

BAB VI

KESIMPULAN DAN SARAN

6.1. Kesimpulan

Setelah melakukan analisis dan perancangan pada Struktur Gedung Rumah Sakit Umum Propinsi Kepulauan Riau, dapat diambil beberapa kesimpulan seperti yang tercantum di bawah ini.

1. Pelat atap dan lantai digunakan tebal 120 mm. Pelat atap dua arah dengan tulangan P10-250 untuk arah X dan arah Y, sedangkan pelat lantai dua arah dengan tulangan P10-150 untuk arah X dan P10-200 untuk arah Y.
2. Dalam perencanaan balok, digunakan 3 macam dimensi yaitu sebesar 300 mm x 500 mm, 400 mm x 600 mm, dan 450 mm x 700 mm. Balok – balok tersebut direncanakan dengan tulangan lentur dan geser yang berbeda-beda.
3. Dalam perencanaan kolom, dimensi yang digunakan untuk kolom *basement* - lantai 3 sebesar 900 mm x 900 mm, dimensi yang digunakan untuk kolom lantai 4 - lantai 6 sebesar 800 mm x 800 mm, sedangkan dimensi 700 mm x 700 mm digunakan untuk kolom lantai 7 - *Top Floor*. Kolom – kolom tersebut direncanakan dengan jumlah tulangan longitudinal dan transversal yang berbeda – beda pula.
4. Dalam perencanaan pondasi, dimensi poer yang digunakan adalah 3,0 m x 3,0 m, dengan tebal poer 1,0 m. Tulangan yang digunakan untuk bagian poer adalah D22-300 untuk arah memanjang dan arah lebar. Jumlah tiang yang digunakan 4 buah dengan tulangan 6 D22.

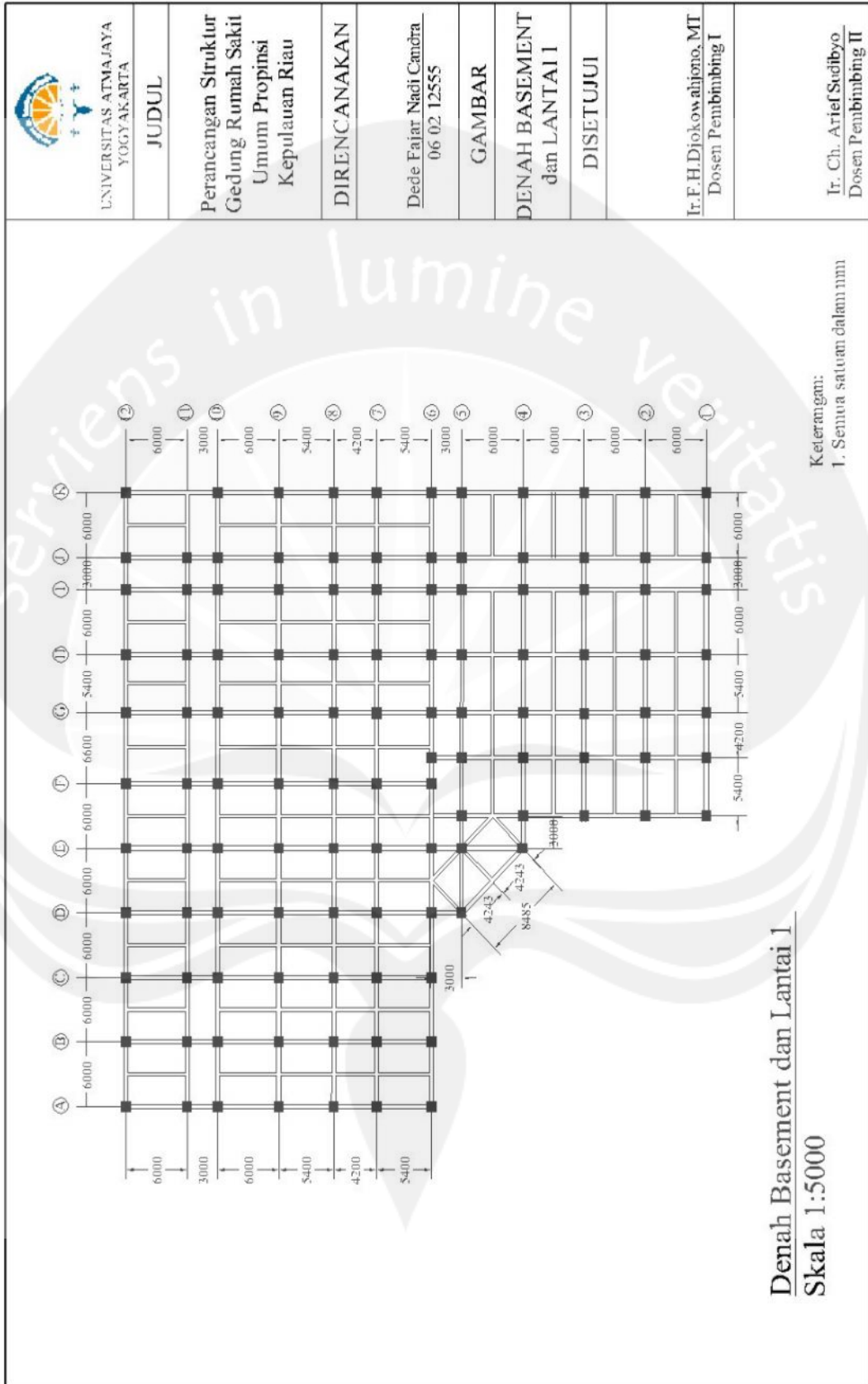
6.2. Saran

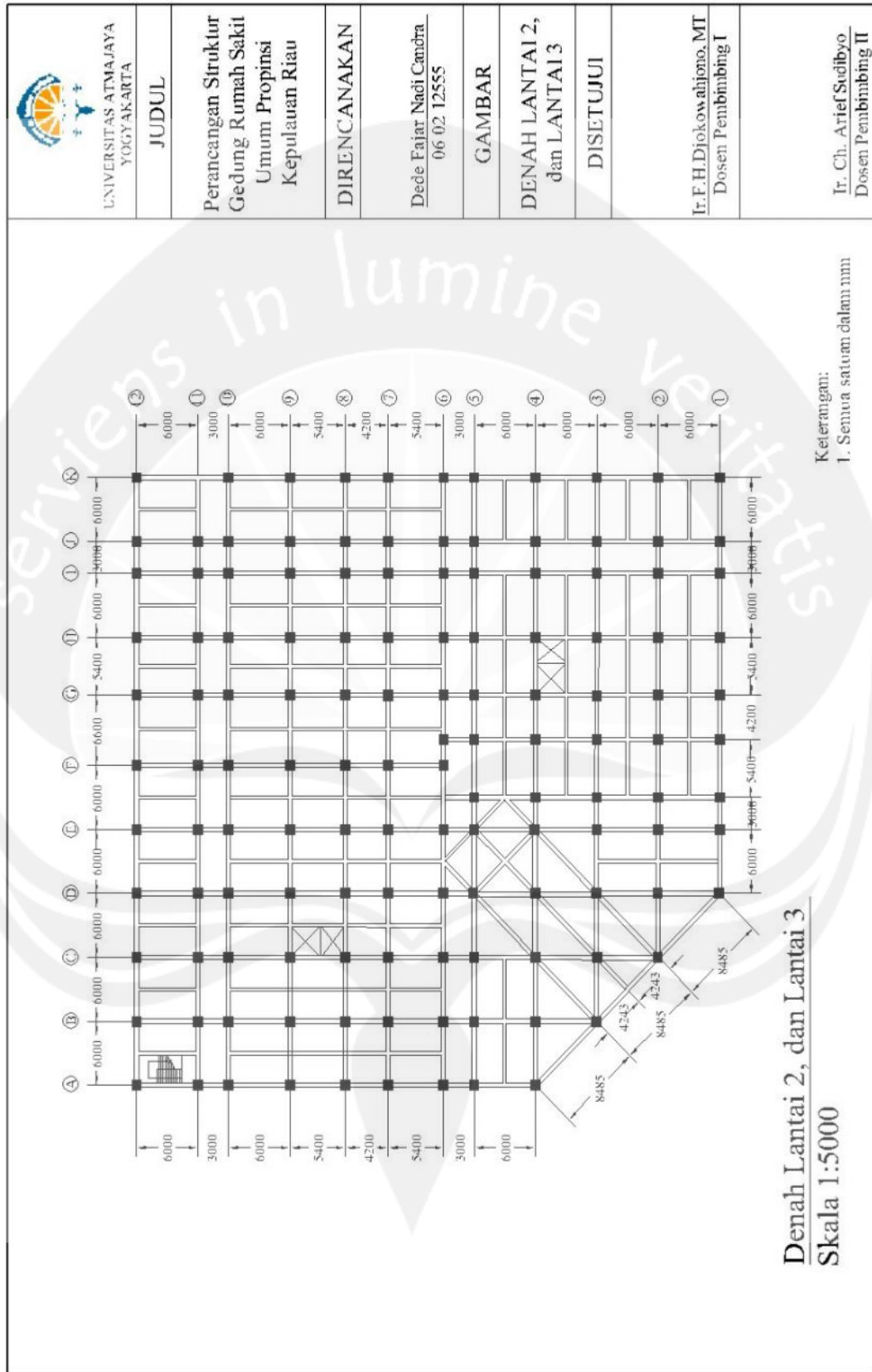
Saran-saran yang dapat diberikan penulis dari hasil Tugas Akhir yang disusun tercantum seperti di bawah ini.

1. Sebelum perencanaan struktur sebaiknya dilakukan estimasi awal pada ukuran elemen struktur, sehingga tidak terjadi penentuan elemen struktur berulang-ulang.
2. Untuk kemudahan dalam melaksanakan analisis struktur terutama dalam pembuatan model struktur gedung akan lebih mudah jika memakai program analisis struktur ETABS beserta program-program bantu lainnya.

DAFTAR PUSTAKA

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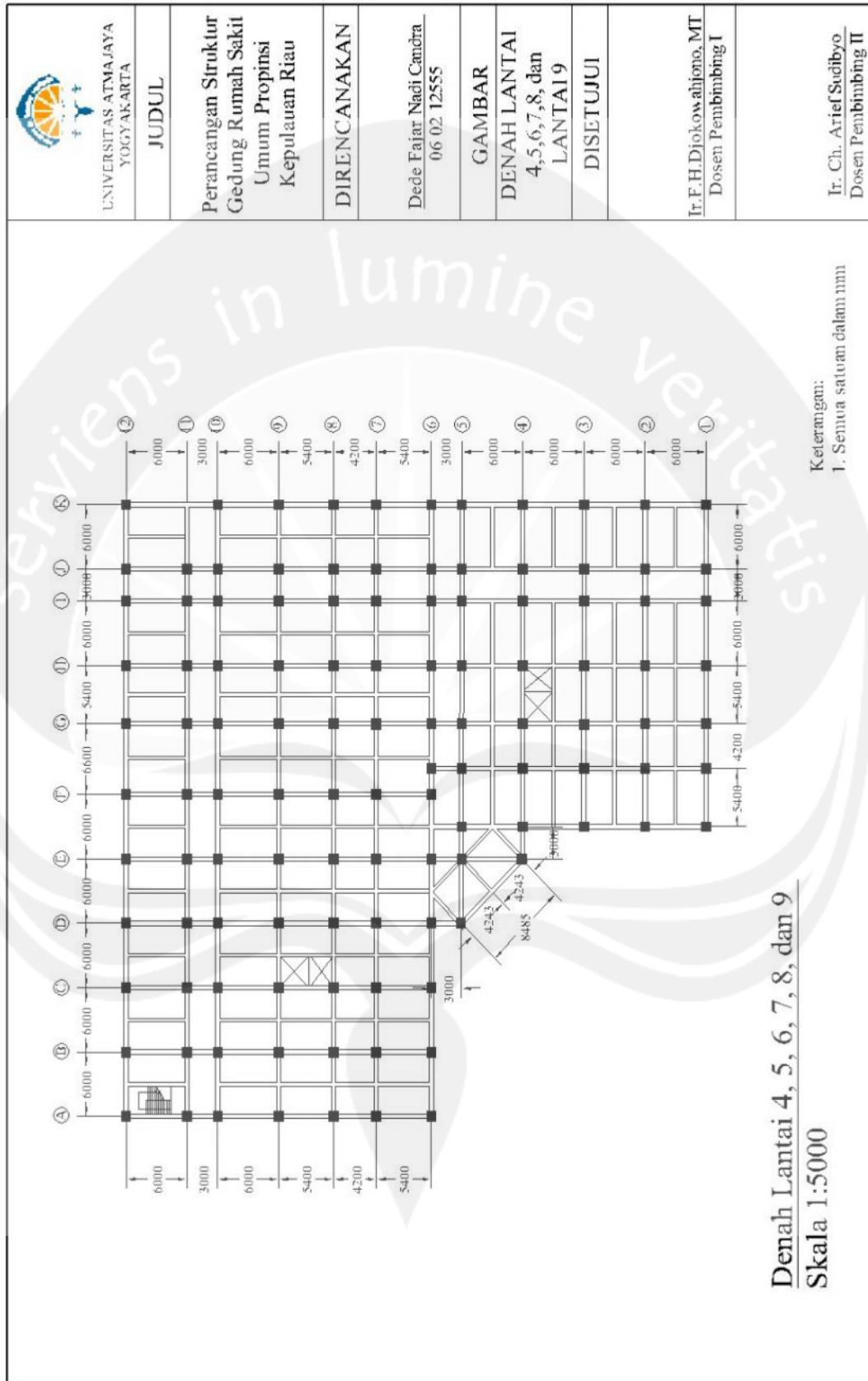




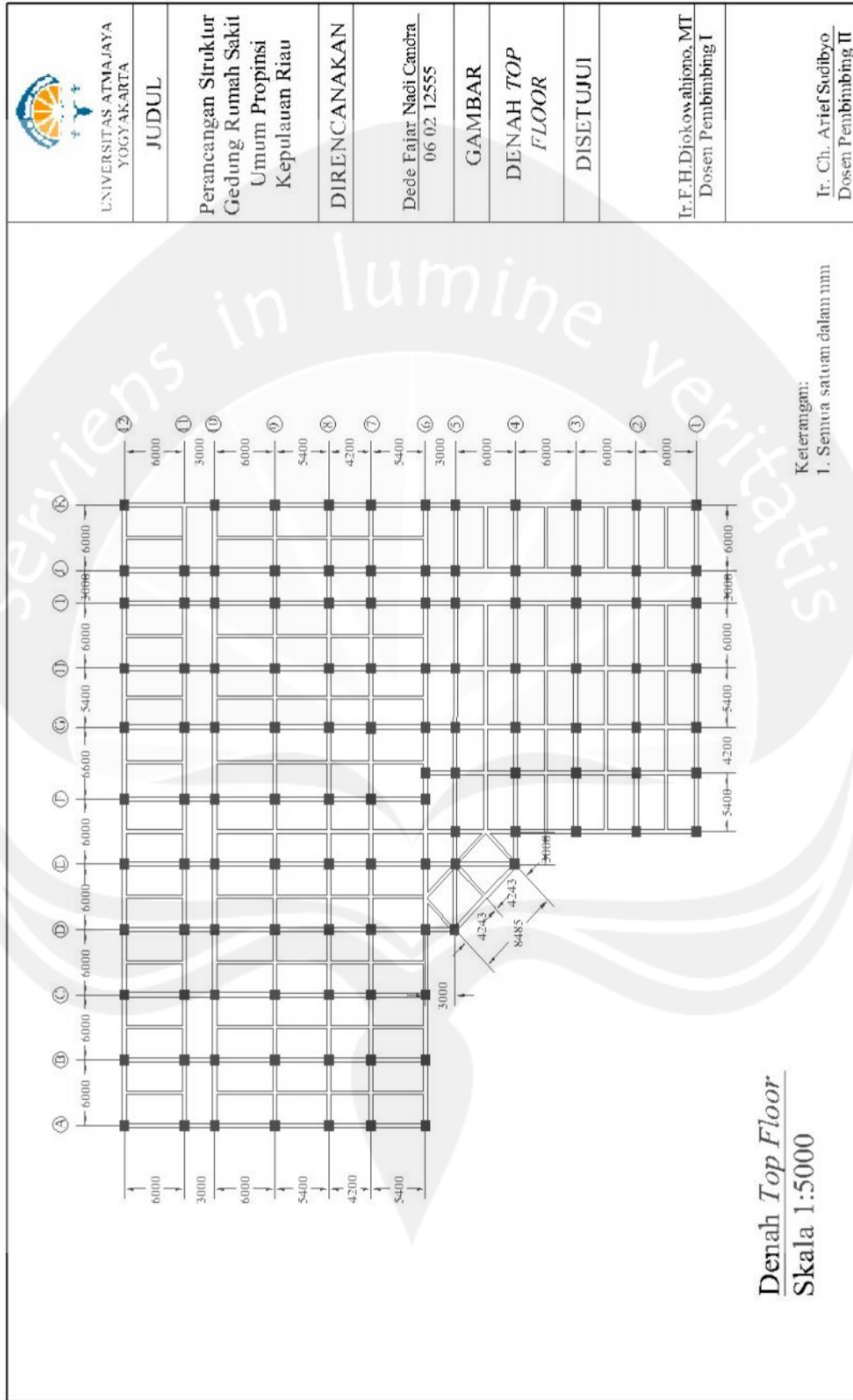
Denah Lantai 2, dan Lantai 3
Skala 1:5000


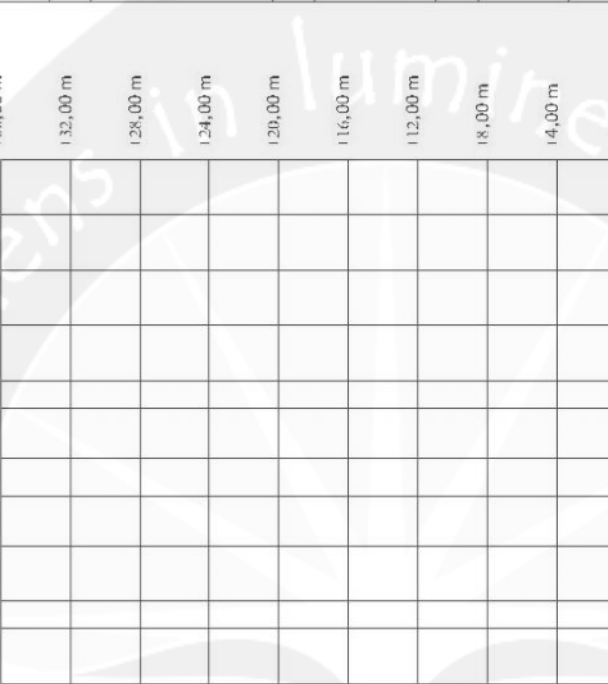
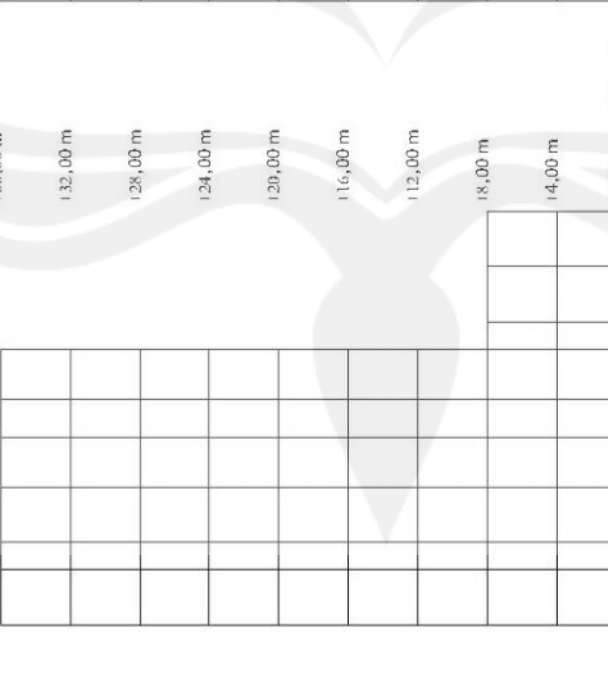
Keterangan:
1. Semua satuan dalam mm


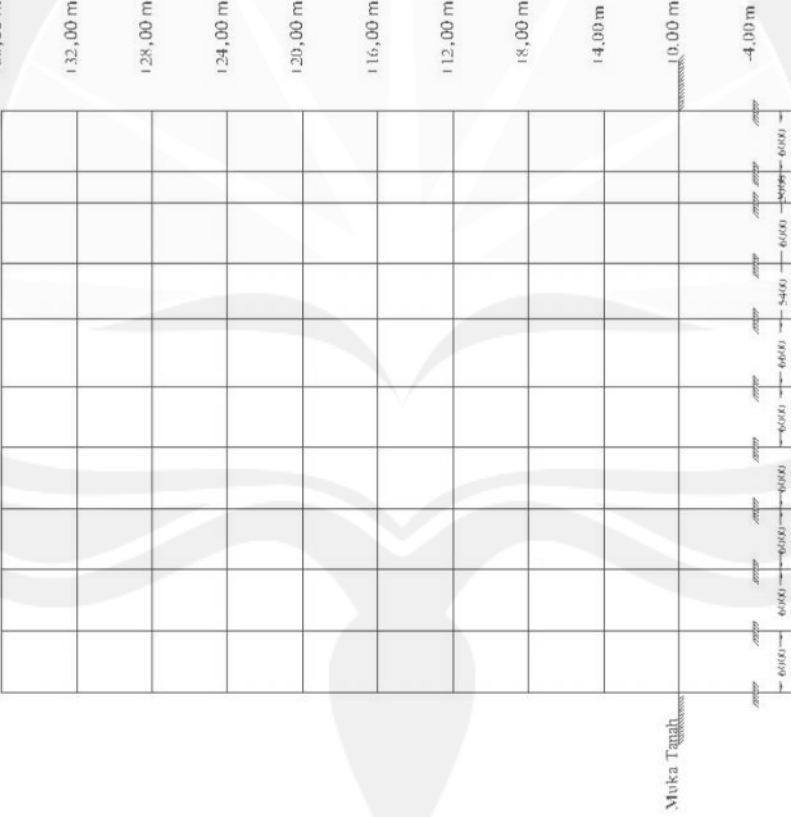
 <p>UNIVERSITAS ATMAJAYA YOGYAKARTA</p>	JUDUL
Perancangan Struktur Gedung Rumah Sakit Umum Propinsi Kepulauan Riau	DIRENCANAKAN
Dede Fajar Nadi Candra 06 02 12555	GAMBAR
DENAH LANTAI 2, dan LANTAI 3	DISETUJUI
Ir.F.H.Djokowahjono, MT Dosen Pembimbing I	Ir. Ch. Ariet Sudibyo Dosen Pembimbing II



Denah Lantai 4, 5, 6, 7, 8, dan 9
Skala 1:5000



 <p>UNIVERSITAS ATMAJAYA YOGYAKARTA</p>	<p>JUDUL</p> <p>Perancangan Struktur Gedung Rumah Sakit Umum Propinsi Kepulauan Riau</p> <p>DIRENCANAKAN</p> <p>Dede Fajar Nadi Candra 06 02 12555</p> <p>GAMBAR</p> <p>PORTAL AS A dan PORTAL AS G</p> <p>DISETUJUI</p> <p>Ir. F. H. Djokowahjono, MT Dosen Pembimbing I</p> <p>Ir. Ch. Ariel Sudibyo Dosen Pembimbing II</p>
 <p>136,00 m 132,00 m 128,00 m 124,00 m 120,00 m 116,00 m 112,00 m 18,00 m 14,00 m 10,00 m -4,00 m</p> <p>6000</p> <p>Portal As A Skala 1:5000</p>	 <p>136,00 m 132,00 m 128,00 m 124,00 m 120,00 m 116,00 m 112,00 m 18,00 m 14,00 m 10,00 m -4,00 m</p> <p>6000</p> <p>Portal As G Skala 1:5000</p>
<p>Muka Tanah</p> <p>Keterangan: 1. Semua satuan dalam mm</p>	

 <p>UNIVERSITAS ATMAJAYA YOGYAKARTA</p>	<p>JUDUL</p> <p>Perancangan Struktur Gedung Rumah Sakit Umum Propinsi Kepulauan Riau</p> <p>DIRENCANAKAN</p> <p>Dede Fajar Nadi Camdra 06 02 12555</p> <p>GAMBAR</p> <p>PORTAL AS 9</p> <p>DISETUJUI</p> <p>Ir. F.H. Djokowahjono, MT Dosen Pembimbing I</p> <p>Ir. Ch. Arief Sudibyo Dosen Pembimbing II</p>
<div style="text-align: center;">  <p>Muka Tagah</p> <p>Portal As 9 Skala 1:5000</p> <p>Keterangan: 1. Semua satuan dalam mm</p> </div>	


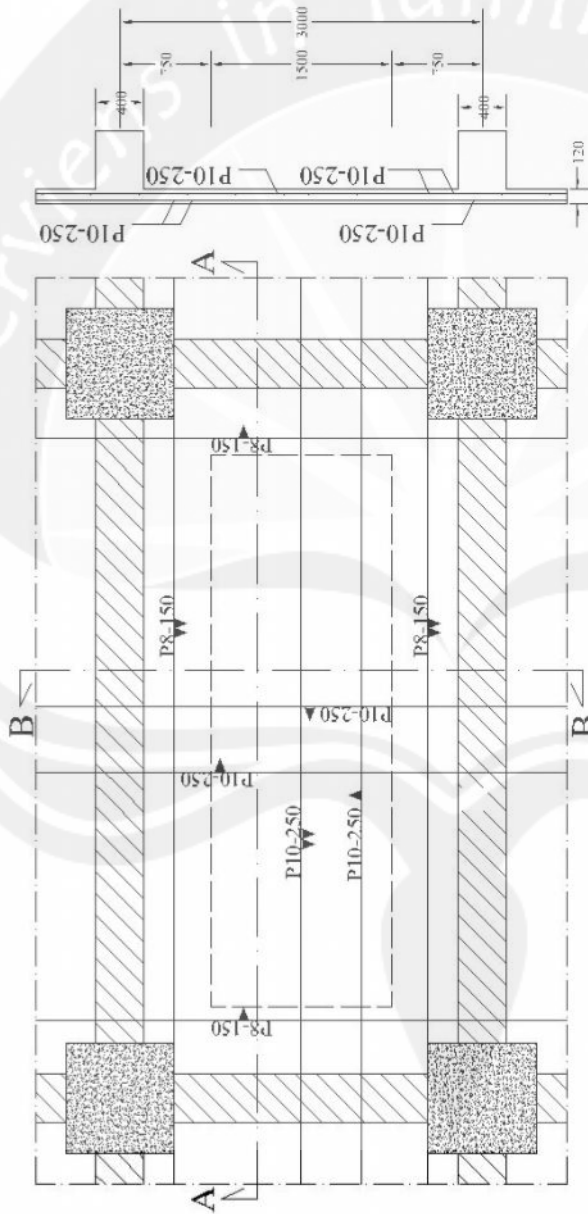
Tabel 13.3.1
Momen di dalam pelat persegi yang menopu pada keempat tepinya akibat beban terbagi rata

