



UNIVERSITAS ISLAM INDONESIA

FAKULTAS TEKNIK SIPIL DAN PERENCANAAN

KAMPUS : Jalan Kaliurang Km. 14,4 Tel. 895042, 895707, 896440, Fax. 895330, Yogyakarta 55584

FM-UII-AA-FPU-09

Yogyakarta, 28 Februari 2003

Nomor : 34/Kajur.TS.20/Bg.Pn./II/2003

Lamp. : -

Hal : BIMBINGAN TUGAS AKHIR

Periode : II (Desember – Mei 2003).

Kepada Yth. :

Bapak/Ibu. : **Prof. Ir. H. Widodo, MSCE, PhD.**

Di - Yogyakarta.

Assalamu'alaikum Wr. Wb.

Dengan ini kami mohon dengan hormat kepada Bapak/Ibu agar mahasiswa Jurusan Teknik Sipil, Fakultas Teknik Sipil dan Perencanaan tersebut dibawah ini :

1 Nama : **Nurdiyanto**
No. Mhs. : **98511007**
Bidang Studi : **TS.**
Tahun akademi : **2002/2003**

2 Nama : **Martana**
No. Mhs. : **98511121**
Bidang Studi : **TS**
Tahun akademi : **2002/2003**

Dapat diberikan petunjuk-petunjuk, pengarahan serta bimbingan dalam melaksanakan Tugas Akhir.

Kedua mahasiswa tersebut merupakan satu kelompok dengan dosen pembimbing sbb :

Dosen Pembimbing I : **Prof. Ir. H. Widodo, MSCE, PhD.**

Dosen Pembimbing II : **Ir. H. A. Kadir Aboe, MS.**

Dengan mengambil Topik/Judul :

Analisis dan desain struktur beton bertingkat banyak daktilitas penuh diatas tanah lunak di wilayah gempa 1,2,3, dan 4.(Berdasarkan Spektrum baru)

Demikian atas bantuan serta kerjasamanya diucapkan terima kasih.

Wassalamu'alaikum Wr. Wb.

An. Dekan
Ketua Jurusan Teknik Sipil,

Ir. H. Munadhir, MS.

Tembusan :

1. Dosen Pembimbing ybs.
2. Mahasiswa ybs.
3. Arsip/Jurusan Teknik Sipil

KARTU PESERTA TUGAS AKHIR

| NO. | N A M A | NO. MHS. | BID.STUDI |
|-----|------------|----------|--------------|
| 1 | Nurdiyanto | 98511007 | Teknik Sipil |
| 2 | Martana | 98511121 | Teknik Sipil |

JUDUL TUGAS AKHIR :

Analisis dan desain struktur beton bertingkat banyak daktilitas penuh diatas tanah lunak di wilayah gempa 1,2,3, dan 4. (Berdasarkan Spektrum baru).....

**PERIODE II : DESEMBER - MEI
TAHUN :**

2002 / 2003

| No. | Kegiatan | Bulan Ke : | | | | | |
|-----|----------------------------|------------|------|------|------|------|------|
| | | Des. | Jan. | Peb. | Mar. | Apr. | Mei. |
| 1. | Pendaftaran | | | | | | |
| 2. | Penentuan Dosen Pembimbing | | | | | | |
| 3. | Pembuatan Proposal | | | | | | |
| 4. | Seminar Proposal | | | | | | |
| 5. | Konsultasi Penyusunan TA. | | | | | | |
| 6. | Sidang-Sidang | | | | | | |
| 7. | Pendadaran. | | | | | | |

DOSEN PEMBIMBING I
DOSEN PEMBIMBING II

Prof. Ir. H. Widodo, MSCE, PhD.
Ir. Aboe., MS.



Yogyakarta, 28 Feb 2003
a.n. Dekan,
[Signature]
(.....Ir. H. Mmudhir, MS.....)

Catatan.

Seminar :
Sidang :
Pendadaran :

LAMPIRAN 1
HASIL PERHITUNGAN
R/W 1/1 LAMA

Tabel 1.1.1.1 Hitungan Gaya Horizontal R/W 1/1 Lama Portal E

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | K | V (kN) | Fi (kN) |
|------------------|--------|-------------|--------------|--------|---|---|------------|------------|
| 12 | 48 | 6313,6800 | 303056,6400 | 0,1238 | 1 | 1 | 14436,8706 | 1482,9766 |
| 11 | 44 | 10027,3440 | 441203,1360 | 0,1238 | 1 | 1 | 14436,8706 | 2158,9823 |
| 10 | 40 | 10027,3440 | 401093,7600 | 0,1238 | 1 | 1 | 14436,8706 | 1962,7112 |
| 9 | 36 | 10027,3440 | 360984,3840 | 0,1238 | 1 | 1 | 14436,8706 | 1766,4401 |
| 8 | 32 | 10027,3440 | 320875,0080 | 0,1238 | 1 | 1 | 14436,8706 | 1570,1690 |
| 7 | 28 | 10027,3440 | 280765,6320 | 0,1238 | 1 | 1 | 14436,8706 | 1373,8979 |
| 6 | 24 | 10027,3440 | 240656,2560 | 0,1238 | 1 | 1 | 14436,8706 | 1177,6267 |
| 5 | 20 | 10027,3440 | 200546,8800 | 0,1238 | 1 | 1 | 14436,8706 | 981,3556 |
| 4 | 16 | 10027,3440 | 160437,5040 | 0,1238 | 1 | 1 | 14436,8706 | 785,0845 |
| 3 | 12 | 10027,3440 | 120328,1280 | 0,1238 | 1 | 1 | 14436,8706 | 588,8134 |
| 2 | 8 | 10027,3440 | 80218,7520 | 0,1238 | 1 | 1 | 14436,8706 | 392,5422 |
| 1 | 4 | 10027,3440 | 40109,3760 | 0,1238 | 1 | 1 | 14436,8706 | 196,2711 |
| Σ Total = | | 116614,4640 | 2950275,4560 | | | | | 14436,8706 |

Tabel 1.1.1.2 Hitungan Gaya Horizontal R/W 1/1 Lama Portal 2

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | K | V (kN) | Fi (kN) |
|------------------|--------|-------------|--------------|--------|---|---|------------|------------|
| 12 | 48 | 6313,6800 | 303056,6400 | 0,1238 | 1 | 1 | 14436,8706 | 1482,9766 |
| 11 | 44 | 10027,3440 | 441203,1360 | 0,1238 | 1 | 1 | 14436,8706 | 2158,9823 |
| 10 | 40 | 10027,3440 | 401093,7600 | 0,1238 | 1 | 1 | 14436,8706 | 1962,7112 |
| 9 | 36 | 10027,3440 | 360984,3840 | 0,1238 | 1 | 1 | 14436,8706 | 1766,4401 |
| 8 | 32 | 10027,3440 | 320875,0080 | 0,1238 | 1 | 1 | 14436,8706 | 1570,1690 |
| 7 | 28 | 10027,3440 | 280765,6320 | 0,1238 | 1 | 1 | 14436,8706 | 1373,8979 |
| 6 | 24 | 10027,3440 | 240656,2560 | 0,1238 | 1 | 1 | 14436,8706 | 1177,6267 |
| 5 | 20 | 10027,3440 | 200546,8800 | 0,1238 | 1 | 1 | 14436,8706 | 981,3556 |
| 4 | 16 | 10027,3440 | 160437,5040 | 0,1238 | 1 | 1 | 14436,8706 | 785,0845 |
| 3 | 12 | 10027,3440 | 120328,1280 | 0,1238 | 1 | 1 | 14436,8706 | 588,8134 |
| 2 | 8 | 10027,3440 | 80218,7520 | 0,1238 | 1 | 1 | 14436,8706 | 392,5422 |
| 1 | 4 | 10027,3440 | 40109,3760 | 0,1238 | 1 | 1 | 14436,8706 | 196,2711 |
| Σ Total = | | 116614,4640 | 2950275,4560 | | | | | 14436,8706 |

Tabel 1.1.2.1 Kontrol Periode Getar menurut Rayleigh untuk R/W 1/1 Lama Portal E (Iterasi I)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|-----------|-----------------|-----------------------|---------------------------|------------------|--------|-----------------|-----------------|------------------|
| 12 | 1482,9766 | 1482,9766 | 1175000 | 0,0013 | 0,0997 | 0,0003 | 6313,6800 | 62,7172 | 147,8041 |
| 11 | 2158,9823 | 3641,9590 | 1175000 | 0,0031 | 0,0984 | 0,0008 | 10027,3440 | 97,1003 | 212,4548 |
| 10 | 1962,7112 | 5604,6702 | 1175000 | 0,0048 | 0,0953 | 0,0012 | 10027,3440 | 91,0798 | 187,0572 |
| 9 | 1766,4401 | 7371,1103 | 1175000 | 0,0063 | 0,0905 | 0,0016 | 10027,3440 | 82,1910 | 159,9257 |
| 8 | 1570,1690 | 8941,2792 | 1175000 | 0,0076 | 0,0843 | 0,0019 | 10027,3440 | 71,1955 | 132,3060 |
| 7 | 1373,8979 | 10315,1771 | 1175000 | 0,0088 | 0,0767 | 0,0022 | 10027,3440 | 58,9170 | 105,3130 |
| 6 | 1177,6267 | 11492,8038 | 1175000 | 0,0098 | 0,0679 | 0,0024 | 10027,3440 | 46,1945 | 79,9300 |
| 5 | 981,3556 | 12474,1594 | 1175000 | 0,0106 | 0,0581 | 0,0027 | 10027,3440 | 33,8399 | 57,0096 |
| 4 | 785,0845 | 13259,2439 | 1175000 | 0,0113 | 0,0475 | 0,0028 | 10027,3440 | 22,6017 | 37,2730 |
| 3 | 588,8134 | 13848,0573 | 1175000 | 0,0118 | 0,0362 | 0,0029 | 10027,3440 | 13,1344 | 21,3103 |
| 2 | 392,5422 | 14240,5995 | 1175000 | 0,0121 | 0,0244 | 0,0030 | 10027,3440 | 5,9730 | 9,5805 |
| 1 | 196,2711 | 14436,8706 | 1175000 | 0,0123 | 0,0123 | 0,0031 | 10027,3440 | 1,5138 | 2,4115 |
| | | | | | | | Σtotal = | 586,4581 | 1152,3756 |

T Awal = 1,0942
T Rayleigh = 1,4349

Tabel 1.1.2.2 Kontrol Periode Getar menurut Rayleigh untuk R/W 1/1 Lama Portal 2 (Iterasi I)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|-----------|-----------------|-----------------------|---------------------------|------------------|--------|-----------------|-----------------|-----------------|
| 12 | 1482,9766 | 1482,9766 | 1692000 | 0,0009 | 0,0692 | 0,0002 | 6313,6800 | 30,2456 | 102,6417 |
| 11 | 2158,9823 | 3641,9590 | 1692000 | 0,0022 | 0,0683 | 0,0005 | 10027,3440 | 46,8269 | 147,5380 |
| 10 | 1962,7112 | 5604,6702 | 1692000 | 0,0033 | 0,0662 | 0,0008 | 10027,3440 | 43,9235 | 129,9008 |
| 9 | 1766,4401 | 7371,1103 | 1692000 | 0,0044 | 0,0629 | 0,0011 | 10027,3440 | 39,6369 | 111,0595 |
| 8 | 1570,1690 | 8941,2792 | 1692000 | 0,0053 | 0,0585 | 0,0013 | 10027,3440 | 34,3342 | 91,8792 |
| 7 | 1373,8979 | 10315,1771 | 1692000 | 0,0061 | 0,0532 | 0,0015 | 10027,3440 | 28,4129 | 73,1340 |
| 6 | 1177,6267 | 11492,8038 | 1692000 | 0,0068 | 0,0471 | 0,0017 | 10027,3440 | 22,2774 | 55,5070 |
| 5 | 981,3556 | 12474,1594 | 1692000 | 0,0074 | 0,0403 | 0,0018 | 10027,3440 | 16,3194 | 39,5900 |
| 4 | 785,0845 | 13259,2439 | 1692000 | 0,0078 | 0,0330 | 0,0020 | 10027,3440 | 10,8997 | 25,8840 |
| 3 | 588,8134 | 13848,0573 | 1692000 | 0,0082 | 0,0251 | 0,0020 | 10027,3440 | 6,3341 | 14,7988 |
| 2 | 392,5422 | 14240,5995 | 1692000 | 0,0084 | 0,0169 | 0,0021 | 10027,3440 | 2,8805 | 6,6531 |
| 1 | 196,2711 | 14436,8706 | 1692000 | 0,0085 | 0,0085 | 0,0021 | 10027,3440 | 0,7300 | 1,6747 |
| | | | | | | | Σtotal = | 282,8212 | 800,2609 |

T Awal = 1,0942
T Rayleigh = 1,1958

Tabel 1.1.3.1 Kontrol Hitungan Gaya Horizontal R/W 1/1 Lama Portal E

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | K | V (kN) | Fi (kN) |
|------------------|--------|-------------|--------------|-------|---|---|-----------|-----------|
| 12 | 48 | 6313,6800 | 303056,6400 | 0,065 | 1 | 1 | 7579,9402 | 778,6226 |
| 11 | 44 | 10027,3440 | 441203,1360 | 0,065 | 1 | 1 | 7579,9402 | 1133,5529 |
| 10 | 40 | 10027,3440 | 401093,7600 | 0,065 | 1 | 1 | 7579,9402 | 1030,5027 |
| 9 | 36 | 10027,3440 | 360984,3840 | 0,065 | 1 | 1 | 7579,9402 | 927,4524 |
| 8 | 32 | 10027,3440 | 320875,0080 | 0,065 | 1 | 1 | 7579,9402 | 824,4021 |
| 7 | 28 | 10027,3440 | 280765,6320 | 0,065 | 1 | 1 | 7579,9402 | 721,3519 |
| 6 | 24 | 10027,3440 | 240656,2560 | 0,065 | 1 | 1 | 7579,9402 | 618,3016 |
| 5 | 20 | 10027,3440 | 200546,8800 | 0,065 | 1 | 1 | 7579,9402 | 515,2513 |
| 4 | 16 | 10027,3440 | 160437,5040 | 0,065 | 1 | 1 | 7579,9402 | 412,2011 |
| 3 | 12 | 10027,3440 | 120328,1280 | 0,065 | 1 | 1 | 7579,9402 | 309,1508 |
| 2 | 8 | 10027,3440 | 80218,7520 | 0,065 | 1 | 1 | 7579,9402 | 206,1005 |
| 1 | 4 | 10027,3440 | 40109,3760 | 0,065 | 1 | 1 | 7579,9402 | 103,0503 |
| Σ Total = | | 116614,4640 | 2950275,4560 | | | | | 7579,9402 |

Tabel 1.1.3.2 Kontrol Hitungan Gaya Horizontal R/W 1/1 Lama Portal 2

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | K | V (kN) | Fi (kN) |
|------------------|--------|-------------|--------------|-------|---|---|-----------|-----------|
| 12 | 48 | 6313,6800 | 303056,6400 | 0,065 | 1 | 1 | 7579,9402 | 778,6226 |
| 11 | 44 | 10027,3440 | 441203,1360 | 0,065 | 1 | 1 | 7579,9402 | 1133,5529 |
| 10 | 40 | 10027,3440 | 401093,7600 | 0,065 | 1 | 1 | 7579,9402 | 1030,5027 |
| 9 | 36 | 10027,3440 | 360984,3840 | 0,065 | 1 | 1 | 7579,9402 | 927,4524 |
| 8 | 32 | 10027,3440 | 320875,0080 | 0,065 | 1 | 1 | 7579,9402 | 824,4021 |
| 7 | 28 | 10027,3440 | 280765,6320 | 0,065 | 1 | 1 | 7579,9402 | 721,3519 |
| 6 | 24 | 10027,3440 | 240656,2560 | 0,065 | 1 | 1 | 7579,9402 | 618,3016 |
| 5 | 20 | 10027,3440 | 200546,8800 | 0,065 | 1 | 1 | 7579,9402 | 515,2513 |
| 4 | 16 | 10027,3440 | 160437,5040 | 0,065 | 1 | 1 | 7579,9402 | 412,2011 |
| 3 | 12 | 10027,3440 | 120328,1280 | 0,065 | 1 | 1 | 7579,9402 | 309,1508 |
| 2 | 8 | 10027,3440 | 80218,7520 | 0,065 | 1 | 1 | 7579,9402 | 206,1005 |
| 1 | 4 | 10027,3440 | 40109,3760 | 0,065 | 1 | 1 | 7579,9402 | 103,0503 |
| Σ Total = | | 116614,4640 | 2950275,4560 | | | | | 7579,9402 |

Tabel 1.1.4.1 Kontrol Periode Getar menurut Rayleigh untuk R/W 1/1 Lama Portal E. Iterasi II)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|-----------|-----------------|-----------------------|---------------------------|------------------|---------|-------------|----------------|--------------|
| 12 | 778,6226 | 778,6226 | 1175000 | 0,00066 | 0,05233 | 0,00017 | 6313,68000 | 17,28909 | 40,74476 |
| 11 | 1133,5529 | 1912,1755 | 1175000 | 0,00163 | 0,05167 | 0,00041 | 10027,34400 | 26,76739 | 58,56685 |
| 10 | 1030,5027 | 2942,6782 | 1175000 | 0,00250 | 0,05004 | 0,00063 | 10027,34400 | 25,10772 | 51,56557 |
| 9 | 927,4524 | 3870,1306 | 1175000 | 0,00329 | 0,04753 | 0,00082 | 10027,34400 | 22,65739 | 44,08630 |
| 8 | 824,4021 | 4694,5327 | 1175000 | 0,00400 | 0,04424 | 0,00100 | 10027,34400 | 19,62627 | 36,47246 |
| 7 | 721,3519 | 5415,8846 | 1175000 | 0,00461 | 0,04025 | 0,00115 | 10027,34400 | 16,24150 | 29,03135 |
| 6 | 618,3016 | 6034,1862 | 1175000 | 0,00514 | 0,03564 | 0,00128 | 10027,34400 | 12,73432 | 22,03410 |
| 5 | 515,2513 | 6549,4375 | 1175000 | 0,00557 | 0,03050 | 0,00139 | 10027,34400 | 9,32856 | 15,71569 |
| 4 | 412,2011 | 6961,6386 | 1175000 | 0,00592 | 0,02493 | 0,00148 | 10027,34400 | 6,23056 | 10,27495 |
| 3 | 309,1508 | 7270,7894 | 1175000 | 0,00619 | 0,01900 | 0,00155 | 10027,34400 | 3,62072 | 5,87455 |
| 2 | 206,1005 | 7476,8899 | 1175000 | 0,00636 | 0,01281 | 0,00159 | 10027,34400 | 1,64656 | 2,64104 |
| 1 | 103,0503 | 7579,9402 | 1175000 | 0,00645 | 0,00645 | 0,00161 | 10027,34400 | 0,41729 | 0,66478 |
| | | | | | | | Σtotal = | 161,66738 | 317,67241 |

T Awal = 1,4349

T Rayleigh = 1,4349

Tabel 1.1.4.2 Kontrol Periode Getar menurut Rayleigh untuk R/W 1/1 Lama Portal 2 (Iterasi II)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|-----------|-----------------|-----------------------|---------------------------|------------------|--------|------------|----------------|--------------|
| 12 | 778,6226 | 778,6226 | 1692000 | 0,0005 | 0,0363 | 0,0001 | 6313,6800 | 8,3377 | 28,2950 |
| 11 | 1133,5529 | 1912,1755 | 1692000 | 0,0011 | 0,0359 | 0,0003 | 10027,3440 | 12,9087 | 40,6714 |
| 10 | 1030,5027 | 2942,6782 | 1692000 | 0,0017 | 0,0347 | 0,0004 | 10027,3440 | 12,1083 | 35,8094 |
| 9 | 927,4524 | 3870,1306 | 1692000 | 0,0023 | 0,0330 | 0,0006 | 10027,3440 | 10,9266 | 30,6155 |
| 8 | 824,4021 | 4694,5327 | 1692000 | 0,0028 | 0,0307 | 0,0007 | 10027,3440 | 9,4648 | 25,3281 |
| 7 | 721,3519 | 5415,8846 | 1692000 | 0,0032 | 0,0279 | 0,0008 | 10027,3440 | 7,8325 | 20,1607 |
| 6 | 618,3016 | 6034,1862 | 1692000 | 0,0036 | 0,0247 | 0,0009 | 10027,3440 | 6,1412 | 15,3015 |
| 5 | 515,2513 | 6549,4375 | 1692000 | 0,0039 | 0,0212 | 0,0010 | 10027,3440 | 4,4987 | 10,9137 |
| 4 | 412,2011 | 6961,6386 | 1692000 | 0,0041 | 0,0173 | 0,0010 | 10027,3440 | 3,0047 | 7,1354 |
| 3 | 309,1508 | 7270,7894 | 1692000 | 0,0043 | 0,0132 | 0,0011 | 10027,3440 | 1,7461 | 4,0796 |
| 2 | 206,1005 | 7476,8899 | 1692000 | 0,0044 | 0,0089 | 0,0011 | 10027,3440 | 0,7941 | 1,8341 |
| 1 | 103,0503 | 7579,9402 | 1692000 | 0,0045 | 0,0045 | 0,0011 | 10027,3440 | 0,2012 | 0,4617 |
| | | | | | | | Σtotal = | 77,9646 | 220,6058 |

T Awal = 1,1958

T Rayleigh = 1,1958

Tabel 1.2.1.1 Momen Redistribusi Balok untuk RW 1/1 Lama Portal E

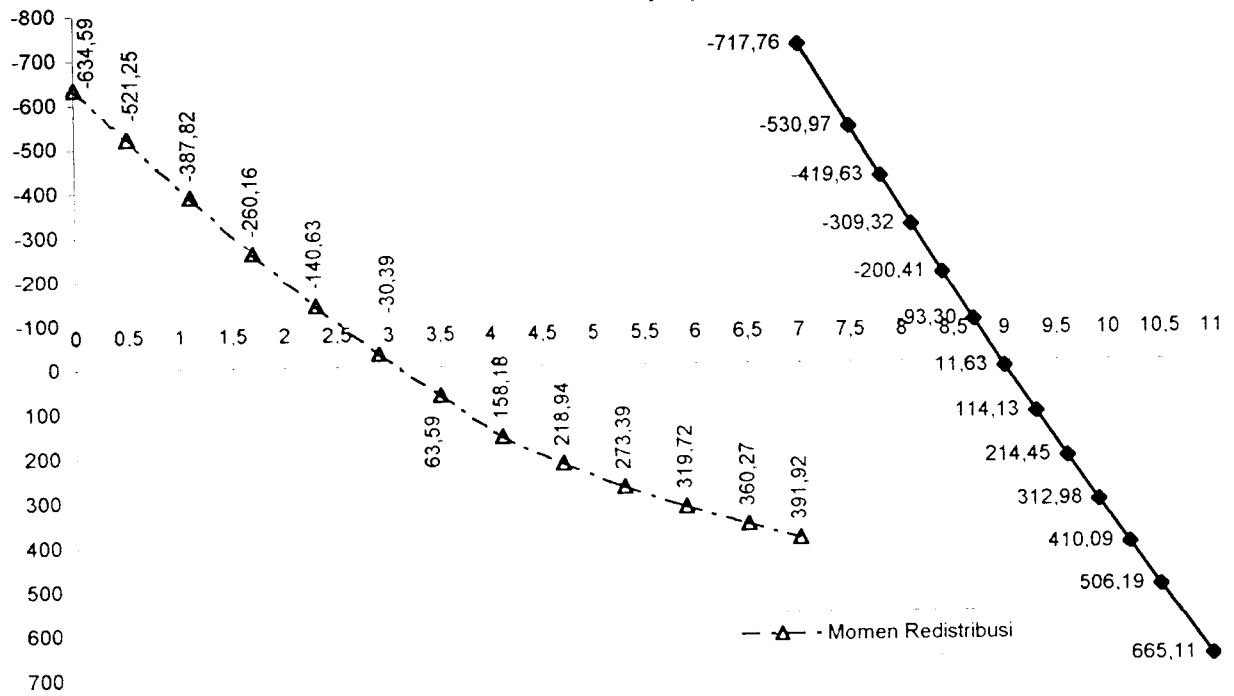
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| 3 | 51 | 0 | -146,6887 | 391,9175 | -634,5874 | 353,9747 | -525,8866 | 391,9175 | -634,5874 | -634,5874 | 0 | 0,0000 | -634,5874 | M - maks : |
| | | 0.5 | -96,91348 | 360,2694 | -521,2507 | 319,8818 | -435,7069 | 360,2694 | -521,2507 | -521,2507 | 0 | 0,0000 | -521,2507 | -521,2507 |
| | | 1.1 | -40,47175 | 319,7223 | -387,8161 | 277,5599 | -328,9016 | 319,7223 | -387,8161 | -387,8161 | 0 | 0,0000 | -387,8161 | M + maks : |
| | | 1.7 | 8,570801 | 273,3939 | -260,1629 | 232,0647 | -225,2697 | 273,3939 | -260,1629 | -260,1629 | 0 | 0,0000 | -260,1629 | 360,2694 |
| | | 2.3 | 47,21449 | 218,9404 | -140,6347 | 182,1095 | -126,0978 | 218,9404 | -140,6347 | -140,6347 | 0 | 0,0000 | -140,6347 | p/p : |
| | | 2.9 | 77,78711 | 158,1807 | -27,41272 | 128,6927 | -30,38733 | 158,1807 | -30,38733 | -30,38733 | 0 | 0,0000 | -30,38733 | -0,691163388 |
| | | 3.5 | 104,3238 | 94,26756 | 82,65582 | 73,54509 | 63,59217 | 94,26756 | 63,59217 | 63,59217 | 0 | 0,0000 | 63,59217 | |
| | | 4.1 | 79,46803 | -14,48802 | 147,8819 | -19,71494 | 119,4593 | 147,8819 | -19,71494 | 158,1807 | 0 | 0,0000 | 158,1807 | M - red maks : |
| | | 4.7 | 50,57632 | -126,397 | 209,9546 | -114,7059 | 173,5955 | 209,9546 | -126,397 | 218,9404 | 0 | 0,0000 | 218,9404 | -521,2507 |
| | | 5.3 | 13,61355 | -244,6123 | 265,721 | -213,1584 | 224,2701 | 265,721 | -244,6123 | 273,3939 | 0 | 0,0000 | 273,3939 | M + red maks |
| | | 5.9 | -33,74809 | -370,9526 | 313,3624 | -316,0709 | 270,4849 | 313,3624 | -370,9526 | 319,7223 | 0 | 0,0000 | 319,7223 | 360,2694 |
| | | 6.5 | -88,5089 | -503,0742 | 355,2224 | -422,1567 | 318,5262 | 355,2224 | -503,0742 | 360,2694 | 0 | 0,0000 | 360,2694 | p/p red : |
| 7 | -136,8833 | -615,3168 | 387,9646 | -511,7368 | 348,2187 | 387,9646 | -615,3168 | 391,9175 | 0 | 0,0000 | 391,9175 | -0,691163388 | | |
| 3 | 63 | 7 | -33,52812 | 665,1083 | -717,7648 | 577,83 | -607,4899 | 665,1083 | -717,7648 | -717,7648 | 0 | 0,0000 | -717,7648 | M - maks : |
| | | 7.5 | -15,64149 | 506,1865 | -530,9684 | 437,2049 | -451,785 | 506,1865 | -530,9684 | -530,9684 | 0 | 0,0000 | -530,9684 | -530,9684 |
| | | 7.8 | -5,859399 | 410,0932 | -419,6307 | 352,4295 | -358,7625 | 410,0932 | -419,6307 | -419,6307 | 0 | 0,0000 | -419,6307 | M + maks : |
| | | 8.1 | 2,607448 | 312,975 | -309,3179 | 267,0996 | -266,2943 | 312,975 | -309,3179 | -309,3179 | 0 | 0,0000 | -309,3179 | 506,1865 |
| | | 8.4 | 9,265842 | 214,4478 | -200,4142 | 181,0074 | -174,5885 | 214,4478 | -200,4142 | -200,4142 | 0 | 0,0000 | -200,4142 | p/p : |
| | | 8.7 | 13,62257 | 114,1271 | -93,30393 | 93,94499 | -83,85299 | 114,1271 | -93,30393 | -93,30393 | 0 | 0,0000 | -93,30393 | -0,953326978 |
| | | 9 | 15,18441 | 11,62855 | 11,62855 | 5,704385 | 5,704385 | 11,62855 | 5,704385 | 11,62855 | 0 | 0,0000 | 11,62855 | |
| | | 9.3 | 13,62257 | -93,30393 | 114,1271 | -83,85299 | 93,94499 | 114,1271 | -93,30393 | 114,1271 | 0 | 0,0000 | 114,1271 | M - red maks |
| | | 9.6 | 9,265842 | -200,4142 | 214,4478 | -174,5885 | 181,0074 | 214,4478 | -200,4142 | 214,4478 | 0 | 0,0000 | 214,4478 | -530,9684 |
| | | 9.9 | 2,607448 | -309,3179 | 312,975 | -266,2943 | 267,0996 | 312,975 | -309,3179 | 312,975 | 0 | 0,0000 | 312,975 | M + red maks |
| | | 10.2 | -5,859399 | -419,6307 | 410,0932 | -358,7625 | 352,4295 | 410,0932 | -419,6307 | 410,0932 | 0 | 0,0000 | 410,0932 | 506,1865 |
| | | 10.5 | -15,64149 | -530,9684 | 506,1865 | -451,785 | 437,2049 | 506,1865 | -530,9684 | 506,1865 | 0 | 0,0000 | 506,1865 | p/p red : |
| 11 | -33,52812 | -717,7648 | 665,1083 | -607,4899 | 577,83 | 665,1083 | -717,7648 | 665,1083 | 0 | 0,0000 | 665,1083 | -0,953326978 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|--------------|
| 4 | 52 | 0 | -148,2395 | 391,9909 | -637,0907 | 354,4027 | -527,6672 | 391,9909 | -637,0907 | -637,0907 | 0 | 0,0000 | -637,0907 | M - maks : |
| | | 0.5 | -98,24652 | 360,2969 | -523,3672 | 320,2186 | -437,2078 | 360,2969 | -523,3672 | -523,3672 | 0 | 0,0000 | -523,3672 | -523,3672 |
| | | 1.1 | -41,5435 | 319,6945 | -389,4686 | 277,7873 | -330,0668 | 319,6945 | -389,4686 | -389,4686 | 0 | 0,0000 | -389,4686 | M + maks : |
| | | 1.7 | 7,760344 | 273,3109 | -261,3511 | 232,1826 | -226,0992 | 273,3109 | -261,3511 | -261,3511 | 0 | 0,0000 | -261,3511 | 360,2969 |
| | | 2.3 | 46,66532 | 218,8022 | -141,3588 | 182,118 | -126,5915 | 218,8022 | -141,3588 | -141,3588 | 0 | 0,0000 | -141,3588 | p/p : |
| | | 2.9 | 77,49923 | 157,9873 | -27,67267 | 128,5918 | -30,54529 | 157,9873 | -30,54529 | -30,54529 | 0 | 0,0000 | -30,54529 | -0,688420864 |
| | | 3.5 | 104,2972 | 94,01895 | 82,86002 | 73,33474 | 63,76994 | 94,01895 | 63,76994 | 63,76994 | 0 | 0,0000 | 63,76994 | |
| | | 4.1 | 79,70272 | -14,79184 | 148,5503 | -20,03473 | 119,9728 | 148,5503 | -20,03473 | 157,9873 | 0 | 0,0000 | 157,9873 | M - red maks |
| | | 4.7 | 51,0723 | -126,7561 | 211,0871 | -115,1351 | 174,4447 | 211,0871 | -126,7561 | 218,8022 | 0 | 0,0000 | 218,8022 | -523,3672 |
| | | 5.3 | 14,37082 | -245,0265 | 267,3177 | -213,6971 | 225,4551 | 267,3177 | -245,0265 | 273,3109 | 0 | 0,0000 | 273,3109 | M + red maks |
| | | 5.9 | -32,72953 | -371,4221 | 315,4232 | -316,7189 | 272,0056 | 315,4232 | -371,4221 | 319,6945 | 0 | 0,0000 | 319,6945 | 360,2969 |
| | | 6.5 | -87,22906 | -503,5989 | 357,7474 | -422,9142 | 315,3826 | 357,7474 | -503,5989 | 360,2969 | 0 | 0,0000 | 360,2969 | p/p red : |
| 7 | -135,3858 | -615,8875 | 390,8763 | -512,5855 | 350,3549 | 390,8763 | -615,8875 | 391,9909 | 0 | 0,0000 | 391,9909 | -0,688420864 | | |
| 4 | 64 | 7 | -33,44582 | 642,9618 | -695,485 | 558,8334 | -588,4067 | 642,9618 | -695,485 | -695,485 | 0 | 0,0000 | -695,485 | M - maks : |
| | | 7.5 | -15,55919 | 489,5932 | -514,2419 | 422,9684 | -437,4617 | 489,5932 | -514,2419 | -514,2419 | 0 | 0,0000 | -514,2419 | -514,2419 |
| | | 7.8 | -5,777102 | 396,8319 | -406,2361 | 341,0489 | -347,2951 | 396,8319 | -406,2361 | -406,2361 | 0 | 0,0000 | -406,2361 | M + maks : |
| | | 8.1 | 2,689745 | 303,0457 | -299,2552 | 258,575 | -257,683 | 303,0457 | -299,2552 | -299,2552 | 0 | 0,0000 | -299,2552 | 489,5932 |
| | | 8.4 | 9,34814 | 207,8505 | -193,6835 | 175,3389 | -168,8332 | 207,8505 | -193,6835 | -193,6835 | 0 | 0,0000 | -193,6835 | p/p : |
| | | 8.7 | 13,70487 | 110,8617 | -89,90529 | 91,13239 | -80,95362 | 110,8617 | -89,90529 | -89,90529 | 0 | 0,0000 | -89,90529 | -0,952067889 |
| | | 9 | 15,26671 | 11,69521 | 11,69521 | 5,747766 | 5,747766 | 11,69521 | 5,747766 | 11,69521 | 0 | 0,0000 | 11,69521 | |
| | | 9.3 | 13,70487 | -89,90529 | 110,8617 | -80,95362 | 91,13239 | 110,8617 | -89,90529 | 110,8617 | 0 | 0,0000 | 110,8617 | M - red maks |
| | | 9.6 | 9,34814 | -193,6835 | 207,8505 | -168,8332 | 175,3389 | 207,8505 | -193,6835 | 207,8505 | 0 | 0,0000 | 207,8505 | -514,2419 |
| | | 9.9 | 2,689745 | -299,2552 | 303,0457 | -257,683 | 258,575 | 303,0457 | -299,2552 | 303,0457 | 0 | 0,0000 | 303,0457 | M + red maks |
| | | 10.2 | -5,777102 | -406,2361 | 396,8319 | -347,2951 | 341,0489 | 396,8319 | -406,2361 | 396,8319 | 0 | 0,0000 | 396,8319 | 489,5932 |
| | | 10.5 | -15,55919 | -514,2419 | 489,5932 | -437,4617 | 422,9684 | 489,5932 | -514,2419 | 489,5932 | 0 | 0,0000 | 489,5932 | p/p red : |
| 11 | -33,44582 | -695,485 | 642,9618 | -588,4067 | 558,8334 | 642,9618 | -695,485 | 642,9618 | 0 | 0,0000 | 642,9618 | -0,952067889 | | |

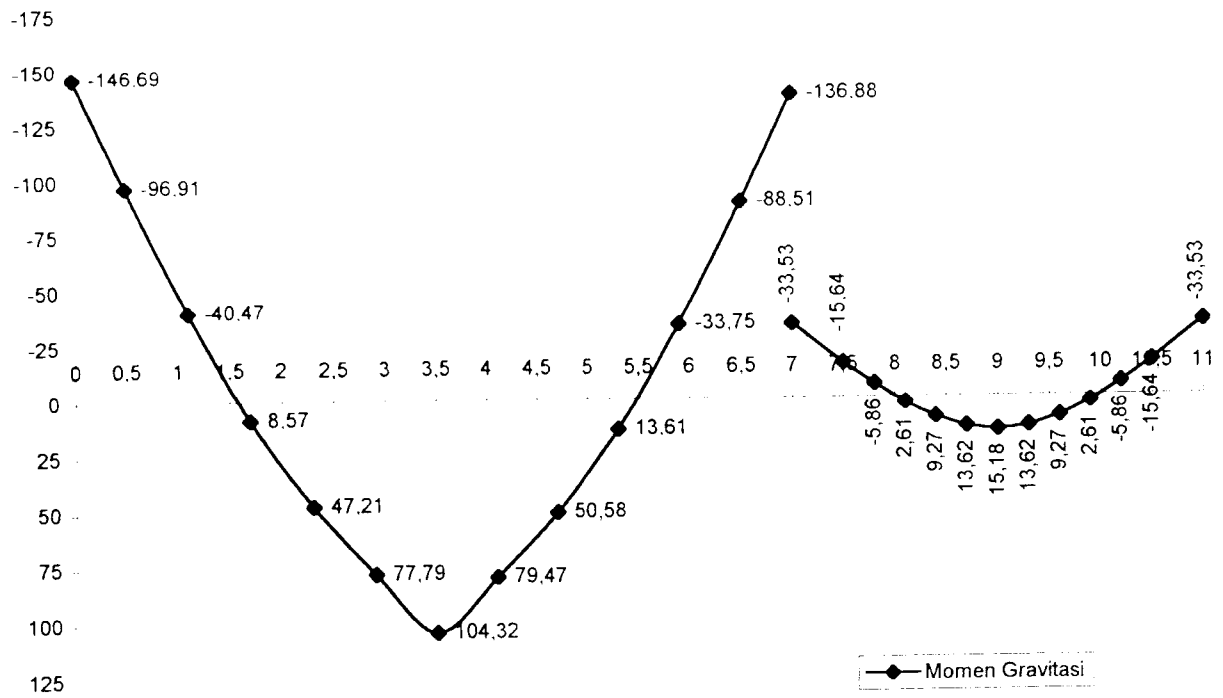
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|-----------|----------------|
| 7 | 55 | 0 | -151,6615 | 288,0801 | -538,5418 | 266,1419 | -442,3911 | 288,0801 | -538,5418 | -538,5418 | 0 | 0,0000 | -538,5418 | M - maks : |
| | | 0,5 | -101,179 | 270,9963 | -438,6615 | 244,3657 | -363,9124 | 270,9963 | -438,6615 | -438,6615 | 0 | 0,0000 | -438,6615 | -438,6615 |
| | | 1,1 | -43,8885 | 247,9264 | -321,3747 | 216,8239 | -271,1484 | 247,9264 | -321,3747 | -321,3747 | 0 | 0,0000 | -321,3747 | M + maks : |
| | | 1,7 | 6,002806 | 219,0752 | -209,8692 | 186,1088 | -181,5578 | 219,0752 | -209,8692 | -209,8692 | 0 | 0,0000 | -209,8692 | 270,9963 |
| | | 2,3 | 45,49524 | 182,0989 | -106,4887 | 150,9337 | -96,42709 | 182,0989 | -106,4887 | -106,4887 | 0 | 0,0000 | -106,4887 | p/p : |
| | | 2,9 | 76,91662 | 138,8164 | -9,414419 | 112,2971 | -14,75791 | 138,8164 | -14,75791 | -14,75791 | 0 | 0,0000 | -14,75791 | -0,617779997 |
| | | 3,5 | 104,3021 | 92,38046 | 84,5064 | 71,92952 | 65,18034 | 92,38046 | 65,18034 | 65,18034 | 0 | 0,0000 | 65,18034 | |
| | | 4,1 | 80,29504 | 1,102063 | 133,5848 | -6,550409 | 107,0062 | 133,5848 | -6,550409 | 138,8164 | 0 | 0,0000 | 138,8164 | M - red maks : |
| | | 4,7 | 52,25207 | -93,32977 | 179,5097 | -86,76128 | 147,1011 | 179,5097 | -93,32977 | 182,0989 | 0 | 0,0000 | 182,0989 | -438,6615 |
| | | 5,3 | 16,13805 | -194,0678 | 219,1284 | -170,4337 | 183,7345 | 219,1284 | -194,0678 | 219,0752 | 0 | 0,0000 | 219,0752 | M + red maks : |
| | | 5,9 | -30,37483 | -302,931 | 250,6221 | -258,566 | 215,908 | 250,6221 | -302,931 | 247,9264 | 0 | 0,0000 | 247,9264 | 270,9963 |
| | | 6,5 | -84,2869 | -417,5753 | 276,3344 | -349,8717 | 244,9081 | 276,3344 | -417,5753 | 270,9963 | 0 | 0,0000 | 270,9963 | p/p red : |
| 7 | -131,9541 | -515,2536 | 295,6202 | -427,1351 | 267,8995 | 295,6202 | -515,2536 | 288,0801 | 0 | 0,0000 | 288,0801 | -0,617779997 | | |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 7 | 67 | 7 | -33,35352 | 447,1238 | -499,5029 | 390,95 | -420,4444 | 447,1238 | -499,5029 | -499,5029 | 0 | 0,0000 | -499,5029 | M - maks : |
| | | 7,5 | -15,46689 | 342,7328 | -367,2373 | 297,0656 | -311,4801 | 342,7328 | -367,2373 | -367,2373 | 0 | 0,0000 | -367,2373 | -367,2373 |
| | | 7,8 | -5,684802 | 279,358 | -288,6181 | 240,3346 | -246,502 | 279,358 | -288,6181 | -288,6181 | 0 | 0,0000 | -288,6181 | M + maks : |
| | | 8,1 | 2,782045 | 214,9583 | -211,0237 | 183,0492 | -182,0782 | 214,9583 | -211,0237 | -211,0237 | 0 | 0,0000 | -211,0237 | 342,7328 |
| | | 8,4 | 9,44044 | 149,1496 | -134,8385 | 125,0014 | -118,4169 | 149,1496 | -134,8385 | -134,8385 | 0 | 0,0000 | -134,8385 | p/p : |
| | | 8,7 | 13,79717 | 81,5473 | -60,44671 | 65,98339 | -55,72576 | 81,5473 | -60,44671 | -60,44671 | 0 | 0,0000 | -60,44671 | -0,93327339 |
| | | 9 | 15,35901 | 11,76729 | 11,76729 | 5,7872 | 5,7872 | 11,76729 | 5,7872 | 11,76729 | 0 | 0,0000 | 11,76729 | |
| | | 9,3 | 13,79717 | -60,44671 | 81,5473 | -55,72576 | 65,98339 | 81,5473 | -60,44671 | 81,5473 | 0 | 0,0000 | 81,5473 | M - red maks : |
| | | 9,6 | 9,44044 | -134,8385 | 149,1496 | -118,4169 | 125,0014 | 149,1496 | -134,8385 | 149,1496 | 0 | 0,0000 | 149,1496 | -367,2373 |
| | | 9,9 | 2,782045 | -211,0237 | 214,9583 | -182,0782 | 183,0492 | 214,9583 | -211,0237 | 214,9583 | 0 | 0,0000 | 214,9583 | M + red maks : |
| | | 10,2 | -5,684802 | -288,6181 | 279,358 | -246,502 | 240,3346 | 279,358 | -288,6181 | 279,358 | 0 | 0,0000 | 279,358 | 342,7328 |
| | | 10,5 | -15,46689 | -367,2373 | 342,7328 | -311,4801 | 297,0656 | 342,7328 | -367,2373 | 342,7328 | 0 | 0,0000 | 342,7328 | p/p red : |
| 11 | -33,35352 | -499,5029 | 447,1238 | -420,4444 | 390,95 | 447,1238 | -499,5029 | 447,1238 | 0 | 0,0000 | 447,1238 | -0,93327339 | | |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 10 | 58 | 0 | -153,3535 | 105,3547 | -358,4522 | 109,9384 | -287,6104 | 109,9384 | -358,4522 | -358,4522 | 12,5 | -35,4934 | -322,9588 | M - maks : |
| | | 0,5 | -102,6176 | 114,0441 | -283,9473 | 110,1948 | -230,9406 | 114,0441 | -283,9473 | -283,9473 | 12,5 | -35,4934 | -248,4539 | -283,9473 |
| | | 1,1 | -45,02307 | 121,9019 | -197,1107 | 109,0922 | -164,3472 | 121,9019 | -197,1107 | -197,1107 | 12,5 | -35,4934 | -161,6173 | M + maks : |
| | | 1,7 | 5,172323 | 123,9784 | -116,0555 | 104,8161 | -100,9272 | 123,9784 | -116,0555 | -116,0555 | 12,5 | -35,4934 | -80,56209 | 123,9784 |
| | | 2,3 | 44,96885 | 117,9299 | -43,12531 | 96,08018 | -41,96713 | 117,9299 | -43,12531 | -43,12531 | 12,5 | -35,4934 | -7,631898 | p/p : |
| | | 2,9 | 76,69431 | 105,5751 | 23,49862 | 83,8827 | 13,53142 | 105,5751 | 13,53142 | 13,53142 | 12,5 | -35,4934 | 49,024833 | -0,436624684 |
| | | 3,5 | 104,3839 | 90,0669 | 86,96913 | 69,95427 | 67,29904 | 90,0669 | 67,29904 | 67,29904 | 12,5 | -35,4934 | 102,79245 | |
| | | 4,1 | 80,6809 | 29,71625 | 105,5972 | 17,91347 | 82,95428 | 105,5972 | 17,91347 | 105,5751 | 12,5 | -35,4934 | 141,06851 | M - red maks : |
| | | 4,7 | 52,94202 | -33,78783 | 121,0718 | -35,85826 | 96,87858 | 121,0718 | -35,85826 | 117,9299 | 12,5 | -35,4934 | 153,42331 | -248,4538875 |
| | | 5,3 | 17,1321 | -103,5982 | 130,2402 | -93,09155 | 107,3413 | 130,2402 | -103,5982 | 123,9784 | 12,5 | -35,4934 | 159,47181 | M + red maks : |
| | | 5,9 | -29,0767 | -181,5335 | 131,2835 | -154,7847 | 113,3442 | 131,2835 | -181,5335 | 121,9019 | 12,5 | -35,4934 | 157,39531 | 159,4718125 |
| | | 6,5 | -82,68468 | -265,2502 | 126,5456 | -219,6513 | 116,1737 | 126,5456 | -265,2502 | 114,0441 | 12,5 | -35,4934 | 149,53751 | p/p red : |
| 7 | -130,0984 | -337,1553 | 120,4561 | -274,8821 | 117,3562 | 120,4561 | -337,1553 | 109,9384 | 12,5 | -35,4934 | 145,43181 | -0,641856781 | | |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 10 | 70 | 7 | -33,39972 | 160,2102 | -212,6921 | 144,9957 | -174,6348 | 160,2102 | -212,6921 | -212,6921 | 0 | 0,0000 | -212,6921 | M - maks : |
| | | 7,5 | -15,51308 | 127,5347 | -152,1421 | 112,5819 | -127,1411 | 127,5347 | -152,1421 | -152,1421 | 0 | 0,0000 | -152,1421 | -152,1421 |
| | | 7,8 | -5,730995 | 107,1892 | -116,5522 | 92,73316 | -99,04519 | 107,1892 | -116,5522 | -116,5522 | 0 | 0,0000 | -116,5522 | M + maks : |
| | | 8,1 | 2,735852 | 85,81892 | -81,98713 | 72,33 | -71,50376 | 85,81892 | -81,98713 | -81,98713 | 0 | 0,0000 | -81,98713 | 127,5347 |
| | | 8,4 | 9,394246 | 63,03947 | -48,83123 | 51,16451 | -44,72467 | 63,03947 | -48,83123 | -48,83123 | 0 | 0,0000 | -48,83123 | p/p : |
| | | 8,7 | 13,75097 | 38,46655 | -17,4688 | 29,02876 | -18,91583 | 38,46655 | -18,91583 | -18,91583 | 0 | 0,0000 | -18,91583 | -0,838260416 |
| | | 9 | 15,31282 | 11,71587 | 11,71587 | 5,714847 | 5,714847 | 11,71587 | 5,714847 | 11,71587 | 0 | 0,0000 | 11,71587 | |
| | | 9,3 | 13,75097 | -17,4688 | 38,46655 | -18,91583 | 29,02876 | 38,46655 | -18,91583 | 38,46655 | 0 | 0,0000 | 38,46655 | M - red maks : |
| | | 9,6 | 9,394246 | -48,83123 | 63,03947 | -44,72467 | 51,16451 | 63,03947 | -48,83123 | 63,03947 | 0 | 0,0000 | 63,03947 | -152,1421 |
| | | 9,9 | 2,735852 | -81,98713 | 85,81892 | -71,50376 | 72,33 | 85,81892 | -81,98713 | 85,81892 | 0 | 0,0000 | 85,81892 | M + red maks : |
| | | 10,2 | -5,730995 | -116,5522 | 107,1892 | -99,04519 | 92,73316 | 107,1892 | -116,5522 | 107,1892 | 0 | 0,0000 | 107,1892 | 127,5347 |
| | | 10,5 | -15,51308 | -152,1421 | 127,5347 | -127,1411 | 112,5819 | 127,5347 | -152,1421 | 127,5347 | 0 | 0,0000 | 127,5347 | p/p red : |
| 11 | -33,39972 | -212,6921 | 160,2102 | -174,6348 | 144,9957 | 160,2102 | -212,6921 | 160,2102 | 0 | 0,0000 | 160,2102 | -0,838260416 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|------|------------|-----------|----------------|
| 12 | 60 | 0 | -117,2261 | 25,9236 | -225,2059 | 29,7588 | -185,4951 | 29,7588 | -225,2059 | -225,2059 | 12,5 | -21,8552 | -203,3507 | M - maks : |
| | | 0,5 | -79,09396 | 40,47905 | -174,8419 | 39,90554 | -144,6552 | 40,47905 | -174,8419 | -174,8419 | 12,5 | -21,8552 | -152,9867 | -174,8419 |
| | | 1,1 | -35,43572 | 56,1958 | -116,1548 | 50,8081 | -96,92097 | 56,1958 | -116,1548 | -116,1548 | 12,5 | -21,8552 | -94,29956 | M + maks : |
| | | 1,7 | 3,496762 | 67,97552 | -61,40471 | 58,8452 | -52,05215 | 67,97552 | -61,40471 | -61,40471 | 12,5 | -21,8552 | -39,54947 | 76,17415 |
| | | 2,3 | 35,78764 | 74,2221 | -12,18779 | 62,85516 | -11,21046 | 74,2221 | -12,18779 | -12,18779 | 12,5 | -21,8552 | 9,6674475 | p/p : |
| | | 2,9 | 62,92364 | 76,17415 | 32,7346 | 63,73947 | 26,50557 | 76,17415 | 26,50557 | 26,50557 | 12,5 | -21,8552 | 48,360808 | -0,435674458 |
| | | 3,5 | 87,48196 | 75,97872 | 75,50951 | 63,0608 | 62,65862 | 75,97872 | 62,65862 | 62,65862 | 12,5 | -21,8552 | 84,513858 | |
| | | 4,1 | 66,57706 | 36,03898 | 78,54012 | 28,40815 | 64,83769 | 78,54012 | 28,40815 | 76,17415 | 12,5 | -21,8552 | 98,029388 | M - red maks : |
| | | 4,7 | 43,09447 | -6,048237 | 79,42324 | -7,807486 | 65,45378 | 79,42324 | -7,807486 | 74,2221 | 12,5 | -21,8552 | 96,077338 | -152,9866625 |
| | | 5,3 | 14,45702 | -52,42999 | 76,01183 | -47,14877 | 62,94422 | 76,01183 | -52,42999 | 67,97552 | 12,5 | -21,8552 | 89,830758 | M + red maks : |
| | | 5,9 | -20,82204 | -104,3449 | 67,06729 | -90,51719 | 56,40752 | 67,06729 | -104,3449 | 56,1958 | 12,5 | -21,8552 | 78,051038 | 98,0293875 |
| | | 6,5 | -60,82686 | -160,1968 | 54,18571 | -136,7511 | 47,00536 | 54,18571 | -160,1968 | 40,47905 | 12,5 | -21,8552 | 62,334288 | p/p red : |
| | | 7 | -95,91448 | -208,1982 | 41,9929 | -176,3406 | 38,10896 | 41,9929 | -208,1982 | 29,7588 | 12,5 | -21,8552 | 51,614038 | -0,640770809 |
| 12 | 72 | 7 | -25,60604 | 1,214104 | -43,82753 | 3,865567 | -34,74154 | 3,865567 | -43,82753 | -43,82753 | 17,5 | -4,9429 | -38,88464 | M - maks : |
| | | 7,5 | -13,44871 | 5,53615 | -28,24507 | 5,807679 | -23,14765 | 5,807679 | -28,24507 | -28,24507 | 17,5 | -4,9429 | -23,30218 | -28,24507 |
| | | 7,8 | -6,799939 | 7,60085 | -19,42413 | 6,613521 | -16,55075 | 7,60085 | -19,42413 | -19,42413 | 17,5 | -4,9429 | -14,48124 | M + maks : |
| | | 8,1 | -1,045123 | 8,933742 | -11,33499 | 6,9217 | -10,4515 | 8,933742 | -11,33499 | -11,33499 | 17,5 | -4,9429 | -6,392103 | 9,260398 |
| | | 8,4 | 3,480509 | 9,260398 | -4,25209 | 6,54559 | -5,036542 | 9,260398 | -5,036542 | -5,036542 | 17,5 | -4,9429 | -0,093655 | p/p : |
| | | 8,7 | 6,441725 | 8,30639 | 1,550146 | 5,298569 | -0,492497 | 8,30639 | -0,492497 | -0,492497 | 17,5 | -4,9429 | 4,4503902 | -0,327858915 |
| | | 9 | 7,503293 | 5,79729 | 5,79729 | 2,994012 | 2,994012 | 5,79729 | 2,994012 | 5,79729 | 17,5 | -4,9429 | 10,740177 | |
| | | 9,3 | 6,441725 | 1,550146 | 8,30639 | -0,492497 | 5,298569 | 8,30639 | -0,492497 | 8,30639 | 17,5 | -4,9429 | 13,249277 | M - red maks : |
| | | 9,6 | 3,480509 | -4,25209 | 9,260398 | -5,036542 | 6,54559 | 9,260398 | -5,036542 | 9,260398 | 17,5 | -4,9429 | 14,203285 | -23,30218275 |
| | | 9,9 | -1,045123 | -11,33499 | 8,933742 | -10,4515 | 6,9217 | 8,933742 | -11,33499 | 8,933742 | 17,5 | -4,9429 | 13,876629 | M + red maks : |
| | | 10,2 | -6,799939 | -19,42413 | 7,60085 | -16,55075 | 6,613521 | 7,60085 | -19,42413 | 7,60085 | 17,5 | -4,9429 | 12,543737 | 14,20328525 |
| | | 10,5 | -13,44871 | -28,24507 | 5,53615 | -23,14765 | 5,807679 | 5,807679 | -28,24507 | 5,807679 | 17,5 | -4,9429 | 10,750566 | p/p red : |
| | | 11 | -25,60604 | -43,82753 | 1,214104 | -34,74154 | 3,865567 | 3,865567 | -43,82753 | 3,865567 | 17,5 | -4,9429 | 8,8084543 | -0,609525957 |

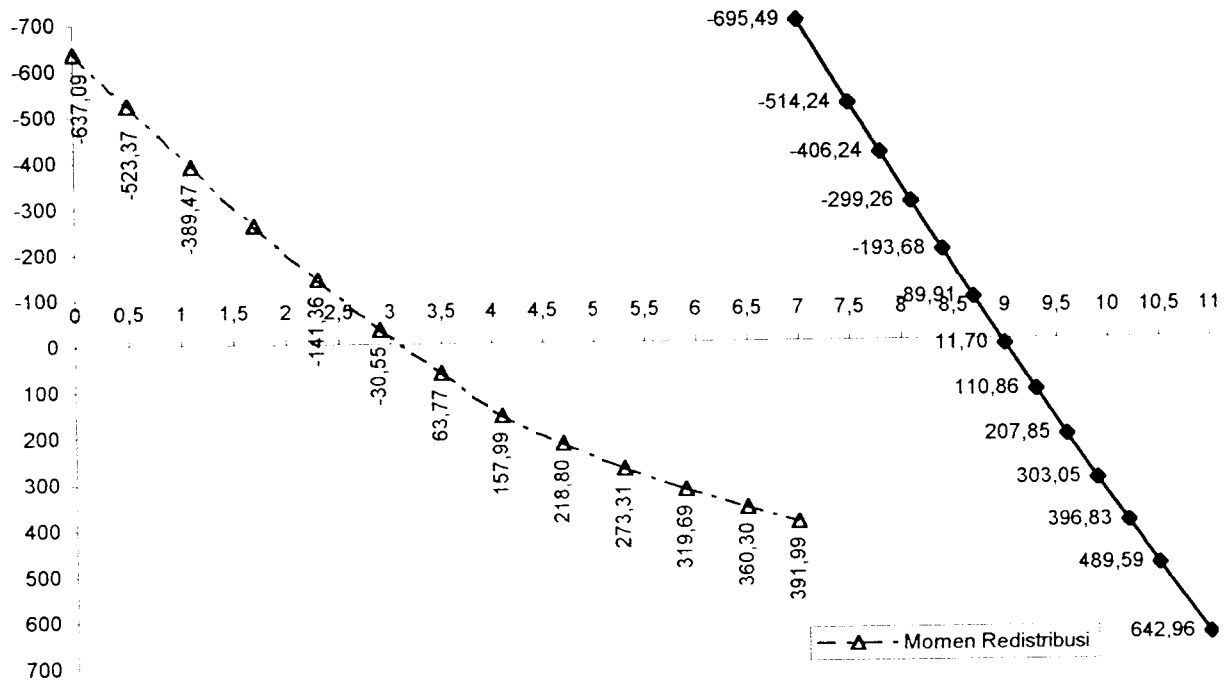
**Grafik Momen Lantai 3
Akibat Gempa (0%)**



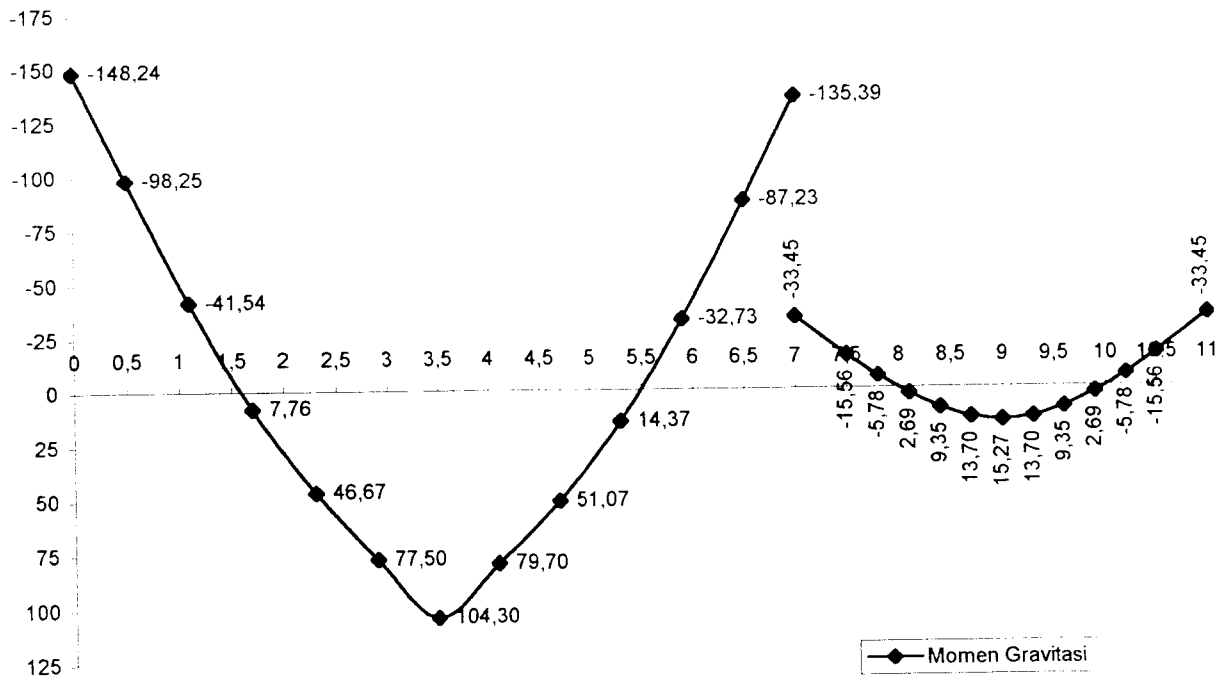
**Grafik Momen Lantai 3
Akibat Berat Sendiri**



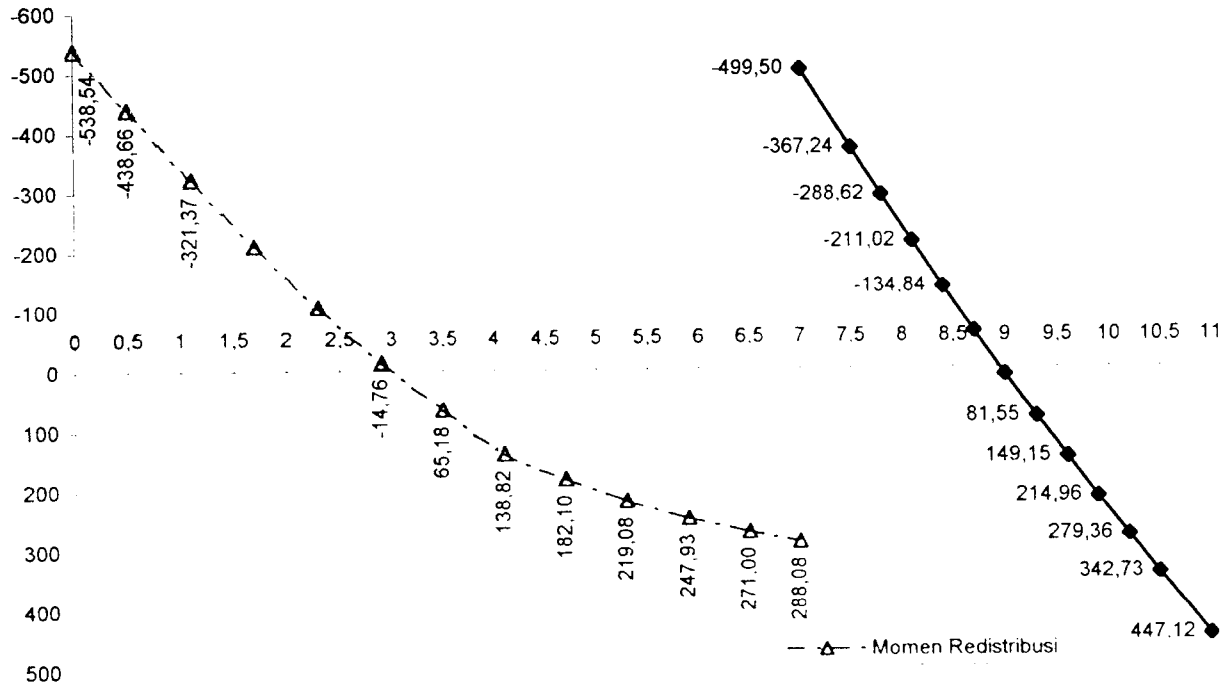
Grafik Momen Lantai 4
Akibat Gempa (0%)



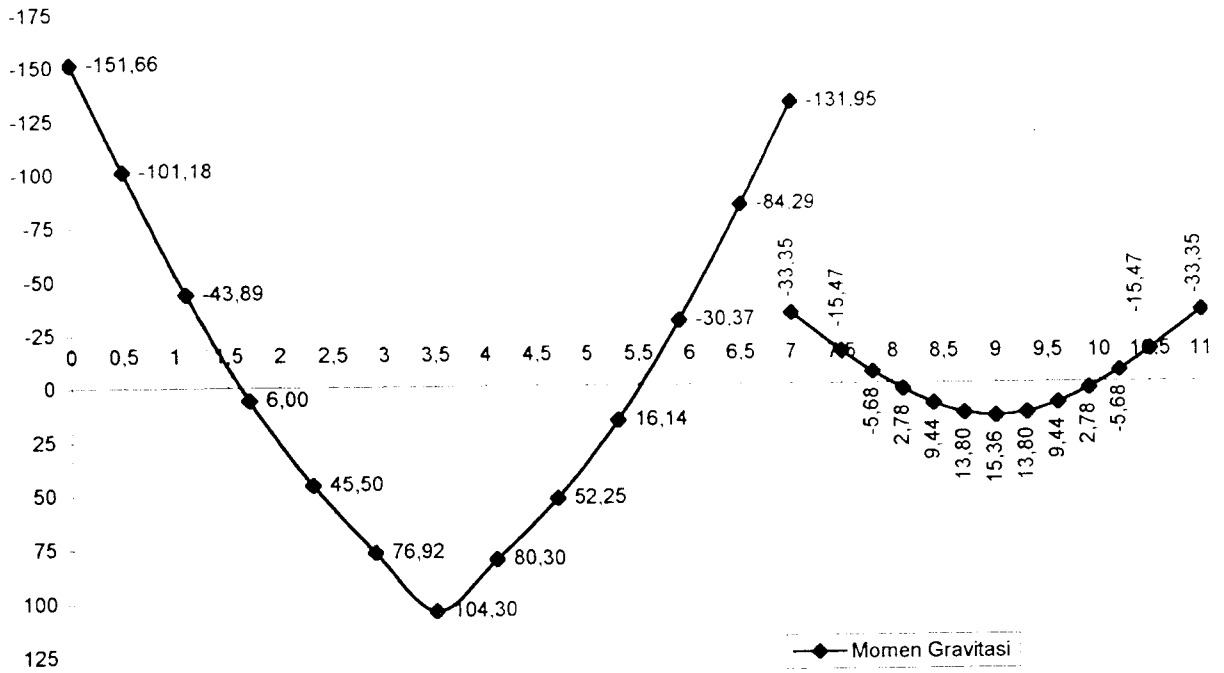
Grafik Momen Lantai 4
Akibat Berat Sendiri



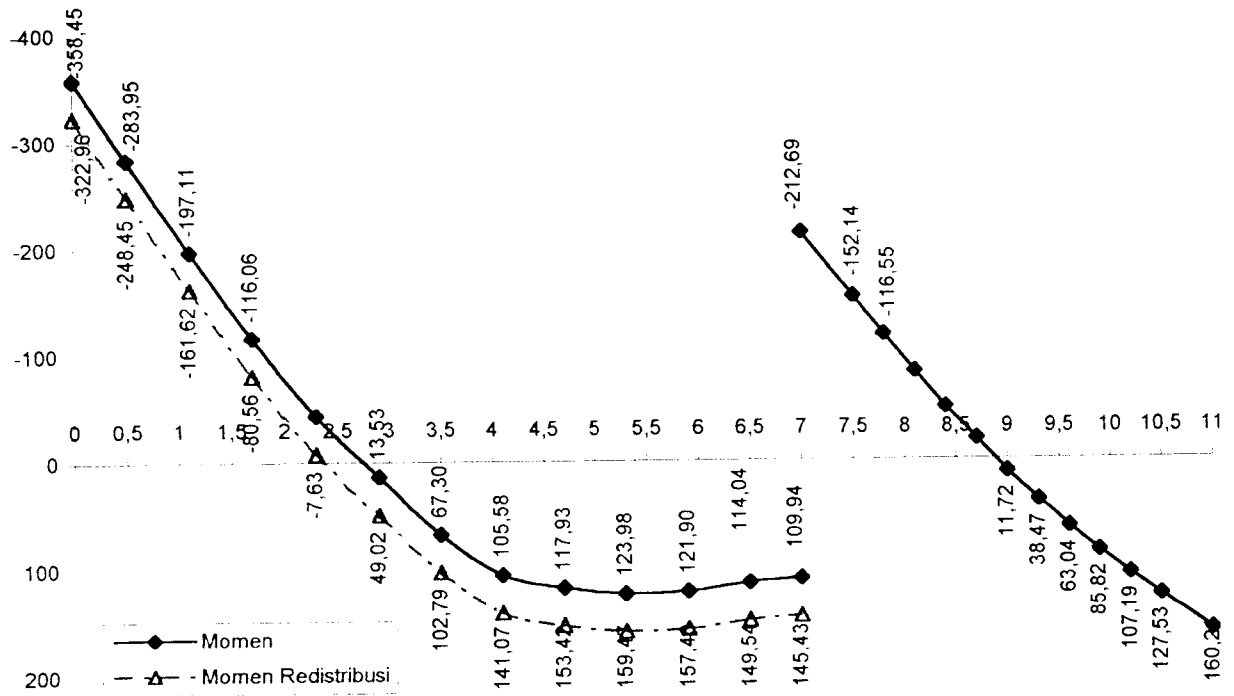
**Grafik Momen Lantai 7
Akibat Gempa (0%)**



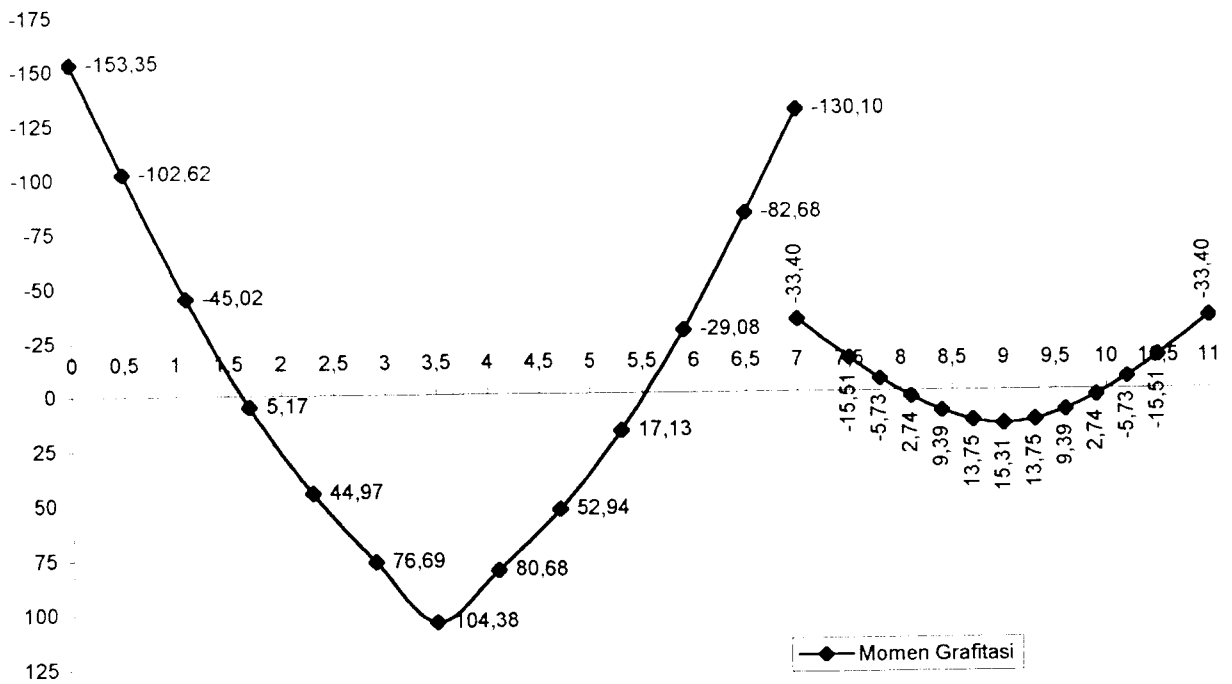
**Grafik Momen Lantai 7
Akibat Berat Sendiri**



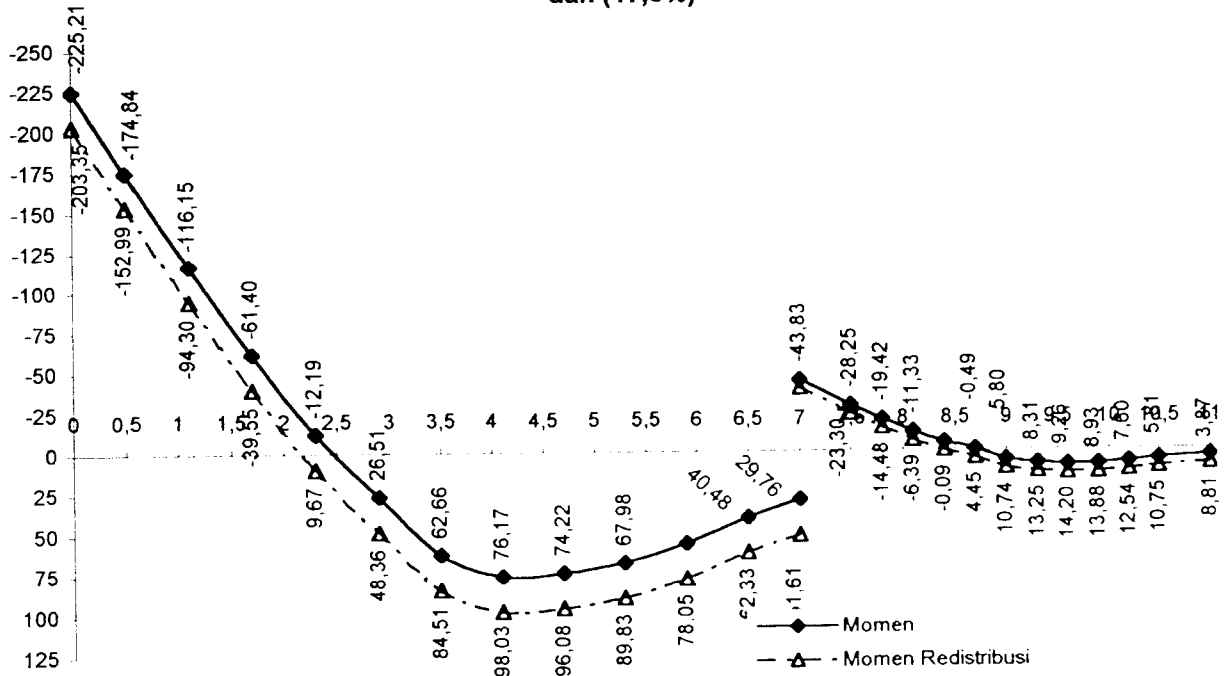
**Grafik Momen Lantai 10
Akibat Gempa (12,5%) dan (0%)**



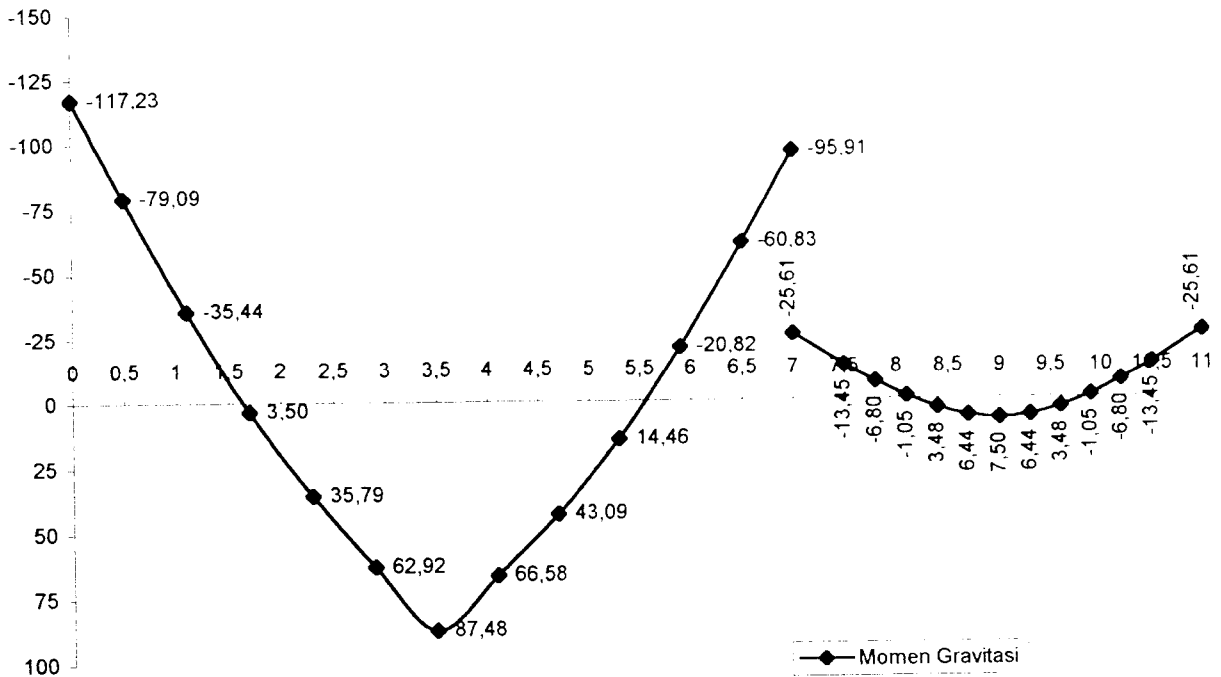
**Grafik Momen Lantai 10
Akibat Berat Sendiri**



Grafik Momen Lantai 12
Akibat Gempa (12,5%
dan (17,5%)



Momen Akibat Lantai 12
Akibat Berat Sendiri



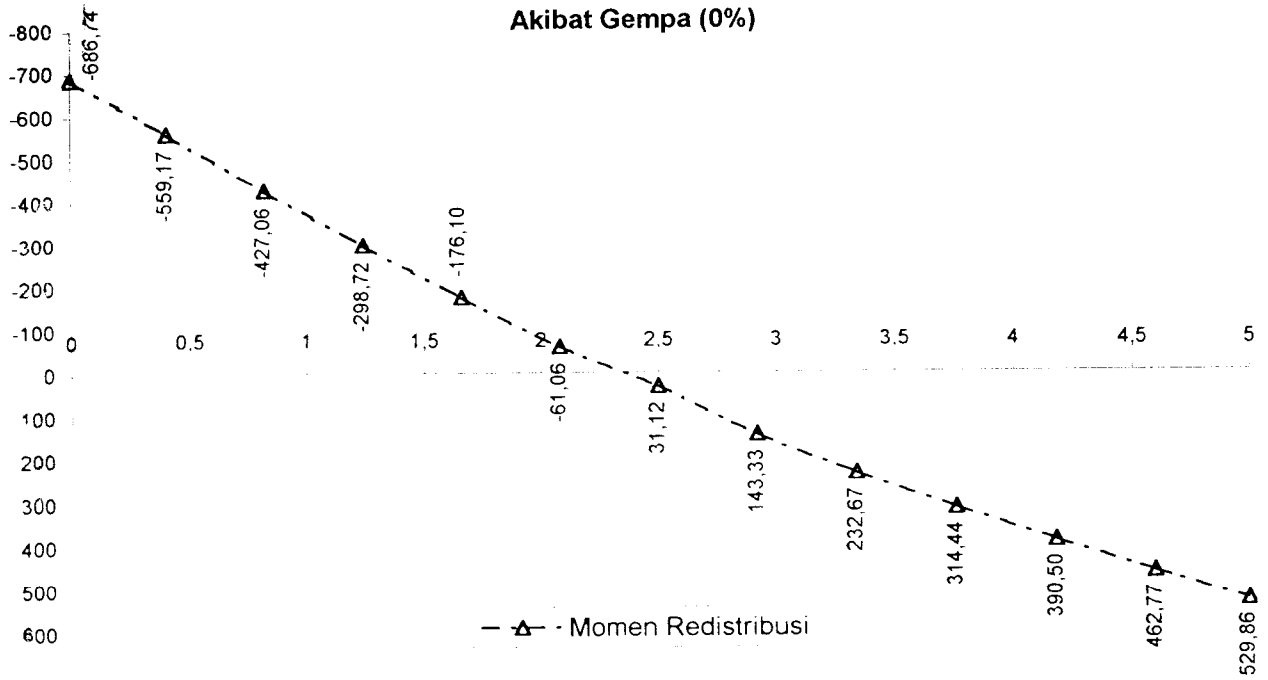
Tabel 1.2.1.2 Momen Redistribusi Balok untuk R/W 1/1 Lama Portal 2

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| 3 | 147 | 0 | -95,68401 | 529,8089 | -686,7369 | 467,6463 | -575,1073 | 529,8089 | -686,7369 | -686,7369 | 0 | 0,0000 | -686,7369 | M - maks : |
| | | 0,4 | -58,80302 | 462,7303 | -559,1706 | 404,9381 | -470,9769 | 462,7303 | -559,1706 | -559,1706 | 0 | 0,0000 | -559,1706 | -559,1706 |
| | | 0,82 | -22,30953 | 390,4677 | -427,0559 | 337,8411 | -362,8935 | 390,4677 | -427,0559 | -427,0559 | 0 | 0,0000 | -427,0559 | M + maks : |
| | | 1,24 | 9,574579 | 314,4251 | -298,7214 | 268,1549 | -257,3992 | 314,4251 | -298,7214 | -298,7214 | 0 | 0,0000 | -298,7214 | 462,7697 |
| | | 1,66 | 34,48838 | 232,6662 | -176,1031 | 194,5534 | -155,8203 | 232,6662 | -176,1031 | -176,1031 | 0 | 0,0000 | -176,1031 | p/p : |
| | | 2,08 | 50,17051 | 143,3368 | -61,05535 | 115,7668 | -59,42641 | 143,3368 | -61,05535 | -61,05535 | 0 | 0,0000 | -61,05535 | -0,827600199 |
| | | 2,5 | 55,43673 | 45,46637 | 45,45143 | 31,13284 | 31,12004 | 45,46637 | 31,12004 | 31,12004 | 0 | 0,0000 | 31,12004 | |
| | | 2,92 | 50,18372 | -61,02955 | 143,3327 | -59,40607 | 115,7616 | 143,3327 | -61,02955 | 143,3327 | 0 | 0,0000 | 143,3327 | M - red maks : |
| | | 3,34 | 34,51479 | -176,0664 | 232,673 | -155,7924 | 194,5557 | 232,673 | -176,0664 | 232,673 | 0 | 0,0000 | 232,673 | -559,1706 |
| | | 3,76 | 9,614202 | -298,6739 | 314,4427 | -257,3638 | 268,1647 | 314,4427 | -298,6739 | 314,4427 | 0 | 0,0000 | 314,4427 | M + red maks : |
| | | 4,18 | -22,25669 | -426,9976 | 390,4963 | -362,8506 | 337,8585 | 390,4963 | -426,9976 | 390,4963 | 0 | 0,0000 | 390,4963 | 462,7697 |
| | | 4,6 | -58,73699 | -559,1013 | 462,7697 | -470,9264 | 404,963 | 462,7697 | -559,1013 | 462,7697 | 0 | 0,0000 | 462,7697 | p/p red : |
| 5 | -95,60539 | -686,6573 | 529,8586 | -575,0496 | 467,6784 | 529,8586 | -686,6573 | 529,8586 | 0 | 0,0000 | 529,8586 | -0,827600199 | | |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 4 | 148 | 0 | -95,69376 | 511,4282 | -668,3723 | 451,8927 | -559,3649 | 511,4282 | -668,3723 | -668,3723 | 0 | 0,0000 | -668,3723 | M - maks : |
| | | 0,4 | -58,81086 | 447,2912 | -543,7443 | 391,7056 | -457,7534 | 447,2912 | -543,7443 | -543,7443 | 0 | 0,0000 | -543,7443 | -543,7443 |
| | | 0,82 | -22,31535 | 378,1173 | -414,7151 | 327,2558 | -352,3148 | 378,1173 | -414,7151 | -414,7151 | 0 | 0,0000 | -414,7151 | M + maks : |
| | | 1,24 | 9,570776 | 305,1633 | -289,4659 | 260,2167 | -249,4654 | 305,1633 | -289,4659 | -289,4659 | 0 | 0,0000 | -289,4659 | 447,3425 |
| | | 1,66 | 34,4866 | 226,4931 | -169,9329 | 189,2624 | -150,5313 | 226,4931 | -169,9329 | -169,9329 | 0 | 0,0000 | -169,9329 | p/p : |
| | | 2,08 | 50,17074 | 140,2523 | -57,9705 | 113,123 | -56,78228 | 140,2523 | -57,9705 | -57,9705 | 0 | 0,0000 | -57,9705 | -0,822707475 |
| | | 2,5 | 55,43898 | 45,47056 | 45,45094 | 31,13614 | 31,11932 | 45,47056 | 31,11932 | 31,11932 | 0 | 0,0000 | 31,11932 | |
| | | 2,92 | 50,18798 | -57,93668 | 140,2469 | -56,75561 | 113,116 | 140,2469 | -57,93668 | 140,2469 | 0 | 0,0000 | 140,2469 | M - red maks : |
| | | 3,34 | 34,52108 | -169,8849 | 226,5018 | -150,4948 | 189,2652 | 226,5018 | -169,8849 | 226,5018 | 0 | 0,0000 | 226,5018 | -543,7443 |
| | | 3,76 | 9,622505 | -289,4037 | 305,1862 | -249,4191 | 260,2294 | 305,1862 | -289,4037 | 305,1862 | 0 | 0,0000 | 305,1862 | M + red maks : |
| | | 4,18 | -22,24637 | -414,6387 | 378,1544 | -352,2586 | 327,2783 | 378,1544 | -414,6387 | 378,1544 | 0 | 0,0000 | 378,1544 | 447,3425 |
| | | 4,6 | -58,72465 | -543,6538 | 447,3425 | -457,6873 | 391,738 | 447,3425 | -543,6538 | 447,3425 | 0 | 0,0000 | 447,3425 | p/p red : |
| 5 | -95,59113 | -668,2682 | 511,493 | -559,2894 | 451,9344 | 511,493 | -668,2682 | 511,493 | 0 | 0,0000 | 511,493 | -0,822707475 | | |

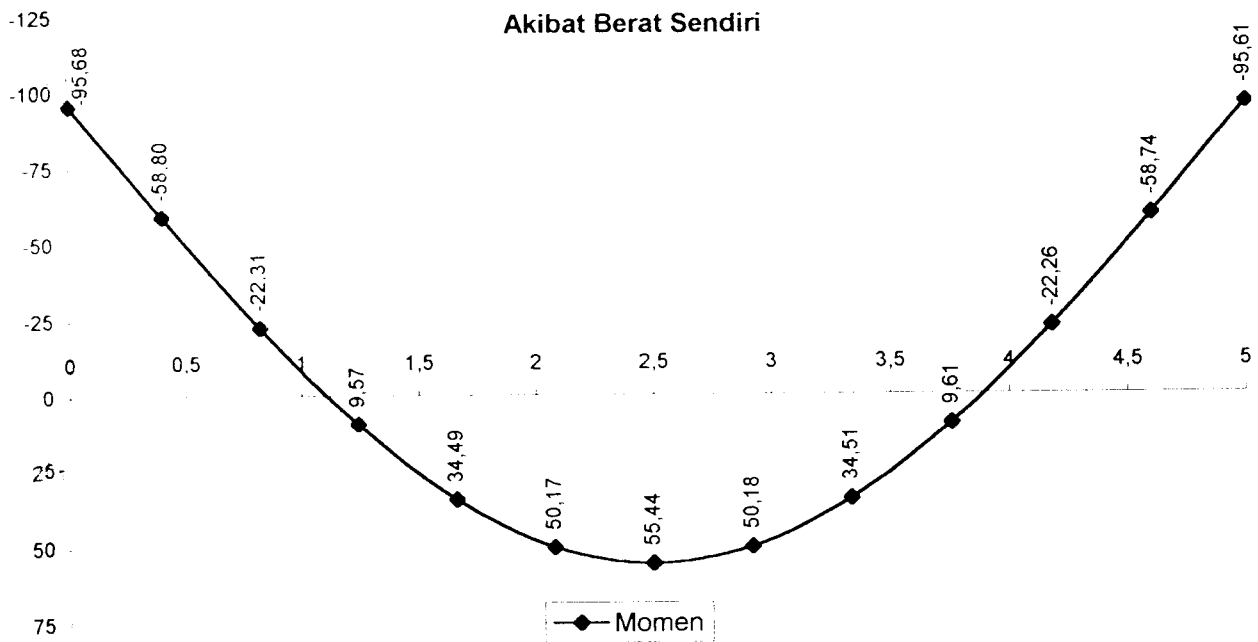
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| 7 | 151 | 0 | -95,71854 | 373,2434 | -530,2283 | 333,4519 | -440,9523 | 373,2434 | -530,2283 | -530,2283 | 0 | 0,0000 | -530,2283 | M - maks : |
| | | 0,4 | -58,83078 | 331,2176 | -427,7036 | 292,2167 | -358,2871 | 331,2176 | -427,7036 | -427,7036 | 0 | 0,0000 | -427,7036 | -427,7036 |
| | | 0,82 | -22,33015 | 285,2605 | -321,8827 | 247,6662 | -272,7422 | 285,2605 | -321,8827 | -321,8827 | 0 | 0,0000 | -321,8827 | M + maks : |
| | | 1,24 | 9,561071 | 235,5233 | -219,8418 | 200,5266 | -169,7864 | 235,5233 | -219,8418 | -219,8418 | 0 | 0,0000 | -219,8418 | 331,2994 |
| | | 1,66 | 34,48199 | 180,0699 | -123,5172 | 149,4716 | -110,7459 | 180,0699 | -123,5172 | -123,5172 | 0 | 0,0000 | -123,5172 | p/p : |
| | | 2,08 | 50,17124 | 117,0459 | -34,76323 | 93,23167 | -36,8904 | 117,0459 | -36,8904 | -36,8904 | 0 | 0,0000 | -36,8904 | -0,774600448 |
| | | 2,5 | 55,44458 | 45,4809 | 45,44982 | 31,14425 | 31,11761 | 45,4809 | 31,11761 | 31,11761 | 0 | 0,0000 | 31,11761 | |
| | | 2,92 | 50,19869 | -34,70957 | 117,0374 | -36,84809 | 93,2207 | 117,0374 | -36,84809 | 117,0374 | 0 | 0,0000 | 117,0374 | M - red maks : |
| | | 3,34 | 34,53689 | -123,441 | 180,084 | -110,6879 | 149,4763 | 180,084 | -123,441 | 180,084 | 0 | 0,0000 | 180,084 | -427,7036 |
| | | 3,76 | 9,643419 | -219,743 | 235,56 | -189,7127 | 200,547 | 235,56 | -219,743 | 235,56 | 0 | 0,0000 | 235,56 | M + red maks : |
| | | 4,18 | -22,22036 | -321,7612 | 285,3198 | -272,6529 | 247,7023 | 285,3198 | -321,7612 | 285,3198 | 0 | 0,0000 | 285,3198 | 331,2994 |
| | | 4,6 | -58,69353 | -427,5595 | 331,2994 | -358,1822 | 292,2684 | 331,2994 | -427,5595 | 331,2994 | 0 | 0,0000 | 331,2994 | p/p red : |
| 5 | -95,55515 | -530,0627 | 373,3467 | -440,8324 | 333,5185 | 373,3467 | -530,0627 | 373,3467 | 0 | 0,0000 | 373,3467 | -0,774600448 | | |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 10 | 154 | 0 | -95,73193 | 151,7472 | -308,7542 | 143,5998 | -251,1156 | 151,7472 | -308,7542 | -308,7542 | 0 | 0,0000 | -308,7542 | M - maks : |
| | | 0,4 | -58,84142 | 145,1619 | -241,6654 | 132,7418 | -198,8245 | 145,1619 | -241,6654 | -241,6654 | 0 | 0,0000 | -241,6654 | -241,6654 |
| | | 0,82 | -22,33792 | 136,4174 | -173,0523 | 120,0874 | -145,1723 | 136,4174 | -173,0523 | -173,0523 | 0 | 0,0000 | -173,0523 | M + maks : |
| | | 1,24 | 9,556191 | 123,8927 | -108,2193 | 104,8439 | -94,1093 | 123,8927 | -108,2193 | -108,2193 | 0 | 0,0000 | -108,2193 | 145,2596 |
| | | 1,66 | 34,48 | 105,6519 | -49,10252 | 85,68504 | -46,96158 | 105,6519 | -49,10252 | -49,10252 | 0 | 0,0000 | -49,10252 | p/p : |
| | | 2,08 | 50,17213 | 79,8404 | 2,443679 | 61,34115 | -4,998901 | 79,8404 | -4,998901 | -4,998901 | 0 | 0,0000 | -4,998901 | -0,601077357 |
| | | 2,5 | 55,44836 | 45,48799 | 45,44894 | 31,14981 | 31,11633 | 45,48799 | 31,11633 | 31,11633 | 0 | 0,0000 | 31,11633 | |
| | | 2,92 | 50,20536 | 2,510075 | 79,82867 | -4,946446 | 61,32664 | 79,82867 | -4,946446 | 79,82867 | 0 | 0,0000 | 79,82867 | M - red maks : |
| | | 3,34 | 34,54644 | -49,00879 | 105,6675 | -46,89016 | 85,6895 | 105,6675 | -49,00879 | 105,6675 | 0 | 0,0000 | 105,6675 | -241,6654 |
| | | 3,76 | 9,655851 | -108,0983 | 123,9357 | -94,0189 | 104,8673 | 123,9357 | -108,0983 | 123,9357 | 0 | 0,0000 | 123,9357 | M + red maks : |
| | | 4,18 | -22,20504 | -172,9039 | 136,4877 | -145,063 | 120,1298 | 136,4877 | -172,9039 | 136,4877 | 0 | 0,0000 | 136,4877 | 145,2596 |
| | | 4,6 | -58,67532 | -241,4897 | 145,2596 | -198,6962 | 132,8032 | 145,2596 | -241,4897 | 145,2596 | 0 | 0,0000 | 145,2596 | p/p red : |
| 5 | -95,5342 | -225,0892 | 129,8931 | -185,886 | -7,8325 | 129,8931 | -225,0892 | 129,8931 | 0 | 0,0000 | 129,8931 | -0,601077357 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|---|------------|------------|----------------|
| 12 | 156 | 0 | -78,44711 | 16,10892 | -149,1821 | 19,21951 | -122,4585 | 19,21951 | -149,1821 | -149,1821 | 2 | -11,18341 | -137,99869 | M - maks : |
| | | 0,4 | -48,20546 | 28,54153 | -110,3142 | 27,79014 | -91,22908 | 28,54153 | -110,3142 | -110,3142 | 2 | -11,18341 | -99,130788 | -110,3142 |
| | | 0,82 | -18,28158 | 40,04366 | -71,055 | 35,58497 | -59,64245 | 40,04366 | -71,055 | -71,055 | 2 | -11,18341 | -59,871588 | M + maks : |
| | | 1,24 | 7,862608 | 48,33981 | -35,00176 | 40,89219 | -30,54344 | 48,33981 | -35,00176 | -35,00176 | 2 | -11,18341 | -23,818348 | 51,75279 |
| | | 1,66 | 28,29116 | 51,78791 | -3,79658 | 42,43765 | -5,206194 | 51,78791 | -5,206194 | -5,206194 | 2 | -11,18341 | 5,977218 | p/p : |
| | | 2,08 | 41,15031 | 48,81561 | 20,98821 | 39,00154 | 15,14948 | 48,81561 | 15,14948 | 15,14948 | 2 | -11,18341 | 26,332892 | -0,469139875 |
| | | 2,5 | 45,47185 | 38,60211 | 38,5318 | 29,94803 | 29,88776 | 38,60211 | 29,88776 | 29,88776 | 2 | -11,18341 | 41,071172 | |
| | | 2,92 | 41,17167 | 21,07612 | 48,7629 | 15,22202 | 38,95354 | 48,7629 | 15,22202 | 48,7629 | 2 | -11,18341 | 59,946312 | M - red maks : |
| | | 3,34 | 28,33389 | -3,691069 | 51,75279 | -5,121395 | 42,40191 | 51,75279 | -5,121395 | 51,75279 | 2 | -11,18341 | 62,936202 | -99,130788 |
| | | 3,76 | 7,926708 | -34,87865 | 48,3223 | -30,44638 | 40,86872 | 48,3223 | -34,87865 | 48,3223 | 2 | -11,18341 | 59,505712 | M + red maks : |
| | | 4,18 | -18,19612 | -70,91429 | 40,04375 | -59,53312 | 35,57377 | 40,04375 | -70,91429 | 40,04375 | 2 | -11,18341 | 51,227162 | 62,936202 |
| | | 4,6 | -48,09863 | -110,1559 | 28,55921 | -91,10748 | 27,79119 | 28,55921 | -110,1559 | 28,55921 | 2 | -11,18341 | 39,742622 | p/p red |
| | | 5 | -78,31993 | -149,0071 | 16,14337 | -122,3253 | 19,23225 | 19,23225 | -149,0071 | 19,23225 | 2 | -11,18341 | 30,415662 | -0,634880477 |

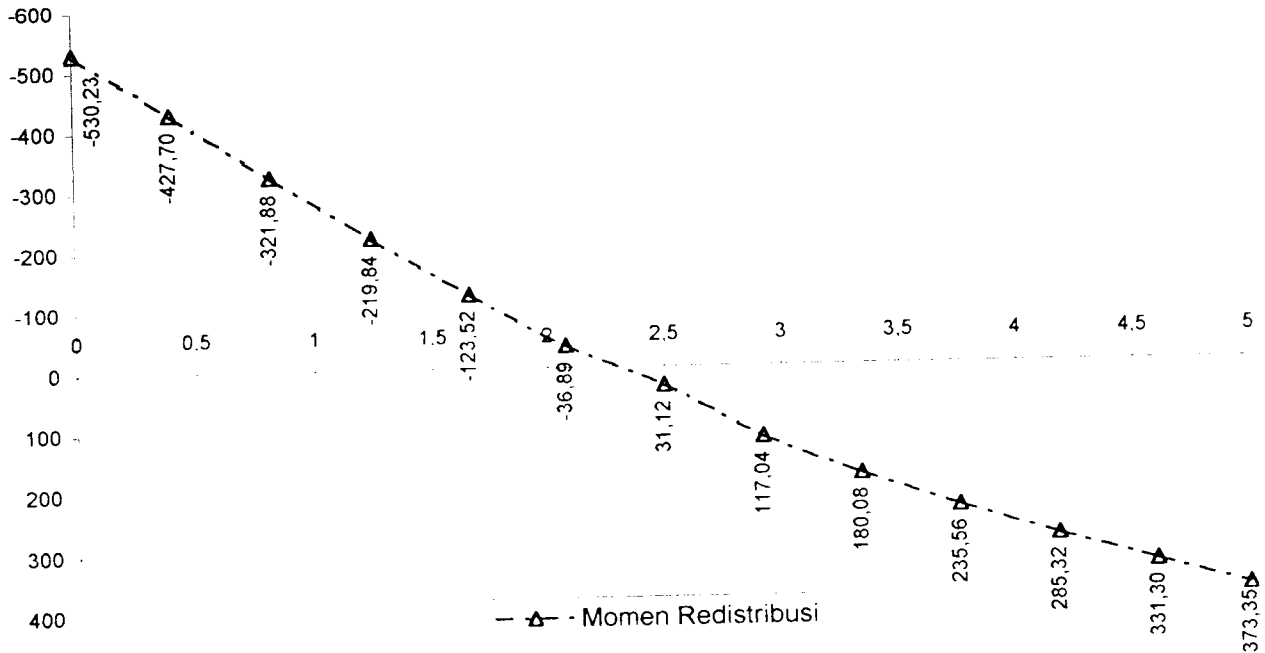
**Grafik Momen Lantai 3
Akibat Gempa (0%)**



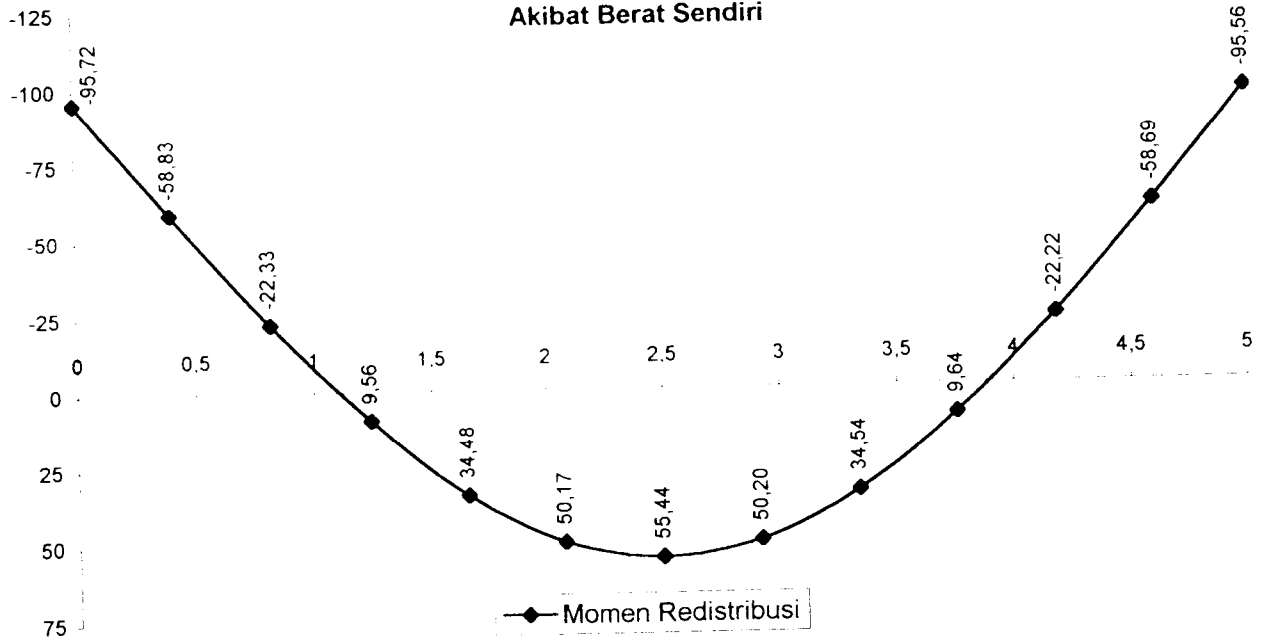
**Grafik Momen Lantai 3
Akibat Berat Sendiri**



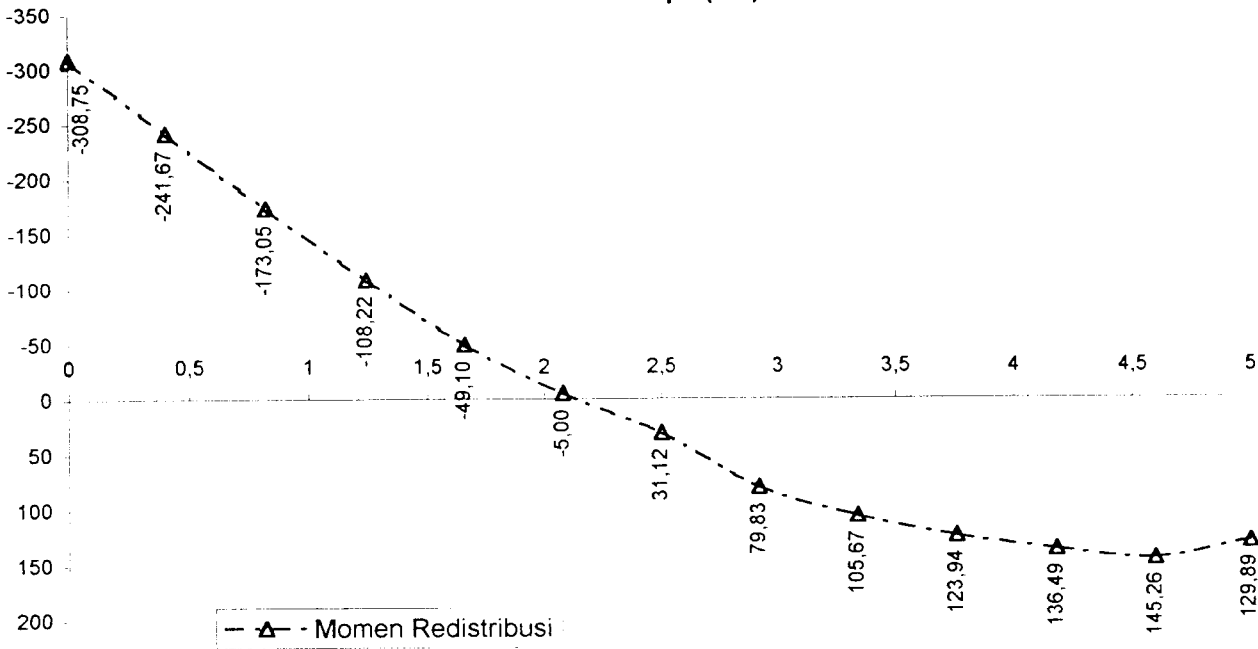
**Grafik Momen Lantai 7
Akibat Gempa (0%)**



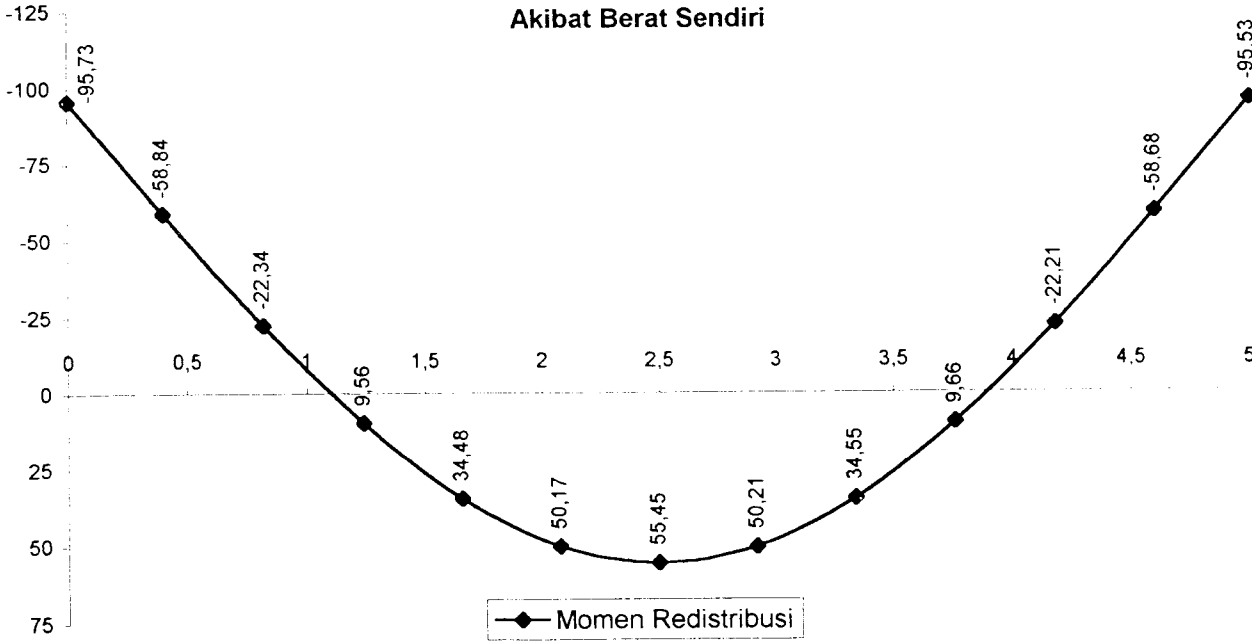
**Grafik Momen Lantai 7
Akibat Berat Sendiri**



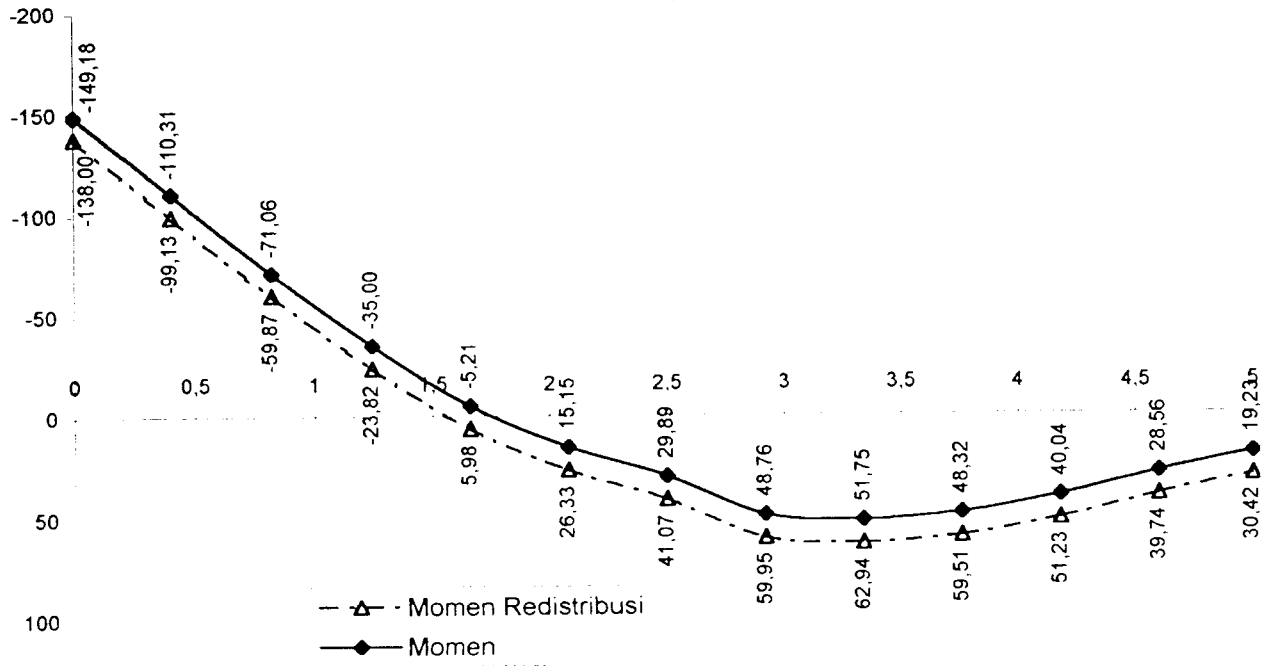
Grafik Momen Lantai 10
Akibat Gempa (0%)



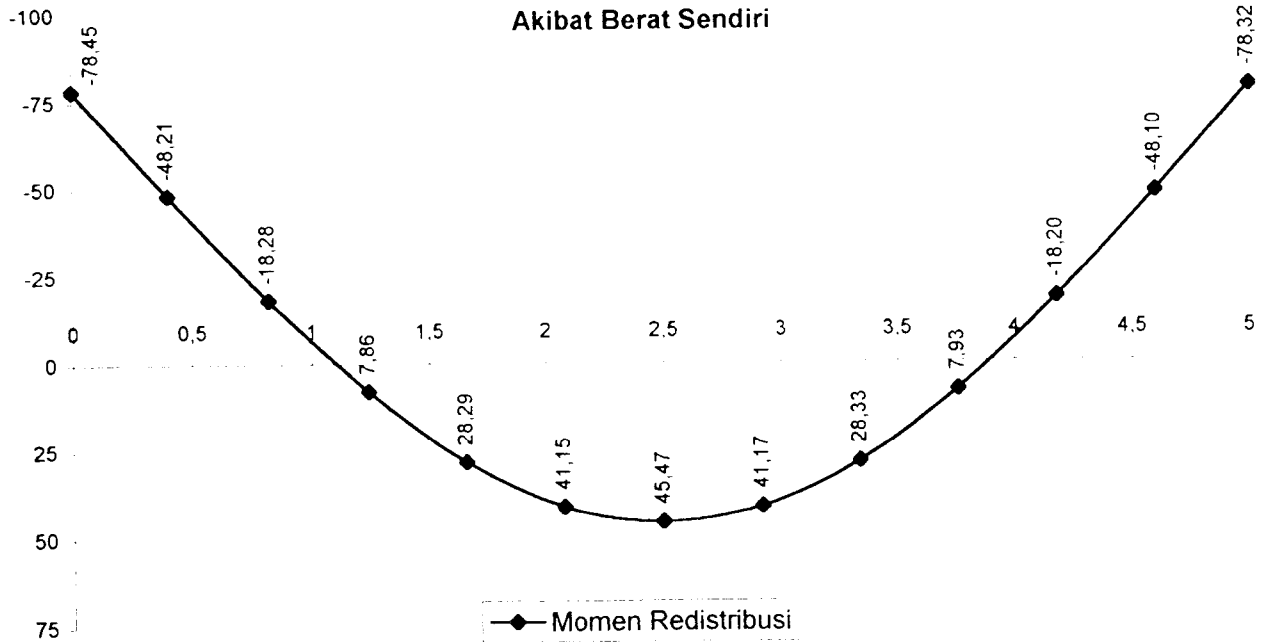
Grafik Momen Lantai 10
Akibat Berat Sendiri



Grafik Momen Lantai 12
Akibat Gempa (2%)



Grafik Momen Lantai 12
Akibat Berat Sendiri



Tabel 1.2.2.1 Momen Kapasitas Tulangan Tumpuan Aktual untuk RW 1/1 Lama Portal E

| Lantai | Frame | M(-) | | | | | | | | | | | | M(+) | | | | | | | | | | | |
|--------|-------|------|-----|----|-----|----------|-----------------|---|-----------|----------|----------|-----------------|----|-----------|------|-----------------|----------|-----------------|-----------|------|---|-----------------|--|--|--|
| | | b | h | d' | d | As pakai | | | Mterseada | Mkap | As pakai | | | Mterseada | Mkap | As pakai | | | Mterseada | Mkap | | | | | |
| | | | | | | n | mm ² | n | | | n | mm ² | n | | | mm ² | n | mm ² | | | n | mm ² | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | | |
| 1 | 49 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 5 | 1899,7000 | 521,2507 | 693,4891 | 849,5256 | 5 | 1899,7 | 9 | 3419,4600 | 360,2694 | 397,8673 | 492,7449 | | | | | | |
| 2 | 50 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 5 | 1899,7000 | 521,2507 | 693,4891 | 849,5256 | 5 | 1899,7 | 9 | 3419,4600 | 360,2694 | 397,8673 | 492,7449 | | | | | | |
| 3 | 51 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 5 | 1899,7000 | 521,2507 | 693,4891 | 849,5256 | 5 | 1899,7 | 9 | 3419,4600 | 360,2694 | 397,8673 | 492,7449 | | | | | | |
| 4 | 52 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 5 | 1899,7000 | 523,3672 | 693,4891 | 849,5256 | 5 | 1899,7 | 9 | 3419,4600 | 360,2969 | 397,8673 | 492,7449 | | | | | | |
| 5 | 53 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 5 | 1899,7000 | 523,3672 | 693,4891 | 849,5256 | 5 | 1899,7 | 9 | 3419,4600 | 360,2969 | 397,8673 | 492,7449 | | | | | | |
| 6 | 54 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 5 | 1899,7000 | 523,3672 | 693,4891 | 849,5256 | 5 | 1899,7 | 9 | 3419,4600 | 360,2969 | 397,8673 | 492,7449 | | | | | | |
| 7 | 55 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 438,6615 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 270,9963 | 321,8007 | 397,8694 | | | | | | |
| 8 | 56 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 438,6615 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 270,9963 | 321,8007 | 397,8694 | | | | | | |
| 9 | 57 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 438,6615 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 270,9963 | 321,8007 | 397,8694 | | | | | | |
| 10 | 58 | 300 | 650 | 75 | 575 | 5 | 1899,7 | 3 | 1139,8200 | 248,4539 | 397,2563 | 489,7623 | 3 | 1139,82 | 5 | 1899,7000 | 159,4718 | 245,6263 | 302,8348 | | | | | | |
| 11 | 59 | 300 | 650 | 75 | 575 | 5 | 1899,7 | 3 | 1139,8200 | 248,4539 | 397,2563 | 489,7623 | 3 | 1139,82 | 5 | 1899,7000 | 159,4718 | 245,6263 | 302,8348 | | | | | | |
| 12 | 60 | 300 | 650 | 75 | 575 | 4 | 1519,76 | 2 | 759,8800 | 152,9867 | 321,7858 | 396,5371 | 2 | 759,88 | 4 | 1519,7600 | 98,0294 | 167,5264 | 207,1436 | | | | | | |
| 1 | 61 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 7 | 2659,5800 | 530,9684 | 697,9831 | 861,0973 | 7 | 2659,58 | 9 | 3419,4600 | 506,1865 | 549,5029 | 681,2250 | | | | | | |
| 2 | 62 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 7 | 2659,5800 | 530,9684 | 697,9831 | 861,0973 | 7 | 2659,58 | 9 | 3419,4600 | 506,1865 | 549,5029 | 681,2250 | | | | | | |
| 3 | 63 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 7 | 2659,5800 | 530,9684 | 697,9831 | 861,0973 | 7 | 2659,58 | 9 | 3419,4600 | 506,1865 | 549,5029 | 681,2250 | | | | | | |
| 4 | 64 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 7 | 2659,5800 | 514,2419 | 697,9831 | 861,0973 | 7 | 2659,58 | 9 | 3419,4600 | 489,5932 | 549,5029 | 681,2250 | | | | | | |
| 5 | 65 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 7 | 2659,5800 | 514,2419 | 697,9831 | 861,0973 | 7 | 2659,58 | 9 | 3419,4600 | 489,5932 | 549,5029 | 681,2250 | | | | | | |
| 6 | 66 | 300 | 650 | 75 | 575 | 9 | 3419,46 | 7 | 2659,5800 | 514,2419 | 697,9831 | 861,0973 | 7 | 2659,58 | 9 | 3419,4600 | 489,5932 | 549,5029 | 681,2250 | | | | | | |
| 7 | 67 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 5 | 1899,7000 | 367,2373 | 547,6961 | 675,5732 | 5 | 1899,7 | 7 | 2659,5800 | 342,7328 | 397,8598 | 492,5070 | | | | | | |
| 8 | 68 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 5 | 1899,7000 | 367,2373 | 547,6961 | 675,5732 | 5 | 1899,7 | 7 | 2659,5800 | 342,7328 | 397,8598 | 492,5070 | | | | | | |
| 9 | 69 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 5 | 1899,7000 | 367,2373 | 547,6961 | 675,5732 | 5 | 1899,7 | 7 | 2659,5800 | 342,7328 | 397,8598 | 492,5070 | | | | | | |
| 10 | 70 | 300 | 650 | 75 | 575 | 4 | 1519,76 | 2 | 759,8800 | 152,1421 | 321,7858 | 396,5371 | 2 | 759,88 | 4 | 1519,7600 | 127,5347 | 167,5264 | 207,1436 | | | | | | |
| 11 | 71 | 300 | 650 | 75 | 575 | 4 | 1519,76 | 2 | 759,8800 | 152,1421 | 321,7858 | 396,5371 | 2 | 759,88 | 4 | 1519,7600 | 127,5347 | 167,5264 | 207,1436 | | | | | | |
| 12 | 72 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 2 | 759,8800 | 23,3022 | 245,7155 | 302,8713 | 2 | 759,88 | 3 | 1139,8200 | 14,2033 | 167,5264 | 207,1436 | | | | | | |

Tabel 1.2.2.2 Momen Kapasitas Tulangan Tumpuan Aktual untuk RW 1/1 Lama Portal 2

| Lantai | Frame | M(-) | | | | | | | | | | | | M(+) | | | | | | | | | | | |
|--------|-------|------|-----|----|-----|----------|-----------------|---|-----------|----------|----------|-----------------|----|-----------|------|-----------------|----------|-----------------|-----------|------|--|--|--|--|--|
| | | b | h | d' | d | As pakai | | | Mterseada | Mkap | As pakai | | | Mterseada | Mkap | As pakai | | | Mterseada | Mkap | | | | | |
| | | | | | | n | mm ² | n | | | n | mm ² | n | | | mm ² | n | mm ² | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | | |
| 1 | 145 | 300 | 650 | 75 | 575 | 10 | 3799,4 | 6 | 2279,6400 | 559,1706 | 768,3497 | 941,4481 | 6 | 2279,64 | 10 | 3799,4000 | 462,7697 | 473,8302 | 587,4492 | | | | | | |
| 2 | 146 | 300 | 650 | 75 | 575 | 10 | 3799,4 | 6 | 2279,6400 | 559,1706 | 768,3497 | 941,4481 | 6 | 2279,64 | 10 | 3799,4000 | 462,7697 | 473,8302 | 587,4492 | | | | | | |
| 3 | 147 | 300 | 650 | 75 | 575 | 10 | 3799,4 | 6 | 2279,6400 | 559,1706 | 768,3497 | 941,4481 | 6 | 2279,64 | 10 | 3799,4000 | 462,7697 | 473,8302 | 587,4492 | | | | | | |
| 4 | 148 | 300 | 650 | 75 | 575 | 10 | 3799,4 | 6 | 2279,6400 | 543,7443 | 768,3497 | 941,4481 | 6 | 2279,64 | 10 | 3799,4000 | 447,3425 | 473,8302 | 587,4492 | | | | | | |
| 5 | 149 | 300 | 650 | 75 | 575 | 10 | 3799,4 | 6 | 2279,6400 | 543,7443 | 768,3497 | 941,4481 | 6 | 2279,64 | 10 | 3799,4000 | 447,3425 | 473,8302 | 587,4492 | | | | | | |
| 6 | 150 | 300 | 650 | 75 | 575 | 10 | 3799,4 | 6 | 2279,6400 | 543,7443 | 768,3497 | 941,4481 | 6 | 2279,64 | 10 | 3799,4000 | 447,3425 | 473,8302 | 587,4492 | | | | | | |
| 7 | 151 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 5 | 1899,7000 | 427,7036 | 621,2579 | 764,0750 | 5 | 1899,70 | 8 | 3039,5200 | 331,2994 | 397,8694 | 492,6556 | | | | | | |
| 8 | 152 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 5 | 1899,7000 | 427,7036 | 621,2579 | 764,0750 | 5 | 1899,70 | 8 | 3039,5200 | 331,2994 | 397,8694 | 492,6556 | | | | | | |
| 9 | 153 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 5 | 1899,7000 | 427,7036 | 621,2579 | 764,0750 | 5 | 1899,70 | 8 | 3039,5200 | 331,2994 | 397,8694 | 492,6556 | | | | | | |
| 10 | 154 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 5 | 1899,7000 | 427,7036 | 621,2579 | 764,0750 | 5 | 1899,70 | 8 | 3039,5200 | 331,2994 | 397,8694 | 492,6556 | | | | | | |
| 11 | 155 | 300 | 650 | 75 | 575 | 4 | 1519,76 | 2 | 759,8800 | 241,6654 | 321,7858 | 396,5371 | 2 | 759,88 | 4 | 1519,7600 | 145,2596 | 167,5264 | 207,1436 | | | | | | |
| 12 | 156 | 300 | 650 | 75 | 575 | 4 | 1519,76 | 2 | 759,8800 | 241,6654 | 321,7858 | 396,5371 | 2 | 759,88 | 4 | 1519,7600 | 145,2596 | 167,5264 | 207,1436 | | | | | | |
| | | 300 | 650 | 75 | 575 | 3 | 1139,82 | 2 | 759,8800 | 99,1308 | 245,7155 | 302,8713 | 2 | 759,88 | 3 | 1139,8200 | 62,9362 | 167,5264 | 207,1436 | | | | | | |

Tabel 1.2.3.1 Momen Kapasitas Tulangan Lapangan untuk R/W 1/1 Lama Portal E

| Lantai | Frame | b mm | h mm | d' mm | d mm | M (-) | | | | | | |
|--------|-------|---------|---------|----------|---------|----------|-----------------|-----------|-----------------|----------|-----------|----------|
| | | | | | | As pakai | | As' pakai | | Mperlu | Mtersedia | Mkap |
| | | | | | | n | mm ² | n | mm ² | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | 49 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3238 | 245,8550 | 302,2239 |
| 2 | 50 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3238 | 245,8550 | 302,2239 |
| 3 | 51 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3238 | 245,8550 | 302,2239 |
| 4 | 52 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,2972 | 245,8550 | 302,2239 |
| 5 | 53 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,2972 | 245,8550 | 302,2239 |
| 6 | 54 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,2972 | 245,8550 | 302,2239 |
| 7 | 55 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3021 | 245,8550 | 302,2239 |
| 8 | 56 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3021 | 245,8550 | 302,2239 |
| 9 | 57 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3021 | 245,8550 | 302,2239 |
| 10 | 58 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3839 | 245,8550 | 302,2239 |
| 11 | 59 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3839 | 245,8550 | 302,2239 |
| 12 | 60 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 87,4820 | 245,8550 | 302,2239 |
| 1 | 61 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,1844 | 245,8550 | 302,2239 |
| 2 | 62 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,1844 | 245,8550 | 302,2239 |
| 3 | 63 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,1844 | 245,8550 | 302,2239 |
| 4 | 64 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,2667 | 245,8550 | 302,2239 |
| 5 | 65 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,2667 | 245,8550 | 302,2239 |
| 6 | 66 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,2667 | 245,8550 | 302,2239 |
| 7 | 67 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,3590 | 245,8550 | 302,2239 |
| 8 | 68 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,3590 | 245,8550 | 302,2239 |
| 9 | 69 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,3590 | 245,8550 | 302,2239 |
| 10 | 70 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,3128 | 245,8550 | 302,2239 |
| 11 | 71 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,3128 | 245,8550 | 302,2239 |
| 12 | 72 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 7,5033 | 245,8550 | 302,2239 |

Tabel 1.2.3.2 Momen Kapasitas Tulangan Lapangan untuk R/W 1/1 Lama Portal 2

| Lantai | Frame | b mm | h mm | d' mm | d mm | M (-) | | | | | | |
|--------|-------|---------|---------|----------|---------|----------|-----------------|-----------|-----------------|---------|-----------|----------|
| | | | | | | As pakai | | As' pakai | | Mperlu | Mtersedia | Mkap |
| | | | | | | n | mm ² | n | mm ² | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | 145 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4367 | 245,8550 | 302,2239 |
| 2 | 146 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4367 | 245,8550 | 302,2239 |
| 3 | 147 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4367 | 245,8550 | 302,2239 |
| 4 | 148 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4390 | 245,8550 | 302,2239 |
| 5 | 149 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4390 | 245,8550 | 302,2239 |
| 6 | 150 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4390 | 245,8550 | 302,2239 |
| 7 | 151 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4446 | 245,8550 | 302,2239 |
| 8 | 152 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4446 | 245,8550 | 302,2239 |
| 9 | 153 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4446 | 245,8550 | 302,2239 |
| 10 | 154 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4484 | 245,8550 | 302,2239 |
| 11 | 155 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4484 | 245,8550 | 302,2239 |
| 12 | 156 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 51,7528 | 245,8550 | 302,2239 |

Tabel 1.2.4.1 Gaya Geser Rencana Balok untuk RW 1/1 Lama Portal E

| Lantai | Frame | h | Ln | d | VD | VL | VE | Vg | Mkap(-) | Mkap(+) | Vu.d | Vu,2h | | Vc | Vu,b (Rb) | x,0 | x,Vc | Vu,b max | |
|--------|-------|------|-----|-------|---------|---------|----------|---------|----------|----------|----------|----------|----------|--------|-----------|----------|-----------|----------|----|
| | | | | | | | | | | | | kN | kN | | | | | kN | kN |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 19 |
| 1 | 49 | 0,65 | 6,1 | 0,575 | 61,8764 | 15,2229 | 91,20988 | 77,0993 | 849,5256 | 492,7449 | 234,9853 | 205,9467 | 169,3327 | 143,75 | -73,07677 | 4,652992 | 1,866569 | 464,0358 | |
| 2 | 50 | 0,65 | 6,1 | 0,575 | 61,5814 | 15,0623 | 126,5777 | 76,6437 | 849,5256 | 492,7449 | 234,5069 | 205,4683 | 168,8543 | 143,75 | -73,55515 | 4,643519 | 1,797096 | 612,1022 | |
| 3 | 51 | 0,65 | 6,1 | 0,575 | 61,3573 | 14,9367 | 138,0807 | 76,294 | 849,5256 | 492,7449 | 233,1397 | 205,1011 | 168,4871 | 143,75 | -73,92236 | 4,636248 | 1,789825 | 660,0476 | |
| 4 | 52 | 0,65 | 6,1 | 0,575 | 61,1478 | 14,8216 | 138,4929 | 75,9694 | 849,5256 | 492,7449 | 233,9989 | 204,7603 | 168,1464 | 143,75 | -74,26315 | 4,6295 | 1,783077 | 661,4381 | |
| 5 | 53 | 0,65 | 6,1 | 0,575 | 60,9659 | 14,7222 | 132,9703 | 75,6981 | 849,5256 | 492,7449 | 233,5035 | 204,4649 | 167,8509 | 143,75 | -74,55855 | 4,623651 | 1,777228 | 637,9477 | |
| 6 | 54 | 0,65 | 6,1 | 0,575 | 60,8077 | 14,6369 | 123,6282 | 75,4446 | 849,5256 | 492,7449 | 233,2478 | 204,2092 | 167,5953 | 143,75 | -74,81424 | 4,618588 | 1,772165 | 598,4552 | |
| 7 | 55 | 0,65 | 6,1 | 0,575 | 60,6732 | 14,5656 | 111,3943 | 75,2388 | 849,5256 | 492,7449 | 231,6081 | 186,6084 | 155,087 | 143,75 | -53,60656 | 4,867037 | 1,560753 | 546,8568 | |
| 8 | 56 | 0,65 | 6,1 | 0,575 | 60,5633 | 14,5082 | 96,77919 | 75,0715 | 757,7089 | 397,8694 | 211,4324 | 186,4326 | 154,9112 | 143,75 | -53,78229 | 4,862995 | 1,556711 | 485,2977 | |
| 9 | 57 | 0,65 | 6,1 | 0,575 | 60,4711 | 14,4641 | 80,26775 | 74,9352 | 757,7089 | 397,8694 | 211,2893 | 186,2896 | 154,7682 | 143,75 | -53,92536 | 4,859704 | 1,55342 | 415,8065 | |
| 10 | 58 | 0,65 | 6,1 | 0,575 | 60,4246 | 14,4353 | 62,68152 | 74,8599 | 489,7623 | 302,8348 | 169,5867 | 152,4097 | 130,7895 | 143,75 | -12,35085 | 5,685833 | 0,865389 | 341,8653 | |
| 11 | 59 | 0,65 | 6,1 | 0,575 | 60,3006 | 14,4087 | 45,83525 | 74,7103 | 489,7623 | 302,8348 | 169,3996 | 152,2526 | 130,6324 | 143,75 | -12,50791 | 5,680566 | 0,860122 | 270,9539 | |
| 12 | 60 | 0,65 | 6,1 | 0,575 | 54,2082 | 3,51412 | 34,10345 | 57,7224 | 396,5371 | 207,1436 | 129,8833 | 116,8233 | 100,3563 | 143,75 | -8,666354 | 5,718442 | -0,610516 | 203,843 | |
| 1 | 61 | 0,65 | 3,1 | 0,575 | 17,112 | 10 | 231,5839 | 27,112 | 861,0973 | 681,225 | 376,7339 | 247,5384 | 84,63959 | 143,75 | -319,7987 | 1,676698 | 1,036922 | 1001,12 | |
| 2 | 62 | 0,65 | 3,1 | 0,575 | 17,112 | 10 | 312,3922 | 27,112 | 861,0973 | 681,225 | 376,7339 | 247,5384 | 84,63959 | 143,75 | -319,7987 | 1,676698 | 1,036922 | 1340,515 | |
| 3 | 63 | 0,65 | 3,1 | 0,575 | 17,112 | 10 | 329,2555 | 27,112 | 861,0973 | 681,225 | 376,7339 | 247,5384 | 84,63959 | 143,75 | -319,7987 | 1,676698 | 1,036922 | 1411,341 | |
| 4 | 64 | 0,65 | 3,1 | 0,575 | 17,112 | 10 | 318,6778 | 27,112 | 861,0973 | 681,225 | 376,7339 | 247,5384 | 84,63959 | 143,75 | -319,7987 | 1,676698 | 1,036922 | 1366,914 | |
| 5 | 65 | 0,65 | 3,1 | 0,575 | 17,112 | 10 | 294,6918 | 27,112 | 861,0973 | 681,225 | 376,7339 | 247,5384 | 84,63959 | 143,75 | -319,7987 | 1,676698 | 1,036922 | 1266,173 | |
| 6 | 66 | 0,65 | 3,1 | 0,575 | 17,112 | 10 | 262,8775 | 27,112 | 861,0973 | 681,225 | 376,7339 | 247,5384 | 84,63959 | 143,75 | -319,7987 | 1,676698 | 1,036922 | 1132,553 | |
| 7 | 67 | 0,65 | 3,1 | 0,575 | 17,112 | 10 | 225,3873 | 27,112 | 675,5732 | 492,507 | 292,2277 | 194,3812 | 71,00955 | 143,75 | -235,2925 | 1,717291 | 0,872537 | 975,0943 | |
| 8 | 68 | 0,65 | 3,1 | 0,575 | 17,112 | 10 | 183,1685 | 27,112 | 675,5732 | 492,507 | 292,2277 | 194,3812 | 71,00955 | 143,75 | -235,2925 | 1,717291 | 0,872537 | 797,7753 | |
| 9 | 69 | 0,65 | 3,1 | 0,575 | 17,112 | 10 | 137,0619 | 27,112 | 675,5732 | 492,507 | 292,2277 | 194,3812 | 71,00955 | 143,75 | -235,2925 | 1,717291 | 0,872537 | 604,1276 | |
| 10 | 70 | 0,65 | 3,1 | 0,575 | 17,112 | 10 | 88,78627 | 27,112 | 396,5371 | 207,1436 | 164,7826 | 114,2141 | 50,45389 | 143,75 | -107,8474 | 1,873697 | 0,239156 | 401,3699 | |
| 11 | 71 | 0,65 | 3,1 | 0,575 | 17,112 | 10 | 42,96586 | 27,112 | 396,5371 | 207,1436 | 164,7826 | 114,2141 | 50,45389 | 143,75 | -107,8474 | 1,873697 | 0,239156 | 208,9242 | |
| 12 | 72 | 0,65 | 3,1 | 0,575 | 15,36 | 4 | 10,7242 | 19,36 | 302,8713 | 207,1436 | 135,4926 | 92,7028 | 38,90294 | 143,75 | -94,83665 | 1,823594 | -0,111136 | 65,36964 | |

