

## BAB VI

### KESIMPULAN DAN SARAN

#### 6.1 Kesimpulan

Setelah melakukan analisis dan perancangan pada struktur Gedung *Konominium* di Jakarta, dapat diambil beberapa kesimpulan seperti yang tercantum di bawah ini.

1. Dalam perencanaan atap, digunakan rangka kuda-kuda baja. Untuk batang kuda-kuda digunakan profil *double* siku dengan ukuran 2Lx90x90x7 , sedangkan untuk gording digunakan profil C 100x50x20x3,2 .
2. Pelat tangga tipe 1 dan 2 digunakan tebal 120 mm dengan tulangan D13-200 pada tumpuan dan D13-100 pada lapangan.
3. Pelat lantai dan atap digunakan tebal 130 mm. Pelat atap dua arah dengan tulangan P10-100 untuk arah X dan tulangan P10-100 untuk arah Y,. Pelat lantai dua arah dengan tulangan P10-100 untuk arah X dan tulangan P10-100 untuk arah Y
4. Balok induk B5 as 5 Lantai dasar digunakan dimensi 450/700 menggunakan tulangan pokok atas 12D25 dan tulangan pokok bawah 6D25 utuk daerah tumpuan, sedangkan tulangan pokok atas 3D25 dan tulangan pokok bawah 5D25 untuk daerah lapangan. Untuk tulangan sengkang digunakan 5P10-80 pada daerah sendi plastis dan 5P10-90 untuk daerah luar sendi plastis.
5. Kolom struktur C45 As 5 Lantai digunakan dimensi 800x800 dengan jumlah tulangan longitudinal 20D25, dengan 6D25 pada setiap sisinya. Untuk

tulangan geser digunakan 4D13-100 pada daerah sendi plastis dan 4D13-150 pada daerah diluar sendi palstis.

6. Dalam perencanaan pondasi, dimensi poer yang digunakan adalah 4,5 m x 4,5 m, dengan tebal poer 0,9 m. Tulangan yang digunakan untuk lapisan bawah poer adalah D25-100 untuk arah memanjang dan D25-100 untuk arah lebar, sedangkan untuk lapisan atas poer adalah D25-200 untuk arah memanjang dan D25-200 untuk arah lebar. Jumlah tiang yang digunakan 5 buah dengan diameter 0,6 m dengan tulangan 8D25 dan untuk tulangan geser digunakan tulangan spiral D13-50

## **6.2 Saran**

Saran-saran yang dapat diberikan penulis dari hasil Tugas Akhir yang disusun tercantum seperti di bawah ini.

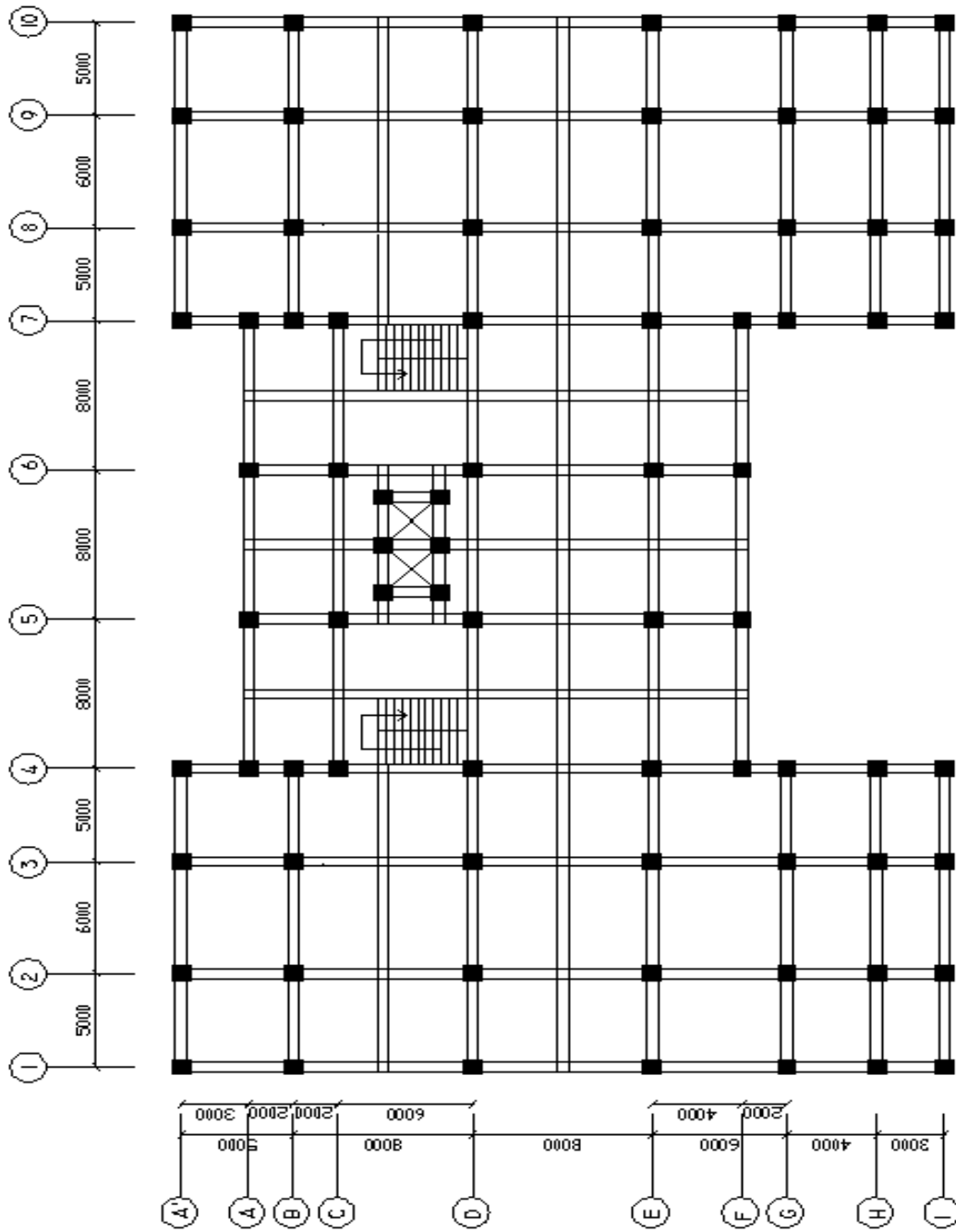
1. Pada perencanaan estimasi tebal pelat yang digunakan adalah 130 mm sehingga memenuhi syarat aman sesuai dengan peraturan yang terdapat pada SNI 03-2847-2002. Tebal pelat yang digunakan tersebut dapat ditambah, namun harus mengecek kontrol lendutan izin maksimum pada pelat tersebut sesuai dengan peraturan yang terdapat pada tabel 9 SNI 03-2847-2002.
2. Pada perencanaan estimasi tinggi balok yang digunakan adalah 700 mm sehingga memenuhi syarat aman sesuai dengan tabel 8 pada SNI 03-2847-2002. Tinggi balok yang digunakan tersebut dapat dikurangi, namun harus mengecek kontrol lendutan izin maksimum pada balok yang ditinjau

sesuai dengan peraturan yang terdapat pada pasal 11.5.2 SNI 03-2847-2002.



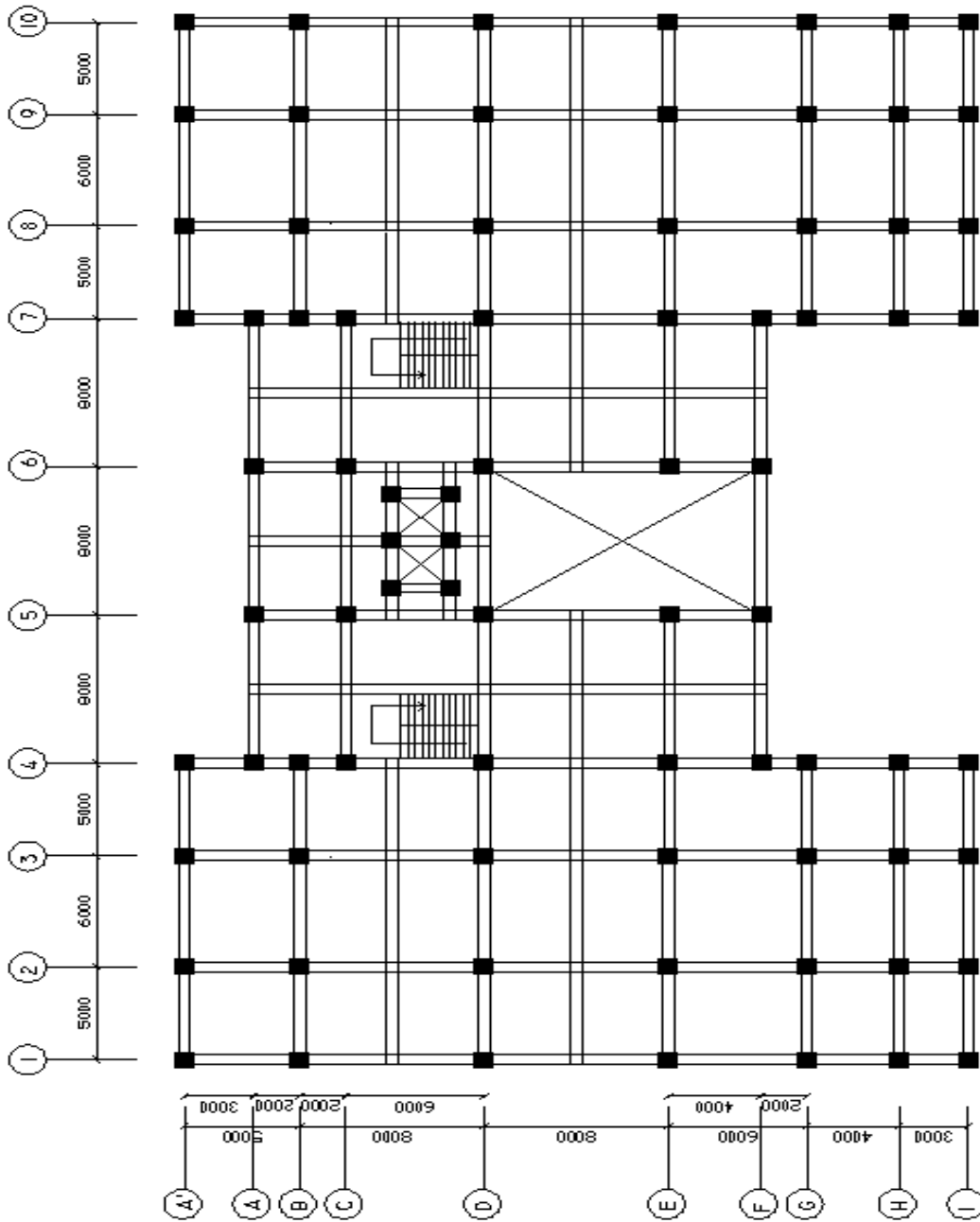
## DAFTAR PUSTAKA

- Arfiadi, Y., 2005, *Lecture Notes On Reinforce Concrete Structures I*, FT.UAJY
- Badan Standarisasi Nasional, 2002, *Tata Cara Perencanaan Struktur Beton Untuk Bangunan Gedung*, SNI 03-2847-2002, Yayasan LPMB, Bandung.
- Badan Standarisasi Nasional, 2002, *Tata cara Perencanaan Ketahanan Gempa untuk Bangunan Gedung*, SNI 03-1726-2002, Yayasan LPMB, Bandung.
- Badan Standarisasi Nasional, 2002, *Tata Cara Perencanaan Struktur Baja untuk Bangunan Gedung*, SNI 03-1729-2002, Yayasan LPMB, Bandung.
- Bowles, J.E., 1984, *Analisa dan Disain Pondasi*, Penerbit Erlangga, Jakarta.
- Christady, Hary, 2001, *Teknik Fondasi II*, Yogyakarta.
- Departemen Pekerjaan Umum, 1983, *Peraturan Beton Bertulang Indonesia 1971*, Yayasan LPMB, Bandung.
- Departemen Pekerjaan Umum, 1983, *Peraturan Pembebanan Indonesia untuk Gedung*, Yayasan LPMB, Bandung.
- Dipohusodo, I., 1994, *Struktur Beton Bertulang*, Gramedia, Jakarta.
- Nawy, E., G., 1990, *Beton Bertulang Suatu Pendekatan Dasar*, PT. Eresco, Bandung.
- Purwono, Rachmat, 2005, *Perencanaan Struktur Beton Bertulang Tahan Gempa*, ITS Press, Surabaya.

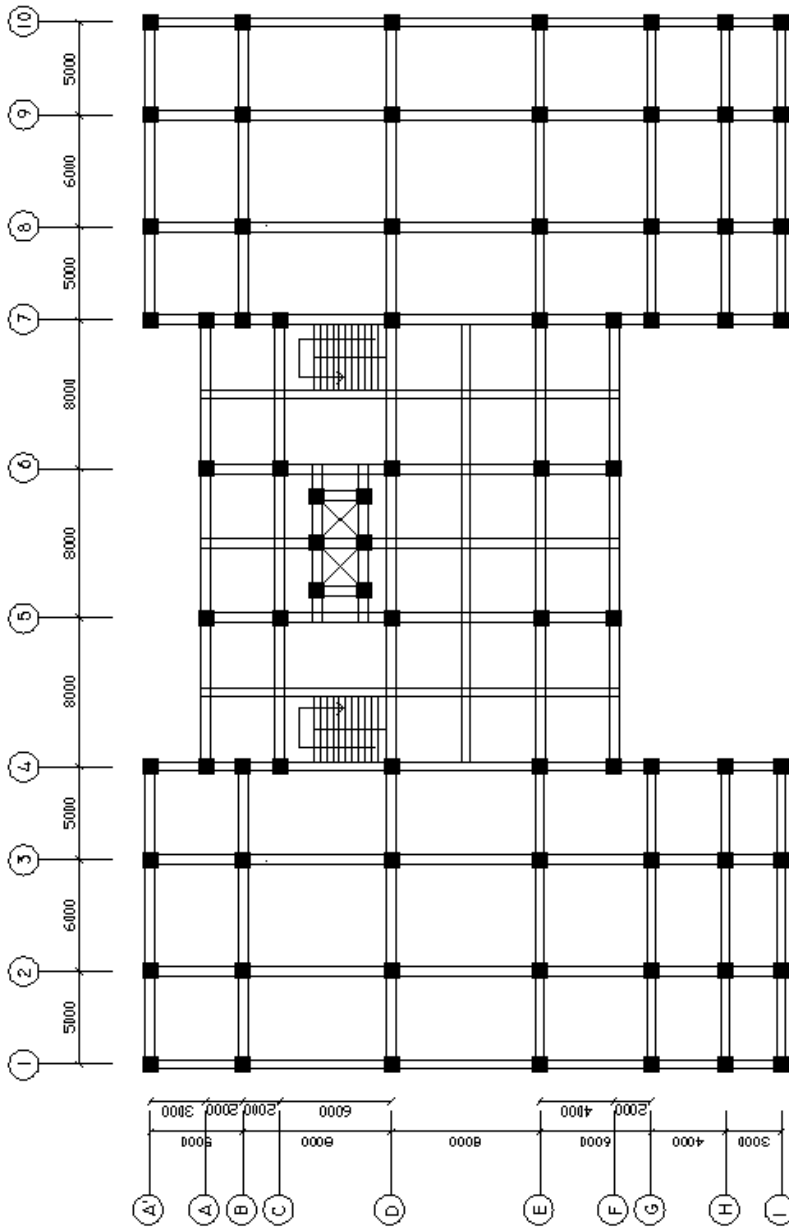


DENAH BALOK DAN KOLOM LT DASAR, 2, 3, 4, 5, 6, PENTHOUSE  
SKALA 1:350

X

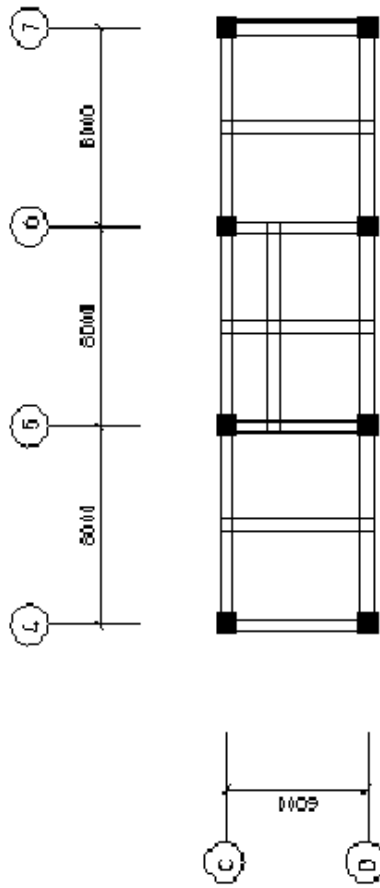


DENAH BALOK DAN KOLOM L.T.I  
SKALA 1:350



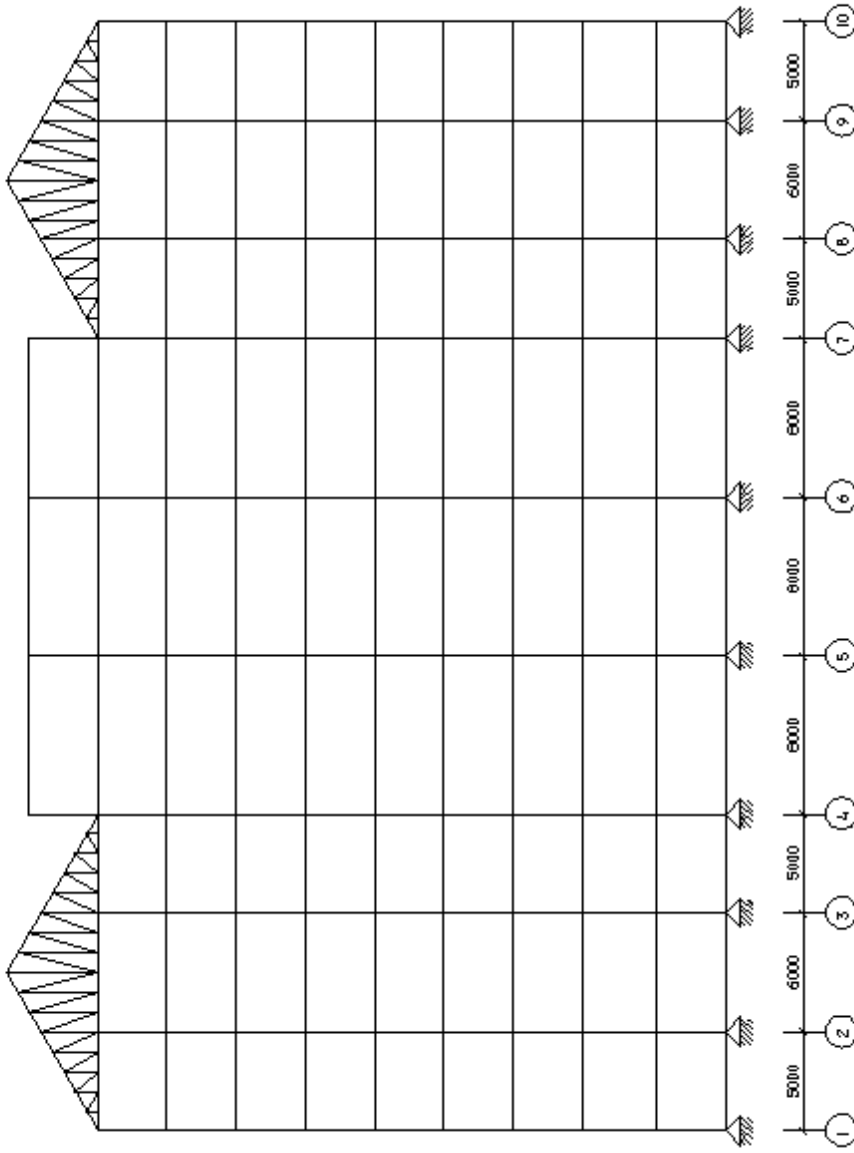
DENAH BALOK DAN KOLOM ATAP BETON  
SKALA 1:350





DENAH BALOK DAN KOLON ATAP  
SKALA 1:200

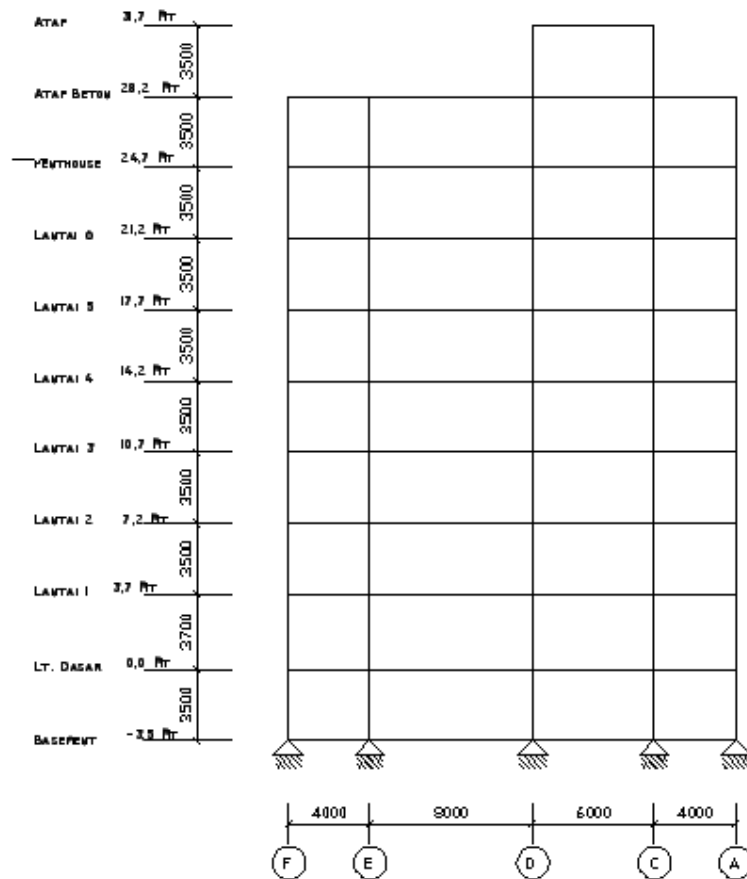




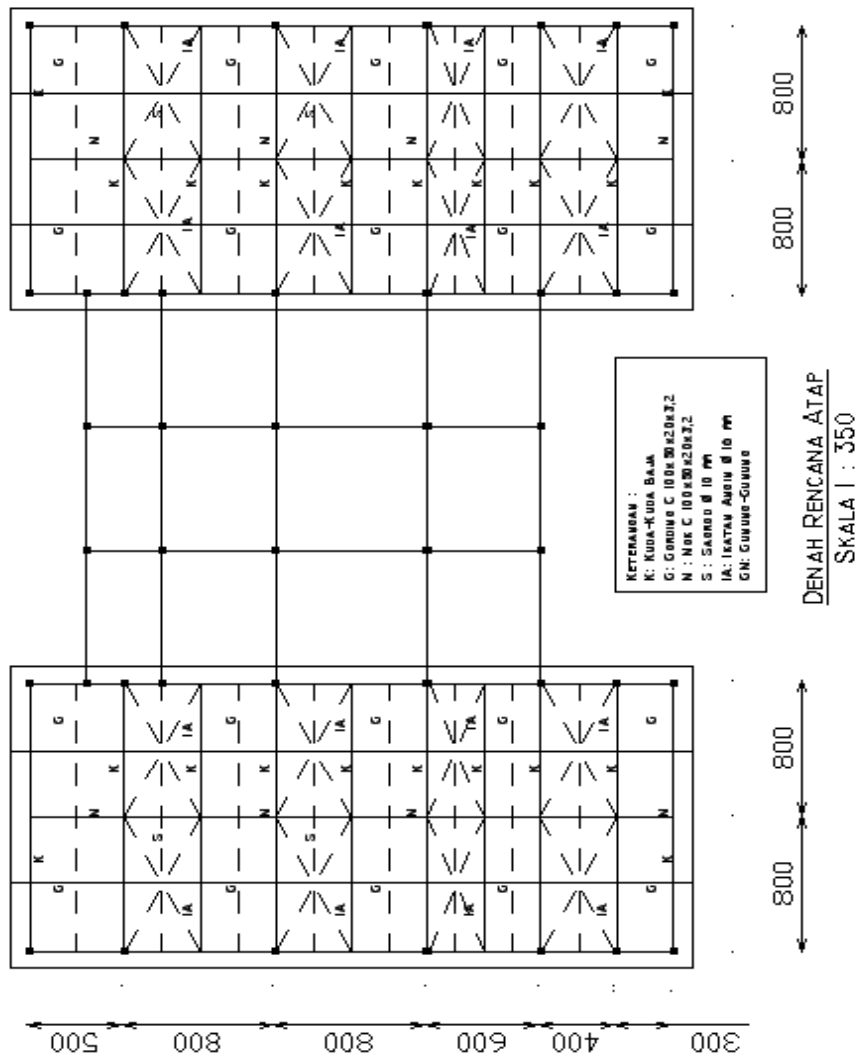
DENAH PORTAL D  
SKALA 1 : 350

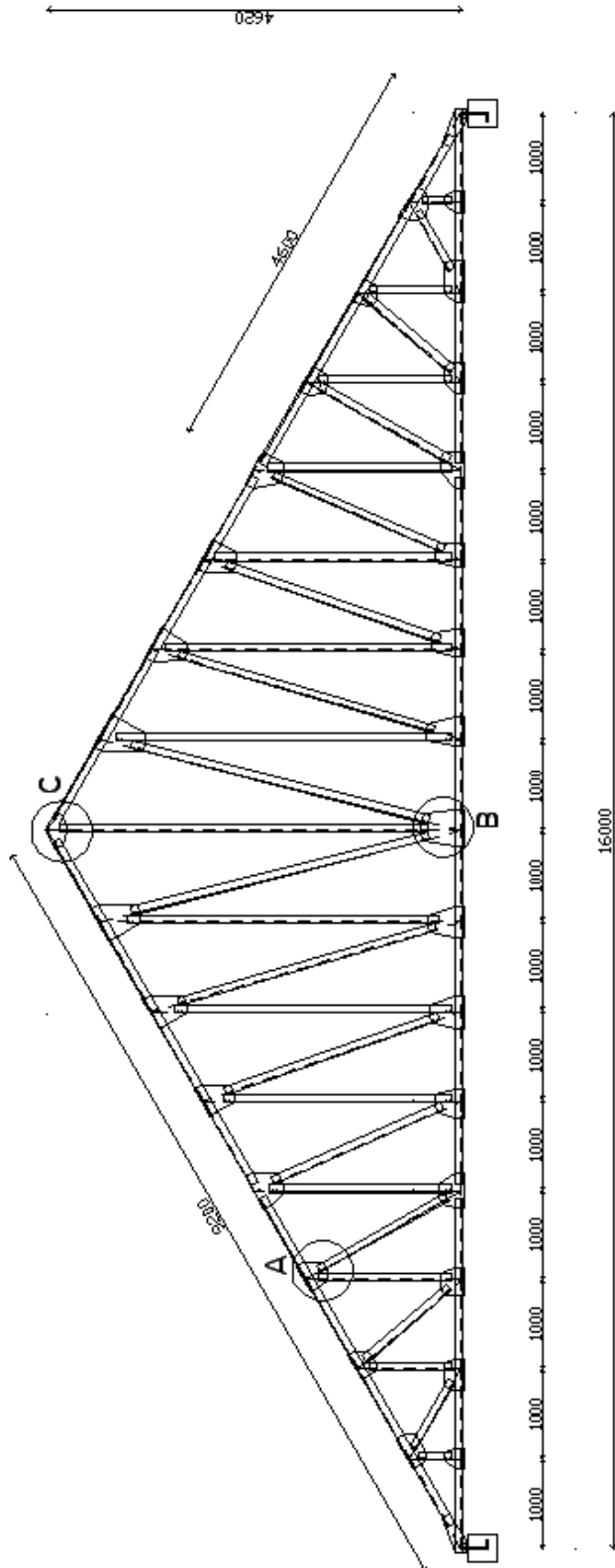
ATAP	31,7	PT
ATAP B STUN	38,2	PT
PERUBUHS	24,7	PT
LANTAI 6	21,2	PT
LANTAI 5	17,7	PT
LANTAI 4	14,2	PT
LANTAI 3	10,7	PT
LANTAI 2	7,2	PT
LANTAI 1	3,7	PT
LT. 0 ASAR	0,0	PT
BA SERIANT	-3,5	PT