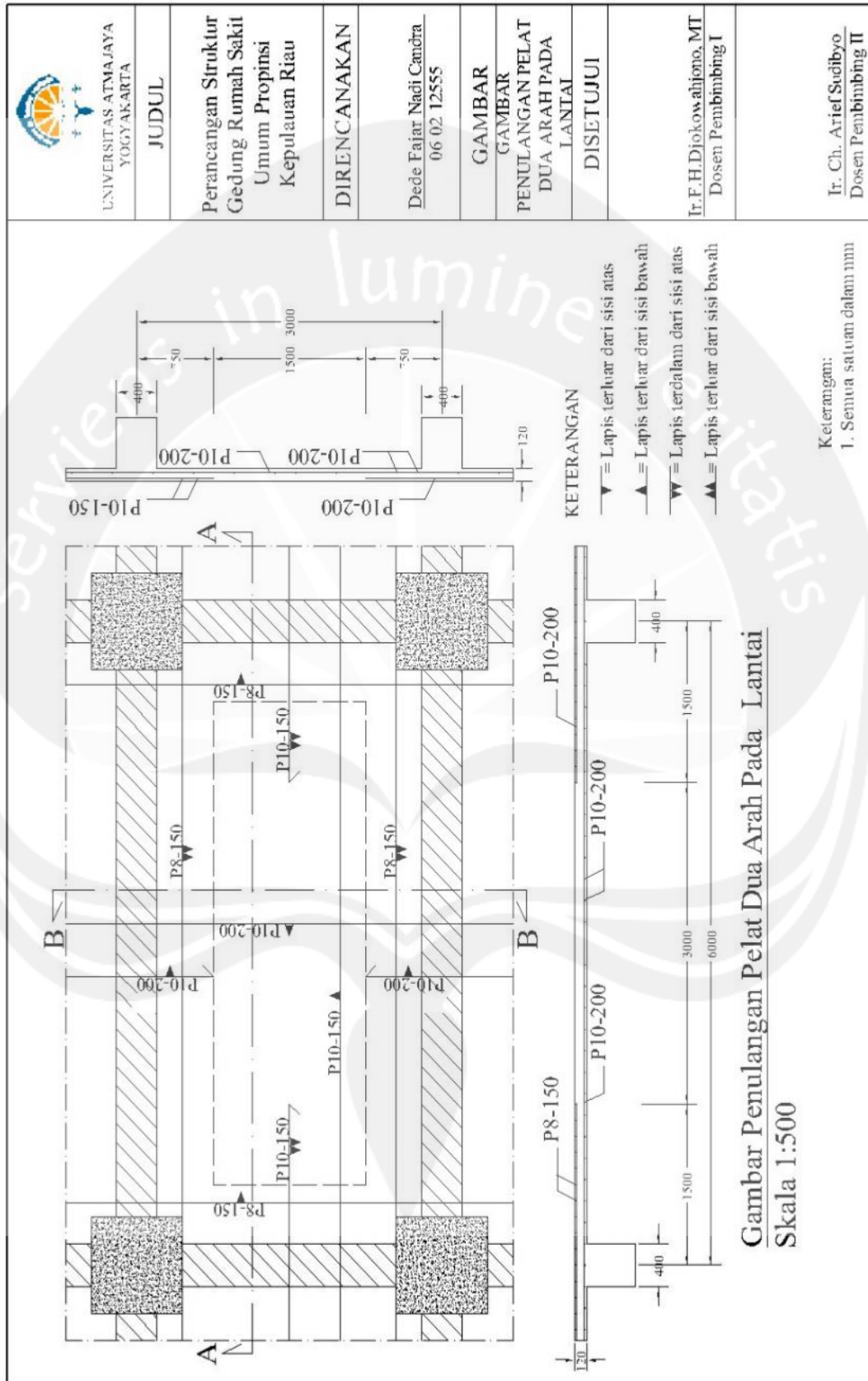
l_x/l_y			1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	>2,5	
	I		M _{1x} = +0,001 qlx ² X	44	52	59	66	73	78	84	88	93	97	100	103	106	109	110	112	125
M _{1y} = +0,001 qlx ² X			44	45	45	44	44	43	41	40	39	38	37	36	35	34	33	32	25	
II		M _{1x} = +0,001 qlx ² X	21	25	28	30	34	36	37	38	40	40	41	41	41	42	42	42	42	
		M _{1y} = +0,001 qlx ² X	21	21	20	19	18	17	16	14	13	12	12	11	11	11	10	10	8	
		M _{2x} = -0,001 qlx ² X	52	59	64	69	73	76	79	81	82	83	83	83	83	83	83	83	83	83
		M _{2y} = -0,001 qlx ² X	52	54	56	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
III		M _{1x} = +0,001 qlx ² X	28	33	38	42	45	48	51	53	55	57	58	59	59	60	61	61	63	
		M _{1y} = +0,001 qlx ² X	28	28	28	27	26	25	23	23	22	21	19	18	17	17	16	16	13	
		M _{2x} = -0,001 qlx ² X	68	77	85	92	98	103	107	111	113	116	118	119	120	121	122	122	122	125
		M _{2y} = -0,001 qlx ² X	63	72	74	76	77	77	78	78	78	78	78	79	79	79	79	79	79	79
IVA		M _{1x} = +0,001 qlx ² X	22	28	34	42	49	55	62	68	74	80	85	89	93	97	100	103	125	
		M _{1y} = +0,001 qlx ² X	32	35	37	39	40	41	41	41	41	40	39	38	37	36	35	35	25	
		M _{2x} = -0,001 qlx ² X	70	79	87	94	100	105	109	112	115	117	119	120	121	122	123	123	125	
		M _{2y} = -0,001 qlx ² X	32	34	36	38	39	40	41	41	42	42	42	42	42	42	42	42	42	
IVB		M _{1x} = +0,001 qlx ² X	22	28	34	42	49	55	62	68	74	80	85	89	93	97	100	103	125	
		M _{1y} = +0,001 qlx ² X	32	35	37	39	40	41	41	41	41	40	39	38	37	36	35	35	25	
		M _{2x} = -0,001 qlx ² X	70	79	87	94	100	105	109	112	115	117	119	120	121	122	123	123	125	
		M _{2y} = -0,001 qlx ² X	32	34	36	38	39	40	41	41	42	42	42	42	42	42	42	42	42	
VA		M _{1x} = +0,001 qlx ² X	31	38	45	53	60	66	72	78	83	88	92	96	99	102	105	108	125	
		M _{1y} = +0,001 qlx ² X	37	39	41	41	42	42	41	41	40	39	38	37	36	35	34	33	25	
		M _{2x} = -0,001 qlx ² X	84	92	99	104	109	112	115	117	119	121	122	122	123	123	124	124	125	
		M _{2y} = -0,001 qlx ² X	37	41	45	48	51	53	55	56	58	59	60	60	60	60	60	60	60	
VB		M _{1x} = +0,001 qlx ² X	37	41	45	48	51	53	55	56	58	59	60	60	60	60	60	60	63	
		M _{1y} = +0,001 qlx ² X	31	30	28	27	25	24	22	21	20	19	18	17	17	16	15	15	13	
		M _{2x} = -0,001 qlx ² X	84	92	98	103	108	111	114	117	119	120	121	122	122	123	123	124	125	
		M _{2y} = -0,001 qlx ² X	37	41	45	48	51	53	55	56	58	59	60	60	60	60	60	60	60	
VIA		M _{1x} = +0,001 qlx ² X	21	26	31	36	40	43	46	49	51	53	55	56	57	58	59	60	63	
		M _{1y} = -0,001 qlx ² X	26	27	28	28	27	26	25	23	22	21	21	20	20	19	19	18	13	
		M _{2x} = -0,001 qlx ² X	55	55	54	52	49	49	50	50	50	50	50	50	50	50	50	50	50	
		M _{2y} = -0,001 qlx ² X	63	55	69	72	74	76	77	78	78	78	78	78	78	78	78	78	79	
VIB		M _{1x} = +0,001 qlx ² X	26	29	32	35	36	38	39	40	40	41	41	42	42	42	42	42	42	
		M _{1y} = +0,001 qlx ² X	21	20	19	18	17	15	14	13	12	11	11	10	10	10	10	10	8	
		M _{2x} = -0,001 qlx ² X	60	65	71	74	77	79	80	82	83	83	83	83	83	83	83	83	83	83
		M _{2y} = -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 menopu pada keempat tepinya akibat beban terbagi rata

l_x/l_y			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		M _{1x} = 0,001 qlx ² X	44	52	59	65	73	78	84	88	93	97	100	103	106	108	110	112
M _{1y} = 0,001 qlx ² X			44	45	45	44	44	43	41	40	39	38	37	36	35	34	33	32	25
II		M _{1x} = - (M _{2x}) = 0,001 qlx ² X	36	42	46	50	53	56	58	59	60	61	62	62	62	63	63	63	63
		M _{1y} = 0,001 qlx ² X	56	57	58	58	57	56	56	55	55	55	54	54	54	54	54	54	53
		M _{2x} = - (M _{1x}) = 0,001 qlx ² X	36	37	38	38	37	36	36	35	35	35	35	34	34	34	34	34	33
		M _{2y} = 0,001 qlx ² X	56	57	58	58	57	56	56	55	55	55	54	54	54	54	54	54	53
III		M _{1x} = - (M _{2x}) = 0,001 qlx ² X	48	55	61	67	71	76	79	82	84	86	88	89	90	91	92	92	94
		M _{1y} = 0,001 qlx ² X	48	50	51	51	51	51	50	50	49	49	49	49	48	48	47	47	19
		M _{2x} = - (M _{1x}) = 0,001 qlx ² X	48	50	51	51	51	51	50	50	49	49	49	49	48	48	47	47	19
		M _{2y} = 0,001 qlx ² X	48	50	51	51	51	51	50	50	49	49	49	49	48	48	47	47	19
IVA		M _{1x} = 0,001 qlx ² X	22	28	34	41	48	55	62	68	74	80	85	89	93	97	100	103	125
		M _{1y} = 0,001 qlx ² X	51	57	62	67	70	73	75	77	78	79	79	79	79	79	79	79	79
		M _{2x} = - (M _{1x}) = 0,001 qlx ² X	51	57	62	67	70	73	75	77	78	79	79	79	79	79	79	79	79
		M _{2y} = 0,001 qlx ² X	51	57	62	67	70	73	75	77	78	79	79	79	79	79	79	79	79
IVB		M _{1x} = - (M _{2x}) = 0,001 qlx ² X	51	54	57	59	60	61	62	62	63	63	63	63	63	63	63	63	63
		M _{1y} = 0,001 qlx ² X	22	20	18	17	15	14	13	12	11	10	10	10	9	9	9	9	13
		M _{2x} = - (M _{1x}) = 0,001 qlx ² X	51	54	57	59	60	61	62	62	63	63	63	63	63	63	63	63	63
		M _{2y} = 0,001 qlx ² X	22	20	18	17	15	14	13	12	11	10	10	10	10	9	9	9	13
VA		M _{1x} = 0,001 qlx ² X	31	38	45	53	59	66	72	78	83	88	92	96	99	102	105	108	125
		M _{1y} = 0,001 qlx ² X	60	65	66	67	67	67	67	67	67	67	67	67	67	67	67	67	67
		M _{2x} = - (M _{1x}) = 0,001 qlx ² X	60	65	66	67	67	67	67	67	67	67	67	67	67	67	67	67	67
		M _{2y} = 0,001 qlx ² X	60	65	66	67	67	67	67	67	67	67	67	67	67	67	67	67	67
VB		M _{1x} = - (M _{2x}) = 0,001 qlx ² X	60	66	71	75	79	82	85	87	88	89	90	91	91	92	92	93	94
		M _{1y} = 0,001 qlx ² X	31	30	28	27	25	24	22	21	20	19	18	17	17	16	16	16	12
		M _{2x} = - (M _{1x}) = 0,001 qlx ² X	60	66	71	75	79	82	85	87	88	89	90	91	91	92	92	93	94
		M _{2y} = 0,001 qlx ² X	31	30	28	27	25	24	22	21	20	19	18	17	17	16	16	16	12
VIA		M _{1x} = - (M _{2x}) = 0,001 qlx ² X	38	46	53	59	65	69	73	77	80	83	85	86	87	88	89	90	94
		M _{1y} = 0,001 qlx ² X	43	46	48	50	51	51	51	51	50	50	50	50					

 <p>UNIVERSITAS ATMAJAYA YOGYAKARTA</p>	<p>JUDUL</p>
<p>Perancangan Struktur Gedung Rumah Sakit Umum Propinsi Kepulauan Riau</p>	<p>DIRENCANAKAN</p>
<p>Dede Fajar Nadi Candra 06 02 12555</p>	<p>GAMBAR GAMBAR PENJELANGAN PELAT DUA ARAH PADA ATAP</p>
<p>DISETUIJU</p>	<p>Ir. F.H.Djokowahjono, MT Dosen Pembimbing I</p>
<p>Ir. Ch. Arief Suci Byo Dosen Pembimbing II</p>	<div style="display: flex; justify-content: space-between;"> <div data-bbox="343 649 933 1859">  </div> <div data-bbox="941 582 1165 1859"> <p>KETERANGAN</p> <ul style="list-style-type: none"> ▼ = Lapis terluar dari sisi atas ▲ = Lapis terluar dari sisi bawah ▼▼ = Lapis terdalam dari sisi atas ▲▲ = Lapis terluar dari sisi bawah </div> </div> <div style="text-align: center; margin-top: 20px;"> <p>Gambar Penulangan Pelat Dua Arah Pada Atap Skala 1:500</p> </div> <div style="text-align: right; margin-top: 20px;"> <p>Keterangan: 1. Semua satuan dalam mm</p> </div>



INPUT STRUKTUR RUMAH SAKIT UMUM PROPINSI KEPULAUAN RIAU

ETABS v9.0.0 File:SUMMARY REPORT Units:KN-m November 6, 2010 14:59 PAGE 1
PROJECT INFORMATION

Company Name = mahasiswa
ETABS v9.0.0 File:REVISI I Units:KN-m November 6, 2010 14:59 PAGE 2

S T O R Y D A T A			
STORY	SIMILAR TO	HEIGHT	ELEVATION
TOP FLOOR	None	4.000	40.000
STORY9	STORY9	4.000	36.000
STORY8	STORY9	4.000	32.000
STORY7	STORY9	4.000	28.000
STORY6	STORY9	4.000	24.000
STORY5	STORY9	4.000	20.000
STORY4	STORY9	4.000	16.000
STORY3	None	4.000	12.000
STORY2	STORY3	4.000	8.000
STORY1	None	4.000	4.000
BASE	None		0.000

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

STATIC CASE	AUTO LAT	SELF WT
CASE TYPE	LOAD	MULTIPLIER
DEAD DEAD	N/A	1.0000
LIVE LIVE	N/A	0.0000
EX QUAKE	USER_COEFF	0.0000
EY QUAKE	USER_COEFF	0.0000

ETABS v9.0.0 File:REVISI I Units:KN-m November 6, 2010 14:59 PAGE 4
R E S P O N S E S P E C T R U M C A S E S
RESP SPEC CASE: SNI2002

BASIC RESPONSE SPECTRUM DATA				
MODAL	DIRECTION	MODAL	SPECTRUM	TYPICAL
COMBO	COMBO	DAMPING	ANGLE	ECCEN
CQC	SRSS	0.0500	0.0000	0.0000

RESPONSE SPECTRUM FUNCTION ASSIGNMENT DATA		
DIRECTION	FUNCTION	SCALE FACT
U1	WGS DG3	9.8100
U2	WGS DG3	9.8100
UZ	WGS DG3	9.8100

ETABS v9.0.0 File:REVISI I Units:KN-m November 6, 2010 14:59 PAGE 5
A U T O S E I S M I C U S E R C O E F F I C I E N T

Case: EX
AUTO SEISMIC INPUT DATA
Direction: X
Typical Eccentricity = 5%
Eccentricity Overrides: No
Period Calculation: Program Calculated
Ct = 0.035 (in feet units)
Top Story: STORY10
Bottom Story: BASE
C = 0.06
K = 1
AUTO SEISMIC CALCULATION FORMULAS
V = C W
AUTO SEISMIC CALCULATION RESULTS
W Used = 236026.53
V Used = 0.0600W = 14161.59
AUTO SEISMIC STORY FORCES

STORY	FX	FY	FZ	MX	MY	MZ
TOP FLOOR	2199.05	0.00	0.00	0.000	0.000	0.000
STORY9	2241.72	0.00	0.00	0.000	0.000	-218.837
STORY8	1992.64	0.00	0.00	0.000	0.000	-194.522
STORY7	1797.13	0.00	0.00	0.000	0.000	-182.853
STORY6	1596.99	0.00	0.00	0.000	0.000	-168.839
STORY5	1330.83	0.00	0.00	0.000	0.000	-140.699
STORY4	1100.30	0.00	0.00	0.000	0.000	-120.867

STORY3	977.33	0.00	0.00	0.000	0.000	1855.050
STORY2	632.82	0.00	0.00	0.000	0.000	1024.149
STORY1	292.79	0.00	0.00	0.000	0.000	101.915

ETABS v9.0.0 File:REVISI I Units:KN-m November 6, 2010 14:59 PAGE 6
 A U T O S E I S M I C U S E R C O E F F I C I E N T

Case: EY
 AUTO SEISMIC INPUT DATA
 Direction: X
 Typical Eccentricity = 5%
 Eccentricity Overrides: No
 Period Calculation: Program Calculated
 Ct = 0.035 (in feet units)
 Top Story: STORY10
 Bottom Story: BASE
 C = 0.06
 K = 1
 AUTO SEISMIC CALCULATION FORMULAS
 V = C W
 AUTO SEISMIC CALCULATION RESULTS
 W Used = 236026.53
 V Used = 0.0600W = 14161.59
 AUTO SEISMIC STORY FORCES

STORY	FX	FY	FZ	MX	MY	MZ
TOP FLOOR	2199.05	0.00	0.00	0.000	0.000	0.000
STORY9	2241.72	0.00	0.00	0.000	0.000	-218.837
STORY8	1992.64	0.00	0.00	0.000	0.000	-194.522
STORY7	1797.13	0.00	0.00	0.000	0.000	-182.853
STORY6	1596.99	0.00	0.00	0.000	0.000	-168.839
STORY5	1330.83	0.00	0.00	0.000	0.000	-140.699
STORY4	1100.30	0.00	0.00	0.000	0.000	-120.867
STORY3	977.33	0.00	0.00	0.000	0.000	1855.050
STORY2	632.82	0.00	0.00	0.000	0.000	1024.149
STORY1	292.79	0.00	0.00	0.000	0.000	101.915

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M A S S S O U R C E D A T A
 MASS LATERAL LUMP MASS
 FROM MASS ONLY AT STORIES
 Masses Yes Yes

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 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
TOP FLOOR	D10	1947.8504	1947.85041006971.3405		32.586	32.430
STORY9	D9	2197.5604	2197.56041135163.8531		32.880	32.285
STORY8	D8	2197.5604	2197.56041135163.8531		32.880	32.285
STORY7	D7	2264.7031	2264.70311172919.1077		32.896	32.278
STORY6	D6	2347.5376	2347.53761218769.1682		32.913	32.271
STORY5	D5	2347.5376	2347.53761218769.1682		32.913	32.271
STORY4	D4	2425.7250	2425.72501262634.8943		32.929	32.264
STORY3	D3	2567.1291	2567.12911334739.3277		32.701	32.024
STORY2	D2	2538.6052	2538.60521321621.1944		32.851	32.167
STORY1	D1	2519.6041	2519.60411314594.8564		32.946	32.257

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

STORY	UX	UY	UZ	RX	RY	RZ
TOP FLOOR	1947.850352	1947.850352	0.000000	0.000000	0.0000001006971.3405	
STORY9	2206.274784	2206.274784	0.000000	0.000000	0.0000001135163.8531	
STORY8	2206.274784	2206.274784	0.000000	0.000000	0.0000001135163.8531	
STORY7	2274.062217	2274.062217	0.000000	0.000000	0.0000001172919.1077	
STORY6	2357.617017	2357.617017	0.000000	0.000000	0.0000001218769.1682	
STORY5	2357.617017	2357.617017	0.000000	0.000000	0.0000001218769.1682	
STORY4	2436.545090	2436.545090	0.000000	0.000000	0.0000001262634.8943	
STORY3	2885.635083	2885.635083	0.000000	0.000000	0.0000001334739.3277	
STORY2	2802.656523	2802.656523	0.000000	0.000000	0.0000001321621.1944	
STORY1	2593.474450	2593.474450	0.000000	0.000000	0.0000001314594.8564	
BASE	451.195920	451.195920	0.000000	0.000000	0.000000	0.000000
Totals	24519.20323824519.203238		0.000000	0.000000	0.00000012121346.764	

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CENTERS OF CUMULATIVE MASS & CENTERS OF RIGIDITY

STORY LEVEL	DIAPHRAGM NAME	MASS	ORDINATE-X	ORDINATE-Y	ORDINATE-X	ORDINATE-Y
TOP FLOOR	D10	1947.8504	32.586	32.430	32.302	30.922
STORY9	D9	2197.5604	32.880	32.285	32.146	30.758
STORY8	D8	2197.5604	32.880	32.285	31.948	30.549
STORY7	D7	2264.7031	32.896	32.278	31.672	30.266
STORY6	D6	2347.5376	32.913	32.271	31.319	29.929
STORY5	D5	2347.5376	32.913	32.271	30.787	29.422
STORY4	D4	2425.7250	32.929	32.264	29.925	28.611
STORY3	D3	2567.1291	32.701	32.024	28.874	27.674
STORY2	D2	2538.6052	32.851	32.167	28.032	26.997
STORY1	D1	2519.6041	32.946	32.257	30.375	29.460

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MODAL PERIODS AND FREQUENCIES

MODE NUMBER	PERIOD (TIME)	FREQUENCY (CYCLES/TIME)	CIRCULAR FREQ (RADIANS/TIME)
Mode 1	0.94793	1.05493	6.62834
Mode 2	0.90389	1.10633	6.95128
Mode 3	0.83162	1.20247	7.55533
Mode 4	0.32368	3.08943	19.41146
Mode 5	0.31253	3.19972	20.10444
Mode 6	0.29266	3.41688	21.46891
Mode 7	0.18504	5.40411	33.95499
Mode 8	0.18042	5.54261	34.82523
Mode 9	0.17234	5.80257	36.45864
Mode 10	0.12298	8.13173	51.09314
Mode 11	0.12031	8.31179	52.22449
Mode 12	0.11514	8.68533	54.57155

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MODAL PARTICIPATING MASS RATIOS

MODE NUMBER	X-TRANS %MASS <SUM>	Y-TRANS %MASS <SUM>	Z-TRANS %MASS <SUM>	RX-ROTN %MASS <SUM>	RY-ROTN %MASS <SUM>	RZ-ROTN %MASS <SUM>
Mode 1	52.44 < 52>	7.46 < 7>	0.00 < 0>	9.65 < 10>	69.82 < 70>	16.66 < 17>
Mode 2	11.04 < 63>	62.13 < 70>	0.00 < 0>	83.54 < 93>	15.12 < 85>	0.81 < 17>
Mode 3	10.41 < 74>	4.37 < 74>	0.00 < 0>	6.27 < 99>	14.51 < 99>	55.06 < 73>
Mode 4	9.48 < 83>	0.49 < 74>	0.00 < 0>	0.02 < 99>	0.01 < 99>	1.72 < 74>
Mode 5	1.10 < 84>	11.56 < 86>	0.00 < 0>	0.00 < 99>	0.00 < 99>	0.05 < 74>
Mode 6	2.15 < 87>	0.73 < 87>	0.00 < 0>	0.03 < 100>	0.03 < 100>	11.54 < 86>
Mode 7	4.47 < 91>	0.04 < 87>	0.00 < 0>	0.00 < 100>	0.33 < 100>	0.37 < 86>
Mode 8	0.09 < 91>	5.22 < 92>	0.00 < 0>	0.39 < 100>	0.01 < 100>	0.02 < 86>
Mode 9	0.77 < 92>	0.05 < 92>	0.00 < 0>	0.01 < 100>	0.08 < 100>	5.39 < 92>
Mode 10	2.27 < 94>	0.02 < 92>	0.00 < 0>	0.00 < 100>	0.00 < 100>	0.20 < 92>
Mode 11	0.03 < 94>	2.53 < 95>	0.00 < 0>	0.01 < 100>	0.00 < 100>	0.01 < 92>
Mode 12	0.27 < 95>	0.00 < 95>	0.00 < 0>	0.00 < 100>	0.00 < 100>	2.44 < 94>

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MODAL LOAD PARTICIPATION RATIOS
(STATIC AND DYNAMIC RATIOS ARE IN PERCENT)

TYPE	NAME	STATIC	DYNAMIC
Load	DEAD	0.0035	0.0000
Load	LIVE	0.0044	0.0000
Load	EX	99.9995	99.9277
Load	EY	99.9995	99.9277
Acce1	UX	99.9581	94.5400
Acce1	UY	99.9572	94.5936
Acce1	UZ	0.0000	0.0000
Acce1	RX	99.9994	99.9291
Acce1	RY	99.9995	99.9277
Acce1	RZ	76.0204	94.2752

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TOTAL REACTIVE FORCES (RECOVERED LOADS) AT ORIGIN

LOAD	FX	FY	FZ	MX	MY	MZ
DEAD	0.00	0.00	356818.8411416791	853-11534530.21		0.000
LIVE	0.00	0.00	59566.50	1936913.900-1959269.900		0.000
EX	-14161.59	0.00	0.00	0.000	-383258.480	455155.117
EY	-14161.59	0.00	0.00	0.000	-383258.480	455155.117
SN12002	53953.03	57174.78	0.00	1545258.798	1457704.627	2734623.731

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S T O R Y F O R C E S

STORY	LOAD	P	VX	VY	T	MX	MY
TOP FLOOR	EX	0.00	-2199.05	0.00	71315.016	0.000	-8796.180
STORY9	EX	0.00	-4440.76	0.00	143907.592	0.000	-26559.226
STORY8	EX	0.00	-6433.40	0.00	208434.327	0.000	-52292.819
STORY7	EX	0.00	-8230.53	0.00	266624.136	0.000	-85214.923
STORY6	EX	0.00	-9827.52	0.00	318329.329	0.000	-124524.999
STORY5	EX	0.00	-11158.35	0.00	361416.990	0.000	-169158.386
STORY4	EX	0.00	-12258.65	0.00	397037.579	0.000	-218192.992
STORY3	EX	0.00	-13235.98	0.00	426480.946	0.000	-271136.917
STORY2	EX	0.00	-13868.80	0.00	445812.425	0.000	-326612.113
STORY1	EX	1165.88	-10337.27	786.26	412553.010	7357.953	-372250.227
TOP FLOOR	EY	0.00	-2199.05	0.00	71315.016	0.000	-8796.180
STORY9	EY	0.00	-4440.76	0.00	143907.592	0.000	-26559.226
STORY8	EY	0.00	-6433.40	0.00	208434.327	0.000	-52292.819
STORY7	EY	0.00	-8230.53	0.00	266624.136	0.000	-85214.923
STORY6	EY	0.00	-9827.52	0.00	318329.329	0.000	-124524.999
STORY5	EY	0.00	-11158.35	0.00	361416.990	0.000	-169158.386
STORY4	EY	0.00	-12258.65	0.00	397037.579	0.000	-218192.992
STORY3	EY	0.00	-13235.98	0.00	426480.946	0.000	-271136.917
STORY2	EY	0.00	-13868.80	0.00	445812.425	0.000	-326612.113
STORY1	EY	1165.88	-10337.27	786.26	412553.010	7357.953	-372250.227
TOP FLOOR	SNI2002	0.00	8741.88	9256.33	429782.598	37025.328	34967.519
STORY9	SNI2002	0.00	17552.55	18612.54	869204.504	111298.987	105000.807
STORY8	SNI2002	0.00	25239.94	26772.12	1256395.137	217601.992	205181.179
STORY7	SNI2002	0.00	32103.92	34040.62	1605089.628	352125.306	331995.169
STORY6	SNI2002	0.00	38262.63	40557.64	1920628.615	511813.717	482595.457
STORY5	SNI2002	0.00	43402.00	45992.42	2186977.162	692384.256	652956.382
STORY4	SNI2002	0.00	47544.00	50370.44	2405979.415	889714.170	839188.640
STORY3	SNI2002	0.00	51072.02	54122.26	2582433.353	1101049.808	1038600.041
STORY2	SNI2002	0.00	53200.07	56377.32	2693142.582	1321156.083	1246268.395
STORY1	SNI2002	6622.90	40880.00	43146.03	2555714.118	1508510.901	1424685.612

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S T O R Y D R I F T S

STORY	DIRECTION	LOAD	MAX DRIFT
TOP FLOOR	X	EX	1/4191
TOP FLOOR	Y	EX	1/100941
STORY9	X	EX	1/2445
STORY9	Y	EX	1/59136
STORY8	X	EX	1/1736
STORY8	Y	EX	1/40127
STORY7	X	EX	1/1565
STORY7	Y	EX	1/31747
STORY6	X	EX	1/1346
STORY6	Y	EX	1/26361
STORY5	X	EX	1/1204
STORY5	Y	EX	1/20829
STORY4	X	EX	1/1224
STORY4	Y	EX	1/14250
STORY3	X	EX	1/1155
STORY3	Y	EX	1/6016
STORY2	X	EX	1/1369
STORY2	Y	EX	1/5559
STORY1	X	EX	1/2638
STORY1	Y	EX	1/11597
TOP FLOOR	X	EY	1/4191
TOP FLOOR	Y	EY	1/100941
STORY9	X	EY	1/2445
STORY9	Y	EY	1/59136
STORY8	X	EY	1/1736
STORY8	Y	EY	1/40127
STORY7	X	EY	1/1565
STORY7	Y	EY	1/31747
STORY6	X	EY	1/1346
STORY6	Y	EY	1/26361
STORY5	X	EY	1/1204
STORY5	Y	EY	1/20829
STORY4	X	EY	1/1224
STORY4	Y	EY	1/14250
STORY3	X	EY	1/1155
STORY3	Y	EY	1/6016
STORY2	X	EY	1/1369
STORY2	Y	EY	1/5559
STORY1	X	EY	1/2638

STORY1	Y	EY	1/11597
TOP FLOOR	X	SNI2002	1/886
TOP FLOOR	Y	SNI2002	1/940
STORY9	X	SNI2002	1/514
STORY9	Y	SNI2002	1/554
STORY8	X	SNI2002	1/364
STORY8	Y	SNI2002	1/396
STORY7	X	SNI2002	1/329
STORY7	Y	SNI2002	1/360
STORY6	X	SNI2002	1/282
STORY6	Y	SNI2002	1/309
STORY5	X	SNI2002	1/252
STORY5	Y	SNI2002	1/275
STORY4	X	SNI2002	1/257
STORY4	Y	SNI2002	1/281
STORY3	X	SNI2002	1/261
STORY3	Y	SNI2002	1/280
STORY2	X	SNI2002	1/297
STORY2	Y	SNI2002	1/314
STORY1	X	SNI2002	1/555
STORY1	Y	SNI2002	1/575

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DISPLACEMENTS AT DIAPHRAGM CENTER OF MASS

STORY	DIAPHRAGM	LOAD	UX	UY	RZ
TOP FLOOR	D10	EX	0.0228	-0.0001	-0.00007
STORY9	D9	EX	0.0219	-0.0002	-0.00007
STORY8	D8	EX	0.0203	-0.0002	-0.00007
STORY7	D7	EX	0.0180	-0.0002	-0.00007
STORY6	D6	EX	0.0156	-0.0002	-0.00006
STORY5	D5	EX	0.0127	-0.0002	-0.00006
STORY4	D4	EX	0.0095	-0.0002	-0.00005
STORY3	D3	EX	0.0065	-0.0002	-0.00005
STORY2	D2	EX	0.0036	-0.0002	-0.00003
STORY1	D1	EX	0.0012	-0.0001	-0.00001
TOP FLOOR	D10	EY	0.0228	-0.0001	-0.00007
STORY9	D9	EY	0.0219	-0.0002	-0.00007
STORY8	D8	EY	0.0203	-0.0002	-0.00007
STORY7	D7	EY	0.0180	-0.0002	-0.00007
STORY6	D6	EY	0.0156	-0.0002	-0.00006
STORY5	D5	EY	0.0127	-0.0002	-0.00006
STORY4	D4	EY	0.0095	-0.0002	-0.00005
STORY3	D3	EY	0.0065	-0.0002	-0.00005
STORY2	D2	EY	0.0036	-0.0002	-0.00003
STORY1	D1	EY	0.0012	-0.0001	-0.00001
TOP FLOOR	D10	SNI2002	0.0882	0.0884	0.00175
STORY9	D9	SNI2002	0.0846	0.0850	0.00168
STORY8	D8	SNI2002	0.0786	0.0789	0.00157
STORY7	D7	SNI2002	0.0701	0.0703	0.00141
STORY6	D6	SNI2002	0.0607	0.0608	0.00123
STORY5	D5	SNI2002	0.0497	0.0497	0.00103
STORY4	D4	SNI2002	0.0374	0.0373	0.00079
STORY3	D3	SNI2002	0.0254	0.0254	0.00056
STORY2	D2	SNI2002	0.0143	0.0143	0.00033
STORY1	D1	SNI2002	0.0049	0.0050	0.00012

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STORY MAXIMUM AND AVERAGE LATERAL DISPLACEMENTS

STORY	LOAD	DIR	MAXIMUM	AVERAGE	RATIO
TOP FLOOR	EX	X	0.0246	0.0226	1.090
STORY9	EX	X	0.0236	0.0216	1.093
STORY8	EX	X	0.0220	0.0200	1.098
STORY7	EX	X	0.0197	0.0178	1.107
STORY6	EX	X	0.0171	0.0153	1.118
STORY5	EX	X	0.0142	0.0125	1.135
STORY4	EX	X	0.0109	0.0093	1.164
STORY3	EX	X	0.0076	0.0063	1.204
STORY2	EX	X	0.0043	0.0035	1.247
STORY1	EX	X	0.0015	0.0012	1.265
TOP FLOOR	EY	X	0.0246	0.0226	1.090
STORY9	EY	X	0.0236	0.0216	1.093
STORY8	EY	X	0.0220	0.0200	1.098
STORY7	EY	X	0.0197	0.0178	1.107
STORY6	EY	X	0.0171	0.0153	1.118
STORY5	EY	X	0.0142	0.0125	1.135
STORY4	EY	X	0.0109	0.0093	1.164

STORY3	EY	X	0.0076	0.0063	1.204
STORY2	EY	X	0.0043	0.0035	1.247
STORY1	EY	X	0.0015	0.0012	1.265
TOP FLOOR	SNI2002	X	0.1152	0.0962	1.198
STORY9	SNI2002	X	0.1110	0.0925	1.200
STORY8	SNI2002	X	0.1035	0.0859	1.205
STORY7	SNI2002	X	0.0929	0.0766	1.212
STORY6	SNI2002	X	0.0810	0.0663	1.221
STORY5	SNI2002	X	0.0670	0.0543	1.235
STORY4	SNI2002	X	0.0513	0.0409	1.257
STORY3	SNI2002	X	0.0359	0.0280	1.285
STORY2	SNI2002	X	0.0206	0.0157	1.316
STORY1	SNI2002	X	0.0072	0.0054	1.328
TOP FLOOR	SNI2002	Y	0.1067	0.0964	1.107
STORY9	SNI2002	Y	0.1028	0.0927	1.110
STORY8	SNI2002	Y	0.0959	0.0861	1.114
STORY7	SNI2002	Y	0.0861	0.0769	1.121
STORY6	SNI2002	Y	0.0753	0.0666	1.130
STORY5	SNI2002	Y	0.0625	0.0547	1.143
STORY4	SNI2002	Y	0.0481	0.0413	1.166
STORY3	SNI2002	Y	0.0340	0.0283	1.199
STORY2	SNI2002	Y	0.0197	0.0159	1.235
STORY1	SNI2002	Y	0.0070	0.0055	1.253