Tabel 1.2.4.2 Gaya Geser Rencana Balok untuk RW 1/1 Lama Portal 2

| Lantai | Frame | h | Ln | d | VD | VL | VE | Vg | Mkap(-) | Mkap(+) | Vu.d | Vu,2h | | Vc | Vu,b (Rb) | x,0 | x,Vc | Vu,b max | |
|--------|-------|------|-----|-------|---------|---------|----------|---------|----------|----------|----------|----------|----------|--------|-----------|----------|----------|----------|----|
| | | | | | | | | | | | | kN | kN | | | | | kN | kN |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 19 |
| 1 | 145 | 0,65 | 4,2 | 0,575 | 58,0478 | 14,6086 | 178,6513 | 72,6564 | 941,4481 | 587,4492 | 331,1054 | 261,3343 | 173,362 | 143,75 | -178,527 | 2,728717 | 1,54404 | 826,6247 | |
| 2 | 146 | 0,65 | 4,2 | 0,575 | 58,0445 | 14,6078 | 225,1603 | 72,6523 | 941,4481 | 587,4492 | 331,1012 | 261,3301 | 173,3578 | 143,75 | -178,5313 | 2,728682 | 1,544005 | 1021,958 | |
| 3 | 147 | 0,65 | 4,2 | 0,575 | 58,0413 | 14,607 | 231,7202 | 72,6483 | 941,4481 | 587,4492 | 331,0969 | 261,3258 | 173,3536 | 143,75 | -178,5355 | 2,728647 | 1,54397 | 1049,506 | |
| 4 | 148 | 0,65 | 4,2 | 0,575 | 58,0382 | 14,6063 | 224,7202 | 72,6445 | 941,4481 | 587,4492 | 331,093 | 261,3219 | 173,3496 | 143,75 | -178,5395 | 2,728615 | 1,543937 | 1020,102 | |
| 5 | 149 | 0,65 | 4,2 | 0,575 | 58,0354 | 14,6056 | 211,3292 | 72,641 | 941,4481 | 587,4492 | 331,0893 | 261,3182 | 173,3459 | 143,75 | -178,5431 | 2,728584 | 1,543907 | 963,8557 | |
| 6 | 150 | 0,65 | 4,2 | 0,575 | 58,0328 | 14,605 | 193,5877 | 72,6378 | 941,4481 | 587,4492 | 331,0859 | 261,3142 | 173,3426 | 143,75 | -178,5465 | 2,728557 | 1,543879 | 889,3381 | |
| 7 | 151 | 0,65 | 4,2 | 0,575 | 58,0305 | 14,6045 | 172,0839 | 72,635 | 764,075 | 492,6556 | 285,7219 | 228,3711 | 156,0592 | 143,75 | -133,1893 | 2,864652 | 1,423412 | 799,0192 | |
| 8 | 152 | 0,65 | 4,2 | 0,575 | 58,0286 | 14,604 | 147,0408 | 72,6327 | 764,075 | 492,6556 | 285,7194 | 228,3686 | 156,0567 | 143,75 | -133,1908 | 2,864627 | 1,423387 | 693,8356 | |
| 9 | 153 | 0,65 | 4,2 | 0,575 | 58,027 | 14,6037 | 118,7322 | 72,6307 | 764,075 | 492,6556 | 285,7173 | 228,3656 | 156,0546 | 143,75 | -133,1929 | 2,864606 | 1,423366 | 574,9374 | |
| 10 | 154 | 0,65 | 4,2 | 0,575 | 58,0262 | 14,6035 | 87,7071 | 72,6296 | 396,5371 | 207,1436 | 176,8746 | 149,3256 | 114,59 | 143,75 | -24,35234 | 3,691719 | 0,691375 | 444,6309 | |
| 11 | 155 | 0,65 | 4,2 | 0,575 | 58,0236 | 14,6028 | 56,99425 | 72,6263 | 396,5371 | 207,1436 | 176,8746 | 149,3222 | 114,5866 | 143,75 | -24,35579 | 3,691647 | 0,691302 | 315,6335 | |
| 12 | 156 | 0,65 | 4,2 | 0,575 | 55,755 | 5,84002 | 31,47062 | 61,595 | 302,8713 | 207,1436 | 149,6773 | 126,4028 | 97,05669 | 143,75 | -20,32768 | 3,697801 | 0,146434 | 196,8514 | |

Tabel 1.2.5.1 Tulangan Sengkang Geser Balok untuk RW 1/1 Lama Portal E

| Lantai | Frame | Dalam sendi plastis | | | | | | Luar sendi plastis | | | | | | Sengkang Praktis | | | | |
|--------|-------|---------------------|----------|----------|----------|--------------------|--------------|-----------------------|----------|------------|----------|--------------------|--------------|-----------------------|------------|--------|----------|----|
| | | Vu,b pakai | | Vs | s | Sengkang Terpasang | Vs terpasang | CEK Vs terpasang > Vs | Vc | Vs | s | Sengkang Terpasang | Vs terpasang | CEK Vs terpasang > Vs | xVc | xVc-2h | s | |
| | | kN | kN | | | | | | | | | | | | | | | kN |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 1 | 49 | 205,967 | 343,244 | 63,1212 | 10 - 60 | 361,1000 | AMAN | 143,7500 | 138,4712 | 156,4657 | 10 - 180 | 144,4400 | AMAN | 1806,5688 | 506,5688 | 250 | 10 - 250 | |
| 2 | 50 | 205,4683 | 342,4471 | 63,2682 | 10 - 60 | 361,1000 | AMAN | 143,7500 | 137,6739 | 157,3719 | 10 - 180 | 144,4400 | AMAN | 1787,0963 | 487,0963 | 250 | 10 - 250 | |
| 3 | 51 | 205,1011 | 341,8351 | 63,3814 | 10 - 60 | 361,1000 | AMAN | 143,7500 | 137,0619 | 158,0746 | 10 - 180 | 144,4400 | AMAN | 1789,8252 | 489,8252 | 250 | 10 - 250 | |
| 4 | 52 | 204,7603 | 341,2672 | 63,4868 | 10 - 60 | 361,1000 | AMAN | 143,7500 | 136,4939 | 158,7323 | 10 - 180 | 144,4400 | AMAN | 1783,0772 | 483,0772 | 250 | 10 - 250 | |
| 5 | 53 | 204,4649 | 340,7748 | 63,5786 | 10 - 60 | 361,1000 | AMAN | 143,7500 | 136,0016 | 159,3070 | 10 - 180 | 144,4400 | AMAN | 1777,2278 | 477,2278 | 250 | 10 - 250 | |
| 6 | 54 | 204,2092 | 340,3487 | 63,6592 | 10 - 60 | 361,1000 | AMAN | 143,7500 | 135,5754 | 159,8077 | 10 - 180 | 144,4400 | AMAN | 1772,1649 | 472,1649 | 250 | 10 - 250 | |
| 7 | 55 | 186,6084 | 311,0140 | 69,6625 | 10 - 65 | 333,3231 | AMAN | 143,7500 | 114,7283 | 188,8462 | 10 - 180 | 120,3667 | AMAN | 1560,7528 | 280,7528 | 250 | 10 - 250 | |
| 8 | 56 | 186,4326 | 310,7211 | 69,7281 | 10 - 65 | 333,3231 | AMAN | 143,7500 | 114,4354 | 189,3295 | 10 - 180 | 120,3667 | AMAN | 1556,7110 | 256,7110 | 250 | 10 - 250 | |
| 9 | 57 | 186,2896 | 310,4826 | 69,7817 | 10 - 65 | 333,3231 | AMAN | 143,7500 | 114,1969 | 189,7249 | 10 - 180 | 120,3667 | AMAN | 1553,4203 | 253,4203 | 250 | 10 - 250 | |
| 10 | 58 | 152,4097 | 254,0161 | 85,2836 | 10 - 80 | 270,8250 | AMAN | 143,7500 | 74,2325 | 291,8668 | 10 - 250 | 86,6640 | AMAN | 865,3888 | -434,6112 | 250 | 10 - 250 | |
| 11 | 59 | 152,2526 | 253,7543 | 85,3818 | 10 - 80 | 270,8250 | AMAN | 143,7500 | 73,9707 | 292,8996 | 10 - 250 | 86,6640 | AMAN | 860,1221 | -439,8779 | 250 | 10 - 250 | |
| 12 | 60 | 116,8233 | 194,7055 | 111,2757 | 10 - 110 | 196,9636 | AMAN | 143,7500 | 23,5106 | 921,5434 | 10 - 250 | 86,6640 | AMAN | -610,5160 | -1910,5160 | 250 | 10 - 250 | |
| 1 | 61 | 247,5384 | 412,5639 | 52,5155 | 10 - 60 | 433,3200 | AMAN | 143,7500 | -2,6840 | -8072,2193 | 10 - 250 | 86,6640 | AMAN | 1036,9222 | -263,0778 | 250 | 10 - 250 | |
| 2 | 62 | 247,5384 | 412,5639 | 52,5155 | 10 - 60 | 433,3200 | AMAN | 143,7500 | -2,6840 | -8072,2193 | 10 - 250 | 86,6640 | AMAN | 1036,9222 | -263,0778 | 250 | 10 - 250 | |
| 3 | 63 | 247,5384 | 412,5639 | 52,5155 | 10 - 60 | 433,3200 | AMAN | 143,7500 | -2,6840 | -8072,2193 | 10 - 250 | 86,6640 | AMAN | 1036,9222 | -263,0778 | 250 | 10 - 250 | |
| 4 | 64 | 247,5384 | 412,5639 | 52,5155 | 10 - 60 | 433,3200 | AMAN | 143,7500 | -2,6840 | -8072,2193 | 10 - 250 | 86,6640 | AMAN | 1036,9222 | -263,0778 | 250 | 10 - 250 | |
| 5 | 65 | 247,5384 | 412,5639 | 52,5155 | 10 - 60 | 433,3200 | AMAN | 143,7500 | -2,6840 | -8072,2193 | 10 - 250 | 86,6640 | AMAN | 1036,9222 | -263,0778 | 250 | 10 - 250 | |
| 6 | 66 | 247,5384 | 412,5639 | 52,5155 | 10 - 60 | 433,3200 | AMAN | 143,7500 | -2,6840 | -8072,2193 | 10 - 250 | 86,6640 | AMAN | 1036,9222 | -263,0778 | 250 | 10 - 250 | |
| 7 | 67 | 194,3812 | 323,9686 | 66,8768 | 10 - 65 | 333,3231 | AMAN | 143,7500 | -25,4008 | -852,9667 | 10 - 250 | 86,6640 | AMAN | 872,5369 | -427,4631 | 250 | 10 - 250 | |
| 8 | 68 | 194,3812 | 323,9686 | 66,8768 | 10 - 65 | 333,3231 | AMAN | 143,7500 | -25,4008 | -852,9667 | 10 - 250 | 86,6640 | AMAN | 872,5369 | -427,4631 | 250 | 10 - 250 | |
| 9 | 69 | 194,3812 | 323,9686 | 66,8768 | 10 - 65 | 333,3231 | AMAN | 143,7500 | -25,4008 | -852,9667 | 10 - 250 | 86,6640 | AMAN | 872,5369 | -427,4631 | 250 | 10 - 250 | |
| 10 | 70 | 114,2141 | 190,3569 | 113,8178 | 10 - 110 | 196,9636 | AMAN | 143,7500 | -59,6602 | -363,1568 | 10 - 250 | 86,6640 | AMAN | 239,1558 | -1060,8442 | 250 | 10 - 250 | |
| 11 | 71 | 114,2141 | 190,3569 | 113,8178 | 10 - 110 | 196,9636 | AMAN | 143,7500 | -59,6602 | -363,1568 | 10 - 250 | 86,6640 | AMAN | 239,1558 | -1060,8442 | 250 | 10 - 250 | |
| 12 | 72 | 92,7703 | 154,6171 | 140,1268 | 10 - 140 | 154,7571 | AMAN | 143,7500 | -78,9118 | -274,5598 | 10 - 250 | 86,6640 | AMAN | -111,1357 | -1411,1357 | 250 | 10 - 250 | |

Tabel 1.2.5.2 Tulangan Sengkang Geser Balok untuk RW 1/1 Lama Portal 2

| Lantai | Frame | Dalam sendi plastis | | | | | | Luar sendi plastis | | | | | | Sengkang Praktis | | | | |
|--------|-------|---------------------|----------|----------|----------|--------------------|--------------|-----------------------|----------|-----------|----------|--------------------|--------------|-----------------------|------------|--------|----------|----|
| | | Vu,b pakai | | Vs | s | Sengkang Terpasang | Vs terpasang | CEK Vs terpasang > Vs | Vc | Vs | s | Sengkang Terpasang | Vs terpasang | CEK Vs terpasang > Vs | xVc | xVc-2h | s | |
| | | kN | kN | | | | | | | | | | | | | | | kN |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 1 | 145 | 261,3343 | 435,5572 | 49,7432 | 10 - 45 | 481,4667 | AMAN | 143,7500 | 145,1667 | 148,2285 | 10 - 140 | 154,7571 | AMAN | 1544,0398 | 244,0398 | 250 | 10 - 250 | |
| 2 | 146 | 261,3301 | 435,5501 | 49,7440 | 10 - 45 | 481,4667 | AMAN | 143,7500 | 145,1797 | 149,2358 | 10 - 140 | 154,7571 | AMAN | 1544,0048 | 244,0048 | 250 | 10 - 250 | |
| 3 | 147 | 261,3258 | 435,5431 | 49,7448 | 10 - 45 | 481,4667 | AMAN | 143,7500 | 145,1726 | 149,2430 | 10 - 140 | 154,7571 | AMAN | 1543,9699 | 243,9699 | 250 | 10 - 250 | |
| 4 | 148 | 261,3219 | 435,5365 | 49,7455 | 10 - 45 | 481,4667 | AMAN | 143,7500 | 145,1660 | 149,2498 | 10 - 140 | 154,7571 | AMAN | 1543,9373 | 243,9373 | 250 | 10 - 250 | |
| 5 | 149 | 261,3182 | 435,5303 | 49,7463 | 10 - 45 | 481,4667 | AMAN | 143,7500 | 145,1599 | 149,2561 | 10 - 140 | 154,7571 | AMAN | 1543,9069 | 243,9069 | 250 | 10 - 250 | |
| 6 | 150 | 261,3148 | 435,5247 | 49,7469 | 10 - 45 | 481,4667 | AMAN | 143,7500 | 145,1543 | 149,2619 | 10 - 140 | 154,7571 | AMAN | 1543,8793 | 243,8793 | 250 | 10 - 250 | |
| 7 | 151 | 228,3711 | 380,6184 | 56,9231 | 10 - 65 | 393,9273 | AMAN | 143,7500 | 116,3487 | 186,2162 | 10 - 180 | 120,3667 | AMAN | 1423,4121 | 123,4121 | 250 | 10 - 250 | |
| 8 | 152 | 228,3666 | 380,6143 | 56,9238 | 10 - 65 | 393,9273 | AMAN | 143,7500 | 116,3445 | 186,2228 | 10 - 180 | 120,3667 | AMAN | 1423,3872 | 123,3872 | 250 | 10 - 250 | |
| 9 | 153 | 228,3665 | 380,6108 | 56,9243 | 10 - 65 | 393,9273 | AMAN | 143,7500 | 116,3410 | 186,2284 | 10 - 180 | 120,3667 | AMAN | 1423,3661 | 123,3661 | 250 | 10 - 250 | |
| 10 | 154 | 149,3256 | 248,8761 | 87,0554 | 10 - 80 | 270,8250 | AMAN | 143,7500 | 47,2334 | 458,7008 | 10 - 250 | 86,6640 | AMAN | 691,3745 | -608,6255 | 250 | 10 - 250 | |
| 11 | 155 | 149,3222 | 248,8703 | 87,0574 | 10 - 80 | 270,8250 | AMAN | 143,7500 | 47,2277 | 458,7567 | 10 - 250 | 86,6640 | AMAN | 691,3024 | -608,6976 | 250 | 10 - 250 | |
| 12 | 156 | 126,4028 | 210,6713 | 102,8427 | 10 - 100 | 216,6600 | AMAN | 143,7500 | 18,0111 | 1202,9216 | 10 - 250 | 86,6640 | AMAN | 146,4342 | -1153,5658 | 250 | 10 - 250 | |

Lanjutan

| KOLOM | ud | h | | hn | Arah X | | | | | | | | | | | | Arah Y | | | | | | | | | | | |
|-----------|-----|---|------|---------|--------|------|-------|------|--------|----------|----------|--------|-------|------|------|-------|---------|---------|----------|-------|-------|-------|-------------|-------|------|-------|------|-------|
| | | m | 3 | | 4 | Lx | | Lnx | | Mkep.bx | | Mu.kx | | dk.x | Ly | | Lny | | Mkep.by | | Mu.ky | | Atlas Bawah | Atlas | | | | |
| | | | | | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | | | Kiri | Kanan | Kiri | Kanan |
| 1 | 2 | | | | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | | | | |
| B | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 1,3 | 4 | 3,35 | 0,07979 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 59,2784 | 0,1904 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 264,073 | | | | | | | | | |
| Lantai 2 | 1 | 4 | 3,35 | 0,34665 | 1 | 7 | 0 | 6,1 | 0,0000 | 0,0000 | 0,0000 | 1,0000 | 5 | 5 | 4,2 | 4,2 | 0,000 | 0,000 | 0,000 | | | | | | | | | |
| Lantai 3 | 1,3 | 4 | 3,35 | 0,92021 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 683,6909 | 0,4485 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 622,081 | | | | | | | | | |
| Lantai 4 | 1,3 | 4 | 3,35 | 0,47104 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 349,9707 | 0,8096 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 1123,083 | | | | | | | | | |
| Lantai 5 | 1,3 | 4 | 3,35 | 0,65335 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 485,4199 | 0,5093 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 706,497 | | | | | | | | | |
| Lantai 6 | 1,3 | 4 | 3,35 | 0,5289 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 392,9551 | 0,5515 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 765,074 | | | | | | | | | |
| Lantai 7 | 1,3 | 4 | 3,35 | 0,52896 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 392,9551 | 0,5352 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 742,368 | | | | | | | | | |
| Lantai 8 | 1,3 | 4 | 3,35 | 0,56728 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 421,4694 | 0,4907 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 680,659 | | | | | | | | | |
| Lantai 9 | 1,3 | 4 | 3,35 | 0,4711 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 350,0142 | 0,5537 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 768,100 | | | | | | | | | |
| Lantai 10 | 1,3 | 4 | 3,35 | 0,60276 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 447,8345 | 0,4648 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 644,788 | | | | | | | | | |
| Lantai 11 | 1,3 | 4 | 3,35 | 0,43272 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 321,4999 | 0,5732 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 795,072 | | | | | | | | | |
| Lantai 12 | 1,3 | 4 | 3,35 | 0,64383 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 426,6430 | 0,4463 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 619,055 | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,39724 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 295,1348 | 0,5974 | 5 | 5 | 4,2 | 4,2 | 492,656 | 764,075 | 681,208 | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,69837 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 462,7896 | 0,4268 | 5 | 5 | 4,2 | 4,2 | 587,449 | 941,448 | 592,084 | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,35617 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 236,0262 | 0,6310 | 5 | 5 | 4,2 | 4,2 | 492,656 | 764,075 | 719,443 | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,77775 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 515,3901 | 0,4026 | 5 | 5 | 4,2 | 4,2 | 492,656 | 764,075 | 459,013 | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,30163 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 199,8795 | 0,6808 | 5 | 5 | 4,2 | 4,2 | 492,656 | 764,075 | 776,261 | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,90081 | 0 | 7 | 0 | 6,1 | 0,0000 | 489,7623 | 385,8439 | 0,3690 | 5 | 5 | 4,2 | 4,2 | 207,144 | 396,537 | 420,778 | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,22225 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 147,2791 | 0,3192 | 5 | 5 | 4,2 | 4,2 | 492,656 | 764,075 | 418,543 | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,9385 | 0 | 7 | 0 | 6,1 | 0,0000 | 489,7623 | 401,9870 | 0,8687 | 5 | 5 | 4,2 | 4,2 | 207,144 | 396,537 | 363,960 | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,09919 | 0 | 7 | 0 | 6,1 | 0,0000 | 489,7623 | 42,4874 | 0,2358 | 5 | 5 | 4,2 | 4,2 | 207,144 | 396,537 | 475,811 | | | | | | | | | |
| | 1 | 4 | 3,35 | 1 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 266,7687 | 1,0000 | 5 | 5 | 4,2 | 4,2 | 207,144 | 302,871 | 129,171 | | | | | | | | | |
| | 1 | 4 | 3,35 | 0,0615 | 0 | 7 | 0 | 6,1 | 0,0000 | 489,7623 | 20,2648 | 0,1313 | 5 | 5 | 4,2 | 4,2 | 207,144 | 396,537 | 355,948 | | | | | | | | | |

Lanjutan

| KO.LOM | wd | h | | hn | Arah X | | | | | | | | | | | | Arah Y | | | | | | | | | |
|-----------|-----|---|------|---------|--------|------|-------|------|--------|----------|----------|--------|----|---------|-------|------|--------|----------|----------|-------|------|-------|---------|-------|----|----|
| | | m | 3 | | 4 | Lx | | | Lnx | | | dk.x | 5 | Mkap.bx | | | Mu.bx | 12 | 13 | Lny | | | Mkap.by | Mu.by | 19 | 20 |
| | | | | | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | | | Kiri | Kanan | Kiri | | | | Kanan | Kiri | Kanan | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | | | |
| D | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 1,3 | 4 | 3,35 | 0,07979 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 59,2784 | 0,1904 | 0 | 5 | 0 | 4,2 | 0,0000 | 941,4481 | 162,6080 | | | | | | | |
| Lantai 2 | 1 | 4 | 3,35 | 0,34665 | 0 | 7 | 0 | 6,1 | 0,0000 | 0,0000 | 0,0000 | 1,0000 | 0 | 5 | 0 | 4,2 | 0,0000 | 0,0000 | 0,0000 | | | | | | | |
| Lantai 3 | 1,3 | 4 | 3,35 | 0,92021 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 257,5494 | 0,4485 | 0 | 5 | 0 | 4,2 | 0,0000 | 941,4481 | 383,0586 | | | | | | | |
| Lantai 4 | 1,3 | 4 | 3,35 | 0,47104 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 683,6909 | 0,8096 | 0 | 5 | 0 | 4,2 | 0,0000 | 941,4481 | 691,5600 | | | | | | | |
| Lantai 5 | 1,3 | 4 | 3,35 | 0,65335 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 349,9707 | 0,5093 | 0 | 5 | 0 | 4,2 | 0,0000 | 941,4481 | 435,0393 | | | | | | | |
| Lantai 6 | 1,3 | 4 | 3,35 | 0,5289 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 485,4199 | 0,5515 | 0 | 5 | 0 | 4,2 | 0,0000 | 941,4481 | 471,1094 | | | | | | | |
| Lantai 7 | 1,3 | 4 | 3,35 | 0,52896 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 392,9551 | 0,5352 | 0 | 5 | 0 | 4,2 | 0,0000 | 941,4481 | 457,1273 | | | | | | | |
| Lantai 8 | 1,3 | 4 | 3,35 | 0,56728 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 421,4694 | 0,4907 | 0 | 5 | 0 | 4,2 | 0,0000 | 941,4481 | 419,1288 | | | | | | | |
| Lantai 9 | 1,3 | 4 | 3,35 | 0,4711 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 350,0142 | 0,4648 | 0 | 5 | 0 | 4,2 | 0,0000 | 941,4481 | 472,9727 | | | | | | | |
| Lantai 10 | 1,3 | 4 | 3,35 | 0,60276 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 447,8345 | 0,5732 | 0 | 5 | 0 | 4,2 | 0,0000 | 941,4481 | 397,0408 | | | | | | | |
| Lantai 11 | 1,3 | 4 | 3,35 | 0,43272 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 321,4999 | 0,4463 | 0 | 5 | 0 | 4,2 | 0,0000 | 941,4481 | 489,5810 | | | | | | | |
| Lantai 12 | 1,3 | 4 | 3,35 | 0,64383 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 426,6430 | 0,5974 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 381,1953 | | | | | | | |
| Lantai 13 | 1,3 | 4 | 3,35 | 0,39724 | 0 | 7 | 0 | 6,1 | 0,0000 | 849,5256 | 295,1348 | 0,4268 | 0 | 5 | 0 | 4,2 | 0,0000 | 941,4481 | 414,1653 | | | | | | | |
| Lantai 14 | 1,3 | 4 | 3,35 | 0,69837 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 462,7896 | 0,6310 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 364,5871 | | | | | | | |
| Lantai 15 | 1,3 | 4 | 3,35 | 0,35617 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 236,0262 | 0,4026 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 437,4118 | | | | | | | |
| Lantai 16 | 1,3 | 4 | 3,35 | 0,77775 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 515,3901 | 0,6808 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 279,0736 | | | | | | | |
| Lantai 17 | 1,3 | 4 | 3,35 | 0,30163 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 199,8795 | 0,3690 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 471,9564 | | | | | | | |
| Lantai 18 | 1,3 | 4 | 3,35 | 0,90081 | 0 | 7 | 0 | 6,1 | 0,0000 | 489,7623 | 385,8439 | 0,7642 | 0 | 5 | 0 | 4,2 | 0,0000 | 396,5371 | 255,8271 | | | | | | | |
| Lantai 19 | 1,3 | 4 | 3,35 | 0,22225 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 147,2791 | 0,3192 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 274,9265 | | | | | | | |
| Lantai 20 | 1,3 | 4 | 3,35 | 0,9385 | 0 | 7 | 0 | 6,1 | 0,0000 | 489,7623 | 401,9870 | 0,8687 | 0 | 5 | 0 | 4,2 | 0,0000 | 396,5371 | 221,2825 | | | | | | | |
| Lantai 21 | 1,3 | 4 | 3,35 | 0,09919 | 0 | 7 | 0 | 6,1 | 0,0000 | 489,7623 | 42,4874 | 0,2358 | 0 | 5 | 0 | 4,2 | 0,0000 | 396,5371 | 312,5441 | | | | | | | |
| Lantai 22 | 1 | 4 | 3,35 | 0,09919 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 266,7687 | 1,0000 | 0 | 5 | 0 | 4,2 | 0,0000 | 302,8713 | 84,8483 | | | | | | | |
| Lantai 23 | 1 | 4 | 3,35 | 0,0615 | 0 | 7 | 0 | 6,1 | 0,0000 | 489,7623 | 20,2648 | 0,1313 | 0 | 5 | 0 | 4,2 | 0,0000 | 396,5371 | 211,3789 | | | | | | | |
| Lantai 24 | 1 | 4 | 3,35 | 0,0615 | 0 | 7 | 0 | 6,1 | 0,0000 | 489,7623 | 20,2648 | 0,1313 | 0 | 5 | 0 | 4,2 | 0,0000 | 396,5371 | 36,3313 | | | | | | | |

Tabel 1.3.2 Momen Maksimum Rencana Kolom untuk R/W 1/1 Lama

| KOLOM | Arah X | | | | | | Arah Y | | | | | | | | | | |
|-----------|---------|--------|-----------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-----------|-----------|-----------|
| | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | |
| | MD,kx | ML,kx | ME,kx | Mu,kx | MD,ky | ML,ky | ME,ky | Mu,ky | MD,ky | ML,ky | ME,ky | Mu,ky | MD,ky | ML,ky | ME,ky | Mu,ky | |
| kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | |
| 1 | | | | | | | | | | | | | | | | | |
| A,B,C,D | | | | | | | | | | | | | | | | | |
| Lantai 1 | 32,2536 | 4,1767 | 73,8641 | 348,4810 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 170,0484 | 714,2033 | 4236,0234 | 714,2033 |
| Lantai 2 | 14,0434 | 1,8186 | 1150,3410 | 4848,0873 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 1008,5770 | 4236,0234 | 4236,0234 | 4236,0234 |
| Lantai 3 | 38,9918 | 4,8733 | 368,3223 | 1593,0120 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 504,8704 | 2120,4557 | 2120,4557 | 2120,4557 |
| Lantai 4 | 43,1162 | 5,5068 | 851,9160 | 3629,1014 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 723,2035 | 3037,4547 | 3037,4547 | 3037,4547 |
| Lantai 5 | 37,0393 | 4,4389 | 535,2296 | 2291,5164 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 590,0838 | 2478,3520 | 2478,3520 | 2478,3520 |
| Lantai 6 | 36,3458 | 4,4083 | 694,2008 | 2958,4352 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 620,9212 | 2607,8690 | 2607,8690 | 2607,8690 |
| Lantai 7 | 37,0052 | 4,2821 | 590,6560 | 2524,1068 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 601,3103 | 2525,5033 | 2525,5033 | 2525,5033 |
| Lantai 8 | 37,3264 | 4,3839 | 601,0344 | 2568,1403 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 568,5029 | 2387,7122 | 2387,7122 | 2387,7122 |
| Lantai 9 | 36,6104 | 4,0955 | 595,5692 | 2544,1319 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 585,0770 | 2457,3234 | 2457,3234 | 2457,3234 |
| Lantai 10 | 36,6934 | 4,1565 | 526,1109 | 2252,5582 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 522,2718 | 2193,5416 | 2193,5416 | 2193,5416 |
| Lantai 11 | 36,3475 | 3,9449 | 575,0846 | 2457,6624 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 554,7752 | 2330,0558 | 2330,0558 | 2330,0558 |
| Lantai 12 | 36,4598 | 4,0034 | 454,3044 | 1950,5648 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 471,5465 | 1980,4953 | 1980,4953 | 1980,4953 |
| | 36,0897 | 3,8183 | 538,8203 | 2304,9487 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 514,0272 | 2158,9142 | 2158,9142 | 2158,9142 |
| | 36,1864 | 3,8643 | 378,9959 | 1633,8360 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 413,1367 | 1735,1741 | 1735,1741 | 1735,1741 |
| | 35,9546 | 3,7031 | 490,2685 | 2100,7683 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 463,8701 | 1948,2544 | 1948,2544 | 1948,2544 |
| | 35,9888 | 3,7482 | 298,0846 | 1293,6791 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 346,3627 | 1454,7233 | 1454,7233 | 1454,7233 |
| | 35,4949 | 3,6713 | 429,9261 | 1846,8141 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 404,1404 | 1697,3897 | 1697,3897 | 1697,3897 |
| | 35,7395 | 3,6697 | 211,7477 | 930,7200 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 271,3017 | 1139,4671 | 1139,4671 | 1139,4671 |
| | 36,7490 | 3,3785 | 356,2537 | 1538,3994 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 335,0841 | 1407,3532 | 1407,3532 | 1407,3532 |
| | 35,9344 | 3,5445 | 122,8567 | 557,4510 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 189,4862 | 795,8420 | 795,8420 | 795,8420 |
| | 30,3081 | 4,4483 | 262,9319 | 1140,8082 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 247,5329 | 1039,6382 | 1039,6382 | 1039,6382 |
| | 34,2992 | 3,7720 | 39,2290 | 204,7368 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 103,4142 | 434,3396 | 434,3396 | 434,3396 |
| | 59,6420 | 0,7887 | 140,5870 | 653,9177 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 157,2861 | 660,6016 | 660,6016 | 660,6016 |
| | 41,3425 | 2,4625 | 17,2313 | 118,3666 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 37,4064 | 157,1068 | 157,1068 | 157,1068 |

Tabel 1.3.3 Momen Rencana Kolom Terpakai untuk R/W 1/1 Lama

| KOLOM | Mrencana | | Mmaksimum | | Mterpakai | |
|-----------|-----------------------|-----------------------|------------------------|------------------------|-----------------------|-----------------------|
| | Mu,kx | Mu,ky | Mu,kx | Mu,ky | Mu,kx | Mu,ky |
| | kNm | kNm | kNm | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| A | | | | | | |
| Lantai 1 | 101,9448 0,0000 | 264,0729 0,0000 | 348,4810 4848,0873 | 714,2033 4236,0234 | 101,9448 101,9448 | 264,0729 264,0729 |
| Lantai 2 | 442,9241 1175,7869 | 622,0813 1123,0829 | 1593,0120 3629,1014 | 2120,4557 3037,4547 | 442,9241 1175,7869 | 622,0813 1123,0829 |
| Lantai 3 | 601,8670 834,8076 | 706,4971 765,0745 | 2291,5164 2958,4352 | 2478,3520 2607,8690 | 601,8670 834,8076 | 706,4971 765,0745 |
| Lantai 4 | 675,7900 675,8647 | 742,3677 680,6587 | 2524,1068 2568,1403 | 2525,5033 2387,7122 | 675,7900 675,8647 | 742,3677 680,6587 |
| Lantai 5 | 724,8279 601,9417 | 768,1004 644,7881 | 2544,1319 2252,5582 | 2457,3234 2193,5416 | 724,8279 601,9417 | 768,1004 644,7881 |
| Lantai 6 | 770,1696 552,9038 | 795,0720 619,0554 | 2457,6624 1950,5648 | 2330,0558 1980,4953 | 770,1696 552,9038 | 795,0720 619,0554 |
| Lantai 7 | 651,7534 507,5621 | 681,2083 592,0838 | 2304,9487 1633,8360 | 2158,9142 1735,1741 | 651,7534 507,5621 | 681,2083 592,0838 |
| Lantai 8 | 706,9722 360,5611 | 719,4434 459,0129 | 2100,7683 1293,6791 | 1948,2544 1454,7233 | 706,9722 360,5611 | 719,4434 459,0129 |
| Lantai 9 | 787,3263 305,3423 | 776,2615 420,7778 | 1846,8141 930,7200 | 1697,3897 1139,4671 | 787,3263 305,3423 | 776,2615 420,7778 |
| Lantai 10 | 589,8482 224,9882 | 418,5430 363,9597 | 1538,3994 557,4510 | 1407,3532 795,8420 | 589,8482 224,9882 | 418,5430 363,9597 |
| Lantai 11 | 614,5265 64,9514 | 475,8114 129,1714 | 1140,8082 204,7368 | 1039,6382 434,3396 | 614,5265 64,9514 | 475,8114 129,1714 |
| Lantai 12 | 368,4625 30,9793 | 355,9479 55,3101 | 653,9177 118,3666 | 660,6016 157,1068 | 368,4625 30,9793 | 355,9479 55,3101 |
| B | | | | | | |
| Lantai 1 | 59,2784 0,0000 | 264,0729 0,0000 | 348,4810 4848,0873 | 714,2033 4236,0234 | 59,2784 59,2784 | 264,0729 264,0729 |
| Lantai 2 | 257,5494 683,6909 | 622,0813 1123,0829 | 1593,0120 3629,1014 | 2120,4557 3037,4547 | 257,5494 683,6909 | 622,0813 1123,0829 |
| Lantai 3 | 349,9707 485,4199 | 706,4971 765,0745 | 2291,5164 2958,4352 | 2478,3520 2607,8690 | 349,9707 485,4199 | 706,4971 765,0745 |
| Lantai 4 | 392,9551 392,9986 | 742,3677 680,6587 | 2524,1068 2568,1403 | 2525,5033 2387,7122 | 392,9551 392,9986 | 742,3677 680,6587 |
| Lantai 5 | 421,4694 350,0142 | 768,1004 644,7881 | 2544,1319 2252,5582 | 2457,3234 2193,5416 | 421,4694 350,0142 | 768,1004 644,7881 |
| Lantai 6 | 447,8345 321,4999 | 795,0720 619,0554 | 2457,6624 1950,5648 | 2330,0558 1980,4953 | 447,8345 321,4999 | 795,0720 619,0554 |
| Lantai 7 | 426,6430 295,1348 | 681,2083 592,0838 | 2304,9487 1633,8360 | 2158,9142 1735,1741 | 426,6430 295,1348 | 681,2083 592,0838 |
| Lantai 8 | 462,7896 236,0262 | 719,4434 459,0129 | 2100,7683 1293,6791 | 1948,2544 1454,7233 | 462,7896 236,0262 | 719,4434 459,0129 |
| Lantai 9 | 515,3901 199,8795 | 776,2615 420,7778 | 1846,8141 930,7200 | 1697,3897 1139,4671 | 515,3901 199,8795 | 776,2615 420,7778 |
| Lantai 10 | 385,8439 147,2791 | 418,5430 363,9597 | 1538,3994 557,4510 | 1407,3532 795,8420 | 385,8439 147,2791 | 418,5430 363,9597 |
| Lantai 11 | 401,9870 42,4874 | 475,8114 129,1714 | 1140,8082 204,7368 | 1039,6382 434,3396 | 401,9870 42,4874 | 475,8114 129,1714 |
| Lantai 12 | 266,7687 20,2648 | 355,9479 55,3101 | 653,9177 118,3666 | 660,6016 157,1068 | 266,7687 20,2648 | 355,9479 55,3101 |

Lanjutan

| KOLOM | Mrencana | | Mmaksimum | | Mterpakai | |
|-----------|-----------|----------|-----------|-----------|-----------|----------|
| | Mu,kx | Mu,ky | Mu,kx | Mu,ky | Mu,kx | Mu,ky |
| | kNm | kNm | kNm | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| C | | | | | | |
| Lantai 1 | 101,9448 | 162,6080 | 348,4810 | 714,2033 | 101,9448 | 162,6080 |
| | 0,0000 | 0,0000 | 4848,0873 | 4236,0234 | 101,9448 | 162,6080 |
| Lantai 2 | 442,9241 | 383,0586 | 1593,0120 | 2120,4557 | 442,9241 | 383,0586 |
| | 1175,7869 | 691,5600 | 3629,1014 | 3037,4547 | 1175,7869 | 691,5600 |
| Lantai 3 | 601,8670 | 435,0393 | 2291,5164 | 2478,3520 | 601,8670 | 435,0393 |
| | 834,8076 | 471,1094 | 2958,4352 | 2607,8690 | 834,8076 | 471,1094 |
| Lantai 4 | 675,7900 | 457,1273 | 2524,1068 | 2525,5033 | 675,7900 | 457,1273 |
| | 675,8647 | 419,1288 | 2568,1403 | 2387,7122 | 675,8647 | 419,1288 |
| Lantai 5 | 724,8279 | 472,9727 | 2544,1319 | 2457,3234 | 724,8279 | 472,9727 |
| | 601,9417 | 397,0408 | 2252,5582 | 2193,5416 | 601,9417 | 397,0408 |
| Lantai 6 | 770,1696 | 489,5810 | 2457,6624 | 2330,0558 | 770,1696 | 489,5810 |
| | 552,9038 | 381,1953 | 1950,5648 | 1980,4953 | 552,9038 | 381,1953 |
| Lantai 7 | 651,7534 | 414,1653 | 2304,9487 | 2158,9142 | 651,7534 | 414,1653 |
| | 507,5621 | 364,5871 | 1633,8360 | 1735,1741 | 507,5621 | 364,5871 |
| Lantai 8 | 706,9722 | 437,4118 | 2100,7683 | 1948,2544 | 706,9722 | 437,4118 |
| | 360,5611 | 279,0736 | 1293,6791 | 1454,7233 | 360,5611 | 279,0736 |
| Lantai 9 | 787,3263 | 471,9564 | 1846,8141 | 1697,3897 | 787,3263 | 471,9564 |
| | 305,3423 | 255,8271 | 930,7200 | 1139,4671 | 305,3423 | 255,8271 |
| Lantai 10 | 589,8482 | 274,9265 | 1538,3994 | 1407,3532 | 589,8482 | 274,9265 |
| | 224,9882 | 221,2825 | 557,4510 | 795,8420 | 224,9882 | 221,2825 |
| Lantai 11 | 614,5265 | 312,5441 | 1140,8082 | 1039,6382 | 614,5265 | 312,5441 |
| | 64,9514 | 84,8483 | 204,7368 | 434,3396 | 64,9514 | 84,8483 |
| Lantai 12 | 368,4625 | 211,3789 | 653,9177 | 660,6016 | 368,4625 | 211,3789 |
| | 30,9793 | 36,3313 | 118,3666 | 157,1068 | 30,9793 | 36,3313 |
| D | | | | | | |
| Lantai 1 | 59,2784 | 162,6080 | 348,4810 | 714,2033 | 59,2784 | 162,6080 |
| | 0,0000 | 0,0000 | 4848,0873 | 4236,0234 | 59,2784 | 162,6080 |
| Lantai 2 | 257,5494 | 383,0586 | 1593,0120 | 2120,4557 | 257,5494 | 383,0586 |
| | 683,6909 | 691,5600 | 3629,1014 | 3037,4547 | 683,6909 | 691,5600 |
| Lantai 3 | 349,9707 | 435,0393 | 2291,5164 | 2478,3520 | 349,9707 | 435,0393 |
| | 485,4199 | 471,1094 | 2958,4352 | 2607,8690 | 485,4199 | 471,1094 |
| Lantai 4 | 392,9551 | 457,1273 | 2524,1068 | 2525,5033 | 392,9551 | 457,1273 |
| | 392,9986 | 419,1288 | 2568,1403 | 2387,7122 | 392,9986 | 419,1288 |
| Lantai 5 | 421,4694 | 472,9727 | 2544,1319 | 2457,3234 | 421,4694 | 472,9727 |
| | 350,0142 | 397,0408 | 2252,5582 | 2193,5416 | 350,0142 | 397,0408 |
| Lantai 6 | 447,8345 | 489,5810 | 2457,6624 | 2330,0558 | 447,8345 | 489,5810 |
| | 321,4999 | 381,1953 | 1950,5648 | 1980,4953 | 321,4999 | 381,1953 |
| Lantai 7 | 426,6430 | 414,1653 | 2304,9487 | 2158,9142 | 426,6430 | 414,1653 |
| | 295,1348 | 364,5871 | 1633,8360 | 1735,1741 | 295,1348 | 364,5871 |
| Lantai 8 | 462,7896 | 437,4118 | 2100,7683 | 1948,2544 | 462,7896 | 437,4118 |
| | 236,0262 | 279,0736 | 1293,6791 | 1454,7233 | 236,0262 | 279,0736 |
| Lantai 9 | 515,3901 | 471,9564 | 1846,8141 | 1697,3897 | 515,3901 | 471,9564 |
| | 199,8795 | 255,8271 | 930,7200 | 1139,4671 | 199,8795 | 255,8271 |
| Lantai 10 | 385,8439 | 274,9265 | 1538,3994 | 1407,3532 | 385,8439 | 274,9265 |
| | 147,2791 | 221,2825 | 557,4510 | 795,8420 | 147,2791 | 221,2825 |
| Lantai 11 | 401,9870 | 312,5441 | 1140,8082 | 1039,6382 | 401,9870 | 312,5441 |
| | 42,4874 | 84,8483 | 204,7368 | 434,3396 | 42,4874 | 84,8483 |
| Lantai 12 | 266,7687 | 211,3789 | 653,9177 | 660,6016 | 266,7687 | 211,3789 |
| | 20,2648 | 36,3313 | 118,3666 | 157,1068 | 20,2648 | 36,3313 |

Tabel 1.3.4.1 Kumulatif Momen Kapasitas Balok

| Kolom | Portal E | | | | Portal 2 | | | | |
|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------|
| | $\Sigma M1- 7m$ | $\Sigma M2+ 7m$ | $\Sigma M3- 4m$ | $\Sigma M4+ 4m$ | $\Sigma M1- 5m$ | $\Sigma M2+ 5m$ | $\Sigma M3- 5m$ | $\Sigma M4+ 5m$ | |
| A | | | | | | | | | |
| | Lantai 1 | 8746,3417 | 4962,8907 | 8289,2490 | 6186,3019 | 9036,8594 | 5624,0926 | 9036,8594 | 5624,0926 |
| | | 8349,8046 | 4755,7471 | 7986,3777 | 5979,1583 | 8733,9881 | 5416,9490 | 8733,9881 | 5416,9490 |
| Lantai 2 | | 7896,8161 | 4470,1458 | 7428,1517 | 5505,0769 | 8095,4112 | 5036,6434 | 8095,4112 | 5036,6434 |
| | | 8349,8046 | 4755,7471 | 7986,3777 | 5979,1583 | 8733,9881 | 5416,9490 | 8733,9881 | 5416,9490 |
| Lantai 3 | | 7047,2906 | 3977,4009 | 6567,0544 | 4823,8519 | 7153,9631 | 4449,1942 | 7153,9631 | 4449,1942 |
| | | 7500,2790 | 4263,0022 | 7125,2804 | 5297,9333 | 7792,5400 | 4829,4998 | 7792,5400 | 4829,4998 |
| Lantai 4 | | 6197,7650 | 3484,6560 | 5705,9571 | 4142,6269 | 6212,5150 | 3861,7450 | 6212,5150 | 3861,7450 |
| | | 6650,7534 | 3770,2573 | 6264,1831 | 4616,7083 | 6851,0918 | 4242,0507 | 6851,0918 | 4242,0507 |
| Lantai 5 | | 5348,2394 | 2991,9111 | 4844,8598 | 3461,4019 | 5271,0668 | 3274,2959 | 5271,0668 | 3274,2959 |
| | | 5801,2279 | 3277,5124 | 5403,0858 | 3935,4833 | 5909,6437 | 3654,6015 | 5909,6437 | 3654,6015 |
| Lantai 6 | | 4498,7138 | 2499,1662 | 3983,7625 | 2780,1769 | 4329,6187 | 2686,8467 | 4329,6187 | 2686,8467 |
| | | 4951,7023 | 2784,7675 | 4541,9885 | 3254,2583 | 4968,1956 | 3067,1523 | 4968,1956 | 3067,1523 |
| Lantai 7 | | 3649,1883 | 2006,4213 | 3122,6652 | 2098,9519 | 3388,1706 | 2099,3975 | 3388,1706 | 2099,3975 |
| | | 4102,1767 | 2292,0226 | 3680,8912 | 2573,0333 | 4026,7474 | 2479,7031 | 4026,7474 | 2479,7031 |
| Lantai 8 | | 2891,4794 | 1608,5519 | 2447,0919 | 1606,4448 | 2624,0955 | 1606,7419 | 2624,0955 | 1606,7419 |
| | | 3252,6512 | 1799,2777 | 2819,7939 | 1891,8083 | 3085,2993 | 1892,2539 | 3085,2993 | 1892,2539 |
| Lantai 9 | | 2133,7706 | 1210,6825 | 1771,5187 | 1113,9378 | 1860,0205 | 1114,0863 | 1860,0205 | 1114,0863 |
| | | 2494,9423 | 1401,4083 | 2144,2207 | 1399,3013 | 2321,2243 | 1399,5983 | 2321,2243 | 1399,5983 |
| Lantai 10 | | 1376,0617 | 812,8131 | 1095,9455 | 621,4308 | 1095,9455 | 621,4308 | 1095,9455 | 621,4308 |
| | | 1737,2335 | 1003,5390 | 1468,6474 | 906,7942 | 1557,1492 | 906,9427 | 1557,1492 | 906,9427 |
| Lantai 11 | | 886,2994 | 509,9784 | 699,4084 | 414,2872 | 699,4084 | 414,2872 | 699,4084 | 414,2872 |
| | | 979,5246 | 605,6696 | 793,0742 | 414,2872 | 793,0742 | 414,2872 | 793,0742 | 414,2872 |
| Lantai 12 | | 396,5371 | 207,1436 | 302,8713 | 207,1436 | 302,8713 | 207,1436 | 302,8713 | 207,1436 |
| | | 489,7623 | 302,8348 | 396,5371 | 207,1436 | 396,5371 | 207,1436 | 396,5371 | 207,1436 |

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|----------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 0m | 0 m | $\Sigma M1- 7m$ | $\Sigma M2+ 7m$ | $\Sigma M1- 5m$ | $\Sigma M2+ 5m$ | $\Sigma M3- 5m$ | $\Sigma M4+ 5m$ |
| B | | | | | | | | |
| | Lantai 1 | 0,0000 | 0,0000 | 8746,3417 | 4962,8907 | 9036,8594 | 5624,0926 | 9036,8594 |
| | | 0,0000 | 8349,8046 | 4755,7471 | 8733,9881 | 5416,9490 | 8733,9881 | 5416,9490 |
| Lantai 2 | | 0,0000 | 7896,8161 | 4470,1458 | 8095,4112 | 5036,6434 | 8095,4112 | 5036,6434 |
| | | 0,0000 | 8349,8046 | 4755,7471 | 8733,9881 | 5416,9490 | 8733,9881 | 5416,9490 |
| Lantai 3 | | 0,0000 | 7047,2906 | 3977,4009 | 7153,9631 | 4449,1942 | 7153,9631 | 4449,1942 |
| | | 0,0000 | 7500,2790 | 4263,0022 | 7792,5400 | 4829,4998 | 7792,5400 | 4829,4998 |
| Lantai 4 | | 0,0000 | 6197,7650 | 3484,6560 | 6212,5150 | 3861,7450 | 6212,5150 | 3861,7450 |
| | | 0,0000 | 6650,7534 | 3770,2573 | 6851,0918 | 4242,0507 | 6851,0918 | 4242,0507 |
| Lantai 5 | | 0,0000 | 5348,2394 | 2991,9111 | 5271,0668 | 3274,2959 | 5271,0668 | 3274,2959 |
| | | 0,0000 | 5801,2279 | 3277,5124 | 5909,6437 | 3654,6015 | 5909,6437 | 3654,6015 |
| Lantai 6 | | 0,0000 | 4498,7138 | 2499,1662 | 4329,6187 | 2686,8467 | 4329,6187 | 2686,8467 |
| | | 0,0000 | 4951,7023 | 2784,7675 | 4968,1956 | 3067,1523 | 4968,1956 | 3067,1523 |
| Lantai 7 | | 0,0000 | 3649,1883 | 2006,4213 | 3388,1706 | 2099,3975 | 3388,1706 | 2099,3975 |
| | | 0,0000 | 4102,1767 | 2292,0226 | 4026,7474 | 2479,7031 | 4026,7474 | 2479,7031 |
| Lantai 8 | | 0,0000 | 2891,4794 | 1608,5519 | 2624,0955 | 1606,7419 | 2624,0955 | 1606,7419 |
| | | 0,0000 | 3252,6512 | 1799,2777 | 3085,2993 | 1892,2539 | 3085,2993 | 1892,2539 |
| Lantai 9 | | 0,0000 | 2133,7706 | 1210,6825 | 1860,0205 | 1114,0863 | 1860,0205 | 1114,0863 |
| | | 0,0000 | 2494,9423 | 1401,4083 | 2321,2243 | 1399,5983 | 2321,2243 | 1399,5983 |
| Lantai 10 | | 0,0000 | 1376,0617 | 812,8131 | 1095,9455 | 621,4308 | 1095,9455 | 621,4308 |
| | | 0,0000 | 1737,2335 | 1003,5390 | 1557,1492 | 906,9427 | 1557,1492 | 906,9427 |
| Lantai 11 | | 0,0000 | 886,2994 | 509,9784 | 699,4084 | 414,2872 | 699,4084 | 414,2872 |
| | | 0,0000 | 979,5246 | 605,6696 | 793,0742 | 414,2872 | 793,0742 | 414,2872 |
| Lantai 12 | | 0,0000 | 396,5371 | 207,1436 | 302,8713 | 207,1436 | 302,8713 | 207,1436 |
| | | 0,0000 | 489,7623 | 302,8348 | 396,5371 | 207,1436 | 396,5371 | 207,1436 |

Tabel 1.3.4.2 Gaya Aksial Rencana Kolom untuk RW 1/1 Lama

| KOLOM | h m | n | Rv | Arah X | | | | Arah Y | | | | Nu.k Maksimum | | | | | | | | | |
|-----------|--------|----|-------|------------|-------------|-------------|-------------|------------|-------------|------------|------------|---------------|-------------|------------|------------|----------|----------|-----------|------------|------------|-------------|
| | | | | Lx Kiri | Lx Kanan | NDk.x KN | NLk.x KN | Ng.x KN | Nuk.x KN | Mkap.by | | NDk.y KN | NLk.y KN | Ng.y KN | Nu.k KN | | | | | | |
| | | | | | | | | | | Kiri | Kanan | | | | | Kiri | Kanan | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | |
| A | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0.8 | 7 | 4 | 13709.2324 | 14475.5508 | 1852.282 | 279.2997 | 2131.5817 | 3167.99931 | 5 | 5 | 14660.952 | 14660.9520 | 1388.262 | 332.9977 | 1721.2597 | 1807.32269 | 1807.32269 | 3167.999306 |
| Lantai 2 | 4 | 11 | 0.825 | 7 | 4 | 13105.5517 | 13965.5360 | 1700.821 | 254.0768 | 1954.8978 | 2899.6032 | 5 | 5 | 14150.9371 | 14150.9371 | 1272.166 | 303.7806 | 1575.9466 | 1654.74393 | 1654.74393 | 2987.708927 |
| Lantai 3 | 4 | 10 | 0.85 | 7 | 4 | 12366.9620 | 12933.2285 | 1549.543 | 229.0145 | 1778.5575 | 2624.7839 | 5 | 5 | 13132.0547 | 11603.1573 | 1156.077 | 274.565 | 1430.642 | 1502.1741 | 1502.1741 | 2715.559501 |
| Lantai 4 | 4 | 9 | 0.875 | 7 | 4 | 13105.5517 | 13965.5360 | 1393.392 | 204.0778 | 1597.4698 | 2338.19587 | 5 | 5 | 14150.9371 | 12622.0398 | 1039.995 | 245.3509 | 1285.3459 | 1349.6132 | 1349.6132 | 2431.641338 |
| Lantai 5 | 4 | 8 | 0.9 | 7 | 4 | 11024.6915 | 11390.9062 | 1247.365 | 179.2562 | 1426.6212 | 2055.57492 | 5 | 5 | 10074.26 | 11093.1425 | 923.9181 | 216.1383 | 1140.0564 | 1197.05922 | 1197.05922 | 2151.690261 |
| Lantai 6 | 4 | 7 | 0.925 | 7 | 4 | 11763.2813 | 12423.2137 | 1096.544 | 154.534 | 1251.078 | 1761.24068 | 5 | 5 | 8545.3627 | 8545.3627 | 807.8474 | 186.927 | 994.7744 | 1044.51312 | 1044.51312 | 1860.025887 |
| Lantai 7 | 4 | 6 | 0.95 | 7 | 4 | 9882.4210 | 9848.5839 | 945.6814 | 129.8971 | 1075.5785 | 1480.16835 | 5 | 5 | 7016.4654 | 7016.4654 | 691.7817 | 157.717 | 849.4987 | 891.973635 | 891.973635 | 1561.62343 |
| Lantai 8 | 4 | 5 | 0.975 | 7 | 4 | 8340.1505 | 8306.2616 | 794.8227 | 105.3315 | 900.1542 | 1198.04357 | 5 | 5 | 5487.56805 | 5487.5681 | 575.7207 | 128.508 | 704.2287 | 739.440135 | 739.440135 | 1256.515966 |
| Lantai 9 | 4 | 4 | 1 | 7 | 4 | 6997.8901 | 7796.2468 | 644.1911 | 80.82325 | 725.01435 | 931.774648 | 5 | 5 | 6506.45052 | 6506.4505 | 459.6635 | 99.29989 | 558.96339 | 586.91156 | 586.91156 | 991.746339 |
| Lantai 10 | 4 | 3 | 1 | 7 | 4 | 5655.6096 | 5221.6171 | 494.567 | 56.35916 | 550.92616 | 660.125827 | 5 | 5 | 4230.83745 | 4230.8375 | 343.6095 | 70.09258 | 413.70208 | 434.367184 | 434.367184 | 720.0975177 |
| Lantai 11 | 4 | 2 | 1 | 7 | 4 | 4500.0313 | 4053.5368 | 343.9655 | 31.92383 | 375.88933 | 449.952741 | 5 | 5 | 4977.55319 | 4977.5532 | 227.5572 | 40.88562 | 268.44282 | 281.864961 | 281.864961 | 449.9527413 |
| Lantai 12 | 2 | 1 | 1 | 7 | 4 | 5051.9289 | 4711.6022 | 192.4563 | 7.514122 | 196.970422 | 238.853474 | 5 | 5 | 2974.10695 | 2974.1069 | 111.51 | 11.68004 | 123.19004 | 129.349542 | 129.349542 | 238.8534739 |

Lanjutan

| KOLOM | h | h | Rv | Arah X | | | | | | | | | | | | Arah Y | | | | | | Nuk | |
|-----------|---|----|-------|--------|-------|--------|------------|----------|----------|------------|------------|-----|---------|------------|------------|----------|----------|-----------|------------|-------------|----|-----|----|
| | | | | Lx | | NDk.x | NLk.x | Ng.x | Nuk.x | L3 | | 14 | Mkap.by | | 17 | NLk.y | Ng.y | Nuk.y | | Maksimum | | | |
| | | | | Kiri | Kanan | | | | | Kiri | Kanan | | Kiri | Kanan | | | | kN | kNm | | kN | kN | kN |
| m | m | m | | | kN | kN | kN | kN | m | m | kNm | kNm | kN | kN | kN | kN | kN | kN | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | | |
| B | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8 | 0 | 7 | 0,0000 | 13709,2324 | 1852,282 | 279,2997 | 2131,5817 | 3334,89938 | 5 | 5 | 14660,952 | 14660,9520 | 1388,262 | 332,9977 | 1721,2597 | 1807,32269 | 3334,899379 | | | |
| Lantai 2 | 4 | 11 | 0,825 | 0 | 7 | 0,0000 | 13105,5517 | 1700,821 | 254,0768 | 1954,8978 | 3072,91705 | 5 | 5 | 13132,0547 | 13132,0547 | 1272,166 | 303,7806 | 1575,9466 | 1654,74393 | 3133,850708 | | | |
| Lantai 3 | 4 | 10 | 0,85 | 0 | 7 | 0,0000 | 11024,6915 | 1549,543 | 229,0145 | 1778,5575 | 2804,58415 | 5 | 5 | 11603,1573 | 11603,1573 | 1156,077 | 274,565 | 1430,642 | 1502,1741 | 2867,364282 | | | |
| Lantai 4 | 4 | 9 | 0,875 | 0 | 7 | 0,0000 | 9882,4210 | 1393,392 | 204,0778 | 1597,4698 | 2524,55513 | 5 | 5 | 10074,26 | 10074,2600 | 1039,595 | 245,3509 | 1285,3459 | 1349,6132 | 2589,181734 | | | |
| Lantai 5 | 4 | 8 | 0,9 | 0 | 7 | 0,0000 | 8340,1505 | 1247,365 | 179,2562 | 1426,6212 | 2248,56581 | 5 | 5 | 8545,3627 | 8545,3627 | 923,9181 | 186,927 | 894,7744 | 1197,05922 | 2029,255361 | | | |
| Lantai 6 | 4 | 7 | 0,925 | 0 | 7 | 0,0000 | 7736,4698 | 1096,544 | 154,534 | 1251,078 | 1960,93581 | 5 | 5 | 7016,46538 | 7016,4654 | 807,8474 | 186,927 | 994,7744 | 1044,51312 | 2029,255361 | | | |
| Lantai 7 | 4 | 6 | 0,95 | 0 | 7 | 0,0000 | 6394,1994 | 945,6814 | 129,8971 | 1075,5785 | 1666,64034 | 5 | 5 | 5487,56805 | 5487,5681 | 691,7817 | 157,717 | 849,4987 | 891,973635 | 1736,806366 | | | |
| Lantai 8 | 4 | 5 | 0,975 | 0 | 7 | 0,0000 | 4500,0313 | 794,8227 | 105,3315 | 900,1542 | 1383,91497 | 5 | 5 | 4230,83745 | 4230,8375 | 575,7207 | 128,508 | 704,2287 | 739,440135 | 1437,724978 | | | |
| Lantai 9 | 4 | 4 | 1 | 0 | 7 | 0,0000 | 3344,4531 | 644,1911 | 80,82325 | 725,01435 | 1095,71038 | 5 | 5 | 2974,10685 | 2974,1069 | 459,6635 | 99,29989 | 558,96339 | 586,91156 | 1150,900133 | | | |
| Lantai 10 | 4 | 3 | 1 | 0 | 7 | 0,0000 | 2740,7724 | 494,567 | 56,35916 | 550,92616 | 852,549708 | 5 | 5 | 3720,82259 | 3720,8226 | 343,6095 | 70,09258 | 413,70208 | 434,387184 | 852,5497085 | | | |
| Lantai 11 | 4 | 2 | 1 | 0 | 7 | 0,0000 | 1396,2778 | 343,9655 | 31,92383 | 375,88933 | 534,311574 | 5 | 5 | 2464,09199 | 2464,0920 | 227,5572 | 40,88582 | 268,44282 | 281,864961 | 553,203212 | | | |
| Lantai 12 | 2 | 1 | 1 | 0 | 7 | 0,0000 | 603,6807 | 192,4563 | 7,514122 | 199,970422 | 270,337013 | 5 | 5 | 510,014859 | 510,0149 | 111,51 | 11,68004 | 123,19004 | 129,349542 | 289,2288509 | | | |

Lanjutan

| KOLOM | h | n | Rv | Arah X | | | | | | Arah Y | | | | | | Nu.k | | | | |
|-----------|---|----|--------|--------|-------|------------|------------|------------|-----------|-----------|-----------|-------|-------|--------|------------|-----------|----------|-----------|-----------|-----------|
| | | | | Lx | | Ndk.x | Nlk.x | Ng.x | Nuk.x | Ly | Mkap.by | | Ndk.y | Nlk.y | Ng.y | Nuk.y | Nu.k | Maksimum | | |
| | | | | Kiri | Kanan | | | | | | Kiri | Kanan | | | | | | | kNm | kNm |
| m | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | | |
| C | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8000 | 7 | 4 | 13709,2324 | 14475,5508 | 1852,2820 | 279,2987 | 2131,5817 | 3167,9993 | 0 | 5 | 0,0000 | 14660,9520 | 1388,2620 | 332,9977 | 1721,2597 | 3449,3493 | 3449,3493 |
| Lantai 2 | 4 | 11 | 0,8250 | 7 | 4 | 13105,5517 | 13965,5360 | 1700,8210 | 254,0768 | 1954,8978 | 3144,8917 | 0 | 5 | 0,0000 | 14150,9371 | 1272,1660 | 303,7806 | 1575,9466 | 3392,2276 | 3171,4962 |
| Lantai 3 | 4 | 10 | 0,8500 | 7 | 4 | 12366,9620 | 12933,2285 | 13965,5360 | 1549,5430 | 1778,5575 | 2899,6032 | 0 | 5 | 0,0000 | 13132,0547 | 1156,0770 | 274,5650 | 1430,6420 | 3289,1772 | 3289,1772 |
| Lantai 4 | 4 | 9 | 0,8750 | 7 | 4 | 13105,5517 | 11390,9062 | 12423,2137 | 229,0145 | 1597,4698 | 2987,7089 | 0 | 5 | 0,0000 | 11603,1573 | 1039,9950 | 245,3509 | 1285,3459 | 2882,9498 | 3004,1968 |
| Lantai 5 | 4 | 8 | 0,9000 | 7 | 4 | 11024,6915 | 10421,0108 | 1393,3920 | 204,0778 | 1426,6212 | 2715,5595 | 0 | 5 | 0,0000 | 10074,2600 | 923,9181 | 216,1383 | 1140,0564 | 2583,7100 | 2708,5231 |
| Lantai 6 | 4 | 7 | 0,9250 | 7 | 4 | 9682,4210 | 9648,5839 | 1247,3650 | 179,2562 | 1251,0780 | 2431,6413 | 0 | 5 | 0,0000 | 11093,1425 | 807,8474 | 186,9270 | 994,7744 | 2273,7749 | 2402,1541 |
| Lantai 7 | 4 | 6 | 0,9500 | 7 | 4 | 10421,0108 | 8306,2616 | 1096,5440 | 154,5340 | 1075,5785 | 2055,5749 | 0 | 5 | 0,0000 | 8545,3627 | 691,7817 | 157,7170 | 849,4987 | 1953,1454 | 2085,0907 |
| Lantai 8 | 4 | 5 | 0,9750 | 7 | 4 | 9078,7403 | 9338,5691 | 945,6814 | 129,8971 | 900,1542 | 1860,0259 | 0 | 5 | 0,0000 | 7016,4654 | 575,7207 | 128,5080 | 704,2287 | 1621,8202 | 1757,3316 |
| Lantai 9 | 4 | 4 | 1,0000 | 7 | 4 | 6997,8801 | 6763,9393 | 794,8227 | 105,3315 | 725,0144 | 1460,1683 | 0 | 5 | 0,0000 | 8035,3478 | 459,6635 | 99,2999 | 558,9634 | 1757,3316 | 1418,8761 |
| Lantai 10 | 4 | 3 | 1,0000 | 7 | 4 | 7736,4698 | 7796,2468 | 644,1911 | 80,8233 | 550,9262 | 1561,6234 | 0 | 5 | 0,0000 | 4230,8375 | 2974,1069 | 70,0926 | 413,7021 | 1316,9494 | 1107,8267 |
| Lantai 11 | 4 | 2 | 1,0000 | 7 | 4 | 5655,6096 | 5221,6171 | 494,5670 | 56,3592 | 375,8893 | 1198,0436 | 0 | 5 | 0,0000 | 6506,4505 | 4977,5532 | 40,8856 | 268,4428 | 674,8199 | 450,8956 |
| Lantai 12 | 2 | 1 | 1,0000 | 7 | 4 | 6394,1994 | 6253,9245 | 343,9655 | 31,9238 | 199,9704 | 1256,5160 | 0 | 5 | 0,0000 | 4977,5532 | 227,5572 | 11,6800 | 123,1900 | 200,7516 | 238,8535 |
| | | | | | | 4500,0313 | 4053,5368 | 192,4563 | 7,5141 | 236,8535 | 931,7746 | 0 | 5 | 0,0000 | 2974,1069 | 111,5100 | | | 213,8648 | 213,8648 |
| | | | | | | 5051,9289 | 4711,6022 | | | | 991,7463 | 0 | 5 | 0,0000 | 3720,8226 | | | | | |
| | | | | | | 3344,4531 | 2885,4565 | | | | 660,1258 | 0 | 5 | 0,0000 | 1717,3763 | | | | | |
| | | | | | | 3896,3507 | 3543,5219 | | | | 720,0975 | 0 | 5 | 0,0000 | 2464,0920 | | | | | |
| | | | | | | 2188,8749 | 1717,3763 | | | | 449,9527 | 0 | 5 | 0,0000 | 1113,6956 | | | | | |
| | | | | | | 2740,7724 | 2375,4417 | | | | 447,4526 | 0 | 5 | 0,0000 | 1207,3614 | | | | | |
| | | | | | | 1396,2778 | 1113,6956 | | | | 238,8535 | 0 | 5 | 0,0000 | 603,6807 | | | | | |
| | | | | | | 1585,1942 | 1207,3614 | | | | 236,3534 | 0 | 5 | 0,0000 | 603,6807 | | | | | |
| | | | | | | 603,6807 | 510,0149 | | | | | 0 | 5 | 0,0000 | 603,6807 | | | | | |
| | | | | | | 792,5971 | 603,6807 | | | | | 0 | 5 | 0,0000 | 603,6807 | | | | | |

| KOLOM | h | n | Rv | Arah X | | | | | | | | | | | | Arah Y | | | | | | NUK Maksimum |
|-----------|---|----|--------|--------|-------|--------|------------|-----------|----------|-----------|-----------|------|-------|---------|------------|-----------|----------|-----------|-----------|-----------|--|--------------|
| | | | | Lx | | | NDk x | NLk x | Ng x | Nuk x | Ly | | | Mkap.by | | | NDk y | NLk y | Ng y | Nuk y | | |
| | | | | Kiri | Kanan | Kiri | | | | | Kanan | Kiri | Kanan | Kiri | Kanan | | | | | | | |
| | | | | m | m | m | kN | kN | kN | kN | m | m | kNm | kNm | kN | kN | kN | kN | kN | kN | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | |
| D | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8000 | 0 | 7 | 0,0000 | 13709,2324 | 1852,2620 | 279,2997 | 2131,5817 | 3334,8994 | 0 | 5 | 0,0000 | 14660,9520 | 1388,2620 | 332,9977 | 1721,2597 | 3449,3493 | 3449,3493 | | |
| Lantai 2 | 4 | 11 | 0,8250 | 0 | 7 | 0,0000 | 13105,5517 | 1700,8210 | 254,0768 | 1954,8978 | 3286,6049 | 0 | 5 | 0,0000 | 14150,9371 | 1272,1660 | 303,7806 | 1575,9466 | 3171,4962 | 3289,1772 | | |
| Lantai 3 | 4 | 10 | 0,8500 | 0 | 7 | 0,0000 | 11024,6915 | 1549,5430 | 229,0145 | 1778,5575 | 2804,5842 | 0 | 5 | 0,0000 | 11603,1573 | 1156,0770 | 274,5650 | 1430,6420 | 2882,9498 | 3004,1968 | | |
| Lantai 4 | 4 | 9 | 0,8750 | 0 | 7 | 0,0000 | 9682,4210 | 1393,3920 | 204,0778 | 1597,4698 | 2524,5551 | 0 | 5 | 0,0000 | 10074,2600 | 1039,9950 | 245,3509 | 1285,3459 | 2593,7100 | 2708,5231 | | |
| Lantai 5 | 4 | 8 | 0,9000 | 0 | 7 | 0,0000 | 8340,1505 | 1247,3650 | 179,2562 | 1426,6212 | 2248,5658 | 0 | 5 | 0,0000 | 8545,3627 | 923,9181 | 216,1383 | 1140,0564 | 2273,7749 | 2402,1541 | | |
| Lantai 6 | 4 | 7 | 0,9250 | 0 | 7 | 0,0000 | 6978,7403 | 1096,5440 | 154,5340 | 1251,0780 | 1960,9358 | 0 | 5 | 0,0000 | 7016,4654 | 807,8474 | 186,9270 | 994,7744 | 1953,1454 | 2085,0907 | | |
| Lantai 7 | 4 | 6 | 0,9500 | 0 | 7 | 0,0000 | 5655,6096 | 945,6814 | 129,8971 | 1075,5785 | 1686,6403 | 0 | 5 | 0,0000 | 5487,5681 | 691,7817 | 157,7170 | 849,4987 | 1621,8202 | 1757,3316 | | |
| Lantai 8 | 4 | 5 | 0,9750 | 0 | 7 | 0,0000 | 4500,0313 | 794,8227 | 105,3315 | 900,1542 | 1383,9150 | 0 | 5 | 0,0000 | 4230,8375 | 575,7207 | 128,5080 | 704,2287 | 1316,9494 | 1437,7250 | | |
| Lantai 9 | 4 | 4 | 1,0000 | 0 | 7 | 0,0000 | 3344,4531 | 644,1911 | 80,8233 | 725,0144 | 1095,7104 | 0 | 5 | 0,0000 | 2974,1069 | 459,6635 | 99,2999 | 558,9634 | 1003,2865 | 1150,9001 | | |
| Lantai 10 | 4 | 3 | 1,0000 | 0 | 7 | 0,0000 | 2188,8749 | 494,5670 | 56,3592 | 550,9262 | 797,3600 | 0 | 5 | 0,0000 | 1717,3763 | 343,6095 | 70,0926 | 413,7021 | 674,8199 | 852,5497 | | |
| Lantai 11 | 4 | 2 | 1,0000 | 0 | 7 | 0,0000 | 1396,2778 | 343,9655 | 31,9238 | 375,8893 | 534,3116 | 0 | 5 | 0,0000 | 1113,6956 | 227,5572 | 40,8856 | 268,4428 | 437,7823 | 553,2032 | | |
| Lantai 12 | 2 | 1 | 1,0000 | 0 | 7 | 0,0000 | 603,6807 | 192,4563 | 7,5141 | 199,9704 | 270,3370 | 0 | 5 | 0,0000 | 510,0149 | 111,5100 | 11,6800 | 123,1900 | 200,7516 | 289,2287 | | |
| | | | | | | | 792,5971 | | | | 289,2287 | | | | 603,6807 | | | | 213,8648 | | | |

Lanjutan

Tabel 1.3.5 Gaya Aksial Terpakai Kolom untuk RW 1/1 Lama

| KOLOM | Arah X | | | | | | | | | | | | Arah Y | | | | | | Nu, k Maksimum KN | Nu, k Terpakai KN | | | |
|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|--------|-----------|-----------|-----------|-----------|--------|--|--------|--|-------|--|-------------------------|-------------------------|--------|--|----|
| | ND, kx | | NL, kx | | NE, kx | | Ng, x | | Nu, kx | | ND, ky | | NL, ky | | NE, ky | | Ng, y | | | | Nu, ky | | |
| | KN | | KN | | KN | | KN | | KN | | KN | | KN | | KN | | KN | | | | KN | | |
| 1 | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | | 11 | | 12 | | 13 |
| A | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 1852,2820 | 279,2997 | 1255,5520 | 2131,5817 | 7511,4792 | 1388,2620 | 332,9977 | 0,0000 | 1721,2597 | 1807,3227 | 7511,4792 | 3167,9993 | | | | | | | | | | | |
| Lantai 2 | 1700,8210 | 254,0768 | 1115,1780 | 1954,8978 | 6736,3903 | 1272,1660 | 303,7806 | 0,0000 | 1575,9466 | 1654,7439 | 6736,3903 | 2987,7089 | | | | | | | | | | | |
| Lantai 3 | 1549,5430 | 229,0145 | 929,3632 | 1778,5575 | 5770,8108 | 1156,0770 | 274,5650 | 0,0000 | 1430,6420 | 1502,1741 | 5770,8108 | 2715,5595 | | | | | | | | | | | |
| Lantai 4 | 1393,3920 | 204,0778 | 738,1884 | 1597,4698 | 4777,7346 | 1039,9950 | 245,3509 | 0,0000 | 1285,3459 | 1349,6132 | 4777,7346 | 2431,8413 | | | | | | | | | | | |
| Lantai 5 | 1247,3650 | 179,2562 | 558,0035 | 1426,6212 | 3841,5670 | 923,9181 | 216,1383 | 0,0000 | 1140,0564 | 1197,0592 | 3841,5670 | 2151,8903 | | | | | | | | | | | |
| Lantai 6 | 1096,5440 | 154,5340 | 396,2820 | 1251,0780 | 2978,0163 | 807,8474 | 186,9270 | 0,0000 | 994,7744 | 1044,5131 | 2978,0163 | 1860,0259 | | | | | | | | | | | |
| Lantai 7 | 945,6814 | 129,8971 | 257,0326 | 1075,5785 | 2208,8943 | 691,7817 | 157,7170 | 0,0000 | 849,4987 | 891,9736 | 2208,8943 | 1561,8234 | | | | | | | | | | | |
| Lantai 8 | 794,8227 | 105,3315 | 143,0396 | 900,1542 | 1545,9282 | 575,7207 | 128,5080 | 0,0000 | 704,2287 | 739,4401 | 1545,9282 | 1256,5160 | | | | | | | | | | | |
| Lantai 9 | 644,1911 | 80,8233 | 56,6502 | 725,0144 | 999,1961 | 459,6635 | 99,2999 | 0,0000 | 558,9634 | 586,9116 | 999,1961 | 991,7463 | | | | | | | | | | | |
| Lantai 10 | 494,5670 | 56,3592 | 0,1439 | 550,9262 | 579,0768 | 343,6095 | 70,0926 | 0,0000 | 413,7021 | 434,3872 | 579,0768 | 579,0768 | | | | | | | | | | | |
| Lantai 11 | 343,9655 | 31,9238 | 26,2486 | 375,8893 | 504,9281 | 227,5572 | 40,8856 | 0,0000 | 268,4428 | 281,8650 | 504,9281 | 504,9281 | | | | | | | | | | | |
| Lantai 12 | 192,4563 | 7,5141 | 23,3793 | 199,9704 | 308,1618 | 111,5100 | 11,6800 | 0,0000 | 123,1900 | 129,3495 | 308,1618 | 289,2287 | | | | | | | | | | | |
| B | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 1852,2820 | 279,2997 | 1255,5520 | 2131,5817 | 7511,4792 | 1388,2620 | 332,9977 | 0,0000 | 1721,2597 | 1807,3227 | 7511,4792 | 3334,8994 | | | | | | | | | | | |
| Lantai 2 | 1700,8210 | 254,0768 | 1115,1780 | 1954,8978 | 6736,3903 | 1272,1660 | 303,7806 | 0,0000 | 1575,9466 | 1654,7439 | 6736,3903 | 3133,8507 | | | | | | | | | | | |
| Lantai 3 | 1549,5430 | 229,0145 | 929,3632 | 1778,5575 | 5770,8108 | 1156,0770 | 274,5650 | 0,0000 | 1430,6420 | 1502,1741 | 5770,8108 | 2867,3643 | | | | | | | | | | | |
| Lantai 4 | 1393,3920 | 204,0778 | 738,1884 | 1597,4698 | 4777,7346 | 1039,9950 | 245,3509 | 0,0000 | 1285,3459 | 1349,6132 | 4777,7346 | 2589,1817 | | | | | | | | | | | |
| Lantai 5 | 1247,3650 | 179,2562 | 558,0035 | 1426,6212 | 3841,5670 | 923,9181 | 216,1383 | 0,0000 | 1140,0564 | 1197,0592 | 3841,5670 | 2315,0389 | | | | | | | | | | | |
| Lantai 6 | 1096,5440 | 154,5340 | 396,2820 | 1251,0780 | 2978,0163 | 807,8474 | 186,9270 | 0,0000 | 994,7744 | 1044,5131 | 2978,0163 | 2029,2554 | | | | | | | | | | | |
| Lantai 7 | 945,6814 | 129,8971 | 257,0326 | 1075,5785 | 2208,8943 | 691,7817 | 157,7170 | 0,0000 | 849,4987 | 891,9736 | 2208,8943 | 1736,8064 | | | | | | | | | | | |
| Lantai 8 | 794,8227 | 105,3315 | 143,0396 | 900,1542 | 1545,9282 | 575,7207 | 128,5080 | 0,0000 | 704,2287 | 739,4401 | 1545,9282 | 1437,7250 | | | | | | | | | | | |
| Lantai 9 | 644,1911 | 80,8233 | 56,6502 | 725,0144 | 999,1961 | 459,6635 | 99,2999 | 0,0000 | 558,9634 | 586,9116 | 999,1961 | 999,1961 | | | | | | | | | | | |
| Lantai 10 | 494,5670 | 56,3592 | 0,1439 | 550,9262 | 579,0768 | 343,6095 | 70,0926 | 0,0000 | 413,7021 | 434,3872 | 579,0768 | 579,0768 | | | | | | | | | | | |
| Lantai 11 | 343,9655 | 31,9238 | 26,2486 | 375,8893 | 504,9281 | 227,5572 | 40,8856 | 0,0000 | 268,4428 | 281,8650 | 504,9281 | 504,9281 | | | | | | | | | | | |
| Lantai 12 | 192,4563 | 7,5141 | 23,3793 | 199,9704 | 308,1618 | 111,5100 | 11,6800 | 0,0000 | 123,1900 | 129,3495 | 308,1618 | 289,2287 | | | | | | | | | | | |

Tabel 1.3.6.1 Mn-Pn Arah X untuk R/W 1/1 lama

| UNTUK KOLOM | 800 | X | 900 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 |
| xb (mm) | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 928,8 | 825,6 | 722,4 | 619,2 | 516 | 464,4 | 412,8 | 361,2 | 309,6 | 0 |
| ab (mm) | 0 | 789,48 | 701,76 | 614,04 | 526,32 | 438,6 | 394,74 | 350,88 | 307,02 | 263,16 | 84,7059 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 574,16 | 570,93 | 566,777 | 561,24 | 553,488 | 548,32 | 541,86 | 533,555 | 522,481 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| As (mm2) | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 |
| As' (mm2) | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 |
| Ts (kn) | 0 | -160 | 90 | 411,429 | 840 | 1440 | 1440 | 1440 | 1440 | 1440 | 0 |
| Cs (kn) | 0 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 0 |
| Cc (kn) | 0 | 13421,2 | 11929,9 | 10438,7 | 8947,4 | 7456,2 | 6710,6 | 5964,96 | 5219,34 | 4473,72 | 0 |
| Mn (kn m) | 0 | 1235,09 | 1778,43 | 2220,24 | 2575,2 | 2869,58 | 2844,7 | 2787,17 | 2695,92 | 2573,96 | 1177,41 |
| Pn (kn) | 18027 | 14944,7 | 13203,4 | 11390,8 | 9470,9 | 7379,7 | 6634,1 | 5888,46 | 5142,84 | 4397,22 | 0 |

| UNTUK KOLOM | 800 | X | 900 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 |
| xb (mm) | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 928,8 | 825,6 | 722,4 | 619,2 | 516 | 464,4 | 412,8 | 361,2 | 309,6 | 0 |
| ab (mm) | 0 | 789,48 | 701,76 | 614,04 | 526,32 | 438,6 | 394,74 | 350,88 | 307,02 | 263,16 | 169,412 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 574,16 | 570,93 | 566,777 | 561,24 | 553,488 | 548,32 | 541,86 | 533,555 | 522,481 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| As (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| As' (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| Ts (kn) | 0 | -320 | 180 | 822,857 | 1680 | 2880 | 2880 | 2880 | 2880 | 2880 | 0 |
| Cs (kn) | 0 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 0 |
| Cc (kn) | 0 | 13421,2 | 11929,9 | 10438,7 | 8947,4 | 7456,2 | 6710,6 | 5964,96 | 5219,34 | 4473,72 | 0 |
| Mn (kn m) | 0 | 1728,52 | 2374,36 | 2947,96 | 3478,6 | 4019,02 | 3994,2 | 3936,61 | 3846,35 | 3723,39 | 2232,85 |
| Pn (kn) | 20754 | 16468,2 | 14476,9 | 12342,8 | 9994,4 | 7303,2 | 6557,6 | 5811,96 | 5066,34 | 4320,72 | 0 |

Lanjutan

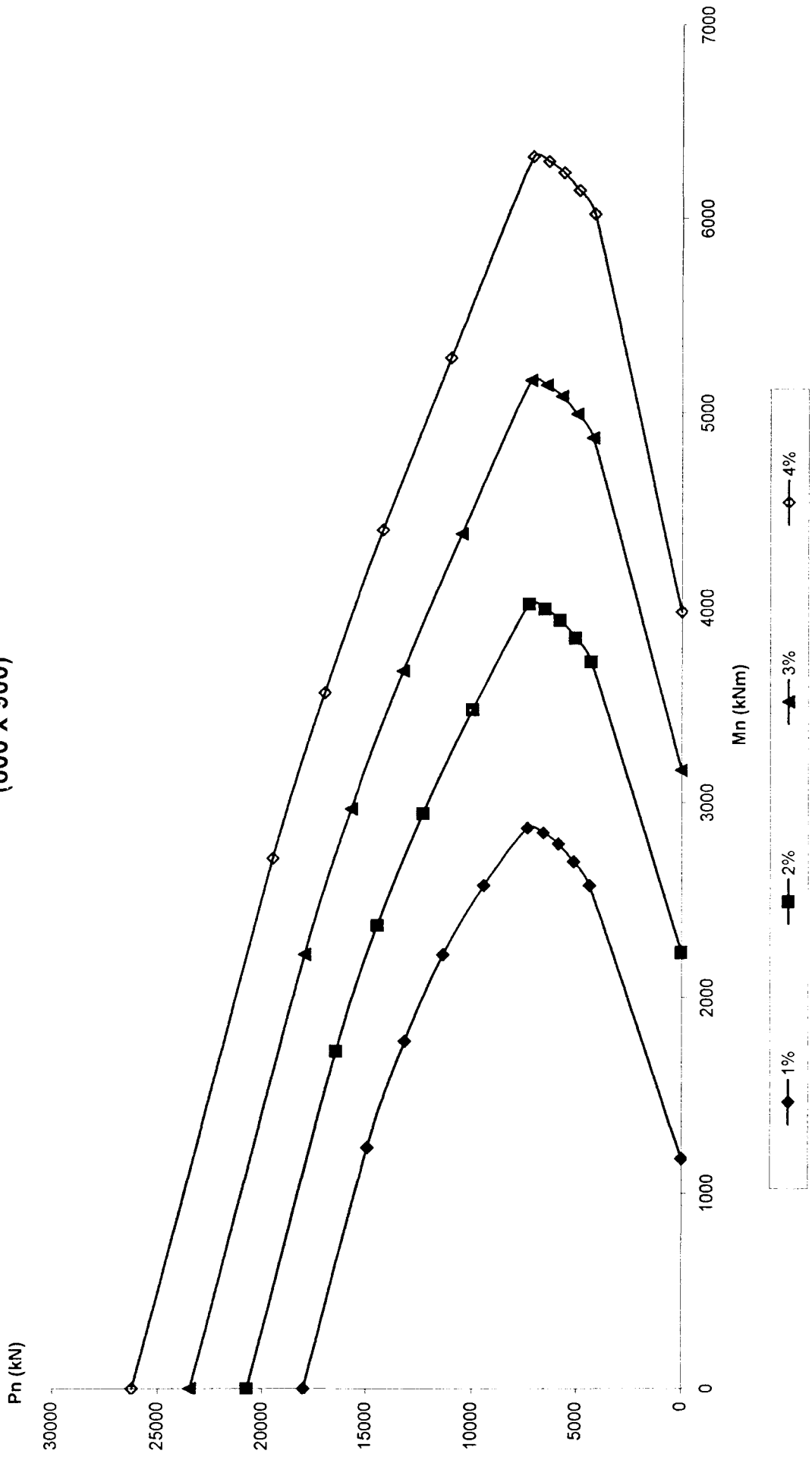
UNTUK KOLOM

| | 800 | X | 900 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 |
| xb (mm) | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 928,8 | 825,6 | 722,4 | 619,2 | 516 | 464,4 | 412,8 | 361,2 | 309,6 | 0 |
| ab (mm) | 0 | 789,48 | 701,76 | 614,04 | 526,32 | 438,6 | 394,74 | 350,88 | 307,02 | 263,16 | 254,118 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 574,16 | 570,93 | 566,777 | 561,24 | 553,488 | 548,32 | 541,86 | 533,555 | 522,481 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 |
| As (mm ²) | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 |
| As' (mm ²) | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 |
| Ts (kn) | 0 | -480 | 270 | 1234,29 | 2520 | 4320 | 4320 | 4320 | 4320 | 4320 | 0 |
| Cs (kn) | 0 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 0 |
| Cc (kn) | 0 | 13421,2 | 11929,9 | 10438,7 | 8947,4 | 7456,2 | 6710,6 | 5964,96 | 5219,34 | 4473,72 | 0 |
| Mn (kn m) | 0 | 2221,96 | 2970,3 | 3675,68 | 4382 | 5168,45 | 5143,6 | 5086,04 | 4995,79 | 4872,83 | 3166,31 |
| Pn (kn) | 23481 | 17991,7 | 15750,4 | 13294,9 | 10518 | 7226,7 | 6481,1 | 5735,46 | 4989,84 | 4244,22 | 0 |

UNTUK KOLOM

| | 800 | X | 900 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 |
| xb (mm) | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 928,8 | 825,6 | 722,4 | 619,2 | 516 | 464,4 | 412,8 | 361,2 | 309,6 | 0 |
| ab (mm) | 0 | 789,48 | 701,76 | 614,04 | 526,32 | 438,6 | 394,74 | 350,88 | 307,02 | 263,16 | 338,824 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 574,16 | 570,93 | 566,777 | 561,24 | 553,488 | 548,32 | 541,86 | 533,555 | 522,481 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 |
| As (mm ²) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| As' (mm ²) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| Ts (kn) | 0 | -640 | 360 | 1645,71 | 3360 | 5760 | 5760 | 5760 | 5760 | 5760 | 0 |
| Cs (kn) | 0 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 0 |
| Cc (kn) | 0 | 13421,2 | 11929,9 | 10438,7 | 8947,4 | 7456,2 | 6710,6 | 5964,96 | 5219,34 | 4473,72 | 0 |
| Mn (kn m) | 0 | 2715,39 | 3566,23 | 4403,41 | 5285,5 | 6317,89 | 6293 | 6235,48 | 6145,22 | 6022,26 | 3977,79 |
| Pn (kn) | 26208 | 19515,2 | 17023,9 | 14247 | 11041 | 7150,2 | 6404,6 | 5658,96 | 4913,34 | 4167,72 | 0 |

Grafik Mn-Pn Arah X
(800 x 900)



Tabel 1.3.6.2 Mn-Pn Arah Y untuk R/W 1/1 lama

| UNTUK KOLOM | 900 | X | 800 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 75,2941 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| As (mm2) | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 |
| As' (mm2) | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 |
| Ts (kn) | 0 | -160 | 90 | 411,429 | 840 | 1440 | 1440 | 1440 | 1440 | 1440 | 0 |
| Cs (kn) | 0 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 0 |
| Cc (kn) | 0 | 13343,1 | 11860,6 | 10378 | 8895,4 | 7412,85 | 6671,6 | 5930,28 | 5189 | 4447,71 | 0 |
| Mn (kn m) | 0 | 1115,89 | 1589,76 | 1974,41 | 2282,7 | 2537,79 | 2514,2 | 2461,94 | 2380,92 | 2271,16 | 1040,19 |
| Pn (kn) | 18027 | 14866,6 | 13134,1 | 11330,1 | 9418,9 | 7336,35 | 6595,1 | 5853,78 | 5112,5 | 4371,21 | 0 |

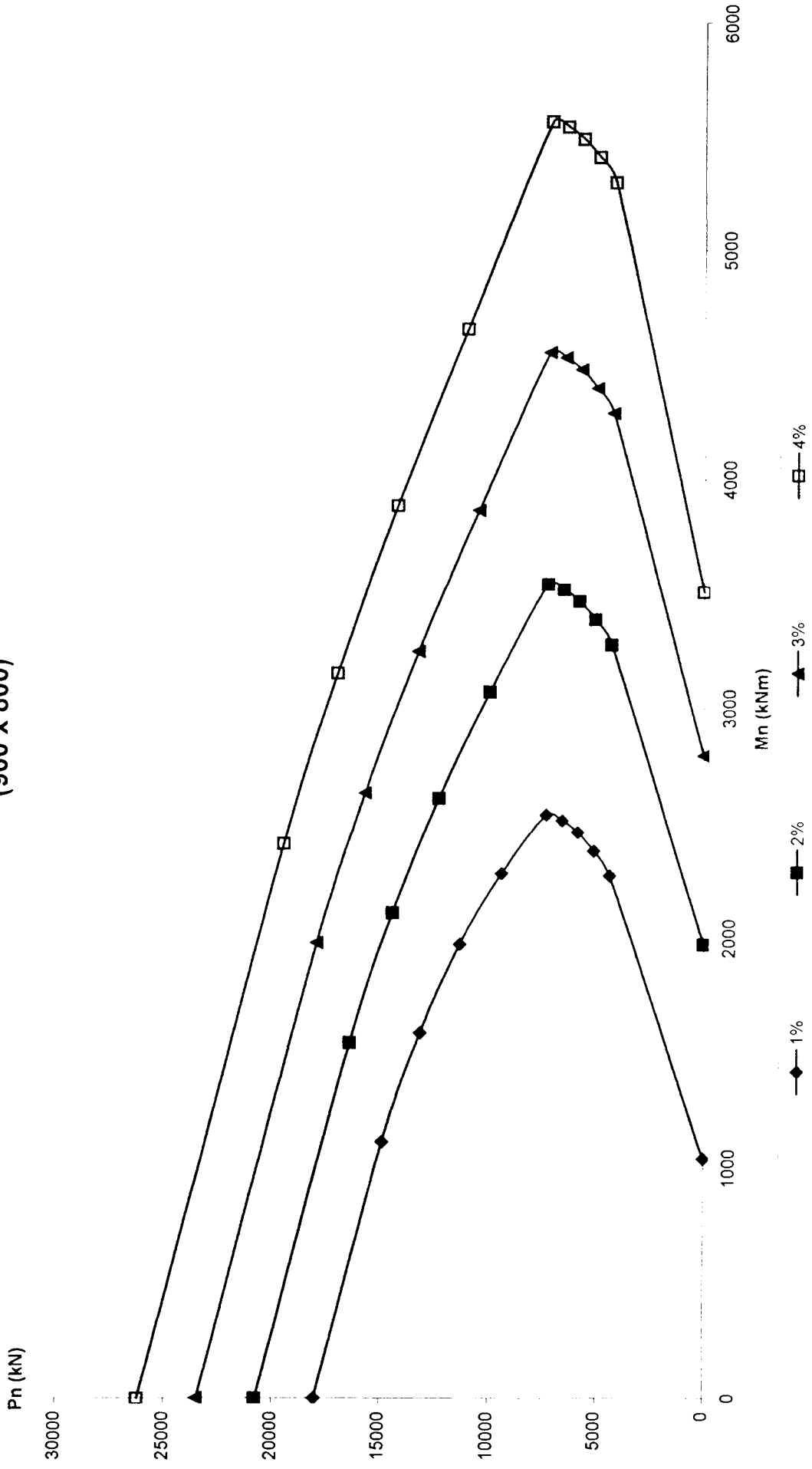
| UNTUK KOLOM | 900 | X | 800 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 150,588 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| As (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| As' (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| Ts (kn) | 0 | -320 | 180 | 822,857 | 1680 | 2880 | 2880 | 2880 | 2880 | 2880 | 0 |
| Cs (kn) | 0 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 0 |
| Cc (kn) | 0 | 13343,1 | 11860,6 | 10378 | 8895,4 | 7412,85 | 6671,6 | 5930,28 | 5189 | 4447,71 | 0 |
| Mn (kn m) | 0 | 1549,15 | 2113,02 | 2613,39 | 3076 | 3547,05 | 3523,5 | 3471,2 | 3390,18 | 3280,42 | 1971,95 |
| Pn (kn) | 20754 | 16390,1 | 14407,6 | 12282,1 | 9942,4 | 7259,85 | 6518,6 | 5777,28 | 5036 | 4294,71 | 0 |

Lanjutan

| UNTUK KOLOM | 900 | X | 800 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 225,882 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 |
| As (mm ²) | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 |
| As' (mm ²) | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 |
| Ts (kn) | 0 | -480 | 270 | 1234,29 | 2520 | 4320 | 4320 | 4320 | 4320 | 4320 | 0 |
| Cs (kn) | 0 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 0 |
| Cc (kn) | 0 | 13343,1 | 11860,6 | 10378 | 8895,4 | 7412,85 | 6671,6 | 5930,28 | 5189 | 4447,71 | 0 |
| Mn (kn m) | 0 | 1982,41 | 2636,28 | 3252,36 | 3869,2 | 4556,31 | 4532,8 | 4480,46 | 4399,44 | 4289,68 | 2795,29 |
| Pn (kn) | 23481 | 17913,6 | 15681,1 | 13234,2 | 10466 | 7183,35 | 6442,1 | 5700,78 | 4959,5 | 4218,21 | 0 |

| UNTUK KOLOM | 900 | X | 800 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 301,176 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 |
| As (mm ²) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| As' (mm ²) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| Ts (kn) | 0 | -640 | 360 | 1645,71 | 3360 | 5760 | 5760 | 5760 | 5760 | 5760 | 0 |
| Cs (kn) | 0 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 0 |
| Cc (kn) | 0 | 13343,1 | 11860,6 | 10378 | 8895,4 | 7412,85 | 6671,6 | 5930,28 | 5189 | 4447,71 | 0 |
| Mn (kn m) | 0 | 2415,67 | 3159,54 | 3891,34 | 4662,5 | 5565,57 | 5542 | 5489,72 | 5408,7 | 5298,94 | 3510,21 |
| Pn (kn) | 26208 | 19437,1 | 16954,6 | 14186,3 | 10989 | 7106,85 | 6365,6 | 5624,28 | 4883 | 4141,71 | 0 |

Grafik Mn-Pn Arah Y
(900 x 800)



Tabel 1.3.7 Penulangan Longitudinal Kolom untuk RW 1/1 Lama

| KOLOM | Arah X | | | | | | Arah Y | | | | | | | | | |
|-----------|--------|-----|-----------|-----------|--------|-----------|---------|---------------|-----|-----|-----------|-----------|--------|-----------|---------|---------------|
| | b | h | Mn | Ph | ppakai | Ast | Jml Tul | Tul Terpasang | b | h | Mh | Ph | ppakai | Ast | Jml Tul | Tul Terpasang |
| | mm | mm | kNm | kN | | | | | mm | mm | kNm | kN | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| A | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 900 | 156,8382 | 4873,8451 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 406,2660 | 4873,8451 | 1,0% | 6633,0000 | 18 | Ø22 - 28 |
| Lantai 2 | 800 | 900 | 1808,9029 | 4596,4753 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1727,8198 | 4596,4753 | 1,5% | 9949,5000 | 28 | Ø22 - 28 |
| Lantai 3 | 800 | 900 | 1284,3194 | 4177,7838 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1177,0377 | 4177,7838 | 1,0% | 6633,0000 | 18 | Ø22 - 28 |
| Lantai 4 | 800 | 900 | 1039,7918 | 3740,9867 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1142,1042 | 3740,9867 | 1,0% | 6633,0000 | 18 | Ø22 - 22 |
| Lantai 5 | 800 | 900 | 1115,1198 | 3310,2927 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1181,6930 | 3310,2927 | 1,0% | 6633,0000 | 18 | Ø22 - 22 |
| Lantai 6 | 800 | 900 | 1184,8764 | 2861,5783 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1223,1877 | 2861,5783 | 1,0% | 6633,0000 | 18 | Ø22 - 22 |
| Lantai 7 | 800 | 900 | 1002,6975 | 2402,4976 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1048,0127 | 2402,4976 | 1,0% | 6633,0000 | 18 | Ø22 - 22 |
| Lantai 8 | 800 | 900 | 1087,6495 | 1933,1015 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1106,8360 | 1933,1015 | 1,0% | 6633,0000 | 18 | Ø22 - 22 |
| Lantai 9 | 800 | 900 | 1211,2712 | 1525,7636 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1194,2484 | 1525,7636 | 1,3% | 8291,2500 | 22 | Ø22 - 22 |
| Lantai 10 | 800 | 900 | 907,4587 | 890,8874 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 643,9124 | 890,8874 | 1,0% | 6633,0000 | 18 | Ø22 - 20 |
| Lantai 11 | 800 | 900 | 945,4254 | 692,2350 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 732,0175 | 692,2350 | 1,1% | 7296,3000 | 20 | Ø22 - 20 |
| Lantai 12 | 800 | 900 | 566,8653 | 367,4669 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 547,6121 | 367,4669 | 1,0% | 6633,0000 | 18 | Ø22 - 18 |
| B | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 900 | 91,1975 | 5130,6144 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 406,2660 | 5130,6144 | 1,0% | 6633,0000 | 18 | Ø22 - 28 |
| Lantai 2 | 800 | 900 | 1051,8322 | 4821,3088 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1727,8198 | 4821,3088 | 1,5% | 9949,5000 | 28 | Ø22 - 28 |
| Lantai 3 | 800 | 900 | 746,7999 | 4411,3297 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1177,0377 | 4411,3297 | 1,0% | 6633,0000 | 18 | Ø22 - 28 |
| Lantai 4 | 800 | 900 | 604,6132 | 3983,3565 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1142,1042 | 3983,3565 | 1,0% | 6633,0000 | 18 | Ø22 - 22 |
| Lantai 5 | 800 | 900 | 648,4145 | 3561,5983 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1181,6930 | 3561,5983 | 1,0% | 6633,0000 | 18 | Ø22 - 22 |
| Lantai 6 | 800 | 900 | 688,9762 | 3121,9313 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1223,1877 | 3121,9313 | 1,0% | 6633,0000 | 18 | Ø22 - 22 |
| Lantai 7 | 800 | 900 | 656,3738 | 2672,0098 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1048,0127 | 2672,0098 | 1,0% | 6633,0000 | 18 | Ø22 - 22 |
| Lantai 8 | 800 | 900 | 711,9841 | 2211,8846 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1106,8360 | 2211,8846 | 1,0% | 6633,0000 | 18 | Ø22 - 22 |
| Lantai 9 | 800 | 900 | 792,9078 | 1537,2247 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1194,2484 | 1537,2247 | 1,3% | 8291,2500 | 22 | Ø22 - 22 |
| Lantai 10 | 800 | 900 | 593,6060 | 890,8874 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 643,9124 | 890,8874 | 1,0% | 6633,0000 | 18 | Ø22 - 20 |
| Lantai 11 | 800 | 900 | 618,4415 | 776,8124 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 732,0175 | 776,8124 | 1,1% | 7296,3000 | 20 | Ø22 - 20 |
| Lantai 12 | 800 | 900 | 410,4134 | 444,9672 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 547,6121 | 444,9672 | 1,0% | 6633,0000 | 18 | Ø22 - 18 |

Lanjutan

| KOLOM | Arah X | | | | | | | | | | Arah Y | | | | | | |
|-----------|--------|-----|-----------|-----------|--------|-----------|-----------|----------|-----|-----|-----------|-----------|------|-----------|----|----------|--|
| | b | h | Mn | Pn | Ast | Jml | Tul. | b | h | Mn | Pn | Ast | Jml | Tul. | | | |
| | mm | mm | kNm | kN | mm2 | Tul. | Terpasang | mm | mm | kNm | kN | mm2 | Tul. | Terpasang | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | |
| C | | | | | ppakai | | | | | | | | | | | | |
| Lantai 1 | 800 | 900 | 156,8382 | 5306,6912 | 1,0% | 6696,0000 | 18 | Ø22 - 22 | 900 | 800 | 250,1662 | 5306,6912 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 2 | 800 | 900 | 1808,9029 | 5060,2726 | 1,2% | 8035,2000 | 22 | Ø22 - 22 | 900 | 800 | 1063,9385 | 5060,2726 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 3 | 800 | 900 | 1284,3194 | 4621,8413 | 1,0% | 6696,0000 | 18 | Ø22 - 22 | 900 | 800 | 724,7838 | 4621,8413 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 4 | 800 | 900 | 1039,7918 | 4166,9587 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | 900 | 800 | 703,2728 | 4166,9587 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 5 | 800 | 900 | 1115,1198 | 3695,6217 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | 900 | 800 | 727,6503 | 3695,6217 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 6 | 800 | 900 | 1184,8764 | 3207,8318 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | 900 | 800 | 753,2015 | 3207,8318 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 7 | 800 | 900 | 1002,6975 | 2703,5870 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | 900 | 800 | 637,1774 | 2703,5870 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 8 | 800 | 900 | 1087,6495 | 2182,8864 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | 900 | 800 | 672,9412 | 2182,8864 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 9 | 800 | 900 | 1211,2712 | 1537,2247 | 1,1% | 7030,8000 | 20 | Ø22 - 20 | 900 | 800 | 726,0867 | 1537,2247 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 10 | 800 | 900 | 907,4587 | 890,8874 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 422,9639 | 890,8874 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 11 | 800 | 900 | 945,4254 | 693,6855 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 480,8371 | 693,6855 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 12 | 800 | 900 | 566,8653 | 367,4669 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 325,1983 | 367,4669 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| D | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 900 | 91,1975 | 5306,6912 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 250,1662 | 5306,6912 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 2 | 800 | 900 | 1051,8322 | 5060,2726 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 1063,9385 | 5060,2726 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 3 | 800 | 900 | 746,7999 | 4621,8413 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 724,7838 | 4621,8413 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 4 | 800 | 900 | 604,6132 | 4166,9587 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 703,2728 | 4166,9587 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 5 | 800 | 900 | 648,4145 | 3695,6217 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 727,6503 | 3695,6217 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 6 | 800 | 900 | 688,9762 | 3207,8318 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 753,2015 | 3207,8318 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 7 | 800 | 900 | 656,3738 | 2703,5870 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 637,1774 | 2703,5870 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 8 | 800 | 900 | 711,9841 | 2211,8846 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 672,9412 | 2211,8846 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 9 | 800 | 900 | 792,9078 | 1537,2247 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 726,0867 | 1537,2247 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 10 | 800 | 900 | 593,6060 | 890,8874 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 422,9639 | 890,8874 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 11 | 800 | 900 | 618,4415 | 776,8124 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 480,8371 | 776,8124 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |
| Lantai 12 | 800 | 900 | 410,4134 | 444,9672 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | 900 | 800 | 325,1983 | 444,9672 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | |

Tabel 1.3.8 Gaya Geser Rencana Kolom untuk R/W 1/1 Lama

| kolom | hn | Sumbu X | | | | | | Sumbu Y | | | | | | Vu,k Terpakai | | |
|-----------|------|-----------|---------------|---------|--------|----------|-----------|-----------|------------|---------------|--------|--------|----------|------------------|----------|-----------|
| | | Mu,kx | Atas Bawah | Vu,kx | VD | VL | VE | Vu,kx max | Mu,ky | Atas Bawah | Vu,ky | VD | VL | | VE | Vu,ky max |
| | | | | | | | | | | | | | | | | |
| 1 | 2 | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| A | | | | | | | | | | | | | | | | |
| Lantai 1 | 3,35 | 101,9448 | 60,8626 | 11,5743 | 1,4988 | 269,1193 | 1144,0278 | 264,0729 | 157,655466 | 0,0000 | 0,0000 | 0,0000 | 294,6564 | 1237,55688 | 157,6555 | |
| Lantai 2 | 3,35 | 101,9448 | 483,1973 | 20,5270 | 2,5950 | 305,0596 | 1305,5284 | 622,0813 | 520,944537 | 0,0000 | 0,0000 | 0,0000 | 307,0185 | 1289,4777 | 520,9445 | |
| Lantai 3 | 3,35 | 442,9241 | 428,8581 | 18,3463 | 2,2118 | 307,3576 | 1312,4879 | 1123,0829 | 439,27511 | 0,0000 | 0,0000 | 0,0000 | 302,7513 | 1271,55546 | 439,2751 | |
| Lantai 4 | 3,35 | 1175,7869 | 403,4790 | 18,5829 | 2,1665 | 297,9226 | 1273,0618 | 765,0745 | 424,783998 | 0,0000 | 0,0000 | 0,0000 | 292,4533 | 1228,30386 | 424,7840 | |
| Lantai 5 | 3,35 | 601,8670 | 396,0506 | 18,3260 | 2,0630 | 280,4200 | 1199,1724 | 742,3677 | 421,757765 | 0,0000 | 0,0000 | 0,0000 | 276,8372 | 1162,71624 | 421,7578 | |
| Lantai 6 | 3,35 | 834,8076 | 394,9473 | 18,2018 | 1,9871 | 257,3473 | 1102,0570 | 680,6587 | 422,127572 | 0,0000 | 0,0000 | 0,0000 | 256,5804 | 1077,63768 | 422,1276 | |
| Lantai 7 | 3,35 | 675,7900 | 346,0643 | 18,0690 | 1,9207 | 229,4541 | 984,6964 | 768,1004 | 380,087188 | 0,0000 | 0,0000 | 0,0000 | 231,7910 | 973,5222 | 380,0872 | |
| Lantai 8 | 3,35 | 675,8647 | 318,6666 | 17,9858 | 1,8628 | 197,0883 | 848,6119 | 644,7881 | 351,77802 | 0,0000 | 0,0000 | 0,0000 | 202,5582 | 850,74444 | 351,7780 | |
| Lantai 9 | 3,35 | 724,8279 | 326,1697 | 17,8086 | 1,8352 | 160,4185 | 694,3837 | 795,0720 | 357,325144 | 0,0000 | 0,0000 | 0,0000 | 168,8605 | 709,2141 | 357,3251 | |
| Lantai 10 | 3,35 | 601,9417 | 243,2347 | 18,1708 | 1,7308 | 119,7776 | 523,9626 | 420,7778 | 233,582917 | 0,0000 | 0,0000 | 0,0000 | 131,1426 | 550,79892 | 243,2347 | |
| Lantai 11 | 3,35 | 770,1696 | 202,8292 | 16,1518 | 2,0551 | 75,5403 | 336,3863 | 418,5430 | 180,591882 | 0,0000 | 0,0000 | 0,0000 | 87,7368 | 368,494518 | 202,8292 | |
| Lantai 12 | 3,35 | 552,9038 | 119,2363 | 25,2461 | 0,4184 | 30,8389 | 156,4714 | 363,9597 | 122,763565 | 0,0000 | 0,0000 | 0,0000 | 48,6731 | 204,427146 | 122,7636 | |
| | | 651,7534 | | | | | | 475,8114 | | | | | | | | |
| | | 507,5621 | | | | | | 129,1714 | | | | | | | | |
| | | 706,9722 | | | | | | 355,9479 | | | | | | | | |
| | | 360,5611 | | | | | | 55,3101 | | | | | | | | |

| Lanjutan | KOLOM | hn | Sumbu X | | | | | | Sumbu Y | | | | | | Vu,k Terpakai | | | |
|----------|-----------|------|-----------------------|----------|---------|--------|----------|------------|----------------------|------------|--------|--------|----------|------------|------------------|----|----|-------|
| | | | Mu,kx | Atas | | Vu,kx | VE | VL | VD | Vu,ky | Atas | | Vu,ky | VE | | VL | VD | Vu,ky |
| | | | | Bawah | kNm | | | | | | kN | kN | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | | | | |
| C | Lantai 1 | 3,35 | 101,9448 0,0000 | 30,4313 | 11,5743 | 1,4988 | 269,1193 | 1144,02779 | 162,6080 162,6080 | 97,0794064 | 0,0000 | 0,0000 | 294,6564 | 1237,55688 | 97,0794 | | | |
| | Lantai 2 | 3,35 | 442,9241 1175,7869 | 483,1973 | 20,5270 | 2,5950 | 305,0586 | 1305,52844 | 383,0586 691,5600 | 320,781687 | 0,0000 | 0,0000 | 307,0185 | 1289,4777 | 483,1973 | | | |
| | Lantai 3 | 3,35 | 601,8670 834,8076 | 428,8581 | 18,3463 | 2,2118 | 307,3576 | 1312,4879 | 435,0393 471,1094 | 270,492156 | 0,0000 | 0,0000 | 302,7513 | 1271,55546 | 428,8581 | | | |
| | Lantai 4 | 3,35 | 675,7900 675,8647 | 403,4790 | 18,5829 | 2,1665 | 297,9226 | 1273,06176 | 457,1273 419,1288 | 261,568973 | 0,0000 | 0,0000 | 292,4533 | 1228,30386 | 403,4790 | | | |
| | Lantai 5 | 3,35 | 724,8279 601,9417 | 396,0506 | 18,3260 | 2,0630 | 280,4200 | 1199,17241 | 472,9727 397,0408 | 259,705511 | 0,0000 | 0,0000 | 276,8372 | 1162,71624 | 396,0506 | | | |
| | Lantai 6 | 3,35 | 770,1696 552,9038 | 394,9473 | 18,2018 | 1,9871 | 257,3473 | 1102,05701 | 489,5810 381,1953 | 259,933228 | 0,0000 | 0,0000 | 256,5804 | 1077,63768 | 394,9473 | | | |
| | Lantai 7 | 3,35 | 651,7534 507,5621 | 346,0643 | 18,0690 | 1,9207 | 229,4541 | 984,696387 | 414,1653 364,5871 | 232,463399 | 0,0000 | 0,0000 | 231,7910 | 973,5222 | 346,0643 | | | |
| | Lantai 8 | 3,35 | 706,9722 360,5611 | 318,6666 | 17,9858 | 1,8628 | 197,0883 | 848,611941 | 437,4118 279,0736 | 213,876227 | 0,0000 | 0,0000 | 202,5582 | 850,74444 | 318,6666 | | | |
| | Lantai 9 | 3,35 | 787,3263 305,3423 | 326,1697 | 17,8086 | 1,8352 | 160,4185 | 694,383725 | 471,9564 255,8271 | 217,248802 | 0,0000 | 0,0000 | 168,8605 | 709,2141 | 326,1697 | | | |
| | Lantai 10 | 3,35 | 589,8482 224,9882 | 243,2347 | 18,1708 | 1,7308 | 119,7776 | 523,962595 | 274,9265 221,2825 | 148,122115 | 0,0000 | 0,0000 | 131,1426 | 550,79892 | 243,2347 | | | |
| | Lantai 11 | 3,35 | 614,5265 64,9514 | 202,8292 | 16,1518 | 2,0551 | 75,5403 | 336,386316 | 312,5441 84,8483 | 118,624603 | 0,0000 | 0,0000 | 87,7368 | 368,494518 | 202,8292 | | | |
| | Lantai 12 | 3,35 | 368,4625 30,9793 | 119,2363 | 25,2461 | 0,4184 | 30,8389 | 156,471355 | 211,3789 36,3313 | 73,9433418 | 0,0000 | 0,0000 | 48,6731 | 204,427146 | 119,2363 | | | |

| Lanjutan | KOLOM | hn | Sumbu X | | | | | | | | | | Sumbu Y | | | | | | | | | | Vu,k Terpakai | | | |
|-----------|-------|----------|----------|---------|--------|----------|------------|----------|------------|--------|--------|----------|------------|----------|-------|----|----|----|-------|-------|-------|----|------------------|----|----|-------|
| | | | Atas | | Vu,kx | VD | VL | VE | Vu,kx | VD | VL | VE | Atas | | Vu,ky | VD | VL | VE | Atas | | Vu,ky | VD | | VL | VE | Vu,ky |
| | | | Mu,kx | Bawah | | | | | | | | | Mu,ky | Bawah | | | | | Mu,kx | Bawah | | | | | | |
| | | | kNm | kNm | kN | kN | kN | kN | kN | kN | kN | kN | kN | kN | kN | kN | kN | kN | kN | kN | kN | kN | | kN | kN | kN |
| 1 | | 2 | | 3 | 4 | 5 | 6 | 7 | 8 | | 9 | 10 | 11 | 12 | 13 | 14 | 15 | | | | | | | | | |
| D | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 3,35 | 59,2784 | 35,3901 | 11,5743 | 1,4988 | 269,1193 | 1144,02779 | 162,6080 | 97,0794064 | 0,0000 | 0,0000 | 294,6564 | 1237,55688 | 97,0794 | | | | | | | | | | | | |
| Lantai 2 | 3,35 | 59,2784 | 280,9673 | 20,5270 | 2,5950 | 305,0596 | 1305,52844 | 162,6080 | 320,781687 | 0,0000 | 0,0000 | 307,0185 | 1289,4777 | 320,7817 | | | | | | | | | | | | |
| Lantai 3 | 3,35 | 257,5494 | 249,3703 | 18,3463 | 2,2118 | 307,3576 | 1312,4879 | 383,0586 | 270,492156 | 0,0000 | 0,0000 | 302,7513 | 1271,55546 | 270,4922 | | | | | | | | | | | | |
| Lantai 4 | 3,35 | 683,6909 | 485,4199 | 18,5829 | 2,1665 | 297,9226 | 1273,06176 | 691,5600 | 261,568973 | 0,0000 | 0,0000 | 292,4533 | 1228,30386 | 261,5690 | | | | | | | | | | | | |
| Lantai 5 | 3,35 | 349,9707 | 234,6130 | 18,3260 | 2,0630 | 280,4200 | 1199,17241 | 435,0393 | 259,705511 | 0,0000 | 0,0000 | 276,8372 | 1162,71624 | 259,7055 | | | | | | | | | | | | |
| Lantai 6 | 3,35 | 485,4199 | 230,2936 | 18,2018 | 1,9871 | 257,3473 | 1102,05701 | 457,1273 | 259,933228 | 0,0000 | 0,0000 | 256,5804 | 1077,63768 | 259,9332 | | | | | | | | | | | | |
| Lantai 7 | 3,35 | 392,9551 | 229,6521 | 18,0690 | 1,9207 | 229,4541 | 984,596387 | 419,1288 | 232,463399 | 0,0000 | 0,0000 | 231,7910 | 973,5222 | 232,4634 | | | | | | | | | | | | |
| Lantai 8 | 3,35 | 392,9551 | 215,4560 | 17,9858 | 1,8628 | 197,0883 | 848,611941 | 472,9277 | 213,876227 | 0,0000 | 0,0000 | 202,5582 | 850,74444 | 213,8762 | | | | | | | | | | | | |
| Lantai 9 | 3,35 | 421,4694 | 208,6017 | 17,8086 | 1,8352 | 160,4185 | 694,383725 | 397,0408 | 217,248802 | 0,0000 | 0,0000 | 168,8605 | 709,2141 | 217,2488 | | | | | | | | | | | | |
| Lantai 10 | 3,35 | 350,0142 | 213,5133 | 17,8086 | 1,7308 | 119,7776 | 523,962595 | 489,5810 | 148,122115 | 0,0000 | 0,0000 | 131,1426 | 550,79892 | 159,1412 | | | | | | | | | | | | |
| Lantai 11 | 3,35 | 447,8345 | 159,1412 | 18,1708 | 2,0551 | 75,5403 | 336,386316 | 381,1953 | 118,624603 | 0,0000 | 0,0000 | 87,7368 | 368,494518 | 132,6789 | | | | | | | | | | | | |
| Lantai 12 | 3,35 | 321,4999 | 85,6817 | 25,2461 | 0,4184 | 30,8389 | 156,471355 | 414,1653 | 73,9433418 | 0,0000 | 0,0000 | 48,6731 | 204,427146 | 85,6817 | | | | | | | | | | | | |
| | | 295,1348 | | | | | | 364,5871 | | | | | | | | | | | | | | | | | | |
| | | 462,7896 | | | | | | 437,4118 | | | | | | | | | | | | | | | | | | |
| | | 236,0262 | | | | | | 279,0736 | | | | | | | | | | | | | | | | | | |
| | | 515,3901 | | | | | | 471,9564 | | | | | | | | | | | | | | | | | | |
| | | 199,8795 | | | | | | 255,8271 | | | | | | | | | | | | | | | | | | |
| | | 385,8439 | | | | | | 274,9265 | | | | | | | | | | | | | | | | | | |
| | | 147,2791 | | | | | | 221,2825 | | | | | | | | | | | | | | | | | | |
| | | 401,9870 | | | | | | 312,5441 | | | | | | | | | | | | | | | | | | |
| | | 42,4874 | | | | | | 84,8483 | | | | | | | | | | | | | | | | | | |
| | | 266,7687 | | | | | | 211,3789 | | | | | | | | | | | | | | | | | | |
| | | 20,2648 | | | | | | 36,3313 | | | | | | | | | | | | | | | | | | |

Tabel 1.3.9 Penulangan Sengkang Geser Kolom untuk RAW 1/4 Lama

| KOLOM | Di Dalam Sendi Plastis | | | | | | | | | | Di Luar Sendi Plastis | | | | | |
|-----------|------------------------|---------|-----------------------|------------|------------|----------|----------|-----------------------|-----------------|------|-----------------------|----------|----------|-----------------------|-----------------|------|
| | b mm | d mm | Ag mm ² | Vu,k kN | Nu,k kN | Vs kN | S mm | Sengkang Terpasang | Vs pasang kN | Cek | Vc kN | Vs kN | S mm | Sengkang Terpasang | Vs pasang kN | Cek |
| | | | | | | | | | | | | | | | | |
| A | 900 | 760 | 720000 | 157,6555 | 3167,9993 | 262,7591 | 294,2595 | ø12 - 80 | 966,492 | AMAN | 686,4428 | 515,6494 | 149,9456 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 1 | 900 | 760 | 720000 | 520,9445 | 2987,7089 | 868,2409 | 89,0529 | ø12 - 80 | 966,492 | AMAN | 679,8161 | 115,4595 | 669,6665 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 2 | 900 | 760 | 720000 | 439,2751 | 2715,5595 | 732,1252 | 105,6095 | ø12 - 80 | 966,492 | AMAN | 669,8130 | 193,9316 | 398,6940 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 3 | 900 | 760 | 720000 | 424,7840 | 2431,6413 | 707,9733 | 109,2122 | ø12 - 100 | 773,1936 | AMAN | 659,3773 | 199,1946 | 388,1599 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 4 | 900 | 760 | 720000 | 421,7578 | 2151,6903 | 702,9296 | 109,9959 | ø12 - 100 | 773,1936 | AMAN | 649,0874 | 192,1832 | 402,3212 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 5 | 900 | 760 | 720000 | 422,1276 | 1860,0259 | 703,5460 | 109,8995 | ø12 - 100 | 773,1936 | AMAN | 638,3670 | 181,0622 | 427,0321 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 6 | 900 | 760 | 720000 | 380,0872 | 1561,6234 | 633,4786 | 122,0552 | ø12 - 100 | 773,1936 | AMAN | 627,3990 | 215,6378 | 358,5612 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 7 | 900 | 760 | 720000 | 351,7780 | 1256,5160 | 586,2967 | 131,8775 | ø12 - 100 | 773,1936 | AMAN | 616,1844 | 235,0916 | 328,8904 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 8 | 900 | 760 | 720000 | 357,3251 | 991,7463 | 595,5419 | 129,8303 | ø12 - 100 | 773,1936 | AMAN | 606,4526 | 219,3503 | 352,4925 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 9 | 900 | 760 | 720000 | 243,2347 | 579,0768 | 405,3912 | 190,7277 | ø12 - 100 | 773,1936 | AMAN | 591,2845 | 327,7802 | 235,8878 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 10 | 900 | 760 | 720000 | 202,8292 | 449,9527 | 338,0487 | 228,7225 | ø12 - 100 | 773,1936 | AMAN | 586,5384 | 366,8068 | 210,7904 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 11 | 900 | 760 | 720000 | 122,7636 | 238,8535 | 204,6059 | 377,8940 | ø12 - 100 | 773,1936 | AMAN | 578,7793 | 445,7854 | 173,4452 | ø12 - 100 | 773,1936 | AMAN |
| B | 900 | 760 | 720000 | 157,6555 | 3334,8994 | 262,7591 | 294,2595 | ø12 - 80 | 966,492 | AMAN | 692,5774 | 521,7840 | 148,1827 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 1 | 900 | 760 | 720000 | 520,9445 | 3133,8507 | 868,2409 | 89,0529 | ø12 - 80 | 966,492 | AMAN | 685,1877 | 120,8311 | 639,8963 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 2 | 900 | 760 | 720000 | 439,2751 | 2867,3643 | 732,1252 | 105,6095 | ø12 - 80 | 966,492 | AMAN | 675,3927 | 199,5113 | 387,5437 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 3 | 900 | 760 | 720000 | 424,7840 | 2589,1817 | 707,9733 | 109,2122 | ø12 - 100 | 773,1936 | AMAN | 665,1678 | 204,9852 | 377,1949 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 4 | 900 | 760 | 720000 | 421,7578 | 2315,0389 | 702,9296 | 109,9959 | ø12 - 100 | 773,1936 | AMAN | 655,0915 | 198,1872 | 390,1329 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 5 | 900 | 760 | 720000 | 422,1276 | 2029,2554 | 703,5460 | 109,8995 | ø12 - 100 | 773,1936 | AMAN | 644,5872 | 187,2823 | 412,8492 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 6 | 900 | 760 | 720000 | 380,0872 | 1736,8064 | 633,4786 | 122,0552 | ø12 - 100 | 773,1936 | AMAN | 633,8380 | 222,0769 | 348,1649 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 7 | 900 | 760 | 720000 | 351,7780 | 1437,7250 | 586,2967 | 131,8775 | ø12 - 100 | 773,1936 | AMAN | 622,8450 | 241,7521 | 319,8291 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 8 | 900 | 760 | 720000 | 357,3251 | 999,1961 | 595,5419 | 129,8303 | ø12 - 100 | 773,1936 | AMAN | 606,7284 | 219,6242 | 352,0531 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 9 | 900 | 760 | 720000 | 233,5829 | 579,0768 | 389,3049 | 198,6088 | ø12 - 100 | 773,1936 | AMAN | 591,2845 | 338,2364 | 228,5956 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 10 | 900 | 760 | 720000 | 180,5919 | 504,9281 | 300,9865 | 256,8865 | ø12 - 100 | 773,1936 | AMAN | 588,5919 | 392,9179 | 196,7825 | ø12 - 100 | 773,1936 | AMAN |
| Lantai 11 | 900 | 760 | 720000 | 122,7636 | 289,2287 | 204,6059 | 377,8940 | ø12 - 100 | 773,1936 | AMAN | 580,6309 | 447,6370 | 172,7278 | ø12 - 100 | 773,1936 | AMAN |

Lanjutan

| KOLOM | Dalam Sendi Plastis | | | | | | | | | | Di Luar Sendi Plastis | | | | | | | | | |
|-----------|---------------------|---------|-----------------------|------------|------------|----------|----------|-----------------------|-----------------|------|-----------------------|----------|----------|-----------------------|-----------------|------|---|---|---|---|
| | b mm | d mm | Ag mm ² | Vu,k kN | Nu,k kN | Vs kN | S mm | Sengkang Terpasang | Vs pasang kN | Cek | Vc kN | Vs kN | S mm | Sengkang Terpasang | Vs pasang kN | Cek | | | | |
| | | | | | | | | | | | | | | | | | 2 | 3 | 4 | 5 |
| C | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 900 | 760 | 720000 | 97,0794 | 3449,3493 | 161,7990 | 477,8729 | ø12 - 90 | 859,104 | AMAN | 696,7841 | 591,6148 | 130,6921 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 2 | 900 | 760 | 720000 | 483,1973 | 3289,1772 | 805,3289 | 96,0097 | ø12 - 90 | 859,104 | AMAN | 690,8968 | 167,4331 | 461,7926 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 3 | 900 | 760 | 720000 | 428,8581 | 3004,1968 | 714,7635 | 108,1747 | ø12 - 90 | 859,104 | AMAN | 680,4221 | 215,8258 | 358,2489 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 4 | 900 | 760 | 720000 | 403,4790 | 2708,5231 | 672,4650 | 114,9790 | ø12 - 100 | 773,1936 | AMAN | 669,5543 | 232,4521 | 332,6249 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 5 | 900 | 760 | 720000 | 396,0506 | 2402,1541 | 660,0844 | 117,1356 | ø12 - 100 | 773,1936 | AMAN | 658,2935 | 229,2386 | 337,2877 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 6 | 900 | 760 | 720000 | 394,9473 | 2085,0907 | 658,2455 | 117,4628 | ø12 - 100 | 773,1936 | AMAN | 646,6395 | 218,7799 | 353,4116 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 7 | 900 | 760 | 720000 | 346,0643 | 1757,3316 | 576,7739 | 134,0549 | ø12 - 100 | 773,1936 | AMAN | 634,5924 | 259,6894 | 297,7379 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 8 | 900 | 760 | 720000 | 318,6666 | 1418,8761 | 531,1111 | 145,5804 | ø12 - 100 | 773,1936 | AMAN | 622,1521 | 276,9299 | 279,2019 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 9 | 900 | 760 | 720000 | 326,1697 | 999,1961 | 543,6162 | 142,2315 | ø12 - 100 | 773,1936 | AMAN | 606,7264 | 253,3759 | 305,1568 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 10 | 900 | 760 | 720000 | 243,2347 | 579,0768 | 405,3912 | 190,7277 | ø12 - 100 | 773,1936 | AMAN | 591,2845 | 327,7802 | 235,8878 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 11 | 900 | 760 | 720000 | 202,8292 | 450,8956 | 338,0487 | 228,7225 | ø12 - 100 | 773,1936 | AMAN | 586,5731 | 366,8414 | 210,7705 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 12 | 900 | 760 | 720000 | 119,2363 | 238,8535 | 198,7272 | 389,0728 | ø12 - 100 | 773,1936 | AMAN | 578,7793 | 449,6066 | 171,9711 | ø12 - 100 | 773,1936 | AMAN | | | | |
| D | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 900 | 760 | 720000 | 97,0794 | 3449,3493 | 161,7990 | 477,8729 | ø12 - 100 | 773,1936 | AMAN | 696,7841 | 591,6148 | 130,6921 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 2 | 900 | 760 | 720000 | 320,7817 | 3289,1772 | 534,6361 | 144,6205 | ø12 - 100 | 773,1936 | AMAN | 690,8968 | 343,3833 | 225,1592 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 3 | 900 | 760 | 720000 | 270,4922 | 3004,1968 | 450,8203 | 171,5082 | ø12 - 100 | 773,1936 | AMAN | 680,4221 | 387,3889 | 199,5910 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 4 | 900 | 760 | 720000 | 261,5690 | 2708,5231 | 435,9483 | 177,3590 | ø12 - 100 | 773,1936 | AMAN | 669,5543 | 386,1880 | 200,2117 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 5 | 900 | 760 | 720000 | 259,7055 | 2402,1541 | 432,8425 | 178,6316 | ø12 - 100 | 773,1936 | AMAN | 658,2935 | 376,9458 | 205,1206 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 6 | 900 | 760 | 720000 | 259,9332 | 2085,0907 | 433,2220 | 178,4751 | ø12 - 100 | 773,1936 | AMAN | 646,6395 | 365,0452 | 211,8077 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 7 | 900 | 760 | 720000 | 232,4634 | 1757,3316 | 387,4390 | 199,5652 | ø12 - 100 | 773,1936 | AMAN | 634,5924 | 382,7570 | 202,0064 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 8 | 900 | 760 | 720000 | 213,8762 | 1437,7250 | 356,4604 | 216,9087 | ø12 - 100 | 773,1936 | AMAN | 622,8450 | 391,1457 | 197,6741 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 9 | 900 | 760 | 720000 | 217,2488 | 999,1961 | 362,0813 | 213,5414 | ø12 - 100 | 773,1936 | AMAN | 606,7264 | 371,3735 | 208,1984 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 10 | 900 | 760 | 720000 | 159,1412 | 579,0768 | 265,2353 | 291,5123 | ø12 - 100 | 773,1936 | AMAN | 591,2845 | 418,8816 | 184,5853 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 11 | 900 | 760 | 720000 | 132,6789 | 504,9281 | 221,1315 | 349,6533 | ø12 - 100 | 773,1936 | AMAN | 588,5591 | 444,8236 | 173,8203 | ø12 - 100 | 773,1936 | AMAN | | | | |
| Lantai 12 | 900 | 760 | 720000 | 85,6817 | 289,2287 | 142,8028 | 541,4417 | ø12 - 100 | 773,1936 | AMAN | 580,6309 | 487,8091 | 158,5033 | ø12 - 100 | 773,1936 | AMAN | | | | |

Tabel 1.4.1 Penulangan Sengkang Joint untuk RW 1/1

| Kolom | Penulangan Geser Horizontal | | | | | | | | | | | | | | |
|-----------|-----------------------------|---------|----------|----------|------------------|------------------|------------|------------|------------|------------|-------------------------|-----------|--------------------------------|-------------|------------------|
| | bj m | hc m | Lki m | Lka m | Mkap,b ki kNm | Mkap,b ka kNm | Vj,h kN | Vj,v kN | Vc,h kN | Vs,h kN | As,h mm ² | øSengkang | As tersedia mm ² | Jumlah Tul. | Jarak Tul. mm |
| | | | | | | | | | | | | | | | |
| A | | | | | | | | | | | | | | | |
| Lantai 1 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 477,8469 | 1315,9501 | 4386,5005 | 4 ø 12 | 452,16 | 8 | 80 |
| Lantai 2 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 445,2468 | 1348,5502 | 4495,1674 | 4 ø 12 | 452,16 | 8 | 80 |
| Lantai 3 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 390,9211 | 1402,8759 | 4676,2531 | 4 ø 12 | 452,16 | 8 | 80 |
| Lantai 4 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 324,6991 | 1469,0979 | 4896,9931 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 5 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 242,2847 | 1551,5123 | 5171,7078 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 6 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 100,0956 | 1693,7014 | 5645,6714 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 7 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 0,00 | 1444,3190 | 4814,3967 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 8 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 0,00 | 1444,3190 | 4814,3967 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 9 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 0,00 | 1444,3190 | 4814,3967 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 10 | 0,65 | 0,8 | 5 | 5 | 207,1436 | 396,5371 | 667,3310 | 821,3305 | 0,00 | 667,3310 | 2224,4367 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 11 | 0,65 | 0,8 | 5 | 5 | 207,1436 | 396,5371 | 667,3310 | 821,3305 | 0,00 | 667,3310 | 2224,4367 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 12 | 0,65 | 0,8 | 5 | 5 | 207,1436 | 302,8713 | 555,5385 | 683,7397 | 0,00 | 555,5385 | 1851,7949 | 4 ø 12 | 452,16 | 6 | 100 |
| B | | | | | | | | | | | | | | | |
| Lantai 1 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 477,8469 | 1315,9501 | 4386,5005 | 4 ø 12 | 452,16 | 8 | 80 |
| Lantai 2 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 445,2468 | 1348,5502 | 4495,1674 | 4 ø 12 | 452,16 | 8 | 80 |
| Lantai 3 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 390,9211 | 1402,8759 | 4676,2531 | 4 ø 12 | 452,16 | 8 | 80 |
| Lantai 4 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 324,6991 | 1469,0979 | 4896,9931 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 5 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 242,2847 | 1551,5123 | 5171,7078 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 6 | 0,65 | 0,8 | 5 | 5 | 587,4492 | 941,4481 | 1793,7970 | 2207,7502 | 100,0956 | 1693,7014 | 5645,6714 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 7 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 0,00 | 1444,3190 | 4814,3967 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 8 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 0,00 | 1444,3190 | 4814,3967 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 9 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 0,00 | 1444,3190 | 4814,3967 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 10 | 0,65 | 0,8 | 5 | 5 | 207,1436 | 396,5371 | 667,3310 | 821,3305 | 0,00 | 667,3310 | 2224,4367 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 11 | 0,65 | 0,8 | 5 | 5 | 207,1436 | 396,5371 | 667,3310 | 821,3305 | 0,00 | 667,3310 | 2224,4367 | 4 ø 12 | 452,16 | 6 | 100 |
| Lantai 12 | 0,65 | 0,8 | 5 | 5 | 207,1436 | 302,8713 | 555,5385 | 683,7397 | 0,00 | 555,5385 | 1851,7949 | 4 ø 12 | 452,16 | 6 | 100 |

lanjutan

| Kolom | Penulangan Geser Horizontal | | | | | | | | | | | | | | |
|-----------|-----------------------------|---------|----------|----------|------------------|------------------|------------|------------|------------|------------|-------------------------|--------|--------------------------------|-------------|------------------|
| | bj m | hc m | Lki m | Lka m | Mkap.b.ki kNm | Mkap.b.ka kNm | Vj.h kN | Vj.v kN | Vc.h kN | Vs.h kN | As.h mm ² | | As tersedia mm ² | Jumlah Tul. | Jarak Tul. mm |
| | | | | | | | | | | | 10 | 11 | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| C | | | | | | | | | | | | | | | |
| Lantai 1 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 524,6892 | 618,4839 | 2061,6130 | 4 Ø 12 | 452,16 | 7 | 90 |
| Lantai 2 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 498,5618 | 644,6113 | 2148,7044 | 4 Ø 12 | 452,16 | 7 | 90 |
| Lantai 3 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 448,3267 | 694,8465 | 2316,1549 | 4 Ø 12 | 452,16 | 7 | 90 |
| Lantai 4 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 389,4160 | 753,7571 | 2512,5236 | 4 Ø 12 | 452,16 | 7 | 90 |
| Lantai 5 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 317,0295 | 826,1436 | 2753,8121 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 6 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 218,1410 | 925,0321 | 3083,4404 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 7 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 0,00 | 900,6056 | 3002,0186 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 8 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 0,00 | 900,6056 | 3002,0186 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 9 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 0,00 | 900,6056 | 3002,0186 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 10 | 0,65 | 0,8 | 0 | 5 | 0 | 396,5371 | 443,8213 | 546,2416 | 0,00 | 443,8213 | 1479,4045 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 11 | 0,65 | 0,8 | 0 | 5 | 0 | 396,5371 | 443,8213 | 546,2416 | 0,00 | 443,8213 | 1479,4045 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 12 | 0,65 | 0,8 | 0 | 5 | 0 | 302,8713 | 332,0930 | 408,7298 | 0,00 | 332,0930 | 1106,9766 | 4 Ø 12 | 452,16 | 6 | 100 |
| D | | | | | | | | | | | | | | | |
| Lantai 1 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 524,6892 | 618,4839 | 2061,6130 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 2 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 498,5618 | 644,6113 | 2148,7044 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 3 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 448,3267 | 694,8465 | 2316,1549 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 4 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 389,4160 | 753,7571 | 2512,5236 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 5 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 317,0295 | 826,1436 | 2753,8121 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 6 | 0,65 | 0,8 | 0 | 5 | 0 | 941,4481 | 1143,1731 | 1406,9823 | 218,1410 | 925,0321 | 3083,4404 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 7 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 0,00 | 900,6056 | 3002,0186 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 8 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 0,00 | 900,6056 | 3002,0186 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 9 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 0,00 | 900,6056 | 3002,0186 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 10 | 0,65 | 0,8 | 0 | 5 | 0 | 396,5371 | 443,8213 | 546,2416 | 0,00 | 443,8213 | 1479,4045 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 11 | 0,65 | 0,8 | 0 | 5 | 0 | 396,5371 | 443,8213 | 546,2416 | 0,00 | 443,8213 | 1479,4045 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 12 | 0,65 | 0,8 | 0 | 5 | 0 | 302,8713 | 332,0930 | 408,7298 | 0,00 | 332,0930 | 1106,9766 | 4 Ø 12 | 452,16 | 6 | 100 |