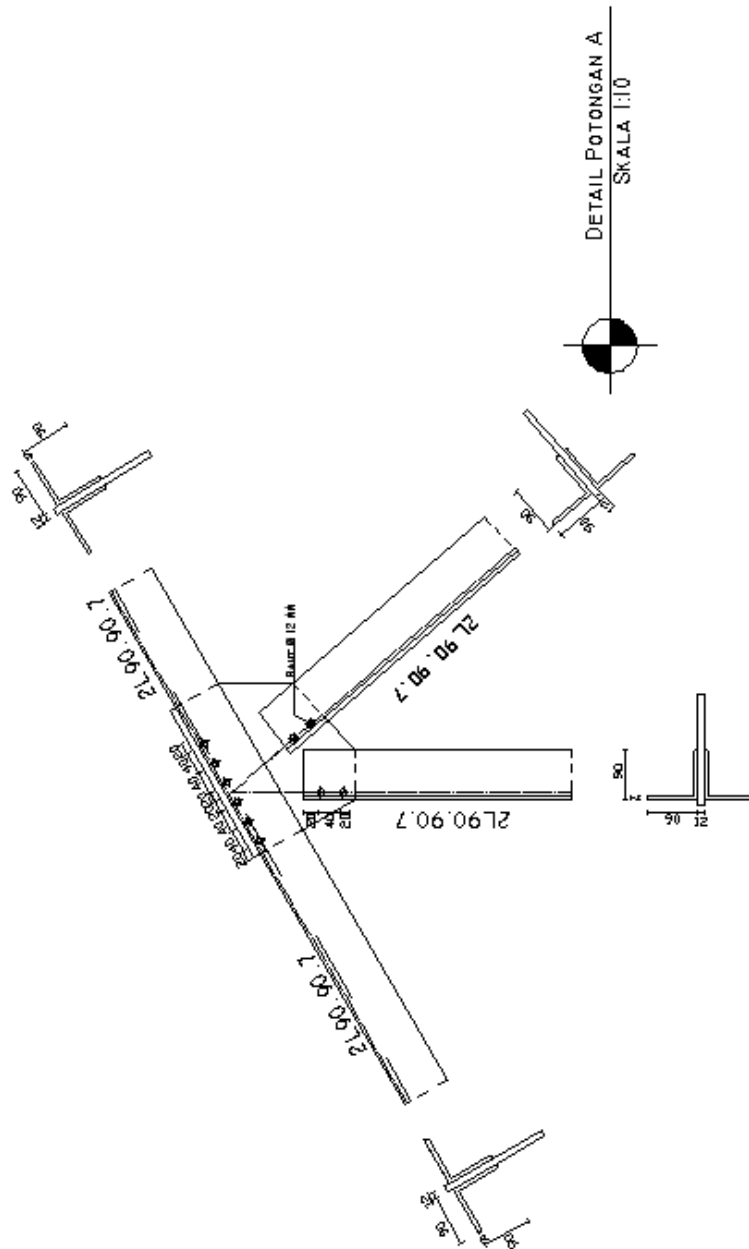


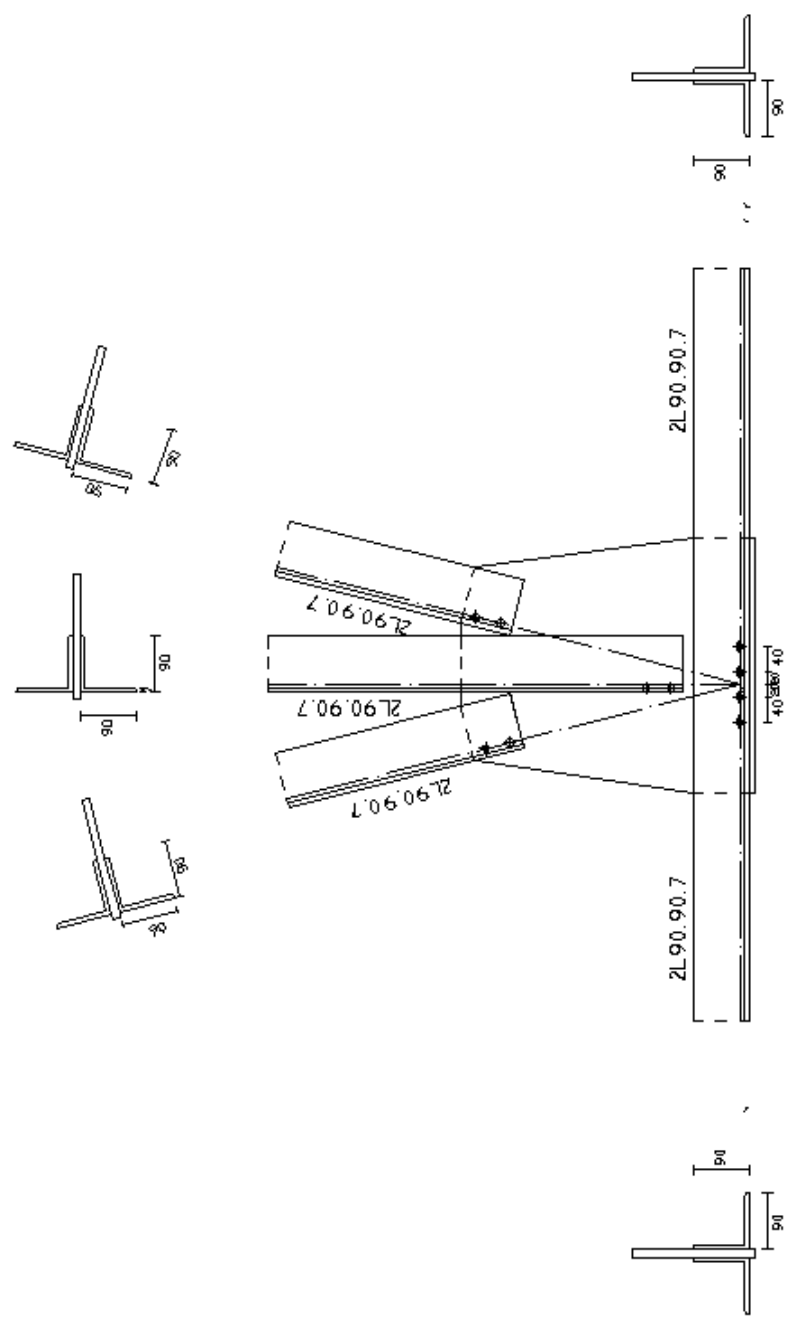
DENAH PORTAL 5  
SKALA 1 : 300



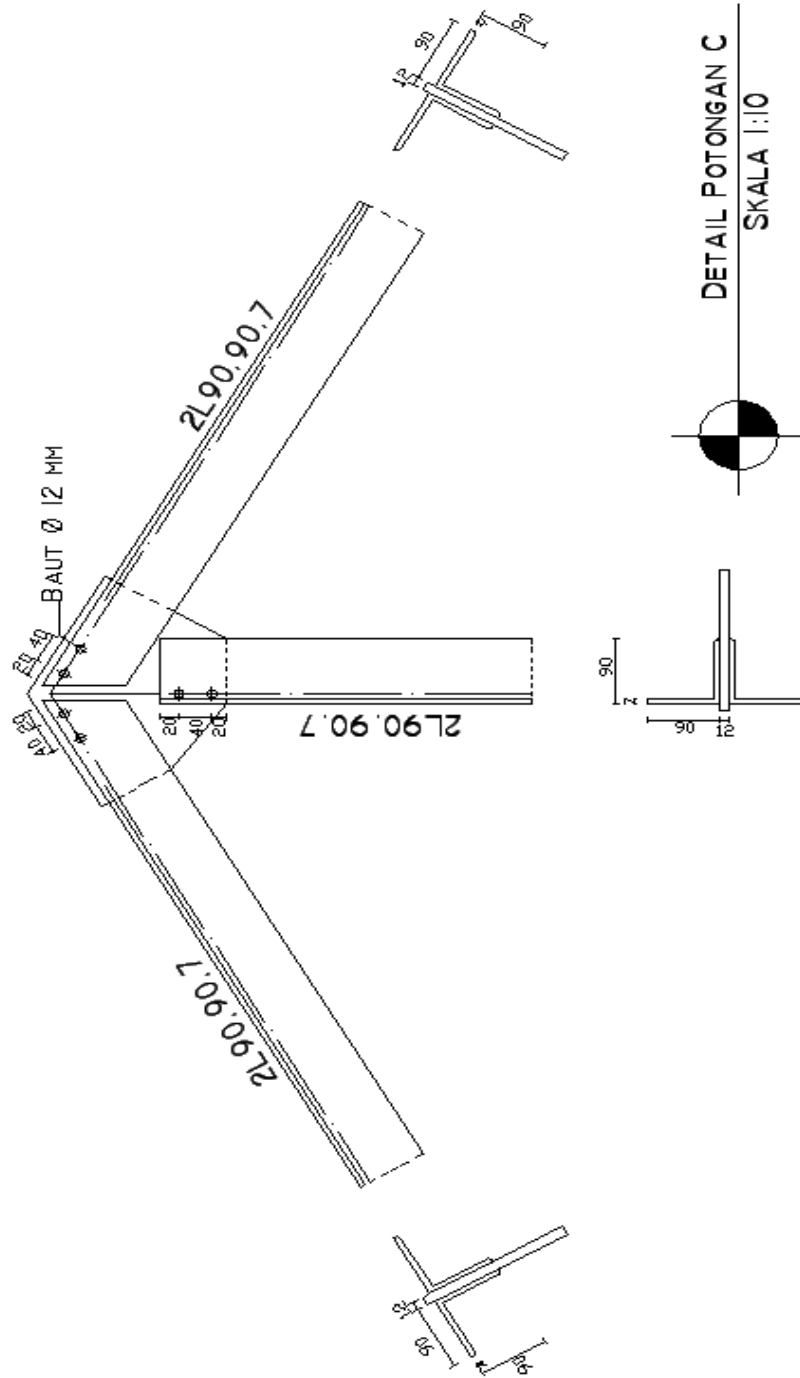


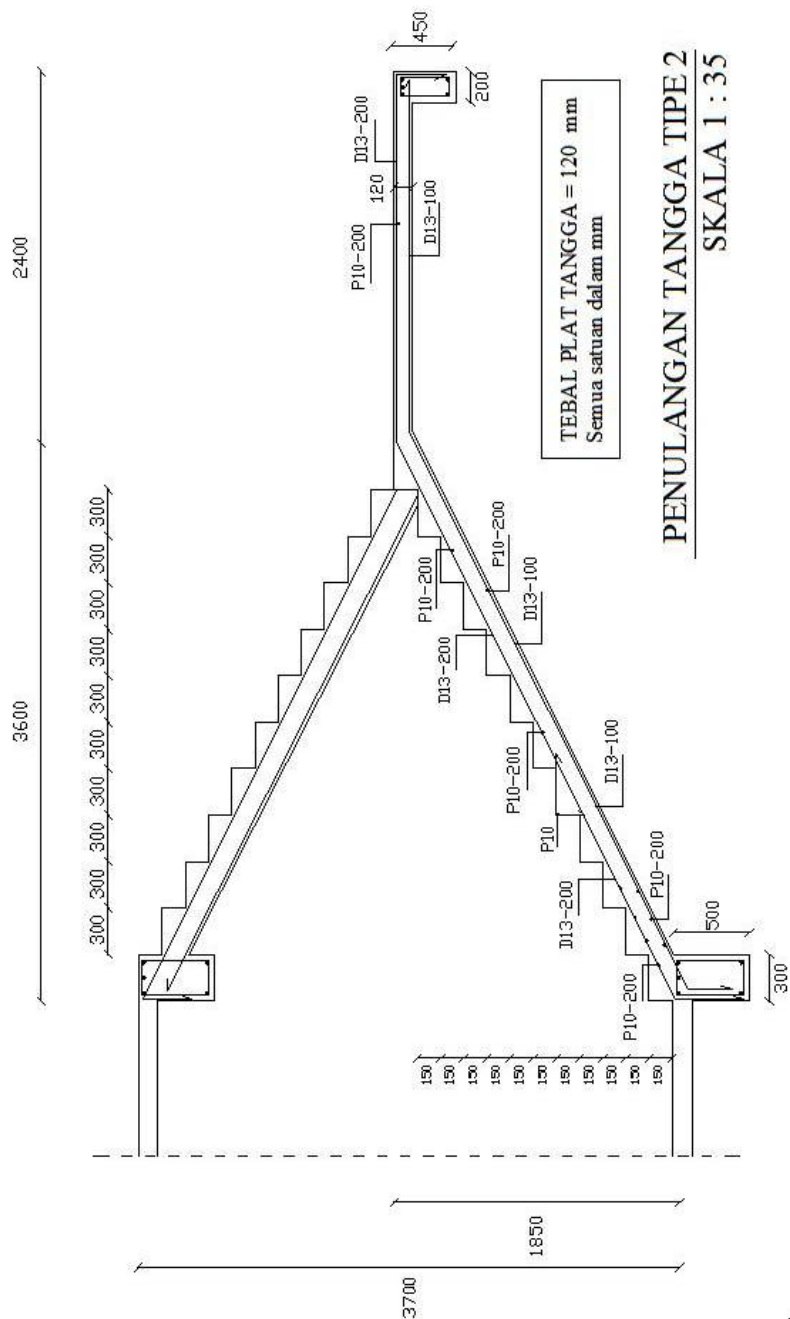
RENCANA KUDA-KUDA  
SKALA 1:70





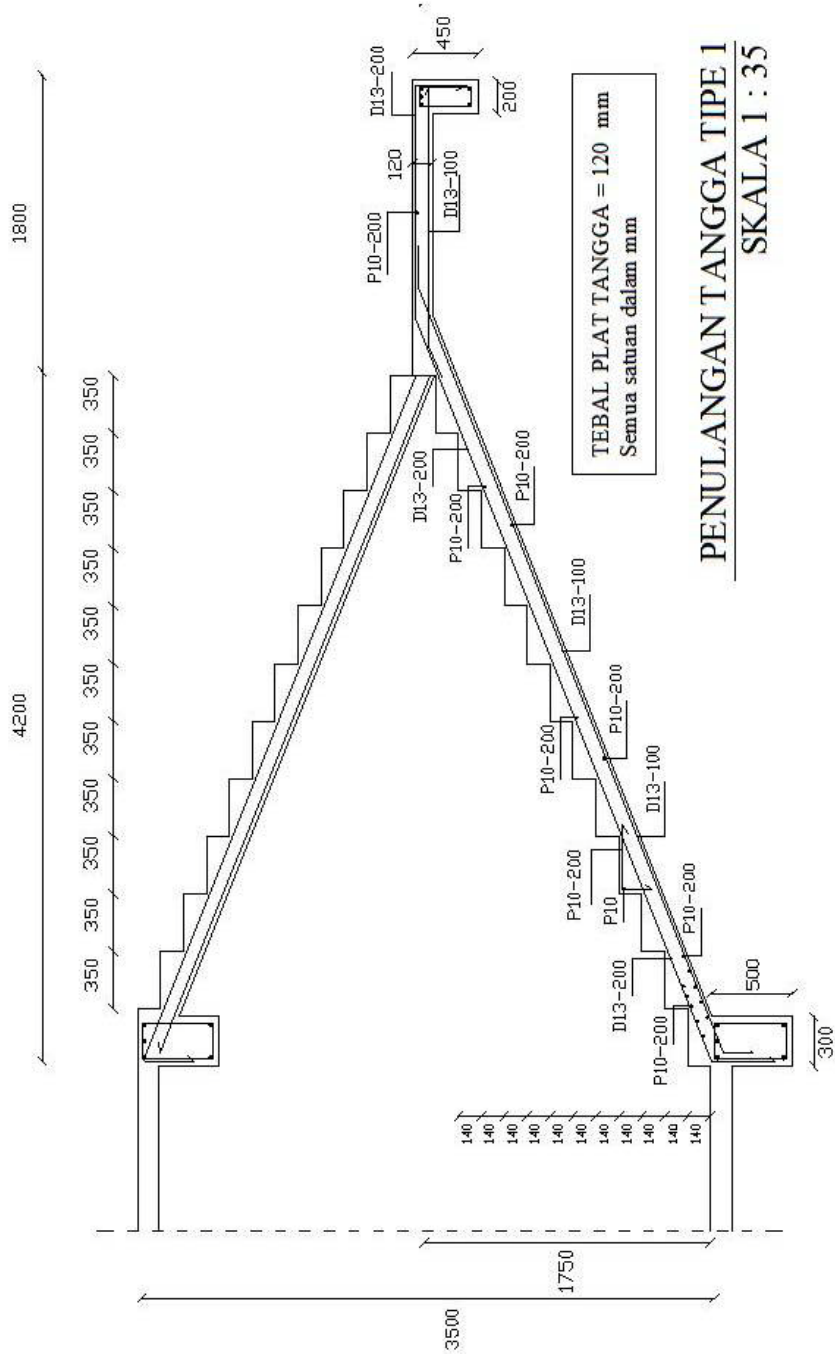
DETAIL POTONGAN B  
SKALA 1:10

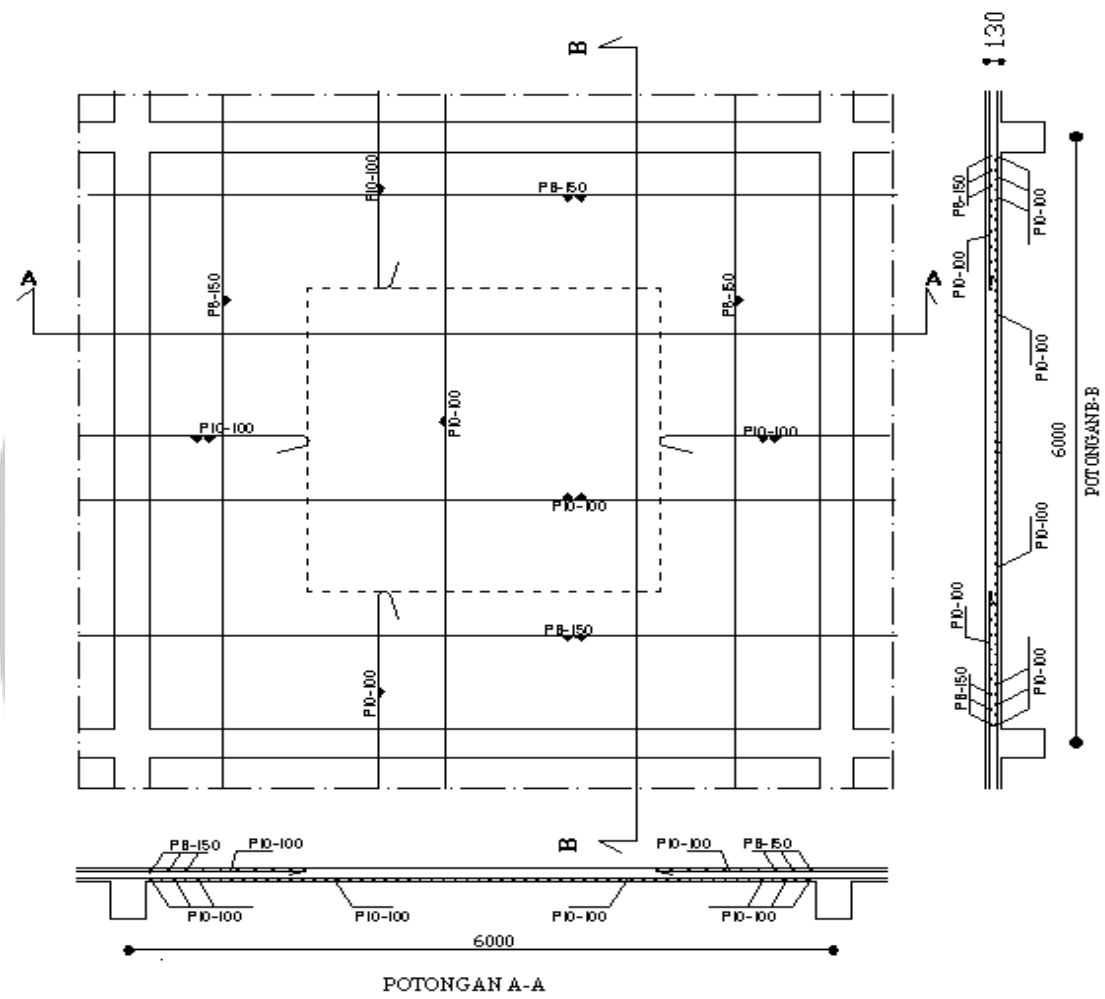




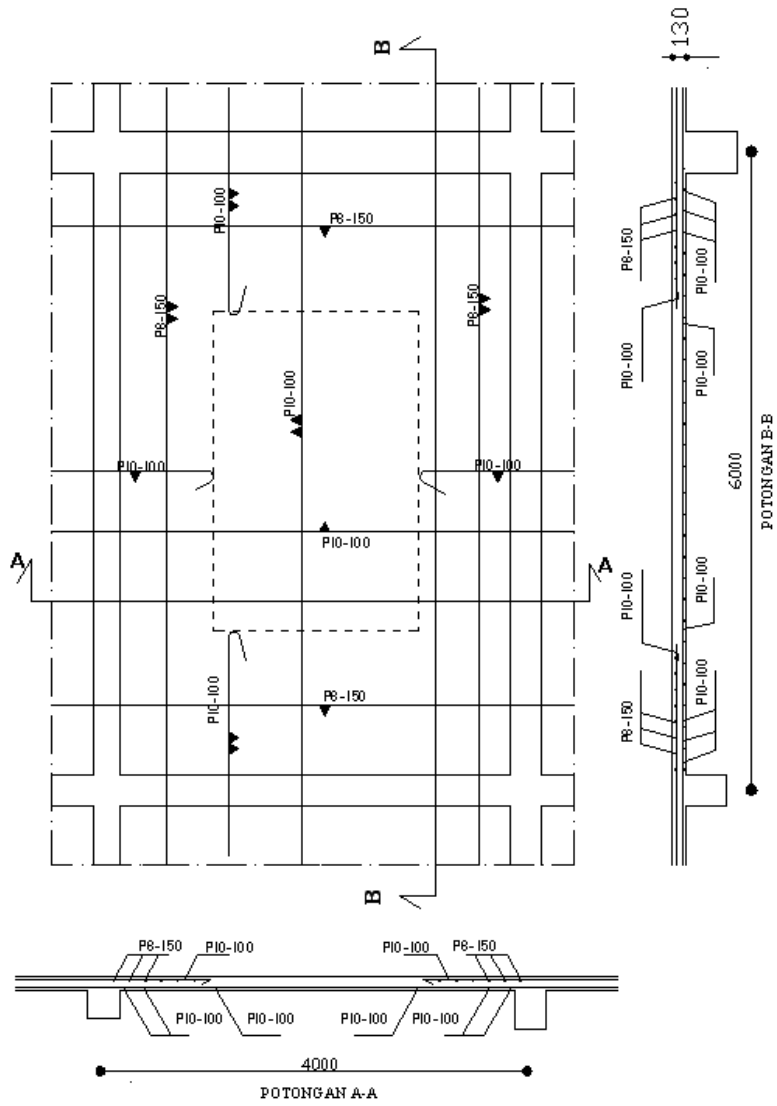
X



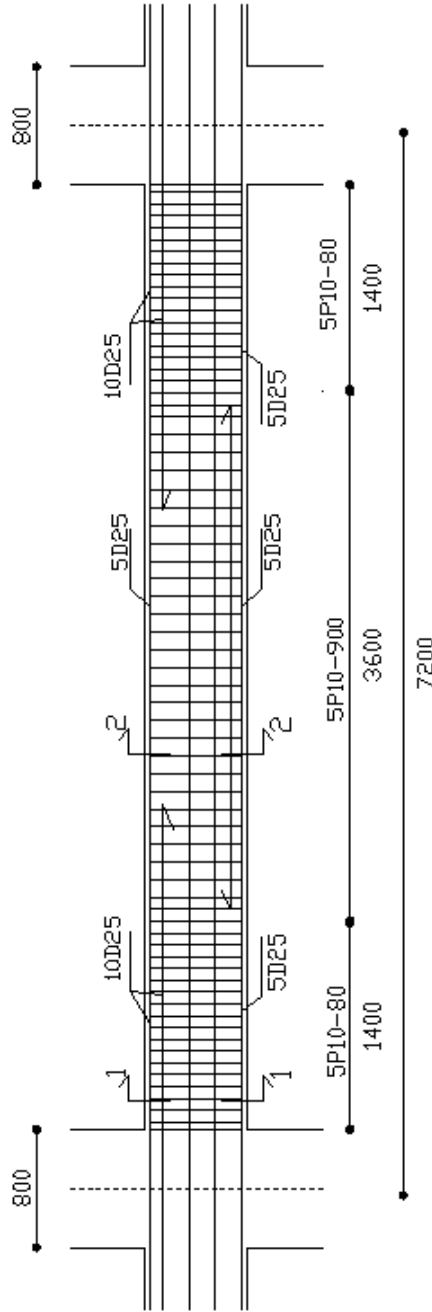




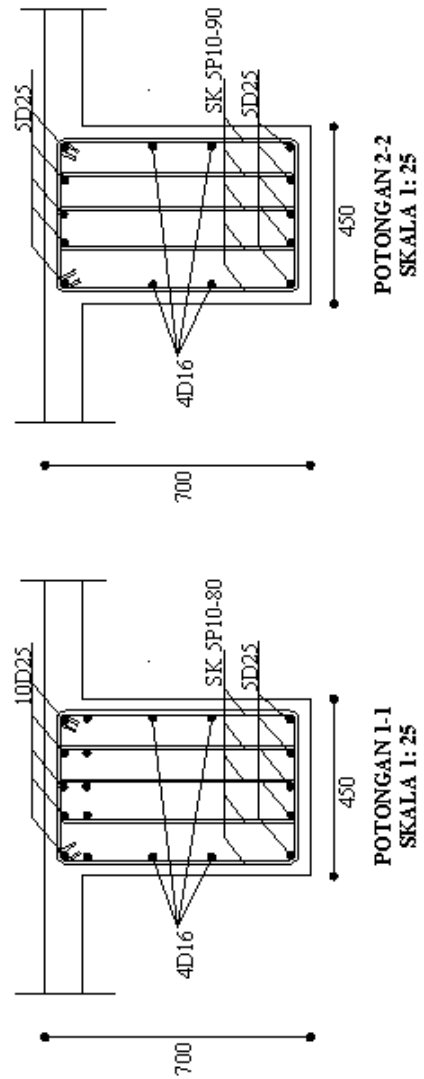
GAMBAR PENULANGAN DUA ARAH PADA LANTAI TEBAL 130  
SKALA 1 : 50



GAMBAR PENULANGAN DUA ARAH PADA ATAP TEBAL 130  
SKALA 1 : 50

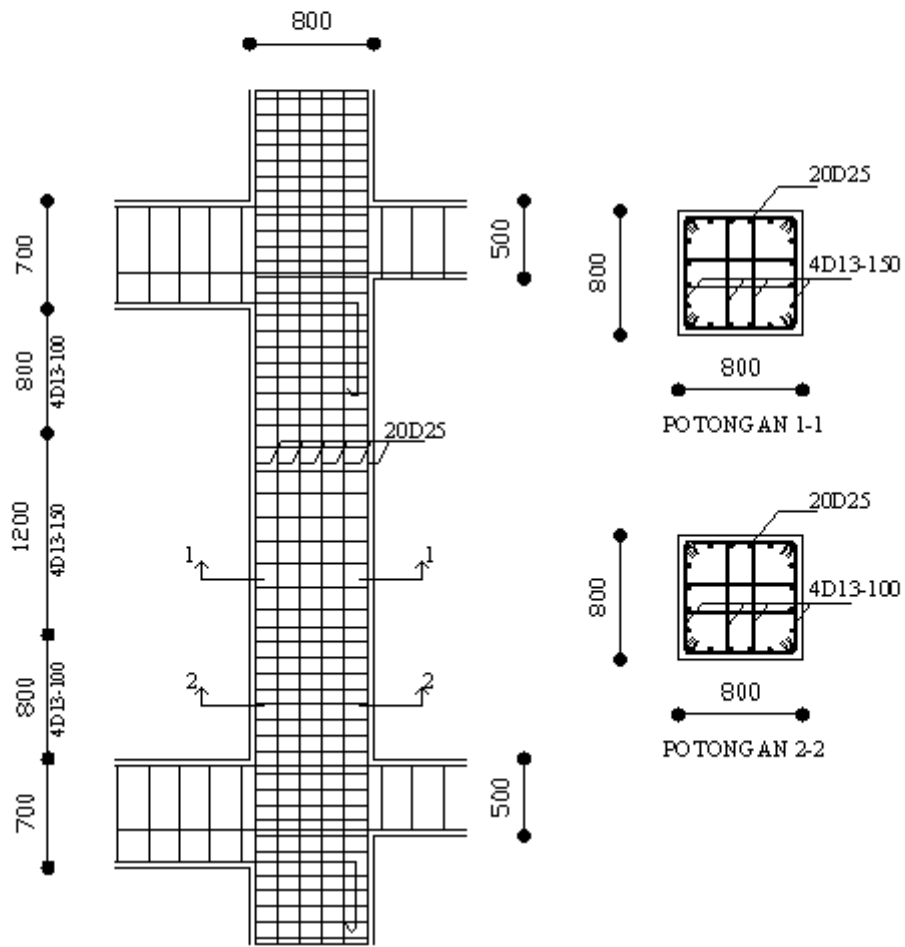


GAMBAR PENULANGAN BALOK INDUK  
 SKALA 1:50 (Semua satuan dalam mm)

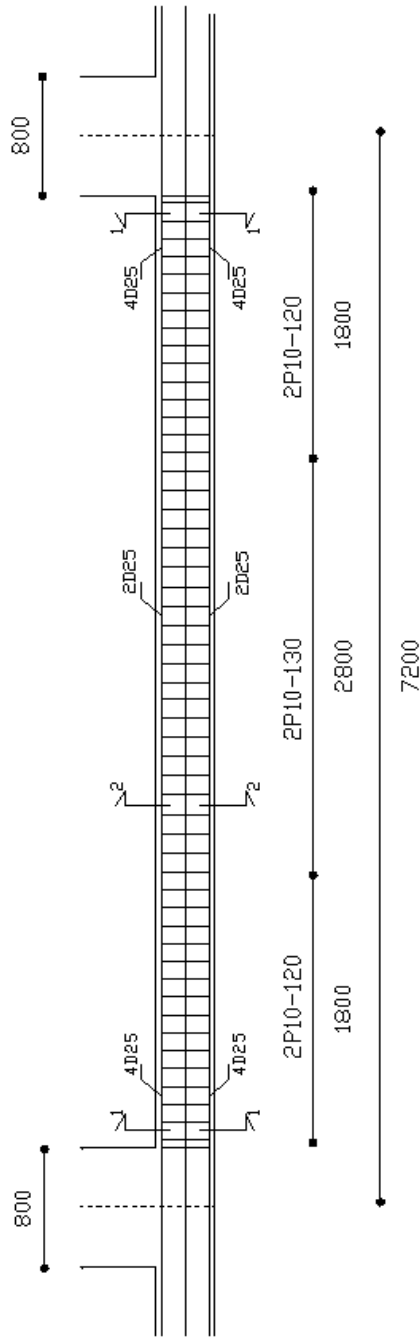


POTONGAN 1-1  
 SKALA 1: 25

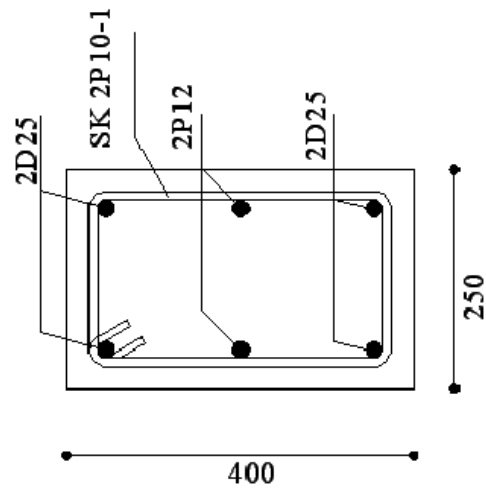
POTONGAN 2-2  
 SKALA 1: 25



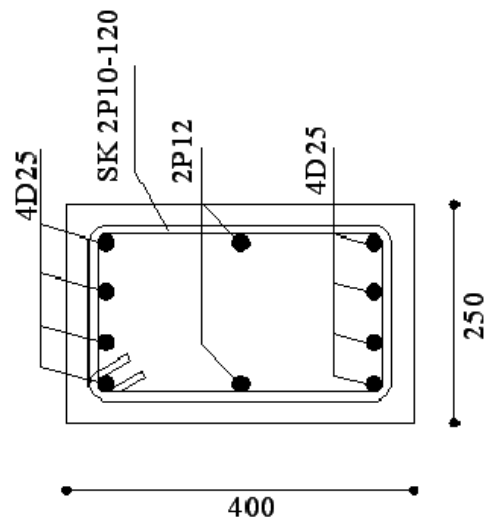
**GAMBAR PENULANGAN KOLOM**  
 Skala 1 : 50 (semua satuan dalam mm)



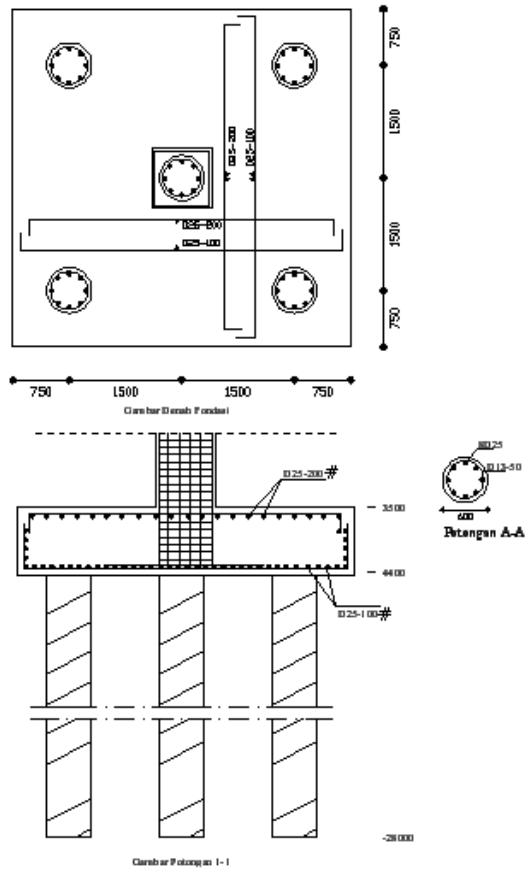
**GAMBAR PENULANGAN BALOK SLOOF**  
**SKALA 1:50 (Semua satuan dalam mm)**



**POTONGAN SLOOF 2-2  
SKALA 1:20**



**POTONGAN SLOOF 1-1  
SKALA 1:20**



GAMBAR DETAIL PONDASI  
SKALA 1 : 50 (ukuran sebenarnya)



## LAMPIRAN 21

TABEL PERHITUNGAN BATANG TARIK				
No. Batang	Panjang Batang(mm)	Gaya Batang (kN)	Cek Tegangan	Cek Kelangsingan
F1	1000	67.86	61.7021	51.2636
F4	1000	54.58	49.6272	51.2636
F5	1155	6.08	5.5283	59.2095
F8	1000	55.71	50.6547	51.2636
F9	1528	2.39	2.1731	78.3205
F12	1000	55.28	50.2637	51.2636
F15	2310	2.62	2.3823	118.4189
F16	1000	53.47	48.6179	51.2636
F19	2888	6.58	5.9829	148.0237
F20	1000	50.73	46.1266	51.2636
F23	3465	10.62	9.6563	177.6284
F24	1000	25.78	23.4406	51.2636
F27	4043	14.63	13.3024	207.2331
F28	1000	43.5	39.5526	51.2636
F31	4620	37.15	33.7789	236.8378
F32	1000	43.5	39.5526	51.2636
F35	4043	14.63	13.3024	207.2331
F36	1000	47.34	43.0442	51.2636
F39	3465	10.62	9.6563	177.6284
F40	1000	50.73	46.1266	51.2636
F43	2888	6.78	6.1648	148.0237
F44	1000	53.47	48.6179	51.2636
F47	2310	2.94	2.6732	118.4189
F48	1000	55.28	50.2637	51.2636
F52	1000	55.71	50.6547	51.2636
F53	1528	2.65	2.4095	78.3205
F56	1000	54.58	49.6272	51.2636

TABEL PERHITUNGAN BATANG TEKAN						
No. Batang	Panjang Batang mm	Gaya Batang (KN)	$\lambda_c$	$\omega$	Cek	Cek
					Tegangan	Kelangsingan
F2	1155	81.56	0.6528	1.23	96.5773	59.1992
F3	578	2.36	0.3264	1.04	2.3522	29.6047
F6	1155	68.99	0.6528	1.23	81.6928	59.1992
F7	1155	5.57	0.6529	1.23	6.5960	59.2095
F10	1155	66.05	0.6528	1.23	78.2115	59.1992
F11	1733	2.04	0.9793	1.52	2.9756	88.8142
F13	2004	2.13	1.1328	1.70	3.4867	102.7323
F14	1155	63.01	0.6528	1.23	74.6118	59.1992
F17	2517	6.13	1.4229	2.53	14.9354	129.0407
F18	1155	59.29	0.6528	1.23	70.2068	59.1992
F21	3056	10.06	1.7273	3.73	36.1216	156.6513
F22	1155	54.95	0.6528	1.23	65.0677	59.1992
F25	3606	13.94	2.0386	5.19	69.7156	184.8771
F26	1155	50.13	0.6528	1.23	59.3602	59.1992
F29	4164	17.22	2.3539	6.93	114.8251	213.4770
F30	1155	44.74	0.6528	1.23	52.9778	59.1992
F33	4164	17.22	2.3539	6.93	114.8251	213.4770
F34	1155	44.74	0.6528	1.23	52.9778	59.1992
F37	3606	13.94	2.0386	5.19	69.7156	184.8771
F38	1155	50.13	0.6528	1.23	59.3602	59.1992
F41	3056	10.06	1.7273	3.73	36.1216	156.6513
F42	1155	54.95	0.6528	1.23	65.0677	59.1992
F45	2517	6.27	1.4229	2.53	15.2765	129.0407
F46	1155	59.29	0.6528	1.23	70.2068	59.1992
F49	2004	2.53	1.1328	1.70	4.1415	102.7323

Lantai	Balok	D (mm)	d (mm)	Mu (kN/m)	Rin	P perlu	pmin	pmax	As (mm <sup>2</sup> )	As digunakan	As digunakan	Tulangan terpasang			
												As	As'		
ATAP BETON	B5	450	637.5	137.8159	0.9420	0.0024	0.0035	0.0244	1004.0625	1473.21	982.14	3	D25	2	D25
		450	637.5	238.5536	1.6306	0.0042	0.0035	0.0244	1209.4194	1473.21	982.14	3	D25	2	D25
		450	637.5	275.6318	1.8839	0.0049	0.0035	0.0244	1405.1148	1473.21	982.14	3	D25	2	D25
PENTHOUSE	B5	450	637.5	202.6348	1.3850	0.0036	0.0035	0.0244	1021.6659	1473.21	982.14	3	D25	2	D25
		450	637.5	313.2221	2.1409	0.0056	0.0035	0.0244	1605.9107	1954.29	982.14	4	D25	2	D25
		450	637.5	405.2696	2.7700	0.0073	0.0035	0.0244	2108.1188	2455.36	1473.21	5	D25	3	D25
LANTAI 6	B5	450	637.5	238.9831	1.6334	0.0042	0.0035	0.0244	1211.6215	1473.21	982.14	3	D25	2	D25
		450	637.5	304.1364	2.0788	0.0054	0.0035	0.0244	1557.1568	1954.29	982.14	4	D25	2	D25
		450	637.5	477.9562	3.2659	0.0098	0.0035	0.0244	2516.0466	2946.43	1473.21	6	D25	3	D25
LANTAI 5	B5	450	637.5	275.98115	1.8932	0.0049	0.0035	0.0244	1412.2612	1473.21	982.14	3	D25	2	D25
		450	637.5	297.2396	2.0316	0.0053	0.0035	0.0244	1520.2432	1954.29	982.14	4	D25	2	D25
		450	637.5	553.9523	3.7963	0.0103	0.0035	0.0244	2954.0667	3437.50	1954.29	7	D25	4	D25
LANTAI 4	B5	450	637.5	310.00855	2.1189	0.0055	0.0035	0.0244	1688.6494	1954.29	982.14	4	D25	2	D25
		450	637.5	298.8559	2.0427	0.0053	0.0035	0.0244	1628.8868	1954.29	982.14	4	D25	2	D25
		450	637.5	620.0167	4.2378	0.0117	0.0035	0.0244	3345.2503	3437.50	1954.29	7	D25	4	D25
LANTAI 3	B5	450	637.5	343.6772	2.3490	0.0062	0.0035	0.0244	1770.3824	1954.29	982.14	4	D25	2	D25
		450	637.5	292.1745	1.9970	0.0052	0.0035	0.0244	1493.1851	1954.29	982.14	4	D25	2	D25
		450	637.5	637.3544	4.6981	0.0131	0.0035	0.0244	3754.8462	3928.67	1954.29	8	D25	4	D25
LANTAI 2	B5	450	637.5	372.6637	2.5471	0.0067	0.0035	0.0244	1928.4587	1954.29	1473.21	4	D25	3	D25
		450	637.5	290.8501	1.9880	0.0052	0.0035	0.0244	1486.1705	1954.29	982.14	4	D25	2	D25
		450	637.5	745.3274	5.0943	0.0144	0.0035	0.0244	4116.9596	4419.64	2455.36	9	D25	5	D25
LANTAI 1	B5	450	637.5	397.6544	2.7180	0.0072	0.0035	0.0244	2066.0358	2455.36	1473.21	5	D25	3	D25
		450	637.5	180.295425	1.2323	0.0032	0.0035	0.0244	1004.0625	1473.21	982.14	3	D25	2	D25
		450	637.5	721.1817	4.9293	0.0158	0.0035	0.0244	3965.0272	4419.64	2455.36	9	D25	5	D25
L. DASAR	B5	450	637.5	430.88655	2.9451	0.0078	0.0035	0.0244	2250.6800	2455.36	1473.21	5	D25	3	D25
		450	637.5	294.3754	2.0120	0.0052	0.0035	0.0244	1604.9371	1954.29	982.14	4	D25	2	D25
		450	637.5	861.7727	5.8902	0.0170	0.0035	0.0244	4873.8085	4910.71	2455.36	10	D25	5	D25
BASE	B5	250	337.5	79.9427	3.5091	0.0095	0.0035	0.0244	799.6498	982.14	982.14	2	D25	2	D25
		250	337.5	39.97135	1.7546	0.0045	0.0035	0.0244	393.7975	982.14	982.14	2	D25	2	D25
		250	337.5	159.8654	7.0183	0.0210	0.0035	0.0244	1772.4471	1954.29	982.14	4	D25	2	D25

## LAMPIRAN 24

Tabel Penulangan Lantai Aras Y Elevasi 5

Lantai	Balok	b (mm)	d (mm)	Mu (kNm)	Rn	ρ	pmin	pmax	As'(mm <sup>2</sup> )	As' digunakan	Tulangan Bersang	
											As	As'
ATAP BETON	B45	300	437.5	71.5970	1.5586	0.0040	0.0035	0.0244	528.0710	982.14	2	D25 2
		300	437.5	24.7715	0.5392	0.0014	0.0035	0.0244	459.3750	982.14	2	D25 2
		300	437.5	99.0860	2.1570	0.0056	0.0035	0.0244	740.5268	982.14	2	D25 2
PENTHOUSE	B45	300	437.5	77.7809	1.6932	0.0044	0.0035	0.0244	375.3588	982.14	2	D25 2
		300	437.5	35.1358	0.7649	0.0019	0.0035	0.0244	459.3750	982.14	2	D25 2
		300	437.5	140.5431	3.0594	0.0082	0.0035	0.0244	1072.6324	1473.21	3	D25 2
LANTAI 6	B45	300	437.5	108.4082	2.3816	0.0053	0.0035	0.0244	821.8335	982.14	2	D25 2
		300	437.5	41.1658	0.8962	0.0023	0.0035	0.0244	459.3750	982.14	2	D25 2
		300	437.5	164.6752	3.5848	0.0087	0.0035	0.0244	1273.1058	1473.21	3	D25 2
LANTAI 5	B45	300	437.5	137.1038	2.9846	0.0080	0.0035	0.0244	1044.9078	1473.21	3	D25 2
		300	437.5	48.0382	1.0457	0.0027	0.0035	0.0244	459.3750	982.14	2	D25 2
		300	437.5	192.1628	4.1829	0.0115	0.0035	0.0244	1508.5023	1964.29	4	D25 2
LANTAI 4	B45	300	437.5	164.7403	3.5862	0.0087	0.0035	0.0244	1273.6643	1473.21	3	D25 2
		300	437.5	55.2196	1.2021	0.0031	0.0035	0.0244	459.3750	982.14	2	D25 2
		300	437.5	220.8784	4.8082	0.0134	0.0035	0.0244	1763.5555	1964.29	4	D25 2
LANTAI 3	B45	300	437.5	188.0687	4.1157	0.0113	0.0035	0.0244	1431.8630	1964.29	4	D25 2
		300	437.5	59.7355	1.3004	0.0033	0.0035	0.0244	459.3750	982.14	2	D25 2
		300	437.5	238.9424	5.2015	0.0147	0.0035	0.0244	1929.1177	1964.29	4	D25 2
LANTAI 2	B45	300	437.5	209.0097	4.5499	0.0126	0.0035	0.0244	1686.9985	1964.29	4	D25 2
		300	437.5	64.5254	1.4046	0.0036	0.0035	0.0244	474.3409	982.14	2	D25 2
		300	437.5	258.1015	5.6185	0.0161	0.0035	0.0244	2109.5017	2455.36	5	D25 3
LANTAI 1	B45	300	437.5	232.7285	5.0662	0.0143	0.0035	0.0244	1871.6892	1964.29	4	D25 2
		300	437.5	70.4992	1.5347	0.0040	0.0035	0.0244	519.7054	982.14	2	D25 2
		300	437.5	281.9956	6.1387	0.0178	0.0035	0.0244	2342.0385	2455.36	5	D25 3
L. DASAR	B45	300	437.5	289.9296	5.6583	0.0162	0.0035	0.0244	2126.9858	2455.36	5	D25 3
		300	437.5	77.7158	1.8918	0.0044	0.0035	0.0244	374.8552	982.14	2	D25 2
		300	437.5	310.8672	6.7672	0.0201	0.0035	0.0244	2635.5663	2945.43	6	D25 3
BASE	B45	250	337.5	150.4154	6.6026	0.0195	0.0035	0.0244	1643.9567	1473.21	3	D25 2
		250	337.5	46.7227	2.0509	0.0054	0.0035	0.0244	451.5727	982.14	2	D25 2
		250	337.5	186.8907	6.2037	0.0237	0.0035	0.0244	2166.9650	2455.36	5	D25 2

Tabel Penulangan Lentur Arak Y Elevasi 5

Lantai	Balok	b (mm)	d (mm)	Mu (kNm)	Rn	$\rho$	pmin	pmax	$A_c$ (mm <sup>2</sup> )	$A_c$ digunakan	$A_s'$ digunakan	Tulangan dipasang			
												$A_s$	$A_s''$		
ATAP	B105	300	437.5	60.6970	1.3213	0.0034	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	68.5716	1.4927	0.0038	0.0035	0.0244	505.0391	982.14	982.14	2	D25	2	D25
		300	437.5	121.3939	2.6426	0.0070	0.0035	0.0244	917.3914	982.14	982.14	2	D25	2	D25
ATAP BETON	B105	300	437.5	66.7946	1.4540	0.0037	0.0035	0.0244	491.5436	982.14	982.14	2	D25	2	D25
		300	437.5	53.7099	1.1692	0.0030	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	133.8895	2.9081	0.0077	0.0035	0.0244	1016.8810	1473.21	982.14	3	D25	2	D25
PENTHOUSE	B105	300	437.5	79.6509	1.7339	0.0045	0.0035	0.0244	589.7165	982.14	982.14	2	D25	2	D25
		300	437.5	50.9555	1.3270	0.0034	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	169.3018	3.4676	0.0094	0.0035	0.0244	1227.9800	1473.21	982.14	3	D25	2	D25
LANTAI 6	B105	300	437.5	92.5886	2.0155	0.0053	0.0035	0.0244	639.7790	982.14	982.14	2	D25	2	D25
		300	437.5	71.1125	1.5480	0.0040	0.0035	0.0244	524.3780	982.14	982.14	2	D25	2	D25
		300	437.5	165.1771	4.0311	0.0110	0.0035	0.0244	1447.9840	1473.21	982.14	3	D25	2	D25
LANTAI 5	B105	300	437.5	105.0983	2.2879	0.0050	0.0035	0.0244	767.7877	982.14	982.14	2	D25	2	D25
		300	437.5	76.4902	1.7066	0.0044	0.0035	0.0244	580.8023	982.14	982.14	2	D25	2	D25
		300	437.5	210.1965	4.5757	0.0127	0.0035	0.0244	1667.5773	1964.29	982.14	4	D25	2	D25
LANTAI 4	B105	300	437.5	116.3158	2.5320	0.0067	0.0035	0.0244	876.7630	982.14	982.14	2	D25	2	D25
		300	437.5	85.4138	1.8593	0.0048	0.0035	0.0244	634.1281	982.14	982.14	2	D25	2	D25
		300	437.5	232.6315	5.0641	0.0143	0.0035	0.0244	1670.7966	1964.29	982.14	4	D25	2	D25
LANTAI 3	B105	300	437.5	123.6720	2.6922	0.0071	0.0035	0.0244	935.6894	982.14	982.14	2	D25	2	D25
		300	437.5	94.4578	2.0662	0.0054	0.0035	0.0244	704.3442	982.14	982.14	2	D25	2	D25
		300	437.5	247.3439	5.3944	0.0153	0.0035	0.0244	2007.5984	2455.36	1473.21	5	D25	3	D25
LANTAI 2	B105	300	437.5	129.6355	2.8220	0.0075	0.0035	0.0244	985.8053	1473.21	982.14	3	D25	2	D25
		300	437.5	96.1054	2.1355	0.0056	0.0035	0.0244	732.8463	982.14	982.14	2	D25	2	D25
		300	437.5	269.2710	5.8440	0.0162	0.0035	0.0244	2120.6813	2455.36	1473.21	5	D25	3	D25
LANTAI 1	B105	300	437.5	183.0749	3.3322	0.0090	0.0035	0.0244	1176.0407	1473.21	982.14	3	D25	2	D25
		300	437.5	103.2383	2.2474	0.0059	0.0035	0.0244	773.1356	982.14	982.14	2	D25	2	D25
		300	437.5	271.8736	5.9118	0.0171	0.0035	0.0244	2239.5212	2455.36	1473.21	5	D25	3	D25
L. DASAR	B105	300	437.5	161.6730	3.5194	0.0085	0.0035	0.0244	1247.8581	1473.21	982.14	3	D25	2	D25
		300	437.5	108.7087	2.3011	0.0060	0.0035	0.0244	792.6028	982.14	982.14	2	D25	2	D25
		300	437.5	285.6466	6.2162	0.0181	0.0035	0.0244	2378.3536	2455.36	1473.21	5	D25	3	D25
BASE	B105	250	337.5	122.2788	5.3675	0.0152	0.0035	0.0244	1285.9223	1473.21	982.14	3	D25	2	D25
		250	337.5	48.1952	2.1157	0.0055	0.0035	0.0244	465.5087	982.14	982.14	2	D25	2	D25
		250	337.5	168.2218	7.3842	0.0224	0.0035	0.0244	1688.4702	1964.29	982.14	4	D25	2	D25