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M O D A L P E R I O D S A N D F R E Q U E N C I E S

MODE NUMBER	PERIOD (TIME)	FREQUENCY (CYCLES/TIME)	CIRCULAR FREQ (RADIANS/TIME)
Mode 1	0.94793	1.05493	6.62834
Mode 2	0.90389	1.10633	6.95128
Mode 3	0.83162	1.20247	7.55533
Mode 4	0.32368	3.08943	19.41146
Mode 5	0.31253	3.19972	20.10444
Mode 6	0.29266	3.41688	21.46891
Mode 7	0.18504	5.40411	33.95499
Mode 8	0.18042	5.54261	34.82523
Mode 9	0.17234	5.80257	36.45864
Mode 10	0.12298	8.13173	51.09314
Mode 11	0.12031	8.31179	52.22449
Mode 12	0.11514	8.68533	54.57155

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

MODE	UX	UY	UZ	RX	RY	RZ
Mode 1	112.2030	-42.3258	0.0000	1144.7945	3079.0524	-1456.9795
Mode 2	-51.4905	-122.1214	0.0000	3367.9115	-1433.0514	-321.4175
Mode 3	-49.9974	32.3922	0.0000	-922.4872	-1403.5746	-2649.0940
Mode 4	-47.7051	10.8183	0.0000	55.7478	43.6012	468.2062
Mode 5	-16.2799	-52.6681	0.0000	-10.5631	-18.8011	-83.2968
Mode 6	22.7035	-13.2202	0.0000	68.3476	66.3034	1212.7614
Mode 7	32.7605	-3.0331	0.0000	11.7510	210.5094	-217.1432
Mode 8	4.5797	35.4048	0.0000	-231.1336	32.1841	-51.7417
Mode 9	13.5864	-3.6173	0.0000	41.5955	105.5354	829.0789
Mode 10	23.3640	-2.1048	0.0000	-5.9121	22.1598	-158.1496
Mode 11	-2.7621	-24.6394	0.0000	27.5522	-4.9719	34.6353
Mode 12	-8.1208	0.7285	0.0000	-14.4545	-21.9678	-557.9348

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

MODE NUMBER	X-TRANS %MASS <SUM>	Y-TRANS %MASS <SUM>	Z-TRANS %MASS <SUM>	RX-ROTN %MASS <SUM>	RY-ROTN %MASS <SUM>	RZ-ROTN %MASS <SUM>
Mode 1	52.44 < 52>	7.46 < 7>	0.00 < 0>	9.65 < 10>	69.82 < 70>	16.66 < 17>
Mode 2	11.04 < 63>	62.13 < 70>	0.00 < 0>	83.54 < 93>	15.12 < 85>	0.81 < 17>
Mode 3	10.41 < 74>	4.37 < 74>	0.00 < 0>	6.27 < 99>	14.51 < 99>	55.06 < 73>
Mode 4	9.48 < 83>	0.49 < 74>	0.00 < 0>	0.02 < 99>	0.01 < 99>	1.72 < 74>
Mode 5	1.10 < 84>	11.56 < 86>	0.00 < 0>	0.00 < 99>	0.00 < 99>	0.05 < 74>
Mode 6	2.15 < 87>	0.73 < 87>	0.00 < 0>	0.03 <100>	0.03 <100>	11.54 < 86>
Mode 7	4.47 < 91>	0.04 < 87>	0.00 < 0>	0.00 <100>	0.33 <100>	0.37 < 86>
Mode 8	0.09 < 91>	5.22 < 92>	0.00 < 0>	0.39 <100>	0.01 <100>	0.02 < 86>
Mode 9	0.77 < 92>	0.05 < 92>	0.00 < 0>	0.01 <100>	0.08 <100>	5.39 < 92>
Mode 10	2.27 < 94>	0.02 < 92>	0.00 < 0>	0.00 <100>	0.00 <100>	0.20 < 92>
Mode 11	0.03 < 94>	2.53 < 95>	0.00 < 0>	0.01 <100>	0.00 <100>	0.01 < 92>
Mode 12	0.27 < 95>	0.00 < 95>	0.00 < 0>	0.00 <100>	0.00 <100>	2.44 < 94>

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MODAL LOAD PARTICIPATION RATIOS

(STATIC AND DYNAMIC RATIOS ARE IN PERCENT)

TYPE	LOAD	ACCEL	STORY	LINK	DOF	STATIC	DYNAMIC
Load	DEAD					0.0035	0.0000
Load	LIVE					0.0044	0.0000
Load	EX					99.9995	99.9277
Load	EY					99.9995	99.9277
Acce1		UX				99.9581	94.5400
Acce1		UY				99.9572	94.5936
Acce1		UZ				0.0000	0.0000
Acce1		RX				99.9994	99.9291
Acce1		RY				99.9995	99.9277
Acce1		RZ				76.0204	94.2752

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RESPONSE SPECTRUM ACCELERATIONS

(IN RESPONSE SPECTRUM LOCAL COORDINATES)

SPEC	MODE	PERIOD	DAMP-RATIO	SPEC-FACTOR	U1	U2	U3
SNI2002	Mode 1	0.947927	0.050000	1.000000	3.237300	3.237300	3.237300
SNI2002	Mode 2	0.903889	0.050000	1.000000	3.237300	3.237300	3.237300
SNI2002	Mode 3	0.831623	0.050000	1.000000	3.237300	3.237300	3.237300
SNI2002	Mode 4	0.323684	0.050000	1.000000	3.237300	3.237300	3.237300
SNI2002	Mode 5	0.312527	0.050000	1.000000	3.237300	3.237300	3.237300
SNI2002	Mode 6	0.292664	0.050000	1.000000	3.237300	3.237300	3.237300
SNI2002	Mode 7	0.185045	0.050000	1.000000	3.156608	3.156608	3.156608
SNI2002	Mode 8	0.180421	0.050000	1.000000	3.131659	3.131659	3.131659
SNI2002	Mode 9	0.172337	0.050000	1.000000	3.088046	3.088046	3.088046
SNI2002	Mode 10	0.122975	0.050000	1.000000	2.821712	2.821712	2.821712
SNI2002	Mode 11	0.120311	0.050000	1.000000	2.807338	2.807338	2.807338
SNI2002	Mode 12	0.115137	0.050000	1.000000	2.779420	2.779420	2.779420

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RESPONSE SPECTRUM MODAL AMPLITUDES

(IN RESPONSE SPECTRUM LOCAL COORDINATES)

SPEC	MODE	PERIOD	U1	U2	U3
SNI2002	Mode 1	0.947927	-8.267569	3.118733	0.000000
SNI2002	Mode 2	0.903889	3.449688	8.181723	0.000000
SNI2002	Mode 3	0.831623	2.835459	-1.837029	0.000000
SNI2002	Mode 4	0.323684	0.409857	-0.092945	0.000000
SNI2002	Mode 5	0.312527	0.130392	0.421839	0.000000
SNI2002	Mode 6	0.292664	-0.159462	0.092854	0.000000
SNI2002	Mode 7	0.185045	-0.089694	0.008304	0.000000
SNI2002	Mode 8	0.180421	-0.011826	-0.091422	0.000000
SNI2002	Mode 9	0.172337	-0.031564	0.008404	0.000000
SNI2002	Mode 10	0.122975	-0.025254	0.002275	0.000000
SNI2002	Mode 11	0.120311	0.002843	0.025362	0.000000
SNI2002	Mode 12	0.115137	0.007579	-0.000680	0.000000

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RESPONSE SPECTRUM BASE REACTIONS

(IN RESPONSE SPECTRUM LOCAL COORDINATES)

SPEC	MODE	DIR	F1	F2	F3	M1	M2	M3
SNI2002	Mode 1	U1	40756.03	-15374.19	0.00	415829.155	1118418.833	-1826194.593
SNI2002	Mode 2	U1	8582.95	20356.42	0.00	-561397.333	238875.409	387710.214
SNI2002	Mode 3	U1	8092.41	-5242.89	0.00	149310.606	227177.752	-421382.782
SNI2002	Mode 4	U1	7367.38	-1670.74	0.00	-8609.463	-6733.583	-290879.455
SNI2002	Mode 5	U1	858.00	2775.76	0.00	556.707	990.873	61862.580
SNI2002	Mode 6	U1	1668.67	-971.66	0.00	5023.423	4873.183	-74552.741
SNI2002	Mode 7	U1	3387.82	-313.66	0.00	1215.198	21769.185	-116121.791
SNI2002	Mode 8	U1	65.68	507.78	0.00	-3314.935	461.587	13465.380
SNI2002	Mode 9	U1	570.02	-151.76	0.00	1745.158	4427.783	-16452.544
SNI2002	Mode 10	U1	1540.30	-138.76	0.00	-389.764	1460.913	-52660.643
SNI2002	Mode 11	U1	21.42	191.06	0.00	-213.642	38.552	5152.464
SNI2002	Mode 12	U1	183.30	-16.44	0.00	326.253	495.837	-3514.933
SNI2002	Mode 1	U2	-15374.19	5799.53	0.00	-156861.136	-421895.498	688886.180
SNI2002	Mode 2	U2	20356.42	48279.90	0.00	-1331481.996	566547.592	919543.324
SNI2002	Mode 3	U2	-5242.89	3396.75	0.00	-96734.939	-147183.289	273004.302
SNI2002	Mode 4	U2	-1670.74	378.88	0.00	1952.411	1527.008	65964.184
SNI2002	Mode 5	U2	2775.76	8980.03	0.00	1801.033	3205.631	200135.125
SNI2002	Mode 6	U2	-971.66	565.79	0.00	-2925.120	-2837.636	43411.774
SNI2002	Mode 7	U2	-313.66	29.04	0.00	-112.510	-2015.507	10751.175
SNI2002	Mode 8	U2	507.78	3925.53	0.00	-25627.112	3568.441	104098.208

SNI2002	Mode 9	U2	-151.76	40.41	0.00	-464.632	-1178.855	4380.335
SNI2002	Mode 10	U2	-138.76	12.50	0.00	35.112	-131.607	4743.953
SNI2002	Mode 11	U2	191.06	1704.34	0.00	-1905.817	343.910	45963.203
SNI2002	Mode 12	U2	-16.44	1.48	0.00	-29.267	-44.481	315.317
SNI2002	Mode 1	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	Mode 2	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	Mode 3	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	Mode 4	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	Mode 5	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	Mode 6	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	Mode 7	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	Mode 8	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	Mode 9	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	Mode 10	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	Mode 11	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	Mode 12	U3	0.00	0.00	0.00	0.000	0.000	0.000
SNI2002	A11	A11	53953.03	57174.79	0.00	1545258.803	1457704.625	2441679.013

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L O A D I N G C O M B I N A T I O N S

COMBO	COMBO TYPE	CASE	CASE TYPE	SCALE FACTOR
COMB1	ADD	DEAD	Static	1.4000
COMB2	ADD	DEAD	Static	1.2000
		LIVE	Static	1.6000
COMB3	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	1.0000
		EY	Static	0.3000
COMB4	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	-1.0000
		EY	Static	0.3000
COMB5	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	1.0000
		EY	Static	-0.3000
COMB6	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	-1.0000
		EY	Static	-0.3000
COMB7	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	0.3000
		EY	Static	1.0000
COMB8	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	-0.3000
		EY	Static	1.0000
COMB9	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	0.3000
		EY	Static	-1.0000
COMB10	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	-0.3000
		EY	Static	-1.0000
COMB11	ADD	DEAD	Static	0.9000
		LIVE	Static	1.0000
		EX	Static	0.3000
		EY	Static	0.9000
COMB12	ADD	DEAD	Static	0.9000
		EX	Static	-1.0000
		EY	Static	0.3000
COMB13	ADD	DEAD	Static	0.9000
		EX	Static	1.0000
		EY	Static	-0.3000
COMB14	ADD	DEAD	Static	0.9000
		EX	Static	-1.0000
		EY	Static	-0.3000
COMB15	ADD	DEAD	Static	0.9000
		EX	Static	0.3000
		EY	Static	1.0000
COMB16	ADD	DEAD	Static	0.9000
		EX	Static	-0.3000
		EY	Static	1.0000
COMB17	ADD	DEAD	Static	0.9000
		EX	Static	0.3000
		EY	Static	-1.0000
COMB18	ADD	DEAD	Static	0.9000
		EX	Static	-0.3000
		EY	Static	-1.0000

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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
TOP FLOOR	C113	Min Value	-372.24	-41.05	-2.73	-0.089	-5.890	-62.033
		Min Case	COMB1	COMB10	COMB7	COMB10	COMB6	
		Max Value	-203.00	28.07	-0.23	0.069	3.128	73.442
		Max Case	COMB15	COMB15	COMB15	COMB18	COMB10	COMB10
STORY9	C113	Min Value	-967.71	-62.88	-3.85	-0.183	-7.622	-107.312
		Min Case	COMB2	COMB10	COMB7	COMB10	COMB10	
		Max Value	-548.71	50.87	-0.74	0.164	5.092	100.187
		Max Case	COMB15	COMB15	COMB15	COMB18	COMB10	COMB10

STORY8	C113	Min Value	-1568.93	-83.63	-3.68	-0.289	-6.874	-147.825
		Min Case	COMB2	COMB10	COMB10	COMB7	COMB10	COMB10
		Max Value	-891.11	72.63	-0.60	0.272	5.270	128.152
		Max Case	COMB18	COMB15	COMB15	COMB18	COMB6	COMB10
STORY7	C113	Min Value	-2186.84	-105.48	-5.13	-0.650	-9.658	-186.564
		Min Case	COMB2	COMB10	COMB10	COMB7	COMB6	COMB10
		Max Value	-1232.64	91.65	-0.75	0.622	7.256	161.518
		Max Case	COMB18	COMB15	COMB15	COMB18	COMB10	COMB10
STORY6	C113	Min Value	-2805.46	-121.05	-5.17	-0.808	-10.609	-221.813
		Min Case	COMB2	COMB10	COMB10	COMB3	COMB10	COMB10
		Max Value	-1583.18	108.30	-0.85	0.784	6.459	195.775
		Max Case	COMB18	COMB15	COMB15	COMB18	COMB10	COMB15
STORY5	C113	Min Value	-3428.72	-134.16	-5.27	-1.076	-10.672	-253.523
		Min Case	COMB2	COMB10	COMB10	COMB7	COMB10	COMB10
		Max Value	-1934.15	122.22	-1.02	1.053	6.724	230.256
		Max Case	COMB18	COMB15	COMB15	COMB18	COMB10	COMB15
STORY4	C113	Min Value	-4074.65	-145.06	-6.34	-2.684	-14.682	-289.942
		Min Case	COMB2	COMB6	COMB10	COMB7	COMB10	COMB10
		Max Value	-2287.67	131.03	-1.57	2.646	6.717	260.498
		Max Case	COMB18	COMB15	COMB15	COMB18	COMB2	COMB15
STORY3	C113	Min Value	-4724.37	-139.44	-3.83	-4.657	-11.843	-305.183
		Min Case	COMB2	COMB10	COMB10	COMB3	COMB10	COMB10
		Max Value	-2654.77	130.91	-0.04	4.622	5.848	287.774
		Max Case	COMB18	COMB15	COMB15	COMB18	COMB7	COMB15
STORY2	C113	Min Value	-5379.93	-127.82	-11.05	-5.941	-18.605	-320.698
		Min Case	COMB2	COMB10	COMB7	COMB15	COMB7	COMB6
		Max Value	-3025.74	114.41	1.82	5.929	17.860	295.122
		Max Case	COMB18	COMB15	COMB18	COMB10	COMB7	COMB15
STORY1	C113	Min Value	-6043.00	-129.42	-8.77	-3.457	-18.640	-455.873
		Min Case	COMB2	COMB10	COMB3	COMB15	COMB7	COMB10
		Max Value	-3403.21	122.02	3.27	3.459	15.170	449.549
		Max Case	COMB18	COMB15	COMB18	COMB10	COMB18	COMB15

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LOADING COMBINATIONS

COMBO	COMBO TYPE	CASE	CASE TYPE	SCALE FACTOR
COMB19	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

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COLUMN FORCES

STORY	COLUMN	LOAD	LOC	P	V2	V3	T	M2	M3	
TOP FLOOR	C113	COMB19 MAX								
		0.0000	-237.93	28.07	-0.23	0.069	-0.869	37.494		
		1.6500	-220.47	28.07	-0.23	0.069	-0.484	6.833		
		3.3000	-203.00	28.07	-0.23	0.069	3.128	73.442		
TOP FLOOR	C113	COMB19 MIN								
		0.0000	-372.24	-41.05	-2.73	-0.089	-5.890	-62.033		
		1.6500	-345.72	-41.05	-2.73	-0.089	-1.680	-9.949		
		3.3000	-322.43	-41.05	-2.73	-0.089	-0.100	-55.135		
STORY9	C113	COMB19 MAX								
		0.0000	-583.63	50.87	-0.74	0.164	-1.563	82.919		
		1.6500	-566.17	50.87	-0.74	0.164	-0.343	-1.023		
		3.3000	-548.71	50.87	-0.74	0.164	5.092	100.187		
STORY9	C113	COMB19 MIN								
		0.0000	-967.71	-62.88	-3.85	-0.183	-7.622	-107.312		
		1.6500	-944.42	-62.88	-3.85	-0.183	-1.265	-3.563		
		3.3000	-921.14	-62.88	-3.85	-0.183	0.878	-84.964		

STORY8	C113	COMB19 MAX	0.0000	-926.04	72.63	-0.60	0.272	-1.178	127.069
			1.6500	-908.58	72.63	-0.60	0.272	-0.190	7.229
			3.3000	-891.11	72.63	-0.60	0.272	5.270	128.152
STORY8	C113	COMB19 MIN	0.0000	-1568.93	-83.63	-3.68	-0.289	-6.874	-147.825
			1.6500	-1545.64	-83.63	-3.68	-0.289	-0.802	-9.837
			3.3000	-1522.36	-83.63	-3.68	-0.289	0.797	-112.610
STORY7	C113	COMB19 MAX	0.0000	-1278.26	91.65	-0.75	0.622	-1.451	160.303
			1.6500	-1255.45	91.65	-0.75	0.622	-0.214	9.081
			3.3000	-1232.64	91.65	-0.75	0.622	7.256	161.518
STORY7	C113	COMB19 MIN	0.0000	-2186.84	-105.48	-5.13	-0.650	-9.658	-186.564
			1.6500	-2156.42	-105.48	-5.13	-0.650	-1.201	-12.523
			3.3000	-2126.01	-105.48	-5.13	-0.650	1.024	-142.142
STORY6	C113	COMB19 MAX	0.0000	-1628.80	108.30	-0.85	0.784	-1.804	195.775
			1.6500	-1605.99	108.30	-0.85	0.784	-0.402	17.081
			3.3000	-1583.18	108.30	-0.85	0.784	6.459	177.641
STORY6	C113	COMB19 MIN	0.0000	-2805.46	-121.05	-5.17	-0.808	-10.609	-221.813
			1.6500	-2775.05	-121.05	-5.17	-0.808	-2.075	-22.086
			3.3000	-2744.63	-121.05	-5.17	-0.808	1.000	-161.612
STORY5	C113	COMB19 MAX	0.0000	-1979.77	122.22	-1.02	1.053	-1.839	230.256
			1.6500	-1956.96	122.22	-1.02	1.053	-0.152	28.594
			3.3000	-1934.15	122.22	-1.02	1.053	6.724	189.195
STORY5	C113	COMB19 MIN	0.0000	-3428.72	-134.16	-5.27	-1.076	-10.672	-253.523
			1.6500	-3398.31	-134.16	-5.27	-1.076	-1.974	-32.164
			3.3000	-3367.90	-134.16	-5.27	-1.076	1.535	-173.067
STORY4	C113	COMB19 MAX	0.0000	-2345.41	131.03	-1.57	2.646	-2.799	260.498
			1.6500	-2316.54	131.03	-1.57	2.646	-0.205	44.297
			3.3000	-2287.67	131.03	-1.57	2.646	6.717	188.758
STORY4	C113	COMB19 MIN	0.0000	-4074.65	-145.06	-6.34	-2.684	-14.682	-289.942
			1.6500	-4036.15	-145.06	-6.34	-2.684	-4.225	-50.592
			3.3000	-3997.66	-145.06	-6.34	-2.684	2.389	-171.904
STORY3	C113	COMB19 MAX	0.0000	-2712.51	130.91	-0.04	4.622	3.837	287.774
			1.6500	-2683.64	130.91	-0.04	4.622	3.901	71.771
			3.3000	-2654.77	130.91	-0.04	4.622	5.848	154.985
STORY3	C113	COMB19 MIN	0.0000	-4724.37	-139.44	-3.83	-4.657	-11.843	-305.183
			1.6500	-4685.88	-139.44	-3.83	-4.657	-5.518	-75.099
			3.3000	-4647.39	-139.44	-3.83	-4.657	-1.076	-144.232
STORY2	C113	COMB19 MAX	0.0000	-3083.47	114.41	1.82	5.929	1.443	295.122
			1.6500	-3054.61	114.41	1.82	5.929	0.338	106.341
			3.3000	-3025.74	114.41	1.82	5.929	17.860	101.115
STORY2	C113	COMB19 MIN	0.0000	-5379.93	-127.82	-11.05	-5.941	-18.605	-320.698
			1.6500	-5341.44	-127.82	-11.05	-5.941	-2.272	-109.791
			3.3000	-5302.95	-127.82	-11.05	-5.941	-4.565	-82.440
STORY1	C113	COMB19 MAX	0.0000	-3460.94	122.02	3.27	3.459	15.170	449.549
			1.6500	-3432.07	122.02	3.27	3.459	11.050	249.564
			3.3000	-3403.21	122.02	3.27	3.459	10.516	51.634
STORY1	C113	COMB19 MIN	0.0000	-6043.00	-129.42	-8.77	-3.457	-18.640	-455.873
			1.6500	-6004.51	-129.42	-8.77	-3.457	-5.452	-243.679
			3.3000	-5966.02	-129.42	-8.77	-3.457	4.363	-33.540

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LOADING COMBINATIONS

COMBO	COMBO TYPE	CASE	CASE TYPE	SCALE FACTOR
COMB3	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	1.0000
COMB4	ADD	EY	Static	0.3000
		DEAD	Static	1.2000
		LIVE	Static	1.0000
COMB11	ADD	EX	Static	-1.0000
		EY	Static	0.3000
		DEAD	Static	0.9000
COMB12	ADD	LIVE	Static	1.0000
		EX	Static	0.3000
		EY	Static	0.9000
COMB12	ADD	DEAD	Static	0.9000
		EX	Static	-1.0000
		EY	Static	0.3000

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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
TOP FLOOR	C113	Min Value	-351.01	-25.79	-2.35	-0.089	-5.232	-51.314
		Min Case	COMB4	COMB4	COMB4	COMB3	COMB4	COMB3
		Max Value	-205.11	25.07	-0.79	0.033	2.525	44.652
		Max Case	COMB12	COMB3	COMB11	COMB12	COMB4	COMB4
STORY9	C113	Min Value	-896.75	-37.38	-3.49	-0.183	-6.925	-80.714
		Min Case	COMB4	COMB4	COMB4	COMB3	COMB4	COMB3
		Max Value	-548.87	47.60	-1.84	0.084	4.595	76.362
		Max Case	COMB12	COMB3	COMB11	COMB12	COMB4	COMB3
STORY8	C113	Min Value	-1449.17	-48.24	-3.28	-0.289	-6.154	-108.530
		Min Case	COMB3	COMB4	COMB4	COMB3	COMB4	COMB3
		Max Value	-892.83	69.73	-1.54	0.143	4.679	121.581
		Max Case	COMB12	COMB3	COMB11	COMB12	COMB4	COMB3
STORY7	C113	Min Value	-2021.20	-60.84	-4.54	-0.650	-8.566	-136.989
		Min Case	COMB3	COMB4	COMB4	COMB3	COMB4	COMB3
		Max Value	-1237.34	87.98	-2.01	0.329	6.415	153.337
		Max Case	COMB12	COMB3	COMB11	COMB12	COMB4	COMB3
STORY6	C113	Min Value	-2595.95	-68.90	-4.59	-0.808	-9.440	-157.346
		Min Case	COMB3	COMB4	COMB4	COMB3	COMB4	COMB3
		Max Value	-1591.83	104.92	-2.07	0.417	5.724	188.879
		Max Case	COMB12	COMB3	COMB11	COMB12	COMB4	COMB3
STORY5	C113	Min Value	-3176.75	-75.72	-4.72	-1.076	-9.468	-168.735
		Min Case	COMB3	COMB4	COMB4	COMB3	COMB4	COMB3
		Max Value	-1947.66	119.05	-2.22	0.562	6.098	224.131
		Max Case	COMB12	COMB3	COMB11	COMB12	COMB4	COMB3
STORY4	C113	Min Value	-3781.45	-82.21	-5.77	-2.684	-13.053	-167.212
		Min Case	COMB3	COMB4	COMB4	COMB3	COMB4	COMB3
		Max Value	-2306.78	127.30	-3.02	1.417	5.974	252.870
		Max Case	COMB12	COMB3	COMB11	COMB12	COMB4	COMB3
STORY3		Min Case	COMB3	COMB4	COMB4	COMB3	COMB4	COMB4
		Max Value	-2679.70	128.33	-1.18	2.481	5.848	282.614
		Max Case	COMB12	COMB3	COMB11	COMB12	COMB3	COMB3
		Min Value	-5002.76	-72.77	-11.05	-5.941	-18.605	-180.242
STORY2	C113	Min Case	COMB3	COMB4	COMB3	COMB3	COMB3	COMB4
		Max Value	-3056.07	110.72	-0.54	3.190	17.860	287.942
		Max Case	COMB12	COMB3	COMB12	COMB4	COMB3	COMB3
		Min Value	-5619.42	-71.87	-8.77	-3.456	-18.640	-247.404
STORY1	C113	Min Case	COMB3	COMB4	COMB3	COMB3	COMB3	COMB4
		Max Value	-3437.69	119.96	0.86	1.864	10.304	447.495
		Max Case	COMB12	COMB3	COMB12	COMB4	COMB3	COMB3

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L O A D I N G C O M B I N A T I O N S

COMBO	COMBO TYPE	CASE	CASE TYPE	SCALE FACTOR
COMB5	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	1.0000
		EY	Static	-0.3000
COMB6	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	-1.0000
		EY	Static	-0.3000
COMB13	ADD	DEAD	Static	0.9000
		EX	Static	1.0000
		EY	Static	-0.3000
COMB14	ADD	DEAD	Static	0.9000
		EX	Static	-1.0000
		EY	Static	-0.3000

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

STORY	POINT	ITEM	FX	FY	FZ	MX	MY	MZ
TOP FLOOR	C113	Min Value	-351.65	-41.05	-2.73	-0.053	-5.890	-62.033
		Min Case	COMB6	COMB6	COMB6	COMB5	COMB6	COMB6
		Max Value	-203.63	12.81	-0.62	0.069	3.128	73.442
		Max Case	COMB13	COMB13	COMB13	COMB14	COMB6	COMB6

STORY9	C113	Min Value	-896.80	-62.88	-3.85	-0.104	-7.622	-107.312
		Min Case	COMB6	COMB6	COMB6	COMB5	COMB6	COMB6
		Max Value	-548.76	25.38	-1.10	0.164	5.092	100.187
		Max Case	COMB13	COMB13	COMB13	COMB14	COMB6	COMB6
STORY8	C113	Min Value	-1447.46	-83.63	-3.68	-0.160	-6.874	-147.825
		Min Case	COMB5	COMB6	COMB6	COMB5	COMB6	COMB6
		Max Value	-891.11	37.24	-1.00	0.272	5.270	128.152
		Max Case	COMB14	COMB13	COMB13	COMB14	COMB6	COMB6
STORY7	C113	Min Value	-2016.49	-105.48	-5.13	-0.356	-9.658	-186.564
		Min Case	COMB5	COMB6	COMB6	COMB5	COMB6	COMB6
		Max Value	-1232.64	47.01	-1.34	0.622	7.256	161.518
		Max Case	COMB14	COMB13	COMB13	COMB14	COMB6	COMB6
STORY6	C113	Min Value	-2587.29	-121.05	-5.17	-0.441	-10.609	-221.813
		Min Case	COMB5	COMB6	COMB6	COMB5	COMB6	COMB6
		Max Value	-1583.18	56.15	-1.43	0.784	6.459	177.641
		Max Case	COMB14	COMB13	COMB13	COMB14	COMB6	COMB6
STORY5	C113	Min Value	-3163.24	-134.16	-5.27	-0.585	-10.672	-253.523
		Min Case	COMB5	COMB6	COMB6	COMB5	COMB6	COMB6
		Max Value	-1934.15	63.79	-1.58	1.053	6.724	189.195
		Max Case	COMB14	COMB13	COMB13	COMB14	COMB6	COMB6
STORY4	C113	Min Value	-3762.34	-145.06	-6.34	-1.455	-14.682	-289.942
		Min Case	COMB5	COMB6	COMB6	COMB5	COMB6	COMB6
		Max Value	-2287.67	68.18	-2.14	2.646	6.233	188.758
		Max Case	COMB14	COMB13	COMB13	COMB14	COMB6	COMB6
STORY3	C113	Min Value	-4365.07	-139.44	-3.83	-2.517	-11.843	-305.183
		Min Case	COMB5	COMB6	COMB6	COMB5	COMB6	COMB6
		Max Value	-2654.77	69.12	-0.58	4.622	4.684	154.985
		Max Case	COMB14	COMB13	COMB13	COMB14	COMB5	COMB6
STORY2	C113	Min Value	-4972.43	-127.82	-8.69	-3.202	-15.150	-320.698
		Min Case	COMB5	COMB6	COMB5	COMB13	COMB5	COMB6
		Max Value	-3025.74	59.36	1.82	5.929	13.528	154.667
		Max Case	COMB14	COMB13	COMB14	COMB6	COMB5	COMB13
STORY1	C113	Min Value	-5584.94	-129.42	-6.35	-1.861	-11.140	-455.873
		Min Case	COMB5	COMB6	COMB5	COMB13	COMB5	COMB6
		Max Value	-3403.21	64.47	3.27	3.459	15.170	241.080
		Max Case	COMB14	COMB13	COMB14	COMB6	COMB14	COMB13

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LOADING COMBINATIONS

COMBO	COMBO TYPE	CASE	CASE TYPE	SCALE FACTOR
COMB7	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	0.3000
		EY	Static	1.0000
COMB9	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	0.3000
		EY	Static	-1.0000
COMB15	ADD	DEAD	Static	0.9000
		EX	Static	0.3000
		EY	Static	1.0000
COMB17	ADD	DEAD	Static	0.9000
		EX	Static	0.3000
		EY	Static	-1.0000