LAMPIRAN 2
HASIL PERHITUNGAN
R/W 1/6 BARU

Tabel 2.1.1.1 Hitungan Gaya Horizontal R/W 1/6 Baru Portal E

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | R | V (kN) | Fi (kN) |
|------------------|--------|-------------|--------------|--------|---|-----|------------|------------|
| 12 | 48 | 6313,6800 | 303056,6400 | 0,8682 | 1 | 8,5 | 11911,1385 | 1223,5297 |
| 11 | 44 | 10027,3440 | 441203,1360 | 0,8682 | 1 | 8,5 | 11911,1385 | 1781,2681 |
| 10 | 40 | 10027,3440 | 401093,7600 | 0,8682 | 1 | 8,5 | 11911,1385 | 1619,3347 |
| 9 | 36 | 10027,3440 | 360984,3840 | 0,8682 | 1 | 8,5 | 11911,1385 | 1457,4012 |
| 8 | 32 | 10027,3440 | 320875,0080 | 0,8682 | 1 | 8,5 | 11911,1385 | 1295,4677 |
| 7 | 28 | 10027,3440 | 280765,6320 | 0,8682 | 1 | 8,5 | 11911,1385 | 1133,5343 |
| 6 | 24 | 10027,3440 | 240656,2560 | 0,8682 | 1 | 8,5 | 11911,1385 | 971,6008 |
| 5 | 20 | 10027,3440 | 200546,8800 | 0,8682 | 1 | 8,5 | 11911,1385 | 809,6673 |
| 4 | 16 | 10027,3440 | 160437,5040 | 0,8682 | 1 | 8,5 | 11911,1385 | 647,7339 |
| 3 | 12 | 10027,3440 | 120328,1280 | 0,8682 | 1 | 8,5 | 11911,1385 | 485,8004 |
| 2 | 8 | 10027,3440 | 80218,7520 | 0,8682 | 1 | 8,5 | 11911,1385 | 323,8669 |
| 1 | 4 | 10027,3440 | 40109,3760 | 0,8682 | 1 | 8,5 | 11911,1385 | 161,9335 |
| Σ Total = | | 116614,4640 | 2950275,4560 | | | | | 11911,1385 |

Tabel 2.1.1.2 Hitungan Gaya Horizontal R/W 1/6 Baru Portal 2

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | R | V (kN) | Fi (kN) |
|------------------|--------|-------------|--------------|--------|---|-----|------------|------------|
| 12 | 48 | 6313,6800 | 303056,6400 | 0,8682 | 1 | 8,5 | 11911,1385 | 1223,5297 |
| 11 | 44 | 10027,3440 | 441203,1360 | 0,8682 | 1 | 8,5 | 11911,1385 | 1781,2681 |
| 10 | 40 | 10027,3440 | 401093,7600 | 0,8682 | 1 | 8,5 | 11911,1385 | 1619,3347 |
| 9 | 36 | 10027,3440 | 360984,3840 | 0,8682 | 1 | 8,5 | 11911,1385 | 1457,4012 |
| 8 | 32 | 10027,3440 | 320875,0080 | 0,8682 | 1 | 8,5 | 11911,1385 | 1295,4677 |
| 7 | 28 | 10027,3440 | 280765,6320 | 0,8682 | 1 | 8,5 | 11911,1385 | 1133,5343 |
| 6 | 24 | 10027,3440 | 240656,2560 | 0,8682 | 1 | 8,5 | 11911,1385 | 971,6008 |
| 5 | 20 | 10027,3440 | 200546,8800 | 0,8682 | 1 | 8,5 | 11911,1385 | 809,6673 |
| 4 | 16 | 10027,3440 | 160437,5040 | 0,8682 | 1 | 8,5 | 11911,1385 | 647,7339 |
| 3 | 12 | 10027,3440 | 120328,1280 | 0,8682 | 1 | 8,5 | 11911,1385 | 485,8004 |
| 2 | 8 | 10027,3440 | 80218,7520 | 0,8682 | 1 | 8,5 | 11911,1385 | 323,8669 |
| 1 | 4 | 10027,3440 | 40109,3760 | 0,8682 | 1 | 8,5 | 11911,1385 | 161,9335 |
| Σ Total = | | 116614,4640 | 2950275,4560 | | | | | 11911,1385 |

Tabel 2.1.2.1 Hitungan Gaya Horizontal RW 1/6 Baru Portal E

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|------------|-----------------|-----------------------|---------------------------|------------------|--------|-------------|----------------|--------------|
| 12 | 1.223,5297 | 1.223,5297 | 1.175.000,0000 | 0,0010 | 0,0822 | 0,0003 | 6.313,6800 | 42,6921 | 100,6113 |
| 11 | 1.781,2681 | 3.004,7978 | 1.175.000,0000 | 0,0026 | 0,0812 | 0,0006 | 10.027,3440 | 66,0969 | 144,6195 |
| 10 | 1.619,3347 | 4.624,1325 | 1.175.000,0000 | 0,0039 | 0,0786 | 0,0010 | 10.027,3440 | 61,9987 | 127,3312 |
| 9 | 1.457,4012 | 6.081,5337 | 1.175.000,0000 | 0,0052 | 0,0747 | 0,0013 | 10.027,3440 | 55,9480 | 108,8626 |
| 8 | 1.295,4677 | 7.377,0015 | 1.175.000,0000 | 0,0063 | 0,0695 | 0,0016 | 10.027,3440 | 48,4633 | 90,0617 |
| 7 | 1.133,5343 | 8.510,5357 | 1.175.000,0000 | 0,0072 | 0,0632 | 0,0018 | 10.027,3440 | 40,1052 | 71,6873 |
| 6 | 971,6008 | 9.482,1365 | 1.175.000,0000 | 0,0081 | 0,0560 | 0,0020 | 10.027,3440 | 31,4449 | 54,4090 |
| 5 | 809,6673 | 10.291,8039 | 1.175.000,0000 | 0,0088 | 0,0479 | 0,0022 | 10.027,3440 | 23,0351 | 38,8069 |
| 4 | 647,7339 | 10.939,5377 | 1.175.000,0000 | 0,0093 | 0,0392 | 0,0023 | 10.027,3440 | 15,3852 | 25,3720 |
| 3 | 485,8004 | 11.425,3381 | 1.175.000,0000 | 0,0097 | 0,0299 | 0,0024 | 10.027,3440 | 8,9407 | 14,5061 |
| 2 | 323,8669 | 11.749,2051 | 1.175.000,0000 | 0,0100 | 0,0201 | 0,0025 | 10.027,3440 | 4,0659 | 6,5215 |
| 1 | 161,9335 | 11.911,1385 | 1.175.000,0000 | 0,0101 | 0,0101 | 0,0025 | 10.027,3440 | 1,0304 | 1,6415 |
| | | | | | | | Σtotal = | 399,2063 | 784,4305 |

T Awal = 1,0942
T Rayleigh = 1,4349

Tabel 2.1.2.2 Hitungan Gaya Horizontal RW 1/6 Baru Portal 2

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|------------|-----------------|-----------------------|---------------------------|------------------|--------|-------------|----------------|--------------|
| 12 | 1.223,5297 | 1.223,5297 | 1.692.000,0000 | 0,0007 | 0,0571 | 0,0002 | 6.313,6800 | 20,5884 | 69,8690 |
| 11 | 1.781,2681 | 3.004,7978 | 1.692.000,0000 | 0,0018 | 0,0564 | 0,0004 | 10.027,3440 | 31,8754 | 100,4302 |
| 10 | 1.619,3347 | 4.624,1325 | 1.692.000,0000 | 0,0027 | 0,0546 | 0,0007 | 10.027,3440 | 29,8990 | 88,4244 |
| 9 | 1.457,4012 | 6.081,5337 | 1.692.000,0000 | 0,0036 | 0,0519 | 0,0009 | 10.027,3440 | 26,9811 | 75,5990 |
| 8 | 1.295,4677 | 7.377,0015 | 1.692.000,0000 | 0,0044 | 0,0483 | 0,0011 | 10.027,3440 | 23,3716 | 62,5428 |
| 7 | 1.133,5343 | 8.510,5357 | 1.692.000,0000 | 0,0050 | 0,0439 | 0,0013 | 10.027,3440 | 19,3409 | 49,7829 |
| 6 | 971,6008 | 9.482,1365 | 1.692.000,0000 | 0,0056 | 0,0389 | 0,0014 | 10.027,3440 | 15,1644 | 37,7840 |
| 5 | 809,6673 | 10.291,8039 | 1.692.000,0000 | 0,0061 | 0,0333 | 0,0015 | 10.027,3440 | 11,1087 | 26,9492 |
| 4 | 647,7339 | 10.939,5377 | 1.692.000,0000 | 0,0065 | 0,0272 | 0,0016 | 10.027,3440 | 7,4195 | 17,6194 |
| 3 | 485,8004 | 11.425,3381 | 1.692.000,0000 | 0,0068 | 0,0207 | 0,0017 | 10.027,3440 | 4,3117 | 10,0737 |
| 2 | 323,8669 | 11.749,2051 | 1.692.000,0000 | 0,0069 | 0,0140 | 0,0017 | 10.027,3440 | 1,9608 | 4,5288 |
| 1 | 161,9335 | 11.911,1385 | 1.692.000,0000 | 0,0070 | 0,0070 | 0,0018 | 10.027,3440 | 0,4969 | 1,1400 |
| | | | | | | | Σtotal = | 192,5185 | 544,7434 |

T Awal = 1,0942
T Rayleigh = 1,1958

Tabel 2.1.3.1 Hitungan Gaya Horizontal R/W 1/6 Baru Portal E

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | R | V (kN) | Fi (kN) |
|-------------|--------|------------|--------------|--------|---|-----|-------------|-------------|
| 12 | 48 | 6313,68 | 303056,64 | 0,4202 | 1 | 8,5 | 5764,870326 | 592,1759704 |
| 11 | 44 | 10027,344 | 441203,136 | 0,4202 | 1 | 8,5 | 5764,870326 | 862,115726 |
| 10 | 40 | 10027,344 | 401093,76 | 0,4202 | 1 | 8,5 | 5764,870326 | 783,7415691 |
| 9 | 36 | 10027,344 | 360984,384 | 0,4202 | 1 | 8,5 | 5764,870326 | 705,3674122 |
| 8 | 32 | 10027,344 | 320875,008 | 0,4202 | 1 | 8,5 | 5764,870326 | 626,9932553 |
| 7 | 28 | 10027,344 | 280765,632 | 0,4202 | 1 | 8,5 | 5764,870326 | 548,6190983 |
| 6 | 24 | 10027,344 | 240656,256 | 0,4202 | 1 | 8,5 | 5764,870326 | 470,2449414 |
| 5 | 20 | 10027,344 | 200546,88 | 0,4202 | 1 | 8,5 | 5764,870326 | 391,8707845 |
| 4 | 16 | 10027,344 | 160437,504 | 0,4202 | 1 | 8,5 | 5764,870326 | 313,4966276 |
| 3 | 12 | 10027,344 | 120328,128 | 0,4202 | 1 | 8,5 | 5764,870326 | 235,1224707 |
| 2 | 8 | 10027,344 | 80218,752 | 0,4202 | 1 | 8,5 | 5764,870326 | 156,7483138 |
| 1 | 4 | 10027,344 | 40109,376 | 0,4202 | 1 | 8,5 | 5764,870326 | 78,37415691 |
| Σ Total = | | 116614,464 | 2950275,456 | | | | | 5764,870326 |

Tabel 2.1.3.2 Hitungan Gaya Horizontal R/W 1/6 Baru Portal 2

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | R | V (kN) | Fi (kN) |
|-------------|--------|------------|--------------|--------|---|-----|-------------|-------------|
| 12 | 48 | 6313,68 | 303056,64 | 0,4202 | 1 | 8,5 | 5764,870326 | 592,1759704 |
| 11 | 44 | 10027,344 | 441203,136 | 0,4202 | 1 | 8,5 | 5764,870326 | 862,115726 |
| 10 | 40 | 10027,344 | 401093,76 | 0,4202 | 1 | 8,5 | 5764,870326 | 783,7415691 |
| 9 | 36 | 10027,344 | 360984,384 | 0,4202 | 1 | 8,5 | 5764,870326 | 705,3674122 |
| 8 | 32 | 10027,344 | 320875,008 | 0,4202 | 1 | 8,5 | 5764,870326 | 626,9932553 |
| 7 | 28 | 10027,344 | 280765,632 | 0,4202 | 1 | 8,5 | 5764,870326 | 548,6190983 |
| 6 | 24 | 10027,344 | 240656,256 | 0,4202 | 1 | 8,5 | 5764,870326 | 470,2449414 |
| 5 | 20 | 10027,344 | 200546,88 | 0,4202 | 1 | 8,5 | 5764,870326 | 391,8707845 |
| 4 | 16 | 10027,344 | 160437,504 | 0,4202 | 1 | 8,5 | 5764,870326 | 313,4966276 |
| 3 | 12 | 10027,344 | 120328,128 | 0,4202 | 1 | 8,5 | 5764,870326 | 235,1224707 |
| 2 | 8 | 10027,344 | 80218,752 | 0,4202 | 1 | 8,5 | 5764,870326 | 156,7483138 |
| 1 | 4 | 10027,344 | 40109,376 | 0,4202 | 1 | 8,5 | 5764,870326 | 78,37415691 |
| Σ Total = | | 116614,464 | 2950275,456 | | | | | 5764,870326 |

Tabel 2.1.4.1 Hitungan Gaya Horizontal R/W 1/6 Baru Portal E

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|----------|-----------------|-----------------------|---------------------------|------------------|--------|-------------|----------------|--------------|
| 12 | 592,1760 | 592,1760 | 1.175.000,0000 | 0,0005 | 0,0398 | 0,0001 | 6.313,6800 | 10,0005 | 23,5678 |
| 11 | 862,1157 | 1.454,2917 | 1.175.000,0000 | 0,0012 | 0,0393 | 0,0003 | 10.027,3440 | 15,4829 | 33,8766 |
| 10 | 783,7416 | 2.238,0333 | 1.175.000,0000 | 0,0019 | 0,0381 | 0,0005 | 10.027,3440 | 14,5230 | 29,8268 |
| 9 | 705,3674 | 2.943,4007 | 1.175.000,0000 | 0,0025 | 0,0362 | 0,0006 | 10.027,3440 | 13,1056 | 25,5006 |
| 8 | 626,9933 | 3.570,3939 | 1.175.000,0000 | 0,0030 | 0,0336 | 0,0008 | 10.027,3440 | 11,3523 | 21,0966 |
| 7 | 548,6191 | 4.119,0130 | 1.175.000,0000 | 0,0035 | 0,0306 | 0,0009 | 10.027,3440 | 9,3945 | 16,7925 |
| 6 | 470,2449 | 4.589,2580 | 1.175.000,0000 | 0,0039 | 0,0271 | 0,0010 | 10.027,3440 | 7,3659 | 12,7451 |
| 5 | 391,8708 | 4.981,1288 | 1.175.000,0000 | 0,0042 | 0,0232 | 0,0011 | 10.027,3440 | 5,3959 | 9,0904 |
| 4 | 313,4966 | 5.294,6254 | 1.175.000,0000 | 0,0045 | 0,0190 | 0,0011 | 10.027,3440 | 3,6039 | 5,9433 |
| 3 | 235,1225 | 5.529,7479 | 1.175.000,0000 | 0,0047 | 0,0145 | 0,0012 | 10.027,3440 | 2,0943 | 3,3980 |
| 2 | 156,7483 | 5.686,4962 | 1.175.000,0000 | 0,0048 | 0,0097 | 0,0012 | 10.027,3440 | 0,9524 | 1,5276 |
| 1 | 78,3742 | 5.764,8703 | 1.175.000,0000 | 0,0049 | 0,0049 | 0,0012 | 10.027,3440 | 0,2414 | 0,3845 |
| | | | | | | | Σtotal = | 93,5126 | 183,7499 |

T Awal = 1,4349
T Rayleigh = 1,4349

Tabel 2.1.4.2 Hitungan Gaya Horizontal R/W 1/6 Baru Portal 2

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|----------|-----------------|-----------------------|---------------------------|------------------|--------|-------------|----------------|--------------|
| 12 | 592,1760 | 592,1760 | 1.692.000,0000 | 0,0003 | 0,0276 | 0,0001 | 6.313,6800 | 4,8227 | 16,3665 |
| 11 | 862,1157 | 1.454,2917 | 1.692.000,0000 | 0,0009 | 0,0273 | 0,0002 | 10.027,3440 | 7,4667 | 23,5254 |
| 10 | 783,7416 | 2.238,0333 | 1.692.000,0000 | 0,0013 | 0,0264 | 0,0003 | 10.027,3440 | 7,0037 | 20,7131 |
| 9 | 705,3674 | 2.943,4007 | 1.692.000,0000 | 0,0017 | 0,0251 | 0,0004 | 10.027,3440 | 6,3202 | 17,7088 |
| 8 | 626,9933 | 3.570,3939 | 1.692.000,0000 | 0,0021 | 0,0234 | 0,0005 | 10.027,3440 | 5,4747 | 14,6504 |
| 7 | 548,6191 | 4.119,0130 | 1.692.000,0000 | 0,0024 | 0,0213 | 0,0006 | 10.027,3440 | 4,5305 | 11,6614 |
| 6 | 470,2449 | 4.589,2580 | 1.692.000,0000 | 0,0027 | 0,0188 | 0,0007 | 10.027,3440 | 3,5522 | 8,8508 |
| 5 | 391,8708 | 4.981,1288 | 1.692.000,0000 | 0,0029 | 0,0161 | 0,0007 | 10.027,3440 | 2,6022 | 6,3127 |
| 4 | 313,4966 | 5.294,6254 | 1.692.000,0000 | 0,0031 | 0,0132 | 0,0008 | 10.027,3440 | 1,7380 | 4,1273 |
| 3 | 235,1225 | 5.529,7479 | 1.692.000,0000 | 0,0033 | 0,0100 | 0,0008 | 10.027,3440 | 1,0100 | 2,3597 |
| 2 | 156,7483 | 5.686,4962 | 1.692.000,0000 | 0,0034 | 0,0068 | 0,0008 | 10.027,3440 | 0,4593 | 1,0609 |
| 1 | 78,3742 | 5.764,8703 | 1.692.000,0000 | 0,0034 | 0,0034 | 0,0009 | 10.027,3440 | 0,1164 | 0,2670 |
| | | | | | | | Σtotal = | 45,0967 | 127,6041 |

T Awal = 1,1958
T Rayleigh = 1,1958

Tabel 2.2.1.1 Momen Redistribusi Balok untuk R/W 1/6 Baru Portal E

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|-----------|----------------|
| 3 | 51 | 0 | -146,6887 | 284,3056 | -533,5719 | 322,9828 | -494,8947 | 322,9828 | -533,5719 | -533,5719 | 1,05 | -4,5628 | -529,0091 | M - maks : |
| | | 0,5 | -96,91348 | 267,8078 | -434,5517 | 293,2672 | -409,0923 | 293,2672 | -434,5517 | -434,5517 | 1,05 | -4,5628 | -429,9889 | -434,5517 |
| | | 1,1 | -40,47175 | 245,69 | -318,048 | 256,1982 | -307,5398 | 256,1982 | -318,048 | -318,048 | 1,05 | -4,5628 | -313,4852 | M + maks : |
| | | 1,7 | 8,570801 | 218,3509 | -206,7655 | 215,9557 | -209,1608 | 218,3509 | -209,1608 | -209,1608 | 1,05 | -4,5628 | -204,598 | 293,2672 |
| | | 2,3 | 47,21449 | 183,674 | -102,8209 | 171,2533 | -115,2416 | 183,674 | -115,2416 | -115,2416 | 1,05 | -4,5628 | -110,6788 | p/p : |
| | | 2,9 | 77,78711 | 143,3018 | -4,571534 | 123,0894 | -24,78395 | 143,3018 | -24,78395 | -24,78395 | 1,05 | -4,5628 | -20,22116 | -0,674872978 |
| | | 3,5 | 104,3238 | 100,0816 | 90,82989 | 73,19451 | 63,94275 | 100,0816 | 63,94275 | 63,94275 | 1,05 | -4,5628 | 68,505543 | |
| | | 4,1 | 79,46803 | 5,865021 | 135,2348 | -14,81272 | 114,5571 | 135,2348 | -14,81272 | 143,3018 | 1,05 | -4,5628 | 147,86459 | M - red maks : |
| | | 4,7 | 50,57632 | -91,19952 | 176,7918 | -104,5509 | 163,4404 | 176,7918 | -104,5509 | 183,674 | 1,05 | -4,5628 | 188,23679 | -429,9889072 |
| | | 5,3 | 13,61355 | -193,9594 | 212,6535 | -197,7506 | 208,8623 | 212,6535 | -197,7506 | 218,3509 | 1,05 | -4,5628 | 222,91369 | M + red maks : |
| | | 5,9 | -33,74809 | -304,0571 | 241,1774 | -295,4102 | 249,8242 | 249,8242 | -304,0571 | 256,1982 | 1,05 | -4,5628 | 260,76099 | 297,8299929 |
| 6,5 | -88,5089 | -419,376 | 264,48 | -396,2432 | 287,6128 | 287,6128 | -419,376 | 293,2672 | 1,05 | -4,5628 | 297,82999 | p/p red : | | |
| 7 | -136,8833 | -517,4088 | 281,9651 | -481,446 | 317,9279 | 317,9279 | -517,4088 | 322,9828 | 1,05 | -4,5628 | 327,54559 | -0,692645759 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| 3 | 63 | 7 | -33,52812 | 526,8369 | -574,9803 | 536,0786 | -565,7386 | 536,0786 | -574,9803 | -574,9803 | 0 | 0,0000 | -574,9803 | M - maks : |
| | | 7,5 | -15,64149 | 401,611 | -424,752 | 405,8914 | -420,4715 | 405,8914 | -424,752 | -424,752 | 0 | 0,0000 | -424,752 | -424,752 |
| | | 7,8 | -5,859399 | 325,8115 | -335,2788 | 327,3787 | -333,7116 | 327,3787 | -335,2788 | -335,2788 | 0 | 0,0000 | -335,2788 | M + maks : |
| | | 8,1 | 2,607448 | 249,0928 | -246,7249 | 248,3115 | -247,5062 | 249,0928 | -247,5062 | -247,5062 | 0 | 0,0000 | -247,5062 | 405,8914 |
| | | 8,4 | 9,265842 | 171,1102 | -159,435 | 168,482 | -162,0631 | 171,1102 | -162,0631 | -162,0631 | 0 | 0,0000 | -162,0631 | p/p : |
| | | 8,7 | 13,62257 | 91,51884 | -73,75374 | 87,68229 | -77,59029 | 91,51884 | -77,59029 | -77,59029 | 0 | 0,0000 | -77,59029 | -0,955596207 |
| | | 9 | 15,18441 | 9,97415 | 9,97415 | 5,704385 | 5,704385 | 9,97415 | 5,704385 | 9,97415 | 0 | 0,0000 | 9,97415 | |
| | | 9,3 | 13,62257 | -73,75374 | 91,51884 | -77,59029 | 87,68229 | 91,51884 | -77,59029 | 91,51884 | 0 | 0,0000 | 91,51884 | M - red maks : |
| | | 9,6 | 9,265842 | -159,435 | 171,1102 | -162,0631 | 168,482 | 171,1102 | -162,0631 | 171,1102 | 0 | 0,0000 | 171,1102 | -424,752 |
| | | 9,9 | 2,607448 | -246,7249 | 249,0928 | -247,5062 | 248,3115 | 249,0928 | -247,5062 | 249,0928 | 0 | 0,0000 | 249,0928 | M + red maks : |
| | | 10,2 | -5,859399 | -335,2788 | 325,8115 | -333,7116 | 327,3787 | 327,3787 | -335,2788 | 327,3787 | 0 | 0,0000 | 327,3787 | 405,8914 |
| 10,5 | -15,64149 | -424,752 | 401,611 | -420,4715 | 405,8914 | 405,8914 | -424,752 | 405,8914 | 0 | 0,0000 | 405,8914 | p/p red : | | |
| 11 | -33,52812 | -574,9803 | 526,8369 | -565,7386 | 536,0786 | 536,0786 | -574,9803 | 536,0786 | 0 | 0,0000 | 536,0786 | -0,955596207 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|-----------|----------------|
| Geser | 52 | 0 | -148,2395 | 284,2275 | -535,703 | 323,333 | -496,5975 | 323,333 | -535,703 | -535,703 | 1 | -4,3636 | -531,3394 | M - maks : |
| | | 0,5 | -98,24652 | 267,7118 | -436,3559 | 293,5393 | -410,5284 | 293,5393 | -436,3559 | -436,3559 | 1 | -4,3636 | -431,9923 | -436,3559 |
| | | 1,1 | -41,5435 | 245,5724 | -319,46 | 256,3765 | -308,6559 | 256,3765 | -319,46 | -319,46 | 1 | -4,3636 | -315,0964 | M + maks : |
| | | 1,7 | 7,760344 | 218,2119 | -207,7852 | 216,0403 | -209,9568 | 218,2119 | -209,9568 | -209,9568 | 1 | -4,3636 | -205,5932 | 293,5393 |
| | | 2,3 | 46,66532 | 183,5134 | -103,4483 | 171,2441 | -115,7176 | 183,5134 | -115,7176 | -115,7176 | 1 | -4,3636 | -111,354 | p/p : |
| | | 2,9 | 77,49923 | 143,1197 | -4,806658 | 122,9864 | -24,93989 | 143,1197 | -24,93989 | -24,93989 | 1 | -4,3636 | -20,57633 | -0,672706156 |
| | | 3,5 | 104,2972 | 99,87802 | 90,98703 | 72,99783 | 64,10684 | 99,87802 | 64,10684 | 64,10684 | 1 | -4,3636 | 68,470399 | |
| | | 4,1 | 79,70272 | 5,639864 | 135,7842 | -15,10315 | 115,0412 | 135,7842 | -15,10315 | 143,1197 | 1 | -4,3636 | 147,48326 | M - red maks : |
| | | 4,7 | 51,0723 | -91,44621 | 177,7335 | -104,9351 | 164,2446 | 177,7335 | -104,9351 | 183,5134 | 1 | -4,3636 | 187,87696 | -431,992341 |
| | | 5,3 | 14,37082 | -194,2276 | 213,9875 | -198,2285 | 209,9865 | 213,9875 | -198,2285 | 218,2119 | 1 | -4,3636 | 222,57546 | M + red maks : |
| | | 5,9 | -32,72953 | -304,3468 | 242,9036 | -295,9819 | 251,2685 | 251,2685 | -304,3468 | 256,3765 | 1 | -4,3636 | 260,74006 | 297,902859 |
| 6,5 | -87,22906 | -419,6873 | 266,5985 | -396,9087 | 289,3771 | 289,3771 | -419,6873 | 293,5393 | 1 | -4,3636 | 297,90286 | p/p red : | | |
| 7 | -135,3858 | -517,738 | 284,4105 | -482,1896 | 319,959 | 319,959 | -517,738 | 323,333 | 1 | -4,3636 | 327,69656 | -0,689602177 | | |

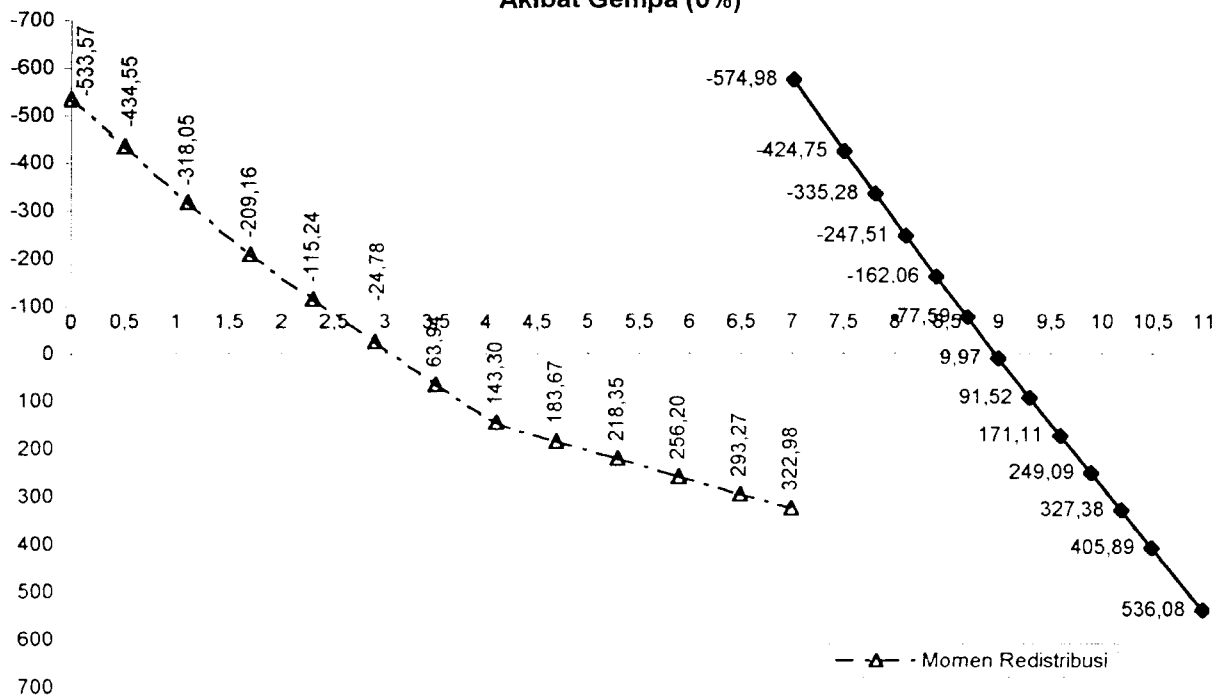
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| 4 | 64 | 7 | -33,44582 | 509,2038 | -557,2162 | 518,4234 | -547,9966 | 518,4234 | -557,2162 | -557,2162 | 0 | 0,0000 | -557,2162 | M - maks : |
| | | 7,5 | -15,55919 | 388,4025 | -411,4126 | 392,6609 | -407,1542 | 392,6609 | -411,4126 | -411,4126 | 0 | 0,0000 | -411,4126 | -411,4126 |
| | | 7,8 | -5,777102 | 315,2578 | -324,5942 | 316,8029 | -323,0491 | 316,8029 | -324,5942 | -324,5942 | 0 | 0,0000 | -324,5942 | M + maks : |
| | | 8,1 | 2,689745 | 241,1939 | -238,6951 | 240,3906 | -239,4985 | 241,1939 | -239,4985 | -239,4985 | 0 | 0,0000 | -239,4985 | 392,6609 |
| | | 8,4 | 9,34814 | 165,8661 | -154,06 | 163,2158 | -156,7102 | 165,8661 | -156,7102 | -156,7102 | 0 | 0,0000 | -156,7102 | p/p : |
| | | 8,7 | 13,70487 | 88,92954 | -71,03346 | 85,07088 | -74,89212 | 88,92954 | -74,89212 | -74,89212 | 0 | 0,0000 | -74,89212 | -0,954421182 |
| | | 9 | 15,26671 | 10,03963 | 10,03963 | 5,747766 | 5,747766 | 10,03963 | 5,747766 | 10,03963 | 0 | 0,0000 | 10,03963 | |
| | | 9,3 | 13,70487 | -71,03346 | 88,92954 | -74,89212 | 85,07088 | 88,92954 | -74,89212 | 88,92954 | 0 | 0,0000 | 88,92954 | M - red maks : |
| | | 9,6 | 9,34814 | -154,06 | 165,8661 | -156,7102 | 163,2158 | 165,8661 | -156,7102 | 165,8661 | 0 | 0,0000 | 165,8661 | -411,4126 |
| | | 9,9 | 2,689745 | -238,6951 | 241,1939 | -239,4985 | 240,3906 | 241,1939 | -239,4985 | 241,1939 | 0 | 0,0000 | 241,1939 | M + red maks : |
| | | 10,2 | -5,777102 | -324,5942 | 315,2578 | -323,0491 | 316,8029 | 316,8029 | -324,5942 | 316,8029 | 0 | 0,0000 | 316,8029 | 392,6609 |
| 10,5 | -15,55919 | -411,4126 | 388,4025 | -407,1542 | 392,6609 | 392,6609 | -411,4126 | 392,6609 | 0 | 0,0000 | 392,6609 | p/p red : | | |
| 11 | -33,44582 | -557,2162 | 509,2038 | -547,9966 | 518,4234 | 518,4234 | -557,2162 | 518,4234 | 0 | 0,0000 | 518,4234 | -0,954421182 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|-----------|----------------|
| 7 | 55 | 0 | -151,6615 | 201,1343 | -457,4845 | 241,1848 | -417,4341 | 241,1848 | -457,4845 | -457,4845 | 0,5 | -1,8456 | -455,6389 | M - maks : |
| | | 0,5 | -101,179 | 196,3026 | -369,124 | 222,94 | -342,4867 | 222,94 | -369,124 | -369,124 | 0,5 | -1,8456 | -367,2784 | -369,124 |
| | | 1,1 | -43,8885 | 188,1842 | -265,4119 | 199,6358 | -253,9603 | 199,6358 | -265,4119 | -265,4119 | 0,5 | -1,8456 | -263,5663 | M + maks : |
| | | 1,7 | 6,002806 | 174,8445 | -166,921 | 173,1582 | -168,6073 | 174,8445 | -168,6073 | -168,6073 | 0,5 | -1,8456 | -166,7617 | 222,94 |
| | | 2,3 | 45,49524 | 154,1669 | -75,76801 | 142,2207 | -87,71416 | 154,1669 | -87,71416 | -87,71416 | 0,5 | -1,8456 | -85,86854 | p/p : |
| | | 2,9 | 76,91662 | 127,7941 | 9,689734 | 107,8217 | -10,28258 | 127,7941 | -10,28258 | -10,28258 | 0,5 | -1,8456 | -8,43696 | -0,603970481 |
| | | 3,5 | 104,3021 | 98,57328 | 92,29955 | 71,69179 | 65,41807 | 98,57328 | 65,41807 | 65,41807 | 0,5 | -1,8456 | 67,26369 | |
| | | 4,1 | 80,29504 | 18,356 | 123,9129 | -2,550536 | 103,0063 | 123,9129 | -2,550536 | 127,7941 | 0,5 | -1,8456 | 129,63972 | M - red maks : |
| | | 4,7 | 52,25207 | -64,70918 | 152,6783 | -78,5238 | 138,8636 | 152,6783 | -78,5238 | 154,1669 | 0,5 | -1,8456 | 156,01252 | -367,27838 |
| | | 5,3 | 16,13805 | -153,4697 | 175,7484 | -157,9586 | 171,2594 | 175,7484 | -157,9586 | 174,8445 | 0,5 | -1,8456 | 176,69012 | M + red maks : |
| | | 5,9 | -30,37483 | -249,568 | 191,4806 | -241,8533 | 199,1953 | 199,1953 | -249,568 | 199,6358 | 0,5 | -1,8456 | 201,48142 | 224,78562 |
| | | 6,5 | -84,2869 | -350,8876 | 201,9916 | -328,9214 | 223,9578 | 223,9578 | -350,8876 | 222,94 | 0,5 | -1,8456 | 224,78562 | p/p red : |
| 7 | -131,9541 | -437,2543 | 208,8171 | -402,6535 | 243,4179 | 243,4179 | -437,2543 | 241,1848 | 0,5 | -1,8456 | 243,03042 | -0,612030635 | | |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 7 | 67 | 7 | -33,35352 | 353,1757 | -401,0582 | 362,3697 | -391,8641 | 362,3697 | -401,0582 | -401,0582 | 0 | 0,0000 | -401,0582 | M - maks : |
| | | 7,5 | -15,46689 | 271,3977 | -294,2777 | 275,6305 | -290,0449 | 275,6305 | -294,2777 | -294,2777 | 0 | 0,0000 | -294,2777 | -294,2777 |
| | | 7,8 | -5,684802 | 221,667 | -230,8733 | 223,1865 | -229,3538 | 223,1865 | -230,8733 | -230,8733 | 0 | 0,0000 | -230,8733 | M + maks : |
| | | 8,1 | 2,782045 | 171,017 | -168,3882 | 170,1881 | -169,2171 | 171,017 | -169,2171 | -169,2171 | 0 | 0,0000 | -169,2171 | 275,6305 |
| | | 8,4 | 9,44044 | 119,1031 | -107,167 | 116,4273 | -109,8428 | 119,1031 | -109,8428 | -109,8428 | 0 | 0,0000 | -109,8428 | p/p : |
| | | 8,7 | 13,79717 | 65,58057 | -47,55451 | 61,69635 | -51,43872 | 65,58057 | -51,43872 | -51,43872 | 0 | 0,0000 | -51,43872 | -0,936634003 |
| | | 9 | 15,35901 | 10,10462 | 10,10462 | 5,7872 | 5,7872 | 10,10462 | 5,7872 | 10,10462 | 0 | 0,0000 | 10,10462 | |
| | | 9,3 | 13,79717 | -47,55451 | 65,58057 | -51,43872 | 61,69635 | 65,58057 | -51,43872 | 65,58057 | 0 | 0,0000 | 65,58057 | M - red maks : |
| | | 9,6 | 9,44044 | -107,167 | 119,1031 | -109,8428 | 116,4273 | 119,1031 | -109,8428 | 119,1031 | 0 | 0,0000 | 119,1031 | -294,2777 |
| | | 9,9 | 2,782045 | -168,3882 | 171,017 | -169,2171 | 170,1881 | 171,017 | -169,2171 | 171,017 | 0 | 0,0000 | 171,017 | M + red maks : |
| | | 10,2 | -5,684802 | -230,8733 | 221,667 | -229,3538 | 223,1865 | 223,1865 | -230,8733 | 223,1865 | 0 | 0,0000 | 223,1865 | 275,6305 |
| | | 10,5 | -15,46689 | -294,2777 | 271,3977 | -290,0449 | 275,6305 | 275,6305 | -294,2777 | 275,6305 | 0 | 0,0000 | 275,6305 | p/p red : |
| 11 | -33,35352 | -401,0582 | 353,1757 | -391,8641 | 362,3697 | 362,3697 | -401,0582 | 362,3697 | 0 | 0,0000 | 362,3697 | -0,936634003 | | |

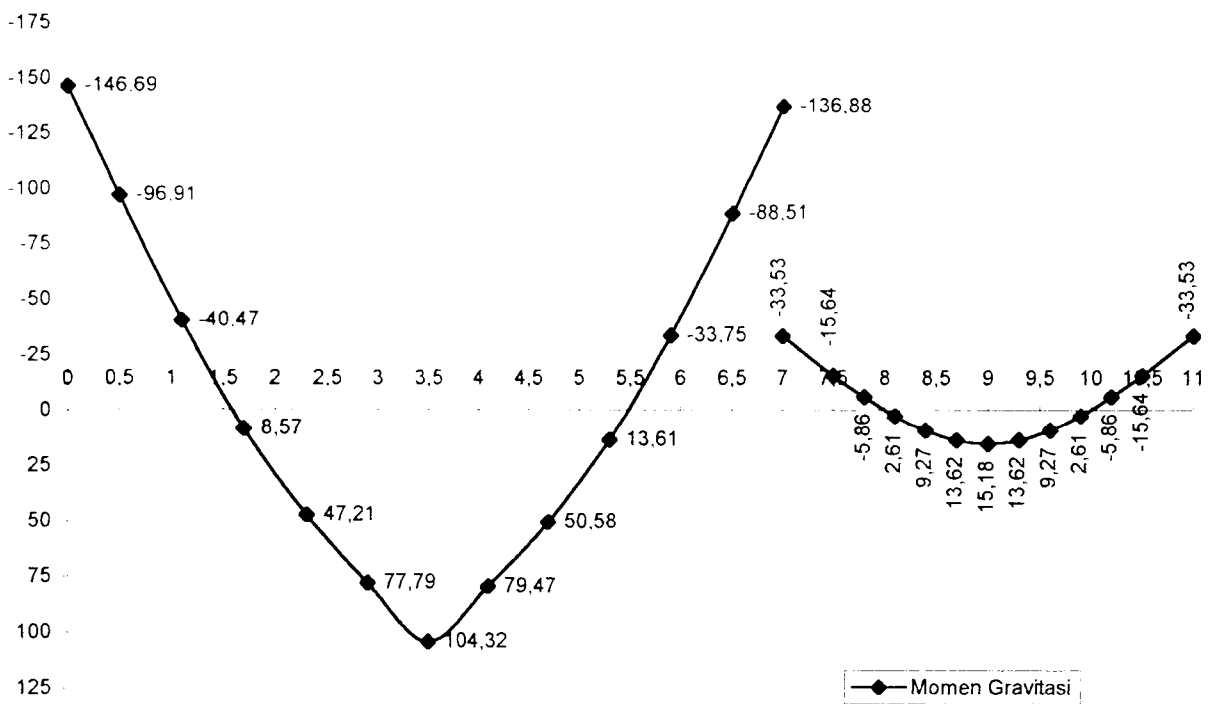
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|-----------|----------------|
| 10 | 58 | 0 | -153,3535 | 55,41528 | -314,1273 | 95,93526 | -273,6073 | 95,93526 | -314,1273 | -314,1273 | 13,5 | -33,2048 | -280,9225 | M - maks : |
| | | 0,5 | -102,6176 | 71,14186 | -245,9615 | 98,1788 | -218,9246 | 98,1788 | -245,9615 | -245,9615 | 13,5 | -33,2048 | -212,7567 | -245,9615 |
| | | 1,1 | -45,02307 | 87,69323 | -166,4831 | 99,46064 | -154,7157 | 99,46064 | -166,4831 | -166,4831 | 13,5 | -33,2048 | -133,2783 | M + maks : |
| | | 1,7 | 5,172323 | 99,02341 | -92,2259 | 97,5691 | -93,68021 | 99,02341 | -93,68021 | -93,68021 | 13,5 | -33,2048 | -60,47541 | 103,0157 |
| | | 2,3 | 44,96885 | 103,0157 | -25,30656 | 91,21766 | -37,10461 | 103,0157 | -37,10461 | -37,10461 | 13,5 | -33,2048 | -3,899808 | p/p : |
| | | 2,9 | 76,65431 | 101,3127 | 35,9175 | 81,40467 | 16,00945 | 101,3127 | 16,00945 | 16,00945 | 13,5 | -33,2048 | 49,214253 | -0,418828557 |
| | | 3,5 | 104,3839 | 96,76181 | 94,29363 | 69,86074 | 67,39256 | 96,76181 | 67,39256 | 67,39256 | 13,5 | -33,2048 | 100,59736 | |
| | | 4,1 | 80,6809 | 41,2144 | 101,6733 | 20,20444 | 80,66331 | 101,6733 | 20,20444 | 101,3127 | 13,5 | -33,2048 | 134,5175 | M - red maks : |
| | | 4,7 | 52,94202 | -17,18093 | 106,205 | -31,1828 | 92,20311 | 106,205 | -31,1828 | 103,0157 | 13,5 | -33,2048 | 136,2205 | -212,7566975 |
| | | 5,3 | 17,1321 | -81,27154 | 105,0414 | -86,03158 | 100,2814 | 105,0414 | -86,03158 | 99,02341 | 13,5 | -33,2048 | 132,22821 | M + red maks : |
| | | 5,9 | -29,0767 | -152,7 | 96,53996 | -145,3403 | 103,8997 | 103,8997 | -152,7 | 99,46064 | 13,5 | -33,2048 | 132,66544 | 136,2205025 |
| | | 6,5 | -82,68468 | -229,3497 | 82,81732 | -207,8223 | 104,3447 | 104,3447 | -229,3497 | 98,1788 | 13,5 | -33,2048 | 131,3836 | p/p red : |
| 7 | -130,0984 | -295,1582 | 69,44802 | -261,0661 | 103,5402 | 103,5402 | -295,1582 | 95,93526 | 13,5 | -33,2048 | 129,14006 | -0,640264227 | | |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 10 | 70 | 7 | -33,39972 | 124,5348 | -172,5788 | 133,7372 | -163,3763 | 133,7372 | -172,5788 | -172,5788 | 0 | 0,0000 | -172,5788 | M - maks : |
| | | 7,5 | -15,51308 | 99,89679 | -122,9384 | 104,138 | -118,6972 | 104,138 | -122,9384 | -122,9384 | 0 | 0,0000 | -122,9384 | -122,9384 |
| | | 7,8 | -5,730995 | 84,4501 | -93,81801 | 85,97804 | -92,29007 | 85,97804 | -93,81801 | -93,81801 | 0 | 0,0000 | -93,81801 | M + maks : |
| | | 8,1 | 2,735852 | 68,08419 | -65,61689 | 67,26366 | -66,43742 | 68,08419 | -66,43742 | -66,43742 | 0 | 0,0000 | -66,43742 | 104,138 |
| | | 8,4 | 9,394246 | 50,45432 | -38,67974 | 47,78695 | -41,34711 | 50,45432 | -41,34711 | -41,34711 | 0 | 0,0000 | -41,34711 | p/p : |
| | | 8,7 | 13,75097 | 31,21578 | -13,35124 | 27,33998 | -17,22705 | 31,21578 | -17,22705 | -17,22705 | 0 | 0,0000 | -17,22705 | -0,847074632 |
| | | 9 | 15,31282 | 10,02387 | 10,02387 | 5,714847 | 5,714847 | 10,02387 | 5,714847 | 10,02387 | 0 | 0,0000 | 10,02387 | |
| | | 9,3 | 13,75097 | -13,35124 | 31,21578 | -17,22705 | 27,33998 | 31,21578 | -17,22705 | 31,21578 | 0 | 0,0000 | 31,21578 | M - red maks : |
| | | 9,6 | 9,394246 | -38,67974 | 50,45432 | -41,34711 | 47,78695 | 50,45432 | -41,34711 | 50,45432 | 0 | 0,0000 | 50,45432 | -122,9384 |
| | | 9,9 | 2,735852 | -65,61689 | 68,08419 | -66,43742 | 67,26366 | 68,08419 | -66,43742 | 68,08419 | 0 | 0,0000 | 68,08419 | M + red maks : |
| | | 10,2 | -5,730995 | -93,81801 | 84,4501 | -92,29007 | 85,97804 | 85,97804 | -93,81801 | 85,97804 | 0 | 0,0000 | 85,97804 | 104,138 |
| | | 10,5 | -15,51308 | -122,9384 | 99,89679 | -118,6972 | 104,138 | 104,138 | -122,9384 | 104,138 | 0 | 0,0000 | 104,138 | p/p red : |
| 11 | -33,39972 | -172,5788 | 124,5348 | -163,3763 | 133,7372 | 133,7372 | -172,5788 | 133,7372 | 0 | 0,0000 | 133,7372 | -0,847074632 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M peru |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|-----------|----------------|
| 12 | 60 | 0 | -117,2261 | -7,967355 | -208,0572 | 22,17679 | -177,9131 | 22,17679 | -208,0572 | -208,0572 | 9,1 | -14,4241 | -193,6331 | M - maks : |
| | | 0,5 | -79,09396 | 13,05236 | -158,5066 | 33,40465 | -138,1543 | 33,40465 | -158,5066 | -158,5066 | 9,1 | -14,4241 | -144,0825 | -158,5066 |
| | | 1,1 | -35,43572 | 36,45226 | -100,8697 | 45,60455 | -91,71741 | 45,60455 | -100,8697 | -100,8697 | 9,1 | -14,4241 | -86,4456 | M + maks : |
| | | 1,7 | 3,496762 | 55,74869 | -47,33625 | 54,93899 | -48,14594 | 55,74869 | -48,14594 | -48,14594 | 9,1 | -14,4241 | -33,72184 | 78,33138 |
| | | 2,3 | 35,78764 | 69,27808 | 0,4301653 | 60,2463 | -8,601608 | 69,27808 | -8,601608 | -8,601608 | 9,1 | -14,4241 | 5,8224926 | p/p : |
| | | 2,9 | 62,92364 | 78,33138 | 43,72051 | 62,42796 | 27,81708 | 78,33138 | 27,81708 | 27,81708 | 9,1 | -14,4241 | 42,241181 | -0,494183712 |
| | | 3,5 | 87,48196 | 85,14644 | 84,77259 | 63,04663 | 62,67279 | 85,14644 | 62,67279 | 62,67279 | 9,1 | -14,4241 | 77,096891 | |
| | | 4,1 | 66,57706 | 46,61141 | 80,4746 | 29,69132 | 63,55451 | 80,4746 | 29,69132 | 78,33138 | 9,1 | -14,4241 | 92,755481 | M - red maks : |
| | | 4,7 | 43,09447 | 5,838134 | 73,93835 | -5,226961 | 62,87325 | 73,93835 | -5,226961 | 69,27808 | 9,1 | -14,4241 | 83,702181 | -144,0824994 |
| | | 5,3 | 14,45702 | -39,41122 | 62,92602 | -43,2709 | 59,06635 | 62,92602 | -43,2709 | 55,74869 | 9,1 | -14,4241 | 70,172791 | M + red maks : |
| | | 5,9 | -20,82204 | -90,42762 | 46,14665 | -85,34197 | 51,2323 | 51,2323 | -90,42762 | 45,60455 | 9,1 | -14,4241 | 60,028651 | 92,7554806 |
| | | 6,5 | -60,82686 | -145,5475 | 25,26381 | -130,2785 | 40,5328 | 40,5328 | -145,5475 | 33,40465 | 9,1 | -14,4241 | 47,828751 | p/p red : |
| 7 | -95,91448 | -193,0005 | 6,341653 | -168,7869 | 30,55528 | 30,55528 | -193,0005 | 22,17679 | 9,1 | -14,4241 | 36,600891 | -0,64376646 | | |
| 12 | 72 | 7 | -25,60604 | -4,209696 | -40,09706 | 2,505692 | -33,38167 | 2,505692 | -40,09706 | -40,09706 | 20,5 | -5,2496 | -34,84743 | M - maks : |
| | | 7,5 | -13,44871 | 1,307551 | -25,60797 | 4,787773 | -22,12775 | 4,787773 | -25,60797 | -25,60797 | 20,5 | -5,2496 | -20,35834 | -25,60797 |
| | | 7,8 | -6,799939 | 4,086667 | -17,44575 | 5,797596 | -15,73482 | 5,797596 | -17,44575 | -17,44575 | 20,5 | -5,2496 | -12,19612 | M + maks : |
| | | 8,1 | -1,045123 | 6,13023 | -10,01908 | 6,309756 | -9,839556 | 6,309756 | -10,01908 | -10,01908 | 20,5 | -5,2496 | -4,769446 | 7,16241 |
| | | 8,4 | 3,480509 | 7,16241 | -3,603798 | 6,137629 | -4,62858 | 7,16241 | -4,62858 | -4,62858 | 20,5 | -5,2496 | 0,6210539 | p/p : |
| | | 8,7 | 6,441725 | 6,907374 | 1,52427 | 5,094588 | -0,288516 | 6,907374 | -0,288516 | -0,288516 | 20,5 | -5,2496 | 4,9611179 | -0,279694564 |
| | | 9 | 7,503293 | 5,08929 | 5,08929 | 2,994012 | 2,994012 | 5,08929 | 2,994012 | 5,08929 | 20,5 | -5,2496 | 10,338924 | |
| | | 9,3 | 6,441725 | 1,52427 | 6,907374 | -0,288516 | 5,094588 | 6,907374 | -0,288516 | 6,907374 | 20,5 | -5,2496 | 12,157008 | M - red maks |
| | | 9,6 | 3,480509 | -3,603798 | 7,16241 | -4,62858 | 6,137629 | 7,16241 | -4,62858 | 7,16241 | 20,5 | -5,2496 | 12,412044 | -20,35833615 |
| | | 9,9 | -1,045123 | -10,01908 | 6,13023 | -9,839556 | 6,309756 | 6,309756 | -10,01908 | 6,309756 | 20,5 | -5,2496 | 11,55939 | M + red maks |
| | | 10,2 | -6,799939 | -17,44575 | 4,086667 | -15,73482 | 5,797596 | 5,797596 | -17,44575 | 5,797596 | 20,5 | -5,2496 | 11,04723 | 12,41204385 |
| | | 10,5 | -13,44871 | -25,60797 | 1,307551 | -22,12775 | 4,787773 | 4,787773 | -25,60797 | 4,787773 | 20,5 | -5,2496 | 10,037407 | p/p red : |
| 11 | -25,60604 | -40,09706 | -4,209696 | -33,38167 | 2,505692 | 2,505692 | -40,09706 | 2,505692 | 20,5 | -5,2496 | 7,7553259 | -0,609678697 | | |

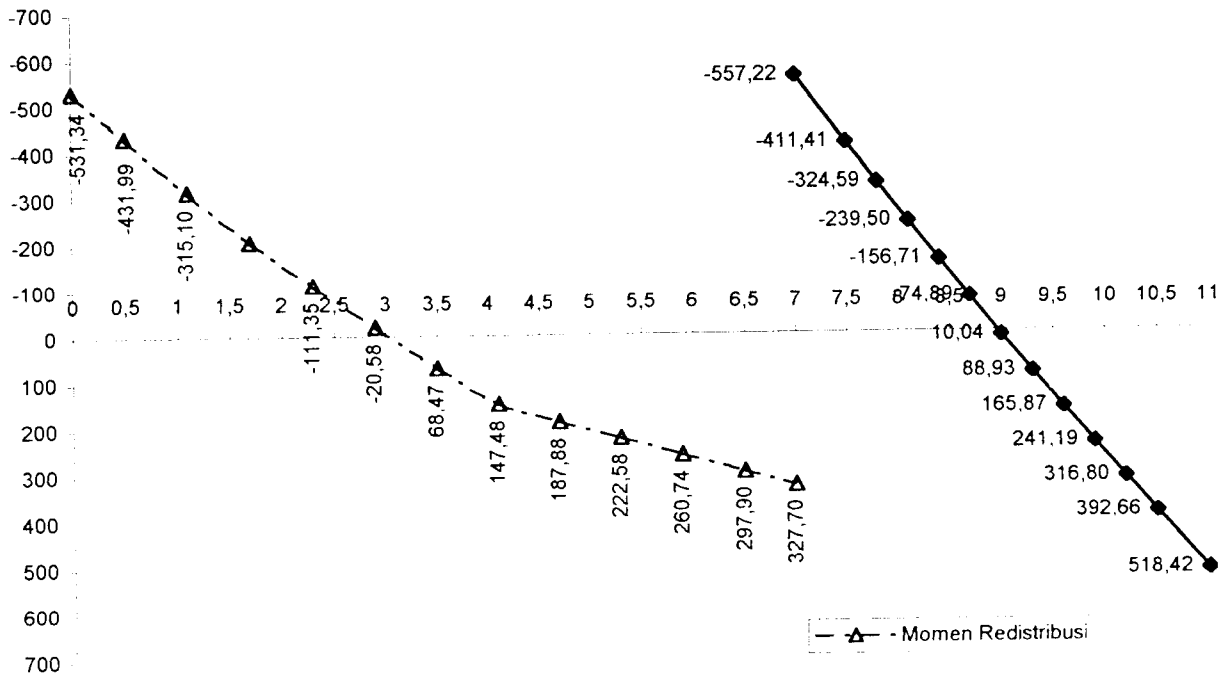
**Grafik Momen Lantai 3
Akibat Gempa (0%)**



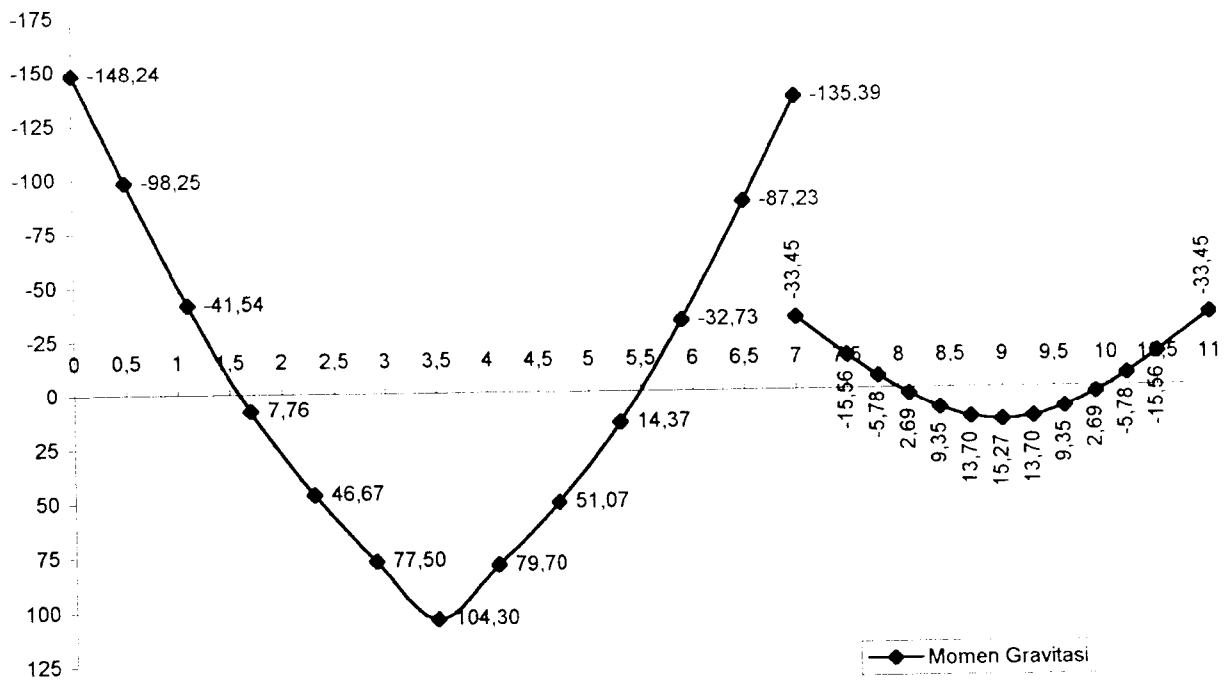
**Grafik Momen Lantai 3
Akibat Berat Sendiri**



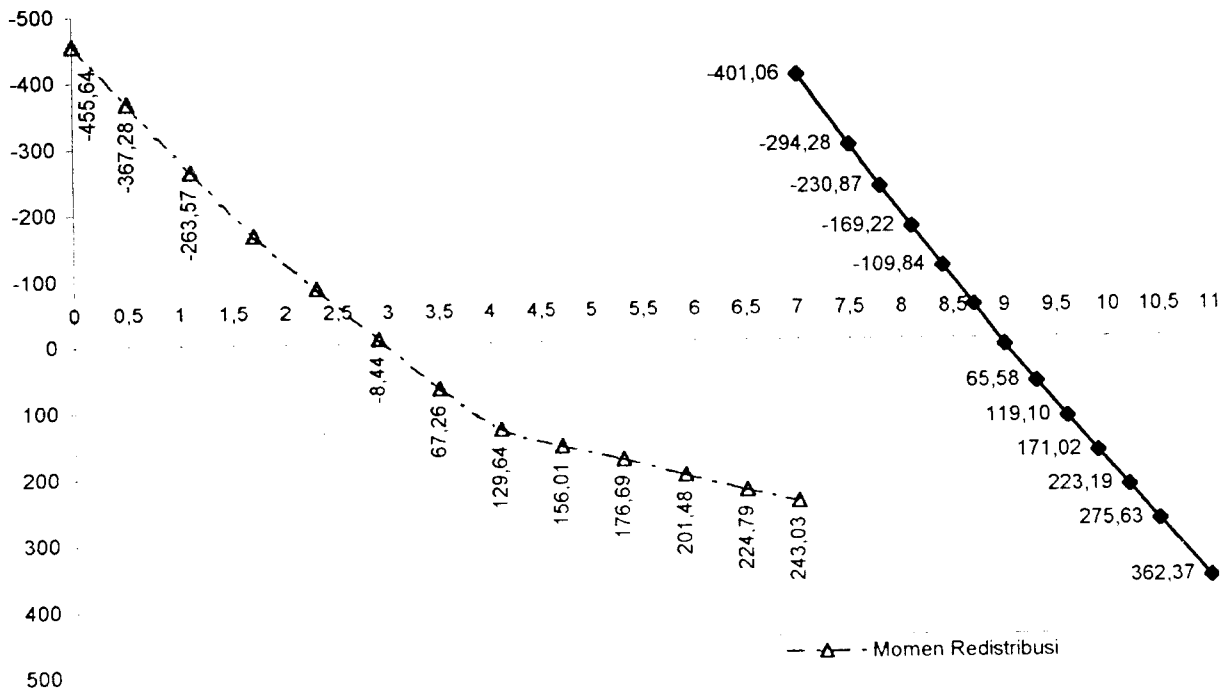
Grafik Momen Lantai 4
Akibat Gempa (0%)



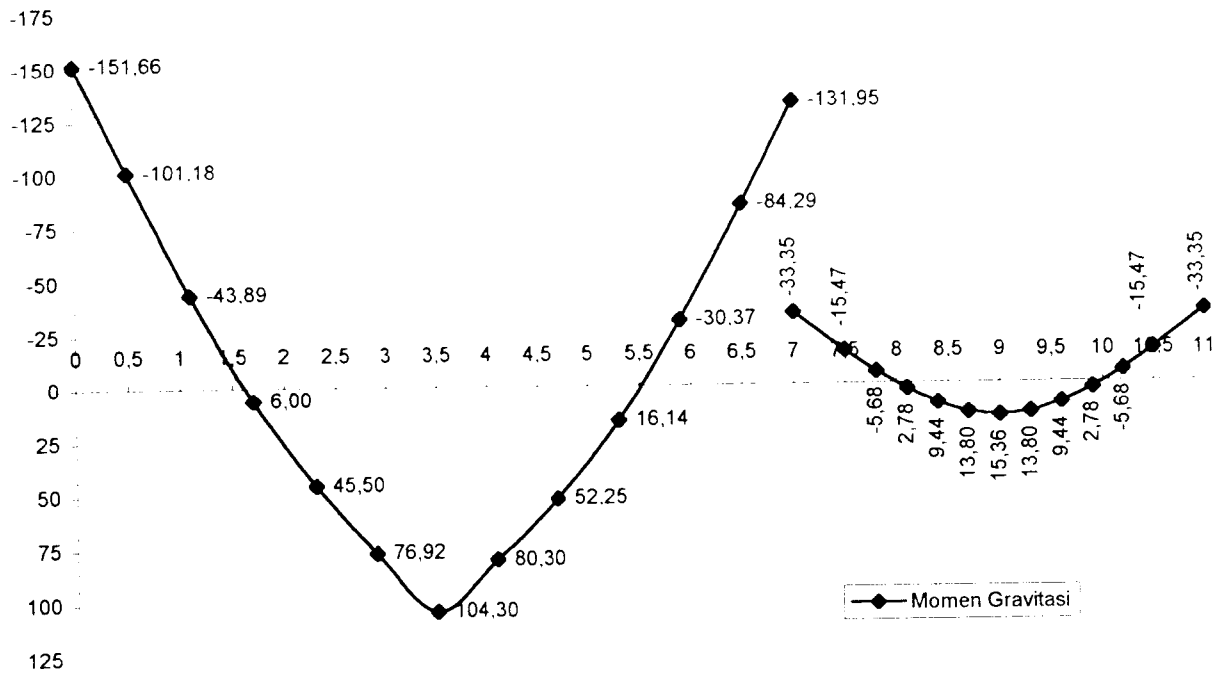
Grafik Momen Lantai 4
Akibat Berat Sendiri



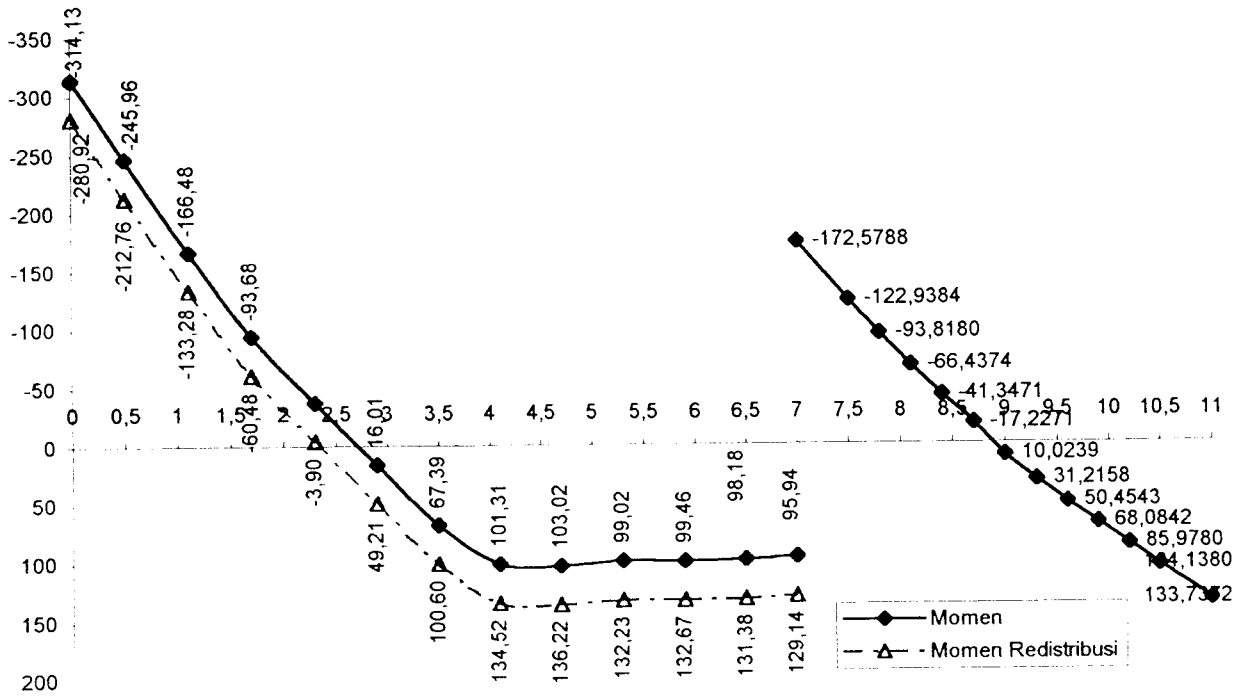
Grafik Momen Lantai 7
Akibat Gempa (0%)



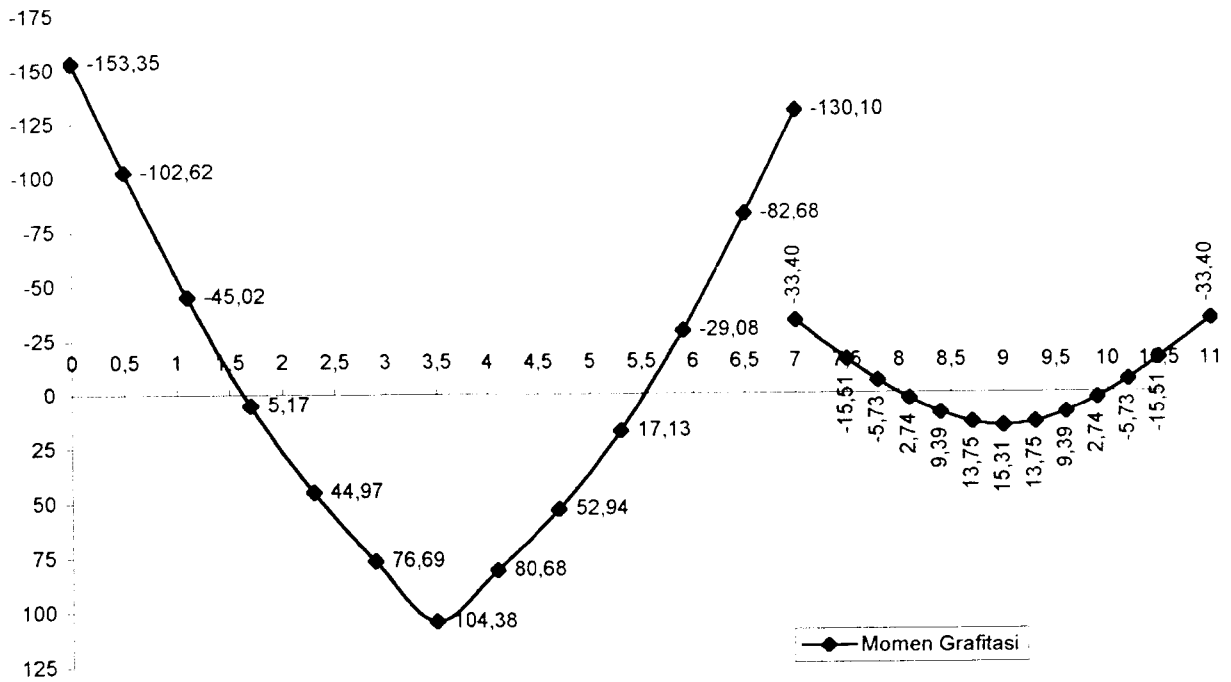
Grafik Momen Lantai 7
Akibat Berat Sendiri



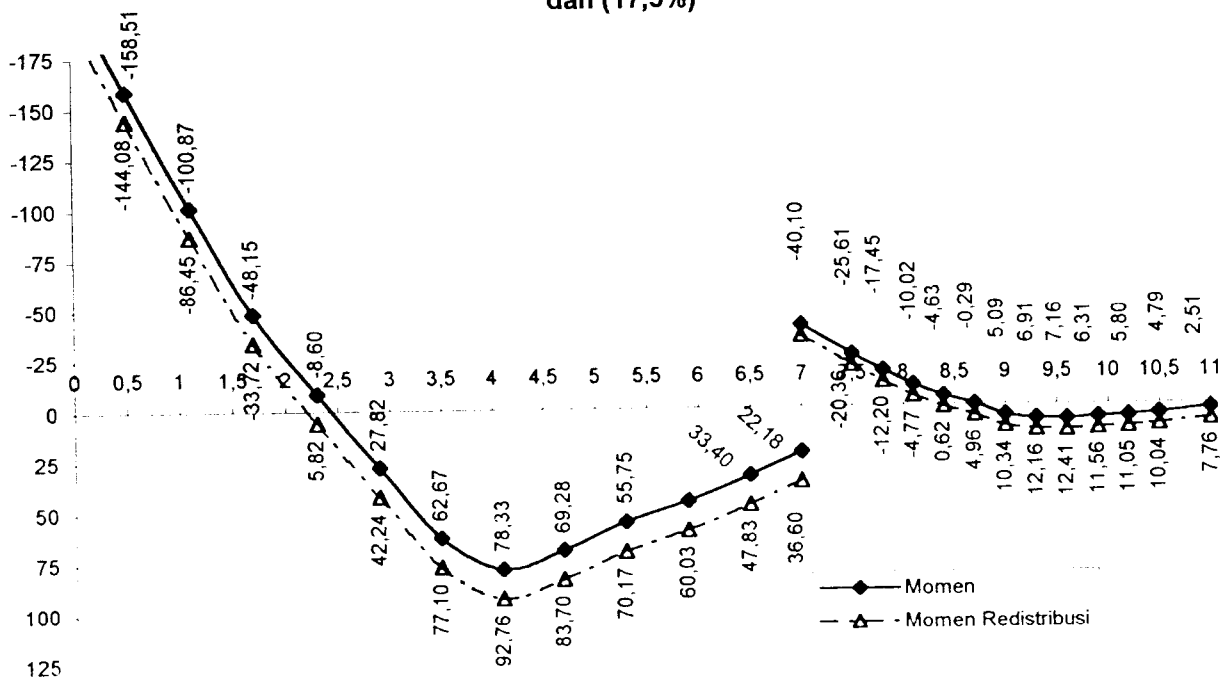
**Grafik Momen Lantai 10
Akibat Gempa (12,5% dan (0%))**



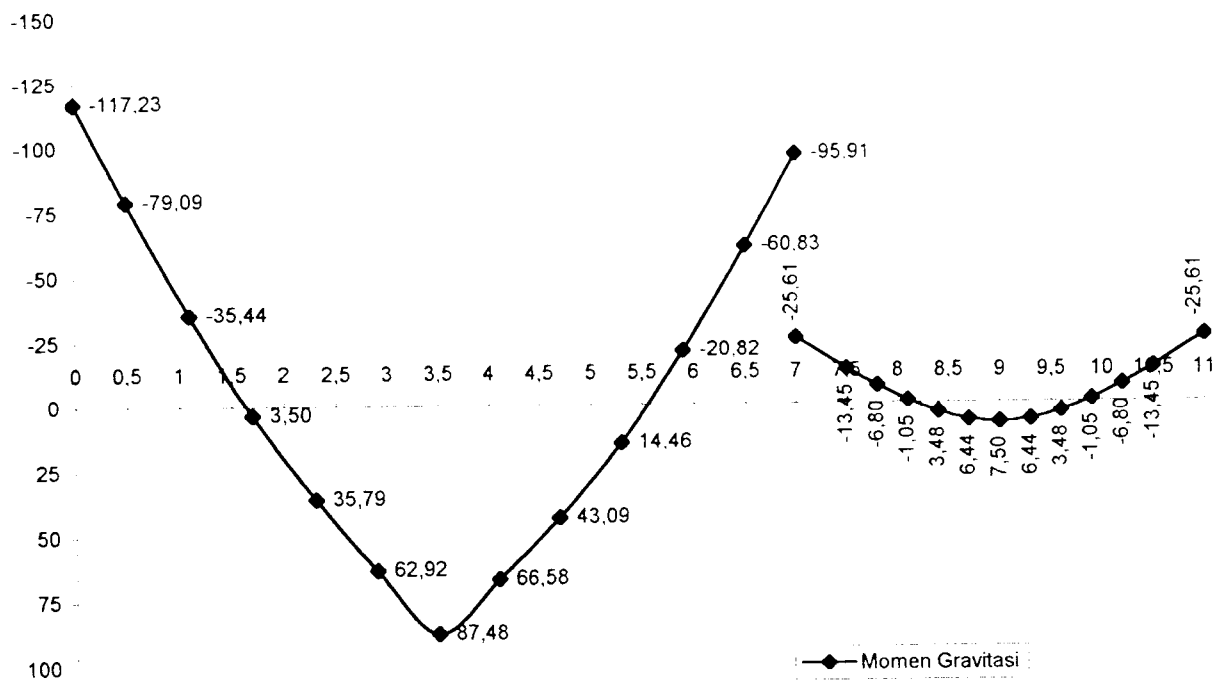
**Grafik Momen Lantai 10
Akibat Berat Sendiri**



**Grafik Momen Lantai 12
Akibat Gempa (12,5%
dan (17,5%)**



**Momen Akibat Lantai 12
Akibat Berat Sendiri**



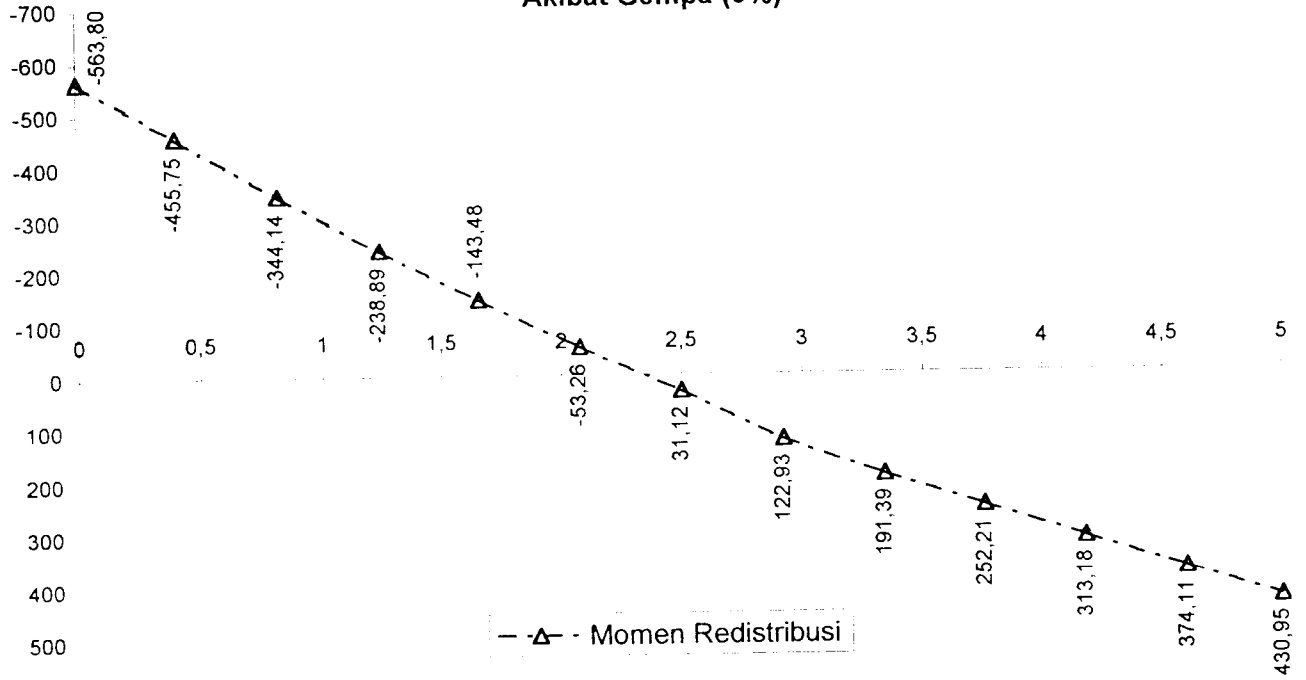
Tabel 2.2.1.2 Momen Redistribusi Balok untuk RW 1/6 Baru Portal 2

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| 3 | 147 | 0 | -95,68401 | 405,494 | -563,8025 | 430,9178 | -538,3788 | 430,9178 | -563,8025 | -563,8025 | 0 | 0,0000 | -563,8025 | M - maks : |
| | | 0,4 | -58,80302 | 358,4618 | -455,7492 | 374,0861 | -440,1249 | 374,0861 | -455,7492 | -455,7492 | 0 | 0,0000 | -455,7492 | -455,7492 |
| | | 0,82 | -22,30953 | 307,2315 | -344,1396 | 313,1594 | -338,2118 | 313,1594 | -344,1396 | -344,1396 | 0 | 0,0000 | -344,1396 | M + maks : |
| | | 1,24 | 9,574579 | 252,1874 | -236,3439 | 249,6435 | -238,8878 | 252,1874 | -238,8878 | -238,8878 | 0 | 0,0000 | -238,8878 | 374,1119 |
| | | 1,66 | 34,48838 | 191,376 | -134,3155 | 182,2123 | -143,4792 | 191,376 | -143,4792 | -143,4792 | 0 | 0,0000 | -143,4792 | p/p : |
| | | 2,08 | 50,17051 | 122,9268 | -39,92487 | 109,5961 | -53,25564 | 122,9268 | -53,25564 | -53,25564 | 0 | 0,0000 | -53,25564 | -0,820872313 |
| | | 2,5 | 55,43673 | 45,8625 | 45,8506 | 31,13239 | 31,12049 | 45,8625 | 31,12049 | 31,12049 | 0 | 0,0000 | 31,12049 | |
| | | 2,92 | 50,18372 | -39,90194 | 122,926 | -53,2362 | 109,5917 | 122,926 | -53,2362 | 122,926 | 0 | 0,0000 | 122,926 | M - red maks : |
| | | 3,34 | 34,51479 | -134,2815 | 191,3862 | -143,4522 | 182,2155 | 191,3862 | -143,4522 | 191,3862 | 0 | 0,0000 | 191,3862 | -455,7492 |
| | | 3,76 | 9,614202 | -236,2989 | 252,2086 | -238,8533 | 249,6542 | 252,2086 | -238,8533 | 252,2086 | 0 | 0,0000 | 252,2086 | M + red maks : |
| | | 4,18 | -22,25669 | -344,0836 | 307,2637 | -338,1697 | 313,1776 | 313,1776 | -344,0836 | 313,1776 | 0 | 0,0000 | 313,1776 | 374,1119 |
| 4,6 | -58,73699 | -455,6821 | 358,505 | -440,0753 | 374,1119 | 374,1119 | -455,6821 | 374,1119 | 0 | 0,0000 | 374,1119 | p/p red : | | |
| 5 | -95,60539 | -563,7249 | 405,5478 | -538,322 | 430,9507 | 430,9507 | -563,7249 | 430,9507 | 0 | 0,0000 | 430,9507 | -0,820872313 | | |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 4 | 148 | 0 | -95,69376 | 390,8472 | -549,1719 | 416,2735 | -523,7457 | 416,2735 | -549,1719 | -549,1719 | 0 | 0,0000 | -549,1719 | M - maks : |
| | | 0,4 | -58,81086 | 346,159 | -443,4596 | 361,7854 | -427,8332 | 361,7854 | -443,4596 | -443,4596 | 0 | 0,0000 | -443,4596 | -443,4596 |
| | | 0,82 | -22,31535 | 297,3901 | -334,308 | 303,3195 | -328,3785 | 303,3195 | -334,308 | -334,308 | 0 | 0,0000 | -334,308 | M + maks : |
| | | 1,24 | 9,570776 | 244,8073 | -228,9702 | 242,2643 | -231,513 | 244,8073 | -231,513 | -231,513 | 0 | 0,0000 | -231,513 | 361,819 |
| | | 1,66 | 34,4866 | 186,4572 | -129,3996 | 177,2939 | -138,5629 | 186,4572 | -138,5629 | -138,5629 | 0 | 0,0000 | -138,5629 | p/p : |
| | | 2,08 | 50,17074 | 120,4693 | -37,46693 | 107,1385 | -50,79776 | 120,4693 | -50,79776 | -50,79776 | 0 | 0,0000 | -50,79776 | -0,815900704 |
| | | 2,5 | 55,43698 | 45,86625 | 45,85061 | 31,13555 | 31,11991 | 45,86625 | 31,11991 | 31,11991 | 0 | 0,0000 | 31,11991 | |
| | | 2,92 | 50,18798 | -37,43689 | 120,4681 | -50,77229 | 107,1327 | 120,4681 | -50,77229 | 120,4681 | 0 | 0,0000 | 120,4681 | M - red maks : |
| | | 3,34 | 34,52108 | -129,3552 | 186,4704 | -138,5276 | 177,298 | 186,4704 | -138,5276 | 186,4704 | 0 | 0,0000 | 186,4704 | -443,4596 |
| | | 3,76 | 9,622505 | -228,9113 | 244,8349 | -231,4679 | 242,2782 | 244,8349 | -231,4679 | 244,8349 | 0 | 0,0000 | 244,8349 | M + red maks : |
| | | 4,18 | -22,24637 | -334,2347 | 297,4321 | -328,3235 | 303,3432 | 303,3432 | -334,2347 | 303,3432 | 0 | 0,0000 | 303,3432 | 361,819 |
| 4,6 | -58,72465 | -443,3719 | 346,2154 | -427,7683 | 361,819 | 361,819 | -443,3719 | 361,819 | 0 | 0,0000 | 361,819 | p/p red : | | |
| 5 | -95,59113 | -549,0705 | 390,9174 | -523,6714 | 416,3164 | 416,3164 | -549,0705 | 416,3164 | 0 | 0,0000 | 416,3164 | -0,815900704 | | |

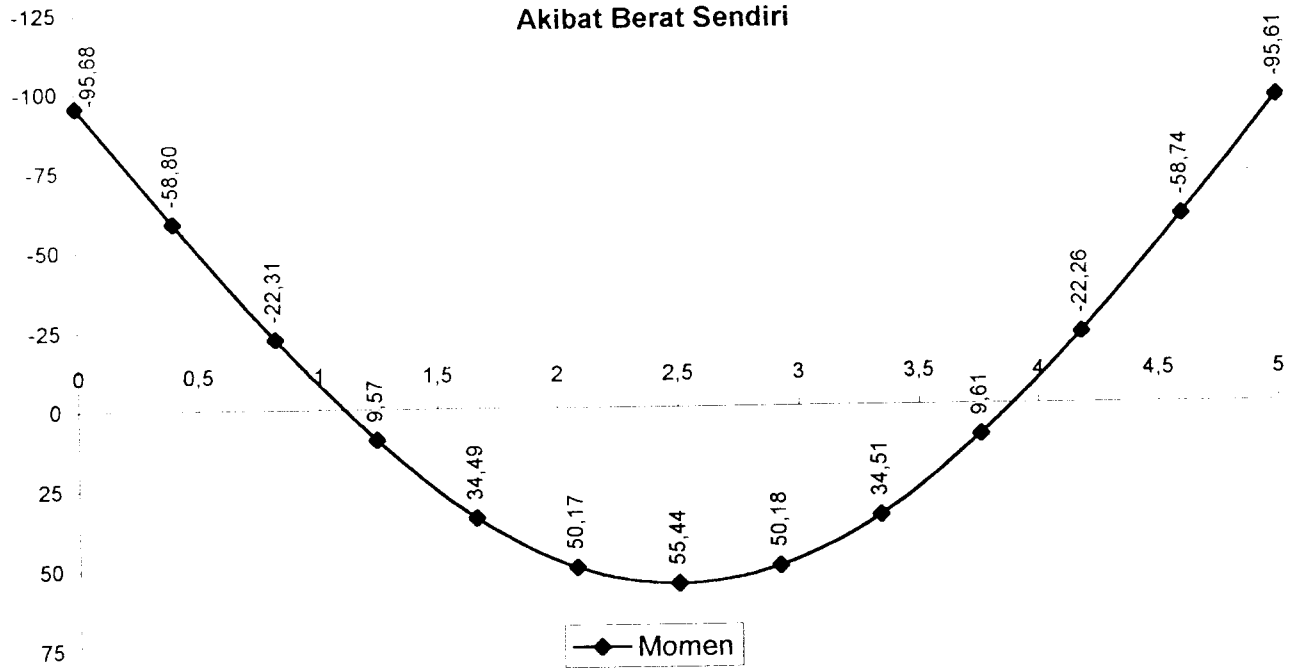
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| Geser | 151 | 0 | -95,71854 | 280,7425 | -439,1086 | 306,1753 | -413,6757 | 306,1753 | -439,1086 | -439,1086 | 0 | 0,0000 | -439,1086 | M - maks : |
| | | 0,4 | -58,83078 | 253,6725 | -351,0063 | 269,3042 | -335,3746 | 269,3042 | -351,0063 | -351,0063 | 0 | 0,0000 | -351,0063 | -351,0063 |
| | | 0,82 | -22,33015 | 223,4027 | -260,3453 | 229,336 | -254,412 | 229,336 | -260,3453 | -260,3453 | 0 | 0,0000 | -260,3453 | M + maks : |
| | | 1,24 | 9,561071 | 189,319 | -173,4982 | 186,7787 | -176,0385 | 189,319 | -176,0385 | -176,0385 | 0 | 0,0000 | -176,0385 | 269,3578 |
| | | 1,66 | 34,48199 | 149,4681 | -92,41825 | 140,3061 | -101,5803 | 149,4681 | -101,5803 | -101,5803 | 0 | 0,0000 | -101,5803 | p/p : |
| | | 2,08 | 50,17124 | 101,9794 | -18,97619 | 88,64842 | -32,30715 | 101,9794 | -32,30715 | -32,30715 | 0 | 0,0000 | -32,30715 | -0,767387366 |
| | | 2,5 | 55,44458 | 45,8755 | 45,85074 | 31,14331 | 31,11855 | 45,8755 | 31,11855 | 31,11855 | 0 | 0,0000 | 31,11855 | |
| | | 2,92 | 50,19869 | -18,92849 | 101,9776 | -32,26672 | 88,63933 | 101,9776 | -32,26672 | 101,9776 | 0 | 0,0000 | 101,9776 | M - red maks : |
| | | 3,34 | 34,53689 | -92,3476 | 149,4892 | -101,5242 | 140,3127 | 149,4892 | -101,5242 | 149,4892 | 0 | 0,0000 | 149,4892 | -351,0063 |
| | | 3,76 | 9,643419 | -173,4046 | 189,3631 | -175,9667 | 186,8009 | 189,3631 | -175,9667 | 189,3631 | 0 | 0,0000 | 189,3631 | M + red maks : |
| | | 4,18 | -22,22036 | -260,2288 | 223,4697 | -254,3246 | 229,3739 | 229,3739 | -260,2288 | 229,3739 | 0 | 0,0000 | 229,3739 | 269,3578 |
| 4,6 | -58,69353 | -350,8668 | 253,7624 | -335,2715 | 269,3578 | 269,3578 | -350,8668 | 269,3578 | 0 | 0,0000 | 269,3578 | p/p red : | | |
| 5 | -95,55515 | -438,9473 | 280,8542 | -413,5577 | 306,2438 | 306,2438 | -438,9473 | 306,2438 | 0 | 0,0000 | 306,2438 | -0,767387366 | | |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 10 | 154 | 0 | -95,73193 | 104,2604 | -262,649 | 129,6968 | -237,2126 | 129,6968 | -262,649 | -262,649 | 0 | 0,0000 | -262,649 | M - maks : |
| | | 0,4 | -58,84142 | 105,4286 | -202,7803 | 121,0631 | -187,1458 | 121,0631 | -202,7803 | -202,7803 | 0 | 0,0000 | -202,7803 | -202,7803 |
| | | 0,82 | -22,33792 | 104,8088 | -141,7645 | 110,7442 | -135,8291 | 110,7442 | -141,7645 | -141,7645 | 0 | 0,0000 | -141,7645 | M + maks : |
| | | 1,24 | 9,556191 | 100,3752 | -84,56255 | 97,83618 | -87,10159 | 100,3752 | -87,10159 | -87,10159 | 0 | 0,0000 | -87,10159 | 121,1268 |
| | | 1,66 | 34,48 | 90,17435 | -33,12786 | 81,01283 | -42,28938 | 90,17435 | -42,28938 | -42,28938 | 0 | 0,0000 | -42,28938 | p/p : |
| | | 2,08 | 50,17213 | 72,33566 | 10,66899 | 59,00446 | -2,662211 | 72,33566 | -2,662211 | -2,662211 | 0 | 0,0000 | -2,662211 | -0,597330214 |
| | | 2,5 | 55,44836 | 45,88182 | 45,8507 | 31,14863 | 31,11751 | 45,88182 | 31,11751 | 31,11751 | 0 | 0,0000 | 31,11751 | |
| | | 2,92 | 50,20536 | 10,72788 | 72,33231 | -2,612118 | 58,99231 | 72,33231 | -2,612118 | 72,33231 | 0 | 0,0000 | 72,33231 | M - red maks : |
| | | 3,34 | 34,54644 | -33,04119 | 90,19878 | -42,22032 | 81,01966 | 90,19878 | -42,22032 | 90,19878 | 0 | 0,0000 | 90,19878 | -202,7803 |
| | | 3,76 | 9,655851 | -84,44811 | 100,4274 | -87,01355 | 97,86198 | 100,4274 | -87,01355 | 100,4274 | 0 | 0,0000 | 100,4274 | M + red maks : |
| | | 4,18 | -22,20504 | -141,6223 | 104,8888 | -135,7221 | 110,789 | 110,789 | -141,6223 | 110,789 | 0 | 0,0000 | 110,789 | 121,1268 |
| 4,6 | -58,67532 | -202,6103 | 105,5363 | -187,0198 | 121,1268 | 121,1268 | -202,6103 | 121,1268 | 0 | 0,0000 | 121,1268 | p/p red : | | |
| 5 | -95,5342 | -188,0108 | 118,7704 | -174,7633 | -7,8325 | 118,7704 | -188,0108 | 118,7704 | 0 | 0,0000 | 118,7704 | -0,597330214 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|---|------------|------------|----------------|
| 12 | 156 | 0 | -78,44711 | -5,983943 | -137,6813 | 14,22915 | -117,4682 | 14,22915 | -137,6813 | -137,6813 | 2 | -9,114984 | -128,56632 | M - maks : |
| | | 0,4 | -48,20546 | 11,17698 | -99,45776 | 23,5979 | -87,03684 | 23,5979 | -99,45776 | -99,45776 | 2 | -9,114984 | -90,342776 | -99,45776 |
| | | 0,82 | -18,28158 | 27,52015 | -60,99884 | 32,23075 | -56,28823 | 32,23075 | -60,99884 | -60,99884 | 2 | -9,114984 | -51,883856 | M + maks : |
| | | 1,24 | 7,862608 | 40,40187 | -26,00138 | 38,376 | -28,02725 | 40,40187 | -28,02725 | -28,02725 | 2 | -9,114984 | -18,912266 | 48,72647 |
| | | 1,66 | 28,29116 | 48,04916 | 3,761652 | 40,75948 | -3,528026 | 48,04916 | -3,528026 | -3,528026 | 2 | -9,114984 | 5,586958 | p/p : |
| | | 2,08 | 41,15031 | 48,76457 | 26,59281 | 38,1614 | 15,98963 | 48,76457 | 15,98963 | 15,98963 | 2 | -9,114984 | 25,104614 | -0,489921249 |
| | | 2,5 | 45,47185 | 41,6627 | 41,60668 | 29,9459 | 29,88988 | 41,6627 | 29,88988 | 29,88988 | 2 | -9,114984 | 39,004864 | |
| | | 2,92 | 41,17167 | 26,66675 | 48,72647 | 16,05792 | 38,11764 | 48,72647 | 16,05792 | 48,72647 | 2 | -9,114984 | 57,841454 | M - red maks : |
| | | 3,34 | 28,33389 | 3,853515 | 48,02898 | -3,447472 | 40,72799 | 48,02898 | -3,447472 | 48,02898 | 2 | -9,114984 | 57,143964 | -90,342776 |
| | | 3,76 | 7,926708 | -25,8916 | 40,3996 | -27,93443 | 38,35677 | 40,3996 | -27,93443 | 40,3996 | 2 | -9,114984 | 49,514584 | M + red maks : |
| | | 4,18 | -18,19612 | -60,87113 | 27,53581 | -56,18315 | 32,22379 | 32,22379 | -60,87113 | 32,22379 | 2 | -9,114984 | 41,338774 | 57,841454 |
| | | 4,6 | -48,09863 | -99,31213 | 11,21056 | -86,91949 | 23,6032 | 23,6032 | -99,31213 | 23,6032 | 2 | -9,114984 | 32,718184 | p/p red : |
| | | 5 | -78,31993 | -137,5186 | -5,933295 | -117,3392 | 14,24614 | 14,24614 | -137,5186 | 14,24614 | 2 | -9,114984 | 23,361124 | -0,640244373 |

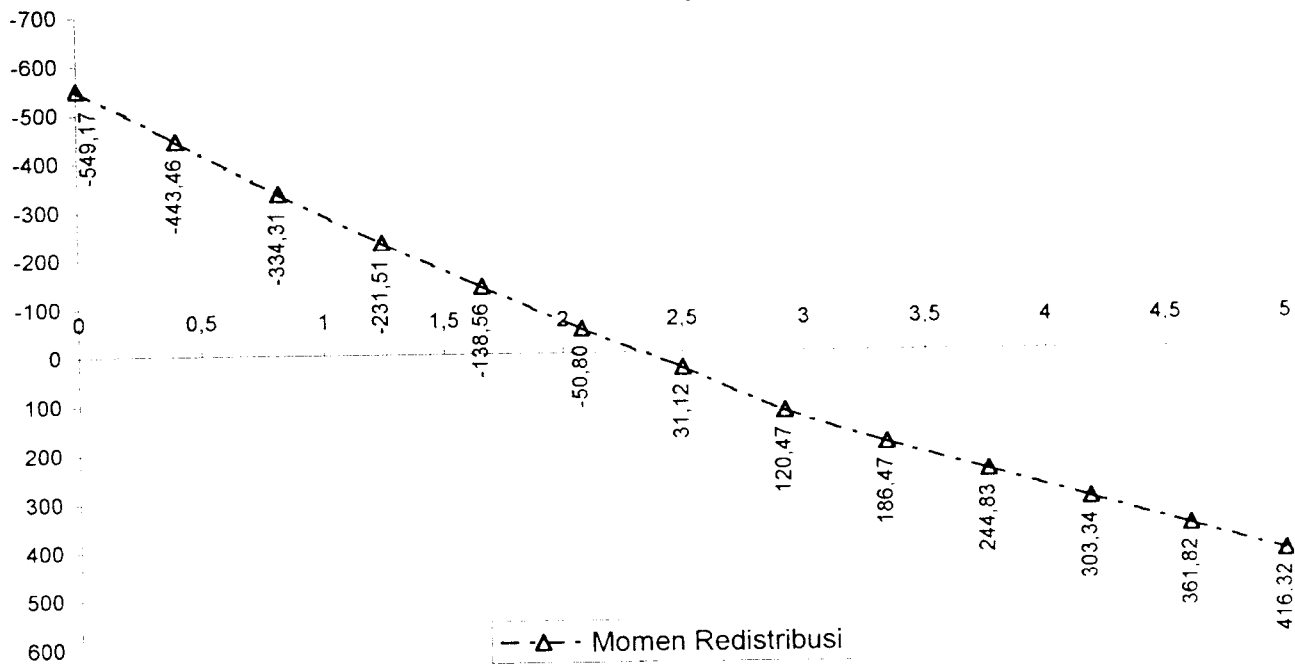
Grafik Momen Lantai 3
Akibat Gempa (0%)



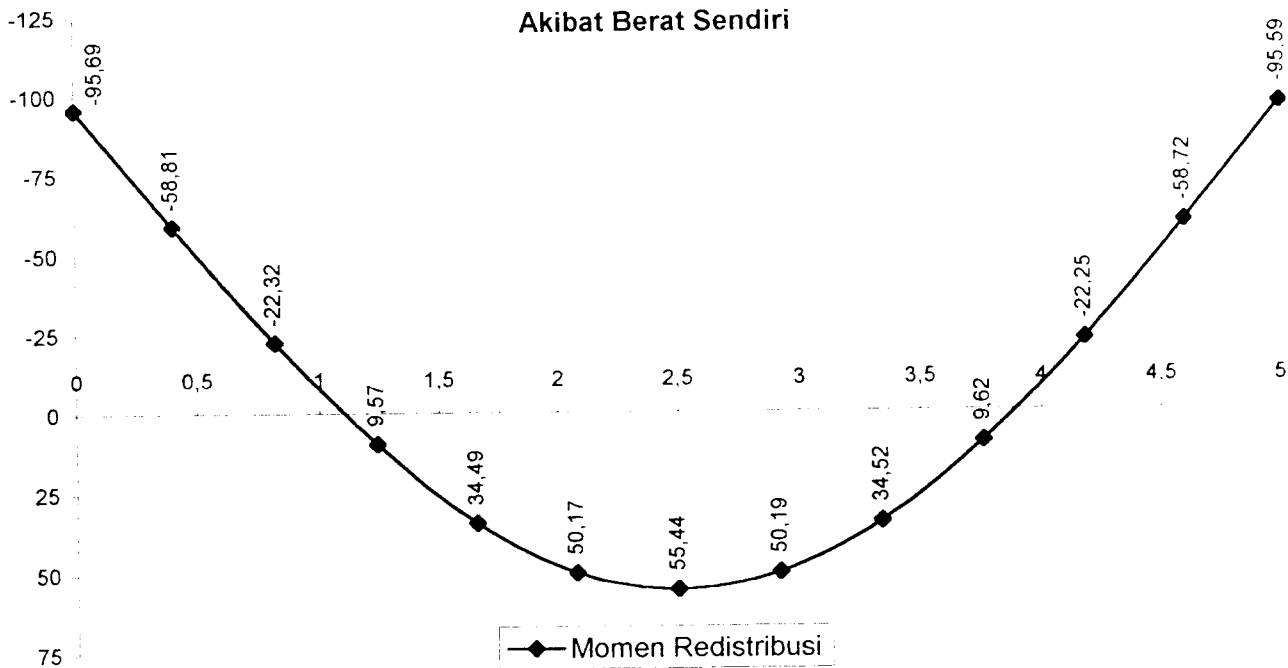
Grafik Momen Lantai 3
Akibat Berat Sendiri



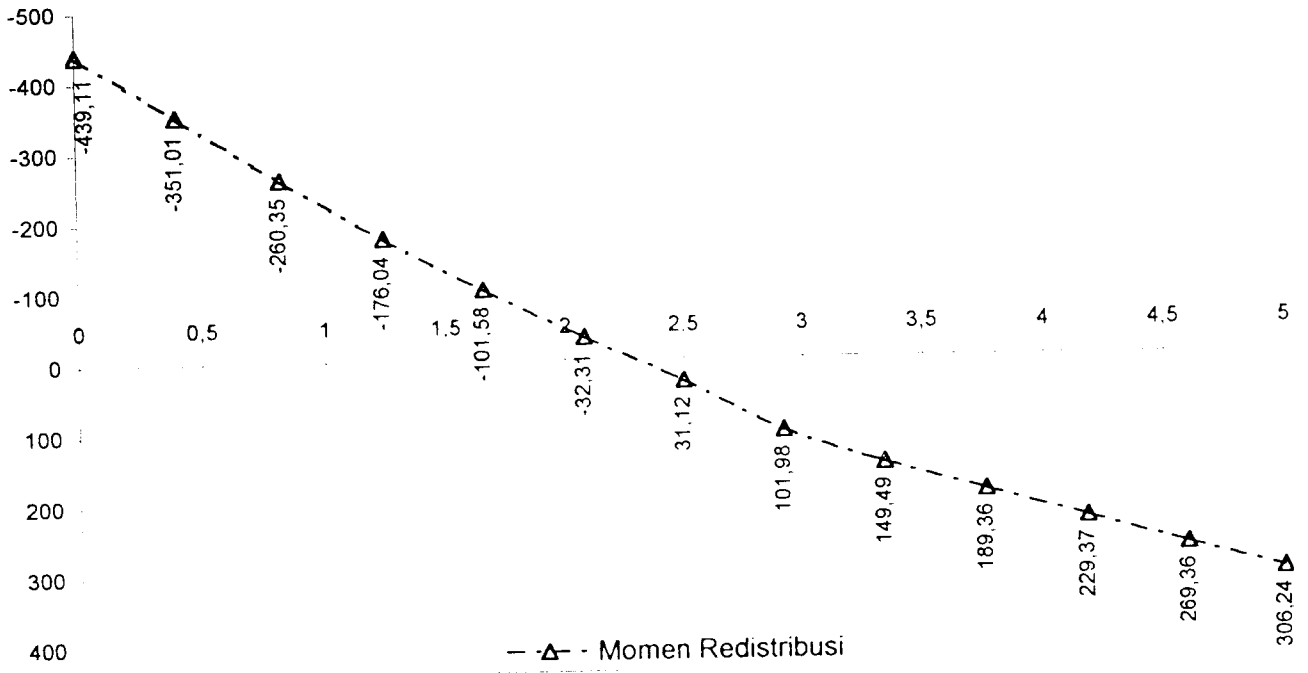
**Grafik Momen Lantai 4
Akibat Gempa (0%)**



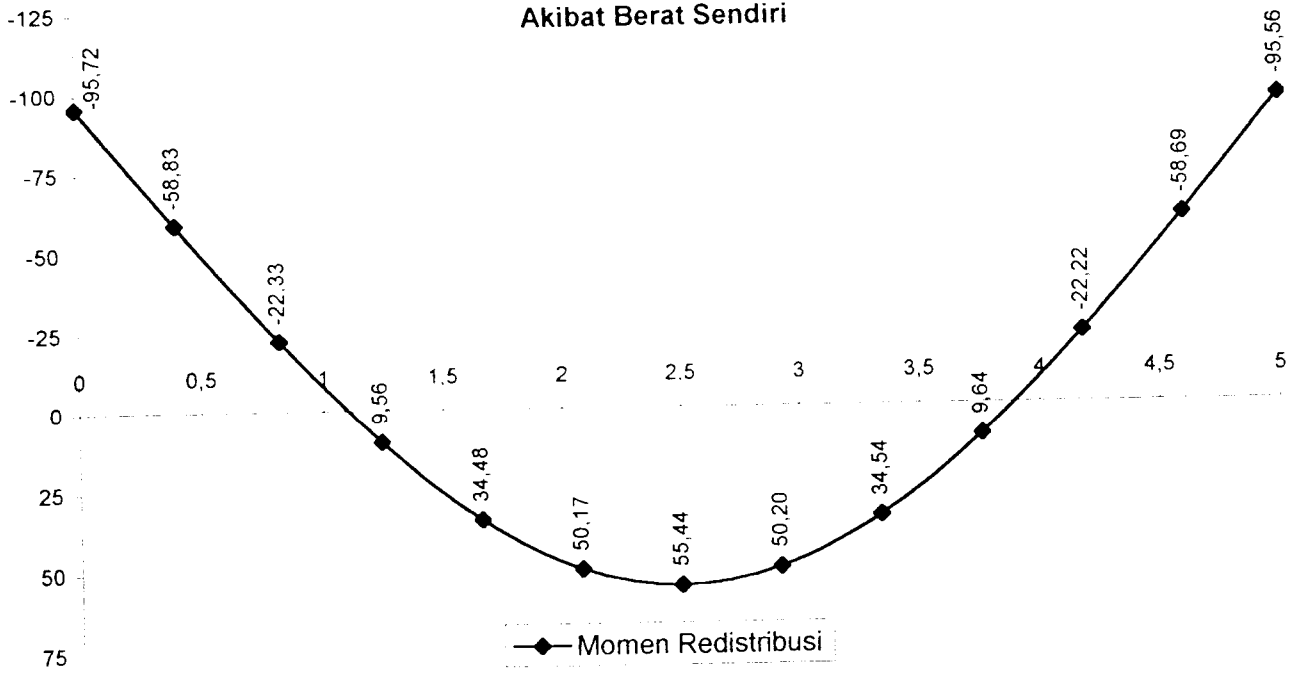
**Grafik Momen Lantai 4
Akibat Berat Sendiri**



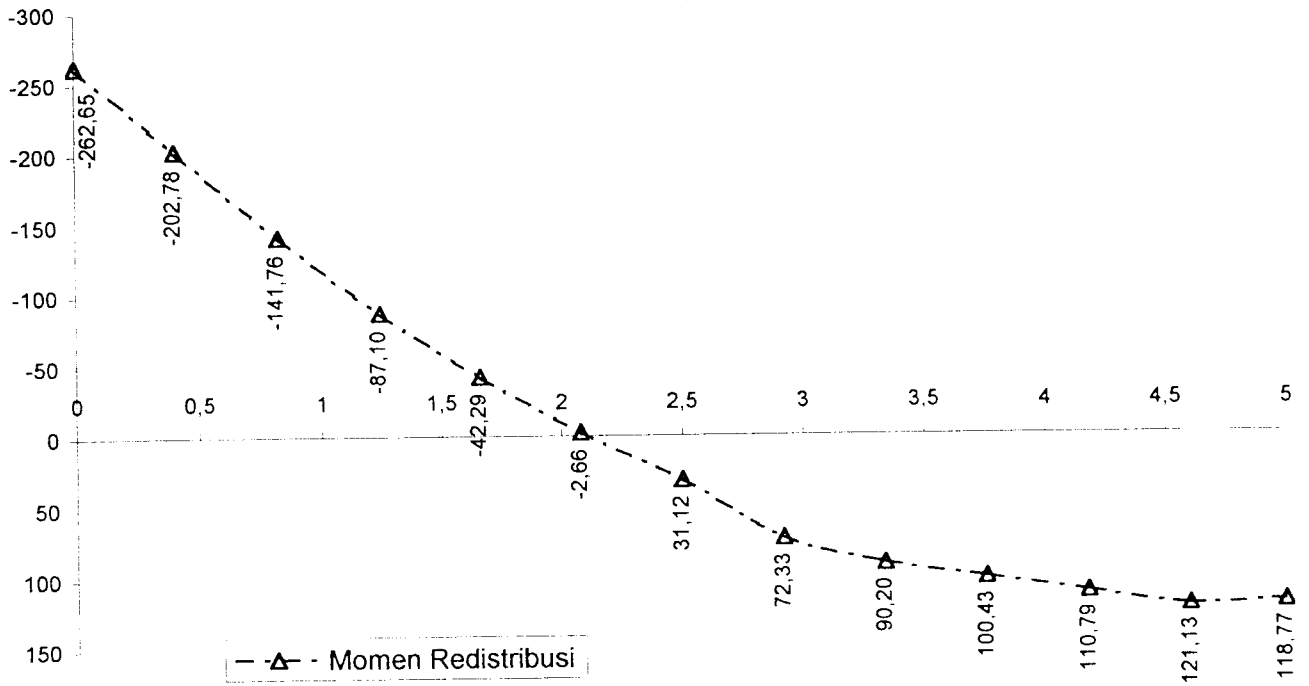
**Grafik Momen Lantai 7
Akibat Gempa (0%)**



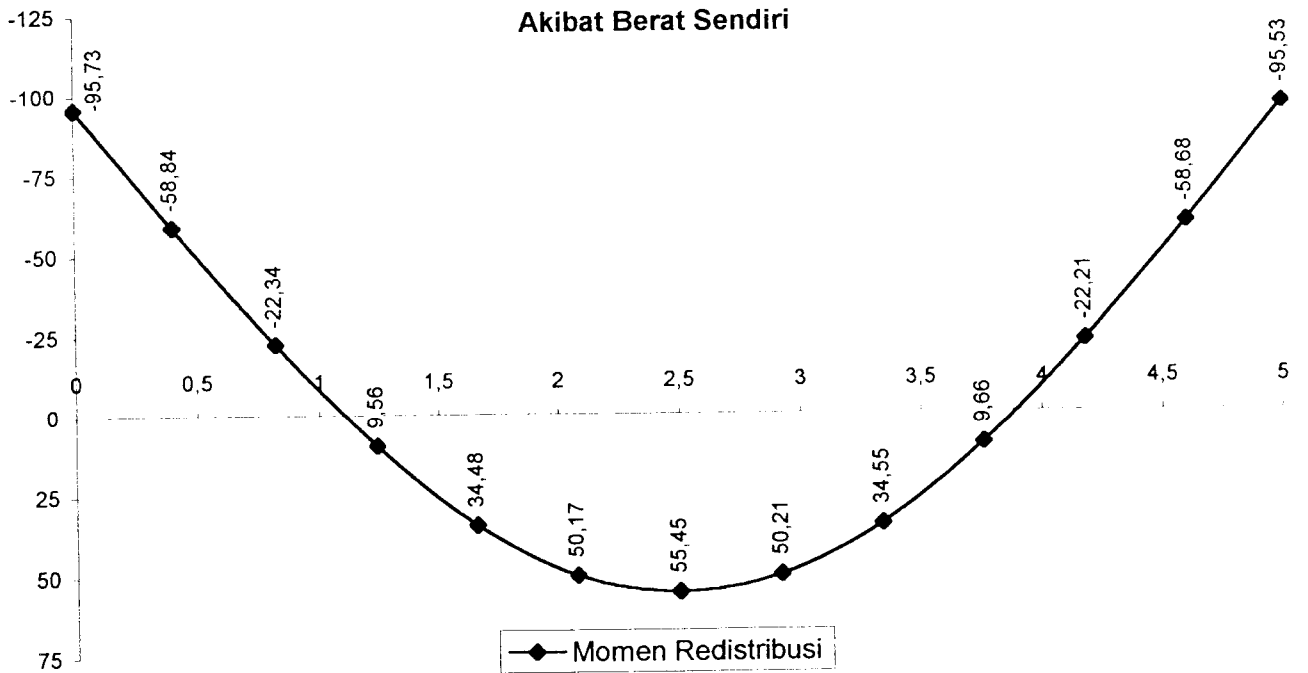
**Grafik Momen Lantai 7
Akibat Berat Sendiri**



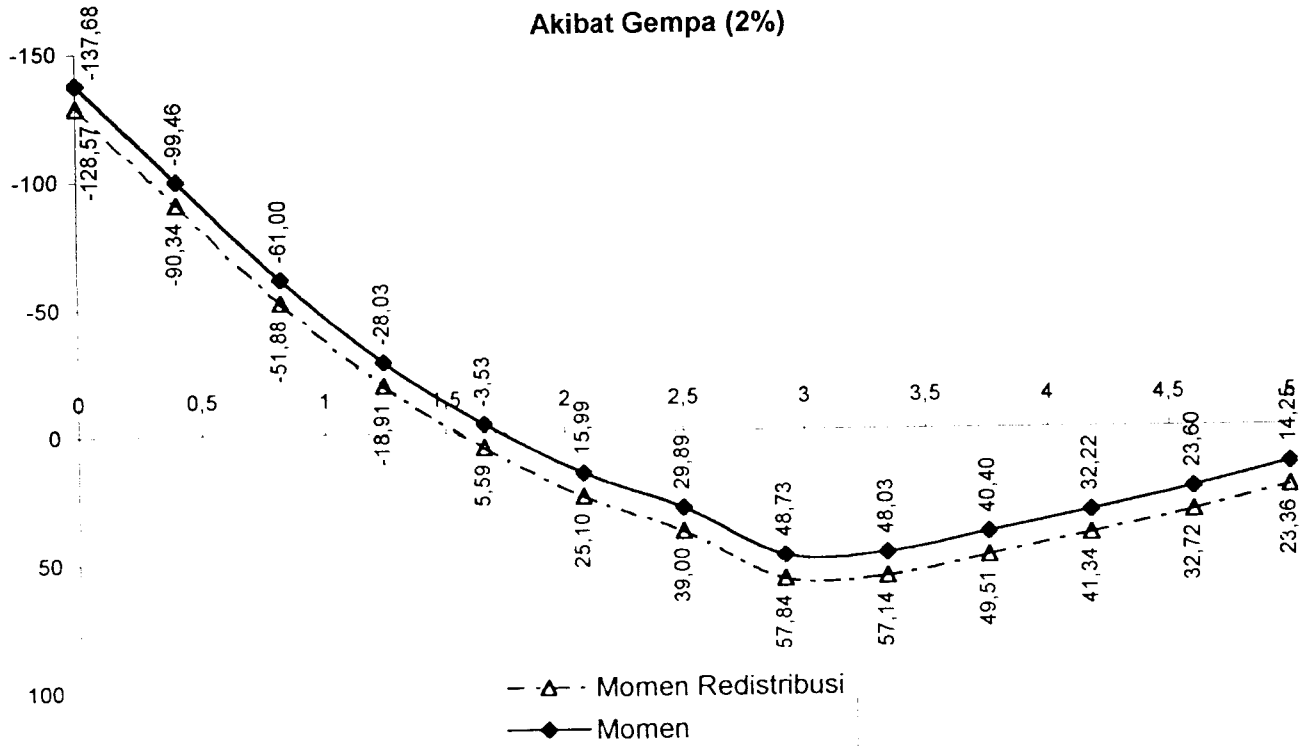
Grafik Momen Lantai 10
Akibat Gempa (0%)



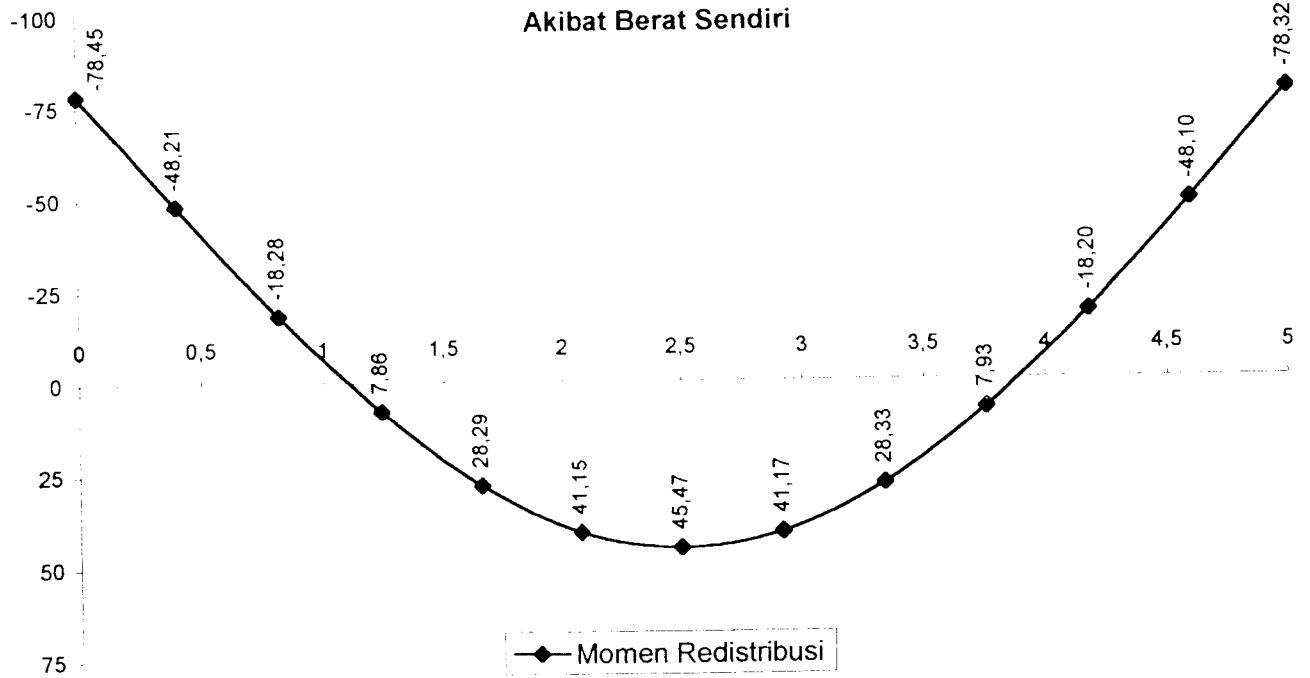
Grafik Momen Lantai 10
Akibat Berat Sendiri



Grafik Momen Lantai 12
Akibat Gempa (2%)



Grafik Momen Lantai 12
Akibat Berat Sendiri



Tabel 2.2.2.1 Momen Kapasitas Tulangan Aktual untuk RW 1/6 Baru Portal E

| Lantai | Frame | b mm | h mm | d' mm | d mm | M(-) | | | | | | M(+) | | | | | | | | | | | | | | |
|--------|-------|---------|---------|----------|---------|----------|-----------------|-----------|-----------------|----------|-----------|----------|----------|-----------------|-----------|-----------------|----------|-----------|----------|---|-----------------|---|-----------------|-----|-----|--|
| | | | | | | As pakai | | As' pakai | | M perlu | Mtersedia | Mkap | As pakai | | As' pakai | | M perlu | Mtersedia | Mkap | | | | | | | |
| | | | | | | n | mm ² | n | mm ² | kNm | kNm | kNm | n | mm ² | n | mm ² | kNm | kNm | kNm | n | mm ² | n | mm ² | kNm | kNm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | | | |
| 1 | 49 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 429,9889 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 297,8300 | 321,8007 | 397,8694 | | | | | | | |
| 2 | 50 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 429,9889 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 297,8300 | 321,8007 | 397,8694 | | | | | | | |
| 3 | 51 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 429,9889 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 297,8300 | 321,8007 | 397,8694 | | | | | | | |
| 4 | 52 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 431,9923 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 297,9029 | 321,8007 | 397,8694 | | | | | | | |
| 5 | 53 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 431,9923 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 297,9029 | 321,8007 | 397,8694 | | | | | | | |
| 6 | 54 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 431,9923 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 297,9029 | 321,8007 | 397,8694 | | | | | | | |
| 7 | 55 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 3 | 1139,8200 | 367,2784 | 544,0334 | 666,0060 | 3 | 1139,82 | 7 | 2659,5800 | 224,7856 | 245,5974 | 302,7816 | | | | | | | |
| 8 | 56 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 3 | 1139,8200 | 367,2784 | 544,0334 | 666,0060 | 3 | 1139,82 | 7 | 2659,5800 | 224,7856 | 245,5974 | 302,7816 | | | | | | | |
| 9 | 57 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 3 | 1139,8200 | 367,2784 | 544,0334 | 666,0060 | 3 | 1139,82 | 7 | 2659,5800 | 224,7856 | 245,5974 | 302,7816 | | | | | | | |
| 10 | 58 | 300 | 650 | 75 | 575 | 4 | 1519,76 | 2 | 759,8800 | 212,7567 | 321,7858 | 396,5371 | 2 | 759,88 | 4 | 1519,7600 | 136,2205 | 167,5264 | 207,1436 | | | | | | | |
| 11 | 59 | 300 | 650 | 75 | 575 | 4 | 1519,76 | 2 | 759,8800 | 212,7567 | 321,7858 | 396,5371 | 2 | 759,88 | 4 | 1519,7600 | 136,2205 | 167,5264 | 207,1436 | | | | | | | |
| 12 | 60 | 300 | 650 | 75 | 575 | 4 | 1519,76 | 2 | 759,8800 | 144,0825 | 321,7858 | 396,5371 | 2 | 759,88 | 4 | 1519,7600 | 92,7555 | 167,5264 | 207,1436 | | | | | | | |
| 1 | 61 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 4 | 1519,7600 | 424,7520 | 546,3425 | 671,8267 | 4 | 1519,76 | 7 | 2659,5800 | 405,8914 | 321,8231 | 397,8598 | | | | | | | |
| 2 | 62 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 4 | 1519,7600 | 424,7520 | 546,3425 | 671,8267 | 4 | 1519,76 | 7 | 2659,5800 | 405,8914 | 321,8231 | 397,8598 | | | | | | | |
| 3 | 63 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 4 | 1519,7600 | 424,7520 | 546,3425 | 671,8267 | 4 | 1519,76 | 7 | 2659,5800 | 405,8914 | 321,8231 | 397,8598 | | | | | | | |
| 4 | 64 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 4 | 1519,7600 | 411,4126 | 546,3425 | 671,8267 | 4 | 1519,76 | 7 | 2659,5800 | 392,6609 | 321,8231 | 397,8598 | | | | | | | |
| 5 | 65 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 4 | 1519,7600 | 411,4126 | 546,3425 | 671,8267 | 4 | 1519,76 | 7 | 2659,5800 | 392,6609 | 321,8231 | 397,8598 | | | | | | | |
| 6 | 66 | 300 | 650 | 75 | 575 | 7 | 2659,58 | 4 | 1519,7600 | 411,4126 | 546,3425 | 671,8267 | 4 | 1519,76 | 7 | 2659,5800 | 392,6609 | 321,8231 | 397,8598 | | | | | | | |
| 7 | 67 | 300 | 650 | 75 | 575 | 5 | 1899,7 | 3 | 1139,8200 | 294,2777 | 397,2563 | 489,7623 | 3 | 1139,82 | 5 | 1899,7000 | 275,6305 | 245,6263 | 302,8348 | | | | | | | |
| 8 | 68 | 300 | 650 | 75 | 575 | 5 | 1899,7 | 3 | 1139,8200 | 294,2777 | 397,2563 | 489,7623 | 3 | 1139,82 | 5 | 1899,7000 | 275,6305 | 245,6263 | 302,8348 | | | | | | | |
| 9 | 69 | 300 | 650 | 75 | 575 | 5 | 1899,7 | 3 | 1139,8200 | 294,2777 | 397,2563 | 489,7623 | 3 | 1139,82 | 5 | 1899,7000 | 275,6305 | 245,6263 | 302,8348 | | | | | | | |
| 10 | 70 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0,0000 | 122,9384 | 245,8550 | 302,2239 | 0 | 0 | 3 | 1139,8200 | 104,1380 | 0,0000 | 0,0000 | | | | | | | |
| 11 | 71 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0,0000 | 122,9384 | 245,8550 | 302,2239 | 0 | 0 | 3 | 1139,8200 | 104,1380 | 0,0000 | 0,0000 | | | | | | | |
| 12 | 72 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0,0000 | 20,3583 | 245,8550 | 302,2239 | 0 | 0 | 3 | 1139,8200 | 12,4120 | 0,0000 | 0,0000 | | | | | | | |

Tabel 2.2.2.2 Momen Kapasitas Tulangan Aktual untuk RW 1/6 Baru Portal 2

| Lantai | Frame | b mm | h mm | d' mm | d mm | M(-) | | | | | | M(+) | | | | | | | | | | | | | | |
|--------|-------|---------|---------|----------|---------|----------|-----------------|-----------|-----------------|----------|-----------|----------|----------|-----------------|-----------|-----------------|----------|-----------|----------|---|-----------------|---|-----------------|-----|-----|--|
| | | | | | | As pakai | | As' pakai | | M perlu | Mtersedia | Mkap | As pakai | | As' pakai | | M perlu | Mtersedia | Mkap | | | | | | | |
| | | | | | | n | mm ² | n | mm ² | kNm | kNm | kNm | n | mm ² | n | mm ² | kNm | kNm | kNm | n | mm ² | n | mm ² | kNm | kNm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | | | |
| 1 | 145 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 5 | 1899,7000 | 455,7492 | 621,2579 | 764,0750 | 5 | 1899,70 | 8 | 3039,5200 | 374,1119 | 397,8694 | 492,6556 | | | | | | | |
| 2 | 146 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 5 | 1899,7000 | 455,7492 | 621,2579 | 764,0750 | 5 | 1899,70 | 8 | 3039,5200 | 374,1119 | 397,8694 | 492,6556 | | | | | | | |
| 3 | 147 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 5 | 1899,7000 | 455,7492 | 621,2579 | 764,0750 | 5 | 1899,70 | 8 | 3039,5200 | 374,1119 | 397,8694 | 492,6556 | | | | | | | |
| 4 | 148 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 443,4596 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 361,8190 | 321,8007 | 397,8694 | | | | | | | |
| 5 | 149 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 443,4596 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 361,8190 | 321,8007 | 397,8694 | | | | | | | |
| 6 | 150 | 300 | 650 | 75 | 575 | 8 | 3039,52 | 4 | 1519,7600 | 443,4596 | 618,7140 | 757,7089 | 4 | 1519,76 | 8 | 3039,5200 | 361,8190 | 321,8007 | 397,8694 | | | | | | | |
| 7 | 151 | 300 | 650 | 75 | 575 | 6 | 2279,64 | 3 | 1139,8200 | 351,0063 | 471,4492 | 579,5954 | 3 | 1139,82 | 6 | 2279,6400 | 269,3578 | 245,6101 | 302,8070 | | | | | | | |
| 8 | 152 | 300 | 650 | 75 | 575 | 6 | 2279,64 | 3 | 1139,8200 | 351,0063 | 471,4492 | 579,5954 | 3 | 1139,82 | 6 | 2279,6400 | 269,3578 | 245,6101 | 302,8070 | | | | | | | |
| 9 | 153 | 300 | 650 | 75 | 575 | 6 | 2279,64 | 3 | 1139,8200 | 351,0063 | 471,4492 | 579,5954 | 3 | 1139,82 | 6 | 2279,6400 | 269,3578 | 245,6101 | 302,8070 | | | | | | | |
| 10 | 154 | 300 | 650 | 75 | 575 | 4 | 1519,76 | 2 | 759,8800 | 202,7803 | 321,7858 | 396,5371 | 2 | 759,88 | 4 | 1519,7600 | 121,1268 | 167,5264 | 207,1436 | | | | | | | |
| 11 | 155 | 300 | 650 | 75 | 575 | 4 | 1519,76 | 2 | 759,8800 | 202,7803 | 321,7858 | 396,5371 | 2 | 759,88 | 4 | 1519,7600 | 121,1268 | 167,5264 | 207,1436 | | | | | | | |
| 12 | 156 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0,0000 | 90,3428 | 245,8550 | 302,2239 | 0 | 0,00 | 3 | 1139,8200 | 57,8415 | 0,0000 | 0,0000 | | | | | | | |

Tabel 2.2.3.1 Momen Kapasitas Tulangan Lapangan untuk R/W 1/6 Baru Portal E

| Lantai | Frame | b mm | h mm | d' mm | d mm | M (-) | | | | | | |
|--------|-------|---------|---------|----------|---------|----------|-----------------|-----------|-----------------|----------|-----------|----------|
| | | | | | | As pakai | | As' pakai | | Mperlu | Mtersedia | Mkap |
| | | | | | | n | mm ² | n | mm ² | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | 49 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3238 | 245,8550 | 302,2239 |
| 2 | 50 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3238 | 245,8550 | 302,2239 |
| 3 | 51 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3238 | 245,8550 | 302,2239 |
| 4 | 52 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,2972 | 245,8550 | 302,2239 |
| 5 | 53 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,2972 | 245,8550 | 302,2239 |
| 6 | 54 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,2972 | 245,8550 | 302,2239 |
| 7 | 55 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3021 | 245,8550 | 302,2239 |
| 8 | 56 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3021 | 245,8550 | 302,2239 |
| 9 | 57 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3021 | 245,8550 | 302,2239 |
| 10 | 58 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3839 | 245,8550 | 302,2239 |
| 11 | 59 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 104,3839 | 245,8550 | 302,2239 |
| 12 | 60 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 87,4820 | 245,8550 | 302,2239 |
| 1 | 61 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,1844 | 245,8550 | 302,2239 |
| 2 | 62 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,1844 | 245,8550 | 302,2239 |
| 3 | 63 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,1844 | 245,8550 | 302,2239 |
| 4 | 64 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,2667 | 245,8550 | 302,2239 |
| 5 | 65 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,2667 | 245,8550 | 302,2239 |
| 6 | 66 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,2667 | 245,8550 | 302,2239 |
| 7 | 67 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,3590 | 245,8550 | 302,2239 |
| 8 | 68 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,3590 | 245,8550 | 302,2239 |
| 9 | 69 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,3590 | 245,8550 | 302,2239 |
| 10 | 70 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,3128 | 245,8550 | 302,2239 |
| 11 | 71 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 15,3128 | 245,8550 | 302,2239 |
| 12 | 72 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 7,5033 | 245,8550 | 302,2239 |

Tabel 2.2.3.2 Momen Kapasitas Tulangan Lapangan untuk R/W 1/6 Baru Portal 2

| Lantai | Frame | b mm | h mm | d' mm | d mm | M (-) | | | | | | |
|--------|-------|---------|---------|----------|---------|----------|-----------------|-----------|-----------------|---------|-----------|----------|
| | | | | | | As pakai | | As' pakai | | Mperlu | Mtersedia | Mkap |
| | | | | | | n | mm ² | n | mm ² | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | 145 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4367 | 245,8550 | 302,2239 |
| 2 | 146 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4367 | 245,8550 | 302,2239 |
| 3 | 147 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4367 | 245,8550 | 302,2239 |
| 4 | 148 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4390 | 245,8550 | 302,2239 |
| 5 | 149 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4390 | 245,8550 | 302,2239 |
| 6 | 150 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4390 | 245,8550 | 302,2239 |
| 7 | 151 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4446 | 245,8550 | 302,2239 |
| 8 | 152 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4446 | 245,8550 | 302,2239 |
| 9 | 153 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4446 | 245,8550 | 302,2239 |
| 10 | 154 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4484 | 245,8550 | 302,2239 |
| 11 | 155 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 55,4484 | 245,8550 | 302,2239 |
| 12 | 156 | 300 | 650 | 75 | 575 | 3 | 1139,82 | 0 | 0 | 48,0290 | 245,8550 | 302,2239 |