Tabel Penulangan Lentur Arsh Y Elevasi 5

Lantai	Balok	b (mm)	d (mm)	Mu (kNm)	k	p	pmin	pmax	Ac(m <sup>2</sup> )	Ac digunakan	As' digunakan	Tulangan terpasang			
												As	As"		
ATAP BETON	B139	300	437.5	26.6615	0.5586	0.0014	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	12.8000	0.2604	0.0007	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	51.3230	1.1172	0.0029	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
PENTHOUSE	B139	300	437.5	40.0903	0.8727	0.0022	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	24.3269	0.5296	0.0013	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	80.1806	1.7454	0.0045	0.0035	0.0244	593.7880	982.14	982.14	2	D25	2	D25
LANTAI 6	B139	300	437.5	43.1890	0.9402	0.0024	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	26.1082	0.5583	0.0014	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	86.3780	1.8903	0.0049	0.0035	0.0244	641.5836	982.14	982.14	2	D25	2	D25
LANTAI 5	B139	300	437.5	52.7964	1.1493	0.0029	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	27.1366	0.5907	0.0015	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	102.5361	2.2321	0.0058	0.0035	0.0244	767.6113	1473.21	982.14	3	D25	2	D25
LANTAI 4	B139	300	437.5	94.4824	2.0568	0.0064	0.0035	0.0244	704.5350	982.14	982.14	2	D25	2	D25
		300	437.5	35.4876	0.7725	0.0020	0.0035	0.0244	459.3750	1473.21	982.14	3	D25	2	D25
		300	437.5	141.9512	3.0901	0.0083	0.0035	0.0244	1084.1763	1473.21	982.14	3	D25	2	D25
LANTAI 3	B139	300	437.5	130.4534	2.8398	0.0075	0.0035	0.0244	990.4288	1473.21	982.14	3	D25	2	D25
		300	437.5	42.9631	0.9380	0.0024	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	171.8125	3.7401	0.0102	0.0035	0.0244	1333.4926	1473.21	982.14	3	D25	2	D25
LANTAI 2	B139	300	437.5	161.2244	3.5096	0.0095	0.0035	0.0244	1244.0932	1473.21	982.14	3	D25	2	D25
		300	437.5	50.8902	1.1069	0.0028	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	203.4008	4.4278	0.0122	0.0035	0.0244	1607.2263	1964.29	982.14	4	D25	2	D25
LANTAI 1	B139	300	437.5	205.4546	4.4949	0.0125	0.0035	0.0244	1634.5458	1964.29	982.14	4	D25	2	D25
		300	437.5	57.7055	1.2562	0.0032	0.0035	0.0244	459.3750	982.14	982.14	2	D25	2	D25
		300	437.5	230.8220	5.0247	0.0141	0.0035	0.0244	1854.1710	1964.29	1473.21	4	D25	3	D25
L. DASAR	B139	300	437.5	245.4431	5.3430	0.0162	0.0035	0.0244	1989.7602	2455.36	1473.21	6	D25	3	D25
		300	437.5	70.9912	1.5454	0.0040	0.0035	0.0244	523.4535	982.14	982.14	2	D25	2	D25
		300	437.5	283.9547	6.1815	0.0180	0.0035	0.0244	2361.5925	2455.36	1473.21	5	D25	3	D25
BASE	B139	250	337.5	153.6150	6.7430	0.0200	0.0035	0.0244	1686.8691	1964.29	982.14	4	D25	2	D25
		250	337.5	47.4253	2.0818	0.0054	0.0035	0.0244	458.6793	982.14	982.14	2	D25	2	D25
		250	337.5	189.7010	8.3271	0.0262	0.0035	0.0244	2210.8415	2455.36	1473.21	5	D25	3	D25

Momen Kapasitas Positif Atarah Y elevasi 5

Lantai	Balok	Tul. Atas Balok mm <sup>2</sup>	Tul. Bawah Balok mm <sup>2</sup>	Ac mm <sup>2</sup>	Ac' mm <sup>2</sup>	d m	A	B	C	c m	a m	F <sub>d</sub> MPa	M <sub>max</sub> kNm
Atap	B105	982.14	982.142857	982.142857	1634.32786	437.5	29044.50	587739.57	-69123599.143	59.70	33.75	-400.00	199.08
	B5	1473.21	1473.21429	1473.21429	2125.39929	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B45	982.14	982.142857	982.142857	1634.32786	437.5	29044.50	587739.57	-69123599.143	59.70	33.75	-400.00	199.08
	B105	1473.21	1473.21429	1473.21429	2125.39929	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B5	2455.36	2455.35714	2455.35714	3107.54214	437.5	29044.50	587739.57	-69123599.143	59.70	33.75	-400.00	199.08
Penthouse	B45	1473.21	1473.21429	1473.21429	2125.39929	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B105	1473.21	1473.21429	1473.21429	2125.39929	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B139	982.14	982.142857	982.142857	1634.32786	437.5	29044.50	587739.57	-69123599.143	59.70	33.75	-400.00	199.08
	B5	2455.36	2455.35714	2455.35714	3107.54214	437.5	29044.50	587739.57	-69123599.143	59.70	33.75	-400.00	199.08
	B45	1473.21	1473.21429	1473.21429	2125.39929	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
Lantai 6	B45	1473.21	1473.21429	1473.21429	2125.39929	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B105	1473.21	1473.21429	1473.21429	2125.39929	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B139	982.14	982.142857	982.142857	1634.32786	437.5	29044.50	587739.57	-69123599.143	59.70	33.75	-400.00	199.08
	B5	3437.50	1964.28571	1964.28571	4089.685	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B45	1473.21	1473.21429	1473.21429	2125.39929	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
Lantai 5	B105	1964.29	1964.2857	1964.2857	2616.47071	437.5	29044.50	1177025.29	-103953956.286	45.44	36.93	-32.11	199.08
	B139	1473.21	1473.21429	1473.21429	2125.39929	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B5	3437.50	1964.2857	1964.2857	4089.685	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B45	1964.29	1964.2857	1964.2857	2616.47071	437.5	29044.50	1177025.29	-103953956.286	45.44	36.93	-32.11	199.08
	B105	1964.29	1964.2857	1964.2857	2616.47071	437.5	29044.50	1177025.29	-103953956.286	45.44	36.93	-32.11	199.08
Lantai 4	B45	1964.29	1964.2857	1964.2857	2616.47071	437.5	29044.50	1177025.29	-103953956.286	45.44	36.93	-32.11	199.08
	B105	1964.29	1964.2857	1964.2857	2616.47071	437.5	29044.50	1177025.29	-103953956.286	45.44	36.93	-32.11	199.08
	B139	1473.21	1473.21429	1473.21429	2125.39929	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B5	3628.57	1964.28571	1964.28571	4580.76843	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B45	1964.29	1964.28571	1964.28571	2616.47071	437.5	29044.50	1177025.29	-103953956.286	45.44	36.93	-32.11	199.08
Lantai 3	B105	2455.36	2455.35714	2455.35714	3107.54214	437.5	29044.50	1275239.57	-124369134.857	47.07	40.01	-20.29	366.64
	B139	1473.21	1473.21429	1473.21429	2125.39929	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B5	4419.64	2455.35714	2455.35714	6071.82786	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B45	2455.36	2455.35714	2455.35714	3107.54214	437.5	29044.50	1275239.57	-124369134.857	47.07	40.01	-20.29	366.64
	B105	2455.36	2455.35714	2455.35714	3107.54214	437.5	29044.50	1275239.57	-124369134.857	47.07	40.01	-20.29	366.64
Lantai 2	B45	4419.64	2455.35714	2455.35714	6071.82786	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B105	2455.36	2455.35714	2455.35714	3107.54214	437.5	29044.50	1275239.57	-124369134.857	47.07	40.01	-20.29	366.64
	B139	1964.29	1964.28571	1964.28571	2616.47071	437.5	29044.50	980596.71	-103953956.286	45.83	38.96	-23.05	366.80
	B5	4419.64	2455.35714	2455.35714	6071.82786	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B45	2455.36	2455.35714	2455.35714	3107.54214	437.5	29044.50	1078831.00	-124369134.857	49.45	42.03	-2.09	54.60
Lantai 1	B105	2455.36	2455.35714	2455.35714	3107.54214	437.5	29044.50	1275239.57	-124369134.857	47.07	40.01	-20.29	366.80
	B139	1964.29	1964.28571	1964.28571	2616.47071	437.5	29044.50	980596.71	-103953956.286	45.83	38.96	-23.05	366.80
	B5	4419.64	2455.35714	2455.35714	6071.82786	637.5	32295.75	685933.86	-87458777.714	42.52	36.14	-368.76	445.94
	B45	2455.36	2455.35714	2455.35714	3107.54214	437.5	29044.50	1078831.00	-124369134.857	49.45	42.03	-2.09	54.60
	B105	2455.36	2455.35714	2455.35714	3107.54214	437.5	29044.50	1275239.57	-124369134.857	47.07	40.01	-20.29	366.80
Base	B139	2455.36	2455.35714	2455.35714	3107.54214	437.5	29044.50	82332.43	-124369134.857	51.99	44.19	-1.69	43.60
	B5	1964.28571	1964.2857	1964.2857	2616.47071	437.5	29044.50	785714.29	-73660714.356	59.16	33.29	-3.57	146.82
	B45	2455.35714	1473.21429	1473.21429	2455.35714	337.5	27960.75	833923.57	-92075892.837	45.72	37.16	-2.57	306.05
	B105	2455.35714	1473.21429	1473.21429	2455.35714	337.5	27960.75	833923.57	-92075892.837	45.72	37.16	-2.57	306.05
	B139	2455.35714	1964.28571	1964.28571	2455.35714	337.5	27960.75	833923.57	-92075892.837	45.72	37.16	-2.57	306.05

Momen Kapasitas Negatif Arah Y elevasi 5

Lantai	Balok	Tul. Atas Balok mm <sup>2</sup>	Tul. Bawah Balok mm <sup>2</sup>	As <sup>+</sup> mm <sup>2</sup>	As <sup>-</sup> mm <sup>2</sup>	bs mm	d mm		A	B	C	c mm	a mm	fs' MPa	Min kN/m	M <sub>req</sub> kNm
							mm	mm								
Atap	E105	982.143	982.14	1634.33	982.14	300	429.51	65.02.50	-64.445.43	-4.1539553.32	85.04	72.28	102.62	253.70	307.33472.41	
	E5	1473.214	1473.21	2125.40	1473.21	450	631.36	97.53.75	337.658.86	-5.0677247.21	77.16	65.59	66.22	505.38	521.73245.66	
	E45	982.143	982.14	1634.33	982.14	300	429.51	65.02.50	-64.445.43	-4.1539553.32	85.04	72.28	102.62	253.70	307.33472.41	
Atp. Beton	E105	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E139	982.143	982.14	1634.33	982.14	300	429.51	65.02.50	-64.445.43	-4.1539553.32	85.04	72.28	102.62	253.70	307.33472.41	
	E5	1473.214	2455.36	3107.54	1473.21	450	633.30	97.53.75	-359.068.29	-5.8860547.52	98.31	83.66	192.99	325.20	67.830470.66	
Penthouse	E45	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E105	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E139	982.143	982.14	1634.33	982.14	300	429.51	65.02.50	-64.445.43	-4.1539553.32	85.04	72.28	102.62	253.70	307.33472.41	
Lantai 6	E105	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E139	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E5	1473.214	2946.43	3598.61	1473.21	450	633.87	97.53.75	-555.516.86	-5.8433592.24	110.96	94.32	242.12	837.76	995.46007.01	
Lantai 5	E105	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E139	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E5	1473.214	2946.43	3598.61	1473.21	450	633.87	97.53.75	-555.516.86	-5.8433592.24	110.96	94.32	242.12	837.76	995.46007.01	
Lantai 4	E105	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E139	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E5	1473.214	2946.43	3598.61	1473.21	450	633.87	97.53.75	-555.516.86	-5.8433592.24	110.96	94.32	242.12	837.76	995.46007.01	
Lantai 3	E105	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E139	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E5	1473.214	2946.43	3598.61	1473.21	450	633.87	97.53.75	-555.516.86	-5.8433592.24	110.96	94.32	242.12	837.76	995.46007.01	
Lantai 2	E105	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E139	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E5	1473.214	2946.43	3598.61	1473.21	450	633.87	97.53.75	-555.516.86	-5.8433592.24	110.96	94.32	242.12	837.76	995.46007.01	
Basse	E105	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E139	982.143	1473.21	2125.40	982.14	300	431.36	65.02.50	-260.874.00	-4.0451498.14	101.44	86.23	193.99	325.20	384.5838.87	
	E5	1473.214	2946.43	3598.61	1473.21	450	633.87	97.53.75	-555.516.86	-5.8433592.24	110.96	94.32	242.12	837.76	995.46007.01	



Lantai	Balok	dimensi (mm)			L	Ln	V <sub>c</sub> kNm	M <sub>s</sub> <sup>+</sup> kNm	M <sub>s</sub> <sup>-</sup> kNm	Ve <sub>1</sub> kNm	Ve <sub>2</sub> kNm	Se ndi Plasts						
		b	h	d								0.5 Ve	Ve	V <sub>s</sub>	Av	s	dipakai	
Atap	B105	300	500	437.5	6	5.4	92.61	199.08	307.33	199.02	1.17	194.02	246.36	236.7	101	3	P 10 -100	
	B5	460	700	637.5	8	7.4	160.7	445.94	621.73	304.95	-16.99	277.27	138.63	107.81	157.1	223	2	P 10 -200
Atap Beton	B46	300	500	437.5	4	3.4	100.1	199.08	307.33	268.15	68.87	243.38	121.69	204.69	121	3	P 10 -120	
	B105	300	500	437.5	6	5.4	100.8	199.08	384.69	208.86	7.32	192.53	96.26	196.89	157.1	2	P 10 -100	
Penthouse	B139	300	500	437.5	4	3.4	23.98	199.08	307.33	192.99	145.03	188.62	93.41	129.28	236.7	151	3	P 10 -150
	B5	460	700	637.5	8	7.4	230.7	445.94	878.80	409.72	-51.88	369.97	184.99	493.29	382.9	122	5	P 10 -100
Lantai 6	B46	300	500	437.5	4	3.4	100.1	199.08	384.69	271.81	71.53	246.04	123.02	208.23	236.7	119	3	P 10 -100
	B105	300	500	437.5	6	5.4	117.1	199.08	384.69	225.15	-8.97	206.18	103.09	274.91	314.3	120	4	P 10 -100
Lantai 6	B139	300	500	437.5	4	3.4	48	199.08	307.33	217.01	121.01	204.68	102.33	153.06	157.1	103	2	P 10 -100
	B5	460	700	637.5	8	7.4	237.3	445.94	989.46	432.61	-41.97	381.73	195.87	522.31	382.9	115	5	P 10 -100
Lantai 6	B46	300	500	437.5	4	3.4	104.6	199.08	384.69	276.25	67.09	249.33	124.67	212.63	236.7	116	3	P 10 -100
	B105	300	500	437.5	6	5.4	124.2	199.08	384.69	232.30	-16.12	212.17	106.09	282.89	314.3	117	4	P 10 -100
Lantai 6	B139	300	500	437.5	4	3.4	62.85	199.08	307.33	221.86	116.16	208.26	104.13	157.86	157.1	105	2	P 10 -100
	B5	460	700	637.5	8	7.3	244.9	584.09	1090.31	474.22	-15.48	431.45	215.73	575.27	471.4	125	6	P 10 -120
Lantai 6	B46	300	500	437.5	4	3.3	110.4	286.80	453.96	334.89	114.05	305.62	152.81	287.67	314.3	115	4	P 10 -100
	B105	300	500	437.5	6	5.3	129	199.08	453.96	252.19	-5.75	230.89	116.92	307.86	314.3	107	4	P 10 -100
Lantai 4	B139	300	500	437.5	4	3.3	59.63	199.08	384.69	236.50	117.24	220.69	110.34	174.44	314.3	189	4	P 10 -150
	B5	460	700	637.5	8	7.3	253.1	302.55	1090.31	463.35	-42.81	419.15	209.56	556.87	392.9	108	5	P 10 -100
Lantai 4	B46	300	500	437.5	4	3.3	115.4	286.80	453.96	339.86	109.08	309.27	154.63	282.54	314.3	113	4	P 10 -100
	B105	300	500	437.5	6	5.3	132.5	199.08	453.96	255.72	-9.28	233.84	116.92	311.79	314.3	106	4	P 10 -100
Lantai 3	B139	300	500	437.5	4	3.3	72.99	199.08	384.69	249.86	103.88	230.51	115.25	187.53	236.7	132	3	P 10 -120
	B5	460	700	637.5	8	7.3	261.8	584.09	1188.18	504.42	-18.86	468.72	229.36	611.62	471.4	118	6	P 10 -100
Lantai 3	B46	300	500	437.5	4	3.3	120.5	286.80	453.96	369.20	128.14	337.24	168.82	329.94	352.9	125	5	P 10 -120
	B105	300	500	437.5	6	5.3	136.1	199.08	453.96	287.44	15.30	264.97	132.49	333.49	314.3	141	4	P 10 -140
Lantai 2	B139	300	500	437.5	4	3.3	83.7	286.80	384.69	287.15	119.75	284.96	132.48	233.46	314.3	141	4	P 10 -140
	B5	460	700	637.5	8	7.2	269.3	716.97	1280.80	546.77	8.17	499.08	249.54	665.44	471.4	108	6	P 10 -100
Lantai 2	B46	300	500	437.5	4	3.2	125	366.64	515.45	400.65	150.65	366.47	183.24	366.82	471.4	134	6	P 10 -120
	B105	300	500	437.5	6	5.2	134	286.80	515.45	288.28	20.28	285.73	132.87	234.49	314.3	141	4	P 10 -140
Lantai 2	B139	300	500	437.5	4	3.2	95.33	286.80	453.96	326.82	136.16	300.75	150.38	281.19	314.3	117	4	P 10 -100
	B5	460	700	637.5	8	7.2	205.8	716.97	1280.80	483.29	71.65	446.84	223.42	333.91	314.3	144	4	P 10 -120
Lantai 1	B46	300	500	437.5	4	3.2	130.5	366.64	515.45	408.12	145.18	370.45	185.22	493.93	471.4	100	6	P 10 -100
	B105	300	500	437.5	6	5.2	129.5	286.80	515.45	283.76	24.80	261.97	130.89	229.48	236.7	108	3	P 10 -100
Lantai 1	B139	300	500	437.5	4	3.2	92.82	366.64	453.96	349.26	163.62	323.88	161.94	312.02	314.3	106	4	P 10 -100
	B5	460	700	637.5	8	7.2	288.8	716.97	1368.16	578.39	0.81	527.25	263.63	703.00	382.9	85.5	5	P 10 -80
Lantai dasar	B46	300	500	437.5	4	3.2	137.8	436.60	569.00	452.66	177.14	414.99	207.49	433.50	471.4	114	6	P 10 -100
	B105	300	500	437.5	6	5.2	128.7	286.80	515.45	282.95	25.61	261.30	130.65	228.58	236.7	108	3	P 10 -100
Basis	B139	300	500	437.5	4	3.2	129.3	436.60	515.45	427.43	168.85	362.08	196.04	420.96	471.4	123	6	P 10 -120
	B5	250	400	337.5	8	7.2	63.44	146.82	300.77	125.61	-1.27	119.66	59.83	82.52	157.1	125	2	P 10 -120
Basis	B46	250	400	337.5	4	3.2	65.43	206.05	328.52	232.48	101.62	218.68	109.94	214.55	314.3	119	4	P 10 -100
	B105	250	400	337.5	6	5.2	60.08	208.05	300.77	157.52	37.40	149.73	74.86	122.61	236.7	158	3	P 10 -150
Basis	B139	250	400	337.5	4	3.2	65.79	256.82	328.52	248.40	116.82	234.52	117.26	236.67	314.3	108	4	P 10 -100

Penulangan Geser Pada daerah Luar Daerah Sendi Plastik

Lantai	Balok	dimensi (mm)		L	Ln	V <sub>e</sub> kNm	M <sub>r</sub> <sup>+</sup> kNm	M <sub>r</sub> <sup>-</sup> kNm	V <sub>e1</sub> kNm	V <sub>e2</sub> kNm	Luar Sendi Plastik							
		b	h								d	V <sub>e</sub>	V <sub>s</sub>	s				
Atap Beton	B105	300	500	437.5	6	5.4	92.61	199.08	307.33	199.02	13.80	164.72	99.8176	166.30	2	P	10	-150
	B5	450	700	637.5	8	7.4	160.67	445.94	621.73	304.95	-6.95	253.60	76.25148	315.31	2	P	10	-300
	B45	300	500	437.5	4	3.4	100.14	199.08	307.33	289.68	68.87	210.04	160.117	154.59	3	P	10	-150
	B105	300	500	437.5	6	5.4	100.77	199.08	384.59	208.86	22.34	186.56	128.9364	127.97	2	P	10	-120
	B139	300	500	437.5	4	3.4	23.98	199.08	307.33	192.99	145.03	178.88	118.6983	208.51	3	P	10	-200
Penthouse	B5	450	700	637.5	8	7.4	230.7	445.94	878.80	409.72	-39.14	334.97	184.7446	130.14	2	P	10	-120
	B45	300	500	437.5	4	3.4	100.14	199.08	384.59	271.81	95.39	236.77	195.8776	126.35	3	P	10	-120
	B105	300	500	437.5	6	5.4	117.08	199.08	384.59	225.15	6.05	196.82	142.611	173.55	3	P	10	-150
	B139	300	500	437.5	4	3.4	48	199.08	307.33	217.01	121.01	188.78	131.8858	125.11	2	P	10	-120
	B5	450	700	637.5	8	7.4	237.29	445.94	889.46	432.61	-27.14	357.65	214.9928	167.75	3	P	10	-150
Lantai 6	B45	300	500	437.5	4	3.4	104.58	199.08	384.59	276.26	90.95	238.60	198.3153	124.80	3	P	10	-120
	B105	300	500	437.5	6	5.4	124.21	199.08	384.59	232.30	-1.10	201.32	148.6135	166.54	3	P	10	-150
	B139	300	500	437.5	4	3.4	52.85	199.08	307.33	221.88	116.16	190.77	134.5458	122.98	2	P	10	-120
	B5	450	700	637.5	8	7.3	244.85	584.09	1090.31	474.22	4.80	400.58	272.2286	132.48	3	P	10	-120
	B45	300	500	437.5	4	3.3	110.42	286.80	453.96	334.89	146.78	300.68	281.094	117.40	4	P	10	-100
Lantai 5	B105	300	500	437.5	6	5.3	128.97	199.08	453.96	252.19	12.99	222.26	176.5344	140.20	3	P	10	-120
	B139	300	500	437.5	4	3.3	59.63	199.08	384.59	236.50	141.83	224.95	180.12	183.21	4	P	10	-180
	B5	450	700	637.5	8	7.3	253.08	302.55	1090.31	463.35	-42.81	366.28	226.5494	159.23	3	P	10	-150
	B45	300	500	437.5	4	3.3	115.39	286.80	453.96	339.86	141.79	302.64	283.7045	116.32	4	P	10	-100
	B105	300	500	437.5	6	5.3	132.5	199.08	453.96	255.72	9.46	224.46	179.465	137.91	3	P	10	-120
Lantai 3	B139	300	500	437.5	4	3.3	72.99	199.08	384.59	249.86	128.47	230.21	187.1374	132.26	3	P	10	-120
	B5	450	700	637.5	8	7.3	261.64	584.09	1188.18	504.42	5.19	428.12	308.9426	155.65	4	P	10	-150
	B45	300	500	437.5	4	3.3	120.53	366.64	453.96	369.20	165.39	333.41	324.7263	127.03	5	P	10	-120
	B105	300	500	437.5	6	5.3	136.07	286.80	515.45	287.44	40.49	261.28	228.5599	144.38	4	P	10	-140
	B139	300	500	437.5	4	3.3	89.7	286.80	384.59	287.15	146.38	263.05	230.9168	142.91	4	P	10	-140
Lantai 2	B5	450	700	637.5	8	7.2	269.3	716.97	1280.80	546.77	38.01	471.89	367.301	163.65	5	P	10	-150
	B45	300	500	437.5	4	3.2	125	366.64	515.45	400.65	197.64	369.52	372.8774	110.63	5	P	10	-110
	B105	300	500	437.5	6	5.2	134	286.80	515.45	288.28	45.95	262.41	230.0719	143.43	4	P	10	-140
	B139	300	500	437.5	4	3.2	95.33	286.80	453.96	326.82	169.89	300.97	281.4766	117.24	4	P	10	-110
	B5	450	700	637.5	8	7.2	205.82	716.97	1280.80	483.29	101.49	433.09	315.5766	114.28	3	P	10	-110
Lantai 1	B45	300	500	437.5	4	3.2	130.47	366.64	515.45	406.12	192.17	371.57	375.6124	109.82	5	P	10	-100
	B105	300	500	437.5	6	5.2	129.48	286.80	515.45	283.78	50.47	259.63	226.3632	109.34	3	P	10	-100
	B139	300	500	437.5	4	3.2	92.82	366.64	453.96	349.26	202.04	329.67	319.7411	103.21	4	P	10	-100
	B5	450	700	637.5	8	7.2	288.79	716.97	1368.16	578.39	0.81	466.27	621.6933	96.68	5	P	10	-90
	B45	300	500	437.5	4	3.2	137.76	438.60	569.06	452.66	242.27	431.69	455.773	108.61	6	P	10	-100
Lantai dasar	B105	300	500	437.5	6	5.2	128.67	286.80	515.45	282.95	51.28	259.13	225.6968	109.68	3	P	10	-100
	B139	300	500	437.5	4	3.2	129.29	438.60	515.45	427.43	223.08	400.85	414.6548	119.38	6	P	10	-110
	B5	250	400	337.5	8	7.2	63.44	146.82	300.77	125.61	13.36	126.13	91.15209	139.64	2	P	10	-130
Base	B45	250	400	337.5	4	3.2	65.43	206.05	328.52	232.48	150.13	248.28	254.012	100.22	4	P	10	-90
	B105	250	400	337.5	6	5.2	60.06	206.05	300.77	157.62	60.68	162.32	139.4037	136.95	3	P	10	-130
	B139	250	400	337.5	4	3.2	65.79	255.82	328.52	248.40	173.20	271.88	285.4882	89.17	4	P	10	-80

**TABEL PERHITUNGAN PELAT**  
TULANGAN POKOK

Ukuran (m)	Keterangan	$q_u$ (kN/m <sup>2</sup> )	$l_y/l_x$	$K$	Momen (kNm)	lebar (mm)	$f_c$ (Mpa)	$f'_c$ (Mpa)	$R_n$	$\rho$ perflu	$A_s$ (mm <sup>2</sup> )	$A_s$ terpasang (mm <sup>2</sup> )	Spasi hit (mm)	spasi giras (mm)	tuil terpasang
6x6 (Lantai)	Tumpuan x	9.508	1	36	12.3224	130	30	240	1.3971	0.0060	628.958	628.958	12.4.9.232	100	P10-100
	Lapangan x	9.508	1	36	12.3224	130	30	240	1.3971	0.0060	628.958	628.958	12.4.9.232	100	P10-100
6x6 (Lantai)	Tumpuan y	9.508	1	36	12.3224	130	30	240	1.7067	0.0074	699.829	699.829	11.2.2723	100	P10-100
	Lapangan y	9.508	1	36	12.3224	130	30	240	1.7067	0.0074	699.829	699.829	11.2.2723	100	P10-100
6x5 (Lantai)	Tumpuan x	9.508	1.2	46	10.9342	130	30	240	1.2397	0.0053	556.2377	556.2377	141.2.551	100	P10-100
	Lapangan x	9.508	1.2	46	10.9342	130	30	240	1.2397	0.0053	556.2377	556.2377	141.2.551	100	P10-100
6x5 (Lantai)	Tumpuan y	9.508	1.2	38	9.0326	130	30	240	1.2511	0.0053	507.9912	507.9912	154.6708	100	P10-100
	Lapangan y	9.508	1.2	38	9.0326	130	30	240	1.2511	0.0053	507.9912	507.9912	154.6708	100	P10-100
6x4 (Lantai)	Tumpuan x	9.508	1.5	56	8.5192	130	30	240	0.9659	0.0041	430.8993	430.8993	182.3.429	100	P10-100
	Lapangan x	9.508	1.5	56	8.5192	130	30	240	0.9659	0.0041	430.8993	430.8993	182.3.429	100	P10-100
6x4 (Lantai)	Tumpuan y	9.508	1.5	37	5.6287	130	30	240	0.7796	0.0033	313.4602	313.4602	250.6584	100	P10-100
	Lapangan y	9.508	1.5	37	5.6287	130	30	240	0.7796	0.0033	313.4602	313.4602	250.6584	100	P10-100
6x3 (Lantai)	Tumpuan x	9.508	2	62	5.3055	130	30	240	0.6015	0.0025	266.3473	275.6	285.0923	100	P10-100
	Lapangan x	9.508	2	62	5.3055	130	30	240	0.6015	0.0025	266.3473	275.6	285.0923	100	P10-100
6x3 (Lantai)	Tumpuan y	9.508	2	35	2.9950	130	30	240	0.4148	0.0017	165.5584	275.6	285.0923	100	P10-100
	Lapangan y	9.508	2	35	2.9950	130	30	240	0.4148	0.0017	165.5584	275.6	285.0923	100	P10-100
5x4 (Lantai)	Tumpuan x	9.508	1.25	48	7.3021	130	30	240	0.8279	0.0035	368.2885	368.2885	213.3.421	100	P10-101
	Lapangan x	9.508	1.25	48	7.3021	130	30	240	0.8279	0.0035	368.2885	368.2885	213.3.421	100	P10-102
5x4 (Lantai)	Tumpuan y	9.508	1.25	38	5.7809	130	30	240	0.8007	0.0034	322.0717	322.0717	243.9563	100	P10-103
	Lapangan y	9.508	1.25	38	5.7809	130	30	240	0.8007	0.0034	322.0717	322.0717	243.9563	100	P10-104
5x3 (Lantai)	Tumpuan x	9.508	1.667	58.67	5.0205	130	30	240	0.5692	0.0024	251.8765	275.6	285.0923	100	P10-100
	Lapangan x	9.508	1.667	58.67	5.0205	130	30	240	0.5692	0.0024	251.8765	275.6	285.0923	100	P10-100
5x3 (Lantai)	Tumpuan y	9.508	1.667	36.33	3.1088	130	30	240	0.4306	0.0018	171.9041	275.6	285.0923	100	P10-100
	Lapangan y	9.508	1.667	36.33	3.1088	130	30	240	0.4306	0.0018	171.9041	275.6	285.0923	100	P10-100
4x4 (Lantai)	Tumpuan x	9.508	1.000	36	5.4766	130	30	240	0.6209	0.0026	275.0477	275.6	285.0923	100	P10-100
	Lapangan x	9.508	1.000	36	5.4766	130	30	240	0.6209	0.0026	275.0477	275.6	285.0923	100	P10-100
4x4 (Lantai)	Tumpuan y	9.508	1.000	36	5.4766	130	30	240	0.7585	0.0032	304.8563	304.8563	257.7.326	100	P10-100
	Lapangan y	9.508	1.000	36	5.4766	130	30	240	0.7585	0.0032	304.8563	304.8563	257.7.326	100	P10-100
4x2 (Lantai)	Tumpuan x	9.508	2.000	62	2.3580	130	30	240	0.2673	0.0011	117.5831	275.6	285.0923	100	P10-100
	Lapangan x	9.508	2.000	62	2.3580	130	30	240	0.2673	0.0011	117.5831	275.6	285.0923	100	P10-100
4x2 (Lantai)	Tumpuan y	9.508	2.000	35	1.3311	130	30	240	0.1844	0.0008	73.2438	275.6	285.0923	100	P10-100
	Lapangan y	9.508	2.000	35	1.3311	130	30	240	0.1844	0.0008	73.2438	275.6	285.0923	100	P10-100

TABEL PERHITUNGAN PELAT TULANGAN SUSUT										
Ukuran (m)	Keterangan	Ø tul susut (mm)	As hit (mmf)	Spasi hit (mm)	spasi guna (mm)	As guna (mmf)	tul terpakai	$P_u$ (kN)	$\phi P_u$ (kN)	Keterangan
4x2 (lantai)	Tumpuan x	8	275.6	182.4591	150	335.2381	P8-150	28.524	71.88859	kuat menahan geser
	Lapangan x	8	275.6	182.4591	150	335.2381	P8-150	28.524	71.88859	kuat menahan geser
6x6 (lantai)	Tumpuan y	8	275.6	182.4591	150	335.2381	P8-150	28.524	65.04205	kuat menahan geser
	Lapangan y	8	275.6	182.4591	150	335.2381	P8-150	28.524	65.04205	kuat menahan geser
4x4 (lantai)	Tumpuan x	8	275.6	182.4591	150	335.2381	P8-150	28.524	71.88859	kuat menahan geser
	Lapangan x	8	275.6	182.4591	150	335.2381	P8-150	28.524	71.88859	kuat menahan geser
6x5 (lantai)	Tumpuan y	8	275.6	182.4591	150	335.2381	P8-150	28.524	65.04205	kuat menahan geser
	Lapangan y	8	275.6	182.4591	150	335.2381	P8-150	28.524	65.04205	kuat menahan geser
4x2 (lantai)	Tumpuan x	8	275.6	182.4591	150	335.2381	P8-150	28.524	71.88859	kuat menahan geser
	Lapangan x	8	275.6	182.4591	150	335.2381	P8-150	28.524	71.88859	kuat menahan geser
6x4 (lantai)	Tumpuan y	8	275.6	182.4591	150	335.2381	P8-150	28.524	65.04205	kuat menahan geser
	Lapangan y	8	275.6	182.4591	150	335.2381	P8-150	28.524	65.04205	kuat menahan geser
6x3 (lantai)	Tumpuan x	8	275.6	182.4591	150	335.2381	P8-150	28.524	71.88859	kuat menahan geser
	Lapangan x	8	275.6	182.4591	150	335.2381	P8-150	28.524	71.88859	kuat menahan geser
6x3 (lantai)	Tumpuan y	8	275.6	182.4591	150	335.2381	P8-150	28.524	65.04205	kuat menahan geser
	Lapangan y	8	275.6	182.4591	150	335.2381	P8-150	28.524	65.04205	kuat menahan geser
5x4 (lantai)	Tumpuan x	8	275.6	182.4591	150	335.2381	P8-151	23.77	71.88859	kuat menahan geser
	Lapangan x	8	275.6	182.4591	150	335.2381	P8-152	23.77	71.88859	kuat menahan geser
5x4 (lantai)	Tumpuan y	8	275.6	182.4591	150	335.2381	P8-153	23.77	65.04205	kuat menahan geser
	Lapangan y	8	275.6	182.4591	150	335.2381	P8-154	23.77	65.04205	kuat menahan geser
5x3 (lantai)	Tumpuan x	8	275.6	182.4591	150	335.2381	P8-150	23.77	71.88859	kuat menahan geser
	Lapangan x	8	275.6	182.4591	150	335.2381	P8-150	23.77	71.88859	kuat menahan geser
5x3 (lantai)	Tumpuan y	8	275.6	182.4591	150	335.2381	P8-150	23.77	65.04205	kuat menahan geser
	Lapangan y	8	275.6	182.4591	150	335.2381	P8-150	23.77	65.04205	kuat menahan geser
4x4 (lantai)	Tumpuan x	8	275.6	182.4591	150	335.2381	P8-150	19.016	71.88859	kuat menahan geser
	Lapangan x	8	275.6	182.4591	150	335.2381	P8-150	19.016	71.88859	kuat menahan geser
4x4 (lantai)	Tumpuan y	8	275.6	182.4591	150	335.2381	P8-150	19.016	65.04205	kuat menahan geser
	Lapangan y	8	275.6	182.4591	150	335.2381	P8-150	19.016	65.04205	kuat menahan geser
4x2 (lantai)	Tumpuan x	8	275.6	182.4591	150	335.2381	P8-150	19.016	71.88859	kuat menahan geser
	Lapangan x	8	275.6	182.4591	150	335.2381	P8-150	19.016	71.88859	kuat menahan geser
4x2 (lantai)	Tumpuan y	8	275.6	182.4591	150	335.2381	P8-150	19.016	65.04205	kuat menahan geser
	Lapangan y	8	275.6	182.4591	150	335.2381	P8-150	19.016	65.04205	kuat menahan geser



**TABEL PERHITUNGAN PELAT**  
**TULANGAN POKOK**

Ukuran (m)	Keterangan	$q_u$ (kN/m <sup>2</sup> )	$\mu/A_s$	$\lambda$	Momen (kNm)	tebal (mm)	$f_c$ (Mpa)	$f_y$ (Mpa)	$R_n$	$\rho$ peribu	$A_s$ (mm <sup>2</sup> )	$A_s$ terpasang (mm <sup>2</sup> )	Spasi hit (mm)	spasi guna (mm)	tul terpasang
6x1 (MxP)	Tumpuan x	6.82	1.500	38	4.14656	130	30	240	0.4701	0.001977	207.6144	275.6	285.0923	100	P10-100
	Lapangan x	6.82	1.500	56	6.11072	130	30	240	0.6928	0.002927	307.3446	307.3446	255.646	100	P10-100
	Tumpuan y	6.82	1.500	37	4.03744	130	30	240	0.5592	0.002356	223.8327	275.6	285.0923	100	P10-100
	Lapangan y	6.82	1.500	37	4.03744	130	30	240	0.5592	0.002356	223.8327	275.6	285.0923	100	P10-100
4x1 (MxP)	Tumpuan x	6.82	1.000	36	3.92832	130	30	240	0.4454	0.001872	196.5892	275.6	285.0923	100	P10-100
	Lapangan x	6.82	1.000	36	3.92832	130	30	240	0.4454	0.001872	196.5892	275.6	285.0923	100	P10-100
	Tumpuan y	6.82	1.000	36	3.92832	130	30	240	0.5441	0.002292	217.7164	275.6	285.0923	100	P10-100
	Lapangan y	6.82	1.000	36	3.92832	130	30	240	0.5441	0.002292	217.7164	275.6	285.0923	100	P10-100
4x2 (MxP)	Tumpuan x	6.82	2.000	62	1.69136	130	30	240	0.1918	0.000802	84.21468	275.6	285.0923	100	P10-100
	Lapangan x	6.82	2.000	62	1.69136	130	30	240	0.1918	0.000802	84.21468	275.6	285.0923	100	P10-100
	Tumpuan y	6.82	2.000	35	0.9548	130	30	240	0.1322	0.000552	52.48293	275.6	285.0923	100	P10-100
	Lapangan y	6.82	2.000	35	0.9548	130	30	240	0.1322	0.000552	52.48293	275.6	285.0923	100	P10-100

**TABEL PERHITUNGAN PELAT  
TULANGAN SUSUT**

Ukuran (m)	Keterangan	Ø tul susut (mm)	Ar hit (mm <sup>2</sup> )	Spasi hit (mm)	spasi guna (mm)	Ar guna (mm <sup>2</sup> )	tul terpasang	$P_u$ (kN)	$\phi V_c$ (kN)	Keterangan
B1 (A-B)	Tumpuan x	8	275.6	182.4591	150	335.2381	P8-150	20.46	71.88859	kuat menahan geser
	Lapangan x	8	275.6	182.4591	150	335.2381	P8-150	20.46	71.88859	kuat menahan geser
	Tumpuan y	8	275.6	182.4591	150	335.2381	P8-150	20.46	65.04205	kuat menahan geser
	Lapangan y	8	275.6	182.4591	150	335.2381	P8-150	20.46	65.04205	kuat menahan geser
A1 (B-D)	Tumpuan x	8	275.6	182.4591	150	335.2381	P8-150	13.64	71.88859	kuat menahan geser
	Lapangan x	8	275.6	182.4591	150	335.2381	P8-150	13.64	71.88859	kuat menahan geser
	Tumpuan y	8	275.6	182.4591	150	335.2381	P8-150	13.64	65.04205	kuat menahan geser
	Lapangan y	8	275.6	182.4591	150	335.2381	P8-150	13.64	65.04205	kuat menahan geser
A2 (A-B)	Tumpuan x	8	275.6	182.4591	150	335.2381	P8-150	13.64	71.88859	kuat menahan geser
	Lapangan x	8	275.6	182.4591	150	335.2381	P8-150	13.64	71.88859	kuat menahan geser
	Tumpuan y	8	275.6	182.4591	150	335.2381	P8-150	13.64	65.04205	kuat menahan geser
	Lapangan y	8	275.6	182.4591	150	335.2381	P8-150	13.64	65.04205	kuat menahan geser