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COLUMN FORCE ENVELOPES

STORY	COLUMN	ITEM	P	V2	V3	T	M2	M3
TOP FLOOR	C113	Min Value	-351.01	-25.79	-2.35	-0.089	-5.232	-55.135
		Min Case	COMB9	COMB9	COMB9	COMB7	COMB9	COMB15
		Max Value	-203.00	28.07	-0.23	0.033	2.525	44.652
		Max Case	COMB15	COMB15	COMB15	COMB17	COMB9	COMB9
STORY9	C113	Min Value	-896.75	-37.38	-3.49	-0.183	-6.925	-84.964
		Min Case	COMB9	COMB9	COMB9	COMB7	COMB9	COMB15
		Max Value	-548.71	50.87	-0.74	0.084	4.595	82.919
		Max Case	COMB15	COMB15	COMB15	COMB17	COMB9	COMB15
STORY8	C113	Min Value	-1449.17	-48.24	-3.28	-0.289	-6.154	-112.610
		Min Case	COMB7	COMB9	COMB9	COMB7	COMB9	COMB15
		Max Value	-892.83	72.63	-0.60	0.143	4.679	127.069
		Max Case	COMB17	COMB15	COMB15	COMB17	COMB9	COMB15

STORY7	C113	Min Value	-2021.20	-60.84	-4.54	-0.650	-8.566	-142.142
		Min Case	COMB7	COMB9	COMB9	COMB7	COMB9	COMB15
		Max Value	-1237.34	91.65	-0.75	0.329	6.415	160.303
		Max Case	COMB17	COMB15	COMB15	COMB17	COMB9	COMB15
STORY6	C113	Min Value	-2595.95	-68.90	-4.59	-0.808	-9.440	-161.612
		Min Case	COMB7	COMB9	COMB9	COMB7	COMB9	COMB15
		Max Value	-1591.83	108.30	-0.85	0.417	5.724	195.775
		Max Case	COMB17	COMB15	COMB15	COMB17	COMB9	COMB15
STORY5	C113	Min Value	-3176.75	-75.72	-4.72	-1.076	-9.468	-173.067
		Min Case	COMB7	COMB9	COMB9	COMB7	COMB9	COMB15
		Max Value	-1947.66	122.22	-1.02	0.562	6.098	230.256
		Max Case	COMB17	COMB15	COMB15	COMB17	COMB9	COMB15
STORY4	C113	Min Value	-3781.45	-82.21	-5.77	-2.684	-13.053	-171.904
		Min Case	COMB7	COMB9	COMB9	COMB7	COMB9	COMB15
		Max Value	-2306.78	131.03	-1.57	1.417	5.974	260.498
		Max Case	COMB17	COMB15	COMB15	COMB17	COMB9	COMB15
STORY3	C113	Min Value	-4390.00	-77.65	-3.29	-4.657	-8.897	-169.538
		Min Case	COMB7	COMB9	COMB9	COMB7	COMB9	COMB15
		Max Value	-2679.70	130.91	-0.04	2.481	5.848	287.774
		Max Case	COMB17	COMB15	COMB15	COMB17	COMB7	COMB15
STORY2	C113	Min Value	-5002.76	-72.77	-11.05	-5.941	-18.605	-180.242
		Min Case	COMB7	COMB9	COMB7	COMB15	COMB7	COMB9
		Max Value	-3056.07	114.41	-0.54	3.190	17.860	295.122
		Max Case	COMB17	COMB15	COMB17	COMB9	COMB7	COMB15
STORY1	C113	Min Value	-5619.42	-71.87	-8.77	-3.457	-18.640	-247.404
		Min Case	COMB7	COMB9	COMB7	COMB15	COMB7	COMB9
		Max Value	-3437.69	122.02	0.86	1.864	10.304	449.549
		Max Case	COMB17	COMB15	COMB17	COMB9	COMB7	COMB15

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LOADING COMBINATIONS

COMBO	COMBO TYPE	CASE	CASE TYPE	SCALE FACTOR
COMB8	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	-0.3000
COMB10	ADD	EY	Static	1.0000
		DEAD	Static	1.2000
		LIVE	Static	1.0000
		EX	Static	-0.3000
COMB16	ADD	EY	Static	-1.0000
		DEAD	Static	0.9000
		EX	Static	-0.3000
COMB18	ADD	EY	Static	1.0000
		DEAD	Static	0.9000
		EX	Static	-0.3000
		EY	Static	-1.0000

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COLUMN FORCE ENVELOPES

STORY	COLUMN	ITEM	P	V2	V3	T	M2	M3
TOP FLOOR	C113	Min Value	-351.65	-41.05	-2.73	-0.053	-5.890	-62.033
		Min Case	COMB10	COMB10	COMB10	COMB8	COMB10	COMB10
		Max Value	-203.63	12.81	-0.62	0.069	3.128	73.442
		Max Case	COMB16	COMB16	COMB16	COMB18	COMB10	COMB10
STORY9	C113	Min Value	-896.80	-62.88	-3.85	-0.104	-7.622	-107.312
		Min Case	COMB10	COMB10	COMB10	COMB8	COMB10	COMB10
		Max Value	-548.76	25.38	-1.10	0.164	5.092	100.187
		Max Case	COMB16	COMB16	COMB16	COMB18	COMB10	COMB10
STORY8	C113	Min Value	-1447.46	-83.63	-3.68	-0.160	-6.874	-147.825
		Min Case	COMB8	COMB10	COMB10	COMB8	COMB10	COMB10
		Max Value	-891.11	37.24	-1.00	0.272	5.270	128.152
		Max Case	COMB18	COMB16	COMB16	COMB18	COMB10	COMB10
STORY7	C113	Min Value	-2016.49	-105.48	-5.13	-0.356	-9.658	-186.564
		Min Case	COMB8	COMB10	COMB10	COMB8	COMB10	COMB10
		Max Value	-1232.64	47.01	-1.34	0.622	7.256	161.518
		Max Case	COMB18	COMB16	COMB16	COMB18	COMB10	COMB10
STORY6	C113	Min Value	-2587.29	-121.05	-5.17	-0.441	-10.609	-221.813
		Min Case	COMB8	COMB10	COMB10	COMB8	COMB10	COMB10
		Max Value	-1583.18	56.15	-1.43	0.784	6.459	177.641
		Max Case	COMB18	COMB16	COMB16	COMB18	COMB10	COMB10

STORY5	C113	Min Value	-3163.24	-134.16	-5.27	-0.585	-10.672	-253.523
		Min Case	COMB8	COMB10	COMB10	COMB8	COMB10	COMB10
		Max Value	-1934.15	63.79	-1.58	1.053	6.724	189.195
		Max Case	COMB18	COMB16	COMB16	COMB18	COMB10	COMB10
STORY4	C113	Min Value	-3762.34	-145.06	-6.34	-1.455	-14.682	-289.942
		Min Case	COMB8	COMB10	COMB10	COMB8	COMB10	COMB10
		Max Value	-2287.67	68.18	-2.14	2.646	6.233	188.758
		Max Case	COMB18	COMB16	COMB16	COMB18	COMB10	COMB10
STORY3	C113	Min Value	-4365.07	-139.44	-3.83	-2.517	-11.843	-305.183
		Min Case	COMB8	COMB10	COMB10	COMB8	COMB10	COMB10
		Max Value	-2654.77	69.12	-0.58	4.622	4.684	154.985
		Max Case	COMB18	COMB16	COMB16	COMB18	COMB8	COMB10
STORY2	C113	Min Value	-4972.43	-127.82	-8.69	-3.202	-15.150	-320.698
		Min Case	COMB8	COMB10	COMB8	COMB16	COMB8	COMB10
		Max Value	-3025.74	59.36	1.82	5.929	13.528	154.667
		Max Case	COMB18	COMB16	COMB18	COMB10	COMB8	COMB16
STORY1	C113	Min Value	-5584.94	-129.42	-6.35	-1.861	-11.140	-455.873
		Min Case	COMB8	COMB10	COMB8	COMB16	COMB8	COMB10
		Max Value	-3403.21	64.47	3.27	3.459	15.170	241.080
		Max Case	COMB18	COMB16	COMB18	COMB10	COMB18	COMB16

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LOADING COMBINATIONS

COMBO	COMBO TYPE	CASE	CASE TYPE	SCALE FACTOR
COMB19	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

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BEAM FORCES

STORY	BEAM	LOAD	LOC	P	V2	V3	T	M2	M3
TOP FLOOR	B82	COMB19 MAX	0.3500	0.00	-52.30	0.00	-1.350	0.000	-25.947
			0.8417	0.00	-47.44	0.00	-1.350	0.000	-1.378
			1.3333	0.00	-41.32	0.00	-1.350	0.000	20.492
			1.8250	0.00	-34.11	0.00	-1.350	0.000	48.953
			2.3167	0.00	-27.63	0.00	-1.350	0.000	75.325
			2.8083	0.00	-22.40	0.00	-1.350	0.000	97.386
			3.3000	0.00	-18.43	0.00	-1.350	0.000	125.101
			3.3000	0.00	66.14	0.00	2.611	0.000	125.215
			3.7917	0.00	71.67	0.00	2.611	0.000	97.339
			4.2833	0.00	79.37	0.00	2.611	0.000	74.395
			4.7750	0.00	89.21	0.00	2.611	0.000	47.141
			5.2667	0.00	100.32	0.00	2.611	0.000	19.634
			5.7583	0.00	109.54	0.00	2.611	0.000	-2.646
			6.2500	0.00	116.62	0.00	2.611	0.000	-27.626
			TOP FLOOR	B82	COMB19 MIN	0.3500	0.00	-114.85	0.00
0.8417	0.00	-107.78				0.00	-2.547	0.000	-89.156
1.3333	0.00	-98.55				0.00	-2.547	0.000	-38.343
1.8250	0.00	-87.45				0.00	-2.547	0.000	-2.478
2.3167	0.00	-77.60				0.00	-2.547	0.000	26.761
2.8083	0.00	-69.91				0.00	-2.547	0.000	53.124
3.3000	0.00	-64.37				0.00	-2.547	0.000	76.416
3.3000	0.00	19.27				0.00	1.421	0.000	76.520
3.7917	0.00	23.24				0.00	1.421	0.000	52.023
4.2833	0.00	28.46				0.00	1.421	0.000	25.266
4.7750	0.00	34.94				0.00	1.421	0.000	-4.369
5.2667	0.00	42.15				0.00	1.421	0.000	-42.467
5.7583	0.00	48.27				0.00	1.421	0.000	-94.146
6.2500	0.00	53.13				0.00	1.421	0.000	-149.832

TOP FLOOR	B83	COMB19 MAX	0.3500	0.00	-48.79	0.00	-1.333	0.000	-25.524
			0.7917	0.00	-44.48	0.00	-1.333	0.000	-4.890
			1.2333	0.00	-39.16	0.00	-1.333	0.000	13.617
			1.6750	0.00	-32.98	0.00	-1.333	0.000	35.505
			2.1167	0.00	-27.45	0.00	-1.333	0.000	58.557
			2.5583	0.00	-22.92	0.00	-1.333	0.000	78.304
			3.0000	0.00	-19.41	0.00	-1.333	0.000	101.816
			3.0000	0.00	61.36	0.00	2.574	0.000	101.649
			3.4417	0.00	66.23	0.00	2.574	0.000	77.784
			3.8833	0.00	72.85	0.00	2.574	0.000	58.628
			4.3250	0.00	81.20	0.00	2.574	0.000	36.167
			4.7667	0.00	90.66	0.00	2.574	0.000	13.660
			5.2083	0.00	98.65	0.00	2.574	0.000	-4.575
			5.6500	0.00	104.91	0.00	2.574	0.000	-24.938
TOP FLOOR	B83	COMB19 MIN	0.3500	0.00	-106.13	0.00	-2.544	0.000	-126.292
			0.7917	0.00	-99.87	0.00	-2.544	0.000	-80.735
			1.2333	0.00	-91.88	0.00	-2.544	0.000	-38.325
			1.6750	0.00	-82.43	0.00	-2.544	0.000	-5.759
			2.1167	0.00	-74.07	0.00	-2.544	0.000	18.991
			2.5583	0.00	-67.46	0.00	-2.544	0.000	41.521
			3.0000	0.00	-62.58	0.00	-2.544	0.000	62.277
			3.0000	0.00	18.80	0.00	1.333	0.000	62.221
			3.4417	0.00	22.31	0.00	1.333	0.000	42.639
			3.8833	0.00	26.83	0.00	1.333	0.000	20.330
			4.3250	0.00	32.37	0.00	1.333	0.000	-4.200
			4.7667	0.00	38.54	0.00	1.333	0.000	-35.335
			5.2083	0.00	43.86	0.00	1.333	0.000	-77.205
			5.6500	0.00	48.18	0.00	1.333	0.000	-122.222
STORY9	B82	COMB19 MAX	0.3500	0.00	-65.43	0.00	-1.208	0.000	-9.979
			0.8417	0.00	-56.14	0.00	-1.208	0.000	19.957
			1.3333	0.00	-45.60	0.00	-1.208	0.000	45.017
			1.8250	0.00	-33.96	0.00	-1.208	0.000	80.999
			2.3167	0.00	-23.06	0.00	-1.208	0.000	114.498
			2.8083	0.00	-13.41	0.00	-1.208	0.000	143.374
			3.3000	0.00	-5.01	0.00	-1.208	0.000	181.033
			3.3000	0.00	90.33	0.00	3.572	0.000	181.151
			3.7917	0.00	102.13	0.00	3.572	0.000	142.009
			4.2833	0.00	116.81	0.00	3.572	0.000	111.890
			4.7750	0.00	134.37	0.00	3.572	0.000	77.104
			5.2667	0.00	153.62	0.00	3.572	0.000	42.044
			5.7583	0.00	170.35	0.00	3.572	0.000	16.261
			6.2500	0.00	184.20	0.00	3.572	0.000	-14.397
STORY9	B82	COMB19 MIN	0.3500	0.00	-181.57	0.00	-3.525	0.000	-233.604
			0.8417	0.00	-167.72	0.00	-3.525	0.000	-147.618
			1.3333	0.00	-150.99	0.00	-3.525	0.000	-69.149
			1.8250	0.00	-131.75	0.00	-3.525	0.000	-15.995
			2.3167	0.00	-114.19	0.00	-3.525	0.000	24.813
			2.8083	0.00	-99.51	0.00	-3.525	0.000	60.568
			3.3000	0.00	-87.71	0.00	-3.525	0.000	91.887
			3.3000	0.00	6.48	0.00	1.304	0.000	91.864
			3.7917	0.00	14.87	0.00	1.304	0.000	60.016
			4.2833	0.00	24.52	0.00	1.304	0.000	23.535
			4.7750	0.00	35.43	0.00	1.304	0.000	-17.998
			5.2667	0.00	47.06	0.00	1.304	0.000	-74.086
			5.7583	0.00	57.61	0.00	1.304	0.000	-153.845
			6.2500	0.00	66.90	0.00	1.304	0.000	-241.122
STORY9	B83	COMB19 MAX	0.3500	0.00	-57.29	0.00	-1.134	0.000	-3.398
			0.7917	0.00	-49.00	0.00	-1.134	0.000	20.111
			1.2333	0.00	-39.70	0.00	-1.134	0.000	39.736
			1.6750	0.00	-29.55	0.00	-1.134	0.000	66.109
			2.1167	0.00	-20.04	0.00	-1.134	0.000	93.676
			2.5583	0.00	-11.55	0.00	-1.134	0.000	115.675
			3.0000	0.00	-4.06	0.00	-1.134	0.000	149.063
			3.0000	0.00	86.63	0.00	3.467	0.000	148.878
			3.4417	0.00	97.09	0.00	3.467	0.000	116.639
			3.8833	0.00	109.89	0.00	3.467	0.000	95.479
			4.3250	0.00	125.00	0.00	3.467	0.000	68.947
			4.7667	0.00	141.59	0.00	3.467	0.000	42.005
			5.2083	0.00	156.23	0.00	3.467	0.000	22.996
			5.6500	0.00	168.54	0.00	3.467	0.000	0.102
STORY9	B83	COMB19 MIN	0.3500	0.00	-170.81	0.00	-3.466	0.000	-209.247
			0.7917	0.00	-158.50	0.00	-3.466	0.000	-136.439
			1.2333	0.00	-143.87	0.00	-3.466	0.000	-69.582
			1.6750	0.00	-127.27	0.00	-3.466	0.000	-20.748
			2.1167	0.00	-112.16	0.00	-3.466	0.000	15.388
			2.5583	0.00	-99.36	0.00	-3.466	0.000	47.548
			3.0000	0.00	-88.90	0.00	-3.466	0.000	76.179
			3.0000	0.00	2.67	0.00	1.183	0.000	76.109
			3.4417	0.00	10.15	0.00	1.183	0.000	48.154
			3.8833	0.00	18.65	0.00	1.183	0.000	16.578

			4.3250	0.00	28.16	0.00	1.183	0.000	-18.975
			4.7667	0.00	38.31	0.00	1.183	0.000	-65.622
			5.2083	0.00	47.61	0.00	1.183	0.000	-131.477
			5.6500	0.00	55.89	0.00	1.183	0.000	-203.281
STORY8	B82	COMB19 MAX							
			0.3500	0.00	-52.97	0.00	-1.228	0.000	27.274
			0.8417	0.00	-43.68	0.00	-1.228	0.000	51.087
			1.3333	0.00	-33.14	0.00	-1.228	0.000	70.024
			1.8250	0.00	-21.50	0.00	-1.228	0.000	99.824
			2.3167	0.00	-10.60	0.00	-1.228	0.000	127.273
			2.8083	0.00	-0.95	0.00	-1.228	0.000	146.797
			3.3000	0.00	7.45	0.00	-1.228	0.000	181.655
			3.3000	0.00	103.02	0.00	3.655	0.000	181.766
			3.7917	0.00	114.82	0.00	3.655	0.000	145.588
			4.2833	0.00	129.50	0.00	3.655	0.000	125.011
			4.7750	0.00	147.06	0.00	3.655	0.000	96.508
			5.2667	0.00	166.30	0.00	3.655	0.000	67.529
			5.7583	0.00	183.03	0.00	3.655	0.000	48.018
			6.2500	0.00	196.88	0.00	3.655	0.000	23.633
STORY8	B82	COMB19 MIN							
			0.3500	0.00	-194.73	0.00	-3.606	0.000	-271.854
			0.8417	0.00	-180.88	0.00	-3.606	0.000	-179.400
			1.3333	0.00	-164.15	0.00	-3.606	0.000	-94.463
			1.8250	0.00	-144.90	0.00	-3.606	0.000	-34.783
			2.3167	0.00	-127.34	0.00	-3.606	0.000	12.420
			2.8083	0.00	-112.66	0.00	-3.606	0.000	54.569
			3.3000	0.00	-100.86	0.00	-3.606	0.000	92.282
			3.3000	0.00	-6.28	0.00	1.374	0.000	92.258
			3.7917	0.00	2.12	0.00	1.374	0.000	54.276
			4.2833	0.00	11.77	0.00	1.374	0.000	11.547
			4.7750	0.00	22.67	0.00	1.374	0.000	-36.234
			5.2667	0.00	34.31	0.00	1.374	0.000	-98.367
			5.7583	0.00	44.85	0.00	1.374	0.000	-184.364
			6.2500	0.00	54.14	0.00	1.374	0.000	-277.878
STORY8	B83	COMB19 MAX							
			0.3500	0.00	-41.98	0.00	-1.114	0.000	37.194
			0.7917	0.00	-33.69	0.00	-1.114	0.000	53.942
			1.2333	0.00	-24.39	0.00	-1.114	0.000	66.807
			1.6750	0.00	-14.24	0.00	-1.114	0.000	86.522
			2.1167	0.00	-4.74	0.00	-1.114	0.000	107.329
			2.5583	0.00	3.76	0.00	-1.114	0.000	121.973
			3.0000	0.00	11.25	0.00	-1.114	0.000	149.320
			3.0000	0.00	102.33	0.00	3.552	0.000	149.149
			3.4417	0.00	112.80	0.00	3.552	0.000	122.727
			3.8833	0.00	125.59	0.00	3.552	0.000	108.928
			4.3250	0.00	140.70	0.00	3.552	0.000	88.965
			4.7667	0.00	157.30	0.00	3.552	0.000	68.715
			5.2083	0.00	171.93	0.00	3.552	0.000	56.333
			5.6500	0.00	184.24	0.00	3.552	0.000	40.067
STORY8	B83	COMB19 MIN							
			0.3500	0.00	-186.09	0.00	-3.548	0.000	-249.453
			0.7917	0.00	-173.78	0.00	-3.548	0.000	-169.895
			1.2333	0.00	-159.15	0.00	-3.548	0.000	-96.287
			1.6750	0.00	-142.56	0.00	-3.548	0.000	-40.804
			2.1167	0.00	-127.44	0.00	-3.548	0.000	2.082
			2.5583	0.00	-114.65	0.00	-3.548	0.000	40.992
			3.0000	0.00	-104.18	0.00	-3.548	0.000	76.332
			3.0000	0.00	-12.34	0.00	1.208	0.000	76.241
			3.4417	0.00	-4.85	0.00	1.208	0.000	41.317
			3.8833	0.00	3.64	0.00	1.208	0.000	2.864
			4.3250	0.00	13.15	0.00	1.208	0.000	-39.565
			4.7667	0.00	23.30	0.00	1.208	0.000	-93.211
			5.2083	0.00	32.60	0.00	1.208	0.000	-166.001
			5.6500	0.00	40.89	0.00	1.208	0.000	-244.741
STORY7	B82	COMB19 MAX							
			0.4000	0.00	-39.40	0.00	-1.239	0.000	66.288
			0.8833	0.00	-30.16	0.00	-1.239	0.000	83.147
			1.3667	0.00	-19.70	0.00	-1.239	0.000	95.244
			1.8500	0.00	-8.24	0.00	-1.239	0.000	119.133
			2.3333	0.00	2.43	0.00	-1.239	0.000	139.612
			2.8167	0.00	11.88	0.00	-1.239	0.000	152.479
			3.3000	0.00	20.13	0.00	-1.239	0.000	180.711
			3.3000	0.00	115.88	0.00	3.757	0.000	180.817
			3.7833	0.00	127.45	0.00	3.757	0.000	150.952
			4.2667	0.00	141.81	0.00	3.757	0.000	136.927
			4.7500	0.00	158.95	0.00	3.757	0.000	115.290
			5.2333	0.00	177.92	0.00	3.757	0.000	92.301
			5.7167	0.00	194.58	0.00	3.757	0.000	79.572
			6.2000	0.00	208.46	0.00	3.757	0.000	62.081
STORY7	B82	COMB19 MIN							
			0.4000	0.00	-206.03	0.00	-3.719	0.000	-299.570
			0.8833	0.00	-192.15	0.00	-3.719	0.000	-203.232
			1.3667	0.00	-175.49	0.00	-3.719	0.000	-114.274
			1.8500	0.00	-156.52	0.00	-3.719	0.000	-51.134
			2.3333	0.00	-139.38	0.00	-3.719	0.000	1.138
			2.8167	0.00	-125.02	0.00	-3.719	0.000	48.547
			3.3000	0.00	-113.44	0.00	-3.719	0.000	91.680

			3.3000	0.00	-18.82	0.00	1.449	0.000	91.655
			3.7833	0.00	-10.58	0.00	1.449	0.000	48.391
			4.2667	0.00	-1.12	0.00	1.449	0.000	0.331
			4.7500	0.00	9.55	0.00	1.449	0.000	-52.592
			5.2333	0.00	21.01	0.00	1.449	0.000	-118.439
			5.7167	0.00	31.46	0.00	1.449	0.000	-208.573
			6.2000	0.00	40.71	0.00	1.449	0.000	-306.089
STORY7	B83	COMB19 MAX							
			0.4000	0.00	-25.94	0.00	-1.056	0.000	78.778
			0.8333	0.00	-17.71	0.00	-1.056	0.000	88.270
			1.2667	0.00	-8.50	0.00	-1.056	0.000	93.982
			1.7000	0.00	1.47	0.00	-1.056	0.000	107.697
			2.1333	0.00	10.76	0.00	-1.056	0.000	121.278
			2.5667	0.00	19.07	0.00	-1.056	0.000	128.964
			3.0000	0.00	26.40	0.00	-1.056	0.000	149.717
			3.0000	0.00	117.50	0.00	3.653	0.000	149.555
			3.4333	0.00	127.75	0.00	3.653	0.000	130.095
			3.8667	0.00	140.23	0.00	3.653	0.000	123.388
			4.3000	0.00	154.96	0.00	3.653	0.000	110.785
			4.7333	0.00	171.27	0.00	3.653	0.000	96.437
			5.1667	0.00	185.82	0.00	3.653	0.000	91.284
			5.6000	0.00	198.14	0.00	3.653	0.000	82.351
STORY7	B83	COMB19 MIN							
			0.4000	0.00	-200.37	0.00	-3.653	0.000	-280.143
			0.8333	0.00	-188.06	0.00	-3.653	0.000	-195.903
			1.2667	0.00	-173.51	0.00	-3.653	0.000	-117.483
			1.7000	0.00	-157.20	0.00	-3.653	0.000	-58.010
			2.1333	0.00	-142.47	0.00	-3.653	0.000	-9.429
			2.5667	0.00	-129.99	0.00	-3.653	0.000	35.340
			3.0000	0.00	-119.74	0.00	-3.653	0.000	76.440
			3.0000	0.00	-27.69	0.00	1.223	0.000	76.356
			3.4333	0.00	-20.36	0.00	1.223	0.000	35.526
			3.8667	0.00	-12.05	0.00	1.223	0.000	-8.693
			4.3000	0.00	-2.77	0.00	1.223	0.000	-56.723
			4.7333	0.00	7.21	0.00	1.223	0.000	-114.034
			5.1667	0.00	16.41	0.00	1.223	0.000	-191.484
			5.6000	0.00	24.65	0.00	1.223	0.000	-274.755
STORY6	B82	COMB19 MAX							
			0.4000	0.00	-30.16	0.00	-1.265	0.000	92.886
			0.8833	0.00	-20.92	0.00	-1.265	0.000	105.279
			1.3667	0.00	-10.46	0.00	-1.265	0.000	112.910
			1.8500	0.00	1.00	0.00	-1.265	0.000	132.089
			2.3333	0.00	11.67	0.00	-1.265	0.000	148.124
			2.8167	0.00	21.12	0.00	-1.265	0.000	156.547
			3.3000	0.00	29.37	0.00	-1.265	0.000	180.245
			3.3000	0.00	125.37	0.00	3.858	0.000	180.344
			3.7833	0.00	136.95	0.00	3.858	0.000	154.931
			4.2667	0.00	151.31	0.00	3.858	0.000	145.326
			4.7500	0.00	168.45	0.00	3.858	0.000	128.108
			5.2333	0.00	187.42	0.00	3.858	0.000	109.856
			5.7167	0.00	204.08	0.00	3.858	0.000	101.581
			6.2000	0.00	217.96	0.00	3.858	0.000	88.544
STORY6	B82	COMB19 MIN							
			0.4000	0.00	-215.45	0.00	-3.828	0.000	-327.326
			0.8833	0.00	-201.57	0.00	-3.828	0.000	-226.434
			1.3667	0.00	-184.91	0.00	-3.828	0.000	-132.923
			1.8500	0.00	-165.94	0.00	-3.828	0.000	-64.988
			2.3333	0.00	-148.80	0.00	-3.828	0.000	-8.185
			2.8167	0.00	-134.44	0.00	-3.828	0.000	43.755
			3.3000	0.00	-122.86	0.00	-3.828	0.000	91.418
			3.3000	0.00	-28.04	0.00	1.530	0.000	91.394
			3.7833	0.00	-19.79	0.00	1.530	0.000	43.630
			4.2667	0.00	-10.34	0.00	1.530	0.000	-8.985
			4.7500	0.00	0.33	0.00	1.530	0.000	-66.461
			5.2333	0.00	11.79	0.00	1.530	0.000	-137.180
			5.7167	0.00	22.25	0.00	1.530	0.000	-231.903
			6.2000	0.00	31.49	0.00	1.530	0.000	-334.007
STORY6	B83	COMB19 MAX							
			0.4000	0.00	-14.68	0.00	-1.024	0.000	108.242
			0.8333	0.00	-6.45	0.00	-1.024	0.000	112.855
			1.2667	0.00	2.76	0.00	-1.024	0.000	113.689
			1.7000	0.00	12.73	0.00	-1.024	0.000	122.577
			2.1333	0.00	22.02	0.00	-1.024	0.000	131.315
			2.5667	0.00	30.32	0.00	-1.024	0.000	134.157
			3.0000	0.00	37.66	0.00	-1.024	0.000	150.157
			3.0000	0.00	128.96	0.00	3.754	0.000	150.008
			3.4333	0.00	139.21	0.00	3.754	0.000	135.416
			3.8667	0.00	151.70	0.00	3.754	0.000	133.587
			4.3000	0.00	166.42	0.00	3.754	0.000	125.862
			4.7333	0.00	182.73	0.00	3.754	0.000	116.295
			5.1667	0.00	197.28	0.00	3.754	0.000	116.037
			5.6000	0.00	209.60	0.00	3.754	0.000	111.999
STORY6	B83	COMB19 MIN							
			0.4000	0.00	-211.95	0.00	-3.755	0.000	-309.800
			0.8333	0.00	-199.63	0.00	-3.755	0.000	-220.544
			1.2667	0.00	-185.08	0.00	-3.755	0.000	-137.109
			1.7000	0.00	-168.77	0.00	-3.755	0.000	-72.673
			2.1333	0.00	-154.05	0.00	-3.755	0.000	-19.113