Tabel 2.2.5.1 Tulangan Sengkang Geser Balok untuk RW 1/6 Baru Portal E

| Lantai | Frame | Dalam sendi plastis | | | | | | | | | | Luar sendi plastis | | | | | | | | | | Sengkang Praktis | | |
|--------|-------|---------------------|----------|-----------|----------|----------|--------------|----------|----------|-----------|----------|--------------------|--------------|------------|------------|--------|----------|----------|----------|----|----|------------------|----|----|
| | | Vu,b pakai | | Vs=Vu,b/e | Sengkang | | Vs terpasang | CEK | Vc | Vs | s | Sengkang | Vs terpasang | CEK | xVc | xVc-2h | s | Sengkang | Terpakai | 19 | | | | |
| | | kN | 3 | | mm | 6 | | | | | | | | | | | | | | | kN | 7 | mm | 13 |
| 1 | 2 | 188,5619 | 314,2698 | 68,9408 | 10 - 65 | 333,3231 | AMAN | 143,7500 | 117,9841 | 183,6350 | 10 - 160 | 144,4400 | AMAN | 1605,6833 | 305,6833 | 250 | 10 - 260 | | | | | | | |
| 2 | 50 | 188,0835 | 313,4725 | 69,1161 | 10 - 65 | 333,3231 | AMAN | 143,7500 | 117,1868 | 184,8643 | 10 - 160 | 144,4400 | AMAN | 1594,6805 | 294,6805 | 250 | 10 - 260 | | | | | | | |
| 3 | 51 | 187,7163 | 312,8605 | 69,2513 | 10 - 65 | 333,3231 | AMAN | 143,7500 | 116,5748 | 185,8550 | 10 - 160 | 144,4400 | AMAN | 1586,2347 | 286,2347 | 250 | 10 - 260 | | | | | | | |
| 4 | 52 | 187,3755 | 312,2925 | 69,3773 | 10 - 65 | 333,3231 | AMAN | 143,7500 | 116,0068 | 186,7649 | 10 - 160 | 144,4400 | AMAN | 1578,3964 | 278,3964 | 250 | 10 - 260 | | | | | | | |
| 5 | 53 | 187,0801 | 311,8001 | 69,4868 | 10 - 65 | 333,3231 | AMAN | 143,7500 | 115,5144 | 187,5610 | 10 - 160 | 144,4400 | AMAN | 1571,6020 | 271,6020 | 250 | 10 - 260 | | | | | | | |
| 6 | 54 | 186,8244 | 311,3740 | 69,5819 | 10 - 65 | 333,3231 | AMAN | 143,7500 | 115,0883 | 188,2555 | 10 - 160 | 144,4400 | AMAN | 1565,7212 | 265,7212 | 250 | 10 - 260 | | | | | | | |
| 7 | 55 | 186,2144 | 282,0240 | 76,8232 | 10 - 75 | 288,8800 | AMAN | 143,7500 | 94,2303 | 229,9260 | 10 - 180 | 120,3667 | AMAN | 1273,6129 | -26,3871 | 250 | 10 - 260 | | | | | | | |
| 8 | 56 | 169,0387 | 281,7311 | 76,9031 | 10 - 75 | 288,8800 | AMAN | 143,7500 | 93,9374 | 230,6429 | 10 - 180 | 120,3667 | AMAN | 1288,7918 | -31,2082 | 250 | 10 - 260 | | | | | | | |
| 9 | 57 | 168,8956 | 281,4927 | 76,9683 | 10 - 75 | 288,8800 | AMAN | 143,7500 | 93,6990 | 231,2298 | 10 - 180 | 120,3667 | AMAN | 1284,8666 | -35,1334 | 250 | 10 - 260 | | | | | | | |
| 10 | 58 | 134,8177 | 224,6962 | 96,4235 | 10 - 95 | 228,0632 | AMAN | 143,7500 | 53,5013 | 404,9622 | 10 - 260 | 86,6640 | AMAN | 181,7948 | -1118,2654 | 250 | 10 - 260 | | | | | | | |
| 11 | 59 | 134,6607 | 224,4345 | 96,5360 | 10 - 95 | 228,0632 | AMAN | 143,7500 | 53,2395 | 406,9533 | 10 - 260 | 86,6640 | AMAN | 174,8197 | -1125,1803 | 250 | 10 - 260 | | | | | | | |
| 12 | 60 | 118,8233 | 194,7055 | 111,2757 | 10 - 110 | 196,9636 | AMAN | 143,7500 | 23,5106 | 921,5434 | 10 - 260 | 86,6640 | AMAN | -610,5160 | -1910,5160 | 250 | 10 - 260 | | | | | | | |
| 1 | 61 | 180,4054 | 300,6756 | 72,0577 | 10 - 70 | 309,5143 | AMAN | 143,7500 | -31,3733 | -690,5866 | 10 - 260 | 86,6640 | AMAN | 810,2212 | -489,7788 | 250 | 10 - 260 | | | | | | | |
| 2 | 62 | 180,4054 | 300,6756 | 72,0577 | 10 - 70 | 309,5143 | AMAN | 143,7500 | -31,3733 | -690,5866 | 10 - 260 | 86,6640 | AMAN | 810,2212 | -489,7788 | 250 | 10 - 260 | | | | | | | |
| 3 | 63 | 180,4054 | 300,6756 | 72,0577 | 10 - 70 | 309,5143 | AMAN | 143,7500 | -31,3733 | -690,5866 | 10 - 260 | 86,6640 | AMAN | 810,2212 | -489,7788 | 250 | 10 - 260 | | | | | | | |
| 4 | 64 | 180,4054 | 300,6756 | 72,0577 | 10 - 70 | 309,5143 | AMAN | 143,7500 | -31,3733 | -690,5866 | 10 - 260 | 86,6640 | AMAN | 810,2212 | -489,7788 | 250 | 10 - 260 | | | | | | | |
| 5 | 65 | 180,4054 | 300,6756 | 72,0577 | 10 - 70 | 309,5143 | AMAN | 143,7500 | -31,3733 | -690,5866 | 10 - 260 | 86,6640 | AMAN | 810,2212 | -489,7788 | 250 | 10 - 260 | | | | | | | |
| 6 | 66 | 180,4054 | 300,6756 | 72,0577 | 10 - 70 | 309,5143 | AMAN | 143,7500 | -31,3733 | -690,5866 | 10 - 260 | 86,6640 | AMAN | 810,2212 | -489,7788 | 250 | 10 - 260 | | | | | | | |
| 7 | 67 | 141,0477 | 235,0795 | 92,1645 | 10 - 90 | 240,7333 | AMAN | 143,7500 | -48,1928 | -449,5889 | 10 - 260 | 86,6640 | AMAN | 551,5970 | -748,4030 | 250 | 10 - 260 | | | | | | | |
| 8 | 68 | 141,0477 | 235,0795 | 92,1645 | 10 - 90 | 240,7333 | AMAN | 143,7500 | -48,1928 | -449,5889 | 10 - 260 | 86,6640 | AMAN | 551,5970 | -748,4030 | 250 | 10 - 260 | | | | | | | |
| 9 | 69 | 141,0477 | 235,0795 | 92,1645 | 10 - 90 | 240,7333 | AMAN | 143,7500 | -48,1928 | -449,5889 | 10 - 260 | 86,6640 | AMAN | 551,5970 | -748,4030 | 250 | 10 - 260 | | | | | | | |
| 10 | 70 | 71,3954 | 118,9923 | 182,0791 | 10 - 160 | 144,4400 | AMAN | 143,7500 | -77,9588 | -277,9160 | 10 - 260 | 86,6640 | AMAN | -1068,3608 | -2368,3608 | 250 | 10 - 260 | | | | | | | |
| 11 | 71 | 71,3954 | 118,9923 | 182,0791 | 10 - 160 | 144,4400 | AMAN | 143,7500 | -77,9588 | -277,9160 | 10 - 260 | 86,6640 | AMAN | -1068,3608 | -2368,3608 | 250 | 10 - 260 | | | | | | | |
| 12 | 72 | 63,2558 | 105,4263 | 205,5086 | 10 - 160 | 144,4400 | AMAN | 143,7500 | -91,5248 | -296,7227 | 10 - 260 | 86,6640 | AMAN | -1253,2321 | -2553,2321 | 250 | 10 - 260 | | | | | | | |

Tabel 2.2.5.2 Tulangan Sengkang Geser Balok untuk RW 1/6 Baru Portal 2

| Lantai | Frame | Dalam sendi plastis | | | | | | | | | | Luar sendi plastis | | | | | | | | | | Sengkang Praktis | | |
|--------|-------|---------------------|----------|-----------|----------|----------|--------------|----------|----------|------------|----------|--------------------|--------------|------------|------------|--------|----------|----------|----------|----|----|------------------|----|----|
| | | Vu,b pakai | | Vs=Vu,b/e | Sengkang | | Vs terpasang | CEK | Vc | Vs | s | Sengkang | Vs terpasang | CEK | xVc | xVc-2h | s | Sengkang | Terpakai | 19 | | | | |
| | | kN | 3 | | mm | 6 | | | | | | | | | | | | | | | kN | 7 | mm | 12 |
| 1 | 145 | 228,3935 | 380,6558 | 56,9176 | 10 - 55 | 393,9273 | AMAN | 143,7500 | 116,3860 | 186,1564 | 10 - 160 | 144,4400 | AMAN | 1423,6370 | 123,6370 | 250 | 10 - 260 | | | | | | | |
| 2 | 146 | 228,3893 | 380,6488 | 56,9186 | 10 - 55 | 393,9273 | AMAN | 143,7500 | 116,3790 | 186,1677 | 10 - 160 | 144,4400 | AMAN | 1423,5945 | 123,5945 | 250 | 10 - 260 | | | | | | | |
| 3 | 147 | 228,3650 | 380,6417 | 56,9197 | 10 - 55 | 393,9273 | AMAN | 143,7500 | 116,3719 | 186,1790 | 10 - 160 | 144,4400 | AMAN | 1423,5520 | 123,5520 | 250 | 10 - 260 | | | | | | | |
| 4 | 148 | 216,1384 | 360,2307 | 60,1448 | 10 - 60 | 361,1000 | AMAN | 143,7500 | 105,6614 | 205,0513 | 10 - 160 | 144,4400 | AMAN | 1364,2967 | 64,2967 | 250 | 10 - 260 | | | | | | | |
| 5 | 149 | 216,1347 | 360,2245 | 60,1458 | 10 - 60 | 361,1000 | AMAN | 143,7500 | 105,6552 | 205,0633 | 10 - 160 | 144,4400 | AMAN | 1364,2564 | 64,2564 | 250 | 10 - 260 | | | | | | | |
| 6 | 150 | 216,1314 | 360,2190 | 60,1468 | 10 - 60 | 361,1000 | AMAN | 143,7500 | 105,6496 | 205,0741 | 10 - 160 | 144,4400 | AMAN | 1364,2199 | 64,2199 | 250 | 10 - 260 | | | | | | | |
| 7 | 151 | 183,0655 | 305,1091 | 71,0107 | 10 - 70 | 309,5143 | AMAN | 143,7500 | 76,7372 | 282,3402 | 10 - 160 | 144,4400 | AMAN | 1136,3936 | -163,6064 | 250 | 10 - 260 | | | | | | | |
| 8 | 152 | 183,0630 | 305,1050 | 71,0116 | 10 - 70 | 309,5143 | AMAN | 143,7500 | 76,7331 | 282,3555 | 10 - 160 | 144,4400 | AMAN | 1136,3580 | -163,6420 | 250 | 10 - 260 | | | | | | | |
| 9 | 153 | 183,0609 | 305,1015 | 71,0124 | 10 - 70 | 309,5142 | AMAN | 143,7500 | 76,7296 | 282,3684 | 10 - 160 | 144,4400 | AMAN | 1136,3280 | -163,6720 | 250 | 10 - 260 | | | | | | | |
| 10 | 154 | 148,3256 | 248,8761 | 87,0554 | 10 - 85 | 254,8941 | AMAN | 143,7500 | 47,2334 | 458,7008 | 10 - 160 | 144,4400 | AMAN | 691,3745 | -608,6255 | 250 | 10 - 260 | | | | | | | |
| 11 | 155 | 149,3222 | 248,8703 | 87,0574 | 10 - 85 | 254,8941 | AMAN | 143,7500 | 47,2277 | 458,7567 | 10 - 160 | 144,4400 | AMAN | 691,3024 | -608,6976 | 250 | 10 - 260 | | | | | | | |
| 12 | 156 | 101,2535 | 168,7558 | 128,3867 | 10 - 100 | 216,6600 | AMAN | 143,7500 | -3,9773 | -5447,4023 | 10 - 150 | 144,4400 | AMAN | -1196,7196 | -2496,7196 | 250 | 10 - 260 | | | | | | | |

Lanjutan

| KOLOM | wd | h | hn | Arah X | | | | | | | | | | Arah Y | | | | | | | |
|-----------|-----|---|------|---------|------|-------|------|-------|---------|----------|----------|------------|------|--------|-------|------|---------|---------|---------|-------|------------|
| | | | | ck,x | Lx | | Lnx | | Mkap,bx | | Mu,kx | Atas Bawah | ck,y | Ly | | Lny | | Mkap,by | | Mu,ky | Atas Bawah |
| | | | | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | | | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | |
| B | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 1,3 | 4 | 3,35 | 0,07979 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 52,8716 | 0,1904 | 5 | 5 | 4,2 | 4,2 | 492,656 | 764,075 | 217,064 | | |
| | 1 | | | 1 | 0 | 7 | 0 | 6,1 | 0,0000 | 0,0000 | 0,0000 | 1,0000 | 5 | 5 | 4,2 | 4,2 | 0,000 | 0,000 | 0,000 | | |
| Lantai 2 | 1,3 | 4 | 3,35 | 0,34665 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 229,7134 | 0,4485 | 5 | 5 | 4,2 | 4,2 | 492,656 | 764,075 | 511,341 | | |
| | 1,3 | 4 | 3,35 | 0,92021 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 609,7976 | 0,8096 | 5 | 5 | 4,2 | 4,2 | 492,656 | 764,075 | 923,157 | | |
| Lantai 3 | 1,3 | 4 | 3,35 | 0,47104 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 312,1459 | 0,5093 | 5 | 5 | 4,2 | 4,2 | 492,656 | 764,075 | 580,730 | | |
| | 1,3 | 4 | 3,35 | 0,65335 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 432,9558 | 0,5515 | 5 | 5 | 4,2 | 4,2 | 492,656 | 764,075 | 628,880 | | |
| Lantai 4 | 1,3 | 4 | 3,35 | 0,5289 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 350,4846 | 0,5352 | 5 | 5 | 4,2 | 4,2 | 397,869 | 757,709 | 561,100 | | |
| | 1,3 | 4 | 3,35 | 0,52896 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 350,5233 | 0,4907 | 5 | 5 | 4,2 | 4,2 | 492,656 | 764,075 | 559,491 | | |
| Lantai 5 | 1,3 | 4 | 3,35 | 0,56728 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 375,9170 | 0,5537 | 5 | 5 | 4,2 | 4,2 | 397,869 | 757,709 | 580,549 | | |
| | 1,3 | 4 | 3,35 | 0,4711 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 312,1846 | 0,4648 | 5 | 5 | 4,2 | 4,2 | 397,869 | 757,709 | 487,347 | | |
| Lantai 6 | 1,3 | 4 | 3,35 | 0,60276 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 399,4326 | 0,5732 | 5 | 5 | 4,2 | 4,2 | 397,869 | 757,709 | 600,935 | | |
| | 1,3 | 4 | 3,35 | 0,43272 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 286,7522 | 0,4463 | 5 | 5 | 4,2 | 4,2 | 397,869 | 757,709 | 467,897 | | |
| Lantai 7 | 1,3 | 4 | 3,35 | 0,64382 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 375,0078 | 0,5974 | 5 | 5 | 4,2 | 4,2 | 302,807 | 579,595 | 478,304 | | |
| | 1,3 | 4 | 3,35 | 0,39724 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 263,2366 | 0,4268 | 5 | 5 | 4,2 | 4,2 | 397,869 | 757,709 | 447,512 | | |
| Lantai 8 | 1,3 | 4 | 3,35 | 0,69837 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 406,7798 | 0,6310 | 5 | 5 | 4,2 | 4,2 | 302,807 | 579,595 | 505,151 | | |
| | 1,3 | 4 | 3,35 | 0,35618 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 207,4608 | 0,4026 | 5 | 5 | 4,2 | 4,2 | 302,807 | 579,595 | 322,292 | | |
| Lantai 9 | 1,3 | 4 | 3,35 | 0,77775 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 453,0142 | 0,6808 | 5 | 5 | 4,2 | 4,2 | 302,807 | 579,595 | 545,045 | | |
| | 1,3 | 4 | 3,35 | 0,30163 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 175,6889 | 0,3690 | 5 | 5 | 4,2 | 4,2 | 302,807 | 579,595 | 295,445 | | |
| Lantai 10 | 1,3 | 4 | 3,35 | 0,90081 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 312,3993 | 0,7642 | 5 | 5 | 4,2 | 4,2 | 207,144 | 396,537 | 418,543 | | |
| | 1,3 | 4 | 3,35 | 0,22225 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 129,4544 | 0,3192 | 5 | 5 | 4,2 | 4,2 | 302,807 | 579,595 | 255,551 | | |
| Lantai 11 | 1,3 | 4 | 3,35 | 0,9385 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 325,4696 | 0,8687 | 5 | 5 | 4,2 | 4,2 | 207,144 | 396,537 | 475,812 | | |
| | 1,3 | 4 | 3,35 | 0,09919 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 34,4000 | 0,2358 | 5 | 5 | 4,2 | 4,2 | 207,144 | 396,537 | 129,171 | | |
| Lantai 12 | 1 | 4 | 3,35 | 0,09919 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 266,7687 | 1,0000 | 5 | 5 | 4,2 | 4,2 | 0,000 | 302,224 | 210,927 | | |
| | 1 | 4 | 3,35 | 0,0615 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 16,4075 | 0,1313 | 5 | 5 | 4,2 | 4,2 | 207,144 | 396,537 | 55,310 | | |

| Lanjutan | KOLOM | ud | Arah X | | | | | | | | | | Arah Y | | | | | | | | | | | | | | | | |
|-----------|-------|----|--------|---------|------|---|------|-------|--------|----------|----------|--------|--------|-------|------|------|--------|----------|----------|---------|-------|-------|-------|------|-------|------|-------|------|-------|
| | | | h | hn | dk,x | | Lx | | Lnx | | Mkap,bx | | Mu,kx | | dk,y | Ly | | Lny | | Mkap,by | | Mu,ky | | Atas | Bawah | | | | |
| | | | | | m | m | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | | | Kiri | Kanan | Kiri | Kanan |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | | | | | | | | |
| 1 | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 1,3 | 4 | 3,35 | 0,07979 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 52,8716 | 0,1904 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 131,9720 | | | | | | | | | | |
| Lantai 2 | 1 | 4 | 3,35 | 0,34665 | 0 | 7 | 0 | 6,1 | 0,0000 | 0,0000 | 0,0000 | 1,0000 | 0 | 5 | 0 | 4,2 | 0,0000 | 0,0000 | 0,0000 | | | | | | | | | | |
| Lantai 3 | 1,3 | 4 | 3,35 | 0,92021 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 229,7134 | 0,4485 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 310,8886 | | | | | | | | | | |
| Lantai 4 | 1,3 | 4 | 3,35 | 0,47104 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 609,7976 | 0,8096 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 561,2669 | | | | | | | | | | |
| Lantai 5 | 1,3 | 4 | 3,35 | 0,65335 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 312,1459 | 0,5093 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 353,0759 | | | | | | | | | | |
| Lantai 6 | 1,3 | 4 | 3,35 | 0,5289 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 432,9558 | 0,5515 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 382,3503 | | | | | | | | | | |
| Lantai 7 | 1,3 | 4 | 3,35 | 0,52896 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 350,4846 | 0,5352 | 0 | 5 | 0 | 4,2 | 0,0000 | 757,7089 | 367,9113 | | | | | | | | | | |
| Lantai 8 | 1,3 | 4 | 3,35 | 0,56728 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 375,9170 | 0,4907 | 0 | 5 | 0 | 4,2 | 0,0000 | 764,0750 | 340,1630 | | | | | | | | | | |
| Lantai 9 | 1,3 | 4 | 3,35 | 0,4711 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 312,1846 | 0,4646 | 0 | 5 | 0 | 4,2 | 0,0000 | 757,7089 | 380,6642 | | | | | | | | | | |
| Lantai 10 | 1,3 | 4 | 3,35 | 0,60276 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 399,4326 | 0,5732 | 0 | 5 | 0 | 4,2 | 0,0000 | 757,7089 | 319,5516 | | | | | | | | | | |
| Lantai 11 | 1,3 | 4 | 3,35 | 0,43272 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 286,7522 | 0,4463 | 0 | 5 | 0 | 4,2 | 0,0000 | 757,7089 | 394,0311 | | | | | | | | | | |
| Lantai 12 | 1,3 | 4 | 3,35 | 0,64382 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 375,0078 | 0,5974 | 0 | 5 | 0 | 4,2 | 0,0000 | 579,5954 | 306,7987 | | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,39724 | 0 | 7 | 0 | 6,1 | 0,0000 | 757,7089 | 263,2366 | 0,4268 | 0 | 5 | 0 | 4,2 | 0,0000 | 757,7089 | 293,4318 | | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,69837 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 406,7798 | 0,6310 | 0 | 5 | 0 | 4,2 | 0,0000 | 579,5954 | 331,8024 | | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,35618 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 207,4608 | 0,4026 | 0 | 5 | 0 | 4,2 | 0,0000 | 579,5954 | 211,6936 | | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,77775 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 453,0142 | 0,6808 | 0 | 5 | 0 | 4,2 | 0,0000 | 579,5954 | 358,0065 | | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,30163 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 175,6889 | 0,3690 | 0 | 5 | 0 | 4,2 | 0,0000 | 579,5954 | 194,0598 | | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,90081 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 312,3993 | 0,7642 | 0 | 5 | 0 | 4,2 | 0,0000 | 396,5371 | 274,9266 | | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,22225 | 0 | 7 | 0 | 6,1 | 0,0000 | 666,0060 | 129,4544 | 0,3192 | 0 | 5 | 0 | 4,2 | 0,0000 | 579,5954 | 167,8556 | | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,9385 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 325,4696 | 0,8687 | 0 | 5 | 0 | 4,2 | 0,0000 | 396,5371 | 312,5443 | | | | | | | | | | |
| | 1,3 | 4 | 3,35 | 0,09919 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 34,4000 | 0,2358 | 0 | 5 | 0 | 4,2 | 0,0000 | 396,5371 | 84,8482 | | | | | | | | | | |
| | 1 | 4 | 3,35 | 1 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 266,7687 | 1,0000 | 0 | 5 | 0 | 4,2 | 0,0000 | 302,2239 | 210,9271 | | | | | | | | | | |
| | 1 | 1 | | 0,0615 | 0 | 7 | 0 | 6,1 | 0,0000 | 396,5371 | 16,4075 | 0,1313 | 0 | 5 | 0 | 4,2 | 0,0000 | 396,5371 | 36,3312 | | | | | | | | | | |

Tabel 2.3.2 Momen Maksimum Rencana Kolom untuk R/W 1/6 Baru

| KOLOM | Arah X | | | | | | Arah Y | | | | | | | | | | |
|-----------|---------|---------------|---------|---------------|--------|---------------|-----------|---------------|--------|---------------|--------|---------------|----------|---------------|-------|---------------|--|
| | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | |
| | MD,kx | Atas Bawah | ML,kx | Atas Bawah | ME,kx | Atas Bawah | Mu,kx | Atas Bawah | MD,kx | Atas Bawah | ML,kx | Atas Bawah | ME,kx | Atas Bawah | Mu,ky | Atas Bawah | |
| kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | |
| 1 | | | | | | | | | | | | | | | | | |
| A,B,C,D | | | | | | | | | | | | | | | | | |
| Lantai 1 | 32,2536 | 4,1767 | 32,2536 | 56,1768 | 4,1767 | 32,2536 | 274,1945 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 129,3295 | 543,1839 | | | |
| | 14,0434 | 1,8186 | 14,0434 | 874,8840 | 1,8186 | 14,0434 | 3691,1679 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 767,0661 | 3221,6860 | | | |
| Lantai 2 | 38,9918 | 4,8733 | 38,9918 | 280,1249 | 4,8733 | 38,9918 | 1222,5829 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 383,9766 | 1612,7017 | | | |
| | 43,1162 | 5,5068 | 43,1162 | 647,9188 | 5,5068 | 43,1162 | 2772,3131 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 550,0286 | 2310,1201 | | | |
| Lantai 3 | 37,0393 | 4,4389 | 37,0393 | 407,0652 | 4,4389 | 37,0393 | 1753,2259 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 448,7851 | 1884,8974 | | | |
| | 36,3458 | 4,4083 | 36,3458 | 527,9697 | 4,4083 | 36,3458 | 2260,2646 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 472,2384 | 1983,4013 | | | |
| Lantai 4 | 37,0052 | 4,2821 | 37,0052 | 449,2194 | 4,2821 | 37,0052 | 1930,0730 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 457,3234 | 1920,7583 | | | |
| | 37,3264 | 4,3839 | 37,3264 | 457,1126 | 4,3839 | 37,3264 | 1963,6687 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 432,3718 | 1815,9616 | | | |
| Lantai 5 | 36,6104 | 4,0955 | 36,6104 | 452,9561 | 4,0955 | 36,6104 | 1945,1569 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 444,9772 | 1868,9042 | | | |
| | 36,6934 | 4,1565 | 36,6934 | 400,1300 | 4,1565 | 36,6934 | 1723,4384 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 397,2111 | 1668,2866 | | | |
| Lantai 6 | 36,3475 | 3,9449 | 36,3475 | 437,3766 | 3,9449 | 36,3475 | 1879,2888 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 421,9313 | 1772,1115 | | | |
| | 36,4598 | 4,0034 | 36,4598 | 345,5181 | 4,0034 | 36,4598 | 1493,6624 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 358,6322 | 1506,2552 | | | |
| Lantai 7 | 36,0897 | 3,8183 | 36,0897 | 409,7961 | 3,8183 | 36,0897 | 1763,0471 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 390,9407 | 1641,9509 | | | |
| | 36,1864 | 3,8643 | 36,1864 | 288,2427 | 3,8643 | 36,1864 | 1252,6726 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 314,2089 | 1319,6774 | | | |
| Lantai 8 | 35,9546 | 3,7031 | 35,9546 | 372,8703 | 3,7031 | 35,9546 | 1607,6958 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 352,7939 | 1481,7344 | | | |
| | 35,9888 | 3,7482 | 35,9888 | 226,7063 | 3,7482 | 35,9888 | 993,8902 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 263,4243 | 1106,3821 | | | |
| Lantai 9 | 35,4949 | 3,6713 | 35,4949 | 326,9774 | 3,6713 | 35,4949 | 1414,4295 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 307,3668 | 1290,9406 | | | |
| | 35,7395 | 3,6697 | 35,7395 | 161,0433 | 3,6697 | 35,7395 | 717,7615 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 206,3370 | 866,6154 | | | |
| Lantai 10 | 36,7490 | 3,3785 | 36,7490 | 270,9463 | 3,3785 | 36,7490 | 1180,1083 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 254,8464 | 1070,3549 | | | |
| | 35,9344 | 3,5445 | 35,9344 | 93,4379 | 3,5445 | 35,9344 | 433,8919 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 144,1126 | 605,2729 | | | |
| Lantai 11 | 30,3081 | 4,483 | 30,3081 | 199,9711 | 4,483 | 30,3081 | 876,3729 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 188,2598 | 790,6912 | | | |
| | 34,2992 | 3,7720 | 34,2992 | 29,8354 | 3,7720 | 34,2992 | 165,2835 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 78,6510 | 330,3344 | | | |
| Lantai 12 | 59,6420 | 0,7887 | 59,6420 | 106,9225 | 0,7887 | 59,6420 | 512,5268 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 119,6230 | 502,4166 | | | |
| | 41,3425 | 2,4625 | 41,3425 | 13,1051 | 2,4625 | 41,3425 | 101,0368 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 28,4491 | 119,4863 | | | |

Tabel 2.3.3 Momen Rencana Kolom Terpakai untuk R/W 1/6 Baru

| KOLOM | Mrencana | | Mmaksimum | | Mterpakai | | |
|----------|-----------|----------|-----------|-----------|-----------|----------|----------|
| | Mu,kx | Mu,ky | Mu,kx | Mu,ky | Mu,kx | Mu,ky | |
| | kNm | kNm | kNm | kNm | kNm | kNm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| A | Lantai 1 | 80,4744 | 217,0641 | 274,1945 | 543,1839 | 80,4744 | 217,0641 |
| | | 0,0000 | 0,0000 | 3691,1679 | 3221,6860 | 80,4744 | 217,0641 |
| | Lantai 2 | 349,6403 | 511,3415 | 1222,5829 | 1612,7017 | 349,6403 | 511,3415 |
| | | 928,1559 | 923,1571 | 2772,3131 | 2310,1201 | 928,1559 | 923,1571 |
| | Lantai 3 | 475,1085 | 580,7300 | 1753,2259 | 1884,8974 | 475,1085 | 580,7300 |
| | | 658,9899 | 628,8797 | 2260,2646 | 1983,4013 | 658,9899 | 628,8797 |
| | Lantai 4 | 533,4627 | 561,0998 | 1930,0730 | 1920,7583 | 533,4627 | 561,0998 |
| | | 533,5217 | 559,4912 | 1963,6687 | 1815,9616 | 533,5217 | 559,4912 |
| | Lantai 5 | 572,1728 | 580,5492 | 1945,1569 | 1868,9042 | 572,1728 | 580,5492 |
| | | 475,1675 | 487,3467 | 1723,4384 | 1668,2866 | 475,1675 | 487,3467 |
| | Lantai 6 | 607,9652 | 600,9350 | 1879,2888 | 1772,1115 | 607,9652 | 600,9350 |
| | | 436,4574 | 467,8973 | 1493,6624 | 1506,2552 | 436,4574 | 467,8973 |
| | Lantai 7 | 480,5699 | 478,3045 | 1763,0471 | 1641,9509 | 480,5699 | 478,3045 |
| | | 400,6651 | 447,5115 | 1252,6726 | 1319,6774 | 400,6651 | 447,5115 |
| | Lantai 8 | 521,2854 | 505,1510 | 1607,6958 | 1481,7344 | 521,2854 | 505,1510 |
| | | 265,8596 | 322,2919 | 993,8902 | 1106,3821 | 265,8596 | 322,2919 |
| | Lantai 9 | 580,5345 | 545,0454 | 1414,4295 | 1290,9406 | 580,5345 | 545,0454 |
| | | 225,1440 | 295,4454 | 717,7615 | 866,6154 | 225,1440 | 295,4454 |
| | Lantai 10 | 430,9143 | 418,5431 | 1180,1083 | 1070,3549 | 430,9143 | 418,5431 |
| | | 165,8950 | 255,5510 | 433,8919 | 605,2729 | 165,8950 | 255,5510 |
| | Lantai 11 | 448,9431 | 475,8116 | 876,3729 | 790,6912 | 448,9431 | 475,8116 |
| | | 47,4503 | 129,1713 | 165,2835 | 330,3344 | 47,4503 | 129,1713 |
| | Lantai 12 | 367,9728 | 210,9271 | 512,5268 | 502,4166 | 367,9728 | 210,9271 |
| | | 22,6320 | 55,3099 | 101,0368 | 119,4863 | 22,6320 | 55,3099 |
| B | Lantai 1 | 52,8716 | 217,0641 | 274,1945 | 543,1839 | 52,8716 | 217,0641 |
| | | 0,0000 | 0,0000 | 3691,1679 | 3221,6860 | 52,8716 | 217,0641 |
| | Lantai 2 | 229,7134 | 511,3415 | 1222,5829 | 1612,7017 | 229,7134 | 511,3415 |
| | | 609,7976 | 923,1571 | 2772,3131 | 2310,1201 | 609,7976 | 923,1571 |
| | Lantai 3 | 312,1459 | 580,7300 | 1753,2259 | 1884,8974 | 312,1459 | 580,7300 |
| | | 432,9558 | 628,8797 | 2260,2646 | 1983,4013 | 432,9558 | 628,8797 |
| | Lantai 4 | 350,4846 | 561,0998 | 1930,0730 | 1920,7583 | 350,4846 | 561,0998 |
| | | 350,5233 | 559,4912 | 1963,6687 | 1815,9616 | 350,5233 | 559,4912 |
| | Lantai 5 | 375,9170 | 580,5492 | 1945,1569 | 1868,9042 | 375,9170 | 580,5492 |
| | | 312,1846 | 487,3467 | 1723,4384 | 1668,2866 | 312,1846 | 487,3467 |
| | Lantai 6 | 399,4326 | 600,9350 | 1879,2888 | 1772,1115 | 399,4326 | 600,9350 |
| | | 286,7522 | 467,8973 | 1493,6624 | 1506,2552 | 286,7522 | 467,8973 |
| | Lantai 7 | 375,0078 | 478,3045 | 1763,0471 | 1641,9509 | 375,0078 | 478,3045 |
| | | 263,2366 | 447,5115 | 1252,6726 | 1319,6774 | 263,2366 | 447,5115 |
| | Lantai 8 | 406,7798 | 505,1510 | 1607,6958 | 1481,7344 | 406,7798 | 505,1510 |
| | | 207,4608 | 322,2919 | 993,8902 | 1106,3821 | 207,4608 | 322,2919 |
| | Lantai 9 | 453,0142 | 545,0454 | 1414,4295 | 1290,9406 | 453,0142 | 545,0454 |
| | | 175,6889 | 295,4454 | 717,7615 | 866,6154 | 175,6889 | 295,4454 |
| | Lantai 10 | 312,3993 | 418,5431 | 1180,1083 | 1070,3549 | 312,3993 | 418,5431 |
| | | 129,4544 | 255,5510 | 433,8919 | 605,2729 | 129,4544 | 255,5510 |
| | Lantai 11 | 325,4696 | 475,8116 | 876,3729 | 790,6912 | 325,4696 | 475,8116 |
| | | 34,4000 | 129,1713 | 165,2835 | 330,3344 | 34,4000 | 129,1713 |
| | Lantai 12 | 266,7687 | 210,9271 | 512,5268 | 502,4166 | 266,7687 | 210,9271 |
| | | 16,4075 | 55,3099 | 101,0368 | 119,4863 | 16,4075 | 55,3099 |

Lanjutan

| KOLOM | Mrencana | | Mmaksimum | | Mterpakai | |
|-----------|----------------------|----------------------|------------------------|------------------------|----------------------|----------------------|
| | Mu,kx | Mu,ky | Mu,kx | Mu,ky | Mu,kx | Mu,ky |
| | kNm | kNm | kNm | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| C | | | | | | |
| Lantai 1 | 80,4744 0,0000 | 131,9720 0,0000 | 274,1945 3691,1679 | 543,1839 3221,6860 | 80,4744 80,4744 | 131,9720 131,9720 |
| Lantai 2 | 349,6403 928,1559 | 310,8886 561,2669 | 1222,5829 2772,3131 | 1612,7017 2310,1201 | 349,6403 928,1559 | 310,8886 561,2669 |
| Lantai 3 | 475,1085 658,9899 | 353,0759 382,3503 | 1753,2259 2260,2646 | 1884,8974 1983,4013 | 475,1085 658,9899 | 353,0759 382,3503 |
| Lantai 4 | 533,4627 533,5217 | 367,9113 340,1630 | 1930,0730 1963,6687 | 1920,7583 1815,9616 | 533,4627 533,5217 | 367,9113 340,1630 |
| Lantai 5 | 572,1728 475,1675 | 380,6642 319,5516 | 1945,1569 1723,4384 | 1868,9042 1668,2866 | 572,1728 475,1675 | 380,6642 319,5516 |
| Lantai 6 | 607,9652 436,4574 | 394,0311 306,7987 | 1879,2888 1493,6624 | 1772,1115 1506,2552 | 607,9652 436,4574 | 394,0311 306,7987 |
| Lantai 7 | 480,5699 400,6651 | 314,1686 293,4318 | 1763,0471 1252,6726 | 1641,9509 1319,6774 | 480,5699 400,6651 | 314,1686 293,4318 |
| Lantai 8 | 521,2854 265,8596 | 331,8024 211,6936 | 1607,6958 993,8902 | 1481,7344 1106,3821 | 521,2854 265,8596 | 331,8024 211,6936 |
| Lantai 9 | 580,5345 225,1440 | 358,0065 194,0598 | 1414,4295 717,7615 | 1290,9406 866,6154 | 580,5345 225,1440 | 358,0065 194,0598 |
| Lantai 10 | 430,9143 165,8950 | 274,9266 167,8556 | 1180,1083 433,8919 | 1070,3549 605,2729 | 430,9143 165,8950 | 274,9266 167,8556 |
| Lantai 11 | 448,9431 47,4503 | 312,5443 84,8482 | 876,3729 165,2835 | 790,6912 330,3344 | 448,9431 47,4503 | 312,5443 84,8482 |
| Lantai 12 | 367,9728 22,6320 | 210,9271 36,3312 | 512,5268 101,0368 | 502,4166 119,4863 | 367,9728 22,6320 | 210,9271 36,3312 |
| D | | | | | | |
| Lantai 1 | 52,8716 0,0000 | 131,9720 0,0000 | 274,1945 3691,1679 | 543,1839 3221,6860 | 52,8716 52,8716 | 131,9720 131,9720 |
| Lantai 2 | 229,7134 609,7976 | 310,8886 561,2669 | 1222,5829 2772,3131 | 1612,7017 2310,1201 | 229,7134 609,7976 | 310,8886 561,2669 |
| Lantai 3 | 312,1459 432,9558 | 353,0759 382,3503 | 1753,2259 2260,2646 | 1884,8974 1983,4013 | 312,1459 432,9558 | 353,0759 382,3503 |
| Lantai 4 | 350,4846 350,5233 | 367,9113 340,1630 | 1930,0730 1963,6687 | 1920,7583 1815,9616 | 350,4846 350,5233 | 367,9113 340,1630 |
| Lantai 5 | 375,9170 312,1846 | 380,6642 319,5516 | 1945,1569 1723,4384 | 1868,9042 1668,2866 | 375,9170 312,1846 | 380,6642 319,5516 |
| Lantai 6 | 399,4326 286,7522 | 394,0311 306,7987 | 1879,2888 1493,6624 | 1772,1115 1506,2552 | 399,4326 286,7522 | 394,0311 306,7987 |
| Lantai 7 | 375,0078 263,2366 | 314,1686 293,4318 | 1763,0471 1252,6726 | 1641,9509 1319,6774 | 375,0078 263,2366 | 314,1686 293,4318 |
| Lantai 8 | 406,7798 207,4608 | 331,8024 211,6936 | 1607,6958 993,8902 | 1481,7344 1106,3821 | 406,7798 207,4608 | 331,8024 211,6936 |
| Lantai 9 | 453,0142 175,6889 | 358,0065 194,0598 | 1414,4295 717,7615 | 1290,9406 866,6154 | 453,0142 175,6889 | 358,0065 194,0598 |
| Lantai 10 | 312,3993 129,4544 | 274,9266 167,8556 | 1180,1083 433,8919 | 1070,3549 605,2729 | 312,3993 129,4544 | 274,9266 167,8556 |
| Lantai 11 | 325,4696 34,4000 | 312,5443 84,8482 | 876,3729 165,2835 | 790,6912 330,3344 | 325,4696 34,4000 | 312,5443 84,8482 |
| Lantai 12 | 266,7687 16,4075 | 210,9271 36,3312 | 512,5268 101,0368 | 502,4166 119,4863 | 266,7687 16,4075 | 210,9271 36,3312 |

Tabel 2.3.4.1 Kumulatif Momen Kapasitas Balok

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | $\Sigma M1- 7m$ | $\Sigma M2+ 7m$ | $\Sigma M3- 4m$ | $\Sigma M4+ 4m$ | $\Sigma M1- 5m$ | $\Sigma M2+ 5m$ | $\Sigma M3- 5m$ | $\Sigma M4+ 5m$ |
| A | | | | | | | | |
| Lantai 1 | 7733,8825 | 3916,9918 | 6406,9189 | 3295,6630 | 7399,4361 | 3994,2831 | 7399,4361 | 3994,2831 |
| | 7337,3454 | 3709,8482 | 6104,6950 | 3295,6630 | 7097,2122 | 3994,2831 | 7097,2122 | 3994,2831 |
| Lantai 2 | 6976,1736 | 3519,1224 | 5735,0922 | 2897,8032 | 6635,3611 | 3501,6275 | 6635,3611 | 3501,6275 |
| | 7337,3454 | 3709,8482 | 6104,6950 | 3295,6630 | 7097,2122 | 3994,2831 | 7097,2122 | 3994,2831 |
| Lantai 3 | 6218,4648 | 3121,2530 | 5063,2655 | 2499,9435 | 5871,2861 | 3008,9720 | 5871,2861 | 3008,9720 |
| | 6579,6365 | 3311,9788 | 5432,8683 | 2897,8032 | 6333,1372 | 3501,6275 | 6333,1372 | 3501,6275 |
| Lantai 4 | 5460,7559 | 2723,3836 | 4391,4388 | 2102,0837 | 5107,2111 | 2516,3164 | 5107,2111 | 2516,3164 |
| | 5821,9276 | 2914,1094 | 4761,0416 | 2499,9435 | 5569,0621 | 3008,9720 | 5569,0621 | 3008,9720 |
| Lantai 5 | 4703,0470 | 2325,5142 | 3719,6121 | 1704,2239 | 4349,5022 | 2118,4470 | 4349,5022 | 2118,4470 |
| | 5064,2188 | 2516,2400 | 4089,2149 | 2102,0837 | 4804,9871 | 2516,3164 | 4804,9871 | 2516,3164 |
| Lantai 6 | 3945,3382 | 1927,6448 | 3047,7854 | 1306,3641 | 3591,7933 | 1720,5776 | 3591,7933 | 1720,5776 |
| | 4306,5099 | 2118,3706 | 3417,3882 | 1704,2239 | 4047,2783 | 2118,4470 | 4047,2783 | 2118,4470 |
| Lantai 7 | 3187,6293 | 1529,7754 | 2375,9587 | 908,5043 | 2834,0845 | 1322,7082 | 2834,0845 | 1322,7082 |
| | 3548,8011 | 1720,5012 | 2745,5615 | 1306,3641 | 3289,5694 | 1720,5776 | 3289,5694 | 1720,5776 |
| Lantai 8 | 2521,6233 | 1226,9939 | 1886,1964 | 605,6696 | 2254,4890 | 1019,9012 | 2254,4890 | 1019,9012 |
| | 2791,0922 | 1322,6318 | 2073,7348 | 908,5043 | 2531,8605 | 1322,7082 | 2531,8605 | 1322,7082 |
| Lantai 9 | 1855,6173 | 924,2123 | 1396,4341 | 302,8348 | 1674,8936 | 717,0942 | 1674,8936 | 717,0942 |
| | 2125,0862 | 1019,8503 | 1583,9725 | 605,6696 | 1952,2651 | 1019,9012 | 1952,2651 | 1019,9012 |
| Lantai 10 | 1189,6113 | 621,4308 | 906,6718 | 0,0000 | 1095,2982 | 414,2872 | 1095,2982 | 414,2872 |
| | 1459,0802 | 717,0687 | 1094,2102 | 302,8348 | 1372,6697 | 717,0942 | 1372,6697 | 717,0942 |
| Lantai 11 | 793,0742 | 414,2872 | 604,4479 | 0,0000 | 698,7611 | 207,1436 | 698,7611 | 207,1436 |
| | 793,0742 | 414,2872 | 604,4479 | 0,0000 | 793,0742 | 414,2872 | 793,0742 | 414,2872 |
| Lantai 12 | 396,5371 | 207,1436 | 302,2239 | 0,0000 | 302,2239 | 0,0000 | 302,2239 | 0,0000 |
| | 396,5371 | 207,1436 | 302,2239 | 0,0000 | 396,5371 | 207,1436 | 396,5371 | 207,1436 |

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|----------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 0m | 0 m | $\Sigma M1- 7m$ | $\Sigma M2+ 7m$ | $\Sigma M1- 5m$ | $\Sigma M2+ 5m$ | $\Sigma M3- 5m$ | $\Sigma M4+ 5m$ |
| B | | | | | | | | |
| Lantai 1 | 0,0000 | 0,0000 | 7733,8825 | 3916,9918 | 7399,4361 | 3994,2831 | 7399,4361 | 3994,2831 |
| | 0,0000 | 0,0000 | 7337,3454 | 3709,8482 | 7097,2122 | 3994,2831 | 7097,2122 | 3994,2831 |
| Lantai 2 | 0,0000 | 0,0000 | 6976,1736 | 3519,1224 | 6635,3611 | 3501,6275 | 6635,3611 | 3501,6275 |
| | 0,0000 | 0,0000 | 7337,3454 | 3709,8482 | 7097,2122 | 3994,2831 | 7097,2122 | 3994,2831 |
| Lantai 3 | 0,0000 | 0,0000 | 6218,4648 | 3121,2530 | 5871,2861 | 3008,9720 | 5871,2861 | 3008,9720 |
| | 0,0000 | 0,0000 | 6579,6365 | 3311,9788 | 6333,1372 | 3501,6275 | 6333,1372 | 3501,6275 |
| Lantai 4 | 0,0000 | 0,0000 | 5460,7559 | 2723,3836 | 5107,2111 | 2516,3164 | 5107,2111 | 2516,3164 |
| | 0,0000 | 0,0000 | 5821,9276 | 2914,1094 | 5569,0621 | 3008,9720 | 5569,0621 | 3008,9720 |
| Lantai 5 | 0,0000 | 0,0000 | 4703,0470 | 2325,5142 | 4349,5022 | 2118,4470 | 4349,5022 | 2118,4470 |
| | 0,0000 | 0,0000 | 5064,2188 | 2516,2400 | 4804,9871 | 2516,3164 | 4804,9871 | 2516,3164 |
| Lantai 6 | 0,0000 | 0,0000 | 3945,3382 | 1927,6448 | 3591,7933 | 1720,5776 | 3591,7933 | 1720,5776 |
| | 0,0000 | 0,0000 | 4306,5099 | 2118,3706 | 4047,2783 | 2118,4470 | 4047,2783 | 2118,4470 |
| Lantai 7 | 0,0000 | 0,0000 | 3187,6293 | 1529,7754 | 2834,0845 | 1322,7082 | 2834,0845 | 1322,7082 |
| | 0,0000 | 0,0000 | 3548,8011 | 1720,5012 | 3289,5694 | 1720,5776 | 3289,5694 | 1720,5776 |
| Lantai 8 | 0,0000 | 0,0000 | 2521,6233 | 1226,9939 | 2254,4890 | 1019,9012 | 2254,4890 | 1019,9012 |
| | 0,0000 | 0,0000 | 2791,0922 | 1322,6318 | 2531,8605 | 1322,7082 | 2531,8605 | 1322,7082 |
| Lantai 9 | 0,0000 | 0,0000 | 1855,6173 | 924,2123 | 1674,8936 | 717,0942 | 1674,8936 | 717,0942 |
| | 0,0000 | 0,0000 | 2125,0862 | 1019,8503 | 1952,2651 | 1019,9012 | 1952,2651 | 1019,9012 |
| Lantai 10 | 0,0000 | 0,0000 | 1189,6113 | 621,4308 | 1095,2982 | 414,2872 | 1095,2982 | 414,2872 |
| | 0,0000 | 0,0000 | 1459,0802 | 717,0687 | 1372,6697 | 717,0942 | 1372,6697 | 717,0942 |
| Lantai 11 | 0,0000 | 0,0000 | 793,0742 | 414,2872 | 698,7611 | 207,1436 | 698,7611 | 207,1436 |
| | 0,0000 | 0,0000 | 793,0742 | 414,2872 | 793,0742 | 414,2872 | 793,0742 | 414,2872 |
| Lantai 12 | 0,0000 | 0,0000 | 396,5371 | 207,1436 | 302,2239 | 0,0000 | 302,2239 | 0,0000 |
| | 0,0000 | 0,0000 | 396,5371 | 207,1436 | 396,5371 | 207,1436 | 396,5371 | 207,1436 |

lanjutan

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|-----------|-----------|-----------|-----------|----------|--------|-----------|-----------|
| | ΣM1- 7m | ΣM2+ 7m | ΣM3- 4m | ΣM4+ 4m | 0m | 0m | ΣM1- 5m | ΣM2+ 5m |
| C | | | | | | | | |
| Lantai 1 | 7733,8825 | 3916,9918 | 6406,9189 | 3295,6630 | 0,0000 | 0,0000 | 7399,4361 | 3994,2831 |
| | 7337,3454 | 3709,8482 | 6104,6950 | 3295,6630 | 0,0000 | 0,0000 | 7097,2122 | 3994,2831 |
| Lantai 2 | 6976,1736 | 3519,1224 | 5735,0922 | 2897,8032 | 0,0000 | 0,0000 | 6635,3611 | 3501,6275 |
| | 7337,3454 | 3709,8482 | 6104,6950 | 3295,6630 | 0,0000 | 0,0000 | 7097,2122 | 3994,2831 |
| Lantai 3 | 6218,4648 | 3121,2530 | 5063,2655 | 2499,9435 | 0,0000 | 0,0000 | 5871,2861 | 3008,9720 |
| | 6579,6365 | 3311,9788 | 5432,8683 | 2897,8032 | 0,0000 | 0,0000 | 6333,1372 | 3501,6275 |
| Lantai 4 | 5460,7559 | 2723,3836 | 4391,4388 | 2102,0837 | 0,0000 | 0,0000 | 5107,2111 | 2516,3164 |
| | 5821,9276 | 2914,1094 | 4761,0416 | 2499,9435 | 0,0000 | 0,0000 | 5569,0621 | 3008,9720 |
| Lantai 5 | 4703,0470 | 2325,5142 | 3719,6121 | 1704,2239 | 0,0000 | 0,0000 | 4349,5022 | 2118,4470 |
| | 5064,2188 | 2516,2400 | 4089,2149 | 2102,0837 | 0,0000 | 0,0000 | 4804,9871 | 2516,3164 |
| Lantai 6 | 3945,3382 | 1927,6448 | 3047,7854 | 1306,3641 | 0,0000 | 0,0000 | 3591,7933 | 1720,5776 |
| | 4306,5099 | 2118,3706 | 3417,3882 | 1704,2239 | 0,0000 | 0,0000 | 4047,2783 | 2118,4470 |
| Lantai 7 | 3187,6293 | 1529,7754 | 2375,9587 | 908,5043 | 0,0000 | 0,0000 | 2834,0845 | 1322,7082 |
| | 3548,8011 | 1720,5012 | 2745,5615 | 1306,3641 | 0,0000 | 0,0000 | 3289,5694 | 1720,5776 |
| Lantai 8 | 2521,6233 | 1226,9939 | 1886,1964 | 605,6696 | 0,0000 | 0,0000 | 2254,4890 | 1019,9012 |
| | 2791,0922 | 1322,6318 | 2073,7348 | 908,5043 | 0,0000 | 0,0000 | 2531,8605 | 1322,7082 |
| Lantai 9 | 1855,6173 | 924,2123 | 1396,4341 | 302,8348 | 0,0000 | 0,0000 | 1674,8936 | 717,0942 |
| | 2125,0862 | 1019,8503 | 1583,9725 | 605,6696 | 0,0000 | 0,0000 | 1952,2651 | 1019,9012 |
| Lantai 10 | 1189,6113 | 621,4308 | 906,6718 | 0,0000 | 0,0000 | 0,0000 | 1095,2982 | 414,2872 |
| | 1459,0802 | 717,0687 | 1094,2102 | 302,8348 | 0,0000 | 0,0000 | 1372,6697 | 717,0942 |
| Lantai 11 | 793,0742 | 414,2872 | 604,4479 | 0,0000 | 0,0000 | 0,0000 | 698,7611 | 207,1436 |
| | 793,0742 | 414,2872 | 604,4479 | 0,0000 | 0,0000 | 0,0000 | 793,0742 | 414,2872 |
| Lantai 12 | 396,5371 | 207,1436 | 302,2239 | 0,0000 | 0,0000 | 0,0000 | 302,2239 | 0,0000 |
| | 396,5371 | 207,1436 | 302,2239 | 0,0000 | 0,0000 | 0,0000 | 396,5371 | 207,1436 |

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|----------|--------|-----------|-----------|----------|--------|-----------|-----------|
| | 0m | 0 m | ΣM1- 7m | ΣM2+ 7m | 0m | 0m | ΣM1- 5m | ΣM2+ 5m |
| D | | | | | | | | |
| Lantai 1 | 0,0000 | 0,0000 | 7733,8825 | 3916,9918 | 0,0000 | 0,0000 | 7399,4361 | 3994,2831 |
| | 0,0000 | 0,0000 | 7337,3454 | 3709,8482 | 0,0000 | 0,0000 | 7097,2122 | 3994,2831 |
| Lantai 2 | 0,0000 | 0,0000 | 6976,1736 | 3519,1224 | 0,0000 | 0,0000 | 6635,3611 | 3501,6275 |
| | 0,0000 | 0,0000 | 7337,3454 | 3709,8482 | 0,0000 | 0,0000 | 7097,2122 | 3994,2831 |
| Lantai 3 | 0,0000 | 0,0000 | 6218,4648 | 3121,2530 | 0,0000 | 0,0000 | 5871,2861 | 3008,9720 |
| | 0,0000 | 0,0000 | 6579,6365 | 3311,9788 | 0,0000 | 0,0000 | 6333,1372 | 3501,6275 |
| Lantai 4 | 0,0000 | 0,0000 | 5460,7559 | 2723,3836 | 0,0000 | 0,0000 | 5107,2111 | 2516,3164 |
| | 0,0000 | 0,0000 | 5821,9276 | 2914,1094 | 0,0000 | 0,0000 | 5569,0621 | 3008,9720 |
| Lantai 5 | 0,0000 | 0,0000 | 4703,0470 | 2325,5142 | 0,0000 | 0,0000 | 4349,5022 | 2118,4470 |
| | 0,0000 | 0,0000 | 5064,2188 | 2516,2400 | 0,0000 | 0,0000 | 4804,9871 | 2516,3164 |
| Lantai 6 | 0,0000 | 0,0000 | 3945,3382 | 1927,6448 | 0,0000 | 0,0000 | 3591,7933 | 1720,5776 |
| | 0,0000 | 0,0000 | 4306,5099 | 2118,3706 | 0,0000 | 0,0000 | 4047,2783 | 2118,4470 |
| Lantai 7 | 0,0000 | 0,0000 | 3187,6293 | 1529,7754 | 0,0000 | 0,0000 | 2834,0845 | 1322,7082 |
| | 0,0000 | 0,0000 | 3548,8011 | 1720,5012 | 0,0000 | 0,0000 | 3289,5694 | 1720,5776 |
| Lantai 8 | 0,0000 | 0,0000 | 2521,6233 | 1226,9939 | 0,0000 | 0,0000 | 2254,4890 | 1019,9012 |
| | 0,0000 | 0,0000 | 2791,0922 | 1322,6318 | 0,0000 | 0,0000 | 2531,8605 | 1322,7082 |
| Lantai 9 | 0,0000 | 0,0000 | 1855,6173 | 924,2123 | 0,0000 | 0,0000 | 1674,8936 | 717,0942 |
| | 0,0000 | 0,0000 | 2125,0862 | 1019,8503 | 0,0000 | 0,0000 | 1952,2651 | 1019,9012 |
| Lantai 10 | 0,0000 | 0,0000 | 1189,6113 | 621,4308 | 0,0000 | 0,0000 | 1095,2982 | 414,2872 |
| | 0,0000 | 0,0000 | 1459,0802 | 717,0687 | 0,0000 | 0,0000 | 1372,6697 | 717,0942 |
| Lantai 11 | 0,0000 | 0,0000 | 793,0742 | 414,2872 | 0,0000 | 0,0000 | 698,7611 | 207,1436 |
| | 0,0000 | 0,0000 | 793,0742 | 414,2872 | 0,0000 | 0,0000 | 793,0742 | 414,2872 |
| Lantai 12 | 0,0000 | 0,0000 | 396,5371 | 207,1436 | 0,0000 | 0,0000 | 302,2239 | 0,0000 |
| | 0,0000 | 0,0000 | 396,5371 | 207,1436 | 0,0000 | 0,0000 | 396,5371 | 207,1436 |

Tabel 2.3.4.2 Gaya Aksial Rencana Kolom untuk R/W 1/6 Baru

| KOLOM | h | n | Rv | Arah X | | | | | | Arah Y | | | | | | | | | | Nu,k Maksimum | |
|-----------|---|----|-------|--------|----|------------|-----------|----------|----------|------------|------------|----|----------|------------|------------|----------|----------|-----------|------------|---------------|----|
| | | | | m | Lx | Mikap bx | | NDk x | NLk x | Ng x | Nuk x | Ly | Mikap by | | NDk y | NLk y | Ng y | Nuk y | KN | KN | |
| | | | | | | Kiri | Kanan | | | | | | Kiri | Kanan | | | | | | | |
| | | | | | | m | m | | | | | | kNm | kNm | | | | | | | kN |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | |
| A | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8 | 7 | 4 | 11650,8742 | 9702,5819 | 1852,282 | 279,2997 | 2.131,5817 | 2664,45231 | 5 | 5 | 11393,7193 | 11393,7193 | 1388,262 | 332,9977 | 1721,2597 | 1807,32269 | 2670,435417 | |
| Lantai 2 | 4 | 11 | 0,825 | 7 | 4 | 11047,1935 | 9400,3580 | 1700,821 | 254,0768 | 1954,8978 | 2433,15505 | 5 | 5 | 10136,9887 | 10136,9887 | 1272,166 | 303,7806 | 1575,9466 | 1654,74393 | 2498,425904 | |
| Lantai 3 | 4 | 10 | 0,85 | 7 | 4 | 9339,7177 | 7563,2090 | 1549,543 | 229,0145 | 1778,5575 | 2198,6367 | 5 | 5 | 8880,25806 | 8880,2581 | 1156,077 | 274,565 | 1430,642 | 1502,1741 | 2285,885459 | |
| Lantai 4 | 4 | 9 | 0,875 | 7 | 4 | 8184,1395 | 6493,5225 | 1393,392 | 204,0778 | 1597,4698 | 1955,55172 | 5 | 5 | 7623,52746 | 7623,5275 | 1039,995 | 245,3509 | 1285,3459 | 1349,6132 | 2024,778379 | |
| Lantai 5 | 4 | 8 | 0,9 | 7 | 4 | 7028,5612 | 5423,8360 | 1247,365 | 179,2562 | 1426,6212 | 1719,63592 | 5 | 5 | 6467,94921 | 6467,9492 | 923,9181 | 216,1383 | 1140,0564 | 1197,05922 | 1790,840489 | |
| Lantai 6 | 4 | 7 | 0,925 | 7 | 4 | 5872,9830 | 4354,1495 | 1096,544 | 154,534 | 1251,078 | 1475,20893 | 5 | 5 | 5312,37096 | 5312,3710 | 807,8474 | 186,927 | 994,7744 | 1044,51312 | 1548,391403 | |
| Lantai 7 | 4 | 6 | 0,95 | 7 | 4 | 4717,4047 | 3284,4631 | 945,6814 | 129,8971 | 1075,5785 | 1548,3914 | 5 | 5 | 4156,79271 | 4156,7927 | 691,7817 | 157,717 | 849,4987 | 891,973635 | 1302,406337 | |
| Lantai 8 | 4 | 5 | 0,975 | 7 | 4 | 3748,6172 | 2491,9660 | 794,8227 | 105,3315 | 900,1542 | 1302,40634 | 5 | 5 | 3274,39025 | 3274,3903 | 575,7207 | 128,508 | 704,2287 | 739,440135 | 1052,918365 | |
| Lantai 9 | 4 | 4 | 1 | 7 | 4 | 2779,8296 | 1699,2689 | 644,1911 | 80,82325 | 725,01435 | 1052,91836 | 5 | 5 | 2391,98779 | 2391,9878 | 459,6635 | 99,29989 | 558,96339 | 586,91156 | 829,9587751 | |
| Lantai 10 | 4 | 3 | 1 | 7 | 4 | 1811,0421 | 906,6718 | 494,567 | 56,35916 | 550,92616 | 556,03583 | 5 | 5 | 1509,58533 | 1509,5853 | 343,6095 | 70,09258 | 413,70208 | 434,387184 | 605,3404423 | |
| Lantai 11 | 4 | 2 | 1 | 7 | 4 | 1207,3614 | 604,4479 | 343,9655 | 31,92383 | 375,88933 | 379,726038 | 5 | 5 | 905,904639 | 905,9046 | 227,5572 | 40,88562 | 268,44282 | 281,864961 | 379,7260376 | |
| Lantai 12 | 2 | 1 | 1 | 7 | 4 | 603,6807 | 302,2239 | 192,4563 | 7,514122 | 199,970422 | 202,490064 | 5 | 5 | 302,223943 | 302,2239 | 111,51 | 11,68004 | 123,19004 | 129,349542 | 202,4900636 | |
| | | | | | | 603,6807 | 302,2239 | | | | 202,490064 | | | 603,680696 | 603,6807 | | | | 129,349542 | | |

| Lanjutan | Arah X | | | | | | | | | | | | Arah Y | | | | | | | | | | | | Nu.k Maksimum | | | | | | | |
|-----------|--------|----|-------|------|-------|--------|------------|----------|----------|------------|------------|------|--------|------------|------------|----------|----------|-----------|------------|------------|-------------|----|------|----|---------------|----|----|----|----|----|----|----|
| | h | n | Rv | Lx | | | Mkap.bx | | | NDk.x | NLk.x | Ng.x | Nuk.x | Ly | | Mkap.by | | NDk.y | NLk.y | Ng.y | Nuky | | Nu.k | | | | | | | | | |
| | | | | Kiri | Kanan | m | Kiri | Kanan | m | | | | | Kiri | Kanan | KN | KN | | | | KN | KN | | KN | KN | KN | KN | KN | KN | KN | KN | KN |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | | | | | | | | | | | |
| B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8 | 0 | 7 | 0,0000 | 11650,8742 | 1852,282 | 279,2997 | 2131,5817 | 3170,23072 | 5 | 5 | 11393,7193 | 11393,7193 | 1388,262 | 332,9977 | 1721,2597 | 1807,32269 | 1807,32269 | 3170,230725 | | | | | | | | | | | |
| Lantai 2 | 4 | 11 | 0,825 | 0 | 7 | 0,0000 | 10495,2960 | 1700,821 | 254,0768 | 1954,8978 | 2918,50461 | 5 | 5 | 10136,9887 | 10136,9887 | 1272,166 | 303,7806 | 1575,9466 | 1654,74393 | 1654,74393 | 2964,036158 | | | | | | | | | | | |
| Lantai 3 | 4 | 10 | 0,85 | 0 | 7 | 0,0000 | 9891,6153 | 1549,543 | 229,0145 | 1778,5575 | 2661,36138 | 5 | 5 | 8880,25806 | 8880,2581 | 1156,077 | 274,565 | 1430,642 | 1502,1741 | 1502,1741 | 2708,272675 | | | | | | | | | | | |
| Lantai 4 | 4 | 9 | 0,875 | 0 | 7 | 0,0000 | 8184,1395 | 1393,392 | 204,0778 | 1597,4698 | 2393,4555 | 5 | 5 | 7623,52746 | 7623,5275 | 1039,995 | 245,3509 | 1285,3459 | 1349,6132 | 1349,6132 | 2441,746532 | | | | | | | | | | | |
| Lantai 5 | 4 | 8 | 0,9 | 0 | 7 | 0,0000 | 7028,5612 | 1247,365 | 179,2562 | 1426,6212 | 2130,52277 | 5 | 5 | 6467,94921 | 6467,9492 | 923,9181 | 216,1363 | 1140,0564 | 1197,05922 | 1197,05922 | 2180,193552 | | | | | | | | | | | |
| Lantai 6 | 4 | 7 | 0,925 | 0 | 7 | 0,0000 | 5872,9830 | 1096,544 | 154,534 | 1251,078 | 1856,86283 | 5 | 5 | 5312,37096 | 5312,3710 | 807,8474 | 186,927 | 994,7744 | 1044,51312 | 1044,51312 | 1907,933351 | | | | | | | | | | | |
| Lantai 7 | 4 | 6 | 0,95 | 0 | 7 | 0,0000 | 4717,4047 | 945,6814 | 129,8971 | 1075,5785 | 1577,51088 | 5 | 5 | 4156,79271 | 4156,7927 | 691,7817 | 157,717 | 849,4987 | 891,973635 | 891,973635 | 1629,941144 | | | | | | | | | | | |
| Lantai 8 | 4 | 5 | 0,975 | 0 | 7 | 0,0000 | 3748,6172 | 794,8227 | 105,3315 | 900,1542 | 1310,65209 | 5 | 5 | 3274,39025 | 3274,3903 | 575,7207 | 128,508 | 704,2287 | 739,440135 | 739,440135 | 1346,250005 | | | | | | | | | | | |
| Lantai 9 | 4 | 4 | 1 | 0 | 7 | 0,0000 | 2779,8296 | 644,1911 | 80,82325 | 725,01435 | 1039,24803 | 5 | 5 | 2391,98779 | 2391,9878 | 459,6635 | 99,29989 | 558,96339 | 586,91156 | 586,91156 | 1075,758717 | | | | | | | | | | | |
| Lantai 10 | 4 | 3 | 1 | 0 | 7 | 0,0000 | 1811,0421 | 494,567 | 56,35916 | 550,92616 | 759,576677 | 5 | 5 | 1509,58533 | 1509,5853 | 343,6095 | 70,09258 | 413,70208 | 434,387184 | 434,387184 | 796,0873625 | | | | | | | | | | | |
| Lantai 11 | 4 | 2 | 1 | 0 | 7 | 0,0000 | 1207,3614 | 343,9655 | 31,92383 | 375,88933 | 515,419936 | 5 | 5 | 905,904639 | 905,9046 | 227,5572 | 40,88562 | 268,44282 | 281,864961 | 281,864961 | 515,4199356 | | | | | | | | | | | |
| Lantai 12 | 2 | 1 | 1 | 0 | 7 | 0,0000 | 603,6807 | 192,4563 | 7,514122 | 199,970422 | 270,337013 | 5 | 5 | 302,23943 | 302,2394 | 111,51 | 11,68004 | 123,19004 | 129,346542 | 129,346542 | 270,3370127 | | | | | | | | | | | |

| Lanjutan | KOLOM | h | n | Rv | Arah X | | | | | | | | | | | | Arah Y | | | | | | Nu.k Maksimum | |
|-----------|-------|----|--------|----|--------|-------|------------|-----------|-----------|----------|-----------|-----------|------|-------|--------|------------|-----------|----------|-----------|-----------|-----------|--|---------------|--|
| | | | | | Lx | | | NDK.x | NLK.x | Ng.x | Nuk.x | Mkap.by | | | NDK.y | NLK.y | Ng.y | Nuk.y | Nu.k | Maksimum | | | | |
| | | | | | Kiri | Kanan | Kiri | | | | | Kanan | Kiri | Kanan | | | | | | | | | | |
| | | | | | m | m | m | kNm | kN | kN | kN | kN | kNm | kNm | kN | kN | kN | kN | kN | kN | | | | |
| 1 | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | | |
| C | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8000 | 7 | 4 | | 11650,8742 | 9702,5819 | 1852,2820 | 279,2997 | 2131,5817 | 2664,4523 | 0 | 5 | 0,0000 | 11393,7193 | 1388,2620 | 332,9977 | 1721,2597 | 3083,4192 | 3083,4192 | | | |
| Lantai 2 | 4 | 11 | 0,8250 | 7 | 4 | | 11047,1935 | 9400,3580 | 1700,8210 | 254,0768 | 1954,8978 | 2670,4354 | 0 | 5 | 0,0000 | 11091,4953 | 1272,1660 | 303,7806 | 1575,9466 | 2825,5661 | 2935,8116 | | | |
| Lantai 3 | 4 | 10 | 0,8500 | 7 | 4 | | 10495,2960 | 8632,8954 | 1549,5430 | 229,0145 | 1778,5575 | 2433,1550 | 0 | 5 | 0,0000 | 10136,9887 | 1156,0770 | 274,5650 | 1430,6420 | 2558,9248 | 2672,5111 | | | |
| Lantai 4 | 4 | 9 | 0,8750 | 7 | 4 | | 11047,1935 | 7563,2090 | 1393,3920 | 204,0778 | 1597,4698 | 2498,4259 | 0 | 5 | 0,0000 | 8880,2581 | 1039,8950 | 245,3509 | 1285,3459 | 2283,4953 | 2400,4224 | | | |
| Lantai 5 | 4 | 8 | 0,9000 | 7 | 4 | | 9339,7177 | 6493,5225 | 1247,3650 | 179,2562 | 1426,6212 | 2265,8855 | 0 | 5 | 0,0000 | 9834,7647 | 923,9181 | 216,1383 | 1140,0564 | 2012,0208 | 2119,5435 | | | |
| Lantai 6 | 4 | 7 | 0,9250 | 7 | 4 | | 9891,6153 | 5423,8360 | 1096,5440 | 154,5340 | 1251,0780 | 2024,7784 | 0 | 5 | 0,0000 | 8578,0341 | 807,8474 | 186,9270 | 994,7744 | 1732,4652 | 1842,9745 | | | |
| Lantai 7 | 4 | 6 | 0,9500 | 7 | 4 | | 8184,1395 | 4354,1495 | 945,6814 | 129,8971 | 1075,5785 | 1719,6359 | 0 | 5 | 0,0000 | 7321,3035 | 691,7817 | 157,7170 | 849,4987 | 1444,8271 | 1558,3232 | | | |
| Lantai 8 | 4 | 5 | 0,9750 | 7 | 4 | | 8736,0370 | 3284,4631 | 794,8227 | 105,3315 | 900,1542 | 1475,2089 | 0 | 5 | 0,0000 | 6165,7253 | 575,7207 | 128,5080 | 704,2287 | 1186,3944 | 1265,5888 | | | |
| Lantai 9 | 4 | 4 | 1,0000 | 7 | 4 | | 7028,5612 | 2491,8660 | 644,1911 | 80,8233 | 725,0144 | 1302,4063 | 0 | 5 | 0,0000 | 5010,1470 | 459,8635 | 99,2999 | 558,9634 | 921,7899 | 1003,0148 | | | |
| Lantai 10 | 4 | 3 | 1,0000 | 7 | 4 | | 5269,3023 | 1699,2689 | 494,5670 | 56,3592 | 550,3262 | 829,9588 | 0 | 5 | 0,0000 | 3854,5688 | 343,6095 | 70,0926 | 413,7021 | 645,7291 | 726,9541 | | | |
| Lantai 11 | 4 | 2 | 1,0000 | 7 | 4 | | 4717,4047 | 1397,0450 | 343,9655 | 31,9238 | 375,8893 | 1004,8464 | 0 | 5 | 0,0000 | 2972,1663 | 227,5572 | 40,8856 | 268,4428 | 408,6916 | 450,8956 | | | |
| Lantai 12 | 2 | 1 | 1,0000 | 7 | 4 | | 3748,6172 | 604,4479 | 192,4563 | 7,5141 | 199,9704 | 1052,9184 | 0 | 5 | 0,0000 | 2391,9878 | 111,5100 | 11,6800 | 123,1900 | 171,6609 | 213,8648 | | | |
| | | | | | | | 4113,7241 | 302,2239 | 302,2239 | | | 1548,3914 | 0 | 5 | 0,0000 | 2089,7638 | 603,6807 | | | | | | | |
| | | | | | | | 2779,8296 | 603,6807 | | | | 1227,2460 | 0 | 5 | 0,0000 | 1509,5853 | | | | | | | | |
| | | | | | | | 3144,9365 | 302,2239 | | | | 1227,2460 | 0 | 5 | 0,0000 | 905,9046 | | | | | | | | |
| | | | | | | | 1811,0421 | 302,2239 | | | | 1227,2460 | 0 | 5 | 0,0000 | 1207,3614 | | | | | | | | |
| | | | | | | | 2176,1489 | 302,2239 | | | | 1227,2460 | 0 | 5 | 0,0000 | 302,2239 | | | | | | | | |
| | | | | | | | 1207,3614 | 302,2239 | | | | 1227,2460 | 0 | 5 | 0,0000 | 603,6807 | | | | | | | | |
| | | | | | | | 1207,3614 | 302,2239 | | | | 1227,2460 | 0 | 5 | 0,0000 | 603,6807 | | | | | | | | |
| | | | | | | | 603,6807 | 302,2239 | | | | 1227,2460 | 0 | 5 | 0,0000 | 603,6807 | | | | | | | | |
| | | | | | | | 603,6807 | 302,2239 | | | | 1227,2460 | 0 | 5 | 0,0000 | 603,6807 | | | | | | | | |

| Lanjutan | KOLOM | h | n | Rv | Arah X | | | | | | | | | | Arah Y | | | | | | Nu.k Maksimum | |
|-----------|-------|----|--------|----|--------|--------|------------|-----------|----------|-----------|-----------|---------|-------|--------|------------|-----------|----------|-----------|-----------|-----------|---------------|----------|
| | | | | | Lx | | Rv | NLk.x | NDk.x | Ng.x | Nuk.x | Mkap.bx | | Ly | Mkap.by | | NLk.y | NDk.y | Ng.y | Nuk.y | Nu.k | Maksimum |
| | | | | | Kiri | Kanan | | | | | | Kiri | Kanan | | Kiri | Kanan | | | | | | |
| | | | | | m | m | m | kN | kN | kN | kN | m | m | kNm | kNm | kN | kN | kN | kN | kN | kN | kN |
| 1 | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | |
| D | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8000 | 0 | 7 | 0,0000 | 11650,8742 | 1852,2820 | 279,2997 | 2131,5817 | 3170,2307 | 0 | 5 | 0,0000 | 11393,7193 | 1388,2620 | 332,9877 | 1721,2597 | 3083,4192 | 3049,5702 | 3170,2307 | |
| Lantai 2 | 4 | 11 | 0,8250 | 0 | 7 | 0,0000 | 11047,1935 | 1700,8210 | 254,0768 | 1954,8978 | 3121,9363 | 0 | 5 | 0,0000 | 11091,4953 | 1272,1660 | 303,7806 | 1575,9466 | 2825,5661 | 2935,8116 | 2964,0362 | |
| Lantai 3 | 4 | 10 | 0,8500 | 0 | 7 | 0,0000 | 10495,2960 | 1549,5430 | 229,0145 | 1778,5575 | 2918,5046 | 0 | 5 | 0,0000 | 11091,4953 | 1156,0770 | 274,5650 | 1430,6420 | 2558,9248 | 2672,5111 | 2708,2727 | |
| Lantai 4 | 4 | 9 | 0,8750 | 0 | 7 | 0,0000 | 9339,7177 | 1393,3920 | 204,0778 | 1597,4698 | 2661,3614 | 0 | 5 | 0,0000 | 8880,2581 | 1039,9950 | 245,3509 | 1285,3459 | 2283,4953 | 2400,4224 | 2441,7465 | |
| Lantai 5 | 4 | 8 | 0,9000 | 0 | 7 | 0,0000 | 8184,1395 | 1247,3650 | 179,2562 | 1426,6212 | 2393,4555 | 0 | 5 | 0,0000 | 7623,5275 | 923,9181 | 216,1383 | 1140,0564 | 2012,0208 | 2119,5435 | 2180,1936 | |
| Lantai 6 | 4 | 7 | 0,9250 | 0 | 7 | 0,0000 | 7028,5612 | 1096,5440 | 154,5340 | 1251,0780 | 2180,1936 | 0 | 5 | 0,0000 | 6467,9492 | 807,8474 | 186,9270 | 994,7744 | 1732,4652 | 1842,9745 | 1907,9334 | |
| Lantai 7 | 4 | 6 | 0,9500 | 0 | 7 | 0,0000 | 5872,9830 | 945,6814 | 129,8971 | 1075,5785 | 1907,9334 | 0 | 5 | 0,0000 | 4156,7927 | 691,7817 | 157,7170 | 849,4987 | 1444,8271 | 1558,3232 | 1629,9411 | |
| Lantai 8 | 4 | 5 | 0,9750 | 0 | 7 | 0,0000 | 4717,4047 | 794,8227 | 105,3315 | 900,1542 | 1577,5109 | 0 | 5 | 0,0000 | 3274,3903 | 575,7207 | 128,5080 | 704,2287 | 1186,3944 | 1265,5888 | 1346,2500 | |
| Lantai 9 | 4 | 4 | 1,0000 | 0 | 7 | 0,0000 | 3748,6172 | 644,1911 | 80,8233 | 725,0144 | 1346,2500 | 0 | 5 | 0,0000 | 3854,5688 | 459,6635 | 99,2999 | 558,9634 | 921,7899 | 1003,0148 | 1075,7587 | |
| Lantai 10 | 4 | 3 | 1,0000 | 0 | 7 | 0,0000 | 2779,8296 | 494,5670 | 56,3592 | 550,9262 | 1039,2480 | 0 | 5 | 0,0000 | 2972,1663 | 343,6095 | 70,0926 | 413,7021 | 645,7291 | 726,9541 | 796,0874 | |
| Lantai 11 | 4 | 2 | 1,0000 | 0 | 7 | 0,0000 | 1811,0421 | 343,9655 | 31,9238 | 375,8893 | 796,0874 | 0 | 5 | 0,0000 | 1509,5853 | 227,5572 | 40,8856 | 268,4428 | 408,6916 | 450,8956 | 515,4199 | |
| Lantai 12 | 2 | 1 | 1,0000 | 0 | 7 | 0,0000 | 2176,1489 | 192,4563 | 7,5141 | 199,9704 | 515,4199 | 0 | 5 | 0,0000 | 1207,3614 | 111,5100 | 11,6800 | 123,1900 | 171,6809 | 213,8648 | 270,3370 | |
| | | | | | | | 1207,3614 | 603,6807 | 603,6807 | 270,3370 | 270,3370 | 0 | 5 | 0,0000 | 302,2239 | 603,6807 | | | | | | |

Tabel 2.3.5 Gaya Aksial Terpakai Kolom untuk RAW 1/6 Baru

| KOLOM | Arah X | | | | Arah Y | | | | | | | | Nu.k Maksimum | | Nu.k Terpakai | |
|-----------|-------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|------------|-----------|-----------|-----------|---------------|------|---------------|----|
| | ND,kx KN | NL,kx KN | NE,kx KN | Ng,x KN | Nu,kx KN | ND,ky KN | NL,ky KN | NE,ky KN | Ng,y KN | Nu,ky | | Nu,k | KN | Nu,k | KN | |
| | | | | | | | | | | 8 | 9 | | | | | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | | | | |
| A | | | | | | | | | | | | | | | | |
| Lantai 1 | 1852,2820 | 279,2997 | 954,9013 | 2131,5817 | 6248,7462 | 1388,2620 | 332,9977 | 0,0000 | 1721,2597 | 1807,3227 | 6248,7462 | 2670,4364 | | | | |
| Lantai 2 | 1700,8210 | 254,0768 | 848,1408 | 1954,8978 | 5614,8341 | 1272,1660 | 303,7806 | 0,0000 | 1575,9466 | 1654,7439 | 5614,8341 | 2498,4259 | | | | |
| Lantai 3 | 1549,5430 | 229,0145 | 706,8208 | 1778,5575 | 4836,1327 | 1156,0770 | 274,5650 | 0,0000 | 1430,6420 | 1502,1741 | 4836,1327 | 2265,8855 | | | | |
| Lantai 4 | 1393,3920 | 204,0778 | 561,4241 | 1597,4698 | 4035,3245 | 1039,9950 | 245,3509 | 0,0000 | 1285,3459 | 1349,6132 | 4035,3245 | 2024,7784 | | | | |
| Lantai 5 | 1247,3650 | 179,2562 | 424,3857 | 1426,6212 | 3280,3722 | 923,9181 | 216,1383 | 0,0000 | 1140,0564 | 1197,0592 | 3280,3722 | 1790,8405 | | | | |
| Lantai 6 | 1096,5440 | 154,5340 | 301,3896 | 1251,0780 | 2579,4682 | 807,8474 | 186,9270 | 0,0000 | 994,7744 | 1044,5131 | 2579,4682 | 1548,3914 | | | | |
| Lantai 7 | 945,6814 | 129,8971 | 195,4844 | 1075,5785 | 1950,3919 | 691,7817 | 157,7170 | 0,0000 | 849,4987 | 891,9736 | 1950,3919 | 1302,4063 | | | | |
| Lantai 8 | 794,8227 | 105,3315 | 108,7878 | 900,1542 | 1402,0707 | 575,7207 | 128,5080 | 0,0000 | 704,2287 | 739,4401 | 1402,0707 | 1052,9184 | | | | |
| Lantai 9 | 644,1911 | 80,8233 | 43,0850 | 725,0144 | 942,2219 | 459,6635 | 99,2999 | 0,0000 | 558,9634 | 586,9116 | 942,2219 | 829,9588 | | | | |
| Lantai 10 | 494,5670 | 56,3592 | 0,1094 | 550,9262 | 578,9320 | 343,6095 | 70,0926 | 0,0000 | 413,7021 | 434,3872 | 578,9320 | 578,9320 | | | | |
| Lantai 11 | 343,9655 | 31,9238 | 19,9632 | 375,8893 | 478,5293 | 227,5572 | 40,8856 | 0,0000 | 268,4428 | 281,8650 | 478,5293 | 379,7260 | | | | |
| Lantai 12 | 192,4563 | 7,5141 | 17,7809 | 199,9704 | 284,6488 | 111,5100 | 11,6800 | 0,0000 | 123,1900 | 129,3495 | 284,6488 | 202,4901 | | | | |
| B | | | | | | | | | | | | | | | | |
| Lantai 1 | 1852,2820 | 279,2997 | 954,9013 | 2131,5817 | 6248,7462 | 1388,2620 | 332,9977 | 0,0000 | 1721,2597 | 1807,3227 | 6248,7462 | 3170,2307 | | | | |
| Lantai 2 | 1700,8210 | 254,0768 | 848,1408 | 1954,8978 | 5614,8341 | 1272,1660 | 303,7806 | 0,0000 | 1575,9466 | 1654,7439 | 5614,8341 | 2964,0362 | | | | |
| Lantai 3 | 1549,5430 | 229,0145 | 706,8208 | 1778,5575 | 4836,1327 | 1156,0770 | 274,5650 | 0,0000 | 1430,6420 | 1502,1741 | 4836,1327 | 2708,2727 | | | | |
| Lantai 4 | 1393,3920 | 204,0778 | 561,4241 | 1597,4698 | 4035,3245 | 1039,9950 | 245,3509 | 0,0000 | 1285,3459 | 1349,6132 | 4035,3245 | 2441,7465 | | | | |
| Lantai 5 | 1247,3650 | 179,2562 | 424,3857 | 1426,6212 | 3280,3722 | 923,9181 | 216,1383 | 0,0000 | 1140,0564 | 1197,0592 | 3280,3722 | 2180,1936 | | | | |
| Lantai 6 | 1096,5440 | 154,5340 | 301,3896 | 1251,0780 | 2579,4682 | 807,8474 | 186,9270 | 0,0000 | 994,7744 | 1044,5131 | 2579,4682 | 1907,9334 | | | | |
| Lantai 7 | 945,6814 | 129,8971 | 195,4844 | 1075,5785 | 1950,3919 | 691,7817 | 157,7170 | 0,0000 | 849,4987 | 891,9736 | 1950,3919 | 1629,9411 | | | | |
| Lantai 8 | 794,8227 | 105,3315 | 108,7878 | 900,1542 | 1402,0707 | 575,7207 | 128,5080 | 0,0000 | 704,2287 | 739,4401 | 1402,0707 | 1346,2500 | | | | |
| Lantai 9 | 644,1911 | 80,8233 | 43,0850 | 725,0144 | 942,2219 | 459,6635 | 99,2999 | 0,0000 | 558,9634 | 586,9116 | 942,2219 | 942,2219 | | | | |
| Lantai 10 | 494,5670 | 56,3592 | 0,1094 | 550,9262 | 578,9320 | 343,6095 | 70,0926 | 0,0000 | 413,7021 | 434,3872 | 578,9320 | 578,9320 | | | | |
| Lantai 11 | 343,9655 | 31,9238 | 19,9632 | 375,8893 | 478,5293 | 227,5572 | 40,8856 | 0,0000 | 268,4428 | 281,8650 | 478,5293 | 478,5293 | | | | |
| Lantai 12 | 192,4563 | 7,5141 | 17,7809 | 199,9704 | 284,6488 | 111,5100 | 11,6800 | 0,0000 | 123,1900 | 129,3495 | 284,6488 | 270,3370 | | | | |

Lanjutan

| KOLOM | Arah X | | | | | | | | | | | | Arah Y | | | | | | | | | | | | Nu,k Maksimum | | Nu,k Terpakai | |
|-----------|-----------|----------|----------|-----------|-----------|-----------|----------|--------|-----------|-----------|-----------|-----------|--------|---|-------|---|------|----|-------|----|----------|----|----------|----|---------------|--|---------------|--|
| | ND,kx | | NL,kx | | NE,kx | | Ng,x | | Nu,kx | | ND,ky | | NL,ky | | NE,ky | | Ng,y | | Nu,ky | | Maksimum | | Terpakai | | | | | |
| | KN | 2 | KN | 3 | KN | 4 | KN | 5 | KN | 6 | KN | 7 | KN | 8 | KN | 9 | KN | 10 | KN | 11 | KN | 12 | KN | 13 | | | | |
| C | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 1852,2820 | 279,2997 | 954,9013 | 2131,5817 | 6248,7462 | 1388,2620 | 332,9977 | 0,0000 | 1721,2597 | 1807,3227 | 6248,7462 | 3083,4192 | | | | | | | | | | | | | | | | |
| Lantai 2 | 1700,8210 | 254,0768 | 848,1408 | 1954,8978 | 5614,8341 | 1272,1660 | 303,7806 | 0,0000 | 1575,9466 | 1654,7439 | 5614,8341 | 2935,8116 | | | | | | | | | | | | | | | | |
| Lantai 3 | 1549,5430 | 229,0145 | 706,8208 | 1778,5575 | 4836,1327 | 1156,0770 | 274,5650 | 0,0000 | 1430,6420 | 1502,1741 | 4836,1327 | 2672,5111 | | | | | | | | | | | | | | | | |
| Lantai 4 | 1393,3920 | 204,0778 | 561,4241 | 1597,4698 | 4035,3245 | 1039,9950 | 245,3509 | 0,0000 | 1285,3459 | 1349,6132 | 4035,3245 | 2400,4224 | | | | | | | | | | | | | | | | |
| Lantai 5 | 1247,3650 | 179,2562 | 424,3857 | 1426,6212 | 3280,3722 | 923,9181 | 216,1383 | 0,0000 | 1140,0564 | 1197,0592 | 3280,3722 | 2119,5435 | | | | | | | | | | | | | | | | |
| Lantai 6 | 1096,5440 | 154,5340 | 301,3896 | 1251,0780 | 2579,4682 | 807,8474 | 186,9270 | 0,0000 | 994,7744 | 1044,5131 | 2579,4682 | 1842,9745 | | | | | | | | | | | | | | | | |
| Lantai 7 | 945,6814 | 129,8971 | 195,4844 | 1075,5785 | 1950,3919 | 691,7817 | 157,7170 | 0,0000 | 849,4987 | 891,9736 | 1950,3919 | 1558,3232 | | | | | | | | | | | | | | | | |
| Lantai 8 | 794,8227 | 105,3315 | 108,7878 | 900,1542 | 1402,0707 | 575,7207 | 128,5080 | 0,0000 | 704,2287 | 739,4401 | 1402,0707 | 1265,5888 | | | | | | | | | | | | | | | | |
| Lantai 9 | 644,1911 | 80,8233 | 43,0850 | 725,0144 | 942,2219 | 459,6635 | 99,2999 | 0,0000 | 558,9634 | 586,9116 | 942,2219 | 942,2219 | | | | | | | | | | | | | | | | |
| Lantai 10 | 494,5670 | 56,3592 | 0,1094 | 550,9262 | 578,9320 | 343,6095 | 70,0926 | 0,0000 | 413,7021 | 434,3872 | 578,9320 | 578,9320 | | | | | | | | | | | | | | | | |
| Lantai 11 | 343,9655 | 31,9238 | 19,9632 | 375,8893 | 478,5293 | 227,5572 | 40,8856 | 0,0000 | 268,4428 | 281,8650 | 478,5293 | 450,8956 | | | | | | | | | | | | | | | | |
| Lantai 12 | 192,4563 | 7,5141 | 17,7809 | 199,9704 | 284,6488 | 111,5100 | 11,6800 | 0,0000 | 123,1900 | 129,3495 | 284,6488 | 213,8648 | | | | | | | | | | | | | | | | |
| D | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 1852,2820 | 279,2997 | 954,9013 | 2131,5817 | 6248,7462 | 1388,2620 | 332,9977 | 0,0000 | 1721,2597 | 1807,3227 | 6248,7462 | 3170,2307 | | | | | | | | | | | | | | | | |
| Lantai 2 | 1700,8210 | 254,0768 | 848,1408 | 1954,8978 | 5614,8341 | 1272,1660 | 303,7806 | 0,0000 | 1575,9466 | 1654,7439 | 5614,8341 | 2964,0362 | | | | | | | | | | | | | | | | |
| Lantai 3 | 1549,5430 | 229,0145 | 706,8208 | 1778,5575 | 4836,1327 | 1156,0770 | 274,5650 | 0,0000 | 1430,6420 | 1502,1741 | 4836,1327 | 2708,2727 | | | | | | | | | | | | | | | | |
| Lantai 4 | 1393,3920 | 204,0778 | 561,4241 | 1597,4698 | 4035,3245 | 1039,9950 | 245,3509 | 0,0000 | 1285,3459 | 1349,6132 | 4035,3245 | 2441,7465 | | | | | | | | | | | | | | | | |
| Lantai 5 | 1247,3650 | 179,2562 | 424,3857 | 1426,6212 | 3280,3722 | 923,9181 | 216,1383 | 0,0000 | 1140,0564 | 1197,0592 | 3280,3722 | 2180,1936 | | | | | | | | | | | | | | | | |
| Lantai 6 | 1096,5440 | 154,5340 | 301,3896 | 1251,0780 | 2579,4682 | 807,8474 | 186,9270 | 0,0000 | 994,7744 | 1044,5131 | 2579,4682 | 1907,9334 | | | | | | | | | | | | | | | | |
| Lantai 7 | 945,6814 | 129,8971 | 195,4844 | 1075,5785 | 1950,3919 | 691,7817 | 157,7170 | 0,0000 | 849,4987 | 891,9736 | 1950,3919 | 1629,9411 | | | | | | | | | | | | | | | | |
| Lantai 8 | 794,8227 | 105,3315 | 108,7878 | 900,1542 | 1402,0707 | 575,7207 | 128,5080 | 0,0000 | 704,2287 | 739,4401 | 1402,0707 | 1346,2500 | | | | | | | | | | | | | | | | |
| Lantai 9 | 644,1911 | 80,8233 | 43,0850 | 725,0144 | 942,2219 | 459,6635 | 99,2999 | 0,0000 | 558,9634 | 586,9116 | 942,2219 | 942,2219 | | | | | | | | | | | | | | | | |
| Lantai 10 | 494,5670 | 56,3592 | 0,1094 | 550,9262 | 578,9320 | 343,6095 | 70,0926 | 0,0000 | 413,7021 | 434,3872 | 578,9320 | 578,9320 | | | | | | | | | | | | | | | | |
| Lantai 11 | 343,9655 | 31,9238 | 19,9632 | 375,8893 | 478,5293 | 227,5572 | 40,8856 | 0,0000 | 268,4428 | 281,8650 | 478,5293 | 478,5293 | | | | | | | | | | | | | | | | |
| Lantai 12 | 192,4563 | 7,5141 | 17,7809 | 199,9704 | 284,6488 | 111,5100 | 11,6800 | 0,0000 | 123,1900 | 129,3495 | 284,6488 | 270,3370 | | | | | | | | | | | | | | | | |

Tabel 2.3.6.1 Mn-Pn Arah X untuk R/W 1/6 Baru

| UNTUK KOLOM | 800 | X | 900 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 |
| xb (mm) | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 928,8 | 825,6 | 722,4 | 619,2 | 516 | 464,4 | 412,8 | 361,2 | 309,6 | 0 |
| ab (mm) | 0 | 789,48 | 701,76 | 614,04 | 526,32 | 438,6 | 394,74 | 350,88 | 307,02 | 263,16 | 84,7059 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 574,16 | 570,93 | 566,777 | 561,24 | 553,488 | 548,32 | 541,86 | 533,555 | 522,481 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| As (mm2) | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 |
| As' (mm2) | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 |
| Ts (kn) | 0 | -160 | 90 | 411,429 | 840 | 1440 | 1440 | 1440 | 1440 | 1440 | 0 |
| Cs (kn) | 0 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 0 |
| Cc (kn) | 0 | 13421,2 | 11929,9 | 10438,7 | 8947,4 | 7456,2 | 6710,6 | 5964,96 | 5219,34 | 4473,72 | 0 |
| Mn (kn m) | 0 | 1235,09 | 1778,43 | 2220,24 | 2575,2 | 2869,58 | 2844,7 | 2787,17 | 2696,92 | 2573,96 | 1177,41 |
| Pn (kn) | 18027 | 14944,7 | 13203,4 | 11390,8 | 9470,9 | 7379,7 | 6634,1 | 5888,46 | 5142,84 | 4397,22 | 0 |

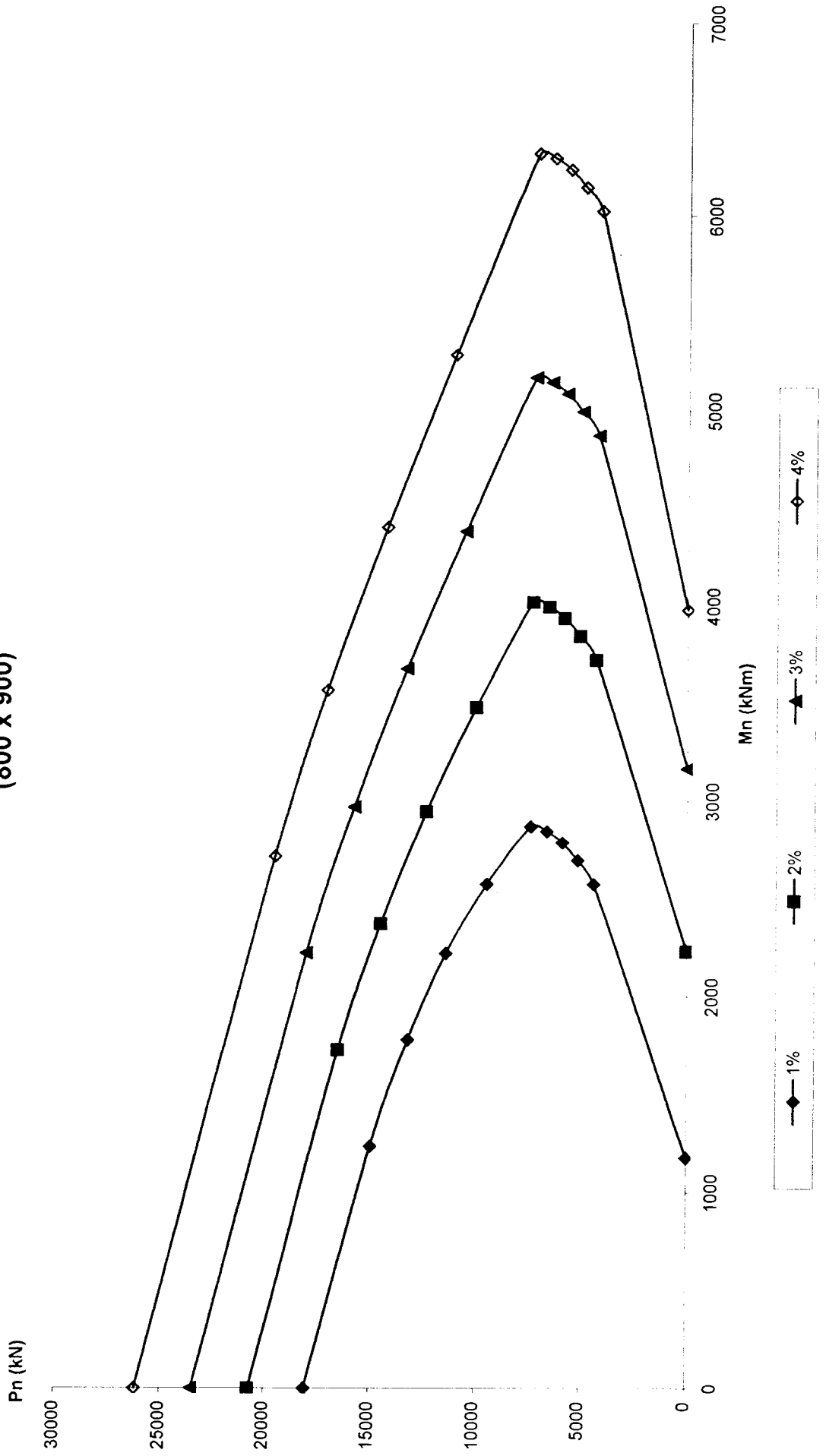
| UNTUK KOLOM | 800 | X | 900 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 |
| xb (mm) | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 928,8 | 825,6 | 722,4 | 619,2 | 516 | 464,4 | 412,8 | 361,2 | 309,6 | 0 |
| ab (mm) | 0 | 789,48 | 701,76 | 614,04 | 526,32 | 438,6 | 394,74 | 350,88 | 307,02 | 263,16 | 169,412 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 574,16 | 570,93 | 566,777 | 561,24 | 553,488 | 548,32 | 541,86 | 533,555 | 522,481 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| As (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| As' (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| Ts (kn) | 0 | -320 | 180 | 822,857 | 1680 | 2880 | 2880 | 2880 | 2880 | 2880 | 0 |
| Cs (kn) | 0 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 0 |
| Cc (kn) | 0 | 13421,2 | 11929,9 | 10438,7 | 8947,4 | 7456,2 | 6710,6 | 5964,96 | 5219,34 | 4473,72 | 0 |
| Mn (kn m) | 0 | 1728,52 | 2374,36 | 2947,96 | 3478,6 | 4019,02 | 3994,2 | 3936,61 | 3846,35 | 3723,39 | 2232,85 |
| Pn (kn) | 20754 | 16468,2 | 14476,9 | 12342,8 | 9994,4 | 7303,2 | 6557,6 | 5811,96 | 5066,34 | 4320,72 | 0 |

Lanjutan

| UNTUK KOLOM | 800 | X | 900 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 |
| xb (mm) | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 928,8 | 825,6 | 722,4 | 619,2 | 516 | 464,4 | 412,8 | 361,2 | 309,6 | 0 |
| ab (mm) | 0 | 789,48 | 701,76 | 614,04 | 526,32 | 438,6 | 394,74 | 350,88 | 307,02 | 263,16 | 254,118 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 574,16 | 570,93 | 566,777 | 561,24 | 553,488 | 548,32 | 541,86 | 533,555 | 522,481 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 |
| As (mm2) | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 |
| As' (mm2) | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 |
| Ts (kn) | 0 | -480 | 270 | 1234,29 | 2520 | 4320 | 4320 | 4320 | 4320 | 4320 | 0 |
| Cs (kn) | 0 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 0 |
| Cc (kn) | 0 | 13421,2 | 11929,9 | 10438,7 | 8947,4 | 7456,2 | 6710,6 | 5964,96 | 5219,34 | 4473,72 | 0 |
| Mn (kn m) | 0 | 2221,96 | 2970,3 | 3675,68 | 4382 | 5168,45 | 5143,6 | 5086,04 | 4995,79 | 4872,83 | 3166,31 |
| Pn (kn) | 23481 | 17991,7 | 15750,4 | 13294,9 | 10518 | 7226,7 | 6481,1 | 5735,46 | 4989,84 | 4244,22 | 0 |

| UNTUK KOLOM | 800 | X | 900 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 | 860 |
| xb (mm) | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 | 516 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 928,8 | 825,6 | 722,4 | 619,2 | 516 | 464,4 | 412,8 | 361,2 | 309,6 | 0 |
| ab (mm) | 0 | 789,48 | 701,76 | 614,04 | 526,32 | 438,6 | 394,74 | 350,88 | 307,02 | 263,16 | 338,824 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 574,16 | 570,93 | 566,777 | 561,24 | 553,488 | 548,32 | 541,86 | 533,555 | 522,481 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 |
| As (mm2) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| As' (mm2) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| Ts (kn) | 0 | -640 | 360 | 1645,71 | 3360 | 5760 | 5760 | 5760 | 5760 | 5760 | 0 |
| Cs (kn) | 0 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 0 |
| Cc (kn) | 0 | 13421,2 | 11929,9 | 10438,7 | 8947,4 | 7456,2 | 6710,6 | 5964,96 | 5219,34 | 4473,72 | 0 |
| Mn (kn m) | 0 | 2715,39 | 3566,23 | 4403,41 | 5285,5 | 6317,89 | 6293 | 6235,48 | 6145,22 | 6022,26 | 3977,79 |
| Pn (kn) | 26208 | 19515,2 | 17023,9 | 14247 | 11041 | 7150,2 | 6404,6 | 5658,96 | 4913,34 | 4167,72 | 0 |

Grafik Mn-Pn Arah X
(800 x 900)



Tabel 2.3.6.2 Mn-Pn Arah Y untuk RW 1/6 Baru

| UNTUK KOLOM | 900 | X | 800 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 75,2941 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| As (mm2) | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 |
| As' (mm2) | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 | 3600 |
| Ts (kn) | 0 | -160 | 90 | 411,429 | 840 | 1440 | 1440 | 1440 | 1440 | 1440 | 0 |
| Cs (kn) | 0 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 1363,5 | 0 |
| Cc (kn) | 0 | 13343,1 | 11860,6 | 10378 | 8895,4 | 7412,85 | 6671,6 | 5930,28 | 5189 | 4447,71 | 0 |
| Mn (kn m) | 0 | 1115,89 | 1589,76 | 1974,41 | 2282,7 | 2537,79 | 2514,2 | 2461,94 | 2380,92 | 2271,16 | 1040,19 |
| Pn (kn) | 18027 | 14866,6 | 13134,1 | 11330,1 | 9418,9 | 7336,35 | 6595,1 | 5853,78 | 5112,5 | 4371,21 | 0 |

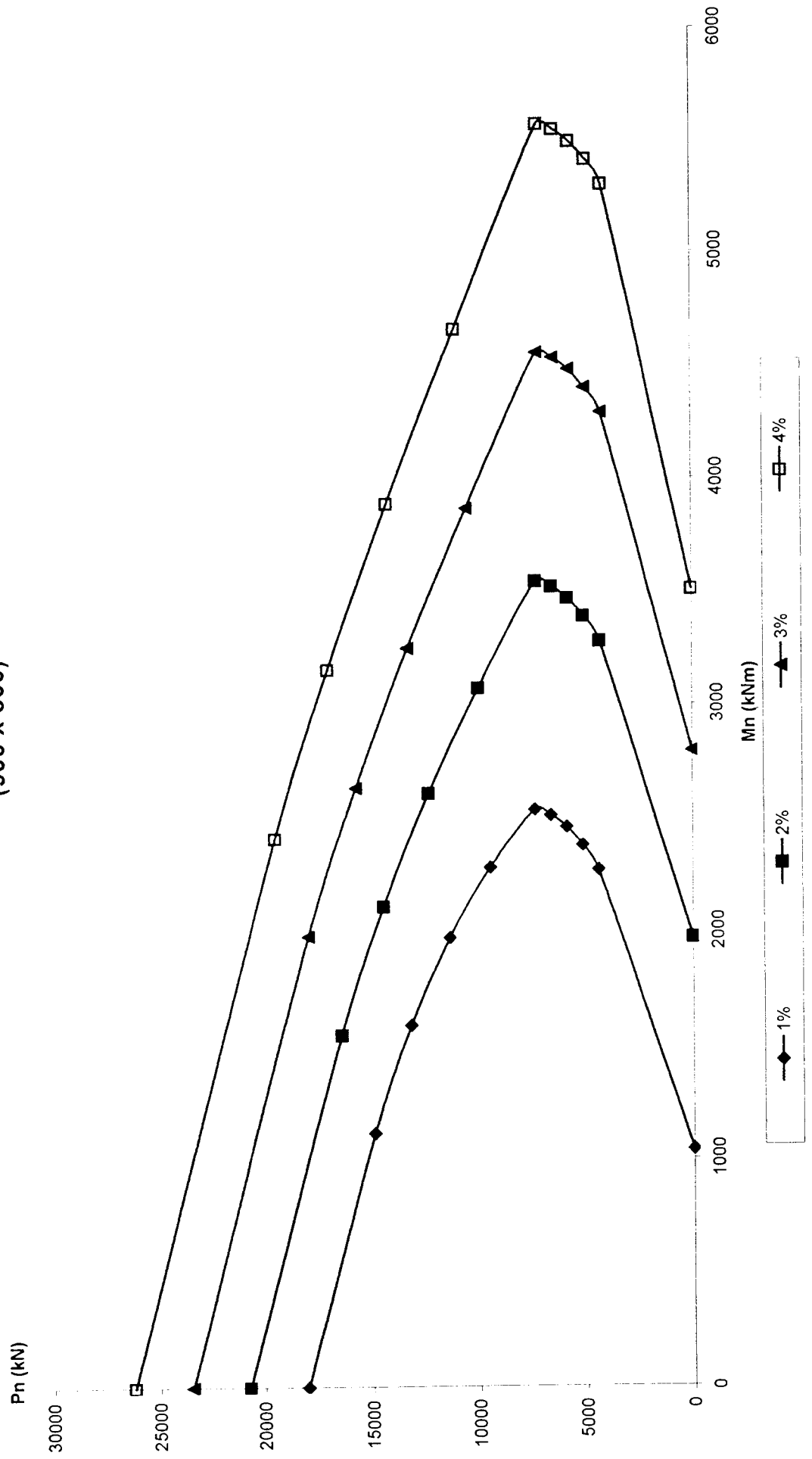
| UNTUK KOLOM | 900 | X | 800 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 150,588 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| As (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| As' (mm2) | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 | 7200 |
| Ts (kn) | 0 | -320 | 180 | 822,857 | 1680 | 2880 | 2880 | 2880 | 2880 | 2880 | 0 |
| Cs (kn) | 0 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 2727 | 0 |
| Cc (kn) | 0 | 13343,1 | 11860,6 | 10378 | 8895,4 | 7412,85 | 6671,6 | 5930,28 | 5189 | 4447,71 | 0 |
| Mn (kn m) | 0 | 1549,15 | 2113,02 | 2613,39 | 3076 | 3547,05 | 3523,5 | 3471,2 | 3390,18 | 3280,42 | 1971,95 |
| Pn (kn) | 20754 | 16390,1 | 14407,6 | 12282,1 | 9942,4 | 7259,85 | 6518,6 | 5777,28 | 5036 | 4294,71 | 0 |

Lanjutan

| UNTUK KOLOM | 900 | X | 800 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 225,882 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 | 21600 |
| As (mm ²) | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 |
| As' (mm ²) | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 | 10800 |
| Ts (kn) | 0 | -480 | 270 | 1234,29 | 2520 | 4320 | 4320 | 4320 | 4320 | 4320 | 0 |
| Cs (kn) | 0 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 4090,5 | 0 |
| Cc (kn) | 0 | 13343,1 | 11860,6 | 10378 | 8895,4 | 7412,85 | 6671,6 | 5930,28 | 5189 | 4447,71 | 0 |
| Mn (kn m) | 0 | 1982,41 | 2636,28 | 3252,36 | 3869,2 | 4556,31 | 4532,8 | 4480,46 | 4399,44 | 4289,68 | 2795,29 |
| Pn (kn) | 23481 | 17913,6 | 15681,1 | 13234,2 | 10466 | 7183,35 | 6442,1 | 5700,78 | 4959,5 | 4218,21 | 0 |

| UNTUK KOLOM | 900 | X | 800 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 301,176 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 | 28800 |
| As (mm ²) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| As' (mm ²) | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 | 14400 |
| Ts (kn) | 0 | -640 | 360 | 1645,71 | 3360 | 5760 | 5760 | 5760 | 5760 | 5760 | 0 |
| Cs (kn) | 0 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 5454 | 0 |
| Cc (kn) | 0 | 13343,1 | 11860,6 | 10378 | 8895,4 | 7412,85 | 6671,6 | 5930,28 | 5189 | 4447,71 | 0 |
| Mn (kn m) | 0 | 2415,67 | 3159,54 | 3891,34 | 4662,5 | 5565,57 | 5542 | 5489,72 | 5408,7 | 5298,94 | 3510,21 |
| Pn (kn) | 26208 | 19437,1 | 16954,6 | 14186,3 | 10989 | 7106,85 | 6365,6 | 5624,28 | 4883 | 4141,71 | 0 |

Grafik Mn-Pn Arah Y
(900 x 800)



Tabel 2.3.7 Penulangan Longitudinal Kolom untuk R/W 1/6 Baru

| KOLOM | Arah X | | | | | | | | | | Arah Y | | | | | | | | | |
|-----------|--------|-----|-----------|-----------|------|-----------|-----|----------|------|-----------|--------|-----|-----------|-----------|------|-----------|-----|----------|------|-----------|
| | b | | h | Mn | Pn | ppakai | Ast | Jml | Tul. | Terpasang | b | | h | Mn | Pn | ppakai | Ast | Jml | Tul. | Terpasang |
| | mm | mm | mm | kNm | kN | | | | | | mm2 | mm | mm | kNm | kN | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | | |
| A | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 900 | 123,8067 | 4108,3622 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | | | 900 | 800 | 333,9447 | 4108,3622 | 1,0% | 6633,0000 | 18 | Ø22 - 28 | | |
| Lantai 2 | 800 | 900 | 1427,9321 | 3843,7322 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | | | 900 | 800 | 1420,2417 | 3843,7322 | 1,5% | 9949,5000 | 28 | Ø22 - 28 | | |
| Lantai 3 | 800 | 900 | 1013,8306 | 3485,9776 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | | | 900 | 800 | 967,5072 | 3485,9776 | 1,0% | 6633,0000 | 18 | Ø22 - 28 | | |
| Lantai 4 | 800 | 900 | 820,8026 | 3115,0437 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | | | 900 | 800 | 863,2304 | 3115,0437 | 1,0% | 6633,0000 | 18 | Ø22 - 22 | | |
| Lantai 5 | 800 | 900 | 880,2658 | 2755,1392 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | | | 900 | 800 | 893,1526 | 2755,1392 | 1,0% | 6633,0000 | 18 | Ø22 - 22 | | |
| Lantai 6 | 800 | 900 | 935,3310 | 2382,1406 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | | | 900 | 800 | 924,5154 | 2382,1406 | 1,0% | 6633,0000 | 18 | Ø22 - 22 | | |
| Lantai 7 | 800 | 900 | 739,3383 | 2003,7021 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | | | 900 | 800 | 735,8531 | 2003,7021 | 1,0% | 6633,0000 | 18 | Ø22 - 22 | | |
| Lantai 8 | 800 | 900 | 801,9776 | 1619,8744 | 1,0% | 6696,0000 | 18 | Ø22 - 20 | | | 900 | 800 | 777,1554 | 1619,8744 | 1,0% | 6633,0000 | 18 | Ø22 - 22 | | |
| Lantai 9 | 800 | 900 | 893,1300 | 1276,8597 | 1,1% | 7365,6000 | 20 | Ø22 - 20 | | | 900 | 800 | 838,5313 | 1276,8597 | 1,3% | 8291,2500 | 22 | Ø22 - 22 | | |
| Lantai 10 | 800 | 900 | 662,9450 | 890,6647 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 643,9125 | 890,6647 | 1,0% | 6633,0000 | 18 | Ø22 - 20 | | |
| Lantai 11 | 800 | 900 | 690,6817 | 584,1939 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 732,0178 | 584,1939 | 1,1% | 7296,3000 | 20 | Ø22 - 20 | | |
| Lantai 12 | 800 | 900 | 566,1120 | 311,5232 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 324,5033 | 311,5232 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | | |
| B | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 900 | 81,3409 | 4877,2780 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 333,9447 | 4877,2780 | 1,0% | 6633,0000 | 18 | Ø22 - 28 | | |
| Lantai 2 | 800 | 900 | 938,1502 | 4560,0556 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 1420,2417 | 4560,0556 | 1,5% | 9949,5000 | 28 | Ø22 - 28 | | |
| Lantai 3 | 800 | 900 | 666,0859 | 4166,5733 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 967,5072 | 4166,5733 | 1,0% | 6633,0000 | 18 | Ø22 - 28 | | |
| Lantai 4 | 800 | 900 | 539,2666 | 3756,5331 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 863,2304 | 3756,5331 | 1,0% | 6633,0000 | 18 | Ø22 - 22 | | |
| Lantai 5 | 800 | 900 | 578,3339 | 3354,1439 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 893,1526 | 3354,1439 | 1,0% | 6633,0000 | 18 | Ø22 - 22 | | |
| Lantai 6 | 800 | 900 | 614,5117 | 2935,2821 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 924,5154 | 2935,2821 | 1,0% | 6633,0000 | 18 | Ø22 - 22 | | |
| Lantai 7 | 800 | 900 | 576,9351 | 2507,6018 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 735,8531 | 2507,6018 | 1,0% | 6633,0000 | 18 | Ø22 - 22 | | |
| Lantai 8 | 800 | 900 | 625,8151 | 2071,1539 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 777,1554 | 2071,1539 | 1,0% | 6633,0000 | 18 | Ø22 - 22 | | |
| Lantai 9 | 800 | 900 | 696,9449 | 1449,5722 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 838,5313 | 1449,5722 | 1,3% | 8291,2500 | 22 | Ø22 - 22 | | |
| Lantai 10 | 800 | 900 | 480,6143 | 890,6647 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 643,9125 | 890,6647 | 1,0% | 6633,0000 | 18 | Ø22 - 20 | | |
| Lantai 11 | 800 | 900 | 500,7225 | 736,1990 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 732,0178 | 736,1990 | 1,1% | 7296,3000 | 20 | Ø22 - 20 | | |
| Lantai 12 | 800 | 900 | 410,4134 | 415,9031 | 1,0% | 6696,0000 | 18 | Ø22 - 18 | | | 900 | 800 | 324,5033 | 415,9031 | 1,0% | 6633,0000 | 18 | Ø22 - 18 | | |

Lanjutan

| KOLOM | Arah X | | | | | | | | | | Arah Y | | | | | | |
|-----------|--------|-----|-----------|-----------|--------|-----------|----------|----------------|-----|-----|----------|-----------|--------|-----------|----------|----------------|-----|
| | b | h | Mn | Pn | ppakai | Ast | Jml Tul. | Tul. Terpasang | b | h | Mn | Ph | ppakai | Ast | Jml Tul. | Tul. Terpasang | |
| | mm | mm | kNm | kN | | | | | | | | | | | | | mm2 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | |
| C | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 900 | 123,8067 | 4743,7219 | 1,0% | 6696,0000 | 18 | ø22 - 22 | 900 | 800 | 203,0338 | 4743,7219 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 2 | 800 | 900 | 1427,9321 | 4516,6333 | 1,2% | 8035,2000 | 22 | ø22 - 22 | 900 | 800 | 863,4876 | 4516,6333 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 3 | 800 | 900 | 1013,8306 | 4111,5555 | 1,0% | 6696,0000 | 18 | ø22 - 22 | 900 | 800 | 588,2312 | 4111,5555 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 4 | 800 | 900 | 820,8026 | 3692,9575 | 1,0% | 6696,0000 | 18 | ø22 - 20 | 900 | 800 | 566,0174 | 3692,9575 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 5 | 800 | 900 | 880,2658 | 3260,8361 | 1,0% | 6696,0000 | 18 | ø22 - 20 | 900 | 800 | 585,6372 | 3260,8361 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 6 | 800 | 900 | 935,3310 | 2835,3454 | 1,0% | 6696,0000 | 18 | ø22 - 20 | 900 | 800 | 606,2017 | 2835,3454 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 7 | 800 | 900 | 739,3383 | 2397,4203 | 1,0% | 6696,0000 | 18 | ø22 - 20 | 900 | 800 | 483,3362 | 2397,4203 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 8 | 800 | 900 | 801,9776 | 1947,0596 | 1,0% | 6696,0000 | 18 | ø22 - 20 | 900 | 800 | 510,4652 | 1947,0596 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 9 | 800 | 900 | 893,1300 | 1449,5722 | 1,1% | 7030,8000 | 20 | ø22 - 20 | 900 | 800 | 550,7792 | 1449,5722 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 10 | 800 | 900 | 662,9450 | 890,6647 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 422,9640 | 890,6647 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 11 | 800 | 900 | 690,6817 | 693,6855 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 480,8373 | 693,6855 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 12 | 800 | 900 | 566,1120 | 329,0228 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 324,5033 | 329,0228 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| D | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 900 | 81,3409 | 4877,2780 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 203,0338 | 4877,2780 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 2 | 800 | 900 | 938,1502 | 4560,0556 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 863,4876 | 4560,0556 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 3 | 800 | 900 | 666,0859 | 4166,5733 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 588,2312 | 4166,5733 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 4 | 800 | 900 | 539,2666 | 3756,5331 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 566,0174 | 3756,5331 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 5 | 800 | 900 | 578,3339 | 3354,1439 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 585,6372 | 3354,1439 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 6 | 800 | 900 | 614,5117 | 2935,2821 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 606,2017 | 2935,2821 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 7 | 800 | 900 | 576,9351 | 2507,6018 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 483,3362 | 2507,6018 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 8 | 800 | 900 | 625,8151 | 2071,1539 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 510,4652 | 2071,1539 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 9 | 800 | 900 | 696,9449 | 1449,5722 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 550,7792 | 1449,5722 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 10 | 800 | 900 | 480,6143 | 890,6647 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 422,9640 | 890,6647 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 11 | 800 | 900 | 500,7225 | 736,1990 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 480,8373 | 736,1990 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |
| Lantai 12 | 800 | 900 | 410,4134 | 415,9031 | 1,0% | 6696,0000 | 18 | ø22 - 18 | 900 | 800 | 324,5033 | 415,9031 | 1,0% | 6633,0000 | 18 | ø22 - 18 | |

| Lanjutan | KOLOM | hn | Sumbu X | | | | | | Sumbu Y | | | | | | Vu,k Terpakai kN | | |
|-----------|-------|----------------------|----------|---------------|--------|----------|------------|----------------------|------------|--------|---------------|----------|------------|----------|------------------------|----|-------|
| | | | Mu,kx | Atas Bawah | Vu,kx | VD | VL | VE | Vu,kx | Mu,ky | Atas Bawah | Vu,ky | VD | VL | | VE | Vu,ky |
| | | | | | | | | | | | | | | | | | |
| | | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | | 15 | |
| B | | | | | | | | | | | | | | | | | |
| Lantai 1 | 3,35 | 52,8716 52,8716 | 31,5651 | 11,5743 | 1,4988 | 204,6768 | 873,369291 | 217,0641 217,0641 | 129,590493 | 0,0000 | 0,0000 | 224,0994 | 941,21748 | 129,5905 | | | |
| Lantai 2 | 3,35 | 229,7134 609,7976 | 250,6003 | 20,5270 | 2,5950 | 232,0110 | 998,724321 | 511,3415 923,1571 | 428,208544 | 0,0000 | 0,0000 | 233,5013 | 980,70546 | 428,2085 | | | |
| Lantai 3 | 3,35 | 312,1459 432,9558 | 222,4184 | 18,3463 | 2,2118 | 233,7587 | 1003,37252 | 580,7300 628,8797 | 361,077537 | 0,0000 | 0,0000 | 230,2559 | 967,07478 | 361,0775 | | | |
| Lantai 4 | 3,35 | 350,4846 350,5233 | 209,2561 | 18,5829 | 2,1665 | 226,5830 | 973,435439 | 561,0998 559,4912 | 334,504759 | 0,0000 | 0,0000 | 222,4238 | 934,17996 | 334,5048 | | | |
| Lantai 5 | 3,35 | 375,9170 312,1846 | 205,4035 | 18,3260 | 2,0630 | 213,2715 | 917,148709 | 580,5492 487,3467 | 318,774905 | 0,0000 | 0,0000 | 210,5471 | 884,29782 | 318,7749 | | | |
| Lantai 6 | 3,35 | 399,4326 286,7522 | 204,8313 | 18,2018 | 1,9871 | 195,7237 | 843,237891 | 600,9350 467,8973 | 319,054418 | 0,0000 | 0,0000 | 195,1409 | 819,59178 | 319,0544 | | | |
| Lantai 7 | 3,35 | 375,0078 263,2366 | 190,5207 | 18,0690 | 1,9207 | 174,5097 | 753,929907 | 478,3045 447,5115 | 276,36299 | 0,0000 | 0,0000 | 176,2874 | 740,40708 | 276,3630 | | | |
| Lantai 8 | 3,35 | 406,7798 207,4608 | 183,3554 | 17,9858 | 1,8628 | 149,8941 | 650,396301 | 505,1510 322,2919 | 246,997879 | 0,0000 | 0,0000 | 154,0546 | 647,02932 | 246,9979 | | | |
| Lantai 9 | 3,35 | 453,0142 175,6889 | 187,6726 | 17,8086 | 1,8352 | 122,0052 | 533,047865 | 545,0454 295,4454 | 250,892768 | 0,0000 | 0,0000 | 128,4259 | 539,38878 | 250,8928 | | | |
| Lantai 10 | 3,35 | 312,3993 129,4544 | 131,8966 | 18,1708 | 1,7308 | 91,0961 | 403,500085 | 418,5431 255,5510 | 201,222136 | 0,0000 | 0,0000 | 99,7398 | 418,90695 | 201,2221 | | | |
| Lantai 11 | 3,35 | 325,4696 34,4000 | 107,4238 | 16,1518 | 2,0551 | 57,4516 | 260,414112 | 475,8116 129,1713 | 180,591913 | 0,0000 | 0,0000 | 66,7277 | 280,256382 | 180,5919 | | | |
| Lantai 12 | 3,35 | 266,7687 16,4075 | 84,5302 | 25,2461 | 0,4184 | 23,4544 | 125,456077 | 210,9271 55,3099 | 79,4737458 | 0,0000 | 0,0000 | 37,0180 | 155,475726 | 84,5302 | | | |

Tabel 2.3.9 Penulangan Sengkang Geser Kolom untuk RW 1/6 Baru

| KOLOM | Di Dalam Sendi Plastis | | | | | | | | | | Di Luar Sendi Plastis | | | | | |
|-----------|------------------------|---------|-----------------------|------------|------------|----------|----------|-----------------------|-----------------|------|-----------------------|----------|----------|-----------------------|-----------------|------|
| | b mm | d mm | Ag mm ² | Vu,k kN | Nu,k kN | Vs kN | S mm | Sengkang Terpasang | Vs pasang kN | Cek | Vc kN | Vs kN | S mm | Sengkang Terpasang | Vs pasang kN | Cek |
| | | | | | | | | | | | | | | | | |
| A | 900 | 760 | 720000 | 129,5905 | 2670,4354 | 215,9842 | 357,9863 | Ø12 - 100 | 773,1936 | AMAN | 668,1544 | 527,7647 | 146,5035 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 1 | 900 | 760 | 720000 | 428,2085 | 2498,4259 | 713,6809 | 108,3388 | Ø12 - 100 | 773,1936 | AMAN | 661,8320 | 197,9394 | 390,6213 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 2 | 900 | 760 | 720000 | 361,0775 | 2265,8855 | 601,7959 | 128,4810 | Ø12 - 100 | 773,1936 | AMAN | 653,2848 | 262,1174 | 294,9798 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 3 | 900 | 760 | 720000 | 334,5048 | 2024,7784 | 557,5079 | 138,6875 | Ø12 - 100 | 773,1936 | AMAN | 644,4227 | 282,0425 | 274,1408 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 4 | 900 | 760 | 720000 | 318,7749 | 1790,8405 | 531,2915 | 145,5310 | Ø12 - 100 | 773,1936 | AMAN | 635,8240 | 290,4846 | 266,1737 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 5 | 900 | 760 | 720000 | 319,0544 | 1548,3914 | 531,7574 | 145,4035 | Ø12 - 100 | 773,1936 | AMAN | 626,9126 | 281,2703 | 274,8934 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 6 | 900 | 760 | 720000 | 276,3630 | 1302,4063 | 460,6050 | 167,8648 | Ø12 - 100 | 773,1936 | AMAN | 617,8712 | 318,4779 | 242,7778 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 7 | 900 | 760 | 720000 | 246,9979 | 1052,9184 | 411,6631 | 187,8219 | Ø12 - 100 | 773,1936 | AMAN | 608,7010 | 341,1200 | 226,6632 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 8 | 900 | 760 | 720000 | 250,8928 | 829,9588 | 418,1546 | 184,9062 | Ø12 - 100 | 773,1936 | AMAN | 600,5059 | 328,7054 | 235,2239 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 9 | 900 | 760 | 720000 | 201,2221 | 578,9320 | 335,3702 | 230,5493 | Ø12 - 100 | 773,1936 | AMAN | 591,2792 | 373,2886 | 207,1303 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 10 | 900 | 760 | 720000 | 180,5919 | 379,7260 | 300,9865 | 256,8865 | Ø12 - 100 | 773,1936 | AMAN | 583,9572 | 388,3160 | 199,1146 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 11 | 900 | 760 | 720000 | 116,5984 | 202,4901 | 194,3307 | 397,8751 | Ø12 - 100 | 773,1936 | AMAN | 577,4427 | 451,1277 | 171,3913 | Ø12 - 100 | 773,1936 | AMAN |
| B | 900 | 760 | 720000 | 129,5905 | 3170,2307 | 215,9842 | 357,9863 | Ø12 - 100 | 773,1936 | AMAN | 686,5248 | 546,1351 | 141,5755 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 1 | 900 | 760 | 720000 | 428,2085 | 2964,0362 | 713,6809 | 108,3388 | Ø12 - 100 | 773,1936 | AMAN | 678,9460 | 215,0534 | 359,5357 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 2 | 900 | 760 | 720000 | 361,0775 | 2708,2727 | 601,7959 | 128,4810 | Ø12 - 100 | 773,1936 | AMAN | 669,5451 | 278,3778 | 277,7497 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 3 | 900 | 760 | 720000 | 334,5048 | 2441,7465 | 557,5079 | 138,6875 | Ø12 - 100 | 773,1936 | AMAN | 659,7487 | 297,3686 | 260,0119 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 4 | 900 | 760 | 720000 | 318,7749 | 2180,1936 | 531,2915 | 145,5310 | Ø12 - 100 | 773,1936 | AMAN | 650,1351 | 304,7956 | 253,6761 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 5 | 900 | 760 | 720000 | 319,0544 | 1907,9334 | 531,7574 | 145,4035 | Ø12 - 100 | 773,1936 | AMAN | 640,1279 | 294,4856 | 262,5573 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 6 | 900 | 760 | 720000 | 276,3630 | 1629,9411 | 460,6050 | 167,8648 | Ø12 - 100 | 773,1936 | AMAN | 629,9100 | 330,5168 | 233,9347 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 7 | 900 | 760 | 720000 | 246,9979 | 1346,2500 | 411,6631 | 187,8219 | Ø12 - 100 | 773,1936 | AMAN | 619,4827 | 351,9017 | 219,7187 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 8 | 900 | 760 | 720000 | 250,8928 | 942,2219 | 418,1546 | 184,9062 | Ø12 - 100 | 773,1936 | AMAN | 604,6323 | 332,8318 | 232,3076 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 9 | 900 | 760 | 720000 | 201,2221 | 578,9320 | 335,3702 | 230,5493 | Ø12 - 100 | 773,1936 | AMAN | 591,2792 | 373,2886 | 207,1303 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 10 | 900 | 760 | 720000 | 180,5919 | 478,5293 | 300,9865 | 256,8865 | Ø12 - 100 | 773,1936 | AMAN | 587,5888 | 391,9476 | 197,2697 | Ø12 - 100 | 773,1936 | AMAN |
| Lantai 11 | 900 | 760 | 720000 | 84,5302 | 270,3370 | 140,8837 | 548,8171 | Ø12 - 100 | 773,1936 | AMAN | 579,9365 | 488,3621 | 158,3238 | Ø12 - 100 | 773,1936 | AMAN |

Lanjutan

| KOLOM | Dalam Sendi Plastik | | | | | | | | | | | | Di Luar Sendi Plastik | | | | | | | | | | | |
|-----------|---------------------|-----|--------|----------|-----------|----------|----------|--------------------|-----------|------|----------|----------|-----------------------|--------------------|-----------|------|----|-----------------|----|----|----|----|----|----|
| | b | d | Ag | Vu,k | Nu,k | Vs | S | Sengkang Terpasang | Vs pasang | Cek | Vc | Vs | S | Sengkang Terpasang | Vs pasang | Cek | | | | | | | | |
| | | | | | | | | | | | | | | | | | mm | mm ² | mm | mm | mm | mm | mm | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | | | | | | | | |
| C | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 900 | 760 | 720000 | 78,7892 | 3083,4192 | 131,3154 | 588,8064 | ø12 - 100 | 773,1936 | AMAN | 683,3340 | 597,9790 | 129,3011 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 2 | 900 | 760 | 720000 | 381,4317 | 2935,8116 | 635,7195 | 121,6250 | ø12 - 100 | 773,1936 | AMAN | 677,9086 | 264,6909 | 292,1119 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 3 | 900 | 760 | 720000 | 338,5369 | 2672,5111 | 564,2281 | 137,0356 | ø12 - 100 | 773,1936 | AMAN | 668,2307 | 301,4824 | 256,4639 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 4 | 900 | 760 | 720000 | 318,5028 | 2400,4224 | 530,8380 | 145,6553 | ø12 - 100 | 773,1936 | AMAN | 658,2298 | 313,1851 | 246,8807 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 5 | 900 | 760 | 720000 | 312,6389 | 2119,5435 | 521,0948 | 148,3872 | ø12 - 100 | 773,1936 | AMAN | 647,9058 | 309,2137 | 250,0515 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 6 | 900 | 760 | 720000 | 311,7679 | 1842,9745 | 519,6132 | 148,8018 | ø12 - 100 | 773,1936 | AMAN | 637,7403 | 299,9917 | 257,7383 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 7 | 900 | 760 | 720000 | 263,0552 | 1558,3232 | 438,4253 | 176,3570 | ø12 - 100 | 773,1936 | AMAN | 627,2777 | 342,3012 | 225,8811 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 8 | 900 | 760 | 720000 | 234,9687 | 1265,5888 | 391,6144 | 197,4375 | ø12 - 100 | 773,1936 | AMAN | 616,5179 | 361,9685 | 213,6080 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 9 | 900 | 760 | 720000 | 240,5011 | 942,2219 | 400,8351 | 192,8957 | ø12 - 100 | 773,1936 | AMAN | 604,6323 | 344,0894 | 224,7072 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 10 | 900 | 760 | 720000 | 178,1520 | 578,9320 | 296,9200 | 260,4047 | ø12 - 100 | 773,1936 | AMAN | 591,2792 | 398,2812 | 194,1326 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 11 | 900 | 760 | 720000 | 148,1771 | 450,8956 | 246,9619 | 313,0821 | ø12 - 100 | 773,1936 | AMAN | 586,5731 | 426,0479 | 181,4805 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 12 | 900 | 760 | 720000 | 116,5984 | 213,8648 | 194,3307 | 397,8751 | ø12 - 100 | 773,1936 | AMAN | 577,8608 | 451,5458 | 171,2326 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| D | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 900 | 760 | 720000 | 78,7892 | 3170,2307 | 131,3154 | 588,8064 | ø12 - 100 | 773,1936 | AMAN | 686,5248 | 601,1698 | 128,6148 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 2 | 900 | 760 | 720000 | 260,3449 | 2964,0362 | 433,9082 | 178,1929 | ø12 - 100 | 773,1936 | AMAN | 678,9460 | 396,9056 | 194,8054 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 3 | 900 | 760 | 720000 | 222,4184 | 2708,2727 | 370,6974 | 208,5781 | ø12 - 100 | 773,1936 | AMAN | 669,5451 | 428,5918 | 180,4032 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 4 | 900 | 760 | 720000 | 211,3655 | 2441,7465 | 352,2758 | 219,4853 | ø12 - 100 | 773,1936 | AMAN | 659,7487 | 430,7695 | 179,4913 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 5 | 900 | 760 | 720000 | 209,0197 | 2180,1936 | 348,3661 | 221,9486 | ø12 - 100 | 773,1936 | AMAN | 650,1351 | 423,6971 | 182,4873 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 6 | 900 | 760 | 720000 | 209,2029 | 1907,9334 | 348,6716 | 221,7541 | ø12 - 100 | 773,1936 | AMAN | 640,1279 | 413,4914 | 186,9915 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 7 | 900 | 760 | 720000 | 190,5207 | 1629,9411 | 317,5345 | 243,4991 | ø12 - 100 | 773,1936 | AMAN | 629,9100 | 423,5126 | 182,5669 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 8 | 900 | 760 | 720000 | 183,3554 | 1346,2500 | 305,5923 | 253,0147 | ø12 - 100 | 773,1936 | AMAN | 619,4827 | 420,8477 | 183,7229 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 9 | 900 | 760 | 720000 | 187,6726 | 942,2219 | 312,7876 | 247,1945 | ø12 - 100 | 773,1936 | AMAN | 604,6323 | 401,3203 | 192,6625 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 10 | 900 | 760 | 720000 | 132,1738 | 578,9320 | 220,2897 | 350,9895 | ø12 - 100 | 773,1936 | AMAN | 591,2792 | 448,0909 | 172,5528 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 11 | 900 | 760 | 720000 | 118,6246 | 478,5293 | 197,7077 | 391,0791 | ø12 - 100 | 773,1936 | AMAN | 587,5888 | 459,0788 | 168,4229 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 12 | 900 | 760 | 720000 | 84,5302 | 270,3370 | 140,8837 | 548,8171 | ø12 - 100 | 773,1936 | AMAN | 579,9365 | 488,3621 | 158,3238 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |

Tabel 2.4.1 Penulangan Sengkang Joint untuk R/W 1/6 baru

| KOLOM | Penulangan Geser Horizontal | | | | | | | | | | | | | | |
|-----------|-----------------------------|-----|-----|-----|-----------|-----------|-----------|-----------|----------|-----------|-----------|-------------|-------------|------------|-----|
| | bj | hc | Lki | Lka | Mkap.b.ki | Mkap.b.ka | Vj.h | Vj.v | Vc.h | Vs.h | As.h | As tersedia | Jumlah Tul. | Jarak Tul. | |
| | | | | | | | | | | | | | | | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| A | | | | | | | | | | | | | | | |
| Lantai 1 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 381,1660 | 1063,1531 | 3543,8435 | 4 Ø 12 | 452,16 | 8 | 80 |
| Lantai 2 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 341,4334 | 1102,8856 | 3676,2854 | 4 Ø 12 | 452,16 | 8 | 80 |
| Lantai 3 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 278,8595 | 1165,4595 | 3884,8651 | 4 Ø 12 | 452,16 | 8 | 80 |
| Lantai 4 | 0,65 | 0,8 | 5 | 5 | 397,8694 | 757,7089 | 1343,0492 | 1652,9836 | 193,6971 | 1149,3521 | 3831,1736 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 5 | 0,65 | 0,8 | 5 | 5 | 397,8694 | 757,7089 | 1343,0492 | 1652,9836 | 0,0000 | 1343,0492 | 4476,8305 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 6 | 0,65 | 0,8 | 5 | 5 | 397,8694 | 757,7089 | 1343,0492 | 1652,9836 | 0,0000 | 1343,0492 | 4476,8305 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 7 | 0,65 | 0,8 | 5 | 5 | 302,8070 | 579,5954 | 1001,0219 | 1232,0269 | 0,00 | 1001,0219 | 3336,7395 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 8 | 0,65 | 0,8 | 5 | 5 | 302,8070 | 579,5954 | 1001,0219 | 1232,0269 | 0,00 | 1001,0219 | 3336,7395 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 9 | 0,65 | 0,8 | 5 | 5 | 302,8070 | 579,5954 | 1001,0219 | 1232,0269 | 0,00 | 1001,0219 | 3336,7395 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 10 | 0,65 | 0,8 | 5 | 5 | 207,1436 | 396,5371 | 667,3310 | 821,3305 | 0,00 | 667,3310 | 2224,4367 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 11 | 0,65 | 0,8 | 5 | 5 | 207,1436 | 396,5371 | 667,3310 | 821,3305 | 0,00 | 667,3310 | 2224,4367 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 12 | 0,65 | 0,8 | 5 | 5 | 0,0000 | 302,2239 | 335,9737 | 413,5061 | 0,00 | 335,9737 | 1119,9123 | 4 Ø 12 | 452,16 | 6 | 100 |
| B | | | | | | | | | | | | | | | |
| Lantai 1 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 381,1660 | 1063,1531 | 3543,8435 | 4 Ø 12 | 452,16 | 8 | 80 |
| Lantai 2 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 341,4334 | 1102,8856 | 3676,2854 | 4 Ø 12 | 452,16 | 8 | 80 |
| Lantai 3 | 0,65 | 0,8 | 5 | 5 | 492,6556 | 764,0750 | 1444,3190 | 1777,6234 | 278,8595 | 1165,4595 | 3884,8651 | 4 Ø 12 | 452,16 | 8 | 80 |
| Lantai 4 | 0,65 | 0,8 | 5 | 5 | 397,8694 | 757,7089 | 1343,0492 | 1652,9836 | 193,6971 | 1149,3521 | 3831,1736 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 5 | 0,65 | 0,8 | 5 | 5 | 397,8694 | 757,7089 | 1343,0492 | 1652,9836 | 0,0000 | 1343,0492 | 4476,8305 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 6 | 0,65 | 0,8 | 5 | 5 | 397,8694 | 757,7089 | 1343,0492 | 1652,9836 | 0,0000 | 1343,0492 | 4476,8305 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 7 | 0,65 | 0,8 | 5 | 5 | 302,8070 | 579,5954 | 1001,0219 | 1232,0269 | 0,00 | 1001,0219 | 3336,7395 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 8 | 0,65 | 0,8 | 5 | 5 | 302,8070 | 579,5954 | 1001,0219 | 1232,0269 | 0,00 | 1001,0219 | 3336,7395 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 9 | 0,65 | 0,8 | 5 | 5 | 302,8070 | 579,5954 | 1001,0219 | 1232,0269 | 0,00 | 1001,0219 | 3336,7395 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 10 | 0,65 | 0,8 | 5 | 5 | 207,1436 | 396,5371 | 667,3310 | 821,3305 | 0,00 | 667,3310 | 2224,4367 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 11 | 0,65 | 0,8 | 5 | 5 | 207,1436 | 396,5371 | 667,3310 | 821,3305 | 0,00 | 667,3310 | 2224,4367 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 12 | 0,65 | 0,8 | 5 | 5 | 0,0000 | 302,2239 | 335,9737 | 413,5061 | 0,00 | 335,9737 | 1119,9123 | 4 Ø 12 | 452,16 | 6 | 100 |

lanjutan

| Kolom | Penulangan Geser Horizontal | | | | | | | | | | | | | | |
|-----------|-----------------------------|---------|----------|----------|------------------|------------------|------------|------------|------------|------------|-------------------------|-----------|--------------------------------|-------------|------------------|
| | bj m | hc m | Lki m | Lka m | Mkap.b.ki kNm | Mkap.b.ka kNm | Vj.h kN | Vj.v kN | Vc.h kN | Vs.h kN | As.h mm ² | ØSengkang | As tersedia mm ² | Jumlah Tul. | Jarak Tul. mm |
| | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | |
| C | | | | | | | | | | | | | | | |
| Lantai 1 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 462,8392 | 437,7664 | 1459,2214 | 4 Ø 12 | 452,16 | 7 | 90 |
| Lantai 2 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 435,4106 | 465,1950 | 1550,6499 | 4 Ø 12 | 452,16 | 7 | 90 |
| Lantai 3 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 381,6202 | 518,9854 | 1729,9514 | 4 Ø 12 | 452,16 | 7 | 90 |
| Lantai 4 | 0,65 | 0,8 | 0 | 5 | 0 | 757,7089 | 907,6365 | 1117,0911 | 316,5733 | 591,0632 | 1970,2108 | 4 Ø 12 | 452,16 | 7 | 90 |
| Lantai 5 | 0,65 | 0,8 | 0 | 5 | 0 | 757,7089 | 907,6365 | 1117,0911 | 230,9462 | 676,6903 | 2255,6344 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 6 | 0,65 | 0,8 | 0 | 5 | 0 | 757,7089 | 907,6365 | 1117,0911 | 84,6938 | 822,9427 | 2743,1425 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 7 | 0,65 | 0,8 | 0 | 5 | 0 | 579,5954 | 671,5559 | 826,5304 | 0,00 | 671,5559 | 2238,5197 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 8 | 0,65 | 0,8 | 0 | 5 | 0 | 579,5954 | 671,5559 | 826,5304 | 0,00 | 671,5559 | 2238,5197 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 9 | 0,65 | 0,8 | 0 | 5 | 0 | 579,5954 | 671,5559 | 826,5304 | 0,00 | 671,5559 | 2238,5197 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 10 | 0,65 | 0,8 | 0 | 5 | 0 | 396,5371 | 443,8213 | 546,2416 | 0,00 | 443,8213 | 1479,4045 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 11 | 0,65 | 0,8 | 0 | 5 | 0 | 396,5371 | 443,8213 | 546,2416 | 0,00 | 443,8213 | 1479,4045 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 12 | 0,65 | 0,8 | 0 | 5 | 0 | 302,2239 | 335,9737 | 413,5061 | 0,00 | 335,9737 | 1119,9123 | 4 Ø 12 | 452,16 | 6 | 100 |
| D | | | | | | | | | | | | | | | |
| Lantai 1 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 478,2365 | 422,3691 | 1407,8970 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 2 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 440,7873 | 459,8183 | 1532,7276 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 3 | 0,65 | 0,8 | 0 | 5 | 0 | 764,0750 | 900,6056 | 1108,4376 | 389,3624 | 511,2432 | 1704,1441 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 4 | 0,65 | 0,8 | 0 | 5 | 0 | 757,7089 | 907,6365 | 1117,0911 | 327,2861 | 580,3504 | 1934,5013 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 5 | 0,65 | 0,8 | 0 | 5 | 0 | 757,7089 | 907,6365 | 1117,0911 | 251,9116 | 655,7249 | 2185,7496 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 6 | 0,65 | 0,8 | 0 | 5 | 0 | 757,7089 | 907,6365 | 1117,0911 | 134,2220 | 773,4145 | 2578,0484 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 7 | 0,65 | 0,8 | 0 | 5 | 0 | 579,5954 | 671,5559 | 826,5304 | 0,00 | 671,5559 | 2238,5197 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 8 | 0,65 | 0,8 | 0 | 5 | 0 | 579,5954 | 671,5559 | 826,5304 | 0,00 | 671,5559 | 2238,5197 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 9 | 0,65 | 0,8 | 0 | 5 | 0 | 579,5954 | 671,5559 | 826,5304 | 0,00 | 671,5559 | 2238,5197 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 10 | 0,65 | 0,8 | 0 | 5 | 0 | 396,5371 | 443,8213 | 546,2416 | 0,00 | 443,8213 | 1479,4045 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 11 | 0,65 | 0,8 | 0 | 5 | 0 | 396,5371 | 443,8213 | 546,2416 | 0,00 | 443,8213 | 1479,4045 | 4 Ø 12 | 452,16 | 6 | 100 |
| Lantai 12 | 0,65 | 0,8 | 0 | 5 | 0 | 302,2239 | 335,9737 | 413,5061 | 0,00 | 335,9737 | 1119,9123 | 4 Ø 12 | 452,16 | 6 | 100 |

LAMPIRAN 3
HASIL PERHITUNGAN
R/W 2/2 LAMA

Tabel 3.1.1.1 Hitungan Gaya Horizontal R/W 2/2 Lama Portal E

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | K | V (kN) | Fi (kN) |
|------------------|--------|--------------|----------------|--------|---|---|------------|------------|
| 12 | 48 | 5.615,7600 | 269.556,4800 | 0,0858 | 1 | 1 | 9.165,5774 | 915,5350 |
| 11 | 44 | 9.200,8320 | 404.836,6080 | 0,0858 | 1 | 1 | 9.165,5774 | 1.375,0071 |
| 10 | 40 | 9.200,8320 | 368.033,2800 | 0,0858 | 1 | 1 | 9.165,5774 | 1.250,0064 |
| 9 | 36 | 9.200,8320 | 331.229,9520 | 0,0858 | 1 | 1 | 9.165,5774 | 1.125,0058 |
| 8 | 32 | 9.200,8320 | 294.426,6240 | 0,0858 | 1 | 1 | 9.165,5774 | 1.000,0051 |
| 7 | 28 | 9.200,8320 | 257.623,2960 | 0,0858 | 1 | 1 | 9.165,5774 | 875,0045 |
| 6 | 24 | 9.200,8320 | 220.819,9680 | 0,0858 | 1 | 1 | 9.165,5774 | 750,0039 |
| 5 | 20 | 9.200,8320 | 184.016,6400 | 0,0858 | 1 | 1 | 9.165,5774 | 625,0032 |
| 4 | 16 | 9.200,8320 | 147.213,3120 | 0,0858 | 1 | 1 | 9.165,5774 | 500,0026 |
| 3 | 12 | 9.200,8320 | 110.409,9840 | 0,0858 | 1 | 1 | 9.165,5774 | 375,0019 |
| 2 | 8 | 9.200,8320 | 73.606,6560 | 0,0858 | 1 | 1 | 9.165,5774 | 250,0013 |
| 1 | 4 | 9.200,8320 | 36.803,3280 | 0,0858 | 1 | 1 | 9.165,5774 | 125,0006 |
| Σ Total = | | 106.824,9120 | 2.698.576,1280 | | | | | 9.165,5774 |

Tabel 3.1.1.2 Hitungan Gaya Horizontal R/W 2/2 Lama Portal 2

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | K | V (kN) | Fi (kN) |
|------------------|--------|--------------|----------------|--------|---|---|------------|------------|
| 12 | 48 | 5.615,7600 | 269.556,4800 | 0,0858 | 1 | 1 | 9.165,5774 | 915,5350 |
| 11 | 44 | 9.200,8320 | 404.836,6080 | 0,0858 | 1 | 1 | 9.165,5774 | 1.375,0071 |
| 10 | 40 | 9.200,8320 | 368.033,2800 | 0,0858 | 1 | 1 | 9.165,5774 | 1.250,0064 |
| 9 | 36 | 9.200,8320 | 331.229,9520 | 0,0858 | 1 | 1 | 9.165,5774 | 1.125,0058 |
| 8 | 32 | 9.200,8320 | 294.426,6240 | 0,0858 | 1 | 1 | 9.165,5774 | 1.000,0051 |
| 7 | 28 | 9.200,8320 | 257.623,2960 | 0,0858 | 1 | 1 | 9.165,5774 | 875,0045 |
| 6 | 24 | 9.200,8320 | 220.819,9680 | 0,0858 | 1 | 1 | 9.165,5774 | 750,0039 |
| 5 | 20 | 9.200,8320 | 184.016,6400 | 0,0858 | 1 | 1 | 9.165,5774 | 625,0032 |
| 4 | 16 | 9.200,8320 | 147.213,3120 | 0,0858 | 1 | 1 | 9.165,5774 | 500,0026 |
| 3 | 12 | 9.200,8320 | 110.409,9840 | 0,0858 | 1 | 1 | 9.165,5774 | 375,0019 |
| 2 | 8 | 9.200,8320 | 73.606,6560 | 0,0858 | 1 | 1 | 9.165,5774 | 250,0013 |
| 1 | 4 | 9.200,8320 | 36.803,3280 | 0,0858 | 1 | 1 | 9.165,5774 | 125,0006 |
| Σ Total = | | 106.824,9120 | 2.698.576,1280 | | | | | 9.165,5774 |

Tabel 3.1.2.1 Kontrol Periode Gedar menurut Rayleigh untuk RW 2/2 Lama Portal E (Iterasi I)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|------------|-----------------|-----------------------|---------------------------|------------------|--------|------------|----------------|--------------|
| 12 | 915,5350 | 915,5350 | 856.575,0000 | 0,0011 | 0,0867 | 0,0003 | 5.615,7600 | 42,1809 | 79,3466 |
| 11 | 1.375,0071 | 2.290,5420 | 856.575,0000 | 0,0027 | 0,0856 | 0,0007 | 9.200,8320 | 67,4148 | 117,6980 |
| 10 | 1.250,0064 | 3.540,5485 | 856.575,0000 | 0,0041 | 0,0829 | 0,0010 | 9.200,8320 | 63,2686 | 103,6556 |
| 9 | 1.125,0058 | 4.665,5543 | 856.575,0000 | 0,0054 | 0,0788 | 0,0014 | 9.200,8320 | 57,1185 | 88,6400 |
| 8 | 1.000,0051 | 5.665,5594 | 856.575,0000 | 0,0066 | 0,0733 | 0,0017 | 9.200,8320 | 49,4943 | 73,3443 |
| 7 | 875,0045 | 6.540,5639 | 856.575,0000 | 0,0076 | 0,0667 | 0,0019 | 9.200,8320 | 40,9700 | 58,3888 |
| 6 | 750,0039 | 7.290,5678 | 856.575,0000 | 0,0085 | 0,0591 | 0,0021 | 9.200,8320 | 32,1302 | 44,3207 |
| 5 | 625,0032 | 7.915,5710 | 856.575,0000 | 0,0092 | 0,0506 | 0,0023 | 9.200,8320 | 23,5413 | 31,6143 |
| 4 | 500,0026 | 8.415,5736 | 856.575,0000 | 0,0098 | 0,0413 | 0,0025 | 9.200,8320 | 15,7255 | 20,6710 |
| 3 | 375,0019 | 8.790,5755 | 856.575,0000 | 0,0103 | 0,0315 | 0,0026 | 9.200,8320 | 9,1394 | 11,8190 |
| 2 | 250,0013 | 9.040,5768 | 856.575,0000 | 0,0106 | 0,0213 | 0,0026 | 9.200,8320 | 4,1565 | 5,3137 |
| 1 | 125,0006 | 9.165,5774 | 856.575,0000 | 0,0107 | 0,0107 | 0,0027 | 9.200,8320 | 1,0535 | 1,3375 |
| | | | | | | | Σtotal = | 406,1936 | 636,1495 |

T Awal = 1,0942
T Rayleigh = 1,6073

Tabel 3.1.2.2 Kontrol Periode Gedar menurut Rayleigh untuk RW 2/2 Lama Portal 2 (Iterasi I)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|------------|-----------------|-----------------------|---------------------------|------------------|--------|------------|----------------|--------------|
| 12 | 915,5350 | 915,5350 | 1.522.800,0000 | 0,0006 | 0,0488 | 0,0002 | 5.615,7600 | 13,3463 | 44,6325 |
| 11 | 1.375,0071 | 2.290,5420 | 1.522.800,0000 | 0,0015 | 0,0481 | 0,0004 | 9.200,8320 | 21,3305 | 66,2051 |
| 10 | 1.250,0064 | 3.540,5485 | 1.522.800,0000 | 0,0023 | 0,0466 | 0,0006 | 9.200,8320 | 20,0186 | 58,3063 |
| 9 | 1.125,0058 | 4.665,5543 | 1.522.800,0000 | 0,0031 | 0,0443 | 0,0008 | 9.200,8320 | 18,0726 | 49,8600 |
| 8 | 1.000,0051 | 5.665,5594 | 1.522.800,0000 | 0,0037 | 0,0413 | 0,0009 | 9.200,8320 | 15,6603 | 41,2562 |
| 7 | 875,0045 | 6.540,5639 | 1.522.800,0000 | 0,0043 | 0,0375 | 0,0011 | 9.200,8320 | 12,9632 | 32,8437 |
| 6 | 750,0039 | 7.290,5678 | 1.522.800,0000 | 0,0048 | 0,0332 | 0,0012 | 9.200,8320 | 10,1662 | 24,9304 |
| 5 | 625,0032 | 7.915,5710 | 1.522.800,0000 | 0,0052 | 0,0285 | 0,0013 | 9.200,8320 | 7,4486 | 17,7831 |
| 4 | 500,0026 | 8.415,5736 | 1.522.800,0000 | 0,0055 | 0,0233 | 0,0014 | 9.200,8320 | 4,9756 | 11,6274 |
| 3 | 375,0019 | 8.790,5755 | 1.522.800,0000 | 0,0058 | 0,0177 | 0,0014 | 9.200,8320 | 2,8918 | 6,6482 |
| 2 | 250,0013 | 9.040,5768 | 1.522.800,0000 | 0,0059 | 0,0120 | 0,0015 | 9.200,8320 | 1,3152 | 2,9889 |
| 1 | 125,0006 | 9.165,5774 | 1.522.800,0000 | 0,0060 | 0,0060 | 0,0015 | 9.200,8320 | 0,3333 | 0,7524 |
| | | | | | | | Σtotal = | 128,5222 | 357,8341 |

T Awal = 1,0942
T Rayleigh = 1,2055

Tabel 3.1.3.1 Kontrol Hitungan Gaya Horizontal R/W 2/2 Lama Portal E

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | K | V (kN) | Fi (kN) |
|-------------|--------|--------------|----------------|--------|---|---|------------|------------|
| 12 | 48 | 5.615,7600 | 269.556,4800 | 0,0450 | 1 | 1 | 4.807,1210 | 480,1757 |
| 11 | 44 | 9.200,8320 | 404.836,6080 | 0,0450 | 1 | 1 | 4.807,1210 | 721,1576 |
| 10 | 40 | 9.200,8320 | 368.033,2800 | 0,0450 | 1 | 1 | 4.807,1210 | 655,5978 |
| 9 | 36 | 9.200,8320 | 331.229,9520 | 0,0450 | 1 | 1 | 4.807,1210 | 590,0380 |
| 8 | 32 | 9.200,8320 | 294.426,6240 | 0,0450 | 1 | 1 | 4.807,1210 | 524,4782 |
| 7 | 28 | 9.200,8320 | 257.623,2960 | 0,0450 | 1 | 1 | 4.807,1210 | 458,9184 |
| 6 | 24 | 9.200,8320 | 220.819,9680 | 0,0450 | 1 | 1 | 4.807,1210 | 393,3587 |
| 5 | 20 | 9.200,8320 | 184.016,6400 | 0,0450 | 1 | 1 | 4.807,1210 | 327,7989 |
| 4 | 16 | 9.200,8320 | 147.213,3120 | 0,0450 | 1 | 1 | 4.807,1210 | 262,2391 |
| 3 | 12 | 9.200,8320 | 110.409,9840 | 0,0450 | 1 | 1 | 4.807,1210 | 196,6793 |
| 2 | 8 | 9.200,8320 | 73.606,6560 | 0,0450 | 1 | 1 | 4.807,1210 | 131,1196 |
| 1 | 4 | 9.200,8320 | 36.803,3280 | 0,0450 | 1 | 1 | 4.807,1210 | 65,5598 |
| Σ Total = | | 106.824,9120 | 2.698.576,1280 | | | | | 4.807,1210 |

Tabel 3.1.3.2 Kontrol Hitungan Gaya Horizontal R/W 2/2 Lama Portal 2

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | K | V (kN) | Fi (kN) |
|-------------|--------|--------------|----------------|--------|---|---|------------|------------|
| 12 | 48 | 5.615,7600 | 269.556,4800 | 0,0650 | 1 | 1 | 6.943,6193 | 693,5871 |
| 11 | 44 | 9.200,8320 | 404.836,6080 | 0,0650 | 1 | 1 | 6.943,6193 | 1.041,6720 |
| 10 | 40 | 9.200,8320 | 368.033,2800 | 0,0650 | 1 | 1 | 6.943,6193 | 946,9746 |
| 9 | 36 | 9.200,8320 | 331.229,9520 | 0,0650 | 1 | 1 | 6.943,6193 | 852,2771 |
| 8 | 32 | 9.200,8320 | 294.426,6240 | 0,0650 | 1 | 1 | 6.943,6193 | 757,5797 |
| 7 | 28 | 9.200,8320 | 257.623,2960 | 0,0650 | 1 | 1 | 6.943,6193 | 662,8822 |
| 6 | 24 | 9.200,8320 | 220.819,9680 | 0,0650 | 1 | 1 | 6.943,6193 | 568,1847 |
| 5 | 20 | 9.200,8320 | 184.016,6400 | 0,0650 | 1 | 1 | 6.943,6193 | 473,4873 |
| 4 | 16 | 9.200,8320 | 147.213,3120 | 0,0650 | 1 | 1 | 6.943,6193 | 378,7898 |
| 3 | 12 | 9.200,8320 | 110.409,9840 | 0,0650 | 1 | 1 | 6.943,6193 | 284,0924 |
| 2 | 8 | 9.200,8320 | 73.606,6560 | 0,0650 | 1 | 1 | 6.943,6193 | 189,3949 |
| 1 | 4 | 9.200,8320 | 36.803,3280 | 0,0650 | 1 | 1 | 6.943,6193 | 94,6975 |
| Σ Total = | | 106.824,9120 | 2.698.576,1280 | | | | | 6.943,6193 |

Tabel 3.1.4.1 Kontrol Periode Getar menurut Rayleigh untuk RW 2/2 Lama Portal E. (Iterasi II)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Simpangan Tk δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|----------|-----------------|-----------------------|---------------------------|------------------|---------------------|--------|------------|----------------|--------------|
| 12 | 480,1757 | 480,1757 | 856.575,0000 | 0,0006 | 0,0455 | 0,0001 | 0,0001 | 5.615,7600 | 11,6029 | 21,8262 |
| 11 | 721,1576 | 1.201,3332 | 856.575,0000 | 0,0014 | 0,0449 | 0,0004 | 0,0004 | 9.200,8320 | 18,5441 | 32,3757 |
| 10 | 655,5978 | 1.856,9310 | 856.575,0000 | 0,0022 | 0,0435 | 0,0005 | 0,0005 | 9.200,8320 | 17,4036 | 28,5130 |
| 9 | 590,0380 | 2.446,9690 | 856.575,0000 | 0,0029 | 0,0413 | 0,0007 | 0,0007 | 9.200,8320 | 15,7118 | 24,3826 |
| 8 | 524,4782 | 2.971,4473 | 856.575,0000 | 0,0035 | 0,0385 | 0,0009 | 0,0009 | 9.200,8320 | 13,6146 | 20,1752 |
| 7 | 458,9184 | 3.430,3657 | 856.575,0000 | 0,0040 | 0,0350 | 0,0010 | 0,0010 | 9.200,8320 | 11,2698 | 16,0613 |
| 6 | 393,3587 | 3.823,7244 | 856.575,0000 | 0,0045 | 0,0310 | 0,0011 | 0,0011 | 9.200,8320 | 8,8382 | 12,1915 |
| 5 | 327,7989 | 4.151,5233 | 856.575,0000 | 0,0048 | 0,0265 | 0,0012 | 0,0012 | 9.200,8320 | 6,4756 | 8,6963 |
| 4 | 262,2391 | 4.413,7624 | 856.575,0000 | 0,0052 | 0,0217 | 0,0013 | 0,0013 | 9.200,8320 | 4,3257 | 5,6861 |
| 3 | 196,6793 | 4.610,4417 | 856.575,0000 | 0,0054 | 0,0165 | 0,0013 | 0,0013 | 9.200,8320 | 2,5140 | 3,2511 |
| 2 | 131,1196 | 4.741,5613 | 856.575,0000 | 0,0055 | 0,0111 | 0,0014 | 0,0014 | 9.200,8320 | 1,1434 | 1,4617 |
| 1 | 65,5598 | 4.807,1210 | 856.575,0000 | 0,0056 | 0,0056 | 0,0014 | 0,0014 | 9.200,8320 | 0,2898 | 0,3679 |
| | | | | | | | | Σtotal = | 111,7335 | 174,9886 |

T Awal = 1,6073
T Rayleigh = 1,6073

Tabel 3.1.4.2 Kontrol Periode Getar menurut Rayleigh untuk RW 2/2 Lama Portal 2. (Iterasi II)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Simpangan Tk δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|----------|-----------------|-----------------------|---------------------------|------------------|---------------------|--------|------------|----------------|--------------|
| 12 | 480,1757 | 480,1757 | 1.522.800,0000 | 0,0003 | 0,0256 | 0,0001 | 0,0001 | 5.615,7600 | 3,6712 | 12,2773 |
| 11 | 721,1576 | 1.201,3332 | 1.522.800,0000 | 0,0008 | 0,0253 | 0,0002 | 0,0002 | 9.200,8320 | 5,8675 | 18,2114 |
| 10 | 655,5978 | 1.856,9310 | 1.522.800,0000 | 0,0012 | 0,0245 | 0,0003 | 0,0003 | 9.200,8320 | 5,5066 | 16,0386 |
| 9 | 590,0380 | 2.446,9690 | 1.522.800,0000 | 0,0016 | 0,0232 | 0,0004 | 0,0004 | 9.200,8320 | 4,9713 | 13,7152 |
| 8 | 524,4782 | 2.971,4473 | 1.522.800,0000 | 0,0020 | 0,0216 | 0,0005 | 0,0005 | 9.200,8320 | 4,3078 | 11,3485 |
| 7 | 458,9184 | 3.430,3657 | 1.522.800,0000 | 0,0023 | 0,0197 | 0,0006 | 0,0006 | 9.200,8320 | 3,5658 | 9,0345 |
| 6 | 393,3587 | 3.823,7244 | 1.522.800,0000 | 0,0025 | 0,0174 | 0,0006 | 0,0006 | 9.200,8320 | 2,7965 | 6,8577 |
| 5 | 327,7989 | 4.151,5233 | 1.522.800,0000 | 0,0027 | 0,0149 | 0,0007 | 0,0007 | 9.200,8320 | 2,0489 | 4,8917 |
| 4 | 262,2391 | 4.413,7624 | 1.522.800,0000 | 0,0029 | 0,0122 | 0,0007 | 0,0007 | 9.200,8320 | 1,3687 | 3,1984 |
| 3 | 196,6793 | 4.610,4417 | 1.522.800,0000 | 0,0030 | 0,0093 | 0,0008 | 0,0008 | 9.200,8320 | 0,7955 | 1,8287 |
| 2 | 131,1196 | 4.741,5613 | 1.522.800,0000 | 0,0031 | 0,0063 | 0,0008 | 0,0008 | 9.200,8320 | 0,3618 | 0,8222 |
| 1 | 65,5598 | 4.807,1210 | 1.522.800,0000 | 0,0032 | 0,0032 | 0,0008 | 0,0008 | 9.200,8320 | 0,0917 | 0,2070 |
| | | | | | | | | Σtotal = | 35,3532 | 98,4311 |

T Awal = 1,2055
T Rayleigh = 1,2055

Tabel 3.2.1.1 Momen Redistribusi Balok untuk R/W 2/2 Lama Portal E

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----|------------|-----------|----------------|
| 3 | 51 | 0 | -135,5927 | 193,5406 | -417,081 | 183,5665 | -339,8234 | 193,5406 | -417,081 | -417,081 | 7,5 | -25,8075 | -391,2735 | M - maks : |
| | | 0,45 | -93,88763 | 188,6985 | -344,1005 | 173,1862 | -283,4986 | 188,6985 | -344,1005 | -344,1005 | 7,5 | -25,8075 | -318,293 | -344,1005 |
| | | 1,06 | -40,23665 | 179,8973 | -247,4088 | 157,9296 | -208,3328 | 179,8973 | -247,4088 | -247,4088 | 7,5 | -25,8075 | -221,6013 | M + maks : |
| | | 1,67 | 6,427538 | 165,6728 | -156,1403 | 139,7994 | -136,0405 | 165,6728 | -156,1403 | -156,1403 | 7,5 | -25,8075 | -130,3328 | 188,6985 |
| | | 2,28 | 42,96329 | 143,5867 | -72,73365 | 117,5036 | -67,9138 | 143,5867 | -72,73365 | -72,73365 | 7,5 | -25,8075 | -46,92611 | p/p : |
| | | 2,89 | 71,46066 | 115,261 | 4,433594 | 91,90175 | -3,093187 | 115,261 | -3,093187 | -3,093187 | 7,5 | -25,8075 | 22,714351 | -0,548381941 |
| | | 3,5 | 95,93732 | 83,81448 | 78,47994 | 64,64626 | 60,0738 | 83,81448 | 60,0738 | 60,0738 | 7,5 | -25,8075 | 85,881338 | |
| | | 4,11 | 72,4966 | 10,57263 | 110,731 | 1,906684 | 87,7567 | 110,731 | 1,906684 | 115,261 | 7,5 | -25,8075 | 141,06854 | M - red maks : |
| | | 4,72 | 45,03517 | -65,79012 | 139,8611 | -62,48653 | 113,7859 | 139,8611 | -65,79012 | 143,5867 | 7,5 | -25,8075 | 169,39424 | -318,2929625 |
| | | 5,33 | 9,53536 | -148,3923 | 162,7518 | -130,1858 | 136,5092 | 162,7518 | -148,3923 | 165,6728 | 7,5 | -25,8075 | 191,48034 | M + red maks : |
| | | 5,94 | -36,09289 | -238,8563 | 177,7807 | -202,0507 | 155,0668 | 177,7807 | -238,8563 | 179,8973 | 7,5 | -25,8075 | 205,70484 | 214,5060375 |
| | | 6,55 | -88,70793 | -334,7434 | 187,3864 | -276,7891 | 170,7508 | 187,3864 | -334,7434 | 188,6985 | 7,5 | -25,8075 | 214,50604 | p/p red : |
| | | 7 | -129,6488 | -407,1305 | 192,8221 | -332,7986 | 181,4464 | 192,8221 | -407,1305 | 193,5406 | 7,5 | -25,8075 | 219,34814 | -0,673926422 |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|---|------------|-----------|----------------|
| 3 | 63 | 7 | -31,14459 | 414,852 | -463,3798 | 363,2698 | -389,5003 | 414,852 | -463,3798 | -463,3798 | 0 | 0,0000 | -463,3798 | M - maks : |
| | | 7,45 | -15,73328 | 327,9874 | -352,6422 | 284,8328 | -298,5641 | 327,9874 | -352,6422 | -352,6422 | 0 | 0,0000 | -352,6422 | -352,6422 |
| | | 7,76 | -5,944155 | 267,5063 | -276,9973 | 230,4628 | -236,2547 | 267,5063 | -276,9973 | -276,9973 | 0 | 0,0000 | -276,9973 | M + maks : |
| | | 8,07 | 2,572856 | 206,04 | -202,3377 | 175,5769 | -174,4612 | 206,04 | -202,3377 | -202,3377 | 0 | 0,0000 | -202,3377 | 327,9874 |
| | | 8,38 | 9,298869 | 143,1866 | -129,0653 | 119,9648 | -113,3939 | 143,1866 | -129,0653 | -129,0653 | 0 | 0,0000 | -129,0653 | p/p : |
| | | 8,69 | 13,71499 | 78,544 | -57,58192 | 63,41593 | -53,26343 | 78,544 | -57,58192 | -57,58192 | 0 | 0,0000 | -57,58192 | -0,930085509 |
| | | 9 | 15,30234 | 11,71048 | 11,71048 | 5,719953 | 5,719953 | 11,71048 | 5,719953 | 11,71048 | 0 | 0,0000 | 11,71048 | |
| | | 9,31 | 13,71499 | -57,58192 | 78,544 | -53,26343 | 63,41593 | 78,544 | -57,58192 | 78,544 | 0 | 0,0000 | 78,544 | M - red maks : |
| | | 9,62 | 9,298869 | -129,0653 | 143,1866 | -113,3939 | 119,9648 | 143,1866 | -129,0653 | 143,1866 | 0 | 0,0000 | 143,1866 | -352,6422 |
| | | 9,93 | 2,572856 | -202,3377 | 206,04 | -174,4612 | 175,5769 | 206,04 | -202,3377 | 206,04 | 0 | 0,0000 | 206,04 | M + red maks : |
| | | 10,24 | -5,944155 | -276,9973 | 267,5063 | -236,2547 | 230,4628 | 267,5063 | -276,9973 | 267,5063 | 0 | 0,0000 | 267,5063 | 327,9874 |
| | | 10,55 | -15,73328 | -352,6422 | 327,9874 | -298,5641 | 284,8328 | 327,9874 | -352,6422 | 327,9874 | 0 | 0,0000 | 327,9874 | p/p red : |
| | | 11 | -31,14459 | -463,3798 | 414,852 | -389,5003 | 363,2698 | 414,852 | -463,3798 | 414,852 | 0 | 0,0000 | 414,852 | -0,930085509 |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|---|------------|-----------|----------------|
| 4 | 52 | 0 | -136,5623 | 196,5278 | -421,5787 | 186,3664 | -343,4391 | 196,5278 | -421,5787 | -421,5787 | 6 | -20,8809 | -400,6978 | M - maks : |
| | | 0,45 | -94,73527 | 191,2921 | -348,0149 | 175,6183 | -286,6448 | 191,2921 | -348,0149 | -348,0149 | 6 | -20,8809 | -327,134 | -348,0149 |
| | | 1,06 | -40,91688 | 161,9574 | -250,5325 | 159,8631 | -210,8425 | 161,9574 | -250,5325 | -250,5325 | 6 | -20,8809 | -229,6516 | M + maks : |
| | | 1,67 | 5,910709 | 144,5799 | -158,4732 | 141,2343 | -137,9138 | 144,5799 | -158,4732 | -158,4732 | 6 | -20,8809 | -137,5923 | 191,2921 |
| | | 2,28 | 42,96329 | 115,261 | 74,27577 | 118,4399 | -69,15064 | 115,261 | 74,27577 | -74,27577 | 6 | -20,8809 | -53,39488 | p/p : |
| | | 2,89 | 71,46066 | 115,261 | 3,682237 | 92,33949 | -3,693562 | 115,261 | -3,693562 | -3,693562 | 6 | -20,8809 | 17,187332 | -0,549666408 |
| | | 3,5 | 95,91671 | 83,74078 | 78,51935 | 64,5854 | 60,10988 | 83,74078 | 60,10988 | 60,10988 | 6 | -20,8809 | 80,990774 | |
| | | 4,11 | 72,64139 | 9,965476 | 111,5612 | 1,347233 | 88,42924 | 111,5612 | 1,347233 | 115,261 | 6 | -20,8809 | 136,60169 | M - red maks : |
| | | 4,72 | 45,34537 | -66,93073 | 141,4821 | -63,54457 | 115,095 | 141,4821 | -66,93073 | 144,5799 | 6 | -20,8809 | 165,46079 | -327,134006 |
| | | 5,33 | 10,01096 | -150,0664 | 165,1635 | -131,7424 | 138,4547 | 165,1635 | -150,0664 | 167,1995 | 6 | -20,8809 | 188,08039 | M + red maks : |
| | | 5,94 | -35,45188 | -241,0638 | 180,9832 | -204,1059 | 157,6487 | 180,9832 | -241,0638 | 181,9574 | 6 | -20,8809 | 202,83829 | 212,172994 |
| | | 6,55 | -87,90152 | -337,4844 | 191,3797 | -279,3429 | 173,9692 | 191,3797 | -337,4844 | 191,2921 | 6 | -20,8809 | 212,17299 | p/p red : |
| | | 7 | -128,7203 | -410,265 | 197,3987 | -335,7202 | 185,1343 | 197,3987 | -410,265 | 196,5278 | 6 | -20,8809 | 217,40869 | -0,648581285 |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|---|------------|-----------|----------------|
| 4 | 64 | 7 | -31,09469 | 408,7455 | -457,1921 | 358,028 | -384,2043 | 408,7455 | -457,1921 | -457,1921 | 0 | 0,0000 | -457,1921 | M - maks : |
| | | 7,45 | -15,68338 | 323,264 | -347,8376 | 280,7764 | -294,4536 | 323,264 | -347,8376 | -347,8376 | 0 | 0,0000 | -347,8376 | -347,8376 |
| | | 7,76 | -5,894262 | 263,7358 | -273,1455 | 227,2231 | -232,9608 | 263,7358 | -273,1455 | -273,1455 | 0 | 0,0000 | -273,1455 | M + maks : |
| | | 8,07 | 2,62275 | 203,2223 | -199,4387 | 173,1539 | -171,984 | 203,2223 | -199,4387 | -199,4387 | 0 | 0,0000 | -199,4387 | 323,264 |
| | | 8,38 | 9,348763 | 141,3216 | -127,119 | 118,3585 | -111,7335 | 141,3216 | -127,119 | -127,119 | 0 | 0,0000 | -127,119 | p/p : |
| | | 8,69 | 13,76489 | 77,63184 | -56,58848 | 62,62633 | -52,41966 | 77,63184 | -56,58848 | -56,58848 | 0 | 0,0000 | -56,58848 | -0,929353238 |
| | | 9 | 15,35224 | 11,75113 | 11,75113 | 5,747037 | 5,747037 | 11,75113 | 5,747037 | 11,75113 | 0 | 0,0000 | 11,75113 | |
| | | 9,31 | 13,76489 | -56,58848 | 77,63184 | -52,41966 | 62,62633 | 77,63184 | -56,58848 | 77,63184 | 0 | 0,0000 | 77,63184 | M - red maks : |
| | | 9,62 | 9,348763 | -127,119 | 141,3216 | -111,7335 | 118,3585 | 141,3216 | -127,119 | 141,3216 | 0 | 0,0000 | 141,3216 | -347,8376 |
| | | 9,93 | 2,62275 | -199,4387 | 203,2223 | -171,984 | 173,1539 | 203,2223 | -199,4387 | 203,2223 | 0 | 0,0000 | 203,2223 | M + red maks : |
| | | 10,24 | -5,894262 | -273,1455 | 263,7358 | -232,9608 | 227,2231 | 263,7358 | -273,1455 | 263,7358 | 0 | 0,0000 | 263,7358 | 323,264 |
| | | 10,55 | -15,68338 | -347,8376 | 323,264 | -294,4536 | 280,7764 | 323,264 | -347,8376 | 323,264 | 0 | 0,0000 | 323,264 | p/p red : |
| | | 11 | -31,09469 | -457,1921 | 408,7455 | -384,2043 | 358,028 | 408,7455 | -457,1921 | 408,7455 | 0 | 0,0000 | 408,7455 | -0,929353238 |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| 7 | 55 | 0 | -138,7017 | 135,3897 | -363,7722 | 134,4927 | -293,3604 | 135,3897 | -363,7722 | -363,7722 | 9 | -26,7794 | -336,9928 | M - maks : |
| | | 0,45 | -96,59917 | 137,9236 | -297,5489 | 130,3359 | -242,9262 | 137,9236 | -297,5489 | -297,5489 | 9 | -26,7794 | -270,7695 | -297,5489 |
| | | 1,06 | -42,40932 | 139,121 | -210,0169 | 123,5157 | -175,7454 | 139,121 | -210,0169 | -210,0169 | 9 | -26,7794 | -183,2375 | M + maks |
| | | 1,67 | 4,793731 | 134,8952 | -127,9082 | 113,8219 | -111,4381 | 134,8952 | -127,9082 | -127,9082 | 9 | -26,7794 | -101,1288 | 139,121 |
| | | 2,28 | 41,86835 | 122,8076 | -53,66116 | 99,96245 | -51,29649 | 122,8076 | -53,66116 | -53,66116 | 9 | -26,7794 | -26,88176 | p/p : |
| | | 2,89 | 70,90459 | 104,4806 | 14,34639 | 82,79698 | 5,539111 | 104,4806 | 5,539111 | 5,539111 | 9 | -26,7794 | 32,318512 | -0,467556761 |
| | | 3,5 | 95,92011 | 83,03264 | 79,23303 | 63,97787 | 60,72107 | 83,03264 | 60,72107 | 60,72107 | 9 | -26,7794 | 87,500471 | |
| | | 4,11 | 73,01825 | 19,78939 | 102,3244 | 9,674687 | 80,41895 | 102,3244 | 9,674687 | 104,4806 | 9 | -26,7794 | 131,26 | M - red maks : |
| | | 4,72 | 46,09569 | -46,57474 | 122,2948 | -46,28214 | 98,46319 | 122,2948 | -46,57474 | 122,8076 | 9 | -26,7794 | 149,587 | -270,769499 |
| | | 5,33 | 11,13474 | -119,1783 | 136,0258 | -105,545 | 113,2014 | 136,0258 | -119,1783 | 134,8952 | 9 | -26,7794 | 161,6746 | M + red maks : |
| | | 5,94 | -33,95464 | -199,6437 | 141,895 | -168,9735 | 123,7739 | 141,895 | -199,6437 | 139,121 | 9 | -26,7794 | 165,9004 | 165,900401 |
| | | 6,55 | -86,03082 | -285,5323 | 142,341 | -235,2756 | 131,473 | 142,341 | -285,5323 | 137,9236 | 9 | -26,7794 | 164,703 | p/p red : |
| 7 | -126,5741 | -350,5432 | 141,0195 | -285,0615 | 136,278 | 141,0195 | -350,5432 | 135,3897 | 9 | -26,7794 | 162,1691 | -0,612699738 | | |

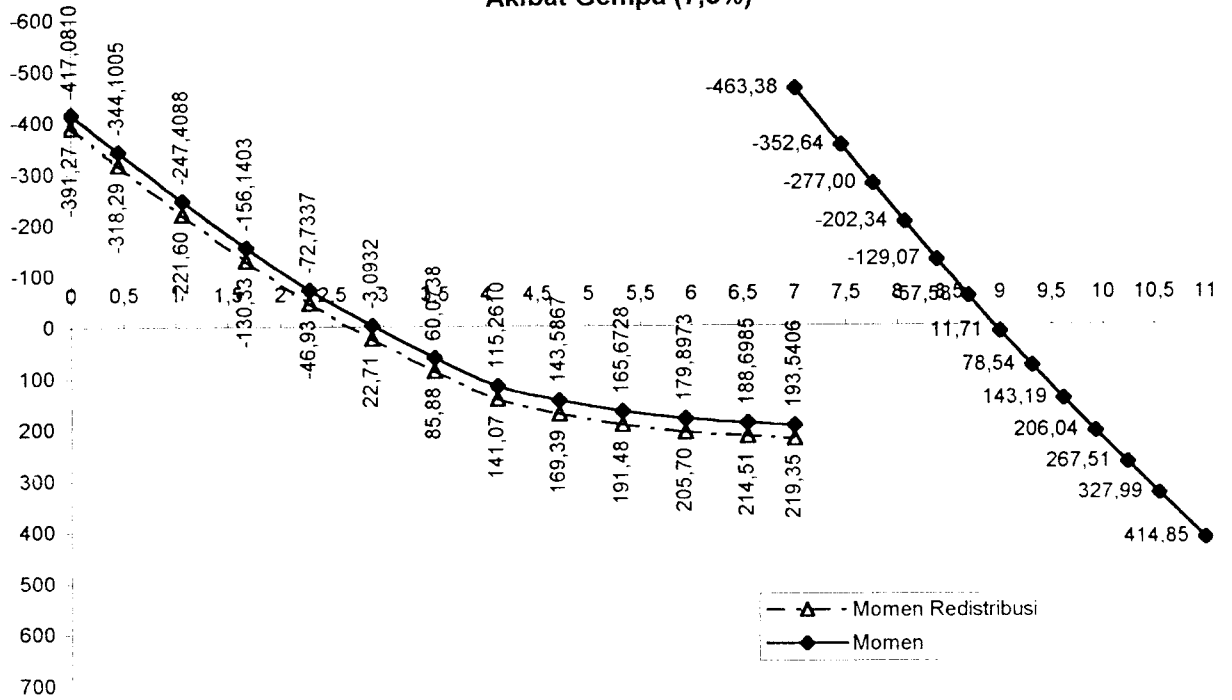
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|--------------|
| 7 | 67 | 7 | -31,05481 | 291,9471 | -340,332 | 257,9046 | -284,0489 | 291,9471 | -340,332 | -340,332 | 0 | 0,0000 | -340,332 | M - maks : |
| | | 7,45 | -15,6435 | 232,7522 | -257,2641 | 203,1844 | -216,8295 | 232,7522 | -257,2641 | -257,2641 | 0 | 0,0000 | -257,2641 | -257,2641 |
| | | 7,76 | -5,854372 | 191,3325 | -200,6805 | 165,1527 | -170,8584 | 191,3325 | -200,6805 | -200,6805 | 0 | 0,0000 | -200,6805 | M + maks |
| | | 8,07 | 2,66264 | 148,9275 | -145,0822 | 126,6052 | -125,4032 | 148,9275 | -145,0822 | -145,0822 | 0 | 0,0000 | -145,0822 | 232,7522 |
| | | 8,38 | 9,388653 | 105,1354 | -90,87113 | 87,33131 | -80,67428 | 105,1354 | -90,87113 | -90,87113 | 0 | 0,0000 | -90,87113 | p/p |
| | | 8,69 | 13,80478 | 59,55415 | -38,4491 | 47,12074 | -36,88205 | 59,55415 | -38,4491 | -38,4491 | 0 | 0,0000 | -38,4491 | -0,904720869 |
| | | 9 | 15,39213 | 11,78197 | 11,78197 | 5,763049 | 5,763049 | 11,78197 | 5,763049 | 11,78197 | 0 | 0,0000 | 11,78197 | |
| | | 9,31 | 13,80478 | -38,4491 | 59,55415 | -36,88205 | 47,12074 | 59,55415 | -38,4491 | 59,55415 | 0 | 0,0000 | 59,55415 | M - red maks |
| | | 9,62 | 9,388653 | -90,87113 | 105,1354 | -80,67428 | 87,33131 | 105,1354 | -90,87113 | 105,1354 | 0 | 0,0000 | 105,1354 | -257,2641 |
| | | 9,93 | 2,66264 | -145,0822 | 148,9275 | -125,4032 | 126,6052 | 148,9275 | -145,0822 | 148,9275 | 0 | 0,0000 | 148,9275 | M + red maks |
| | | 10,24 | -5,854372 | -200,6805 | 191,3325 | -170,8584 | 165,1527 | 191,3325 | -200,6805 | 191,3325 | 0 | 0,0000 | 191,3325 | 232,7522 |
| | | 10,55 | -15,6435 | -257,2641 | 232,7522 | -216,8295 | 203,1844 | 232,7522 | -257,2641 | 232,7522 | 0 | 0,0000 | 232,7522 | p/p red |
| 11 | -31,05481 | -340,332 | 291,9471 | -284,0489 | 257,9046 | 291,9471 | -340,332 | 291,9471 | 0 | 0,0000 | 291,9471 | -0,904720869 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|-----------|--------------|
| 10 | 58 | 0 | -139,7557 | 25,26771 | -255,2792 | 40,37921 | -200,0896 | 40,37921 | -255,2792 | -255,2792 | 13 | -26,3717 | -228,9075 | M - maks |
| | | 0,45 | -97,50932 | 41,82879 | -202,8589 | 48,21052 | -161,5218 | 48,21052 | -202,8589 | -202,8589 | 13 | -26,3717 | -176,4872 | -202,8589 |
| | | 1,06 | -43,12456 | 62,04082 | -134,0377 | 57,64076 | -110,4265 | 62,04082 | -134,0377 | -134,0377 | 13 | -26,3717 | -107,666 | M + maks |
| | | 1,67 | 4,273404 | 76,82965 | -70,63961 | 64,19746 | -62,20477 | 76,82965 | -70,63961 | -70,63961 | 13 | -26,3717 | -44,26795 | 84,44434 |
| | | 2,28 | 41,54293 | 83,75672 | -15,10333 | 66,58852 | -18,14867 | 83,75672 | -18,14867 | -18,14867 | 13 | -26,3717 | 8,222987 | p/p |
| | | 2,89 | 70,77408 | 84,44434 | 34,19349 | 65,67354 | 22,60139 | 84,44434 | 22,60139 | 22,60139 | 13 | -26,3717 | 48,973047 | -0,41627131 |
| | | 3,5 | 95,98452 | 82,01106 | 80,36942 | 63,10492 | 61,6978 | 82,01106 | 61,6978 | 61,6978 | 13 | -26,3717 | 88,069457 | |
| | | 4,11 | 73,27757 | 37,78247 | 84,75003 | 25,05222 | 65,31013 | 84,75003 | 25,05222 | 84,44434 | 13 | -26,3717 | 110,816 | M - red maks |
| | | 4,72 | 46,54992 | -9,567023 | 86,00975 | -14,65412 | 67,26882 | 86,00975 | -14,65412 | 83,75672 | 13 | -26,3717 | 110,12838 | -176,487243 |
| | | 5,33 | 11,78389 | -63,15596 | 81,03001 | -57,6665 | 65,92148 | 81,03001 | -63,15596 | 76,82965 | 13 | -26,3717 | 103,20131 | M + red maks |
| | | 5,94 | -33,11058 | -124,6067 | 68,18852 | -104,8445 | 60,4085 | 68,18852 | -124,6067 | 62,04082 | 13 | -26,3717 | 88,412477 | 110,815997 |
| | | 6,55 | -84,99185 | -191,4806 | 49,92382 | -154,8961 | 52,02197 | 52,02197 | -191,4806 | 48,21052 | 13 | -26,3717 | 74,582177 | p/p red |
| 7 | -125,3914 | -242,4644 | 34,79929 | -192,6939 | 44,96061 | 44,96061 | -242,4644 | 40,37921 | 13 | -26,3717 | 66,750867 | -0,627898057 | | |

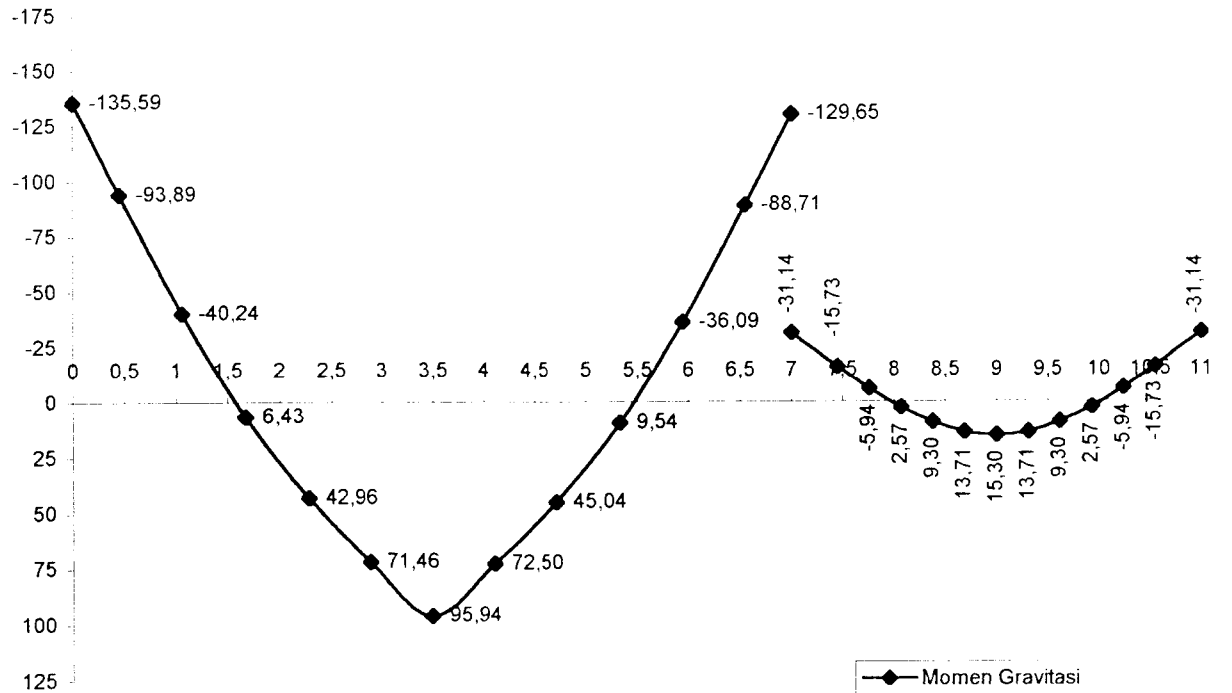
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| 10 | 70 | 7 | -31,11724 | 111,0961 | -159,5995 | 102,8776 | -129,1472 | 111,0961 | -159,5995 | -159,5995 | 0 | 0,0000 | -159,5995 | M - maks |
| | | 7,45 | -15,70593 | 92,57933 | -117,2097 | 83,02437 | -96,79484 | 92,57933 | -117,2097 | -117,2097 | 0 | 0,0000 | -117,2097 | -117,2097 |
| | | 7,76 | -5,916804 | 79,18236 | -88,6489 | 69,01214 | -74,84322 | 79,18236 | -88,6489 | -88,6489 | 0 | 0,0000 | -88,6489 | M + maks |
| | | 8,07 | 2,600208 | 64,80011 | -61,07334 | 54,48404 | -53,40748 | 64,80011 | -61,07334 | -61,07334 | 0 | 0,0000 | -61,07334 | 92,57933 |
| | | 8,38 | 9,326221 | 49,03068 | -34,88495 | 39,22966 | -32,69802 | 49,03068 | -34,88495 | -34,88495 | 0 | 0,0000 | -34,88495 | p/p : |
| | | 8,69 | 13,74235 | 31,47218 | -10,48564 | 23,03857 | -12,92527 | 31,47218 | -12,92527 | -12,92527 | 0 | 0,0000 | -12,92527 | -0,789860651 |
| | | 9 | 15,3297 | 11,72272 | 11,72272 | 5,700355 | 5,700355 | 11,72272 | 5,700355 | 11,72272 | 0 | 0,0000 | 11,72272 | |
| | | 9,31 | 13,74235 | -10,48564 | 31,47218 | -12,92527 | 23,03857 | 31,47218 | -12,92527 | 31,47218 | 0 | 0,0000 | 31,47218 | M - red maks : |
| | | 9,62 | 9,326221 | -34,88495 | 49,03068 | -32,69802 | 39,22966 | 49,03068 | -34,88495 | 49,03068 | 0 | 0,0000 | 49,03068 | -117,2097 |
| | | 9,93 | 2,600208 | -61,07334 | 64,80011 | -53,40748 | 54,48404 | 64,80011 | -61,07334 | 64,80011 | 0 | 0,0000 | 64,80011 | M + red maks : |
| | | 10,24 | -5,916804 | -88,6489 | 79,18236 | -74,84322 | 69,01214 | 79,18236 | -88,6489 | 79,18236 | 0 | 0,0000 | 79,18236 | 92,57933 |
| | | 10,55 | -15,70593 | -117,2097 | 92,57933 | -96,79484 | 83,02437 | 92,57933 | -117,2097 | 92,57933 | 0 | 0,0000 | 92,57933 | p/p red : |
| 11 | -31,11724 | -159,5995 | 111,0961 | -129,1472 | 102,8776 | 111,0961 | -159,5995 | 111,0961 | 0 | 0,0000 | 111,0961 | -0,789860651 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|------------|---------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|----------------|
| 12 | 60 | 0 | -107,8325 | -11,79233 | -170,2915 | -1,592331 | -137,4488 | -1,592331 | -170,2915 | -170,2915 | 10 | -13,3087 | -156,9829 | M - maks : |
| | | 0,45 | -75,69987 | 5,147804 | -133,0865 | 10,24452 | -108,242 | 10,24452 | -133,0865 | -133,0865 | 10 | -13,3087 | -119,7779 | -133,0865 |
| | | 1,06 | -34,07235 | 26,53622 | -84,22794 | 25,23305 | -69,70766 | 26,53622 | -84,22794 | -84,22794 | 10 | -13,3087 | -70,91929 | M + maks : |
| | | 1,67 | 2,877068 | 44,10738 | -39,18663 | 37,65961 | -33,73526 | 44,10738 | -39,18663 | -39,18663 | 10 | -13,3087 | -25,87798 | 63,79052 |
| | | 2,28 | 33,04483 | 56,14485 | 0,3209739 | 46,37221 | -1,47683 | 56,14485 | -1,47683 | -1,47683 | 10 | -13,3087 | 11,83182 | p/p : |
| | | 2,89 | 57,83037 | 63,79052 | 35,43679 | 52,13723 | 27,83403 | 63,79052 | 27,83403 | 27,83403 | 10 | -13,3087 | 41,14268 | -0,479316234 |
| | | 3,5 | 79,92377 | 69,23946 | 68,35588 | 56,42792 | 55,67056 | 69,23946 | 55,67056 | 55,67056 | 10 | -13,3087 | 68,97921 | |
| | | 4,11 | 60,16441 | 38,1202 | 64,70676 | 29,51061 | 52,29909 | 64,70676 | 29,51061 | 63,79052 | 10 | -13,3087 | 77,09917 | M - red maks : |
| | | 4,72 | 37,71292 | 4,80421 | 58,86091 | 1,118963 | 47,45328 | 58,86091 | 1,118963 | 56,14485 | 10 | -13,3087 | 69,4535 | -119,77785 |
| | | 5,33 | 9,879214 | -32,90357 | 48,62327 | -30,22025 | 39,6599 | 48,62327 | -32,90357 | 44,10738 | 10 | -13,3087 | 57,41603 | M + red maks : |
| | | 5,94 | -24,73615 | -76,14506 | 32,85193 | -65,27344 | 28,15255 | 32,85193 | -76,14506 | 26,53622 | 10 | -13,3087 | 39,84487 | 77,09917 |
| | | 6,55 | -64,02963 | -123,2038 | 13,26334 | -102,8886 | 14,08325 | 14,08325 | -123,2038 | 10,24452 | 10 | -13,3087 | 23,55317 | p/p red : |
| | | 7 | -94,44043 | -159,0811 | -2,349051 | -131,4172 | 2,924506 | 2,924506 | -159,0811 | -1,592331 | 10 | -13,3087 | 11,716319 | -0,643684705 |
| | | 12 | 72 | 7 | -22,92105 | 17,01664 | -54,76856 | 17,61987 | -43,9103 | 17,61987 | -54,76856 | -54,76856 | 10 | -3,8368 |
| 7,45 | -12,6997 | | | 17,26512 | -38,36841 | 16,24019 | -31,44569 | 17,26512 | -38,36841 | -38,36841 | 10 | -3,8368 | -34,53157 | -38,36841 |
| 7,76 | -6,207185 | | | 16,98929 | -27,51752 | 14,99212 | -23,15658 | 16,98929 | -27,51752 | -27,51752 | 10 | -3,8368 | -23,68068 | M + maks : |
| 8,07 | -0,5583856 | | | 16,02635 | -17,35377 | 13,28656 | -15,32497 | 16,02635 | -17,35377 | -17,35377 | 10 | -3,8368 | -13,51693 | 17,26512 |
| 8,38 | 3,902556 | | | 14,09601 | -8,157402 | 10,93689 | -8,137461 | 14,09601 | -8,157402 | -8,157402 | 10 | -3,8368 | -4,320561 | p/p : |
| 8,69 | 6,831494 | | | 10,918 | -0,20871 | 7,756501 | -1,780674 | 10,918 | -1,780674 | -1,780674 | 10 | -3,8368 | 2,056167 | -0,449982681 |
| 9 | 7,884284 | | | 6,212039 | 6,212039 | 3,558782 | 3,558782 | 6,212039 | 3,558782 | 6,212039 | 10 | -3,8368 | 10,04888 | |
| 9,31 | 6,831494 | | | -0,2087096 | 10,918 | -1,780674 | 7,756501 | 10,918 | -1,780674 | 10,918 | 10 | -3,8368 | 14,754841 | M - red maks : |
| 9,62 | 3,902556 | | | -8,157402 | 14,09601 | -8,137461 | 10,93689 | 14,09601 | -8,157402 | 14,09601 | 10 | -3,8368 | 17,932851 | -34,531569 |
| 9,93 | -0,5583856 | | | -17,35377 | 16,02635 | -15,32497 | 13,28656 | 16,02635 | -17,35377 | 16,02635 | 10 | -3,8368 | 19,863191 | M + red maks : |
| 10,24 | -6,207185 | | | -27,51752 | 16,98929 | -23,15658 | 14,99212 | 16,98929 | -27,51752 | 16,98929 | 10 | -3,8368 | 20,826131 | 21,101961 |
| 10,55 | -12,6997 | | | -38,36841 | 17,26512 | -31,44569 | 16,24019 | 17,26512 | -38,36841 | 17,26512 | 10 | -3,8368 | 21,101961 | p/p red : |
| 11 | -22,92105 | | | -54,76856 | 17,01664 | -43,9103 | 17,61987 | 17,61987 | -54,76856 | 17,61987 | 10 | -3,8368 | 21,456711 | -0,611091868 |

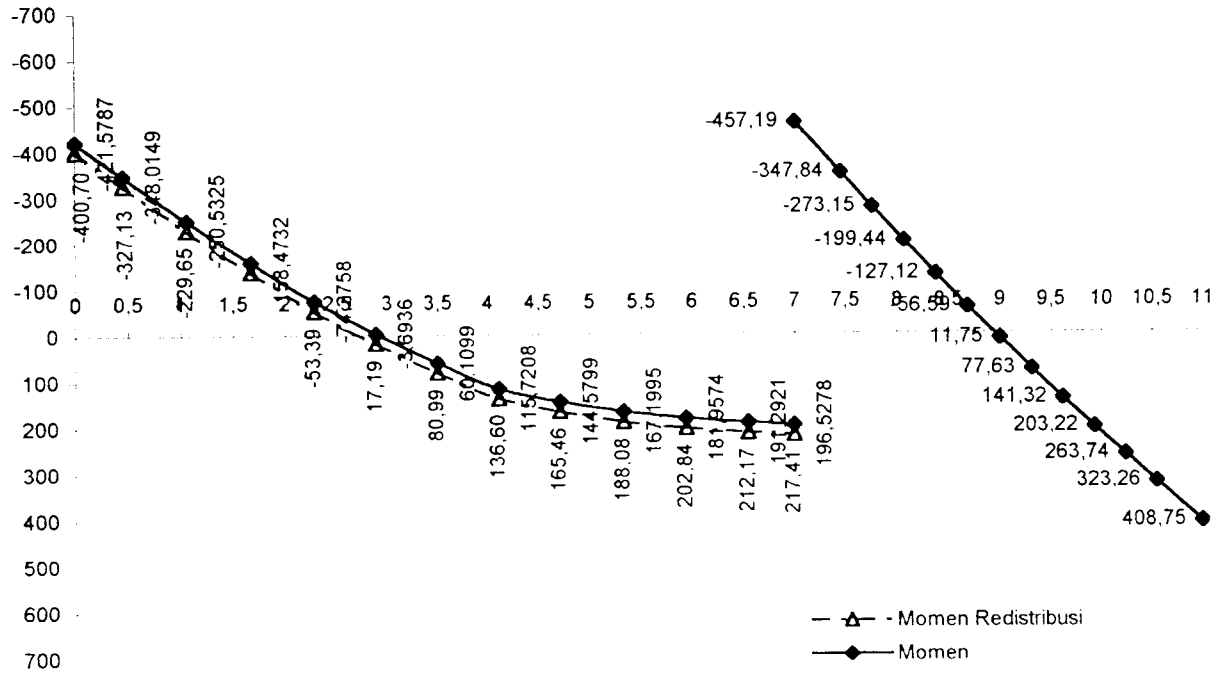
**Grafik Momen Lantai 3
Akibat Gempa (7,5%)**



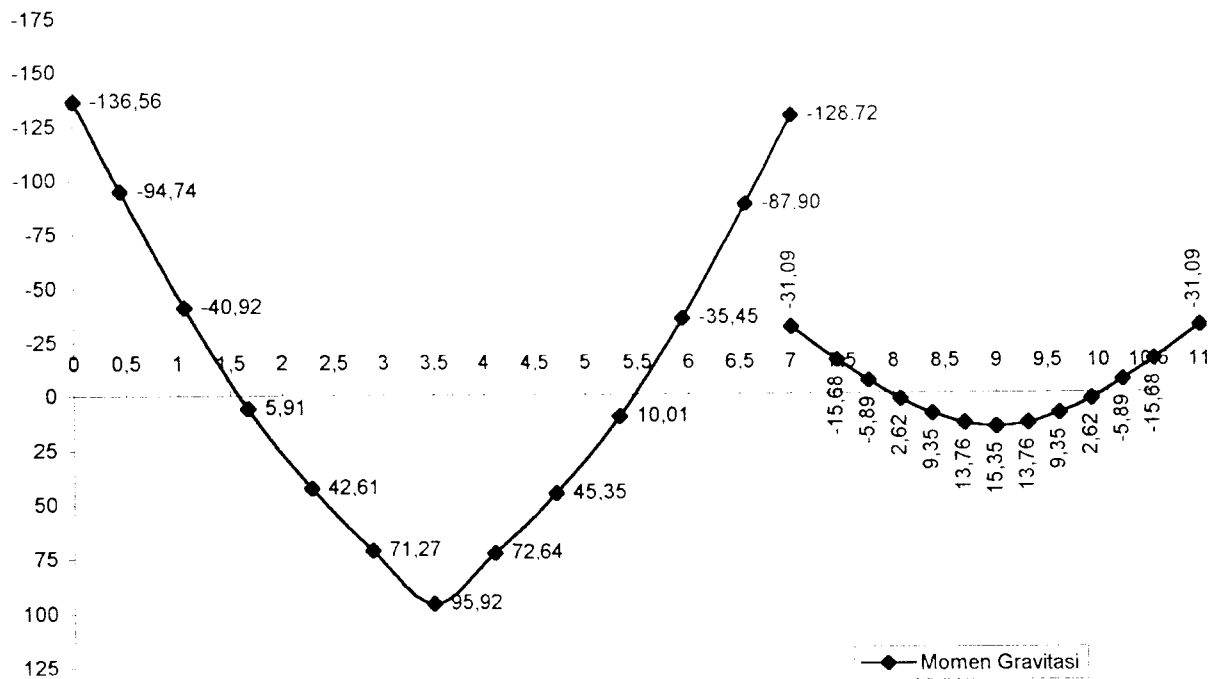
**Grafik Momen Lantai 3
Akibat Berat Sendiri**



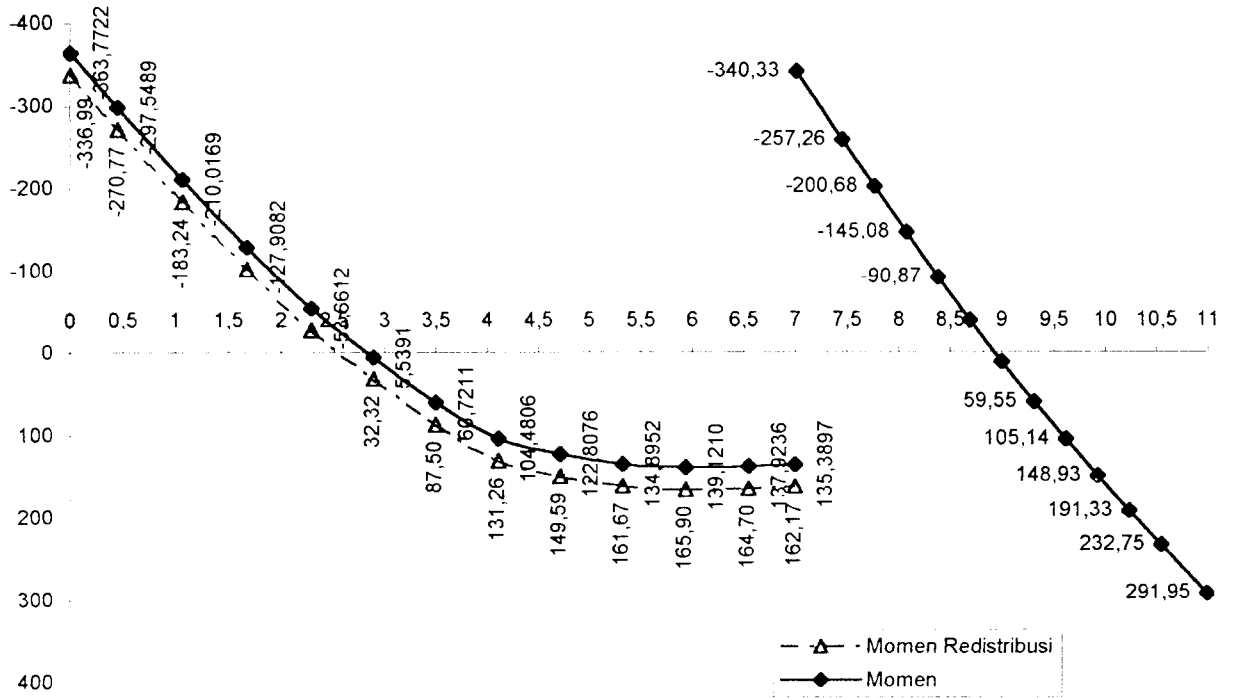
Grafik Momen Lantai 4
Akibat Gempa (6%)



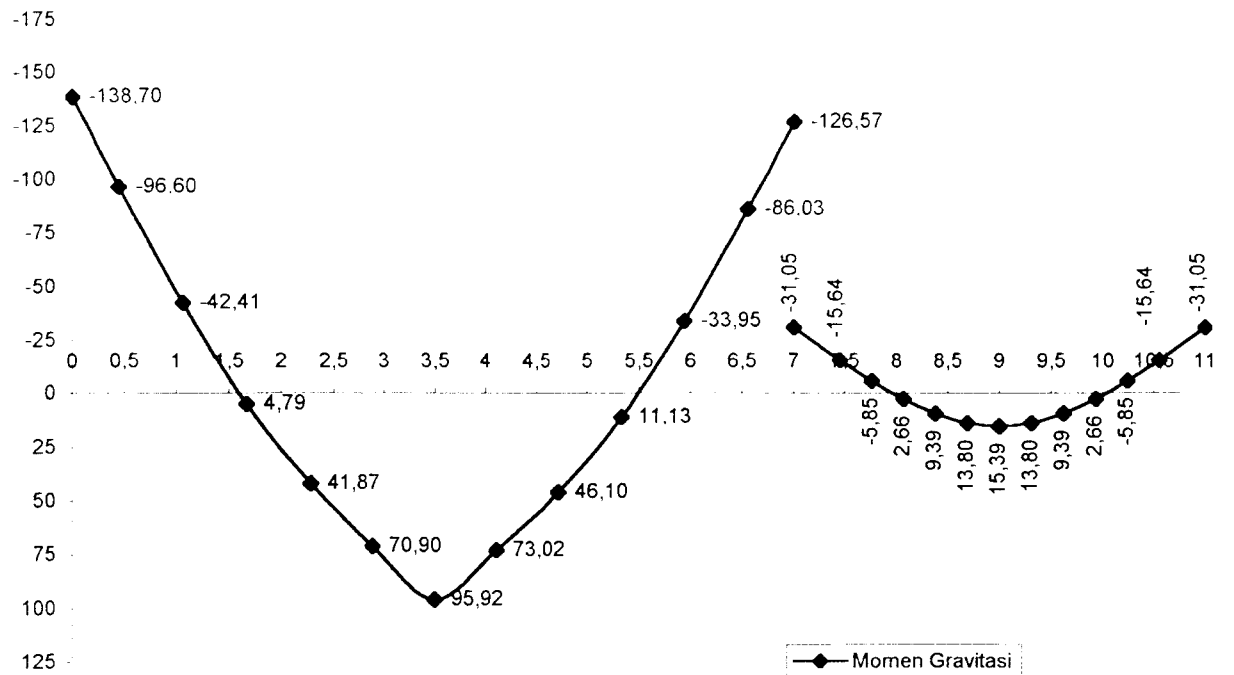
Grafik Momen Lantai 4
Akibat Berat Sendiri



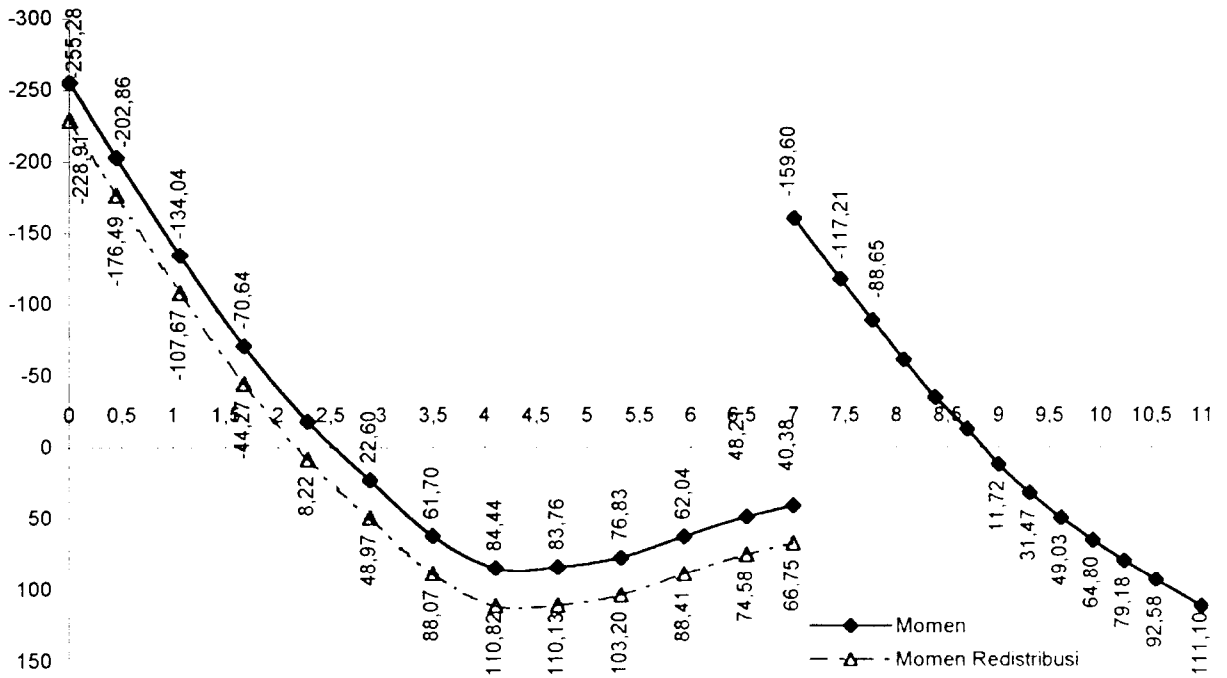
Grafik Momen Lantai 7
Akibat Gempa (9%)



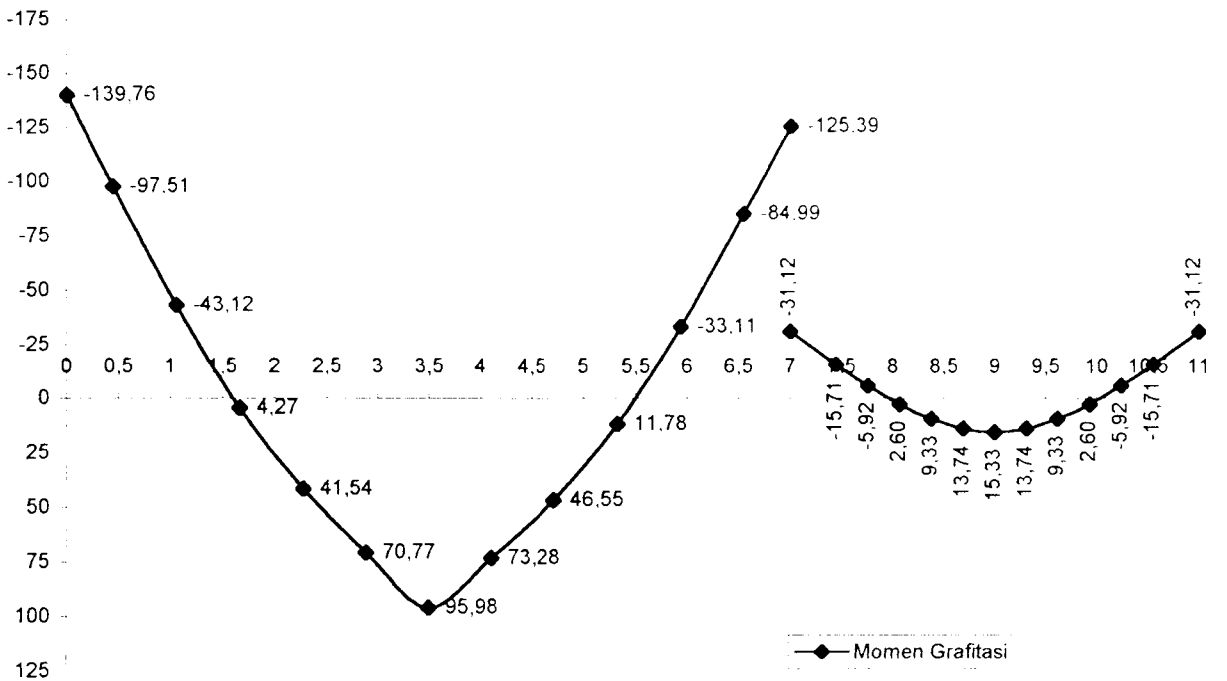
Grafik Momen Lantai 7
Akibat Berat Sendiri



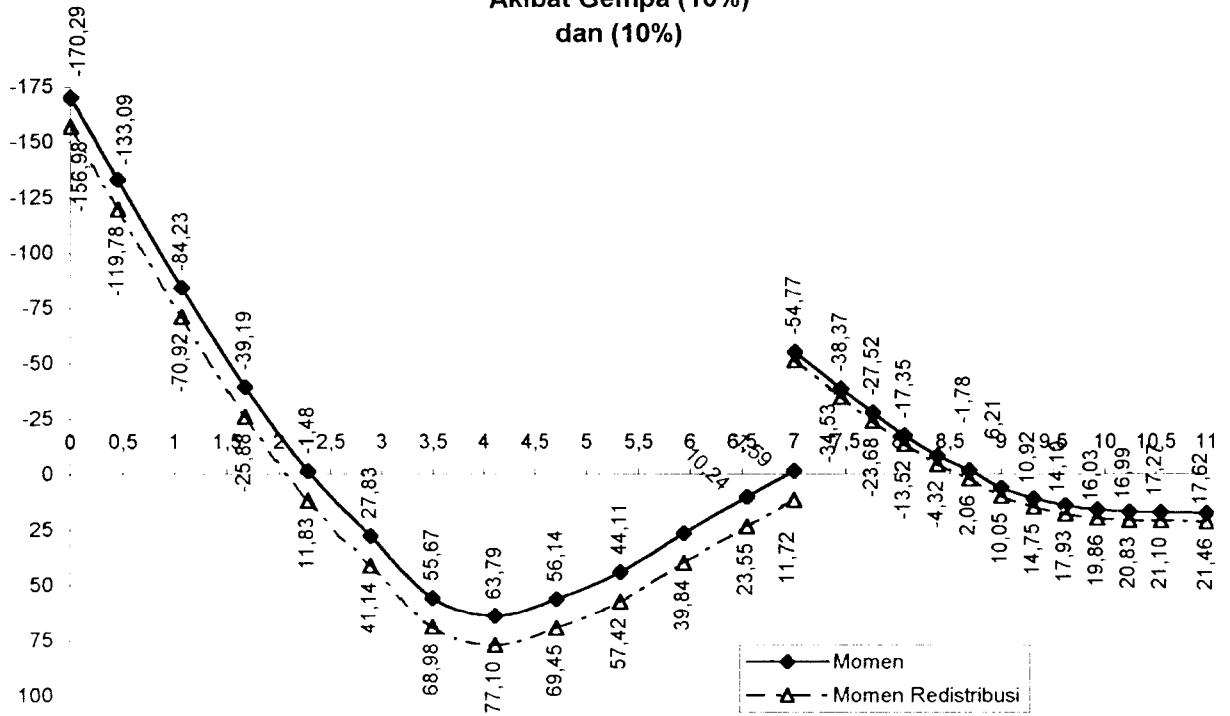
Grafik Momen Lantai 10
Akibat Gempa (13%)



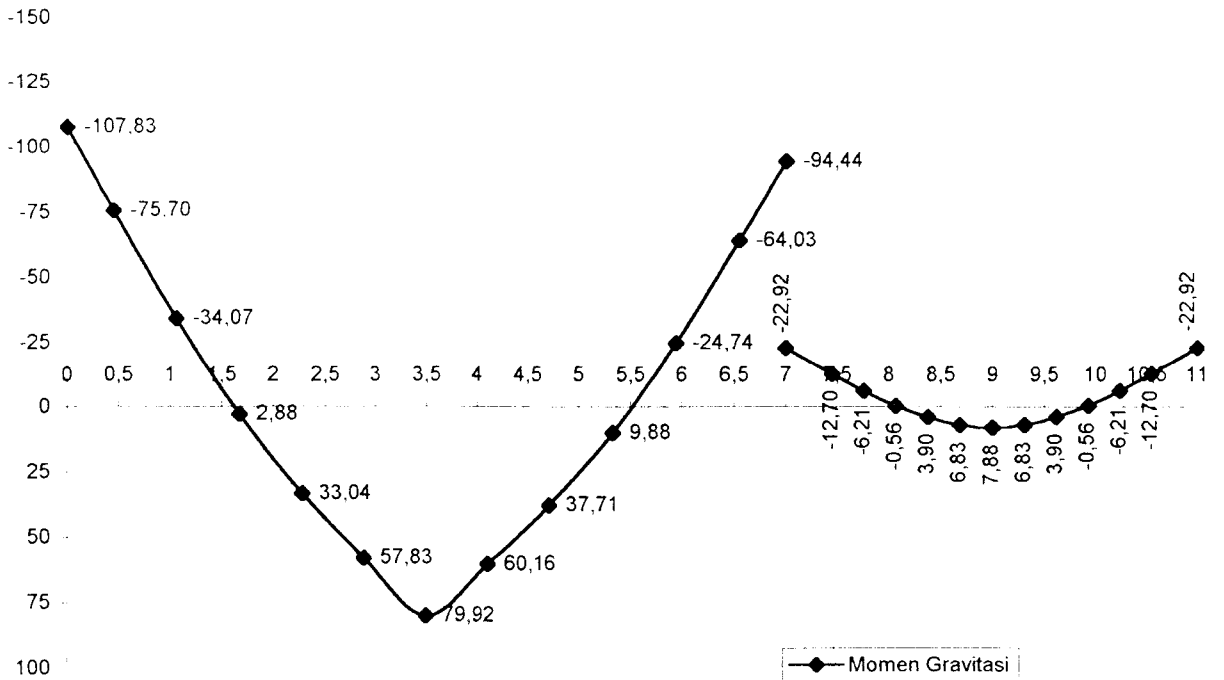
Grafik Momen Lantai 10
Akibat Berat Sendiri



**Grafik Momen Lantai 12
Akibat Gempa (10%)
dan (10%)**



**Momen Akibat Lantai 12
Akibat Berat Sendiri**



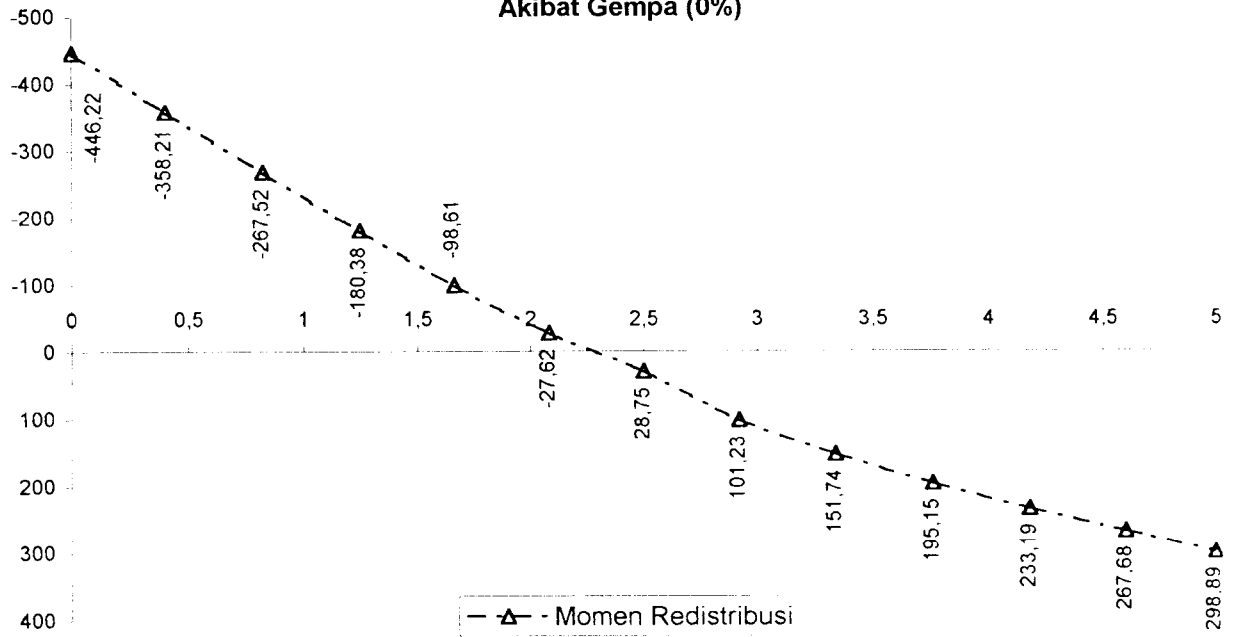
Tabel 3.2.1.2 Momen Redistribusi Balok untuk R/W 2/2 Lama Portal 2

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| 3 | 147 | 0 | -90,20245 | 298,8784 | -446,216 | 269,7028 | -368,9496 | 298,8784 | -446,216 | -446,216 | 0 | 0,0000 | -446,216 | M - maks : |
| | | 0,4 | -55,4307 | 267,6695 | -358,2101 | 237,7407 | -298,7276 | 267,6695 | -358,2101 | -358,2101 | 0 | 0,0000 | -358,2101 | -358,2101 |
| | | 0,82 | -21,02441 | 233,1817 | -267,5224 | 203,0227 | -226,1523 | 233,1817 | -267,5224 | -267,5224 | 0 | 0,0000 | -267,5224 | M + maks : |
| | | 1,24 | 9,035825 | 195,1443 | -180,3843 | 165,9131 | -155,9686 | 195,1443 | -180,3843 | -180,3843 | 0 | 0,0000 | -180,3843 | 267,6814 |
| | | 1,66 | 32,52398 | 151,7391 | -98,61405 | 125,1867 | -89,40166 | 151,7391 | -98,61405 | -98,61405 | 0 | 0,0000 | -98,61405 | p/p : |
| | | 2,08 | 47,30769 | 101,2246 | -23,95303 | 79,67082 | -27,6243 | 101,2246 | -27,6243 | -27,6243 | 0 | 0,0000 | -27,6243 | -0,747274854 |
| | | 2,5 | 52,26928 | 42,68874 | 42,68661 | 28,75279 | 28,75096 | 42,68874 | 28,75096 | 28,75096 | 0 | 0,0000 | 28,75096 | |
| | | 2,92 | 47,31112 | -23,94809 | 101,2253 | -27,62055 | 79,67091 | 101,2253 | -27,62055 | 101,2253 | 0 | 0,0000 | 101,2253 | M - red maks : |
| | | 3,34 | 32,53084 | -98,60629 | 151,7426 | -89,396 | 125,1888 | 151,7426 | -98,60629 | -98,60629 | 0 | 0,0000 | 151,7426 | -358,2101 |
| | | 3,76 | 9,046103 | -180,3738 | 195,1506 | -155,9611 | 165,917 | 195,1506 | -180,3738 | 195,1506 | 0 | 0,0000 | 195,1506 | M + red maks : |
| | | 4,18 | -21,01071 | -267,509 | 233,1908 | -226,1428 | 203,0285 | 233,1908 | -267,509 | 233,1908 | 0 | 0,0000 | 233,1908 | 267,6814 |
| 4,6 | -55,41357 | -358,194 | 267,6814 | -298,7161 | 237,7485 | 267,6814 | -358,194 | 267,6814 | 0 | 0,0000 | 267,6814 | p/p red : | | |
| 5 | -90,18205 | -446,1972 | 298,8929 | -368,9363 | 269,7123 | 298,8929 | -446,1972 | 298,8929 | 0 | 0,0000 | 298,8929 | -0,747274854 | | |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 4 | 148 | 0 | -90,20512 | 292,3355 | -439,6776 | 264,095 | -363,3448 | 292,3355 | -439,6776 | -439,6776 | 0 | 0,0000 | -439,6776 | M - maks : |
| | | 0,4 | -55,43288 | 262,1737 | -352,7178 | 233,0303 | -294,0196 | 262,1737 | -352,7178 | -352,7178 | 0 | 0,0000 | -352,7178 | -352,7178 |
| | | 0,82 | -21,02606 | 228,7852 | -263,1286 | 199,2545 | -222,3859 | 228,7852 | -263,1286 | -263,1286 | 0 | 0,0000 | -263,1286 | M + maks : |
| | | 1,24 | 9,034702 | 191,8471 | -177,0889 | 163,087 | -153,1439 | 191,8471 | -177,0889 | -177,0889 | 0 | 0,0000 | -177,0889 | 262,1892 |
| | | 1,66 | 32,52338 | 149,5412 | -96,41711 | 123,3029 | -87,51849 | 149,5412 | -96,41711 | -96,41711 | 0 | 0,0000 | -96,41711 | p/p : |
| | | 2,08 | 47,30761 | 100,126 | -22,85454 | 78,72917 | -26,68273 | 100,126 | -26,68273 | -26,68273 | 0 | 0,0000 | -26,68273 | -0,74333986 |
| | | 2,5 | 52,26973 | 42,68945 | 42,68665 | 28,75333 | 28,75093 | 42,68945 | 28,75093 | 28,75093 | 0 | 0,0000 | 28,75093 | |
| | | 2,92 | 47,31209 | -22,84808 | 100,1269 | -26,67782 | 78,72927 | 100,1269 | -26,67782 | 100,1269 | 0 | 0,0000 | 100,1269 | M - red maks : |
| | | 3,34 | 32,53234 | -96,40698 | 149,5457 | -87,51108 | 123,3055 | 149,5457 | -96,40698 | -96,40698 | 0 | 0,0000 | 149,5457 | -352,7178 |
| | | 3,76 | 9,048127 | -177,0751 | 191,8553 | -153,1339 | 163,0921 | 191,8553 | -177,0751 | 191,8553 | 0 | 0,0000 | 191,8553 | M + red maks : |
| | | 4,18 | -21,00816 | -263,1111 | 228,7971 | -222,3735 | 199,2621 | 228,7971 | -263,1111 | 228,7971 | 0 | 0,0000 | 228,7971 | 262,1892 |
| 4,6 | -55,4105 | -352,6967 | 262,1892 | -294,0046 | 233,0404 | 262,1892 | -352,6967 | 262,1892 | 0 | 0,0000 | 262,1892 | p/p red : | | |
| 5 | -90,17848 | -439,653 | 292,3546 | -363,3275 | 264,1075 | 292,3546 | -439,653 | 292,3546 | 0 | 0,0000 | 292,3546 | -0,74333986 | | |

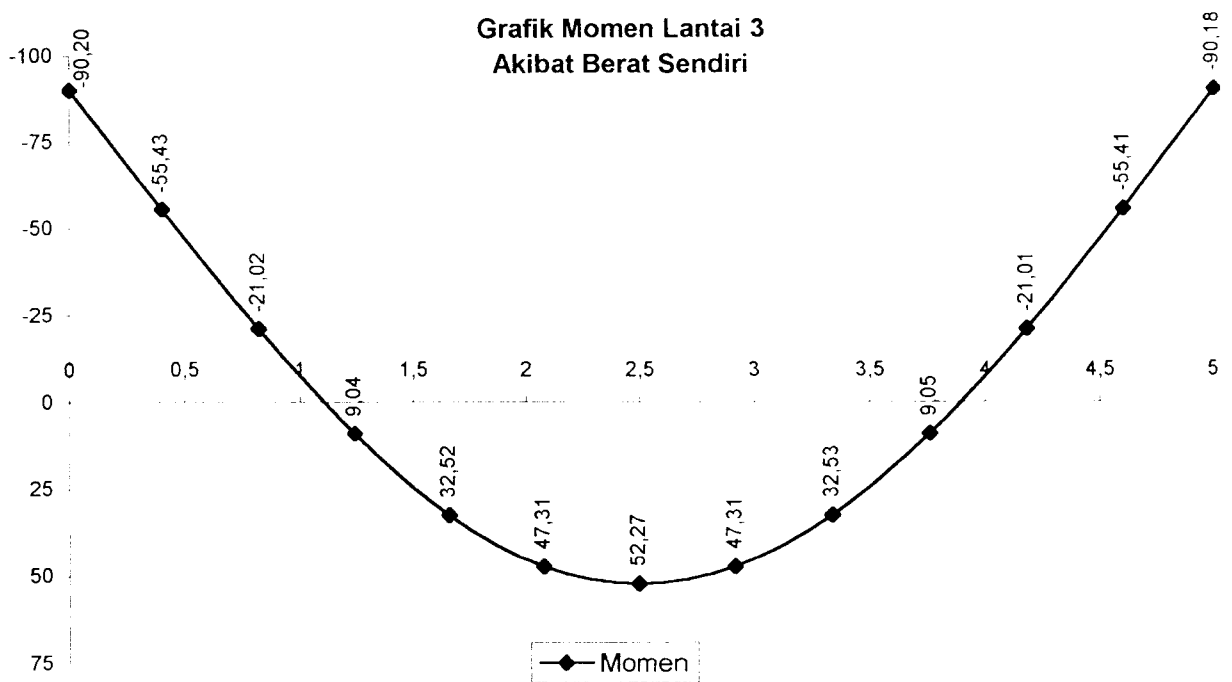
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|--------------|------------|----------------|
| 7 | 151 | 0 | -90,21189 | 207,3602 | -354,7134 | 191,26 | -290,5174 | 207,3602 | -354,7134 | -354,7134 | 0 | 0,0000 | -354,7134 | M - maks : |
| | | 0,4 | -55,43839 | 190,7946 | -281,3479 | 171,8491 | -232,8445 | 190,7946 | -281,3479 | -281,3479 | 0 | 0,0000 | -281,3479 | -281,3479 |
| | | 0,82 | -21,03024 | 171,6823 | -206,0326 | 150,3098 | -173,4459 | 171,6823 | -206,0326 | -206,0326 | 0 | 0,0000 | -206,0326 | M + maks : |
| | | 1,24 | 9,031844 | 149,0204 | -134,2669 | 126,3788 | -116,4389 | 149,0204 | -134,2669 | -134,2669 | 0 | 0,0000 | -134,2669 | 190,8194 |
| | | 1,66 | 32,52185 | 120,9906 | -67,86906 | 98,83121 | -63,04851 | 120,9906 | -67,86906 | -67,86906 | 0 | 0,0000 | -67,86906 | p/p : |
| | | 2,08 | 47,30741 | 85,85159 | -8,580468 | 66,49399 | -14,44777 | 85,85159 | -14,44777 | -14,44777 | 0 | 0,0000 | -14,44777 | -0,678232892 |
| | | 2,5 | 52,27085 | 42,69118 | 42,68674 | 28,75466 | 28,75085 | 42,69118 | 28,75085 | 28,75085 | 0 | 0,0000 | 28,75085 | |
| | | 2,92 | 47,31454 | -8,570185 | 85,85299 | -14,43998 | 66,49417 | 85,85299 | -14,43998 | 85,85299 | 0 | 0,0000 | 85,85299 | M - red maks : |
| | | 3,34 | 32,53611 | -67,85294 | 120,9979 | -63,03672 | 98,83538 | 120,9979 | -67,85294 | 120,9979 | 0 | 0,0000 | 120,9979 | -281,3479 |
| | | 3,76 | 9,053231 | -134,245 | 149,0335 | -116,4231 | 126,387 | 149,0335 | -134,245 | 149,0335 | 0 | 0,0000 | 149,0335 | M + red maks : |
| | | 4,18 | -21,00173 | -206,0048 | 171,7013 | -173,4261 | 150,3219 | 171,7013 | -206,0048 | 171,7013 | 0 | 0,0000 | 171,7013 | 190,8194 |
| 4,6 | -55,40274 | -281,3142 | 190,8194 | -232,8208 | 171,8652 | 190,8194 | -281,3142 | 190,8194 | 0 | 0,0000 | 190,8194 | p/p red : | | |
| 5 | -90,16946 | -354,6742 | 207,3905 | -290,4898 | 191,2799 | 207,3905 | -354,6742 | 207,3905 | 0 | 0,0000 | 207,3905 | -0,678232892 | | |
| 10 | 154 | 0 | -90,21556 | 69,09517 | -216,4544 | 72,74761 | -172,0091 | 72,74761 | -216,4544 | -216,4544 | 5 | -17,9105 | -198,5439 | M - maks : |
| | | 0,4 | -55,44134 | 74,65223 | -165,2103 | 72,29884 | -133,2976 | 74,65223 | -165,2103 | -165,2103 | 5 | -17,9105 | -147,2998 | -165,2103 |
| | | 0,82 | -21,03245 | 78,76865 | -113,1225 | 70,66978 | -93,80834 | 78,76865 | -113,1225 | -113,1225 | 5 | -17,9105 | -95,211995 | M + maks : |
| | | 1,24 | 9,030391 | 79,33541 | -64,58435 | 66,64905 | -56,71074 | 79,33541 | -64,58435 | -64,58435 | 5 | -17,9105 | -46,673845 | 79,35099 |
| | | 1,66 | 32,52115 | 74,53439 | -21,414 | 59,01169 | -23,22979 | 74,53439 | -23,22979 | -23,22979 | 5 | -17,9105 | -5,319285 | p/p : |
| | | 2,08 | 47,30745 | 62,6241 | 14,64709 | 46,5847 | 5,461551 | 62,6241 | 5,461551 | 5,461551 | 5 | -17,9105 | 23,372056 | -0,480302923 |
| | | 2,5 | 52,27164 | 42,69243 | 42,6868 | 28,75561 | 28,75079 | 42,69243 | 28,75079 | 28,75079 | 5 | -17,9105 | 46,661295 | |
| | | 2,92 | 47,31608 | 14,65979 | 62,62554 | 5,471209 | 46,58471 | 62,62554 | 5,471209 | 62,62554 | 5 | -17,9105 | 80,536045 | M - red maks : |
| | | 3,34 | 32,53384 | -21,39423 | 74,5429 | -23,2153 | 59,01652 | 74,5429 | -23,2153 | 74,5429 | 5 | -17,9105 | 92,453405 | -147,299795 |
| | | 3,76 | 9,05627 | -64,55751 | 79,35099 | -56,69142 | 66,65871 | 79,35099 | -64,55751 | 79,35099 | 5 | -17,9105 | 97,261495 | M + red maks : |
| | | 4,18 | -20,99794 | -113,0886 | 78,7913 | -93,78419 | 70,68427 | 78,7913 | -113,0886 | 78,7913 | 5 | -17,9105 | 96,701805 | 97,261495 |
| 4,6 | -55,3982 | -165,1693 | 74,68195 | -133,2686 | 72,31817 | 74,68195 | -165,1693 | 74,68195 | 5 | -17,9105 | 92,592455 | p/p red : | | |
| 5 | -90,16422 | -152,5833 | 72,06265 | -123,7437 | -7,824912 | 72,06265 | -152,5833 | 72,06265 | 5 | -17,9105 | 89,973155 | -0,660296201 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|---|------------|------------|----------------|
| 12 | 156 | 0 | -72,87655 | -3,522608 | -119,804 | 2,390072 | -97,27969 | 2,390072 | -119,804 | -119,804 | 2 | -7,164202 | -112,6398 | M - maks : |
| | | 0,4 | -44,78253 | 10,9472 | -86,7309 | 12,70782 | -71,01626 | 12,70782 | -86,7309 | -86,7309 | 2 | -7,164202 | -79,566698 | -86,7309 |
| | | 0,82 | -16,984 | 24,70184 | -53,44278 | 22,43437 | -44,54673 | 24,70184 | -53,44278 | -53,44278 | 2 | -7,164202 | -46,278578 | M + maks : |
| | | 1,24 | 7,30264 | 35,48483 | -23,12631 | 29,87416 | -20,36396 | 35,48483 | -23,12631 | -23,12631 | 2 | -7,164202 | -15,962108 | 42,10625 |
| | | 1,66 | 26,27862 | 41,77412 | 2,696447 | 33,85593 | 0,3607824 | 41,77412 | 0,3607824 | 0,3607824 | 2 | -7,164202 | 7,5249844 | p/p : |
| | | 2,08 | 38,22134 | 42,11214 | 22,56795 | 33,25823 | 16,50607 | 42,11214 | 16,50607 | 16,50607 | 2 | -7,164202 | 23,670272 | -0,48548153 |
| | | 2,5 | 42,23032 | 35,73735 | 35,72663 | 27,49603 | 27,48684 | 35,73735 | 27,48684 | 27,48684 | 2 | -7,164202 | 34,651042 | |
| | | 2,92 | 38,22722 | 22,5835 | 42,10625 | 16,51856 | 33,25235 | 42,10625 | 16,51856 | 42,10625 | 2 | -7,164202 | 49,270452 | M - red maks : |
| | | 3,34 | 26,29038 | 2,716814 | 41,77304 | 0,3765856 | 33,85335 | 41,77304 | 0,3765856 | 41,77304 | 2 | -7,164202 | 48,937242 | -79,566698 |
| | | 3,76 | 7,320281 | -23,10112 | 35,48858 | -20,34485 | 29,8749 | 35,48858 | -23,10112 | 35,48858 | 2 | -7,164202 | 42,652782 | M + red maks : |
| | | 4,18 | -16,96048 | -53,41277 | 24,71042 | -44,52431 | 22,43842 | 24,71042 | -53,41277 | 24,71042 | 2 | -7,164202 | 31,874622 | 49,270452 |
| | | 4,6 | -44,75312 | -86,69605 | 10,9606 | -70,99053 | 12,71517 | 12,71517 | -86,69605 | 12,71517 | 2 | -7,164202 | 19,879372 | p/p red : |
| | | 5 | -72,84155 | -119,7646 | -3,504615 | -97,25082 | 2,400571 | 2,400571 | -119,7646 | 2,400571 | 2 | -7,164202 | 9,564773 | -0,619234595 |

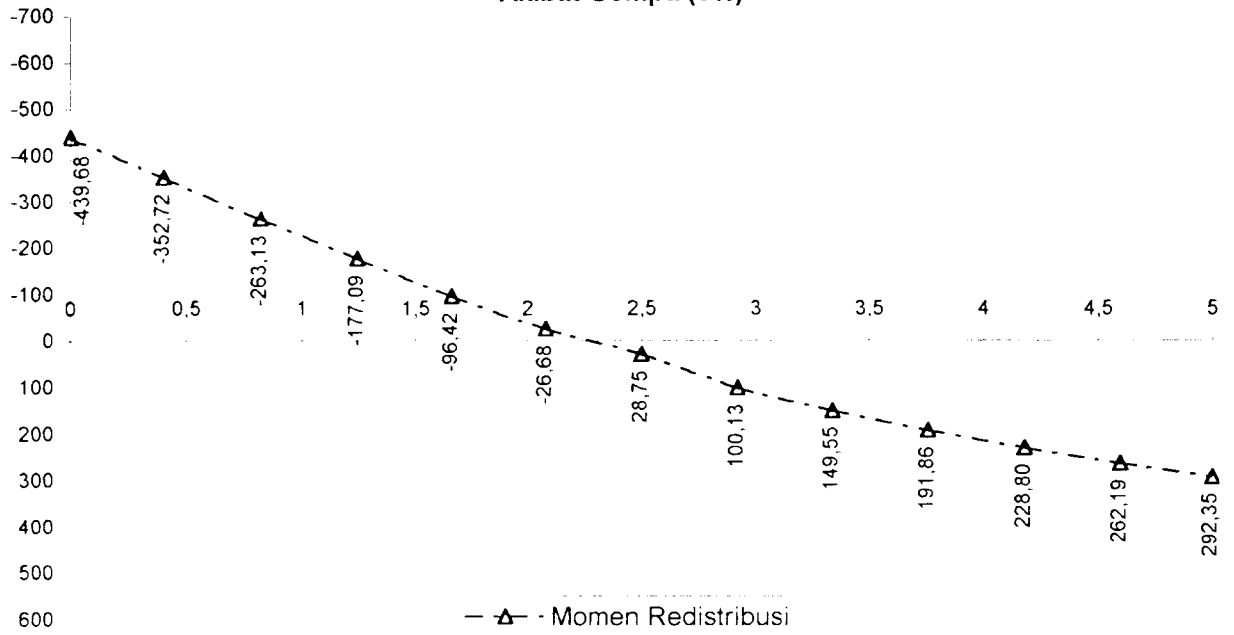
**Grafik Momen Lantai 3
Akibat Gempa (0%)**



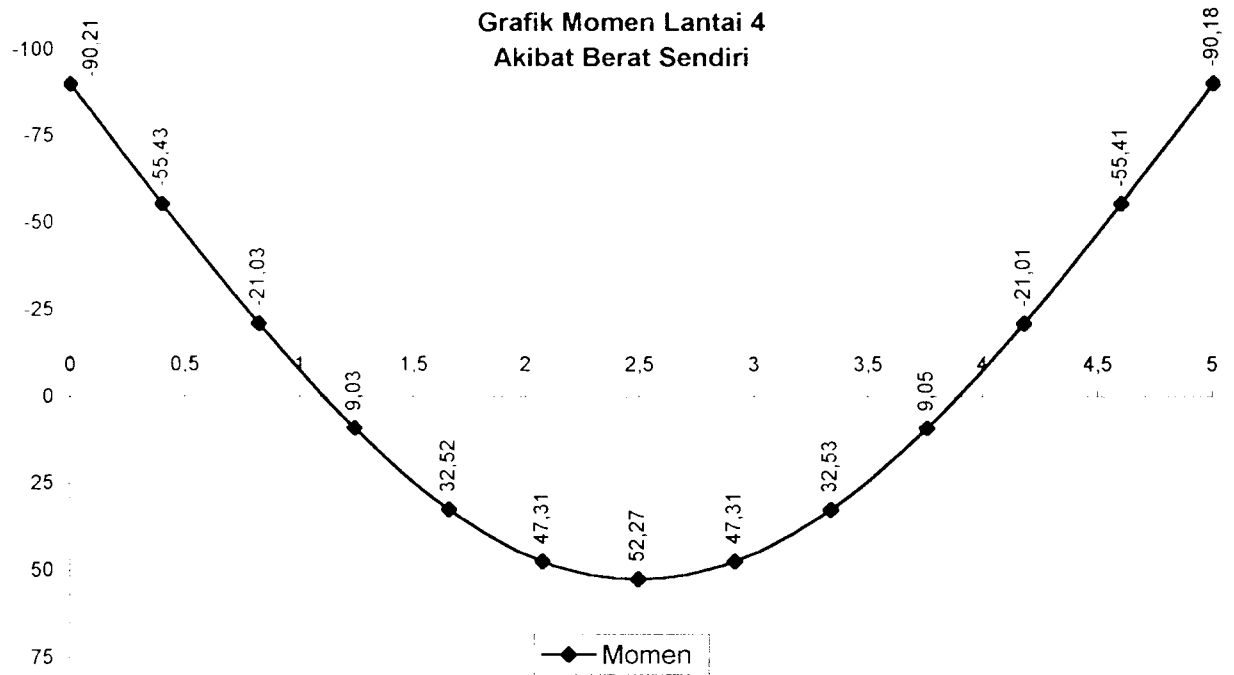
**Grafik Momen Lantai 3
Akibat Berat Sendiri**



**Grafik Momen Lantai 4
Akibat Gempa (0%)**



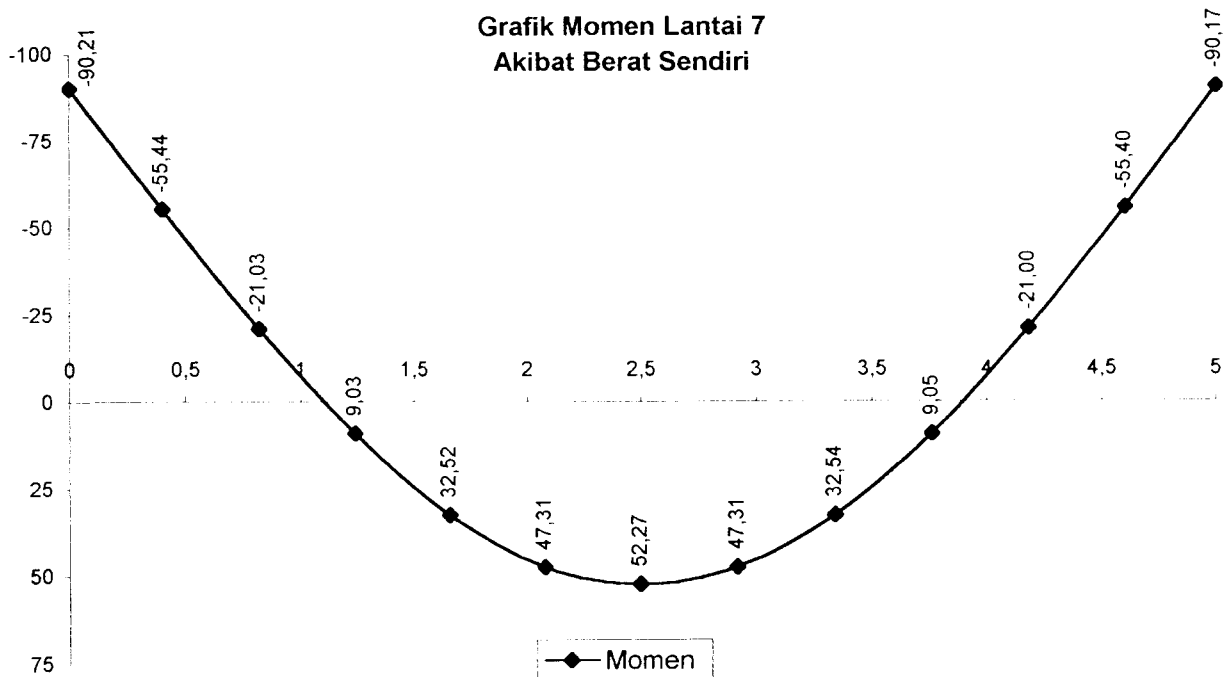
**Grafik Momen Lantai 4
Akibat Berat Sendiri**



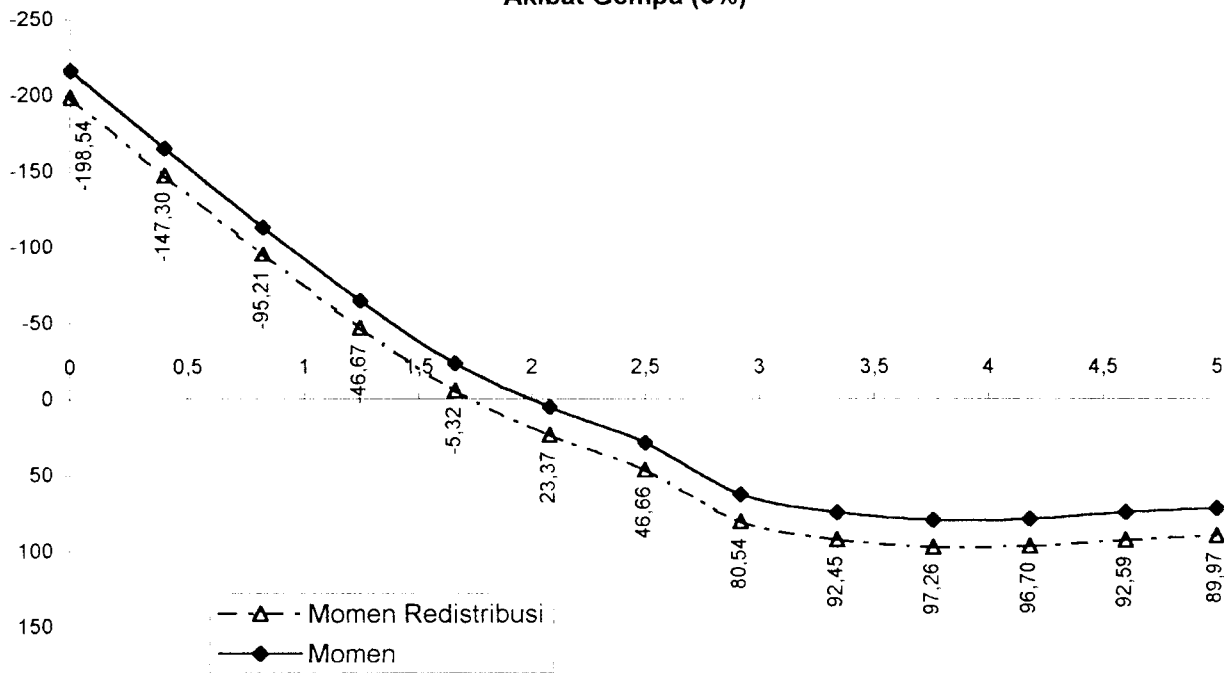
**Grafik Momen Lantai 7
Akibat Gempa (0%)**



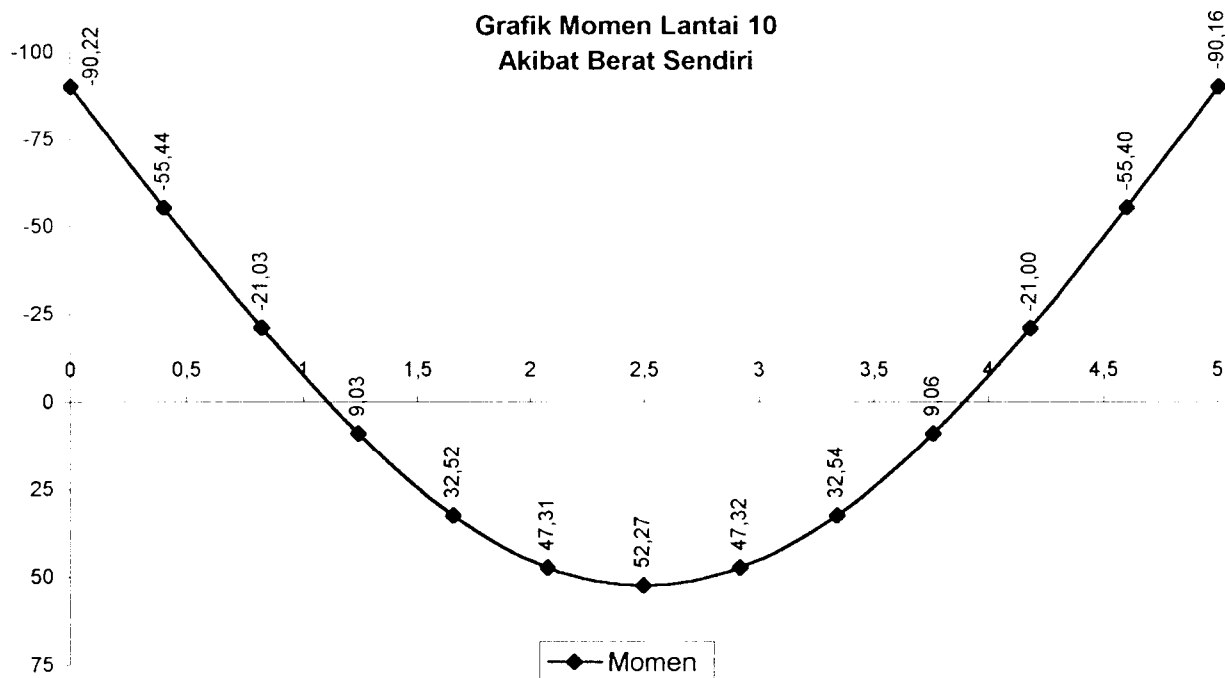
**Grafik Momen Lantai 7
Akibat Berat Sendiri**



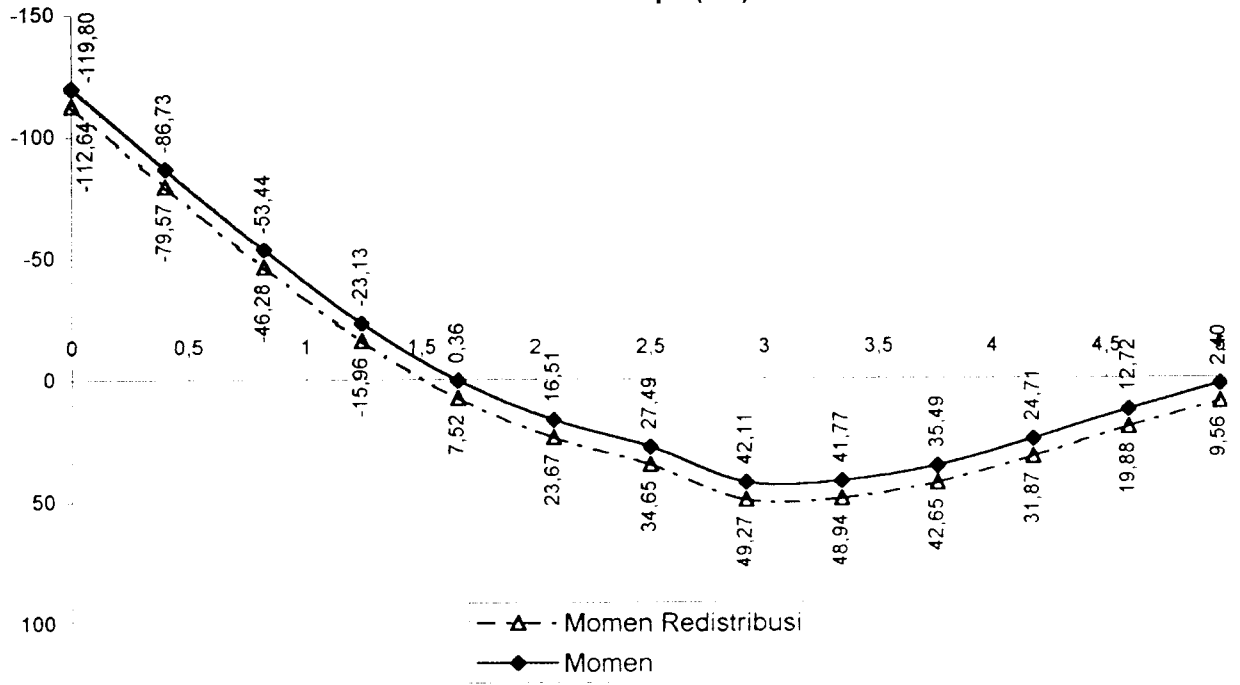
Grafik Momen Lantai 10
Akibat Gempa (5%)



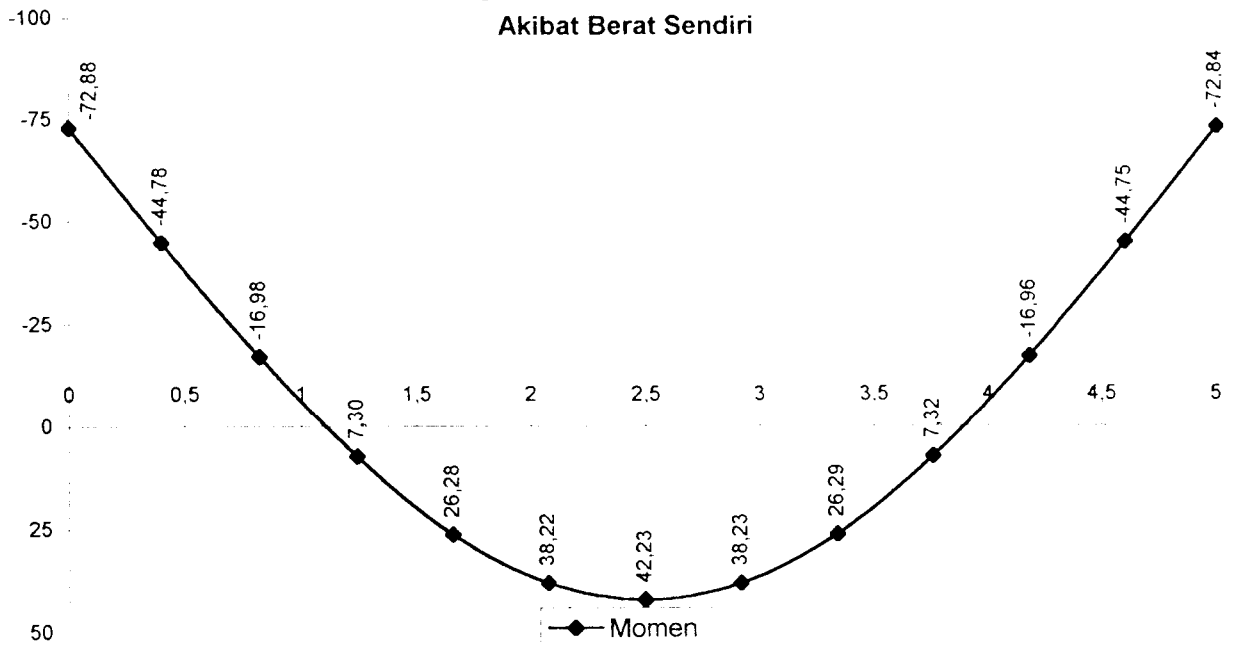
Grafik Momen Lantai 10
Akibat Berat Sendiri



Grafik Momen Lantai 12
Akibat Gempa (2%)



Grafik Momen Lantai 12
Akibat Berat Sendiri



Tabel 3.2.2.1 Momen Kapasitas Tulangan Tumpuan Aktual untuk RW/ 2/2 Lama Portal E

| Lantai | Frame | M(-) | | | | | | | | | | M(+) | | | | | | | | | |
|--------|-------|------|-----|----|-----|----------|-----------------|---------|-----------|----------|----------|-----------------|---------|-----------|------|-----------|----------|----------|----------|--|--|
| | | b | h | d' | d | As pakai | | M perlu | Mtersedia | Mkap | As pakai | | M perlu | Mtersedia | Mkap | | | | | | |
| | | | | | | n | mm ² | | | | n | mm ² | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | |
| 1 | 49 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 318,2930 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 214,5060 | 235,3116 | 292,1058 | | |
| 2 | 50 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 318,2930 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 214,5060 | 235,3116 | 292,1058 | | |
| 3 | 51 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 318,2930 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 214,5060 | 235,3116 | 292,1058 | | |
| 4 | 52 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 327,1340 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 212,1730 | 235,3116 | 292,1058 | | |
| 5 | 53 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 327,1340 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 212,1730 | 235,3116 | 292,1058 | | |
| 6 | 54 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 327,1340 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 212,1730 | 235,3116 | 292,1058 | | |
| 7 | 55 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 270,7695 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 165,9004 | 235,3237 | 292,0997 | | |
| 8 | 56 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 270,7695 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 165,9004 | 235,3237 | 292,0997 | | |
| 9 | 57 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 270,7695 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 165,9004 | 235,3237 | 292,0997 | | |
| 10 | 58 | 300 | 600 | 51 | 549 | 4 | 1519,76 | 2 | 759,8800 | 176,4872 | 310,0099 | 383,1533 | 2 | 759,88 | 4 | 1519,7600 | 110,8160 | 159,5189 | 197,4594 | | |
| 11 | 59 | 300 | 600 | 51 | 549 | 4 | 1519,76 | 2 | 759,8800 | 176,4872 | 310,0099 | 383,1533 | 2 | 759,88 | 4 | 1519,7600 | 110,8160 | 159,5189 | 197,4594 | | |
| 12 | 60 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0,0000 | 119,7779 | 234,0009 | 287,4063 | 0 | 0 | 3 | 1139,8200 | 77,0992 | 0,0000 | 0,0000 | | |
| 1 | 61 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 352,6422 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 327,9874 | 311,0211 | 386,5753 | | |
| 2 | 62 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 352,6422 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 327,9874 | 311,0211 | 386,5753 | | |
| 3 | 63 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 352,6422 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 327,9874 | 311,0211 | 386,5753 | | |
| 4 | 64 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 347,8376 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 323,2640 | 235,3116 | 292,1058 | | |
| 5 | 65 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 347,8376 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 323,2640 | 235,3116 | 292,1058 | | |
| 6 | 66 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 347,8376 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 323,2640 | 235,3116 | 292,1058 | | |
| 7 | 67 | 300 | 600 | 51 | 549 | 5 | 1899,7 | 3 | 1139,8200 | 257,2641 | 384,9635 | 475,9126 | 3 | 1139,82 | 5 | 1899,7000 | 232,7522 | 235,3352 | 292,0765 | | |
| 8 | 68 | 300 | 600 | 51 | 549 | 5 | 1899,7 | 3 | 1139,8200 | 257,2641 | 384,9635 | 475,9126 | 3 | 1139,82 | 5 | 1899,7000 | 232,7522 | 235,3352 | 292,0765 | | |
| 9 | 69 | 300 | 600 | 51 | 549 | 5 | 1899,7 | 3 | 1139,8200 | 257,2641 | 384,9635 | 475,9126 | 3 | 1139,82 | 5 | 1899,7000 | 232,7522 | 235,3352 | 292,0765 | | |
| 10 | 70 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0,0000 | 117,2097 | 234,0009 | 287,4063 | 0 | 0 | 3 | 1139,8200 | 92,5793 | 0,0000 | 0,0000 | | |
| 11 | 71 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0,0000 | 117,2097 | 234,0009 | 287,4063 | 0 | 0 | 3 | 1139,8200 | 92,5793 | 0,0000 | 0,0000 | | |
| 12 | 72 | 300 | 600 | 51 | 549 | 2 | 759,88 | 0 | 0,0000 | 34,5316 | 159,6236 | 197,2651 | 0 | 0 | 2 | 759,8800 | 21,1020 | 0,0000 | 0,0000 | | |

Tabel 3.2.2.2 Momen Kapasitas Tulangan Tumpuan Aktual untuk RW/ 2/2 Lama Portal 2

| Lantai | Frame | M(-) | | | | | | | | | | M(+) | | | | | | | | | |
|--------|-------|------|-----|----|-----|----------|-----------------|---------|-----------|----------|----------|-----------------|---------|-----------|------|-----------|----------|----------|----------|--|--|
| | | b | h | d' | d | As pakai | | M perlu | Mtersedia | Mkap | As pakai | | M perlu | Mtersedia | Mkap | | | | | | |
| | | | | | | n | mm ² | | | | n | mm ² | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | |
| 1 | 145 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 358,2101 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 267,6814 | 235,3116 | 292,1058 | | |
| 2 | 146 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 358,2101 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 267,6814 | 235,3116 | 292,1058 | | |
| 3 | 147 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 358,2101 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 267,6814 | 235,3116 | 292,1058 | | |
| 4 | 148 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 352,7178 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 262,1892 | 235,3116 | 292,1058 | | |
| 5 | 149 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 352,7178 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 262,1892 | 235,3116 | 292,1058 | | |
| 6 | 150 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 3 | 1139,8200 | 352,7178 | 529,0508 | 703,6725 | 3 | 1139,82 | 7 | 2659,5800 | 262,1892 | 235,3116 | 292,1058 | | |
| 7 | 151 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 281,3479 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 190,8194 | 235,3237 | 292,0997 | | |
| 8 | 152 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 281,3479 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 190,8194 | 235,3237 | 292,0997 | | |
| 9 | 153 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 281,3479 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 190,8194 | 235,3237 | 292,0997 | | |
| 10 | 154 | 300 | 600 | 51 | 549 | 4 | 1519,76 | 2 | 759,8800 | 147,2998 | 310,0099 | 383,1533 | 2 | 759,88 | 4 | 1519,7600 | 97,2615 | 159,5189 | 197,4594 | | |
| 11 | 155 | 300 | 600 | 51 | 549 | 4 | 1519,76 | 2 | 759,8800 | 147,2998 | 310,0099 | 383,1533 | 2 | 759,88 | 4 | 1519,7600 | 97,2615 | 159,5189 | 197,4594 | | |
| 12 | 156 | 300 | 600 | 51 | 549 | 2 | 759,88 | 0 | 0,0000 | 79,5667 | 159,6236 | 197,2651 | 0 | 0,00 | 2 | 759,8800 | 49,2705 | 0,0000 | 0,0000 | | |

Tabel 3.2.3.1 Momen Kapasitas Tulangan Lapangan untuk R/W 2/2 Lama Portal E

| Lantai | Frame | b mm | h mm | d' mm | d mm | M (-) | | | | | | |
|--------|-------|---------|---------|----------|---------|----------|-----------------|-----------|-----------------|---------|-----------|----------|
| | | | | | | As pakai | | As' pakai | | Mperlu | Mtersedia | Mkap |
| | | | | | | n | mm ² | n | mm ² | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | 49 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9373 | 234,0009 | 287,4063 |
| 2 | 50 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9373 | 234,0009 | 287,4063 |
| 3 | 51 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9373 | 234,0009 | 287,4063 |
| 4 | 52 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9167 | 234,0009 | 287,4063 |
| 5 | 53 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9167 | 234,0009 | 287,4063 |
| 6 | 54 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9167 | 234,0009 | 287,4063 |
| 7 | 55 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9201 | 234,0009 | 287,4063 |
| 8 | 56 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9201 | 234,0009 | 287,4063 |
| 9 | 57 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9201 | 234,0009 | 287,4063 |
| 10 | 58 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9845 | 234,0009 | 287,4063 |
| 11 | 59 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9845 | 234,0009 | 287,4063 |
| 12 | 60 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 79,9238 | 234,0009 | 287,4063 |
| 1 | 61 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3023 | 234,0009 | 287,4063 |
| 2 | 62 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3023 | 234,0009 | 287,4063 |
| 3 | 63 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3023 | 234,0009 | 287,4063 |
| 4 | 64 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3522 | 234,0009 | 287,4063 |
| 5 | 65 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3522 | 234,0009 | 287,4063 |
| 6 | 66 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3522 | 234,0009 | 287,4063 |
| 7 | 67 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3921 | 234,0009 | 287,4063 |
| 8 | 68 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3921 | 234,0009 | 287,4063 |
| 9 | 69 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3921 | 234,0009 | 287,4063 |
| 10 | 70 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3297 | 234,0009 | 287,4063 |
| 11 | 71 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3297 | 234,0009 | 287,4063 |
| 12 | 72 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 7,8843 | 234,0009 | 287,4063 |

Tabel 3.2.3.2 Momen Kapasitas Tulangan Lapangan untuk R/W 2/2 Lama Portal 2

| Lantai | Frame | b mm | h mm | d' mm | d mm | M (-) | | | | | | |
|--------|-------|---------|---------|----------|---------|----------|-----------------|-----------|-----------------|---------|-----------|----------|
| | | | | | | As pakai | | As' pakai | | Mperlu | Mtersedia | Mkap |
| | | | | | | n | mm ² | n | mm ² | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | 145 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 52,2693 | 234,0009 | 287,4063 |
| 2 | 146 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 52,2693 | 234,0009 | 287,4063 |
| 3 | 147 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 52,2693 | 234,0009 | 287,4063 |
| 4 | 148 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 52,2697 | 234,0009 | 287,4063 |
| 5 | 149 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 52,2697 | 234,0009 | 287,4063 |
| 6 | 150 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 52,2697 | 234,0009 | 287,4063 |
| 7 | 151 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 52,2709 | 234,0009 | 287,4063 |
| 8 | 152 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 52,2709 | 234,0009 | 287,4063 |
| 9 | 153 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 52,2709 | 234,0009 | 287,4063 |
| 10 | 154 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 52,2716 | 234,0009 | 287,4063 |
| 11 | 155 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 52,2716 | 234,0009 | 287,4063 |
| 12 | 156 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 41,7730 | 234,0009 | 287,4063 |

