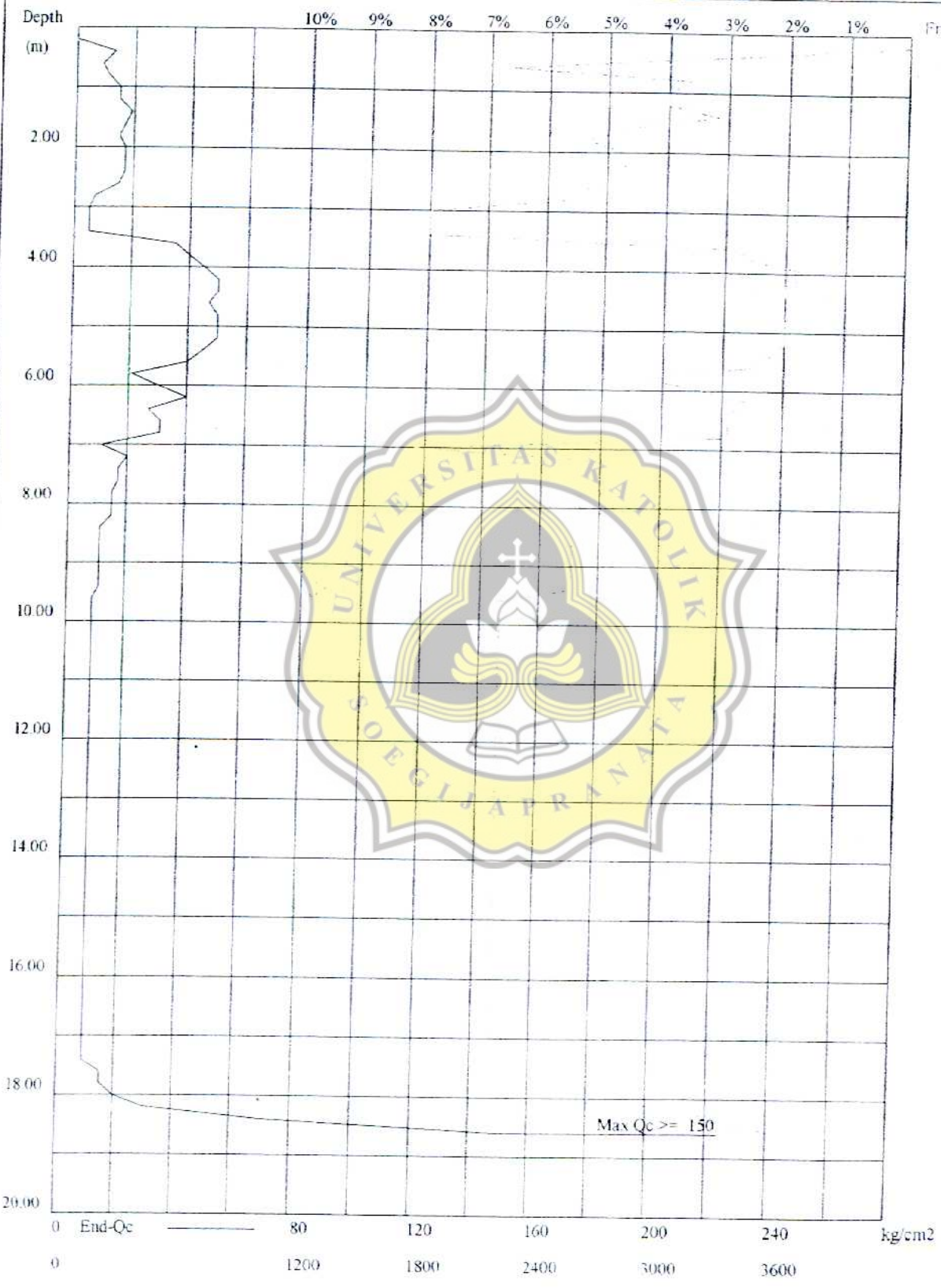
LAMPIRAN 01
DATA TANAH

Lab Mektan
FT Sipil

CONE PENETRATION TEST

Project	: RUKO			Capacity	: 2.5 t
Location	: JL. DR CIPTO 198 - SEMARANG			G.W.L	: 0.00 m
Test Point	: 1	X-coord	: 0.000 m	Depth-H	: 18.60 m
Test Date	: 5 JUNI 2013	Y-coord	: 0.000 m	Final-Qc	: 150.00 kg/cm2
Test By	: Andi	Z-coord	: 0.000 m		



FAKULTAS TEKNIK
PROGRAM STUDI TEKNIK SIPIL
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Unika SOEGIJAPRANATA

CPT V.2.0
Cone Penetration Test
Project : RUKO
Location : JL. DR CIPTO 198 - SEMARANG
Job No : 1
Point : 1
Test No : 1
Test By : Andi
Test Date : 5 JUNI 2013

No.	Depth (m)	R1	R2	LF	LFF	TF	FR
0	0.0	0.00	0.00	0.00	0.00	0.00	0.00
1	0.2	0.00	0.00	0.00	0.00	0.00	0.00
2	0.4	13.00	17.00	0.40	8.00	8.00	3.08
3	0.6	9.00	15.00	0.60	12.00	20.00	6.67
4	0.8	11.00	15.00	0.40	8.00	28.00	3.64
5	1.0	15.00	21.00	0.60	12.00	40.00	4.00
6	1.2	15.00	21.00	0.60	12.00	52.00	4.00
7	1.4	19.00	25.00	0.60	12.00	64.00	3.16
8	1.6	17.00	25.00	0.80	16.00	80.00	4.71
9	1.8	15.00	23.00	0.80	16.00	96.00	5.33
10	2.0	17.00	25.00	0.80	16.00	112.00	4.71
11	2.2	17.00	25.00	0.80	16.00	128.00	4.71
12	2.4	17.00	25.00	0.80	16.00	144.00	4.71
13	2.6	15.00	23.00	0.80	16.00	160.00	5.33
14	2.8	7.00	11.00	0.40	8.00	168.00	5.71
15	3.0	5.00	9.00	0.40	8.00	176.00	8.00
16	3.2	5.00	9.00	0.40	8.00	184.00	8.00
17	3.4	5.00	9.00	0.40	8.00	192.00	8.00
18	3.6	35.00	45.00	1.00	20.00	212.00	2.86
19	3.8	40.00	50.00	1.00	20.00	232.00	2.50
20	4.0	45.00	52.00	0.70	14.00	246.00	1.56
21	4.2	50.00	60.00	1.00	20.00	266.00	2.00
22	4.4	50.00	60.00	1.00	20.00	286.00	2.00
23	4.6	47.00	55.00	0.80	16.00	302.00	1.70
24	4.8	50.00	60.00	1.00	20.00	322.00	2.00
25	5.0	50.00	60.00	1.00	20.00	342.00	2.00
26	5.2	50.00	60.00	1.00	20.00	362.00	2.00
27	5.4	45.00	55.00	1.00	20.00	382.00	2.22
28	5.6	40.00	50.00	1.00	20.00	402.00	2.50
29	5.8	21.00	30.00	0.90	18.00	420.00	4.29
30	6.0	30.00	40.00	1.00	20.00	440.00	3.33
31	6.2	40.00	50.00	1.00	20.00	460.00	2.50
32	6.4	27.00	35.00	0.80	16.00	476.00	2.96
33	6.6	31.00	40.00	0.90	18.00	494.00	2.90
34	6.8	31.00	40.00	0.90	18.00	512.00	2.90
35	7.0	11.00	20.00	0.90	18.00	530.00	8.18
36	7.2	20.00	30.00	1.00	20.00	550.00	5.00

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37	7.4	17.00	25.00	0.80	16.00	566.00	4.71
38	7.6	17.00	25.00	0.80	16.00	582.00	4.71
39	7.8	15.00	23.00	0.80	16.00	598.00	5.33
40	8.0	15.00	23.00	0.80	16.00	614.00	5.33
41	8.2	15.00	23.00	0.80	16.00	630.00	5.33
42	8.4	11.00	17.00	0.60	12.00	642.00	5.45
43	8.6	11.00	17.00	0.60	12.00	654.00	5.45
44	8.8	11.00	17.00	0.60	12.00	666.00	5.45
45	9.0	11.00	17.00	0.60	12.00	678.00	5.45
46	9.2	11.00	17.00	0.60	12.00	690.00	5.45
47	9.4	11.00	17.00	0.60	12.00	702.00	5.45
48	9.6	9.00	15.00	0.60	12.00	714.00	6.67
49	9.8	9.00	15.00	0.60	12.00	726.00	6.67
50	10.0	9.00	15.00	0.60	12.00	738.00	6.67
51	10.2	9.00	15.00	0.60	12.00	750.00	6.67
52	10.4	9.00	15.00	0.60	12.00	762.00	6.67
53	10.6	9.00	15.00	0.60	12.00	774.00	6.67
54	10.8	9.00	15.00	0.60	12.00	786.00	6.67
55	11.0	9.00	15.00	0.60	12.00	798.00	6.67
56	11.2	9.00	15.00	0.60	12.00	810.00	6.67
57	11.4	9.00	15.00	0.60	12.00	822.00	6.67
58	11.6	9.00	15.00	0.60	12.00	834.00	6.67
59	11.8	9.00	15.00	0.60	12.00	846.00	6.67
60	12.0	9.00	15.00	0.60	12.00	858.00	6.67
61	12.2	9.00	15.00	0.60	12.00	870.00	6.67
62	12.4	9.00	15.00	0.60	12.00	882.00	6.67
63	12.6	9.00	15.00	0.60	12.00	894.00	6.67
64	12.8	9.00	15.00	0.60	12.00	906.00	6.67
65	13.0	9.00	15.00	0.60	12.00	918.00	6.67
66	13.2	9.00	15.00	0.60	12.00	930.00	6.67
67	13.4	9.00	15.00	0.60	12.00	942.00	6.67
68	13.6	9.00	15.00	0.60	12.00	954.00	6.67
69	13.8	9.00	15.00	0.60	12.00	966.00	6.67
70	14.0	9.00	15.00	0.60	12.00	978.00	6.67
71	14.2	9.00	15.00	0.60	12.00	990.00	6.67
72	14.4	9.00	15.00	0.60	12.00	1002.00	6.67
73	14.6	9.00	15.00	0.60	12.00	1014.00	6.67
74	14.8	9.00	15.00	0.60	12.00	1026.00	6.67
75	15.0	9.00	15.00	0.60	12.00	1038.00	6.67
76	15.2	9.00	15.00	0.60	12.00	1050.00	6.67
77	15.4	9.00	15.00	0.60	12.00	1062.00	6.67
78	15.6	9.00	15.00	0.60	12.00	1074.00	6.67
79	15.8	9.00	15.00	0.60	12.00	1086.00	6.67
80	16.0	9.00	15.00	0.60	12.00	1098.00	6.67
81	16.2	9.00	15.00	0.60	12.00	1110.00	6.67
82	16.4	9.00	15.00	0.60	12.00	1122.00	6.67
83	16.6	9.00	15.00	0.60	12.00	1134.00	6.67
84	16.8	9.00	15.00	0.60	12.00	1146.00	6.67

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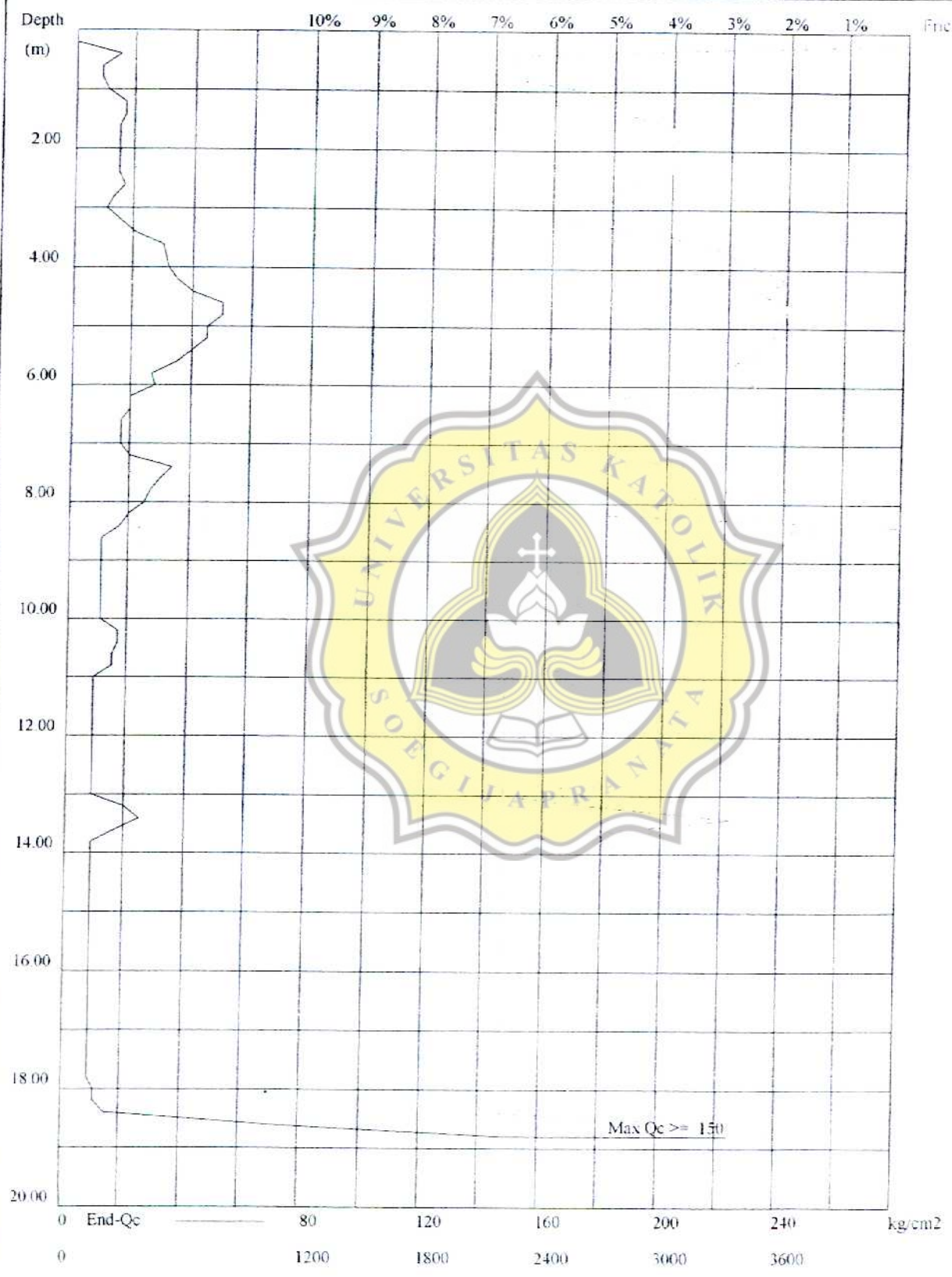
85	17.0	9.00	15.00	0.60	12.00	1158.00	6.67
86	17.2	9.00	15.00	0.60	12.00	1170.00	6.67
87	17.4	9.00	15.00	0.60	12.00	1182.00	6.67
88	17.6	15.00	23.00	0.80	16.00	1198.00	5.33
89	17.8	15.00	23.00	0.80	16.00	1214.00	5.33
90	18.0	20.00	30.00	1.00	20.00	1234.00	5.00
91	18.2	30.00	40.00	1.00	20.00	1254.00	3.33
92	18.4	70.00	90.00	2.00	40.00	1294.00	2.86
93	18.6	150.00	175.00	2.50	50.00	1344.00	1.67

Lab Mektan
FT Sipil

CONE PENETRATION TEST

Project	: RUKO			Capacity	: 2.5 t
Location	: JL. DR CIPTO 198 - SEMARANG			G.W.L	: 0.00 m
Test Point	: 2	X-coord	: 0.000 m	Depth-H	: 18.80 m
Test Date	: 5 JUNI 2013	Y-coord	: 0.000 m	Final-Qc	: 150.00 kg/cm2
Test By	: Andi	Z-coord	: 0.000 m		



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CPT V.2.0
Cone Penetration Test
Project : RUKO
Location : JL. DR CIPTO 198 - SEMARANG
Job No : 2
Point : 2
Test No : 2
Test By : Andi
Test Date : 5 JUNI 2013