			2.5667	0.00	-141.56	0.00	-3.755	0.000	30.636
			3.0000	0.00	-131.31	0.00	-3.755	0.000	76.633
			3.0000	0.00	-38.99	0.00	1.254	0.000	76.557
			3.4333	0.00	-31.65	0.00	1.254	0.000	30.777
			3.8667	0.00	-23.34	0.00	1.254	0.000	-18.393
			4.3000	0.00	-14.06	0.00	1.254	0.000	-71.373
			4.7333	0.00	-4.09	0.00	1.254	0.000	-133.537
			5.1667	0.00	5.12	0.00	1.254	0.000	-215.955
			5.6000	0.00	13.35	0.00	1.254	0.000	-304.193
STORY5	B82	COMB19 MAX	0.4000	0.00	-22.53	0.00	-1.312	0.000	115.579
			0.8833	0.00	-13.29	0.00	-1.312	0.000	124.285
			1.3667	0.00	-2.83	0.00	-1.312	0.000	128.228
			1.8500	0.00	8.63	0.00	-1.312	0.000	143.666
			2.3333	0.00	19.30	0.00	-1.312	0.000	156.146
			2.8167	0.00	28.75	0.00	-1.312	0.000	161.013
			3.3000	0.00	37.00	0.00	-1.312	0.000	181.173
			3.3000	0.00	133.50	0.00	3.925	0.000	181.258
			3.7833	0.00	145.07	0.00	3.925	0.000	159.462
			4.2667	0.00	159.43	0.00	3.925	0.000	153.666
			4.7500	0.00	176.57	0.00	3.925	0.000	140.257
			5.2333	0.00	195.54	0.00	3.925	0.000	125.561
			5.7167	0.00	212.20	0.00	3.925	0.000	121.116
			6.2000	0.00	226.08	0.00	3.925	0.000	111.908
STORY5	B82	COMB19 MIN	0.4000	0.00	-224.09	0.00	-3.896	0.000	-351.647
			0.8833	0.00	-210.21	0.00	-3.896	0.000	-246.581
			1.3667	0.00	-193.55	0.00	-3.896	0.000	-148.895
			1.8500	0.00	-174.58	0.00	-3.896	0.000	-76.730
			2.3333	0.00	-157.44	0.00	-3.896	0.000	-15.884
			2.8167	0.00	-143.08	0.00	-3.896	0.000	40.099
			3.3000	0.00	-131.50	0.00	-3.896	0.000	91.805
			3.3000	0.00	-35.96	0.00	1.533	0.000	91.781
			3.7833	0.00	-27.71	0.00	1.533	0.000	40.282
			4.2667	0.00	-18.26	0.00	1.533	0.000	-16.240
			4.7500	0.00	-7.59	0.00	1.533	0.000	-77.624
			5.2333	0.00	3.87	0.00	1.533	0.000	-151.997
			5.7167	0.00	14.33	0.00	1.533	0.000	-250.648
			6.2000	0.00	23.57	0.00	1.533	0.000	-356.679
STORY5	B83	COMB19 MAX	0.4000	0.00	-4.77	0.00	-1.022	0.000	134.191
			0.8333	0.00	3.46	0.00	-1.022	0.000	134.511
			1.2667	0.00	12.67	0.00	-1.022	0.000	131.053
			1.7000	0.00	22.64	0.00	-1.022	0.000	135.808
			2.1333	0.00	31.92	0.00	-1.022	0.000	140.267
			2.5667	0.00	40.23	0.00	-1.022	0.000	138.830
			3.0000	0.00	47.56	0.00	-1.022	0.000	150.710
			3.0000	0.00	139.64	0.00	3.821	0.000	150.583
			3.4333	0.00	149.89	0.00	3.821	0.000	140.008
			3.8667	0.00	162.38	0.00	3.821	0.000	142.166
			4.3000	0.00	177.10	0.00	3.821	0.000	138.429
			4.7333	0.00	193.41	0.00	3.821	0.000	133.171
			5.1667	0.00	207.96	0.00	3.821	0.000	137.032
			5.6000	0.00	220.28	0.00	3.821	0.000	137.115
STORY5	B83	COMB19 MIN	0.4000	0.00	-221.97	0.00	-3.824	0.000	-335.269
			0.8333	0.00	-209.65	0.00	-3.824	0.000	-241.670
			1.2667	0.00	-195.10	0.00	-3.824	0.000	-153.893
			1.7000	0.00	-178.79	0.00	-3.824	0.000	-85.274
			2.1333	0.00	-164.07	0.00	-3.824	0.000	-27.384
			2.5667	0.00	-151.58	0.00	-3.824	0.000	26.695
			3.0000	0.00	-141.33	0.00	-3.824	0.000	76.826
			3.0000	0.00	-48.49	0.00	1.310	0.000	76.764
			3.4333	0.00	-41.16	0.00	1.310	0.000	26.488
			3.8667	0.00	-32.85	0.00	1.310	0.000	-27.178
			4.3000	0.00	-23.57	0.00	1.310	0.000	-84.655
			4.7333	0.00	-13.60	0.00	1.310	0.000	-151.637
			5.1667	0.00	-4.39	0.00	1.310	0.000	-238.683
			5.6000	0.00	3.85	0.00	1.310	0.000	-331.549
STORY4	B82	COMB19 MAX	0.4500	0.00	-16.31	0.00	-1.378	0.000	131.838
			0.9250	0.00	-7.11	0.00	-1.378	0.000	137.445
			1.4000	0.00	3.26	0.00	-1.378	0.000	138.405
			1.8750	0.00	14.54	0.00	-1.378	0.000	151.887
			2.3500	0.00	24.97	0.00	-1.378	0.000	161.332
			2.8250	0.00	34.23	0.00	-1.378	0.000	163.469
			3.3000	0.00	42.32	0.00	-1.378	0.000	181.135
			3.3000	0.00	139.38	0.00	4.005	0.000	181.206
			3.7750	0.00	150.73	0.00	4.005	0.000	161.877
			4.2500	0.00	164.77	0.00	4.005	0.000	158.767
			4.7250	0.00	181.50	0.00	4.005	0.000	148.350
			5.2000	0.00	200.17	0.00	4.005	0.000	135.586
			5.6750	0.00	216.76	0.00	4.005	0.000	134.085
			6.1500	0.00	230.66	0.00	4.005	0.000	127.936
STORY4	B82	COMB19 MIN	0.4500	0.00	-228.50	0.00	-3.983	0.000	-356.818
			0.9250	0.00	-214.60	0.00	-3.983	0.000	-251.473

			1.4000	0.00	-198.02	0.00	-3.983	0.000	-153.369
			1.8750	0.00	-179.35	0.00	-3.983	0.000	-81.443
			2.3500	0.00	-162.62	0.00	-3.983	0.000	-19.208
			2.8250	0.00	-148.58	0.00	-3.983	0.000	38.351
			3.3000	0.00	-137.22	0.00	-3.983	0.000	91.788
			3.3000	0.00	-41.18	0.00	1.383	0.000	91.765
			3.7750	0.00	-33.09	0.00	1.383	0.000	38.461
			4.2500	0.00	-23.83	0.00	1.383	0.000	-19.690
			4.7250	0.00	-13.40	0.00	1.383	0.000	-82.518
			5.2000	0.00	-2.12	0.00	1.383	0.000	-156.728
			5.6750	0.00	8.25	0.00	1.383	0.000	-255.856
			6.1500	0.00	17.45	0.00	1.383	0.000	-362.223
STORY4	B83	COMB19 MAX							
			0.4500	0.00	3.18	0.00	-0.940	0.000	152.792
			0.8750	0.00	11.36	0.00	-0.940	0.000	149.736
			1.3000	0.00	20.47	0.00	-0.940	0.000	143.006
			1.7250	0.00	30.26	0.00	-0.940	0.000	145.855
			2.1500	0.00	39.31	0.00	-0.940	0.000	146.946
			2.5750	0.00	47.44	0.00	-0.940	0.000	142.402
			3.0000	0.00	54.62	0.00	-0.940	0.000	151.468
			3.0000	0.00	147.34	0.00	3.896	0.000	151.363
			3.4250	0.00	157.38	0.00	3.896	0.000	143.331
			3.8500	0.00	169.56	0.00	3.896	0.000	148.335
			4.2750	0.00	183.89	0.00	3.896	0.000	147.703
			4.7000	0.00	199.90	0.00	3.896	0.000	144.459
			5.1250	0.00	214.36	0.00	3.896	0.000	151.424
			5.5500	0.00	226.67	0.00	3.896	0.000	154.716
STORY4	B83	COMB19 MIN							
			0.4500	0.00	-227.80	0.00	-3.905	0.000	-341.750
			0.8750	0.00	-215.49	0.00	-3.905	0.000	-247.472
			1.3000	0.00	-201.03	0.00	-3.905	0.000	-158.884
			1.7250	0.00	-185.02	0.00	-3.905	0.000	-90.485
			2.1500	0.00	-170.69	0.00	-3.905	0.000	-30.880
			2.5750	0.00	-158.51	0.00	-3.905	0.000	25.075
			3.0000	0.00	-148.47	0.00	-3.905	0.000	77.219
			3.0000	0.00	-55.17	0.00	1.403	0.000	77.172
			3.4250	0.00	-47.99	0.00	1.403	0.000	24.727
			3.8500	0.00	-39.87	0.00	1.403	0.000	-30.971
			4.2750	0.00	-30.81	0.00	1.403	0.000	-90.320
			4.7000	0.00	-21.02	0.00	1.403	0.000	-157.608
			5.1250	0.00	-11.91	0.00	1.403	0.000	-245.716
			5.5500	0.00	-3.73	0.00	1.403	0.000	-339.513
STORY3	B82	COMB19 MAX							
			0.4500	0.00	-16.43	0.00	-1.433	0.000	131.597
			0.9250	0.00	-7.23	0.00	-1.433	0.000	137.263
			1.4000	0.00	3.14	0.00	-1.433	0.000	138.283
			1.8750	0.00	14.41	0.00	-1.433	0.000	151.795
			2.3500	0.00	24.84	0.00	-1.433	0.000	161.343
			2.8250	0.00	34.11	0.00	-1.433	0.000	163.584
			3.3000	0.00	42.20	0.00	-1.433	0.000	181.407
			3.3000	0.00	139.90	0.00	3.977	0.000	181.464
			3.7750	0.00	151.25	0.00	3.977	0.000	161.803
			4.2500	0.00	165.29	0.00	3.977	0.000	158.366
			4.7250	0.00	182.02	0.00	3.977	0.000	147.623
			5.2000	0.00	200.69	0.00	3.977	0.000	134.840
			5.6750	0.00	217.28	0.00	3.977	0.000	133.113
			6.1500	0.00	231.18	0.00	3.977	0.000	126.738
STORY3	B82	COMB19 MIN							
			0.4500	0.00	-228.51	0.00	-3.959	0.000	-356.590
			0.9250	0.00	-214.61	0.00	-3.959	0.000	-251.240
			1.4000	0.00	-198.03	0.00	-3.959	0.000	-153.131
			1.8750	0.00	-179.36	0.00	-3.959	0.000	-81.171
			2.3500	0.00	-162.63	0.00	-3.959	0.000	-18.974
			2.8250	0.00	-148.59	0.00	-3.959	0.000	38.546
			3.3000	0.00	-137.23	0.00	-3.959	0.000	91.944
			3.3000	0.00	-40.71	0.00	0.923	0.000	91.922
			3.7750	0.00	-32.62	0.00	0.923	0.000	38.418
			4.2500	0.00	-23.35	0.00	0.923	0.000	-19.880
			4.7250	0.00	-12.92	0.00	0.923	0.000	-82.856
			5.2000	0.00	-1.65	0.00	0.923	0.000	-157.520
			5.6750	0.00	8.72	0.00	0.923	0.000	-256.895
			6.1500	0.00	17.92	0.00	0.923	0.000	-363.511
STORY3	B83	COMB19 MAX							
			0.4500	0.00	3.82	0.00	-0.696	0.000	154.816
			0.8750	0.00	11.99	0.00	-0.696	0.000	151.488
			1.3000	0.00	21.11	0.00	-0.696	0.000	144.487
			1.7250	0.00	30.89	0.00	-0.696	0.000	147.409
			2.1500	0.00	39.95	0.00	-0.696	0.000	148.204
			2.5750	0.00	48.07	0.00	-0.696	0.000	143.363
			3.0000	0.00	55.26	0.00	-0.696	0.000	152.193
			3.0000	0.00	148.79	0.00	3.856	0.000	152.110
			3.4250	0.00	158.82	0.00	3.856	0.000	143.719
			3.8500	0.00	171.00	0.00	3.856	0.000	148.482
			4.2750	0.00	185.34	0.00	3.856	0.000	147.609
			4.7000	0.00	201.35	0.00	3.856	0.000	144.491
			5.1250	0.00	215.81	0.00	3.856	0.000	151.377
			5.5500	0.00	228.12	0.00	3.856	0.000	154.588
STORY3	B83	COMB19 MIN							

			0.4500	0.00	-228.00	0.00	-4.073	0.000	-341.637
			0.8750	0.00	-215.69	0.00	-4.073	0.000	-247.276
			1.3000	0.00	-201.23	0.00	-4.073	0.000	-158.604
			1.7250	0.00	-185.22	0.00	-4.073	0.000	-90.464
			2.1500	0.00	-170.89	0.00	-4.073	0.000	-30.750
			2.5750	0.00	-158.70	0.00	-4.073	0.000	25.313
			3.0000	0.00	-148.67	0.00	-4.073	0.000	77.617
			3.0000	0.00	-54.99	0.00	1.518	0.000	77.584
			3.4250	0.00	-47.80	0.00	1.518	0.000	24.685
			3.8500	0.00	-39.68	0.00	1.518	0.000	-31.467
			4.2750	0.00	-30.62	0.00	1.518	0.000	-91.269
			4.7000	0.00	-20.83	0.00	1.518	0.000	-159.378
			5.1250	0.00	-11.72	0.00	1.518	0.000	-248.100
			5.5500	0.00	-3.55	0.00	1.518	0.000	-342.511
STORY2	B82	COMB19 MAX							
			0.4500	0.00	-23.90	0.00	-1.428	0.000	110.826
			0.9250	0.00	-14.70	0.00	-1.428	0.000	120.039
			1.4000	0.00	-4.33	0.00	-1.428	0.000	124.604
			1.8750	0.00	6.95	0.00	-1.428	0.000	141.529
			2.3500	0.00	17.38	0.00	-1.428	0.000	154.783
			2.8250	0.00	26.64	0.00	-1.428	0.000	160.730
			3.3000	0.00	34.73	0.00	-1.428	0.000	182.344
			3.3000	0.00	133.16	0.00	4.866	0.000	182.382
			3.7750	0.00	144.51	0.00	4.866	0.000	159.125
			4.2500	0.00	158.55	0.00	4.866	0.000	152.225
			4.7250	0.00	175.28	0.00	4.866	0.000	138.017
			5.2000	0.00	193.95	0.00	4.866	0.000	121.613
			5.6750	0.00	210.54	0.00	4.866	0.000	116.467
			6.1500	0.00	224.44	0.00	4.866	0.000	106.674
STORY2	B82	COMB19 MIN							
			0.4500	0.00	-222.21	0.00	-4.058	0.000	-337.844
			0.9250	0.00	-208.32	0.00	-4.058	0.000	-235.487
			1.4000	0.00	-191.73	0.00	-4.058	0.000	-140.370
			1.8750	0.00	-173.06	0.00	-4.058	0.000	-71.268
			2.3500	0.00	-156.33	0.00	-4.058	0.000	-12.224
			2.8250	0.00	-142.29	0.00	-4.058	0.000	42.144
			3.3000	0.00	-130.94	0.00	-4.058	0.000	92.390
			3.3000	0.00	-33.51	0.00	0.155	0.000	92.369
			3.7750	0.00	-25.42	0.00	0.155	0.000	42.155
			4.2500	0.00	-16.16	0.00	0.155	0.000	-12.896
			4.7250	0.00	-5.73	0.00	0.155	0.000	-72.625
			5.2000	0.00	5.55	0.00	0.155	0.000	-143.885
			5.6750	0.00	15.92	0.00	0.155	0.000	-240.059
			6.1500	0.00	25.12	0.00	0.155	0.000	-343.473
STORY2	B83	COMB19 MAX							
			0.4500	0.00	-3.98	0.00	-0.774	0.000	135.395
			0.8750	0.00	4.20	0.00	-0.774	0.000	135.383
			1.3000	0.00	13.31	0.00	-0.774	0.000	131.696
			1.7250	0.00	23.10	0.00	-0.774	0.000	138.166
			2.1500	0.00	32.15	0.00	-0.774	0.000	142.307
			2.5750	0.00	40.27	0.00	-0.774	0.000	140.812
			3.0000	0.00	47.46	0.00	-0.774	0.000	153.085
			3.0000	0.00	142.02	0.00	3.951	0.000	153.030
			3.4250	0.00	152.05	0.00	3.951	0.000	140.836
			3.8500	0.00	164.24	0.00	3.951	0.000	141.918
			4.2750	0.00	178.57	0.00	3.951	0.000	137.365
			4.7000	0.00	194.58	0.00	3.951	0.000	130.878
			5.1250	0.00	209.04	0.00	3.951	0.000	134.246
			5.5500	0.00	221.35	0.00	3.951	0.000	133.940
STORY2	B83	COMB19 MIN							
			0.4500	0.00	-220.41	0.00	-4.137	0.000	-321.505
			0.8750	0.00	-208.10	0.00	-4.137	0.000	-230.370
			1.3000	0.00	-193.64	0.00	-4.137	0.000	-144.923
			1.7250	0.00	-177.63	0.00	-4.137	0.000	-80.244
			2.1500	0.00	-163.30	0.00	-4.137	0.000	-23.788
			2.5750	0.00	-151.11	0.00	-4.137	0.000	29.019
			3.0000	0.00	-141.08	0.00	-4.137	0.000	78.083
			3.0000	0.00	-46.71	0.00	1.203	0.000	78.065
			3.4250	0.00	-39.52	0.00	1.203	0.000	28.205
			3.8500	0.00	-31.40	0.00	1.203	0.000	-24.907
			4.2750	0.00	-22.34	0.00	1.203	0.000	-81.670
			4.7000	0.00	-12.56	0.00	1.203	0.000	-147.052
			5.1250	0.00	-3.45	0.00	1.203	0.000	-232.898
			5.5500	0.00	4.73	0.00	1.203	0.000	-324.433
STORY1	B82	COMB19 MAX							
			0.4500	0.00	-41.83	0.00	-1.299	0.000	60.499
			0.9250	0.00	-32.63	0.00	-1.299	0.000	78.229
			1.4000	0.00	-22.26	0.00	-1.299	0.000	91.312
			1.8750	0.00	-10.98	0.00	-1.299	0.000	116.503
			2.3500	0.00	-0.55	0.00	-1.299	0.000	138.553
			2.8250	0.00	8.71	0.00	-1.299	0.000	153.295
			3.3000	0.00	16.80	0.00	-1.299	0.000	183.910
			3.3000	0.00	115.96	0.00	5.298	0.000	183.925
			3.7750	0.00	127.32	0.00	5.298	0.000	152.461
			4.2500	0.00	141.36	0.00	5.298	0.000	137.509
			4.7250	0.00	158.09	0.00	5.298	0.000	115.249
			5.2000	0.00	176.76	0.00	5.298	0.000	90.166

			5.6750	0.00	193.34	0.00	5.298	0.000	76.954
			6.1500	0.00	207.24	0.00	5.298	0.000	59.094
STORY1	B82	COMB19 MIN							
			0.4500	0.00	-206.58	0.00	-4.283	0.000	-291.890
			0.9250	0.00	-192.68	0.00	-4.283	0.000	-196.959
			1.4000	0.00	-176.09	0.00	-4.283	0.000	-109.269
			1.8750	0.00	-157.42	0.00	-4.283	0.000	-47.342
			2.3500	0.00	-140.69	0.00	-4.283	0.000	3.998
			2.8250	0.00	-126.65	0.00	-4.283	0.000	50.661
			3.3000	0.00	-115.30	0.00	-4.283	0.000	93.203
			3.3000	0.00	-16.53	0.00	0.070	0.000	93.187
			3.7750	0.00	-8.44	0.00	0.070	0.000	51.068
			4.2500	0.00	0.82	0.00	0.070	0.000	4.170
			4.7250	0.00	11.26	0.00	0.070	0.000	-47.404
			5.2000	0.00	22.53	0.00	0.070	0.000	-109.882
			5.6750	0.00	32.90	0.00	0.070	0.000	-197.888
			6.1500	0.00	42.10	0.00	0.070	0.000	-293.133
STORY1	B83	COMB19 MAX							
			0.4500	0.00	-24.04	0.00	-1.266	0.000	84.780
			0.8750	0.00	-15.87	0.00	-1.266	0.000	93.294
			1.3000	0.00	-6.75	0.00	-1.266	0.000	98.134
			1.7250	0.00	3.03	0.00	-1.266	0.000	113.194
			2.1500	0.00	12.09	0.00	-1.266	0.000	125.963
			2.5750	0.00	20.21	0.00	-1.266	0.000	133.097
			3.0000	0.00	27.40	0.00	-1.266	0.000	154.079
			3.0000	0.00	123.15	0.00	4.223	0.000	154.055
			3.4250	0.00	133.18	0.00	4.223	0.000	133.045
			3.8500	0.00	145.36	0.00	4.223	0.000	125.469
			4.2750	0.00	159.70	0.00	4.223	0.000	112.258
			4.7000	0.00	175.71	0.00	4.223	0.000	97.336
			5.1250	0.00	190.17	0.00	4.223	0.000	92.196
			5.5500	0.00	202.48	0.00	4.223	0.000	83.382
STORY1	B83	COMB19 MIN							
			0.4500	0.00	-201.42	0.00	-4.194	0.000	-272.240
			0.8750	0.00	-189.11	0.00	-4.194	0.000	-189.176
			1.3000	0.00	-174.65	0.00	-4.194	0.000	-111.800
			1.7250	0.00	-158.64	0.00	-4.194	0.000	-55.254
			2.1500	0.00	-144.31	0.00	-4.194	0.000	-6.969
			2.5750	0.00	-132.12	0.00	-4.194	0.000	37.666
			3.0000	0.00	-122.09	0.00	-4.194	0.000	78.629
			3.0000	0.00	-26.69	0.00	1.055	0.000	78.625
			3.4250	0.00	-19.51	0.00	1.055	0.000	36.937
			3.8500	0.00	-11.38	0.00	1.055	0.000	-8.004
			4.2750	0.00	-2.33	0.00	1.055	0.000	-56.596
			4.7000	0.00	7.46	0.00	1.055	0.000	-114.030
			5.1250	0.00	16.57	0.00	1.055	0.000	-191.855
			5.5500	0.00	24.75	0.00	1.055	0.000	-275.369

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LOADING COMBINATIONS

COMBO	COMBO TYPE	CASE	CASE TYPE	SCALE FACTOR
COMB19	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

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BEAM FORCES

STORY	BEAM	LOAD	LOC	P	V2	V3	T	M2	M3
TOP FLOOR	B158	COMB19 MAX							
			0.3500	0.00	-34.29	0.00	0.066	0.000	-26.545
			0.8200	0.00	-29.66	0.00	0.066	0.000	-11.472
			1.2900	0.00	-23.89	0.00	0.066	0.000	1.158
			1.7600	0.00	-17.08	0.00	0.066	0.000	16.005
			2.2300	0.00	-10.05	0.00	0.066	0.000	27.562
			2.7000	0.00	-3.01	0.00	0.066	0.000	33.755

			3.1700	0.00	5.76	0.00	0.066	0.000	34.426
			3.6400	0.00	16.70	0.00	0.066	0.000	29.575
			4.1100	0.00	27.51	0.00	0.066	0.000	19.249
			4.5800	0.00	36.78	0.00	0.066	0.000	4.053
			5.0500	0.00	43.83	0.00	0.066	0.000	-11.339
TOP FLOOR	B158	COMB19 MIN							
			0.3500	0.00	-58.43	0.00	0.014	0.000	-49.299
			0.8200	0.00	-51.39	0.00	0.014	0.000	-23.403
			1.2900	0.00	-42.11	0.00	0.014	0.000	-1.343
			1.7600	0.00	-30.80	0.00	0.014	0.000	9.762
			2.2300	0.00	-19.05	0.00	0.014	0.000	16.437
			2.7000	0.00	-7.30	0.00	0.014	0.000	19.807
			3.1700	0.00	3.38	0.00	0.014	0.000	19.870
			3.6400	0.00	10.42	0.00	0.014	0.000	16.481
			4.1100	0.00	17.23	0.00	0.014	0.000	9.655
			4.5800	0.00	23.00	0.00	0.014	0.000	-0.143
			5.0500	0.00	27.62	0.00	0.014	0.000	-18.451
TOP FLOOR	B159	COMB19 MAX							
			0.3500	0.00	-30.04	0.00	-0.065	0.000	-8.271
			0.8318	0.00	-25.28	0.00	-0.065	0.000	9.588
			1.3136	0.00	-19.33	0.00	-0.065	0.000	27.002
			1.7955	0.00	-12.30	0.00	-0.065	0.000	39.250
			2.2773	0.00	-5.09	0.00	-0.065	0.000	45.733
			2.7591	0.00	4.61	0.00	-0.065	0.000	46.412
			3.2409	0.00	16.66	0.00	-0.065	0.000	41.288
			3.7227	0.00	28.70	0.00	-0.065	0.000	30.361
			4.2045	0.00	40.75	0.00	-0.065	0.000	14.505
			4.6864	0.00	52.42	0.00	-0.065	0.000	-3.061
			5.1682	0.00	62.01	0.00	-0.065	0.000	-19.037
			5.6500	0.00	69.26	0.00	-0.065	0.000	-37.594
TOP FLOOR	B159	COMB19 MIN							
			0.3500	0.00	-48.00	0.00	-0.145	0.000	-15.623
			0.8318	0.00	-40.75	0.00	-0.145	0.000	2.768
			1.3136	0.00	-31.15	0.00	-0.145	0.000	13.899
			1.7955	0.00	-19.68	0.00	-0.145	0.000	21.882
			2.2773	0.00	-8.46	0.00	-0.145	0.000	26.409
			2.7591	0.00	1.42	0.00	-0.145	0.000	27.461
			3.2409	0.00	8.63	0.00	-0.145	0.000	24.824
			3.7227	0.00	15.85	0.00	-0.145	0.000	18.590
			4.2045	0.00	23.06	0.00	-0.145	0.000	8.881
			4.6864	0.00	30.08	0.00	-0.145	0.000	-8.866
			5.1682	0.00	36.04	0.00	-0.145	0.000	-36.528
			5.6500	0.00	40.79	0.00	-0.145	0.000	-68.249
STORY9	B158	COMB19 MAX							
			0.3500	0.00	-55.86	0.00	0.060	0.000	-42.355
			0.8200	0.00	-47.01	0.00	0.060	0.000	-18.136
			1.2900	0.00	-37.01	0.00	0.060	0.000	1.654
			1.7600	0.00	-25.97	0.00	0.060	0.000	28.358
			2.2300	0.00	-14.71	0.00	0.060	0.000	46.844
			2.7000	0.00	-3.44	0.00	0.060	0.000	55.487
			3.1700	0.00	13.02	0.00	0.060	0.000	54.287
			3.6400	0.00	33.97	0.00	0.060	0.000	43.244
			4.1100	0.00	54.26	0.00	0.060	0.000	22.427
			4.5800	0.00	71.56	0.00	0.060	0.000	-3.702
			5.0500	0.00	85.56	0.00	0.060	0.000	-24.232
STORY9	B158	COMB19 MIN							
			0.3500	0.00	-101.40	0.00	-0.041	0.000	-81.537
			0.8200	0.00	-87.40	0.00	-0.041	0.000	-37.041
			1.2900	0.00	-70.10	0.00	-0.041	0.000	-0.384
			1.7600	0.00	-49.80	0.00	-0.041	0.000	15.243
			2.2300	0.00	-28.86	0.00	-0.041	0.000	25.258
			2.7000	0.00	-7.92	0.00	-0.041	0.000	29.979
			3.1700	0.00	6.85	0.00	-0.041	0.000	29.276
			3.6400	0.00	18.12	0.00	-0.041	0.000	22.950
			4.1100	0.00	29.16	0.00	-0.041	0.000	11.354
			4.5800	0.00	39.16	0.00	-0.041	0.000	-7.519
			5.0500	0.00	48.01	0.00	-0.041	0.000	-44.323
STORY9	B159	COMB19 MAX							
			0.3500	0.00	-52.49	0.00	-0.002	0.000	-24.833
			0.8318	0.00	-43.40	0.00	-0.002	0.000	-1.683
			1.3136	0.00	-33.11	0.00	-0.002	0.000	29.740
			1.7955	0.00	-21.75	0.00	-0.002	0.000	54.789
			2.2773	0.00	-10.20	0.00	-0.002	0.000	69.550
			2.7591	0.00	1.91	0.00	-0.002	0.000	73.966
			3.2409	0.00	23.04	0.00	-0.002	0.000	68.039
			3.7227	0.00	44.51	0.00	-0.002	0.000	51.767
			4.2045	0.00	65.98	0.00	-0.002	0.000	25.151
			4.6864	0.00	86.89	0.00	-0.002	0.000	-5.483
			5.1682	0.00	104.75	0.00	-0.002	0.000	-30.328
			5.6500	0.00	119.15	0.00	-0.002	0.000	-59.843
STORY9	B159	COMB19 MIN							
			0.3500	0.00	-94.55	0.00	-0.117	0.000	-46.937
			0.8318	0.00	-80.15	0.00	-0.117	0.000	-5.466
			1.3136	0.00	-62.29	0.00	-0.117	0.000	15.055
			1.7955	0.00	-41.37	0.00	-0.117	0.000	28.795
			2.2773	0.00	-19.90	0.00	-0.117	0.000	36.990
			2.7591	0.00	0.32	0.00	-0.117	0.000	39.620
			3.2409	0.00	11.86	0.00	-0.117	0.000	36.440

			3.7227	0.00	23.41	0.00	-0.117	0.000	27.445
			4.2045	0.00	34.96	0.00	-0.117	0.000	12.885
			4.6864	0.00	46.32	0.00	-0.117	0.000	-11.754
			5.1682	0.00	56.61	0.00	-0.117	0.000	-58.063
			5.6500	0.00	65.70	0.00	-0.117	0.000	-112.143
STORY8	B158	COMB19 MAX							
			0.3500	0.00	-55.45	0.00	0.097	0.000	-41.358
			0.8200	0.00	-46.60	0.00	0.097	0.000	-17.332
			1.2900	0.00	-36.60	0.00	0.097	0.000	2.265
			1.7600	0.00	-25.56	0.00	0.097	0.000	28.991
			2.2300	0.00	-14.29	0.00	0.097	0.000	47.216
			2.7000	0.00	-3.03	0.00	0.097	0.000	55.597
			3.1700	0.00	13.58	0.00	0.097	0.000	54.135
			3.6400	0.00	34.52	0.00	0.097	0.000	42.831
			4.1100	0.00	54.82	0.00	0.097	0.000	21.753
			4.5800	0.00	72.12	0.00	0.097	0.000	-4.208
			5.0500	0.00	86.12	0.00	0.097	0.000	-24.879
STORY8	B158	COMB19 MIN							
			0.3500	0.00	-100.84	0.00	-0.062	0.000	-80.119
			0.8200	0.00	-86.84	0.00	-0.062	0.000	-35.885
			1.2900	0.00	-69.54	0.00	-0.062	0.000	0.388
			1.7600	0.00	-49.25	0.00	-0.062	0.000	15.588
			2.2300	0.00	-28.30	0.00	-0.062	0.000	25.462
			2.7000	0.00	-7.36	0.00	-0.062	0.000	30.041
			3.1700	0.00	7.16	0.00	-0.062	0.000	29.114
			3.6400	0.00	18.42	0.00	-0.062	0.000	22.596
			4.1100	0.00	29.46	0.00	-0.062	0.000	10.807
			4.5800	0.00	39.46	0.00	-0.062	0.000	-8.534
			5.0500	0.00	48.31	0.00	-0.062	0.000	-45.520
STORY8	B159	COMB19 MAX							
			0.3500	0.00	-53.10	0.00	0.016	0.000	-26.168
			0.8318	0.00	-44.01	0.00	0.016	0.000	-2.725
			1.3136	0.00	-33.72	0.00	0.016	0.000	28.269
			1.7955	0.00	-22.36	0.00	0.016	0.000	53.829
			2.2773	0.00	-10.81	0.00	0.016	0.000	69.099
			2.7591	0.00	0.97	0.00	0.016	0.000	74.026
			3.2409	0.00	21.98	0.00	0.016	0.000	68.608
			3.7227	0.00	43.45	0.00	0.016	0.000	52.846
			4.2045	0.00	64.92	0.00	0.016	0.000	26.740
			4.6864	0.00	85.83	0.00	0.016	0.000	-4.010
			5.1682	0.00	103.70	0.00	0.016	0.000	-28.515
			5.6500	0.00	118.09	0.00	0.016	0.000	-57.689
STORY8	B159	COMB19 MIN							
			0.3500	0.00	-95.60	0.00	-0.154	0.000	-49.428
			0.8318	0.00	-81.21	0.00	-0.154	0.000	-7.382
			1.3136	0.00	-63.35	0.00	-0.154	0.000	14.145
			1.7955	0.00	-42.43	0.00	-0.154	0.000	28.225
			2.2773	0.00	-20.96	0.00	-0.154	0.000	36.760
			2.7591	0.00	-0.39	0.00	-0.154	0.000	39.731
			3.2409	0.00	11.16	0.00	-0.154	0.000	36.866
			3.7227	0.00	22.71	0.00	-0.154	0.000	28.165
			4.2045	0.00	34.25	0.00	-0.154	0.000	13.899
			4.6864	0.00	45.61	0.00	-0.154	0.000	-9.655
			5.1682	0.00	55.91	0.00	-0.154	0.000	-55.454
			5.6500	0.00	65.00	0.00	-0.154	0.000	-109.024
STORY7	B158	COMB19 MAX							
			0.4000	0.00	-54.55	0.00	0.126	0.000	-39.012
			0.8600	0.00	-45.78	0.00	0.126	0.000	-15.893
			1.3200	0.00	-35.91	0.00	0.126	0.000	3.233
			1.7800	0.00	-25.07	0.00	0.126	0.000	29.006
			2.2400	0.00	-14.05	0.00	0.126	0.000	46.656
			2.7000	0.00	-3.02	0.00	0.126	0.000	54.878
			3.1600	0.00	12.87	0.00	0.126	0.000	53.671
			3.6200	0.00	33.37	0.00	0.126	0.000	43.035
			4.0800	0.00	53.34	0.00	0.126	0.000	23.023
			4.5400	0.00	70.51	0.00	0.126	0.000	-2.497
			5.0000	0.00	84.52	0.00	0.126	0.000	-22.212
STORY7	B158	COMB19 MIN							
			0.4000	0.00	-99.77	0.00	-0.104	0.000	-76.434
			0.8600	0.00	-85.76	0.00	-0.104	0.000	-33.641
			1.3200	0.00	-68.59	0.00	-0.104	0.000	0.836
			1.7800	0.00	-48.62	0.00	-0.104	0.000	15.513
			2.2400	0.00	-28.12	0.00	-0.104	0.000	25.137
			2.7000	0.00	-7.62	0.00	-0.104	0.000	29.688
			3.1600	0.00	6.64	0.00	-0.104	0.000	28.765
			3.6200	0.00	17.67	0.00	-0.104	0.000	22.546
			4.0800	0.00	28.51	0.00	-0.104	0.000	11.273
			4.5400	0.00	38.38	0.00	-0.104	0.000	-6.451
			5.0000	0.00	47.15	0.00	-0.104	0.000	-41.362
STORY7	B159	COMB19 MAX							
			0.4000	0.00	-52.05	0.00	0.064	0.000	-23.973
			0.8727	0.00	-43.02	0.00	0.064	0.000	-1.456
			1.3455	0.00	-32.83	0.00	0.064	0.000	28.785
			1.8182	0.00	-21.65	0.00	0.064	0.000	53.248
			2.2909	0.00	-10.32	0.00	0.064	0.000	67.794
			2.7636	0.00	1.37	0.00	0.064	0.000	72.382
			3.2364	0.00	21.89	0.00	0.064	0.000	67.012
			3.7091	0.00	42.95	0.00	0.064	0.000	51.685