Tabel 3.2.5.1 Tulangan Sengkang Geser Balok untuk RAW 2/2 Lama Portal E

| Lantai | Frame | Dalam sendi plastis | | | | | | Luar sendi plastis | | | | | | Sengkang Praktis | | | | |
|--------|-------|---------------------|-----------------|----------|-----------------------|--------------------|--------------------------|--------------------|----------|----------|-------------|-----------------------|--------------------|--------------------------|------------|--------------|---------|----------------------|
| | | Vu.b.pakai kN | Vs-Vu.b/e kN | s mm | Sengkang Terpasang | Vs terpasang kN | CEK Vs terpasang > Vs | Vu.b.pakai kN | Vc kN | Vs kN | s mm | Sengkang Terpasang | Vs terpasang kN | CEK Vs terpasang > Vs | xVc mm | xVc-2h mm | s mm | Sengkang Terpakai |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 1 | 49 | 167,8929 | 279,8215 | 73,9268 | Ø10 - 70 | 295,5189 | AMAN | 144,2833 | 137,2500 | 103,2222 | 200,4057 | Ø10 - 200 | 103,4316 | AMAN | 1393,9342 | 193,9342 | 250 | Ø10 - 250 |
| 2 | 50 | 167,5956 | 279,3260 | 74,0580 | Ø10 - 70 | 295,5189 | AMAN | 143,9860 | 137,2500 | 102,7267 | 201,3723 | Ø10 - 200 | 103,4316 | AMAN | 1385,7364 | 185,7364 | 250 | Ø10 - 250 |
| 3 | 51 | 167,3707 | 278,9511 | 74,1575 | Ø10 - 70 | 295,5189 | AMAN | 143,7611 | 137,2500 | 102,3518 | 202,1099 | Ø10 - 200 | 103,4316 | AMAN | 1379,5339 | 179,5339 | 250 | Ø10 - 250 |
| 4 | 52 | 167,1598 | 278,5996 | 74,2511 | Ø10 - 70 | 295,5189 | AMAN | 143,5502 | 137,2500 | 102,0003 | 202,8064 | Ø10 - 200 | 103,4316 | AMAN | 1373,7186 | 173,7186 | 250 | Ø10 - 250 |
| 5 | 53 | 166,9767 | 278,2945 | 74,3325 | Ø10 - 70 | 295,5189 | AMAN | 143,3671 | 137,2500 | 101,6952 | 203,4149 | Ø10 - 200 | 103,4316 | AMAN | 1368,6708 | 168,6708 | 250 | Ø10 - 250 |
| 6 | 54 | 166,8177 | 278,0295 | 74,4033 | Ø10 - 70 | 295,5189 | AMAN | 143,2081 | 137,2500 | 101,4302 | 203,9464 | Ø10 - 200 | 103,4316 | AMAN | 1364,2865 | 164,2865 | 250 | Ø10 - 250 |
| 7 | 55 | 153,6637 | 256,1395 | 80,7619 | Ø10 - 75 | 275,8176 | AMAN | 133,3915 | 137,2500 | 85,0691 | 243,1707 | Ø10 - 200 | 103,4316 | AMAN | 1072,6941 | -127,3059 | 250 | Ø10 - 250 |
| 8 | 56 | 153,5740 | 255,9567 | 80,8196 | Ø10 - 75 | 275,8176 | AMAN | 133,2818 | 137,2500 | 84,8863 | 243,6945 | Ø10 - 200 | 103,4316 | AMAN | 1069,8204 | -130,1796 | 250 | Ø10 - 250 |
| 9 | 57 | 153,4844 | 255,8074 | 80,8668 | Ø10 - 75 | 275,8176 | AMAN | 133,1922 | 137,2500 | 84,7370 | 244,1239 | Ø10 - 200 | 103,4316 | AMAN | 1068,8204 | -130,1796 | 250 | Ø10 - 250 |
| 10 | 58 | 127,8615 | 213,1025 | 97,0721 | Ø10 - 90 | 229,8480 | AMAN | 114,0954 | 137,2500 | 52,9090 | 390,9794 | Ø10 - 250 | 82,7453 | AMAN | 105,0196 | -1094,9804 | 250 | Ø10 - 250 |
| 11 | 59 | 127,7676 | 212,9460 | 97,1435 | Ø10 - 90 | 229,8480 | AMAN | 114,0015 | 137,2500 | 52,7525 | 392,1393 | Ø10 - 250 | 82,7453 | AMAN | 100,5790 | -1099,4210 | 250 | Ø10 - 250 |
| 12 | 60 | 84,2398 | 140,3997 | 147,3388 | Ø10 - 140 | 147,7594 | AMAN | 77,4255 | 137,2500 | -8,2075 | -2520,4261 | Ø10 - 250 | 82,7453 | AMAN | -4515,2868 | -5715,2868 | 250 | Ø10 - 250 |
| 1 | 61 | 176,8167 | 294,6944 | 70,1958 | Ø10 - 70 | 295,5189 | AMAN | 84,0068 | 137,2500 | 2,7614 | 7491,3599 | Ø10 - 250 | 82,7453 | AMAN | 826,5341 | -373,4659 | 250 | Ø10 - 250 |
| 2 | 62 | 176,8167 | 294,6944 | 70,1958 | Ø10 - 70 | 295,5189 | AMAN | 84,0068 | 137,2500 | 2,7614 | 7491,3599 | Ø10 - 250 | 82,7453 | AMAN | 826,5341 | -373,4659 | 250 | Ø10 - 250 |
| 3 | 63 | 176,8167 | 294,6944 | 70,1958 | Ø10 - 70 | 295,5189 | AMAN | 84,0068 | 137,2500 | 2,7614 | 7491,3599 | Ø10 - 250 | 82,7453 | AMAN | 826,5341 | -373,4659 | 250 | Ø10 - 250 |
| 4 | 64 | 170,0656 | 283,4426 | 72,9824 | Ø10 - 70 | 295,5189 | AMAN | 81,4374 | 137,2500 | -1,5210 | -13600,8362 | Ø10 - 250 | 82,7453 | AMAN | 790,0401 | -409,9599 | 250 | Ø10 - 250 |
| 5 | 65 | 170,0656 | 283,4426 | 72,9824 | Ø10 - 70 | 295,5189 | AMAN | 81,4374 | 137,2500 | -1,5210 | -13600,8362 | Ø10 - 250 | 82,7453 | AMAN | 790,0401 | -409,9599 | 250 | Ø10 - 250 |
| 6 | 66 | 170,0656 | 283,4426 | 72,9824 | Ø10 - 70 | 295,5189 | AMAN | 81,4374 | 137,2500 | -1,5210 | -13600,8362 | Ø10 - 250 | 82,7453 | AMAN | 790,0401 | -409,9599 | 250 | Ø10 - 250 |
| 7 | 67 | 137,3342 | 228,8904 | 90,3765 | Ø10 - 85 | 243,3685 | AMAN | 68,9802 | 137,2500 | -22,2830 | -928,3454 | Ø10 - 250 | 82,7453 | AMAN | 549,8021 | -650,1979 | 250 | Ø10 - 250 |
| 8 | 68 | 137,3342 | 228,8904 | 90,3765 | Ø10 - 85 | 243,3685 | AMAN | 68,9802 | 137,2500 | -22,2830 | -928,3454 | Ø10 - 250 | 82,7453 | AMAN | 549,8021 | -650,1979 | 250 | Ø10 - 250 |
| 9 | 69 | 137,3342 | 228,8904 | 90,3765 | Ø10 - 85 | 243,3685 | AMAN | 68,9802 | 137,2500 | -22,2830 | -928,3454 | Ø10 - 250 | 82,7453 | AMAN | 549,8021 | -650,1979 | 250 | Ø10 - 250 |
| 10 | 70 | 68,2786 | 113,7977 | 181,7815 | Ø10 - 150 | 137,9088 | AMAN | 42,6983 | 137,2500 | -66,0861 | -313,0207 | Ø10 - 250 | 82,7453 | AMAN | -1206,2728 | -2406,2728 | 250 | Ø10 - 250 |
| 11 | 71 | 68,2786 | 113,7977 | 181,7815 | Ø10 - 150 | 137,9088 | AMAN | 42,6983 | 137,2500 | -66,0861 | -313,0207 | Ø10 - 250 | 82,7453 | AMAN | -1206,2728 | -2406,2728 | 250 | Ø10 - 250 |
| 12 | 72 | 47,1613 | 78,6022 | 263,1774 | Ø10 - 150 | 147,7594 | AMAN | 29,6039 | 137,2500 | -87,9101 | -235,3122 | Ø10 - 250 | 82,7453 | AMAN | -2791,3491 | -3991,3491 | 250 | Ø10 - 250 |

Tabel 3.2.5.2 Tulangan Sengkang Geser Balok untuk RAW 2/2 Lama Portal 2

| Lantai | Frame | Dalam sendi plastis | | | | | | Luar sendi plastis | | | | | | Sengkang Praktis | | | | |
|--------|-------|---------------------|-----------------|----------|-----------------------|--------------------|--------------------------|--------------------|----------|----------|------------|-----------------------|--------------------|--------------------------|------------|--------------|---------|----------------------|
| | | Vu.b.pakai kN | Vs-Vu.b/e kN | s mm | Sengkang Terpasang | Vs terpasang kN | CEK Vs terpasang > Vs | Vu.b.pakai kN | Vc kN | Vs kN | s mm | Sengkang Terpasang | Vs terpasang kN | CEK Vs terpasang > Vs | xVc mm | xVc-2h mm | s mm | Sengkang Terpakai |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 1 | 145 | 194,2218 | 323,7030 | 63,9052 | Ø10 - 60 | 344,7720 | AMAN | 142,7733 | 137,2500 | 100,7055 | 205,4141 | Ø10 - 190 | 108,8754 | AMAN | 1269,8883 | 69,8883 | 250 | Ø10 - 250 |
| 2 | 146 | 194,2207 | 323,7012 | 63,9056 | Ø10 - 60 | 344,7720 | AMAN | 142,7722 | 137,2500 | 100,7036 | 205,4178 | Ø10 - 190 | 108,8754 | AMAN | 1269,8744 | 69,8744 | 250 | Ø10 - 250 |
| 3 | 147 | 194,2196 | 323,6994 | 63,9060 | Ø10 - 60 | 344,7720 | AMAN | 142,7711 | 137,2500 | 100,7018 | 205,4215 | Ø10 - 190 | 108,8754 | AMAN | 1269,8606 | 69,8606 | 250 | Ø10 - 250 |
| 4 | 148 | 194,2186 | 323,6977 | 63,9063 | Ø10 - 60 | 344,7720 | AMAN | 142,7701 | 137,2500 | 100,7001 | 205,4250 | Ø10 - 190 | 108,8754 | AMAN | 1269,8477 | 69,8477 | 250 | Ø10 - 250 |
| 5 | 149 | 194,2177 | 323,6961 | 63,9066 | Ø10 - 60 | 344,7720 | AMAN | 142,7691 | 137,2500 | 100,6985 | 205,4283 | Ø10 - 190 | 108,8754 | AMAN | 1269,8356 | 69,8356 | 250 | Ø10 - 250 |
| 6 | 150 | 194,2168 | 323,6947 | 63,9069 | Ø10 - 60 | 344,7720 | AMAN | 142,7682 | 137,2500 | 100,6971 | 205,4312 | Ø10 - 190 | 108,8754 | AMAN | 1269,8247 | 69,8247 | 250 | Ø10 - 250 |
| 7 | 151 | 176,9931 | 294,9884 | 70,1259 | Ø10 - 65 | 318,2511 | AMAFI | 132,7735 | 137,2500 | 84,0392 | 246,1510 | Ø10 - 190 | 108,8754 | AMAN | 1134,0969 | -65,9031 | 250 | Ø10 - 250 |
| 8 | 152 | 176,9924 | 294,9874 | 70,1261 | Ø10 - 65 | 318,2511 | AMAN | 132,7728 | 137,2500 | 84,0381 | 246,1541 | Ø10 - 190 | 108,8754 | AMAN | 1134,0874 | -65,9126 | 250 | Ø10 - 250 |
| 9 | 153 | 176,9919 | 294,9865 | 70,1263 | Ø10 - 65 | 318,2511 | AMAN | 132,7723 | 137,2500 | 84,0372 | 246,1566 | Ø10 - 190 | 108,8754 | AMAN | 1134,0795 | -65,9205 | 250 | Ø10 - 250 |
| 10 | 154 | 143,1096 | 238,5161 | 86,7293 | Ø10 - 80 | 258,5790 | AMAFI | 113,1113 | 137,2500 | 51,2689 | 403,4870 | Ø10 - 250 | 82,7453 | AMAN | 676,1613 | -523,8387 | 250 | Ø10 - 250 |
| 11 | 155 | 143,1087 | 238,5145 | 86,7298 | Ø10 - 80 | 258,5790 | AMAFI | 113,1104 | 137,2500 | 51,2673 | 403,4990 | Ø10 - 250 | 82,7453 | AMAN | 676,1415 | -523,8585 | 250 | Ø10 - 250 |
| 12 | 156 | 84,2474 | 140,4124 | 147,3255 | Ø10 - 140 | 147,7594 | AMAFI | 74,0554 | 137,2500 | -13,8244 | -1496,3666 | Ø10 - 250 | 82,7453 | AMAFI | -2836,4566 | -4036,4566 | 250 | Ø10 - 250 |

Tabel 3.3.1 Momen Rencana Kolom untuk RW 2/2 Lama

| KOLOM | ud | Arah X | | | | | | Arah Y | | | | | | | | | | | | | | | |
|-----------|----------|--------|-----|---------|---------|-------|------|--------|-----------|-----------|----------|----------|--------|------|------|-------|----------|-----------|----------|----------|-------|------|-------|
| | | h | hn | ak.x | Lx | | Lnx | | Mkap bx | | Mu.kx | Atas | Bawah | ck.y | Ly | | Lny | | Mkap.by | | Mu.ky | Atas | Bawah |
| | | | | | Kiri | Kanan | Kiri | Kanan | Kiri (+) | Kanan (-) | | | | | Kiri | Kanan | Kiri (+) | Kanan (-) | Kiri | Kanan | | | |
| | | m | m | | m | m | m | m | kNm | kNm | kNm | kNm | m | m | m | m | m | m | kNm | kNm | kNm | kNm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | |
| A | Lantai 1 | 1,3 | 4 | 3,4 | 0,18316 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 162,9310 | 0,0279 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 25,6031 | | | |
| | | 1 | 4 | 3,4 | 1 | 7 | 4 | 6,2 | 3,2 | 0 | 0,0000 | 0,0000 | 1,0000 | 5 | 5 | 4,2 | 4,2 | 0,0000 | 0,0000 | 0,0000 | | | |
| | Lantai 2 | 1,3 | 4 | 3,4 | 0,27934 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 248,4843 | 0,3832 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 351,3882 | | | |
| | | 1,3 | 4 | 3,4 | 0,81684 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 726,6168 | 0,9721 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 891,3428 | | | |
| | Lantai 3 | 1,3 | 4 | 3,4 | 0,4473 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 397,8905 | 0,4940 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 452,9372 | | | |
| | | 1,3 | 4 | 3,4 | 0,72066 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 641,0635 | 0,6168 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 565,5576 | | | |
| | Lantai 4 | 1,3 | 4 | 3,4 | 0,52721 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 493,1831 | 0,5426 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 497,5705 | | | |
| | | 1,3 | 4 | 3,4 | 0,5527 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 491,6573 | 0,5060 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 464,0086 | | | |
| | Lantai 5 | 1,3 | 4 | 3,4 | 0,57947 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 542,0686 | 0,5747 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 527,0073 | | | |
| | | 1,3 | 4 | 3,4 | 0,47279 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 442,2781 | 0,4574 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 419,3753 | | | |
| | Lantai 6 | 1,3 | 4 | 3,4 | 0,62563 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 585,2482 | 0,6052 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 554,9010 | | | |
| | | 1,3 | 4 | 3,4 | 0,42053 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 393,3926 | 0,4253 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 389,9385 | | | |
| Lantai 7 | 1,3 | 4 | 3,4 | 0,67663 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 483,9557 | 0,6411 | 5 | 5 | 4,2 | 4,2 | 292,0997 | 563,7629 | 505,2934 | | | | |
| | 1,3 | 4 | 3,4 | 0,37437 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 350,2130 | 0,3948 | 5 | 5 | 4,2 | 4,2 | 292,1058 | 703,6725 | 362,0448 | | | | |
| Lantai 8 | 1,3 | 4 | 3,4 | 0,74176 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 530,5374 | 0,6894 | 5 | 5 | 4,2 | 4,2 | 292,0997 | 563,7629 | 543,3308 | | | | |
| | 1,3 | 4 | 3,4 | 0,32337 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 231,2848 | 0,3589 | 5 | 5 | 4,2 | 4,2 | 292,0997 | 563,7629 | 282,8135 | | | | |
| Lantai 9 | 1,3 | 4 | 3,4 | 0,83177 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 594,9144 | 0,7588 | 5 | 5 | 4,2 | 4,2 | 292,0997 | 563,7629 | 598,0194 | | | | |
| | 1,3 | 4 | 3,4 | 0,25824 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 184,7031 | 0,3106 | 5 | 5 | 4,2 | 4,2 | 292,0997 | 563,7629 | 244,7760 | | | | |
| Lantai 10 | 1,3 | 4 | 3,4 | 0,96152 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 432,9981 | 0,8663 | 5 | 5 | 4,2 | 4,2 | 197,4594 | 383,1533 | 463,1643 | | | | |
| | 1,3 | 4 | 3,4 | 0,16823 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 120,3261 | 0,2412 | 5 | 5 | 4,2 | 4,2 | 292,0997 | 563,7629 | 190,0874 | | | | |
| Lantai 11 | 1,3 | 4 | 3,4 | 0,92005 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 414,3250 | 0,9831 | 5 | 5 | 4,2 | 4,2 | 197,4594 | 383,1533 | 525,6029 | | | | |
| | 1,3 | 4 | 3,4 | 0,03848 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 17,3304 | 0,1337 | 5 | 5 | 4,2 | 4,2 | 197,4594 | 383,1533 | 71,4832 | | | | |
| Lantai 12 | 1 | 4 | 3,4 | 1 | 7 | 4 | 6,2 | 3,2 | 0 | 197,2651 | 146,7160 | 1,0000 | 5 | 5 | 4,2 | 4,2 | 0,0000 | 197,2651 | 139,7295 | | | | |
| | 1 | 4 | 3,4 | 0,07995 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 27,6950 | 0,0169 | 5 | 5 | 4,2 | 4,2 | 197,4594 | 383,1533 | 6,9573 | | | | |

Lanjutan

| KOLOM | wd | h | | hn | Arah X | | | | | | | | | | Arah Y | | | | | | | | | |
|-----------|-----------|-----|-----|---------|---------|------|------|-------|--------|----------|----------|-----------|--------|-------|--------|---------|---------|---------|---------|----------|-----------|-------|-------|--|
| | | m | 3 | | 4 | ak,x | Lx | | Lnx | | Mkep,bx | | Mu,kx | | ck,y | Ly | | Lny | | Mkep,by | | Mu,ky | | |
| | | | | | | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan (-) | Mu,kx | Bawah | | Kiri | Kanan | Kiri | Kanan | Kiri (+) | Kanan (-) | Mu,ky | Bawah | |
| | | m | 3 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | |
| kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| B | Lantai 1 | 1,3 | 4 | 3,4 | 0,18316 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 112,5588 | 0,0279 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 25,603 | | | | | |
| | Lantai 2 | 1 | 4 | 3,4 | 0,27934 | 0 | 7 | 0 | 6,2 | 0,0000 | 0,0000 | 0,0000 | 1,0000 | 5 | 4,2 | 4,2 | 0,000 | 0,000 | 0,000 | | | | | |
| | Lantai 3 | 1,3 | 4 | 3,4 | 0,81684 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 171,6592 | 0,3832 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 351,388 | | | | | |
| | Lantai 4 | 1,3 | 4 | 3,4 | 0,4473 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 501,9650 | 0,9721 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 891,343 | | | | | |
| | Lantai 5 | 1,3 | 4 | 3,4 | 0,72066 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 274,8727 | 0,4940 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 452,937 | | | | | |
| | Lantai 6 | 1,3 | 4 | 3,4 | 0,52721 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 442,8626 | 0,6168 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 565,558 | | | | | |
| | Lantai 7 | 1,3 | 4 | 3,4 | 0,5527 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 323,9811 | 0,5426 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 497,571 | | | | | |
| | Lantai 8 | 1,3 | 4 | 3,4 | 0,57947 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 339,6491 | 0,5060 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 464,009 | | | | | |
| | Lantai 9 | 1,3 | 4 | 3,4 | 0,47279 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 356,0949 | 0,5747 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 527,007 | | | | | |
| | Lantai 10 | 1,3 | 4 | 3,4 | 0,62563 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 290,5407 | 0,4574 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 419,375 | | | | | |
| | Lantai 11 | 1,3 | 4 | 3,4 | 0,42053 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 384,4603 | 0,6052 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 554,901 | | | | | |
| | Lantai 12 | 1,3 | 4 | 3,4 | 0,67663 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 258,4288 | 0,4253 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 389,938 | | | | | |
| Lantai 13 | 1,3 | 4 | 3,4 | 0,37437 | 0 | 7 | 0 | 6,2 | 0,0000 | 563,7629 | 333,1322 | 0,6411 | 5 | 4,2 | 4,2 | 292,100 | 563,763 | 505,293 | | | | | | |
| Lantai 14 | 1,3 | 4 | 3,4 | 0,74176 | 0 | 7 | 0 | 6,2 | 0,0000 | 703,6725 | 230,0614 | 0,3948 | 5 | 4,2 | 4,2 | 292,106 | 703,672 | 362,045 | | | | | | |
| Lantai 15 | 1,3 | 4 | 3,4 | 0,32337 | 0 | 7 | 0 | 6,2 | 0,0000 | 563,7629 | 365,1969 | 0,6894 | 5 | 4,2 | 4,2 | 292,100 | 563,763 | 543,331 | | | | | | |
| Lantai 16 | 1,3 | 4 | 3,4 | 0,83177 | 0 | 7 | 0 | 6,2 | 0,0000 | 563,7629 | 159,2056 | 0,3589 | 5 | 4,2 | 4,2 | 292,100 | 563,763 | 282,813 | | | | | | |
| Lantai 17 | 1,3 | 4 | 3,4 | 0,25824 | 0 | 7 | 0 | 6,2 | 0,0000 | 563,7629 | 409,5110 | 0,7588 | 5 | 4,2 | 4,2 | 292,100 | 563,763 | 598,019 | | | | | | |
| Lantai 18 | 1,3 | 4 | 3,4 | 0,96152 | 0 | 7 | 0 | 6,2 | 0,0000 | 563,7629 | 127,1409 | 0,3106 | 5 | 4,2 | 4,2 | 292,100 | 563,763 | 244,776 | | | | | | |
| Lantai 19 | 1,3 | 4 | 3,4 | 0,16823 | 0 | 7 | 0 | 6,2 | 0,0000 | 383,1533 | 321,7331 | 0,8663 | 5 | 4,2 | 4,2 | 197,459 | 383,153 | 463,164 | | | | | | |
| Lantai 20 | 1,3 | 4 | 3,4 | 0,92005 | 0 | 7 | 0 | 6,2 | 0,0000 | 383,1533 | 82,8268 | 0,2412 | 5 | 4,2 | 4,2 | 292,100 | 563,763 | 190,087 | | | | | | |
| Lantai 21 | 1,3 | 4 | 3,4 | 0,03848 | 0 | 7 | 0 | 6,2 | 0,0000 | 383,1533 | 307,8584 | 0,9831 | 5 | 4,2 | 4,2 | 197,459 | 383,153 | 525,603 | | | | | | |
| Lantai 22 | 1 | 4 | 3,4 | 1 | 0 | 7 | 0 | 6,2 | 0,0000 | 287,4063 | 12,8771 | 0,1337 | 5 | 4,2 | 4,2 | 197,459 | 383,153 | 71,483 | | | | | | |
| Lantai 23 | 1 | 4 | 3,4 | 0,07995 | 0 | 7 | 0 | 6,2 | 0,0000 | 383,1533 | 193,0721 | 1,0000 | 5 | 4,2 | 4,2 | 0,000 | 197,265 | 139,729 | | | | | | |
| Lantai 24 | 1 | 4 | 3,4 | 0,07995 | 0 | 7 | 0 | 6,2 | 0,0000 | 383,1533 | 20,5784 | 0,0169 | 5 | 4,2 | 4,2 | 197,459 | 383,153 | 6,957 | | | | | | |

Lanjutan

| KOLOM | ud | h | h _n | Arah X | | | | | | | | | | Arah Y | | | | | | | |
|-----------|-----|---|----------------|---------|------|-------|------|-------|-----------|-----------|----------|--------|------|--------|-------|------|--------|----------|-----------|--------|-------|
| | | | | dk,x | Lx | | Lnx | | Mkap bx | | Mu, kx | | dk,y | Ly | | Lny | | Mkap by | | Mu, ky | |
| | | | | | Kiri | Kanan | Kiri | Kanan | Kiri (+) | Kanan (-) | Mu, kx | Bawah | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan (-) | Mu, ky | Bawah |
| m | m | m | m | m | m | m | m | m | kNm | kNm | m | m | m | m | m | kNm | kNm | kNm | kNm | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | |
| C | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 1,3 | 4 | 3,4 | 0,18316 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 162,9310 | 0,0279 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 18,0926 | | |
| Lantai 2 | 1,3 | 4 | 3,4 | 0,27934 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 248,4843 | 1,0000 | 0 | 5 | 0 | 4,2 | 0,0000 | 0,0000 | 0,0000 | | |
| Lantai 3 | 1,3 | 4 | 3,4 | 0,81684 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 726,6168 | 0,3832 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 248,3105 | | |
| Lantai 4 | 1,3 | 4 | 3,4 | 0,4473 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 397,8905 | 0,9721 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 629,8725 | | |
| Lantai 5 | 1,3 | 4 | 3,4 | 0,72066 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 641,0635 | 0,4940 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 320,0707 | | |
| Lantai 6 | 1,3 | 4 | 3,4 | 0,52721 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 493,1831 | 0,6168 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 399,6546 | | |
| Lantai 7 | 1,3 | 4 | 3,4 | 0,5627 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 656,1861 | 491,6573 | 0,5426 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 351,6111 | | |
| Lantai 8 | 1,3 | 4 | 3,4 | 0,57947 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 542,0686 | 0,5060 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 327,8944 | | |
| Lantai 9 | 1,3 | 4 | 3,4 | 0,47279 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 442,2781 | 0,5747 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 372,4128 | | |
| Lantai 10 | 1,3 | 4 | 3,4 | 0,62563 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 585,2482 | 0,4574 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 296,3540 | | |
| Lantai 11 | 1,3 | 4 | 3,4 | 0,42053 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 393,3926 | 0,6052 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 392,1240 | | |
| Lantai 12 | 1,3 | 4 | 3,4 | 0,67663 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 483,9557 | 0,4253 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 275,5523 | | |
| Lantai 13 | 1,3 | 4 | 3,4 | 0,37437 | 7 | 4 | 6,2 | 3,2 | 292,10578 | 703,6725 | 350,2130 | 0,6411 | 0 | 5 | 0 | 4,2 | 0,0000 | 563,7629 | 332,8404 | | |
| Lantai 14 | 1,3 | 4 | 3,4 | 0,74176 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 530,5374 | 0,3948 | 0 | 5 | 0 | 4,2 | 0,0000 | 703,6725 | 255,8410 | | |
| Lantai 15 | 1,3 | 4 | 3,4 | 0,32337 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 231,2848 | 0,6894 | 0 | 5 | 0 | 4,2 | 0,0000 | 563,7629 | 357,8959 | | |
| Lantai 16 | 1,3 | 4 | 3,4 | 0,83177 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 594,9144 | 0,3589 | 0 | 5 | 0 | 4,2 | 0,0000 | 563,7629 | 186,2913 | | |
| Lantai 17 | 1,3 | 4 | 3,4 | 0,25824 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 184,7031 | 0,7588 | 0 | 5 | 0 | 4,2 | 0,0000 | 563,7629 | 393,9197 | | |
| Lantai 18 | 1,3 | 4 | 3,4 | 0,96152 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 432,9981 | 0,3106 | 0 | 5 | 0 | 4,2 | 0,0000 | 563,7629 | 161,2357 | | |
| Lantai 19 | 1,3 | 4 | 3,4 | 0,16823 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 475,9126 | 120,3261 | 0,8663 | 0 | 5 | 0 | 4,2 | 0,0000 | 383,1533 | 305,6477 | | |
| Lantai 20 | 1,3 | 4 | 3,4 | 0,92005 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 414,3250 | 0,2412 | 0 | 5 | 0 | 4,2 | 0,0000 | 563,7629 | 125,2120 | | |
| Lantai 21 | 1,3 | 4 | 3,4 | 0,03848 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 17,3304 | 0,9831 | 0 | 5 | 0 | 4,2 | 0,0000 | 383,1533 | 346,8517 | | |
| Lantai 22 | 1 | 4 | 3,4 | 0,07995 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 146,7160 | 0,1337 | 0 | 5 | 0 | 4,2 | 0,0000 | 383,1533 | 47,1726 | | |
| Lantai 23 | 1 | 4 | 3,4 | 0,07995 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 27,6950 | 1,0000 | 0 | 5 | 0 | 4,2 | 0,0000 | 197,2651 | 139,7295 | | |
| Lantai 24 | 1 | 4 | 3,4 | 0,07995 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 27,6950 | 0,0169 | 0 | 5 | 0 | 4,2 | 0,0000 | 383,1533 | 4,5912 | | |

Tabel 3.3.2 Momen Maksimum Rencana Kolom untuk R/W 2/2 Lama

| KOLOM | Arah X | | | | | | Arah Y | | | | | | | | | | |
|-----------|---------|--------|----------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|-----------|
| | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | |
| | MD,kx | ML,kx | ME,kx | MD,kx | ML,kx | ME,kx | MD,kx | ML,kx | ME,kx | MD,kx | ML,kx | ME,kx | MD,kx | ML,kx | ME,kx | MD,kx | |
| 1 | | | | | | | | | | | | | | | | | |
| A,B,C,D | | | | | | | | | | | | | | | | | |
| Lantai 1 | 29,8947 | 4,2844 | 131,6279 | 588,7252 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 14,8196 | 62,2424 |
| Lantai 2 | 13,3703 | 1,9162 | 809,1088 | 3414,3078 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 758,3661 | 3185,1376 |
| Lantai 3 | 36,3116 | 5,0876 | 179,7140 | 798,2680 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 256,4713 | 1077,1795 |
| Lantai 4 | 40,1551 | 5,7028 | 587,0158 | 2513,6172 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 515,9288 | 2166,9010 |
| Lantai 5 | 34,5615 | 4,7182 | 314,8499 | 1363,6133 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 350,5208 | 1472,1874 |
| Lantai 6 | 33,8099 | 4,6473 | 463,6432 | 1987,6814 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 412,7893 | 1733,7151 |
| Lantai 7 | 34,6797 | 4,6354 | 369,9500 | 1595,0708 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 378,3008 | 1588,8634 |
| Lantai 8 | 34,9505 | 4,7129 | 389,0473 | 1675,6452 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 359,0888 | 1508,1730 |
| Lantai 9 | 34,4073 | 4,5071 | 385,5566 | 1660,1937 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 378,4688 | 1589,5690 |
| Lantai 10 | 34,4367 | 4,5433 | 331,7648 | 1434,3412 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 318,8493 | 1339,1671 |
| Lantai 11 | 34,2576 | 4,4083 | 380,2697 | 1637,7320 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 365,1228 | 1533,5158 |
| Lantai 12 | 34,3272 | 4,4468 | 279,8072 | 1215,9029 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 280,0332 | 1176,1394 |
| Lantai 13 | 34,0908 | 4,3236 | 362,1090 | 1561,1928 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 343,2065 | 1441,4673 |
| Lantai 14 | 34,1519 | 4,3532 | 227,5537 | 996,1559 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 238,2241 | 1000,5412 |
| Lantai 15 | 34,0432 | 4,2476 | 334,3590 | 1444,5131 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 314,3927 | 1320,4493 |
| Lantai 16 | 34,0421 | 4,2763 | 173,0537 | 767,0599 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 192,0932 | 806,7914 |
| Lantai 17 | 33,6184 | 4,2197 | 297,5566 | 1289,4678 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 278,6513 | 1170,3355 |
| Lantai 18 | 33,8537 | 4,2223 | 116,4049 | 528,8803 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 141,6371 | 594,8758 |
| Lantai 19 | 34,9860 | 4,0589 | 250,8913 | 1094,7407 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 235,5823 | 989,4457 |
| Lantai 20 | 34,1249 | 4,1467 | 60,1832 | 292,9544 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 88,5726 | 372,0048 |
| Lantai 21 | 28,5525 | 4,5796 | 187,5124 | 822,3408 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 177,4437 | 745,2635 |
| Lantai 22 | 32,4938 | 4,2526 | 10,0417 | 80,7568 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 36,3590 | 152,7077 |
| Lantai 23 | 56,7790 | 2,1153 | 108,8177 | 518,8734 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 110,7238 | 465,0400 |
| Lantai 24 | 39,4140 | 3,6237 | 16,2942 | 113,6253 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 3,0534 | 12,8244 |

Tabel 3.3.3 Momen Rencana Kolom Terpakai untuk RW 2/2 Lama

| KOLOM | Mrencana | | Mmaksimum | | Mterpakai | |
|-----------|----------------------|----------------------|------------------------|------------------------|----------------------|----------------------|
| | Mu,kx | Mu,ky | Mu,kx | Mu,ky | Mu,kx | Mu,ky |
| | kNm | kNm | kNm | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| A | | | | | | |
| Lantai 1 | 162,9310 0,0000 | 25,6031 0,0000 | 588,7252 3414,3078 | 62,2424 3185,1376 | 162,9310 162,9310 | 25,6031 25,6031 |
| Lantai 2 | 248,4843 726,6168 | 351,3882 891,3428 | 798,2680 2513,6172 | 1077,1795 2166,9010 | 248,4843 726,6168 | 351,3882 891,3428 |
| Lantai 3 | 397,8905 641,0635 | 452,9372 565,5576 | 1363,6133 1987,6814 | 1472,1874 1733,7151 | 397,8905 641,0635 | 452,9372 565,5576 |
| Lantai 4 | 493,1831 491,6573 | 497,5705 464,0086 | 1595,0708 1675,6452 | 1588,8634 1508,1730 | 493,1831 491,6573 | 497,5705 464,0086 |
| Lantai 5 | 542,0686 442,2781 | 527,0073 419,3753 | 1660,1937 1434,3412 | 1589,5690 1339,1671 | 542,0686 442,2781 | 527,0073 419,3753 |
| Lantai 6 | 585,2482 393,3926 | 554,9010 389,9385 | 1637,7320 1215,9029 | 1533,5158 1176,1394 | 585,2482 393,3926 | 554,9010 389,9385 |
| Lantai 7 | 483,9557 350,2130 | 505,2934 362,0448 | 1561,1928 996,1559 | 1441,4673 1000,5412 | 483,9557 350,2130 | 505,2934 362,0448 |
| Lantai 8 | 530,5374 231,2848 | 543,3308 282,8135 | 1444,5131 767,0599 | 1320,4493 806,7914 | 530,5374 231,2848 | 543,3308 282,8135 |
| Lantai 9 | 594,9144 184,7031 | 598,0194 244,7760 | 1289,4678 528,8803 | 1170,3355 594,8758 | 594,9144 184,7031 | 598,0194 244,7760 |
| Lantai 10 | 432,9981 120,3261 | 463,1643 190,0874 | 1094,7407 292,9544 | 989,4457 372,0048 | 432,9981 120,3261 | 463,1643 190,0874 |
| Lantai 11 | 414,3250 17,3304 | 525,6029 71,4832 | 822,3408 80,7588 | 745,2635 152,7077 | 414,3250 17,3304 | 525,6029 71,4832 |
| Lantai 12 | 146,7160 27,6950 | 139,7295 6,9573 | 518,8734 113,6253 | 465,0400 12,8244 | 146,7160 27,6950 | 139,7295 6,9573 |
| B | | | | | | |
| Lantai 1 | 112,5568 0,0000 | 25,6031 0,0000 | 588,7252 3414,3078 | 62,2424 3185,1376 | 112,5568 112,5568 | 25,6031 25,6031 |
| Lantai 2 | 171,6592 501,9650 | 351,3882 891,3428 | 798,2680 2513,6172 | 1077,1795 2166,9010 | 171,6592 501,9650 | 351,3882 891,3428 |
| Lantai 3 | 274,8727 442,8626 | 452,9372 565,5576 | 1363,6133 1987,6814 | 1472,1874 1733,7151 | 274,8727 442,8626 | 452,9372 565,5576 |
| Lantai 4 | 323,9811 339,6491 | 497,5705 464,0086 | 1595,0708 1675,6452 | 1588,8634 1508,1730 | 323,9811 339,6491 | 497,5705 464,0086 |
| Lantai 5 | 356,0949 290,5407 | 527,0073 419,3753 | 1660,1937 1434,3412 | 1589,5690 1339,1671 | 356,0949 290,5407 | 527,0073 419,3753 |
| Lantai 6 | 384,4603 258,4268 | 554,9010 389,9385 | 1637,7320 1215,9029 | 1533,5158 1176,1394 | 384,4603 258,4268 | 554,9010 389,9385 |
| Lantai 7 | 333,1322 230,0614 | 505,2934 362,0448 | 1561,1928 996,1559 | 1441,4673 1000,5412 | 333,1322 230,0614 | 505,2934 362,0448 |
| Lantai 8 | 365,1969 159,2056 | 543,3308 282,8135 | 1444,5131 767,0599 | 1320,4493 806,7914 | 365,1969 159,2056 | 543,3308 282,8135 |
| Lantai 9 | 409,5110 127,1409 | 598,0194 244,7760 | 1289,4678 528,8803 | 1170,3355 594,8758 | 409,5110 127,1409 | 598,0194 244,7760 |
| Lantai 10 | 321,7331 82,8268 | 463,1643 190,0874 | 1094,7407 292,9544 | 989,4457 372,0048 | 321,7331 82,8268 | 463,1643 190,0874 |
| Lantai 11 | 307,8584 12,8771 | 525,6029 71,4832 | 822,3408 80,7588 | 745,2635 152,7077 | 307,8584 12,8771 | 525,6029 71,4832 |
| Lantai 12 | 193,0721 20,5784 | 139,7295 6,9573 | 518,8734 113,6253 | 465,0400 12,8244 | 193,0721 20,5784 | 139,7295 6,9573 |

Lanjutan

| KOLOM | Mrencana | | Mmaksimum | | Mterpakai | | |
|-----------|----------|----------|-----------|-----------|-----------|----------|----------|
| | Mu,kx | Mu,ky | Mu,kx | Mu,ky | Mu,kx | Mu,ky | |
| | kNm | kNm | kNm | kNm | kNm | kNm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| C | Lantai 1 | 162,9310 | 18,0926 | 588,7252 | 62,2424 | 162,9310 | 18,0926 |
| | | 0,0000 | 0,0000 | 3414,3078 | 3185,1376 | 162,9310 | 18,0926 |
| | Lantai 2 | 248,4843 | 248,3105 | 798,2680 | 1077,1795 | 248,4843 | 248,3105 |
| | | 726,6168 | 629,8725 | 2513,6172 | 2166,9010 | 726,6168 | 629,8725 |
| | Lantai 3 | 397,8905 | 320,0707 | 1363,6133 | 1472,1874 | 397,8905 | 320,0707 |
| | | 641,0635 | 399,6546 | 1987,6814 | 1733,7151 | 641,0635 | 399,6546 |
| | Lantai 4 | 493,1831 | 351,6111 | 1595,0708 | 1588,8634 | 493,1831 | 351,6111 |
| | | 491,6573 | 327,8944 | 1675,6452 | 1508,1730 | 491,6573 | 327,8944 |
| | Lantai 5 | 542,0686 | 372,4128 | 1660,1937 | 1589,5690 | 542,0686 | 372,4128 |
| | | 442,2781 | 296,3540 | 1434,3412 | 1339,1671 | 442,2781 | 296,3540 |
| | Lantai 6 | 585,2482 | 392,1240 | 1637,7320 | 1533,5158 | 585,2482 | 392,1240 |
| | | 393,3926 | 275,5523 | 1215,9029 | 1176,1394 | 393,3926 | 275,5523 |
| Lantai 7 | 483,9557 | 332,8404 | 1561,1928 | 1441,4673 | 483,9557 | 332,8404 | |
| | 350,2130 | 255,8410 | 996,1559 | 1000,5412 | 350,2130 | 255,8410 | |
| Lantai 8 | 530,5374 | 357,8959 | 1444,5131 | 1320,4493 | 530,5374 | 357,8959 | |
| | 231,2848 | 186,2913 | 767,0599 | 806,7914 | 231,2848 | 186,2913 | |
| Lantai 9 | 594,9144 | 393,9197 | 1289,4678 | 1170,3355 | 594,9144 | 393,9197 | |
| | 184,7031 | 161,2357 | 528,8803 | 594,8758 | 184,7031 | 161,2357 | |
| Lantai 10 | 432,9981 | 305,6477 | 1094,7407 | 989,4457 | 432,9981 | 305,6477 | |
| | 120,3261 | 125,2120 | 292,9544 | 372,0048 | 120,3261 | 125,2120 | |
| Lantai 11 | 414,3250 | 346,8517 | 822,3408 | 745,2635 | 414,3250 | 346,8517 | |
| | 17,3304 | 47,1726 | 80,7588 | 152,7077 | 17,3304 | 47,1726 | |
| Lantai 12 | 146,7160 | 139,7295 | 518,8734 | 465,0400 | 146,7160 | 139,7295 | |
| | 27,6950 | 4,5912 | 113,6253 | 12,8244 | 27,6950 | 4,5912 | |
| D | Lantai 1 | 112,5568 | 18,0926 | 588,7252 | 62,2424 | 112,5568 | 18,0926 |
| | | 0,0000 | 0,0000 | 3414,3078 | 3185,1376 | 112,5568 | 18,0926 |
| | Lantai 2 | 171,6592 | 248,3105 | 798,2680 | 1077,1795 | 171,6592 | 248,3105 |
| | | 501,9650 | 629,8725 | 2513,6172 | 2166,9010 | 501,9650 | 629,8725 |
| | Lantai 3 | 274,8727 | 320,0707 | 1363,6133 | 1472,1874 | 274,8727 | 320,0707 |
| | | 442,8626 | 399,6546 | 1987,6814 | 1733,7151 | 442,8626 | 399,6546 |
| | Lantai 4 | 323,9811 | 351,6111 | 1595,0708 | 1588,8634 | 323,9811 | 351,6111 |
| | | 339,6491 | 327,8944 | 1675,6452 | 1508,1730 | 339,6491 | 327,8944 |
| | Lantai 5 | 356,0949 | 372,4128 | 1660,1937 | 1589,5690 | 356,0949 | 372,4128 |
| | | 290,5407 | 296,3540 | 1434,3412 | 1339,1671 | 290,5407 | 296,3540 |
| | Lantai 6 | 384,4603 | 392,1240 | 1637,7320 | 1533,5158 | 384,4603 | 392,1240 |
| | | 258,4268 | 275,5523 | 1215,9029 | 1176,1394 | 258,4268 | 275,5523 |
| Lantai 7 | 333,1322 | 332,8404 | 1561,1928 | 1441,4673 | 333,1322 | 332,8404 | |
| | 230,0614 | 255,8410 | 996,1559 | 1000,5412 | 230,0614 | 255,8410 | |
| Lantai 8 | 365,1969 | 357,8959 | 1444,5131 | 1320,4493 | 365,1969 | 357,8959 | |
| | 159,2056 | 186,2913 | 767,0599 | 806,7914 | 159,2056 | 186,2913 | |
| Lantai 9 | 409,5110 | 393,9197 | 1289,4678 | 1170,3355 | 409,5110 | 393,9197 | |
| | 127,1409 | 161,2357 | 528,8803 | 594,8758 | 127,1409 | 161,2357 | |
| Lantai 10 | 321,7331 | 305,6477 | 1094,7407 | 989,4457 | 321,7331 | 305,6477 | |
| | 82,8268 | 125,2120 | 292,9544 | 372,0048 | 82,8268 | 125,2120 | |
| Lantai 11 | 307,8584 | 346,8517 | 822,3408 | 745,2635 | 307,8584 | 346,8517 | |
| | 12,8771 | 47,1726 | 80,7588 | 152,7077 | 12,8771 | 47,1726 | |
| Lantai 12 | 193,0721 | 139,7295 | 518,8734 | 465,0400 | 193,0721 | 139,7295 | |
| | 20,5784 | 4,5912 | 113,6253 | 12,8244 | 20,5784 | 4,5912 | |

Tabel 3.3.4.1 Kumulatif Momen Kapasitas Balok

| Kolom | Portal E | | | | Portal 2 | | | | |
|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | ΣM1- 7m | ΣM2+ 7m | ΣM3- 4m | ΣM4+ 4m | ΣM1- 5m | ΣM2+ 5m | ΣM3- 5m | ΣM4+ 5m | |
| A | | | | | | | | | |
| | Lantai 1 | 6967,0364 | 3023,8526 | 6279,3912 | 2912,2727 | 6876,8953 | 3023,8526 | 6876,8953 | 3023,8526 |
| | | 6679,6302 | 3023,8526 | 6082,1260 | 2912,2727 | 6679,6302 | 3023,8526 | 6679,6302 | 3023,8526 |
| Lantai 2 | | 6263,3639 | 2731,7468 | 5623,2051 | 2525,6974 | 6173,2228 | 2731,7468 | 6173,2228 | 2731,7468 |
| | | 6679,6302 | 3023,8526 | 6082,1260 | 2912,2727 | 6679,6302 | 3023,8526 | 6679,6302 | 3023,8526 |
| Lantai 3 | | 5559,6915 | 2439,6410 | 4967,0190 | 2139,1221 | 5469,5503 | 2439,6410 | 5469,5503 | 2439,6410 |
| | | 5975,9577 | 2731,7468 | 5425,9399 | 2525,6974 | 5975,9577 | 2731,7468 | 5975,9577 | 2731,7468 |
| Lantai 4 | | 4856,0190 | 2147,5353 | 4310,8329 | 1752,5467 | 4765,8778 | 2147,5353 | 4765,8778 | 2147,5353 |
| | | 5272,2852 | 2439,6410 | 4769,7538 | 2139,1221 | 5272,2852 | 2439,6410 | 5272,2852 | 2439,6410 |
| Lantai 5 | | 4152,3465 | 1855,4295 | 3607,1604 | 1460,4410 | 4062,2053 | 1855,4295 | 4062,2053 | 1855,4295 |
| | | 4568,6127 | 2147,5353 | 4113,5677 | 1752,5467 | 4568,6127 | 2147,5353 | 4568,6127 | 2147,5353 |
| Lantai 6 | | 3448,6740 | 1563,3237 | 2903,4879 | 1168,3352 | 3358,5328 | 1563,3237 | 3358,5328 | 1563,3237 |
| | | 3864,9402 | 1855,4295 | 3409,8952 | 1460,4410 | 3864,9402 | 1855,4295 | 3864,9402 | 1855,4295 |
| Lantai 7 | | 2745,0015 | 1271,2179 | 2199,8154 | 876,2294 | 2654,8603 | 1271,2179 | 2654,8603 | 1271,2179 |
| | | 3161,2677 | 1563,3237 | 2706,2227 | 1168,3352 | 3161,2677 | 1563,3237 | 3161,2677 | 1563,3237 |
| Lantai 8 | | 2181,2386 | 979,1182 | 1723,9028 | 584,1529 | 2091,0975 | 979,1182 | 2091,0975 | 979,1182 |
| | | 2457,5952 | 1271,2179 | 2002,5502 | 876,2294 | 2457,5952 | 1271,2179 | 2457,5952 | 1271,2179 |
| Lantai 9 | | 1617,4757 | 687,0185 | 1247,9903 | 292,0765 | 1527,3346 | 687,0185 | 1527,3346 | 687,0185 |
| | | 1893,8323 | 979,1182 | 1526,6377 | 584,1529 | 1893,8323 | 979,1182 | 1893,8323 | 979,1182 |
| Lantai 10 | | 1053,7128 | 394,9187 | 772,0777 | 0,0000 | 963,5717 | 394,9187 | 963,5717 | 394,9187 |
| | | 1330,0694 | 687,0185 | 1050,7251 | 292,0765 | 1330,0694 | 687,0185 | 1330,0694 | 687,0185 |
| Lantai 11 | | 670,5595 | 197,4594 | 484,6714 | 0,0000 | 580,4184 | 197,4594 | 580,4184 | 197,4594 |
| | | 766,3065 | 394,9187 | 574,8126 | 0,0000 | 766,3065 | 394,9187 | 766,3065 | 394,9187 |
| Lantai 12 | | 287,4063 | 0,0000 | 197,2651 | 0,0000 | 197,2651 | 0,0000 | 197,2651 | 0,0000 |
| | | 383,1533 | 197,4594 | 287,4063 | 0,0000 | 383,1533 | 197,4594 | 383,1533 | 197,4594 |

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|----------|--------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 0m | 0 m | ΣM1- 7m | ΣM2+ 7m | ΣM1- 5m | ΣM2+ 5m | ΣM3- 5m | ΣM4+ 5m |
| B | | | | | | | | |
| | Lantai 1 | 0,0000 | 0,0000 | 6967,0364 | 3023,8526 | 6876,8953 | 3023,8526 | 6876,8953 |
| | | 0,0000 | 6679,6302 | 3023,8526 | 6679,6302 | 3023,8526 | 6679,6302 | 3023,8526 |
| Lantai 2 | | 0,0000 | 6263,3639 | 2731,7468 | 6173,2228 | 2731,7468 | 6173,2228 | 2731,7468 |
| | | 0,0000 | 6679,6302 | 3023,8526 | 6679,6302 | 3023,8526 | 6679,6302 | 3023,8526 |
| Lantai 3 | | 0,0000 | 5559,6915 | 2439,6410 | 5469,5503 | 2439,6410 | 5469,5503 | 2439,6410 |
| | | 0,0000 | 5975,9577 | 2731,7468 | 5975,9577 | 2731,7468 | 5975,9577 | 2731,7468 |
| Lantai 4 | | 0,0000 | 4856,0190 | 2147,5353 | 4765,8778 | 2147,5353 | 4765,8778 | 2147,5353 |
| | | 0,0000 | 5272,2852 | 2439,6410 | 5272,2852 | 2439,6410 | 5272,2852 | 2439,6410 |
| Lantai 5 | | 0,0000 | 4152,3465 | 1855,4295 | 4062,2053 | 1855,4295 | 4062,2053 | 1855,4295 |
| | | 0,0000 | 4568,6127 | 2147,5353 | 4568,6127 | 2147,5353 | 4568,6127 | 2147,5353 |
| Lantai 6 | | 0,0000 | 3448,6740 | 1563,3237 | 3358,5328 | 1563,3237 | 3358,5328 | 1563,3237 |
| | | 0,0000 | 3864,9402 | 1855,4295 | 3864,9402 | 1855,4295 | 3864,9402 | 1855,4295 |
| Lantai 7 | | 0,0000 | 2745,0015 | 1271,2179 | 2654,8603 | 1271,2179 | 2654,8603 | 1271,2179 |
| | | 0,0000 | 3161,2677 | 1563,3237 | 3161,2677 | 1563,3237 | 3161,2677 | 1563,3237 |
| Lantai 8 | | 0,0000 | 2181,2386 | 979,1182 | 2091,0975 | 979,1182 | 2091,0975 | 979,1182 |
| | | 0,0000 | 2457,5952 | 1271,2179 | 2457,5952 | 1271,2179 | 2457,5952 | 1271,2179 |
| Lantai 9 | | 0,0000 | 1617,4757 | 687,0185 | 1527,3346 | 687,0185 | 1527,3346 | 687,0185 |
| | | 0,0000 | 1893,8323 | 979,1182 | 1893,8323 | 979,1182 | 1893,8323 | 979,1182 |
| Lantai 10 | | 0,0000 | 1053,7128 | 394,9187 | 963,5717 | 394,9187 | 963,5717 | 394,9187 |
| | | 0,0000 | 1330,0694 | 687,0185 | 1330,0694 | 687,0185 | 1330,0694 | 687,0185 |
| Lantai 11 | | 0,0000 | 670,5595 | 197,4594 | 580,4184 | 197,4594 | 580,4184 | 197,4594 |
| | | 0,0000 | 766,3065 | 394,9187 | 766,3065 | 394,9187 | 766,3065 | 394,9187 |
| Lantai 12 | | 0,0000 | 287,4063 | 0,0000 | 197,2651 | 0,0000 | 197,2651 | 0,0000 |
| | | 0,0000 | 383,1533 | 197,4594 | 383,1533 | 197,4594 | 383,1533 | 197,4594 |

lanjutan

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|-----------|-----------|-----------|-----------|----------|--------|-----------|-----------|
| | ΣM1- 7m | ΣM2+ 7m | ΣM3- 4m | ΣM4+ 4m | 0m | 0m | ΣM1- 5m | ΣM2+ 5m |
| C | | | | | | | | |
| Lantai 1 | 6967,0364 | 3023,8526 | 6279,3912 | 2912,2727 | 0,0000 | 0,0000 | 6876,8953 | 3023,8526 |
| | 6679,6302 | 3023,8526 | 6082,1260 | 2912,2727 | 0,0000 | 0,0000 | 6679,6302 | 3023,8526 |
| Lantai 2 | 6263,3639 | 2731,7468 | 5623,2051 | 2525,6974 | 0,0000 | 0,0000 | 6173,2228 | 2731,7468 |
| | 6679,6302 | 3023,8526 | 6082,1260 | 2912,2727 | 0,0000 | 0,0000 | 6679,6302 | 3023,8526 |
| Lantai 3 | 5559,6915 | 2439,6410 | 4967,0190 | 2139,1221 | 0,0000 | 0,0000 | 5469,5503 | 2439,6410 |
| | 5975,9577 | 2731,7468 | 5425,9399 | 2525,6974 | 0,0000 | 0,0000 | 5975,9577 | 2731,7468 |
| Lantai 4 | 4856,0190 | 2147,5353 | 4310,8329 | 1752,5467 | 0,0000 | 0,0000 | 4765,8778 | 2147,5353 |
| | 5272,2852 | 2439,6410 | 4769,7538 | 2139,1221 | 0,0000 | 0,0000 | 5272,2852 | 2439,6410 |
| Lantai 5 | 4152,3465 | 1855,4295 | 3607,1604 | 1460,4410 | 0,0000 | 0,0000 | 4062,2053 | 1855,4295 |
| | 4568,6127 | 2147,5353 | 4113,5677 | 1752,5467 | 0,0000 | 0,0000 | 4568,6127 | 2147,5353 |
| Lantai 6 | 3448,6740 | 1563,3237 | 2903,4879 | 1168,3352 | 0,0000 | 0,0000 | 3358,5328 | 1563,3237 |
| | 3864,9402 | 1855,4295 | 3409,8952 | 1460,4410 | 0,0000 | 0,0000 | 3864,9402 | 1855,4295 |
| Lantai 7 | 2745,0015 | 1271,2179 | 2199,8154 | 876,2294 | 0,0000 | 0,0000 | 2654,8603 | 1271,2179 |
| | 3161,2677 | 1563,3237 | 2706,2227 | 1168,3352 | 0,0000 | 0,0000 | 3161,2677 | 1563,3237 |
| Lantai 8 | 2181,2386 | 979,1182 | 1723,9028 | 584,1529 | 0,0000 | 0,0000 | 2091,0975 | 979,1182 |
| | 2457,5952 | 1271,2179 | 2002,5502 | 876,2294 | 0,0000 | 0,0000 | 2457,5952 | 1271,2179 |
| Lantai 9 | 1617,4757 | 687,0185 | 1247,9903 | 292,0765 | 0,0000 | 0,0000 | 1527,3346 | 687,0185 |
| | 1893,8323 | 979,1182 | 1526,6377 | 584,1529 | 0,0000 | 0,0000 | 1893,8323 | 979,1182 |
| Lantai 10 | 1053,7128 | 394,9187 | 772,0777 | 0,0000 | 0,0000 | 0,0000 | 963,5717 | 394,9187 |
| | 1330,0694 | 687,0185 | 1050,7251 | 292,0765 | 0,0000 | 0,0000 | 1330,0694 | 687,0185 |
| Lantai 11 | 670,5595 | 197,4594 | 484,6714 | 0,0000 | 0,0000 | 0,0000 | 580,4184 | 197,4594 |
| | 766,3065 | 394,9187 | 574,8126 | 0,0000 | 0,0000 | 0,0000 | 766,3065 | 394,9187 |
| Lantai 12 | 287,4063 | 0,0000 | 197,2651 | 0,0000 | 0,0000 | 0,0000 | 197,2651 | 0,0000 |
| | 383,1533 | 197,4594 | 287,4063 | 0,0000 | 0,0000 | 0,0000 | 383,1533 | 197,4594 |

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|----------|--------|-----------|-----------|----------|--------|-----------|-----------|
| | 0m | 0 m | ΣM1- 7m | ΣM2+ 7m | 0m | 0m | ΣM1- 5m | ΣM2+ 5m |
| D | | | | | | | | |
| Lantai 1 | 0,0000 | 0,0000 | 6967,0364 | 3023,8526 | 0,0000 | 0,0000 | 6876,8953 | 3023,8526 |
| | 0,0000 | 0,0000 | 6679,6302 | 3023,8526 | 0,0000 | 0,0000 | 6679,6302 | 3023,8526 |
| Lantai 2 | 0,0000 | 0,0000 | 6263,3639 | 2731,7468 | 0,0000 | 0,0000 | 6173,2228 | 2731,7468 |
| | 0,0000 | 0,0000 | 6679,6302 | 3023,8526 | 0,0000 | 0,0000 | 6679,6302 | 3023,8526 |
| Lantai 3 | 0,0000 | 0,0000 | 5559,6915 | 2439,6410 | 0,0000 | 0,0000 | 5469,5503 | 2439,6410 |
| | 0,0000 | 0,0000 | 5975,9577 | 2731,7468 | 0,0000 | 0,0000 | 5975,9577 | 2731,7468 |
| Lantai 4 | 0,0000 | 0,0000 | 4856,0190 | 2147,5353 | 0,0000 | 0,0000 | 4765,8778 | 2147,5353 |
| | 0,0000 | 0,0000 | 5272,2852 | 2439,6410 | 0,0000 | 0,0000 | 5272,2852 | 2439,6410 |
| Lantai 5 | 0,0000 | 0,0000 | 4152,3465 | 1855,4295 | 0,0000 | 0,0000 | 4062,2053 | 1855,4295 |
| | 0,0000 | 0,0000 | 4568,6127 | 2147,5353 | 0,0000 | 0,0000 | 4568,6127 | 2147,5353 |
| Lantai 6 | 0,0000 | 0,0000 | 3448,6740 | 1563,3237 | 0,0000 | 0,0000 | 3358,5328 | 1563,3237 |
| | 0,0000 | 0,0000 | 3864,9402 | 1855,4295 | 0,0000 | 0,0000 | 3864,9402 | 1855,4295 |
| Lantai 7 | 0,0000 | 0,0000 | 2745,0015 | 1271,2179 | 0,0000 | 0,0000 | 2654,8603 | 1271,2179 |
| | 0,0000 | 0,0000 | 3161,2677 | 1563,3237 | 0,0000 | 0,0000 | 3161,2677 | 1563,3237 |
| Lantai 8 | 0,0000 | 0,0000 | 2181,2386 | 979,1182 | 0,0000 | 0,0000 | 2091,0975 | 979,1182 |
| | 0,0000 | 0,0000 | 2457,5952 | 1271,2179 | 0,0000 | 0,0000 | 2457,5952 | 1271,2179 |
| Lantai 9 | 0,0000 | 0,0000 | 1617,4757 | 687,0185 | 0,0000 | 0,0000 | 1527,3346 | 687,0185 |
| | 0,0000 | 0,0000 | 1893,8323 | 979,1182 | 0,0000 | 0,0000 | 1893,8323 | 979,1182 |
| Lantai 10 | 0,0000 | 0,0000 | 1053,7128 | 394,9187 | 0,0000 | 0,0000 | 963,5717 | 394,9187 |
| | 0,0000 | 0,0000 | 1330,0694 | 687,0185 | 0,0000 | 0,0000 | 1330,0694 | 687,0185 |
| Lantai 11 | 0,0000 | 0,0000 | 670,5595 | 197,4594 | 0,0000 | 0,0000 | 580,4184 | 197,4594 |
| | 0,0000 | 0,0000 | 766,3065 | 394,9187 | 0,0000 | 0,0000 | 766,3065 | 394,9187 |
| Lantai 12 | 0,0000 | 0,0000 | 287,4063 | 0,0000 | 0,0000 | 0,0000 | 197,2651 | 0,0000 |
| | 0,0000 | 0,0000 | 383,1533 | 197,4594 | 0,0000 | 0,0000 | 383,1533 | 197,4594 |

Lanjutan

| KOLOM | Arah X | | | | | | | | | | Arah Y | | | | | | | | | | Nu,k Maksimum |
|-----------|--------|----|-------|------|-------|---------|-----------|----------|----------|-----------|------------|------|-------|------------|------------|----------|----------|-----------|------------|------------|------------------|
| | h | n | Rv | Lx | | Mkap.bx | | NDk.x | NLk.x | Ng.x | Nuk.x | Ly | | Mkap.by | | NDk.y | NLk.y | Ng.y | Nuky | | |
| | | | | Kiri | Kanan | Kiri | Kanan | | | | | Kiri | Kanan | Kiri | Kanan | | | | | | |
| m | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | |
| B | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8 | 0 | 7 | 0,0000 | 9990,8891 | 851,33 | 283,7095 | 1135,0395 | 1991,0626 | 5 | 5 | 9900,74791 | 9900,7479 | 1282,216 | 333,0671 | 1615,2831 | 1696,04726 | 1696,04726 | |
| Lantai 2 | 4 | 11 | 0,825 | 0 | 7 | 0,0000 | 8995,1108 | 779,1074 | 258,4487 | 1037,5561 | 1831,53054 | 5 | 5 | 9703,48277 | 8904,96964 | 1174,965 | 303,8488 | 1478,8138 | 1552,75449 | 1552,75449 | |
| Lantai 3 | 4 | 10 | 0,85 | 0 | 7 | 0,0000 | 7999,3325 | 707,0623 | 233,2937 | 940,356 | 1667,31706 | 5 | 5 | 9703,48277 | 7909,1914 | 1067,716 | 274,631 | 1342,347 | 1409,48435 | 1409,48435 | |
| Lantai 4 | 4 | 9 | 0,875 | 0 | 7 | 0,0000 | 7003,5542 | 635,15 | 208,2199 | 843,3699 | 1498,34939 | 5 | 5 | 8707,70449 | 6913,41309 | 960,4683 | 245,4135 | 1205,8818 | 1266,17589 | 1266,17589 | |
| Lantai 5 | 4 | 8 | 0,9 | 0 | 7 | 0,0000 | 7711,9262 | 563,3633 | 183,2215 | 746,5848 | 1324,61388 | 5 | 5 | 7711,92622 | 5917,6348 | 853,2224 | 216,1964 | 1069,4188 | 1122,88974 | 1122,88974 | |
| Lantai 6 | 4 | 7 | 0,925 | 0 | 7 | 0,0000 | 6007,7760 | 491,6858 | 158,2883 | 649,9741 | 1388,36736 | 5 | 5 | 6716,14795 | 4921,85655 | 745,978 | 186,9797 | 932,9577 | 979,605585 | 979,605585 | |
| Lantai 7 | 4 | 6 | 0,95 | 0 | 7 | 0,0000 | 5720,3697 | 420,1035 | 133,4112 | 553,5147 | 1146,08259 | 5 | 5 | 5720,36967 | 5720,3697 | 638,7349 | 157,7634 | 796,4983 | 836,323215 | 836,323215 | |
| Lantai 8 | 4 | 5 | 0,975 | 0 | 7 | 0,0000 | 4016,2194 | 348,6024 | 108,5813 | 457,1837 | 962,731279 | 5 | 5 | 4724,5914 | 3070,2156 | 531,4929 | 128,5473 | 660,0402 | 693,04221 | 693,04221 | |
| Lantai 9 | 4 | 4 | 1 | 0 | 7 | 0,0000 | 3160,3568 | 277,1676 | 83,78944 | 360,95704 | 788,177671 | 5 | 5 | 3728,81313 | 2214,35301 | 424,252 | 99,33151 | 523,58351 | 549,762686 | 549,762686 | |
| Lantai 10 | 4 | 3 | 1 | 0 | 7 | 0,0000 | 2304,4941 | 205,7887 | 59,02704 | 264,81574 | 609,454307 | 5 | 5 | 2872,95049 | 1358,49038 | 317,0118 | 70,11592 | 387,12772 | 406,484106 | 406,484106 | |
| Lantai 11 | 4 | 2 | 1 | 0 | 7 | 0,0000 | 1448,6315 | 134,4377 | 34,28415 | 168,72185 | 422,919678 | 5 | 5 | 2017,08786 | 777,87761 | 209,7721 | 40,90042 | 250,67252 | 263,206146 | 263,206146 | |
| Lantai 12 | 2 | 1 | 1 | 0 | 7 | 0,0000 | 868,0189 | 63,16033 | 9,557158 | 72,717488 | 263,959832 | 5 | 5 | 777,87761 | 197,265146 | 102,5338 | 11,68531 | 114,21911 | 119,930066 | 119,930066 | |
| | | | | | | | 580,6129 | | | | 134,414624 | | | 580,612615 | | | | | | | |

| Lanjutan | Arath X | | | | | | | | | | Arath Y | | | | | | Nul.k Maksimum | | | |
|-----------|---------|----|--------|------|-------|-----------|-----------|----------|----------|-----------|-----------|------|-------|--------|-----------|-----------|----------------|-----------|-----------|-----------|
| | h | n | Rv | Lx | | Mkap.bx | | NDk.x | NLk.x | Ng.x | Nuk.x | Ly | | NDk.y | NLk.y | Ng.y | Nuk.y | kN | kN | |
| | | | | Kiri | Kanan | Kiri | Kanan | | | | | Kiri | Kanan | | | | | | | |
| | | | | m | m | kNm | kNm | | | | | m | m | | | | | | | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| C | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8000 | 7 | 4 | 9990,8891 | 9191,6638 | 851,3300 | 293,7095 | 1135,0395 | 1679,3533 | 0 | 5 | 0,0000 | 9900,7479 | 1282,2160 | 333,0671 | 1615,2831 | 2804,9310 | 2804,9310 |
| Lantai 2 | 4 | 11 | 0,8250 | 7 | 4 | 9703,4828 | 8994,3987 | 779,1074 | 258,4487 | 1037,5561 | 1674,7287 | 0 | 5 | 0,0000 | 9703,4828 | 1174,9650 | 303,8488 | 1478,8138 | 2782,8373 | 2581,2785 |
| Lantai 3 | 4 | 10 | 0,8500 | 7 | 4 | 8995,1108 | 8148,9024 | 707,0623 | 233,2937 | 940,3560 | 1523,8351 | 0 | 5 | 0,0000 | 8904,9696 | 1067,7160 | 274,6310 | 1342,3470 | 2673,5067 | 2673,5067 |
| Lantai 4 | 4 | 9 | 0,8750 | 7 | 4 | 9703,4828 | 8994,3987 | 635,1500 | 208,2199 | 843,3699 | 1587,4629 | 0 | 5 | 0,0000 | 7909,1914 | 960,4683 | 245,4135 | 1205,8818 | 2350,6581 | 2445,6812 |
| Lantai 5 | 4 | 8 | 0,9000 | 7 | 4 | 7999,3325 | 7106,1410 | 563,3633 | 183,2215 | 746,5848 | 1364,4690 | 0 | 5 | 0,0000 | 8707,7045 | 853,2224 | 216,1964 | 1069,4188 | 2210,8869 | 2210,8869 |
| Lantai 6 | 4 | 7 | 0,9250 | 7 | 4 | 7003,5542 | 6063,3796 | 491,6858 | 158,2583 | 649,9741 | 1201,1824 | 0 | 5 | 0,0000 | 7913,4131 | 745,9780 | 186,9797 | 932,8577 | 1868,5117 | 1868,5117 |
| Lantai 7 | 4 | 6 | 0,9500 | 7 | 4 | 7711,9262 | 6908,8759 | 420,1035 | 133,4112 | 553,5147 | 1103,3738 | 0 | 5 | 0,0000 | 7711,9262 | 638,7349 | 157,7634 | 796,4983 | 1720,3935 | 1720,3935 |
| Lantai 8 | 4 | 5 | 0,9750 | 7 | 4 | 6007,7760 | 5067,6013 | 348,6024 | 108,5813 | 457,1837 | 877,9894 | 0 | 5 | 0,0000 | 5917,6348 | 531,4929 | 128,5473 | 660,0402 | 1464,6939 | 1464,6939 |
| Lantai 9 | 4 | 4 | 1,0000 | 7 | 4 | 6716,1479 | 5866,1145 | 277,1676 | 83,7894 | 360,9570 | 776,4995 | 0 | 5 | 0,0000 | 6716,1479 | 424,2520 | 99,3315 | 523,5835 | 1112,1266 | 1202,0252 |
| Lantai 10 | 4 | 3 | 1,0000 | 7 | 4 | 5011,9977 | 4071,8231 | 205,7887 | 59,0270 | 264,8157 | 941,7243 | 0 | 5 | 0,0000 | 4921,8565 | 317,0118 | 70,1159 | 387,1277 | 859,7721 | 951,9758 |
| Lantai 11 | 4 | 2 | 1,0000 | 7 | 4 | 5720,3697 | 4870,3362 | 134,4377 | 34,2842 | 168,7219 | 711,0420 | 0 | 5 | 0,0000 | 5720,3697 | 209,7721 | 40,9004 | 250,6725 | 596,6728 | 688,8764 |
| Lantai 12 | 2 | 1 | 1,0000 | 7 | 4 | 4016,2194 | 3076,0448 | 63,1603 | 9,5572 | 72,7175 | 776,4995 | 0 | 5 | 0,0000 | 3926,0783 | 102,5338 | 11,6853 | 114,2191 | 372,1090 | 425,7777 |
| | | | | | | 4724,5914 | 3874,5579 | 287,7797 | | | 418,0672 | 0 | 5 | 0,0000 | 4724,5914 | | | | 147,5472 | 201,2158 |
| | | | | | | 3160,3568 | 2308,0558 | | | | 461,0982 | 0 | 5 | 0,0000 | 3070,2156 | | | | | |
| | | | | | | 3728,8131 | 2878,7797 | | | | 268,3070 | 0 | 5 | 0,0000 | 3728,8131 | | | | | |
| | | | | | | 2304,4941 | 1540,0667 | | | | 311,3380 | 0 | 5 | 0,0000 | 2214,3530 | | | | | |
| | | | | | | 2872,9505 | 2110,7906 | | | | 175,1736 | 0 | 5 | 0,0000 | 2872,9505 | | | | | |
| | | | | | | 1448,6315 | 772,0777 | | | | 161,6276 | 0 | 5 | 0,0000 | 1358,4904 | | | | | |
| | | | | | | 2017,0879 | 1342,8016 | | | | 82,1341 | 0 | 5 | 0,0000 | 2017,0879 | | | | | |
| | | | | | | 868,0189 | 484,6714 | | | | 68,5882 | 0 | 5 | 0,0000 | 777,8778 | | | | | |
| | | | | | | 1161,2252 | 574,8126 | | | | | 0 | 5 | 0,0000 | 1161,2252 | | | | | |
| | | | | | | 287,4063 | 197,2651 | | | | | 0 | 5 | 0,0000 | 197,2651 | | | | | |
| | | | | | | 580,6126 | 287,4063 | | | | | 0 | 5 | 0,0000 | 580,6126 | | | | | |

| Lanjutan | Arah X | | | | | | | | | | Arah Y | | | | | | | | | | Nuk | |
|-----------|--------|----|--------|------|-------|---------|-----------|----------|----------|-----------|-----------|------|-------|---------|-----------|-----------|----------|-----------|-----------|-----------|-----------|---|
| | h | n | Rv | Lx | | Mkap.bx | | NDk.x | NLk.x | Ng.x | Nuk.x | Ly | | Mkap.by | | NDk.y | NLk.y | Ng.y | Nuk.y | Nuk | Maksimum | |
| | | | | Kiri | Kanan | Kiri | Kanan | | | | | Kiri | Kanan | | | | | | | | | |
| | | | | | | | | | | | | | | m | kNm | | | | | | | m |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | KN | KN | |
| D | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8000 | 0 | 7 | 0,0000 | 9990,8891 | 851,3300 | 283,7095 | 1135,0395 | 1991,0626 | 0 | 5 | 0,0000 | 9900,7479 | 1282,2160 | 333,0671 | 1615,2831 | 2804,9310 | 2804,9310 | 2782,8373 | |
| Lantai 2 | 4 | 11 | 0,8250 | 0 | 7 | 0,0000 | 9703,4828 | 779,1074 | 258,4487 | 1037,5561 | 1968,0701 | 0 | 5 | 0,0000 | 9703,4828 | 1174,9650 | 303,8488 | 1478,8138 | 2581,2785 | 2673,5067 | 2673,5067 | |
| Lantai 3 | 4 | 10 | 0,8500 | 0 | 7 | 0,0000 | 8995,1108 | 707,0623 | 233,2937 | 940,3560 | 1831,5305 | 0 | 5 | 0,0000 | 8904,9696 | 1067,7160 | 274,6310 | 1342,3470 | 2350,6581 | 2445,6612 | 2445,6612 | |
| Lantai 4 | 4 | 9 | 0,8750 | 0 | 7 | 0,0000 | 7999,3325 | 635,1500 | 208,2199 | 843,3699 | 1667,3171 | 0 | 5 | 0,0000 | 7909,1914 | 960,4683 | 245,4135 | 1205,8818 | 2113,0690 | 2210,8869 | 2210,8869 | |
| Lantai 5 | 4 | 8 | 0,9000 | 0 | 7 | 0,0000 | 8707,7045 | 563,3633 | 183,2215 | 746,5848 | 1498,3494 | 0 | 5 | 0,0000 | 8707,7045 | 853,2224 | 216,1964 | 1069,4188 | 1868,5117 | 1969,1244 | 1969,1244 | |
| Lantai 6 | 4 | 7 | 0,9250 | 0 | 7 | 0,0000 | 7003,5542 | 491,6858 | 158,2883 | 649,9741 | 1324,6139 | 0 | 5 | 0,0000 | 6913,4131 | 745,9780 | 186,9797 | 932,9577 | 1616,9860 | 1720,3935 | 1720,3935 | |
| Lantai 7 | 4 | 6 | 0,9500 | 0 | 7 | 0,0000 | 6007,7760 | 420,1035 | 133,4112 | 553,5147 | 1388,3674 | 0 | 5 | 0,0000 | 5917,6348 | 638,7349 | 157,7634 | 796,4983 | 1358,4916 | 1464,6939 | 1464,6939 | |
| Lantai 8 | 4 | 5 | 0,9750 | 0 | 7 | 0,0000 | 6716,1479 | 348,6024 | 108,5813 | 457,1837 | 1211,6070 | 0 | 5 | 0,0000 | 6716,1479 | 531,4929 | 128,5473 | 660,0402 | 1112,1266 | 1202,0252 | 1202,0252 | |
| Lantai 9 | 4 | 4 | 1,0000 | 0 | 7 | 0,0000 | 5011,9977 | 277,1676 | 83,7894 | 360,9570 | 843,6022 | 0 | 5 | 0,0000 | 3070,2156 | 424,2520 | 99,3315 | 523,5635 | 859,7721 | 951,9758 | 951,9758 | |
| Lantai 10 | 4 | 3 | 1,0000 | 0 | 7 | 0,0000 | 4016,2194 | 205,7887 | 59,0270 | 264,8157 | 609,4543 | 0 | 5 | 0,0000 | 2214,3530 | 317,0118 | 70,1159 | 387,1277 | 596,6728 | 688,8764 | 688,8764 | |
| Lantai 11 | 4 | 2 | 1,0000 | 0 | 7 | 0,0000 | 3728,8131 | 134,4377 | 34,2842 | 168,7219 | 422,9197 | 0 | 5 | 0,0000 | 1358,4904 | 209,7721 | 40,9004 | 250,6725 | 372,1090 | 425,7777 | 425,7777 | |
| Lantai 12 | 2 | 1 | 1,0000 | 0 | 7 | 0,0000 | 2304,4941 | 63,1603 | 9,5572 | 72,7175 | 479,7653 | 0 | 5 | 0,0000 | 2017,0879 | 102,5338 | 11,6853 | 114,2191 | 147,5472 | 201,2158 | 201,2158 | |
| | | | | | | | 2872,9505 | | | | 293,2805 | 0 | 5 | 0,0000 | 197,2651 | | | | | | | |
| | | | | | | | 1448,6315 | | | | 105,0940 | 0 | 5 | 0,0000 | 580,6126 | | | | | | | |
| | | | | | | | 2017,0879 | | | | 134,4146 | 0 | 5 | 0,0000 | | | | | | | | |

Tabel 3.3.6.1 Mn-Pn Arah X untuk R/W 2/2 lama

| UNTUK KOLOM | 800 | X | 900 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 75,2941 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| As (mm2) | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 |
| As' (mm2) | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 |
| Ts (kn) | 0 | -142,222 | 80 | 365,714 | 746,67 | 1280 | 1280 | 1280 | 1280 | 1280 | 0 |
| Cs (kn) | 0 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 991,906 | 1413,12 | 1755,03 | 2029,1 | 2255,81 | 2234,9 | 2188,39 | 2116,37 | 2018,81 | 924,612 |
| Pn (kn) | 16024 | 13214,8 | 11674,7 | 10071,2 | 8372,4 | 6521,2 | 5862,3 | 5203,36 | 4544,44 | 3885,52 | 0 |

| UNTUK KOLOM | 800 | X | 900 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 150,588 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| As (mm2) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| As' (mm2) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| Ts (kn) | 0 | -284,444 | 160 | 731,429 | 1493,3 | 2560 | 2560 | 2560 | 2560 | 2560 | 0 |
| Cs (kn) | 0 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 1377,03 | 1878,24 | 2323,01 | 2734,2 | 3152,93 | 3132 | 3085,51 | 3013,49 | 2915,93 | 1752,85 |
| Pn (kn) | 18448 | 14569 | 12806,7 | 10917,5 | 8837,7 | 6453,2 | 5794,3 | 5135,36 | 4476,44 | 3817,52 | 0 |

Lanjutan

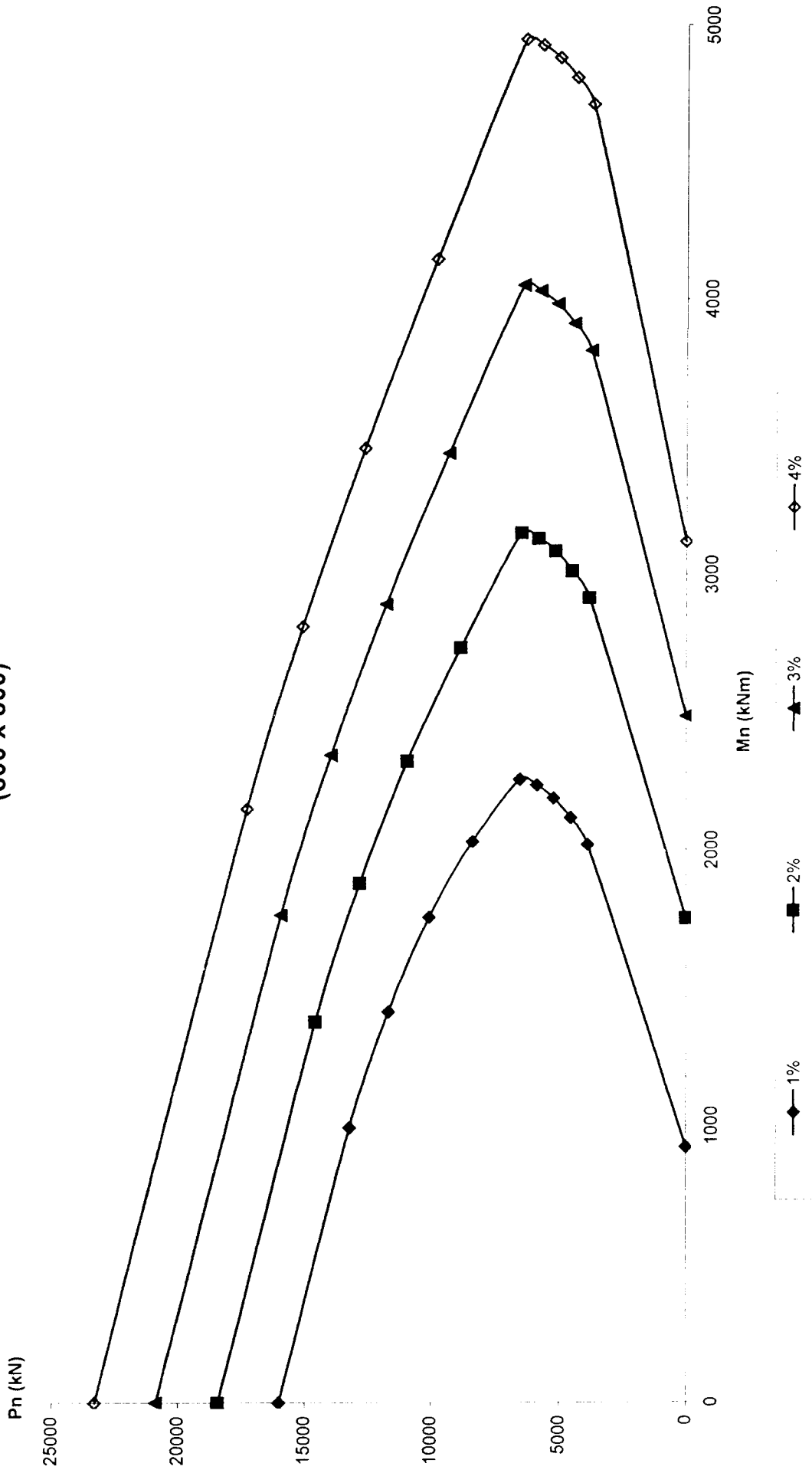
UNTUK KOLOM

| | 800 | X | 900 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 225,882 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 |
| As (mm ²) | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 |
| As' (mm ²) | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 |
| Ts (kn) | 0 | -426,667 | 240 | 1097,14 | 2240 | 3840 | 3840 | 3840 | 3840 | 3840 | 0 |
| Cs (kn) | 0 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 1762,15 | 2343,36 | 2890,99 | 3439,3 | 4050,05 | 4029,1 | 3982,63 | 3910,61 | 3813,05 | 2484,71 |
| Pn (kn) | 20872 | 15923,2 | 13938,7 | 11763,7 | 9303 | 6385,2 | 5726,3 | 5067,36 | 4408,44 | 3749,52 | 0 |

UNTUK KOLOM

| | 800 | X | 900 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 301,176 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 |
| As (mm ²) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| As' (mm ²) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| Ts (kn) | 0 | -568,889 | 320 | 1462,86 | 2986,7 | 5120 | 5120 | 5120 | 5120 | 5120 | 0 |
| Cs (kn) | 0 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 2147,27 | 2808,48 | 3458,97 | 4144,4 | 4947,17 | 4926,2 | 4879,75 | 4807,73 | 4710,17 | 3120,19 |
| Pn (kn) | 23296 | 17277,4 | 15070,7 | 12610 | 9768,4 | 6317,2 | 5658,3 | 4999,36 | 4340,44 | 3681,52 | 0 |

Grafik Mn-Pn Arah X
(800 x 800)



Tabel 3.3.6.2 Mn-Pn Arah Y untuk R/W 2/2 lama

| UNTUK KOLOM | 900 | X | 800 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 75,2941 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| As (mm2) | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 |
| As' (mm2) | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 |
| Ts (kn) | 0 | -142,222 | 80 | 365,714 | 746,67 | 1280 | 1280 | 1280 | 1280 | 1280 | 0 |
| Cs (kn) | 0 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 991,906 | 1413,12 | 1755,03 | 2029,1 | 2255,81 | 2234,9 | 2188,39 | 2116,37 | 2018,81 | 924,612 |
| Pn (kn) | 16024 | 13214,8 | 11674,7 | 10071,2 | 8372,4 | 6521,2 | 5862,3 | 5203,36 | 4544,44 | 3885,52 | 0 |

| UNTUK KOLOM | 900 | X | 800 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 150,588 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| As (mm2) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| As' (mm2) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| Ts (kn) | 0 | -284,444 | 160 | 731,429 | 1493,3 | 2560 | 2560 | 2560 | 2560 | 2560 | 0 |
| Cs (kn) | 0 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 1377,03 | 1878,24 | 2323,01 | 2734,2 | 3152,93 | 3132 | 3085,51 | 3013,49 | 2915,93 | 1752,85 |
| Pn (kn) | 18448 | 14569 | 12806,7 | 10917,5 | 8837,7 | 6453,2 | 5794,3 | 5135,36 | 4476,44 | 3817,52 | 0 |

Lanjutan

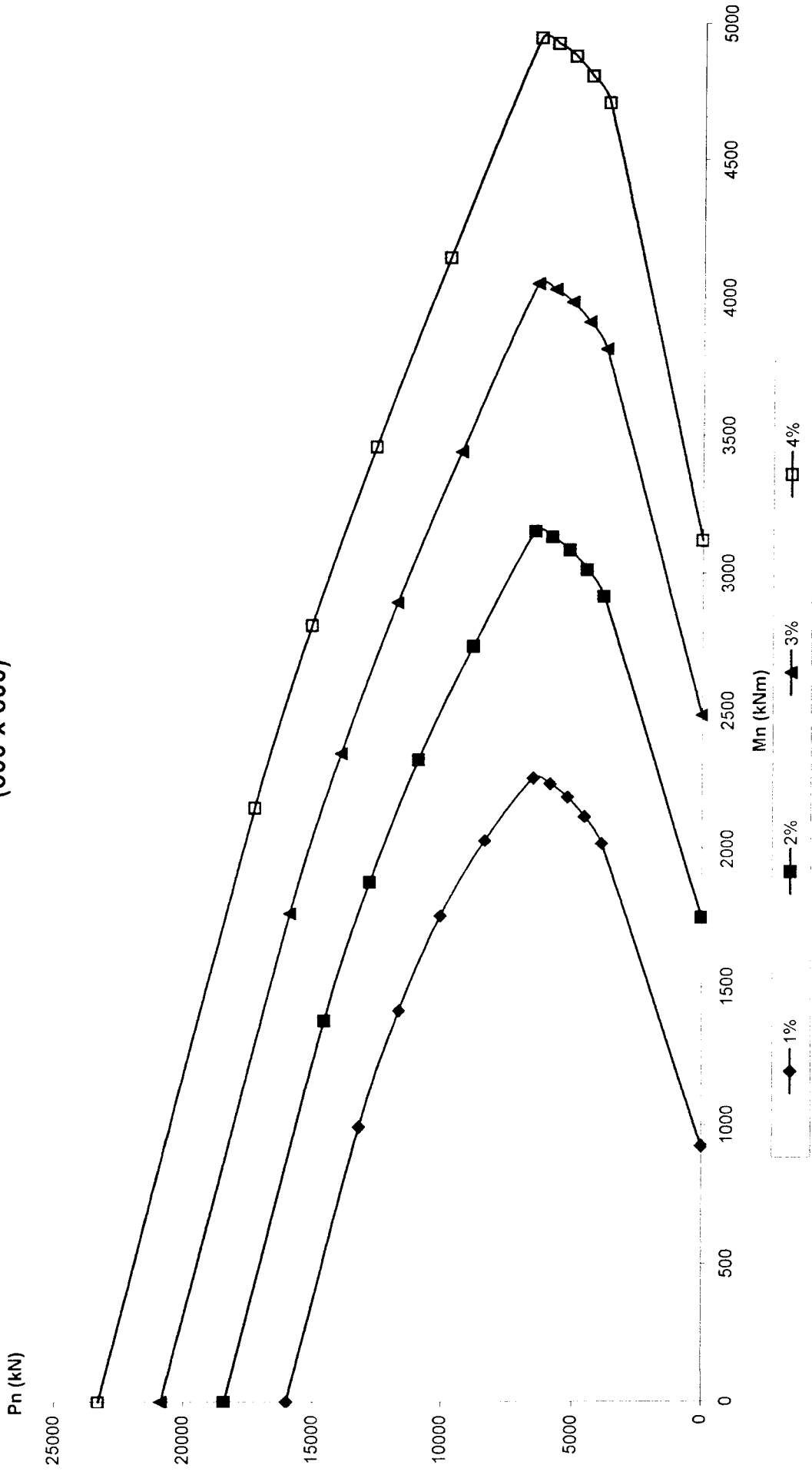
UNTUK KOLOM

| | 900 | X | 800 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 225,882 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 |
| As (mm ²) | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 |
| As' (mm ²) | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 |
| Ts (kn) | 0 | -426,667 | 240 | 1097,14 | 2240 | 3840 | 3840 | 3840 | 3840 | 3840 | 0 |
| Cs (kn) | 0 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 1762,15 | 2343,36 | 2890,99 | 3439,3 | 4050,05 | 4029,1 | 3982,63 | 3910,61 | 3813,05 | 2484,71 |
| Pn (kn) | 20872 | 15923,2 | 13938,7 | 11763,7 | 9303 | 6385,2 | 5726,3 | 5067,36 | 4408,44 | 3749,52 | 0 |

UNTUK KOLOM

| | 900 | X | 800 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 301,176 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 |
| As (mm ²) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| As' (mm ²) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| Ts (kn) | 0 | -568,889 | 320 | 1462,86 | 2986,7 | 5120 | 5120 | 5120 | 5120 | 5120 | 0 |
| Cs (kn) | 0 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 2147,27 | 2808,48 | 3458,97 | 4144,4 | 4947,17 | 4926,2 | 4879,75 | 4807,73 | 4710,17 | 3120,19 |
| Pn (kn) | 23296 | 17277,4 | 15070,7 | 12610 | 9768,4 | 6317,2 | 5658,3 | 4999,36 | 4340,44 | 3681,52 | 0 |

Grafik M_n - P_n Arah Y
(800 x 800)



Tabel 3.3.7 Penulangan Longitudinal Kolom untuk R/W 2/2 Lama

| KOLOM | Arah X | | | | | | Arah Y | | | | | | | | | |
|-----------|--------|-----|-----------|-----------|--------|-----------|----------|----------------|-----|-----|-----------|-----------|--------|-----------|----------|----------------|
| | b | h | Mn | Pn | ppakai | Ast | Jml Tul. | Tul. Terpasang | b | h | Mn | Pn | ppakai | Ast | Jml Tul. | Tul. Terpasang |
| | mm | mm | kNm | kN | mm2 | mm2 | | | mm | mm | kNm | kN | mm2 | mm2 | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| A | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 800 | 250,6630 | 2609,3035 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 800 | 39,3893 | 2609,3035 | 1,0% | 5896,0000 | 16 | Ø22 - 24 |
| Lantai 2 | 800 | 800 | 1117,8721 | 2442,2506 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 800 | 1371,2965 | 2442,2506 | 1,5% | 8844,0000 | 24 | Ø22 - 24 |
| Lantai 3 | 800 | 800 | 986,2515 | 2200,0384 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 800 | 870,0886 | 2200,0384 | 1,0% | 5896,0000 | 16 | Ø22 - 24 |
| Lantai 4 | 800 | 800 | 758,7432 | 1951,7946 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 800 | 765,4931 | 1951,7946 | 1,0% | 5896,0000 | 16 | Ø22 - 20 |
| Lantai 5 | 800 | 800 | 833,9517 | 1727,5227 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 800 | 810,7805 | 1727,5227 | 1,0% | 5896,0000 | 16 | Ø22 - 20 |
| Lantai 6 | 800 | 800 | 900,3818 | 1507,0855 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 800 | 853,6939 | 1507,0855 | 1,0% | 5896,0000 | 16 | Ø22 - 20 |
| Lantai 7 | 800 | 800 | 744,5472 | 1286,6511 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 800 | 777,3744 | 1286,6511 | 1,0% | 5896,0000 | 16 | Ø22 - 20 |
| Lantai 8 | 800 | 800 | 816,2114 | 1066,2188 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 800 | 835,8935 | 1066,2188 | 1,0% | 5896,0000 | 16 | Ø22 - 20 |
| Lantai 9 | 800 | 800 | 915,2530 | 845,7887 | 1,1% | 6485,6000 | 18 | Ø22 - 18 | 800 | 800 | 920,0298 | 845,7887 | 1,3% | 7370,0000 | 20 | Ø22 - 20 |
| Lantai 10 | 800 | 800 | 666,1510 | 625,3602 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 712,5604 | 625,3602 | 1,0% | 5896,0000 | 16 | Ø22 - 18 |
| Lantai 11 | 800 | 800 | 637,4231 | 404,9325 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 808,6199 | 404,9325 | 1,1% | 6485,6000 | 18 | Ø22 - 18 |
| Lantai 12 | 800 | 800 | 225,7168 | 184,5078 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 214,9684 | 184,5078 | 1,0% | 5896,0000 | 16 | Ø22 - 16 |
| B | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 800 | 173,1642 | 3063,1732 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 39,3893 | 3063,1732 | 1,0% | 5896,0000 | 16 | Ø22 - 24 |
| Lantai 2 | 800 | 800 | 772,2538 | 2907,6481 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 1371,2965 | 2907,6481 | 1,5% | 8844,0000 | 24 | Ø22 - 24 |
| Lantai 3 | 800 | 800 | 681,3270 | 2657,7364 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 870,0886 | 2657,7364 | 1,0% | 5896,0000 | 16 | Ø22 - 24 |
| Lantai 4 | 800 | 800 | 522,5370 | 2400,5107 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 765,4931 | 2400,5107 | 1,0% | 5896,0000 | 16 | Ø22 - 20 |
| Lantai 5 | 800 | 800 | 547,8383 | 2135,9498 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 810,7805 | 2135,9498 | 1,0% | 5896,0000 | 16 | Ø22 - 20 |
| Lantai 6 | 800 | 800 | 591,4775 | 1864,0108 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 853,6939 | 1864,0108 | 1,0% | 5896,0000 | 16 | Ø22 - 20 |
| Lantai 7 | 800 | 800 | 512,5111 | 1584,6563 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 777,3744 | 1584,6563 | 1,0% | 5896,0000 | 16 | Ø22 - 20 |
| Lantai 8 | 800 | 800 | 561,8413 | 1297,8495 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 835,8935 | 1297,8495 | 1,0% | 5896,0000 | 16 | Ø22 - 20 |
| Lantai 9 | 800 | 800 | 630,0169 | 1025,0768 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 920,0298 | 1025,0768 | 1,3% | 7370,0000 | 20 | Ø22 - 20 |
| Lantai 10 | 800 | 800 | 494,9740 | 626,0673 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 712,5604 | 626,0673 | 1,0% | 5896,0000 | 16 | Ø22 - 18 |
| Lantai 11 | 800 | 800 | 473,6282 | 404,9325 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 808,6199 | 404,9325 | 1,1% | 6485,6000 | 18 | Ø22 - 18 |
| Lantai 12 | 800 | 800 | 297,0340 | 184,5078 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 800 | 214,9684 | 184,5078 | 1,0% | 5896,0000 | 16 | Ø22 - 16 |

Lanjutan

| KOLOM | Arah X | | | | | | | | | | Arah Y | | | | | | | | | |
|-----------|--------|-----|-----------|-----------|------|-----------|-----|----------|------|-----------|--------|----------|-----------|------|-----------|--------|----------|-----|------|-----------|
| | b | | h | Mn | Pn | ppakai | Ast | Jml | Tul. | Terpasang | b | | h | Mn | Pn | ppakai | Ast | Jml | Tul. | Terpasang |
| | mm | mm | mm | kNm | kN | | | | | | mm2 | mm | mm | kNm | kN | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | | |
| C | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 800 | 250,6630 | 4315,2785 | 1,0% | 5896,0000 | 16 | ø22 - 20 | | 800 | 800 | 27,8347 | 4315,2785 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 2 | 800 | 800 | 1117,8721 | 4113,0873 | 1,2% | 7075,2000 | 20 | ø22 - 20 | | 800 | 800 | 969,0347 | 4113,0873 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 3 | 800 | 800 | 986,2515 | 3762,5864 | 1,0% | 5896,0000 | 16 | ø22 - 20 | | 800 | 800 | 614,8532 | 3762,5864 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 4 | 800 | 800 | 758,7432 | 3401,3644 | 1,0% | 5896,0000 | 16 | ø22 - 18 | | 800 | 800 | 540,9401 | 3401,3644 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 5 | 800 | 800 | 833,9517 | 3029,4221 | 1,0% | 5896,0000 | 16 | ø22 - 18 | | 800 | 800 | 572,9428 | 3029,4221 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 6 | 800 | 800 | 900,3818 | 2646,7592 | 1,0% | 5896,0000 | 16 | ø22 - 18 | | 800 | 800 | 603,2678 | 2646,7592 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 7 | 800 | 800 | 744,5472 | 2253,3752 | 1,0% | 5896,0000 | 16 | ø22 - 18 | | 800 | 800 | 512,0621 | 2253,3752 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 8 | 800 | 800 | 816,2114 | 1657,1412 | 1,0% | 5896,0000 | 16 | ø22 - 18 | | 800 | 800 | 550,6091 | 1657,1412 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 9 | 800 | 800 | 915,2530 | 1079,6552 | 1,1% | 6190,8000 | 18 | ø22 - 18 | | 800 | 800 | 606,0303 | 1079,6552 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 10 | 800 | 800 | 666,1510 | 626,0673 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 470,2272 | 626,0673 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 11 | 800 | 800 | 637,4231 | 404,9325 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 533,6180 | 404,9325 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 12 | 800 | 800 | 225,7168 | 184,5078 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 214,9684 | 184,5078 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| D | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 800 | 173,1642 | 4315,2785 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 27,8347 | 4315,2785 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 2 | 800 | 800 | 772,2538 | 4113,0873 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 969,0347 | 4113,0873 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 3 | 800 | 800 | 681,3270 | 3762,5864 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 614,8532 | 3762,5864 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 4 | 800 | 800 | 522,5370 | 3401,3644 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 540,9401 | 3401,3644 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 5 | 800 | 800 | 547,8383 | 3029,4221 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 572,9428 | 3029,4221 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 6 | 800 | 800 | 591,4775 | 2646,7592 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 603,2678 | 2646,7592 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 7 | 800 | 800 | 512,5111 | 2253,3752 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 512,0621 | 2253,3752 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 8 | 800 | 800 | 561,8413 | 1657,1412 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 550,6091 | 1657,1412 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 9 | 800 | 800 | 630,0169 | 1079,6552 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 606,0303 | 1079,6552 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 10 | 800 | 800 | 494,9740 | 626,0673 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 470,2272 | 626,0673 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 11 | 800 | 800 | 473,6282 | 404,9325 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 533,6180 | 404,9325 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |
| Lantai 12 | 800 | 800 | 297,0340 | 184,5078 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | 800 | 800 | 214,9684 | 184,5078 | 1,0% | 5896,0000 | 16 | ø22 - 16 | | | |

Tabel 3.3.8 Gaya Geser Rencana Kolom untuk RW 2/2 Lama

| kolom | hn | Sumbu X | | | | | | Sumbu Y | | | | | | Vu,k Terpakai | | | |
|-----------|-----|----------------------|----------|---------|--------|----------|----------|----------------------|------------|--------|--------|----------|------------|------------------|----|----|-----------|
| | | Mu,kx | | Vu,kx | VD | VL | VE | Vu,kx max | Mu,ky | Atas | | Vu,ky | VD | | VL | VE | Vu,ky max |
| | | Bawah | Atas | | | | | | | Bawah | | | | | | | |
| m | kNm | kN | kN | kN | kN | kN | kN | kNm | kNm | kNm | kN | kN | kN | kN | kN | kN | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | | | |
| A | | | | | | | | | | | | | | | | | |
| Lantai 1 | 3,4 | 162,9310 162,9310 | 95,8417 | 10,8162 | 1,5502 | 169,3702 | 724,3396 | 25,6031 25,6031 | 15,0606292 | 0,0000 | 0,0000 | 185,8866 | 780,72372 | 95,8417 | | | |
| Lantai 2 | 3,4 | 248,4843 726,6168 | 286,7945 | 19,1167 | 2,6976 | 191,6824 | 827,9711 | 351,3882 891,3428 | 365,50911 | 0,0000 | 0,0000 | 193,1000 | 811,02 | 365,5091 | | | |
| Lantai 3 | 3,4 | 397,8905 641,0635 | 305,5747 | 17,0929 | 2,3414 | 194,6233 | 837,8238 | 452,9372 565,5576 | 299,557297 | 0,0000 | 0,0000 | 190,8275 | 801,4755 | 305,5747 | | | |
| Lantai 4 | 3,4 | 493,1831 491,6573 | 289,6589 | 17,4076 | 2,3371 | 189,7493 | 817,6789 | 497,5705 464,0086 | 282,817397 | 0,0000 | 0,0000 | 184,3474 | 774,25908 | 289,6589 | | | |
| Lantai 5 | 3,4 | 542,0686 442,2781 | 289,5138 | 17,2110 | 2,2626 | 179,3301 | 773,6337 | 527,0073 419,3753 | 278,347836 | 0,0000 | 0,0000 | 174,3295 | 732,1839 | 289,5138 | | | |
| Lantai 6 | 3,4 | 585,2482 393,3926 | 287,8355 | 17,1462 | 2,2138 | 165,0192 | 713,4086 | 554,9010 389,9385 | 277,893981 | 0,0000 | 0,0000 | 161,2890 | 677,4138 | 287,8355 | | | |
| Lantai 7 | 3,4 | 483,9557 350,2130 | 245,3437 | 17,0607 | 2,1692 | 147,4157 | 639,3373 | 505,2934 362,0448 | 255,099456 | 0,0000 | 0,0000 | 145,3577 | 610,50234 | 255,0995 | | | |
| Lantai 8 | 3,4 | 530,5374 231,2848 | 224,0654 | 17,0213 | 2,1310 | 126,8532 | 552,8934 | 543,3308 282,8135 | 242,983609 | 0,0000 | 0,0000 | 126,6215 | 531,8103 | 242,9836 | | | |
| Lantai 9 | 3,4 | 594,9144 184,7031 | 229,2993 | 16,8680 | 2,1105 | 103,4904 | 454,5871 | 598,0194 244,7760 | 247,881009 | 0,0000 | 0,0000 | 105,0721 | 441,30282 | 247,8810 | | | |
| Lantai 10 | 3,4 | 432,9981 120,3261 | 162,7424 | 17,2777 | 2,0514 | 77,7686 | 346,9237 | 463,1643 190,0874 | 192,132854 | 0,0000 | 0,0000 | 81,0387 | 340,36254 | 192,1329 | | | |
| Lantai 11 | 3,4 | 414,3250 17,3304 | 126,9575 | 15,2616 | 2,2080 | 49,3885 | 225,7749 | 525,6029 71,4832 | 175,613565 | 0,0000 | 0,0000 | 53,4507 | 224,492856 | 175,6136 | | | |
| Lantai 12 | 3,4 | 146,7160 27,6950 | 51,2973 | 24,0483 | 1,4348 | 23,1309 | 123,9069 | 139,7295 6,9573 | 43,1431772 | 0,0000 | 0,0000 | 28,4443 | 119,46606 | 51,2973 | | | |

Lanjutan

| KOLOM | hn | Sumbu X | | | | | | Sumbu Y | | | | | | Vu,k Terpakai | | |
|-----------|-----|----------------------|----------|---------|--------|----------|------------|----------------------|------------|--------|--------|--------|----------|------------------|----------|------|
| | | Mu,kx | | Vu,kx | VD | VL | VE | Vu,kx | Mu,ky | | Vu,ky | VD | VL | VE | Vu,ky | Vu,k |
| | | Atas | Bawah | | | | | | Atas | Bawah | | | | | | |
| | | kNm | kNm | kN | kN | kN | kN | kN | kNm | kNm | kN | kN | kN | kN | kN | kN |
| 1 | 2 | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| C | | | | | | | | | | | | | | | | |
| Lantai 1 | 3,4 | 162,9310 0,0000 | 47,9209 | 10,8162 | 1,5502 | 169,3702 | 724,339557 | 18,0926 18,0926 | 10,6426809 | 0,0000 | 0,0000 | 0,0000 | 185,8866 | 780,72372 | 47,9209 | |
| Lantai 2 | 3,4 | 248,4843 726,6168 | 286,7945 | 19,1167 | 2,6976 | 191,6824 | 827,971086 | 248,3105 629,8725 | 258,289133 | 0,0000 | 0,0000 | 0,0000 | 193,1000 | 811,02 | 286,7945 | |
| Lantai 3 | 3,4 | 397,8905 641,0635 | 305,5747 | 17,0929 | 2,3414 | 194,6233 | 837,823786 | 320,0707 399,6546 | 211,683902 | 0,0000 | 0,0000 | 0,0000 | 190,8275 | 801,4755 | 305,5747 | |
| Lantai 4 | 3,4 | 493,1831 491,6573 | 289,6589 | 17,4076 | 2,3371 | 189,7493 | 817,678899 | 351,6111 327,8944 | 199,854554 | 0,0000 | 0,0000 | 0,0000 | 184,3474 | 774,25908 | 289,6589 | |
| Lantai 5 | 3,4 | 542,0686 442,2781 | 289,5138 | 17,2110 | 2,2626 | 179,3301 | 773,633735 | 372,4128 296,3540 | 196,696113 | 0,0000 | 0,0000 | 0,0000 | 174,3295 | 732,1839 | 289,5138 | |
| Lantai 6 | 3,4 | 585,2482 393,3926 | 287,8355 | 17,1462 | 2,2138 | 165,0192 | 713,408617 | 392,1240 275,5523 | 196,375394 | 0,0000 | 0,0000 | 0,0000 | 161,2890 | 677,4138 | 287,8355 | |
| Lantai 7 | 3,4 | 483,9557 350,2130 | 245,3437 | 17,0607 | 2,1692 | 147,4157 | 639,33729 | 332,8404 255,8410 | 173,141598 | 0,0000 | 0,0000 | 0,0000 | 145,3577 | 610,50234 | 245,3437 | |
| Lantai 8 | 3,4 | 530,5374 231,2848 | 224,0654 | 17,0213 | 2,1310 | 126,8532 | 552,893368 | 357,8959 186,2913 | 160,055058 | 0,0000 | 0,0000 | 0,0000 | 126,6215 | 531,8103 | 224,0654 | |
| Lantai 9 | 3,4 | 594,9144 184,7031 | 229,2993 | 16,8680 | 2,1105 | 103,4904 | 454,587135 | 393,9197 161,2357 | 163,28101 | 0,0000 | 0,0000 | 0,0000 | 105,0721 | 441,30282 | 229,2993 | |
| Lantai 10 | 3,4 | 432,9981 120,3261 | 162,7424 | 17,2777 | 2,0514 | 77,7686 | 346,923742 | 305,6477 125,2120 | 126,723425 | 0,0000 | 0,0000 | 0,0000 | 81,0387 | 340,36254 | 162,7424 | |
| Lantai 11 | 3,4 | 414,3250 17,3304 | 126,9575 | 15,2616 | 2,2080 | 49,3885 | 225,774879 | 346,8517 47,1726 | 115,889507 | 0,0000 | 0,0000 | 0,0000 | 53,4507 | 224,492856 | 126,9575 | |
| Lantai 12 | 3,4 | 146,7160 27,6950 | 51,2973 | 24,0483 | 1,4348 | 23,1309 | 123,906876 | 139,7295 4,5912 | 42,4472648 | 0,0000 | 0,0000 | 0,0000 | 28,4443 | 119,46606 | 51,2973 | |

Lanjutan

| KOLOM | hn | Sumbu X | | | | | | | | | | Sumbu Y | | | | | Vu,k Terpakai | |
|-----------|-----|----------|----------|---------|--------|----------|------------|----------|----------|------------|--------|---------|----------|------------|----------|-------|------------------|--|
| | | Mu,kx | | Vu,kx | VD | VL | VE | Vu,kx | Mu,ky | Atas | | Vu,ky | VD | VL | VE | Vu,ky | | |
| | | Bawah | Atas | | | | | | | Bawah | Atas | | | | | | | |
| 1 | 2 | kNm | kN | kN | kN | kN | kN | kNm | kNm | kNm | kN | kN | kN | kN | kN | kN | kN | |
| D | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 3,4 | 112,5668 | 66,2099 | 10,8162 | 1,5502 | 169,3702 | 724,339557 | 18,0926 | 18,0926 | 10,6426809 | 0,0000 | 0,0000 | 185,8866 | 780,72372 | 66,2099 | | | |
| Lantai 2 | 3,4 | 171,6592 | 198,1247 | 19,1167 | 2,6976 | 191,6824 | 827,971086 | 248,3105 | 629,8725 | 258,289133 | 0,0000 | 0,0000 | 193,1000 | 811,02 | 258,2891 | | | |
| Lantai 3 | 3,4 | 274,8727 | 211,0986 | 17,0929 | 2,3414 | 194,6233 | 837,823786 | 320,0707 | 399,6546 | 211,683902 | 0,0000 | 0,0000 | 190,8275 | 801,4755 | 211,6839 | | | |
| Lantai 4 | 3,4 | 323,9811 | 195,1853 | 17,4076 | 2,3371 | 189,7493 | 817,678899 | 351,6111 | 327,8944 | 199,854554 | 0,0000 | 0,0000 | 184,3474 | 774,25908 | 199,8546 | | | |
| Lantai 5 | 3,4 | 356,0949 | 190,1869 | 17,2110 | 2,2626 | 179,3301 | 773,633735 | 372,4128 | 296,3540 | 196,696113 | 0,0000 | 0,0000 | 174,3295 | 732,1839 | 196,6961 | | | |
| Lantai 6 | 3,4 | 384,4603 | 189,0845 | 17,1462 | 2,2138 | 165,0192 | 713,408617 | 392,1240 | 275,5523 | 196,375394 | 0,0000 | 0,0000 | 161,2890 | 677,4138 | 196,3754 | | | |
| Lantai 7 | 3,4 | 333,1322 | 165,6452 | 17,0607 | 2,1692 | 147,4157 | 639,33729 | 332,8404 | 255,8410 | 173,141598 | 0,0000 | 0,0000 | 145,3577 | 610,50234 | 173,1416 | | | |
| Lantai 8 | 3,4 | 365,1969 | 154,2360 | 17,0213 | 2,1310 | 126,8532 | 552,893368 | 357,8959 | 186,2913 | 150,055058 | 0,0000 | 0,0000 | 126,6215 | 531,8103 | 160,0551 | | | |
| Lantai 9 | 3,4 | 409,5110 | 157,8388 | 16,8680 | 2,1105 | 103,4904 | 454,587135 | 393,9197 | 161,2357 | 163,28101 | 0,0000 | 0,0000 | 105,0721 | 441,30282 | 163,2810 | | | |
| Lantai 10 | 3,4 | 82,8268 | 118,9882 | 17,2777 | 2,0514 | 77,7686 | 346,923742 | 305,6477 | 125,2120 | 126,723425 | 0,0000 | 0,0000 | 81,0387 | 340,36254 | 126,7234 | | | |
| Lantai 11 | 3,4 | 307,8584 | 94,3340 | 15,2616 | 2,2080 | 49,3885 | 225,774879 | 346,8517 | 47,1726 | 115,889507 | 0,0000 | 0,0000 | 53,4507 | 224,492856 | 115,8895 | | | |
| Lantai 12 | 3,4 | 193,0721 | 62,8384 | 24,0483 | 1,4348 | 23,1309 | 123,906876 | 139,7295 | 4,5912 | 42,4472648 | 0,0000 | 0,0000 | 28,4443 | 119,46606 | 62,8384 | | | |

| KOLOM | Di Luar Sendi Plastik | | | | | | | | | | | | | | | | |
|-----------|-----------------------|-----------------|--------|----------|-----------|----------|-----------------------|-----------|--------------------|-----------|----------|----------|----------|-----------|--------------------|-----------|-----|
| | Dalam Sendi Plastik | | | | | | Di Luar Sendi Plastik | | | | | | | | | | |
| | b | d | Ag | Vu,k | Nu,k | Cek | Vs | S | Senggang Terpasang | Vs pasang | Cek | Vc | Vs | S | Senggang Terpasang | Vs pasang | Cek |
| mm | mm | mm ² | kN | kN | | kN | mm | | kN | | kN | kN | mm | | kN | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | |
| C | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 760 | 640000 | 47,9209 | 2804,9310 | 79,8681 | 968,0879 | ø12 - 100 | 773,1936 | AMAN | 609,7646 | 557,8503 | 138,6023 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 2 | 800 | 760 | 640000 | 286,7945 | 2673,5067 | 477,9908 | 161,7591 | ø12 - 100 | 773,1936 | AMAN | 604,9340 | 294,2399 | 262,7766 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 3 | 800 | 760 | 640000 | 305,5747 | 2445,6812 | 509,2912 | 151,8176 | ø12 - 100 | 773,1936 | AMAN | 596,5600 | 265,5207 | 291,1989 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 4 | 800 | 760 | 640000 | 289,6589 | 2210,8869 | 482,7649 | 160,1595 | ø12 - 100 | 773,1936 | AMAN | 587,9299 | 274,1327 | 282,0508 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 5 | 800 | 760 | 640000 | 289,5138 | 1969,1244 | 482,5229 | 160,2398 | ø12 - 100 | 773,1936 | AMAN | 579,0437 | 265,4038 | 291,3272 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 6 | 800 | 760 | 640000 | 287,8355 | 1720,3935 | 479,7259 | 161,1740 | ø12 - 100 | 773,1936 | AMAN | 569,9014 | 258,0796 | 299,5951 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 7 | 800 | 760 | 640000 | 245,3437 | 1464,6939 | 408,9062 | 189,0882 | ø12 - 100 | 773,1936 | AMAN | 560,5029 | 294,7138 | 262,3540 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 8 | 800 | 760 | 640000 | 224,0654 | 1077,1418 | 373,4423 | 207,0450 | ø12 - 100 | 773,1936 | AMAN | 546,2580 | 303,5206 | 254,7418 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 9 | 800 | 760 | 640000 | 229,2993 | 701,7759 | 382,1655 | 202,3191 | ø12 - 100 | 773,1936 | AMAN | 532,4611 | 284,0536 | 272,1999 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 10 | 800 | 760 | 640000 | 162,7424 | 406,9437 | 271,2374 | 285,0616 | ø12 - 100 | 773,1936 | AMAN | 521,6243 | 345,3200 | 223,9064 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 11 | 800 | 760 | 640000 | 126,9575 | 263,2061 | 211,5958 | 365,4107 | ø12 - 100 | 773,1936 | AMAN | 516,3411 | 378,8038 | 204,1145 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 12 | 800 | 760 | 640000 | 51,2973 | 119,9301 | 85,4955 | 904,3671 | ø12 - 100 | 773,1936 | AMAN | 511,0748 | 455,5027 | 169,7451 | ø12 - 100 | 773,1936 | AMAN | |
| D | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 760 | 640000 | 66,2099 | 2804,9310 | 110,3498 | 700,6754 | ø12 - 100 | 773,1936 | AMAN | 609,7646 | 538,0372 | 143,7063 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 2 | 800 | 760 | 640000 | 258,2891 | 2673,5067 | 430,4819 | 179,6112 | ø12 - 100 | 773,1936 | AMAN | 604,9340 | 325,1207 | 237,8174 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 3 | 800 | 760 | 640000 | 211,6839 | 2445,6812 | 352,8065 | 219,1551 | ø12 - 100 | 773,1936 | AMAN | 596,5600 | 367,2358 | 210,5442 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 4 | 800 | 760 | 640000 | 199,8546 | 2210,8869 | 333,0909 | 232,1269 | ø12 - 100 | 773,1936 | AMAN | 587,9299 | 371,4208 | 208,1719 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 5 | 800 | 760 | 640000 | 196,6961 | 1969,1244 | 327,8269 | 235,8543 | ø12 - 100 | 773,1936 | AMAN | 579,0437 | 365,9563 | 211,2803 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 6 | 800 | 760 | 640000 | 196,3754 | 1720,3935 | 327,2923 | 236,2395 | ø12 - 100 | 773,1936 | AMAN | 569,9014 | 357,1614 | 216,4830 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 7 | 800 | 760 | 640000 | 173,1416 | 1464,6939 | 288,5693 | 267,9403 | ø12 - 100 | 773,1936 | AMAN | 560,5029 | 372,9328 | 207,3279 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 8 | 800 | 760 | 640000 | 160,0551 | 1077,1418 | 266,7584 | 289,8479 | ø12 - 100 | 773,1936 | AMAN | 546,2580 | 372,8651 | 207,3655 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 9 | 800 | 760 | 640000 | 163,2810 | 701,7759 | 272,1350 | 284,1213 | ø12 - 100 | 773,1936 | AMAN | 532,4611 | 355,5733 | 217,4498 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 10 | 800 | 760 | 640000 | 126,7234 | 406,9437 | 211,2057 | 366,0856 | ø12 - 100 | 773,1936 | AMAN | 521,6243 | 384,3406 | 201,1741 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 11 | 800 | 760 | 640000 | 115,8895 | 263,2061 | 193,1492 | 400,3090 | ø12 - 100 | 773,1936 | AMAN | 516,3411 | 390,7941 | 197,8519 | ø12 - 100 | 773,1936 | AMAN | |
| Lantai 12 | 800 | 760 | 640000 | 62,8384 | 119,9301 | 104,7306 | 738,2689 | ø12 - 100 | 773,1936 | AMAN | 511,0748 | 442,9999 | 174,5358 | ø12 - 100 | 773,1936 | AMAN | |

Tabel 3.4.1. Penulangan Sengkang Joint untuk RW 2/2 lama

| Kolom | bj m | hc m | Lki m | Lka m | Mkap,b ki kNm | Mkap,b ka kNm | Vj,h kN | Vj,v kN | Penulangan Geser Horizontal | | | | | | | |
|-----------|---------|---------|----------|----------|------------------|------------------|------------|------------|-----------------------------|------------|-------------------------|-----------|--------------------------------|-------------|------------------|----|
| | | | | | | | | | Vc,h kN | Vs,h kN | As,h mm ² | øSengkang | As tersedia mm ² | Jumlah Tul. | Jarak Tul. mm | |
| | | | | | | | | | | | | | | | | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | | | | | | |
| A | | | | | | | | | | | | | | | | |
| Lantai 1 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 123,9660 | 1084,4348 | 3614,7827 | 4 ø 12 | 452,16 | 7 | 80 | |
| Lantai 2 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 0,0000 | 1208,4008 | 4028,0026 | 4 ø 12 | 452,16 | 7 | 80 | |
| Lantai 3 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 0,0000 | 1208,4008 | 4028,0026 | 4 ø 12 | 452,16 | 7 | 80 | |
| Lantai 4 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 0,0000 | 1208,4008 | 4028,0026 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 5 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 0,0000 | 1208,4008 | 4028,0026 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 6 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 0,0000 | 1208,4008 | 4028,0026 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 7 | 0,6 | 0,8 | 5 | 5 | 292,0997 | 563,7629 | 1013,8879 | 1351,8505 | 0,00 | 1013,8879 | 3379,6264 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 8 | 0,6 | 0,8 | 5 | 5 | 292,0997 | 563,7629 | 1013,8879 | 1351,8505 | 0,00 | 1013,8879 | 3379,6264 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 9 | 0,6 | 0,8 | 5 | 5 | 292,0997 | 563,7629 | 1013,8879 | 1351,8505 | 0,00 | 1013,8879 | 3379,6264 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 10 | 0,6 | 0,8 | 5 | 5 | 197,4594 | 383,1533 | 671,3880 | 895,1840 | 0,00 | 671,3880 | 2237,9599 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 11 | 0,6 | 0,8 | 5 | 5 | 197,4594 | 383,1533 | 671,3880 | 895,1840 | 0,00 | 671,3880 | 2237,9599 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 12 | 0,6 | 0,8 | 5 | 5 | 0,0000 | 197,2651 | 224,8611 | 299,8148 | 0,00 | 224,8611 | 749,5370 | 4 ø 12 | 452,16 | 5 | 100 | |
| B | | | | | | | | | | | | | | | | |
| Lantai 1 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 123,9660 | 1084,4348 | 3614,7827 | 4 ø 12 | 452,16 | 7 | 80 | |
| Lantai 2 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 0,0000 | 1208,4008 | 4028,0026 | 4 ø 12 | 452,16 | 7 | 80 | |
| Lantai 3 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 0,0000 | 1208,4008 | 4028,0026 | 4 ø 12 | 452,16 | 7 | 80 | |
| Lantai 4 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 0,0000 | 1208,4008 | 4028,0026 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 5 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 0,0000 | 1208,4008 | 4028,0026 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 6 | 0,6 | 0,8 | 5 | 5 | 292,1058 | 703,6725 | 1208,4008 | 1611,2010 | 0,0000 | 1208,4008 | 4028,0026 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 7 | 0,6 | 0,8 | 5 | 5 | 292,0997 | 563,7629 | 1013,8879 | 1351,8505 | 0,00 | 1013,8879 | 3379,6264 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 8 | 0,6 | 0,8 | 5 | 5 | 292,0997 | 563,7629 | 1013,8879 | 1351,8505 | 0,00 | 1013,8879 | 3379,6264 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 9 | 0,6 | 0,8 | 5 | 5 | 292,0997 | 563,7629 | 1013,8879 | 1351,8505 | 0,00 | 1013,8879 | 3379,6264 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 10 | 0,6 | 0,8 | 5 | 5 | 197,4594 | 383,1533 | 671,3880 | 895,1840 | 0,00 | 671,3880 | 2237,9599 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 11 | 0,6 | 0,8 | 5 | 5 | 197,4594 | 383,1533 | 671,3880 | 895,1840 | 0,00 | 671,3880 | 2237,9599 | 4 ø 12 | 452,16 | 5 | 100 | |
| Lantai 12 | 0,6 | 0,8 | 5 | 5 | 0,0000 | 197,2651 | 224,8611 | 299,8148 | 0,00 | 224,8611 | 749,5370 | 4 ø 12 | 452,16 | 5 | 100 | |

lanjutan

| Kolom | Penulangan Geser Horizontal | | | | | | | | | | | | | | | | |
|-----------|-----------------------------|-----|-----|-----|-----------|-----------|----------|-----------|----------|----------|-----------------|--------|-------------|-------------|------------|-----------------|----|
| | bj | hc | Lki | Lka | Mkap,b ki | Mkap,b ka | Vj,h | Vj,v | Vc,h | Vs,h | As,h | | As tersedia | Jumlah Tul. | Jarak Tul. | | |
| | | | | | | | | | | | mm ² | | | | | mm ² | mm |
| | | | | | | | | | | | mm | mm | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | |
| C | | | | | | | | | | | | | | | | | |
| Lantai 1 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 439,0774 | 439,5269 | 1465,0896 | 4 Ø 12 | 452,16 | 6 | 90 | | |
| Lantai 2 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 414,4407 | 464,1636 | 1547,2120 | 4 Ø 12 | 452,16 | 6 | 90 | | |
| Lantai 3 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 367,8437 | 510,7606 | 1702,5352 | 4 Ø 12 | 452,16 | 6 | 90 | | |
| Lantai 4 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 312,6370 | 565,9673 | 1886,5576 | 4 Ø 12 | 452,16 | 6 | 90 | | |
| Lantai 5 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 243,0224 | 635,5818 | 2118,6062 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 6 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 138,7910 | 739,8132 | 2466,0441 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 7 | 0,6 | 0,8 | 0 | 5 | 0 | 563,7629 | 683,6417 | 911,5223 | 0,00 | 683,6417 | 2278,8058 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 8 | 0,6 | 0,8 | 0 | 5 | 0 | 563,7629 | 683,6417 | 911,5223 | 0,00 | 683,6417 | 2278,8058 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 9 | 0,6 | 0,8 | 0 | 5 | 0 | 563,7629 | 683,6417 | 911,5223 | 0,00 | 683,6417 | 2278,8058 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 10 | 0,6 | 0,8 | 0 | 5 | 0 | 383,1533 | 449,3981 | 599,1974 | 0,00 | 449,3981 | 1497,9936 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 11 | 0,6 | 0,8 | 0 | 5 | 0 | 383,1533 | 449,3981 | 599,1974 | 0,00 | 449,3981 | 1497,9936 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 12 | 0,6 | 0,8 | 0 | 5 | 0 | 197,2651 | 224,8611 | 299,8148 | 0,00 | 224,8611 | 749,5370 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| D | | | | | | | | | | | | | | | | | |
| Lantai 1 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 439,0774 | 439,5269 | 1465,0896 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 2 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 414,4407 | 464,1636 | 1547,2120 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 3 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 367,8437 | 510,7606 | 1702,5352 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 4 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 312,6370 | 565,9673 | 1886,5576 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 5 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 243,0224 | 635,5818 | 2118,6062 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 6 | 0,6 | 0,8 | 0 | 5 | 0 | 703,6725 | 878,6043 | 1171,4724 | 138,7910 | 739,8132 | 2466,0441 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 7 | 0,6 | 0,8 | 0 | 5 | 0 | 563,7629 | 683,6417 | 911,5223 | 0,00 | 683,6417 | 2278,8058 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 8 | 0,6 | 0,8 | 0 | 5 | 0 | 563,7629 | 683,6417 | 911,5223 | 0,00 | 683,6417 | 2278,8058 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 9 | 0,6 | 0,8 | 0 | 5 | 0 | 563,7629 | 683,6417 | 911,5223 | 0,00 | 683,6417 | 2278,8058 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 10 | 0,6 | 0,8 | 0 | 5 | 0 | 383,1533 | 449,3981 | 599,1974 | 0,00 | 449,3981 | 1497,9936 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 11 | 0,6 | 0,8 | 0 | 5 | 0 | 383,1533 | 449,3981 | 599,1974 | 0,00 | 449,3981 | 1497,9936 | 4 Ø 12 | 452,16 | 5 | 100 | | |
| Lantai 12 | 0,6 | 0,8 | 0 | 5 | 0 | 197,2651 | 224,8611 | 299,8148 | 0,00 | 224,8611 | 749,5370 | 4 Ø 12 | 452,16 | 5 | 100 | | |

LAMPIRAN 4
HASIL PERHITUNGAN
R/W 2/5 BARU

Tabel 4.1.1.1 Hitungan Gaya Horizontal R/W 2/5 Baru Portal E

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | R | V (kN) | Fi (kN) |
|------------------|--------|------------|--------------|--------|---|-----|-------------|-------------|
| 12 | 48 | 5615,76 | 269556,48 | 0,8225 | 1 | 8,5 | 10336,88119 | 1032,534632 |
| 11 | 44 | 9200,832 | 404836,608 | 0,8225 | 1 | 8,5 | 10336,88119 | 1550,724427 |
| 10 | 40 | 9200,832 | 368033,28 | 0,8225 | 1 | 8,5 | 10336,88119 | 1409,749479 |
| 9 | 36 | 9200,832 | 331229,952 | 0,8225 | 1 | 8,5 | 10336,88119 | 1268,774531 |
| 8 | 32 | 9200,832 | 294426,624 | 0,8225 | 1 | 8,5 | 10336,88119 | 1127,799583 |
| 7 | 28 | 9200,832 | 257623,296 | 0,8225 | 1 | 8,5 | 10336,88119 | 986,8246351 |
| 6 | 24 | 9200,832 | 220819,968 | 0,8225 | 1 | 8,5 | 10336,88119 | 845,8496872 |
| 5 | 20 | 9200,832 | 184016,64 | 0,8225 | 1 | 8,5 | 10336,88119 | 704,8747393 |
| 4 | 16 | 9200,832 | 147213,312 | 0,8225 | 1 | 8,5 | 10336,88119 | 563,8997915 |
| 3 | 12 | 9200,832 | 110409,984 | 0,8225 | 1 | 8,5 | 10336,88119 | 422,9248436 |
| 2 | 8 | 9200,832 | 73606,656 | 0,8225 | 1 | 8,5 | 10336,88119 | 281,9498957 |
| 1 | 4 | 9200,832 | 36803,328 | 0,8225 | 1 | 8,5 | 10336,88119 | 140,9749479 |
| Σ Total = | | 106824,912 | 2698576,128 | | | | | 10336,88119 |

Tabel 4.1.1.2 Hitungan Gaya Horizontal R/W 2/5 Baru Portal 2

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | R | V (kN) | Fi (kN) |
|------------------|--------|------------|--------------|--------|---|-----|-------------|-------------|
| 12 | 48 | 5615,76 | 269556,48 | 0,8225 | 1 | 8,5 | 10336,88119 | 1032,534632 |
| 11 | 44 | 9200,832 | 404836,608 | 0,8225 | 1 | 8,5 | 10336,88119 | 1550,724427 |
| 10 | 40 | 9200,832 | 368033,28 | 0,8225 | 1 | 8,5 | 10336,88119 | 1409,749479 |
| 9 | 36 | 9200,832 | 331229,952 | 0,8225 | 1 | 8,5 | 10336,88119 | 1268,774531 |
| 8 | 32 | 9200,832 | 294426,624 | 0,8225 | 1 | 8,5 | 10336,88119 | 1127,799583 |
| 7 | 28 | 9200,832 | 257623,296 | 0,8225 | 1 | 8,5 | 10336,88119 | 986,8246351 |
| 6 | 24 | 9200,832 | 220819,968 | 0,8225 | 1 | 8,5 | 10336,88119 | 845,8496872 |
| 5 | 20 | 9200,832 | 184016,64 | 0,8225 | 1 | 8,5 | 10336,88119 | 704,8747393 |
| 4 | 16 | 9200,832 | 147213,312 | 0,8225 | 1 | 8,5 | 10336,88119 | 563,8997915 |
| 3 | 12 | 9200,832 | 110409,984 | 0,8225 | 1 | 8,5 | 10336,88119 | 422,9248436 |
| 2 | 8 | 9200,832 | 73606,656 | 0,8225 | 1 | 8,5 | 10336,88119 | 281,9498957 |
| 1 | 4 | 9200,832 | 36803,328 | 0,8225 | 1 | 8,5 | 10336,88119 | 140,9749479 |
| Σ Total = | | 106824,912 | 2698576,128 | | | | | 10336,88119 |

Tabel 4.1.2.1 Kontrol Periode Getar menurut Rayleigh untuk R/W 2/5 Baru Portal E (Iterasi I)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Simpangan Tk Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|-------------|-----------------|-----------------------|---------------------------|------------------|------------------|----------|----------------|--------------|
| 12 | 1032,534632 | 1032,534632 | 856575 | 0,001205422 | 0,09774245 | 0,0003014 | 5615,76 | 53,65064922 | 100,9224647 |
| 11 | 1550,724427 | 2583,259058 | 856575 | 0,0030158 | 0,096537028 | 0,000754 | 9200,832 | 85,74621287 | 149,702327 |
| 10 | 1409,749479 | 3993,008537 | 856575 | 0,004661598 | 0,093521228 | 0,0011654 | 9200,832 | 80,47250092 | 131,8415018 |
| 9 | 1268,774531 | 5261,783067 | 856575 | 0,006142817 | 0,088859629 | 0,0015357 | 9200,832 | 72,65007973 | 112,7428345 |
| 8 | 1127,799583 | 6389,58265 | 856575 | 0,007459455 | 0,082716813 | 0,0018649 | 9200,832 | 62,95274687 | 93,28798695 |
| 7 | 986,8246351 | 7376,407285 | 856575 | 0,008611514 | 0,075257358 | 0,0021529 | 9200,832 | 52,11047528 | 74,26581464 |
| 6 | 845,8496872 | 8222,256973 | 856575 | 0,009598992 | 0,066645844 | 0,0023997 | 9200,832 | 40,86704608 | 56,37236644 |
| 5 | 704,8747393 | 8927,131712 | 856575 | 0,010421892 | 0,057046852 | 0,0026055 | 9200,832 | 29,94266587 | 40,21088472 |
| 4 | 563,8997915 | 9491,031503 | 856575 | 0,011080211 | 0,04662496 | 0,0027701 | 9200,832 | 20,00156828 | 26,29180533 |
| 3 | 422,9248436 | 9913,956347 | 856575 | 0,01157395 | 0,035544749 | 0,0028935 | 9200,832 | 11,62459995 | 15,03275761 |
| 2 | 281,9498957 | 10195,90624 | 856575 | 0,01190311 | 0,023970799 | 0,0029758 | 9200,832 | 5,286790894 | 6,758564371 |
| 1 | 140,9749479 | 10336,88119 | 856575 | 0,01206769 | 0,01206769 | 0,0030169 | 9200,832 | 1,339909173 | 1,701241908 |
| | | | | | | | Σtotal = | 516,6452451 | 809,13055 |

T Awal = 1,0942
T Rayleigh = 1,6073

Tabel 4.1.2.2 Kontrol Periode Getar menurut Rayleigh untuk R/W 2/5 Baru Portal 2 (Iterasi I)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Simpangan Tk Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|-------------|-----------------|-----------------------|---------------------------|------------------|------------------|----------|----------------|--------------|
| 12 | 1032,534632 | 1032,534632 | 1522800 | 0,00067805 | 0,054980128 | 0,0001695 | 5615,76 | 16,97540073 | 56,76888639 |
| 11 | 1550,724427 | 2583,259058 | 1522800 | 0,001696388 | 0,054302078 | 0,0004241 | 9200,832 | 27,13063767 | 84,20755896 |
| 10 | 1409,749479 | 3993,008537 | 1522800 | 0,002622149 | 0,052605691 | 0,0006555 | 9200,832 | 25,46200224 | 74,16084477 |
| 9 | 1268,774531 | 5261,783067 | 1522800 | 0,003455334 | 0,049983541 | 0,0008638 | 9200,832 | 22,98693929 | 63,41784439 |
| 8 | 1127,799583 | 6389,58265 | 1522800 | 0,004195943 | 0,046528207 | 0,001049 | 9200,832 | 19,91864256 | 52,47449266 |
| 7 | 986,8246351 | 7376,407285 | 1522800 | 0,004843976 | 0,042332264 | 0,001211 | 9200,832 | 16,48808007 | 41,77452074 |
| 6 | 845,8496872 | 8222,256973 | 1522800 | 0,005399433 | 0,037488287 | 0,0013499 | 9200,832 | 12,9305888 | 31,70945612 |
| 5 | 704,8747393 | 8927,131712 | 1522800 | 0,005862314 | 0,032088854 | 0,0014656 | 9200,832 | 9,474046624 | 22,61862266 |
| 4 | 563,8997915 | 9491,031503 | 1522800 | 0,006232619 | 0,02622654 | 0,0015582 | 9200,832 | 6,328621214 | 14,7891405 |
| 3 | 422,9248436 | 9913,956347 | 1522800 | 0,006510347 | 0,01993922 | 0,0016276 | 9200,832 | 3,678096079 | 8,455926157 |
| 2 | 281,9498957 | 10195,90624 | 1522800 | 0,006695499 | 0,013483575 | 0,0016739 | 9200,832 | 1,672773681 | 3,801692459 |
| 1 | 140,9749479 | 10336,88119 | 1522800 | 0,006788075 | 0,006788075 | 0,001697 | 9200,832 | 0,423955637 | 0,956948573 |
| | | | | | | | Σtotal = | 163,4697846 | 455,1359344 |

T Awal = 1,0942
T Rayleigh = 1,2055

Tabel 4.1.3.1 Kontrol Hitungan Gaya Horizontal R/W 2/5 Baru Portal E

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | R | V (kN) | Fi (kN) |
|-------------|--------|--------------|----------------|--------|---|-----|------------|------------|
| 12 | 48 | 5.615,7600 | 269.556,4800 | 0,3980 | 1 | 8,5 | 5.001,9194 | 499,6338 |
| 11 | 44 | 9.200,8320 | 404.836,6080 | 0,3980 | 1 | 8,5 | 5.001,9194 | 750,3809 |
| 10 | 40 | 9.200,8320 | 368.033,2800 | 0,3980 | 1 | 8,5 | 5.001,9194 | 682,1645 |
| 9 | 36 | 9.200,8320 | 331.229,9520 | 0,3980 | 1 | 8,5 | 5.001,9194 | 613,9480 |
| 8 | 32 | 9.200,8320 | 294.426,6240 | 0,3980 | 1 | 8,5 | 5.001,9194 | 545,7316 |
| 7 | 28 | 9.200,8320 | 257.623,2960 | 0,3980 | 1 | 8,5 | 5.001,9194 | 477,5151 |
| 6 | 24 | 9.200,8320 | 220.819,9680 | 0,3980 | 1 | 8,5 | 5.001,9194 | 409,2987 |
| 5 | 20 | 9.200,8320 | 184.016,6400 | 0,3980 | 1 | 8,5 | 5.001,9194 | 341,0822 |
| 4 | 16 | 9.200,8320 | 147.213,3120 | 0,3980 | 1 | 8,5 | 5.001,9194 | 272,8658 |
| 3 | 12 | 9.200,8320 | 110.409,9840 | 0,3980 | 1 | 8,5 | 5.001,9194 | 204,6493 |
| 2 | 8 | 9.200,8320 | 73.606,6560 | 0,3980 | 1 | 8,5 | 5.001,9194 | 136,4329 |
| 1 | 4 | 9.200,8320 | 36.803,3280 | 0,3980 | 1 | 8,5 | 5.001,9194 | 68,2164 |
| Σ Total = | | 106.824,9120 | 2.698.576,1280 | | | | | 5.001,9194 |