No.	Depth (m)	R1	R2	LF	LFF	TF	FR
0	0.0	0.00	0.00	0.00	0.00	0.00	0.00
1	0.2	0.00	0.00	0.00	0.00	0.00	0.00
2	0.4	15.00	25.00	1.00	20.00	20.00	6.67
3	0.6	9.00	15.00	0.60	12.00	32.00	6.67
4	0.8	9.00	15.00	0.60	12.00	44.00	6.67
5	1.0	11.00	17.00	0.60	12.00	56.00	5.45
6	1.2	17.00	25.00	0.80	16.00	72.00	4.71
7	1.4	17.00	25.00	0.80	16.00	88.00	4.71
8	1.6	15.00	21.00	0.60	12.00	100.00	4.00
9	1.8	15.00	21.00	0.60	12.00	112.00	4.00
10	2.0	15.00	21.00	0.60	12.00	124.00	4.00
11	2.2	15.00	21.00	0.60	12.00	136.00	4.00
12	2.4	15.00	21.00	0.60	12.00	148.00	4.00
13	2.6	17.00	25.00	0.80	16.00	164.00	4.71
14	2.8	13.00	20.00	0.70	14.00	178.00	5.38
15	3.0	11.00	17.00	0.60	12.00	190.00	5.45
16	3.2	16.00	25.00	0.90	18.00	208.00	5.63
17	3.4	21.00	30.00	0.90	18.00	226.00	4.29
18	3.6	30.00	40.00	1.00	20.00	246.00	3.33
19	3.8	31.00	40.00	0.90	18.00	264.00	2.90
20	4.0	32.00	40.00	0.80	16.00	280.00	2.50
21	4.2	35.00	42.00	0.70	14.00	294.00	2.00
22	4.4	40.00	50.00	1.00	20.00	314.00	2.50
23	4.6	50.00	60.00	1.00	20.00	334.00	2.00
24	4.8	50.00	60.00	1.00	20.00	354.00	2.00
25	5.0	45.00	55.00	1.00	20.00	374.00	2.22
26	5.2	45.00	55.00	1.00	20.00	394.00	2.22
27	5.4	40.00	50.00	1.00	20.00	414.00	2.50
28	5.6	35.00	45.00	1.00	20.00	434.00	2.86
29	5.8	27.00	35.00	0.80	16.00	450.00	2.96
30	6.0	28.00	35.00	0.70	14.00	464.00	2.50
31	6.2	20.00	30.00	1.00	20.00	484.00	5.00
32	6.4	20.00	30.00	1.00	20.00	504.00	5.00
33	6.6	17.00	25.00	0.80	16.00	520.00	4.71
34	6.8	17.00	25.00	0.80	16.00	536.00	4.71
35	7.0	17.00	25.00	0.80	16.00	552.00	4.71
36	7.2	20.00	30.00	1.00	20.00	572.00	5.00

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37	7.4	34.00	45.00	1.10	22.00	594.00	3.24
38	7.6	30.00	40.00	1.00	20.00	614.00	3.33
39	7.8	27.00	35.00	0.80	16.00	630.00	2.96
40	8.0	25.00	35.00	1.00	20.00	650.00	4.00
41	8.2	20.00	30.00	1.00	20.00	670.00	5.00
42	8.4	17.00	17.00	0.00	0.00	670.00	0.00
43	8.6	11.00	17.00	0.60	12.00	682.00	5.45
44	8.8	11.00	17.00	0.60	12.00	694.00	5.45
45	9.0	11.00	17.00	0.60	12.00	706.00	5.45
46	9.2	11.00	17.00	0.60	12.00	718.00	5.45
47	9.4	11.00	17.00	0.60	12.00	730.00	5.45
48	9.6	11.00	17.00	0.60	12.00	742.00	5.45
49	9.8	11.00	17.00	0.60	12.00	754.00	5.45
50	10.0	11.00	17.00	0.60	12.00	766.00	5.45
51	10.2	17.00	25.00	0.80	16.00	782.00	4.71
52	10.4	17.00	25.00	0.80	16.00	798.00	4.71
53	10.6	15.00	23.00	0.80	16.00	814.00	5.33
54	10.8	15.00	23.00	0.80	16.00	830.00	5.33
55	11.0	9.00	15.00	0.60	12.00	842.00	6.67
56	11.2	9.00	15.00	0.60	12.00	854.00	6.67
57	11.4	9.00	15.00	0.60	12.00	866.00	6.67
58	11.6	9.00	15.00	0.60	12.00	878.00	6.67
59	11.8	9.00	15.00	0.60	12.00	890.00	6.67
60	12.0	9.00	15.00	0.60	12.00	902.00	6.67
61	12.2	9.00	15.00	0.60	12.00	914.00	6.67
62	12.4	9.00	15.00	0.60	12.00	926.00	6.67
63	12.6	9.00	15.00	0.60	12.00	938.00	6.67
64	12.8	9.00	15.00	0.60	12.00	950.00	6.67
65	13.0	9.00	15.00	0.60	12.00	962.00	6.67
66	13.2	20.00	30.00	1.00	20.00	982.00	5.00
67	13.4	25.00	32.00	0.70	14.00	996.00	2.80
68	13.6	17.00	25.00	0.80	16.00	1012.00	4.71
69	13.8	9.00	15.00	0.60	12.00	1024.00	6.67
70	14.0	9.00	15.00	0.60	12.00	1036.00	6.67
71	14.2	9.00	15.00	0.60	12.00	1048.00	6.67
72	14.4	9.00	15.00	0.60	12.00	1060.00	6.67
73	14.6	9.00	15.00	0.60	12.00	1072.00	6.67
74	14.8	9.00	15.00	0.60	12.00	1084.00	6.67
75	15.0	9.00	15.00	0.60	12.00	1096.00	6.67
76	15.2	9.00	15.00	0.60	12.00	1108.00	6.67
77	15.4	9.00	15.00	0.60	12.00	1120.00	6.67
78	15.6	9.00	15.00	0.60	12.00	1132.00	6.67
79	15.8	9.00	15.00	0.60	12.00	1144.00	6.67
80	16.0	9.00	15.00	0.60	12.00	1156.00	6.67
81	16.2	9.00	15.00	0.60	12.00	1168.00	6.67
82	16.4	9.00	15.00	0.60	12.00	1180.00	6.67
83	16.6	9.00	15.00	0.60	12.00	1192.00	6.67
84	16.8	9.00	15.00	0.60	12.00	1204.00	6.67

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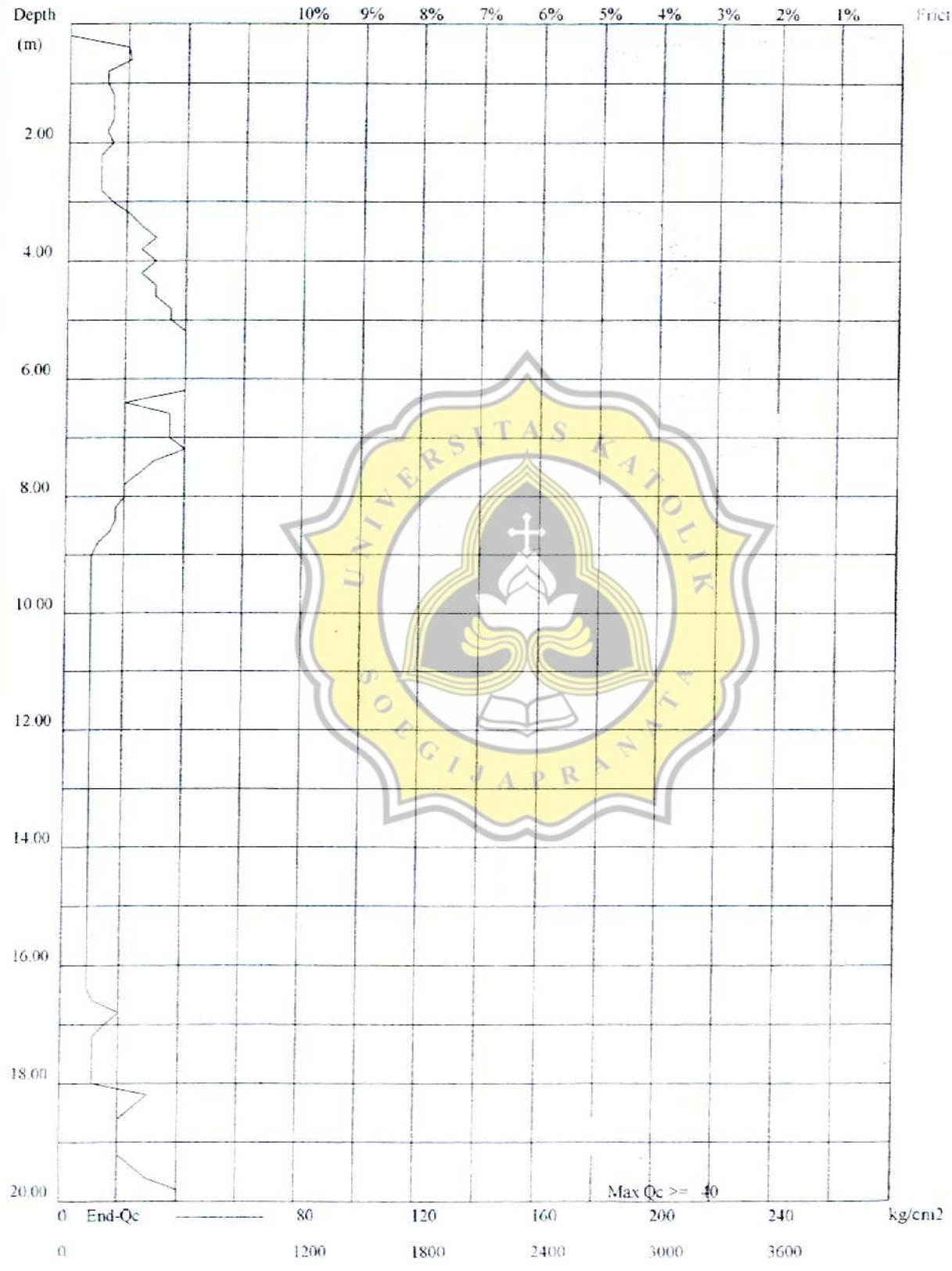
85	17.0	9.00	15.00	0.60	12.00	1216.00	6.67
86	17.2	9.00	15.00	0.60	12.00	1228.00	6.67
87	17.4	9.00	15.00	0.60	12.00	1240.00	6.67
88	17.6	9.00	15.00	0.60	12.00	1252.00	6.67
89	17.8	9.00	15.00	0.60	12.00	1264.00	6.67
90	18.0	11.00	17.00	0.60	12.00	1276.00	5.45
91	18.2	11.00	17.00	0.60	12.00	1288.00	5.45
92	18.4	15.00	25.00	1.00	20.00	1308.00	6.67
93	18.6	70.00	90.00	2.00	40.00	1348.00	2.86
94	18.8	150.00	175.00	2.50	50.00	1398.00	1.67

Lab Mektan
FT Sipil

CONE PENETRATION TEST

Project	: RUKO			Capacity	: 2.5 t
Location	: JL. DR CIPTO 198 - SEMARANG			G.W.L	: 0.00 m
Test Point	: 3	X-coord	: 0.000 m	Depth-H	: 20.00 m
Test Date	: 5 JUNI 2013	Y-coord	: 0.000 m	Final-Qc	: 40.00 kg/cm2
Test By	: Andi	Z-coord	: 0.000 m		



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CPT V.2.0
Cone Penetration Test
Project : RUKO
Location : JL. DR CIPTO 198 - SEMARANG
Job No : 3
Point : 3
Test No : 3
Test By : Andi
Test Date : 5 JUNI 2013

No.	Depth (m)	R1	R2	LF	LFF	TF	FR
0	0.0	0.00	0.00	0.00	0.00	0.00	0.00
1	0.2	0.00	0.00	0.00	0.00	0.00	0.00
2	0.4	20.00	30.00	1.00	20.00	20.00	5.00
3	0.6	21.00	30.00	0.90	18.00	38.00	4.29
4	0.8	13.00	20.00	0.70	14.00	52.00	5.38
5	1.0	13.00	20.00	0.70	14.00	66.00	5.38
6	1.2	15.00	23.00	0.80	16.00	82.00	5.33
7	1.4	15.00	23.00	0.80	16.00	98.00	5.33
8	1.6	15.00	23.00	0.80	16.00	114.00	5.33
9	1.8	13.00	20.00	0.70	14.00	128.00	5.38
10	2.0	15.00	23.00	0.80	16.00	144.00	5.33
11	2.2	11.00	17.00	0.60	12.00	156.00	5.45
12	2.4	11.00	17.00	0.60	12.00	168.00	5.45
13	2.6	11.00	17.00	0.60	12.00	180.00	5.45
14	2.8	11.00	17.00	0.60	12.00	192.00	5.45
15	3.0	15.00	23.00	0.80	16.00	208.00	5.33
16	3.2	21.00	30.00	0.90	18.00	226.00	4.29
17	3.4	25.00	35.00	1.00	20.00	246.00	4.00
18	3.6	30.00	40.00	1.00	20.00	266.00	3.33
19	3.8	25.00	35.00	1.00	20.00	286.00	4.00
20	4.0	30.00	40.00	1.00	20.00	306.00	3.33
21	4.2	25.00	35.00	1.00	20.00	326.00	4.00
22	4.4	30.00	40.00	1.00	20.00	346.00	3.33
23	4.6	30.00	40.00	1.00	20.00	366.00	3.33
24	4.8	35.00	45.00	1.00	20.00	386.00	2.86
25	5.0	35.00	45.00	1.00	20.00	406.00	2.86
26	5.2	40.00	49.00	0.90	18.00	424.00	2.25
27	5.4	40.00	50.00	1.00	20.00	444.00	2.50
28	5.6	40.00	50.00	1.00	20.00	464.00	2.50
29	5.8	40.00	50.00	1.00	20.00	484.00	2.50
30	6.0	40.00	50.00	1.00	20.00	504.00	2.50
31	6.2	40.00	50.00	1.00	20.00	524.00	2.50
32	6.4	20.00	30.00	1.00	20.00	544.00	5.00
33	6.6	35.00	42.00	0.70	14.00	558.00	2.00
34	6.8	35.00	42.00	0.70	14.00	572.00	2.00
35	7.0	35.00	42.00	0.70	14.00	586.00	2.00
36	7.2	40.00	50.00	1.00	20.00	606.00	2.50

FAKULTAS TEKNIK
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Telp. (024) 8441555 (hunting) Fax.(024) 8415429 - 8445265
e-mail:humas@unika.ac.id

37	7.4	30.00	40.00	1.00	20.00	626.00	3.33
38	7.6	25.00	35.00	1.00	20.00	646.00	4.00
39	7.8	20.00	30.00	1.00	20.00	666.00	5.00
40	8.0	20.00	30.00	1.00	20.00	686.00	5.00
41	8.2	17.00	25.00	0.80	16.00	702.00	4.71
42	8.4	17.00	25.00	0.80	16.00	718.00	4.71
43	8.6	15.00	23.00	0.80	16.00	734.00	5.33
44	8.8	11.00	17.00	0.60	12.00	746.00	5.45
45	9.0	9.00	15.00	0.60	12.00	758.00	6.67
46	9.2	9.00	15.00	0.60	12.00	770.00	6.67
47	9.4	9.00	15.00	0.60	12.00	782.00	6.67
48	9.6	9.00	15.00	0.60	12.00	794.00	6.67
49	9.8	9.00	15.00	0.60	12.00	806.00	6.67
50	10.0	9.00	15.00	0.60	12.00	818.00	6.67
51	10.2	9.00	15.00	0.60	12.00	830.00	6.67
52	10.4	9.00	15.00	0.60	12.00	842.00	6.67
53	10.6	9.00	15.00	0.60	12.00	854.00	6.67
54	10.8	9.00	15.00	0.60	12.00	866.00	6.67
55	11.0	9.00	15.00	0.60	12.00	878.00	6.67
56	11.2	9.00	15.00	0.60	12.00	890.00	6.67
57	11.4	9.00	15.00	0.60	12.00	902.00	6.67
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59	11.8	9.00	15.00	0.60	12.00	926.00	6.67
60	12.0	9.00	15.00	0.60	12.00	938.00	6.67
61	12.2	9.00	15.00	0.60	12.00	950.00	6.67
62	12.4	9.00	15.00	0.60	12.00	962.00	6.67
63	12.6	9.00	15.00	0.60	12.00	974.00	6.67
64	12.8	9.00	15.00	0.60	12.00	986.00	6.67
65	13.0	9.00	15.00	0.60	12.00	998.00	6.67
66	13.2	9.00	15.00	0.60	12.00	1010.00	6.67
67	13.4	9.00	15.00	0.60	12.00	1022.00	6.67
68	13.6	9.00	15.00	0.60	12.00	1034.00	6.67
69	13.8	9.00	15.00	0.60	12.00	1046.00	6.67
70	14.0	9.00	15.00	0.60	12.00	1058.00	6.67
71	14.2	9.00	15.00	0.60	12.00	1070.00	6.67
72	14.4	9.00	15.00	0.60	12.00	1082.00	6.67
73	14.6	9.00	15.00	0.60	12.00	1094.00	6.67
74	14.8	9.00	15.00	0.60	12.00	1106.00	6.67
75	15.0	9.00	15.00	0.60	12.00	1118.00	6.67
76	15.2	9.00	15.00	0.60	12.00	1130.00	6.67
77	15.4	9.00	15.00	0.60	12.00	1142.00	6.67
78	15.6	9.00	15.00	0.60	12.00	1154.00	6.67
79	15.8	9.00	15.00	0.60	12.00	1166.00	6.67
80	16.0	9.00	15.00	0.60	12.00	1178.00	6.67
81	16.2	9.00	15.00	0.60	12.00	1190.00	6.67
82	16.4	9.00	15.00	0.60	12.00	1202.00	6.67
83	16.6	11.00	15.00	0.40	8.00	1210.00	3.64
84	16.8	20.00	27.00	0.70	14.00	1224.00	3.50