TABEL PENULANGAN LONGITUDINAL

Lantai	$b = h$ (mm)	$M_x$ (KNm)	$M_y$ (KNm)	$P_u$ (KNm)	$\rho$	$A_s$ (mm <sup>2</sup> )	$n$	tulangan dipakai
Atap	600	92.488	108.407	293.13	0,015	5400	10.996	12D25
Atap Beton	600	238.189	149.37	944.66	0,015	5400	10.996	12D25
Penthouse	600	233.039	165.409	1728.25	0,015	5400	10.996	12D25
Lantai 6	700	337.833	277.24	2524.41	0,015	7350	14.967	16D25
Lantai 5	700	380.217	331.828	3318.02	0,015	7350	14.967	16D26
Lantai 4	700	401.179	346.323	4120.49	0,015	7350	14.967	16D26
Lantai 3	800	513.2	449.128	4941.58	0,015	9800	19.549	20D25
Lantai 2	800	438.385	555.636	5759.75	0,015	9800	19.549	20D25
Lantai 1	800	613.202	619.88	6408.22	0,015	9800	19.549	20D25
Lantai Dasar	800	514.928	398.604	7231.76	0,015	9600	19.549	20D25

Tabel Penulangan Transversal Kolom Sepanjang  $\lambda_n$

Lantai	$b=h$ (mm)	$V_e1$ (KN)	$V_e3$ (KN)	$V_e$ (KN)	$\lambda_o$ (mm)	$S$ (mm)	$h_c$ (mm)	$A_{ch}$ (mm <sup>2</sup> )	$A_g$ (mm <sup>2</sup> )	$A_{sh1}$ (mm <sup>2</sup> )	$A_{sh2}$ (mm <sup>2</sup> )	$A_s$ (mm <sup>2</sup> )	$n$	$V_{seksi}$ (mm <sup>2</sup> )	$V_y$ (KN)	Tul Digunakan
Atap	600	370.286	54.21	214.698	600	100	469	270.400	360000	349.6686	316.6	349.67	4	1135.583	286.26	4D13-100
Atap Beton	600	934.615	146.3	322.117	600	100	469	270.400	360000	349.6686	316.6	349.67	4	1135.583	429.49	4D13-100
Penthouse	600	1068.15	152.35	345.388	600	100	469	270.400	360000	349.6686	316.6	349.67	4	1135.583	460.52	4D13-100
Lantai 6	700	1696.15	223.96	554.725	700	100	569	384.400	490000	351.7020	384.1	384.08	4	1347.492	739.63	4D13-100
Lantai 5	700	1837.5	245.22	502.519	700	100	569	384.400	490000	351.7020	384.1	384.08	4	1347.492	670.00	4D13-100
Lantai 4	700	1850.22	262.62	615.679	700	100	569	384.400	490000	351.7020	384.1	384.08	4	1347.492	670.00	4D13-100
Lantai 3	800	2933.85	329.8	675.82	800	100	669	518.400	640000	354.1389	452.9	452.93	4	1560.050	901.09	4D13-100
Lantai 2	800	1898.9	326.5	559.85	800	100	669	518.400	640000	363.0833	451.6	451.58	4	1560.050	828.65	4D13-100
Lantai 1	800	1910.2	357.45	598.974	800	100	669	518.400	640000	363.0833	451.6	451.58	4	1560.488	798.63	4D13-100
Lantai Dasar	800	1835.5	289.12	331.014	800	100	669	518.400	640000	333.0833	451.6	451.575	4	1149.974	441.35	4D13-100

Tabel Penulangan Transversal Kolom Dituar  $\lambda_o$

Lantai	$b=h$	$V_e1$	$V_e2$ (KN)	$V_e3$	$V_e$ (KN)	$S$	$N_{se}$	$V_c$	Tul
Atap	600	370.3	214.6983	54.21	214.69834	150	455.98	318.663	4D13-150
Atap Beton	600	934.6	322.1169	146.3	322.11685	150	555.45	325.022	4D13-150
Penthouse	600	1068	345.3884	152.4	345.38844	150	986.07	390.69	4D13-150
Lantai 6	700	1696	554.7253	224	554.72531	150	1414.13	489.030	4D13-150
Lantai 5	700	1838	502.5193	245.2	502.51926	150	1841.35	514.282	4D13-150
Lantai 4	700	1850	615.6786	262.6	615.67865	150	2269.01	540.409	4D13-150
Lantai 3	800	2954	675.8204	329.8	675.82039	150	2695.14	697.75	4D13-150
Lantai 2	800	1899	559.85	326.5	559.85	150	3122.95	723.35	4D13-150
Lantai 1	800	1910	598.9742	357.5	598.97416	150	3470.67	744.179	4D13-150
Lantai Dasar	800	1836	331.0137	289.1	331.01374	150	3894.89	636.656	4D13-150



LAMPIRAN 37

SAP2000 v7.40 File: KUDA\_BAJA\_PLAFOND\_OK KN-m Units PAGE 1  
2/17/10 17:24:39

YOGYAKARTA

S T A T I C L O A D C A S E S

STATIC CASE	CASE TYPE	SELF WT FACTOR
DL	DEAD	1.0000
LL	LIVE	0.0000
W	WIND	0.0000

SAP2000 v7.40 File: KUDA\_BAJA\_PLAFOND\_OK KN-m Units PAGE 2  
2/17/10 17:24:39

YOGYAKARTA

J O I N T D A T A

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	RESTRAINTS	ANGLE-A	ANGLE-B	ANGLE-C
J1	-8.00000	0.00000	0.00000	1 1 1 0 0 0	0.000	0.000	0.000
J2	-7.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J3	-7.00000	0.00000	0.57750	0 0 0 0 0 0	0.000	0.000	0.000
J4	-6.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J5	-6.00000	0.00000	1.15500	0 0 0 0 0 0	0.000	0.000	0.000
J6	-5.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J7	-5.00000	0.00000	1.73250	0 0 0 0 0 0	0.000	0.000	0.000
J8	-4.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J9	-4.00000	0.00000	2.31000	0 0 0 0 0 0	0.000	0.000	0.000
J10	-3.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J11	-3.00000	0.00000	2.88750	0 0 0 0 0 0	0.000	0.000	0.000
J12	-2.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J13	-2.00000	0.00000	3.46500	0 0 0 0 0 0	0.000	0.000	0.000
J14	-1.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J15	-1.00000	0.00000	4.04250	0 0 0 0 0 0	0.000	0.000	0.000
J16	0.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J17	0.00000	0.00000	4.62000	0 0 0 0 0 0	0.000	0.000	0.000
J18	1.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J19	1.00000	0.00000	4.04250	0 0 0 0 0 0	0.000	0.000	0.000
J20	2.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J21	2.00000	0.00000	3.46500	0 0 0 0 0 0	0.000	0.000	0.000
J22	3.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J23	3.00000	0.00000	2.88750	0 0 0 0 0 0	0.000	0.000	0.000
J24	4.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J25	4.00000	0.00000	2.31000	0 0 0 0 0 0	0.000	0.000	0.000
J26	5.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J27	5.00000	0.00000	1.73250	0 0 0 0 0 0	0.000	0.000	0.000
J28	6.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J29	6.00000	0.00000	1.15500	0 0 0 0 0 0	0.000	0.000	0.000
J30	7.00000	0.00000	0.00000	0 0 0 0 0 0	0.000	0.000	0.000
J31	7.00000	0.00000	0.57750	0 0 0 0 0 0	0.000	0.000	0.000
J32	8.00000	0.00000	0.00000	0 0 1 0 0 0	0.000	0.000	0.000

SAP2000 v7.40 File: KUDA\_BAJA\_PLAFOND\_OK KN-m Units PAGE 3  
2/17/10 17:24:39

YOGYAKARTA

F R A M E E L E M E N T D A T A

FRAME	JNT-1	JNT-2	SECTION	ANGLE	RELEASES	SEGMENTS	R1	R2	FACTOR	LENGTH
F1	J1	J2	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F2	J1	J3	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F3	J2	J3	L90X90X7	0.000	000000	2	0.000	0.000	1.000	0.578
F4	J2	J4	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F5	J3	J4	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F6	J3	J5	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F7	J4	J5	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F8	J4	J6	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F9	J5	J6	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.528
F10	J5	J7	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155

F11	J6	J7	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.733
F12	J6	J8	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F13	J7	J8	L90X90X7	0.000	000000	2	0.000	0.000	1.000	2.000
F14	J7	J9	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F15	J8	J9	L90X90X7	0.000	000000	2	0.000	0.000	1.000	2.310
F16	J8	J10	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F17	J9	J10	L90X90X7	0.000	000000	2	0.000	0.000	1.000	2.517
F18	J9	J11	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F19	J10	J11	L90X90X7	0.000	000000	2	0.000	0.000	1.000	2.888
F20	J10	J12	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F21	J11	J12	L90X90X7	0.000	000000	2	0.000	0.000	1.000	3.056
F22	J11	J13	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F23	J12	J13	L90X90X7	0.000	000000	2	0.000	0.000	1.000	3.465
F24	J12	J14	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F25	J13	J14	L90X90X7	0.000	000000	2	0.000	0.000	1.000	3.606
F26	J13	J15	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F27	J14	J15	L90X90X7	0.000	000000	2	0.000	0.000	1.000	4.043
F28	J14	J16	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F29	J15	J16	L90X90X7	0.000	000000	2	0.000	0.000	1.000	4.164
F30	J15	J17	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F31	J16	J17	L90X90X7	0.000	000000	2	0.000	0.000	1.000	4.620
F32	J16	J18	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F33	J16	J19	L90X90X7	0.000	000000	2	0.000	0.000	1.000	4.164
F34	J17	J19	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F35	J18	J19	L90X90X7	180.000	000000	2	0.000	0.000	1.000	4.043
F36	J18	J20	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F37	J18	J21	L90X90X7	0.000	000000	2	0.000	0.000	1.000	3.606
F38	J19	J21	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F39	J20	J21	L90X90X7	180.000	000000	2	0.000	0.000	1.000	3.465
F40	J20	J22	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F41	J20	J23	L90X90X7	0.000	000000	2	0.000	0.000	1.000	3.056
F42	J21	J23	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F43	J22	J23	L90X90X7	180.000	000000	2	0.000	0.000	1.000	2.888
F44	J22	J24	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F45	J22	J25	L90X90X7	0.000	000000	2	0.000	0.000	1.000	2.517
F46	J23	J25	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F47	J24	J25	L90X90X7	180.000	000000	2	0.000	0.000	1.000	2.310
F48	J24	J26	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F49	J24	J27	L90X90X7	0.000	000000	2	0.000	0.000	1.000	2.000
F50	J25	J27	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F51	J26	J27	L90X90X7	180.000	000000	2	0.000	0.000	1.000	1.733
F52	J26	J28	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F53	J26	J29	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.528
F54	J27	J29	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F55	J28	J29	L90X90X7	180.000	000000	2	0.000	0.000	1.000	1.155
F56	J28	J30	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F57	J28	J31	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F58	J29	J31	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155
F59	J30	J31	L90X90X7	180.000	000000	2	0.000	0.000	1.000	0.578
F60	J30	J32	L90X90X7	180.000	000000	4	0.000	0.000	1.000	1.000
F61	J31	J32	L90X90X7	0.000	000000	2	0.000	0.000	1.000	1.155

SAP2000 v7.40 File: KUDA\_BAJA\_PLAFOND\_OK KN-m Units PAGE 4  
2/17/10 17:24:39

YOGYAKARTA

J O I N T F O R C E S Load Case DL

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	GLOBAL-XX	GLOBAL-YY	GLOBAL-ZZ
J17	0.000	0.000	-2.530	0.000	0.000	0.000
J3	0.000	0.000	-2.530	0.000	0.000	0.000
J5	0.000	0.000	-2.530	0.000	0.000	0.000
J7	0.000	0.000	-2.530	0.000	0.000	0.000
J9	0.000	0.000	-2.530	0.000	0.000	0.000
J11	0.000	0.000	-2.530	0.000	0.000	0.000
J13	0.000	0.000	-2.530	0.000	0.000	0.000
J15	0.000	0.000	-2.530	0.000	0.000	0.000
J19	0.000	0.000	-2.530	0.000	0.000	0.000
J21	0.000	0.000	-2.530	0.000	0.000	0.000
J23	0.000	0.000	-2.530	0.000	0.000	0.000
J25	0.000	0.000	-2.530	0.000	0.000	0.000
J27	0.000	0.000	-2.530	0.000	0.000	0.000
J29	0.000	0.000	-2.530	0.000	0.000	0.000
J31	0.000	0.000	-2.530	0.000	0.000	0.000
J1	0.000	0.000	-1.265	0.000	0.000	0.000
J32	0.000	0.000	-1.265	0.000	0.000	0.000
J16	0.000	0.000	-0.720	0.000	0.000	0.000
J2	0.000	0.000	-0.720	0.000	0.000	0.000

J4	0.000	0.000	-0.720	0.000	0.000	0.000
J6	0.000	0.000	-0.720	0.000	0.000	0.000
J8	0.000	0.000	-0.720	0.000	0.000	0.000
J10	0.000	0.000	-0.720	0.000	0.000	0.000
J12	0.000	0.000	-0.720	0.000	0.000	0.000
J14	0.000	0.000	-0.720	0.000	0.000	0.000
J18	0.000	0.000	-0.720	0.000	0.000	0.000
J20	0.000	0.000	-0.720	0.000	0.000	0.000
J22	0.000	0.000	-0.720	0.000	0.000	0.000
J24	0.000	0.000	-0.720	0.000	0.000	0.000
J26	0.000	0.000	-0.720	0.000	0.000	0.000
J28	0.000	0.000	-0.720	0.000	0.000	0.000
J30	0.000	0.000	-0.720	0.000	0.000	0.000

SAP2000 v7.40 File: KUDA\_BAJA\_PLAFOND\_OK KN-m Units PAGE 5  
2/17/10 17:24:39

YOGYAKARTA

J O I N T F O R C E S Load Case LL

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	GLOBAL-XX	GLOBAL-YY	GLOBAL-ZZ
J17	0.000	0.000	-1.000	0.000	0.000	0.000
J3	0.000	0.000	-1.000	0.000	0.000	0.000
J5	0.000	0.000	-1.000	0.000	0.000	0.000
J7	0.000	0.000	-1.000	0.000	0.000	0.000
J9	0.000	0.000	-1.000	0.000	0.000	0.000
J11	0.000	0.000	-1.000	0.000	0.000	0.000
J13	0.000	0.000	-1.000	0.000	0.000	0.000
J15	0.000	0.000	-1.000	0.000	0.000	0.000
J19	0.000	0.000	-1.000	0.000	0.000	0.000
J21	0.000	0.000	-1.000	0.000	0.000	0.000
J23	0.000	0.000	-1.000	0.000	0.000	0.000
J25	0.000	0.000	-1.000	0.000	0.000	0.000
J27	0.000	0.000	-1.000	0.000	0.000	0.000
J29	0.000	0.000	-1.000	0.000	0.000	0.000
J31	0.000	0.000	-1.000	0.000	0.000	0.000
J1	0.000	0.000	-0.500	0.000	0.000	0.000
J32	0.000	0.000	-0.500	0.000	0.000	0.000

SAP2000 v7.40 File: KUDA\_BAJA\_PLAFOND\_OK KN-m Units PAGE 6  
2/17/10 17:24:39

YOGYAKARTA

J O I N T F O R C E S Load Case W

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	GLOBAL-XX	GLOBAL-YY	GLOBAL-ZZ
J1	0.115	0.000	-0.200	0.000	0.000	0.000
J17	0.345	0.000	0.200	0.000	0.000	0.000
J3	0.115	0.000	-0.200	0.000	0.000	0.000
J5	0.115	0.000	-0.200	0.000	0.000	0.000
J7	0.115	0.000	-0.200	0.000	0.000	0.000
J9	0.115	0.000	-0.200	0.000	0.000	0.000
J11	0.115	0.000	-0.200	0.000	0.000	0.000
J13	0.115	0.000	-0.200	0.000	0.000	0.000
J15	0.115	0.000	-0.200	0.000	0.000	0.000
J32	0.230	0.000	0.400	0.000	0.000	0.000
J19	0.230	0.000	0.400	0.000	0.000	0.000
J21	0.230	0.000	0.400	0.000	0.000	0.000
J23	0.230	0.000	0.400	0.000	0.000	0.000
J25	0.230	0.000	0.400	0.000	0.000	0.000
J27	0.230	0.000	0.400	0.000	0.000	0.000
J29	0.230	0.000	0.400	0.000	0.000	0.000
J31	0.230	0.000	0.400	0.000	0.000	0.000

SAP2000 v7.40 File: KUDA\_BAJA\_PLAFOND\_OK KN-m Units PAGE 1  
10/22/09 19:53:45

YOGYAKARTA

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
DSTL1	ADD	DL	1.4000	STATIC(DEAD)	DSTL1
DSTL2	ADD	DL	1.2000	STATIC(DEAD)	DSTL2
		LL	1.6000	STATIC(LIVE)	
DSTL3	ADD	DL	1.2000	STATIC(DEAD)	DSTL3
		LL	0.5000	STATIC(LIVE)	
		W	1.3000	STATIC(WIND)	
DSTL4	ADD	DL	1.2000	STATIC(DEAD)	DSTL4
		LL	0.5000	STATIC(LIVE)	
		W	-1.3000	STATIC(WIND)	
DSTL5	ADD	DL	0.9000	STATIC(DEAD)	DSTL5
		W	1.3000	STATIC(WIND)	
DSTL6	ADD	DL	0.9000	STATIC(DEAD)	DSTL6
		W	-1.3000	STATIC(WIND)	

SAP2000 v7.40 File: KUDA\_BAJA\_PLAFOND\_OK KN-m Units PAGE 2  
10/22/09 19:53:45

YOGYAKARTA

FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
F1	Minima		36.15	4.21	0.00	0.00	0.00	-3.76
			DSTL6	DSTL6	DSTL2	DSTL6	DSTL2	DSTL2
F1	Maxima		67.86	7.67	0.00	0.00	0.00	3.80
			DSTL2	DSTL2	DSTL6	DSTL6	DSTL2	DSTL2
F2	Minima		-81.56	-5.53	0.00	0.00	0.00	-3.15
			DSTL2	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F2	Maxima		-46.43	-2.99	0.00	0.00	0.00	3.11
			DSTL5	DSTL6	DSTL6	DSTL6	DSTL2	DSTL2
F3	Minima		-2.36	7.56	0.00	0.00	0.00	-3.83
			DSTL2	DSTL6	DSTL2	DSTL6	DSTL2	DSTL2
F3	Maxima		-1.00	13.28	0.00	0.00	0.00	3.83
			DSTL6	DSTL2	DSTL6	DSTL6	DSTL2	DSTL2
F4	Minima		28.59	2.30	0.00	0.00	0.00	-2.04
			DSTL6	DSTL6	DSTL2	DSTL6	DSTL2	DSTL2
F4	Maxima		54.58	4.23	0.00	0.00	0.00	2.08
			DSTL2	DSTL2	DSTL6	DSTL6	DSTL2	DSTL2
F5	Minima		3.50	-3.20	0.00	0.00	0.00	-1.80
			DSTL5	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F5	Maxima		6.08	-1.71	0.00	0.00	0.00	1.76
			DSTL2	DSTL6	DSTL6	DSTL6	DSTL2	DSTL2
F6	Minima		-68.99	-2.99	0.00	0.00	0.00	-1.69
			DSTL2	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F6	Maxima		-39.06	-1.58	0.00	0.00	0.00	1.64
			DSTL5	DSTL6	DSTL5	DSTL6	DSTL2	DSTL2
F7	Minima		-5.57	1.47	0.00	0.00	0.00	-1.47
			DSTL2	DSTL6	DSTL5	DSTL6	DSTL4	DSTL2
F7	Maxima		-2.90	2.54	0.00	0.00	0.00	1.47
			DSTL5	DSTL2	DSTL4	DSTL6	DSTL4	DSTL2

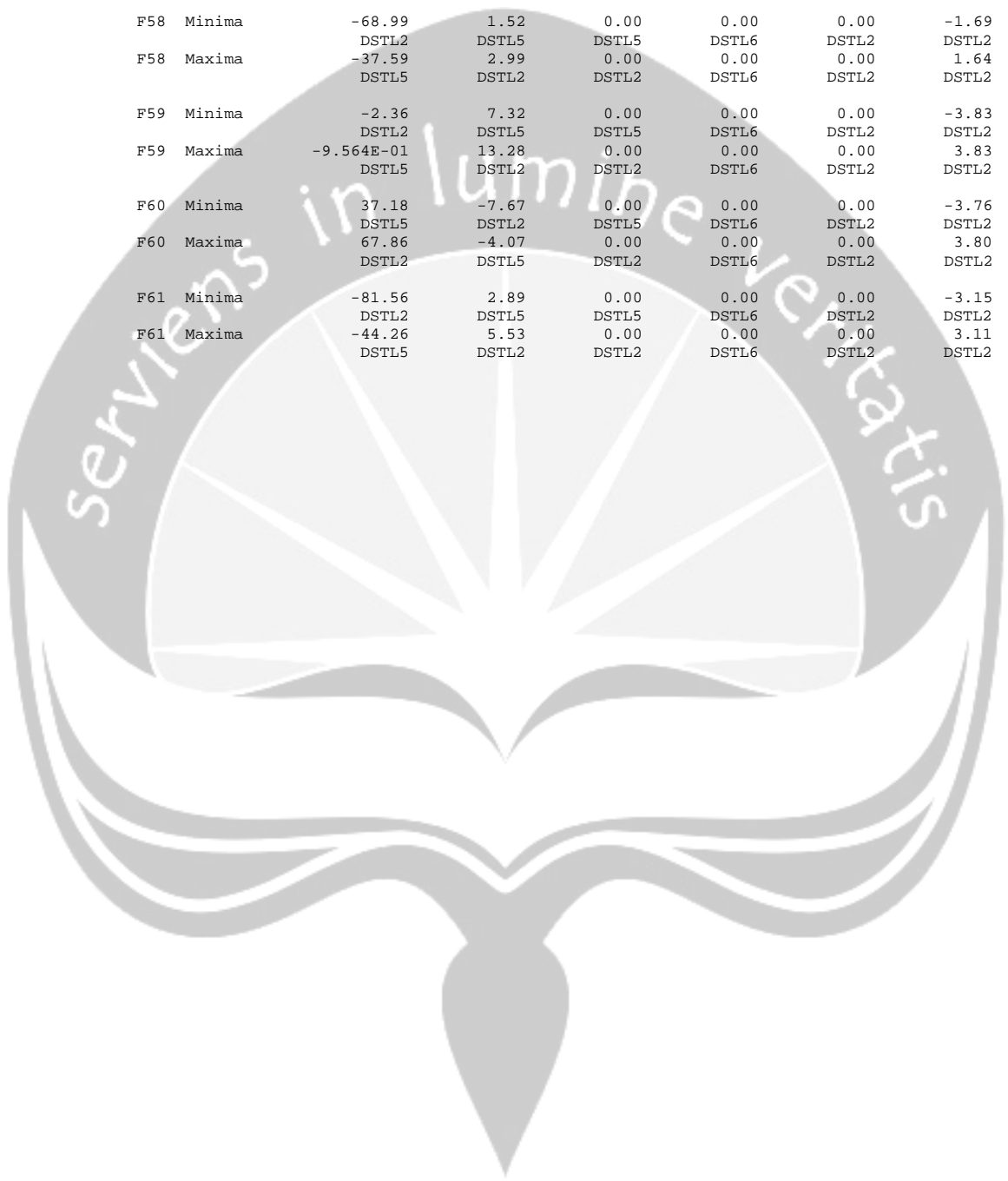
F8	Minima	29.46	1.68	0.00	0.00	0.00	-1.49
		DSTL6	DSTL6	DSTL2	DSTL6	DSTL2	DSTL2
F8	Maxima	55.71	3.13	0.00	0.00	0.00	1.53
		DSTL2	DSTL2	DSTL5	DSTL6	DSTL2	DSTL2
F9	Minima	1.02	-1.40	0.00	0.00	0.00	-1.02
		DSTL5	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F9	Maxima	2.39	-6.714E-01	0.00	0.00	0.00	9.585E-01
		DSTL4	DSTL6	DSTL6	DSTL6	DSTL2	DSTL2
F10	Minima	-66.05	-2.12	0.00	0.00	0.00	-1.18
		DSTL2	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F10	Maxima	-37.37	-1.09	0.00	0.00	0.00	1.14
		DSTL5	DSTL6	DSTL5	DSTL6	DSTL2	DSTL2
F11	Minima	-2.04	4.972E-01	0.00	0.00	0.00	-7.402E-01
		DSTL2	DSTL6	DSTL2	DSTL6	DSTL2	DSTL2
F11	Maxima	-6.023E-01	8.545E-01	0.00	0.00	0.00	7.402E-01
		DSTL5	DSTL2	DSTL6	DSTL6	DSTL2	DSTL2
F12	Minima	29.51	1.19	0.00	0.00	0.00	-1.08
		DSTL6	DSTL5	DSTL2	DSTL6	DSTL2	DSTL2
F12	Maxima	55.28	2.30	0.00	0.00	0.00	1.11
		DSTL2	DSTL2	DSTL5	DSTL6	DSTL2	DSTL2
F13	Minima	-2.13	-6.785E-01	0.00	0.00	0.00	-6.042E-01
		DSTL3	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F13	Maxima	-3.469E-01	-2.472E-01	0.00	0.00	0.00	5.297E-01
		DSTL6	DSTL5	DSTL6	DSTL6	DSTL2	DSTL2
F14	Minima	-63.01	-1.47	0.00	0.00	0.00	-8.053E-01
		DSTL2	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F14	Maxima	-35.58	-7.018E-01	0.00	0.00	0.00	7.623E-01
		DSTL5	DSTL5	DSTL5	DSTL6	DSTL2	DSTL2
F15	Minima	8.317E-01	2.112E-01	0.00	0.00	0.00	-4.165E-01
		DSTL6	DSTL5	DSTL2	DSTL6	DSTL2	DSTL2
F15	Maxima	2.62	3.606E-01	0.00	0.00	0.00	4.165E-01
		DSTL3	DSTL2	DSTL6	DSTL6	DSTL2	DSTL2
F16	Minima	28.76	7.381E-01	0.00	0.00	0.00	-7.094E-01
		DSTL6	DSTL5	DSTL2	DSTL6	DSTL2	DSTL2
F16	Maxima	53.47	1.57	0.00	0.00	0.00	7.466E-01
		DSTL2	DSTL2	DSTL5	DSTL6	DSTL2	DSTL2
F17	Minima	-6.13	-3.780E-01	0.00	0.00	0.00	-3.820E-01
		DSTL2	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F17	Maxima	-2.46	-7.040E-02	0.00	0.00	0.00	2.884E-01
		DSTL6	DSTL5	DSTL6	DSTL6	DSTL2	DSTL2
F18	Minima	-59.29	-8.950E-01	0.00	0.00	0.00	-4.738E-01
		DSTL2	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F18	Maxima	-33.36	-3.512E-01	0.00	0.00	0.00	4.308E-01
		DSTL5	DSTL5	DSTL5	DSTL6	DSTL2	DSTL2
F19	Minima	2.99	9.674E-02	0.00	0.00	0.00	-2.415E-01
		DSTL6	DSTL5	DSTL2	DSTL6	DSTL2	DSTL2
F19	Maxima	6.58	1.673E-01	0.00	0.00	0.00	2.415E-01
		DSTL2	DSTL2	DSTL6	DSTL6	DSTL2	DSTL2
F20	Minima	27.46	2.957E-01	0.00	0.00	0.00	-3.500E-01
		DSTL6	DSTL5	DSTL2	DSTL6	DSTL2	DSTL2
F20	Maxima	50.73	8.489E-01	0.00	0.00	0.00	3.872E-01
		DSTL2	DSTL2	DSTL5	DSTL6	DSTL2	DSTL2
F21	Minima	-10.06	-2.479E-01	0.00	0.00	0.00	-2.532E-01
		DSTL2	DSTL1	DSTL2	DSTL6	DSTL2	DSTL2
F21	Maxima	-4.54	1.258E-02	0.00	0.00	0.00	1.395E-01
		DSTL6	DSTL1	DSTL6	DSTL6	DSTL2	DSTL2
F22	Minima	-54.95	-3.477E-01	0.00	0.00	0.00	-1.578E-01
		DSTL2	DSTL4	DSTL2	DSTL6	DSTL2	DSTL4
F22	Maxima	-30.75	-6.464E-03	0.00	0.00	0.00	1.148E-01
		DSTL5	DSTL5	DSTL5	DSTL6	DSTL2	DSTL4
F23	Minima	5.15	4.369E-02	0.00	0.00	0.00	-1.343E-01
		DSTL6	DSTL5	DSTL2	DSTL6	DSTL2	DSTL2
F23	Maxima	10.62	7.751E-02	0.00	0.00	0.00	1.343E-01
		DSTL2	DSTL2	DSTL6	DSTL6	DSTL2	DSTL2
F24	Minima	25.78	-1.954E-01	0.00	0.00	0.00	-2.720E-02

## LAMPIRAN 42

F24	Maxima	DSTL6 47.34 DSTL2	DSTL3 1.892E-01 DSTL4	DSTL4 0.00 DSTL5	DSTL6 0.00 DSTL6	DSTL4 0.00 DSTL4	DSTL5 6.049E-02 DSTL3
F25	Minima	-13.94 DSTL2	-1.843E-01 DSTL1	0.00 DSTL1	0.00 DSTL6	0.00 DSTL2	-1.758E-01 DSTL1
F25	Maxima	-6.62 DSTL6	7.618E-02 DSTL1	0.00 DSTL1	0.00 DSTL6	0.00 DSTL2	3.915E-02 DSTL2
F26	Minima	-50.13 DSTL2	6.021E-02 DSTL6	0.00 DSTL2	0.00 DSTL6	0.00 DSTL2	-2.295E-01 DSTL3
F26	Maxima	-27.82 DSTL5	4.719E-01 DSTL3	0.00 DSTL5	0.00 DSTL6	0.00 DSTL2	1.865E-01 DSTL3
F27	Minima	7.32 DSTL6	1.615E-02 DSTL5	0.00 DSTL2	0.00 DSTL6	0.00 DSTL2	-6.235E-02 DSTL2
F27	Maxima	14.63 DSTL2	3.084E-02 DSTL2	0.00 DSTL6	0.00 DSTL6	0.00 DSTL2	6.235E-02 DSTL2
F28	Minima	23.81 DSTL6	-8.854E-01 DSTL2	0.00 DSTL6	0.00 DSTL6	0.00 DSTL3	-3.683E-01 DSTL2
F28	Maxima	43.50 DSTL2	-2.637E-01 DSTL6	0.00 DSTL3	0.00 DSTL6	0.00 DSTL3	4.055E-01 DSTL2
F29	Minima	-17.22 DSTL2	-1.496E-01 DSTL1	0.00 DSTL1	0.00 DSTL6	0.00 DSTL1	-1.306E-01 DSTL1
F29	Maxima	-8.32 DSTL6	1.109E-01 DSTL1	0.00 DSTL1	0.00 DSTL6	0.00 DSTL1	4.520E-02 DSTL1
F30	Minima	-44.74 DSTL2	7.954E-01 DSTL6	0.00 DSTL2	0.00 DSTL6	0.00 DSTL2	-9.015E-01 DSTL2
F30	Maxima	-24.56 DSTL5	1.64 DSTL2	0.00 DSTL5	0.00 DSTL6	0.00 DSTL2	8.586E-01 DSTL2
F31	Minima	20.44 DSTL5	-1.559E-03 DSTL3	0.00 DSTL2	0.00 DSTL6	0.00 DSTL2	-3.602E-03 DSTL3
F31	Maxima	37.15 DSTL2	1.559E-03 DSTL6	0.00 DSTL5	0.00 DSTL6	0.00 DSTL2	3.602E-03 DSTL3
F32	Minima	24.58 DSTL6	2.191E-01 DSTL5	0.00 DSTL4	0.00 DSTL6	0.00 DSTL4	-3.896E-01 DSTL4
F32	Maxima	43.50 DSTL2	9.280E-01 DSTL4	0.00 DSTL5	0.00 DSTL6	0.00 DSTL4	4.268E-01 DSTL4
F33	Minima	-17.22 DSTL2	-1.109E-01 DSTL1	0.00 DSTL1	0.00 DSTL6	0.00 DSTL1	-1.306E-01 DSTL1
F33	Maxima	-7.35 DSTL5	1.496E-01 DSTL1	0.00 DSTL1	0.00 DSTL6	0.00 DSTL1	4.520E-02 DSTL1
F34	Minima	-44.74 DSTL2	-1.64 DSTL2	0.00 DSTL6	0.00 DSTL6	0.00 DSTL2	-9.015E-01 DSTL2
F34	Maxima	-25.15 DSTL5	-7.109E-01 DSTL5	0.00 DSTL2	0.00 DSTL6	0.00 DSTL2	8.586E-01 DSTL2
F35	Minima	6.53 DSTL5	1.716E-02 DSTL6	0.00 DSTL5	0.00 DSTL6	0.00 DSTL2	-6.235E-02 DSTL2
F35	Maxima	14.63 DSTL2	3.084E-02 DSTL2	0.00 DSTL2	0.00 DSTL6	0.00 DSTL2	6.235E-02 DSTL2
F36	Minima	27.29 DSTL6	-2.058E-01 DSTL3	0.00 DSTL4	0.00 DSTL6	0.00 DSTL3	-3.549E-02 DSTL6
F36	Maxima	47.34 DSTL2	2.120E-01 DSTL4	0.00 DSTL3	0.00 DSTL6	0.00 DSTL5	6.878E-02 DSTL4
F37	Minima	-13.94 DSTL2	-7.618E-02 DSTL1	0.00 DSTL1	0.00 DSTL6	0.00 DSTL2	-1.758E-01 DSTL1
F37	Maxima	-5.76 DSTL5	1.843E-01 DSTL1	0.00 DSTL1	0.00 DSTL6	0.00 DSTL1	3.915E-02 DSTL2
F38	Minima	-50.13 DSTL2	-5.021E-01 DSTL4	0.00 DSTL6	0.00 DSTL6	0.00 DSTL3	-2.469E-01 DSTL4
F38	Maxima	-28.06 DSTL5	-2.995E-02 DSTL5	0.00 DSTL3	0.00 DSTL6	0.00 DSTL3	2.040E-01 DSTL4
F39	Minima	4.51 DSTL5	4.532E-02 DSTL5	0.00 DSTL5	0.00 DSTL6	0.00 DSTL2	-1.343E-01 DSTL2
F39	Maxima	10.62 DSTL2	7.751E-02 DSTL2	0.00 DSTL2	0.00 DSTL6	0.00 DSTL2	1.343E-01 DSTL2
F40	Minima	29.65 DSTL5	-8.489E-01 DSTL2	0.00 DSTL6	0.00 DSTL6	0.00 DSTL2	-3.500E-01 DSTL2

F40	Maxima	50.73	-3.054E-01	0.00	0.00	0.00	3.872E-01
		DSTL2	DSTL6	DSTL2	DSTL6	DSTL2	DSTL2
F41	Minima	-10.06	-1.258E-02	0.00	0.00	0.00	-2.532E-01
		DSTL2	DSTL1	DSTL1	DSTL6	DSTL2	DSTL2
F41	Maxima	-3.83	2.479E-01	0.00	0.00	0.00	1.395E-01
		DSTL5	DSTL1	DSTL1	DSTL6	DSTL2	DSTL2
F42	Minima	-54.95	-3.202E-03	0.00	0.00	0.00	-1.633E-01
		DSTL2	DSTL6	DSTL6	DSTL6	DSTL3	DSTL3
F42	Maxima	-30.61	3.573E-01	0.00	0.00	0.00	1.204E-01
		DSTL5	DSTL3	DSTL3	DSTL6	DSTL3	DSTL3
F43	Minima	2.51	9.544E-02	0.00	0.00	0.00	-2.415E-01
		DSTL5	DSTL5	DSTL5	DSTL6	DSTL2	DSTL2
F43	Maxima	6.78	1.673E-01	0.00	0.00	0.00	2.415E-01
		DSTL4	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F44	Minima	30.71	-1.57	0.00	0.00	0.00	-7.094E-01
		DSTL5	DSTL2	DSTL6	DSTL6	DSTL2	DSTL2
F44	Maxima	53.47	-7.716E-01	0.00	0.00	0.00	7.466E-01
		DSTL2	DSTL6	DSTL2	DSTL6	DSTL2	DSTL2
F45	Minima	-6.27	6.671E-02	0.00	0.00	0.00	-3.820E-01
		DSTL4	DSTL5	DSTL1	DSTL6	DSTL1	DSTL2
F45	Maxima	-1.90	3.780E-01	0.00	0.00	0.00	2.884E-01
		DSTL5	DSTL2	DSTL1	DSTL6	DSTL4	DSTL2
F46	Minima	-59.29	3.603E-01	0.00	0.00	0.00	-4.738E-01
		DSTL2	DSTL6	DSTL6	DSTL6	DSTL2	DSTL2
F46	Maxima	-32.85	8.950E-01	0.00	0.00	0.00	4.308E-01
		DSTL5	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F47	Minima	5.137E-01	2.032E-01	0.00	0.00	0.00	-4.165E-01
		DSTL5	DSTL5	DSTL5	DSTL6	DSTL2	DSTL2
F47	Maxima	2.94	3.606E-01	0.00	0.00	0.00	4.165E-01
		DSTL4	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F48	Minima	31.24	-2.30	0.00	0.00	0.00	-1.08
		DSTL5	DSTL2	DSTL5	DSTL6	DSTL2	DSTL2
F48	Maxima	55.28	-1.16	0.00	0.00	0.00	1.11
		DSTL2	DSTL5	DSTL2	DSTL6	DSTL2	DSTL2
F49	Minima	-2.53	2.339E-01	0.00	0.00	0.00	-6.042E-01
		DSTL4	DSTL5	DSTL1	DSTL6	DSTL2	DSTL2
F49	Maxima	5.518E-02	6.785E-01	0.00	0.00	0.00	5.297E-01
		DSTL5	DSTL2	DSTL6	DSTL6	DSTL2	DSTL2
F50	Minima	-63.01	6.991E-01	0.00	0.00	0.00	-8.053E-01
		DSTL2	DSTL5	DSTL6	DSTL6	DSTL2	DSTL2
F50	Maxima	-34.73	1.47	0.00	0.00	0.00	7.623E-01
		DSTL5	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F51	Minima	-2.04	4.776E-01	0.00	0.00	0.00	-7.402E-01
		DSTL2	DSTL5	DSTL5	DSTL6	DSTL2	DSTL2
F51	Maxima	-4.528E-01	8.545E-01	0.00	0.00	0.00	7.402E-01
		DSTL6	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F52	Minima	30.98	-3.13	0.00	0.00	0.00	-1.49
		DSTL5	DSTL2	DSTL5	DSTL6	DSTL2	DSTL2
F52	Maxima	55.71	-1.61	0.00	0.00	0.00	1.53
		DSTL2	DSTL5	DSTL2	DSTL6	DSTL2	DSTL2
F53	Minima	7.601E-01	6.364E-01	0.00	0.00	0.00	-1.02
		DSTL6	DSTL5	DSTL2	DSTL6	DSTL2	DSTL2
F53	Maxima	2.65	1.40	0.00	0.00	0.00	9.585E-01
		DSTL3	DSTL2	DSTL5	DSTL6	DSTL2	DSTL2
F54	Minima	-66.05	1.05	0.00	0.00	0.00	-1.18
		DSTL2	DSTL5	DSTL5	DSTL6	DSTL2	DSTL2
F54	Maxima	-36.19	2.12	0.00	0.00	0.00	1.14
		DSTL5	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F55	Minima	-5.57	1.41	0.00	0.00	0.00	-1.47
		DSTL2	DSTL5	DSTL5	DSTL6	DSTL2	DSTL2
F55	Maxima	-2.90	2.54	0.00	0.00	0.00	1.47
		DSTL6	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F56	Minima	29.86	-4.23	0.00	0.00	0.00	-2.04
		DSTL5	DSTL2	DSTL5	DSTL6	DSTL2	DSTL2
F56	Maxima	54.58	-2.20	0.00	0.00	0.00	2.08

		DSTL2	DSTL5	DSTL2	DSTL6	DSTL2	DSTL2
F57	Minima	3.32	1.63	0.00	0.00	0.00	-1.80
		DSTL6	DSTL5	DSTL5	DSTL6	DSTL2	DSTL2
F57	Maxima	6.08	3.20	0.00	0.00	0.00	1.76
		DSTL2	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F58	Minima	-68.99	1.52	0.00	0.00	0.00	-1.69
		DSTL2	DSTL5	DSTL5	DSTL6	DSTL2	DSTL2
F58	Maxima	-37.59	2.99	0.00	0.00	0.00	1.64
		DSTL5	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F59	Minima	-2.36	7.32	0.00	0.00	0.00	-3.83
		DSTL2	DSTL5	DSTL5	DSTL6	DSTL2	DSTL2
F59	Maxima	-9.564E-01	13.28	0.00	0.00	0.00	3.83
		DSTL5	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2
F60	Minima	37.18	-7.67	0.00	0.00	0.00	-3.76
		DSTL5	DSTL2	DSTL5	DSTL6	DSTL2	DSTL2
F60	Maxima	67.86	-4.07	0.00	0.00	0.00	3.80
		DSTL2	DSTL5	DSTL2	DSTL6	DSTL2	DSTL2
F61	Minima	-81.56	2.89	0.00	0.00	0.00	-3.15
		DSTL2	DSTL5	DSTL5	DSTL6	DSTL2	DSTL2
F61	Maxima	-44.26	5.53	0.00	0.00	0.00	3.11
		DSTL5	DSTL2	DSTL2	DSTL6	DSTL2	DSTL2