Tabel 4.1.3.2 Kontrol Hitungan Gaya Horizontal R/W 2/5 Baru Portal 2

| Lantai ke-i | hi (m) | Wi (kN) | Wi.hi (kN.m) | C | I | R | V (kN) | Fi (kN) |
|-------------|--------|--------------|----------------|--------|---|-----|------------|------------|
| 12 | 48 | 5.615,7600 | 269.556,4800 | 0,3980 | 1 | 8,5 | 5.001,9194 | 499,6338 |
| 11 | 44 | 9.200,8320 | 404.836,6080 | 0,3980 | 1 | 8,5 | 5.001,9194 | 750,3809 |
| 10 | 40 | 9.200,8320 | 368.033,2800 | 0,3980 | 1 | 8,5 | 5.001,9194 | 682,1645 |
| 9 | 36 | 9.200,8320 | 331.229,9520 | 0,3980 | 1 | 8,5 | 5.001,9194 | 613,9480 |
| 8 | 32 | 9.200,8320 | 294.426,6240 | 0,3980 | 1 | 8,5 | 5.001,9194 | 545,7316 |
| 7 | 28 | 9.200,8320 | 257.623,2960 | 0,3980 | 1 | 8,5 | 5.001,9194 | 477,5151 |
| 6 | 24 | 9.200,8320 | 220.819,9680 | 0,3980 | 1 | 8,5 | 5.001,9194 | 409,2987 |
| 5 | 20 | 9.200,8320 | 184.016,6400 | 0,3980 | 1 | 8,5 | 5.001,9194 | 341,0822 |
| 4 | 16 | 9.200,8320 | 147.213,3120 | 0,3980 | 1 | 8,5 | 5.001,9194 | 272,8658 |
| 3 | 12 | 9.200,8320 | 110.409,9840 | 0,3980 | 1 | 8,5 | 5.001,9194 | 204,6493 |
| 2 | 8 | 9.200,8320 | 73.606,6560 | 0,3980 | 1 | 8,5 | 5.001,9194 | 136,4329 |
| 1 | 4 | 9.200,8320 | 36.803,3280 | 0,3980 | 1 | 8,5 | 5.001,9194 | 68,2164 |
| Σ Total = | | 106.824,9120 | 2.698.576,1280 | | | | | 5.001,9194 |

Tabel 4.1.4.1 Kontrol Periode Getar menurut Rayleigh untuk R/W 2/5 Baru Portal E. (Iterasi II)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|----------|-----------------|-----------------------|---------------------------|------------------|--------|------------|----------------|--------------|
| 12 | 499,6338 | 499,6338 | 856.575,0000 | 0,0006 | 0,0473 | 0,0001 | 5.615,7600 | 12,5623 | 23,6310 |
| 11 | 750,3809 | 1.250,0147 | 856.575,0000 | 0,0015 | 0,0467 | 0,0004 | 9.200,8320 | 20,0775 | 35,0528 |
| 10 | 682,1645 | 1.932,1792 | 856.575,0000 | 0,0023 | 0,0453 | 0,0006 | 9.200,8320 | 18,8426 | 30,8707 |
| 9 | 613,9480 | 2.546,1272 | 856.575,0000 | 0,0030 | 0,0430 | 0,0007 | 9.200,8320 | 17,0110 | 26,3987 |
| 8 | 545,7316 | 3.091,8588 | 856.575,0000 | 0,0036 | 0,0400 | 0,0009 | 9.200,8320 | 14,7404 | 21,8434 |
| 7 | 477,5151 | 3.569,3740 | 856.575,0000 | 0,0042 | 0,0364 | 0,0010 | 9.200,8320 | 12,2017 | 17,3893 |
| 6 | 409,2987 | 3.978,6727 | 856.575,0000 | 0,0046 | 0,0322 | 0,0012 | 9.200,8320 | 9,5690 | 13,1996 |
| 5 | 341,0822 | 4.319,7549 | 856.575,0000 | 0,0050 | 0,0276 | 0,0013 | 9.200,8320 | 7,0111 | 9,4154 |
| 4 | 272,8658 | 4.592,6207 | 856.575,0000 | 0,0054 | 0,0226 | 0,0013 | 9.200,8320 | 4,6834 | 6,1562 |
| 3 | 204,6493 | 4.797,2701 | 856.575,0000 | 0,0056 | 0,0172 | 0,0014 | 9.200,8320 | 2,7219 | 3,5199 |
| 2 | 136,4329 | 4.933,7030 | 856.575,0000 | 0,0058 | 0,0116 | 0,0014 | 9.200,8320 | 1,2379 | 1,5825 |
| 1 | 68,2164 | 5.001,9194 | 856.575,0000 | 0,0058 | 0,0058 | 0,0015 | 9.200,8320 | 0,3137 | 0,3983 |
| | | | | | | | Σtotal = | 120,9725 | 189,4580 |

T Awal = 1,6073
T Rayleigh = 1,6073

Tabel 4.1.4.2 Kontrol Periode Getar menurut Rayleigh untuk R/W 2/5 Baru Portal 2 (Iterasi II)

| Lantai ke-i | Fi (kN) | Gaya Geser (kN) | Kekakuan Tk. k (kN/m) | Simpangan Antar Tk. Δ (m) | Simpangan δi (m) | Δ/h | Wi (kN) | Wi.δi2 (kN.m2) | Fi.δi (kN.m) |
|-------------|----------|-----------------|-----------------------|---------------------------|------------------|--------|------------|----------------|--------------|
| 12 | 499,6338 | 499,6338 | 1.522.800,0000 | 0,0003 | 0,0266 | 0,0001 | 5.615,7600 | 3,9748 | 13,2924 |
| 11 | 750,3809 | 1.250,0147 | 1.522.800,0000 | 0,0008 | 0,0263 | 0,0002 | 9.200,8320 | 6,3526 | 19,7172 |
| 10 | 682,1645 | 1.932,1792 | 1.522.800,0000 | 0,0013 | 0,0255 | 0,0003 | 9.200,8320 | 5,9619 | 17,3648 |
| 9 | 613,9480 | 2.546,1272 | 1.522.800,0000 | 0,0017 | 0,0242 | 0,0004 | 9.200,8320 | 5,3824 | 14,8493 |
| 8 | 545,7316 | 3.091,8588 | 1.522.800,0000 | 0,0020 | 0,0225 | 0,0005 | 9.200,8320 | 4,6640 | 12,2869 |
| 7 | 477,5151 | 3.569,3740 | 1.522.800,0000 | 0,0023 | 0,0205 | 0,0006 | 9.200,8320 | 3,8607 | 9,7815 |
| 6 | 409,2987 | 3.978,6727 | 1.522.800,0000 | 0,0026 | 0,0181 | 0,0007 | 9.200,8320 | 3,0277 | 7,4248 |
| 5 | 341,0822 | 4.319,7549 | 1.522.800,0000 | 0,0028 | 0,0155 | 0,0007 | 9.200,8320 | 2,2183 | 5,2962 |
| 4 | 272,8658 | 4.592,6207 | 1.522.800,0000 | 0,0030 | 0,0127 | 0,0008 | 9.200,8320 | 1,4818 | 3,4629 |
| 3 | 204,6493 | 4.797,2701 | 1.522.800,0000 | 0,0032 | 0,0097 | 0,0008 | 9.200,8320 | 0,8612 | 1,9800 |
| 2 | 136,4329 | 4.933,7030 | 1.522.800,0000 | 0,0032 | 0,0065 | 0,0008 | 9.200,8320 | 0,3917 | 0,8902 |
| 1 | 68,2164 | 5.001,9194 | 1.522.800,0000 | 0,0033 | 0,0033 | 0,0008 | 9.200,8320 | 0,0993 | 0,2241 |
| | | | | | | | Σtotal = | 38,2765 | 106,5701 |

T Awal = 1,2055
T Rayleigh = 1,2055

Tabel 4.2.1.1 Momen Redistribusi Balok untuk R/W 2/5 Baru Portal E

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----|------------|-----------|----------------|
| 3 | 51 | 0 | -135,5927 | 218,826 | -446,8069 | 254,688 | -410,9448 | 254,688 | -446,8069 | -446,8069 | 2,5 | -9,2575 | -437,5494 | M - maks : |
| | | 0,45 | -93,88763 | 210,5003 | -370,2998 | 235,2439 | -345,5563 | 235,2439 | -370,2998 | -370,2998 | 2,5 | -9,2575 | -361,0423 | -370,2998 |
| | | 1,06 | -40,23665 | 197,2262 | -268,577 | 207,7 | -258,1032 | 207,7 | -268,577 | -268,577 | 2,5 | -9,2575 | -259,3195 | M + maks : |
| | | 1,67 | 6,427538 | 179,1345 | -171,6716 | 177,2825 | -173,5236 | 179,1345 | -173,5236 | -173,5236 | 2,5 | -9,2575 | -164,2661 | 235,2439 |
| | | 2,28 | 42,96329 | 154,0593 | -81,7499 | 142,6995 | -93,10969 | 154,0593 | -93,10969 | -93,10969 | 2,5 | -9,2575 | -83,8522 | p/p : |
| | | 2,89 | 71,46066 | 123,4415 | 2,629306 | 104,8104 | -16,00179 | 123,4415 | -16,00179 | -16,00179 | 2,5 | -9,2575 | -6,744295 | -0,635279576 |
| | | 3,5 | 95,93732 | 90,05135 | 84,2362 | 65,2676 | 59,45245 | 90,05135 | 59,45245 | 59,45245 | 2,5 | -9,2575 | 68,709945 | |
| | | 4,11 | 72,4966 | 9,159969 | 118,3418 | -9,759243 | 99,42262 | 118,3418 | -9,759243 | 123,4415 | 2,5 | -9,2575 | 132,699 | M - red maks : |
| | | 4,72 | 45,03517 | -74,5037 | 149,6752 | -86,43972 | 137,7392 | 149,6752 | -86,43972 | 154,0593 | 2,5 | -9,2575 | 163,3168 | -361,042305 |
| | | 5,33 | 9,53536 | -163,7099 | 175,466 | -166,4262 | 172,7496 | 175,466 | -166,4262 | 179,1345 | 2,5 | -9,2575 | 188,392 | M + red maks : |
| | | 5,94 | -36,09289 | -259,8997 | 194,2731 | -250,5784 | 203,5945 | 203,5945 | -259,8997 | 207,7 | 2,5 | -9,2575 | 216,9575 | 244,501395 |
| | | 6,55 | -88,70793 | -360,9071 | 208,2628 | -337,6041 | 231,5658 | 231,5658 | -360,9071 | 235,2439 | 2,5 | -9,2575 | 244,5014 | p/p red : |
| | | 7 | -129,6488 | -436,8863 | 217,1163 | -402,6774 | 251,3252 | 251,3252 | -436,8863 | 254,688 | 2,5 | -9,2575 | 263,9455 | -0,677209822 |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 3 | 63 | 7 | -31,14459 | 456,9213 | -500,4313 | 465,561 | -491,7915 | 465,561 | -500,4313 | -500,4313 | 0 | 0,0000 | -500,4313 | M - maks : |
| | | 7,45 | -15,73328 | 359,7647 | -382,185 | 364,1092 | -377,8405 | 364,1092 | -382,185 | -382,185 | 0 | 0,0000 | -382,185 | -382,185 |
| | | 7,76 | -5,944155 | 292,2677 | -301,292 | 293,8839 | -299,6758 | 293,8839 | -301,292 | -301,292 | 0 | 0,0000 | -301,292 | M + maks : |
| | | 8,07 | 2,572856 | 223,9003 | -221,2695 | 223,1428 | -222,027 | 223,9003 | -222,027 | -222,027 | 0 | 0,0000 | -222,027 | 364,1092 |
| | | 8,38 | 9,298869 | 154,3074 | -142,4724 | 151,6753 | -145,1045 | 154,3074 | -145,1045 | -145,1045 | 0 | 0,0000 | -145,1045 | p/p : |
| | | 8,69 | 13,71499 | 83,13412 | -65,2558 | 79,27121 | -69,11871 | 83,13412 | -69,11871 | -69,11871 | 0 | 0,0000 | -69,11871 | -0,952704057 |
| | | 9 | 15,30234 | 10,02527 | 10,02527 | 5,719953 | 5,719953 | 10,02527 | 5,719953 | 10,02527 | 0 | 0,0000 | 10,02527 | |
| | | 9,31 | 13,71499 | -65,2558 | 83,13412 | -69,11871 | 79,27121 | 83,13412 | -69,11871 | 83,13412 | 0 | 0,0000 | 83,13412 | M - red maks : |
| | | 9,62 | 9,298869 | -142,4724 | 154,3074 | -145,1045 | 151,6753 | 154,3074 | -145,1045 | 154,3074 | 0 | 0,0000 | 154,3074 | -382,185 |
| | | 9,93 | 2,572856 | -221,2695 | 223,9003 | -222,027 | 223,1428 | 223,9003 | -222,027 | 223,9003 | 0 | 0,0000 | 223,9003 | M + red maks : |
| | | 10,24 | -5,944155 | -301,292 | 292,2677 | -299,6758 | 293,8839 | 293,8839 | -301,292 | 293,8839 | 0 | 0,0000 | 293,8839 | 364,1092 |
| | | 10,55 | -15,73328 | -382,185 | 359,7647 | -377,8405 | 364,1092 | 364,1092 | -382,185 | 364,1092 | 0 | 0,0000 | 364,1092 | p/p red : |
| | | 11 | -31,14459 | -500,4313 | 456,9213 | -491,7915 | 465,561 | 465,561 | -500,4313 | 465,561 | 0 | 0,0000 | 465,561 | -0,952704057 |

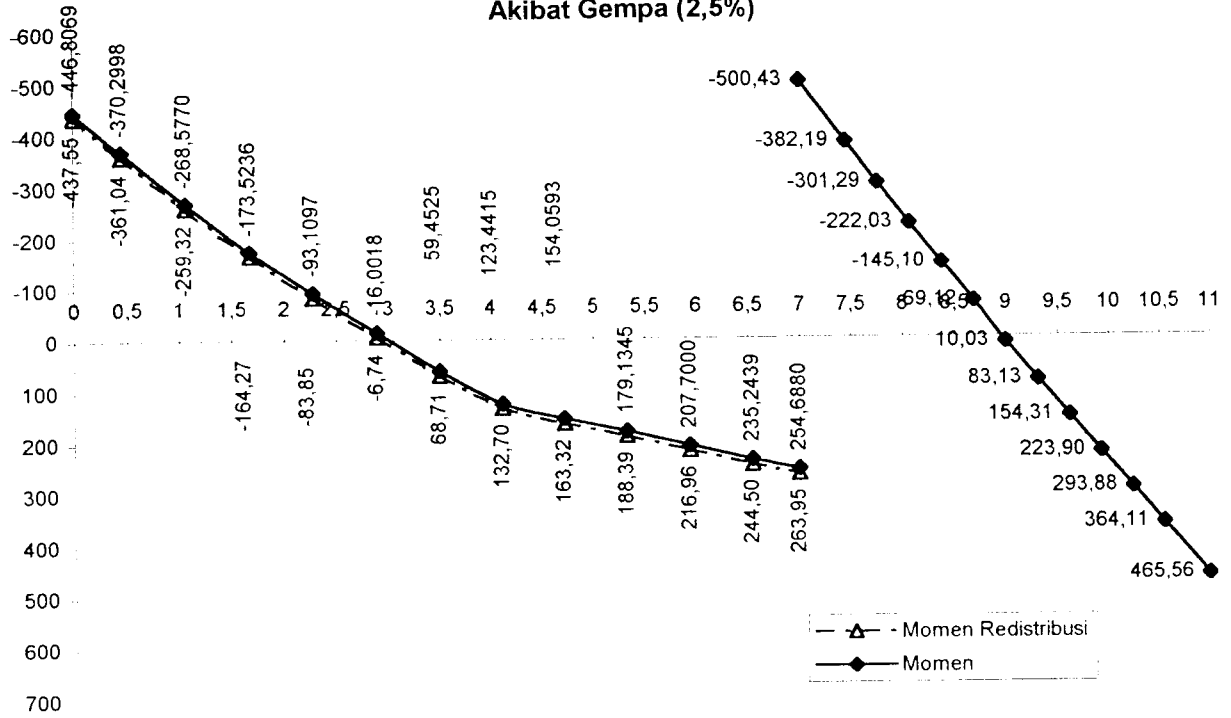
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|---|------------|-----------|----------------|
| 4 | 52 | 0 | -136,5623 | 222,2288 | -451,5635 | 258,3598 | -415,4325 | 258,3598 | -451,5635 | -451,5635 | 0 | 0,0000 | -451,5635 | M - maks : |
| | | 0,45 | -94,73527 | 213,4554 | -374,4393 | 238,4341 | -349,4606 | 238,4341 | -374,4393 | -374,4393 | 0 | 0,0000 | -374,4393 | -374,4393 |
| | | 1,06 | -40,91888 | 199,5743 | -271,8798 | 210,2373 | -261,2168 | 210,2373 | -271,8798 | -271,8798 | 0 | 0,0000 | -271,8798 | M + maks : |
| | | 1,67 | 5,910709 | 180,8758 | -174,1377 | 179,167 | -175,8465 | 180,8758 | -175,8465 | -175,8465 | 0 | 0,0000 | -175,8465 | 238,4341 |
| | | 2,28 | 42,61187 | 155,1936 | -83,37936 | 143,9311 | -94,64185 | 155,1936 | -94,64185 | -94,64185 | 0 | 0,0000 | -94,64185 | p/p : |
| | | 2,89 | 71,27464 | 123,9689 | 1,8365 | 105,3892 | -16,74324 | 123,9689 | -16,74324 | -16,74324 | 0 | 0,0000 | -16,74324 | -0,636776375 |
| | | 3,5 | 95,91671 | 89,9719 | 84,28004 | 65,19357 | 59,50171 | 89,9719 | 59,50171 | 59,50171 | 0 | 0,0000 | 59,50171 | |
| | | 4,11 | 72,64139 | 8,473634 | 119,2223 | -10,48611 | 100,2626 | 119,2223 | -10,48611 | 123,9689 | 0 | 0,0000 | 123,9689 | M - red maks : |
| | | 4,72 | 45,34537 | -75,79694 | 151,3923 | -87,81944 | 139,3698 | 151,3923 | -87,81944 | 155,1936 | 0 | 0,0000 | 155,1936 | -374,4393 |
| | | 5,33 | 10,01096 | -165,61 | 178,0198 | -168,4588 | 175,171 | 178,0198 | -168,4588 | 180,8758 | 0 | 0,0000 | 180,8758 | M + red maks : |
| | | 5,94 | -35,45188 | -262,4068 | 197,6636 | -253,2638 | 206,8066 | 206,8066 | -262,4068 | 210,2373 | 0 | 0,0000 | 210,2373 | 238,4341 |
| | | 6,55 | -87,90152 | -364,021 | 212,49 | -340,9424 | 235,5686 | 235,5686 | -364,021 | 238,4341 | 0 | 0,0000 | 238,4341 | p/p red : |
| | | 7 | -128,7203 | -440,4479 | 221,9607 | -406,4973 | 255,9113 | 255,9113 | -440,4479 | 258,3598 | 0 | 0,0000 | 258,3598 | -0,636776375 |
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
| 4 | 64 | 7 | -31,09469 | 450,2611 | -493,6902 | 458,8875 | -485,0638 | 458,8875 | -493,6902 | -493,6902 | 0 | 0,0000 | -493,6902 | M - maks : |
| | | 7,45 | -15,68338 | 354,612 | -376,9515 | 358,9432 | -372,6203 | 358,9432 | -376,9515 | -376,9515 | 0 | 0,0000 | -376,9515 | -376,9515 |
| | | 7,76 | -5,894262 | 288,1537 | -297,0972 | 289,7566 | -295,4943 | 289,7566 | -297,0972 | -297,0972 | 0 | 0,0000 | -297,0972 | M + maks : |
| | | 8,07 | 2,62275 | 220,8249 | -218,1132 | 220,054 | -218,8841 | 220,8249 | -218,8841 | -218,8841 | 0 | 0,0000 | -218,8841 | 358,9432 |
| | | 8,38 | 9,348763 | 152,2707 | -140,3548 | 149,6252 | -143,0002 | 152,2707 | -143,0002 | -143,0002 | 0 | 0,0000 | -143,0002 | p/p : |
| | | 8,69 | 13,76489 | 82,13593 | -64,17677 | 78,25969 | -68,05302 | 82,13593 | -68,05302 | -68,05302 | 0 | 0,0000 | -68,05302 | -0,95222648 |
| | | 9 | 15,35224 | 10,06569 | 10,06569 | 5,747037 | 5,747037 | 10,06569 | 5,747037 | 10,06569 | 0 | 0,0000 | 10,06569 | |
| | | 9,31 | 13,76489 | -64,17677 | 82,13593 | -68,05302 | 78,25969 | 82,13593 | -68,05302 | 82,13593 | 0 | 0,0000 | 82,13593 | M - red maks : |
| | | 9,62 | 9,348763 | -140,3548 | 152,2707 | -143,0002 | 149,6252 | 152,2707 | -143,0002 | 152,2707 | 0 | 0,0000 | 152,2707 | -376,9515 |
| | | 9,93 | 2,62275 | -218,1132 | 220,8249 | -218,8841 | 220,054 | 220,8249 | -218,8841 | 220,8249 | 0 | 0,0000 | 220,8249 | M + red maks : |
| | | 10,24 | -5,894262 | -297,0972 | 288,1537 | -295,4943 | 289,7566 | 289,7566 | -297,0972 | 289,7566 | 0 | 0,0000 | 289,7566 | 358,9432 |
| | | 10,55 | -15,68338 | -376,9515 | 354,612 | -372,6203 | 358,9432 | 358,9432 | -376,9515 | 358,9432 | 0 | 0,0000 | 358,9432 | p/p red : |
| | | 11 | -31,09469 | -493,6902 | 450,2611 | -485,0638 | 458,8875 | 458,8875 | -493,6902 | 458,8875 | 0 | 0,0000 | 458,8875 | -0,95222648 |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|---|------------|-----------|----------------|
| 7 | 55 | 0 | -138,7017 | 155,9058 | -388,2232 | 192,6306 | -351,4984 | 192,6306 | -388,2232 | -388,2232 | 3 | -9,5743 | -378,6489 | M - maks : |
| | | 0,45 | -96,59917 | 155,56 | -319,1423 | 181,056 | -293,6463 | 181,056 | -319,1423 | -319,1423 | 3 | -9,5743 | -309,568 | -319,1423 |
| | | 1,06 | -42,40932 | 153,1035 | -227,4866 | 164,1802 | -216,41 | 164,1802 | -227,4866 | -227,4866 | 3 | -9,5743 | -217,9123 | M + maks : |
| | | 1,67 | 4,793731 | 145,8296 | -140,6485 | 144,4309 | -142,0472 | 145,8296 | -142,0472 | -142,0472 | 3 | -9,5743 | -132,4729 | 181,056 |
| | | 2,28 | 41,86835 | 131,5721 | -60,79393 | 120,516 | -71,85004 | 131,5721 | -71,85004 | -71,85004 | 3 | -9,5743 | -62,27577 | p/p : |
| | | 2,89 | 70,90459 | 111,772 | 13,51808 | 93,29503 | -4,958935 | 111,772 | -4,958935 | -4,958935 | 3 | -9,5743 | 4,615334 | -0,567320596 |
| | | 3,5 | 95,92011 | 89,19966 | 85,05777 | 64,42042 | 60,27853 | 89,19966 | 60,27853 | 60,27853 | 3 | -9,5743 | 69,852799 | |
| | | 4,11 | 73,01825 | 19,12603 | 109,0962 | 0,061731 | 90,03191 | 109,0962 | 0,061731 | 111,772 | 3 | -9,5743 | 121,34627 | M - red maks : |
| | | 4,72 | 46,09569 | -53,71991 | 130,3624 | -65,9506 | 118,1317 | 130,3624 | -65,9506 | 131,5721 | 3 | -9,5743 | 141,14637 | -309,568031 |
| | | 5,33 | 11,13474 | -132,1084 | 146,0859 | -135,269 | 142,9254 | 146,0859 | -135,269 | 145,8296 | 3 | -9,5743 | 155,40387 | M + red maks : |
| | | 5,94 | -33,95464 | -217,4805 | 154,8259 | -208,753 | 163,5534 | 163,5534 | -217,4805 | 164,1802 | 3 | -9,5743 | 173,75447 | 190,630269 |
| | | 6,55 | -86,03082 | -307,67 | 158,7484 | -285,1105 | 181,3079 | 181,3079 | -307,67 | 181,056 | 3 | -9,5743 | 190,63027 | p/p red : |
| | | 7 | -126,5741 | -375,6695 | 160,1758 | -342,3144 | 193,5309 | 193,5309 | -375,6695 | 192,6306 | 3 | -9,5743 | 202,20487 | -0,615794429 |
| 7 | 67 | 7 | -31,05481 | 322,9316 | -366,3065 | 331,5469 | -357,6912 | 331,5469 | -366,3065 | -366,3065 | 0 | 0,0000 | -366,3065 | M - maks : |
| | | 7,45 | -15,6435 | 255,9372 | -278,2224 | 260,2573 | -273,9024 | 260,2573 | -278,2224 | -278,2224 | 0 | 0,0000 | -278,2224 | -278,2224 |
| | | 7,76 | -5,854372 | 209,2193 | -218,1085 | 210,811 | -216,5167 | 210,811 | -218,1085 | -218,1085 | 0 | 0,0000 | -218,1085 | M + maks : |
| | | 8,07 | 2,66264 | 161,6309 | -158,8649 | 160,8489 | -159,6469 | 161,6309 | -159,6469 | -159,6469 | 0 | 0,0000 | -159,6469 | 260,2573 |
| | | 8,38 | 9,388653 | 112,817 | -100,8468 | 110,1604 | -103,5034 | 112,817 | -103,5034 | -103,5034 | 0 | 0,0000 | -103,5034 | p/p : |
| | | 8,69 | 13,80478 | 62,42269 | -44,40924 | 58,53531 | -48,29662 | 62,42269 | -48,29662 | -48,29662 | 0 | 0,0000 | -48,29662 | -0,935428995 |
| | | 9 | 15,39213 | 10,09284 | 10,09284 | 5,763049 | 5,763049 | 10,09284 | 5,763049 | 10,09284 | 0 | 0,0000 | 10,09284 | |
| | | 9,31 | 13,80478 | -44,40924 | 62,42269 | -48,29662 | 58,53531 | 62,42269 | -48,29662 | 62,42269 | 0 | 0,0000 | 62,42269 | M - red maks : |
| | | 9,62 | 9,388653 | -100,8468 | 112,817 | -103,5034 | 110,1604 | 112,817 | -103,5034 | 112,817 | 0 | 0,0000 | 112,817 | -278,2224 |
| | | 9,93 | 2,66264 | -158,8649 | 161,6309 | -159,6469 | 160,8489 | 161,6309 | -159,6469 | 161,6309 | 0 | 0,0000 | 161,6309 | M + red maks : |
| | | 10,24 | -5,854372 | -218,1085 | 209,2193 | -216,5167 | 210,811 | 210,811 | -218,1085 | 210,811 | 0 | 0,0000 | 210,811 | 260,2573 |
| | | 10,55 | -15,6435 | -278,2224 | 255,9372 | -273,9024 | 260,2573 | 260,2573 | -278,2224 | 260,2573 | 0 | 0,0000 | 260,2573 | p/p red : |
| | | 11 | -31,05481 | -366,3065 | 322,9316 | -357,6912 | 331,5469 | 331,5469 | -366,3065 | 331,5469 | 0 | 0,0000 | 331,5469 | -0,935428995 |

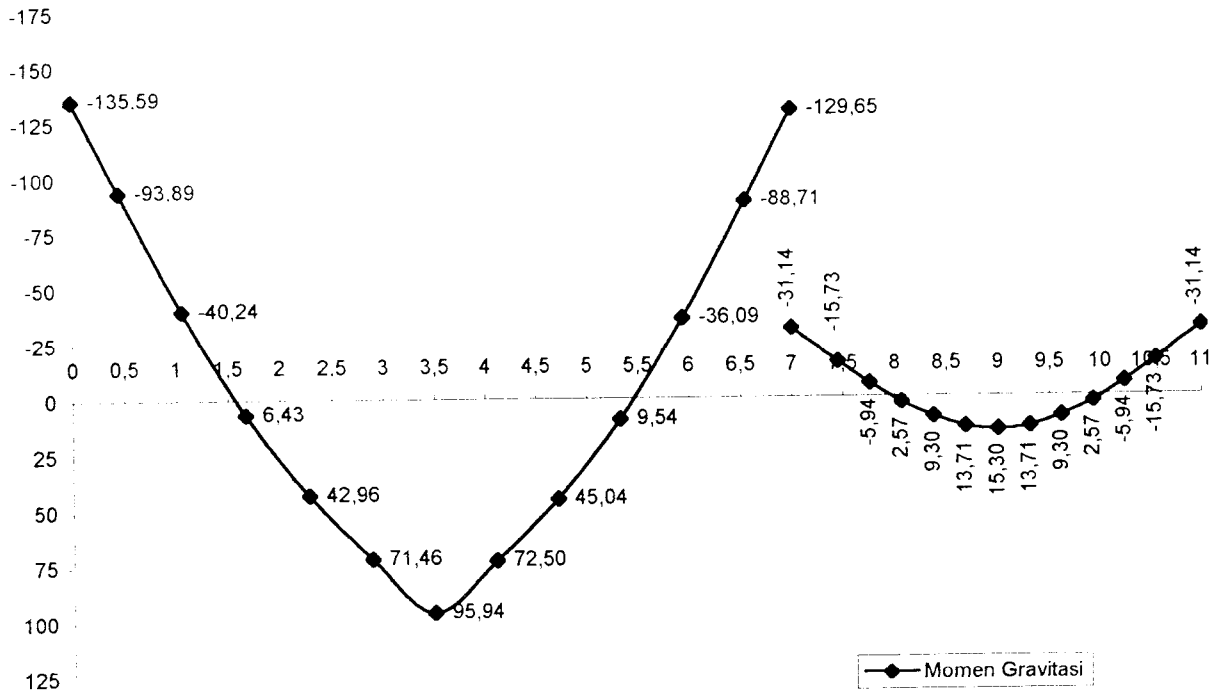
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----|------------|-----------|----------------|
| 10 | 58 | 0 | -139,7557 | 36,03442 | -269,7829 | 73,05347 | -232,7639 | 73,05347 | -269,7829 | -269,7829 | 13 | -28,0501 | -241,7328 | M - maks : |
| | | 0,45 | -97,50932 | 50,95804 | -215,77 | 76,7084 | -190,0197 | 76,7084 | -215,77 | -215,77 | 13 | -28,0501 | -187,7199 | -215,77 |
| | | 1,06 | -43,12456 | 69,20029 | -144,5401 | 80,47731 | -133,263 | 80,47731 | -144,5401 | -144,5401 | 13 | -28,0501 | -116,49 | M + maks : |
| | | 1,67 | 4,273404 | 82,62508 | -78,12756 | 81,37267 | -79,37997 | 82,62508 | -79,37997 | -79,37997 | 13 | -28,0501 | -51,32987 | 89,96485 |
| | | 2,28 | 41,54293 | 89,06623 | -18,6987 | 78,10239 | -29,66254 | 89,06623 | -29,66254 | -29,66254 | 13 | -28,0501 | -1,61244 | p/p : |
| | | 2,89 | 70,77408 | 89,96485 | 35,18763 | 71,52607 | 16,74886 | 89,96485 | 16,74886 | 16,74886 | 13 | -28,0501 | 44,79896 | -0,416947907 |
| | | 3,5 | 95,98452 | 88,09116 | 86,30166 | 63,29612 | 61,50661 | 88,09116 | 61,50661 | 61,50661 | 13 | -28,0501 | 89,55671 | |
| | | 4,11 | 73,27757 | 38,71622 | 89,91443 | 19,58207 | 70,78028 | 89,91443 | 19,58207 | 89,96485 | 13 | -28,0501 | 118,01495 | M - red maks : |
| | | 4,72 | 46,54992 | -13,43104 | 90,75488 | -25,78561 | 78,40031 | 90,75488 | -25,78561 | 89,06623 | 13 | -28,0501 | 117,11633 | -187,7199 |
| | | 5,33 | 11,78389 | -71,12082 | 86,05281 | -74,45933 | 82,7143 | 86,05281 | -74,45933 | 82,62508 | 13 | -28,0501 | 110,67518 | M + red maks : |
| | | 5,94 | -33,11058 | -135,7943 | 74,3671 | -127,2987 | 82,86266 | 82,86266 | -135,7943 | 80,47731 | 13 | -28,0501 | 108,52741 | 118,01495 |
| | | 6,55 | -84,99185 | -205,2851 | 57,86395 | -183,0116 | 80,13747 | 80,13747 | -205,2851 | 76,7084 | 13 | -28,0501 | 104,7585 | p/p red : |
| | | 7 | -125,3914 | -258,015 | 44,22324 | -224,9858 | 77,25249 | 77,25249 | -258,015 | 73,05347 | 13 | -28,0501 | 101,10357 | -0,628675756 |
| 10 | 70 | 7 | -31,11724 | 125,7742 | -169,303 | 134,4038 | -160,6734 | 134,4038 | -169,303 | -169,303 | 0 | 0,0000 | -169,303 | M - maks : |
| | | 7,45 | -15,70593 | 103,1228 | -125,562 | 107,4572 | -121,2276 | 107,4572 | -125,562 | -125,562 | 0 | 0,0000 | -125,562 | -125,562 |
| | | 7,76 | -5,916804 | 86,95233 | -95,9955 | 88,55837 | -94,38946 | 88,55837 | -95,9955 | -95,9955 | 0 | 0,0000 | -95,9955 | M + maks : |
| | | 8,07 | 2,600208 | 69,91143 | -67,29945 | 69,14372 | -68,06715 | 69,91143 | -68,06715 | -68,06715 | 0 | 0,0000 | -68,06715 | 107,4572 |
| | | 8,38 | 9,326221 | 51,64507 | -39,82885 | 49,00278 | -42,47114 | 51,64507 | -42,47114 | -42,47114 | 0 | 0,0000 | -42,47114 | p/p : |
| | | 8,69 | 13,74235 | 31,79823 | -13,93873 | 27,92513 | -17,81183 | 31,79823 | -17,81183 | -17,81183 | 0 | 0,0000 | -17,81183 | -0,855809879 |
| | | 9 | 15,3297 | 10,01586 | 10,01586 | 5,700355 | 5,700355 | 10,01586 | 5,700355 | 10,01586 | 0 | 0,0000 | 10,01586 | |
| | | 9,31 | 13,74235 | -13,93873 | 31,79823 | -17,81183 | 27,92513 | 31,79823 | -17,81183 | 31,79823 | 0 | 0,0000 | 31,79823 | M - red maks : |
| | | 9,62 | 9,326221 | -39,82885 | 51,64507 | -42,47114 | 49,00278 | 51,64507 | -42,47114 | 51,64507 | 0 | 0,0000 | 51,64507 | -125,562 |
| | | 9,93 | 2,600208 | -67,29945 | 69,91143 | -68,06715 | 69,14372 | 69,91143 | -68,06715 | 69,91143 | 0 | 0,0000 | 69,91143 | M + red maks : |
| | | 10,24 | -5,916804 | -95,9955 | 86,95233 | -94,38946 | 88,55837 | 88,55837 | -95,9955 | 88,55837 | 0 | 0,0000 | 88,55837 | 107,4572 |
| | | 10,55 | -15,70593 | -125,562 | 103,1228 | -121,2276 | 107,4572 | 107,4572 | -125,562 | 107,4572 | 0 | 0,0000 | 107,4572 | p/p red : |
| | | 11 | -31,11724 | -169,303 | 125,7742 | -160,6734 | 134,4038 | 134,4038 | -169,303 | 134,4038 | 0 | 0,0000 | 134,4038 | -0,855809879 |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|------------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|------------|-----------|----------------|
| 12 | 60 | 0 | -107,8325 | -11,03677 | -183,8129 | 16,86751 | -155,9086 | 16,86751 | -183,8129 | -183,8129 | 10 | -14,3915 | -169,4214 | M - maks : |
| | | 0,45 | -75,69987 | 6,771215 | -143,9147 | 26,3442 | -124,3417 | 26,3442 | -143,9147 | -143,9147 | 10 | -14,3915 | -129,5232 | -143,9147 |
| | | 1,06 | -34,07235 | 29,33887 | -91,40248 | 38,13337 | -82,60798 | 38,13337 | -91,40248 | -91,40248 | 10 | -14,3915 | -77,01101 | M + maks : |
| | | 1,67 | 2,877068 | 48,09615 | -42,70066 | 47,36058 | -43,43623 | 48,09615 | -43,43623 | -43,43623 | 10 | -14,3915 | -29,04476 | 70,17934 |
| | | 2,28 | 33,04483 | 61,32968 | 0,4774308 | 52,87381 | -7,978438 | 61,32968 | -7,978438 | -7,978438 | 10 | -14,3915 | 6,413032 | p/p : |
| | | 2,89 | 57,83037 | 70,17934 | 39,27163 | 55,43949 | 24,53178 | 70,17934 | 24,53178 | 24,53178 | 10 | -14,3915 | 38,92325 | -0,48764539 |
| | | 3,5 | 79,92377 | 76,83623 | 75,87307 | 56,53082 | 55,56766 | 76,83623 | 55,56766 | 55,56766 | 10 | -14,3915 | 69,95913 | |
| | | 4,11 | 60,16441 | 41,8068 | 70,78819 | 26,41415 | 55,39555 | 70,78819 | 26,41415 | 70,17934 | 10 | -14,3915 | 84,57081 | M - red maks : |
| | | 4,72 | 37,71292 | 4,584597 | 63,51054 | -5,176849 | 53,74909 | 63,51054 | -5,176849 | 61,32968 | 10 | -14,3915 | 75,72115 | -129,52323 |
| | | 5,33 | 9,879214 | -37,02148 | 51,849 | -39,71542 | 49,15506 | 51,849 | -39,71542 | 48,09615 | 10 | -14,3915 | 62,48762 | M + red maks : |
| | | 5,94 | -24,73615 | -84,1513 | 34,66373 | -77,96796 | 40,84707 | 40,84707 | -84,1513 | 38,13337 | 10 | -14,3915 | 52,52484 | 84,57081 |
| | | 6,55 | -64,02963 | -135,0915 | 13,66808 | -118,7825 | 29,97712 | 29,97712 | -135,0915 | 26,3442 | 10 | -14,3915 | 40,73567 | p/p red : |
| | | 7 | -94,44043 | -173,83 | -2,980234 | -149,6712 | 21,17854 | 21,17854 | -173,83 | 16,86751 | 10 | -14,3915 | 31,25898 | -0,652939322 |
| | | 12 | 72 | 7 | -22,92105 | 19,91242 | -58,33764 | 25,97981 | -52,27025 | 25,97981 | -58,33764 | -58,33764 | 4 | -1,6504 |
| 7,45 | -12,6997 | | | 19,38403 | -41,25972 | 22,71912 | -37,92463 | 22,71912 | -41,25972 | -41,25972 | 4 | -1,6504 | -39,60933 | -41,25972 |
| 7,76 | -6,207185 | | | 18,57571 | -29,93929 | 20,17527 | -28,33973 | 20,17527 | -29,93929 | -29,93929 | 4 | -1,6504 | -28,2889 | M + maks : |
| 8,07 | -0,5583856 | | | 17,08436 | -19,30189 | 17,17392 | -19,21233 | 17,17392 | -19,30189 | -19,30189 | 4 | -1,6504 | -17,6515 | 22,71912 |
| 8,38 | 3,902556 | | | 14,63137 | -9,626129 | 13,52847 | -10,72904 | 14,63137 | -10,72904 | -10,72904 | 4 | -1,6504 | -9,078651 | p/p : |
| 8,69 | 6,831494 | | | 10,93814 | -1,190612 | 9,052288 | -3,076462 | 10,93814 | -3,076462 | -3,076462 | 4 | -1,6504 | -1,426073 | -0,550636795 |
| 9 | 7,884284 | | | 5,726056 | 5,726056 | 3,558782 | 3,558782 | 5,726056 | 3,558782 | 5,726056 | 4 | -1,6504 | 7,3764448 | |
| 9,31 | 6,831494 | | | -1,190612 | 10,93814 | -3,076462 | 9,052288 | 10,93814 | -3,076462 | 10,93814 | 4 | -1,6504 | 12,588529 | M - red maks : |
| 9,62 | 3,902556 | | | -9,626129 | 14,63137 | -10,72904 | 13,52847 | 14,63137 | -10,72904 | 14,63137 | 4 | -1,6504 | 16,281759 | -39,6093312 |
| 9,93 | -0,5583856 | | | -19,30189 | 17,08436 | -19,21233 | 17,17392 | 17,17392 | -19,30189 | 17,17392 | 4 | -1,6504 | 18,824309 | M + red maks : |
| 10,24 | -6,207185 | | | -29,93929 | 18,57571 | -28,33973 | 20,17527 | 20,17527 | -29,93929 | 20,17527 | 4 | -1,6504 | 21,825659 | 24,3695088 |
| 10,55 | -12,6997 | | | -41,25972 | 19,38403 | -37,92463 | 22,71912 | 22,71912 | -41,25972 | 22,71912 | 4 | -1,6504 | 24,369509 | p/p red : |
| 11 | -22,92105 | | | -58,33764 | 19,91242 | -52,27025 | 25,97981 | 25,97981 | -58,33764 | 25,97981 | 4 | -1,6504 | 27,630199 | -0,615246662 |

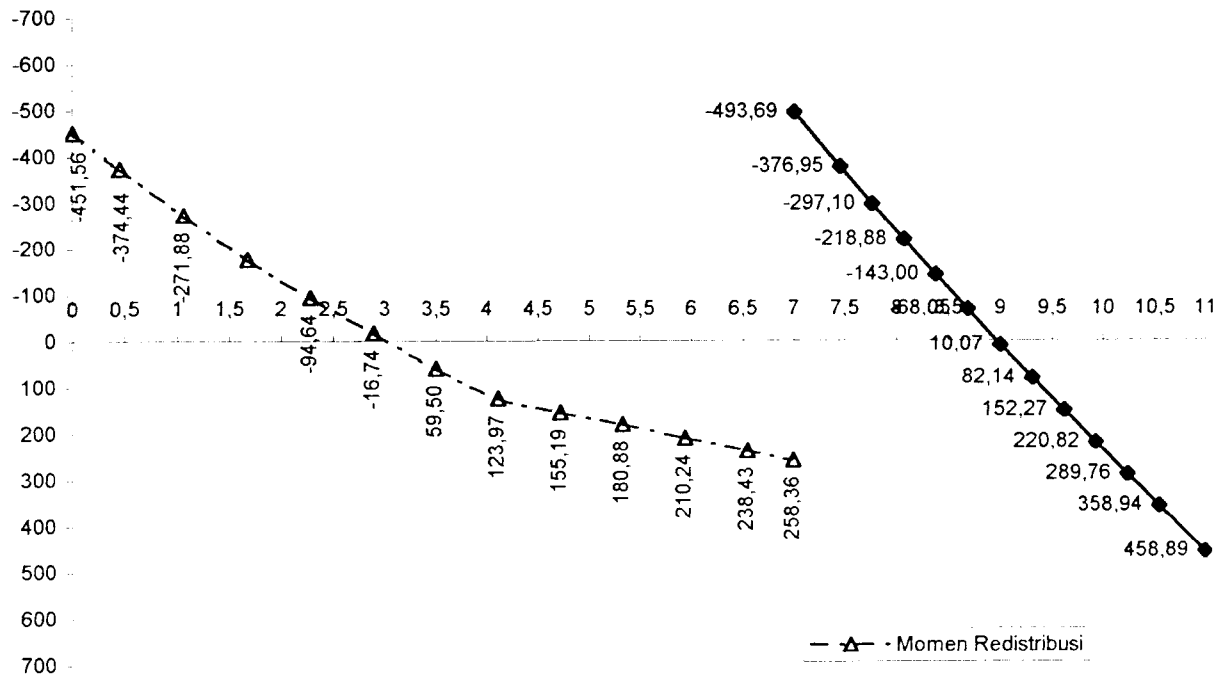
**Grafik Momen Lantai 3
Akibat Gempa (2,5%)**



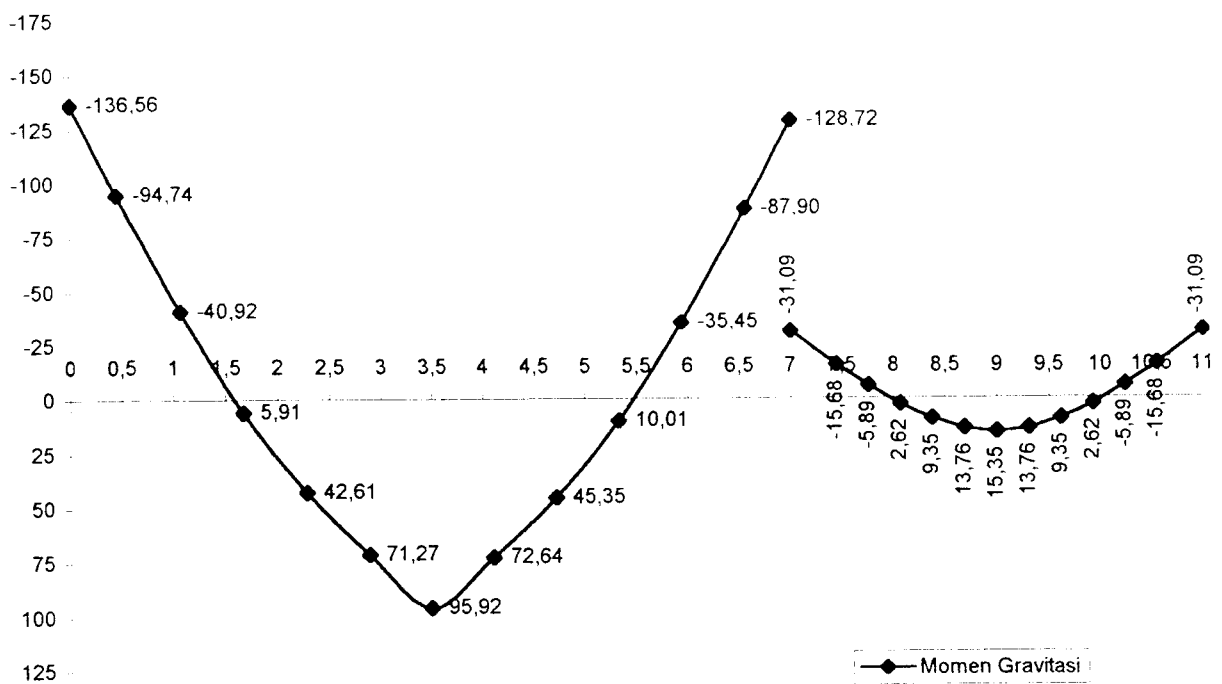
**Grafik Momen Lantai 3
Akibat Berat Sendiri**



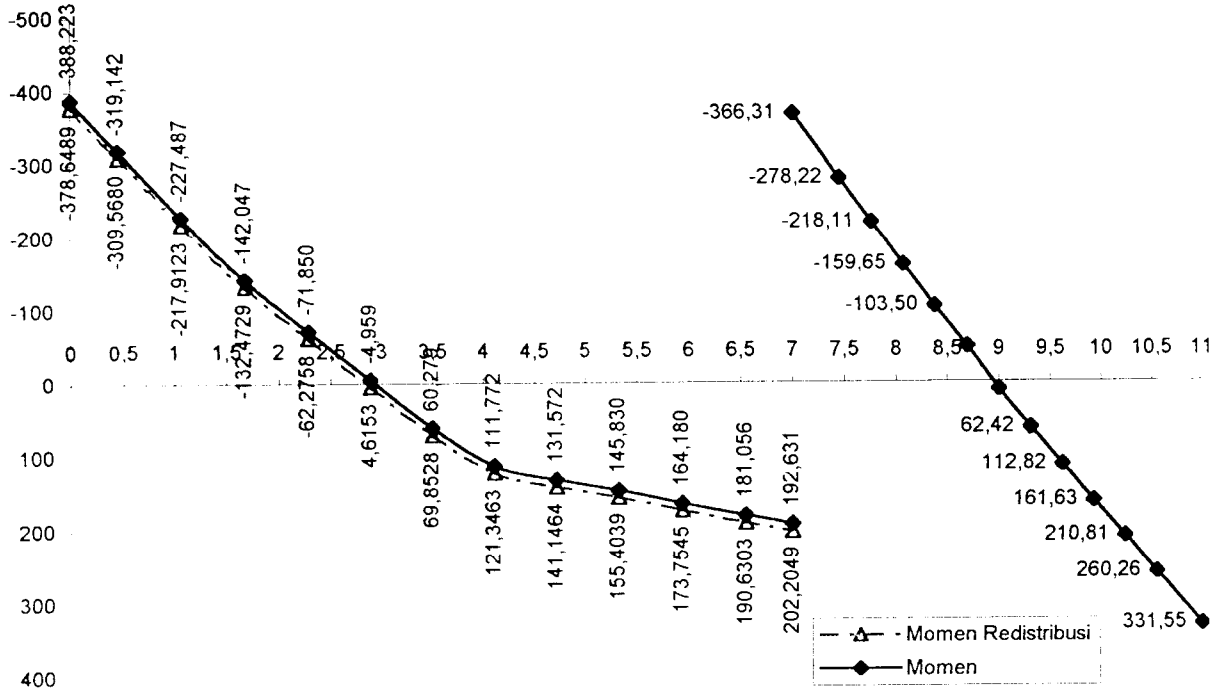
Grafik Momen Lantai 4
Akibat Gempa (0%)



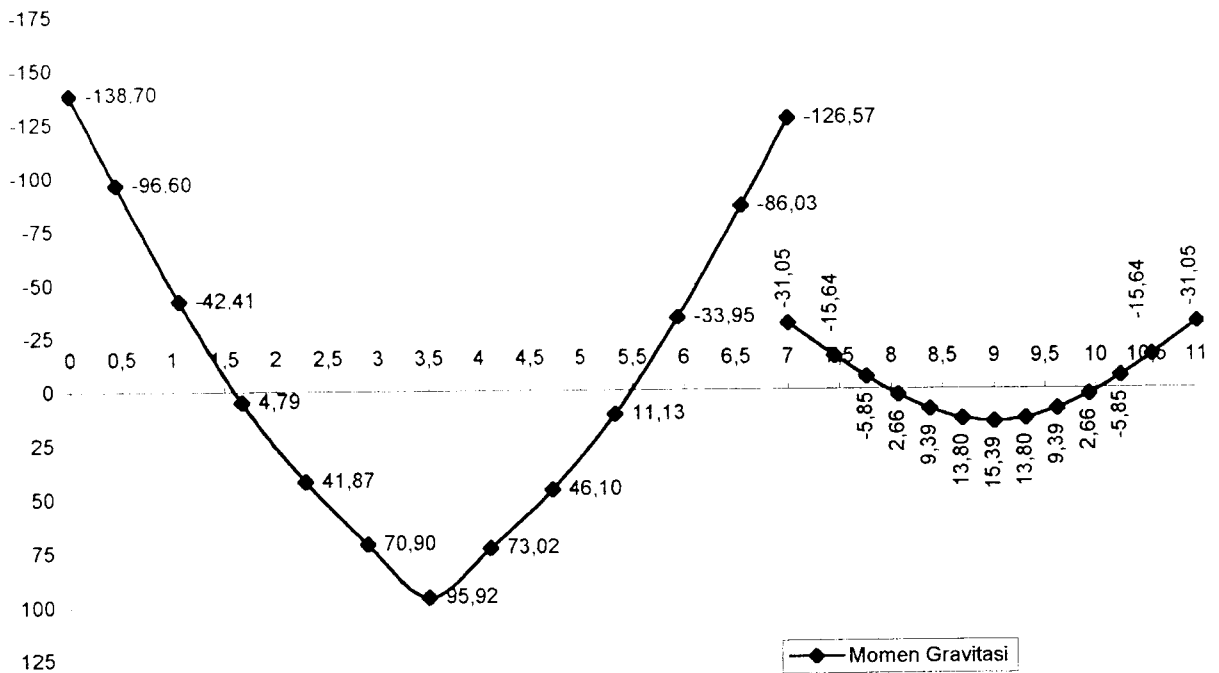
Grafik Momen Lantai 4
Akibat Berat Sendiri



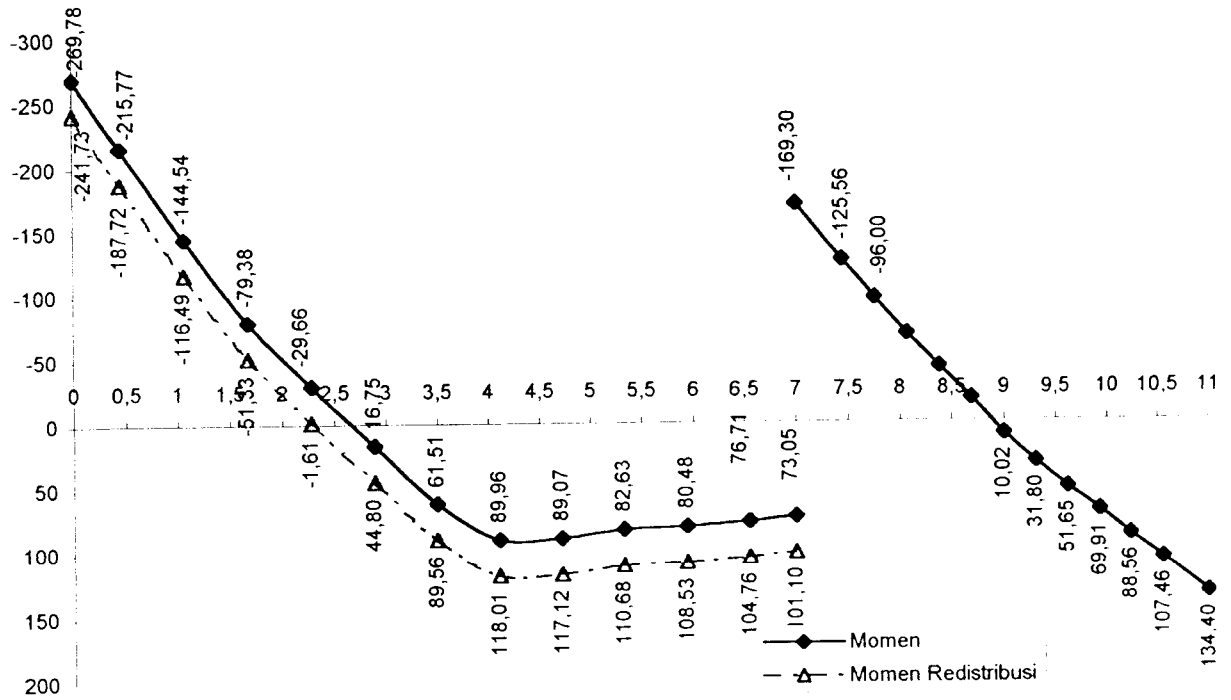
Grafik Momen Lantai 7
Akibat Gempa (3%)



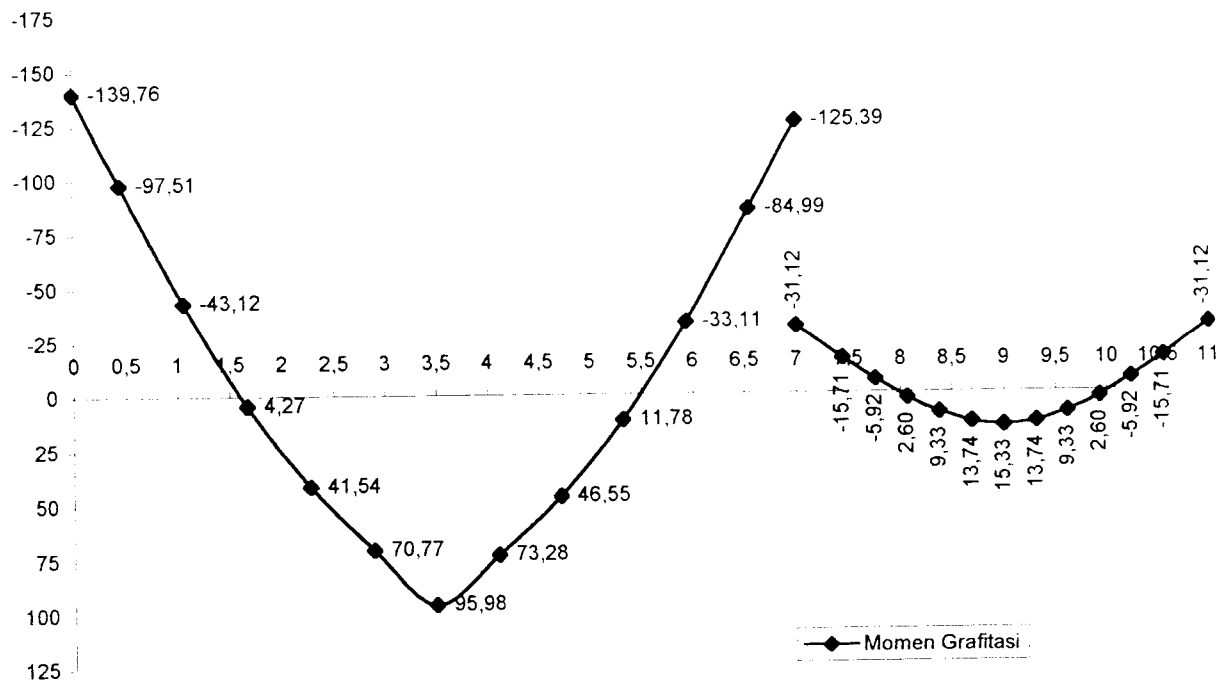
Grafik Momen Lantai 7
Akibat Berat Sendiri



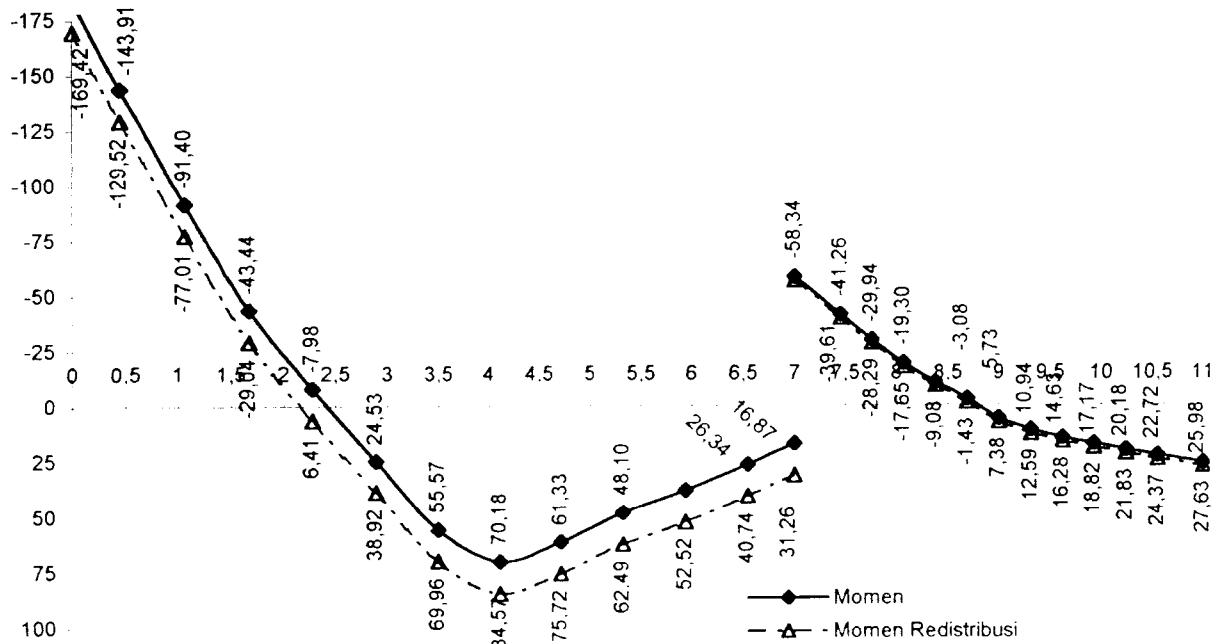
Grafik Momen Lantai 10
Akibat Gempa (13%)



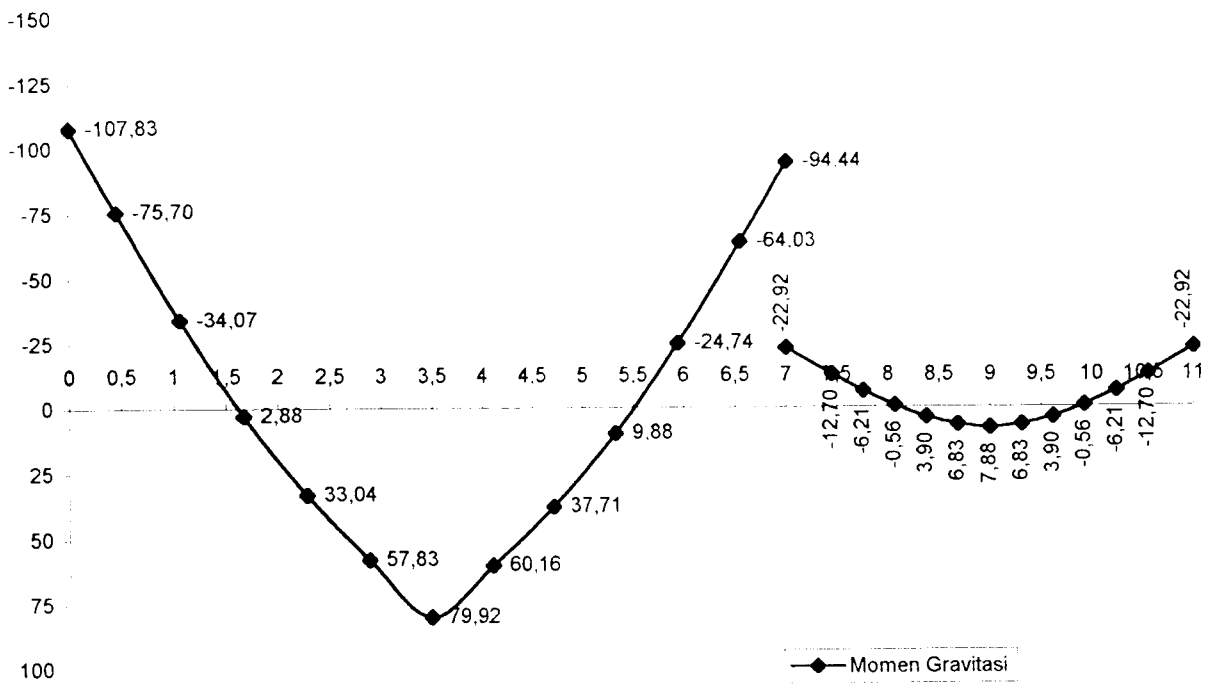
Grafik Momen Lantai 10
Akibat Berat Sendiri



**Grafik Momen Lantai 12
Akibat Gempa (10%)
dan (10%)**



**Momen Akibat Lantai 12
Akibat Berat Sendiri**



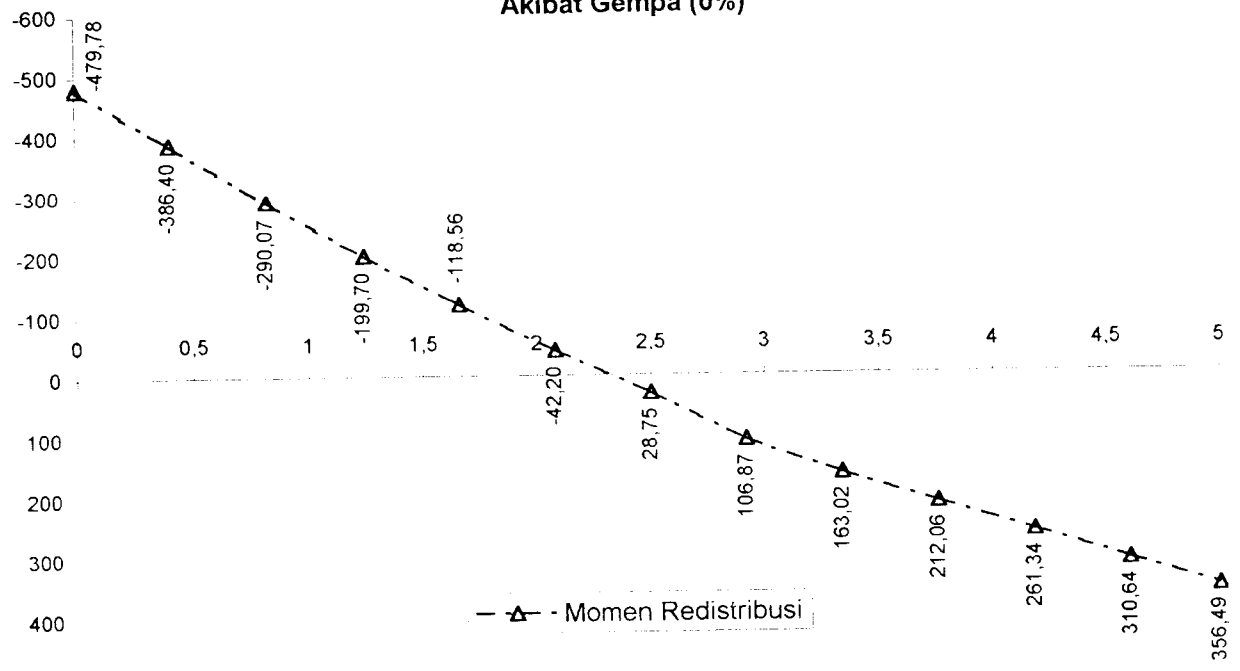
Tabel 4.2.1.2 Momen Redistribusi Balok untuk RW 2/5 Baru Portal 2

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| 3 | 147 | 0 | -95,68401 | 529,8089 | -686,7369 | 467,6463 | -575,1073 | 529,8089 | -686,7369 | -686,7369 | 0 | 0,0000 | -686,7369 | M - maks : |
| | | 0,4 | -58,80302 | 462,7303 | -559,1706 | 404,9381 | -470,9769 | 462,7303 | -559,1706 | -559,1706 | 0 | 0,0000 | -559,1706 | -559,1706 |
| | | 0,82 | -22,30953 | 390,4677 | -427,0559 | 337,8411 | -362,8935 | 390,4677 | -427,0559 | -427,0559 | 0 | 0,0000 | -427,0559 | M + maks : |
| | | 1,24 | 9,574579 | 314,4251 | -298,7214 | 268,1549 | -257,3992 | 314,4251 | -298,7214 | -298,7214 | 0 | 0,0000 | -298,7214 | 462,7697 |
| | | 1,66 | 34,48838 | 232,6662 | -176,1031 | 194,5534 | -155,8203 | 232,6662 | -176,1031 | -176,1031 | 0 | 0,0000 | -176,1031 | p/p : |
| | | 2,08 | 50,17051 | 143,3368 | -61,05535 | 115,7668 | -59,42641 | 143,3368 | -61,05535 | -61,05535 | 0 | 0,0000 | -61,05535 | -0,827600199 |
| | | 2,5 | 55,43673 | 45,46637 | 45,45143 | 31,13284 | 31,12004 | 45,46637 | 31,12004 | 31,12004 | 0 | 0,0000 | 31,12004 | |
| | | 2,92 | 50,18372 | -61,02955 | 143,3327 | -59,40607 | 115,7616 | 143,3327 | -61,02955 | 143,3327 | 0 | 0,0000 | 143,3327 | M - red maks : |
| | | 3,34 | 34,51479 | -176,0664 | 232,673 | -155,7924 | 194,5557 | 232,673 | -176,0664 | 232,673 | 0 | 0,0000 | 232,673 | -559,1706 |
| | | 3,76 | 9,614202 | -298,6739 | 314,4427 | -257,3638 | 268,1647 | 314,4427 | -298,6739 | 314,4427 | 0 | 0,0000 | 314,4427 | M + red maks : |
| | | 4,18 | -22,25669 | -426,9976 | 390,4963 | -362,8506 | 337,8585 | 390,4963 | -426,9976 | 390,4963 | 0 | 0,0000 | 390,4963 | 462,7697 |
| 4,6 | -58,73699 | -559,1013 | 462,7697 | -470,9264 | 404,963 | 462,7697 | -559,1013 | 462,7697 | 0 | 0,0000 | 462,7697 | p/p red : | | |
| 5 | -95,60539 | -686,6573 | 529,8586 | -575,0496 | 467,6784 | 529,8586 | -686,6573 | 529,8586 | 0 | 0,0000 | 529,8586 | -0,827600199 | | |
| 4 | 148 | 0 | -95,69376 | 511,4282 | -668,3723 | 451,8927 | -559,3649 | 511,4282 | -668,3723 | -668,3723 | 0 | 0,0000 | -668,3723 | M - maks : |
| | | 0,4 | -58,81086 | 447,2912 | -543,7443 | 391,7056 | -457,7534 | 447,2912 | -543,7443 | -543,7443 | 0 | 0,0000 | -543,7443 | -543,7443 |
| | | 0,82 | -22,31535 | 378,1173 | -414,7151 | 327,2558 | -352,3148 | 378,1173 | -414,7151 | -414,7151 | 0 | 0,0000 | -414,7151 | M + maks : |
| | | 1,24 | 9,570776 | 305,1633 | -289,4659 | 260,2167 | -249,4654 | 305,1633 | -289,4659 | -289,4659 | 0 | 0,0000 | -289,4659 | 447,3425 |
| | | 1,66 | 34,4866 | 226,4931 | -169,9329 | 189,2624 | -150,5313 | 226,4931 | -169,9329 | -169,9329 | 0 | 0,0000 | -169,9329 | p/p : |
| | | 2,08 | 50,17074 | 140,2523 | -57,9705 | 113,123 | -56,78228 | 140,2523 | -57,9705 | -57,9705 | 0 | 0,0000 | -57,9705 | -0,822707475 |
| | | 2,5 | 55,43898 | 45,47056 | 45,45094 | 31,13614 | 31,11932 | 45,47056 | 31,11932 | 31,11932 | 0 | 0,0000 | 31,11932 | |
| | | 2,92 | 50,18798 | -57,93668 | 140,2469 | -56,75561 | 113,116 | 140,2469 | -57,93668 | 140,2469 | 0 | 0,0000 | 140,2469 | M - red maks : |
| | | 3,34 | 34,52108 | -169,8849 | 226,5018 | -150,4948 | 189,2652 | 226,5018 | -169,8849 | 226,5018 | 0 | 0,0000 | 226,5018 | -543,7443 |
| | | 3,76 | 9,622505 | -289,4037 | 305,1862 | -249,4191 | 260,2294 | 305,1862 | -289,4037 | 305,1862 | 0 | 0,0000 | 305,1862 | M + red maks : |
| | | 4,18 | -22,24637 | -414,6387 | 378,1544 | -352,2586 | 327,2783 | 378,1544 | -414,6387 | 378,1544 | 0 | 0,0000 | 378,1544 | 447,3425 |
| 4,6 | -58,72465 | -543,6538 | 447,3425 | -457,6873 | 391,738 | 447,3425 | -543,6538 | 447,3425 | 0 | 0,0000 | 447,3425 | p/p red : | | |
| 5 | -95,59113 | -668,2682 | 511,493 | -559,2894 | 451,9344 | 511,493 | -668,2682 | 511,493 | 0 | 0,0000 | 511,493 | -0,822707475 | | |

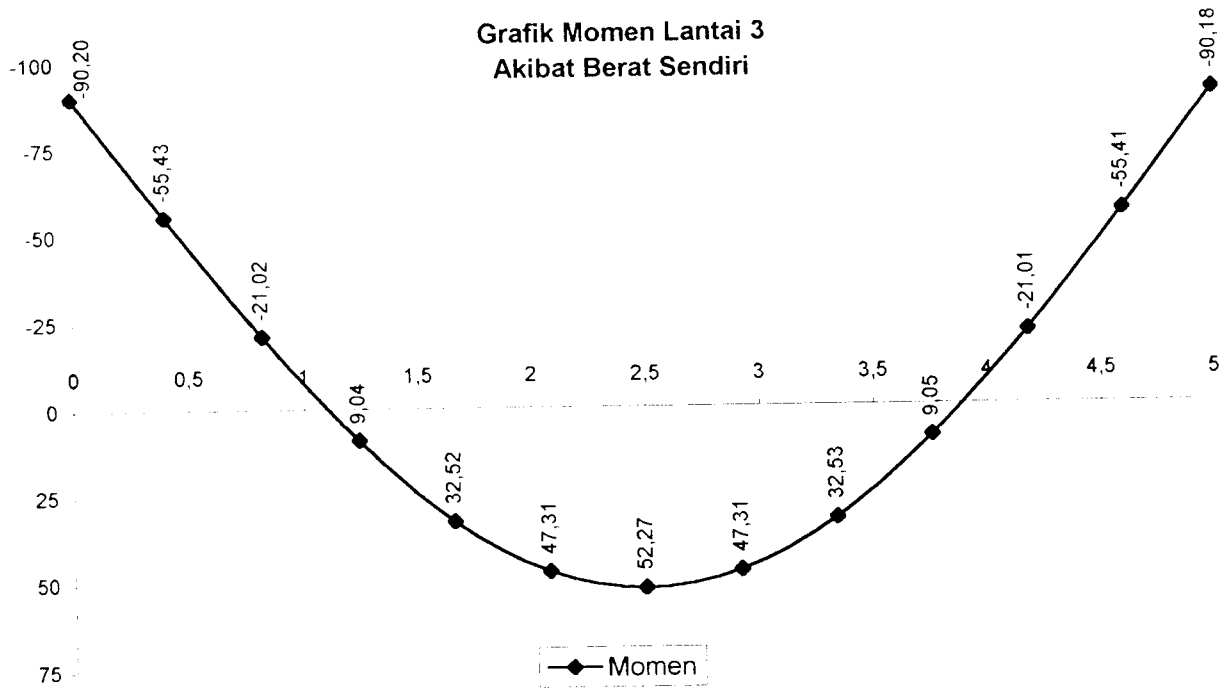
| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|--------------|-----------|----------------|
| 7 | 151 | 0 | -95,71854 | 373,2434 | -530,2283 | 333,4519 | -440,9523 | 373,2434 | -530,2283 | -530,2283 | 0 | 0,0000 | -530,2283 | M - maks : |
| | | 0,4 | -58,83078 | 331,2176 | -427,7036 | 292,2167 | -358,2871 | 331,2176 | -427,7036 | -427,7036 | 0 | 0,0000 | -427,7036 | -427,7036 |
| | | 0,82 | -22,33015 | 285,2605 | -321,8827 | 247,6662 | -272,7422 | 285,2605 | -321,8827 | -321,8827 | 0 | 0,0000 | -321,8827 | M + maks : |
| | | 1,24 | 9,561071 | 235,5233 | -219,8418 | 200,5266 | -189,7864 | 235,5233 | -219,8418 | -219,8418 | 0 | 0,0000 | -219,8418 | 331,2994 |
| | | 1,66 | 34,48199 | 180,0699 | -123,5172 | 149,4716 | -110,7459 | 180,0699 | -123,5172 | -123,5172 | 0 | 0,0000 | -123,5172 | p/p : |
| | | 2,08 | 50,17124 | 117,0459 | -34,76323 | 93,23167 | -36,8904 | 117,0459 | -36,8904 | -36,8904 | 0 | 0,0000 | -36,8904 | -0,774600448 |
| | | 2,5 | 55,44458 | 45,4809 | 45,44982 | 31,14425 | 31,11761 | 45,4809 | 31,11761 | 31,11761 | 0 | 0,0000 | 31,11761 | |
| | | 2,92 | 50,19869 | -34,70957 | 117,0374 | -36,84809 | 93,2207 | 117,0374 | -36,84809 | 117,0374 | 0 | 0,0000 | 117,0374 | M - red maks : |
| | | 3,34 | 34,53689 | -123,441 | 180,084 | -110,6879 | 149,4763 | 180,084 | -123,441 | 180,084 | 0 | 0,0000 | 180,084 | -427,7036 |
| | | 3,76 | 9,643419 | -219,743 | 235,56 | -189,7127 | 200,547 | 235,56 | -219,743 | 235,56 | 0 | 0,0000 | 235,56 | M + red maks : |
| | | 4,18 | -22,22036 | -321,7612 | 285,3198 | -272,6529 | 247,7023 | 285,3198 | -321,7612 | 285,3198 | 0 | 0,0000 | 285,3198 | 331,2994 |
| 4,6 | -58,69353 | -427,5595 | 331,2994 | -358,1822 | 292,2684 | 331,2994 | -427,5595 | 331,2994 | 0 | 0,0000 | 331,2994 | p/p red : | | |
| 5 | -95,55515 | -530,0627 | 373,3467 | -440,8324 | 333,5185 | 373,3467 | -530,0627 | 373,3467 | 0 | 0,0000 | 373,3467 | -0,774600448 | | |
| 10 | 154 | 0 | -95,73193 | 151,7472 | -308,7542 | 143,5998 | -251,1156 | 151,7472 | -308,7542 | -308,7542 | 0 | 0,0000 | -308,7542 | M - maks : |
| | | 0,4 | -58,84142 | 145,1619 | -241,6654 | 132,7418 | -198,8245 | 145,1619 | -241,6654 | -241,6654 | 0 | 0,0000 | -241,6654 | -241,6654 |
| | | 0,82 | -22,33792 | 136,4174 | -173,0523 | 120,0874 | -145,1723 | 136,4174 | -173,0523 | -173,0523 | 0 | 0,0000 | -173,0523 | M + maks : |
| | | 1,24 | 9,556191 | 123,8927 | -108,2193 | 104,8439 | -94,1093 | 123,8927 | -108,2193 | -108,2193 | 0 | 0,0000 | -108,2193 | 145,2596 |
| | | 1,66 | 34,48 | 105,6519 | -49,10252 | 85,68504 | -46,96158 | 105,6519 | -49,10252 | -49,10252 | 0 | 0,0000 | -49,10252 | p/p : |
| | | 2,08 | 50,17213 | 79,8404 | 2,443679 | 61,34115 | -4,998901 | 79,8404 | -4,998901 | -4,998901 | 0 | 0,0000 | -4,998901 | -0,601077357 |
| | | 2,5 | 55,44836 | 45,48799 | 45,44894 | 31,14981 | 31,11633 | 45,48799 | 31,11633 | 31,11633 | 0 | 0,0000 | 31,11633 | |
| | | 2,92 | 50,20536 | 2,510075 | 79,82867 | -4,946446 | 61,32664 | 79,82867 | -4,946446 | 79,82867 | 0 | 0,0000 | 79,82867 | M - red maks : |
| | | 3,34 | 34,54644 | -49,00879 | 105,6675 | -46,89016 | 85,6895 | 105,6675 | -49,00879 | 105,6675 | 0 | 0,0000 | 105,6675 | -241,6654 |
| | | 3,76 | 9,655851 | -108,0983 | 123,9357 | -94,0189 | 104,8673 | 123,9357 | -108,0983 | 123,9357 | 0 | 0,0000 | 123,9357 | M + red maks : |
| | | 4,18 | -22,20504 | -172,9039 | 136,4877 | -145,063 | 120,1298 | 136,4877 | -172,9039 | 136,4877 | 0 | 0,0000 | 136,4877 | 145,2596 |
| 4,6 | -58,67532 | -241,4897 | 145,2596 | -198,6962 | 132,8032 | 145,2596 | -241,4897 | 145,2596 | 0 | 0,0000 | 145,2596 | p/p red : | | |
| 5 | -95,5342 | -225,0892 | 129,8931 | -185,886 | -7,8325 | 129,8931 | -225,0892 | 129,8931 | 0 | 0,0000 | 129,8931 | -0,601077357 | | |

| Lantai | Frame | Stasion | K1 | K2 | K3 | K4 | K5 | M+ | M- | M | % | Distribusi | M red | M perlu |
|--------|-------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|---|------------|------------|----------------|
| 12 | 156 | 0 | -78,44711 | 16,10892 | -149,1821 | 19,21951 | -122,4585 | 19,21951 | -149,1821 | -149,1821 | 2 | -11,18341 | -137,99869 | M - maks : |
| | | 0,4 | -48,20546 | 28,54153 | -110,3142 | 27,79014 | -91,22908 | 28,54153 | -110,3142 | -110,3142 | 2 | -11,18341 | -99,130788 | -110,3142 |
| | | 0,82 | -18,28158 | 40,04366 | -71,055 | 35,58497 | -59,64245 | 40,04366 | -71,055 | -71,055 | 2 | -11,18341 | -59,871588 | M + maks : |
| | | 1,24 | 7,862608 | 48,33981 | -35,00176 | 40,89219 | -30,54344 | 48,33981 | -35,00176 | -35,00176 | 2 | -11,18341 | -23,818348 | 51,75279 |
| | | 1,66 | 28,29116 | 51,78791 | -3,79658 | 42,43765 | -5,206194 | 51,78791 | -5,206194 | -5,206194 | 2 | -11,18341 | 5,977218 | p/p : |
| | | 2,08 | 41,15031 | 48,81561 | 20,98821 | 39,00154 | 15,14948 | 48,81561 | 15,14948 | 15,14948 | 2 | -11,18341 | 26,332892 | -0,469139875 |
| | | 2,5 | 45,47185 | 38,60211 | 38,5318 | 29,94803 | 29,88776 | 38,60211 | 29,88776 | 29,88776 | 2 | -11,18341 | 41,071172 | |
| | | 2,92 | 41,17167 | 21,07612 | 48,7629 | 15,22202 | 38,95354 | 48,7629 | 15,22202 | 48,7629 | 2 | -11,18341 | 59,946312 | M - red maks : |
| | | 3,34 | 28,33389 | -3,691069 | 51,75279 | -5,121395 | 42,40191 | 51,75279 | -5,121395 | 51,75279 | 2 | -11,18341 | 62,936202 | -99,130788 |
| | | 3,76 | 7,926708 | -34,87865 | 48,3223 | -30,44638 | 40,86872 | 48,3223 | -34,87865 | 48,3223 | 2 | -11,18341 | 59,505712 | M + red maks : |
| | | 4,18 | -18,19612 | -70,91429 | 40,04375 | -59,53312 | 35,57377 | 40,04375 | -70,91429 | 40,04375 | 2 | -11,18341 | 51,227162 | 62,936202 |
| | | 4,6 | -48,09863 | -110,1559 | 28,55921 | -91,10748 | 27,79119 | 28,55921 | -110,1559 | 28,55921 | 2 | -11,18341 | 39,742622 | p/p red : |
| | | 5 | -78,31993 | -149,0071 | 16,14337 | -122,3253 | 19,23225 | 19,23225 | -149,0071 | 19,23225 | 2 | -11,18341 | 30,415662 | -0,634880477 |

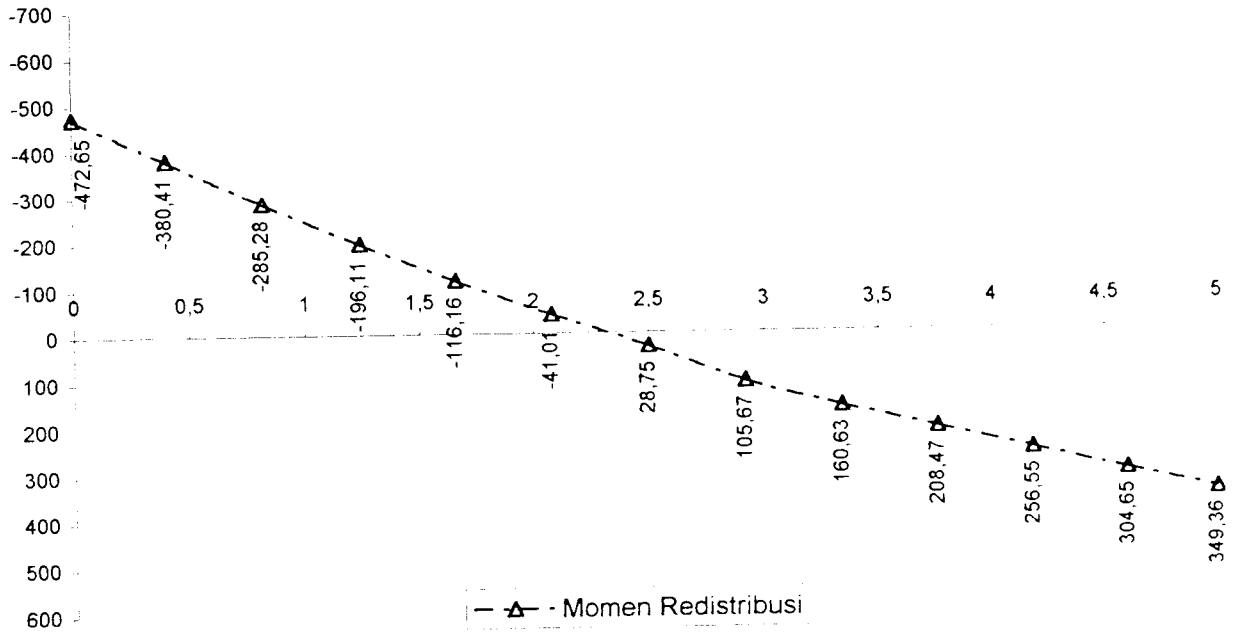
Grafik Momen Lantai 3
Akibat Gempa (0%)



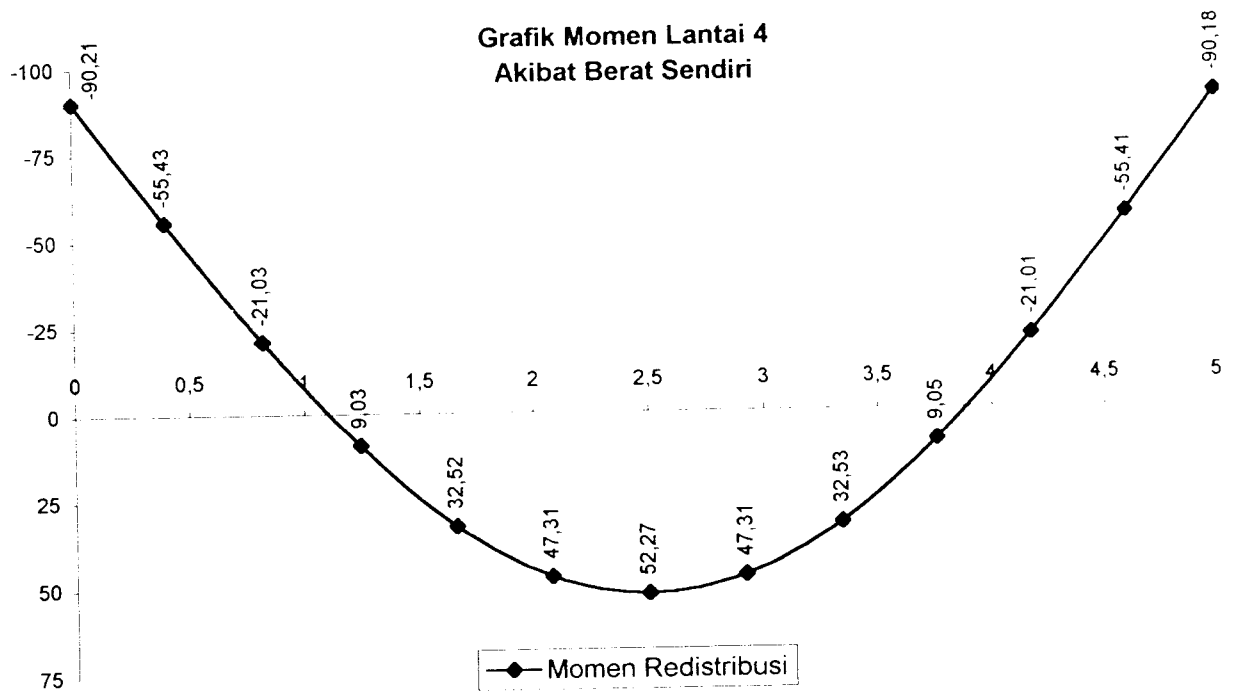
Grafik Momen Lantai 3
Akibat Berat Sendiri



**Grafik Momen Lantai 4
Akibat Gempa (0%)**



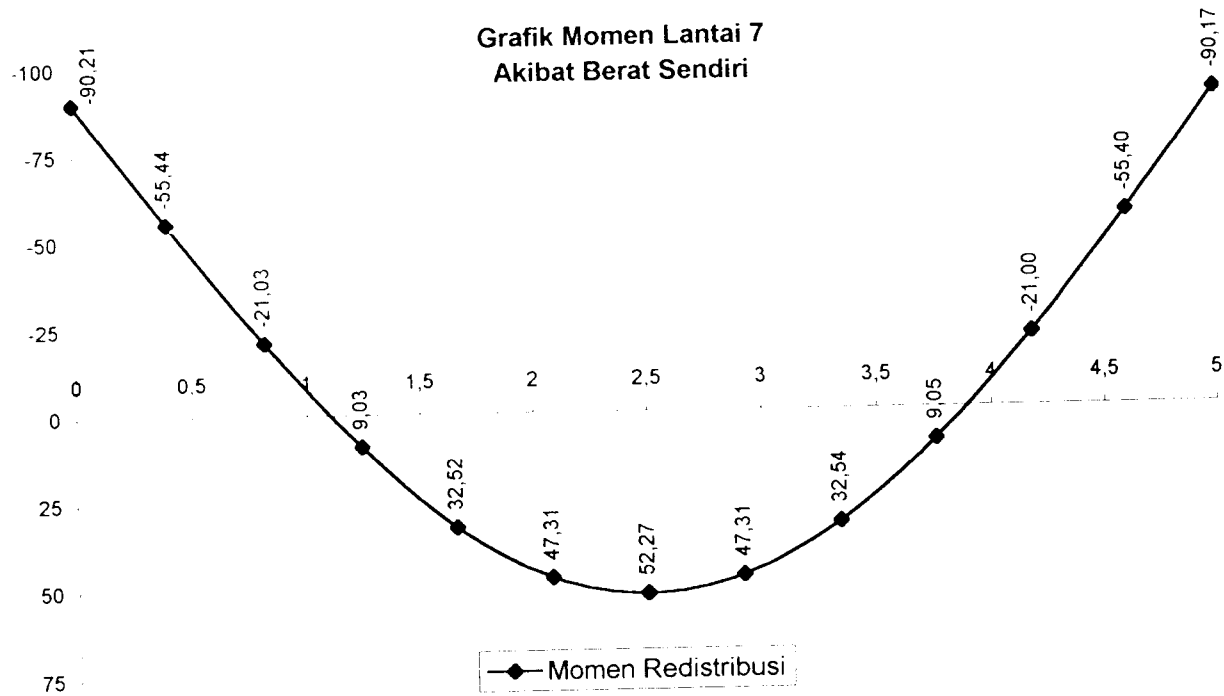
**Grafik Momen Lantai 4
Akibat Berat Sendiri**



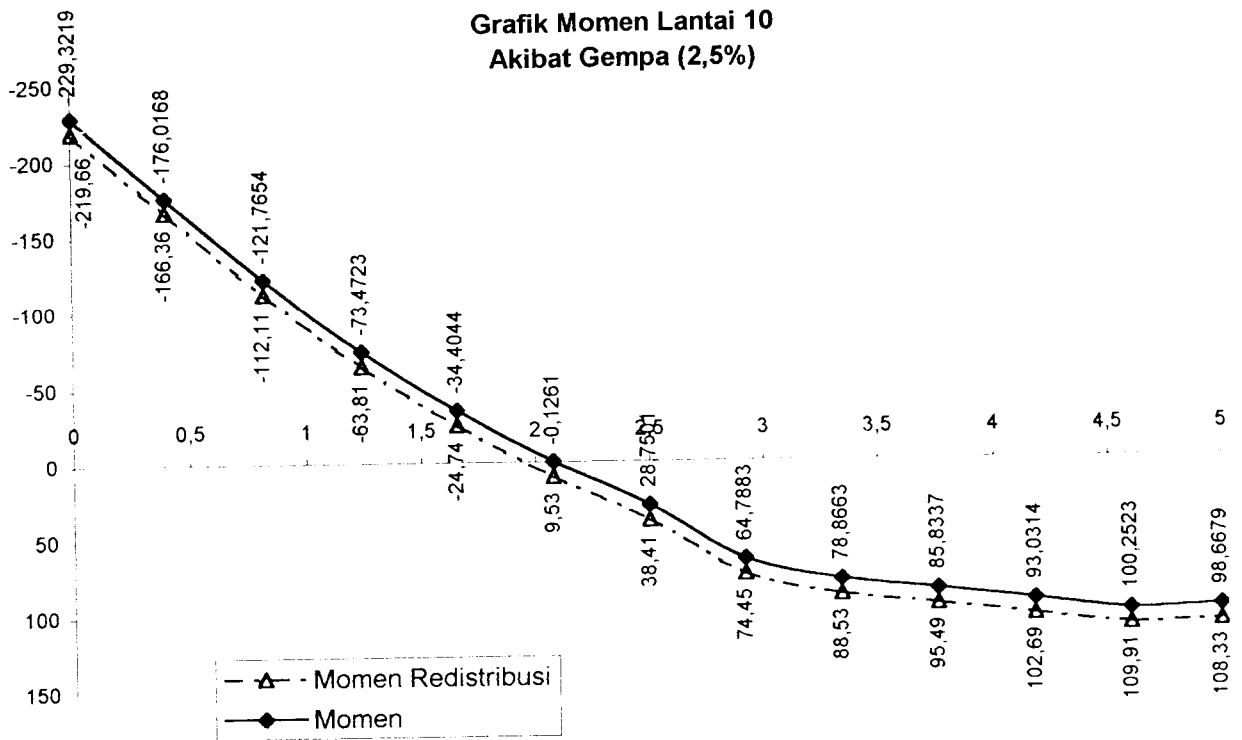
**Grafik Momen Lantai 7
Akibat Gempa (0%)**



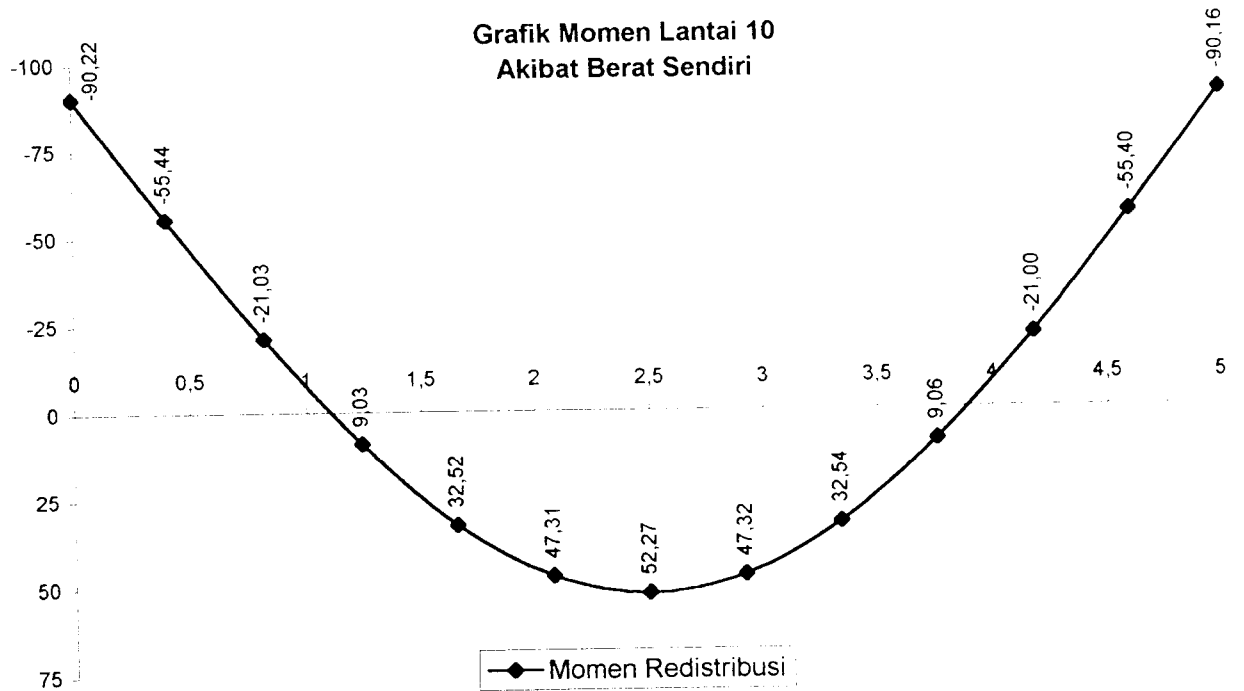
**Grafik Momen Lantai 7
Akibat Berat Sendiri**



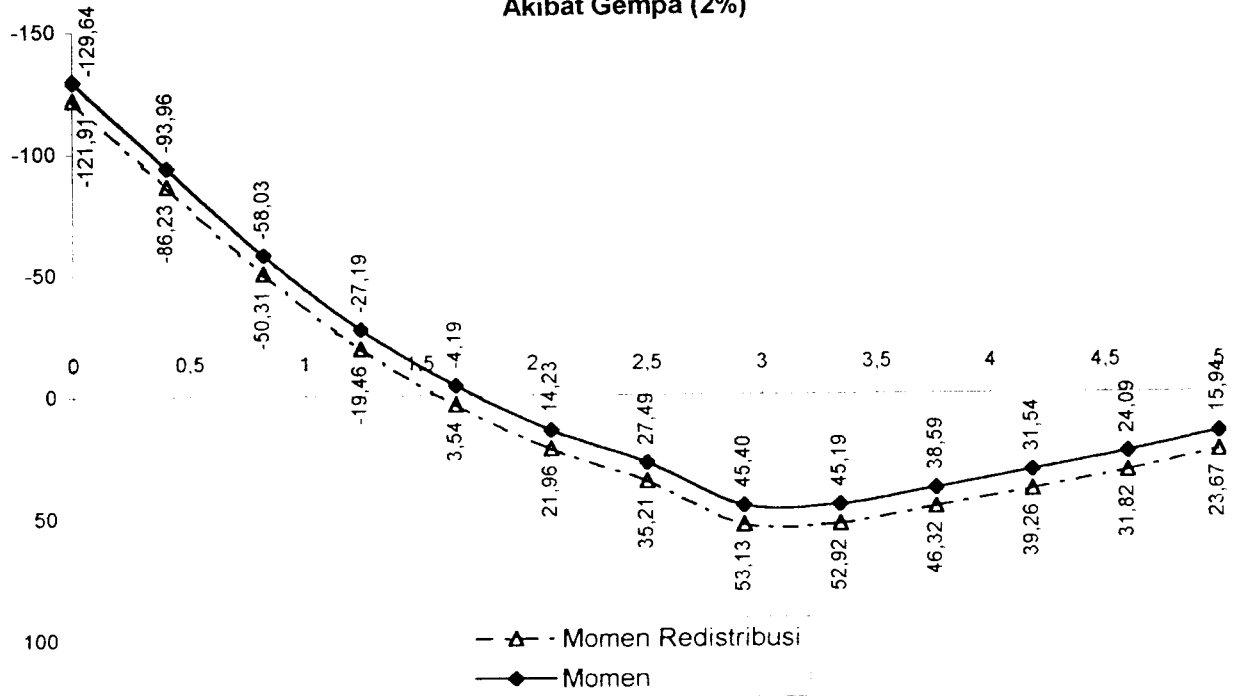
**Grafik Momen Lantai 10
Akibat Gempa (2,5%)**



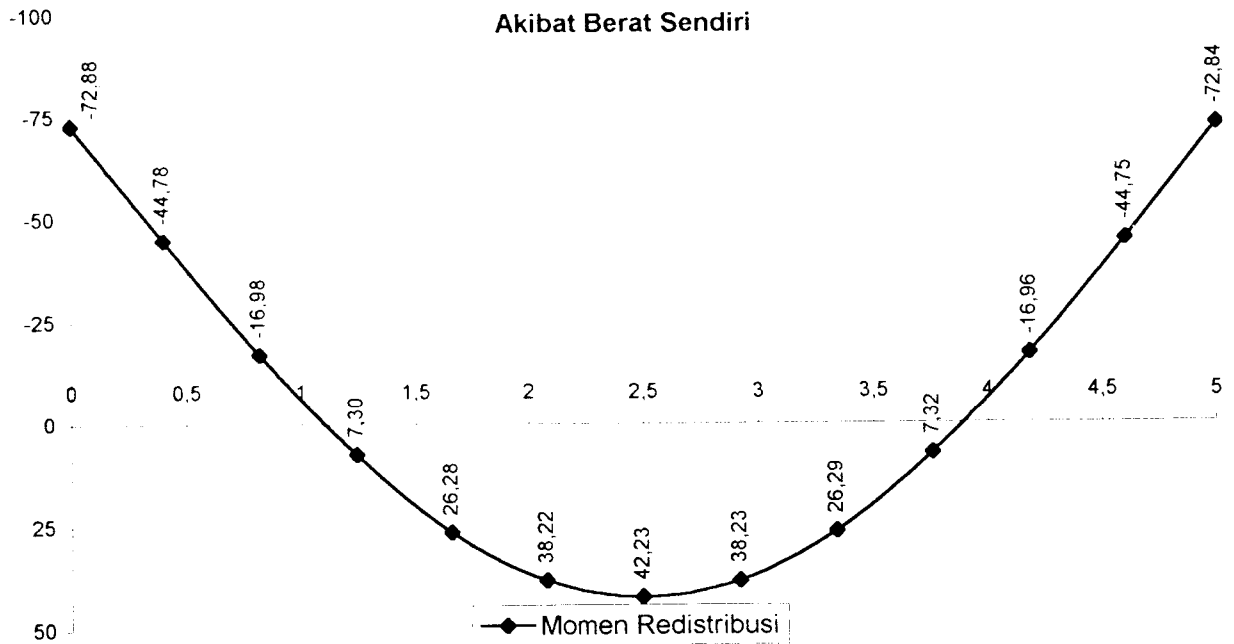
**Grafik Momen Lantai 10
Akibat Berat Sendiri**



**Grafik Momen Lantai 12
Akibat Gempa (2%)**



**Grafik Momen Lantai 12
Akibat Berat Sendiri**



Tabel 4.2.2.1 Momen Kapasitas Tulangan Tumpuan Aktual untuk RW 2/5 Baru Portal E

| Lantai | Frame | M(-) | | | | M(+) | | | | | | | | | | | | | | | | | | |
|--------|-------|------|-----|----|-----|----------|-----------------|---------|-----------------|----------|----------|-----------|---------|-----------|------|-----------------|----------|-----------------|----------|-----|-----|-----|-----|--|
| | | b | h | d' | d | As pakai | As' pakai | M perlu | Mtersedia | Mkap | As pakai | As' pakai | M perlu | Mtersedia | Mkap | | | | | | | | | |
| | | mm | mm | mm | mm | n | mm ² | n | mm ² | kNm | kNm | kNm | kNm | kNm | n | mm ² | n | mm ² | kNm | kNm | kNm | kNm | kNm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | |
| 1 | 49 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 361,0423 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 244,5014 | 311,0211 | 386,5753 | | | | | |
| 2 | 50 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 361,0423 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 244,5014 | 311,0211 | 386,5753 | | | | | |
| 3 | 51 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 361,0423 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 244,5014 | 311,0211 | 386,5753 | | | | | |
| 4 | 52 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 374,4393 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 238,4341 | 311,0211 | 386,5753 | | | | | |
| 5 | 53 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 374,4393 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 238,4341 | 311,0211 | 386,5753 | | | | | |
| 6 | 54 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 374,4393 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 238,4341 | 311,0211 | 386,5753 | | | | | |
| 7 | 55 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 309,5680 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 190,6303 | 235,3237 | 292,0997 | | | | | |
| 8 | 56 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 309,5680 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 190,6303 | 235,3237 | 292,0997 | | | | | |
| 9 | 57 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 309,5680 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 190,6303 | 235,3237 | 292,0997 | | | | | |
| 10 | 58 | 300 | 600 | 51 | 549 | 4 | 1519,76 | 2 | 759,8800 | 187,7199 | 310,0099 | 383,1533 | 2 | 759,88 | 4 | 1519,7600 | 118,0150 | 159,5189 | 197,4594 | | | | | |
| 11 | 59 | 300 | 600 | 51 | 549 | 4 | 1519,76 | 2 | 759,8800 | 187,7199 | 310,0099 | 383,1533 | 2 | 759,88 | 4 | 1519,7600 | 118,0150 | 159,5189 | 197,4594 | | | | | |
| 12 | 60 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0,0000 | 129,5232 | 234,0009 | 287,4063 | 0 | | 3 | 1139,8200 | 84,5708 | 0,0000 | 0,0000 | | | | | |
| 1 | 61 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 382,1850 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 364,1092 | 311,0211 | 386,5753 | | | | | |
| 2 | 62 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 382,1850 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 364,1092 | 311,0211 | 386,5753 | | | | | |
| 3 | 63 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 382,1850 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 364,1092 | 311,0211 | 386,5753 | | | | | |
| 4 | 64 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 376,9515 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 358,9432 | 311,0211 | 386,5753 | | | | | |
| 5 | 65 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 376,9515 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 358,9432 | 311,0211 | 386,5753 | | | | | |
| 6 | 66 | 300 | 600 | 51 | 549 | 7 | 2659,58 | 4 | 1519,7600 | 376,9515 | 532,8350 | 656,1861 | 4 | 1519,76 | 7 | 2659,5800 | 358,9432 | 311,0211 | 386,5753 | | | | | |
| 7 | 67 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 278,2224 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 260,2573 | 235,3237 | 292,0997 | | | | | |
| 8 | 68 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 278,2224 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 260,2573 | 235,3237 | 292,0997 | | | | | |
| 9 | 69 | 300 | 600 | 51 | 549 | 6 | 2279,64 | 3 | 1139,8200 | 278,2224 | 457,9415 | 563,7629 | 3 | 1139,82 | 6 | 2279,6400 | 260,2573 | 235,3237 | 292,0997 | | | | | |
| 10 | 70 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0,0000 | 125,5620 | 234,0009 | 287,4063 | 0 | | 3 | 1139,8200 | 107,4572 | 0,0000 | 0,0000 | | | | | |
| 11 | 71 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0,0000 | 125,5620 | 234,0009 | 287,4063 | 0 | | 3 | 1139,8200 | 107,4572 | 0,0000 | 0,0000 | | | | | |
| 12 | 72 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0,0000 | 39,6093 | 234,0009 | 287,4063 | 0 | | 3 | 1139,8200 | 24,3695 | 0,0000 | 0,0000 | | | | | |

Tabel 4.2.2.2 Momen Kapasitas Tulangan Tumpuan Aktual untuk RW 2/5 Baru Portal 2

| Lantai | Frame | M(-) | | | | M(+) | | | | | | | | | | | | | | | | | | |
|--------|-------|------|-----|----|-----|----------|-----------------|---------|-----------------|----------|----------|-----------|---------|-----------|------|-----------------|----------|-----------------|----------|-----|-----|-----|-----|--|
| | | b | h | d' | d | As pakai | As' pakai | M perlu | Mtersedia | Mkap | As pakai | As' pakai | M perlu | Mtersedia | Mkap | | | | | | | | | |
| | | mm | mm | mm | mm | n | mm ² | n | mm ² | kNm | kNm | kNm | kNm | kNm | n | mm ² | n | mm ² | kNm | kNm | kNm | kNm | kNm | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | |
| 1 | 145 | 300 | 600 | 51 | 549 | 10 | 3799,4 | 5 | 1899,7000 | 559,1706 | 748,7244 | 996,8893 | 5 | 1899,70 | 10 | 3799,4000 | 462,7697 | 386,6960 | 481,1544 | | | | | |
| 2 | 146 | 300 | 600 | 51 | 549 | 10 | 3799,4 | 5 | 1899,7000 | 559,1706 | 748,7244 | 996,8893 | 5 | 1899,70 | 10 | 3799,4000 | 462,7697 | 386,6960 | 481,1544 | | | | | |
| 3 | 147 | 300 | 600 | 51 | 549 | 10 | 3799,4 | 5 | 1899,7000 | 559,1706 | 748,7244 | 996,8893 | 5 | 1899,70 | 10 | 3799,4000 | 462,7697 | 386,6960 | 481,1544 | | | | | |
| 4 | 148 | 300 | 600 | 51 | 549 | 10 | 3799,4 | 5 | 1899,7000 | 543,7443 | 748,7244 | 996,8893 | 5 | 1899,70 | 10 | 3799,4000 | 447,3425 | 386,6960 | 481,1544 | | | | | |
| 5 | 149 | 300 | 600 | 51 | 549 | 10 | 3799,4 | 5 | 1899,7000 | 543,7443 | 748,7244 | 996,8893 | 5 | 1899,70 | 10 | 3799,4000 | 447,3425 | 386,6960 | 481,1544 | | | | | |
| 6 | 150 | 300 | 600 | 51 | 549 | 10 | 3799,4 | 5 | 1899,7000 | 543,7443 | 748,7244 | 996,8893 | 5 | 1899,70 | 10 | 3799,4000 | 447,3425 | 386,6960 | 481,1544 | | | | | |
| 7 | 151 | 300 | 600 | 51 | 549 | 8 | 3039,52 | 4 | 1519,7600 | 427,7036 | 604,0813 | 813,8150 | 4 | 1519,76 | 8 | 3039,5200 | 331,2994 | 311,0267 | 386,6401 | | | | | |
| 8 | 152 | 300 | 600 | 51 | 549 | 8 | 3039,52 | 4 | 1519,7600 | 427,7036 | 604,0813 | 813,8150 | 4 | 1519,76 | 8 | 3039,5200 | 331,2994 | 311,0267 | 386,6401 | | | | | |
| 9 | 153 | 300 | 600 | 51 | 549 | 8 | 3039,52 | 4 | 1519,7600 | 427,7036 | 604,0813 | 813,8150 | 4 | 1519,76 | 8 | 3039,5200 | 331,2994 | 311,0267 | 386,6401 | | | | | |
| 10 | 154 | 300 | 600 | 51 | 549 | 5 | 1899,7 | 3 | 1139,8200 | 241,6654 | 384,9635 | 475,9126 | 3 | 1139,82 | 5 | 1899,7000 | 145,2596 | 235,3352 | 292,0765 | | | | | |
| 11 | 155 | 300 | 600 | 51 | 549 | 5 | 1899,7 | 3 | 1139,8200 | 241,6654 | 384,9635 | 475,9126 | 3 | 1139,82 | 5 | 1899,7000 | 145,2596 | 235,3352 | 292,0765 | | | | | |
| 12 | 156 | 300 | 600 | 51 | 549 | 2 | 759,88 | 0 | 0,0000 | 99,1308 | 159,6236 | 197,2651 | 0 | | 2 | 759,8800 | 62,9362 | 0,0000 | 0,0000 | | | | | |

Tabel 4.2.3.1 Momen Kapasitas Tulangan Lapangan untuk R/W 2/5 Baru Portal E

| Lantai | Frame | b | h | d' | d | M (-) | | | | | | |
|--------|-------|-----|-----|----|-----|----------|-----------------|-----------|-----------------|---------|-----------|----------|
| | | | | | | As pakai | | As' pakai | | Mperlu | Mtersedia | Mkap |
| | | | | | | n | mm ² | n | mm ² | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | 49 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9373 | 234,0009 | 287,4063 |
| 2 | 50 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9373 | 234,0009 | 287,4063 |
| 3 | 51 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9373 | 234,0009 | 287,4063 |
| 4 | 52 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9167 | 234,0009 | 287,4063 |
| 5 | 53 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9167 | 234,0009 | 287,4063 |
| 6 | 54 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9167 | 234,0009 | 287,4063 |
| 7 | 55 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9201 | 234,0009 | 287,4063 |
| 8 | 56 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9201 | 234,0009 | 287,4063 |
| 9 | 57 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9201 | 234,0009 | 287,4063 |
| 10 | 58 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9845 | 234,0009 | 287,4063 |
| 11 | 59 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 95,9845 | 234,0009 | 287,4063 |
| 12 | 60 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 79,9238 | 234,0009 | 287,4063 |
| 1 | 61 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3023 | 234,0009 | 287,4063 |
| 2 | 62 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3023 | 234,0009 | 287,4063 |
| 3 | 63 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3023 | 234,0009 | 287,4063 |
| 4 | 64 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3522 | 234,0009 | 287,4063 |
| 5 | 65 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3522 | 234,0009 | 287,4063 |
| 6 | 66 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3522 | 234,0009 | 287,4063 |
| 7 | 67 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3921 | 234,0009 | 287,4063 |
| 8 | 68 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3921 | 234,0009 | 287,4063 |
| 9 | 69 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3921 | 234,0009 | 287,4063 |
| 10 | 70 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3297 | 234,0009 | 287,4063 |
| 11 | 71 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 15,3297 | 234,0009 | 287,4063 |
| 12 | 72 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 7,8843 | 234,0009 | 287,4063 |

Tabel 4.2.3.2 Momen Kapasitas Tulangan Lapangan untuk R/W 2/5 Baru Portal 2

| Lantai | Frame | b | h | d' | d | M (-) | | | | | | |
|--------|-------|-----|-----|----|-----|----------|-----------------|-----------|-----------------|---------|-----------|----------|
| | | | | | | As pakai | | As' pakai | | Mperlu | Mtersedia | Mkap |
| | | | | | | n | mm ² | n | mm ² | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | 145 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 55,4367 | 234,0009 | 287,4063 |
| 2 | 146 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 55,4367 | 234,0009 | 287,4063 |
| 3 | 147 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 55,4367 | 234,0009 | 287,4063 |
| 4 | 148 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 55,4390 | 234,0009 | 287,4063 |
| 5 | 149 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 55,4390 | 234,0009 | 287,4063 |
| 6 | 150 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 55,4390 | 234,0009 | 287,4063 |
| 7 | 151 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 55,4446 | 234,0009 | 287,4063 |
| 8 | 152 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 55,4446 | 234,0009 | 287,4063 |
| 9 | 153 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 55,4446 | 234,0009 | 287,4063 |
| 10 | 154 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 55,4484 | 234,0009 | 287,4063 |
| 11 | 155 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 55,4484 | 234,0009 | 287,4063 |
| 12 | 156 | 300 | 600 | 51 | 549 | 3 | 1139,82 | 0 | 0 | 51,7528 | 234,0009 | 287,4063 |

Tabel 4.2.5.1 Tulangan Sengkang Geser Balok untuk RAW 2/5 Baru Portal E

| Lantai | Frame | Dalam sendi plastis | | | | | | | | | | Luar sendi plastis | | | | | | | | | | Sengkang Praktis | | |
|--------|-------|---------------------|----------|----------|----------|----------|------|--------------------|--------------|-----------------------|------------|--------------------|----------|--------------------|--------------|-----------------------|-----|----------|---|-------------------|----|------------------|----|----|
| | | Vu,b pakai | | Vs | Vc | Vs | s | Sengkang Terpasang | Vs terpasang | CEK Vs terpasang > Vs | Vu,b pakai | Vc | Vs | Sengkang Terpasang | Vs terpasang | CEK Vs terpasang > Vs | xVc | xVc-2h | s | Sengkang Terpakai | | | | |
| | | kN | kN | | | | | | | | | | | | | | | | | | kN | mm | kN | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | | | | | | |
| 1 | 49 | 172,2581 | 287,0968 | 72,0535 | 10 - 70 | 295,5189 | AMAN | 147,5345 | 137,2500 | 108,8409 | 190,4101 | 10 - 180 | 114,9240 | AMAN | 1470,8035 | 270,8035 | 250 | 10 - 250 | | | | | | |
| 2 | 50 | 171,9607 | 286,6012 | 72,1781 | 10 - 70 | 295,5189 | AMAN | 147,2372 | 137,2500 | 108,1453 | 191,2826 | 10 - 180 | 114,9240 | AMAN | 1462,9750 | 262,9750 | 250 | 10 - 250 | | | | | | |
| 3 | 51 | 171,7358 | 286,2263 | 72,2726 | 10 - 70 | 295,5189 | AMAN | 147,0123 | 137,2500 | 107,7704 | 191,9480 | 10 - 180 | 114,9240 | AMAN | 1457,0520 | 257,0520 | 250 | 10 - 250 | | | | | | |
| 4 | 52 | 171,5249 | 285,8748 | 72,3615 | 10 - 70 | 295,5189 | AMAN | 146,8014 | 137,2500 | 107,4189 | 192,5761 | 10 - 190 | 108,8754 | AMAN | 1451,4987 | 251,4987 | 250 | 10 - 250 | | | | | | |
| 5 | 53 | 171,3418 | 285,5697 | 72,4388 | 10 - 70 | 295,5189 | AMAN | 146,6183 | 137,2500 | 107,1138 | 193,1246 | 10 - 190 | 108,8754 | AMAN | 1446,6783 | 246,6783 | 250 | 10 - 250 | | | | | | |
| 6 | 54 | 171,1828 | 285,3047 | 72,5061 | 10 - 70 | 295,5189 | AMAN | 146,4593 | 137,2500 | 106,8488 | 193,6036 | 10 - 190 | 108,8754 | AMAN | 1442,4916 | 242,4916 | 250 | 10 - 250 | | | | | | |
| 7 | 55 | 153,6837 | 256,1395 | 80,7619 | 10 - 80 | 258,5790 | AMAN | 133,3915 | 137,2500 | 85,0691 | 243,1707 | 10 - 200 | 103,4316 | AMAN | 1076,2135 | -123,7865 | 250 | 10 - 250 | | | | | | |
| 8 | 56 | 153,5740 | 255,9567 | 80,8196 | 10 - 80 | 258,5790 | AMAN | 133,2818 | 137,2500 | 84,8863 | 243,6945 | 10 - 200 | 103,4316 | AMAN | 1072,6941 | -127,3059 | 250 | 10 - 250 | | | | | | |
| 9 | 57 | 153,4844 | 255,8074 | 80,8668 | 10 - 80 | 258,5790 | AMAN | 133,1922 | 137,2500 | 84,7370 | 244,1239 | 10 - 200 | 103,4316 | AMAN | 1069,8204 | -130,1796 | 250 | 10 - 250 | | | | | | |
| 10 | 58 | 127,8615 | 213,1025 | 97,0721 | 10 - 95 | 217,7507 | AMAN | 114,0954 | 137,2500 | 52,9090 | 390,9794 | 10 - 250 | 82,7453 | AMAN | 105,0196 | -1084,9804 | 250 | 10 - 250 | | | | | | |
| 11 | 59 | 127,7676 | 212,9460 | 97,1435 | 10 - 95 | 217,7507 | AMAN | 114,0015 | 137,2500 | 52,7525 | 392,1393 | 10 - 250 | 82,7453 | AMAN | 100,5790 | -1069,4210 | 250 | 10 - 250 | | | | | | |
| 12 | 60 | 84,2398 | 140,3987 | 147,3388 | 10 - 140 | 147,7594 | AMAN | 77,4255 | 137,2500 | -8,2075 | -2520,4261 | 10 - 250 | 82,7453 | AMAN | -4515,2868 | -5715,2868 | 250 | 10 - 250 | | | | | | |
| 1 | 61 | 176,8167 | 294,6944 | 70,1958 | 10 - 65 | 318,2511 | AMAN | 84,0068 | 137,2500 | 2,7614 | 7491,3599 | 10 - 250 | 82,7453 | AMAN | 826,5341 | -373,4659 | 250 | 10 - 250 | | | | | | |
| 2 | 62 | 176,8167 | 294,6944 | 70,1958 | 10 - 65 | 318,2511 | AMAN | 84,0068 | 137,2500 | 2,7614 | 7491,3599 | 10 - 250 | 82,7453 | AMAN | 826,5341 | -373,4659 | 250 | 10 - 250 | | | | | | |
| 3 | 63 | 176,8167 | 294,6944 | 70,1958 | 10 - 65 | 318,2511 | AMAN | 84,0068 | 137,2500 | 2,7614 | 7491,3599 | 10 - 250 | 82,7453 | AMAN | 826,5341 | -373,4659 | 250 | 10 - 250 | | | | | | |
| 4 | 64 | 176,8167 | 294,6944 | 70,1958 | 10 - 65 | 318,2511 | AMAN | 84,0068 | 137,2500 | 2,7614 | 7491,3599 | 10 - 250 | 82,7453 | AMAN | 826,5341 | -373,4659 | 250 | 10 - 250 | | | | | | |
| 5 | 65 | 176,8167 | 294,6944 | 70,1958 | 10 - 65 | 318,2511 | AMAN | 84,0068 | 137,2500 | 2,7614 | 7491,3599 | 10 - 250 | 82,7453 | AMAN | 826,5341 | -373,4659 | 250 | 10 - 250 | | | | | | |
| 6 | 66 | 176,8167 | 294,6944 | 70,1958 | 10 - 65 | 318,2511 | AMAN | 84,0068 | 137,2500 | 2,7614 | 7491,3599 | 10 - 250 | 82,7453 | AMAN | 826,5341 | -373,4659 | 250 | 10 - 250 | | | | | | |
| 7 | 67 | 149,9609 | 249,9348 | 82,7669 | 10 - 80 | 258,5790 | AMAN | 73,7858 | 137,2500 | -14,2737 | -1449,2625 | 10 - 250 | 82,7453 | AMAN | 657,6286 | -542,3714 | 250 | 10 - 250 | | | | | | |
| 8 | 68 | 149,9609 | 249,9348 | 82,7669 | 10 - 80 | 258,5790 | AMAN | 73,7858 | 137,2500 | -14,2737 | -1449,2625 | 10 - 250 | 82,7453 | AMAN | 657,6286 | -542,3714 | 250 | 10 - 250 | | | | | | |
| 9 | 69 | 149,9609 | 249,9348 | 82,7669 | 10 - 80 | 258,5790 | AMAN | 73,7858 | 137,2500 | -14,2737 | -1449,2625 | 10 - 250 | 82,7453 | AMAN | 657,6286 | -542,3714 | 250 | 10 - 250 | | | | | | |
| 10 | 70 | 68,2786 | 113,7977 | 181,7815 | 10 - 150 | 137,9088 | AMAN | 42,6983 | 137,2500 | -66,0861 | -313,0207 | 10 - 250 | 82,7453 | AMAN | -1206,2728 | -2406,2728 | 250 | 10 - 250 | | | | | | |
| 11 | 71 | 68,2786 | 113,7977 | 181,7815 | 10 - 150 | 137,9088 | AMAN | 42,6983 | 137,2500 | -66,0861 | -313,0207 | 10 - 250 | 82,7453 | AMAN | -1206,2728 | -2406,2728 | 250 | 10 - 250 | | | | | | |
| 12 | 72 | 80,1138 | 100,1897 | 206,4715 | 10 - 150 | 137,9088 | AMAN | 34,5335 | 137,2500 | -79,6941 | -259,5715 | 10 - 250 | 82,7453 | AMAN | -1414,0612 | -2614,0612 | 250 | 10 - 250 | | | | | | |

Tabel 4.2.5.2 Tulangan Sengkang Geser Balok untuk RAW 2/5 Baru Portal 2

| Lantai | Frame | Dalam sendi plastis | | | | | | | | | | Luar sendi plastis | | | | | | | | | | Sengkang Praktis | | |
|--------|-------|---------------------|----------|----------|----------|----------|------|--------------------|--------------|-----------------------|------------|--------------------|----------|--------------------|--------------|-----------------------|-----|----------|---|-------------------|----|------------------|----|----|
| | | Vu,b pakai | | Vs | Vc | Vs | s | Sengkang Terpasang | Vs terpasang | CEK Vs terpasang > Vs | Vu,b pakai | Vc | Vs | Sengkang Terpasang | Vs terpasang | CEK Vs terpasang > Vs | xVc | xVc-2h | s | Sengkang Terpakai | | | | |
| | | kN | kN | | | | | | | | | | | | | | | | | | kN | mm | kN | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | | | | | | |
| 1 | 145 | 258,2293 | 430,3822 | 48,0650 | 10 - 45 | 459,6960 | AMAN | 181,8637 | 137,2500 | 165,8562 | 124,7244 | 10 - 120 | 172,3860 | AMAN | 1580,3225 | 380,3225 | 250 | 10 - 250 | | | | | | |
| 2 | 146 | 258,2251 | 430,3752 | 48,0658 | 10 - 45 | 459,6960 | AMAN | 181,8595 | 137,2500 | 165,8492 | 124,7297 | 10 - 120 | 172,3860 | AMAN | 1580,2863 | 380,2863 | 250 | 10 - 250 | | | | | | |
| 3 | 147 | 258,2209 | 430,3681 | 48,0666 | 10 - 45 | 459,6960 | AMAN | 181,8553 | 137,2500 | 165,8421 | 124,7350 | 10 - 120 | 172,3860 | AMAN | 1580,2502 | 380,2502 | 250 | 10 - 250 | | | | | | |
| 4 | 148 | 258,2169 | 430,3615 | 48,0673 | 10 - 45 | 459,6960 | AMAN | 181,8513 | 137,2500 | 165,8355 | 124,7400 | 10 - 120 | 172,3860 | AMAN | 1580,2165 | 380,2165 | 250 | 10 - 250 | | | | | | |
| 5 | 149 | 258,2132 | 430,3553 | 48,0680 | 10 - 45 | 459,6960 | AMAN | 181,8476 | 137,2500 | 165,8294 | 124,7446 | 10 - 120 | 172,3860 | AMAN | 1580,1850 | 380,1850 | 250 | 10 - 250 | | | | | | |
| 6 | 150 | 258,2099 | 430,3498 | 48,0686 | 10 - 45 | 459,6960 | AMAN | 181,8443 | 137,2500 | 165,8238 | 124,7488 | 10 - 120 | 172,3860 | AMAN | 1580,1564 | 380,1564 | 250 | 10 - 250 | | | | | | |
| 7 | 151 | 224,0371 | 373,3951 | 55,4006 | 10 - 55 | 376,1149 | AMAN | 162,0136 | 137,2500 | 132,7726 | 155,8026 | 10 - 160 | 137,9088 | AMAN | 1459,9188 | 259,9188 | 250 | 10 - 250 | | | | | | |
| 8 | 152 | 224,0346 | 373,3910 | 55,4012 | 10 - 55 | 376,1149 | AMAN | 162,0111 | 137,2500 | 132,7685 | 155,8075 | 10 - 160 | 137,9088 | AMAN | 1459,8927 | 259,8927 | 250 | 10 - 250 | | | | | | |
| 9 | 153 | 224,0325 | 373,3875 | 55,4018 | 10 - 55 | 376,1149 | AMAN | 162,0090 | 137,2500 | 132,7650 | 155,8116 | 10 - 160 | 137,9088 | AMAN | 1459,8707 | 259,8707 | 250 | 10 - 250 | | | | | | |
| 10 | 154 | 170,7969 | 284,6615 | 72,6699 | 10 - 70 | 295,5189 | AMAN | 131,1175 | 137,2500 | 81,2791 | 254,5097 | 10 - 250 | 82,7453 | AMAN | 1099,3868 | -100,6132 | 250 | 10 - 250 | | | | | | |
| 11 | 155 | 170,7934 | 284,6557 | 72,6714 | 10 - 70 | 295,5189 | AMAN | 131,1140 | 137,2500 | 81,2734 | 254,5277 | 10 - 250 | 82,7453 | AMAN | 1099,3301 | -100,6699 | 250 | 10 - 250 | | | | | | |
| 12 | 156 | 88,9572 | 148,2620 | 139,5254 | 10 - 100 | 206,8632 | AMAN | 78,7652 | 137,2500 | -5,9747 | -3462,3007 | 10 - 250 | 82,7453 | AMAN | -2535,6269 | -3735,6269 | 250 | 10 - 250 | | | | | | |

Tabel 4.3.1 Momen Rencana Kolom untuk RW 2/5 Baru

| KOLOM | ud | h | h _n | Arah X | | | | | | | | | | Arah Y | | | | | | | | | | | | | |
|-------|-----------|-----|----------------|--------|---------|------|-------|-----------------|-------|-----------|-----------|----------|--------|--------|-------|------|------|----------|-----------------|-----------|---------|-------|-------|-------|----------|-----------|-------|
| | | | | ak,x | | Lx | | Ln _x | | Mkap bx | | Mu,kx | | Atas | | dk,y | Ly | | Ln _y | | Mkap by | | Mu,ky | | Atas | | |
| | | | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | Kiri (+) | Kanan (-) | Mu,kx | Bawah | Kiri | Kanan | | Kiri | Kanan | Kiri (+) | Kanan (-) | Mu,ky | Bawah | Kiri | Kanan | Kiri (+) | Kanan (-) | Mu,ky |
| | | | | m | m | m | m | m | m | m | m | kNm | kNm | m | m | m | m | m | m | m | m | m | kNm | kNm | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | | | | |
| A | Lantai 1 | 1,3 | 4 | 3,4 | 0,18316 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 178,0420 | 0,1904 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 259,0997 | | | | | | | |
| | Lantai 2 | 1,3 | 4 | 3,4 | 0,27934 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 271,5296 | 1,0000 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 0,0000 | | | | | | | |
| | Lantai 3 | 1,3 | 4 | 3,4 | 0,81684 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 794,0066 | 0,4485 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 610,3658 | | | | | | | |
| | Lantai 4 | 1,3 | 4 | 3,4 | 0,44729 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 434,7924 | 0,8096 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 1101,9322 | | | | | | | |
| | Lantai 5 | 1,3 | 4 | 3,4 | 0,72066 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 700,5190 | 0,5093 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 693,1918 | | | | | | | |
| | Lantai 6 | 1,3 | 4 | 3,4 | 0,52721 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 512,4721 | 0,5352 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 750,6660 | | | | | | | |
| | Lantai 7 | 1,3 | 4 | 3,4 | 0,55271 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 537,2562 | 0,4907 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 728,3869 | | | | | | | |
| | Lantai 8 | 1,3 | 4 | 3,4 | 0,57947 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 563,2709 | 0,5537 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 667,8400 | | | | | | | |
| | Lantai 9 | 1,3 | 4 | 3,4 | 0,47279 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 459,5765 | 0,4648 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 753,6350 | | | | | | | |
| | Lantai 10 | 1,3 | 4 | 3,4 | 0,62563 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 608,1412 | 0,5732 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 632,6450 | | | | | | | |
| | Lantai 11 | 1,3 | 4 | 3,4 | 0,42053 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 408,7777 | 0,4463 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 780,0986 | | | | | | | |
| | Lantai 12 | 1,3 | 4 | 3,4 | 0,67664 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 541,4376 | 0,5974 | 5 | 5 | 4,2 | 4,2 | 481,1544 | 996,8893 | 607,3969 | | | | | | | |

| Lanjutan | Arah X | | | | | | | | | | | | Arah Y | | | | | | | | | | | | | | | | | | | | |
|-----------|--------|----|-----|----------------|------|---|------|-------|-----------------|----------|----------|--------|--------|------|------|-------|-----------------|-------|---------|---------|----------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|
| | KOLOM | wd | h | h _n | dk,x | | Lx | | Ln _x | | Mu,kx | Atas | Bawah | dk,y | Ly | | Ln _y | | Mkap,by | | Mu,ky | Atas | Bawah | | | | | | | | | | |
| | | | | | m | m | Kiri | Kanan | Kiri | Kanan | | | | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | | | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | | | | | | | | | | |
| B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 1,3 | 4 | 3,4 | 0,18316 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 104,9611 | 0,1904 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 481,154 | 996,889 | 259,100 | | | | | | | | | | | | |
| Lantai 2 | 1 | 4 | 3,4 | 0,27934 | 0 | 7 | 0 | 6,2 | 0,0000 | 0,0000 | 0,0000 | 1,0000 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 0,000 | 0,000 | 0,000 | | | | | | | | | | | | |
| Lantai 3 | 1,3 | 4 | 3,4 | 0,81684 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 160,0748 | 0,4485 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 481,154 | 996,889 | 610,366 | | | | | | | | | | | | |
| Lantai 4 | 1,3 | 4 | 3,4 | 0,44729 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 488,0905 | 0,8096 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 481,154 | 996,889 | 1101,932 | | | | | | | | | | | | |
| Lantai 5 | 1,3 | 4 | 3,4 | 0,72066 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 412,9768 | 0,5093 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 481,154 | 996,889 | 693,192 | | | | | | | | | | | | |
| Lantai 6 | 1,3 | 4 | 3,4 | 0,52721 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 302,1175 | 0,5352 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 481,154 | 996,889 | 750,666 | | | | | | | | | | | | |
| Lantai 7 | 1,3 | 4 | 3,4 | 0,55271 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 316,7285 | 0,4907 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 481,154 | 996,889 | 728,387 | | | | | | | | | | | | |
| Lantai 8 | 1,3 | 4 | 3,4 | 0,57947 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 332,0649 | 0,5537 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 481,154 | 996,889 | 667,840 | | | | | | | | | | | | |
| Lantai 9 | 1,3 | 4 | 3,4 | 0,47279 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 270,9340 | 0,4648 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 481,154 | 996,889 | 753,635 | | | | | | | | | | | | |
| Lantai 10 | 1,3 | 4 | 3,4 | 0,62563 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 358,5173 | 0,5732 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 481,154 | 996,889 | 632,645 | | | | | | | | | | | | |
| Lantai 11 | 1,3 | 4 | 3,4 | 0,42053 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 240,9866 | 0,4463 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 481,154 | 996,889 | 780,099 | | | | | | | | | | | | |
| Lantai 12 | 1,3 | 4 | 3,4 | 0,67664 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 333,1374 | 0,5974 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 386,640 | 813,815 | 607,397 | | | | | | | | | | | | |
| | 1,3 | 4 | 3,4 | 0,37437 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 214,5343 | 0,4268 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 481,154 | 996,889 | 660,416 | | | | | | | | | | | | |
| | 1,3 | 4 | 3,4 | 0,74177 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 365,1994 | 0,6310 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 386,640 | 813,815 | 580,933 | | | | | | | | | | | | |
| | 1,3 | 4 | 3,4 | 0,32336 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 159,2004 | 0,4026 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 386,640 | 813,815 | 697,484 | | | | | | | | | | | | |
| | 1,3 | 4 | 3,4 | 0,83177 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 409,5123 | 0,6808 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 386,640 | 813,815 | 445,003 | | | | | | | | | | | | |
| | 1,3 | 4 | 3,4 | 0,25823 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 127,1383 | 0,3690 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 386,640 | 813,815 | 752,568 | | | | | | | | | | | | |
| | 1,3 | 4 | 3,4 | 0,96152 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 321,7337 | 0,7642 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 292,076 | 475,913 | 407,935 | | | | | | | | | | | | |
| | 1,3 | 4 | 3,4 | 0,16823 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 82,8254 | 0,3192 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 386,640 | 813,815 | 540,408 | | | | | | | | | | | | |
| | 1,3 | 4 | 3,4 | 0,92005 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 307,8580 | 0,8687 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 292,076 | 475,913 | 352,881 | | | | | | | | | | | | |
| | 1,3 | 4 | 3,4 | 0,03848 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 12,8765 | 0,2358 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 292,076 | 475,913 | 614,351 | | | | | | | | | | | | |
| | 1,3 | 4 | 3,4 | 0,07995 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 193,0721 | 1,0000 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 292,076 | 475,913 | 166,782 | | | | | | | | | | | | |
| | 1 | 1 | 1 | 0,07995 | 0 | 7 | 0 | 6,2 | 0,0000 | 656,1861 | 20,5787 | 0,1313 | 5 | 5 | 4,2 | 4,2 | 4,2 | 4,2 | 0,000 | 197,265 | 139,729 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | 292,076 | 475,913 | 71,414 | | | | | | | | | | | | |

| Lanjutan | KOLOM | ud | h | hn | Arah X | | | | | | | | | | Arah Y | | | | | | | | | |
|----------|-----------|-----|---|-----|---------|------|-------|------|-------|-----------|-----------|----------|-------------|------|--------|-------|--------|----------|----------|-----------|-------|-------------|-----|-----|
| | | | | | ak,x | Lx | | Lnx | | Mkap bx | | Mu,kx | Atlas Bawah | ak,y | Ly | | Lny | | Mkap by | | Mu,ky | Atlas Bawah | | |
| | | | | | | Kiri | Kanan | Kiri | Kanan | Kiri (+) | Kanan (-) | | | | Kiri | Kanan | Kiri | Kanan | Kiri | Kanan (-) | | | | |
| | | | | | | m | m | m | m | m | m | | | | m | m | m | m | m | m | | | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | | | | |
| C | Lantai 1 | 1,3 | 4 | 3,4 | 0,18316 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 178,0420 | 0,1904 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 174,7538 | | | | | |
| | Lantai 2 | 1,3 | 4 | 3,4 | 0,27934 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 0,0000 | 1,0000 | 0 | 0 | 4,2 | 0,0000 | 0,0000 | 0,0000 | | | | | |
| | Lantai 3 | 1,3 | 4 | 3,4 | 0,81684 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 271,5296 | 0,4485 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 411,6706 | | | | | |
| | Lantai 4 | 1,3 | 4 | 3,4 | 0,44729 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 794,0066 | 0,8096 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 743,2151 | | | | | |
| | Lantai 5 | 1,3 | 4 | 3,4 | 0,72066 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 434,7924 | 0,5093 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 467,5339 | | | | | |
| | Lantai 6 | 1,3 | 4 | 3,4 | 0,52721 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 700,5190 | 0,5515 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 506,2983 | | | | | |
| | Lantai 7 | 1,3 | 4 | 3,4 | 0,55271 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 512,4721 | 0,5352 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 491,2717 | | | | | |
| | Lantai 8 | 1,3 | 4 | 3,4 | 0,57947 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 537,2562 | 0,4907 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 450,4350 | | | | | |
| | Lantai 9 | 1,3 | 4 | 3,4 | 0,47279 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 459,5765 | 0,5537 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 508,3007 | | | | | |
| | Lantai 10 | 1,3 | 4 | 3,4 | 0,62563 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 608,1412 | 0,4648 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 426,6971 | | | | | |
| | Lantai 11 | 1,3 | 4 | 3,4 | 0,42063 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 408,7777 | 0,5732 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 526,1495 | | | | | |
| | Lantai 12 | 1,3 | 4 | 3,4 | 0,67664 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 563,7629 | 541,4376 | 0,4463 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 409,6682 | | | | | |
| | | 1,3 | 4 | 3,4 | 0,37437 | 7 | 4 | 6,2 | 3,2 | 386,57531 | 656,1861 | 363,9075 | 0,5974 | 0 | 0 | 4,2 | 0,0000 | 813,8150 | 447,7107 | | | | | |
| | | 1,3 | 4 | 3,4 | 0,74177 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 563,7629 | 593,5470 | 0,4268 | 0 | 0 | 4,2 | 0,0000 | 996,8893 | 391,8194 | | | | | |
| | | 1,3 | 4 | 3,4 | 0,32336 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 563,7629 | 258,7433 | 0,6310 | 0 | 0 | 4,2 | 0,0000 | 813,8150 | 472,8400 | | | | | |
| | | 1,3 | 4 | 3,4 | 0,83177 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 563,7629 | 665,5673 | 0,4026 | 0 | 0 | 4,2 | 0,0000 | 813,8150 | 301,6772 | | | | | |
| | | 1,3 | 4 | 3,4 | 0,25823 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 563,7629 | 206,6339 | 0,6908 | 0 | 0 | 4,2 | 0,0000 | 813,8150 | 510,1826 | | | | | |
| | | 1,3 | 4 | 3,4 | 0,96152 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 432,9989 | 0,3890 | 0 | 0 | 4,2 | 0,0000 | 475,9126 | 276,5479 | | | | | |
| | | 1,3 | 4 | 3,4 | 0,16823 | 7 | 4 | 6,2 | 3,2 | 292,09974 | 563,7629 | 134,6135 | 0,7542 | 0 | 0 | 4,2 | 0,0000 | 813,8150 | 334,8838 | | | | | |
| | | 1,3 | 4 | 3,4 | 0,92005 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 414,3245 | 0,3192 | 0 | 0 | 4,2 | 0,0000 | 475,9126 | 239,2054 | | | | | |
| | | 1,3 | 4 | 3,4 | 0,03848 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 17,3295 | 0,8687 | 0 | 0 | 4,2 | 0,0000 | 475,9126 | 380,7052 | | | | | |
| | | 1 | 4 | 3,4 | 0,07995 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 213,7584 | 1,0000 | 0 | 0 | 4,2 | 0,0000 | 197,2651 | 139,7295 | | | | | |
| | | 1 | 4 | 3,4 | 0,07995 | 7 | 4 | 6,2 | 3,2 | 197,45936 | 287,4063 | 27,6954 | 0,1313 | 0 | 0 | 4,2 | 0,0000 | 475,9126 | 44,2546 | | | | | |