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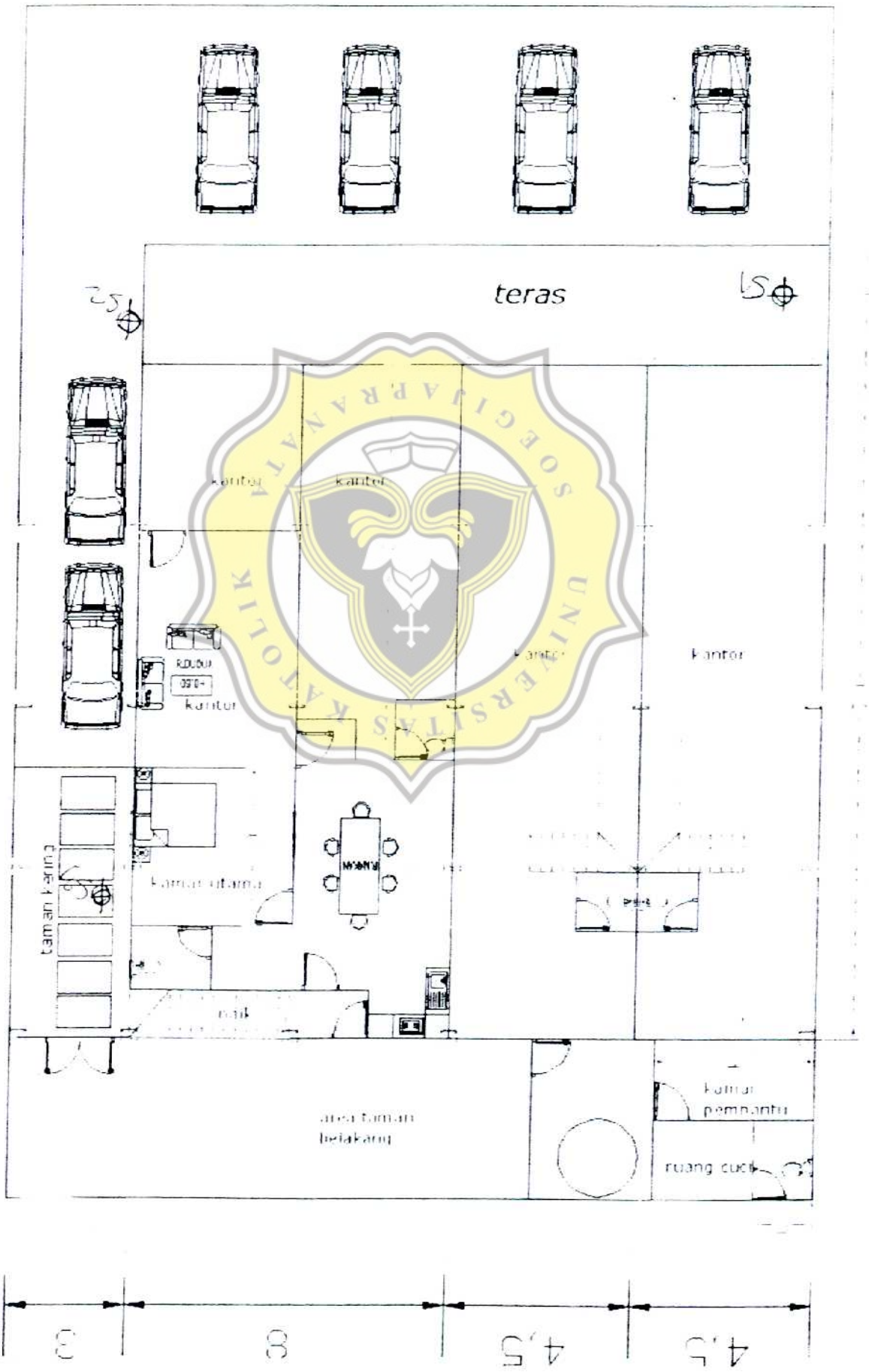
e-mail:humas@unika.ac.id

Unika SOEGIJAPRANATA

85	17.0	15.00	21.00	0.60	12.00	1236.00	4.00
86	17.2	11.00	15.00	0.40	8.00	1244.00	3.64
87	17.4	11.00	15.00	0.40	8.00	1252.00	3.64
88	17.6	11.00	15.00	0.40	8.00	1260.00	3.64
89	17.8	11.00	15.00	0.40	8.00	1268.00	3.64
90	18.0	11.00	15.00	0.40	8.00	1276.00	3.64
91	18.2	30.00	40.00	1.00	20.00	1296.00	3.33
92	18.4	25.00	35.00	1.00	20.00	1316.00	4.00
93	18.6	20.00	30.00	1.00	20.00	1336.00	5.00
94	18.8	20.00	30.00	1.00	20.00	1356.00	5.00
95	19.0	20.00	30.00	1.00	20.00	1376.00	5.00
96	19.2	20.00	30.00	1.00	20.00	1396.00	5.00
97	19.4	25.00	30.00	0.50	10.00	1406.00	2.00
98	19.6	30.00	39.00	0.90	18.00	1424.00	3.00
99	19.8	40.00	50.00	1.00	20.00	1444.00	2.50
100	20.0	40.00	50.00	1.00	20.00	1464.00	2.50

alternatif B

lantai 1




UNIVERSITAS KATOLIK
SOEGIJAPRANATA

LAMPIRAN 02
BROSUR LIFT

PASSENGER LIFT

Satisfactory customer through a fair business practice

We have done supply and installation lift with speed until 240 m/m, this improved by high rise building that we have been installed, for instance : Manggala WanaBhakti, BPK Building , Gloria Apartment, Sarinah Thamrin Building, TVRI Tower, Wisma Nusantara, SCTV, and others building that we can not mention on by one.

Due, developmental of technology in Lift industry, we always keep onward movement and never lost of quality with lift abroad production. Then we build up the personal employee in our company with send them to learn elevator and escalator in oversea with our principle company or join exhibition.

Our company was cooperate with others elevator and escalator company in abroad for licensed motor and controller, so that we capable assembling motor and controller by our own factory.

Some of the prominent customers, and location of installation:

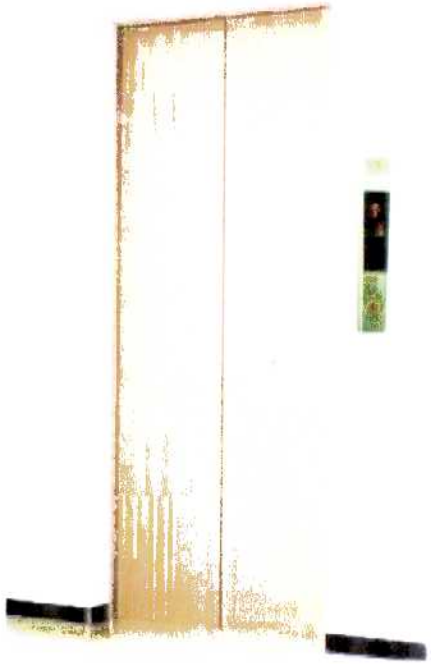
1. Gedung Bapeten, Jakarta
2. Gedung UIN Syarif Hidayatullah, Jakarta
3. Gedung Oil Center, Jakarta
4. Universitas Muhammadiyah, Malang
5. Universitas Islam Al-Azhar, Jakarta
6. Rumah Sakit Medika Permata Hijau, Jakarta
7. Universitas Pancasila, Jakarta
8. Rumah Sakit Internasional SOS, Jakarta
9. Universitas Indonesia, Depok
10. Mall Kalibata, Jakarta
11. Gedung LEMIGAS, Jakarta
12. Gedung MABES AD, Jakarta
13. Gedung LANTAMAL, Jakarta
14. Toko ADA Swalayan, Bogor
15. Gedung BNI 46, Jakarta
16. RSIA Cibubur, Jakarta
17. Gedung PANAS BUMI TAHAP 2, Jakarta
18. Rusunami Kemayoran, Jakarta

Gedung Universitas Jakarta

Gedung Oil Center, Jakarta

RS. Medika Permata Hijau, Jakarta

Universitas Pancasila Jakarta



LES-01
Lintel and Narrow Jamb (standard)

LEO-02
Wide Jamb (Optional)

ENTRANCE DESIGNS		
Jamb	Std.	Painted steel sheet
	Opt.	Stainless Steel Hairline
Doors	Std.	Painted Steel Sheet
	Opt.	Stainless Steel Hairline
		Stainless Steel Etching
		Stainless Steel Miror
Transom Panel	Opt.	Painted Steel Sheet
		Stainless Steel Hairline
		Stainless Steel Etching
Sill	Std.	Extrude Hard Aluminium
	Opt.	Stainless Steel

LEO-03
Splayed Door Frame with
Transom Panel (Optional)

In response to upgrade lifestyle and increasing the demand in elevator appearance, materials, comfort and safety, we spare no effort to enhance both visual attraction and comfortably.

Our products are definitely flexible which various tastes and give more choices to fit your favor, including the interior finishing materials available to meet your various needs.

All of our elevator cars are the results of our professional team-work. The panel or ceiling boards are designed and selected to match the whole car interior and assembled by expert engineers.

Color Standard Painted

EVERGREEN

ANOTEC GREY

ALMOND

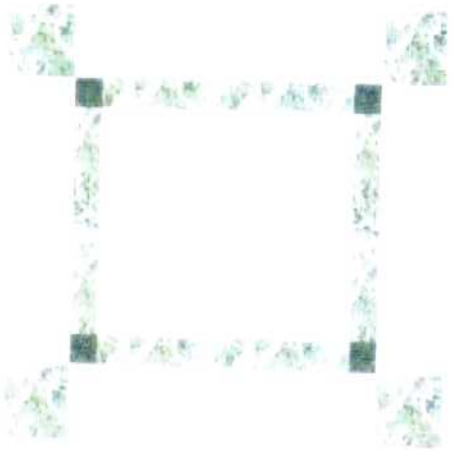
MID BLUE

ORANGE BROWN

Car Standard Finished Design	
Walls and Door	Sheet Steel Painted
Floor	Vinyl Sheet
Ceiling Element	Sheet Steel Painted Finish

LORD-01

Acrylic Milky White, Side of Stainless Steel Hairline cover and Middle Tube Lamp for Soft Illumination Design.

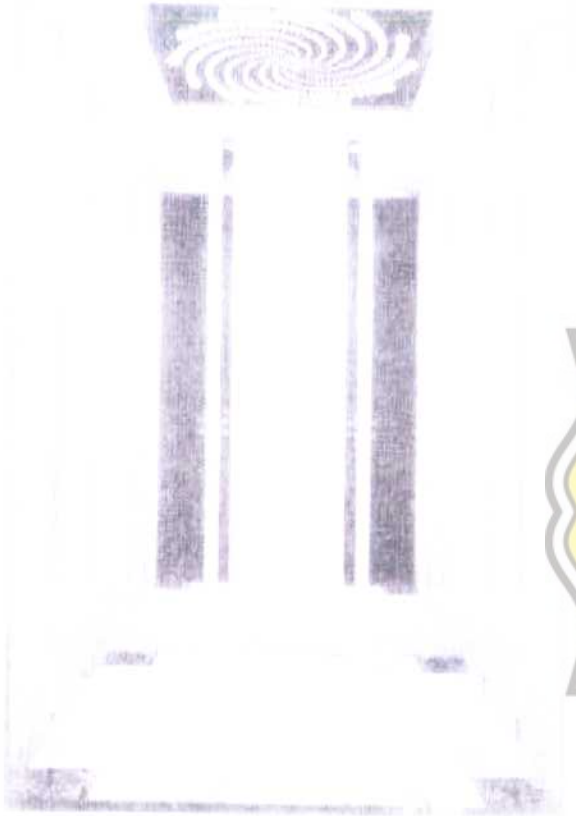


Granito Floor

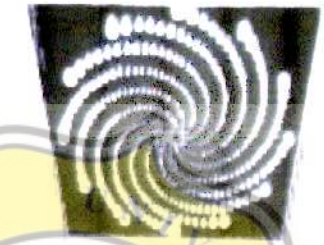
Car Deluxe Finished Design

Walls and Door	Stainless Steel Hairline Finish
Floor	Granito Motif Floor (Almond, Green & Black Colour)
Ceiling Plate	Stainless Steel Hairline
Ventilation	Electric Blower with Side Ventilation

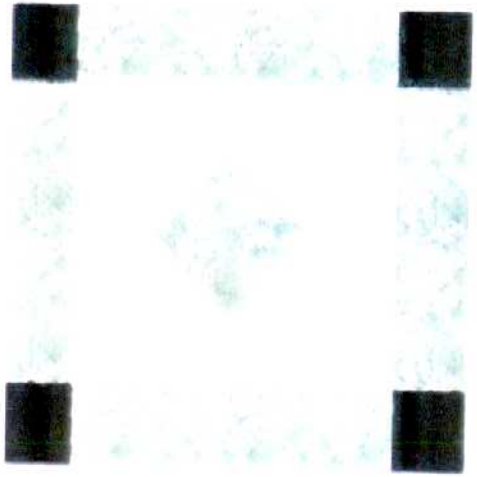
Standard Stainless Steel Hairline



LCRO-01



Arch Type indirect lighting through round acrylic and direct lighting from incandescent lamps

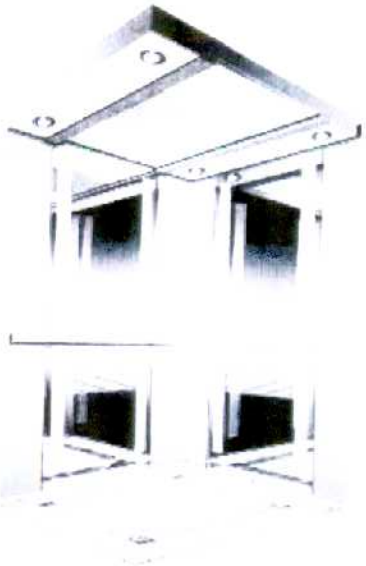


Granito Floor

Car Deluxe Finished Design

Walls and Door	Stainless Steel Hairline Etching and Stainless Mirror Etching
Floor	Granito Matt Floor (Almond, Green & Black Colour)
Ceiling Plate	Stainless Steel Hairline
Ventilation	Electric Blower with Side Ventilation
Car Door	Stainless Steel Hairline Combination Etching

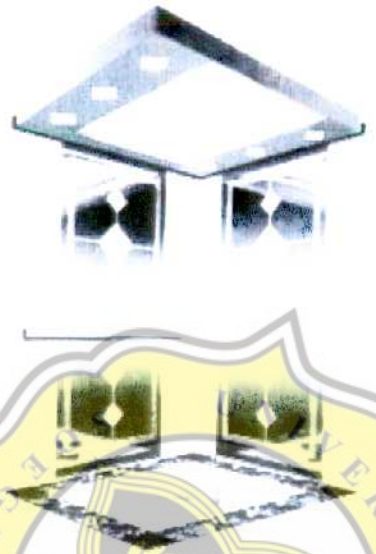
Optional



LCRO-02

Car Side and Car Back

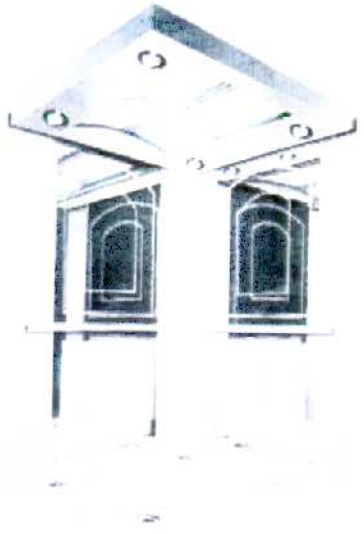
Center Board is made of Mirror Finish
Etching Finish, Hairline Finish
Auxiliary Board is made of Hairline Finish
Car Door is Mirror Etching



LCRO-03

Car Side and Car Back

Center Board is made of Mirror Finish
Etching Finish, Hairline Finish
Auxiliary Board is made of Hairline Finish
Car Door is Mirror Etching