			4.1818	0.00	64.02	0.00	0.064	0.000	26.401
			4.6545	0.00	84.65	0.00	0.064	0.000	-3.317
			5.1273	0.00	102.43	0.00	0.064	0.000	-26.953
			5.6000	0.00	116.87	0.00	0.064	0.000	-55.132
STORY7	B159	COMB19 MIN							
			0.4000	0.00	-94.16	0.00	-0.167	0.000	-46.053
			0.8727	0.00	-79.71	0.00	-0.167	0.000	-5.948
			1.3455	0.00	-61.93	0.00	-0.167	0.000	14.229
			1.8182	0.00	-41.30	0.00	-0.167	0.000	27.777
			2.2909	0.00	-20.24	0.00	-0.167	0.000	35.983
			2.7636	0.00	-0.36	0.00	-0.167	0.000	38.833
			3.2364	0.00	10.97	0.00	-0.167	0.000	36.018
			3.7091	0.00	22.30	0.00	-0.167	0.000	27.506
			4.1818	0.00	33.63	0.00	-0.167	0.000	13.637
			4.6545	0.00	44.81	0.00	-0.167	0.000	-8.852
			5.1273	0.00	55.00	0.00	-0.167	0.000	-53.151
			5.6000	0.00	64.03	0.00	-0.167	0.000	-105.117
STORY6	B158	COMB19 MAX							
			0.4000	0.00	-54.40	0.00	0.153	0.000	-38.970
			0.8600	0.00	-45.63	0.00	0.153	0.000	-15.921
			1.3200	0.00	-35.76	0.00	0.153	0.000	3.007
			1.7800	0.00	-24.92	0.00	0.153	0.000	28.591
			2.2400	0.00	-13.89	0.00	0.153	0.000	46.186
			2.7000	0.00	-2.87	0.00	0.153	0.000	54.353
			3.1600	0.00	12.99	0.00	0.153	0.000	53.091
			3.6200	0.00	33.49	0.00	0.153	0.000	42.401
			4.0800	0.00	53.46	0.00	0.153	0.000	22.334
			4.5400	0.00	70.63	0.00	0.153	0.000	-2.697
			5.0000	0.00	84.64	0.00	0.153	0.000	-22.398
STORY6	B158	COMB19 MIN							
			0.4000	0.00	-99.65	0.00	-0.135	0.000	-76.686
			0.8600	0.00	-85.64	0.00	-0.135	0.000	-33.948
			1.3200	0.00	-68.47	0.00	-0.135	0.000	0.535
			1.7800	0.00	-48.50	0.00	-0.135	0.000	15.227
			2.2400	0.00	-28.00	0.00	-0.135	0.000	24.865
			2.7000	0.00	-7.51	0.00	-0.135	0.000	29.430
			3.1600	0.00	6.61	0.00	-0.135	0.000	28.381
			3.6200	0.00	17.64	0.00	-0.135	0.000	22.091
			4.0800	0.00	28.48	0.00	-0.135	0.000	10.747
			4.5400	0.00	38.35	0.00	-0.135	0.000	-7.313
			5.0000	0.00	47.12	0.00	-0.135	0.000	-42.160
STORY6	B159	COMB19 MAX							
			0.4000	0.00	-52.18	0.00	0.102	0.000	-24.913
			0.8727	0.00	-43.15	0.00	0.102	0.000	-2.336
			1.3455	0.00	-32.96	0.00	0.102	0.000	26.998
			1.8182	0.00	-21.78	0.00	0.102	0.000	51.629
			2.2909	0.00	-10.45	0.00	0.102	0.000	66.342
			2.7636	0.00	1.12	0.00	0.102	0.000	71.097
			3.2364	0.00	21.54	0.00	0.102	0.000	65.895
			3.7091	0.00	42.60	0.00	0.102	0.000	50.735
			4.1818	0.00	63.66	0.00	0.102	0.000	25.618
			4.6545	0.00	84.29	0.00	0.102	0.000	-3.468
			5.1273	0.00	102.07	0.00	0.102	0.000	-26.972
			5.6000	0.00	116.52	0.00	0.102	0.000	-55.019
STORY6	B159	COMB19 MIN							
			0.4000	0.00	-94.51	0.00	-0.181	0.000	-48.174
			0.8727	0.00	-80.06	0.00	-0.181	0.000	-7.855
			1.3455	0.00	-62.28	0.00	-0.181	0.000	13.153
			1.8182	0.00	-41.66	0.00	-0.181	0.000	26.834
			2.2909	0.00	-20.59	0.00	-0.181	0.000	35.172
			2.7636	0.00	-0.64	0.00	-0.181	0.000	38.154
			3.2364	0.00	10.69	0.00	-0.181	0.000	35.442
			3.7091	0.00	22.02	0.00	-0.181	0.000	26.990
			4.1818	0.00	33.35	0.00	-0.181	0.000	13.182
			4.6545	0.00	44.53	0.00	-0.181	0.000	-9.495
			5.1273	0.00	54.72	0.00	-0.181	0.000	-53.599
			5.6000	0.00	63.75	0.00	-0.181	0.000	-105.397
STORY5	B158	COMB19 MAX							
			0.4000	0.00	-53.75	0.00	0.188	0.000	-37.542
			0.8600	0.00	-44.98	0.00	0.188	0.000	-14.793
			1.3200	0.00	-35.11	0.00	0.188	0.000	4.475
			1.7800	0.00	-24.26	0.00	0.188	0.000	29.695
			2.2400	0.00	-13.24	0.00	0.188	0.000	46.685
			2.7000	0.00	-2.21	0.00	0.188	0.000	54.247
			3.1600	0.00	14.31	0.00	0.188	0.000	52.380
			3.6200	0.00	34.80	0.00	0.188	0.000	41.085
			4.0800	0.00	54.77	0.00	0.188	0.000	20.413
			4.5400	0.00	71.94	0.00	0.188	0.000	-3.974
			5.0000	0.00	85.96	0.00	0.188	0.000	-23.984
STORY5	B158	COMB19 MIN							
			0.4000	0.00	-98.34	0.00	-0.167	0.000	-73.767
			0.8600	0.00	-84.32	0.00	-0.167	0.000	-31.633
			1.3200	0.00	-67.15	0.00	-0.167	0.000	1.421
			1.7800	0.00	-47.18	0.00	-0.167	0.000	15.803
			2.2400	0.00	-26.69	0.00	-0.167	0.000	25.132
			2.7000	0.00	-6.19	0.00	-0.167	0.000	29.389
			3.1600	0.00	7.28	0.00	-0.167	0.000	28.008
			3.6200	0.00	18.31	0.00	-0.167	0.000	21.418

			4.0800	0.00	29.15	0.00	-0.167	0.000	9.775
			4.5400	0.00	39.02	0.00	-0.167	0.000	-9.527
			5.0000	0.00	47.79	0.00	-0.167	0.000	-45.291
STORY5	B159	COMB19 MAX							
			0.4000	0.00	-53.13	0.00	0.130	0.000	-27.271
			0.8727	0.00	-44.10	0.00	0.130	0.000	-4.242
			1.3455	0.00	-33.92	0.00	0.130	0.000	24.341
			1.8182	0.00	-22.74	0.00	0.130	0.000	49.802
			2.2909	0.00	-11.41	0.00	0.130	0.000	65.345
			2.7636	0.00	-0.07	0.00	0.130	0.000	70.930
			3.2364	0.00	19.78	0.00	0.130	0.000	66.558
			3.7091	0.00	40.84	0.00	0.130	0.000	52.229
			4.1818	0.00	61.91	0.00	0.130	0.000	27.941
			4.6545	0.00	82.54	0.00	0.130	0.000	-1.849
			5.1273	0.00	100.32	0.00	0.130	0.000	-24.926
			5.6000	0.00	114.76	0.00	0.130	0.000	-52.545
STORY5	B159	COMB19 MIN							
			0.4000	0.00	-96.27	0.00	-0.217	0.000	-52.491
			0.8727	0.00	-81.82	0.00	-0.217	0.000	-10.906
			1.3455	0.00	-64.04	0.00	-0.217	0.000	11.782
			1.8182	0.00	-43.41	0.00	-0.217	0.000	25.890
			2.2909	0.00	-22.35	0.00	-0.217	0.000	34.655
			2.7636	0.00	-1.94	0.00	-0.217	0.000	38.064
			3.2364	0.00	9.78	0.00	-0.217	0.000	35.797
			3.7091	0.00	21.12	0.00	-0.217	0.000	27.798
			4.1818	0.00	32.45	0.00	-0.217	0.000	14.442
			4.6545	0.00	43.63	0.00	-0.217	0.000	-6.644
			5.1273	0.00	53.81	0.00	-0.217	0.000	-49.615
STORY4	B158	COMB19 MAX							
			0.4500	0.00	-52.44	0.00	0.269	0.000	-34.241
			0.9500	0.00	-42.72	0.00	0.269	0.000	-10.397
			1.4500	0.00	-31.71	0.00	0.269	0.000	12.491
			1.9500	0.00	-19.78	0.00	0.269	0.000	37.348
			2.4500	0.00	-7.80	0.00	0.269	0.000	51.075
			2.9500	0.00	6.15	0.00	0.269	0.000	53.662
			3.4500	0.00	28.24	0.00	0.269	0.000	45.110
			3.9500	0.00	50.36	0.00	0.269	0.000	25.429
			4.4500	0.00	69.85	0.00	0.269	0.000	-1.899
			4.9500	0.00	85.60	0.00	0.269	0.000	-23.288
STORY4	B158	COMB19 MIN							
			0.4500	0.00	-95.95	0.00	-0.252	0.000	-67.085
			0.9500	0.00	-80.20	0.00	-0.252	0.000	-22.892
			1.4500	0.00	-60.71	0.00	-0.252	0.000	6.543
			1.9500	0.00	-38.59	0.00	-0.252	0.000	20.077
			2.4500	0.00	-16.31	0.00	-0.252	0.000	27.622
			2.9500	0.00	2.89	0.00	-0.252	0.000	28.944
			3.4500	0.00	14.87	0.00	-0.252	0.000	23.853
			3.9500	0.00	26.80	0.00	-0.252	0.000	12.774
			4.4500	0.00	37.81	0.00	-0.252	0.000	-5.576
			4.9500	0.00	47.53	0.00	-0.252	0.000	-43.798
STORY4	B159	COMB19 MAX							
			0.4500	0.00	-52.88	0.00	0.224	0.000	-26.849
			0.9136	0.00	-43.92	0.00	0.224	0.000	-4.367
			1.3773	0.00	-33.83	0.00	0.224	0.000	23.570
			1.8409	0.00	-22.84	0.00	0.224	0.000	48.471
			2.3045	0.00	-11.73	0.00	0.224	0.000	63.822
			2.7682	0.00	-0.61	0.00	0.224	0.000	69.595
			3.2318	0.00	18.54	0.00	0.224	0.000	65.789
			3.6955	0.00	39.20	0.00	0.224	0.000	52.405
			4.1591	0.00	59.86	0.00	0.224	0.000	29.443
			4.6227	0.00	80.18	0.00	0.224	0.000	-0.339
			5.0864	0.00	97.87	0.00	0.224	0.000	-22.410
			5.5500	0.00	112.35	0.00	0.224	0.000	-48.897
STORY4	B159	COMB19 MIN							
			0.4500	0.00	-95.94	0.00	-0.289	0.000	-51.464
			0.9136	0.00	-81.45	0.00	-0.289	0.000	-10.545
			1.3773	0.00	-63.76	0.00	-0.289	0.000	11.646
			1.8409	0.00	-43.44	0.00	-0.289	0.000	25.381
			2.3045	0.00	-22.78	0.00	-0.289	0.000	33.974
			2.7682	0.00	-2.57	0.00	-0.289	0.000	37.414
			3.2318	0.00	9.25	0.00	-0.289	0.000	35.435
			3.6955	0.00	20.36	0.00	-0.289	0.000	27.991
			4.1591	0.00	31.47	0.00	-0.289	0.000	15.394
			4.6227	0.00	42.47	0.00	-0.289	0.000	-3.593
			5.0864	0.00	52.55	0.00	-0.289	0.000	-44.469
			5.5500	0.00	61.52	0.00	-0.289	0.000	-93.327
STORY3	B158	COMB19 MAX							
			0.4500	0.00	-51.98	0.00	0.448	0.000	-33.398
			0.9500	0.00	-42.26	0.00	0.448	0.000	-9.785
			1.4500	0.00	-31.25	0.00	0.448	0.000	14.092
			1.9500	0.00	-19.32	0.00	0.448	0.000	38.175
			2.4500	0.00	-7.33	0.00	0.448	0.000	51.128
			2.9500	0.00	7.51	0.00	0.448	0.000	52.941
			3.4500	0.00	29.79	0.00	0.448	0.000	43.615
			3.9500	0.00	51.91	0.00	0.448	0.000	23.159
			4.4500	0.00	71.40	0.00	0.448	0.000	-4.185
			4.9500	0.00	87.15	0.00	0.448	0.000	-26.179
STORY3	B158	COMB19 MIN							

			0.4500	0.00	-94.40	0.00	-0.432	0.000	-63.936
			0.9500	0.00	-78.65	0.00	-0.432	0.000	-20.517
			1.4500	0.00	-59.17	0.00	-0.432	0.000	7.891
			1.9500	0.00	-37.05	0.00	-0.432	0.000	20.819
			2.4500	0.00	-14.77	0.00	-0.432	0.000	27.759
			2.9500	0.00	4.10	0.00	-0.432	0.000	28.632
			3.4500	0.00	16.08	0.00	-0.432	0.000	23.311
			3.9500	0.00	28.01	0.00	-0.432	0.000	12.001
			4.4500	0.00	39.02	0.00	-0.432	0.000	-7.824
			4.9500	0.00	48.74	0.00	-0.432	0.000	-47.616
STORY3	B159	COMB19 MAX	0.4500	0.00	-53.67	0.00	0.410	0.000	-29.227
			0.9136	0.00	-44.71	0.00	0.410	0.000	-6.377
			1.3773	0.00	-34.63	0.00	0.410	0.000	21.284
			1.8409	0.00	-23.63	0.00	0.410	0.000	46.641
			2.3045	0.00	-12.52	0.00	0.410	0.000	62.447
			2.7682	0.00	-1.41	0.00	0.410	0.000	68.674
			3.2318	0.00	17.56	0.00	0.410	0.000	65.324
			3.6955	0.00	38.22	0.00	0.410	0.000	52.395
			4.1591	0.00	58.87	0.00	0.410	0.000	29.888
			4.6227	0.00	79.20	0.00	0.410	0.000	-0.461
			5.0864	0.00	96.89	0.00	0.410	0.000	-22.468
			5.5500	0.00	111.37	0.00	0.410	0.000	-48.889
STORY3	B159	COMB19 MIN	0.4500	0.00	-96.92	0.00	-0.461	0.000	-54.660
			0.9136	0.00	-82.43	0.00	-0.461	0.000	-12.959
			1.3773	0.00	-64.75	0.00	-0.461	0.000	11.071
			1.8409	0.00	-44.42	0.00	-0.461	0.000	24.871
			2.3045	0.00	-23.76	0.00	-0.461	0.000	33.528
			2.7682	0.00	-3.10	0.00	-0.461	0.000	37.033
			3.2318	0.00	9.11	0.00	-0.461	0.000	35.265
			3.6955	0.00	20.22	0.00	-0.461	0.000	28.188
			4.1591	0.00	31.34	0.00	-0.461	0.000	15.959
			4.6227	0.00	42.33	0.00	-0.461	0.000	-2.301
			5.0864	0.00	52.41	0.00	-0.461	0.000	-43.115
			5.5500	0.00	61.38	0.00	-0.461	0.000	-91.517
STORY2	B158	COMB19 MAX	0.4500	0.00	-50.21	0.00	0.682	0.000	-29.566
			0.9500	0.00	-40.49	0.00	0.682	0.000	-6.839
			1.4500	0.00	-29.48	0.00	0.682	0.000	16.134
			1.9500	0.00	-17.55	0.00	0.682	0.000	39.327
			2.4500	0.00	-5.56	0.00	0.682	0.000	51.414
			2.9500	0.00	9.57	0.00	0.682	0.000	52.362
			3.4500	0.00	31.52	0.00	0.682	0.000	42.170
			3.9500	0.00	53.64	0.00	0.682	0.000	20.848
			4.4500	0.00	73.13	0.00	0.682	0.000	-4.156
			4.9500	0.00	88.88	0.00	0.682	0.000	-26.142
STORY2	B158	COMB19 MIN	0.4500	0.00	-92.67	0.00	-0.666	0.000	-60.187
			0.9500	0.00	-76.92	0.00	-0.666	0.000	-17.634
			1.4500	0.00	-57.43	0.00	-0.666	0.000	7.861
			1.9500	0.00	-35.31	0.00	-0.666	0.000	20.799
			2.4500	0.00	-13.03	0.00	-0.666	0.000	27.748
			2.9500	0.00	4.08	0.00	-0.666	0.000	28.037
			3.4500	0.00	16.06	0.00	-0.666	0.000	21.830
			3.9500	0.00	27.99	0.00	-0.666	0.000	9.635
			4.4500	0.00	39.00	0.00	-0.666	0.000	-12.091
			4.9500	0.00	48.72	0.00	-0.666	0.000	-51.658
STORY2	B159	COMB19 MAX	0.4500	0.00	-54.18	0.00	0.644	0.000	-30.552
			0.9136	0.00	-45.21	0.00	0.644	0.000	-7.467
			1.3773	0.00	-35.13	0.00	0.644	0.000	17.681
			1.8409	0.00	-24.14	0.00	0.644	0.000	44.040
			2.3045	0.00	-13.02	0.00	0.644	0.000	60.849
			2.7682	0.00	-1.91	0.00	0.644	0.000	68.079
			3.2318	0.00	15.39	0.00	0.644	0.000	65.731
			3.6955	0.00	36.05	0.00	0.644	0.000	53.804
			4.1591	0.00	56.71	0.00	0.644	0.000	32.300
			4.6227	0.00	77.04	0.00	0.644	0.000	2.638
			5.0864	0.00	94.73	0.00	0.644	0.000	-18.937
			5.5500	0.00	109.21	0.00	0.644	0.000	-44.562
STORY2	B159	COMB19 MIN	0.4500	0.00	-99.08	0.00	-0.696	0.000	-60.268
			0.9136	0.00	-84.60	0.00	-0.696	0.000	-17.578
			1.3773	0.00	-66.91	0.00	-0.696	0.000	8.221
			1.8409	0.00	-46.58	0.00	-0.696	0.000	22.818
			2.3045	0.00	-25.92	0.00	-0.696	0.000	32.273
			2.7682	0.00	-5.61	0.00	-0.696	0.000	36.575
			3.2318	0.00	7.39	0.00	-0.696	0.000	35.347
			3.6955	0.00	18.50	0.00	-0.696	0.000	28.505
			4.1591	0.00	29.62	0.00	-0.696	0.000	16.511
			4.6227	0.00	40.61	0.00	-0.696	0.000	-0.626
			5.0864	0.00	50.69	0.00	-0.696	0.000	-38.697
			5.5500	0.00	59.66	0.00	-0.696	0.000	-86.097
STORY1	B158	COMB19 MAX	0.4500	0.00	-48.46	0.00	0.659	0.000	-25.727
			0.9500	0.00	-38.74	0.00	0.659	0.000	-3.872

			1.4500	0.00	-27.73	0.00	0.659	0.000	19.023
			1.9500	0.00	-15.80	0.00	0.659	0.000	40.461
			2.4500	0.00	-3.82	0.00	0.659	0.000	51.688
			2.9500	0.00	12.00	0.00	0.659	0.000	51.775
			3.4500	0.00	33.24	0.00	0.659	0.000	40.723
			3.9500	0.00	55.36	0.00	0.659	0.000	19.342
			4.4500	0.00	74.85	0.00	0.659	0.000	-3.923
			4.9500	0.00	90.60	0.00	0.659	0.000	-25.821
STORY1	B158	COMB19 MIN							
			0.4500	0.00	-90.95	0.00	-0.640	0.000	-56.472
			0.9500	0.00	-75.20	0.00	-0.640	0.000	-16.696
			1.4500	0.00	-55.71	0.00	-0.640	0.000	7.568
			1.9500	0.00	-33.59	0.00	-0.640	0.000	20.594
			2.4500	0.00	-12.18	0.00	-0.640	0.000	27.631
			2.9500	0.00	3.90	0.00	-0.640	0.000	27.511
			3.4500	0.00	15.89	0.00	-0.640	0.000	20.431
			3.9500	0.00	27.82	0.00	-0.640	0.000	7.363
			4.4500	0.00	38.83	0.00	-0.640	0.000	-16.487
			4.9500	0.00	48.55	0.00	-0.640	0.000	-55.685
STORY1	B159	COMB19 MAX							
			0.4500	0.00	-55.13	0.00	0.615	0.000	-32.741
			0.9136	0.00	-46.17	0.00	0.615	0.000	-9.214
			1.3773	0.00	-36.09	0.00	0.615	0.000	14.330
			1.8409	0.00	-25.09	0.00	0.615	0.000	40.639
			2.3045	0.00	-13.98	0.00	0.615	0.000	58.974
			2.7682	0.00	-2.87	0.00	0.615	0.000	67.731
			3.2318	0.00	12.54	0.00	0.615	0.000	66.910
			3.6955	0.00	32.76	0.00	0.615	0.000	56.511
			4.1591	0.00	53.42	0.00	0.615	0.000	36.534
			4.6227	0.00	73.74	0.00	0.615	0.000	9.043
			5.0864	0.00	91.43	0.00	0.615	0.000	-13.414
			5.5500	0.00	105.92	0.00	0.615	0.000	-37.853
STORY1	B159	COMB19 MIN							
			0.4500	0.00	-102.37	0.00	-0.683	0.000	-68.250
			0.9136	0.00	-87.89	0.00	-0.683	0.000	-25.040
			1.3773	0.00	-70.20	0.00	-0.683	0.000	4.254
			1.8409	0.00	-49.88	0.00	-0.683	0.000	20.038
			2.3045	0.00	-29.22	0.00	-0.683	0.000	30.679
			2.7682	0.00	-9.34	0.00	-0.683	0.000	36.167
			3.2318	0.00	4.83	0.00	-0.683	0.000	35.812
			3.6955	0.00	15.94	0.00	-0.683	0.000	29.412
			4.1591	0.00	27.06	0.00	-0.683	0.000	17.860
			4.6227	0.00	38.05	0.00	-0.683	0.000	1.165
			5.0864	0.00	48.13	0.00	-0.683	0.000	-31.608
			5.5500	0.00	57.10	0.00	-0.683	0.000	-77.282

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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	113	DEAD	-0.26	10.22	3290.06	-11.139	-1.607	0.000
BASE	113	LIVE	0.03	3.58	614.46	-4.255	-0.065	-0.001
BASE	113	EX	-104.76	-12.78	32.86	42.266	-375.372	2.660
BASE	113	EY	-104.76	-12.78	32.86	42.266	-375.372	2.660
Summation	0, 0, Base	DEAD	0.00	0.00	356818.8411416791	853-11534530.21		0.000
Summation	0, 0, Base	LIVE	0.00	0.00	59566.50	1936913.900-1959269.900		0.000
Summation	0, 0, Base	EX	-14161.59	0.00	0.00	0.000	-383258.480	455155.117
Summation	0, 0, Base	EY	-14161.59	0.00	0.00	0.000	-383258.480	455155.117

Tabel Penulangan Lentur Balok Induk Arah X

Lantai	Balok	dimensi (mm)		d	Lokasi	Mu (kNm)	Rn	ρ	ρ_{min}	ρ_{maks}	As _{min} (mm ²)	As (mm ²)	As _{max} (mm ²)	As _{perlu} (mm ²)	As _{pasang} (mm ²)	Dipasang Tulangan
		b	h													
Top Floor	B82	400	600	539	Tumpuan (-)	149.8320	1.61	0.0042	0.0035	0.0244	754.60	898.03	5257.27	898.03	1140.40	3 D 22
		400	600	539	Tumpuan (+)	49.9440	0.54	0.0014	0.0035	0.0244	754.60	292.68	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	125.2150	1.35	0.0035	0.0035	0.0244	754.60	746.23	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	29.9664	0.32	0.0008	0.0035	0.0244	754.60	174.85	5257.27	754.60	760.27	2 D 22
	B83	400	600	539	Tumpuan (-)	126.2920	1.36	0.0035	0.0035	0.0244	754.60	752.83	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	42.0973	0.45	0.0011	0.0035	0.0244	754.60	246.28	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	101.8160	1.10	0.0028	0.0035	0.0244	754.60	603.56	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	25.2584	0.27	0.0007	0.0035	0.0244	754.60	147.23	5257.27	754.60	760.27	2 D 22
Lantai 9	B82	400	600	539	Tumpuan (-)	241.1220	2.59	0.0069	0.0035	0.0244	754.60	1477.37	5257.27	1477.37	1520.53	4 D 22
		400	600	539	Tumpuan (+)	80.3740	0.86	0.0022	0.0035	0.0244	754.60	474.17	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	181.1510	1.95	0.0051	0.0035	0.0244	754.60	1093.79	5257.27	1093.79	1140.40	3 D 22
		400	600	539	Lapangan (-)	48.2244	0.52	0.0013	0.0035	0.0244	754.60	282.50	5257.27	754.60	760.27	2 D 22
	B83	400	600	539	Tumpuan (-)	209.2470	2.25	0.0059	0.0035	0.0244	754.60	1272.03	5257.27	1272.03	1520.53	4 D 22
		400	600	539	Tumpuan (+)	69.7490	0.75	0.0019	0.0035	0.0244	754.60	410.52	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	149.0630	1.60	0.0041	0.0035	0.0244	754.60	893.26	5257.27	893.26	1140.40	3 D 22
		400	600	539	Lapangan (-)	41.8494	0.45	0.0011	0.0035	0.0244	754.60	244.81	5257.27	754.60	760.27	2 D 22
Lantai 8	B82	400	600	539	Tumpuan (-)	277.8780	2.99	0.0080	0.0035	0.0244	754.60	1718.51	5257.27	1718.51	1900.66	5 D 22
		400	600	539	Tumpuan (+)	92.6260	1.00	0.0025	0.0035	0.0244	754.60	547.95	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	181.7660	1.96	0.0051	0.0035	0.0244	754.60	1097.67	5257.27	1097.67	1520.53	4 D 22
		400	600	539	Lapangan (-)	55.5756	0.60	0.0015	0.0035	0.0244	754.60	326.08	5257.27	754.60	760.27	2 D 22
	B83	400	600	539	Tumpuan (-)	249.4530	2.68	0.0071	0.0035	0.0244	754.60	1531.61	5257.27	1531.61	1900.66	5 D 22
		400	600	539	Tumpuan (+)	83.1510	0.89	0.0023	0.0035	0.0244	754.60	490.86	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	149.3200	1.61	0.0042	0.0035	0.0244	754.60	894.85	5257.27	894.85	1140.40	3 D 22
		400	600	539	Lapangan (-)	49.8906	0.54	0.0014	0.0035	0.0244	754.60	292.36	5257.27	754.60	760.27	2 D 22
Lantai 7	B82	400	600	539	Tumpuan (-)	306.0890	3.29	0.0088	0.0035	0.0244	754.60	1906.92	5257.27	1906.92	2280.80	6 D 22
		400	600	539	Tumpuan (+)	102.0297	1.10	0.0028	0.0035	0.0244	754.60	604.85	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	180.8170	1.94	0.0051	0.0035	0.0244	754.60	1091.69	5257.27	1091.69	1140.40	3 D 22
		400	600	539	Lapangan (-)	61.2178	0.66	0.0017	0.0035	0.0244	754.60	359.63	5257.27	754.60	760.27	2 D 22
	B83	400	600	539	Tumpuan (-)	280.1430	3.01	0.0080	0.0035	0.0244	754.60	1733.53	5257.27	1733.53	1900.66	5 D 22
		400	600	539	Tumpuan (+)	93.3810	1.00	0.0026	0.0035	0.0244	754.60	552.51	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	149.7170	1.61	0.0042	0.0035	0.0244	754.60	897.32	5257.27	897.32	1140.40	3 D 22
		400	600	539	Lapangan (-)	56.0286	0.60	0.0015	0.0035	0.0244	754.60	328.77	5257.27	754.60	760.27	2 D 22