SAP2000 v7.40 File: DESAIN\_TANGGA\_TINGGI 3,5M KN-m Units PAGE 1  
2/17/10 17:33:34

Your Organization Name

STATIC LOAD CASES

STATIC CASE	CASE TYPE	SELF WT FACTOR
DL	DEAD	0.0000
LL	LIVE	0.0000

SAP2000 v7.40 File: DESAIN\_TANGGA\_TINGGI 3,5M KN-m Units PAGE 2  
2/17/10 17:33:34

Your Organization Name

JOINT DATA

JOINT	GLOBAL-X	GLOBAL-Y	GLOBAL-Z	RESTRAINTS	ANGLE-A	ANGLE-B	ANGLE-C
1	0.00000	0.50000	0.00000	1 1 1 0 0 0	0.000	0.000	0.000
2	4.20000	0.50000	1.75000	0 0 0 0 0 0	0.000	0.000	0.000
3	6.00000	0.50000	1.75000	1 1 1 0 0 0	0.000	0.000	0.000

SAP2000 v7.40 File: DESAIN\_TANGGA\_TINGGI 3,5M KN-m Units PAGE 3  
2/17/10 17:33:34

Your Organization Name

FRAME ELEMENT DATA

FRAME	JNT-1	JNT-2	SECTION	ANGLE	RELEASES	SEGMENTS	R1	R2	FACTOR	LENGTH
1	1	2	PTANGGA	0.000	000000	2	0.000	0.000	1.000	4.550
2	2	3	BORDES	0.000	000000	4	0.000	0.000	1.000	1.800

SAP2000 v7.40 File: DESAIN\_TANGGA\_TINGGI 3,5M KN-m Units PAGE 4  
2/17/10 17:33:34

Your Organization Name

FRAME SPAN DISTRIBUTED LOADS Load Case DL

FRAME	TYPE	DIRECTION	DISTANCE-A	VALUE-A	DISTANCE-B	VALUE-B
1	FORCE	GLOBAL-Z	0.0000	-6.4600	1.0000	-6.4600
2	FORCE	GLOBAL-Z	0.0000	-4.5400	1.0000	-4.5400

SAP2000 v7.40 File: DESAIN\_TANGGA\_TINGGI 3,5M KN-m Units PAGE 5  
2/17/10 17:33:35

Your Organization Name

FRAME SPAN DISTRIBUTED LOADS Load Case LL

FRAME	TYPE	DIRECTION	DISTANCE-A	VALUE-A	DISTANCE-B	VALUE-B
1	FORCE	GLOBAL-Z	0.0000	-3.0000	1.0000	-3.0000
2	FORCE	GLOBAL-Z	0.0000	-3.0000	1.0000	-3.0000

SAP2000 v7.40 File: DESAIN\_TANGGA\_TINGGI 3,5M KN-m Units PAGE 1  
1/9/10 12:56:09

Your Organization Name

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD	DL	1.2000	STATIC(DEAD)	COMB1
		LL	1.6000	STATIC(LIVE)	

SAP2000 v7.40 File: DESAIN\_TANGGA\_TINGGI 3,5M KN-m Units PAGE 2  
1/9/10 12:56:09

Your Organization Name

JOINT DISPLACEMENTS

JOINT	LOAD	U1	U2	U3	R1	R2	R3
1	DL	0.0000	0.0000	0.0000	0.0000	1.148E-03	0.0000
	LL	0.0000	0.0000	0.0000	0.0000	5.262E-04	0.0000
	COMB1	0.0000	0.0000	0.0000	0.0000	2.220E-03	0.0000
2	DL	3.287E-05	0.0000	-2.181E-04	0.0000	-7.900E-04	0.0000
	LL	1.662E-05	0.0000	-1.102E-04	0.0000	-3.468E-04	0.0000
	COMB1	6.603E-05	0.0000	-4.381E-04	0.0000	-1.503E-03	0.0000
3	DL	0.0000	0.0000	0.0000	0.0000	5.984E-05	0.0000
	LL	0.0000	0.0000	0.0000	0.0000	-1.912E-05	0.0000
	COMB1	0.0000	0.0000	0.0000	0.0000	4.121E-05	0.0000

SAP2000 v7.40 File: DESAIN\_TANGGA\_TINGGI 3,5M KN-m Units PAGE 3  
1/9/10 12:56:09

Your Organization Name

JOINT REACTIONS

JOINT	LOAD	F1	F2	F3	M1	M2	M3
1	DL	56.4150	0.0000	36.7856	0.0000	0.0000	0.0000
	LL	28.5161	0.0000	17.9997	0.0000	0.0000	0.0000
	COMB1	113.3238	0.0000	72.9423	0.0000	0.0000	0.0000
3	DL	-56.4150	0.0000	0.7794	0.0000	0.0000	0.0000
	LL	-28.5161	0.0000	1.0503	0.0000	0.0000	0.0000
	COMB1	-113.3238	0.0000	2.6157	0.0000	0.0000	0.0000

SAP2000 v7.40 File: DESAIN\_TANGGA\_TINGGI 3,5M KN-m Units PAGE 4  
1/9/10 12:56:09

Your Organization Name

FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3	
1	DL	0.00	-66.22	-12.26	0.00	0.00	0.00	0.00	
		2.28	-60.57	1.31	0.00	0.00	0.00	12.46	
		4.55	-54.92	14.87	0.00	0.00	0.00	-5.95	
1	LL	0.00	-33.25	-5.65	0.00	0.00	0.00	0.00	
		2.28	-30.62	6.526E-01	0.00	0.00	0.00	5.68	
		4.55	-28.00	6.95	0.00	0.00	0.00	-2.97	
1	COMB1	0.00	-132.66	-23.75	0.00	0.00	0.00	0.00	
		2.28	-121.68	2.61	0.00	0.00	0.00	24.04	
		4.55	-110.70	28.97	0.00	0.00	0.00	-11.89	
2	DL	0.00	-56.41	-7.39	0.00	0.00	0.00	-5.95	
		4.5E-01	-56.41	-5.35	0.00	0.00	0.00	-3.08	
		9.0E-01	-56.41	-3.31	0.00	0.00	0.00	-1.14	
	2	LL	1.35	-56.41	-1.26	0.00	0.00	0.00	-1.090E-01
			1.80	-56.41	7.794E-01	0.00	0.00	0.00	0.00
			0.00	-28.52	-4.35	0.00	0.00	0.00	-2.97
2	COMB1	4.5E-01	-28.52	-3.00	0.00	0.00	0.00	-1.32	
		9.0E-01	-28.52	-1.65	0.00	0.00	0.00	-2.697E-01	
		1.35	-28.52	-2.997E-01	0.00	0.00	0.00	1.689E-01	
1.80	-28.52	1.05	0.00	0.00	0.00	0.00			
2	COMB1	0.00	-113.32	-15.83	0.00	0.00	0.00	-11.89	

4.5E-01	-113.32	-11.22	0.00	0.00	0.00	-5.81
9.0E-01	-113.32	-6.61	0.00	0.00	0.00	-1.80
1.35	-113.32	-2.00	0.00	0.00	0.00	1.395E-01
1.80	-113.32	2.62	0.00	0.00	0.00	0.00



ETABS v7.10 File: SKRIPSI KN-m Units PAGE 1  
February 17, 2010 17:37

YOGYAKARTA

S T O R Y D A T A

STORY	SIMILAR TO	HEIGHT	ELEVATION
ATAP	None	3.500	35.200
ATAP BETON	None	3.500	31.700
PENTHOUSE	None	3.500	28.200
LANTAI 6	None	3.500	24.700
LANTAI 5	None	3.500	21.200
LANTAI 4	None	3.500	17.700
LANTAI 3	None	3.500	14.200
LANTAI 2	None	3.500	10.700
LANTAI 1	None	3.700	7.200
L. DASAR	None	3.500	3.500
BASE	None		0.000

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 2  
February 17, 2010 17:37

YOGYAKARTA

M A S S S O U R C E D A T A

MASS FROM	LATERAL MASS ONLY	LUMP MASS AT STORIES
Loads	Yes	Yes

M A S S S O U R C E L O A D S

LOAD	MULTIPLIER
DEAD	1.0000
LIVE	0.3000
RAIN	0.3000

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 3  
February 17, 2010 17:37

YOGYAKARTA

D I A P H R A G M M A S S D A T A

STORY	DIAPHRAGM	MASS-X	MASS-Y	MMI	X-M	Y-M
ATAP	D10	150.9975	150.9975	11268.0849	28.000	24.388
ATAP BETON	D9	950.4610	950.4610	270541.1679	28.001	19.142
PENTHOUSE	D8	2118.8808	2118.8808	861353.4925	28.000	17.861
LANTAI 6	D7	2158.2330	2158.2330	880744.4257	28.000	17.837
LANTAI 5	D6	2197.5852	2197.5852	900133.0000	28.000	17.815
LANTAI 4	D5	2197.5852	2197.5852	900133.0000	28.000	17.815
LANTAI 3	D4	2242.9915	2242.9915	922501.6627	28.000	17.789
LANTAI 2	D3	2288.3978	2288.3978	944867.5273	28.000	17.765
LANTAI 1	D2	2212.7032	2212.7032	946238.7325	28.000	17.799
L. DASAR	D1	2326.4286	2326.4286	964042.8254	28.000	17.729

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 4  
February 17, 2010 17:37

YOGYAKARTA

A S S E M B L E D P O I N T M A S S E S

STORY	POINT	UX	UY	UZ	RX	RY	RZ
ATAP	272	150.997453	150.997453	0.000000	0.000000	0.000000	11268
ATAP BETON	273	950.460979	950.460979	0.000000	0.000000	0.000000	270541
PENTHOUSE	274	2118.880849	2118.880849	0.000000	0.000000	0.000000	861353
LANTAI 6	275	2158.233002	2158.233002	0.000000	0.000000	0.000000	880744

LANTAI 5	276	2197.585155	2197.585155	0.000000	0.000000	0.000000	900133
LANTAI 4	277	2197.585155	2197.585155	0.000000	0.000000	0.000000	900133
LANTAI 3	278	2242.991486	2242.991486	0.000000	0.000000	0.000000	922502
LANTAI 2	279	2288.397816	2288.397816	0.000000	0.000000	0.000000	944868
LANTAI 1	280	2212.703235	2212.703235	0.000000	0.000000	0.000000	946239
L. DASAR	281	2326.428613	2326.428613	0.000000	0.000000	0.000000	964043
BASE	C1	8.353230	8.353230	0.000000	0.000000	0.000000	0.000000
BASE	C2	11.750720	11.750720	0.000000	0.000000	0.000000	0.000000
BASE	C3	11.750720	11.750720	0.000000	0.000000	0.000000	0.000000
BASE	C4	7.220733	7.220733	0.000000	0.000000	0.000000	0.000000
BASE	C7	7.220733	7.220733	0.000000	0.000000	0.000000	0.000000
BASE	C8	11.750720	11.750720	0.000000	0.000000	0.000000	0.000000
BASE	C9	11.750720	11.750720	0.000000	0.000000	0.000000	0.000000
BASE	C10	8.353230	8.353230	0.000000	0.000000	0.000000	0.000000
BASE	C14	10.051975	10.051975	0.000000	0.000000	0.000000	0.000000
BASE	C15	14.015714	14.015714	0.000000	0.000000	0.000000	0.000000
BASE	C16	14.015714	14.015714	0.000000	0.000000	0.000000	0.000000
BASE	C17	10.051975	10.051975	0.000000	0.000000	0.000000	0.000000
BASE	C21	12.883217	12.883217	0.000000	0.000000	0.000000	0.000000
BASE	C23	16.280707	16.280707	0.000000	0.000000	0.000000	0.000000
BASE	C24	16.280707	16.280707	0.000000	0.000000	0.000000	0.000000
BASE	C25	7.786981	7.786981	0.000000	0.000000	0.000000	0.000000
BASE	C28	7.786981	7.786981	0.000000	0.000000	0.000000	0.000000
BASE	C29	16.280707	16.280707	0.000000	0.000000	0.000000	0.000000
BASE	C30	16.280707	16.280707	0.000000	0.000000	0.000000	0.000000
BASE	C31	12.883217	12.883217	0.000000	0.000000	0.000000	0.000000
BASE	C34	22.168243	22.168243	0.000000	0.000000	0.000000	0.000000
BASE	C35	21.206038	21.206038	0.000000	0.000000	0.000000	0.000000
BASE	C36	21.206038	21.206038	0.000000	0.000000	0.000000	0.000000
BASE	C37	22.168243	22.168243	0.000000	0.000000	0.000000	0.000000
BASE	C41	14.581962	14.581962	0.000000	0.000000	0.000000	0.000000
BASE	C42	17.979452	17.979452	0.000000	0.000000	0.000000	0.000000
BASE	C43	17.979452	17.979452	0.000000	0.000000	0.000000	0.000000
BASE	C44	27.280284	27.280284	0.000000	0.000000	0.000000	0.000000
BASE	C45	20.399137	20.399137	0.000000	0.000000	0.000000	0.000000
BASE	C46	20.411373	20.411373	0.000000	0.000000	0.000000	0.000000
BASE	C47	27.316994	27.316994	0.000000	0.000000	0.000000	0.000000
BASE	C48	17.979452	17.979452	0.000000	0.000000	0.000000	0.000000
BASE	C49	17.979452	17.979452	0.000000	0.000000	0.000000	0.000000
BASE	C50	14.581962	14.581962	0.000000	0.000000	0.000000	0.000000
BASE	C51	13.449465	13.449465	0.000000	0.000000	0.000000	0.000000
BASE	C52	16.846956	16.846956	0.000000	0.000000	0.000000	0.000000
BASE	C53	16.846956	16.846956	0.000000	0.000000	0.000000	0.000000
BASE	C54	16.846956	16.846956	0.000000	0.000000	0.000000	0.000000
BASE	C55	18.545701	18.545701	0.000000	0.000000	0.000000	0.000000
BASE	C56	18.545701	18.545701	0.000000	0.000000	0.000000	0.000000
BASE	C57	16.846956	16.846956	0.000000	0.000000	0.000000	0.000000
BASE	C58	16.846956	16.846956	0.000000	0.000000	0.000000	0.000000
BASE	C59	16.846956	16.846956	0.000000	0.000000	0.000000	0.000000
BASE	C60	13.449465	13.449465	0.000000	0.000000	0.000000	0.000000
BASE	C64	10.618223	10.618223	0.000000	0.000000	0.000000	0.000000
BASE	C65	14.015714	14.015714	0.000000	0.000000	0.000000	0.000000
BASE	C66	14.015714	14.015714	0.000000	0.000000	0.000000	0.000000
BASE	C67	10.618223	10.618223	0.000000	0.000000	0.000000	0.000000
BASE	C71	11.184472	11.184472	0.000000	0.000000	0.000000	0.000000
BASE	C72	14.581962	14.581962	0.000000	0.000000	0.000000	0.000000
BASE	C73	14.581962	14.581962	0.000000	0.000000	0.000000	0.000000
BASE	C74	8.919478	8.919478	0.000000	0.000000	0.000000	0.000000
BASE	C77	8.919478	8.919478	0.000000	0.000000	0.000000	0.000000
BASE	C78	14.581962	14.581962	0.000000	0.000000	0.000000	0.000000
BASE	C79	14.581962	14.581962	0.000000	0.000000	0.000000	0.000000
BASE	C80	11.184472	11.184472	0.000000	0.000000	0.000000	0.000000
BASE	C81	9.485726	9.485726	0.000000	0.000000	0.000000	0.000000
BASE	C82	12.883217	12.883217	0.000000	0.000000	0.000000	0.000000
BASE	C83	12.883217	12.883217	0.000000	0.000000	0.000000	0.000000
BASE	C84	9.485726	9.485726	0.000000	0.000000	0.000000	0.000000
BASE	C87	9.485726	9.485726	0.000000	0.000000	0.000000	0.000000
BASE	C88	12.883217	12.883217	0.000000	0.000000	0.000000	0.000000
BASE	C89	12.883217	12.883217	0.000000	0.000000	0.000000	0.000000
BASE	C90	9.485726	9.485726	0.000000	0.000000	0.000000	0.000000
BASE	C91	7.220733	7.220733	0.000000	0.000000	0.000000	0.000000
BASE	C92	10.618223	10.618223	0.000000	0.000000	0.000000	0.000000
BASE	C93	10.618223	10.618223	0.000000	0.000000	0.000000	0.000000
BASE	C94	7.220733	7.220733	0.000000	0.000000	0.000000	0.000000
BASE	C97	7.220733	7.220733	0.000000	0.000000	0.000000	0.000000
BASE	C98	10.618223	10.618223	0.000000	0.000000	0.000000	0.000000
BASE	C99	10.618223	10.618223	0.000000	0.000000	0.000000	0.000000
BASE	C100	7.220733	7.220733	0.000000	0.000000	0.000000	0.000000
BASE	129	0.849373	0.849373	0.000000	0.000000	0.000000	0.000000
BASE	130	1.132497	1.132497	0.000000	0.000000	0.000000	0.000000
BASE	174	0.821060	0.821060	0.000000	0.000000	0.000000	0.000000

BASE	175	0.821060	0.821060	0.000000	0.000000	0.000000	0.000000
BASE	-2	5.814371	5.814371	0.000000	0.000000	0.000000	0.000000
BASE	191	0.821060	0.821060	0.000000	0.000000	0.000000	0.000000
BASE	C111	5.531247	5.531247	0.000000	0.000000	0.000000	0.000000
BASE	193	0.821060	0.821060	0.000000	0.000000	0.000000	0.000000
BASE	C108	4.059001	4.059001	0.000000	0.000000	0.000000	0.000000
BASE	C109	4.059001	4.059001	0.000000	0.000000	0.000000	0.000000
BASE	C112	4.059001	4.059001	0.000000	0.000000	0.000000	0.000000
BASE	C110	4.059001	4.059001	0.000000	0.000000	0.000000	0.000000
Totals	All	19867	19867	0.000000	0.000000	0.000000	7601824

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 5  
February 17, 2010 17:37

YOGYAKARTA

M A T E R I A L P R O P E R T Y D A T A

MATERIAL NAME	MATERIAL TYPE	DESIGN TYPE	MATERIAL DIR/PLANE	MODULUS OF ELASTICITY	POISSON'S RATIO	THERMAL COEFF	SHEAR MODULUS
CONC	Iso	Concrete	All	25742960	0.2000	9.9000E-06	10726233

M A T E R I A L P R O P E R T Y M A S S A N D W E I G H T

MATERIAL NAME	MASS PER UNIT VOL	WEIGHT PER UNIT VOL
CONC	2.4010E+00	2.3560E+01

M A T E R I A L D E S I G N D A T A F O R C O N C R E T E M A T E R I A L S

MATERIAL NAME	LIGHTWEIGHT CONCRETE	CONCRETE FC	REBAR FY	REBAR FYS	LIGHTWT REDUC FACT
CONC	No	30000.000	400000.000	240000.000	N/A

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 6  
February 17, 2010 17:37

YOGYAKARTA

F R A M E S E C T I O N P R O P E R T Y D A T A

FRAME SECTION NAME	MATERIAL NAME	SECTION SHAPE NAME OR NAME IN SECTION DATABASE FILE	CONC COL	CONC BEAM
K800	CONC	Rectangular	Yes	
K700	CONC	Rectangular	Yes	
K600	CONC	Rectangular	Yes	
B450X700	CONC	Rectangular		Yes
B300X500	CONC	Rectangular		Yes
B250X400	CONC	Rectangular		Yes
K300	CONC	Rectangular	Yes	

F R A M E S E C T I O N P R O P E R T Y D A T A

FRAME SECTION NAME	SECTION DEPTH	FLANGE WIDTH TOP	FLANGE THICK TOP	WEB THICK	FLANGE WIDTH BOT	FLANGE THICK BOT
K800	0.8000	0.8000	0.0000	0.0000	0.0000	0.0000
K700	0.7000	0.7000	0.0000	0.0000	0.0000	0.0000
K600	0.6000	0.6000	0.0000	0.0000	0.0000	0.0000
B450X700	0.7000	0.4500	0.0000	0.0000	0.0000	0.0000
B300X500	0.5000	0.3000	0.0000	0.0000	0.0000	0.0000
B250X400	0.4000	0.2500	0.0000	0.0000	0.0000	0.0000
K300	0.3000	0.3000	0.0000	0.0000	0.0000	0.0000

F R A M E S E C T I O N P R O P E R T Y D A T A

SECTION	TORSIONAL	MOMENTS OF INERTIA	SHEAR AREAS
---------	-----------	--------------------	-------------

FRAME SECTION NAME	AREA	CONSTANT	I33	I22	A2	A3
K800	0.8000	0.8000	0.0000	0.0000	0.0000	0.0000
K700	0.7000	0.7000	0.0000	0.0000	0.0000	0.0000
K600	0.6000	0.6000	0.0000	0.0000	0.0000	0.0000
B450X700	0.7000	0.4500	0.0000	0.0000	0.0000	0.0000
B300X500	0.5000	0.3000	0.0000	0.0000	0.0000	0.0000
B250X400	0.4000	0.2500	0.0000	0.0000	0.0000	0.0000
K300	0.3000	0.3000	0.0000	0.0000	0.0000	0.0000

FRAME SECTION PROPERTY DATA

FRAME SECTION NAME	SECTION MODULI		PLASTIC MODULI		RADIUS OF GYRATION	
	S33	S22	Z33	Z22	R33	R22
K800	0.0853	0.0853	0.1280	0.1280	0.2309	0.2309
K700	0.0572	0.0572	0.0858	0.0858	0.2021	0.2021
K600	0.0360	0.0360	0.0540	0.0540	0.1732	0.1732
B450X700	0.0368	0.0236	0.0551	0.0354	0.2021	0.1299
B300X500	0.0125	0.0075	0.0188	0.0113	0.1443	0.0866
B250X400	0.0067	0.0042	0.0100	0.0063	0.1155	0.0722
K300	0.0045	0.0045	0.0068	0.0068	0.0866	0.0866

FRAME SECTION WEIGHTS AND MASSES

FRAME SECTION NAME	TOTAL WEIGHT	TOTAL MASS
K800	15416.1562	1571.0607
K700	8727.5664	889.4264
K600	4512.2112	459.8395
B450X700	12764.8080	1300.8618
B300X500	13542.2880	1380.0948
B250X400	6785.2800	691.4880
K300	403.3001	41.1003

CONCRETE COLUMN DATA

FRAME SECTION NAME	REINF CONFIGURATION		REINF SIZE/TYPE	NUM BARS 3DIR/2DIR	NUM BARS CIRCULAR	BAR COVER
	LONGIT	LATERAL				
CSECI	Rectangular	Ties	#9/Design	3/3	N/A	0.0381
K800	Rectangular	Ties	#9/Design	3/3	N/A	0.0457
K700	Rectangular	Ties	#9/Design	3/3	N/A	0.0457
K600	Rectangular	Ties	#9/Design	3/3	N/A	0.0457
K300	Rectangular	Ties	#9/Design	3/3	N/A	0.0457

CONCRETE BEAM DATA

FRAME SECTION NAME	TOP COVER	BOT COVER	TOP LEFT AREA	TOP RIGHT AREA	BOT LEFT AREA	BOT RIGHT AREA
B450X700	0.0300	0.0300	0.000	0.000	0.000	0.000
B300X500	0.0300	0.0300	0.000	0.000	0.000	0.000
B250X400	0.0300	0.0300	0.000	0.000	0.000	0.000

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 7  
February 17, 2010 17:37

YOGYAKARTA

SHELL SECTION PROPERTY DATA

SHELL SECTION	MATERIAL NAME	SHELL TYPE	MEMBRANE THICK	BENDING THICK	TOTAL WEIGHT	TOTAL MASS
LANTAI	CONC	Membrane	0.1300	0.1300	38068.3069	3879.5418
ATAP	CONC	Membrane	0.1300	0.1300	1617.1584	164.8046
MESIN	CONC	Membrane	0.1300	0.1300	39.0507	3.9797

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 8  
February 17, 2010 17:37

YOGYAKARTA

R E S P O N S E S P E C T R U M C A S E S

\*\*\*\*\*  
 RESP SPEC CASE: EX  
 \*\*\*\*\*

BASIC RESPONSE SPECTRUM DATA

MODAL COMBO	DIRECTION COMBO	MODAL DAMPING	SPECTRUM ANGLE
CQC	SRSS	0.0500	0.0000

RESPONSE SPECTRUM FUNCTION ASSIGNMENT DATA

DIRECTION	FUNCTION	SCALE FACT
U1	W3TNHLNK	1.1000
U2	----	N/A
UZ	----	N/A

\*\*\*\*\*  
 RESP SPEC CASE: EY  
 \*\*\*\*\*

BASIC RESPONSE SPECTRUM DATA

MODAL COMBO	DIRECTION COMBO	MODAL DAMPING	SPECTRUM ANGLE
CQC	SRSS	0.0500	0.0000

RESPONSE SPECTRUM FUNCTION ASSIGNMENT DATA

DIRECTION	FUNCTION	SCALE FACT
U1	----	N/A
U2	W3TNHLNK	1.0000
UZ	----	N/A

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 9  
 February 17, 2010 17:37

YOGYAKARTA

COMBO	COMBO	DAMPING	ANGLE
COMB1	ADD	DEAD Static	1.4000
COMB2	ADD	DEAD Static	1.2000
		LIVE Static	1.6000
		RAIN Static	0.5000
COMB3	ADD	DEAD Static	1.2000
		LIVE Static	1.0000
		EX Spectra	1.0000
		EY Spectra	0.3000
COMB4	ADD	DEAD Static	1.2000
		LIVE Static	1.0000
		EX Spectra	-1.0000
		EY Spectra	0.3000
COMB5	ADD	DEAD Static	1.2000
		LIVE Static	1.0000
		EX Spectra	1.0000
		EY Spectra	-0.3000
COMB6	ADD	DEAD Static	1.2000
		LIVE Static	1.0000
		EX Spectra	-1.0000
		EY Spectra	-0.3000



## LAMPIRAN 53

COMB7	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Spectra	0.3000
		EY	Spectra	1.0000
COMB8	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Spectra	-0.3000
		EY	Spectra	1.0000
COMB9	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Spectra	0.3000
		EY	Spectra	-1.0000
COMB10	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Spectra	-0.3000
		EY	Spectra	-1.0000
COMB11	ADD	DEAD	Static	0.9000
		EX	Spectra	1.0000
		EY	Spectra	0.3000
COMB12	ADD	DEAD	Static	0.9000
		EX	Spectra	-1.0000
		EY	Spectra	0.3000
COMB13	ADD	DEAD	Static	0.9000
		EX	Spectra	1.0000
		EY	Spectra	-0.3000
COMB14	ADD	DEAD	Static	0.9000
		EX	Spectra	-1.0000
		EY	Spectra	-0.3000
COMB15	ADD	DEAD	Static	0.9000
		EX	Spectra	0.3000
		EY	Spectra	1.0000
COMB16	ADD	DEAD	Static	0.9000
		EX	Spectra	-0.3000
		EY	Spectra	1.0000
COMB17	ADD	DEAD	Static	0.9000
		EX	Spectra	0.3000
		EY	Spectra	-1.0000
COMB18	ADD	DEAD	Static	0.9000
		EX	Spectra	-0.3000
		EY	Spectra	-1.0000
ENVE	ENVE	COMB1	Combo	1.0000
		COMB2	Combo	1.0000
		COMB3	Combo	1.0000
		COMB4	Combo	1.0000
		COMB5	Combo	1.0000
		COMB6	Combo	1.0000
		COMB7	Combo	1.0000
		COMB8	Combo	1.0000
		COMB9	Combo	1.0000
		COMB10	Combo	1.0000
		COMB11	Combo	1.0000
		COMB12	Combo	1.0000
		COMB13	Combo	1.0000
		COMB14	Combo	1.0000
		COMB15	Combo	1.0000
		COMB16	Combo	1.0000
		COMB17	Combo	1.0000
		COMB18	Combo	1.0000

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 10  
February 17, 2010 17:37

YOGYAKARTA

R E S P O N S E   S P E C T R U M   F U N C T I O N   -   U S E R

FUNCTION NAME: W3TNHLNK

PERIOD	ACCEL
0.0000	0.3000
0.2000	0.7500
1.0000	0.7500
1.2500	0.6000
1.5000	0.5000
1.7500	0.4300
2.0000	0.3800
2.2500	0.3300
2.5000	0.3000
2.7500	0.2700
3.0000	0.2500



ETABS v7.10 File: SKRIPSI KN-m Units PAGE 1  
February 17, 2010 18:02

YOGYAKARTA

LEVEL	NAME	MASS	ORDINATE-X	ORDINATE-Y	ORDINATE-X	ORDINATE-Y
COMB1	ADD	DEAD	Static	1.4000		
COMB2	ADD	DEAD	Static	1.2000		
		LIVE	Static	1.6000		
		RAIN	Static	0.5000		
COMB3	ADD	DEAD	Static	1.2000		
		LIVE	Static	1.0000		
		EX	Spectra	1.0000		
		EY	Spectra	0.3000		
COMB4	ADD	DEAD	Static	1.2000		
		LIVE	Static	1.0000		
		EX	Spectra	-1.0000		
		EY	Spectra	0.3000		
COMB5	ADD	DEAD	Static	1.2000		
		LIVE	Static	1.0000		
		EX	Spectra	1.0000		
		EY	Spectra	-0.3000		
COMB6	ADD	DEAD	Static	1.2000		
		LIVE	Static	1.0000		
		EX	Spectra	-1.0000		
		EY	Spectra	-0.3000		
COMB7	ADD	DEAD	Static	1.2000		
		LIVE	Static	1.0000		
		EX	Spectra	0.3000		
		EY	Spectra	1.0000		
COMB8	ADD	DEAD	Static	1.2000		
		LIVE	Static	1.0000		
		EX	Spectra	-0.3000		
		EY	Spectra	1.0000		
COMB9	ADD	DEAD	Static	1.2000		
		LIVE	Static	1.0000		
		EX	Spectra	0.3000		
		EY	Spectra	-1.0000		
COMB10	ADD	DEAD	Static	1.2000		
		LIVE	Static	1.0000		
		EX	Spectra	-0.3000		
		EY	Spectra	-1.0000		
COMB11	ADD	DEAD	Static	0.9000		
		EX	Spectra	1.0000		
		EY	Spectra	0.3000		
COMB12	ADD	DEAD	Static	0.9000		
		EX	Spectra	-1.0000		
		EY	Spectra	0.3000		
COMB13	ADD	DEAD	Static	0.9000		
		EX	Spectra	1.0000		
		EY	Spectra	-0.3000		
COMB14	ADD	DEAD	Static	0.9000		
		EX	Spectra	-1.0000		
		EY	Spectra	-0.3000		
COMB15	ADD	DEAD	Static	0.9000		
		EX	Spectra	0.3000		
		EY	Spectra	1.0000		
COMB16	ADD	DEAD	Static	0.9000		
		EX	Spectra	-0.3000		
		EY	Spectra	1.0000		
COMB17	ADD	DEAD	Static	0.9000		
		EX	Spectra	0.3000		
		EY	Spectra	-1.0000		



February 17, 2010 18:02

YOGYAKARTA

R E S P O N S E S P E C T R U M B A S E R E A C T I O N S  
(IN RESPONSE SPECTRUM LOCAL COORDINATES)

SPEC	MODE	DIR	F1	F2	F3	M1	M2	M3
EX	Mode 1	U1	7399.56	-0.05	0.00	1.014	149940.500	-133228.738
EX	Mode 2	U1	0.00	0.21	0.00	-4.175	0.000	5.764
EX	Mode 3	U1	240.37	-0.16	0.00	3.161	4635.494	-4280.719
EX	Mode 4	U1	1272.96	-0.01	0.00	-0.074	-9515.520	-21565.281
EX	Mode 5	U1	0.00	0.03	0.00	0.201	0.000	0.813
EX	Mode 6	U1	49.01	-0.02	0.00	-0.127	-331.826	-870.824
EX	Mode 7	U1	414.61	0.00	0.00	0.015	1447.877	-8122.962
EX	Mode 8	U1	0.00	0.01	0.00	-0.031	0.000	0.257
EX	Mode 9	U1	31.84	0.00	0.00	0.018	71.502	-553.899
EX	Mode 10	U1	151.56	-0.01	0.00	-0.016	-445.108	-2103.289
EX	Mode 11	U1	0.00	0.01	0.00	0.015	0.000	0.194
EX	Mode 12	U1	45.69	0.00	0.00	0.001	-99.170	-788.682
EX	Mode 13	U1	0.00	-0.01	0.00	-0.007	0.000	-0.146
EX	Mode 14	U1	42.18	0.01	0.00	0.014	48.367	-961.306
EX	Mode 15	U1	27.95	-0.01	0.00	-0.008	-3.991	-573.614
EX	Mode 16	U1	68.94	0.00	0.00	0.002	18.083	-1167.037
EX	Mode 17	U1	0.00	0.00	0.00	-0.003	0.000	0.128
EX	Mode 18	U1	3.29	0.00	0.00	0.001	4.509	-64.153
EX	Mode 19	U1	39.88	0.00	0.00	-0.001	-28.031	-687.930
EX	Mode 20	U1	0.00	0.00	0.00	0.002	0.000	0.071
EX	All	All	7578.93	0.13	0.00	2.670	151028.745	136242.980
EY	Mode 1	U2	-0.04	0.00	0.00	0.000	-0.890	0.791
EY	Mode 2	U2	0.19	8140.01	0.00	-165082.481	3.660	227918.764
EY	Mode 3	U2	-0.14	0.00	0.00	-0.002	-2.771	2.559
EY	Mode 4	U2	-0.01	0.00	0.00	0.000	0.070	0.159
EY	Mode 5	U2	0.03	1256.21	0.00	8713.031	-0.187	35173.361
EY	Mode 6	U2	-0.02	0.00	0.00	0.000	0.116	0.304
EY	Mode 7	U2	0.00	0.00	0.00	0.000	-0.015	0.084
EY	Mode 8	U2	0.01	369.91	0.00	-1263.928	0.026	10357.253
EY	Mode 9	U2	0.00	0.00	0.00	0.000	-0.009	0.071
EY	Mode 10	U2	-0.01	0.00	0.00	0.000	0.017	0.082
EY	Mode 11	U2	0.01	124.93	0.00	270.059	-0.020	3497.854
EY	Mode 12	U2	0.00	0.00	0.00	0.000	-0.001	-0.008
EY	Mode 13	U2	0.00	118.82	0.00	167.464	-0.010	3326.904
EY	Mode 14	U2	0.01	0.00	0.00	0.000	0.010	-0.200
EY	Mode 15	U2	0.00	0.00	0.00	0.000	0.001	0.095
EY	Mode 16	U2	0.00	0.00	0.00	0.000	-0.001	0.047
EY	Mode 17	U2	0.00	71.18	0.00	-40.302	0.002	1992.863
EY	Mode 18	U2	0.00	0.00	0.00	0.000	-0.002	0.024
EY	Mode 19	U2	0.00	0.00	0.00	0.000	0.001	0.030
EY	Mode 20	U2	0.00	37.29	0.00	35.670	-0.001	1043.980
EY	All	All	0.12	8258.04	0.00	165266.676	2.341	231225.691

ETABS v7.10 File: SKRIPSI N-mm Units PAGE 2  
February 17, 2010 18:19

YOGYAKARTA

D I S P L A C E M E N T S   A T   D I A P H R A G M   C E N T E R   O F   M A S S

STORY	DIAPHRAGM	LOAD	POINT	X	Y	UX	UY	RZ
ATAP	D10	EX	272	28000.000	24388.371	50.0977	0.0006	0.00047
ATAP BETON	D9	EX	273	28000.515	19141.647	47.3947	0.0007	0.00044
PENTHOUSE	D8	EX	274	28000.231	17861.274	45.4550	0.0006	0.00043
LANTAI 6	D7	EX	275	28000.227	17837.466	42.8787	0.0006	0.00040
LANTAI 5	D6	EX	276	28000.223	17814.511	39.3667	0.0005	0.00037
LANTAI 4	D5	EX	277	28000.223	17814.511	34.8641	0.0005	0.00033
LANTAI 3	D4	EX	278	28000.218	17789.025	29.3325	0.0004	0.00027
LANTAI 2	D3	EX	279	28000.214	17764.551	23.1726	0.0003	0.00022
LANTAI 1	D2	EX	280	28000.000	17799.434	16.2977	0.0002	0.00015
L. DASAR	D1	EX	281	28000.000	17728.561	8.2394	0.0001	0.00008

ETABS v7.10 File: SKRIPSI N-mm Units PAGE 2  
February 17, 2010 18:19

YOGYAKARTA

D I S P L A C E M E N T S   A T   D I A P H R A G M   C E N T E R   O F   M A S S

STORY	DIAPHRAGM	LOAD	POINT	X	Y	UX	UY	RZ
ATAP	D10	EY	272	28000.000	24388.371	0.0005	38.2098	0.00000
ATAP BETON	D9	EY	273	28000.515	19141.647	0.0004	37.1624	0.00000
PENTHOUSE	D8	EY	274	28000.231	17861.274	0.0005	35.8013	0.00000
LANTAI 6	D7	EY	275	28000.227	17837.466	0.0005	33.6408	0.00000
LANTAI 5	D6	EY	276	28000.223	17814.511	0.0005	30.8013	0.00000
LANTAI 4	D5	EY	277	28000.223	17814.511	0.0004	27.1757	0.00000
LANTAI 3	D4	EY	278	28000.218	17789.025	0.0004	22.7757	0.00000
LANTAI 2	D3	EY	279	28000.214	17764.551	0.0003	17.9985	0.00000
LANTAI 1	D2	EY	280	28000.000	17799.434	0.0002	12.6978	0.00000
L. DASAR	D1	EY	281	28000.000	17728.561	0.0001	6.4748	0.00000

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 2  
February 14, 2010 14:39