LCRO-04

Car Side and Car Back

Center Board is made of Mirror Finish
Etching Finish, Hairline Finish
Auxiliary Board is made of Hairline Finish
Car Door is Mirror Etching

Stainless Steel (Deluxe)

SMR-01

SHL-01

Stainless Steel Etching (Optional)

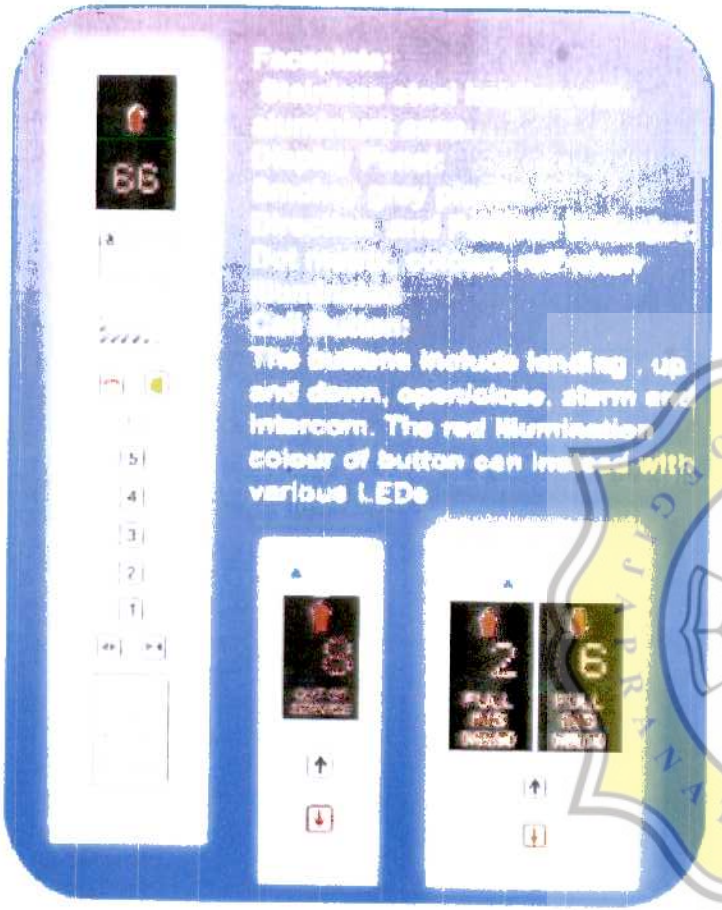
SE-01

SE-02

Hand Rail (Deluxe)

HR-01

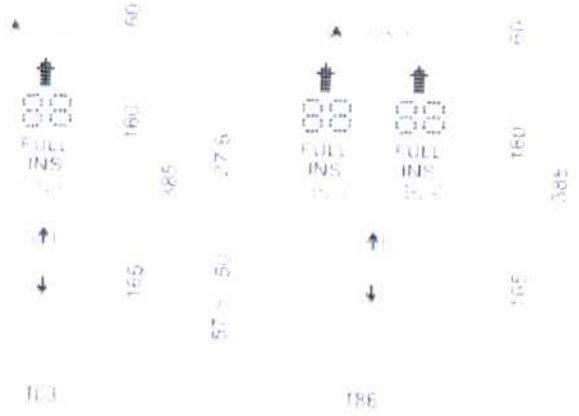
HR-02



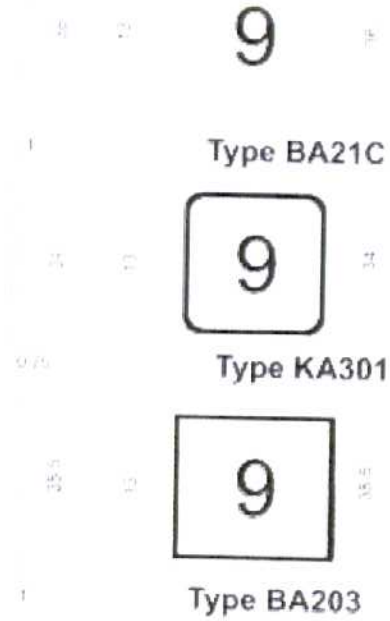
Type BA21C Type KA301 Type BA203

Car Operating Panel

Hall Indicator



Push Button



Type BA21C

Type KA301

Type BA203

Feature & Specification hall indicator

Faceplate
Mirror finished Stainless steel or hairline finished stainless steel with aluminium case;

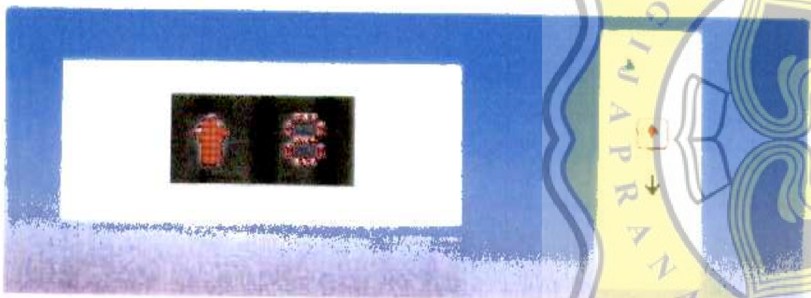
Display Panel
Smokey grey plastic.

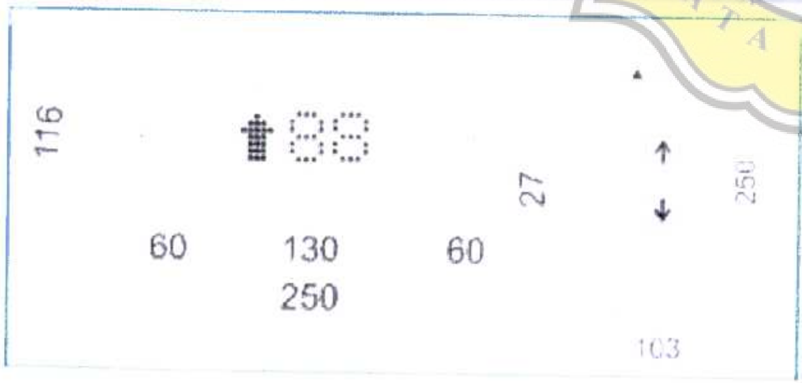
Direction and Position indicator
Dot matrix, colours red when illuminated

Call Button
The buttons include landing , up and down, open/close, alarm and intercom. The red illumination colour of button can instead with various LEDs

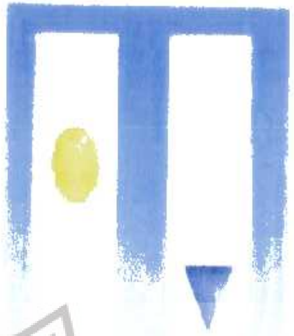
HALL

HALL

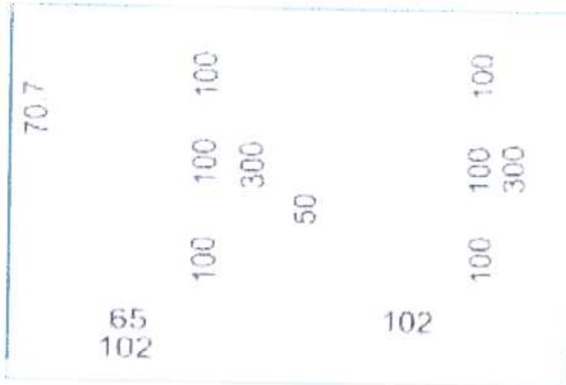




HALL



Feature & Specification hall lantern



- Face plate: mirror finished stainless steel, titanium finished stainlees steel, hairline finished stainlee steel
- Adopting update light reflection techologies;
- With floor-passing chimes;
- Surface mount type, convenient for mounting, only need places left for fixing cable.

Optional

CEILING STANDARD DESIGN

LC-01

LC-02

LC-03

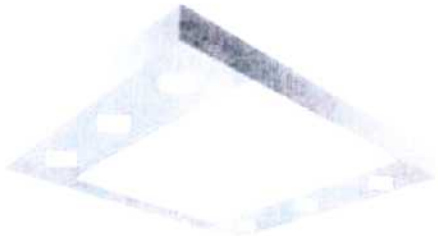
LC-04

CEILING OPTIONAL DESIGN WITH ADDITIONAL PRICE

LCO-01

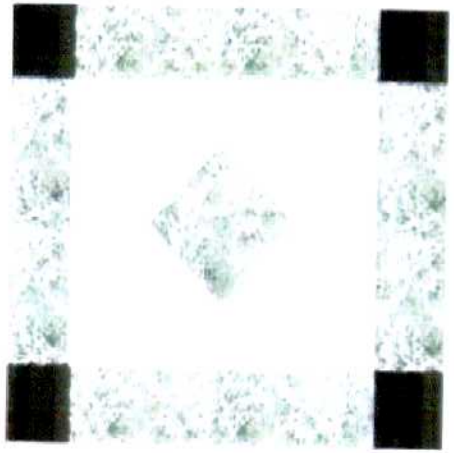
LCO-02

LCO-03



LCO-04

Granito Floor (Optional)



LGF-001

LGF-002

LGF-003

LGF-004

ELEVATOR TRACTION MACHINE

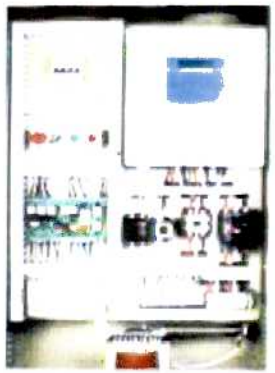
Worm Gear

Gearless

Helical Gear

Traction machine are designed for geared traction machine travel lifts. With motor and brake attached on integrated base, our techno-generator will give high performance, minimal vibration and almost noiseless. The one you can count ride on comfortable.

These machines are equipped with mechanical brake that will be in function only when motors stop to hold steadily



Specification

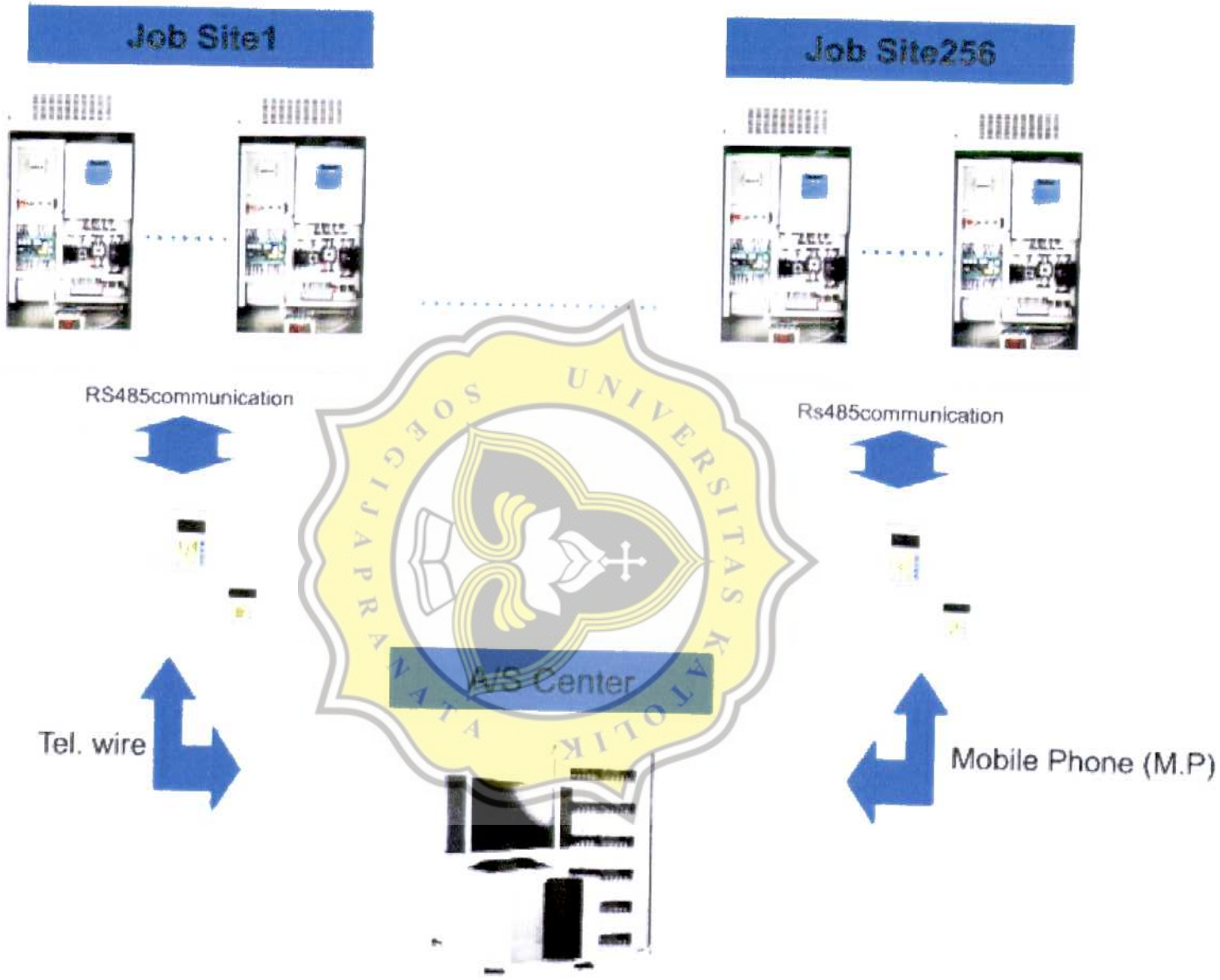
- Power — 3-Phase 380V
- Frequency — 50/60Hz
- Control Type — VVVF Type
- Nos of Stop — Up to 40 Stops
- Main CPU — 87C196 (16 bit)
- Speed Sensing — Encoder (500~4096 Pulse)
- Display — Dot Matrix
- Speed — 30 ~ 180 m/min (Max. 5 Patterns)
- Group — 4 Car
- Usage — Passenger, Freight, Observation, Scenic

Specification

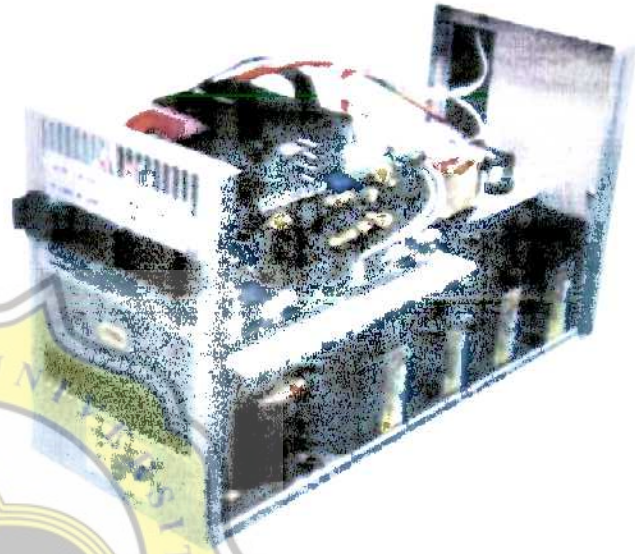
- Power — 3-Phase 380V
- Frequency — 50/60Hz
- Control type — VVVF Type
- Nos of Stop — Up to 16 Stops
- Main CPU — PLC (Program Logic Controller)
- Speed Sensing — Encoder (500 ~ 4096 Pulse)
- Display — 7 Segment, Dot Matrix
- Speed — 30 ~ 150m/min (Max. 5 Patterns)
- Group — 4 Car
- Usage — Passenger, Freight, Observation, Scenic

Features

- Saving the equipment cost and installation time by reducing the number of wires in the hoistway and control panel
- Using equal pieces of wires regardless of number of landings and floor height
- Responding fast and fulfilling the various kinds of specification requirements by changing the programs
- Easy to install and convenient to maintain under the support of Domestic and International Telecommunication network System (RCS - 2000)
- Easy and fast carrying out of maintenance by using portable console (OPP-2000) elevator's fault/trouble codes can be stored by the self-diagnose function of the OPP-2000 and the display on the mini-console
- Extending the wire's lifetime by using low voltage for the limit switches
- Solving the contact problem of relay by using non-contact feature MICOM
- High standard of safety reliability by adopting Vector Inverter exclusively designed for SICON Series