Tabel Penulangan Lentur Balok Induk Arah X

Lantai	Balok	dimensi (mm)		d	Lokasi	Mu (kNm)	Rn	ρ	ρ_{min}	ρ_{maks}	As _{min} (mm ²)	As (mm ²)	As _{max} (mm ²)	As _{perlu} (mm ²)	As _{pasang} (mm ²)	Dipasang Tulangan		
		b	h															
Lantai 6	B82	400	600	539	Tumpuan (-)	334.0070	3.59	0.0097	0.0035	0.0244	754.60	2096.37	5257.27	2096.37	2280.80	6	D	22
		400	600	539	Tumpuan (+)	111.3357	1.20	0.0031	0.0035	0.0244	754.60	661.41	5257.27	754.60	760.27	2	D	22
		400	600	539	Lapangan (+)	180.3440	1.94	0.0050	0.0035	0.0244	754.60	1088.71	5257.27	1088.71	1140.40	3	D	22
		400	600	539	Lapangan (-)	66.8014	0.72	0.0018	0.0035	0.0244	754.60	392.92	5257.27	754.60	760.27	2	D	22
	B83	400	600	539	Tumpuan (-)	309.8000	3.33	0.0090	0.0035	0.0244	754.60	1931.93	5257.27	1931.93	2280.80	6	D	22
		400	600	539	Tumpuan (+)	103.2667	1.11	0.0028	0.0035	0.0244	754.60	612.36	5257.27	754.60	760.27	2	D	22
		400	600	539	Lapangan (+)	150.1570	1.62	0.0042	0.0035	0.0244	754.60	900.05	5257.27	900.05	1140.40	3	D	22
		400	600	539	Lapangan (-)	61.9600	0.67	0.0017	0.0035	0.0244	754.60	364.05	5257.27	754.60	760.27	2	D	22
Lantai 5	B82	400	600	539	Tumpuan (-)	356.6790	3.84	0.0104	0.0035	0.0244	754.60	2252.52	5257.27	2252.52	2280.80	6	D	22
		400	600	539	Tumpuan (+)	118.8930	1.28	0.0033	0.0035	0.0244	754.60	707.53	5257.27	754.60	760.27	2	D	22
		400	600	539	Lapangan (+)	181.2580	1.95	0.0051	0.0035	0.0244	754.60	1094.47	5257.27	1094.47	1140.40	3	D	22
		400	600	539	Lapangan (-)	71.3358	0.77	0.0019	0.0035	0.0244	754.60	420.01	5257.27	754.60	760.27	2	D	22
	B83	400	600	539	Tumpuan (-)	335.2690	3.61	0.0098	0.0035	0.0244	754.60	2105.01	5257.27	2105.01	2280.80	6	D	22
		400	600	539	Tumpuan (+)	111.7563	1.20	0.0031	0.0035	0.0244	754.60	663.98	5257.27	754.60	760.27	2	D	22
		400	600	539	Lapangan (+)	150.5830	1.62	0.0042	0.0035	0.0244	754.60	902.69	5257.27	902.69	1140.40	3	D	22
		400	600	539	Lapangan (-)	67.0538	0.72	0.0018	0.0035	0.0244	754.60	394.42	5257.27	754.60	760.27	2	D	22
Lantai 4	B82	400	600	539	Tumpuan (-)	362.2230	3.90	0.0106	0.0035	0.0244	754.60	2291.03	5257.27	2291.03	2660.93	7	D	22
		400	600	539	Tumpuan (+)	120.7410	1.30	0.0033	0.0035	0.0244	754.60	718.83	5257.27	754.60	760.27	2	D	22
		400	600	539	Lapangan (+)	181.2060	1.95	0.0051	0.0035	0.0244	754.60	1094.14	5257.27	1094.14	1140.40	3	D	22
		400	600	539	Lapangan (-)	72.4446	0.78	0.0020	0.0035	0.0244	754.60	426.64	5257.27	754.60	760.27	2	D	22
	B83	400	600	539	Tumpuan (-)	341.7500	3.68	0.0100	0.0035	0.0244	754.60	2149.46	5257.27	2149.46	2280.80	6	D	22
		400	600	539	Tumpuan (+)	113.9167	1.23	0.0031	0.0035	0.0244	754.60	677.14	5257.27	754.60	760.27	2	D	22
		400	600	539	Lapangan (+)	151.4680	1.63	0.0042	0.0035	0.0244	754.60	908.18	5257.27	908.18	1140.40	3	D	22
		400	600	539	Lapangan (-)	68.3500	0.74	0.0019	0.0035	0.0244	754.60	402.16	5257.27	754.60	760.27	2	D	22
Lantai 3	B82	400	600	539	Tumpuan (-)	363.5110	3.91	0.0107	0.0035	0.0244	754.60	2299.99	5257.27	2299.99	2660.93	7	D	22
		400	600	539	Tumpuan (+)	121.1703	1.30	0.0033	0.0035	0.0244	754.60	721.45	5257.27	754.60	760.27	2	D	22
		400	600	539	Lapangan (+)	181.4640	1.95	0.0051	0.0035	0.0244	754.60	1095.77	5257.27	1095.77	1140.40	3	D	22
		400	600	539	Lapangan (-)	72.7022	0.78	0.0020	0.0035	0.0244	754.60	428.18	5257.27	754.60	760.27	2	D	22
	B83	400	600	539	Tumpuan (-)	342.5110	3.68	0.0100	0.0035	0.0244	754.60	2154.69	5257.27	2154.69	2280.80	6	D	22
		400	600	539	Tumpuan (+)	114.1703	1.23	0.0031	0.0035	0.0244	754.60	678.69	5257.27	754.60	760.27	2	D	22
		400	600	539	Lapangan (+)	154.8160	1.67	0.0043	0.0035	0.0244	754.60	928.98	5257.27	928.98	1140.40	3	D	22
		400	600	539	Lapangan (-)	68.5022	0.74	0.0019	0.0035	0.0244	754.60	403.07	5257.27	754.60	760.27	2	D	22

Tabel Penulangan Lentur Balok Induk Arah X

Lantai	Balok	dimensi (mm)		d	Lokasi	Mu (kNm)	Rn	ρ	ρ_{min}	ρ_{maks}	As _{min} (mm ²)	As (mm ²)	As _{max} (mm ²)	As _{perlu} (mm ²)	As _{pasang} (mm ²)	Dipasang Tulangan
		b	h													
Lantai 2	B82	400	600	539	Tumpuan (-)	343.4730	3.69	0.0100	0.0035	0.0244	754.60	2161.31	5257.27	2161.31	2280.80	6 D 22
		400	600	539	Tumpuan (+)	114.4910	1.23	0.0032	0.0035	0.0244	754.60	680.65	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	182.3830	1.96	0.0051	0.0035	0.0244	754.60	1101.56	5257.27	1101.56	1140.40	3 D 22
		400	600	539	Lapangan (-)	68.6946	0.74	0.0019	0.0035	0.0244	754.60	404.22	5257.27	754.60	760.27	2 D 22
	B83	400	600	539	Tumpuan (-)	324.4330	3.49	0.0094	0.0035	0.0244	754.60	2031.06	5257.27	2031.06	2280.80	6 D 22
		400	600	539	Tumpuan (+)	108.1443	1.16	0.0030	0.0035	0.0244	754.60	641.99	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	153.0850	1.65	0.0043	0.0035	0.0244	754.60	918.22	5257.27	918.22	1140.40	3 D 22
		400	600	539	Lapangan (-)	64.8866	0.70	0.0018	0.0035	0.0244	754.60	381.49	5257.27	754.60	760.27	2 D 22
Lantai 1	B82	400	600	539	Tumpuan (-)	293.1330	3.15	0.0084	0.0035	0.0244	754.60	1820.02	5257.27	1820.02	1900.66	5 D 22
		400	600	539	Tumpuan (+)	97.7110	1.05	0.0027	0.0035	0.0244	754.60	578.69	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	183.9250	1.98	0.0052	0.0035	0.0244	754.60	1111.28	5257.27	1111.28	1140.40	3 D 22
		400	600	539	Lapangan (-)	58.6266	0.63	0.0016	0.0035	0.0244	754.60	344.21	5257.27	754.60	760.27	2 D 22
	B83	400	600	539	Tumpuan (-)	275.3690	2.96	0.0079	0.0035	0.0244	754.60	1701.89	5257.27	1701.89	1900.66	5 D 22
		400	600	539	Tumpuan (+)	91.7897	0.99	0.0025	0.0035	0.0244	754.60	542.90	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	154.0790	1.66	0.0043	0.0035	0.0244	754.60	924.40	5257.27	924.40	1140.40	3 D 22
		400	600	539	Lapangan (-)	55.0738	0.59	0.0015	0.0035	0.0244	754.60	323.10	5257.27	754.60	760.27	2 D 22

Tabel Penulangan Lentur Balok Induk Arah Y

Lantai	Balok	dimensi (mm)		d	Lokasi	Mu (kNm)	Rn	ρ	ρ_{min}	ρ_{maks}	As _{min} (mm ²)	As (mm ²)	As _{max} (mm ²)	As _{perlu} (mm ²)	As _{pasang} (mm ²)	Dipasang Tulangan
		b	h													
Top Floor	B158	400	600	539	Tumpuan (-)	49.2990	0.53	0.0013	0.0035	0.0244	754.60	288.86	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	16.4330	0.18	0.0004	0.0035	0.0244	754.60	95.61	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	34.4260	0.37	0.0009	0.0035	0.0244	754.60	201.06	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	9.8598	0.11	0.0003	0.0035	0.0244	754.60	57.28	5257.27	754.60	760.27	2 D 22
	B159	400	600	539	Tumpuan (-)	68.2490	0.73	0.0019	0.0035	0.0244	754.60	401.56	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	22.7497	0.24	0.0006	0.0035	0.0244	754.60	132.54	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	46.4120	0.50	0.0013	0.0035	0.0244	754.60	271.77	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	13.6498	0.15	0.0004	0.0035	0.0244	754.60	79.37	5257.27	754.60	760.27	2 D 22
Lantai 9	B158	400	600	539	Tumpuan (-)	81.5370	0.88	0.0022	0.0035	0.0244	754.60	481.15	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	27.1790	0.29	0.0007	0.0035	0.0244	754.60	158.49	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	55.4870	0.60	0.0015	0.0035	0.0244	754.60	325.56	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	16.3074	0.18	0.0004	0.0035	0.0244	754.60	94.87	5257.27	754.60	760.27	2 D 22
	B159	400	600	539	Tumpuan (-)	112.1430	1.21	0.0031	0.0035	0.0244	754.60	666.33	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	37.3810	0.40	0.0010	0.0035	0.0244	754.60	218.46	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	73.9660	0.80	0.0020	0.0035	0.0244	754.60	435.75	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	22.4286	0.24	0.0006	0.0035	0.0244	754.60	130.66	5257.27	754.60	760.27	2 D 22
Lantai 8	B158	400	600	539	Tumpuan (-)	80.1190	0.86	0.0022	0.0035	0.0244	754.60	472.64	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	26.7063	0.29	0.0007	0.0035	0.0244	754.60	155.72	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	55.5970	0.60	0.0015	0.0035	0.0244	754.60	326.21	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	16.0238	0.17	0.0004	0.0035	0.0244	754.60	93.22	5257.27	754.60	760.27	2 D 22
	B159	400	600	539	Tumpuan (-)	109.0240	1.17	0.0030	0.0035	0.0244	754.60	647.34	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	36.3413	0.39	0.0010	0.0035	0.0244	754.60	212.34	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	74.0260	0.80	0.0020	0.0035	0.0244	754.60	436.10	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	21.8048	0.23	0.0006	0.0035	0.0244	754.60	127.01	5257.27	754.60	760.27	2 D 22
Lantai 7	B158	400	600	539	Tumpuan (-)	76.4340	0.82	0.0021	0.0035	0.0244	754.60	450.53	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	25.4780	0.27	0.0007	0.0035	0.0244	754.60	148.52	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	54.8780	0.59	0.0015	0.0035	0.0244	754.60	321.94	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	15.2868	0.16	0.0004	0.0035	0.0244	754.60	88.92	5257.27	754.60	760.27	2 D 22
	B159	400	600	539	Tumpuan (-)	105.1170	1.13	0.0029	0.0035	0.0244	754.60	623.59	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	35.0390	0.38	0.0009	0.0035	0.0244	754.60	204.67	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	72.3820	0.78	0.0020	0.0035	0.0244	754.60	426.26	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	21.0234	0.23	0.0006	0.0035	0.0244	754.60	122.43	5257.27	754.60	760.27	2 D 22

Tabel Penulangan Lentur Balok Induk Arah Y

Lantai	Balok	dimensi (mm)		d	Lokasi	Mu (kNm)	Rn	ρ	ρ_{min}	ρ_{maks}	As _{min} (mm ²)	As (mm ²)	As _{max} (mm ²)	As _{perlu} (mm ²)	As _{pasang} (mm ²)	Dipasang Tulangan
		b	h													
Lantai 6	B158	400	600	539	Tumpuan (-)	76.6860	0.82	0.0021	0.0035	0.0244	754.60	452.04	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	25.5620	0.27	0.0007	0.0035	0.0244	754.60	149.01	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	54.3530	0.58	0.0015	0.0035	0.0244	754.60	318.82	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	15.3372	0.16	0.0004	0.0035	0.0244	754.60	89.21	5257.27	754.60	760.27	2 D 22
	B159	400	600	539	Tumpuan (-)	105.3970	1.13	0.0029	0.0035	0.0244	754.60	625.29	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	35.1323	0.38	0.0010	0.0035	0.0244	754.60	205.22	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	71.0970	0.76	0.0019	0.0035	0.0244	754.60	418.58	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	21.0794	0.23	0.0006	0.0035	0.0244	754.60	122.76	5257.27	754.60	760.27	2 D 22
Lantai 5	B158	400	600	539	Tumpuan (-)	73.7670	0.79	0.0020	0.0035	0.0244	754.60	434.55	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	24.5890	0.26	0.0007	0.0035	0.0244	754.60	143.31	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	54.2470	0.58	0.0015	0.0035	0.0244	754.60	318.20	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	14.7534	0.16	0.0004	0.0035	0.0244	754.60	85.80	5257.27	754.60	760.27	2 D 22
	B159	400	600	539	Tumpuan (-)	52.4910	0.56	0.0014	0.0035	0.0244	754.60	307.78	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	17.4970	0.19	0.0005	0.0035	0.0244	754.60	101.82	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	70.9300	0.76	0.0019	0.0035	0.0244	754.60	417.58	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	10.4982	0.11	0.0003	0.0035	0.0244	754.60	61.00	5257.27	754.60	760.27	2 D 22
Lantai 4	B158	400	600	539	Tumpuan (-)	67.0850	0.72	0.0018	0.0035	0.0244	754.60	394.61	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	22.3617	0.24	0.0006	0.0035	0.0244	754.60	130.27	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	53.6620	0.58	0.0015	0.0035	0.0244	754.60	314.72	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	13.4170	0.14	0.0004	0.0035	0.0244	754.60	78.01	5257.27	754.60	760.27	2 D 22
	B159	400	600	539	Tumpuan (-)	93.3270	1.00	0.0026	0.0035	0.0244	754.60	552.18	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	31.1090	0.33	0.0008	0.0035	0.0244	754.60	181.56	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	69.5950	0.75	0.0019	0.0035	0.0244	754.60	409.60	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	18.6654	0.20	0.0005	0.0035	0.0244	754.60	108.65	5257.27	754.60	760.27	2 D 22
Lantai 3	B158	400	600	539	Tumpuan (-)	63.9360	0.69	0.0017	0.0035	0.0244	754.60	375.82	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	21.3120	0.23	0.0006	0.0035	0.0244	754.60	124.12	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	52.9410	0.57	0.0014	0.0035	0.0244	754.60	310.45	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	12.7872	0.14	0.0003	0.0035	0.0244	754.60	74.34	5257.27	754.60	760.27	2 D 22
	B159	400	600	539	Tumpuan (-)	91.5170	0.98	0.0025	0.0035	0.0244	754.60	541.25	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	30.5057	0.33	0.0008	0.0035	0.0244	754.60	178.02	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	68.6740	0.74	0.0019	0.0035	0.0244	754.60	404.10	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	18.3034	0.20	0.0005	0.0035	0.0244	754.60	106.53	5257.27	754.60	760.27	2 D 22

Tabel Penulangan Lentur Balok Induk Arah Y

Lantai	Balok	dimensi (mm)		d	Lokasi	Mu (kNm)	Rn	ρ	ρ_{min}	ρ_{maks}	As _{min} (mm ²)	As (mm ²)	As _{max} (mm ²)	As _{perlu} (mm ²)	As _{pasang} (mm ²)	Dipasang Tulangan
		b	h													
Lantai 2	B158	400	600	539	Tumpuan (-)	60.1870	0.65	0.0016	0.0035	0.0244	754.60	353.50	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	20.0623	0.22	0.0005	0.0035	0.0244	754.60	116.81	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	52.3620	0.56	0.0014	0.0035	0.0244	754.60	307.01	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	12.0374	0.13	0.0003	0.0035	0.0244	754.60	69.97	5257.27	754.60	760.27	2 D 22
	B159	400	600	539	Tumpuan (-)	86.0970	0.93	0.0024	0.0035	0.0244	754.60	508.58	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	28.6990	0.31	0.0008	0.0035	0.0244	754.60	167.41	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	68.0790	0.73	0.0019	0.0035	0.0244	754.60	400.54	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	17.2194	0.19	0.0005	0.0035	0.0244	754.60	100.20	5257.27	754.60	760.27	2 D 22
Lantai 1	B158	400	600	539	Tumpuan (-)	56.4720	0.61	0.0015	0.0035	0.0244	754.60	331.41	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	18.8240	0.20	0.0005	0.0035	0.0244	754.60	109.57	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	51.7750	0.56	0.0014	0.0035	0.0244	754.60	303.53	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	11.2944	0.12	0.0003	0.0035	0.0244	754.60	65.64	5257.27	754.60	760.27	2 D 22
	B159	400	600	539	Tumpuan (-)	77.2820	0.83	0.0021	0.0035	0.0244	754.60	455.62	5257.27	754.60	760.27	2 D 22
		400	600	539	Tumpuan (+)	25.7607	0.28	0.0007	0.0035	0.0244	754.60	150.17	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (+)	67.7310	0.73	0.0018	0.0035	0.0244	754.60	398.46	5257.27	754.60	760.27	2 D 22
		400	600	539	Lapangan (-)	15.4564	0.17	0.0004	0.0035	0.0244	754.60	89.91	5257.27	754.60	760.27	2 D 22

Tabel Perhitungan Momen Kapasitas Positif Balok Induk Arah X

Lantai	Balok	dimensi (mm)		d	Tul. Atas Pelat	Tul. Bawah Pelat	Tul. Atas Balok	Tul. Bawah Balok	As	As'	be	bf	Mn	M _{kap} ⁺
		b	h		Luas (mm ²)	mm ²	mm ²	mm ²	mm ²	mm ²	mm	mm	kNm	kNm
Top Floor	B82	400	600	539	376.9911	376.9911	1140.3981	760.2654	760.2654	1894.3804	1360	480	193.77	230.96
	B83	400	600	539	363.2467	363.2467	760.2654	760.2654	760.2654	1486.7587	1325	463	190.77	228.07
Lantai 9	B82	400	600	539	376.9911	502.6548	1520.5308	760.2654	760.2654	2400.1768	1360	480	197.88	234.85
	B83	400	600	539	363.2467	484.3289	1520.5308	760.2654	760.2654	2368.1064	1325	463	196.65	233.62
Lantai 8	B82	400	600	539	376.9911	502.6548	1900.6636	760.2654	760.2654	2780.3095	1360	480	198.82	235.74
	B83	400	600	539	363.2467	484.3289	1900.6636	760.2654	760.2654	2748.2391	1325	463	197.58	234.49
Lantai 7	B82	400	600	539	376.9911	502.6548	2280.7963	760.2654	760.2654	3160.4422	1360	480	199.62	236.49
	B83	400	600	539	353.4292	471.2389	1900.6636	760.2654	760.2654	2725.3316	1300	450	196.69	233.60
Lantai 6	B82	400	600	539	376.9911	502.6548	2280.7963	760.2654	760.2654	3160.4422	1360	480	199.62	236.49
	B83	400	600	539	353.4292	471.2389	2280.7963	760.2654	760.2654	3105.4643	1300	450	197.45	234.31
Lantai 5	B82	400	600	539	376.9911	502.6548	2280.7963	760.2654	760.2654	3160.4422	1360	480	199.62	236.49
	B83	400	600	539	353.4292	471.2389	2280.7963	760.2654	760.2654	3105.4643	1300	450	197.45	234.31
Lantai 4	B82	400	600	539	376.9911	502.6548	2660.9290	760.2654	760.2654	3540.5749	1360	480	200.29	237.12
	B83	400	600	539	343.6117	458.1489	2280.7963	760.2654	760.2654	3082.5569	1275	438	196.54	233.40
Lantai 3	B82	400	600	539	376.9911	502.6548	2660.9290	760.2654	760.2654	3540.5749	1360	480	200.29	237.12
	B83	400	600	539	343.6117	458.1489	2280.7963	760.2654	760.2654	3082.5569	1275	438	196.54	233.40
Lantai 2	B82	400	600	539	376.9911	502.6548	2280.7963	760.2654	760.2654	3160.4422	1360	480	199.62	236.49
	B83	400	600	539	343.6117	458.1489	2280.7963	760.2654	760.2654	3082.5569	1275	438	196.54	233.40
Lantai 1	B82	400	600	539	376.9911	502.6548	1900.6636	760.2654	760.2654	2780.3095	1360	480	198.82	235.74
	B83	400	600	539	343.6117	458.1489	1900.6636	760.2654	760.2654	2702.4242	1275	438	195.80	232.70

Tabel Perhitungan Momen Kapasitas Positif Balok Induk Arah Y

Lantai	Balok	dimensi (mm)		d	Tul. Atas Pelat	Tul. Bawah Pelat	Tul. Atas Balok	Tul. Bawah Balok	As	As'	be	bf	Mn	M _{kap} ⁺
		b	h		Luas (mm ²)	mm ²	mm ²	mm ²	mm ²	mm ²	mm	mm	kNm	kNm
Top Floor	B158	400	600	539	304.3418	304.3418	760.2654	760.2654	760.2654	1368.9490	1175	388	186.36	223.65
	B159	400	600	539	363.2467	363.2467	760.2654	760.2654	760.2654	1486.7587	1325	463	190.77	228.07
Lantai 9	B158	400	600	539	405.7891	304.3418	760.2654	760.2654	760.2654	1470.3963	1175	388	184.72	222.10
	B159	400	600	539	484.3289	363.2467	760.2654	760.2654	760.2654	1607.8409	1325	463	188.73	226.14
Lantai 8	B158	400	600	539	405.7891	304.3418	760.2654	760.2654	760.2654	1470.3963	1175	388	184.72	222.10
	B159	400	600	539	484.3289	363.2467	760.2654	760.2654	760.2654	1607.8409	1325	463	188.73	226.14
Lantai 7	B158	400	600	539	392.6991	294.5243	760.2654	760.2654	760.2654	1447.4888	1150	375	184.05	221.42
	B159	400	600	539	471.2389	353.4292	760.2654	760.2654	760.2654	1584.9335	1300	450	188.07	225.47
Lantai 6	B158	400	600	539	392.6991	294.5243	760.2654	760.2654	760.2654	1447.4888	1150	375	184.05	221.42
	B159	400	600	539	471.2389	353.4292	760.2654	760.2654	760.2654	1584.9335	1300	450	188.07	225.47
Lantai 5	B158	400	600	539	392.6991	294.5243	760.2654	760.2654	760.2654	1447.4888	1150	375	184.05	221.42
	B159	400	600	539	471.2389	353.4292	760.2654	760.2654	760.2654	1584.9335	1300	450	188.07	225.47
Lantai 4	B158	400	600	539	379.6091	284.7068	760.2654	760.2654	760.2654	1424.5814	1125	363	183.38	220.74
	B159	400	600	539	458.1489	343.6117	760.2654	760.2654	760.2654	1562.0260	1275	438	187.40	224.80
Lantai 3	B158	400	600	539	379.6091	284.7068	760.2654	760.2654	760.2654	1424.5814	1125	363	183.38	220.74
	B159	400	600	539	458.1489	343.6117	760.2654	760.2654	760.2654	1562.0260	1275	438	187.40	224.80
Lantai 2	B158	400	600	539	379.6091	284.7068	760.2654	760.2654	760.2654	1424.5814	1125	363	183.38	220.74
	B159	400	600	539	458.1489	343.6117	760.2654	760.2654	760.2654	1562.0260	1275	438	187.40	224.80
Lantai 1	B158	400	600	539	379.6091	284.7068	760.2654	760.2654	760.2654	1424.5814	1125	363	183.38	220.74
	B159	400	600	539	458.1489	343.6117	760.2654	760.2654	760.2654	1562.0260	1275	438	187.40	224.80

Tabel Perhitungan Momen Kapasitas Negatif Balok Induk Arah X

Lantai	Balok	dimensi (mm)		d	Tul. Atas Pelat	Tul. Bawah Pelat	Tul. Atas Balok	Tul. Bawah Balok	As	As'	be	bf	Mn	M _{kap} ⁻
		b	h		Luas (mm ²)	mm ²	mm ²	mm ²	mm ²	mm ²	mm	mm	kNm	kNm
Top Floor	B82	400	600	539	376.9911	376.9911	760.2654	1140.3981	1894.3804	760.2654	1360	480	381.44	470.74
	B83	400	600	539	363.2467	363.2467	760.2654	760.2654	1486.7587	760.2654	1325	463	303.38	374.67
Lantai 9	B82	400	600	539	376.9911	502.6548	760.2654	1520.5308	2400.1768	760.2654	1360	480	474.55	583.82
	B83	400	600	539	363.2467	484.3289	760.2654	1520.5308	2368.1064	760.2654	1325	463	468.65	576.70
Lantai 8	B82	400	600	539	376.9911	502.6548	760.2654	1900.6636	2780.3095	760.2654	1360	480	544.50	667.83
	B83	400	600	539	363.2467	484.3289	760.2654	1900.6636	2748.2391	760.2654	1325	463	538.72	660.93
Lantai 7	B82	400	600	539	376.9911	502.6548	760.2654	2280.7963	3160.4422	760.2654	1360	480	612.90	748.98
	B83	400	600	539	353.4292	471.2389	760.2654	1900.6636	2725.3316	760.2654	1300	450	534.58	655.99
Lantai 6	B82	400	600	539	376.9911	502.6548	760.2654	2280.7963	3160.4422	760.2654	1360	480	612.90	748.98
	B83	400	600	539	353.4292	471.2389	760.2654	2280.7963	3105.4643	760.2654	1300	450	603.22	737.57
Lantai 5	B82	400	600	539	376.9911	502.6548	760.2654	2280.7963	3160.4422	760.2654	1360	480	612.90	748.98
	B83	400	600	539	353.4292	471.2389	760.2654	2280.7963	3105.4643	760.2654	1300	450	603.22	737.57
Lantai 4	B82	400	600	539	376.9911	502.6548	760.2654	2660.9290	3540.5749	760.2654	1360	480	679.59	827.07
	B83	400	600	539	343.6117	458.1489	760.2654	2280.7963	3082.5569	760.2654	1275	438	599.18	732.80
Lantai 3	B82	400	600	539	376.9911	502.6548	760.2654	2660.9290	3540.5749	760.2654	1360	480	679.59	827.07
	B83	400	600	539	343.6117	458.1489	760.2654	2280.7963	3082.5569	760.2654	1275	438	599.18	732.80
Lantai 2	B82	400	600	539	376.9911	502.6548	760.2654	2280.7963	3160.4422	760.2654	1360	480	612.90	748.98
	B83	400	600	539	343.6117	458.1489	760.2654	2280.7963	3082.5569	760.2654	1275	438	599.18	732.80
Lantai 1	B82	400	600	539	376.9911	502.6548	760.2654	1900.6636	2780.3095	760.2654	1360	480	544.50	667.83
	B83	400	600	539	343.6117	458.1489	760.2654	1900.6636	2702.4242	760.2654	1275	438	530.44	651.04

Tabel Perhitungan Momen Kapasitas Negatif Balok Induk Arah Y

Lantai	Balok	dimensi (mm)		d	Tul. Atas Pelat	Tul. Bawah Pelat	Tul. Atas Balok	Tul. Bawah Balok	As	As'	be	bf	Mn	M _{kap} ⁻
		b	h		Luas (mm ²)	mm ²	mm ²	mm ²	mm ²	mm ²	mm	mm	kNm	kNm
Top Floor	B158	400	600	539	304.3418	304.3418	760.2654	760.2654	1368.9490	760.2654	1175	388	280.61	346.49
	B159	400	600	539	363.2467	363.2467	760.2654	760.2654	1486.7587	760.2654	1325	463	303.38	374.67
Lantai 9	B158	400	600	539	405.7891	304.3418	760.2654	760.2654	1470.3963	760.2654	1175	388	301.68	372.80
	B159	400	600	539	484.3289	363.2467	760.2654	760.2654	1607.8409	760.2654	1325	463	328.54	406.00
Lantai 8	B158	400	600	539	405.7891	304.3418	760.2654	760.2654	1470.3963	760.2654	1175	388	301.68	372.80
	B159	400	600	539	484.3289	363.2467	760.2654	760.2654	1607.8409	760.2654	1325	463	328.54	406.00
Lantai 7	B158	400	600	539	392.6991	294.5243	760.2654	760.2654	1447.4888	760.2654	1150	375	297.19	367.25
	B159	400	600	539	471.2389	353.4292	760.2654	760.2654	1584.9335	760.2654	1300	450	324.07	400.48
Lantai 6	B158	400	600	539	392.6991	294.5243	760.2654	760.2654	1447.4888	760.2654	1150	375	297.19	367.25
	B159	400	600	539	471.2389	353.4292	760.2654	760.2654	1584.9335	760.2654	1300	450	324.07	400.48
Lantai 5	B158	400	600	539	392.6991	294.5243	760.2654	760.2654	1447.4888	760.2654	1150	375	297.19	367.25
	B159	400	600	539	471.2389	353.4292	760.2654	760.2654	1584.9335	760.2654	1300	450	324.07	400.48
Lantai 4	B158	400	600	539	379.6091	284.7068	760.2654	760.2654	1424.5814	760.2654	1125	363	292.70	361.69
	B159	400	600	539	458.1489	343.6117	760.2654	760.2654	1562.0260	760.2654	1275	438	319.60	394.95
Lantai 3	B158	400	600	539	379.6091	284.7068	760.2654	760.2654	1424.5814	760.2654	1125	363	292.70	361.69
	B159	400	600	539	458.1489	343.6117	760.2654	760.2654	1562.0260	760.2654	1275	438	319.60	394.95
Lantai 2	B158	400	600	539	379.6091	284.7068	760.2654	760.2654	1424.5814	760.2654	1125	363	292.70	361.69
	B159	400	600	539	458.1489	343.6117	760.2654	760.2654	1562.0260	760.2654	1275	438	319.60	394.95
Lantai 1	B158	400	600	539	379.6091	284.7068	760.2654	760.2654	1424.5814	760.2654	1125	363	292.70	361.69
	B159	400	600	539	458.1489	343.6117	760.2654	760.2654	1562.0260	760.2654	1275	438	319.60	394.95