Tabel 4.3.2 Momen Maksimum Rencana Kolom untuk R/W 2/5 Baru

| KOLOM | Arah X | | | | | | | | | | | | Arah Y | | | | | | | | | | | |
|-----------|---------|---------------|----------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|----------|---------------|-----------|---------------|-----------|-----------|--|--|
| | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 8 | | 9 | | | | | |
| | MD.kx | Atas Bawah | ML.kx | Atas Bawah | ME.kx | Atas Bawah | Mu.kx | Atas Bawah | MD.ky | Atas Bawah | ML.ky | Atas Bawah | ME.ky | Atas Bawah | Mu.ky | Atas Bawah | MD.kx | Atas Bawah | ML.kx | Atas Bawah | | | | |
| kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | kNm | | | | |
| 1 | 29,8947 | 4,2844 | 136,9645 | 611,1389 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 170,0484 | 714,2033 | 1008,5770 | 4236,0234 | 2120,4557 | 3037,4547 | | |
| A,B,C,D | 13,3703 | 1,9162 | 841,9118 | 3552,0804 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 504,8704 | 2120,4557 | 504,8704 | 2120,4557 | 3037,4547 | 3037,4547 | | |
| Lantai 1 | 36,3116 | 5,0876 | 186,9999 | 828,8688 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 723,2035 | 3037,4547 | 723,2035 | 3037,4547 | 3037,4547 | 3037,4547 | | |
| Lantai 2 | 40,1551 | 5,7028 | 610,8149 | 2613,5734 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 590,0838 | 2478,3520 | 590,0838 | 2478,3520 | 2478,3520 | 2478,3520 | | |
| Lantai 3 | 34,5615 | 4,7182 | 327,6147 | 1417,2254 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 620,9212 | 2607,8690 | 620,9212 | 2607,8690 | 2607,8690 | 2607,8690 | | |
| Lantai 4 | 33,8099 | 4,6473 | 482,4409 | 2066,6318 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 601,3103 | 2525,5033 | 601,3103 | 2525,5033 | 2525,5033 | 2525,5033 | | |
| Lantai 5 | 34,6797 | 4,6354 | 384,9490 | 1658,0666 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 568,5029 | 2387,7122 | 568,5029 | 2387,7122 | 2387,7122 | 2387,7122 | | |
| Lantai 6 | 34,9505 | 4,7129 | 404,8208 | 1741,8939 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 585,0770 | 2457,3234 | 585,0770 | 2457,3234 | 2457,3234 | 2457,3234 | | |
| Lantai 7 | 34,4073 | 4,5071 | 401,1880 | 1725,8498 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 522,2718 | 2193,5416 | 522,2718 | 2193,5416 | 2193,5416 | 2193,5416 | | |
| Lantai 8 | 34,4367 | 4,5433 | 345,2159 | 1490,8359 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 554,7752 | 2330,0558 | 554,7752 | 2330,0558 | 2330,0558 | 2330,0558 | | |
| Lantai 9 | 34,2576 | 4,4083 | 395,6884 | 1702,4905 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 471,5465 | 1980,4953 | 471,5465 | 1980,4953 | 1980,4953 | 1980,4953 | | |
| Lantai 10 | 34,3272 | 4,4468 | 291,1507 | 1263,5456 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 514,0272 | 2158,9142 | 514,0272 | 2158,9142 | 2158,9142 | 2158,9142 | | |
| Lantai 11 | 34,0908 | 4,3236 | 376,7934 | 1622,8673 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 413,1367 | 1735,1741 | 413,1367 | 1735,1741 | 1735,1741 | 1735,1741 | | |
| Lantai 12 | 34,1519 | 4,3532 | 236,7772 | 1034,8946 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 463,8701 | 1948,2544 | 463,8701 | 1948,2544 | 1948,2544 | 1948,2544 | | |
| | 34,0432 | 4,2476 | 347,9129 | 1501,4395 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 346,3627 | 1454,7233 | 346,3627 | 1454,7233 | 1454,7233 | 1454,7233 | | |
| | 34,0421 | 4,2763 | 180,0628 | 796,4982 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 404,1404 | 1697,3897 | 404,1404 | 1697,3897 | 1697,3897 | 1697,3897 | | |
| | 33,6184 | 4,2197 | 309,6165 | 1340,1194 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 271,3017 | 1139,4671 | 271,3017 | 1139,4671 | 1139,4671 | 1139,4671 | | |
| | 33,8537 | 4,2223 | 121,1203 | 548,6850 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 335,0841 | 1407,3532 | 335,0841 | 1407,3532 | 1407,3532 | 1407,3532 | | |
| | 34,9860 | 4,0589 | 261,0589 | 1137,4446 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 189,4862 | 795,8420 | 189,4862 | 795,8420 | 795,8420 | 795,8420 | | |
| | 34,1249 | 4,1467 | 62,6211 | 303,1938 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 247,5329 | 1039,6382 | 247,5329 | 1039,6382 | 1039,6382 | 1039,6382 | | |
| | 28,5525 | 4,5796 | 195,1112 | 854,2557 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 103,4142 | 434,3396 | 103,4142 | 434,3396 | 434,3396 | 434,3396 | | |
| | 32,4938 | 4,2526 | 10,4481 | 82,4658 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 157,2861 | 660,6016 | 157,2861 | 660,6016 | 660,6016 | 660,6016 | | |
| | 56,7790 | 2,1153 | 113,2272 | 537,3933 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 37,4064 | 157,1068 | 37,4064 | 157,1068 | 157,1068 | 157,1068 | | |
| | 39,4140 | 3,6237 | 16,9548 | 116,3997 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | | | | | | | | |

Tabel 4.3.3 Momen Rencana Kolom Terpakai untuk R/W 2/5 Baru

| KOLOM | Mrencana | | Mmaksimum | | Mterpakai | |
|----------|----------|-----------|-----------|-----------|-----------|-----------|
| | Mu,kx | Mu,ky | Mu,kx | Mu,ky | Mu,kx | Mu,ky |
| | kNm | kNm | kNm | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| A | 178,0420 | 259,0997 | 611,1389 | 714,2033 | 178,0420 | 259,0997 |
| | 0,0000 | 0,0000 | 3552,0804 | 4236,0234 | 178,0420 | 259,0997 |
| | 271,5296 | 610,3658 | 828,8688 | 2120,4557 | 271,5296 | 610,3658 |
| | 794,0066 | 1101,9322 | 2613,5734 | 3037,4547 | 794,0066 | 1101,9322 |
| | 434,7924 | 693,1918 | 1417,2254 | 2478,3520 | 434,7924 | 693,1918 |
| | 700,5190 | 750,6660 | 2066,6318 | 2607,8690 | 700,5190 | 750,6660 |
| | 512,4721 | 728,3869 | 1658,0666 | 2525,5033 | 512,4721 | 728,3869 |
| | 537,2562 | 667,8400 | 1741,8939 | 2387,7122 | 537,2562 | 667,8400 |
| | 563,2709 | 753,6350 | 1725,8498 | 2457,3234 | 563,2709 | 753,6350 |
| | 459,5765 | 632,6450 | 1490,8359 | 2193,5416 | 459,5765 | 632,6450 |
| | 608,1412 | 780,0986 | 1702,4905 | 2330,0558 | 608,1412 | 780,0986 |
| | 408,7777 | 607,3969 | 1263,5456 | 1980,4953 | 408,7777 | 607,3969 |
| | 541,4376 | 660,4162 | 1622,8673 | 2158,9142 | 541,4376 | 660,4162 |
| 363,9075 | 580,9333 | 1034,8946 | 1735,1741 | 363,9075 | 580,9333 | |
| 593,5470 | 697,4844 | 1501,4395 | 1948,2544 | 593,5470 | 697,4844 | |
| 258,7433 | 445,0028 | 796,4982 | 1454,7233 | 258,7433 | 445,0028 | |
| 665,5673 | 752,5682 | 1340,1194 | 1697,3897 | 665,5673 | 752,5682 | |
| 206,6339 | 407,9347 | 548,6850 | 1139,4671 | 206,6339 | 407,9347 | |
| 432,9989 | 540,4082 | 1137,4446 | 1407,3532 | 432,9989 | 540,4082 | |
| 134,6135 | 352,8509 | 303,1938 | 795,8420 | 134,6135 | 352,8509 | |
| 414,3245 | 614,3511 | 854,2557 | 1039,6382 | 414,3245 | 614,3511 | |
| 17,3295 | 166,7817 | 82,4658 | 434,3396 | 17,3295 | 166,7817 | |
| 213,7584 | 139,7295 | 537,3933 | 660,6016 | 213,7584 | 139,7295 | |
| 27,6954 | 71,4144 | 116,3997 | 157,1068 | 27,6954 | 71,4144 | |
| B | 104,9611 | 259,0997 | 611,1389 | 714,2033 | 104,9611 | 259,0997 |
| | 0,0000 | 0,0000 | 3552,0804 | 4236,0234 | 104,9611 | 259,0997 |
| | 160,0748 | 610,3658 | 828,8688 | 2120,4557 | 160,0748 | 610,3658 |
| | 468,0905 | 1101,9322 | 2613,5734 | 3037,4547 | 468,0905 | 1101,9322 |
| | 256,3231 | 693,1918 | 1417,2254 | 2478,3520 | 256,3231 | 693,1918 |
| | 412,9768 | 750,6660 | 2066,6318 | 2607,8690 | 412,9768 | 750,6660 |
| | 302,1175 | 728,3869 | 1658,0666 | 2525,5033 | 302,1175 | 728,3869 |
| | 316,7285 | 667,8400 | 1741,8939 | 2387,7122 | 316,7285 | 667,8400 |
| | 332,0649 | 753,6350 | 1725,8498 | 2457,3234 | 332,0649 | 753,6350 |
| | 270,9340 | 632,6450 | 1490,8359 | 2193,5416 | 270,9340 | 632,6450 |
| | 358,5173 | 780,0986 | 1702,4905 | 2330,0558 | 358,5173 | 780,0986 |
| | 240,9866 | 607,3969 | 1263,5456 | 1980,4953 | 240,9866 | 607,3969 |
| | 333,1374 | 660,4162 | 1622,8673 | 2158,9142 | 333,1374 | 660,4162 |
| 214,5343 | 580,9333 | 1034,8946 | 1735,1741 | 214,5343 | 580,9333 | |
| 365,1994 | 697,4844 | 1501,4395 | 1948,2544 | 365,1994 | 697,4844 | |
| 159,2004 | 445,0028 | 796,4982 | 1454,7233 | 159,2004 | 445,0028 | |
| 409,5123 | 752,5682 | 1340,1194 | 1697,3897 | 409,5123 | 752,5682 | |
| 127,1383 | 407,9347 | 548,6850 | 1139,4671 | 127,1383 | 407,9347 | |
| 321,7337 | 540,4082 | 1137,4446 | 1407,3532 | 321,7337 | 540,4082 | |
| 82,8254 | 352,8509 | 303,1938 | 795,8420 | 82,8254 | 352,8509 | |
| 307,8580 | 614,3511 | 854,2557 | 1039,6382 | 307,8580 | 614,3511 | |
| 12,8765 | 166,7817 | 82,4658 | 434,3396 | 12,8765 | 166,7817 | |
| 193,0721 | 139,7295 | 537,3933 | 660,6016 | 193,0721 | 139,7295 | |
| 20,5787 | 71,4144 | 116,3997 | 157,1068 | 20,5787 | 71,4144 | |

Lanjutan

| KOLOM | Mrencana | | Mmaksimum | | Mterpakai | |
|-----------|----------------------|----------------------|------------------------|------------------------|----------------------|----------------------|
| | Mu,kx | Mu,ky | Mu,kx | Mu,ky | Mu,kx | Mu,ky |
| | kNm | kNm | kNm | kNm | kNm | kNm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| C | | | | | | |
| Lantai 1 | 178,0420 0,0000 | 174,7538 0,0000 | 611,1389 3552,0804 | 714,2033 4236,0234 | 178,0420 178,0420 | 174,7538 174,7538 |
| Lantai 2 | 271,5296 794,0066 | 411,6706 743,2151 | 828,8688 2613,5734 | 2120,4557 3037,4547 | 271,5296 794,0066 | 411,6706 743,2151 |
| Lantai 3 | 434,7924 700,5190 | 467,5339 506,2983 | 1417,2254 2066,6318 | 2478,3520 2607,8690 | 434,7924 700,5190 | 467,5339 506,2983 |
| Lantai 4 | 512,4721 537,2562 | 491,2717 450,4350 | 1658,0666 1741,8939 | 2525,5033 2387,7122 | 512,4721 537,2562 | 491,2717 450,4350 |
| Lantai 5 | 563,2709 459,5765 | 508,3007 426,6971 | 1725,8498 1490,8359 | 2457,3234 2193,5416 | 563,2709 459,5765 | 508,3007 426,6971 |
| Lantai 6 | 608,1412 408,7777 | 526,1495 409,6682 | 1702,4905 1263,5456 | 2330,0558 1980,4953 | 608,1412 408,7777 | 526,1495 409,6682 |
| Lantai 7 | 541,4376 363,9075 | 447,7107 391,8194 | 1622,8673 1034,8946 | 2158,9142 1735,1741 | 541,4376 363,9075 | 447,7107 391,8194 |
| Lantai 8 | 593,5470 258,7433 | 472,8400 301,6772 | 1501,4395 796,4982 | 1948,2544 1454,7233 | 593,5470 258,7433 | 472,8400 301,6772 |
| Lantai 9 | 665,5673 206,6339 | 510,1826 276,5479 | 1340,1194 548,6850 | 1697,3897 1139,4671 | 665,5673 206,6339 | 510,1826 276,5479 |
| Lantai 10 | 432,9989 134,6135 | 334,8838 239,2054 | 1137,4446 303,1938 | 1407,3532 795,8420 | 432,9989 134,6135 | 334,8838 239,2054 |
| Lantai 11 | 414,3245 17,3295 | 380,7052 103,3524 | 854,2557 82,4658 | 1039,6382 434,3396 | 414,3245 17,3295 | 380,7052 103,3524 |
| Lantai 12 | 213,7584 27,6954 | 139,7295 44,2546 | 537,3933 116,3997 | 660,6016 157,1068 | 213,7584 27,6954 | 139,7295 44,2546 |
| D | | | | | | |
| Lantai 1 | 104,9611 0,0000 | 174,7538 0,0000 | 611,1389 3552,0804 | 714,2033 4236,0234 | 104,9611 104,9611 | 174,7538 174,7538 |
| Lantai 2 | 160,0748 468,0905 | 411,6706 743,2151 | 828,8688 2613,5734 | 2120,4557 3037,4547 | 160,0748 468,0905 | 411,6706 743,2151 |
| Lantai 3 | 256,3231 412,9768 | 467,5339 506,2983 | 1417,2254 2066,6318 | 2478,3520 2607,8690 | 256,3231 412,9768 | 467,5339 506,2983 |
| Lantai 4 | 302,1175 316,7285 | 491,2717 450,4350 | 1658,0666 1741,8939 | 2525,5033 2387,7122 | 302,1175 316,7285 | 491,2717 450,4350 |
| Lantai 5 | 332,0649 270,9340 | 508,3007 426,6971 | 1725,8498 1490,8359 | 2457,3234 2193,5416 | 332,0649 270,9340 | 508,3007 426,6971 |
| Lantai 6 | 358,5173 240,9866 | 526,1495 409,6682 | 1702,4905 1263,5456 | 2330,0558 1980,4953 | 358,5173 240,9866 | 526,1495 409,6682 |
| Lantai 7 | 333,1374 214,5343 | 447,7107 391,8194 | 1622,8673 1034,8946 | 2158,9142 1735,1741 | 333,1374 214,5343 | 447,7107 391,8194 |
| Lantai 8 | 365,1994 159,2004 | 472,8400 301,6772 | 1501,4395 796,4982 | 1948,2544 1454,7233 | 365,1994 159,2004 | 472,8400 301,6772 |
| Lantai 9 | 409,5123 127,1383 | 510,1826 276,5479 | 1340,1194 548,6850 | 1697,3897 1139,4671 | 409,5123 127,1383 | 510,1826 276,5479 |
| Lantai 10 | 321,7337 82,8254 | 334,8838 239,2054 | 1137,4446 303,1938 | 1407,3532 795,8420 | 321,7337 82,8254 | 334,8838 239,2054 |
| Lantai 11 | 307,8580 12,8765 | 380,7052 103,3524 | 854,2557 82,4658 | 1039,6382 434,3396 | 307,8580 12,8765 | 380,7052 103,3524 |
| Lantai 12 | 193,0721 20,5787 | 139,7295 44,2546 | 537,3933 116,3997 | 660,6016 157,1068 | 193,0721 20,5787 | 139,7295 44,2546 |

Tabel 4.3.4.1 Kumulatif Momen Kapasitas Balok

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | $\Sigma M1- 7m$ | $\Sigma M2+ 7m$ | $\Sigma M3- 4m$ | $\Sigma M4+ 4m$ | $\Sigma M1- 5m$ | $\Sigma M2+ 5m$ | $\Sigma M3- 5m$ | $\Sigma M4+ 5m$ |
| A | | | | | | | | |
| Lantai 1 | 6682,1181 | 3590,6698 | 6490,6241 | 3195,7510 | 9571,8707 | 4630,9996 | 9571,8707 | 4630,9996 |
| | 6394,7118 | 3590,6698 | 6203,2178 | 3195,7510 | 9374,6055 | 4630,9996 | 9374,6055 | 4630,9996 |
| Lantai 2 | 6025,9320 | 3204,0945 | 5834,4380 | 2809,1757 | 8574,9814 | 4149,8452 | 8574,9814 | 4149,8452 |
| | 6394,7118 | 3590,6698 | 6203,2178 | 3195,7510 | 9374,6055 | 4630,9996 | 9374,6055 | 4630,9996 |
| Lantai 3 | 5369,7459 | 2817,5191 | 5178,2519 | 2422,6004 | 7578,0922 | 3668,6908 | 7578,0922 | 3668,6908 |
| | 5738,5257 | 3204,0945 | 5547,0317 | 2809,1757 | 8377,7163 | 4149,8452 | 8377,7163 | 4149,8452 |
| Lantai 4 | 4713,5598 | 2430,9438 | 4522,0658 | 2036,0251 | 6581,2029 | 3187,5364 | 6581,2029 | 3187,5364 |
| | 5082,3396 | 2817,5191 | 4890,8456 | 2422,6004 | 7380,8270 | 3668,6908 | 7380,8270 | 3668,6908 |
| Lantai 5 | 4057,3737 | 2044,3685 | 3865,8797 | 1649,4498 | 5584,3137 | 2706,3820 | 5584,3137 | 2706,3820 |
| | 4426,1535 | 2430,9438 | 4234,6595 | 2036,0251 | 6383,9378 | 3187,5364 | 6383,9378 | 3187,5364 |
| Lantai 6 | 3401,1876 | 1657,7932 | 3209,6936 | 1262,8745 | 4587,4244 | 2225,2276 | 4587,4244 | 2225,2276 |
| | 3769,9674 | 2044,3685 | 3578,4734 | 1649,4498 | 5387,0485 | 2706,3820 | 5387,0485 | 2706,3820 |
| Lantai 7 | 2745,0015 | 1271,2179 | 2553,5075 | 876,2992 | 3590,5351 | 1744,0733 | 3590,5351 | 1744,0733 |
| | 3113,7813 | 1657,7932 | 2922,2873 | 1262,8745 | 4390,1593 | 2225,2276 | 4390,1593 | 2225,2276 |
| Lantai 8 | 2181,2386 | 979,1182 | 1989,7446 | 584,1995 | 2776,7202 | 1357,4332 | 2776,7202 | 1357,4332 |
| | 2457,5952 | 1271,2179 | 2266,1013 | 876,2992 | 3393,2700 | 1744,0733 | 3393,2700 | 1744,0733 |
| Lantai 9 | 1617,4757 | 687,0185 | 1425,9817 | 292,0997 | 1962,9052 | 970,7930 | 1962,9052 | 970,7930 |
| | 1893,8323 | 979,1182 | 1702,3384 | 584,1995 | 2579,4550 | 1357,4332 | 2579,4550 | 1357,4332 |
| Lantai 10 | 1053,7128 | 394,9187 | 862,2189 | 0,0000 | 1149,0903 | 584,1529 | 1149,0903 | 584,1529 |
| | 1330,0694 | 687,0185 | 1138,5755 | 292,0997 | 1765,6401 | 970,7930 | 1765,6401 | 970,7930 |
| Lantai 11 | 670,5595 | 197,4594 | 574,8126 | 0,0000 | 673,1777 | 292,0765 | 673,1777 | 292,0765 |
| | 766,3065 | 394,9187 | 574,8126 | 0,0000 | 951,8251 | 584,1529 | 951,8251 | 584,1529 |
| Lantai 12 | 287,4063 | 0,0000 | 287,4063 | 0,0000 | 197,2651 | 0,0000 | 197,2651 | 0,0000 |
| | 383,1533 | 197,4594 | 287,4063 | 0,0000 | 475,9126 | 292,0765 | 475,9126 | 292,0765 |

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|----------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 0m | 0 m | $\Sigma M1- 7m$ | $\Sigma M2+ 7m$ | $\Sigma M1- 5m$ | $\Sigma M2+ 5m$ | $\Sigma M3- 5m$ | $\Sigma M4+ 5m$ |
| B | | | | | | | | |
| Lantai 1 | 0,0000 | 0,0000 | 6682,1181 | 3590,6698 | 9571,8707 | 4630,9996 | 9571,8707 | 4630,9996 |
| | 0,0000 | 0,0000 | 6394,7118 | 3590,6698 | 9374,6055 | 4630,9996 | 9374,6055 | 4630,9996 |
| Lantai 2 | 0,0000 | 0,0000 | 6025,9320 | 3204,0945 | 8574,9814 | 4149,8452 | 8574,9814 | 4149,8452 |
| | 0,0000 | 0,0000 | 6394,7118 | 3590,6698 | 9374,6055 | 4630,9996 | 9374,6055 | 4630,9996 |
| Lantai 3 | 0,0000 | 0,0000 | 5369,7459 | 2817,5191 | 7578,0922 | 3668,6908 | 7578,0922 | 3668,6908 |
| | 0,0000 | 0,0000 | 5738,5257 | 3204,0945 | 8377,7163 | 4149,8452 | 8377,7163 | 4149,8452 |
| Lantai 4 | 0,0000 | 0,0000 | 4713,5598 | 2430,9438 | 6581,2029 | 3187,5364 | 6581,2029 | 3187,5364 |
| | 0,0000 | 0,0000 | 5082,3396 | 2817,5191 | 7380,8270 | 3668,6908 | 7380,8270 | 3668,6908 |
| Lantai 5 | 0,0000 | 0,0000 | 4057,3737 | 2044,3685 | 5584,3137 | 2706,3820 | 5584,3137 | 2706,3820 |
| | 0,0000 | 0,0000 | 4426,1535 | 2430,9438 | 6383,9378 | 3187,5364 | 6383,9378 | 3187,5364 |
| Lantai 6 | 0,0000 | 0,0000 | 3401,1876 | 1657,7932 | 4587,4244 | 2225,2276 | 4587,4244 | 2225,2276 |
| | 0,0000 | 0,0000 | 3769,9674 | 2044,3685 | 5387,0485 | 2706,3820 | 5387,0485 | 2706,3820 |
| Lantai 7 | 0,0000 | 0,0000 | 2745,0015 | 1271,2179 | 3590,5351 | 1744,0733 | 3590,5351 | 1744,0733 |
| | 0,0000 | 0,0000 | 3113,7813 | 1657,7932 | 4390,1593 | 2225,2276 | 4390,1593 | 2225,2276 |
| Lantai 8 | 0,0000 | 0,0000 | 2181,2386 | 979,1182 | 2776,7202 | 1357,4332 | 2776,7202 | 1357,4332 |
| | 0,0000 | 0,0000 | 2457,5952 | 1271,2179 | 3393,2700 | 1744,0733 | 3393,2700 | 1744,0733 |
| Lantai 9 | 0,0000 | 0,0000 | 1617,4757 | 687,0185 | 1962,9052 | 970,7930 | 1962,9052 | 970,7930 |
| | 0,0000 | 0,0000 | 1893,8323 | 979,1182 | 2579,4550 | 1357,4332 | 2579,4550 | 1357,4332 |
| Lantai 10 | 0,0000 | 0,0000 | 1053,7128 | 394,9187 | 1149,0903 | 584,1529 | 1149,0903 | 584,1529 |
| | 0,0000 | 0,0000 | 1330,0694 | 687,0185 | 1765,6401 | 970,7930 | 1765,6401 | 970,7930 |
| Lantai 11 | 0,0000 | 0,0000 | 670,5595 | 197,4594 | 673,1777 | 292,0765 | 673,1777 | 292,0765 |
| | 0,0000 | 0,0000 | 766,3065 | 394,9187 | 951,8251 | 584,1529 | 951,8251 | 584,1529 |
| Lantai 12 | 0,0000 | 0,0000 | 287,4063 | 0,0000 | 197,2651 | 0,0000 | 197,2651 | 0,0000 |
| | 0,0000 | 0,0000 | 383,1533 | 197,4594 | 475,9126 | 292,0765 | 475,9126 | 292,0765 |

lanjutan

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|-----------|-----------|-----------|-----------|----------|--------|-----------|-----------|
| | ΣM1- 7m | ΣM2+ 7m | ΣM3- 4m | ΣM4+ 4m | 0m | 0m | ΣM1- 5m | ΣM2+ 5m |
| C | | | | | | | | |
| Lantai 1 | 6682,1181 | 3590,6698 | 6490,6241 | 3195,7510 | 0,0000 | 0,0000 | 9571,8707 | 4630,9996 |
| | 6394,7118 | 3590,6698 | 6203,2178 | 3195,7510 | 0,0000 | 0,0000 | 9374,6055 | 4630,9996 |
| Lantai 2 | 6025,9320 | 3204,0945 | 5834,4380 | 2809,1757 | 0,0000 | 0,0000 | 8574,9814 | 4149,8452 |
| | 6394,7118 | 3590,6698 | 6203,2178 | 3195,7510 | 0,0000 | 0,0000 | 9374,6055 | 4630,9996 |
| Lantai 3 | 5369,7459 | 2817,5191 | 5178,2519 | 2422,6004 | 0,0000 | 0,0000 | 7578,0922 | 3668,6908 |
| | 5738,5257 | 3204,0945 | 5547,0317 | 2809,1757 | 0,0000 | 0,0000 | 8377,7163 | 4149,8452 |
| Lantai 4 | 4713,5598 | 2430,9438 | 4522,0658 | 2036,0251 | 0,0000 | 0,0000 | 6581,2029 | 3187,5364 |
| | 5082,3396 | 2817,5191 | 4890,8456 | 2422,6004 | 0,0000 | 0,0000 | 7380,8270 | 3668,6908 |
| Lantai 5 | 4057,3737 | 2044,3685 | 3865,8797 | 1649,4498 | 0,0000 | 0,0000 | 5584,3137 | 2706,3820 |
| | 4426,1535 | 2430,9438 | 4234,6595 | 2036,0251 | 0,0000 | 0,0000 | 6383,9378 | 3187,5364 |
| Lantai 6 | 3401,1876 | 1657,7932 | 3209,6936 | 1262,8745 | 0,0000 | 0,0000 | 4587,4244 | 2225,2276 |
| | 3769,9674 | 2044,3685 | 3578,4734 | 1649,4498 | 0,0000 | 0,0000 | 5387,0485 | 2706,3820 |
| Lantai 7 | 2745,0015 | 1271,2179 | 2553,5075 | 876,2992 | 0,0000 | 0,0000 | 3590,5351 | 1744,0733 |
| | 3113,7813 | 1657,7932 | 2922,2873 | 1262,8745 | 0,0000 | 0,0000 | 4390,1593 | 2225,2276 |
| Lantai 8 | 2181,2386 | 979,1182 | 1989,7446 | 584,1995 | 0,0000 | 0,0000 | 2776,7202 | 1357,4332 |
| | 2457,5952 | 1271,2179 | 2266,1013 | 876,2992 | 0,0000 | 0,0000 | 3393,2700 | 1744,0733 |
| Lantai 9 | 1617,4757 | 687,0185 | 1425,9817 | 292,0997 | 0,0000 | 0,0000 | 1962,9052 | 970,7930 |
| | 1893,8323 | 979,1182 | 1702,3384 | 584,1995 | 0,0000 | 0,0000 | 2579,4550 | 1357,4332 |
| Lantai 10 | 1053,7128 | 394,9187 | 862,2189 | 0,0000 | 0,0000 | 0,0000 | 1149,0903 | 584,1529 |
| | 1330,0694 | 687,0185 | 1138,5755 | 292,0997 | 0,0000 | 0,0000 | 1765,6401 | 970,7930 |
| Lantai 11 | 670,5595 | 197,4594 | 574,8126 | 0,0000 | 0,0000 | 0,0000 | 673,1777 | 292,0765 |
| | 766,3065 | 394,9187 | 574,8126 | 0,0000 | 0,0000 | 0,0000 | 951,8251 | 584,1529 |
| Lantai 12 | 287,4063 | 0,0000 | 287,4063 | 0,0000 | 0,0000 | 0,0000 | 197,2651 | 0,0000 |
| | 383,1533 | 197,4594 | 287,4063 | 0,0000 | 0,0000 | 0,0000 | 475,9126 | 292,0765 |

| Kolom | Portal E | | | | Portal 2 | | | |
|-----------|----------|--------|-----------|-----------|----------|--------|-----------|-----------|
| | 0m | 0 m | ΣM1- 7m | ΣM2+ 7m | 0m | 0m | ΣM1- 5m | ΣM2+ 5m |
| D | | | | | | | | |
| Lantai 1 | 0,0000 | 0,0000 | 6682,1181 | 3590,6698 | 0,0000 | 0,0000 | 9571,8707 | 4630,9996 |
| | 0,0000 | 0,0000 | 6394,7118 | 3590,6698 | 0,0000 | 0,0000 | 9374,6055 | 4630,9996 |
| Lantai 2 | 0,0000 | 0,0000 | 6025,9320 | 3204,0945 | 0,0000 | 0,0000 | 8574,9814 | 4149,8452 |
| | 0,0000 | 0,0000 | 6394,7118 | 3590,6698 | 0,0000 | 0,0000 | 9374,6055 | 4630,9996 |
| Lantai 3 | 0,0000 | 0,0000 | 5369,7459 | 2817,5191 | 0,0000 | 0,0000 | 7578,0922 | 3668,6908 |
| | 0,0000 | 0,0000 | 5738,5257 | 3204,0945 | 0,0000 | 0,0000 | 8377,7163 | 4149,8452 |
| Lantai 4 | 0,0000 | 0,0000 | 4713,5598 | 2430,9438 | 0,0000 | 0,0000 | 6581,2029 | 3187,5364 |
| | 0,0000 | 0,0000 | 5082,3396 | 2817,5191 | 0,0000 | 0,0000 | 7380,8270 | 3668,6908 |
| Lantai 5 | 0,0000 | 0,0000 | 4057,3737 | 2044,3685 | 0,0000 | 0,0000 | 5584,3137 | 2706,3820 |
| | 0,0000 | 0,0000 | 4426,1535 | 2430,9438 | 0,0000 | 0,0000 | 6383,9378 | 3187,5364 |
| Lantai 6 | 0,0000 | 0,0000 | 3401,1876 | 1657,7932 | 0,0000 | 0,0000 | 4587,4244 | 2225,2276 |
| | 0,0000 | 0,0000 | 3769,9674 | 2044,3685 | 0,0000 | 0,0000 | 5387,0485 | 2706,3820 |
| Lantai 7 | 0,0000 | 0,0000 | 2745,0015 | 1271,2179 | 0,0000 | 0,0000 | 3590,5351 | 1744,0733 |
| | 0,0000 | 0,0000 | 3113,7813 | 1657,7932 | 0,0000 | 0,0000 | 4390,1593 | 2225,2276 |
| Lantai 8 | 0,0000 | 0,0000 | 2181,2386 | 979,1182 | 0,0000 | 0,0000 | 2776,7202 | 1357,4332 |
| | 0,0000 | 0,0000 | 2457,5952 | 1271,2179 | 0,0000 | 0,0000 | 3393,2700 | 1744,0733 |
| Lantai 9 | 0,0000 | 0,0000 | 1617,4757 | 687,0185 | 0,0000 | 0,0000 | 1962,9052 | 970,7930 |
| | 0,0000 | 0,0000 | 1893,8323 | 979,1182 | 0,0000 | 0,0000 | 2579,4550 | 1357,4332 |
| Lantai 10 | 0,0000 | 0,0000 | 1053,7128 | 394,9187 | 0,0000 | 0,0000 | 1149,0903 | 584,1529 |
| | 0,0000 | 0,0000 | 1330,0694 | 687,0185 | 0,0000 | 0,0000 | 1765,6401 | 970,7930 |
| Lantai 11 | 0,0000 | 0,0000 | 670,5595 | 197,4594 | 0,0000 | 0,0000 | 673,1777 | 292,0765 |
| | 0,0000 | 0,0000 | 766,3065 | 394,9187 | 0,0000 | 0,0000 | 951,8251 | 584,1529 |
| Lantai 12 | 0,0000 | 0,0000 | 287,4063 | 0,0000 | 0,0000 | 0,0000 | 197,2651 | 0,0000 |
| | 0,0000 | 0,0000 | 383,1533 | 197,4594 | 0,0000 | 0,0000 | 475,9126 | 292,0765 |

Tabel 4.3.4.2 Gaya Aksial Rencana Kolom untuk RW 2/5 Baru

| KOLOM | h m | n | Rv | Arah X | | | | | | | | | | | | Arah Y | | | | | | Nu,k Maksimum | |
|-----------|--------|----|-------|--------|-------|------------|-----------|----------|----------|-----------|------------|------|-------|------------|------------|------------|----------|-----------|------------|------------|----------|---------------|--|
| | | | | Lx | | Mkap.bx | | NDk.x | NLk.x | Ng.x | Nuk.x | Ly | | Mkap.by | | NDK.y | NLk.y | Ng.y | Nuk.y | Nu,k | Maksimum | | |
| | | | | Kiri | Kanan | Kiri | Kanan | | | | | Kiri | Kanan | Kiri | Kanan | | | | | | | | |
| | | | | m | m | kNm | kNm | kN | kN | kN | kN | m | m | kNm | kNm | kN | kN | kN | kN | kN | kN | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | | |
| A | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8 | 7 | 4 | 10272,7878 | 9686,3752 | 851,33 | 283,7095 | 1135,0395 | 1726,06097 | 5 | 5 | 14202,8702 | 14202,8702 | 1388,262 | 332,9977 | 1721,2597 | 1807,32269 | 1807,32269 | | | |
| Lantai 2 | 4 | 11 | 0,825 | 7 | 4 | 9985,3815 | 9398,9689 | 779,1074 | 258,4487 | 1037,5561 | 1708,8166 | 5 | 5 | 14005,6051 | 14005,6051 | 1272,8266 | 303,7806 | 1575,9466 | 1654,74393 | 1654,74393 | | | |
| Lantai 3 | 4 | 10 | 0,85 | 7 | 4 | 9230,0264 | 8643,6138 | 707,0623 | 233,2937 | 940,356 | 1575,87846 | 5 | 5 | 12724,8266 | 12724,8266 | 14005,6051 | 274,565 | 1430,642 | 1502,1741 | 1502,1741 | | | |
| Lantai 4 | 4 | 9 | 0,875 | 7 | 4 | 9985,3815 | 9398,9689 | 635,15 | 208,2199 | 843,3699 | 1622,61606 | 5 | 5 | 11246,783 | 11246,783 | 1039,995 | 245,3509 | 1285,3459 | 1349,6132 | 1349,6132 | | | |
| Lantai 5 | 4 | 8 | 0,9 | 7 | 4 | 8187,2650 | 7600,8524 | 563,3633 | 183,2215 | 746,5848 | 1422,08306 | 5 | 5 | 12527,5615 | 12527,5615 | 923,9181 | 216,1383 | 1140,0564 | 1197,05922 | 1197,05922 | | | |
| Lantai 6 | 4 | 7 | 0,925 | 7 | 4 | 8942,6201 | 8356,2075 | 491,6858 | 158,2883 | 649,9741 | 1470,23695 | 5 | 5 | 9769,73932 | 9769,73932 | 807,8474 | 186,927 | 994,7744 | 1044,51312 | 1044,51312 | | | |
| Lantai 7 | 4 | 6 | 0,95 | 7 | 4 | 7144,5036 | 6558,0910 | 420,1035 | 133,4112 | 553,5147 | 1314,17219 | 5 | 5 | 11049,5178 | 11049,5178 | 691,7817 | 157,717 | 849,4987 | 891,973635 | 891,973635 | | | |
| Lantai 8 | 4 | 5 | 0,975 | 7 | 4 | 7899,8587 | 7313,4461 | 348,6024 | 108,5813 | 457,1837 | 1103,42165 | 5 | 5 | 8290,69568 | 8290,69568 | 575,7207 | 128,508 | 704,2287 | 739,440135 | 739,440135 | | | |
| Lantai 9 | 4 | 4 | 1 | 7 | 4 | 6101,7422 | 5515,3296 | 277,1676 | 83,78944 | 360,95704 | 1154,40812 | 5 | 5 | 9571,47417 | 9571,47417 | 459,6635 | 99,29989 | 558,96339 | 586,91156 | 586,91156 | | | |
| Lantai 10 | 4 | 3 | 1 | 7 | 4 | 5058,9808 | 4472,5682 | 205,7887 | 59,02704 | 264,81574 | 938,514049 | 5 | 5 | 8812,65204 | 8812,65204 | 343,6095 | 70,09258 | 413,70208 | 434,387184 | 434,387184 | | | |
| Lantai 11 | 4 | 2 | 1 | 7 | 4 | 5814,3359 | 5227,9233 | 134,4377 | 34,28415 | 168,72185 | 769,854963 | 5 | 5 | 5334,60841 | 5334,60841 | 227,5572 | 40,88562 | 268,44282 | 281,864961 | 281,864961 | | | |
| Lantai 12 | 2 | 1 | 1 | 7 | 4 | 4016,2194 | 3429,8067 | 63,16033 | 9,557158 | 72,717488 | 823,674015 | 5 | 5 | 8093,43054 | 8093,43054 | 111,51 | 11,68004 | 123,19004 | 129,349542 | 129,349542 | | | |

| Lanjutan | Arah X | | | | | | | | | | | Arah Y | | | | | | Nu,k | | |
|-----------|--------|----|-------|------|-------|---------|------------|----------|----------|-----------|------------|--------|-------|------------|------------|----------|----------|-----------|------------|-------------|
| | h | n | Rv | Lx | | Mkap,bx | | NDk,x | NLk,x | Ng,x | Nuk,x | Ly | | Mkap,by | | NDk,y | NLk,y | Ng,y | Nuk,y | Maksimum |
| | | | | Kiri | Kanan | Kiri | Kanan | | | | | Kiri | Kanan | | | | | | | |
| | | | | m | m | kNm | kNm | | | | | m | m | kNm | kNm | | | | | |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | |
| B | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8 | 0 | 7 | 0,0000 | 10272,7878 | 851,33 | 283,7095 | 1135,0395 | 2013,6145 | 5 | 5 | 14202,8702 | 14202,8702 | 1388,262 | 332,9977 | 1721,2597 | 1807,32269 | 2013,614502 |
| Lantai 2 | 4 | 11 | 0,825 | 0 | 7 | 0,0000 | 9985,3815 | 779,1074 | 258,4487 | 1037,5561 | 1990,622 | 5 | 5 | 14005,6051 | 14005,6051 | 1272,166 | 303,7806 | 1575,9466 | 1654,74393 | 1913,227883 |
| Lantai 3 | 4 | 10 | 0,85 | 0 | 7 | 0,0000 | 9230,0264 | 707,0623 | 233,2937 | 940,356 | 1850,91109 | 5 | 5 | 14005,6051 | 14005,6051 | 1156,077 | 274,565 | 1430,642 | 1502,1741 | 1747,496512 |
| Lantai 4 | 4 | 9 | 0,875 | 0 | 7 | 0,0000 | 8942,6201 | 635,15 | 208,2199 | 843,3699 | 1683,29133 | 5 | 5 | 12527,5615 | 12527,5615 | 1039,995 | 245,3509 | 1285,3459 | 1349,6132 | 1576,776035 |
| Lantai 5 | 4 | 8 | 0,9 | 0 | 7 | 0,0000 | 7144,5036 | 563,3633 | 183,2215 | 746,5848 | 1510,68246 | 5 | 5 | 9768,73932 | 9768,7393 | 923,9181 | 216,1383 | 1140,0564 | 1197,05922 | 1401,0528 |
| Lantai 6 | 4 | 7 | 0,925 | 0 | 7 | 0,0000 | 7899,8587 | 491,6858 | 158,2883 | 649,9741 | 1333,07084 | 5 | 5 | 8290,69568 | 8290,6957 | 807,8474 | 186,927 | 994,7744 | 891,973635 | 1220,298879 |
| Lantai 7 | 4 | 6 | 0,95 | 0 | 7 | 0,0000 | 6101,7422 | 420,1035 | 133,4112 | 553,5147 | 1150,42853 | 5 | 5 | 6812,65204 | 6812,6520 | 691,7817 | 157,717 | 849,4987 | 891,973635 | 1034,490015 |
| Lantai 8 | 4 | 5 | 0,975 | 0 | 7 | 0,0000 | 4771,5745 | 348,6024 | 108,5813 | 457,1837 | 962,731279 | 5 | 5 | 5334,60841 | 5334,6084 | 575,7207 | 128,508 | 704,2287 | 739,440135 | 843,6021648 |
| Lantai 9 | 4 | 4 | 1 | 0 | 7 | 0,0000 | 3160,3568 | 277,1676 | 83,78944 | 360,95704 | 788,177671 | 5 | 5 | 6615,3869 | 6615,3869 | 459,6635 | 99,29989 | 558,96339 | 586,91156 | 666,2999414 |
| Lantai 10 | 4 | 3 | 1 | 0 | 7 | 0,0000 | 2872,9505 | 205,7887 | 59,02704 | 264,81574 | 609,454307 | 5 | 5 | 4134,15334 | 4134,1533 | 343,6095 | 70,09258 | 413,70208 | 434,387184 | 479,7653132 |
| Lantai 11 | 4 | 2 | 1 | 0 | 7 | 0,0000 | 1448,6315 | 134,4377 | 34,28415 | 168,72185 | 422,919678 | 5 | 5 | 2933,69827 | 2933,6983 | 227,5572 | 40,88562 | 268,44282 | 281,864961 | 293,2804654 |
| Lantai 12 | 2 | 1 | 1 | 0 | 7 | 0,0000 | 2017,0879 | 63,16033 | 9,557158 | 72,717488 | 263,959832 | 5 | 5 | 5137,34326 | 5137,3433 | 111,51 | 11,68004 | 123,19004 | 129,349542 | 134,4146239 |

| Lanjutan | KOLOM | Arah X | | | | | | | | | | Arah Y | | | | | | | | | | Nu.k Maksimum |
|-----------|-------|--------|--------|----|------|------------|-----------|----------|----------|-----------|-----------|--------|----|---------|------------|-----------|----------|-----------|-----------|-----------|---|---------------|
| | | h | n | Rv | Lx | | Mkap bx | | NDK.x | NLk.x | Ng.x | Nuk.x | Ly | Mkap.by | | NDK.y | NLk.y | Ng.y | Nuk.y | | | |
| | | | | | Kiri | Kanan | Kiri | Kanan | | | | | | Kiri | Kanan | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | m | m | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | |
| C | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 6 | 12 | 0,8000 | 7 | 4 | 10272,7878 | 9686,3752 | 851,3300 | 283,7095 | 1135,0395 | 1726,0610 | 0 | 5 | 0,0000 | 14202,8702 | 1388,2620 | 332,9977 | 1721,2597 | 3398,0442 | 3398,0442 | | |
| Lantai 2 | 4 | 11 | 0,8250 | 7 | 4 | 9985,3815 | 9398,9689 | 779,1074 | 258,4487 | 1037,5561 | 1708,8166 | 0 | 5 | 0,0000 | 14005,6051 | 1272,1660 | 303,7806 | 1575,9466 | 3375,9505 | 3124,4614 | | |
| Lantai 3 | 4 | 10 | 0,8500 | 7 | 4 | 9230,0264 | 8643,6138 | 707,0623 | 233,2937 | 940,3560 | 1575,8785 | 0 | 5 | 0,0000 | 14005,6051 | 1156,0770 | 274,5650 | 1430,6420 | 3272,3913 | 2840,5413 | | |
| Lantai 4 | 4 | 9 | 0,8750 | 7 | 4 | 9985,3815 | 9398,9689 | 635,1500 | 208,2199 | 843,3699 | 1622,6161 | 0 | 5 | 0,0000 | 11246,7830 | 1039,9950 | 245,3509 | 1285,3459 | 2992,9539 | 2546,2838 | | |
| Lantai 5 | 4 | 8 | 0,9000 | 7 | 4 | 8187,2650 | 7600,8524 | 563,3633 | 183,2215 | 746,5848 | 1422,0831 | 0 | 5 | 0,0000 | 9768,7393 | 923,9181 | 216,1383 | 1140,0564 | 2241,6868 | 2703,1791 | | |
| Lantai 6 | 4 | 7 | 0,9250 | 7 | 4 | 8942,6201 | 8356,2075 | 491,6958 | 158,2883 | 649,9741 | 1470,2370 | 0 | 5 | 0,0000 | 11049,5178 | 807,8474 | 186,9270 | 994,7744 | 2092,6124 | 2092,6124 | | |
| Lantai 7 | 4 | 6 | 0,9500 | 7 | 4 | 7144,5036 | 6558,0910 | 420,1035 | 133,4112 | 553,5147 | 1103,4216 | 0 | 5 | 0,0000 | 8290,6957 | 691,7817 | 157,7170 | 849,4987 | 1601,4766 | 1771,8201 | | |
| Lantai 8 | 4 | 5 | 0,9750 | 7 | 4 | 7899,8587 | 7313,4461 | 348,6024 | 108,5813 | 457,1837 | 1314,1722 | 0 | 5 | 0,0000 | 5334,6084 | 575,7207 | 128,5080 | 704,2287 | 1440,6875 | 1440,6875 | | |
| Lantai 9 | 4 | 4 | 1,0000 | 7 | 4 | 6101,7422 | 5515,3296 | 277,1676 | 83,7894 | 360,9570 | 823,6740 | 0 | 5 | 0,0000 | 6615,3869 | 459,6635 | 99,2999 | 558,9634 | 997,6293 | 1138,0759 | | |
| Lantai 10 | 4 | 3 | 1,0000 | 7 | 4 | 5058,9808 | 4472,5682 | 205,7887 | 59,0270 | 264,8157 | 990,9168 | 0 | 5 | 0,0000 | 4134,1533 | 343,6095 | 70,0926 | 413,7021 | 677,0412 | 817,4878 | | |
| Lantai 11 | 4 | 2 | 1,0000 | 7 | 4 | 5814,3359 | 5227,9233 | 134,4377 | 34,2842 | 168,7219 | 938,5140 | 0 | 5 | 0,0000 | 5137,3433 | 227,5572 | 40,8856 | 288,4428 | 417,0005 | 496,9019 | | |
| Lantai 12 | 2 | 1 | 1,0000 | 7 | 4 | 4016,2194 | 3429,8067 | 63,1603 | 9,5572 | 72,7175 | 769,8550 | 0 | 5 | 0,0000 | 2933,6983 | 111,5100 | 11,6800 | 123,1900 | 156,9667 | 236,8680 | | |
| | | | | | | 4771,5745 | 4185,1619 | 28,4063 | | | 823,6740 | 0 | 5 | 0,0000 | 3936,8882 | | | | | | | |
| | | | | | | 3160,3568 | 2573,9441 | | | | 611,0873 | 0 | 5 | 0,0000 | 1733,2432 | | | | | | | |
| | | | | | | 3728,8131 | 3142,4005 | | | | 449,2197 | 0 | 5 | 0,0000 | 2736,4331 | | | | | | | |
| | | | | | | 2304,4941 | 1718,0815 | | | | 491,8540 | 0 | 5 | 0,0000 | 965,2542 | | | | | | | |
| | | | | | | 2872,9505 | 2286,5378 | | | | 284,0817 | 0 | 5 | 0,0000 | 1535,9781 | | | | | | | |
| | | | | | | 1448,6315 | 862,2189 | | | | 326,7159 | 0 | 5 | 0,0000 | 197,2651 | | | | | | | |
| | | | | | | 2017,0879 | 1430,6752 | | | | 97,9088 | 0 | 5 | 0,0000 | 767,9890 | | | | | | | |
| | | | | | | 868,0189 | 574,8126 | | | | 68,5882 | 0 | 5 | 0,0000 | | | | | | | | |
| | | | | | | 1161,2252 | 574,8126 | | | | | 0 | 5 | 0,0000 | | | | | | | | |
| | | | | | | 287,4063 | 287,4063 | | | | | 0 | 5 | 0,0000 | | | | | | | | |
| | | | | | | 560,6126 | 287,4063 | | | | | 0 | 5 | 0,0000 | | | | | | | | |

Tabel 4.3.5 Gaya Aksial Terpakai Kolom untuk RW 2/5 Baru

| KOLOM | Arah X | | | | | | | | | | | | Arah Y | | | | | | | | | | | | Nu,k Terpakai KN |
|-----------|----------|----------|----------|-----------|-----------|-----------|----------|--------|-----------|-----------|-----------|-----------|-----------|-----------|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|------------------------|
| | ND,kx | | NL,kx | | NE,kx | | Ng,x | | Nu,kx | | ND,ky | | NL,ky | | NE,ky | | Ng,y | | Nu,ky | | Maksimum | | | | |
| | KN | | KN | | KN | | KN | | KN | | KN | | KN | | KN | | KN | | KN | | KN | | | | |
| 1 | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | | 11 | | 12 | | 13 | | |
| A | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 851,3300 | 283,7095 | 927,7198 | 1135,0395 | 5088,2146 | 1388,2620 | 332,9977 | 0,0000 | 1721,2597 | 1807,3227 | 5088,2146 | 1807,3227 | 1807,3227 | 1721,2597 | 0,0000 | 1721,2597 | 1807,3227 | 5088,2146 | 1807,3227 | 5088,2146 | 1807,3227 | 1807,3227 | 1807,3227 | | |
| Lantai 2 | 779,1074 | 258,4487 | 838,2902 | 1037,5561 | 4610,2527 | 1272,1660 | 303,7806 | 0,0000 | 1575,9466 | 1654,7439 | 4610,2527 | 1654,7439 | 1654,7439 | 1575,9466 | 0,0000 | 1575,9466 | 1654,7439 | 4610,2527 | 1654,7439 | 4610,2527 | 1654,7439 | 1654,7439 | 1654,7439 | | |
| Lantai 3 | 707,0623 | 233,2937 | 714,5674 | 940,3560 | 3988,5569 | 1156,0770 | 274,5650 | 0,0000 | 1430,6420 | 1502,1741 | 3988,5569 | 1502,1741 | 1502,1741 | 1430,6420 | 0,0000 | 1430,6420 | 1502,1741 | 3988,5569 | 1502,1741 | 3988,5569 | 1502,1741 | 1502,1741 | 1502,1741 | | |
| Lantai 4 | 635,1500 | 208,2199 | 582,6776 | 843,3699 | 3332,7843 | 1039,9950 | 245,3509 | 0,0000 | 1285,3459 | 1349,6132 | 3332,7843 | 1349,6132 | 1349,6132 | 1285,3459 | 0,0000 | 1285,3459 | 1349,6132 | 3332,7843 | 1349,6132 | 3332,7843 | 1349,6132 | 1349,6132 | 1349,6132 | | |
| Lantai 5 | 563,3633 | 183,2215 | 454,9093 | 746,5848 | 2694,5331 | 923,9181 | 216,1383 | 0,0000 | 1140,0564 | 1197,0592 | 2694,5331 | 1197,0592 | 1197,0592 | 1140,0564 | 0,0000 | 1140,0564 | 1197,0592 | 2694,5331 | 1197,0592 | 2694,5331 | 1197,0592 | 1197,0592 | 1197,0592 | | |
| Lantai 6 | 491,6858 | 158,2883 | 337,6053 | 649,9741 | 2100,4151 | 807,8474 | 186,9270 | 0,0000 | 994,7744 | 1044,5131 | 2100,4151 | 1044,5131 | 1044,5131 | 994,7744 | 0,0000 | 994,7744 | 1044,5131 | 2100,4151 | 1044,5131 | 2100,4151 | 1044,5131 | 1044,5131 | 1044,5131 | | |
| Lantai 7 | 420,1035 | 133,4112 | 234,4435 | 553,5147 | 1565,8531 | 691,7817 | 157,7170 | 0,0000 | 849,4987 | 891,9736 | 1565,8531 | 891,9736 | 891,9736 | 849,4987 | 0,0000 | 849,4987 | 891,9736 | 1565,8531 | 891,9736 | 1565,8531 | 891,9736 | 891,9736 | 891,9736 | | |
| Lantai 8 | 348,6024 | 108,5813 | 147,9267 | 457,1837 | 1101,3350 | 575,7207 | 128,5080 | 0,0000 | 704,2287 | 739,4401 | 1101,3350 | 739,4401 | 739,4401 | 704,2287 | 0,0000 | 704,2287 | 739,4401 | 1101,3350 | 739,4401 | 1101,3350 | 739,4401 | 739,4401 | 739,4401 | | |
| Lantai 9 | 277,1676 | 83,7894 | 79,9635 | 360,9570 | 714,8516 | 459,6635 | 99,2999 | 0,0000 | 558,9634 | 586,9116 | 714,8516 | 586,9116 | 586,9116 | 558,9634 | 0,0000 | 558,9634 | 586,9116 | 714,8516 | 586,9116 | 714,8516 | 586,9116 | 586,9116 | 586,9116 | | |
| Lantai 10 | 205,7887 | 59,0270 | 31,9301 | 264,8157 | 412,1629 | 343,6095 | 70,0926 | 0,0000 | 413,7021 | 434,3872 | 412,1629 | 434,3872 | 434,3872 | 413,7021 | 0,0000 | 413,7021 | 434,3872 | 412,1629 | 434,3872 | 434,3872 | 434,3872 | 434,3872 | 434,3872 | | |
| Lantai 11 | 134,4377 | 34,2842 | 4,3513 | 168,7219 | 195,4332 | 227,5572 | 40,8856 | 0,0000 | 268,4428 | 281,8650 | 195,4332 | 281,8650 | 281,8650 | 268,4428 | 0,0000 | 268,4428 | 281,8650 | 195,4332 | 281,8650 | 281,8650 | 281,8650 | 281,8650 | 281,8650 | | |
| Lantai 12 | 63,1603 | 9,5572 | 4,5293 | 72,7175 | 95,3764 | 111,5100 | 11,6800 | 0,0000 | 123,1900 | 129,3495 | 95,3764 | 129,3495 | 129,3495 | 123,1900 | 0,0000 | 123,1900 | 129,3495 | 95,3764 | 129,3495 | 129,3495 | 129,3495 | 129,3495 | 129,3495 | | |
| B | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 851,3300 | 283,7095 | 927,7198 | 1135,0395 | 5088,2146 | 1388,2620 | 332,9977 | 0,0000 | 1721,2597 | 1807,3227 | 5088,2146 | 1807,3227 | 1807,3227 | 1721,2597 | 0,0000 | 1721,2597 | 1807,3227 | 5088,2146 | 1807,3227 | 5088,2146 | 1807,3227 | 1807,3227 | 1807,3227 | | |
| Lantai 2 | 779,1074 | 258,4487 | 838,2902 | 1037,5561 | 4610,2527 | 1272,1660 | 303,7806 | 0,0000 | 1575,9466 | 1654,7439 | 4610,2527 | 1654,7439 | 1654,7439 | 1575,9466 | 0,0000 | 1575,9466 | 1654,7439 | 4610,2527 | 1654,7439 | 4610,2527 | 1654,7439 | 1654,7439 | 1654,7439 | | |
| Lantai 3 | 707,0623 | 233,2937 | 714,5674 | 940,3560 | 3988,5569 | 1156,0770 | 274,5650 | 0,0000 | 1430,6420 | 1502,1741 | 3988,5569 | 1502,1741 | 1502,1741 | 1430,6420 | 0,0000 | 1430,6420 | 1502,1741 | 3988,5569 | 1502,1741 | 3988,5569 | 1502,1741 | 1502,1741 | 1502,1741 | | |
| Lantai 4 | 635,1500 | 208,2199 | 582,6776 | 843,3699 | 3332,7843 | 1039,9950 | 245,3509 | 0,0000 | 1285,3459 | 1349,6132 | 3332,7843 | 1349,6132 | 1349,6132 | 1285,3459 | 0,0000 | 1285,3459 | 1349,6132 | 3332,7843 | 1349,6132 | 3332,7843 | 1349,6132 | 1349,6132 | 1349,6132 | | |
| Lantai 5 | 563,3633 | 183,2215 | 454,9093 | 746,5848 | 2694,5331 | 923,9181 | 216,1383 | 0,0000 | 1140,0564 | 1197,0592 | 2694,5331 | 1197,0592 | 1197,0592 | 1140,0564 | 0,0000 | 1140,0564 | 1197,0592 | 2694,5331 | 1197,0592 | 2694,5331 | 1197,0592 | 1197,0592 | 1197,0592 | | |
| Lantai 6 | 491,6858 | 158,2883 | 337,6053 | 649,9741 | 2100,4151 | 807,8474 | 186,9270 | 0,0000 | 994,7744 | 1044,5131 | 2100,4151 | 1044,5131 | 1044,5131 | 994,7744 | 0,0000 | 994,7744 | 1044,5131 | 2100,4151 | 1044,5131 | 2100,4151 | 1044,5131 | 1044,5131 | 1044,5131 | | |
| Lantai 7 | 420,1035 | 133,4112 | 234,4435 | 553,5147 | 1565,8531 | 691,7817 | 157,7170 | 0,0000 | 849,4987 | 891,9736 | 1565,8531 | 891,9736 | 891,9736 | 849,4987 | 0,0000 | 849,4987 | 891,9736 | 1565,8531 | 891,9736 | 1565,8531 | 891,9736 | 891,9736 | 891,9736 | | |
| Lantai 8 | 348,6024 | 108,5813 | 147,9267 | 457,1837 | 1101,3350 | 575,7207 | 128,5080 | 0,0000 | 704,2287 | 739,4401 | 1101,3350 | 739,4401 | 739,4401 | 704,2287 | 0,0000 | 704,2287 | 739,4401 | 1101,3350 | 739,4401 | 1101,3350 | 739,4401 | 739,4401 | 739,4401 | | |
| Lantai 9 | 277,1676 | 83,7894 | 79,9635 | 360,9570 | 714,8516 | 459,6635 | 99,2999 | 0,0000 | 558,9634 | 586,9116 | 714,8516 | 586,9116 | 586,9116 | 558,9634 | 0,0000 | 558,9634 | 586,9116 | 714,8516 | 586,9116 | 714,8516 | 586,9116 | 586,9116 | 586,9116 | | |
| Lantai 10 | 205,7887 | 59,0270 | 31,9301 | 264,8157 | 412,1629 | 343,6095 | 70,0926 | 0,0000 | 413,7021 | 434,3872 | 412,1629 | 434,3872 | 434,3872 | 413,7021 | 0,0000 | 413,7021 | 434,3872 | 412,1629 | 434,3872 | 434,3872 | 434,3872 | 434,3872 | 434,3872 | | |
| Lantai 11 | 134,4377 | 34,2842 | 4,3513 | 168,7219 | 195,4332 | 227,5572 | 40,8856 | 0,0000 | 268,4428 | 281,8650 | 195,4332 | 281,8650 | 281,8650 | 268,4428 | 0,0000 | 268,4428 | 281,8650 | 195,4332 | 281,8650 | 281,8650 | 281,8650 | 281,8650 | 281,8650 | | |
| Lantai 12 | 63,1603 | 9,5572 | 4,5293 | 72,7175 | 95,3764 | 111,5100 | 11,6800 | 0,0000 | 123,1900 | 129,3495 | 95,3764 | 129,3495 | 129,3495 | 123,1900 | 0,0000 | 123,1900 | 129,3495 | 95,3764 | 129,3495 | 129,3495 | 129,3495 | 129,3495 | 129,3495 | | |

Tabel 4.3.6.1 Mn-Pn Arah X untuk R/W 2/5 Baru

| UNTUK KOLOM | 800 | X | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 75,2941 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| As (mm ²) | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 |
| As' (mm ²) | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 |
| Ts (kn) | 0 | -142,222 | 80 | 365,714 | 746,67 | 1280 | 1280 | 1280 | 1280 | 1280 | 0 |
| Cs (kn) | 0 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 991,906 | 1413,12 | 1755,03 | 2029,1 | 2255,81 | 2234,9 | 2188,39 | 2116,37 | 2018,81 | 924,612 |
| Pn (kn) | 16024 | 13214,8 | 11674,7 | 10071,2 | 8372,4 | 6521,2 | 5862,3 | 5203,36 | 4544,44 | 3885,52 | 0 |

| UNTUK KOLOM | 800 | X | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 150,588 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| As (mm ²) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| As' (mm ²) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| Ts (kn) | 0 | -284,444 | 160 | 731,429 | 1493,3 | 2560 | 2560 | 2560 | 2560 | 2560 | 0 |
| Cs (kn) | 0 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 1377,03 | 1878,24 | 2323,01 | 2734,2 | 3152,93 | 3132 | 3085,51 | 3013,49 | 2915,93 | 1752,85 |
| Pn (kn) | 18448 | 14569 | 12806,7 | 10917,5 | 8837,7 | 6453,2 | 5794,3 | 5135,36 | 4476,44 | 3817,52 | 0 |

Lanjutan

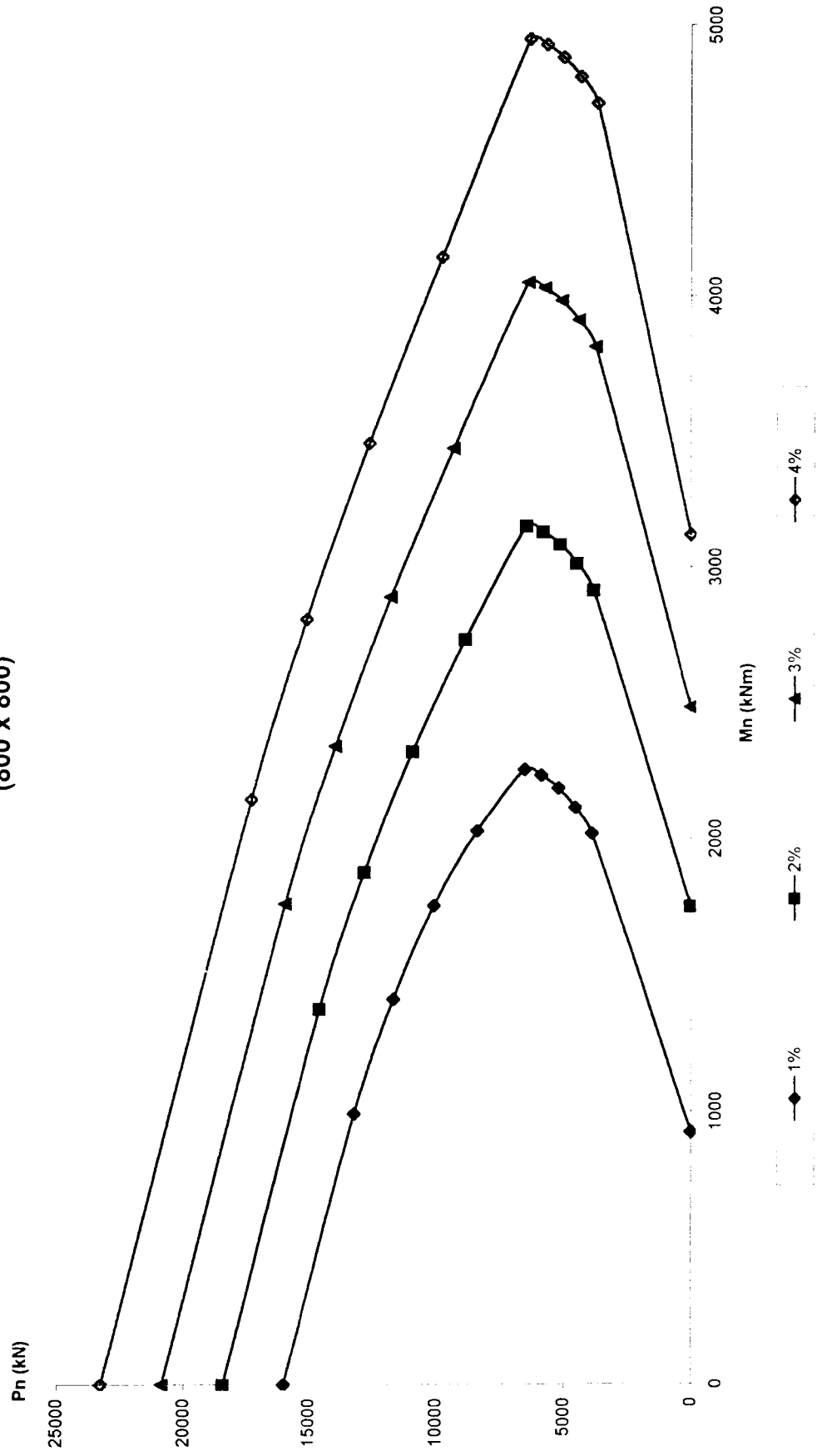
UNTUK KOLOM

| | 800 | X | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 225,882 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 |
| As (mm2) | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 |
| As' (mm2) | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 |
| Ts (kn) | 0 | -426,667 | 240 | 1097,14 | 2240 | 3840 | 3840 | 3840 | 3840 | 3840 | 0 |
| Cs (kn) | 0 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 1762,15 | 2343,36 | 2890,99 | 3439,3 | 4050,05 | 4029,1 | 3982,63 | 3910,61 | 3813,05 | 2484,71 |
| Pn (kn) | 20872 | 15923,2 | 13938,7 | 11763,7 | 9303 | 6385,2 | 5726,3 | 5067,36 | 4408,44 | 3749,52 | 0 |

UNTUK KOLOM

| | 800 | X | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 301,176 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 |
| As (mm2) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| As' (mm2) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| Ts (kn) | 0 | -568,889 | 320 | 1462,86 | 2986,7 | 5120 | 5120 | 5120 | 5120 | 5120 | 0 |
| Cs (kn) | 0 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 2147,27 | 2808,48 | 3458,97 | 4144,4 | 4947,17 | 4926,2 | 4879,75 | 4807,73 | 4710,17 | 3120,19 |
| Pn (kn) | 23296 | 17277,4 | 15070,7 | 12610 | 9768,4 | 6317,2 | 5658,3 | 4999,36 | 4340,44 | 3681,52 | 0 |

Grafik Mn-Pn Arah X
(800 x 800)



Tabel 4.3.6.2 Mn-Pn Arah Y untuk R/W 2/5 Baru

| UNTUK KOLOM | 800 | X | 800 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 75,2941 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| As (mm2) | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 |
| As' (mm2) | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 | 3200 |
| Ts (kn) | 0 | -142,222 | 80 | 365,714 | 746,67 | 1280 | 1280 | 1280 | 1280 | 1280 | 0 |
| Cs (kn) | 0 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 1212 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 991,906 | 1413,12 | 1755,03 | 2029,1 | 2255,81 | 2234,9 | 2188,39 | 2116,37 | 2018,81 | 924,612 |
| Pn (kn) | 16024 | 13214,8 | 11674,7 | 10071,2 | 8372,4 | 6521,2 | 5862,3 | 5203,36 | 4544,44 | 3885,52 | 0 |

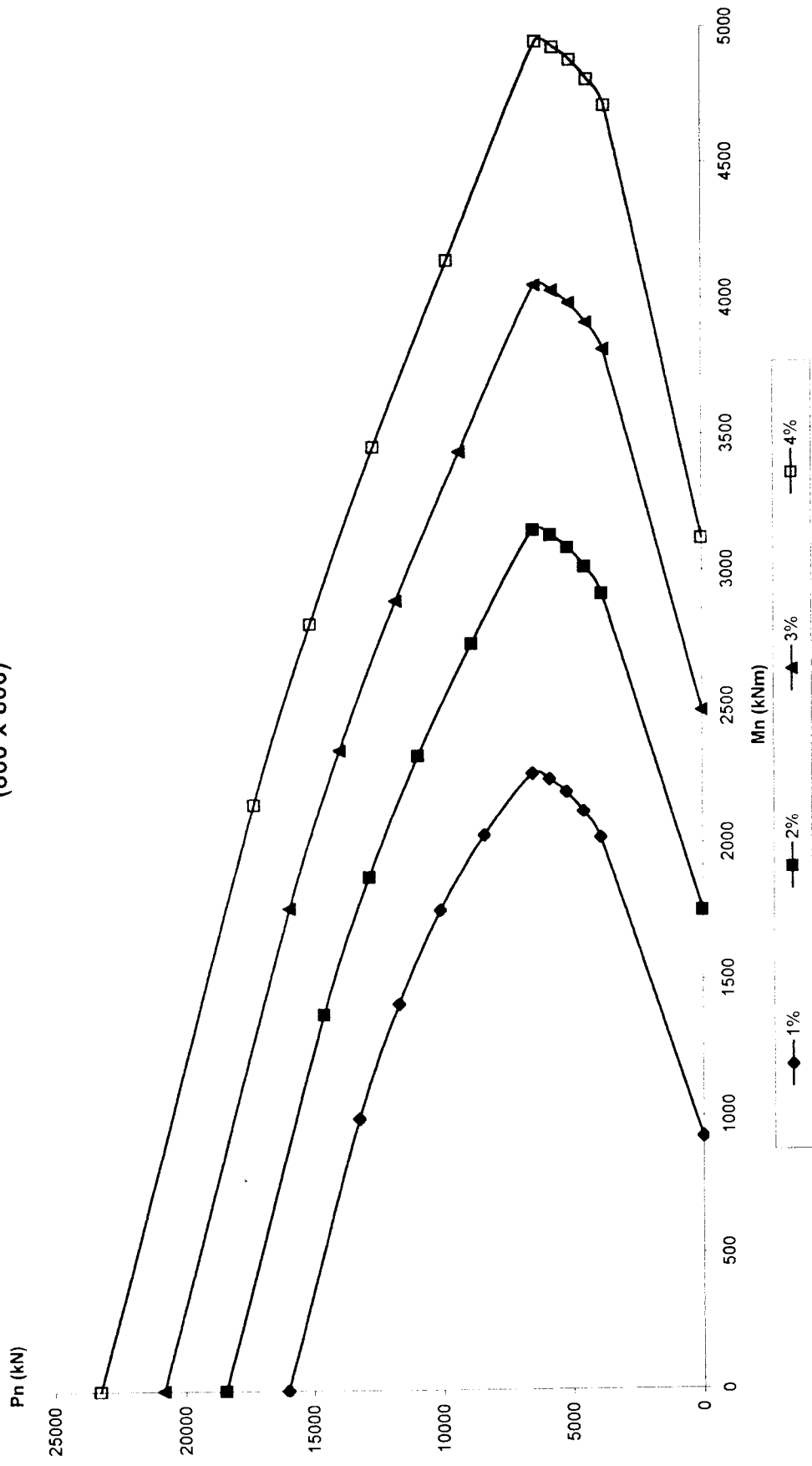
| UNTUK KOLOM | 800 | X | 800 | | | | | | | | |
|-------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 150,588 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm2) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| As (mm2) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| As' (mm2) | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 | 6400 |
| Ts (kn) | 0 | -284,444 | 160 | 731,429 | 1493,3 | 2560 | 2560 | 2560 | 2560 | 2560 | 0 |
| Cs (kn) | 0 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 2424 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 1377,03 | 1878,24 | 2323,01 | 2734,2 | 3152,93 | 3132 | 3085,51 | 3013,49 | 2915,93 | 1752,85 |
| Pn (kn) | 18448 | 14569 | 12806,7 | 10917,5 | 8837,7 | 6453,2 | 5794,3 | 5135,36 | 4476,44 | 3817,52 | 0 |

Lanjutan

| UNTUK KOLOM | 800 | X | 800 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 225,882 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 | 19200 |
| As (mm ²) | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 |
| As' (mm ²) | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 | 9600 |
| Ts (kn) | 0 | -426,667 | 240 | 1097,14 | 2240 | 3840 | 3840 | 3840 | 3840 | 3840 | 0 |
| Cs (kn) | 0 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 3636 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 1762,15 | 2343,36 | 2890,99 | 3439,3 | 4050,05 | 4029,1 | 3982,63 | 3910,61 | 3813,05 | 2484,71 |
| Pn (kn) | 20872 | 15923,2 | 13938,7 | 11763,7 | 9303 | 6385,2 | 5726,3 | 5067,36 | 4408,44 | 3749,52 | 0 |

| UNTUK KOLOM | 800 | X | 800 | | | | | | | | |
|------------------------|-------|----------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| Ast (%) | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% |
| fc' (Mpa) | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| fy (Mpa) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| b (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| h (mm) | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| d' (mm) | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| d (mm) | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 | 760 |
| xb (mm) | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 | 456 |
| faktor | 0 | 1,8 | 1,6 | 1,4 | 1,2 | 1 | 0,9 | 0,8 | 0,7 | 0,6 | 0 |
| x (mm) | 0 | 820,8 | 729,6 | 638,4 | 547,2 | 456 | 410,4 | 364,8 | 319,2 | 273,6 | 0 |
| ab (mm) | 0 | 697,68 | 620,16 | 542,64 | 465,12 | 387,6 | 348,84 | 310,08 | 271,32 | 232,56 | 301,176 |
| fs (Mpa) | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 511,11 | 650 | 828,571 | 1066,67 | 0 |
| fs pakai | 0 | -44,4444 | 25 | 114,286 | 233,33 | 400 | 400 | 400 | 400 | 400 | 0 |
| fs' (Mpa) | 0 | 570,76 | 567,105 | 562,406 | 556,14 | 547,368 | 541,52 | 534,211 | 524,812 | 512,281 | 0 |
| fs' pakai | 0 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 0 |
| Ast (mm ²) | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 | 25600 |
| As (mm ²) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| As' (mm ²) | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 |
| Ts (kn) | 0 | -568,889 | 320 | 1462,86 | 2986,7 | 5120 | 5120 | 5120 | 5120 | 5120 | 0 |
| Cs (kn) | 0 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 4848 | 0 |
| Cc (kn) | 0 | 11860,6 | 10542,7 | 9224,88 | 7907 | 6589,2 | 5930,3 | 5271,36 | 4612,44 | 3953,52 | 0 |
| Mn (kn m) | 0 | 2147,27 | 2808,48 | 3458,97 | 4144,4 | 4947,17 | 4926,2 | 4879,75 | 4807,73 | 4710,17 | 3120,19 |
| Pn (kn) | 23296 | 17277,4 | 15070,7 | 12610 | 9768,4 | 6317,2 | 5658,3 | 4999,36 | 4340,44 | 3681,52 | 0 |

Grafik Mn-Pn Arah Y
(800 x 800)



Tabel 4.3.7 Penulangan Longitudinal Kolom untuk RW 2/5 Baru

| KOLOM | Arah X | | | | | | Arah Y | | | | | | | | | |
|-----------|--------|-----|-----------|-----------|-----------------|-----------|----------------|----------|-----|-----------|-----------|-----------------|----------|----------------|----|----|
| | b | h | Mn | Pn | Ast | Jml Tul. | Tul. Terpasang | b | h | Mn | Pn | Ast | Jml Tul. | Tul. Terpasang | | |
| | mm | mm | kNm | kN | mm ² | | | mm | mm | kNm | kN | mm ² | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| A | | | | | ppakai | | | | | | | | | | | |
| Lantai 1 | 800 | 800 | 273,9108 | 2780,4964 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 398,6149 | 2780,4964 | 5896,0000 | 16 | Ø22 - 24 | | |
| Lantai 2 | 800 | 800 | 1221,5486 | 2545,7599 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 1695,2802 | 2545,7599 | 8844,0000 | 24 | Ø22 - 24 | | |
| Lantai 3 | 800 | 800 | 1077,7216 | 2311,0371 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 1154,8708 | 2311,0371 | 5896,0000 | 16 | Ø22 - 24 | | |
| Lantai 4 | 800 | 800 | 826,5480 | 2076,3280 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 1120,5952 | 2076,3280 | 5896,0000 | 16 | Ø22 - 20 | | |
| Lantai 5 | 800 | 800 | 866,5706 | 1841,6296 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 1159,4384 | 1841,6296 | 5896,0000 | 16 | Ø22 - 20 | | |
| Lantai 6 | 800 | 800 | 935,6018 | 1606,9433 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 1200,1517 | 1606,9433 | 5896,0000 | 16 | Ø22 - 20 | | |
| Lantai 7 | 800 | 800 | 832,9808 | 1372,2671 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 1016,0250 | 1372,2671 | 5896,0000 | 16 | Ø22 - 20 | | |
| Lantai 8 | 800 | 800 | 913,1492 | 1137,6002 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 1073,0529 | 1137,6002 | 5896,0000 | 16 | Ø22 - 20 | | |
| Lantai 9 | 800 | 800 | 1023,9497 | 902,9409 | 1,1% | 6485,6000 | 18 | Ø22 - 18 | 800 | 1157,7972 | 902,9409 | 7370,0000 | 20 | Ø22 - 20 | | |
| Lantai 10 | 800 | 800 | 666,1522 | 668,2880 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 831,3973 | 668,2880 | 5896,0000 | 16 | Ø22 - 18 | | |
| Lantai 11 | 800 | 800 | 637,4223 | 433,6384 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 945,1556 | 433,6384 | 6485,6000 | 18 | Ø22 - 18 | | |
| Lantai 12 | 800 | 800 | 328,8591 | 198,9993 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 214,9684 | 198,9993 | 5896,0000 | 16 | Ø22 - 16 | | |
| B | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 800 | 161,4786 | 3097,8685 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 398,6149 | 3097,8685 | 5896,0000 | 16 | Ø22 - 24 | | |
| Lantai 2 | 800 | 800 | 720,1392 | 2943,4275 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 1695,2802 | 2943,4275 | 8844,0000 | 24 | Ø22 - 24 | | |
| Lantai 3 | 800 | 800 | 635,3489 | 2688,4562 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 1154,8708 | 2688,4562 | 5896,0000 | 16 | Ø22 - 24 | | |
| Lantai 4 | 800 | 800 | 487,2746 | 2425,8093 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 1120,5952 | 2425,8093 | 5896,0000 | 16 | Ø22 - 20 | | |
| Lantai 5 | 800 | 800 | 510,8691 | 2155,4658 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 1159,4384 | 2155,4658 | 5896,0000 | 16 | Ø22 - 20 | | |
| Lantai 6 | 800 | 800 | 551,5651 | 1877,3829 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 1200,1517 | 1877,3829 | 5896,0000 | 16 | Ø22 - 20 | | |
| Lantai 7 | 800 | 800 | 512,5191 | 1591,5231 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 1016,0250 | 1591,5231 | 5896,0000 | 16 | Ø22 - 20 | | |
| Lantai 8 | 800 | 800 | 561,8453 | 1297,8495 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 1073,0529 | 1297,8495 | 5896,0000 | 16 | Ø22 - 20 | | |
| Lantai 9 | 800 | 800 | 630,0190 | 1025,0768 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 1157,7972 | 1025,0768 | 7370,0000 | 20 | Ø22 - 20 | | |
| Lantai 10 | 800 | 800 | 494,9750 | 668,2880 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 831,3973 | 668,2880 | 5896,0000 | 16 | Ø22 - 18 | | |
| Lantai 11 | 800 | 800 | 473,6276 | 433,6384 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 945,1556 | 433,6384 | 6485,6000 | 18 | Ø22 - 18 | | |
| Lantai 12 | 800 | 800 | 297,0340 | 198,9993 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 214,9684 | 198,9993 | 5896,0000 | 16 | Ø22 - 16 | | |

| Lanjutan | Arah X | | | | | | | | | | | Arah Y | | | | | | | | | | |
|-----------|--------|-----|-----------|-----------|------|-----------|--------|----------|-----|-----------|-----------|--------|-----------|----|----------|--------|-----|-----|------|-----------|----|----|
| | KOLOM | | b | h | Mn | Pn | ppakai | Ast | Jml | Tul. | Terpasang | b | h | Mn | Pn | ppakai | Ast | Jml | Tul. | Terpasang | | |
| | mm | mm | | | | | | | | | | | | | | | | | | | mm | mm |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | | | | | | |
| C | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 800 | 273,9108 | 5227,7602 | 1,0% | 5896,0000 | 16 | Ø22 - 20 | 800 | 268,8520 | 5227,7602 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 2 | 800 | 800 | 1221,5486 | 5034,4482 | 1,2% | 7075,2000 | 20 | Ø22 - 20 | 800 | 1143,4078 | 5034,4482 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 3 | 800 | 800 | 1077,7216 | 4604,5445 | 1,0% | 5896,0000 | 16 | Ø22 - 20 | 800 | 778,9204 | 4604,5445 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 4 | 800 | 800 | 826,5480 | 4158,7371 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 755,8027 | 4158,7371 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 5 | 800 | 800 | 866,5706 | 3697,0230 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 782,0011 | 3697,0230 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 6 | 800 | 800 | 935,6018 | 3219,4037 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 809,4608 | 3219,4037 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 7 | 800 | 800 | 832,9808 | 2409,0048 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 688,7857 | 2409,0048 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 8 | 800 | 800 | 913,1492 | 1694,3616 | 1,0% | 5896,0000 | 16 | Ø22 - 18 | 800 | 727,4462 | 1694,3616 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 9 | 800 | 800 | 1023,9497 | 1099,7716 | 1,1% | 6190,8000 | 18 | Ø22 - 18 | 800 | 784,8963 | 1099,7716 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 10 | 800 | 800 | 666,1522 | 668,2880 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 515,2058 | 668,2880 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 11 | 800 | 800 | 637,4223 | 433,6384 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 585,7003 | 433,6384 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 12 | 800 | 800 | 328,8591 | 198,9993 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 214,9684 | 198,9993 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| D | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 800 | 161,4786 | 5227,7602 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 268,8520 | 5227,7602 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 2 | 800 | 800 | 720,1392 | 5034,4482 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 1143,4078 | 5034,4482 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 3 | 800 | 800 | 635,3489 | 4604,5445 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 778,9204 | 4604,5445 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 4 | 800 | 800 | 487,2746 | 4158,7371 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 755,8027 | 4158,7371 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 5 | 800 | 800 | 510,8691 | 3697,0230 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 782,0011 | 3697,0230 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 6 | 800 | 800 | 551,5651 | 3219,4037 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 809,4608 | 3219,4037 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 7 | 800 | 800 | 512,5191 | 2409,0048 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 688,7857 | 2409,0048 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 8 | 800 | 800 | 561,8453 | 1694,3616 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 727,4462 | 1694,3616 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 9 | 800 | 800 | 630,0190 | 1099,7716 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 784,8963 | 1099,7716 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 10 | 800 | 800 | 494,9750 | 668,2880 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 515,2058 | 668,2880 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 11 | 800 | 800 | 473,6276 | 433,6384 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 585,7003 | 433,6384 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |
| Lantai 12 | 800 | 800 | 297,0340 | 198,9993 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | 800 | 214,9684 | 198,9993 | 1,0% | 5896,0000 | 16 | Ø22 - 16 | | | | | | | |

Tabel 4.3.8 Gaya Geser Rencana Kolom untuk RW 2/5 Baru

| kolom | hn | Sumbu X | | | | | | Sumbu Y | | | | | | Vu,k Terpakai | | |
|-------|-----------|--------------|----------------------|----------|----------|----------|-----------------|--------------|-----------------------|------------|-------------|----------|----------|------------------|----------|-----------------|
| | | Mu,kx kNm | Vu,kx kN | VD kN | VL kN | VE kN | Vu,kx max kN | Mu,ky kNm | Atas | | Vu,ky kN | VD kN | VL kN | | VE kN | Vu,ky max kN |
| | | | | | | | | | Bawah | Atas | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | | |
| A | Lantai 1 | 3,4 | 178,0420 178,0420 | 104,7306 | 10,8162 | 1,5502 | 176,2368 | 753,1793 | 259,0997 259,0997 | 152,411581 | 0,0000 | 0,0000 | 294,6564 | 1237,55688 | 152,4116 | |
| | Lantai 2 | 3,4 | 271,5296 794,0066 | 313,3930 | 19,1167 | 2,6976 | 199,4537 | 860,6105 | 610,3658 1101,9322 | 503,617049 | 0,0000 | 0,0000 | 307,0185 | 1289,4777 | 503,6170 | |
| | Lantai 3 | 3,4 | 434,7924 700,5190 | 333,9151 | 17,0929 | 2,3414 | 202,5139 | 870,9643 | 693,1918 750,6660 | 424,664084 | 0,0000 | 0,0000 | 302,7513 | 1271,55546 | 424,6641 | |
| | Lantai 4 | 3,4 | 512,4721 537,2562 | 308,7436 | 17,4076 | 2,3371 | 197,4425 | 849,9903 | 728,3869 667,8400 | 410,65497 | 0,0000 | 0,0000 | 292,4533 | 1228,30386 | 410,6550 | |
| | Lantai 5 | 3,4 | 563,2709 459,5765 | 300,8375 | 17,2110 | 2,2626 | 186,6010 | 804,1715 | 753,6350 632,6450 | 407,729395 | 0,0000 | 0,0000 | 276,8372 | 1162,71624 | 407,7294 | |
| | Lantai 6 | 3,4 | 608,1412 408,7777 | 299,0938 | 17,1462 | 2,2138 | 171,7098 | 741,5091 | 780,0986 607,3969 | 408,086902 | 0,0000 | 0,0000 | 256,5804 | 1077,63768 | 408,0869 | |
| | Lantai 7 | 3,4 | 541,4376 363,9075 | 266,2779 | 17,0607 | 2,1692 | 153,3926 | 664,4403 | 660,4162 580,9333 | 365,102789 | 0,0000 | 0,0000 | 231,7910 | 973,5222 | 365,1028 | |
| | Lantai 8 | 3,4 | 593,5470 258,7433 | 250,6736 | 17,0213 | 2,1310 | 131,9939 | 574,4843 | 697,4844 445,0028 | 336,025642 | 0,0000 | 0,0000 | 202,5582 | 850,74444 | 336,0256 | |
| | Lantai 9 | 3,4 | 665,5673 206,6339 | 256,5298 | 16,8680 | 2,1105 | 107,6842 | 472,2011 | 752,5682 407,9347 | 341,324369 | 0,0000 | 0,0000 | 168,8605 | 709,2141 | 341,3244 | |
| | Lantai 10 | 3,4 | 432,9989 134,6135 | 166,9448 | 17,2777 | 2,0514 | 80,9200 | 360,1596 | 540,4082 352,8509 | 262,72326 | 0,0000 | 0,0000 | 131,1426 | 550,79892 | 262,7233 | |
| | Lantai 11 | 3,4 | 414,3245 17,3295 | 126,9571 | 15,2616 | 2,2080 | 51,3898 | 234,1804 | 614,3511 166,7817 | 229,744938 | 0,0000 | 0,0000 | 87,7368 | 368,494518 | 229,7449 | |
| | Lantai 12 | 3,4 | 213,7584 27,6954 | 71,0158 | 24,0483 | 1,4348 | 24,0681 | 127,8432 | 139,7295 71,4144 | 62,1011534 | 0,0000 | 0,0000 | 48,6731 | 204,427146 | 71,0158 | |

| Lanjutan | KOLOM | hn | Sumbu X | | | | | | Sumbu Y | | | | | | Vu,k Terpakai | | |
|-----------|-------|----------------------|----------|---------|--------|----------|------------|----------------------|------------|--------|--------|----------|------------|----------|------------------|------|----------|
| | | | Mu,xx | Vu,xx | VD | VL | VE | Vu,xx | Mu,ky | Atas | | VD | VL | VE | Vu,ky | Vu,k | Terpakai |
| | | | | | | | | | | Bawah | Bawah | | | | | | |
| | | | kNm | kN | kN | kN | kN | kN | kNm | kN | kN | kN | kN | kN | kN | kN | kN |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | | | | | |
| 1 | | 2 | | | | | | | | | | | | | | | |
| C | | | | | | | | | | | | | | | | | |
| Lantai 1 | 3,4 | 178,0420 0,0000 | 52,3653 | 10,8162 | 1,5502 | 176,2368 | 753,179277 | 174,7538 174,7538 | 102,796334 | 0,0000 | 0,0000 | 294,6564 | 1237,55688 | 102,7963 | | | |
| Lantai 2 | 3,4 | 271,5296 794,0066 | 313,3930 | 19,1167 | 2,6976 | 199,4537 | 860,610546 | 411,6706 743,2151 | 339,672261 | 0,0000 | 0,0000 | 307,0185 | 1289,4777 | 339,6723 | | | |
| Lantai 3 | 3,4 | 434,7924 700,5190 | 333,9151 | 17,0929 | 2,3414 | 202,5139 | 870,964306 | 467,5339 506,2983 | 286,42122 | 0,0000 | 0,0000 | 302,7513 | 1271,55546 | 333,9151 | | | |
| Lantai 4 | 3,4 | 512,4721 537,2562 | 308,7436 | 17,4076 | 2,3371 | 197,4425 | 849,990339 | 491,2717 450,4350 | 276,972558 | 0,0000 | 0,0000 | 292,4533 | 1228,30386 | 308,7436 | | | |
| Lantai 5 | 3,4 | 563,2709 459,5765 | 300,8375 | 17,2110 | 2,2626 | 186,6010 | 804,171515 | 508,3007 426,6971 | 274,999358 | 0,0000 | 0,0000 | 276,8372 | 1162,71624 | 300,8375 | | | |
| Lantai 6 | 3,4 | 608,1412 408,7777 | 299,0938 | 17,1462 | 2,2138 | 171,7098 | 741,509137 | 526,1495 409,6682 | 275,240485 | 0,0000 | 0,0000 | 256,5804 | 1077,63768 | 299,0938 | | | |
| Lantai 7 | 3,4 | 541,4376 363,9075 | 266,2779 | 17,0607 | 2,1692 | 153,3926 | 664,44027 | 447,7107 391,8194 | 246,920614 | 0,0000 | 0,0000 | 231,7910 | 973,5222 | 266,2779 | | | |
| Lantai 8 | 3,4 | 593,5470 258,7433 | 250,6736 | 17,0213 | 2,1310 | 131,9939 | 574,484308 | 472,8400 301,6772 | 227,799192 | 0,0000 | 0,0000 | 202,5582 | 850,74444 | 250,6736 | | | |
| Lantai 9 | 3,4 | 665,5673 206,6339 | 256,5298 | 16,8680 | 2,1105 | 107,6842 | 472,201095 | 510,1826 276,5479 | 231,391316 | 0,0000 | 0,0000 | 168,8605 | 709,2141 | 256,5298 | | | |
| Lantai 10 | 3,4 | 432,9989 134,6135 | 166,9448 | 17,2777 | 2,0514 | 80,9200 | 360,159622 | 334,8838 239,2054 | 168,84975 | 0,0000 | 0,0000 | 131,1426 | 550,79892 | 168,8497 | | | |
| Lantai 11 | 3,4 | 414,3245 17,3295 | 126,9571 | 15,2616 | 2,2080 | 51,3898 | 234,180381 | 380,7052 103,3524 | 142,369874 | 0,0000 | 0,0000 | 87,7368 | 368,494518 | 142,3699 | | | |
| Lantai 12 | 3,4 | 213,7584 27,6954 | 71,0158 | 24,0483 | 1,4348 | 24,0681 | 127,8432 | 139,7295 44,2546 | 54,1129578 | 0,0000 | 0,0000 | 48,6731 | 204,427146 | 71,0158 | | | |

Tabel 4.3.9 Penulangan Sengkang Geser Kolom untuk RAW 2/5 Baru

| KOLOM | Di Dalam Sendi Plastis | | | | | | | | | | | | Di Luar Sendi Plastis | | | | | |
|-----------|------------------------|---------|-----------------------|------------|------------|----------|----------|-----------------------|-----------------|------|----------|----------|-----------------------|-----------------------|-----------------|------|---|---|
| | b mm | d mm | Ag mm ² | Vu,k kN | Nu,k kN | Vs kN | S mm | Sengkang Terpasang | Vs pasang kN | Cek | Vc kN | Vs kN | S mm | Sengkang Terpasang | Vs pasang kN | Cek | | |
| | | | | | | | | | | | | | | | | | 2 | 3 |
| A | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 760 | 640000 | 152,4116 | 1807,3227 | 254,0193 | 304,3838 | ø12 - 90 | 859,104 | AMAN | 573,0965 | 407,9840 | 189,5157 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 2 | 800 | 760 | 640000 | 503,6170 | 1654,7439 | 839,3617 | 92,1168 | ø12 - 90 | 859,104 | AMAN | 567,4884 | 21,9032 | 3530,0454 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 3 | 800 | 760 | 640000 | 424,6641 | 1502,1741 | 707,7735 | 109,2431 | ø12 - 90 | 859,104 | AMAN | 561,8805 | 101,8277 | 759,3152 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 4 | 800 | 760 | 640000 | 410,6550 | 1349,6132 | 684,4250 | 112,9698 | ø12 - 100 | 773,1936 | AMAN | 556,2730 | 111,3968 | 694,0898 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 5 | 800 | 760 | 640000 | 407,7294 | 1197,0592 | 679,5490 | 113,7804 | ø12 - 100 | 773,1936 | AMAN | 550,6657 | 108,9589 | 709,6197 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 6 | 800 | 760 | 640000 | 408,0869 | 1044,5131 | 680,1448 | 113,6807 | ø12 - 100 | 773,1936 | AMAN | 545,0587 | 102,9646 | 750,9315 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 7 | 800 | 760 | 640000 | 365,1028 | 891,9736 | 608,5046 | 127,0645 | ø12 - 100 | 773,1936 | AMAN | 539,4520 | 143,9240 | 537,2236 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 8 | 800 | 760 | 640000 | 336,0256 | 739,4401 | 560,0427 | 138,0597 | ø12 - 100 | 773,1936 | AMAN | 533,8455 | 169,8177 | 455,3080 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 9 | 800 | 760 | 640000 | 341,3244 | 566,9116 | 568,8739 | 135,9165 | ø12 - 100 | 773,1936 | AMAN | 528,2392 | 158,4711 | 487,9083 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 10 | 800 | 760 | 640000 | 262,7233 | 434,3872 | 437,8721 | 176,5798 | ø12 - 100 | 773,1936 | AMAN | 522,6330 | 238,0161 | 324,8493 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 11 | 800 | 760 | 640000 | 229,7449 | 281,8650 | 382,9082 | 201,9266 | ø12 - 100 | 773,1936 | AMAN | 517,0269 | 268,1365 | 288,3582 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 12 | 800 | 760 | 640000 | 71,0158 | 129,3495 | 118,3597 | 653,2575 | ø12 - 100 | 773,1936 | AMAN | 511,4210 | 434,4872 | 177,9554 | ø12 - 100 | 773,1936 | AMAN | | |
| B | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 760 | 640000 | 152,4116 | 2013,6145 | 254,0193 | 304,3838 | ø12 - 90 | 859,104 | AMAN | 580,6790 | 415,5664 | 186,0578 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 2 | 800 | 760 | 640000 | 503,6170 | 1913,2279 | 839,3617 | 92,1168 | ø12 - 90 | 859,104 | AMAN | 576,9892 | 31,4040 | 2462,0830 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 3 | 800 | 760 | 640000 | 424,6641 | 1747,4965 | 707,7735 | 109,2431 | ø12 - 90 | 859,104 | AMAN | 570,8976 | 110,8448 | 697,5461 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 4 | 800 | 760 | 640000 | 410,6550 | 1576,7760 | 684,4250 | 112,9698 | ø12 - 100 | 773,1936 | AMAN | 564,6226 | 119,7464 | 645,6928 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 5 | 800 | 760 | 640000 | 407,7294 | 1401,0528 | 679,5490 | 113,7804 | ø12 - 100 | 773,1936 | AMAN | 558,1637 | 116,4569 | 663,9314 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 6 | 800 | 760 | 640000 | 408,0869 | 1220,2989 | 680,1448 | 113,6807 | ø12 - 100 | 773,1936 | AMAN | 551,5199 | 109,4258 | 706,5919 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 7 | 800 | 760 | 640000 | 365,1028 | 1034,4900 | 608,5046 | 127,0645 | ø12 - 100 | 773,1936 | AMAN | 544,6903 | 149,1623 | 518,3572 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 8 | 800 | 760 | 640000 | 336,0256 | 843,6022 | 560,0427 | 138,0597 | ø12 - 100 | 773,1936 | AMAN | 537,6741 | 173,6463 | 445,2693 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 9 | 800 | 760 | 640000 | 341,3244 | 666,2999 | 568,8739 | 135,9165 | ø12 - 100 | 773,1936 | AMAN | 531,1572 | 161,3891 | 479,0867 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 10 | 800 | 760 | 640000 | 262,7233 | 434,3872 | 437,8721 | 176,5798 | ø12 - 100 | 773,1936 | AMAN | 522,6330 | 238,0161 | 324,8493 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 11 | 800 | 760 | 640000 | 229,7449 | 281,8650 | 382,9082 | 201,9266 | ø12 - 100 | 773,1936 | AMAN | 517,0269 | 268,1365 | 288,3582 | ø12 - 100 | 773,1936 | AMAN | | |
| Lantai 12 | 800 | 760 | 640000 | 71,0158 | 129,3495 | 104,7308 | 738,2678 | ø12 - 100 | 773,1936 | AMAN | 511,4210 | 443,3460 | 174,3996 | ø12 - 100 | 773,1936 | AMAN | | |

| Lanjutan | Di Luar Sendi Plastik | | | | | | | | | | | | Dalam Sendi Plastik | | | | | | | | | | | |
|-----------|-----------------------|-----|-----------------|----------|-----------|----------|----------|-----------|----------|------|--------------------|-----------|---------------------|-----------|----------|------|--------------------|-----------|-----|----|----|----|----|----|
| | KOLOM | | | b | d | Ag | Vu,k | Nu,k | Vs | S | Sengkang Terpasang | Vs pasang | Cek | Vc | Vs | S | Sengkang Terpasang | Vs pasang | Cek | | | | | |
| | mm | mm | mm ² | | | | | | | | | | | | | | | | | mm | mm | mm | mm | mm |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | | | | | | | | |
| C | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 760 | 640000 | 102,7963 | 3398,0442 | 171,3272 | 451,2964 | ø12 - 100 | 773,1936 | AMAN | 631,5650 | 520,2023 | 148,6332 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 2 | 800 | 760 | 640000 | 339,6723 | 3272,3913 | 566,1204 | 136,5776 | ø12 - 100 | 773,1936 | AMAN | 626,9465 | 258,9682 | 298,5670 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 3 | 800 | 760 | 640000 | 333,9151 | 2992,9539 | 556,5252 | 138,9324 | ø12 - 100 | 773,1936 | AMAN | 616,6755 | 306,3859 | 303,2915 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 4 | 800 | 760 | 640000 | 308,7436 | 2703,1791 | 514,5727 | 150,2594 | ø12 - 100 | 773,1936 | AMAN | 606,0246 | 271,5523 | 284,7310 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 5 | 800 | 760 | 640000 | 300,8375 | 2403,0650 | 501,3958 | 154,2082 | ø12 - 100 | 773,1936 | AMAN | 594,9936 | 269,0863 | 287,3403 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 6 | 800 | 760 | 640000 | 299,0938 | 2092,6124 | 498,4897 | 155,1072 | ø12 - 100 | 773,1936 | AMAN | 583,5826 | 259,5643 | 297,8813 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 7 | 800 | 760 | 640000 | 266,2779 | 1565,8531 | 443,7966 | 174,2225 | ø12 - 100 | 773,1936 | AMAN | 564,2211 | 275,7533 | 280,3932 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 8 | 800 | 760 | 640000 | 250,6736 | 1101,3350 | 417,7893 | 185,0678 | ø12 - 100 | 773,1936 | AMAN | 547,1473 | 275,5842 | 280,5653 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 9 | 800 | 760 | 640000 | 256,5298 | 714,8516 | 427,5496 | 180,8430 | ø12 - 100 | 773,1936 | AMAN | 532,9417 | 255,0345 | 303,1722 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 10 | 800 | 760 | 640000 | 168,8497 | 434,3872 | 281,4162 | 274,7509 | ø12 - 100 | 773,1936 | AMAN | 522,6330 | 339,7124 | 227,6024 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 11 | 800 | 760 | 640000 | 142,3699 | 281,8650 | 237,2831 | 325,8528 | ø12 - 100 | 773,1936 | AMAN | 517,0269 | 362,7929 | 213,1226 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 12 | 800 | 760 | 640000 | 71,0158 | 129,3495 | 118,3597 | 653,2575 | ø12 - 100 | 773,1936 | AMAN | 511,4210 | 434,4872 | 177,9554 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| D | | | | | | | | | | | | | | | | | | | | | | | | |
| Lantai 1 | 800 | 760 | 640000 | 102,7963 | 3398,0442 | 171,3272 | 451,2964 | ø12 - 100 | 773,1936 | AMAN | 631,5650 | 520,2023 | 148,6332 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 2 | 800 | 760 | 640000 | 339,6723 | 3272,3913 | 566,1204 | 136,5776 | ø12 - 100 | 773,1936 | AMAN | 626,9465 | 258,9682 | 298,5670 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 3 | 800 | 760 | 640000 | 286,4212 | 2992,9539 | 477,3687 | 161,9699 | ø12 - 100 | 773,1936 | AMAN | 616,6755 | 306,3859 | 252,3594 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 4 | 800 | 760 | 640000 | 276,9726 | 2703,1791 | 461,6209 | 167,4954 | ø12 - 100 | 773,1936 | AMAN | 606,0246 | 305,9710 | 252,7016 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 5 | 800 | 760 | 640000 | 274,9994 | 2403,0650 | 458,3323 | 168,6972 | ø12 - 100 | 773,1936 | AMAN | 594,9936 | 297,0776 | 260,2665 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 6 | 800 | 760 | 640000 | 275,2405 | 2092,6124 | 458,7341 | 168,5494 | ø12 - 100 | 773,1936 | AMAN | 583,5826 | 285,4054 | 270,9106 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 7 | 800 | 760 | 640000 | 246,9206 | 1565,8531 | 411,5344 | 187,8807 | ø12 - 100 | 773,1936 | AMAN | 564,2211 | 296,7238 | 260,5769 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 8 | 800 | 760 | 640000 | 227,7992 | 1101,3350 | 379,6653 | 203,6514 | ø12 - 100 | 773,1936 | AMAN | 547,1473 | 300,3648 | 257,4182 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 9 | 800 | 760 | 640000 | 231,3913 | 714,8516 | 385,6522 | 200,4899 | ø12 - 100 | 773,1936 | AMAN | 532,9417 | 282,2678 | 273,9220 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 10 | 800 | 760 | 640000 | 168,8497 | 434,3872 | 281,4162 | 274,7509 | ø12 - 100 | 773,1936 | AMAN | 522,6330 | 339,7124 | 227,6024 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 11 | 800 | 760 | 640000 | 142,3699 | 281,8650 | 237,2831 | 325,8528 | ø12 - 100 | 773,1936 | AMAN | 517,0269 | 362,7929 | 213,1226 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |
| Lantai 12 | 800 | 760 | 640000 | 62,8385 | 129,3495 | 104,7308 | 736,2678 | ø12 - 100 | 773,1936 | AMAN | 511,4210 | 443,4460 | 174,3996 | ø12 - 100 | 773,1936 | AMAN | | | | | | | | |

Tabel 4.4.1. Penulangan Sengkang Joint untuk R/W 2/5 Baru

| Kolom | Penulangan Geser Horizontal | | | | | | | | | | | | | | |
|-----------|-----------------------------|-----|-----|-----|-----------|-----------|-----------|-----------|----------|-----------|-----------|-------------|-----------------|-------------|------------|
| | bj | hc | Lki | Lka | Mkap.b.ki | Mkap.b.ka | Vj.h | Vj.v | Vc.h | Vs.h | As.h | As tersedia | | Jumlah Tul. | Jarak Tul. |
| | | | | | | | | | | | | mm | mm ² | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| A | | | | | | | | | | | | | | | |
| Lantai 1 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 182,1308 | 1676,0441 | 5586,8137 | 4 Ø 12 | 452,16 | 7 | 80 |
| Lantai 2 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 93,5897 | 1764,5852 | 5881,9508 | 4 Ø 12 | 452,16 | 7 | 80 |
| Lantai 3 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 0,0000 | 1858,1749 | 6193,9164 | 4 Ø 12 | 452,16 | 7 | 80 |
| Lantai 4 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 0,0000 | 1858,1749 | 6193,9164 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 5 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 0,0000 | 1858,1749 | 6193,9164 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 6 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 0,0000 | 1858,1749 | 6193,9164 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 7 | 0,6 | 0,8 | 5 | 5 | 386,6401 | 813,8150 | 1462,3129 | 1949,7506 | 0,00 | 1462,3129 | 4874,3765 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 8 | 0,6 | 0,8 | 5 | 5 | 386,6401 | 813,8150 | 1462,3129 | 1949,7506 | 0,00 | 1462,3129 | 4874,3765 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 9 | 0,6 | 0,8 | 5 | 5 | 386,6401 | 813,8150 | 1462,3129 | 1949,7506 | 0,00 | 1462,3129 | 4874,3765 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 10 | 0,6 | 0,8 | 5 | 5 | 292,0765 | 475,9126 | 884,5688 | 1179,4250 | 0,00 | 884,5688 | 2948,5625 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 11 | 0,6 | 0,8 | 5 | 5 | 292,0765 | 475,9126 | 884,5688 | 1179,4250 | 0,00 | 884,5688 | 2948,5625 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 12 | 0,6 | 0,8 | 5 | 5 | 0,0000 | 197,2651 | 224,8611 | 299,8148 | 0,00 | 224,8611 | 749,5370 | 4 Ø 12 | 452,16 | 5 | 100 |
| B | | | | | | | | | | | | | | | |
| Lantai 1 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 182,1308 | 1676,0441 | 5586,8137 | 4 Ø 12 | 452,16 | 7 | 80 |
| Lantai 2 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 93,5897 | 1764,5852 | 5881,9508 | 4 Ø 12 | 452,16 | 7 | 80 |
| Lantai 3 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 0,0000 | 1858,1749 | 6193,9164 | 4 Ø 12 | 452,16 | 7 | 80 |
| Lantai 4 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 0,0000 | 1858,1749 | 6193,9164 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 5 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 0,0000 | 1858,1749 | 6193,9164 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 6 | 0,6 | 0,8 | 5 | 5 | 481,1544 | 996,8893 | 1858,1749 | 2477,5665 | 0,0000 | 1858,1749 | 6193,9164 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 7 | 0,6 | 0,8 | 5 | 5 | 386,6401 | 813,8150 | 1462,3129 | 1949,7506 | 0,00 | 1462,3129 | 4874,3765 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 8 | 0,6 | 0,8 | 5 | 5 | 386,6401 | 813,8150 | 1462,3129 | 1949,7506 | 0,00 | 1462,3129 | 4874,3765 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 9 | 0,6 | 0,8 | 5 | 5 | 386,6401 | 813,8150 | 1462,3129 | 1949,7506 | 0,00 | 1462,3129 | 4874,3765 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 10 | 0,6 | 0,8 | 5 | 5 | 292,0765 | 475,9126 | 884,5688 | 1179,4250 | 0,00 | 884,5688 | 2948,5625 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 11 | 0,6 | 0,8 | 5 | 5 | 292,0765 | 475,9126 | 884,5688 | 1179,4250 | 0,00 | 884,5688 | 2948,5625 | 4 Ø 12 | 452,16 | 5 | 100 |
| Lantai 12 | 0,6 | 0,8 | 5 | 5 | 0,0000 | 197,2651 | 224,8611 | 299,8148 | 0,00 | 224,8611 | 749,5370 | 4 Ø 12 | 452,16 | 5 | 100 |

| Kolum | Penulangan Geser Horizontal | | | | | | | | | | | | | | | |
|-----------|-----------------------------|-----|-----|-----|------------|------------|-----------|-----------|----------|-----------|-----------|------------|-------------|-----------------|-------------|------------|
| | bj | hc | Lki | Lka | Mkap, b ki | Mkap, b ka | Vj, h | Vj, v | Vc, h | Vs, h | As, h | Ø Sengkang | As tersedia | | Jumlah Tul. | Jarak Tul. |
| | | | | | | | | | | | | | mm | mm ² | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | |
| C | | | | | | | | | | | | | | | | |
| Lantai 1 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 536,3647 | 774,2680 | 2580,8932 | 4 Ø 12 | 452,16 | 6 | 90 | |
| Lantai 2 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 517,2839 | 793,3488 | 2644,4959 | 4 Ø 12 | 452,16 | 6 | 90 | |
| Lantai 3 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 472,0939 | 838,5388 | 2795,1292 | 4 Ø 12 | 452,16 | 6 | 90 | |
| Lantai 4 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 420,1293 | 890,5033 | 2968,3443 | 4 Ø 12 | 452,16 | 6 | 90 | |
| Lantai 5 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 358,4556 | 952,1771 | 3173,9236 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 6 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 280,7454 | 1029,8872 | 3432,9574 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 7 | 0,6 | 0,8 | 0 | 5 | 0 | 813,8150 | 1023,5277 | 1364,7035 | 0,00 | 1023,5277 | 3411,7588 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 8 | 0,6 | 0,8 | 0 | 5 | 0 | 813,8150 | 1023,5277 | 1364,7035 | 0,00 | 1023,5277 | 3411,7588 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 9 | 0,6 | 0,8 | 0 | 5 | 0 | 813,8150 | 1023,5277 | 1364,7035 | 0,00 | 1023,5277 | 3411,7588 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 10 | 0,6 | 0,8 | 0 | 5 | 0 | 475,9126 | 553,7307 | 738,3076 | 0,00 | 553,7307 | 1845,7691 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 11 | 0,6 | 0,8 | 0 | 5 | 0 | 475,9126 | 553,7307 | 738,3076 | 0,00 | 553,7307 | 1845,7691 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 12 | 0,6 | 0,8 | 0 | 5 | 0 | 197,2651 | 224,8611 | 299,8148 | 0,00 | 224,8611 | 749,5370 | 4 Ø 12 | 452,16 | 5 | 100 | |
| D | | | | | | | | | | | | | | | | |
| Lantai 1 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 536,3647 | 774,2680 | 2580,8932 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 2 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 517,2839 | 793,3488 | 2644,4959 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 3 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 472,0939 | 838,5388 | 2795,1292 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 4 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 420,1293 | 890,5033 | 2968,3443 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 5 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 358,4556 | 952,1771 | 3173,9236 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 6 | 0,6 | 0,8 | 0 | 5 | 0 | 996,8893 | 1310,6326 | 1747,5102 | 280,7454 | 1029,8872 | 3432,9574 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 7 | 0,6 | 0,8 | 0 | 5 | 0 | 813,8150 | 1023,5277 | 1364,7035 | 0,00 | 1023,5277 | 3411,7588 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 8 | 0,6 | 0,8 | 0 | 5 | 0 | 813,8150 | 1023,5277 | 1364,7035 | 0,00 | 1023,5277 | 3411,7588 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 9 | 0,6 | 0,8 | 0 | 5 | 0 | 813,8150 | 1023,5277 | 1364,7035 | 0,00 | 1023,5277 | 3411,7588 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 10 | 0,6 | 0,8 | 0 | 5 | 0 | 475,9126 | 553,7307 | 738,3076 | 0,00 | 553,7307 | 1845,7691 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 11 | 0,6 | 0,8 | 0 | 5 | 0 | 475,9126 | 553,7307 | 738,3076 | 0,00 | 553,7307 | 1845,7691 | 4 Ø 12 | 452,16 | 5 | 100 | |
| Lantai 12 | 0,6 | 0,8 | 0 | 5 | 0 | 197,2651 | 224,8611 | 299,8148 | 0,00 | 224,8611 | 749,5370 | 4 Ø 12 | 452,16 | 5 | 100 | |

LAMPIRAN 5
HASIL PERHITUNGAN
PONDASI

Tabel 5.1.1 Data Tanah CPT dan N-SPT

| Depth | N-Value | qc | JHL |
|-------|---------|--------------------|-------|
| | | kg/cm ² | kg/cm |
| -2 | 2 | 6 | |
| -3 | 2 | 3 | |
| -4 | 2 | 4 | |
| -5 | 3 | 8 | |
| -6 | 3 | 10 | |
| -7 | 4 | 28 | |
| -8 | 4 | 10 | |
| -9 | 13 | 20 | |
| -10 | 13 | 24 | |
| -11 | 12 | 20 | |
| -12 | 21 | 76 | |
| -13 | 50 | 90 | |
| -13,8 | 82 | 94 | |
| -14 | 90 | 90 | |
| -15 | 100 | 136 | |
| -16 | 100 | 172 | |
| -17 | 100 | 180 | 1680 |
| -18 | 100 | 200 | |
| -18,2 | 100 | 230 | |

Tabel 5.1.2 Kapasitas Tiang Tunggal Cara N-SPT

| | | |
|----------------------|-----------------|-------------------|
| Tahanan Ujung (Qp) | | |
| Ap= | 0,09 | m ² |
| Np= | 96,0000 | |
| qp= | 192000,0000 | kN/m ² |
| qL= | 38400,0000 | kN/m ² |
| q kecil = | 38400,0000 | kN/m ² |
| Qp= | 3456,0000 | kN |
| Tahanan Selimut (Qs) | | |
| As= | 18 | m ² |
| Ns= | 35,3529 | |
| fav= | 70,7059 | kN/m ² |
| Qs= | 1272,7059 | kN |
| Qu= | 4728,7059 | kN |
| Q net= | 1576,2353 | kN |
| | 160,6764 | ton |

Tabel 5.1.3 Kapasitas Tiang Tunggal Cara CPT

| | | |
|----------------------|-----------------|--------------------|
| Tahanan Ujung (Qp) | | |
| qc= | 157,4286 | kg/cm ² |
| Ap= | 900 | cm ² |
| Qp= | 141685,7143 | kg |
| | 141,6857 | ton |
| Tahanan Selimut (Qs) | | |
| As= | 120 | cm |
| JHP= | 1680 | kg/cm |
| Qs= | 201600 | kg |
| | 201,6 | ton |
| Qu= | 343,2857 | ton |
| Q net= | 114,4286 | ton |

Tabel 5.2.1 Data Tanah Laboratorium

| Tanah | Cu kg/cm ² | Gs | γ_b t/m ³ | ϕ |
|-----------|--------------------------|--------|--------------------------------|--------|
| Lapisan 1 | 0,4700 | 2,5370 | 1,8460 | 2 |
| Lapisan 2 | 0,4587 | 2,6450 | 2,0000 | 2 |
| Lapisan 3 | 0,4077 | 2,6190 | 1,8210 | 2,5 |
| Lapisan 4 | 0,5097 | 2,6700 | 2,1100 | 3 |
| Lapisan 5 | 0,8359 | 2,6120 | 1,8110 | 2,5 |
| Lapisan 6 | 1,9878 | 2,6080 | 1,9170 | 5,5 |
| Lapisan 7 | 2,5484 | 2,6010 | 2,1800 | 5,5 |

Tabel 5.2.2 Tahanan Selimut Metode α

| Depth | | ΔL m | $A_s = A_p \cdot \Delta L$ m ² | Cu kN/m ² | α | $Q_s = A_s \cdot \alpha \cdot C_u$ kN |
|---------|----|-----------------|----------------------------------------------|-------------------------|----------|------------------------------------------|
| 2 | 3 | 1 | 1,2 | 45 | 1 | 54 |
| 3 | 7 | 4 | 4,8 | 40 | 1 | 192 |
| 7 | 9 | 2 | 2,4 | 50 | 1 | 120 |
| 9 | 12 | 3 | 3,6 | 82 | 0,65 | 191,88 |
| 12 | 15 | 3 | 3,6 | 195 | 0,28 | 196,56 |
| 15 | 17 | 2 | 2,4 | 250 | 0,24 | 144 |
| Qs(kN) | | | | | | 898,4400 |
| Qs(ton) | | | | | | 91,5841 |

Tabel 5.2.3 Tahanan Selimut Metode λ

| | | |
|-----------------|----------|------------------|
| $\sigma_1 =$ | 2,0000 | t/m ² |
| $\sigma_2 =$ | 9,2840 | t/m ² |
| $\sigma_3 =$ | 13,5040 | t/m ² |
| $\sigma_4 =$ | 18,9370 | t/m ² |
| $\sigma_5 =$ | 24,6880 | t/m ² |
| $\sigma_6 =$ | 29,0480 | t/m ² |
| σ rata2= | 14,2794 | t/m ² |
| A1= | 1,0000 | t/m |
| A2= | 22,5680 | t/m |
| A3= | 22,7880 | t/m |
| A4= | 48,6615 | t/m |
| A5= | 65,4375 | t/m |
| A6= | 53,7360 | t/m |
| $\Sigma A_i =$ | 214,1910 | t/m |

Cu rata2= 109,0667 kN/m²
11,1179 t/m²

Dari Grafik didapat nilai Lamda (λ)

$\lambda =$ 0,21

$f_s =$ 7,6682 t/m²

$Q_s =$ 138,0275 ton

Tabel 5.2.4 Tahanan Selimut Metode β

| Depth | | ΔL | ϕ | $1 - \sin \phi$ | $\tan \phi$ | σ_v | f_{av} | $f_{av L}$ |
|-------------------|----|------------|--------|-----------------|-------------|------------|----------|------------|
| 2 | 3 | 1 | 2 | 0,9651 | 0,0349 | 1,0000 | 0,0337 | 0,0337 |
| 3 | 7 | 4 | 2,5 | 0,9564 | 0,0437 | 5,6420 | 0,2356 | 0,2356 |
| 7 | 9 | 2 | 3 | 0,9477 | 0,0524 | 11,3940 | 0,5659 | 1,1318 |
| 9 | 12 | 3 | 2,5 | 0,9564 | 0,0437 | 16,2205 | 0,6773 | 2,0319 |
| 12 | 15 | 3 | 5,5 | 0,9042 | 0,0963 | 21,8125 | 1,8990 | 5,6970 |
| 15 | 17 | 2 | 5,5 | 0,9042 | 0,0963 | 26,8680 | 2,3391 | 4,6783 |
| $\Sigma f_{av L}$ | | | | | | | | 14,5150 |

$Q_s =$ 17,4180 ton

Dari ketiga Q_s , diambil rata-rata dari 2 nilai yang saling berdekatan, yaitu Q_s Alfa dan Q_s Lamda

$Q_s =$ 114,805803 ton

Mencari tahanan Ujung (Q_p)

$Q_p =$ 202,5000 kN
20,6422 ton

$Q_u =$ 135,4480 ton

$Q_{net} =$ 45,1493 ton

Tabel 5.3 Daya Dukung Kelompok Tiang

| Keterangan | Satuan | R/W 1/1 | R/W 1/6 | R/W 2/2 | R/W 2/5 |
|---------------------------------------|--------|------------|------------|------------|------------|
| | | LAMA | BARU | LAMA | BARU |
| Q net terpakai | ton | 114,4286 | 114,4286 | 114,4286 | 114,4286 |
| P kolom | ton | 322,9357 | 272,2156 | 172,8896 | 184,2327 |
| Jml tiang= | bh | 2,8222 | 2,3789 | 1,5109 | 1,6100 |
| Jml tiang pakai= | bh | 9 | 9 | 9 | 9 |
| m= | bh | 3 | 3 | 3 | 3 |
| n= | bh | 3 | 3 | 3 | 3 |
| s=2,5D= | m | 0,90 | 0,90 | 0,90 | 0,90 |
| Lg= | m | 2,10 | 2,10 | 2,10 | 2,10 |
| Bg= | m | 2,10 | 2,10 | 2,10 | 2,10 |
| Tiang-Tepi=1,5D= | m | 0,60 | 0,60 | 0,60 | 0,60 |
| L= | m | 3,30 | 3,30 | 3,30 | 3,30 |
| B= | m | 3,30 | 3,30 | 3,30 | 3,30 |
| ΣQ_{ui} = | kN | 9908,4600 | 9908,4600 | 9908,4600 | 9908,4600 |
| | ton | 1010,0367 | 1010,0367 | 1010,0367 | 1010,0367 |
| Ltiang/Bg= | | 7,1429 | 7,1429 | 7,1429 | 7,1429 |
| Lg/Bg= | | 1 | 1 | 1 | 1 |
| Dari Grafik Nc*= ΣQ_{ug} = | kN | 23664,9000 | 23664,9000 | 23664,9000 | 23664,9000 |
| | ton | 2412,3242 | 2412,3242 | 2412,3242 | 2412,3242 |
| ΣQ_u terkecil= | ton | 1010,0367 | 1010,0367 | 1010,0367 | 1010,0367 |
| ΣQ_u aman= | ton | 336,6789 | 336,6789 | 336,6789 | 336,6789 |
| Maka, | | AMAN | AMAN | AMAN | AMAN |

Tabel 5.4.1 Perhitungan Tebal Poer

| Keterangan | satuan | R/W 1/1lama | R/W 1/6baru | R/W 2/2lama | R/W 2/5baru |
|----------------------|--------|-------------|-------------|-------------|-------------|
| tebal poer= | m | 1,0000 | 1,0000 | 1,0000 | 1,0000 |
| D= | mm | 906,0000 | 906,0000 | 906,0000 | 906 |
| tebal selimut= | mm | 75,0000 | 75,0000 | 75,0000 | 75 |
| $\Sigma x2=$ | kN | 6,0750 | 6,0750 | 6,0750 | 6,0750 |
| $\Sigma y2=$ | kN | 6,0750 | 6,0750 | 6,0750 | 6,0750 |
| | | 0,0000 | 0,0000 | | |
| $\Sigma P=$ | kN | 3613,5309 | 3115,9670 | 2141,5788 | 2252,8543 |
| Pmax= | kN | 461,7533 | 395,1961 | 268,9876 | 322,2746 |
| Pmin= | kN | 341,2536 | 297,2410 | 206,9188 | 178,3597 |
| Kontrol Geser 1 arah | | | | | |
| Vu= | kN | 1385,2598 | 1185,5882 | 806,9628 | 966,8239 |
| Vc= | kN | 2491,5000 | 2491,5000 | 2491,5000 | 2491,5000 |
| $\Phi Vc=$ | kN | 1494,9000 | 1494,9000 | 1494,9000 | 1494,9000 |
| kontrol | | | | | |
| $\Phi Vc > Vu$ | | Aman | Aman | Aman | Aman |
| Kontrol Geser | | | | | |
| 2 Arah (Geser Pons) | | | | | |
| Pmin= | kN | 341,2536 | 297,2410 | 206,9188 | 178,3597 |
| P1= | kN | 381,4202 | 329,8927 | 227,6084 | 226,3313 |
| P2= | kN | 421,5867 | 362,5444 | 248,2980 | 274,3030 |
| Pmax= | kN | 461,7533 | 395,1961 | 268,9876 | 322,2746 |
| Vux= | kN | 3212,0275 | 2769,7484 | 1903,6256 | 2002,5371 |
| Vuy= | kN | 3212,0275 | 2769,7484 | 1903,6256 | 2002,5371 |
| Vc= | kN | 14730,8889 | 14730,8889 | 14730,8889 | 14730,8889 |
| Vc kontrol= | kN | 10606,2400 | 10606,2400 | 10606,2400 | 10606,2400 |
| Vc pakai= | kN | 10606,2400 | 10606,2400 | 10606,2400 | 10606,2400 |
| $\Phi Vc=$ | kN | 6363,7440 | 6363,7440 | 6363,7440 | 6363,7440 |
| kontrol | | | | | |
| $\Phi Vc > Vux$ | | Aman | Aman | Aman | Aman |
| $\Phi Vc > Vuy$ | | Aman | Aman | Aman | Aman |

Tabel 5.4.2 Penulangan Sengkang Poer

| Keterangan | Satuan | R/W 1/1 | R/W 1/6 | R/W 2/2 | R/W 2/5 |
|--------------------------------|-----------------|-----------|-----------|----------|-----------|
| | | LAMA | BARU | LAMA | BARU |
| Y1= | m | 0,5 | 0,5 | 0,5 | 0,5 |
| X1= | m | 0,45 | 0,45 | 0,5 | 0,5 |
| β = | | 0,85 | 0,85 | 0,85 | 0,85 |
| b= | | 1000 | 1000 | 1000 | 1000 |
| Momen Lentur Arah Y | | | | | |
| Mu,y= | kNm | 230,8766 | 197,5980 | 134,4938 | 161,1373 |
| d= | mm | 906,0000 | 906,0000 | 906,0000 | 906,0000 |
| ρ min= | | 0,0035 | 0,0035 | 0,0035 | 0,0035 |
| ρ b= | | 0,0271 | 0,0271 | 0,0271 | 0,0271 |
| ρ max= | | 0,0203 | 0,0203 | 0,0203 | 0,0203 |
| Rn= | Mpa | 0,3516 | 0,3009 | 0,2048 | 0,2454 |
| m= | | 18,8235 | 18,8235 | 18,8235 | 18,8235 |
| ρ perlu= | | 0,0009 | 0,0008 | 0,0005 | 0,0006 |
| 1,33 ρ perlu= | | 0,0012 | 0,0010 | 0,0007 | 0,0008 |
| kontrol | | | | | |
| ρ perlu < ρ min | | | | | |
| 1,33 ρ perlu < ρ min | | | | | |
| ρ pakai= | | 0,0012 | 0,0010 | 0,0007 | 0,00082 |
| As perlu= | mm ² | 1068,0501 | 912,9861 | 619,9890 | 743,53104 |
| jarak antar tul (S)= | | 265,3293 | 310,3935 | 457,0807 | 381,13405 |
| digunakan Φ 22 | | | | | |
| (S) pakai | | 260 | 260 | 300 | 300 |
| As ada= | mm ² | 1089,9423 | 1089,9423 | 944,6167 | 944,6167 |
| As ada > As perlu | | | | | |
| Cek | | | | | |
| a= | kNm | 20,5166 | 20,5166 | 17,7810 | 17,7810 |
| Mn= | kNm | 390,5227 | 390,5227 | 338,9698 | 338,9698 |
| Φ Mn= | kNm | 312,4182 | 312,4182 | 271,1759 | 271,1759 |
| kontrol | | | | | |
| Φ Mn > Mu | | Aman | Aman | Aman | Aman |
| Momen Lentur Arah X | | | | | |
| Mu,x= | kNm | 207,7890 | 177,8382 | 134,4938 | 161,1373 |
| d= | mm | 906,0000 | 906,0000 | 906,0000 | 906,0000 |
| Rn= | Mpa | 0,3164 | 0,2708 | 0,2048 | 0,2454 |
| m= | | 18,8235 | 18,8235 | 18,8235 | 18,8235 |
| ρ perlu= | | 0,0008 | 0,0007 | 0,0005 | 0,0006 |
| 1,33 ρ perlu= | | 0,0011 | 0,0009 | 0,0007 | 0,0008 |
| kontrol | | | | | |
| ρ perlu < ρ min | | | | | |
| 1,33 ρ perlu < ρ min | | | | | |
| ρ pakai= | | 0,0011 | 0,0009 | 0,0007 | 0,0008 |
| As perlu= | mm ² | 960,4310 | 821,0939 | 619,9890 | 743,5310 |
| jarak antar tul (S)= | | 295,0602 | 345,1310 | 457,0807 | 381,1341 |
| digunakan Φ 22 | | | | | |
| (S) pakai | | 290 | 290 | 300 | 300 |
| As ada= | mm ² | 977,1897 | 977,1897 | 944,6167 | 944,6167 |
| As ada > As perlu | | | | | |
| Cek | | | | | |
| a= | kNm | 18,3942 | 18,3942 | 17,7810 | 17,7810 |
| Mn= | kNm | 350,5386 | 350,5386 | 338,9698 | 338,9698 |
| Φ Mn= | kNm | 280,4309 | 280,4309 | 271,1759 | 271,1759 |
| kontrol | | | | | |
| Φ Mn > Mu | | Aman | Aman | Aman | Aman |