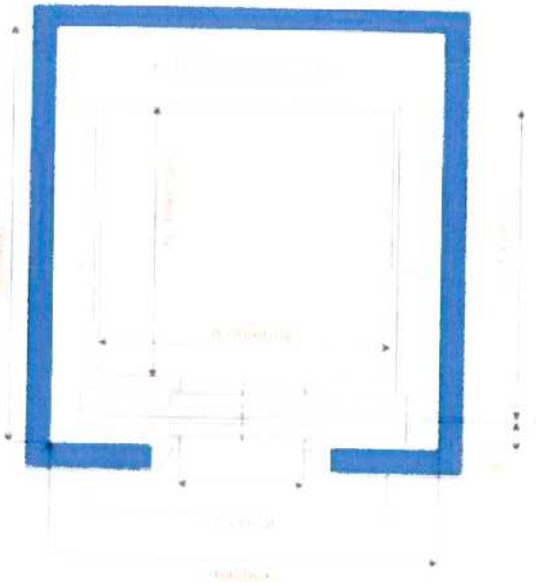
Data communication(M.P, Tel wire, Internet)



TYPE RED-R SMART ARD (ELD)

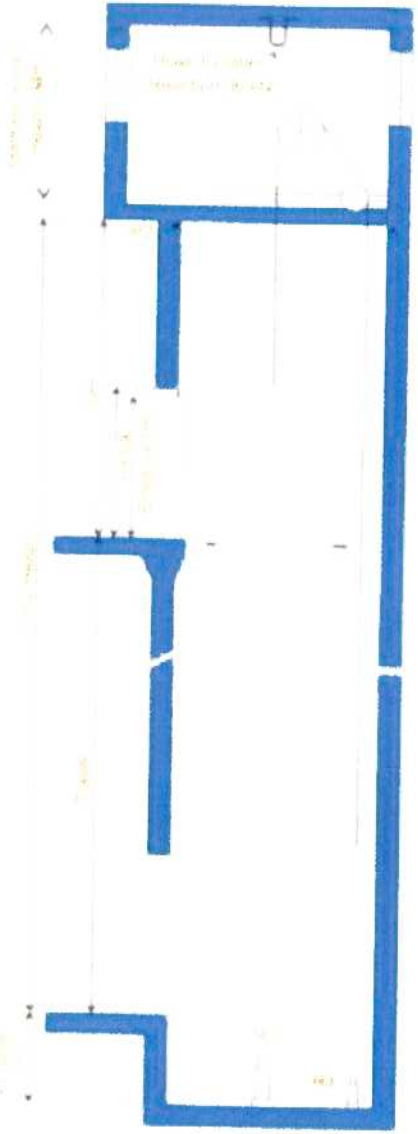
The SMART ARD (ELD) drive and RED-R is used in traction lifts, to assure car return to floor and the door opening in case of main power failure. SMART ARD (ELD) can drive any kind of lift motors (alternative current or direct current), gearless motor too. SMART ARD (ELD) can be easily installed, it is powered by

Electronic device to ensure the car return to closed floor and the door opening in case of main power failure



Hoistway plan layout

Machine Room Plan



Hoistway vertical section

TYPE OF ELEVATOR	CAPACITY (KG)	ENTRANCE		CAR DIMENSION (mm)		HOISTWAY DIMENSION (mm)			MACHINE ROOM (mm)		REACTION ON MACHINE ROOM (KG)		REACTION ON PIT (KG)		POWER CONSUMPTION (KW)
		WIDTH (W)	HEIGHT (H)	INTERNAL (A x B)	EXTERNAL (A x B)	X x Y	OH	PIT	MA x MB	MH	R1	R2	R3	R4	
P6-CO60	450	800	2100	1400 x 850	1450 x 1015	1850 x 1500	4600	1550	2400 x 3300	2500	3600	2000	4950	3950	5.5
P8-CO60						1850 x 1650	4600	1550			4200	2800	7100	5900	5.5
P8-CO90	550	800	2100	1400 x 1030	1450 x 1195		4800	1850	2400 x 3400	2500					7.5
P8-CO105						1900 x 1650	5100	2150			4200	2800	7150	5950	9.5
P9-CO60						1850 x 1750	4600	1550	2400 x 3400		4500	3100	7350	6000	5.5
P9-CO90	600	800	2100	1400 x 1100	1450 x 1265	1900 x 1800	4800	1850	3000 x 3400	2500					9.5
P9-CO105						(1900 x 1900)	5100	2150			4500	3100	7400	6100	11
P10-CO60						1850 x 1850	4600	1550	2400 x 3600		4900	3400	7900	6400	7.5
P10-CO90	680	800	2100	1400 x 1250	1450 x 1415	1900 x 1900	4800	1850	3000 x 3600	2500					9.5
P10-CO105						(1900 x 2000)	5100	2150			4900	3400	7900	6400	11
P11-CO60						1850 x 2000	4600	1550	2400 x 3600		5250	3700	8700	7000	7.5
P11-CO90						1900 x 2050	4800	1850							9.5
P11-CO105	750	800	2100	1400 x 1350	1450 x 1515	(1900 x 2150)	5150	2150	3000 x 3600	2500	5300	3800	8800	7100	11
P11-CO120								2450							15
P11-CO150						1900 x 2100	5500	2600	3000 x 4150		11200	7600	10000	8300	18.5
P13-CO60							4600	1550	2600 x 3800		5750	4100	9500	7450	9.5
P13-CO90						2150 x 2150	4800	1850							13
P13-CO105	900	900	2100	1600 x 1350	1650 x 1515		5150	2150	3000 x 3800	2500	5800	4200	9600	7600	15
P13-CO120								2450							15
P13-CO150						2250 x 2250	5500	2600	3150 x 4450		11000	7500	13200	10100	18.5

TYPE OF ELEVATOR	CAPACITY (KG)	ENTRANCE		CAR DIMENSION (mm)		HOISTWAY DIMENSION (mm)			MACHINE ROOM (mm)		REACTION ON MACHINE ROOM (KG)		REACTION ON PIT (KG)		POWER CONSUMPTION (KW)
		WIDTH (W)	HEIGHT (H)	INTERNAL (A x B)	EXTERNAL (A x B)	X x Y	OH	PIT	MA x MB	MH	R1	R2	R3	R4	
P15-CO60	1000	900	2100	1600 x 1500	1650 x 1665	2150 x 2200	4600	1550	2800 x 4000	2500	6150	4600	10300	8000	11
P15-CO90							4800	1850	3200 x 4000		6200	4700	10400	8100	13
P15-CO105							5150	2150							15
P15-CO120						2250 x 2300	5500	2450	3200 x 4700		11650	7850	13900	10500	18,5
P15-CO150								2600							22
P15-CO180							6000								32,5
P17-CO60	1150	1000	2100	1800 x 1500	1850 x 1665	2400 x 2200	4600	1550	2800 x 4000	2500	12300	8200	17550	13300	11
P17-CO90							4800	1850	3200 x 4100		12400	8300	17750	13300	15
P17-CO105							5150	2150							18.5
P17-CO120						2450 x 2300	5500	2450	3400 x 4700		12400	8300	17750	13300	22
P17-CO150								2600							24
P17-CO180							6000								37.5
P20-CO60	1350	1000	2100	1800 x 1700	1850 x 1865	2400 x 2400	4600	1550	3400 x 4600	2500	13100	8850	18000	13500	15
P20-CO90							4800	1850			13100	8900	18100	13600	18.5
P20-CO105							5150	2150							22
P20-CO120		1100				2500 x 2500	5500	2450	3600 x 4700		13100	8900	18100	13550	24
P20-CO150								2600							30
P20-CO180							6000								44
P24-CO60	1600	1100	2100	2000 x 1750	2090 x 1935	2600 x 2500	4600	1550	3800 x 4800	2500	14000	9300	19600	14400	18.5
P24-CO90							4800	1850			14100	9500	19700	14500	22
P24-CO105							5150	2150							30
P24-CO120						2700 x 2600	5500	2600			14100	9500	19700	14500	37
P24-CO150							6000								45
P24-CO180															48

220V / 380V

Speed (m/min)	CAPACITY Person	Load (Kg)	Motor Capacity (kW)	MCCB Capacity of Building (A) Simplex	Duplex	Power Supply Capacity (kVA) Simplex	Duplex	Lead in Wire Size (mm) Simplex	Duplex	Earth Wire Size (mm)	Heat Output (kcal/H)	Starting Power (kVA/set)
60	6	450	5.5	50	100	4.2	8.2	8	14	5.5	675	13.1
	8	550	5.5	50	100	5.1	10.2	8	14	5.5	825	16
	9	600	7.5	50	100	5.5	11	8	14	5.5	900	17.5
	10	680	7.5	75	150	6.3	12.6	14	22	5.5	1020	19.9
	11	750	9.5	75	150	6.9	13.8	14	22	5.5	1125	21.8
	13	900	11	75	150	8.3	16.6	22	38	8	1350	26.2
	15	1000	11	75	150	9.2	18.4	22	38	8	1500	29.1
	17	1150	11	75	150	10	20	22	38	8	1725	23
	20	1350	15	100	150	8.9	17.8	22	38	8	2025	28.1
	24	1600	18.5	100	200	10.5	21	22	60	8	2400	33.3
90	8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	9	600	[illegible]	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	10	680	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	15	1000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]	[illegible]
	17	1150	[illegible]	100	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]	[illegible]
	20	[illegible]	18.5	100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	24	1600	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
105	8	550	9.5	75	100	7.6	15.2	14	38	5.5	1445	24.1
	9	600	11	75	100	8.3	16.6	14	38	6.5	1575	26.3
	10	680	11	75	100	9.4	18.8	14	38	5.5	1785	29.8
	11	750	11	75	150	10.4	20.8	14	38	5.5	1970	32.8
	13	900	15	100	150	12.5	25	22	60	14	2365	39.4
	15	1000	15	100	150	13.8	27.6	22	60	14	2625	43.8
	17	1150	18.5	125	250	13.2	26.4	38	60	14	3019	41.8
	20	1350	22	125	250	15	30	38	60	14	3544	47.4
	24	1600	30	150	300	17.7	35.4	60	100	14	4200	56.2

Heat Output of MachineRoom
kcal/H = F x L x S (H : Hour F : Factor 1/40 L : Rated Load (Kg) S : Rated Speed (m/min) 1 kcal = 4.2 Joule)

Speed (m/min)	CAPACITY		Motor Capacity (kW)	MCCB Capacity of Building (A)		Power Supply Capacity (kVA)		Lead in Wire Size (mm)		Earth Wire Size (mm)	Heat Output (kcal/H)	Starting Power (kVA/set)
	Person	Load (Kg)		Simplex	Duplex	Simplex	Duplex	Simplex	Duplex			
120	11	750	15	90	150	11	22	14	22	14	2250	28
	13	900	15	90	150	13	26	22	38	14	2700	31
	15	1000	18.5	90	180	15	30	22	38	14	3000	35
	17	1150	22	105	205	17	34	22	50	14	3450	39
	20	1350	24	125	250	20	40	22	50	14	4050	43
	24	1600	37	150	295	23	46	22	60	14	4800	48
150	11	750	18.5	120	180	15	26	14	38	14	2850	39
	13	900	18.5	120	205	17	30	22	50	14	3375	43
	15	1000	22	120	230	19	34	22	50	14	3750	46
	17	1150	24	130	260	21	38	22	60	14	4350	51
	20	1350	30	155	305	24	48	22	60	22	5100	57
	24	1600	45	185	365	28	57	22	80	22	6000	64

220V 400V

Heat Output of MachineRoom
kcal/H = F x L x S (H Hour / F Factor = 1/40 / L Rated Load (Kg) / S Rated Speed (m/min) / *cal = 4.2 Joule)

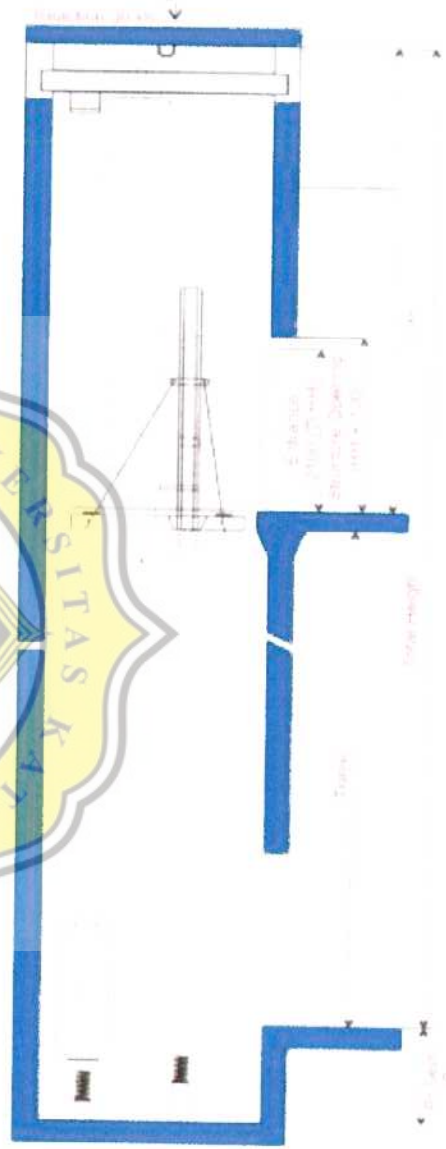
GEARLESS TRACTION MACHINE

With following advanced the new technology elevator design we give solution for our customer sastification. We called Roomless design that meaning no need machine room and one part with hoistway.

There are several advantages Roomless design which:

- Saving in building construction cost.
- The ride comfort is smooth and safe (VVVF and Gearless).
- Using gearless drive system with very high motor efeciency, reduces power consumption until 40% compared with geared machine.
- No Oil in machine makes the equipment very enviromental-friendly.
- Downsizing of electrical cabling and fuse sizes due to lower power requirement.
- Gearless machine with low rpm the vibration and noise level are much lower.
- More aesthetically pleasing, easy layout,flexiblebuilding design.

Hoistway Plan



Hoistway Vertical Section

Door Type : 2 Panel centre Opening (CO) Rooping: 2 1

Model		Speed		Door Opening		Car Size (W x Dmm)		Hoistway Size (W x D mm)			Top Beam Reaction Load (Kg)				Pit Reaction Load (Kg)		Motor	Rope
Person	Cap (kg)	M/min	M/sec	Type	W x D	Internal Size	External Size	AH x BH	PIT	OH	R1	R2	R3	R4	R5	R6	(kw)	Dia x Rope
					JJ x HH	AA x BB	AS x BS											
P 6	450	45	0.75	SO	800 x 2100	1000 x 1230	1050 x 1430	1850 x 1900	1550	4200	1500	2900	600	700	5328	4429	1.8	4 x Ø8
		60	1.0						1550	4500							3.0	
P 8	550	60	1.0	CO	800 x 2100	1300 x 1100	1350 x 1765	2100 x 1800	1550	4200	1635	3265	665	775	5849	4759	4.3	4 x Ø8
		90	1.5						1850	4500	1650	3285	685	795			6.8	
P 9	600	60	1.0	CO	800 x 2100	1300 x 1300	[illegible]	[illegible]	1550	4200	1690	3280	680	815	6115	4925	4.3	4 x Ø8
		90	1.5						1850	4500	[illegible]	3310	710	830			6.8	
P 10	680	60	1.0	CO	800 x 2100	1300 x 1350	1350 x 1815	2100 x 1900	1550	4200	1800	3550	760	865	6612	5202	5.4	5 x Ø10
		90	1.5						1850	4500	1820	3575	790	895			8.6	
P 11	750	60	1.0	CO	800 x 2100	1300 x 1500	[illegible]	[illegible]	1550	4200	1850	3675	790	890	6865	5465	5.4	5 x Ø10
		90	1.5						1850	4500	1870	3695	815	915			8.6	
P 13	900	60	1.0	CO	900 x 2100	1500 x 1400	1550 x 1865	2300 x 1850	1550	4200	2050	4050	880	990	7820	6035	6.4	5 x Ø10
		90	1.5						1850	4500	2075	4075	910	1010			10.7	
P 15	1000	60	1.0	CO	900 x 2100	1500 x 1600	[illegible]	2300 x 2050	[illegible]	4200	2120	4250	935	1050	8300	6300	6.4	5 x Ø10
		90	1.5						[illegible]	4500	2150	4280	950	1070			10.7	