YOGYAKARTA

B E A M F O R C E S

STORY	BEAM	LOAD	LOC	P	V2	V3	T	M2	M3
L. DASAR	B5	COMB1	0.4000	0.00	-136.99	0.00	-0.785	0.000	-8.308
			0.8500	0.00	-122.91	0.00	-0.785	0.000	50.265
			1.3000	0.00	-106.27	0.00	-0.785	0.000	101.928
			1.7500	0.00	-87.06	0.00	-0.785	0.000	145.523
			2.2000	0.00	-65.78	0.00	-0.785	0.000	179.928
			2.6500	0.00	-46.28	0.00	-0.785	0.000	205.047
			3.1000	0.00	-29.36	0.00	-0.785	0.000	221.970
			3.5500	0.00	-15.00	0.00	-0.785	0.000	231.853
			4.0000	0.00	-3.21	0.00	-0.785	0.000	235.853
			4.0000	0.00	129.32	0.00	-2.275	0.000	236.880
			4.4500	0.00	141.11	0.00	-2.275	0.000	176.130
			4.9000	0.00	155.47	0.00	-2.275	0.000	109.498
			5.3500	0.00	172.39	0.00	-2.275	0.000	35.826
			5.8000	0.00	191.89	0.00	-2.275	0.000	-46.042
			6.2500	0.00	213.17	0.00	-2.275	0.000	-137.197
			6.7000	0.00	232.38	0.00	-2.275	0.000	-237.541
			7.1500	0.00	249.02	0.00	-2.275	0.000	-345.953
			7.6000	0.00	263.10	0.00	-2.275	0.000	-461.276
L. DASAR	B5	COMB2	0.4000	0.00	-145.96	0.00	-1.569	0.000	42.245
			0.8500	0.00	-131.65	0.00	-1.569	0.000	104.850
			1.3000	0.00	-113.51	0.00	-1.569	0.000	160.153
			1.7500	0.00	-91.55	0.00	-1.569	0.000	206.436
			2.2000	0.00	-66.53	0.00	-1.569	0.000	242.028
			2.6500	0.00	-44.14	0.00	-1.569	0.000	266.786
			3.1000	0.00	-25.58	0.00	-1.569	0.000	282.331
			3.5500	0.00	-10.85	0.00	-1.569	0.000	290.385
			4.0000	0.00	0.07	0.00	-1.569	0.000	292.667
			4.0000	0.00	180.73	0.00	-2.267	0.000	294.375
			4.4500	0.00	191.65	0.00	-2.267	0.000	210.732
			4.9000	0.00	206.39	0.00	-2.267	0.000	121.318
			5.3500	0.00	224.95	0.00	-2.267	0.000	24.412
			5.8000	0.00	247.33	0.00	-2.267	0.000	-81.707
			6.2500	0.00	272.35	0.00	-2.267	0.000	-198.659
			6.7000	0.00	294.31	0.00	-2.267	0.000	-326.303
			7.1500	0.00	312.45	0.00	-2.267	0.000	-462.967
			7.6000	0.00	326.76	0.00	-2.267	0.000	-606.932
L. DASAR	B5	COMB3 MAX	0.4000	0.00	-103.43	0.00	22.683	0.000	138.209
			0.8500	0.00	-89.96	0.00	22.683	0.000	181.846
			1.3000	0.00	-73.28	0.00	22.683	0.000	218.699
			1.7500	0.00	-53.38	0.00	22.683	0.000	247.321
			2.2000	0.00	-30.90	0.00	22.683	0.000	266.310
			2.6500	0.00	-10.64	0.00	22.683	0.000	275.546
			3.1000	0.00	6.40	0.00	22.683	0.000	276.398
			3.5500	0.00	20.22	0.00	22.683	0.000	270.332
			4.0000	0.00	30.83	0.00	22.683	0.000	260.339
			4.0000	0.00	186.36	0.00	26.321	0.000	261.296
			4.4500	0.00	196.97	0.00	26.321	0.000	202.282
			4.9000	0.00	210.80	0.00	26.321	0.000	139.199
			5.3500	0.00	227.84	0.00	26.321	0.000	69.249
			5.8000	0.00	248.09	0.00	26.321	0.000	-9.078
			6.2500	0.00	270.57	0.00	26.321	0.000	-97.155
			6.7000	0.00	290.47	0.00	26.321	0.000	-194.865
			7.1500	0.00	307.16	0.00	26.321	0.000	-300.806
			7.6000	0.00	320.62	0.00	26.321	0.000	-413.529
L. DASAR	B5	COMB3 MIN	0.4000	0.00	-167.08	0.00	-25.150	0.000	-90.743
			0.8500	0.00	-153.61	0.00	-25.150	0.000	-18.470
			1.3000	0.00	-136.93	0.00	-25.150	0.000	47.018
			1.7500	0.00	-117.03	0.00	-25.150	0.000	104.274
			2.2000	0.00	-94.55	0.00	-25.150	0.000	151.893
			2.6500	0.00	-74.29	0.00	-25.150	0.000	189.751
			3.1000	0.00	-57.25	0.00	-25.150	0.000	219.210
			3.5500	0.00	-43.42	0.00	-25.150	0.000	241.697
			4.0000	0.00	-32.81	0.00	-25.150	0.000	257.113
			4.0000	0.00	122.69	0.00	-30.617	0.000	258.952
			4.4500	0.00	133.30	0.00	-30.617	0.000	174.358
			4.9000	0.00	147.13	0.00	-30.617	0.000	82.838
			5.3500	0.00	164.17	0.00	-30.617	0.000	-15.705
			5.8000	0.00	184.43	0.00	-30.617	0.000	-122.656
			6.2500	0.00	206.91	0.00	-30.617	0.000	-239.369
			6.7000	0.00	226.81	0.00	-30.617	0.000	-365.720
			7.1500	0.00	243.49	0.00	-30.617	0.000	-500.304
			7.6000	0.00	256.96	0.00	-30.617	0.000	-641.673
L. DASAR	B5	COMB4 MAX	0.4000	0.00	-103.43	0.00	22.683	0.000	138.209
			0.8500	0.00	-89.96	0.00	22.683	0.000	181.846
			1.3000	0.00	-73.28	0.00	22.683	0.000	218.699
			1.7500	0.00	-53.38	0.00	22.683	0.000	247.321

			2.2000	0.00	-30.90	0.00	22.683	0.000	266.310
			2.6500	0.00	-10.64	0.00	22.683	0.000	275.546
			3.1000	0.00	6.40	0.00	22.683	0.000	276.398
			3.5500	0.00	20.22	0.00	22.683	0.000	270.332
			4.0000	0.00	30.83	0.00	22.683	0.000	260.339
			4.0000	0.00	186.36	0.00	26.321	0.000	261.296
			4.4500	0.00	196.97	0.00	26.321	0.000	202.282
			4.9000	0.00	210.80	0.00	26.321	0.000	139.199
			5.3500	0.00	227.84	0.00	26.321	0.000	69.249
			5.8000	0.00	248.09	0.00	26.321	0.000	-9.078
			6.2500	0.00	270.57	0.00	26.321	0.000	-97.155
			6.7000	0.00	290.47	0.00	26.321	0.000	-194.865
			7.1500	0.00	307.16	0.00	26.321	0.000	-300.806
			7.6000	0.00	320.62	0.00	26.321	0.000	-413.529
L. DASAR	B5	COMB4 MIN							
			0.4000	0.00	-167.08	0.00	-25.150	0.000	-90.743
			0.8500	0.00	-153.61	0.00	-25.150	0.000	-18.470
			1.3000	0.00	-136.93	0.00	-25.150	0.000	47.018
			1.7500	0.00	-117.03	0.00	-25.150	0.000	104.274
			2.2000	0.00	-94.55	0.00	-25.150	0.000	151.893
			2.6500	0.00	-74.29	0.00	-25.150	0.000	189.751
			3.1000	0.00	-57.25	0.00	-25.150	0.000	219.210
			3.5500	0.00	-43.42	0.00	-25.150	0.000	241.697
			4.0000	0.00	-32.81	0.00	-25.150	0.000	257.113
			4.0000	0.00	122.69	0.00	-30.617	0.000	258.952
			4.4500	0.00	133.30	0.00	-30.617	0.000	174.358
			4.9000	0.00	147.13	0.00	-30.617	0.000	82.838
			5.3500	0.00	164.17	0.00	-30.617	0.000	-15.705
			5.8000	0.00	184.43	0.00	-30.617	0.000	-122.656
			6.2500	0.00	206.91	0.00	-30.617	0.000	-239.369
			6.7000	0.00	226.81	0.00	-30.617	0.000	-365.720
			7.1500	0.00	243.49	0.00	-30.617	0.000	-500.304
			7.6000	0.00	256.96	0.00	-30.617	0.000	-641.673
L. DASAR	B5	COMB5 MAX							
			0.4000	0.00	-103.43	0.00	22.683	0.000	138.209
			0.8500	0.00	-89.96	0.00	22.683	0.000	181.846
			1.3000	0.00	-73.28	0.00	22.683	0.000	218.699
			1.7500	0.00	-53.38	0.00	22.683	0.000	247.321
			2.2000	0.00	-30.90	0.00	22.683	0.000	266.310
			2.6500	0.00	-10.64	0.00	22.683	0.000	275.546
			3.1000	0.00	6.40	0.00	22.683	0.000	276.398
			3.5500	0.00	20.22	0.00	22.683	0.000	270.332
			4.0000	0.00	30.83	0.00	22.683	0.000	260.339
			4.0000	0.00	186.36	0.00	26.321	0.000	261.296
			4.4500	0.00	196.97	0.00	26.321	0.000	202.282
			4.9000	0.00	210.80	0.00	26.321	0.000	139.199
			5.3500	0.00	227.84	0.00	26.321	0.000	69.249
			5.8000	0.00	248.09	0.00	26.321	0.000	-9.078
			6.2500	0.00	270.57	0.00	26.321	0.000	-97.155
			6.7000	0.00	290.47	0.00	26.321	0.000	-194.865
			7.1500	0.00	307.16	0.00	26.321	0.000	-300.806
			7.6000	0.00	320.62	0.00	26.321	0.000	-413.529
L. DASAR	B5	COMB5 MIN							
			0.4000	0.00	-167.08	0.00	-25.150	0.000	-90.743
			0.8500	0.00	-153.61	0.00	-25.150	0.000	-18.470
			1.3000	0.00	-136.93	0.00	-25.150	0.000	47.018
			1.7500	0.00	-117.03	0.00	-25.150	0.000	104.274
			2.2000	0.00	-94.55	0.00	-25.150	0.000	151.893
			2.6500	0.00	-74.29	0.00	-25.150	0.000	189.751
			3.1000	0.00	-57.25	0.00	-25.150	0.000	219.210
			3.5500	0.00	-43.42	0.00	-25.150	0.000	241.697
			4.0000	0.00	-32.81	0.00	-25.150	0.000	257.113
			4.0000	0.00	122.69	0.00	-30.617	0.000	258.952
			4.4500	0.00	133.30	0.00	-30.617	0.000	174.358
			4.9000	0.00	147.13	0.00	-30.617	0.000	82.838
			5.3500	0.00	164.17	0.00	-30.617	0.000	-15.705
			5.8000	0.00	184.43	0.00	-30.617	0.000	-122.656
			6.2500	0.00	206.91	0.00	-30.617	0.000	-239.369
			6.7000	0.00	226.81	0.00	-30.617	0.000	-365.720
			7.1500	0.00	243.49	0.00	-30.617	0.000	-500.304
			7.6000	0.00	256.96	0.00	-30.617	0.000	-641.673
L. DASAR	B5	COMB6 MAX							
			0.4000	0.00	-103.43	0.00	22.683	0.000	138.209
			0.8500	0.00	-89.96	0.00	22.683	0.000	181.846
			1.3000	0.00	-73.28	0.00	22.683	0.000	218.699
			1.7500	0.00	-53.38	0.00	22.683	0.000	247.321
			2.2000	0.00	-30.90	0.00	22.683	0.000	266.310
			2.6500	0.00	-10.64	0.00	22.683	0.000	275.546
			3.1000	0.00	6.40	0.00	22.683	0.000	276.398
			3.5500	0.00	20.22	0.00	22.683	0.000	270.332
			4.0000	0.00	30.83	0.00	22.683	0.000	260.339
			4.0000	0.00	186.36	0.00	26.321	0.000	261.296
			4.4500	0.00	196.97	0.00	26.321	0.000	202.282
			4.9000	0.00	210.80	0.00	26.321	0.000	139.199
			5.3500	0.00	227.84	0.00	26.321	0.000	69.249
			5.8000	0.00	248.09	0.00	26.321	0.000	-9.078
			6.2500	0.00	270.57	0.00	26.321	0.000	-97.155
			6.7000	0.00	290.47	0.00	26.321	0.000	-194.865
			7.1500	0.00	307.16	0.00	26.321	0.000	-300.806
			7.6000	0.00	320.62	0.00	26.321	0.000	-413.529
L. DASAR	B5	COMB6 MIN							
			0.4000	0.00	-167.08	0.00	-25.150	0.000	-90.743



		0.8500	0.00	-153.61	0.00	-25.150	0.000	-18.470
		1.3000	0.00	-136.93	0.00	-25.150	0.000	47.018
		1.7500	0.00	-117.03	0.00	-25.150	0.000	104.274
		2.2000	0.00	-94.55	0.00	-25.150	0.000	151.893
		2.6500	0.00	-74.29	0.00	-25.150	0.000	189.751
		3.1000	0.00	-57.25	0.00	-25.150	0.000	219.210
		3.5500	0.00	-43.42	0.00	-25.150	0.000	241.697
		4.0000	0.00	-32.81	0.00	-25.150	0.000	257.113
		4.0000	0.00	122.69	0.00	-30.617	0.000	258.952
		4.4500	0.00	133.30	0.00	-30.617	0.000	174.358
		4.9000	0.00	147.13	0.00	-30.617	0.000	82.838
		5.3500	0.00	164.17	0.00	-30.617	0.000	-15.705
		5.8000	0.00	184.43	0.00	-30.617	0.000	-122.656
		6.2500	0.00	206.91	0.00	-30.617	0.000	-239.369
		6.7000	0.00	226.81	0.00	-30.617	0.000	-365.720
		7.1500	0.00	243.49	0.00	-30.617	0.000	-500.304
		7.6000	0.00	256.96	0.00	-30.617	0.000	-641.673
L. DASAR	B5	COMB7 MAX						
		0.4000	0.00	-42.06	0.00	6.165	0.000	357.113
		0.8500	0.00	-28.60	0.00	6.165	0.000	373.133
		1.3000	0.00	-11.91	0.00	6.165	0.000	382.368
		1.7500	0.00	7.99	0.00	6.165	0.000	383.373
		2.2000	0.00	30.47	0.00	6.165	0.000	374.742
		2.6500	0.00	50.72	0.00	6.165	0.000	356.356
		3.1000	0.00	67.77	0.00	6.165	0.000	329.581
		3.5500	0.00	81.59	0.00	6.165	0.000	295.868
		4.0000	0.00	92.20	0.00	6.165	0.000	261.291
		4.0000	0.00	247.25	0.00	6.825	0.000	260.987
		4.4500	0.00	257.86	0.00	6.825	0.000	230.450
		4.9000	0.00	271.69	0.00	6.825	0.000	194.843
		5.3500	0.00	288.73	0.00	6.825	0.000	152.316
		5.8000	0.00	308.99	0.00	6.825	0.000	101.400
		6.2500	0.00	331.47	0.00	6.825	0.000	40.731
		6.7000	0.00	351.37	0.00	6.825	0.000	-29.574
		7.1500	0.00	368.05	0.00	6.825	0.000	-108.110
		7.6000	0.00	381.52	0.00	6.825	0.000	-193.430
L. DASAR	B5	COMB7 MIN						
		0.4000	0.00	-228.45	0.00	-8.631	0.000	-309.647
		0.8500	0.00	-214.98	0.00	-8.631	0.000	-209.757
		1.3000	0.00	-198.29	0.00	-8.631	0.000	-116.651
		1.7500	0.00	-178.39	0.00	-8.631	0.000	-31.777
		2.2000	0.00	-155.91	0.00	-8.631	0.000	43.461
		2.6500	0.00	-135.66	0.00	-8.631	0.000	108.941
		3.1000	0.00	-118.62	0.00	-8.631	0.000	166.027
		3.5500	0.00	-104.79	0.00	-8.631	0.000	216.160
		4.0000	0.00	-94.18	0.00	-8.631	0.000	256.161
		4.0000	0.00	61.80	0.00	-11.120	0.000	259.261
		4.4500	0.00	72.41	0.00	-11.120	0.000	146.191
		4.9000	0.00	86.23	0.00	-11.120	0.000	27.194
		5.3500	0.00	103.28	0.00	-11.120	0.000	-98.772
		5.8000	0.00	123.53	0.00	-11.120	0.000	-233.134
		6.2500	0.00	146.01	0.00	-11.120	0.000	-377.254
		6.7000	0.00	165.91	0.00	-11.120	0.000	-531.011
		7.1500	0.00	182.60	0.00	-11.120	0.000	-692.999
		7.6000	0.00	196.06	0.00	-11.120	0.000	-861.772
L. DASAR	B5	COMB8 MAX						
		0.4000	0.00	-42.06	0.00	6.165	0.000	357.113
		0.8500	0.00	-28.60	0.00	6.165	0.000	373.133
		1.3000	0.00	-11.91	0.00	6.165	0.000	382.368
		1.7500	0.00	7.99	0.00	6.165	0.000	383.373
		2.2000	0.00	30.47	0.00	6.165	0.000	374.742
		2.6500	0.00	50.72	0.00	6.165	0.000	356.356
		3.1000	0.00	67.77	0.00	6.165	0.000	329.581
		3.5500	0.00	81.59	0.00	6.165	0.000	295.868
		4.0000	0.00	92.20	0.00	6.165	0.000	261.291
		4.0000	0.00	247.25	0.00	6.825	0.000	260.987
		4.4500	0.00	257.86	0.00	6.825	0.000	230.450
		4.9000	0.00	271.69	0.00	6.825	0.000	194.843
		5.3500	0.00	288.73	0.00	6.825	0.000	152.316
		5.8000	0.00	308.99	0.00	6.825	0.000	101.400
		6.2500	0.00	331.47	0.00	6.825	0.000	40.731
		6.7000	0.00	351.37	0.00	6.825	0.000	-29.574
		7.1500	0.00	368.05	0.00	6.825	0.000	-108.110
		7.6000	0.00	381.52	0.00	6.825	0.000	-193.430
L. DASAR	B5	COMB8 MIN						
		0.4000	0.00	-228.45	0.00	-8.631	0.000	-309.647
		0.8500	0.00	-214.98	0.00	-8.631	0.000	-209.757
		1.3000	0.00	-198.29	0.00	-8.631	0.000	-116.651
		1.7500	0.00	-178.39	0.00	-8.631	0.000	-31.777
		2.2000	0.00	-155.91	0.00	-8.631	0.000	43.461
		2.6500	0.00	-135.66	0.00	-8.631	0.000	108.941
		3.1000	0.00	-118.62	0.00	-8.631	0.000	166.027
		3.5500	0.00	-104.79	0.00	-8.631	0.000	216.160
		4.0000	0.00	-94.18	0.00	-8.631	0.000	256.161
		4.0000	0.00	61.80	0.00	-11.120	0.000	259.261
		4.4500	0.00	72.41	0.00	-11.120	0.000	146.191
		4.9000	0.00	86.23	0.00	-11.120	0.000	27.194
		5.3500	0.00	103.28	0.00	-11.120	0.000	-98.772
		5.8000	0.00	123.53	0.00	-11.120	0.000	-233.134
		6.2500	0.00	146.01	0.00	-11.120	0.000	-377.254
		6.7000	0.00	165.91	0.00	-11.120	0.000	-531.011
		7.1500	0.00	182.60	0.00	-11.120	0.000	-692.999

			7.6000	0.00	196.06	0.00	-11.120	0.000	-861.772
L. DASAR	B5	COMB9 MAX	0.4000	0.00	-42.06	0.00	6.165	0.000	357.113
			0.8500	0.00	-28.60	0.00	6.165	0.000	373.133
			1.3000	0.00	-11.91	0.00	6.165	0.000	382.368
			1.7500	0.00	7.99	0.00	6.165	0.000	383.373
			2.2000	0.00	30.47	0.00	6.165	0.000	374.742
			2.6500	0.00	50.72	0.00	6.165	0.000	356.356
			3.1000	0.00	67.77	0.00	6.165	0.000	329.581
			3.5500	0.00	81.59	0.00	6.165	0.000	295.868
			4.0000	0.00	92.20	0.00	6.165	0.000	261.291
			4.0000	0.00	247.25	0.00	6.825	0.000	260.987
			4.4500	0.00	257.86	0.00	6.825	0.000	230.450
			4.9000	0.00	271.69	0.00	6.825	0.000	194.843
			5.3500	0.00	288.73	0.00	6.825	0.000	152.316
			5.8000	0.00	308.99	0.00	6.825	0.000	101.400
			6.2500	0.00	331.47	0.00	6.825	0.000	40.731
			6.7000	0.00	351.37	0.00	6.825	0.000	-29.574
			7.1500	0.00	368.05	0.00	6.825	0.000	-108.110
			7.6000	0.00	381.52	0.00	6.825	0.000	-193.430
L. DASAR	B5	COMB9 MIN	0.4000	0.00	-228.45	0.00	-8.631	0.000	-309.647
			0.8500	0.00	-214.98	0.00	-8.631	0.000	-209.757
			1.3000	0.00	-198.29	0.00	-8.631	0.000	-116.651
			1.7500	0.00	-178.39	0.00	-8.631	0.000	-31.777
			2.2000	0.00	-155.91	0.00	-8.631	0.000	43.461
			2.6500	0.00	-135.66	0.00	-8.631	0.000	108.941
			3.1000	0.00	-118.62	0.00	-8.631	0.000	166.027
			3.5500	0.00	-104.79	0.00	-8.631	0.000	216.160
			4.0000	0.00	-94.18	0.00	-8.631	0.000	256.161
			4.0000	0.00	61.80	0.00	-11.120	0.000	259.261
			4.4500	0.00	72.41	0.00	-11.120	0.000	146.191
			4.9000	0.00	86.23	0.00	-11.120	0.000	27.194
			5.3500	0.00	103.28	0.00	-11.120	0.000	-98.772
			5.8000	0.00	123.53	0.00	-11.120	0.000	-233.134
			6.2500	0.00	146.01	0.00	-11.120	0.000	-377.254
			6.7000	0.00	165.91	0.00	-11.120	0.000	-531.011
			7.1500	0.00	182.60	0.00	-11.120	0.000	-692.999
			7.6000	0.00	196.06	0.00	-11.120	0.000	-861.772
L. DASAR	B5	COMB10 MAX	0.4000	0.00	-42.06	0.00	6.165	0.000	357.113
			0.8500	0.00	-28.60	0.00	6.165	0.000	373.133
			1.3000	0.00	-11.91	0.00	6.165	0.000	382.368
			1.7500	0.00	7.99	0.00	6.165	0.000	383.373
			2.2000	0.00	30.47	0.00	6.165	0.000	374.742
			2.6500	0.00	50.72	0.00	6.165	0.000	356.356
			3.1000	0.00	67.77	0.00	6.165	0.000	329.581
			3.5500	0.00	81.59	0.00	6.165	0.000	295.868
			4.0000	0.00	92.20	0.00	6.165	0.000	261.291
			4.0000	0.00	247.25	0.00	6.825	0.000	260.987
			4.4500	0.00	257.86	0.00	6.825	0.000	230.450
			4.9000	0.00	271.69	0.00	6.825	0.000	194.843
			5.3500	0.00	288.73	0.00	6.825	0.000	152.316
			5.8000	0.00	308.99	0.00	6.825	0.000	101.400
			6.2500	0.00	331.47	0.00	6.825	0.000	40.731
			6.7000	0.00	351.37	0.00	6.825	0.000	-29.574
			7.1500	0.00	368.05	0.00	6.825	0.000	-108.110
			7.6000	0.00	381.52	0.00	6.825	0.000	-193.430
L. DASAR	B5	COMB10 MIN	0.4000	0.00	-228.45	0.00	-8.631	0.000	-309.647
			0.8500	0.00	-214.98	0.00	-8.631	0.000	-209.757
			1.3000	0.00	-198.29	0.00	-8.631	0.000	-116.651
			1.7500	0.00	-178.39	0.00	-8.631	0.000	-31.777
			2.2000	0.00	-155.91	0.00	-8.631	0.000	43.461
			2.6500	0.00	-135.66	0.00	-8.631	0.000	108.941
			3.1000	0.00	-118.62	0.00	-8.631	0.000	166.027
			3.5500	0.00	-104.79	0.00	-8.631	0.000	216.160
			4.0000	0.00	-94.18	0.00	-8.631	0.000	256.161
			4.0000	0.00	61.80	0.00	-11.120	0.000	259.261
			4.4500	0.00	72.41	0.00	-11.120	0.000	146.191
			4.9000	0.00	86.23	0.00	-11.120	0.000	27.194
			5.3500	0.00	103.28	0.00	-11.120	0.000	-98.772
			5.8000	0.00	123.53	0.00	-11.120	0.000	-233.134
			6.2500	0.00	146.01	0.00	-11.120	0.000	-377.254
			6.7000	0.00	165.91	0.00	-11.120	0.000	-531.011
			7.1500	0.00	182.60	0.00	-11.120	0.000	-692.999
			7.6000	0.00	196.06	0.00	-11.120	0.000	-861.772
L. DASAR	B5	COMB11 MAX	0.4000	0.00	-56.24	0.00	23.412	0.000	109.135
			0.8500	0.00	-47.19	0.00	23.412	0.000	132.471
			1.3000	0.00	-36.49	0.00	23.412	0.000	151.365
			1.7500	0.00	-24.14	0.00	23.412	0.000	165.074
			2.2000	0.00	-10.46	0.00	23.412	0.000	172.877
			2.6500	0.00	2.07	0.00	23.412	0.000	174.713
			3.1000	0.00	12.95	0.00	23.412	0.000	171.289
			3.5500	0.00	22.18	0.00	23.412	0.000	163.366
			4.0000	0.00	29.76	0.00	23.412	0.000	153.233
			4.0000	0.00	114.97	0.00	27.007	0.000	153.452
			4.4500	0.00	122.55	0.00	27.007	0.000	127.189
			4.9000	0.00	131.78	0.00	27.007	0.000	98.571
			5.3500	0.00	142.66	0.00	27.007	0.000	65.508

			5.8000	0.00	155.19	0.00	27.007	0.000	27.191
			6.2500	0.00	168.87	0.00	27.007	0.000	-17.091
			6.7000	0.00	181.22	0.00	27.007	0.000	-67.278
			7.1500	0.00	191.92	0.00	27.007	0.000	-122.649
			7.6000	0.00	200.97	0.00	27.007	0.000	-182.463
L. DASAR	B5	COMB11 MIN							
			0.4000	0.00	-119.89	0.00	-24.421	0.000	-119.817
			0.8500	0.00	-110.84	0.00	-24.421	0.000	-67.844
			1.3000	0.00	-100.14	0.00	-24.421	0.000	-20.315
			1.7500	0.00	-87.79	0.00	-24.421	0.000	22.027
			2.2000	0.00	-74.11	0.00	-24.421	0.000	58.460
			2.6500	0.00	-61.58	0.00	-24.421	0.000	88.919
			3.1000	0.00	-50.70	0.00	-24.421	0.000	114.100
			3.5500	0.00	-41.47	0.00	-24.421	0.000	134.731
			4.0000	0.00	-33.89	0.00	-24.421	0.000	150.007
			4.0000	0.00	51.30	0.00	-29.932	0.000	151.108
			4.4500	0.00	58.88	0.00	-29.932	0.000	99.264
			4.9000	0.00	68.11	0.00	-29.932	0.000	42.211
			5.3500	0.00	78.99	0.00	-29.932	0.000	-19.446
			5.8000	0.00	91.53	0.00	-29.932	0.000	-86.388
			6.2500	0.00	105.20	0.00	-29.932	0.000	-159.305
			6.7000	0.00	117.55	0.00	-29.932	0.000	-238.132
			7.1500	0.00	128.25	0.00	-29.932	0.000	-322.148
			7.6000	0.00	137.30	0.00	-29.932	0.000	-410.606
L. DASAR	B5	COMB12 MAX							
			0.4000	0.00	-56.24	0.00	23.412	0.000	109.135
			0.8500	0.00	-47.19	0.00	23.412	0.000	132.471
			1.3000	0.00	-36.49	0.00	23.412	0.000	151.365
			1.7500	0.00	-24.14	0.00	23.412	0.000	165.074
			2.2000	0.00	-10.46	0.00	23.412	0.000	172.877
			2.6500	0.00	2.07	0.00	23.412	0.000	174.713
			3.1000	0.00	12.95	0.00	23.412	0.000	171.289
			3.5500	0.00	22.18	0.00	23.412	0.000	163.366
			4.0000	0.00	29.76	0.00	23.412	0.000	153.233
			4.0000	0.00	114.97	0.00	27.007	0.000	153.452
			4.4500	0.00	122.55	0.00	27.007	0.000	127.189
			4.9000	0.00	131.78	0.00	27.007	0.000	98.571
			5.3500	0.00	142.66	0.00	27.007	0.000	65.508
			5.8000	0.00	155.19	0.00	27.007	0.000	27.191
			6.2500	0.00	168.87	0.00	27.007	0.000	-17.091
			6.7000	0.00	181.22	0.00	27.007	0.000	-67.278
			7.1500	0.00	191.92	0.00	27.007	0.000	-122.649
			7.6000	0.00	200.97	0.00	27.007	0.000	-182.463
L. DASAR	B5	COMB12 MIN							
			0.4000	0.00	-119.89	0.00	-24.421	0.000	-119.817
			0.8500	0.00	-110.84	0.00	-24.421	0.000	-67.844
			1.3000	0.00	-100.14	0.00	-24.421	0.000	-20.315
			1.7500	0.00	-87.79	0.00	-24.421	0.000	22.027
			2.2000	0.00	-74.11	0.00	-24.421	0.000	58.460
			2.6500	0.00	-61.58	0.00	-24.421	0.000	88.919
			3.1000	0.00	-50.70	0.00	-24.421	0.000	114.100
			3.5500	0.00	-41.47	0.00	-24.421	0.000	134.731
			4.0000	0.00	-33.89	0.00	-24.421	0.000	150.007
			4.0000	0.00	51.30	0.00	-29.932	0.000	151.108
			4.4500	0.00	58.88	0.00	-29.932	0.000	99.264
			4.9000	0.00	68.11	0.00	-29.932	0.000	42.211
			5.3500	0.00	78.99	0.00	-29.932	0.000	-19.446
			5.8000	0.00	91.53	0.00	-29.932	0.000	-86.388
			6.2500	0.00	105.20	0.00	-29.932	0.000	-159.305
			6.7000	0.00	117.55	0.00	-29.932	0.000	-238.132
			7.1500	0.00	128.25	0.00	-29.932	0.000	-322.148
			7.6000	0.00	137.30	0.00	-29.932	0.000	-410.606
L. DASAR	B5	COMB13 MAX							
			0.4000	0.00	-56.24	0.00	23.412	0.000	109.135
			0.8500	0.00	-47.19	0.00	23.412	0.000	132.471
			1.3000	0.00	-36.49	0.00	23.412	0.000	151.365
			1.7500	0.00	-24.14	0.00	23.412	0.000	165.074
			2.2000	0.00	-10.46	0.00	23.412	0.000	172.877
			2.6500	0.00	2.07	0.00	23.412	0.000	174.713
			3.1000	0.00	12.95	0.00	23.412	0.000	171.289
			3.5500	0.00	22.18	0.00	23.412	0.000	163.366
			4.0000	0.00	29.76	0.00	23.412	0.000	153.233
			4.0000	0.00	114.97	0.00	27.007	0.000	153.452
			4.4500	0.00	122.55	0.00	27.007	0.000	127.189
			4.9000	0.00	131.78	0.00	27.007	0.000	98.571
			5.3500	0.00	142.66	0.00	27.007	0.000	65.508
			5.8000	0.00	155.19	0.00	27.007	0.000	27.191
			6.2500	0.00	168.87	0.00	27.007	0.000	-17.091
			6.7000	0.00	181.22	0.00	27.007	0.000	-67.278
			7.1500	0.00	191.92	0.00	27.007	0.000	-122.649
			7.6000	0.00	200.97	0.00	27.007	0.000	-182.463
L. DASAR	B5	COMB13 MIN							
			0.4000	0.00	-119.89	0.00	-24.421	0.000	-119.817
			0.8500	0.00	-110.84	0.00	-24.421	0.000	-67.844
			1.3000	0.00	-100.14	0.00	-24.421	0.000	-20.315
			1.7500	0.00	-87.79	0.00	-24.421	0.000	22.027
			2.2000	0.00	-74.11	0.00	-24.421	0.000	58.460
			2.6500	0.00	-61.58	0.00	-24.421	0.000	88.919
			3.1000	0.00	-50.70	0.00	-24.421	0.000	114.100
			3.5500	0.00	-41.47	0.00	-24.421	0.000	134.731
			4.0000	0.00	-33.89	0.00	-24.421	0.000	150.007
			4.0000	0.00	51.30	0.00	-29.932	0.000	151.108

			4.4500	0.00	58.88	0.00	-29.932	0.000	99.264
			4.9000	0.00	68.11	0.00	-29.932	0.000	42.211
			5.3500	0.00	78.99	0.00	-29.932	0.000	-19.446
			5.8000	0.00	91.53	0.00	-29.932	0.000	-86.388
			6.2500	0.00	105.20	0.00	-29.932	0.000	-159.305
			6.7000	0.00	117.55	0.00	-29.932	0.000	-238.132
			7.1500	0.00	128.25	0.00	-29.932	0.000	-322.148
			7.6000	0.00	137.30	0.00	-29.932	0.000	-410.606
L. DASAR	B5	COMB14 MAX							
			0.4000	0.00	-56.24	0.00	23.412	0.000	109.135
			0.8500	0.00	-47.19	0.00	23.412	0.000	132.471
			1.3000	0.00	-36.49	0.00	23.412	0.000	151.365
			1.7500	0.00	-24.14	0.00	23.412	0.000	165.074
			2.2000	0.00	-10.46	0.00	23.412	0.000	172.877
			2.6500	0.00	2.07	0.00	23.412	0.000	174.713
			3.1000	0.00	12.95	0.00	23.412	0.000	171.289
			3.5500	0.00	22.18	0.00	23.412	0.000	163.366
			4.0000	0.00	29.76	0.00	23.412	0.000	153.233
			4.0000	0.00	114.97	0.00	27.007	0.000	153.452
			4.4500	0.00	122.55	0.00	27.007	0.000	127.189
			4.9000	0.00	131.78	0.00	27.007	0.000	98.571
			5.3500	0.00	142.66	0.00	27.007	0.000	65.508
			5.8000	0.00	155.19	0.00	27.007	0.000	27.191
			6.2500	0.00	168.87	0.00	27.007	0.000	-17.091
			6.7000	0.00	181.22	0.00	27.007	0.000	-67.278
			7.1500	0.00	191.92	0.00	27.007	0.000	-122.649
			7.6000	0.00	200.97	0.00	27.007	0.000	-182.463
L. DASAR	B5	COMB14 MIN							
			0.4000	0.00	-119.89	0.00	-24.421	0.000	-119.817
			0.8500	0.00	-110.84	0.00	-24.421	0.000	-67.844
			1.3000	0.00	-100.14	0.00	-24.421	0.000	-20.315
			1.7500	0.00	-87.79	0.00	-24.421	0.000	22.027
			2.2000	0.00	-74.11	0.00	-24.421	0.000	58.460
			2.6500	0.00	-61.58	0.00	-24.421	0.000	88.919
			3.1000	0.00	-50.70	0.00	-24.421	0.000	114.100
			3.5500	0.00	-41.47	0.00	-24.421	0.000	134.731
			4.0000	0.00	-33.89	0.00	-24.421	0.000	150.007
			4.0000	0.00	51.30	0.00	-29.932	0.000	151.108
			4.4500	0.00	58.88	0.00	-29.932	0.000	99.264
			4.9000	0.00	68.11	0.00	-29.932	0.000	42.211
			5.3500	0.00	78.99	0.00	-29.932	0.000	-19.446
			5.8000	0.00	91.53	0.00	-29.932	0.000	-86.388
			6.2500	0.00	105.20	0.00	-29.932	0.000	-159.305
			6.7000	0.00	117.55	0.00	-29.932	0.000	-238.132
			7.1500	0.00	128.25	0.00	-29.932	0.000	-322.148
			7.6000	0.00	137.30	0.00	-29.932	0.000	-410.606
L. DASAR	B5	COMB15 MAX							
			0.4000	0.00	5.13	0.00	6.893	0.000	328.039
			0.8500	0.00	14.18	0.00	6.893	0.000	323.758
			1.3000	0.00	24.87	0.00	6.893	0.000	315.035
			1.7500	0.00	37.23	0.00	6.893	0.000	301.125
			2.2000	0.00	50.90	0.00	6.893	0.000	281.309
			2.6500	0.00	63.44	0.00	6.893	0.000	255.523
			3.1000	0.00	74.32	0.00	6.893	0.000	224.472
			3.5500	0.00	83.55	0.00	6.893	0.000	188.902
			4.0000	0.00	91.13	0.00	6.893	0.000	154.185
			4.0000	0.00	175.86	0.00	7.510	0.000	153.143
			4.4500	0.00	183.44	0.00	7.510	0.000	155.356
			4.9000	0.00	192.67	0.00	7.510	0.000	154.216
			5.3500	0.00	203.55	0.00	7.510	0.000	148.574
			5.8000	0.00	216.09	0.00	7.510	0.000	137.669
			6.2500	0.00	229.76	0.00	7.510	0.000	120.795
			6.7000	0.00	242.11	0.00	7.510	0.000	98.013
			7.1500	0.00	252.81	0.00	7.510	0.000	70.046
			7.6000	0.00	261.86	0.00	7.510	0.000	37.637
L. DASAR	B5	COMB15 MIN							
			0.4000	0.00	-181.25	0.00	-7.903	0.000	-338.721
			0.8500	0.00	-172.21	0.00	-7.903	0.000	-259.131
			1.3000	0.00	-161.51	0.00	-7.903	0.000	-183.984
			1.7500	0.00	-149.16	0.00	-7.903	0.000	-114.024
			2.2000	0.00	-135.48	0.00	-7.903	0.000	-49.972
			2.6500	0.00	-122.95	0.00	-7.903	0.000	8.108
			3.1000	0.00	-112.06	0.00	-7.903	0.000	60.918
			3.5500	0.00	-102.83	0.00	-7.903	0.000	109.194
			4.0000	0.00	-95.25	0.00	-7.903	0.000	149.055
			4.0000	0.00	-9.59	0.00	-10.435	0.000	151.417
			4.4500	0.00	-2.02	0.00	-10.435	0.000	71.097
			4.9000	0.00	7.21	0.00	-10.435	0.000	-13.434
			5.3500	0.00	18.10	0.00	-10.435	0.000	-102.513
			5.8000	0.00	30.63	0.00	-10.435	0.000	-196.866
			6.2500	0.00	44.31	0.00	-10.435	0.000	-297.190
			6.7000	0.00	56.66	0.00	-10.435	0.000	-403.423
			7.1500	0.00	67.36	0.00	-10.435	0.000	-514.843
			7.6000	0.00	76.41	0.00	-10.435	0.000	-630.706
L. DASAR	B5	COMB16 MAX							
			0.4000	0.00	5.13	0.00	6.893	0.000	328.039
			0.8500	0.00	14.18	0.00	6.893	0.000	323.758
			1.3000	0.00	24.87	0.00	6.893	0.000	315.035
			1.7500	0.00	37.23	0.00	6.893	0.000	301.125
			2.2000	0.00	50.90	0.00	6.893	0.000	281.309
			2.6500	0.00	63.44	0.00	6.893	0.000	255.523