Tabel Perhitungan Tulangan Geser Arah X

Lantai	Balok	dimensi (mm)		d	Ln m	V _g KNm	M _{pr} ⁺ KNm	M _{pr} ⁻ KNm	V _{e1} KNm	V _{e2} KNm	Sendi Plastis			Luar Sendi Plastis		
		b	h								V _e	V _s	dipasang	V _e	V _s	dipasang
Top Floor	B82	400	600	539	5.9	104.748	230.96	470.74	223.68	-14.18	201.95	72.45	2 P 10 - 200	175.30	36.92	2 P 10 - 250
	B83	400	600	539	5.3	95.352	228.07	374.67	209.08	-18.37	185.95	51.11	2 P 10 - 200	157.58	13.29	2 P 10 - 250
Lantai 9	B82	400	600	539	5.9	163.152	234.85	583.82	301.91	24.39	276.56	171.93	2 P 10 - 100	245.47	130.47	2 P 10 - 150
	B83	400	600	539	5.3	147.816	233.62	576.70	300.71	-5.07	269.61	162.66	2 P 10 - 100	231.47	308.63	2 P 10 - 150
Lantai 8	B82	400	600	539	5.9	162.408	235.74	667.83	315.56	9.26	287.57	186.62	2 P 10 - 100	253.26	140.86	2 P 10 - 150
	B83	400	600	539	5.3	147.804	234.49	660.93	316.75	-21.14	282.39	179.70	2 P 10 - 100	240.25	123.51	2 P 10 - 150
Lantai 7	B82	400	600	539	5.8	162.024	236.49	748.98	331.93	-7.88	300.35	203.66	2 P 10 - 100	261.63	152.02	2 P 10 - 150
	B83	400	600	539	5.2	146.772	233.60	655.99	317.85	-24.30	282.38	179.69	2 P 10 - 100	238.89	121.70	2 P 10 - 150
Lantai 6	B82	400	600	539	5.8	162.204	236.49	748.98	332.11	-7.70	300.53	203.90	2 P 10 - 100	261.81	152.26	2 P 10 - 150
	B83	400	600	539	5.2	146.988	234.31	737.57	333.89	-39.91	295.14	196.71	2 P 10 - 100	247.63	133.35	2 P 10 - 150
Lantai 5	B82	400	600	539	5.8	162.324	236.49	748.98	332.23	-7.58	300.65	204.06	2 P 10 - 100	261.93	152.42	2 P 10 - 150
	B83	400	600	539	5.2	147.048	234.31	737.57	333.95	-39.85	295.20	196.79	2 P 10 - 100	247.69	133.43	2 P 10 - 150
Lantai 4	B82	400	600	539	5.7	161.412	237.12	827.07	348.11	-25.29	312.80	220.26	2 P 10 - 100	269.50	162.52	2 P 10 - 150
	B83	400	600	539	5.1	145.8	233.40	732.80	335.25	-43.65	295.21	196.79	2 P 10 - 100	246.10	131.31	2 P 10 - 150
Lantai 3	B82	400	600	539	5.7	161.436	237.12	827.07	348.14	-25.26	312.83	220.29	2 P 10 - 100	269.53	162.55	2 P 10 - 150
	B83	400	600	539	5.1	145.86	233.40	732.80	335.31	-43.59	295.27	196.87	2 P 10 - 100	246.16	131.39	2 P 10 - 150
Lantai 2	B82	400	600	539	5.7	162.324	236.49	748.98	335.21	-10.57	302.52	206.54	2 P 10 - 100	262.42	153.08	2 P 10 - 150
	B83	400	600	539	5.1	146.652	233.40	732.80	336.10	-42.80	296.06	197.93	2 P 10 - 100	246.95	132.45	2 P 10 - 150
Lantai 1	B82	400	600	539	5.7	162.204	235.74	667.83	320.73	3.68	290.75	190.85	2 P 10 - 100	253.98	141.82	2 P 10 - 150
	B83	400	600	539	5.1	147.444	232.70	651.04	320.73	-25.84	284.10	181.99	2 P 10 - 100	239.18	122.09	2 P 10 - 150

Tabel Perhitungan Tulangan Geser Balok Arah Y


Lantai	Balok	dimensi (mm)		d	Ln m	V _g kNm	M _{pr} ⁺ kNm	M _{pr} ⁻ kNm	V _{e1} kNm	V _{e2} kNm	Sendi Plastis			Luar Sendi Plastis		
		b	h								V _e	V _s	dipasang	V _e	V _s	dipasang
Top Floor	B158	400	600	539	4.7	50.556	223.65	346.49	171.86	70.75	160.27	16.87	2 P 10 - 200	146.05	-2.09	2 P 10 - 250
	B159	400	600	539	5.3	65.664	228.07	374.67	179.39	48.06	166.03	24.56	2 P 10 - 200	149.65	2.72	2 P 10 - 250
Lantai 9	B158	400	600	539	4.7	94.836	222.10	372.80	221.41	31.74	199.66	69.40	2 P 10 - 200	172.98	33.83	2 P 10 - 250
	B159	400	600	539	5.3	111.444	226.14	406.00	230.71	7.83	208.05	80.58	2 P 10 - 200	180.25	43.52	2 P 10 - 250
Lantai 8	B158	400	600	539	4.7	95.136	222.10	372.80	221.71	31.44	199.89	69.70	2 P 10 - 200	173.13	34.03	2 P 10 - 250
	B159	400	600	539	5.3	110.424	226.14	406.00	229.69	8.85	207.23	79.50	2 P 10 - 200	179.69	42.77	2 P 10 - 250
Lantai 7	B158	400	600	539	4.6	93.24	221.42	367.25	221.21	34.73	199.36	69.00	2 P 10 - 200	172.56	33.27	2 P 10 - 250
	B159	400	600	539	5.2	109.236	225.47	400.48	229.61	11.14	206.96	79.14	2 P 10 - 200	179.19	42.11	2 P 10 - 250
Lantai 6	B158	400	600	539	4.6	93.132	221.42	367.25	221.10	34.84	199.28	68.89	2 P 10 - 200	172.51	33.20	2 P 10 - 250
	B159	400	600	539	5.2	108.9	225.47	400.48	229.27	11.47	206.70	78.78	2 P 10 - 200	179.01	41.87	2 P 10 - 250
Lantai 5	B158	400	600	539	4.6	84.72	221.42	367.25	212.69	43.25	192.84	60.30	2 P 10 - 200	168.49	27.84	2 P 10 - 250
	B159	400	600	539	5.2	107.268	225.47	400.48	227.64	13.11	205.40	77.06	2 P 10 - 200	178.13	40.70	2 P 10 - 250
Lantai 4	B158	400	600	539	4.5	89.664	220.74	361.69	219.09	39.77	197.61	66.67	2 P 10 - 200	171.27	31.55	2 P 10 - 250
	B159	400	600	539	5.1	104.976	224.80	394.95	226.50	16.54	204.31	75.59	2 P 10 - 200	177.10	39.31	2 P 10 - 250
Lantai 3	B158	400	600	539	4.5	88.224	220.74	361.69	217.65	41.21	196.52	65.21	2 P 10 - 200	170.60	30.65	2 P 10 - 250
	B159	400	600	539	5.1	104.088	224.80	394.95	225.61	17.43	203.61	74.66	2 P 10 - 200	176.63	38.69	2 P 10 - 250
Lantai 2	B158	400	600	539	4.5	86.64	220.74	361.69	216.07	42.79	195.31	63.60	2 P 10 - 200	169.86	29.67	2 P 10 - 250
	B159	400	600	539	5.1	102.096	224.80	394.95	223.62	19.42	202.04	72.57	2 P 10 - 200	175.57	37.28	2 P 10 - 250
Lantai 1	B158	400	600	539	4.5	85.2	220.74	361.69	214.63	44.23	194.22	62.14	2 P 10 - 200	169.19	28.77	2 P 10 - 250
	B159	400	600	539	5.1	99.036	224.80	394.95	220.56	22.48	199.62	69.35	2 P 10 - 200	173.95	35.12	2 P 10 - 250

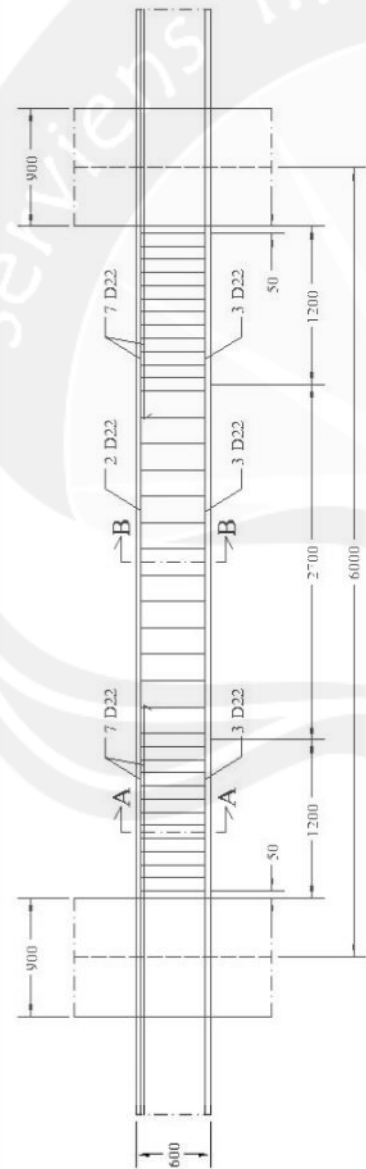
Tabel Perhitungan Torsi Balok Arah X

Lantai	Balok	b_w mm	h mm	h_f mm	h_w mm	b_e mm	b_f mm	p_{cp} mm	A_{cp} mm ²	T_u kNm	Syarat T_u kNm	Keterangan
Top Floor	B82	400	600	120	480	1360	480	3920	355200	2.611	11.0179	diabaikan
	B83	400	600	120	480	1360	480	3920	355200	2.574	11.0179	diabaikan
Lantai 9	B82	400	600	120	480	1360	480	3920	355200	3.572	11.0179	diabaikan
	B83	400	600	120	480	1360	480	3920	355200	3.467	11.0179	diabaikan
Lantai 8	B82	400	600	120	480	1360	480	3920	355200	3.655	11.0179	diabaikan
	B83	400	600	120	480	1360	480	3920	355200	3.552	11.0179	diabaikan
Lantai 7	B82	400	600	120	480	1360	480	3920	355200	3.757	11.0179	diabaikan
	B83	400	600	120	480	1360	480	3920	355200	3.653	11.0179	diabaikan
Lantai 6	B82	400	600	120	480	1360	480	3920	355200	3.858	11.0179	diabaikan
	B83	400	600	120	480	1360	480	3920	355200	3.755	11.0179	diabaikan
Lantai 5	B82	400	600	120	480	1360	480	3920	355200	3.925	11.0179	diabaikan
	B83	400	600	120	480	1360	480	3920	355200	3.824	11.0179	diabaikan
Lantai 4	B82	400	600	120	480	1360	480	3920	355200	4.005	11.0179	diabaikan
	B83	400	600	120	480	1360	480	3920	355200	3.905	11.0179	diabaikan
Lantai 3	B82	400	600	120	480	1360	480	3920	355200	3.977	11.0179	diabaikan
	B83	400	600	120	480	1360	480	3920	355200	4.073	11.0179	diabaikan
Lantai 2	B82	400	600	120	480	1360	480	3920	355200	4.866	11.0179	diabaikan
	B83	400	600	120	480	1360	480	3920	355200	4.137	11.0179	diabaikan
Lantai 1	B82	400	600	120	480	1360	480	3920	355200	5.298	11.0179	diabaikan
	B83	400	600	120	480	1360	480	3920	355200	4.223	11.0179	diabaikan

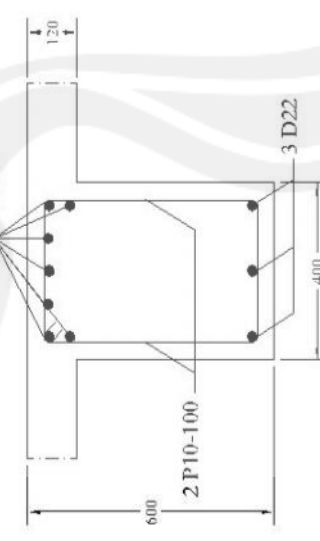
Tabel Perhitungan Torsi Balok Arah Y

Lantai	Balok	b_w mm	h mm	h_f mm	h_w mm	b_e mm	b_f mm	pcp mm	A_{cp} mm ²	T_u kNm	Syarat T_u kNm	Keterangan
Top Floor	B158	400	600	120	480	1360	480	3920	355200	0.066	11.0179	diabaikan
	B159	400	600	120	480	1360	480	3920	355200	0.145	11.0179	diabaikan
Lantai 9	B158	400	600	120	480	1360	480	3920	355200	0.060	11.0179	diabaikan
	B159	400	600	120	480	1360	480	3920	355200	0.117	11.0179	diabaikan
Lantai 8	B158	400	600	120	480	1360	480	3920	355200	0.097	11.0179	diabaikan
	B159	400	600	120	480	1360	480	3920	355200	0.154	11.0179	diabaikan
Lantai 7	B158	400	600	120	480	1360	480	3920	355200	0.126	11.0179	diabaikan
	B159	400	600	120	480	1360	480	3920	355200	0.167	11.0179	diabaikan
Lantai 6	B158	400	600	120	480	1360	480	3920	355200	0.153	11.0179	diabaikan
	B159	400	600	120	480	1360	480	3920	355200	0.181	11.0179	diabaikan
Lantai 5	B158	400	600	120	480	1360	480	3920	355200	0.188	11.0179	diabaikan
	B159	400	600	120	480	1360	480	3920	355200	0.217	11.0179	diabaikan
Lantai 4	B158	400	600	120	480	1360	480	3920	355200	0.269	11.0179	diabaikan
	B159	400	600	120	480	1360	480	3920	355200	0.289	11.0179	diabaikan
Lantai 3	B158	400	600	120	480	1360	480	3920	355200	0.448	11.0179	diabaikan
	B159	400	600	120	480	1360	480	3920	355200	0.461	11.0179	diabaikan
Lantai 2	B158	400	600	120	480	1360	480	3920	355200	0.682	11.0179	diabaikan
	B159	400	600	120	480	1360	480	3920	355200	0.696	11.0179	diabaikan
Lantai 1	B158	400	600	120	480	1360	480	3920	355200	0.659	11.0179	diabaikan
	B159	400	600	120	480	1360	480	3920	355200	0.683	11.0179	diabaikan

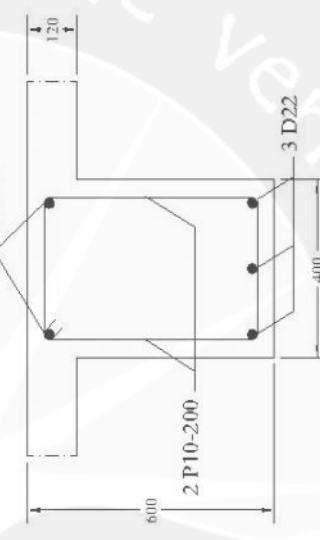
 <p>UNIVERSITAS ATMAJAYA YOGYAKARTA</p>	<p>JUDUL</p>
<p>Perancangan Struktur Gedung Rumah Sakit Umum Propinsi Kepulauan Riau</p>	<p>DIRENCANAKAN</p>
<p>Dede Fajar Nadi Camdra 06 02 12555</p>	<p>GAMBAR</p>
<p>GAMBAR PENULANGAN BALOK INDUK</p>	<p>DISETUJUI</p>
<p>Ir.F.H.Djokowidjono, MT Dosen Pembimbing I</p>	<p>Ir. Ch. Arief Sudibyo Dosen Pembimbing II</p>



Gambar Penulangan Balok Induk
Skala 1:500


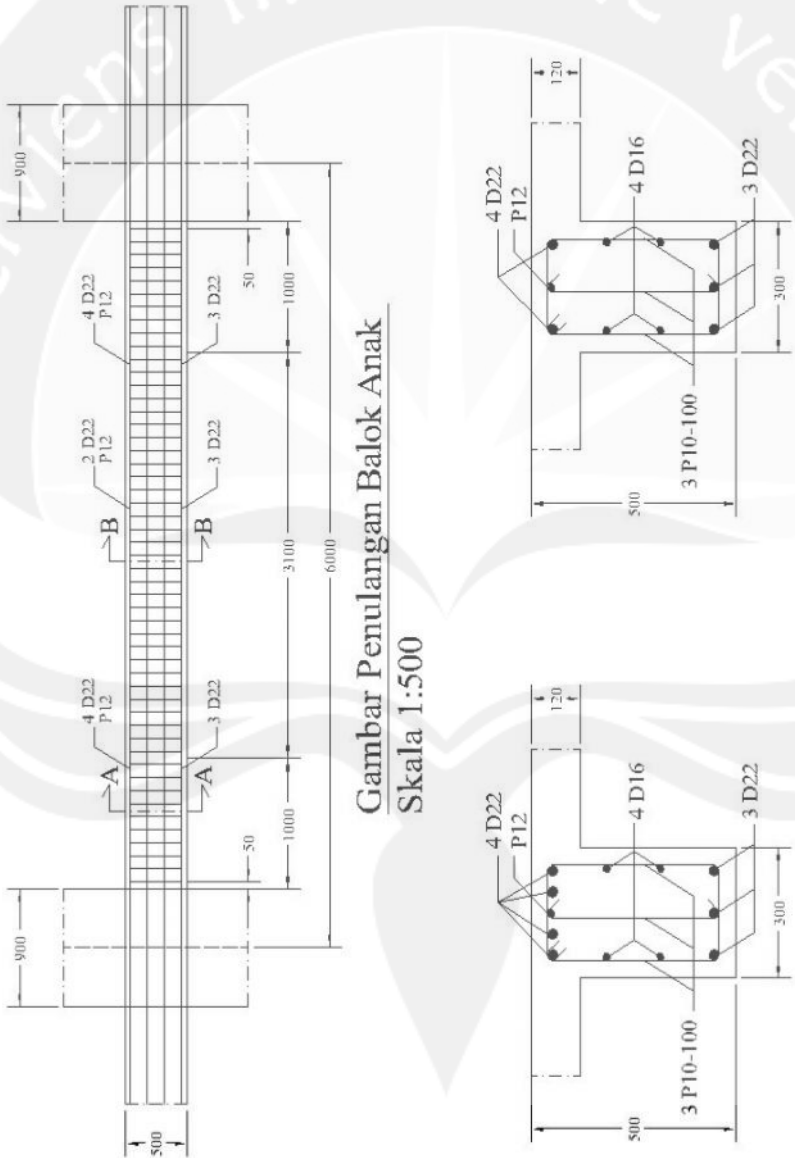


Potongan A-A
Skala 1:150



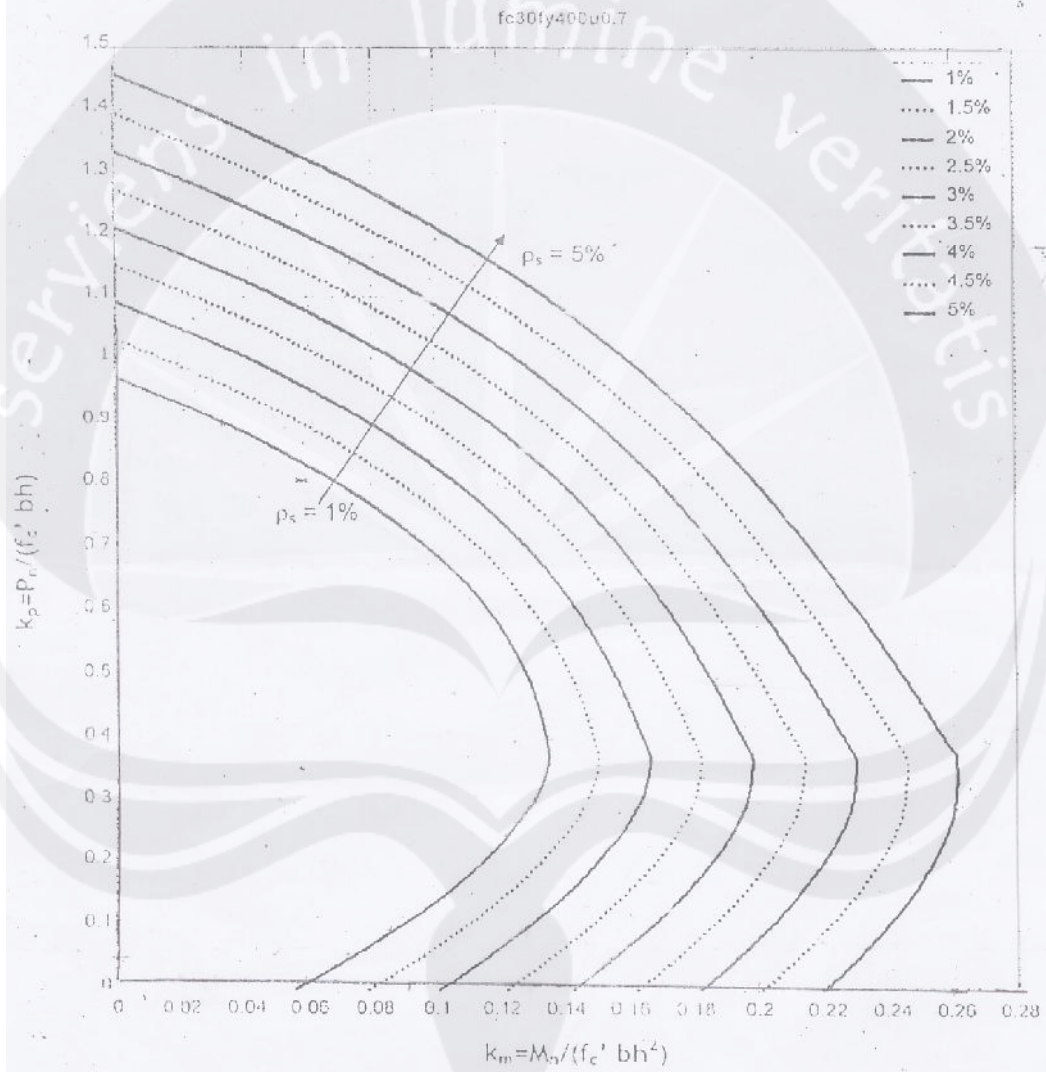
Potongan B-B
Skala 1:150


Keterangan:
1. Semua satuan dalam mm

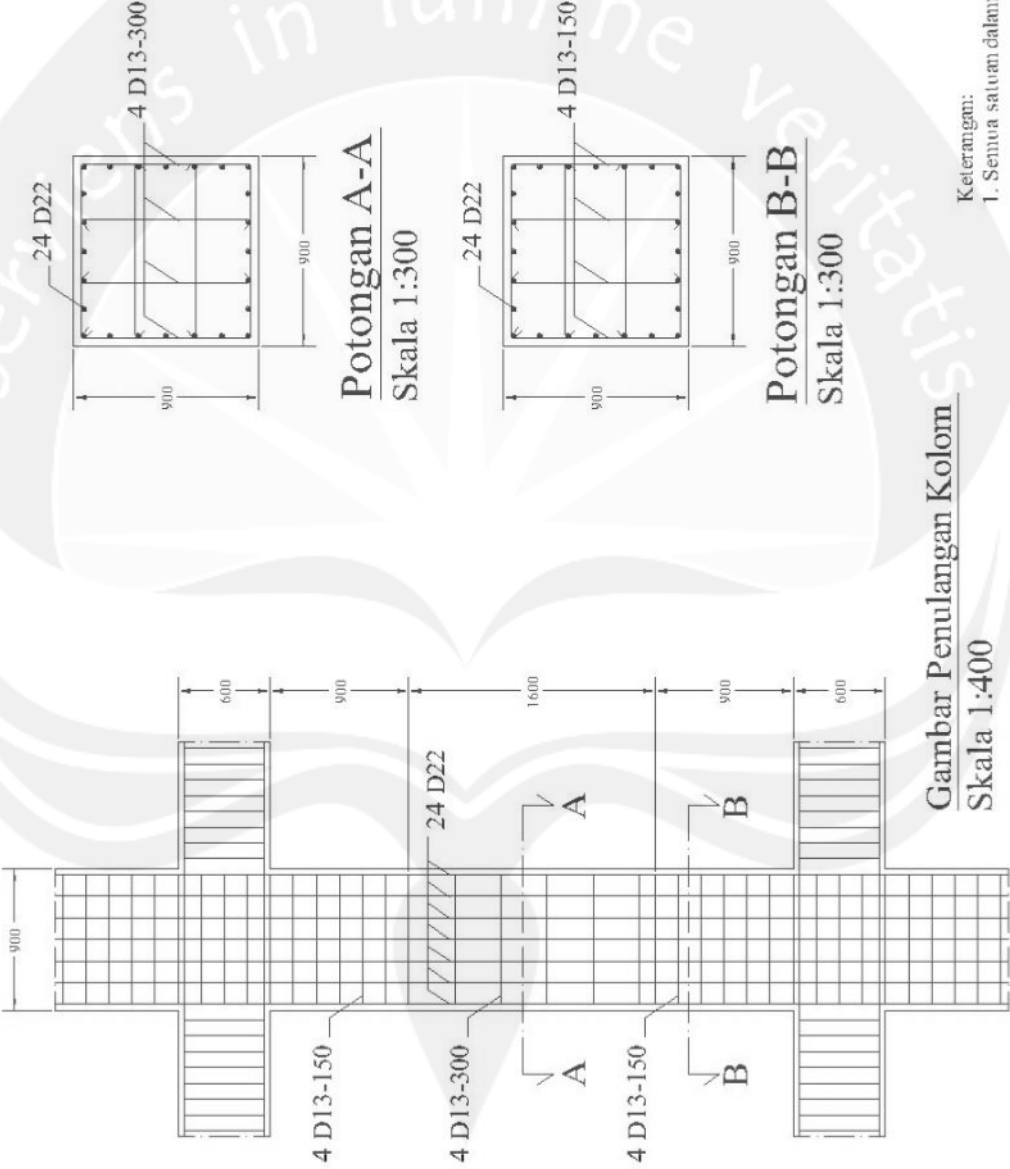
 <p>UNIVERSITAS ATMAJAYA YOGYAKARTA</p>	<p>JUDUL</p> <p>Perancangan Struktur Gedung Rumah Sakit Umum Propinsi Kepulauan Riau</p>	 <p>Gambar Penulangan Balok Anak Skala 1:500</p> <p>Potongan A-A Skala 1:150</p> <p>Potongan B-B Skala 1:150</p> <p>Keterangan: 1. Semua satuan dalam mm</p>
<p>DIRENCAKANAN</p> <p>Dede Fajar Nadi Camdra 06 02 12555</p>		
<p>GAMBAR</p> <p>GAMBAR</p> <p>PENULANGAN</p> <p>BALOK ANAK</p> <p>DISETUJUI</p>		
<p>Ir. F.H. Djokowahjono, MT Dosen Pembimbing I</p>		
<p>Ir. Ch. Arief Sudibyo Dosen Pembimbing II</p>		

Lampiran 16

Non-dimensional Interaction Diagram
Four Faces



 <p>UNIVERSITAS ATMAJAYA YOGYAKARTA</p>	<p>JUDUL</p>
<p>Perancangan Struktur Gedung Rumah Sakit Umum Propinsi Kepulauan Riau</p>	<p>DIRENCANAKAN</p>
<p>Dede Fajar Nadi Candra 06 02 12555</p>	<p>GAMBAR</p>
<p>Gambar Penulangan Kolom</p>	<p>DISETUJUI</p>
<p>Ir.F.H.Djokowahjono, MT Dosen Pembimbing I</p>	<p>Ir. Ch. Arief Sudibyo Dosen Pembimbing II</p>


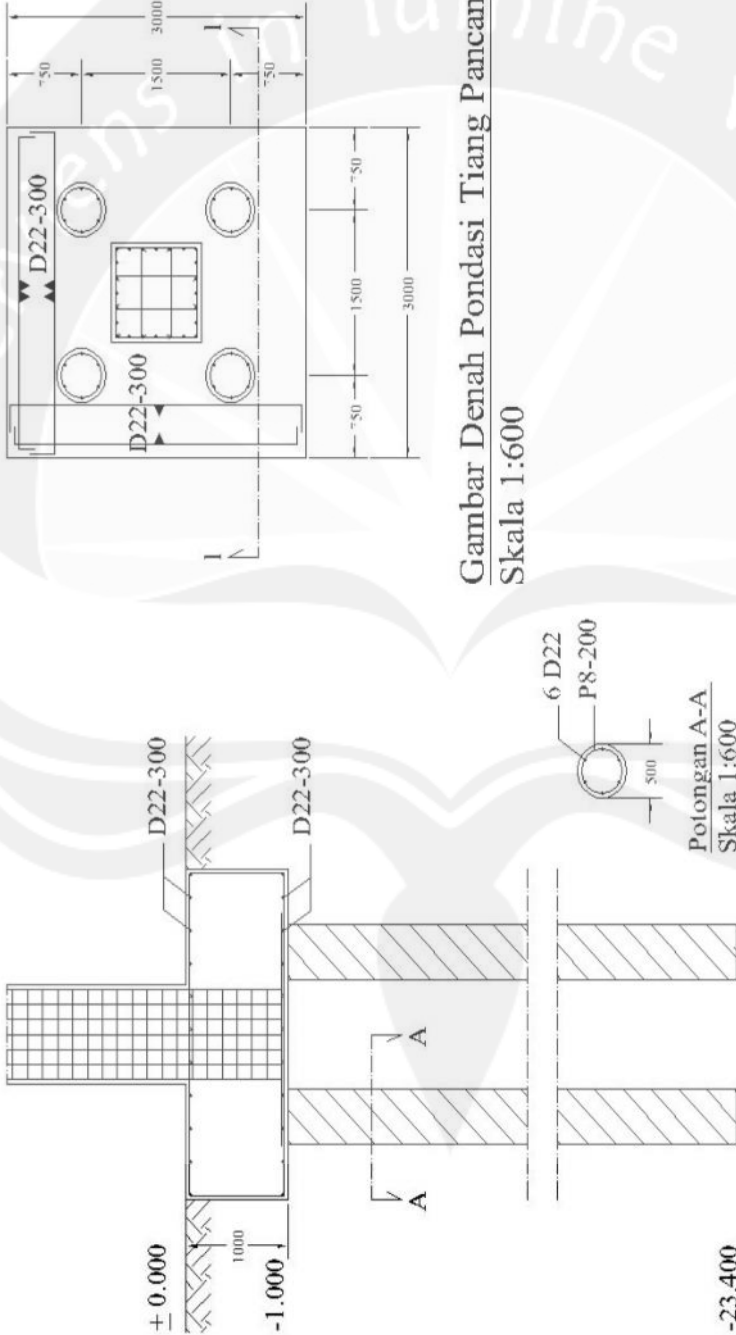


Potongan A-A
Skala 1:300

Potongan B-B
Skala 1:300

Gambar Penulangan Kolom
Skala 1:400

Keterangan:
1. Semua satuan dalam mm

 <p>UNIVERSITAS ATMAJAYA YOGYAKARTA</p>	
<p>JUDUL</p>	<p>Gambar Denah Pondasi Tiang Pancang Skala 1:600</p>
<p>Perancangan Struktural Gedung Rumah Sakit Umum Propinsi Kepulauan Riau</p>	<p>Gambar Detail Pondasi Tiang Pancang Skala 1:600</p>
<p>DIRENCANAKAN</p>	<p>Dede Fajar Naqi Candra 06 02 12555</p>
<p>GAMBAR</p>	<p>DISETUJUI</p>
<p>GAMBAR DENAH DAN DETAIL PONDASI TIANG PANCANG</p>	<p>Ir. F.H.Djokowahjono, MT Dosen Pembimbing I</p>
<p>Ir. Ch. Arief Sudibyo Dosen Pembimbing II</p>	<p>Keterangan: 1. Semua satuan dalam mm</p>