Special Function for Comfort Convinience and Safety

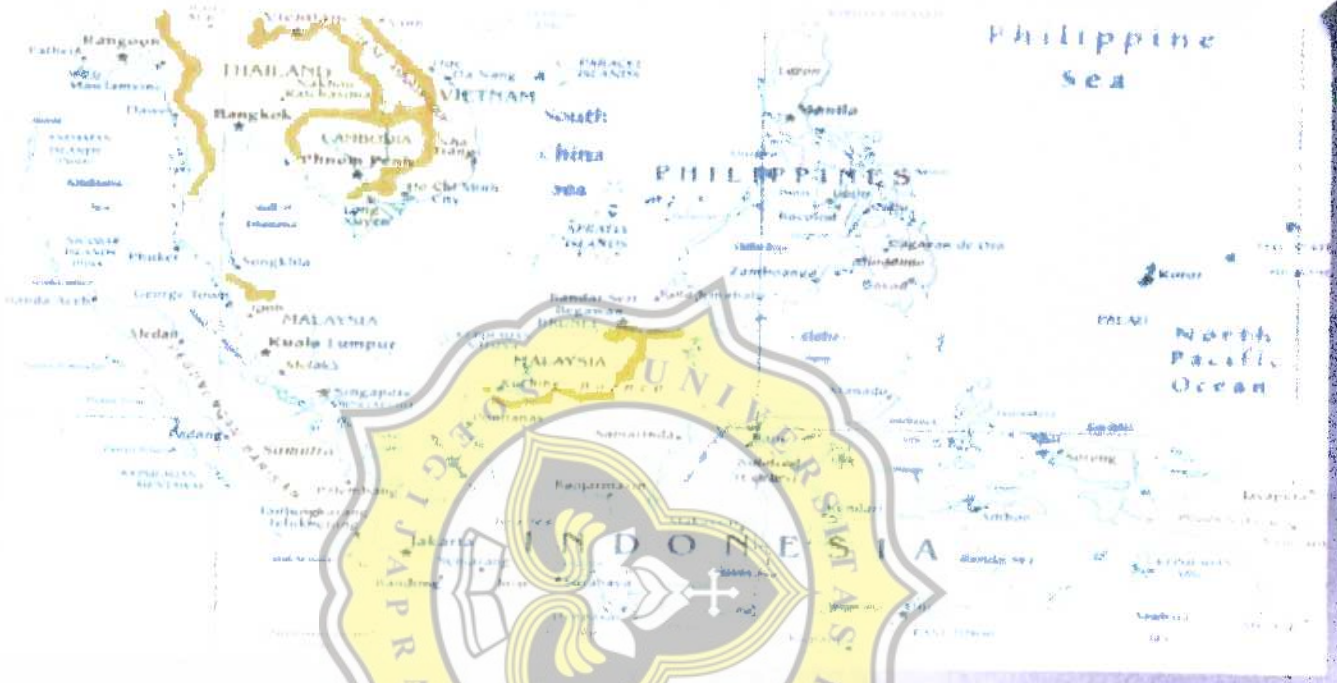
Features	Descriptions
Standard Features	
Door Safety Edge	When a passenger or an object touches one of these safety edges the elevator will stop the door at the point of contact reopen the car door immediately
Overload Device	When the car load exceeds the capacity or rated load of the elevator, the elevator will stop operation with the doors fully opened on that floor and a buzzer is annunciated
Emergency Exit	When traped the passenger can be push out the emergency exit in the top ceiling and the elevator will be shut off
Exhaus fan	Ventilation in the car on the top ceiling
Light	Lighting inside car on the top ceiling
Emergency Car Lighting	An emergency ceiling light switches on automatically in the event of the power failure, providing illumination within car
Interphone	The interphone installed inside the elevator facilities direct two way communication with the rescue personnel in the room
Out of Service Switch in Car	The elevator can be use manual for maintenance.
Car Light & Fan Automatic Shut Off	Elevator can be installed an energy saving features that automatically switches off the car internal lighting and ventilation fans when calls are registered after a predetermined period of time
Car top Fence	For safety to the maintenance on the top car
Automatic Parking	During off-peak hours, after the elevator cars have been dormant with doors closed for a predetermined amount of time, the system disperses each car to a designated location (main floor and upper floor), his allowing more efficient service to future hall calls.

Optional Features	
Group Control System	The group system for to or more elevators employes artifical intellegence and fuzzy logic. The highest refined knowledge harnessed in the field of group control have been incorporated into microprocessors
Continuity of Service	The system will exclude an elevator from the assignment of hall calls when the car cannot respond to the calls registered.
Peak Traffic Control	To alleviate traffic cogeston at the main floor, cars, are automatically assigned to the flor where traffic is heaviest.
Attendant Service	The operating mode of an elevator can br switched to attendant service from the normal full automatic operation by activating this override switch as and when required
Non Service of Specifield Floor	A key can be installed on the maintenance/races panel, which is located on the lower part of the car operating panel, to suspend elevator service to specifield floors when activated.
Auxiliary Car Operating Panel	An auxiliary car operating panel can be installed on the unoccupied front return panel in large capacity elevators or elevators in high accupancy buildings to provide easier access to passengers in the car.
Automatic Rescue Device (ARD)	During normal power failure, the Automatic Rescue Device (ARD) converts stores energy from its bank of rechargeable batteries to the nearest floor and opens the elevator doors to let the passengers out
Optical Door Safety Device	This versatile door safety device re-opens closing doors immediately when the infrared on the car doors is interrupted.
Car Arrival Chime	An electronic chime provides an audio signal to inform waiting passengers of the arrival of the elevator car at each floor.
Operating by Emergency Power(Source - Automatic)	When the normal power supply fails, this optional features will direct each elevator automatically to a specified floor, one-by-one, powered by the building's standby generator. When the elevator car arrives at the specified floor, the door will open to allow the passengers desembark and than elevator will shut down
Hall Lantern	Hall lanterns on each floor will flash to indicated elevator car arrival and service direction to passengers waiting at the elevator lobby.
Fireman Emergency Operation	The fireman's swich is usually installed at the elevator main lobby. When it is activated, all car an hall calls are automatically cancelled and all elevators in the same bank will return immediately to the main lobby.
Supervisory Panel	With this panel, the building superintendent car monitor elevator operations and control emergency operations from the building's control room or electrical room

LOUSER
PASSENGER LIFT

TÜV NORD

ISO 9001 : 2008



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Satisfactory customer through a fair business practice


UNIVERSITAS KATOLIK
SOEGIJAPRANATA

LAMPIRAN 03

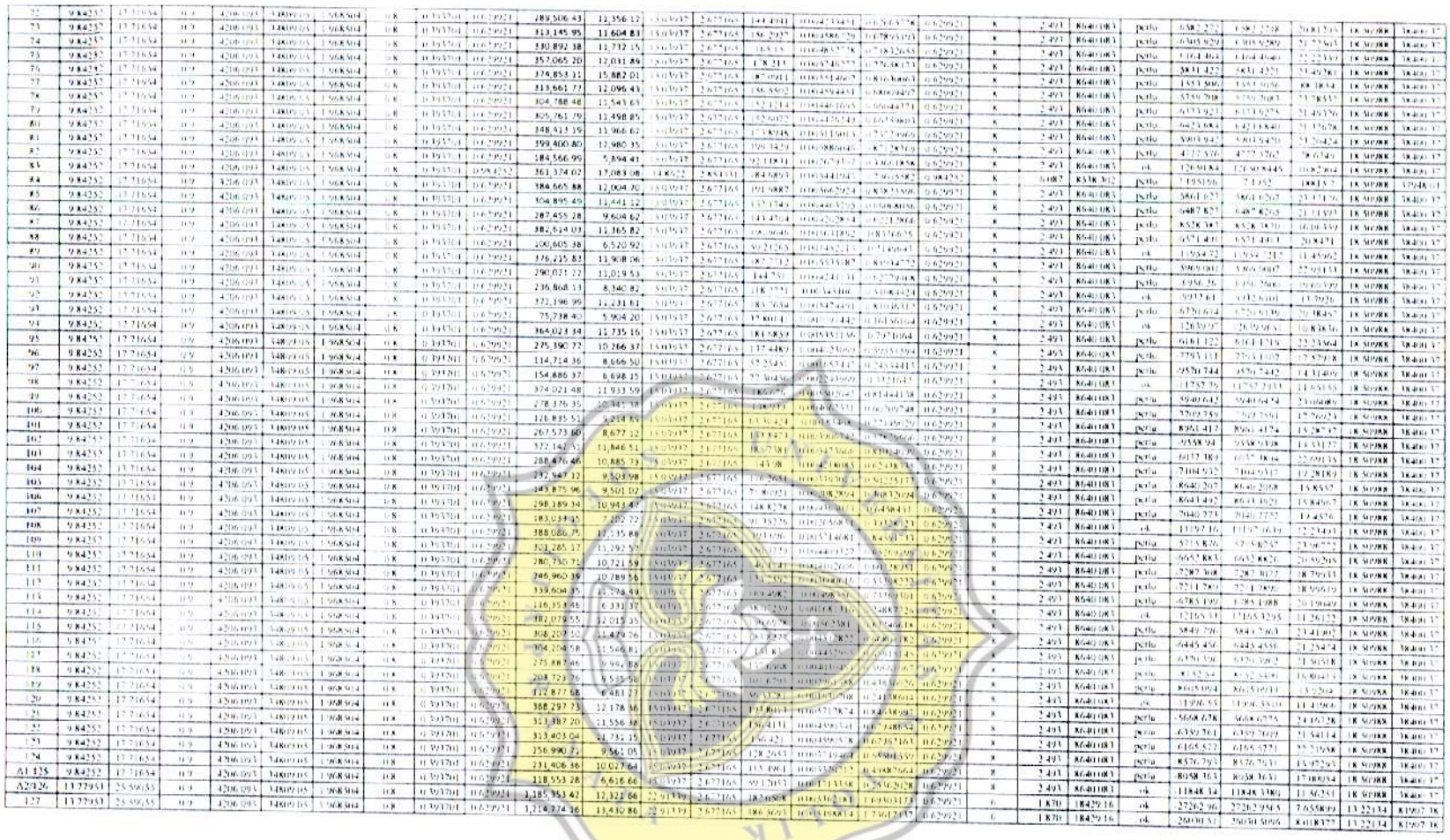
Perhitungan Momen Lentur, Geser, dan Torsi pada Balok Lantai Dasar – Lantai Atap

sk 10
tul 16 tul sengkang 10 As 0.110843 18
jml tul 8

Perhitungan Lentur dan Geser Tumpuan Lantai Dasar

	b	d		fc	fy	Ey		sk	tul	mu	V
HP1/1	17.71654	29.52756	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	1,612,093.25	32,701.56
2	17.71654	29.52756	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	1,685,125.94	34,224.39
3	17.71654	29.52756	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	1,441,537.74	40,119.16
4	17.71654	29.52756	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	1,405,423.27	33,220.86
5	17.71654	29.52756	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	522,721.62	28,588.52
6	17.71654	29.52756	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	1,633,027.35	35,612.54
7	17.71654	29.52756	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	645,927.26	24,331.84
8	17.71654	29.52756	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	1,654,137.50	33,884.56
9	17.71654	29.52756	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	500,416.74	25,077.98
10	17.71654	29.52756	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	1,856,226.53	36,666.02
HP1/11	17.71654	29.52756	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	853,092.43	24,735.70
HP2/12	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	235,027.96	44,291.51
13	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	724,581.06	18,386.90
14	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	774,013.86	15,406.54
15	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	823,320.37	19,484.38
16	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	781,318.76	14,704.17
17	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	883,626.63	20,366.07
18	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	739,496.89	18,885.78
19	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	802,766.12	15,482.59
20	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	807,723.12	19,159.67
21	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	761,972.06	15,118.66
22	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	796,036.29	18,910.95
23	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	700,275.14	11,863.33
24	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	518,195.00	16,951.56
25	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	1,227,843.77	25,263.74
HP2/26	11.81102	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	411,176.28	23,792.76
HP3/27	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	1,479,900.99	81,802.56
28	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,312,635.12	78,949.87
29	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	4,431,520.70	86,782.25
30	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,788,455.53	81,321.31
31	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.984252	3,158,427.22	41,270.76
32	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,377,770.16	75,865.78
33	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,201,579.29	79,224.54
34	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,387,505.17	55,019.86
35	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,321,008.35	80,710.24
36	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,050,104.34	78,415.52
37	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,375,648.40	92,204.81
38	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	2,844,362.18	59,745.54
39	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,246,018.55	79,258.95
40	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,094,695.93	78,090.36
41	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	2,829,941.21	67,515.96
42	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,412,467.72	77,352.56
43	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	1,363,871.73	56,233.29
44	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	4,393,486.94	85,283.67
45	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	4,175,820.25	82,443.52
46	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	3,769,305.89	79,417.14
47	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	2,211,936.15	60,260.70
HP3/48	15.75	29.53	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	2,528,289.24	57,501.85
HP4/49	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	724,982.07	18,177.48
50	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	691,721.04	18,105.46
51	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	707,452.77	18,544.45
52	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	866,691.98	19,565.86
53	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	632,979.66	16,742.50
54	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	597,798.25	15,600.86
55	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	239,496.89	18,885.78
56	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	534,257.19	14,147.38
57	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	352,875.98	13,337.09
58	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	651,563.85	17,053.76
59	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	606,262.86	15,653.11
60	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	794,488.94	17,578.10
61	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	794,488.94	17,578.10
62	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	555,874.21	16,196.61
63	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	817,260.11	21,910.99
64	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	701,616.32	17,864.92
65	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	671,229.69	17,740.26
66	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	665,379.23	17,609.79
67	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	688,820.97	18,118.60
68	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	662,205.83	15,592.96
HP4/69	9.84252	19.68504	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	432,770.46	15,461.25
HP7/70	11.81102	21.65354	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	428,108.22	14,196.26
AI/71	9.84252	17.71654	0.9	4206.093	34809.05	1.968504	0.8	0.393701	0.629921	319,529.68	11,428.38