			3.1000	0.00	74.32	0.00	6.893	0.000	224.472
			3.5500	0.00	83.55	0.00	6.893	0.000	188.902
			4.0000	0.00	91.13	0.00	6.893	0.000	154.185
			4.0000	0.00	175.86	0.00	7.510	0.000	153.143
			4.4500	0.00	183.44	0.00	7.510	0.000	155.356
			4.9000	0.00	192.67	0.00	7.510	0.000	154.216
			5.3500	0.00	203.55	0.00	7.510	0.000	148.574
			5.8000	0.00	216.09	0.00	7.510	0.000	137.669
			6.2500	0.00	229.76	0.00	7.510	0.000	120.795
			6.7000	0.00	242.11	0.00	7.510	0.000	98.013
			7.1500	0.00	252.81	0.00	7.510	0.000	70.046
			7.6000	0.00	261.86	0.00	7.510	0.000	37.637
L. DASAR	B5	COMB16 MIN	0.4000	0.00	-181.25	0.00	-7.903	0.000	-338.721
			0.8500	0.00	-172.21	0.00	-7.903	0.000	-259.131
			1.3000	0.00	-161.51	0.00	-7.903	0.000	-183.984
			1.7500	0.00	-149.16	0.00	-7.903	0.000	-114.024
			2.2000	0.00	-135.48	0.00	-7.903	0.000	-49.972
			2.6500	0.00	-122.95	0.00	-7.903	0.000	8.108
			3.1000	0.00	-112.06	0.00	-7.903	0.000	60.918
			3.5500	0.00	-102.83	0.00	-7.903	0.000	109.194
			4.0000	0.00	-95.25	0.00	-7.903	0.000	149.055
			4.0000	0.00	-9.59	0.00	-10.435	0.000	151.417
			4.4500	0.00	-2.02	0.00	-10.435	0.000	71.097
			4.9000	0.00	7.21	0.00	-10.435	0.000	-13.434
			5.3500	0.00	18.10	0.00	-10.435	0.000	-102.513
			5.8000	0.00	30.63	0.00	-10.435	0.000	-196.866
			6.2500	0.00	44.31	0.00	-10.435	0.000	-297.190
			6.7000	0.00	56.66	0.00	-10.435	0.000	-403.423
			7.1500	0.00	67.36	0.00	-10.435	0.000	-514.843
			7.6000	0.00	76.41	0.00	-10.435	0.000	-630.706
L. DASAR	B5	COMB17 MAX	0.4000	0.00	5.13	0.00	6.893	0.000	328.039
			0.8500	0.00	14.18	0.00	6.893	0.000	323.758
			1.3000	0.00	24.87	0.00	6.893	0.000	315.035
			1.7500	0.00	37.23	0.00	6.893	0.000	301.125
			2.2000	0.00	50.90	0.00	6.893	0.000	281.309
			2.6500	0.00	63.44	0.00	6.893	0.000	255.523
			3.1000	0.00	74.32	0.00	6.893	0.000	224.472
			3.5500	0.00	83.55	0.00	6.893	0.000	188.902
			4.0000	0.00	91.13	0.00	6.893	0.000	154.185
			4.0000	0.00	175.86	0.00	7.510	0.000	153.143
			4.4500	0.00	183.44	0.00	7.510	0.000	155.356
			4.9000	0.00	192.67	0.00	7.510	0.000	154.216
			5.3500	0.00	203.55	0.00	7.510	0.000	148.574
			5.8000	0.00	216.09	0.00	7.510	0.000	137.669
			6.2500	0.00	229.76	0.00	7.510	0.000	120.795
			6.7000	0.00	242.11	0.00	7.510	0.000	98.013
			7.1500	0.00	252.81	0.00	7.510	0.000	70.046
			7.6000	0.00	261.86	0.00	7.510	0.000	37.637
L. DASAR	B5	COMB17 MIN	0.4000	0.00	-181.25	0.00	-7.903	0.000	-338.721
			0.8500	0.00	-172.21	0.00	-7.903	0.000	-259.131
			1.3000	0.00	-161.51	0.00	-7.903	0.000	-183.984
			1.7500	0.00	-149.16	0.00	-7.903	0.000	-114.024
			2.2000	0.00	-135.48	0.00	-7.903	0.000	-49.972
			2.6500	0.00	-122.95	0.00	-7.903	0.000	8.108
			3.1000	0.00	-112.06	0.00	-7.903	0.000	60.918
			3.5500	0.00	-102.83	0.00	-7.903	0.000	109.194
			4.0000	0.00	-95.25	0.00	-7.903	0.000	149.055
			4.0000	0.00	-9.59	0.00	-10.435	0.000	151.417
			4.4500	0.00	-2.02	0.00	-10.435	0.000	71.097
			4.9000	0.00	7.21	0.00	-10.435	0.000	-13.434
			5.3500	0.00	18.10	0.00	-10.435	0.000	-102.513
			5.8000	0.00	30.63	0.00	-10.435	0.000	-196.866
			6.2500	0.00	44.31	0.00	-10.435	0.000	-297.190
			6.7000	0.00	56.66	0.00	-10.435	0.000	-403.423
			7.1500	0.00	67.36	0.00	-10.435	0.000	-514.843
			7.6000	0.00	76.41	0.00	-10.435	0.000	-630.706
L. DASAR	B5	COMB18 MAX	0.4000	0.00	5.13	0.00	6.893	0.000	328.039
			0.8500	0.00	14.18	0.00	6.893	0.000	323.758
			1.3000	0.00	24.87	0.00	6.893	0.000	315.035
			1.7500	0.00	37.23	0.00	6.893	0.000	301.125
			2.2000	0.00	50.90	0.00	6.893	0.000	281.309
			2.6500	0.00	63.44	0.00	6.893	0.000	255.523
			3.1000	0.00	74.32	0.00	6.893	0.000	224.472
			3.5500	0.00	83.55	0.00	6.893	0.000	188.902
			4.0000	0.00	91.13	0.00	6.893	0.000	154.185
			4.0000	0.00	175.86	0.00	7.510	0.000	153.143
			4.4500	0.00	183.44	0.00	7.510	0.000	155.356
			4.9000	0.00	192.67	0.00	7.510	0.000	154.216
			5.3500	0.00	203.55	0.00	7.510	0.000	148.574
			5.8000	0.00	216.09	0.00	7.510	0.000	137.669
			6.2500	0.00	229.76	0.00	7.510	0.000	120.795
			6.7000	0.00	242.11	0.00	7.510	0.000	98.013
			7.1500	0.00	252.81	0.00	7.510	0.000	70.046
			7.6000	0.00	261.86	0.00	7.510	0.000	37.637
L. DASAR	B5	COMB18 MIN	0.4000	0.00	-181.25	0.00	-7.903	0.000	-338.721
			0.8500	0.00	-172.21	0.00	-7.903	0.000	-259.131
			1.3000	0.00	-161.51	0.00	-7.903	0.000	-183.984

			1.7500	0.00	-149.16	0.00	-7.903	0.000	-114.024
			2.2000	0.00	-135.48	0.00	-7.903	0.000	-49.972
			2.6500	0.00	-122.95	0.00	-7.903	0.000	8.108
			3.1000	0.00	-112.06	0.00	-7.903	0.000	60.918
			3.5500	0.00	-102.83	0.00	-7.903	0.000	109.194
			4.0000	0.00	-95.25	0.00	-7.903	0.000	149.055
			4.0000	0.00	-9.59	0.00	-10.435	0.000	151.417
			4.4500	0.00	-2.02	0.00	-10.435	0.000	71.097
			4.9000	0.00	7.21	0.00	-10.435	0.000	-13.434
			5.3500	0.00	18.10	0.00	-10.435	0.000	-102.513
			5.8000	0.00	30.63	0.00	-10.435	0.000	-196.866
			6.2500	0.00	44.31	0.00	-10.435	0.000	-297.190
			6.7000	0.00	56.66	0.00	-10.435	0.000	-403.423
			7.1500	0.00	67.36	0.00	-10.435	0.000	-514.843
			7.6000	0.00	76.41	0.00	-10.435	0.000	-630.706
BASE	B5	COMB1	0.0000	0.00	-53.87	0.00	-0.059	0.002	-49.677
			0.5000	0.00	-46.10	0.00	-0.059	0.001	-24.684
			1.0000	0.00	-38.32	0.00	-0.059	0.001	-3.579
			1.5000	0.00	-30.55	0.00	-0.059	0.001	13.639
			2.0000	0.00	-22.77	0.00	-0.059	0.000	26.970
			2.5000	0.00	-15.00	0.00	-0.059	0.000	36.413
			3.0000	0.00	-7.23	0.00	-0.059	0.000	41.970
			3.5000	0.00	0.55	0.00	-0.059	-0.001	43.640
			4.0000	0.00	8.32	0.00	-0.059	-0.001	41.422
			4.5000	0.00	16.10	0.00	-0.059	-0.001	35.318
			5.0000	0.00	23.87	0.00	-0.059	-0.002	25.326
			5.5000	0.00	31.64	0.00	-0.059	-0.002	11.447
			6.0000	0.00	39.42	0.00	-0.059	-0.002	-6.319
			6.5000	0.00	47.19	0.00	-0.059	-0.002	-27.972
			7.0000	0.00	54.97	0.00	-0.059	-0.003	-53.512
			7.5000	0.00	62.74	0.00	-0.059	-0.003	-82.939
			8.0000	0.00	70.52	0.00	-0.059	-0.003	-116.253
BASE	B5	COMB2	0.0000	0.00	-41.37	0.00	-0.124	0.002	-23.611
			0.5000	0.00	-34.71	0.00	-0.124	0.002	-4.591
			1.0000	0.00	-28.04	0.00	-0.124	0.001	11.097
			1.5000	0.00	-21.38	0.00	-0.124	0.001	23.453
			2.0000	0.00	-14.72	0.00	-0.124	0.001	32.477
			2.5000	0.00	-8.05	0.00	-0.124	0.000	38.169
			3.0000	0.00	-1.39	0.00	-0.124	0.000	40.530
			3.5000	0.00	5.27	0.00	-0.124	-0.001	39.558
			4.0000	0.00	11.94	0.00	-0.124	-0.001	35.255
			4.5000	0.00	18.60	0.00	-0.124	-0.002	27.621
			5.0000	0.00	25.27	0.00	-0.124	-0.002	16.654
			5.5000	0.00	31.93	0.00	-0.124	-0.003	2.356
			6.0000	0.00	38.59	0.00	-0.124	-0.003	-15.275
			6.5000	0.00	45.26	0.00	-0.124	-0.004	-36.237
			7.0000	0.00	51.92	0.00	-0.124	-0.004	-60.531
			7.5000	0.00	58.58	0.00	-0.124	-0.004	-88.156
			8.0000	0.00	65.25	0.00	-0.124	-0.005	-119.114
BASE	B5	COMB3 MAX	0.0000	0.00	-39.09	0.15	0.183	0.599	-14.341
			0.5000	0.00	-32.43	0.15	0.183	0.524	3.539
			1.0000	0.00	-25.76	0.15	0.183	0.450	18.087
			1.5000	0.00	-19.10	0.15	0.183	0.376	29.304
			2.0000	0.00	-12.44	0.15	0.183	0.301	37.190
			2.5000	0.00	-5.77	0.15	0.183	0.227	41.743
			3.0000	0.00	0.89	0.15	0.183	0.153	42.966
			3.5000	0.00	7.55	0.15	0.183	0.079	40.859
			4.0000	0.00	14.22	0.15	0.183	0.004	35.449
			4.5000	0.00	20.88	0.15	0.183	0.067	30.609
			5.0000	0.00	27.54	0.15	0.183	0.141	22.577
			5.5000	0.00	34.21	0.15	0.183	0.214	11.217
			6.0000	0.00	40.87	0.15	0.183	0.288	-3.473
			6.5000	0.00	47.53	0.15	0.183	0.361	-21.494
			7.0000	0.00	54.20	0.15	0.183	0.435	-42.847
			7.5000	0.00	60.86	0.15	0.183	0.508	-67.532
			8.0000	0.00	67.53	0.15	0.183	0.582	-95.548
BASE	B5	COMB3 MIN	0.0000	0.00	-47.25	-0.15	-0.375	-0.595	-47.107
			0.5000	0.00	-40.59	-0.15	-0.375	-0.521	-25.147
			1.0000	0.00	-33.93	-0.15	-0.375	-0.448	-6.518
			1.5000	0.00	-27.26	-0.15	-0.375	-0.374	8.779
			2.0000	0.00	-20.60	-0.15	-0.375	-0.301	20.744
			2.5000	0.00	-13.94	-0.15	-0.375	-0.227	29.377
			3.0000	0.00	-7.27	-0.15	-0.375	-0.153	34.677
			3.5000	0.00	-0.61	-0.15	-0.375	-0.080	36.644
			4.0000	0.00	6.06	-0.15	-0.375	-0.006	35.249
			4.5000	0.00	12.72	-0.15	-0.375	-0.070	26.621
			5.0000	0.00	19.38	-0.15	-0.375	-0.144	14.522
			5.5000	0.00	26.05	-0.15	-0.375	-0.219	-0.914
			6.0000	0.00	32.71	-0.15	-0.375	-0.293	-19.683
			6.5000	0.00	39.37	-0.15	-0.375	-0.367	-41.784
			7.0000	0.00	46.04	-0.15	-0.375	-0.442	-67.216
			7.5000	0.00	52.70	-0.15	-0.375	-0.516	-95.981
			8.0000	0.00	59.36	-0.15	-0.375	-0.590	-128.078
BASE	B5	COMB4 MAX	0.0000	0.00	-39.09	0.15	0.183	0.599	-14.341
			0.5000	0.00	-32.43	0.15	0.183	0.524	3.539

			1.0000	0.00	-25.76	0.15	0.183	0.450	18.087
			1.5000	0.00	-19.10	0.15	0.183	0.376	29.304
			2.0000	0.00	-12.44	0.15	0.183	0.301	37.190
			2.5000	0.00	-5.77	0.15	0.183	0.227	41.743
			3.0000	0.00	0.89	0.15	0.183	0.153	42.966
			3.5000	0.00	7.55	0.15	0.183	0.079	40.859
			4.0000	0.00	14.22	0.15	0.183	0.004	35.449
			4.5000	0.00	20.88	0.15	0.183	0.067	30.609
			5.0000	0.00	27.54	0.15	0.183	0.141	22.577
			5.5000	0.00	34.21	0.15	0.183	0.214	11.217
			6.0000	0.00	40.87	0.15	0.183	0.288	-3.473
			6.5000	0.00	47.53	0.15	0.183	0.361	-21.494
			7.0000	0.00	54.20	0.15	0.183	0.435	-42.847
			7.5000	0.00	60.86	0.15	0.183	0.508	-67.532
			8.0000	0.00	67.53	0.15	0.183	0.582	-95.548
BASE	B5	COMB4 MIN	0.0000	0.00	-47.25	-0.15	-0.375	-0.595	-47.107
			0.5000	0.00	-40.59	-0.15	-0.375	-0.521	-25.147
			1.0000	0.00	-33.93	-0.15	-0.375	-0.448	-6.518
			1.5000	0.00	-27.26	-0.15	-0.375	-0.374	8.779
			2.0000	0.00	-20.60	-0.15	-0.375	-0.301	20.744
			2.5000	0.00	-13.94	-0.15	-0.375	-0.227	29.377
			3.0000	0.00	-7.27	-0.15	-0.375	-0.153	34.677
			3.5000	0.00	-0.61	-0.15	-0.375	-0.080	36.644
			4.0000	0.00	6.06	-0.15	-0.375	-0.006	35.249
			4.5000	0.00	12.72	-0.15	-0.375	-0.070	26.621
			5.0000	0.00	19.38	-0.15	-0.375	-0.144	14.522
			5.5000	0.00	26.05	-0.15	-0.375	-0.219	-0.914
			6.0000	0.00	32.71	-0.15	-0.375	-0.293	-19.683
			6.5000	0.00	39.37	-0.15	-0.375	-0.367	-41.784
			7.0000	0.00	46.04	-0.15	-0.375	-0.442	-67.216
			7.5000	0.00	52.70	-0.15	-0.375	-0.516	-95.981
			8.0000	0.00	59.36	-0.15	-0.375	-0.590	-128.078
BASE	B5	COMB5 MAX	0.0000	0.00	-39.09	0.15	0.183	0.599	-14.341
			0.5000	0.00	-32.43	0.15	0.183	0.524	3.539
			1.0000	0.00	-25.76	0.15	0.183	0.450	18.087
			1.5000	0.00	-19.10	0.15	0.183	0.376	29.304
			2.0000	0.00	-12.44	0.15	0.183	0.301	37.190
			2.5000	0.00	-5.77	0.15	0.183	0.227	41.743
			3.0000	0.00	0.89	0.15	0.183	0.153	42.966
			3.5000	0.00	7.55	0.15	0.183	0.079	40.859
			4.0000	0.00	14.22	0.15	0.183	0.004	35.449
			4.5000	0.00	20.88	0.15	0.183	0.067	30.609
			5.0000	0.00	27.54	0.15	0.183	0.141	22.577
			5.5000	0.00	34.21	0.15	0.183	0.214	11.217
			6.0000	0.00	40.87	0.15	0.183	0.288	-3.473
			6.5000	0.00	47.53	0.15	0.183	0.361	-21.494
			7.0000	0.00	54.20	0.15	0.183	0.435	-42.847
			7.5000	0.00	60.86	0.15	0.183	0.508	-67.532
			8.0000	0.00	67.53	0.15	0.183	0.582	-95.548
BASE	B5	COMB5 MIN	0.0000	0.00	-47.25	-0.15	-0.375	-0.595	-47.107
			0.5000	0.00	-40.59	-0.15	-0.375	-0.521	-25.147
			1.0000	0.00	-33.93	-0.15	-0.375	-0.448	-6.518
			1.5000	0.00	-27.26	-0.15	-0.375	-0.374	8.779
			2.0000	0.00	-20.60	-0.15	-0.375	-0.301	20.744
			2.5000	0.00	-13.94	-0.15	-0.375	-0.227	29.377
			3.0000	0.00	-7.27	-0.15	-0.375	-0.153	34.677
			3.5000	0.00	-0.61	-0.15	-0.375	-0.080	36.644
			4.0000	0.00	6.06	-0.15	-0.375	-0.006	35.249
			4.5000	0.00	12.72	-0.15	-0.375	-0.070	26.621
			5.0000	0.00	19.38	-0.15	-0.375	-0.144	14.522
			5.5000	0.00	26.05	-0.15	-0.375	-0.219	-0.914
			6.0000	0.00	32.71	-0.15	-0.375	-0.293	-19.683
			6.5000	0.00	39.37	-0.15	-0.375	-0.367	-41.784
			7.0000	0.00	46.04	-0.15	-0.375	-0.442	-67.216
			7.5000	0.00	52.70	-0.15	-0.375	-0.516	-95.981
			8.0000	0.00	59.36	-0.15	-0.375	-0.590	-128.078
BASE	B5	COMB6 MAX	0.0000	0.00	-39.09	0.15	0.183	0.599	-14.341
			0.5000	0.00	-32.43	0.15	0.183	0.524	3.539
			1.0000	0.00	-25.76	0.15	0.183	0.450	18.087
			1.5000	0.00	-19.10	0.15	0.183	0.376	29.304
			2.0000	0.00	-12.44	0.15	0.183	0.301	37.190
			2.5000	0.00	-5.77	0.15	0.183	0.227	41.743
			3.0000	0.00	0.89	0.15	0.183	0.153	42.966
			3.5000	0.00	7.55	0.15	0.183	0.079	40.859
			4.0000	0.00	14.22	0.15	0.183	0.004	35.449
			4.5000	0.00	20.88	0.15	0.183	0.067	30.609
			5.0000	0.00	27.54	0.15	0.183	0.141	22.577
			5.5000	0.00	34.21	0.15	0.183	0.214	11.217
			6.0000	0.00	40.87	0.15	0.183	0.288	-3.473
			6.5000	0.00	47.53	0.15	0.183	0.361	-21.494
			7.0000	0.00	54.20	0.15	0.183	0.435	-42.847
			7.5000	0.00	60.86	0.15	0.183	0.508	-67.532
			8.0000	0.00	67.53	0.15	0.183	0.582	-95.548
BASE	B5	COMB6 MIN	0.0000	0.00	-47.25	-0.15	-0.375	-0.595	-47.107
			0.5000	0.00	-40.59	-0.15	-0.375	-0.521	-25.147
			1.0000	0.00	-33.93	-0.15	-0.375	-0.448	-6.518
			1.5000	0.00	-27.26	-0.15	-0.375	-0.374	8.779

			2.0000	0.00	-20.60	-0.15	-0.375	-0.301	20.744
			2.5000	0.00	-13.94	-0.15	-0.375	-0.227	29.377
			3.0000	0.00	-7.27	-0.15	-0.375	-0.153	34.677
			3.5000	0.00	-0.61	-0.15	-0.375	-0.080	36.644
			4.0000	0.00	6.06	-0.15	-0.375	-0.006	35.249
			4.5000	0.00	12.72	-0.15	-0.375	-0.070	26.621
			5.0000	0.00	19.38	-0.15	-0.375	-0.144	14.522
			5.5000	0.00	26.05	-0.15	-0.375	-0.219	-0.914
			6.0000	0.00	32.71	-0.15	-0.375	-0.293	-19.683
			6.5000	0.00	39.37	-0.15	-0.375	-0.367	-41.784
			7.0000	0.00	46.04	-0.15	-0.375	-0.442	-67.216
			7.5000	0.00	52.70	-0.15	-0.375	-0.516	-95.981
			8.0000	0.00	59.36	-0.15	-0.375	-0.590	-128.078
BASE	B5	COMB7 MAX	0.0000	0.00	-31.15	0.05	-0.003	0.181	17.360
			0.5000	0.00	-24.49	0.05	-0.003	0.159	31.271
			1.0000	0.00	-17.83	0.05	-0.003	0.136	41.850
			1.5000	0.00	-11.16	0.05	-0.003	0.113	49.097
			2.0000	0.00	-4.50	0.05	-0.003	0.091	53.012
			2.5000	0.00	2.16	0.05	-0.003	0.068	53.596
			3.0000	0.00	8.83	0.05	-0.003	0.046	50.848
			3.5000	0.00	15.49	0.05	-0.003	0.023	44.769
			4.0000	0.00	22.16	0.05	-0.003	0.001	35.391
			4.5000	0.00	28.82	0.05	-0.003	0.019	34.622
			5.0000	0.00	35.48	0.05	-0.003	0.041	30.564
			5.5000	0.00	42.15	0.05	-0.003	0.063	23.176
			6.0000	0.00	48.81	0.05	-0.003	0.085	12.456
			6.5000	0.00	55.47	0.05	-0.003	0.106	-1.596
			7.0000	0.00	62.14	0.05	-0.003	0.128	-18.979
			7.5000	0.00	68.80	0.05	-0.003	0.150	-39.695
			8.0000	0.00	75.46	0.05	-0.003	0.172	-63.742
BASE	B5	COMB7 MIN	0.0000	0.00	-55.19	-0.04	-0.189	-0.177	-78.808
			0.5000	0.00	-48.53	-0.04	-0.189	-0.155	-52.878
			1.0000	0.00	-41.86	-0.04	-0.189	-0.134	-30.280
			1.5000	0.00	-35.20	-0.04	-0.189	-0.112	-11.013
			2.0000	0.00	-28.54	-0.04	-0.189	-0.090	4.921
			2.5000	0.00	-21.87	-0.04	-0.189	-0.068	17.524
			3.0000	0.00	-15.21	-0.04	-0.189	-0.046	26.794
			3.5000	0.00	-8.55	-0.04	-0.189	-0.024	32.733
			4.0000	0.00	-1.88	-0.04	-0.189	-0.003	35.307
			4.5000	0.00	4.78	-0.04	-0.189	-0.022	22.608
			5.0000	0.00	11.44	-0.04	-0.189	-0.045	6.534
			5.5000	0.00	18.11	-0.04	-0.189	-0.067	-12.872
			6.0000	0.00	24.77	-0.04	-0.189	-0.090	-35.611
			6.5000	0.00	31.43	-0.04	-0.189	-0.112	-61.682
			7.0000	0.00	38.10	-0.04	-0.189	-0.135	-91.084
			7.5000	0.00	44.76	-0.04	-0.189	-0.158	-123.818
			8.0000	0.00	51.43	-0.04	-0.189	-0.180	-159.885
BASE	B5	COMB8 MAX	0.0000	0.00	-31.15	0.05	-0.003	0.181	17.360
			0.5000	0.00	-24.49	0.05	-0.003	0.159	31.271
			1.0000	0.00	-17.83	0.05	-0.003	0.136	41.850
			1.5000	0.00	-11.16	0.05	-0.003	0.113	49.097
			2.0000	0.00	-4.50	0.05	-0.003	0.091	53.012
			2.5000	0.00	2.16	0.05	-0.003	0.068	53.596
			3.0000	0.00	8.83	0.05	-0.003	0.046	50.848
			3.5000	0.00	15.49	0.05	-0.003	0.023	44.769
			4.0000	0.00	22.16	0.05	-0.003	0.001	35.391
			4.5000	0.00	28.82	0.05	-0.003	0.019	34.622
			5.0000	0.00	35.48	0.05	-0.003	0.041	30.564
			5.5000	0.00	42.15	0.05	-0.003	0.063	23.176
			6.0000	0.00	48.81	0.05	-0.003	0.085	12.456
			6.5000	0.00	55.47	0.05	-0.003	0.106	-1.596
			7.0000	0.00	62.14	0.05	-0.003	0.128	-18.979
			7.5000	0.00	68.80	0.05	-0.003	0.150	-39.695
			8.0000	0.00	75.46	0.05	-0.003	0.172	-63.742
BASE	B5	COMB8 MIN	0.0000	0.00	-55.19	-0.04	-0.189	-0.177	-78.808
			0.5000	0.00	-48.53	-0.04	-0.189	-0.155	-52.878
			1.0000	0.00	-41.86	-0.04	-0.189	-0.134	-30.280
			1.5000	0.00	-35.20	-0.04	-0.189	-0.112	-11.013
			2.0000	0.00	-28.54	-0.04	-0.189	-0.090	4.921
			2.5000	0.00	-21.87	-0.04	-0.189	-0.068	17.524
			3.0000	0.00	-15.21	-0.04	-0.189	-0.046	26.794
			3.5000	0.00	-8.55	-0.04	-0.189	-0.024	32.733
			4.0000	0.00	-1.88	-0.04	-0.189	-0.003	35.307
			4.5000	0.00	4.78	-0.04	-0.189	-0.022	22.608
			5.0000	0.00	11.44	-0.04	-0.189	-0.045	6.534
			5.5000	0.00	18.11	-0.04	-0.189	-0.067	-12.872
			6.0000	0.00	24.77	-0.04	-0.189	-0.090	-35.611
			6.5000	0.00	31.43	-0.04	-0.189	-0.112	-61.682
			7.0000	0.00	38.10	-0.04	-0.189	-0.135	-91.084
			7.5000	0.00	44.76	-0.04	-0.189	-0.158	-123.818
			8.0000	0.00	51.43	-0.04	-0.189	-0.180	-159.885
BASE	B5	COMB9 MAX	0.0000	0.00	-31.15	0.05	-0.003	0.181	17.360
			0.5000	0.00	-24.49	0.05	-0.003	0.159	31.271
			1.0000	0.00	-17.83	0.05	-0.003	0.136	41.850
			1.5000	0.00	-11.16	0.05	-0.003	0.113	49.097
			2.0000	0.00	-4.50	0.05	-0.003	0.091	53.012



			2.5000	0.00	2.16	0.05	-0.003	0.068	53.596
			3.0000	0.00	8.83	0.05	-0.003	0.046	50.848
			3.5000	0.00	15.49	0.05	-0.003	0.023	44.769
			4.0000	0.00	22.16	0.05	-0.003	0.001	35.391
			4.5000	0.00	28.82	0.05	-0.003	0.019	34.622
			5.0000	0.00	35.48	0.05	-0.003	0.041	30.564
			5.5000	0.00	42.15	0.05	-0.003	0.063	23.176
			6.0000	0.00	48.81	0.05	-0.003	0.085	12.456
			6.5000	0.00	55.47	0.05	-0.003	0.106	-1.596
			7.0000	0.00	62.14	0.05	-0.003	0.128	-18.979
			7.5000	0.00	68.80	0.05	-0.003	0.150	-39.695
			8.0000	0.00	75.46	0.05	-0.003	0.172	-63.742
BASE	B5	COMB9 MIN	0.0000	0.00	-55.19	-0.04	-0.189	-0.177	-78.808
			0.5000	0.00	-48.53	-0.04	-0.189	-0.155	-52.878
			1.0000	0.00	-41.86	-0.04	-0.189	-0.134	-30.280
			1.5000	0.00	-35.20	-0.04	-0.189	-0.112	-11.013
			2.0000	0.00	-28.54	-0.04	-0.189	-0.090	4.921
			2.5000	0.00	-21.87	-0.04	-0.189	-0.068	17.524
			3.0000	0.00	-15.21	-0.04	-0.189	-0.046	26.794
			3.5000	0.00	-8.55	-0.04	-0.189	-0.024	32.733
			4.0000	0.00	-1.88	-0.04	-0.189	-0.003	35.307
			4.5000	0.00	4.78	-0.04	-0.189	-0.022	22.608
			5.0000	0.00	11.44	-0.04	-0.189	-0.045	6.534
			5.5000	0.00	18.11	-0.04	-0.189	-0.067	-12.872
			6.0000	0.00	24.77	-0.04	-0.189	-0.090	-35.611
			6.5000	0.00	31.43	-0.04	-0.189	-0.112	-61.682
			7.0000	0.00	38.10	-0.04	-0.189	-0.135	-91.084
			7.5000	0.00	44.76	-0.04	-0.189	-0.158	-123.818
			8.0000	0.00	51.43	-0.04	-0.189	-0.180	-159.885
BASE	B5	COMB10 MAX	0.0000	0.00	-31.15	0.05	-0.003	0.181	17.360
			0.5000	0.00	-24.49	0.05	-0.003	0.159	31.271
			1.0000	0.00	-17.83	0.05	-0.003	0.136	41.850
			1.5000	0.00	-11.16	0.05	-0.003	0.113	49.097
			2.0000	0.00	-4.50	0.05	-0.003	0.091	53.012
			2.5000	0.00	2.16	0.05	-0.003	0.068	53.596
			3.0000	0.00	8.83	0.05	-0.003	0.046	50.848
			3.5000	0.00	15.49	0.05	-0.003	0.023	44.769
			4.0000	0.00	22.16	0.05	-0.003	0.001	35.391
			4.5000	0.00	28.82	0.05	-0.003	0.019	34.622
			5.0000	0.00	35.48	0.05	-0.003	0.041	30.564
			5.5000	0.00	42.15	0.05	-0.003	0.063	23.176
			6.0000	0.00	48.81	0.05	-0.003	0.085	12.456
			6.5000	0.00	55.47	0.05	-0.003	0.106	-1.596
			7.0000	0.00	62.14	0.05	-0.003	0.128	-18.979
			7.5000	0.00	68.80	0.05	-0.003	0.150	-39.695
			8.0000	0.00	75.46	0.05	-0.003	0.172	-63.742
BASE	B5	COMB10 MIN	0.0000	0.00	-55.19	-0.04	-0.189	-0.177	-78.808
			0.5000	0.00	-48.53	-0.04	-0.189	-0.155	-52.878
			1.0000	0.00	-41.86	-0.04	-0.189	-0.134	-30.280
			1.5000	0.00	-35.20	-0.04	-0.189	-0.112	-11.013
			2.0000	0.00	-28.54	-0.04	-0.189	-0.090	4.921
			2.5000	0.00	-21.87	-0.04	-0.189	-0.068	17.524
			3.0000	0.00	-15.21	-0.04	-0.189	-0.046	26.794
			3.5000	0.00	-8.55	-0.04	-0.189	-0.024	32.733
			4.0000	0.00	-1.88	-0.04	-0.189	-0.003	35.307
			4.5000	0.00	4.78	-0.04	-0.189	-0.022	22.608
			5.0000	0.00	11.44	-0.04	-0.189	-0.045	6.534
			5.5000	0.00	18.11	-0.04	-0.189	-0.067	-12.872
			6.0000	0.00	24.77	-0.04	-0.189	-0.090	-35.611
			6.5000	0.00	31.43	-0.04	-0.189	-0.112	-61.682
			7.0000	0.00	38.10	-0.04	-0.189	-0.135	-91.084
			7.5000	0.00	44.76	-0.04	-0.189	-0.158	-123.818
			8.0000	0.00	51.43	-0.04	-0.189	-0.180	-159.885
BASE	B5	COMB11 MAX	0.0000	0.00	-30.55	0.15	0.241	0.598	-15.552
			0.5000	0.00	-25.55	0.15	0.241	0.524	-1.526
			1.0000	0.00	-20.56	0.15	0.241	0.450	10.002
			1.5000	0.00	-15.56	0.15	0.241	0.375	19.030
			2.0000	0.00	-10.56	0.15	0.241	0.301	25.560
			2.5000	0.00	-5.56	0.15	0.241	0.227	29.592
			3.0000	0.00	-0.56	0.15	0.241	0.153	31.125
			3.5000	0.00	4.43	0.15	0.241	0.079	30.162
			4.0000	0.00	9.43	0.15	0.241	0.005	26.729
			4.5000	0.00	14.43	0.15	0.241	0.068	24.699
			5.0000	0.00	19.43	0.15	0.241	0.142	20.308
			5.5000	0.00	24.42	0.15	0.241	0.215	13.425
			6.0000	0.00	29.42	0.15	0.241	0.289	4.043
			6.5000	0.00	34.42	0.15	0.241	0.363	-7.837
			7.0000	0.00	39.42	0.15	0.241	0.436	-22.216
			7.5000	0.00	44.41	0.15	0.241	0.510	-39.093
			8.0000	0.00	49.41	0.15	0.241	0.584	-58.469
BASE	B5	COMB11 MIN	0.0000	0.00	-38.71	-0.15	-0.317	-0.596	-48.318
			0.5000	0.00	-33.71	-0.15	-0.317	-0.522	-30.211
			1.0000	0.00	-28.72	-0.15	-0.317	-0.448	-14.604
			1.5000	0.00	-23.72	-0.15	-0.317	-0.374	-1.495
			2.0000	0.00	-18.72	-0.15	-0.317	-0.301	9.115
			2.5000	0.00	-13.72	-0.15	-0.317	-0.227	17.225
			3.0000	0.00	-8.73	-0.15	-0.317	-0.153	22.837

			3.5000	0.00	-3.73	-0.15	-0.317	-0.080	25.947
			4.0000	0.00	1.27	-0.15	-0.317	-0.006	26.528
			4.5000	0.00	6.27	-0.15	-0.317	-0.069	20.710
			5.0000	0.00	11.26	-0.15	-0.317	-0.143	12.254
			5.5000	0.00	16.26	-0.15	-0.317	-0.218	1.293
			6.0000	0.00	21.26	-0.15	-0.317	-0.292	-12.167
			6.5000	0.00	26.26	-0.15	-0.317	-0.366	-28.126
			7.0000	0.00	31.26	-0.15	-0.317	-0.440	-46.585
			7.5000	0.00	36.25	-0.15	-0.317	-0.514	-67.543
			8.0000	0.00	41.25	-0.15	-0.317	-0.588	-90.999
BASE	B5	COMB12 MAX	0.0000	0.00	-30.55	0.15	0.241	0.598	-15.552
			0.5000	0.00	-25.55	0.15	0.241	0.524	-1.526
			1.0000	0.00	-20.56	0.15	0.241	0.450	10.002
			1.5000	0.00	-15.56	0.15	0.241	0.375	19.030
			2.0000	0.00	-10.56	0.15	0.241	0.301	25.560
			2.5000	0.00	-5.56	0.15	0.241	0.227	29.592
			3.0000	0.00	-0.56	0.15	0.241	0.153	31.125
			3.5000	0.00	4.43	0.15	0.241	0.079	30.162
			4.0000	0.00	9.43	0.15	0.241	0.005	26.729
			4.5000	0.00	14.43	0.15	0.241	0.068	24.699
			5.0000	0.00	19.43	0.15	0.241	0.142	20.308
			5.5000	0.00	24.42	0.15	0.241	0.215	13.425
			6.0000	0.00	29.42	0.15	0.241	0.289	4.043
			6.5000	0.00	34.42	0.15	0.241	0.363	-7.837
			7.0000	0.00	39.42	0.15	0.241	0.436	-22.216
			7.5000	0.00	44.41	0.15	0.241	0.510	-39.093
			8.0000	0.00	49.41	0.15	0.241	0.584	-58.469
BASE	B5	COMB12 MIN	0.0000	0.00	-38.71	-0.15	-0.317	-0.596	-48.318
			0.5000	0.00	-33.71	-0.15	-0.317	-0.522	-30.211
			1.0000	0.00	-28.72	-0.15	-0.317	-0.448	-14.604
			1.5000	0.00	-23.72	-0.15	-0.317	-0.374	-1.495
			2.0000	0.00	-18.72	-0.15	-0.317	-0.301	9.115
			2.5000	0.00	-13.72	-0.15	-0.317	-0.227	17.225
			3.0000	0.00	-8.73	-0.15	-0.317	-0.153	22.837
			3.5000	0.00	-3.73	-0.15	-0.317	-0.080	25.947
			4.0000	0.00	1.27	-0.15	-0.317	-0.006	26.528
			4.5000	0.00	6.27	-0.15	-0.317	-0.069	20.710
			5.0000	0.00	11.26	-0.15	-0.317	-0.143	12.254
			5.5000	0.00	16.26	-0.15	-0.317	-0.218	1.293
			6.0000	0.00	21.26	-0.15	-0.317	-0.292	-12.167
			6.5000	0.00	26.26	-0.15	-0.317	-0.366	-28.126
			7.0000	0.00	31.26	-0.15	-0.317	-0.440	-46.585
			7.5000	0.00	36.25	-0.15	-0.317	-0.514	-67.543
			8.0000	0.00	41.25	-0.15	-0.317	-0.588	-90.999
BASE	B5	COMB13 MAX	0.0000	0.00	-30.55	0.15	0.241	0.598	-15.552
			0.5000	0.00	-25.55	0.15	0.241	0.524	-1.526
			1.0000	0.00	-20.56	0.15	0.241	0.450	10.002
			1.5000	0.00	-15.56	0.15	0.241	0.375	19.030
			2.0000	0.00	-10.56	0.15	0.241	0.301	25.560
			2.5000	0.00	-5.56	0.15	0.241	0.227	29.592
			3.0000	0.00	-0.56	0.15	0.241	0.153	31.125
			3.5000	0.00	4.43	0.15	0.241	0.079	30.162
			4.0000	0.00	9.43	0.15	0.241	0.005	26.729
			4.5000	0.00	14.43	0.15	0.241	0.068	24.699
			5.0000	0.00	19.43	0.15	0.241	0.142	20.308
			5.5000	0.00	24.42	0.15	0.241	0.215	13.425
			6.0000	0.00	29.42	0.15	0.241	0.289	4.043
			6.5000	0.00	34.42	0.15	0.241	0.363	-7.837
			7.0000	0.00	39.42	0.15	0.241	0.436	-22.216
			7.5000	0.00	44.41	0.15	0.241	0.510	-39.093
			8.0000	0.00	49.41	0.15	0.241	0.584	-58.469
BASE	B5	COMB13 MIN	0.0000	0.00	-38.71	-0.15	-0.317	-0.596	-48.318
			0.5000	0.00	-33.71	-0.15	-0.317	-0.522	-30.211
			1.0000	0.00	-28.72	-0.15	-0.317	-0.448	-14.604
			1.5000	0.00	-23.72	-0.15	-0.317	-0.374	-1.495
			2.0000	0.00	-18.72	-0.15	-0.317	-0.301	9.115
			2.5000	0.00	-13.72	-0.15	-0.317	-0.227	17.225
			3.0000	0.00	-8.73	-0.15	-0.317	-0.153	22.837
			3.5000	0.00	-3.73	-0.15	-0.317	-0.080	25.947
			4.0000	0.00	1.27	-0.15	-0.317	-0.006	26.528
			4.5000	0.00	6.27	-0.15	-0.317	-0.069	20.710
			5.0000	0.00	11.26	-0.15	-0.317	-0.143	12.254
			5.5000	0.00	16.26	-0.15	-0.317	-0.218	1.293
			6.0000	0.00	21.26	-0.15	-0.317	-0.292	-12.167
			6.5000	0.00	26.26	-0.15	-0.317	-0.366	-28.126
			7.0000	0.00	31.26	-0.15	-0.317	-0.440	-46.585
			7.5000	0.00	36.25	-0.15	-0.317	-0.514	-67.543
			8.0000	0.00	41.25	-0.15	-0.317	-0.588	-90.999
BASE	B5	COMB14 MAX	0.0000	0.00	-30.55	0.15	0.241	0.598	-15.552
			0.5000	0.00	-25.55	0.15	0.241	0.524	-1.526
			1.0000	0.00	-20.56	0.15	0.241	0.450	10.002
			1.5000	0.00	-15.56	0.15	0.241	0.375	19.030
			2.0000	0.00	-10.56	0.15	0.241	0.301	25.560
			2.5000	0.00	-5.56	0.15	0.241	0.227	29.592
			3.0000	0.00	-0.56	0.15	0.241	0.153	31.125
			3.5000	0.00	4.43	0.15	0.241	0.079	30.162