	d	d'	Rn	ρ	As	tul pakai	jml tul	as pakai	φvs		vs	|Vs|	s	S As min	ss
HP1/1	26.85039	2.677165	140.2386	0.004106323	1.95336127	0.748031	9	3.955	27765.88	perlu	-23366.89	23366.8893	9.641915	10.28327	12340.19
2	26.85039	2.677165	146.3918	0.004296174	2.04367258	0.748031	9	3.955	27765.88	perlu	-23674.85	23674.8541	10.33162	10.28327	12340.19
3	26.85039	2.677165	125.4616	0.003664292	1.7430831	0.748031	9	3.955	27765.88	perlu	-17125.11	17125.1106	14.28227	10.28327	12340.19
4	26.85039	2.677165	122.26	0.003570934	1.69867891	0.748031	9	3.955	27765.88	perlu	-24789.88	24789.8843	9.866339	10.28327	12340.19
5	26.85039	2.677165	45.4724	0.00131426	0.62519276	0.748031	9	3.955	27765.88	ok	-32139.15	32139.1535	7.603462	10.28327	12340.19
6	26.85039	2.677165	142.0597	0.004166767	1.97921132	0.748031	9	3.955	27765.88	perlu	-22132.46	22132.4532	11.05098	10.28327	12340.19
7	26.85039	2.677165	56.19025	0.001626405	0.77363466	0.748031	9	3.955	27765.88	ok	-34666.57	34666.5697	7.055368	10.28327	12340.19
8	26.85039	2.677165	143.8261	0.004215576	2.0053326	0.748031	9	3.955	27765.88	perlu	-24052.44	24052.4385	10.16884	10.28327	12340.19
9	26.85039	2.677165	43.53206	0.00125787	0.59836407	0.748031	9	3.955	27765.88	ok	-33832.53	33832.5260	7.228229	10.28327	12340.19
10	26.85039	2.677165	161.4769	0.004742115	2.25589906	0.748031	9	3.955	27765.88	perlu	-20961.93	20961.9294	11.66608	10.28327	12340.19
HP1/11	26.85039	2.677165	[illegible]	0.00211815	1.0218853	0.748031	9	3.955	27765.88	ok	-34217.84	34217.8412	7.147891	10.28327	12340.19
HP2/12	17.00787	2.677165	76.4345	0.00221845	0.44564331	0.708661	8	3.155	11725.18	perlu	-23156.83	23156.8297	6.66136	15.4249	52111.91
13	17.00787	2.677165	235.6443	0.006994564	1.4056709	0.708661	8	3.155	11725.18	perlu	-5626.063	5626.0628	22.33355	15.4249	52111.91
14	17.00787	2.677165	251.7205	0.007489355	1.30446471	0.708661	8	3.155	11725.18	perlu	-8937.573	8937.5729	17.33446	15.4249	52111.91
15	17.00787	2.677165	267.2557	0.007985503	1.66460878	0.708661	8	3.155	11725.18	perlu	-4406.642	4406.6421	35.15783	15.4249	52111.91
16	17.00787	2.677165	254.0962	0.00756267	1.51919379	0.708661	8	3.155	11725.18	perlu	-9717.986	9717.9856	15.9424	15.4249	52111.91
17	17.00787	2.677165	287.3682	0.008595229	1.72661503	0.708661	8	3.155	11725.18	perlu	-3426.989	3426.9893	45.20819	15.4249	52111.91
18	17.00787	2.677165	240.4951	0.007143609	1.43501095	0.708661	8	3.155	11725.18	perlu	-5071.239	5071.2392	30.54719	15.4249	52111.91
19	17.00787	2.677165	261.0212	0.007728263	1.5625615	0.708661	8	3.155	11725.18	perlu	-8853.075	8853.0751	17.49991	15.4249	52111.91
20	17.00787	2.677165	262.6833	0.007828155	1.57152287	0.708661	8	3.155	11725.18	perlu	-4767.439	4767.4390	32.49711	15.4249	52111.91
21	17.00787	2.677165	247.8034	0.007368607	1.48020774	0.708661	8	3.155	11725.18	perlu	-9257.448	9257.4476	16.7355	15.4249	52111.91
22	17.00787	2.677165	258.8823	0.007711566	1.54800151	0.708661	8	3.155	11725.18	perlu	-5043.286	5043.2860	30.71659	15.4249	52111.91
23	17.00787	2.677165	227.7166	0.006752158	1.35637615	0.708661	8	3.155	11725.18	perlu	-12874.48	12874.4792	12.03373	15.4249	52111.91
24	17.00787	2.677165	168.5245	[illegible]	0.99521146	0.708661	8	3.155	11725.18	perlu	-7218.67	7218.6698	21.46212	15.4249	52111.91
25	17.00787	2.677165	[illegible]	[illegible]	[illegible]	0.708661	8	3.155	11725.18	perlu	-2014.87	2014.8704	76.89223	15.4249	52111.91
HP2/26	17.00787	2.677165	[illegible]	[illegible]	[illegible]	0.708661	8	3.155	11725.18	perlu	-380.4472	380.4472	407.221	15.4249	52111.91
HP3/27	26.85039	2.677165	340.5625	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-36043.35	36043.3500	6.785451	11.56867	109692.4
28	26.85039	2.677165	324.1968	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-32875.9	32875.8371	7.439657	11.56867	109692.4
29	26.85039	2.677165	411.6933	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-41579.1	[illegible]	5.882413	11.56867	109692.4
30	26.85039	2.677165	350.7593	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-35510.83	35510.8284	6.887626	11.56867	109692.4
31	[illegible]	[illegible]	313.221	[illegible]	[illegible]	0.984252	9	6.848	24512.93	perlu	-8627.897	8627.8975	28.16117	11.56867	109692.4
32	26.85039	2.677165	330.5674	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-33893.58	33893.5261	7.216276	11.56867	109692.4
33	26.85039	2.677165	313.244	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-33181.08	33181.0841	7.37121	11.56867	109692.4
34	26.85039	2.677165	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-6287	6287.0014	38.90333	11.56867	109692.4
35	26.85039	2.677165	329.9656	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-34831.82	34831.8692	7.021865	11.56867	109692.4
36	26.85039	2.677165	298.5062	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-32282.18	32282.1815	7.576483	11.56867	109692.4
37	26.85039	2.677165	330.1592	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-47605.84	47605.8362	5.137219	11.56867	109692.4
38	26.85039	2.677165	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-11537.76	11537.7586	21.19866	11.56867	109692.4
39	26.85039	2.677165	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-33219.32	33219.3226	7.362745	11.56867	109692.4
40	26.85039	2.677165	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-31920.88	31920.8838	7.662237	11.56867	109692.4
41	26.85039	2.677165	326.558	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-20171.55	20171.5546	12.12527	11.56867	109692.4
42	26.85039	2.677165	333.9631	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-31099.28	31099.2801	7.864538	11.56867	109692.4
43	26.85039	2.677165	133.4761	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-7635.251	7635.2514	32.0332	11.56867	109692.4
44	26.85039	2.677165	429.9711	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-39913.46	39913.4570	6.127893	11.56867	109692.4
45	26.85039	2.677165	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-36757.18	36757.1759	6.654083	11.56867	109692.4
46	26.85039	2.677165	368.8852	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-33395.09	33395.0928	7.323992	11.56867	109692.4
47	26.85039	2.677165	216.4724	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-12110.15	12110.1521	20.19672	11.56867	109692.4
HP3/48	26.85039	2.677165	247.4325	[illegible]	[illegible]	0.984252	9	6.848	24680.78	perlu	-9644.76	9644.7605	25.36117	11.56867	109692.4
HP4/49	17.00787	2.677165	282.9296	[illegible]	[illegible]	0.629921	8	2.493	9770.984	perlu	-3316.102	3316.1018	102.3884	18.50988	43426.39
50	17.00787	2.677165	[illegible]	[illegible]	[illegible]	0.629921	8	2.493	9770.984	perlu	-1596.12	1596.1201	67.06632	18.50988	43426.39
51	17.00787	2.677165	276.0882	[illegible]	[illegible]	0.629921	8	2.493	9770.984	perlu	-1108.35	1108.3500	137.7825	18.50988	43426.39
52	17.00787	2.677165	[illegible]	[illegible]	[illegible]	0.629921	8	2.493	9770.984	perlu	26.54444	26.5444	5816.552	18.50988	43426.39
53	17.00787	2.677165	245.825	[illegible]	[illegible]	0.629921	8	2.493	9770.984	perlu	-3110.322	3110.3223	49.80271	18.50988	43426.39
54	17.00787	2.677165	231.2652	[illegible]	1.1388232	0.629921	8	2.493	9770.984	perlu	-4329.006	4329.0064	35.35921	18.50988	43426.39
55	17.00787	2.677165	[illegible]	[illegible]	1.44524515	0.629921	8	2.493	9770.984	perlu	-2291.999	2291.9999	232.4921	18.50988	43426.39
56	17.00787	2.677165	208.4978	[illegible]	1.04134524	0.629921	8	2.493	9770.984	perlu	-3993.989	3993.9893	23.84722	18.50988	43426.39
57	17.00787	2.677165	132.7125	[illegible]	0.67472925	0.629921	8	2.493	9770.984	perlu	-6894.112	6894.1118	22.47186	18.50988	43426.39
58	17.00787	2.677165	254.2276	0.00753682	1.26693254	0.629921	8	2.493	9770.984	perlu	-2764.678	2764.6779	56.03835	18.50988	43426.39
59	17.00787	2.677165	236.5986	[illegible]	1.12529793	0.629921	8	2.493	9770.984	perlu	-4320.949	4320.9489	35.83526	18.50988	43426.39
60	17.00787	2.677165	310.0352	0.009213436	1.55223109	0.629921	8	2.493	9770.984	perlu	-2182.078	2182.0782	71.0062	18.50988	43426.39
61	17.00787	2.677165	310.0352	0.009213436	1.55223109	0.629921	8	2.493	9770.984	perlu	-2182.078	2182.0782	71.0062	18.50988	43426.39
62	17.00787	2.677165	216.9234	[illegible]	1.07439274	0.629921	8	2.493	9770.984	perlu	-3712.069	3712.0685	41.69015	18.50988	43426.39
63	17.00787	2.677165	328.9078	[illegible]	1.60432677	0.629921	8	2.493	9770.984	perlu	-3632.242	3632.2422	38.8357	18.50988	43426.39
64	17.00787	2.677165	273.813	[illegible]	[illegible]	0.629921	8	2.493	9770.984	perlu	-1863.388	1863.3873	83.14118	18.50988	43426.39
65	17.00787	2.677165	262.2329	[illegible]	[illegible]	0.629921	8	2.493	9770.984	perlu	-2001.893	2001.8936	77.19098	18.50988	43426.39
66	17.00787	2.677165	259.6692	[illegible]	1.29482147	0.629921	8	2.493	9770.984	perlu	-2146.859	2146.8593	72.20424	18.50988	43426.39
67	17.00787	2.677165	268.8125	0.007887827	1.34225197	0.629921	8	2.493	9770.984	perlu	-1581.519	1581.5192	97.96149	18.50988	43426.39
68	17.00787	2.677165	258.4307	0.007696593	1.28843286	0.629921	8	2.493	9770.984	perlu	-4387.29	4387.2899	35.30889	18.50988	43426.39
HP4/69	17.00787	2.677165	168.8919	0.004963366	0.83119191	0.629921	8	2.493	9770.984	perlu	-4534.131	4534.1313	34.15928	18.50988	43426.39
HP7/70	18.97638	2.677165	111.8399	0.003261874	0.73108336	0.629921	5	1.558	13082.76	perlu	-13298.06	13298.0646	12.99884	15.4249	38143.38
AI/71	15.03937	2.677165	159.4789	0.004682336	0.69310417	0.629921	8	2.493	8640.083	perlu	-6501.981	6501.9810	21.06696	18.50988	38400.32



sk 10 tul 16 | tul sengkang 10 | jml tul 8 | As 0.1308452 | 18

Perhitungan Lentur dan Geser Lapangan Lantai Dasar

	b	h		fc	fy	cv		sk	tul	mu	vu	d	d'
BP1/1	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,210,153.47	12,762.20	26.850394	2.6771654
2	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	845,253.59	16,170.69	26.850394	2.6771654
3	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,033,267.73	13,762.01	26.850394	2.6771654
4	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	762,736.14	14,481.04	26.850394	2.6771654
5	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	800,100.83	5,506.00	26.850394	2.6771654
6	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	959,161.88	15,946.45	26.850394	2.6771654
7	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	979,092.20	4,578.14	26.850394	2.6771654
8	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	852,975.41	15,840.96	26.850394	2.6771654
9	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	996,501.43	3,224.42	26.850394	2.6771654
10	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,050,806.83	17,336.70	26.850394	2.6771654
BP1/11	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,052,433.25	5,235.79	26.850394	2.6771654
BP2/12	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,721,482.91	39,916.43	17.007874	2.6771654
13	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	219,634.43	11,829.25	17.007874	2.6771654
14	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	93,548.24	12,817.22	17.007874	2.6771654
15	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	253,562.02	12,926.73	17.007874	2.6771654
16	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	142,331.76	12,114.84	17.007874	2.6771654
17	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	261,800.11	13,808.42	17.007874	2.6771654
18	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	202,505.84	15,449.68	17.007874	2.6771654
19	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	117,809.48	12,893.26	17.007874	2.6771654
20	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	257,140.97	12,602.02	17.007874	2.6771654
21	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	98,507.64	12,529.[illegible]	17.007874	2.6771654
22	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	260,141.98	12,353.39	17.007874	2.6771654
23	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	229,054.53	9,279.60	17.007874	2.6771654
24	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	93,320.04	12,729.61	17.007874	2.6771654
25	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	523,366.46	22,390.78	17.007874	2.6771654
BP2/26	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	151,390.85	20,719.79	17.007874	2.6771654
BP3/27	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,109,088.27	14,545.72	26.850394	2.6771654
28	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,133,879.42	31,743.01	26.850394	2.6771654
29	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,550,128.71	39,393.66	26.850394	2.6771654
30	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,376,984.97	33,865.81	26.850394	2.6771654
31	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.984252	2,688,202.64	22,084.58	26.673228	[illegible]
32	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,233,598.60	31,688.55	26.850394	2.6771654
33	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,307,951.96	29,326.40	26.850394	2.6771654
34	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,906,574.34	11,584.96	26.850394	2.6771654
35	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,274,11[illegible].44	[illegible]	26.850394	2.6771654
36	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,535,569.24	31,449.94	26.850394	2.6771654
37	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,176,615.88	32,28[illegible]	26.850394	2.6771654
38	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,467,124.65	[illegible]	26.850394	2.6771654
39	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,297,828.26	30,588.[illegible]	26.850394	2.6771654
40	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,203,5[illegible].55	[illegible]	26.850394	2.6771654
41	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,481,386.89	[illegible]	26.850394	2.6771654
42	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,239,160.11	[illegible]	26.850394	2.6771654
43	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,392,971.81	13,960.20	26.850394	2.6771654
44	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,749,157.20	45,862.57	26.850394	2.6771654
45	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,701,375.03	14,978.[illegible]	26.850394	2.6771654
46	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,802,760.80	10,238.59	26.850394	2.6771654
47	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,126,953.82	[illegible]	26.850394	2.6771654
BP3/48	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,561,619.56	[illegible]	26.850394	2.6771654
BP4/49	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	314,132.69	10,697.19	17.007874	2.6771654
50	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	285,124.61	10,625.17	17.007874	2.6771654
51	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	274,931.55	11,064.12	17.007874	2.6771654
52	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	394,945.03	11,847.47	17.007874	2.6771654
53	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	306,873.11	9,262.21	17.007874	2.6771654
54	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	335,111.13	8,120.58	17.007874	2.6771654
55	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	202,505.84	15,449.68	17.007874	2.6771654
56	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	361,405.77	6,667.09	17.007874	2.6771654
57	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	109,383.08	8,540.92	17.007874	2.6771654
58	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	307,075.80	9,573.47	17.007874	2.6771654
59	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	344,490.01	8,172.83	17.007874	2.6771654
60	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	443,659.25	6,575.54	17.007874	2.6771654
61	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	443,659.25	6,575.54	17.007874	2.6771654
62	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	262,005.35	8,716.32	17.007874	2.6771654
63	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	227,673.10	17,114.82	17.007874	2.6771654
64	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	309,225.06	10,384.63	17.007874	2.6771654
65	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	288,200.02	10,259.98	17.007874	2.6771654
66	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	288,054.38	10,129.51	17.007874	2.6771654
67	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	281,448.51	10,638.32	17.007874	2.6771654
68	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	403,985.56	8,112.67	17.007874	2.6771654
BP4/69	9.8425197	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	103,558.40	1,153.21	17.007874	2.6771654
BP7/70	11.811024	21.653543	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	442,357.75	11,611.21	18.976378	2.6771654
A1/71	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	296,703.06	4,067.15	15.03937	2.6771654
72	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	270,947.24	3,994.89	15.03937	2.6771654
73	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	279,899.24	4,243.59	15.03937	2.6771654