			4.0000	0.00	9.43	0.15	0.241	0.005	26.729
			4.5000	0.00	14.43	0.15	0.241	0.068	24.699
			5.0000	0.00	19.43	0.15	0.241	0.142	20.308
			5.5000	0.00	24.42	0.15	0.241	0.215	13.425
			6.0000	0.00	29.42	0.15	0.241	0.289	4.043
			6.5000	0.00	34.42	0.15	0.241	0.363	-7.837
			7.0000	0.00	39.42	0.15	0.241	0.436	-22.216
			7.5000	0.00	44.41	0.15	0.241	0.510	-39.093
			8.0000	0.00	49.41	0.15	0.241	0.584	-58.469
BASE	B5	COMB14 MIN	0.0000	0.00	-38.71	-0.15	-0.317	-0.596	-48.318
			0.5000	0.00	-33.71	-0.15	-0.317	-0.522	-30.211
			1.0000	0.00	-28.72	-0.15	-0.317	-0.448	-14.604
			1.5000	0.00	-23.72	-0.15	-0.317	-0.374	-1.495
			2.0000	0.00	-18.72	-0.15	-0.317	-0.301	9.115
			2.5000	0.00	-13.72	-0.15	-0.317	-0.227	17.225
			3.0000	0.00	-8.73	-0.15	-0.317	-0.153	22.837
			3.5000	0.00	-3.73	-0.15	-0.317	-0.080	25.947
			4.0000	0.00	1.27	-0.15	-0.317	-0.006	26.528
			4.5000	0.00	6.27	-0.15	-0.317	-0.069	20.710
			5.0000	0.00	11.26	-0.15	-0.317	-0.143	12.254
			5.5000	0.00	16.26	-0.15	-0.317	-0.218	1.293
			6.0000	0.00	21.26	-0.15	-0.317	-0.292	-12.167
			6.5000	0.00	26.26	-0.15	-0.317	-0.366	-28.126
			7.0000	0.00	31.26	-0.15	-0.317	-0.440	-46.585
			7.5000	0.00	36.25	-0.15	-0.317	-0.514	-67.543
			8.0000	0.00	41.25	-0.15	-0.317	-0.588	-90.999
BASE	B5	COMB15 MAX	0.0000	0.00	-22.61	0.04	0.055	0.180	16.149
			0.5000	0.00	-17.61	0.04	0.055	0.158	26.206
			1.0000	0.00	-12.62	0.04	0.055	0.135	33.764
			1.5000	0.00	-7.62	0.04	0.055	0.113	38.823
			2.0000	0.00	-2.62	0.04	0.055	0.091	41.383
			2.5000	0.00	2.38	0.04	0.055	0.068	41.445
			3.0000	0.00	7.37	0.04	0.055	0.046	39.008
			3.5000	0.00	12.37	0.04	0.055	0.023	34.073
			4.0000	0.00	17.37	0.04	0.055	0.001	26.670
			4.5000	0.00	22.37	0.04	0.055	0.020	28.712
			5.0000	0.00	27.36	0.04	0.055	0.042	28.296
			5.5000	0.00	32.36	0.04	0.055	0.064	25.383
			6.0000	0.00	37.36	0.04	0.055	0.086	19.971
			6.5000	0.00	42.36	0.04	0.055	0.108	12.061
			7.0000	0.00	47.36	0.04	0.055	0.130	1.652
			7.5000	0.00	52.35	0.04	0.055	0.152	-11.256
			8.0000	0.00	57.35	0.04	0.055	0.174	-26.663
BASE	B5	COMB15 MIN	0.0000	0.00	-46.65	-0.04	-0.131	-0.178	-80.019
			0.5000	0.00	-41.65	-0.04	-0.131	-0.156	-57.943
			1.0000	0.00	-36.66	-0.04	-0.131	-0.134	-38.366
			1.5000	0.00	-31.66	-0.04	-0.131	-0.112	-21.287
			2.0000	0.00	-26.66	-0.04	-0.131	-0.090	-6.708
			2.5000	0.00	-21.66	-0.04	-0.131	-0.068	5.372
			3.0000	0.00	-16.66	-0.04	-0.131	-0.046	14.954
			3.5000	0.00	-11.67	-0.04	-0.131	-0.024	22.036
			4.0000	0.00	-6.67	-0.04	-0.131	-0.002	26.587
			4.5000	0.00	-1.67	-0.04	-0.131	-0.021	16.697
			5.0000	0.00	3.33	-0.04	-0.131	-0.044	4.266
			5.5000	0.00	8.32	-0.04	-0.131	-0.066	-10.665
			6.0000	0.00	13.32	-0.04	-0.131	-0.089	-28.095
			6.5000	0.00	18.32	-0.04	-0.131	-0.111	-48.024
			7.0000	0.00	23.32	-0.04	-0.131	-0.133	-70.453
			7.5000	0.00	28.31	-0.04	-0.131	-0.156	-95.380
			8.0000	0.00	33.31	-0.04	-0.131	-0.178	-122.806
BASE	B5	COMB16 MAX	0.0000	0.00	-22.61	0.04	0.055	0.180	16.149
			0.5000	0.00	-17.61	0.04	0.055	0.158	26.206
			1.0000	0.00	-12.62	0.04	0.055	0.135	33.764
			1.5000	0.00	-7.62	0.04	0.055	0.113	38.823
			2.0000	0.00	-2.62	0.04	0.055	0.091	41.383
			2.5000	0.00	2.38	0.04	0.055	0.068	41.445
			3.0000	0.00	7.37	0.04	0.055	0.046	39.008
			3.5000	0.00	12.37	0.04	0.055	0.023	34.073
			4.0000	0.00	17.37	0.04	0.055	0.001	26.670
			4.5000	0.00	22.37	0.04	0.055	0.020	28.712
			5.0000	0.00	27.36	0.04	0.055	0.042	28.296
			5.5000	0.00	32.36	0.04	0.055	0.064	25.383
			6.0000	0.00	37.36	0.04	0.055	0.086	19.971
			6.5000	0.00	42.36	0.04	0.055	0.108	12.061
			7.0000	0.00	47.36	0.04	0.055	0.130	1.652
			7.5000	0.00	52.35	0.04	0.055	0.152	-11.256
			8.0000	0.00	57.35	0.04	0.055	0.174	-26.663
BASE	B5	COMB16 MIN	0.0000	0.00	-46.65	-0.04	-0.131	-0.178	-80.019
			0.5000	0.00	-41.65	-0.04	-0.131	-0.156	-57.943
			1.0000	0.00	-36.66	-0.04	-0.131	-0.134	-38.366
			1.5000	0.00	-31.66	-0.04	-0.131	-0.112	-21.287
			2.0000	0.00	-26.66	-0.04	-0.131	-0.090	-6.708
			2.5000	0.00	-21.66	-0.04	-0.131	-0.068	5.372
			3.0000	0.00	-16.66	-0.04	-0.131	-0.046	14.954
			3.5000	0.00	-11.67	-0.04	-0.131	-0.024	22.036
			4.0000	0.00	-6.67	-0.04	-0.131	-0.002	26.587
			4.5000	0.00	-1.67	-0.04	-0.131	-0.021	16.697

			5.0000	0.00	3.33	-0.04	-0.131	-0.044	4.266
			5.5000	0.00	8.32	-0.04	-0.131	-0.066	-10.665
			6.0000	0.00	13.32	-0.04	-0.131	-0.089	-28.095
			6.5000	0.00	18.32	-0.04	-0.131	-0.111	-48.024
			7.0000	0.00	23.32	-0.04	-0.131	-0.133	-70.453
			7.5000	0.00	28.31	-0.04	-0.131	-0.156	-95.380
			8.0000	0.00	33.31	-0.04	-0.131	-0.178	-122.806
BASE	B5	COMB17 MAX	0.0000	0.00	-22.61	0.04	0.055	0.180	16.149
			0.5000	0.00	-17.61	0.04	0.055	0.158	26.206
			1.0000	0.00	-12.62	0.04	0.055	0.135	33.764
			1.5000	0.00	-7.62	0.04	0.055	0.113	38.823
			2.0000	0.00	-2.62	0.04	0.055	0.091	41.383
			2.5000	0.00	2.38	0.04	0.055	0.068	41.445
			3.0000	0.00	7.37	0.04	0.055	0.046	39.008
			3.5000	0.00	12.37	0.04	0.055	0.023	34.073
			4.0000	0.00	17.37	0.04	0.055	0.001	26.670
			4.5000	0.00	22.37	0.04	0.055	0.020	28.712
			5.0000	0.00	27.36	0.04	0.055	0.042	28.296
			5.5000	0.00	32.36	0.04	0.055	0.064	25.383
			6.0000	0.00	37.36	0.04	0.055	0.086	19.971
			6.5000	0.00	42.36	0.04	0.055	0.108	12.061
			7.0000	0.00	47.36	0.04	0.055	0.130	1.652
			7.5000	0.00	52.35	0.04	0.055	0.152	-11.256
			8.0000	0.00	57.35	0.04	0.055	0.174	-26.663
BASE	B5	COMB17 MIN	0.0000	0.00	-46.65	-0.04	-0.131	-0.178	-80.019
			0.5000	0.00	-41.65	-0.04	-0.131	-0.156	-57.943
			1.0000	0.00	-36.66	-0.04	-0.131	-0.134	-38.366
			1.5000	0.00	-31.66	-0.04	-0.131	-0.112	-21.287
			2.0000	0.00	-26.66	-0.04	-0.131	-0.090	-6.708
			2.5000	0.00	-21.66	-0.04	-0.131	-0.068	5.372
			3.0000	0.00	-16.66	-0.04	-0.131	-0.046	14.954
			3.5000	0.00	-11.67	-0.04	-0.131	-0.024	22.036
			4.0000	0.00	-6.67	-0.04	-0.131	-0.002	26.587
			4.5000	0.00	-1.67	-0.04	-0.131	-0.021	16.697
			5.0000	0.00	3.33	-0.04	-0.131	-0.044	4.266
			5.5000	0.00	8.32	-0.04	-0.131	-0.066	-10.665
			6.0000	0.00	13.32	-0.04	-0.131	-0.089	-28.095
			6.5000	0.00	18.32	-0.04	-0.131	-0.111	-48.024
			7.0000	0.00	23.32	-0.04	-0.131	-0.133	-70.453
			7.5000	0.00	28.31	-0.04	-0.131	-0.156	-95.380
			8.0000	0.00	33.31	-0.04	-0.131	-0.178	-122.806
BASE	B5	COMB18 MAX	0.0000	0.00	-22.61	0.04	0.055	0.180	16.149
			0.5000	0.00	-17.61	0.04	0.055	0.158	26.206
			1.0000	0.00	-12.62	0.04	0.055	0.135	33.764
			1.5000	0.00	-7.62	0.04	0.055	0.113	38.823
			2.0000	0.00	-2.62	0.04	0.055	0.091	41.383
			2.5000	0.00	2.38	0.04	0.055	0.068	41.445
			3.0000	0.00	7.37	0.04	0.055	0.046	39.008
			3.5000	0.00	12.37	0.04	0.055	0.023	34.073
			4.0000	0.00	17.37	0.04	0.055	0.001	26.670
			4.5000	0.00	22.37	0.04	0.055	0.020	28.712
			5.0000	0.00	27.36	0.04	0.055	0.042	28.296
			5.5000	0.00	32.36	0.04	0.055	0.064	25.383
			6.0000	0.00	37.36	0.04	0.055	0.086	19.971
			6.5000	0.00	42.36	0.04	0.055	0.108	12.061
			7.0000	0.00	47.36	0.04	0.055	0.130	1.652
			7.5000	0.00	52.35	0.04	0.055	0.152	-11.256
			8.0000	0.00	57.35	0.04	0.055	0.174	-26.663
BASE	B5	COMB18 MIN	0.0000	0.00	-46.65	-0.04	-0.131	-0.178	-80.019
			0.5000	0.00	-41.65	-0.04	-0.131	-0.156	-57.943
			1.0000	0.00	-36.66	-0.04	-0.131	-0.134	-38.366
			1.5000	0.00	-31.66	-0.04	-0.131	-0.112	-21.287
			2.0000	0.00	-26.66	-0.04	-0.131	-0.090	-6.708
			2.5000	0.00	-21.66	-0.04	-0.131	-0.068	5.372
			3.0000	0.00	-16.66	-0.04	-0.131	-0.046	14.954
			3.5000	0.00	-11.67	-0.04	-0.131	-0.024	22.036
			4.0000	0.00	-6.67	-0.04	-0.131	-0.002	26.587
			4.5000	0.00	-1.67	-0.04	-0.131	-0.021	16.697
			5.0000	0.00	3.33	-0.04	-0.131	-0.044	4.266
			5.5000	0.00	8.32	-0.04	-0.131	-0.066	-10.665
			6.0000	0.00	13.32	-0.04	-0.131	-0.089	-28.095
			6.5000	0.00	18.32	-0.04	-0.131	-0.111	-48.024
			7.0000	0.00	23.32	-0.04	-0.131	-0.133	-70.453
			7.5000	0.00	28.31	-0.04	-0.131	-0.156	-95.380
			8.0000	0.00	33.31	-0.04	-0.131	-0.178	-122.806

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 2  
February 20, 2010 21:51

YOGYAKARTA

C O L U M N F O R C E E N V E L O P E S

STORY	COLUMN	ITEM	P	V2	V3	T	M2	M3
ATAP	C45	Min Value	-293.13	-22.80	-34.45	-2.471	-31.516	-44.070
		Min Case	COMB1	COMB14	COMB18	COMB6	COMB18	COMB6
		Max Value	-155.98	54.21	15.25	2.469	92.486	108.407
		Max Case	COMB18	COMB6	COMB10	COMB14	COMB10	COMB6
ATAP BETON	C45	Min Value	-944.66	-16.91	41.19	-1.081	-172.370	-113.074
		Min Case	COMB2	COMB14	COMB18	COMB14	COMB10	COMB6
		Max Value	-555.04	93.58	146.30	1.081	238.189	149.370
		Max Case	COMB18	COMB6	COMB10	COMB6	COMB10	COMB6
PENTHOUSE	C45	Min Value	-1728.25	-48.00	11.14	-1.563	-193.983	-139.326
		Min Case	COMB2	COMB14	COMB18	COMB14	COMB10	COMB6
		Max Value	-986.07	108.64	152.35	1.563	233.039	165.409
		Max Case	COMB18	COMB6	COMB10	COMB6	COMB10	COMB6
LANTAI 6	C45	Min Value	-2524.41	-98.56	4.78	-3.708	-290.301	-230.570
		Min Case	COMB2	COMB14	COMB18	COMB14	COMB10	COMB6
		Max Value	-1414.13	180.98	223.96	3.709	337.833	277.240
		Max Case	COMB14	COMB6	COMB10	COMB6	COMB10	COMB6
LANTAI 5	C45	Min Value	-3318.02	-129.05	-13.14	-4.624	-297.780	-241.451
		Min Case	COMB2	COMB14	COMB18	COMB14	COMB10	COMB6
		Max Value	-1841.35	204.20	245.22	4.624	390.217	331.828
		Max Case	COMB14	COMB6	COMB10	COMB6	COMB10	COMB6
LANTAI 4	C45	Min Value	-4120.49	-152.15	-27.28	-5.522	-336.070	-278.251
		Min Case	COMB2	COMB14	COMB18	COMB14	COMB10	COMB6
		Max Value	-2269.01	222.29	262.62	5.522	401.179	346.323
		Max Case	COMB14	COMB6	COMB10	COMB6	COMB10	COMB6
LANTAI 3	C45	Min Value	-4941.58	-210.99	-28.21	-10.219	-413.187	-366.376
		Min Case	COMB2	COMB14	COMB18	COMB14	COMB10	COMB6
		Max Value	-2695.14	290.24	329.80	10.219	513.200	449.126
		Max Case	COMB14	COMB6	COMB10	COMB6	COMB10	COMB6
LANTAI 2	C45	Min Value	-5759.75	-204.37	-53.18	-11.269	-417.677	-361.351
		Min Case	COMB2	COMB14	COMB18	COMB14	COMB10	COMB6
		Max Value	-3122.85	326.50	305.09	11.269	439.385	555.636
		Max Case	COMB14	COMB6	COMB10	COMB6	COMB10	COMB6
LANTAI 1	C45	Min Value	-6408.22	-241.61	-56.23	-12.516	-419.269	-453.620
		Min Case	COMB2	COMB14	COMB18	COMB14	COMB10	COMB6
		Max Value	-3470.67	357.45	343.74	12.516	613.202	619.860
		Max Case	COMB14	COMB6	COMB10	COMB6	COMB10	COMB6
L. DASAR	C45	Min Value	-7231.76	-154.56	-38.75	-3.706	-514.928	-398.604
		Min Case	COMB2	COMB14	COMB18	COMB6	COMB10	COMB6
		Max Value	-3894.89	228.85	289.12	3.534	294.766	324.294
		Max Case	COMB14	COMB6	COMB10	COMB14	COMB10	COMB14

ETABS v7.10 File: SKRIPSI KN-m Units PAGE 1  
February 14, 2010 14:50

YOGYAKARTA

S U P P O R T R E A C T I O N S

STORY	POINT	LOAD	FX	FY	FZ	MX	MY	MZ
BASE	C47	DEAD	-67.85	-82.42	4912.18	0.000	0.000	0.000
BASE	C47	LIVE	-31.91	-34.91	1331.85	0.000	0.000	0.000
BASE	C47	EX	151.07	-16.17	133.13	0.000	0.000	0.000
BASE	C47	EY	0.08	111.61	205.41	0.000	0.000	0.000



Diagram Interaksi P-M

$$A_s = A_s' = 2946,4 \text{ mm}^2$$

$$f'_c = 30 \text{ Mpa}$$

$$f_y = 400 \text{ Mpa}$$

$$d' = 65,5 \text{ mm}$$

$$d = 800 - 65,5 = 735,5 \text{ mm}$$

1. Beban Konsentrik

$$Pn_{(\max)} = 0,80[0,85 \cdot f'_c(A_g - A_{st}) + (A_{st} \cdot f_y)]$$

$$A_g = 800 \cdot 800 = 640000 \text{ mm}^2$$

$$A_{st} = 12 \cdot \frac{1}{4} \pi \cdot (25)^2 = 5890,486 \text{ mm}^2$$

$$\begin{aligned} Pn_{(\max)} &= 0,80[0,85 \cdot 30 \cdot (640000 - 5890,486) + (5890,486 \cdot 400)] = 14820789,6 \text{ N} \\ &= 14820,789 \text{ kN} \end{aligned}$$

$$P_u = \phi \cdot P_n$$

Kolom dengan tulangan pengikat di bebani secara konsentrik (dibebani beban aksial saja), maka  $\phi = 0,65$

$$P_u = \phi \cdot P_n = 0,65 \cdot 14820,789 \text{ kN} = 9633,51 \text{ kN.}$$

2. Kondisi Balance

$$A_s = A_s' = 2946,4 \text{ mm}^2$$

$$c_b = d \cdot \frac{600}{600 + f_y} = 735,5 \cdot \frac{600}{600 + 400} = 440,7 \text{ mm}$$

$$\epsilon'_s = 0,003 \cdot \left( \frac{c_b - d'}{c_b} \right) = 0,003 \cdot \left( \frac{440,7 - 65,5}{440,7} \right) = 2,5541 \cdot 10^{-3}$$

$$f'_s = E_s \cdot \epsilon'_s = 200000 \cdot 2,5541 \cdot 10^{-3} = 520 \text{ MPa.} > f_y = 400 \text{ MPa.}$$

$$f'_c = 30 \text{ MPa} \rightarrow \beta = 0,85$$

$$a_b = \beta \cdot c_b = 0,85 \cdot 440,7 = 374,595 \text{ mm}$$

$$\begin{aligned} P_{nb} &= 0,85 \cdot f'_c \cdot b \cdot a_b + A_s' \cdot f'_s - A_s \cdot f_y \\ &= 0,85 \cdot 30 \cdot 800 \cdot 374,595 + (2946,4 \cdot 520) - (2946,4 \cdot 400) \\ &= 7641738 \text{ N} = 7641,738 \text{ kN} \end{aligned}$$

$$\phi.Pnb = 0,65.7641,738 = 4967,13kN$$

$$\begin{aligned} Mnb &= 0,85.f'c.b.a_b \cdot \left( \frac{h}{2} - \frac{a_b}{2} \right) + As'.fs' \left( \frac{h}{2} - d' \right) + As.fy \left( d - \frac{h}{2} \right) \\ &= 0,85.30.800.374,595 \left( \frac{800}{2} - \frac{374,595}{2} \right) + 1178560 \cdot \left( \frac{800}{2} - 65,5 \right) \\ &\quad + 1178560 \cdot \left( 734,5 - \frac{800}{2} \right) \\ &= 1625416777 + 394228320 + 394228320 \\ &= 2413873417 \text{ Nmm} = 2413,87 \text{ kNm} \end{aligned}$$

$$\phi.Mnb = 0,65.2413,87 = 1569,01 \text{ kNm}$$

### 3. Lentur Murni

Apabila  $P_u = 0$ , Kontribusi  $As'$  pada kuat momen dapat diabaikan

$$a = \frac{As.fy}{0,85.f'c.b} = \frac{2946,4.400}{0,85.30.800} = 57,77 \text{ mm}$$

$$c = \frac{a}{\beta} = \frac{57,77}{0,85} = 67,96 \text{ mm}$$

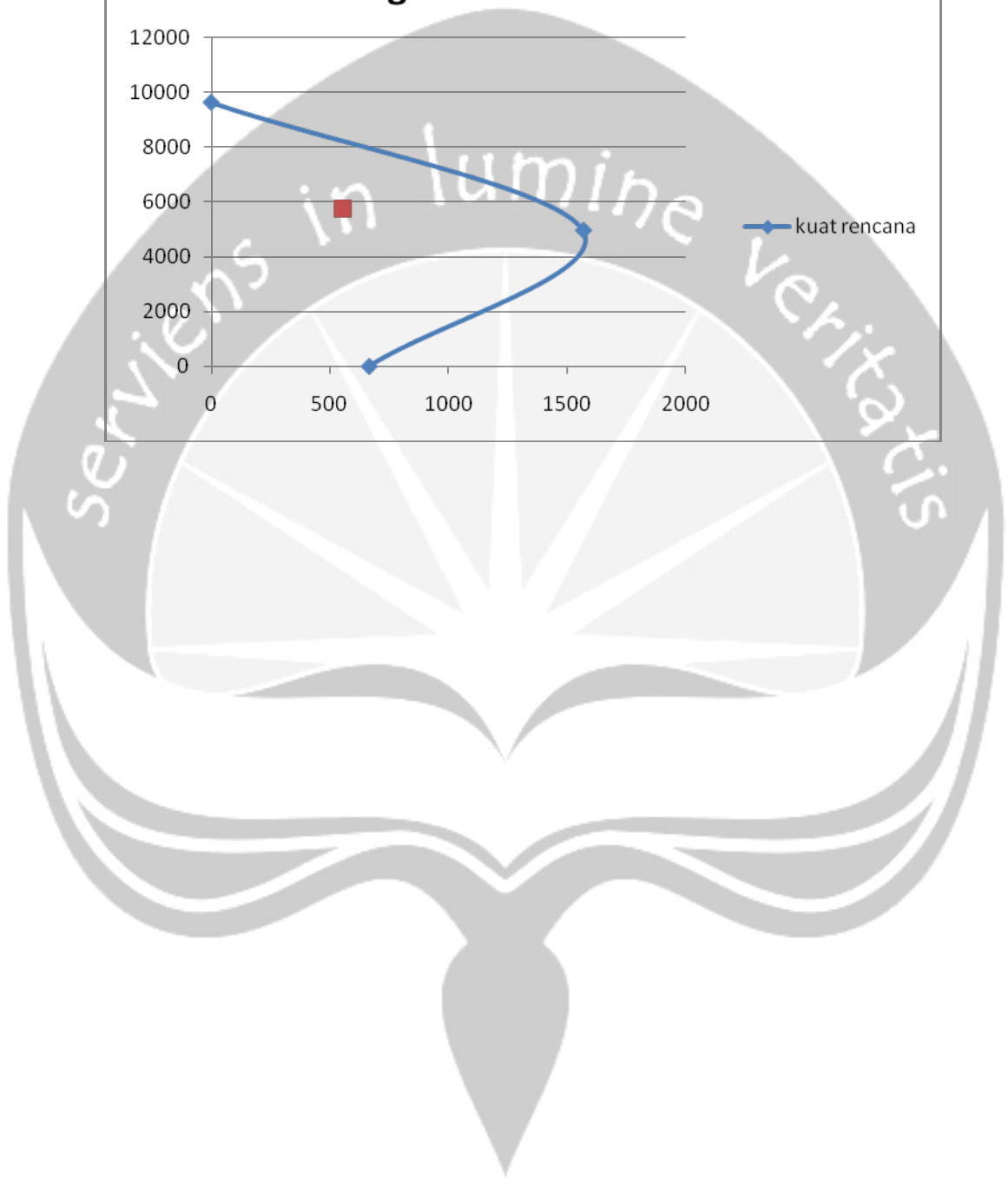
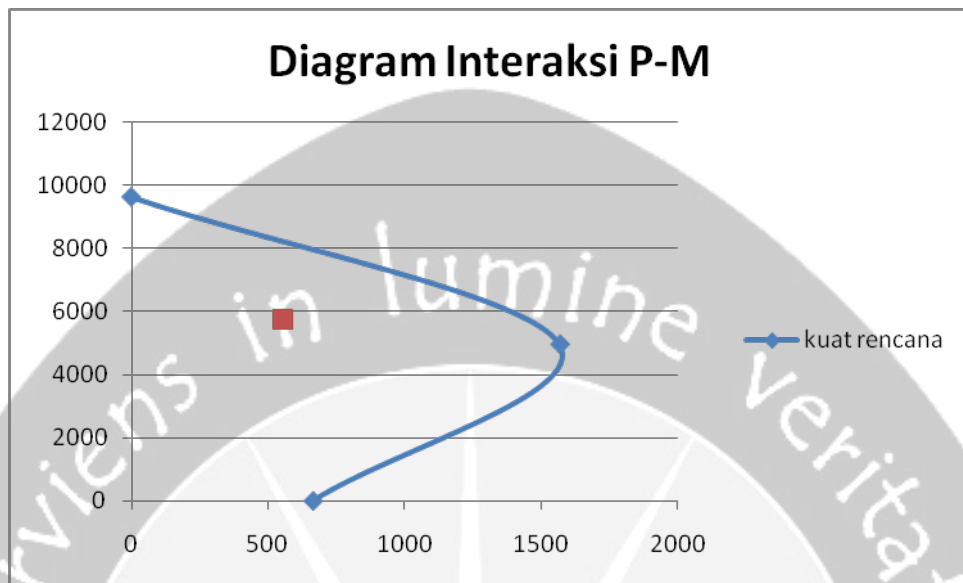
$$\varepsilon's = 0,003 \cdot \left( \frac{c - d'}{c} \right) = 0,003 \cdot \left( \frac{67,96 - 65,5}{67,96} \right) = 1,08.10^{-4}$$

$$f's = Es \cdot \varepsilon's = 200000.1,08.10^{-4} = 21,7 \text{ Mpa}$$

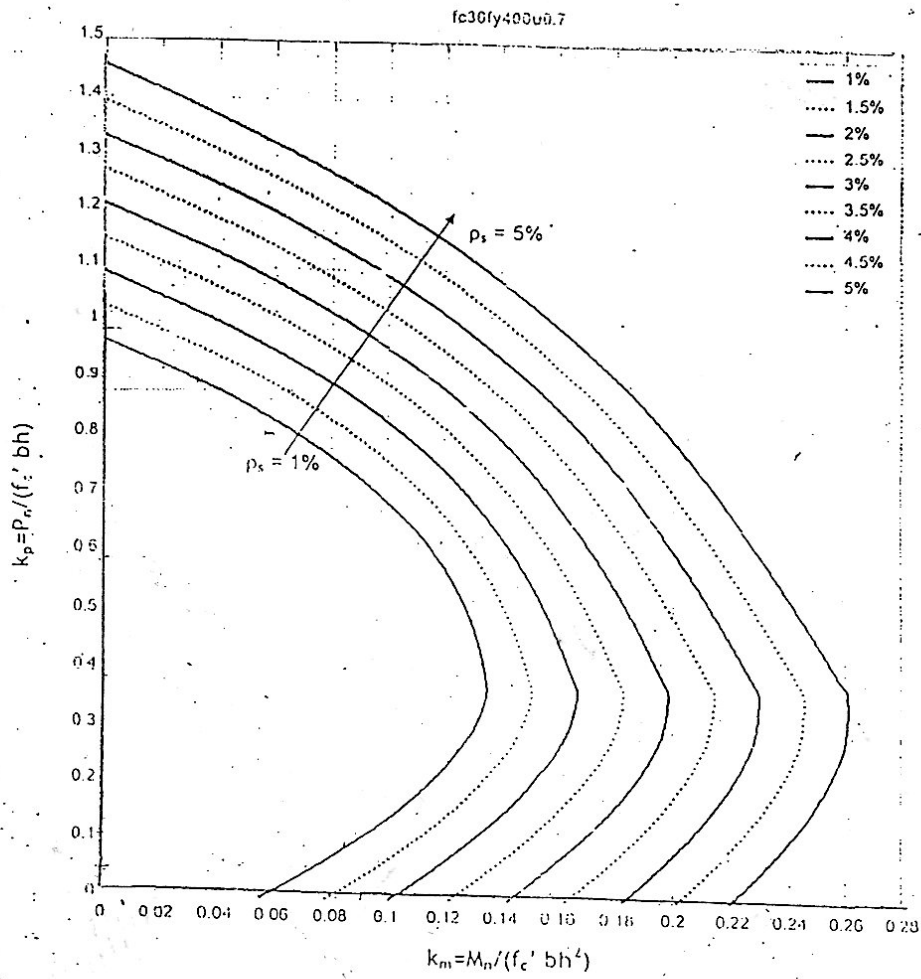
$$Mno = As.fy \left( d - \frac{a}{2} \right) = 2946,4.400 \cdot \left( 734,5 - \frac{57,77}{2} \right) = 831,60 \text{ kNm}$$

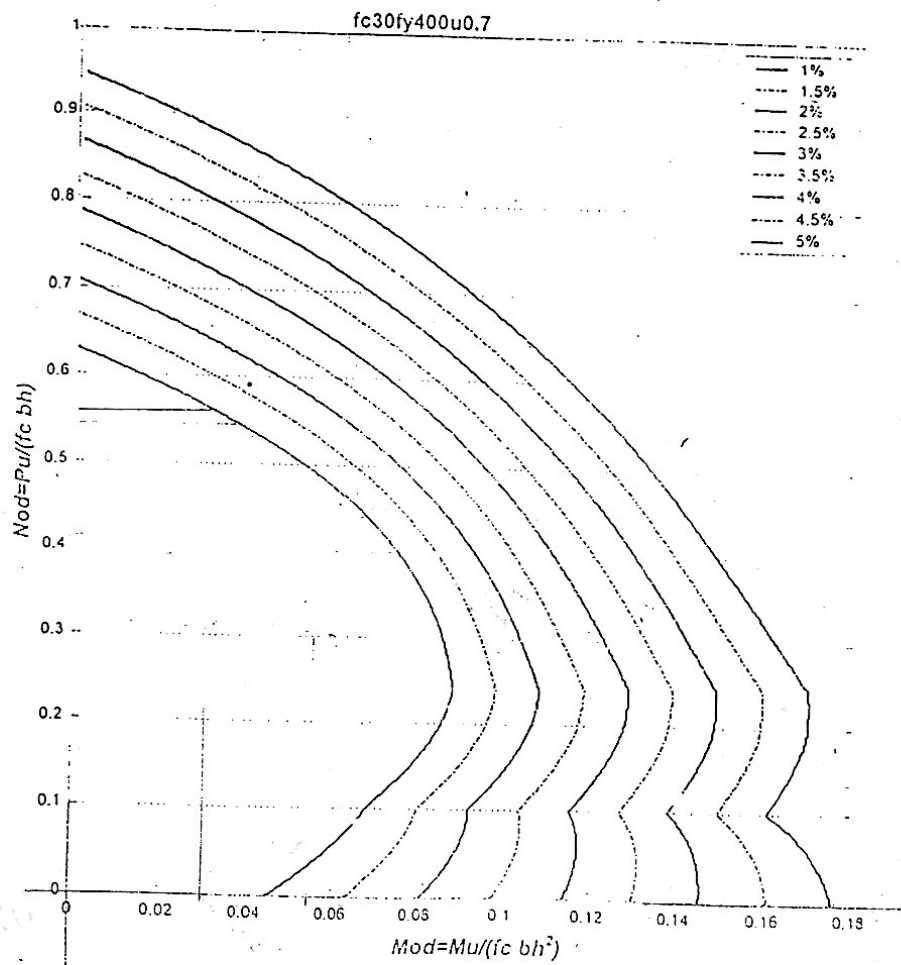
$$\phi.Mno = 0,80.831,60 = 665,28 \text{ kNm}$$



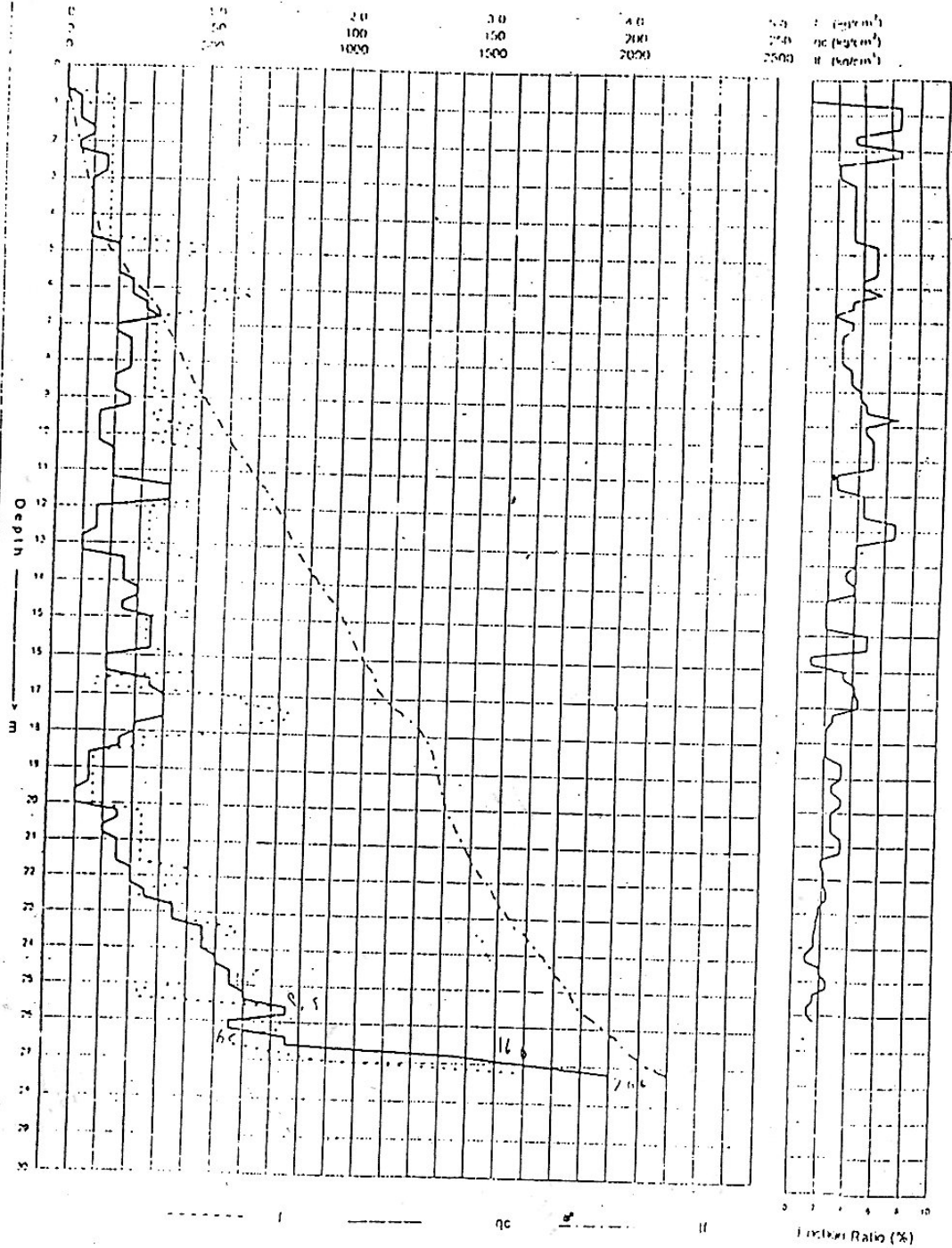


Non-dimensional Interaction Diagram  
Four Faces





Sounding Graph



Project: GEORGRAPHIC  
 Location: BAHAMA

Sounding No: 54  
 Date of Test: 7-07-2006

Tabel 13.3.1  
Momen di dalam pelat persegi yang menumpu pada keempat tepinya akibat beban terbagi rata

I, A <sub>x</sub>	I, A <sub>y</sub>	Mlx	Mly	Mtx	Mty	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	>2,5
						I		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			44	52	59	66	73	78	84	88	93	97	100
II		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			21	25	28	31	34	36	37	38	40	40	41	41	41	41	42	42	42
III		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			52	59	64	69	73	76	79	81	82	83	83	83	83	83	83	83	83
IV		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			28	33	38	42	45	48	51	53	55	57	58	59	59	60	61	61	63
V		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			28	28	28	27	26	25	23	23	22	21	19	18	17	17	16	16	13
VI		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			68	77	85	92	98	103	107	111	113	116	118	119	120	121	122	122	125
VII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			68	72	74	76	77	78	78	78	78	78	79	79	79	79	79	79	79
VIII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			22	28	34	42	49	55	62	68	74	80	85	89	93	97	100	103	125
IX		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			32	35	37	39	40	41	41	41	41	40	39	38	37	36	35	35	25
X		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			70	79	87	94	100	105	109	112	115	117	119	120	121	122	123	123	125
XI		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			32	34	36	38	39	40	41	41	42	42	42	42	42	42	42	42	42
XII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			22	20	18	17	15	14	13	12	11	10	10	10	9	9	9	9	8
XIII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			70	74	77	79	81	82	83	84	84	84	84	84	84	84	83	83	83
XIV		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			31	38	45	53	60	66	72	78	83	88	92	96	99	102	105	108	125
XV		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			37	39	41	41	42	42	41	41	40	39	38	37	36	35	34	33	25
XVI		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			84	92	99	104	109	112	115	117	119	121	122	122	123	123	124	124	125
XVII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			37	41	45	48	51	53	55	56	58	59	60	60	60	61	61	62	63
XVIII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			31	30	28	27	25	24	22	21	20	19	18	17	17	16	16	15	13
XIX		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			84	92	98	103	108	111	114	117	119	120	121	122	122	123	123	124	125
XX		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			21	26	31	36	40	43	46	49	51	53	55	56	57	58	59	60	63
XXI		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			26	27	28	28	27	26	25	23	22	21	21	20	20	19	19	18	13
XXII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			55	65	74	82	89	94	99	103	106	110	114	116	117	118	119	120	125
XXIII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			60	65	69	72	74	76	77	78	78	78	78	78	78	78	78	78	79
XXIV		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			26	29	32	35	36	38	39	40	40	41	41	42	42	42	42	42	42
XXV		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			21	20	19	18	17	15	14	13	12	12	11	11	10	10	10	10	8
XXVI		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			60	66	71	74	77	79	80	82	83	83	83	83	83	83	83	83	83
XXVII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			55	57	57	57	58	57	57	57	57	57	57	57	57	57	57	57	57

— = Terletak bebas  
 = Terjepit penuh

Tabel 13.3.2  
Momen di dalam pelat persegi yang menumpu pada keempat tepinya akibat beban terbagi rata

I, A <sub>x</sub>	I, A <sub>y</sub>	Mlx	Mly	Mtx	Mty	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	>2,5
						I		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			44	52	59	66	73	78	84	88	93	97	100
II		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			36	42	46	50	53	56	58	59	60	61	62	62	62	63	63	63	63
III		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			36	37	38	38	38	37	36	36	35	35	35	34	34	34	34	34	34
IV		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			48	55	61	67	71	76	79	82	84	86	88	89	90	91	92	92	94
V		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			48	50	51	51	51	51	51	50	50	49	49	49	48	48	47	47	19
VI		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			48	50	51	51	51	51	51	50	50	49	49	49	48	48	47	47	56
VII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			22	28	34	41	48	55	62	68	74	80	85	89	93	97	100	103	125
VIII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			51	57	62	67	70	73	75	77	78	79	79	79	79	79	79	79	25
IX		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			51	54	57	59	60	61	62	63	63	63	63	63	63	63	63	63	63
X		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			22	20	18	17	15	14	13	12	11	10	10	10	9	9	9	9	13
XI		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			31	38	45	53	59	66	72	78	83	88	92	96	99	102	105	108	125
XII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			60	65	69	73	75	77	78	79	79	80	80	80	79	79	79	79	25
XIII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			60	65	69	73	75	77	78	79	79	80	80	80	80	80	80	80	75
XIV		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			60	66	71	76	79	82	85	87	88	89	90	91	91	92	92	93	94
XV		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			31	30	28	27	25	24	22	21	20	19	18	17	16	16	15	15	12
XVI		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			38	46	53	59	65	69	73	77	80	83	85	86	87	88	89	90	54
XVII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			43	46	48	50	51	51	51	51	50	50	50	49	49	48	48	48	19
XVIII		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			43	46	48	50	51	51	51	51	50	50	50	49	49	48	48	48	56
XIX		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			13	48	51	55	57	58	60	61	62	62	62	62	63	63	63	63	63
XX		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			38	39	38	38	37	36	36	35	35	34	34	34	33	33	33	33	13
XXI		$+0,001 qlx^2 X$	$+0,001 qlx^2 X$			38	39	38	38	37	36	36	35	35	34	34	34	34	33	33	33	38

— = Terletak bebas  
 = Menerus atau terjepit elastis