	Rn	ρ	As	tul pakai	jml tul	as pakai	φvc		vs	|Vs|	s	S Av min	vs
BP1/1	111.46574	0.003253744	1.547793055	0.7480315	9	3.955	26223.329	ok	-46687.6	46687.6011	5.2357634	10.283266	123403.9
2	77.855265	0.002261537	1.075804066	0.7480315	9	3.955	26223.329	ok	-42442.31	42442.3142	5.7627752	10.283266	123403.9
3	95.173016	0.00277154	1.318410499	0.7480315	9	3.955	26223.329	ok	-45511.35	45511.3512	5.3741653	10.283266	123403.9
4	70.254684	0.002038518	0.969714708	0.7480315	9	3.955	26223.329	ok	-44665.43	44665.4292	5.475944	10.283266	123403.9
5	73.6963	0.002139442	1.017723841	0.7480315	9	3.955	26223.329	ok	-55224.3	55224.2996	4.4289441	10.283266	123403.9
6	88.347217	0.002570212	1.222639546	0.7480315	9	3.955	26223.329	ok	-42941.43	42941.4255	5.6957911	10.283266	123403.9
7	90.182974	0.002624718	1.248377622	0.7480315	9	3.955	26223.329	ok	-56315.9	56315.9042	4.3430862	10.283266	123403.9
8	78.566512	0.002282432	1.085743752	0.7480315	9	3.955	26223.329	ok	-43065.53	43065.5288	5.6793724	10.283266	123403.9
9	91.786517	0.002671664	1.270871346	0.7480315	9	3.955	26223.329	ok	-57908.51	57908.5122	4.2236518	10.283266	123403.9
10	96.78852	0.002819249	1.341105461	0.7480315	9	3.955	26223.329	ok	-41305.83	41305.8324	5.9213232	10.283266	123403.9
BP1/11	96.938328	0.002823675	1.343210542	0.7480315	9	3.955	26223.329	ok	-55542.2	55542.2028	4.4039934	10.283266	123403.9
BP2/12	937.12858	0.031864992	6.401052352	0.7086614	8	3.155	11073.281	perlu	20904.554	20904.5544	7.4112024	15.424898	52111.912
13	75.629963	0.00219619	0.441171525	0.7086614	8	3.155	11073.281	perlu	-12139.19	12139.1862	12.762634	15.424898	52111.912
14	32.212845	0.000929623	0.186743023	0.7086614	8	3.155	11073.281	perlu	-10976.88	10976.8787	14.114029	15.424898	52111.912
15	87.312752	0.002539736	0.510183146	0.7086614	8	3.155	11073.281	perlu	-10848.04	10848.0351	14.281644	15.424898	52111.912
16	49.011197	0.001417787	0.284805667	0.7086614	8	3.155	11073.281	perlu	-11803.2	11803.1986	13.125933	15.424898	52111.912
17	90.149495	0.002623331	0.526935857	0.7086614	8	3.155	11073.281	perlu	-9810.755	9810.7554	15.791642	15.424898	52111.912
18	69.731823	0.002025194	0.406420033	0.7086614	8	3.155	11073.281	perlu	-7879.865	7879.8648	19.66125	15.424898	52111.912
19	40.566077	0.001122106	0.235453049	0.7086614	8	3.155	11073.281	perlu	-10887.41	10887.4107	14.231042	15.424898	52111.912
20	88.545145	0.002576644	0.51247684	0.7086614	8	3.155	11073.281	perlu	-11230.06	11230.0551	13.795835	15.424898	52111.912
21	[illegible]	0.000979143	0.19669073	0.7086614	8	3.155	11073.281	perlu	-11315.52	11315.5695	13.691527	15.424898	52111.912
22	89.578[illegible]	0.0026065	0.523594759	0.7086614	8	3.155	11073.281	perlu	-11522.66	11522.6599	13.445536	15.424898	52111.912
23	78.87[illegible]	0.002291459	0.460306182	0.7086614	8	3.155	11073.281	ok	-15145.12	15145.3627	10.229328	15.424898	52111.912
24	32.1[illegible]	[illegible]	0.186265357	0.7086614	8	3.155	11073.281	perlu	-11079.88	11079.8829	13.982848	15.424898	52111.912
25	180.2185	[illegible]	1.267651347	0.7086614	8	3.155	11073.281	perlu	50.838832	50.8388	3047.4311	15.424898	52111.912
BP2/26	52.1[illegible]647	0.0015086[illegible]	0.300062053	0.7086614	8	3.155	11073.281	perlu	-1679.722	1679.7269	92.231606	15.424898	52111.912
BP3/27	[illegible]5.5487[illegible]	0.00648311	2.241325899	0.984252	9	6.848	23309.626	perlu	-14674.74	14674.7388	16.86113	11.568674	109692.36
28	221.11262	0.00656192	2.224647783	0.984252	9	6.848	23309.626	perlu	-17501.46	17501.4586	13.925143	11.568674	109692.36
29	264.25006	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-8500.695	8500.6952	28.772598	11.568674	109692.36
30	246.30692	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-15664.03	15664.0311	15.301312	11.568674	109692.36
31	282.22059	[illegible]	3.552502754	0.984252	9	6.848	23155.824	ok	-28502.49	28502.4874	8.5245738	11.568674	108968.58
32	231.45026	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-17565.53	17565.5271	[illegible]	11.568674	109692.36
33	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-19991.59	19991.5930	12.234412	11.568674	109692.36
34	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	ok	-42216.82	42216.8159	5.9341166	11.568674	109692.36
35	235.649[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-17883.49	17883.4948	[illegible]	11.568674	109692.36
36	262.74172	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-17834.02	17834.0197	13.714541	11.568674	109692.36
37	329.16844	[illegible]	4.201818[illegible]	0.984252	9	6.848	23309.626	perlu	-16861.03	16861.0282	[illegible]	11.568674	109692.36
38	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	ok	-31666.63	31666.6336	7.7235572	11.568674	109692.36
39	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-18859.16	18859.1613	12.969049	11.568674	109692.36
40	228.34011	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-21015.39	21015.3890	11.638005	11.568674	109692.36
41	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	ok	-31153.62	31153.6174	[illegible]	11.568674	109692.36
42	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-17790.8	17790.7969	13.74728	11.568674	109692.36
43	144.14324	[illegible]	[illegible]	0.984252	9	6.848	23309.626	ok	38421.83	38421.8284	6.3653526	11.568674	109692.36
44	284.87416	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-890.2147	890.2147	274.74877	11.568674	109692.36
45	279.92286	0.008383847	[illegible]	0.984252	9	6.848	23309.626	perlu	-13700.22	13700.2161	17.852062	11.568674	109692.36
46	290.42869	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-19271.37	19271.3725	12.69144	11.568674	109692.36
47	220.3999[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	ok	-34944.22	34944.2216	6.9992582	11.568674	109692.36
BP3/48	265.44[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	ok	-35640.64	35640.6351	6.852343	11.568674	109692.36
BP4/49	179.80195	0.003799299	0.636683886	0.6299213	8	2.493	9228.1511	perlu	9128.366	9128.3656	16.97235	18.509878	43426.594
50	[illegible]	0.00344236	0.52625295	0.6299213	8	2.493	9228.1511	perlu	-9213.091	9213.0910	16.816171	18.509878	43426.594
51	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-8696.629	8696.6285	17.814128	18.509878	43426.594
52	163.1963	0.004800528	0.801610067	0.6299213	8	2.493	9228.1511	perlu	-7725.092	7725.0923	19.926893	18.509878	43426.594
53	126.8[illegible]	0.003709851	0.621030361	0.6299213	8	2.493	9228.1511	perlu	-10816.58	10816.5756	14.325401	18.509878	43426.594
54	140.125[illegible]	0.004107685	0.687627874	0.6299213	8	2.493	9228.1511	ok	-12159.68	12159.6763	12.741128	18.509878	43426.594
55	[illegible]	0.002432731	0.407240019	0.6299213	8	2.493	9228.1511	perlu	-3537.205	3537.2055	43.799545	18.509878	43426.594
56	149.33782	0.004383754	0.733841884	0.6299213	8	2.493	9228.1511	ok	-13869.66	13869.6583	11.170282	18.509878	43426.594
57	45.195588	0.001306786	0.218756161	0.6299213	8	2.493	9228.1511	ok	-11665.15	11665.1532	13.281365	18.509878	43426.594
58	126.88793	0.003712348	0.62144826	0.6299213	8	2.493	9228.1511	perlu	10450.39	10450.3874	14.829195	18.509878	43426.594
59	142.348	0.00417422	0.698765765	0.6299213	8	2.493	9228.1511	ok	12098.2	12098.2038	12.803867	18.509878	43426.594
60	183.32609	0.005409053	0.905477347	0.6299213	8	2.493	9228.1511	ok	-13977.36	13977.3633	11.084027	18.509878	43426.594
61	183.32609	0.005409053	0.905477142	0.6299213	8	2.493	9228.1511	ok	-13977.36	13977.3633	11.084027	18.509878	43426.594
62	108.2642	0.003158006	0.528785253	0.6299213	8	2.493	9228.1511	ok	-11458.8	11458.8011	13.520636	18.509878	43426.594
63	94.027645	0.002729205	0.455543808	0.6299213	8	2.493	9228.1511	perlu	1578.209	1578.2087	98.166882	18.509878	43426.594
64	127.77604	0.003738822	0.625879997	0.6299213	8	2.493	9228.1511	perlu	9496.08	9496.0804	16.314941	18.509878	43426.594
65	119.0882	0.003480145	0.582577505	0.6299213	8	2.493	9228.1511	perlu	-9642.735	9642.7346	16.067631	18.509878	43426.594
66	119.02802	0.003478356	0.582277932	0.6299213	8	2.493	9228.1511	perlu	-9796.227	9796.2268	15.815168	18.509878	43426.594
67	116.29838	0.003397223	0.568696241	0.6299213	8	2.493	9228.1511	perlu	-9197.631	9197.6312	16.844736	18.509878	43426.594
68	166.91217	0.004913174	0.82246698	0.6299213	8	2.493	9228.1511	ok	-12168.98	12168.9766	12.73139	18.509878	43426.594
BP4/69	42.791751	0.001236775	0.207036513	0.6299213	8	2.493	9228.1511	ok	-20356.58	20356.5774	7.6107091	18.509878	43426.594
BP7/70	122.3603	0.003522491	0.801824753	0.6299213	5	1.558	12355.469	ok	-15411.44	15411.4404	11.235108	15.424898	58143.384
A1/71	156.79691	0.004607849	0.682078253	0.6299213	8	2.493	8160.0781	ok	-14415.3	14415.3038	9.5035465	18.509878	38400.362
72	143.18589	0.004199314	0.621604661	0.6299213	8	2.493	8160.0781	ok	-14500.32	14500.3176	9.4478282	18.509878	38400.362
73	147.9167	0.004341117	0.642595105	0.6299213	8	2.493	8160.0781	ok	-14207.72	14207.7192	9.6423898	18.509878	38400.362

74	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	290,126.87	4,170.91	15.03937	2.6771654	153.32164	0.004503377	0.66661372	0.6299213	x	2.493	8160.0781	ok	-14057.93	14057.9328	9.745139	18.509878	38400.367
75	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	298,598.64	4,670.65	15.03937	2.6771654	157.29866	0.004637984	0.686538954	0.6299213	x	2.493	8160.0781	ok	-13705.3	13705.3002	9.995878	18.509878	38400.367
76	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	354,965.47	4,887.64	15.03937	2.6771654	187.58651	0.005530117	0.819814041	0.6299213	x	2.493	8160.0781	ok	-13455.9	13455.8993	10.181149	18.509878	38400.367
77	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	375,939.89	2,774.79	15.03937	2.6771654	198.67073	0.005875501	0.869722816	0.6299213	x	2.493	8160.0781	ok	-15935.23	15935.2265	8.596816	18.509878	38400.367
78	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	275,155.86	4,182.40	15.03937	2.6771654	145.41	0.004263955	0.631469181	0.6299213	x	2.493	8160.0781	ok	-14279.72	14279.7176	9.5937828	18.509878	38400.367
79	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	278,773.71	4,137.62	15.03937	2.6771654	147.3219	0.004323277	0.63995433	0.6299213	x	2.493	8160.0781	ok	-14312.4	14312.4000	9.5585177	18.509878	38400.367
80	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	293,801.03	4,605.38	15.03937	2.6771654	155.2633	0.004561733	0.675251826	0.6299213	x	2.493	8160.0781	ok	-13782.09	13782.0859	9.9401868	18.509878	38400.367
81	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	284,922.74	5,619.11	15.03937	2.6771654	150.57144	0.004420781	0.654387365	0.6299213	x	2.493	8160.0781	ok	-12589.46	12589.4633	10.881839	18.509878	38400.367
82	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	199,118.33	1,882.42	15.03937	2.6771654	105.22689	0.003068822	0.454263265	0.6299213	x	2.493	8160.0781	ok	-16985.57	16985.5716	8.0654636	18.509878	38400.367
83	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.984252	324,674.74	6,390.83	14.862205	2.8543307	170.28256	0.005014367	0.233300495	0.984252	x	6.087	8063.9513	ok	-11455.38	11455.3752	11.818266	18.509878	17948.007
84	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	327,804.68	4,643.47	15.03937	2.6771654	171.23301	0.005103458	0.755440952	0.6299213	x	2.493	8160.0781	ok	-13737.28	13737.2815	9.9726069	18.509878	38400.367
85	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	281,316.57	4,079.89	15.03937	2.6771654	148.66571	0.004363582	0.645921204	0.6299213	x	2.493	8160.0781	ok	-14400.72	14400.7166	9.5134373	18.509878	38400.367
86	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	372,331.34	2,243.38	15.03937	2.6771654	196.76375	0.00581743	0.86112389	0.6299213	x	2.493	8160.0781	ok	-16560.91	16560.9080	8.2722614	18.509878	38400.367
87	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	363,481.85	4,004.59	15.03937	2.6771654	192.08711	0.005675092	0.840052932	0.6299213	x	2.493	8160.0781	ok	-14488.9	14488.9028	9.4552714	18.509878	38400.367
88	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	127,250.19	1,806.10	15.03937	2.6771654	67.247159	0.001950406	0.288709454	0.6299213	x	2.493	8160.0781	ok	-17025.36	17025.3574	8.0230537	18.509878	38400.367
89	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	325,061.52	4,546.83	15.03937	2.6771654	171.78334	0.005059645	0.748955389	0.6299213	x	2.493	8160.0781	ok	-13850.97	13850.9713	9.8907508	18.509878	38400.367
90	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	291,339.15	3,658.30	15.03937	2.6771654	153.96239	0.004522631	0.669463747	0.6299213	x	2.493	8160.0781	ok	-14896.31	14896.3050	9.1966722	18.509878	38400.367
91	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	196,378.09	979.58	15.03937	2.6771654	209.47159	0.006205129	0.918523397	0.6299213	x	2.493	8160.0781	ok	-18047.73	18047.7345	7.590787	18.509878	38400.367
92	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	360,990.62	3,870.38	15.03937	2.6771654	190.77658	0.005635672	0.83413319	0.6299213	x	2.493	8160.0781	ok	-14646.8	14646.7974	9.3533422	18.509878	38400.367
93	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	127,270.52	1,189.38	15.03937	2.6771654	67.257899	0.001950721	0.288756809	0.6299213	x	2.493	8160.0781	ok	-17800.91	17800.9098	7.6960397	18.509878	38400.367
94	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	323,080.19	4,373.92	15.03937	2.6771654	170.73628	0.005028011	0.744272825	0.6299213	x	2.493	8160.0781	ok	-14054.39	14054.3941	9.7475927	18.509878	38400.367
95	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	321,187.19	2,905.13	15.03937	2.6771654	169.7359	0.004997297	0.739800399	0.6299213	x	2.493	8160.0781	ok	-15782.38	15782.3822	8.6801441	18.509878	38400.367
96	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	254,991.29	1,395.26	15.03937	2.6771654	134.75374	0.00394707	0.58426624	0.6299213	x	2.493	8160.0781	ok	-17664.58	17664.5824	7.7554343	18.509878	38400.367
97	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	174,378.96	1,983.34	15.03937	2.6771654	92.153029	0.002682415	0.397065317	0.6299213	x	2.493	8160.0781	ok	-16866.85	16866.8455	8.1222365	18.509878	38400.367
98	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	321,359.94	4,572.35	15.03937	2.6771654	169.87219	0.005000554	0.740208492	0.6299213	x	2.493	8160.0781	ok	-13820.95	13820.9452	9.9122388	18.509878	38400.367
99	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	319,742.66	2,980.15	15.03937	2.6771654	168.97252	0.004974748	0.736388492	0.6299213	x	2.493	8160.0781	ok	-15694.13	15694.1276	8.7291533	18.509878	38400.367
100	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	234,726.97	1,853.66	15.03937	2.6771654	124.04427	0.003627642	0.536982836	0.6299213	x	2.493	8160.0781	ok	-17019.41	17019.4128	8.1494263	18.509878	38400.367
101	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	207,206.27	3,962.31	15.03937	2.6771654	109.50108	0.003195474	0.473010946	0.6299213	x	2.493	8160.0781	ok	-14538.65	14538.6477	9.4229196	18.509878	38400.367
102	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	324,622.83	4,485.28	15.03937	2.6771654	171.55451	0.00505264	0.747918489	0.6299213	x	2.493	8160.0781	ok	-13923.38	13923.3832	9.8393118	18.509878	38400.367
103	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	297,696.44	3,524.49	15.03937	2.6771654	157.32188	0.00462364	0.68441571	0.6299213	x	2.493	8160.0781	ok	-15053.72	15053.7221	9.1095074	18.509878	38400.367
104	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	323,766.36	2,142.74	15.03937	2.6771654	[illegible]	0.005038965	0.745894315	0.6299213	x	2.493	8160.0781	ok	-16679.31	16679.3075	8.2135609	18.509878	38400.367
105	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	234,869.82	2,139.79	15.03937	2.6771654	124.12027	0.003629891	0.537335624	0.6299213	x	2.493	8160.0781	ok	-16682.79	16682.7861	8.2118483	18.509878	38400.367
106	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	303,999.28	3,582.24	15.03937	2.6771654	160.65271	0.004723891	0.699255322	0.6299213	x	2.493	8160.0781	ok	-14985.29	14985.2890	9.1417615	18.509878	38400.367
107	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	182,164.32	2,487.90	15.03937	2.6771654	96.267405	0.002810854	0.415041359	0.6299213	x	2.493	8160.0781	ok	-16273.24	16273.2379	8.4185157	18.509878	38400.367
108	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	323,478.94	4,774.64	15.03937	2.6771654	170.94701	0.005034277	0.74521508	0.6299213	x	2.493	8160.0781	ok	-13582.96	13582.9569	10.085912	18.509878	38400.367
109	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	286,478.92	3,933.34	15.03937	2.6771654	151.39382	0.004445472	0.65880423	0.6299213	x	2.493	8160.0781	ok	-14575.08	14575.0819	9.3993646	18.509878	38400.367
110	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	299,643.90	3,362.05	15.03937	2.6771654	158.35165	0.004654605	0.688999261	0.6299213	x	2.493	8160.0781	ok	-15246.83	15246.8261	8.9852477	18.509878	38400.367
111	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	261,859.78	3,428.32	15.03937	2.6771654	138.38549	[illegible]	0.65922445	0.6299213	x	2.493	8160.0781	ok	-15166.87	15166.8651	9.0325152	18.509878	38400.367
112	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	331,830.64	3,812.25	15.03937	2.6771654	175.36058	0.005167292	0.764964652	0.6299213	x	2.493	8160.0781	ok	-14715.18	14715.1824	9.3098757	18.509878	38400.367
113	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	150,647.33	1,626.55	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	x	2.493	8160.0781	ok	-17298.35	17298.3544	7.9196262	18.509878	38400.367
114	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	324,589.57	4,654.11	15.03937	2.6771654	171.33564	0.005052109	[illegible]	0.6299213	x	2.493	8160.0781	ok	-13724.76	13724.7553	9.9817087	18.509878	38400.367
115	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	282,376.18	4,138.92	15.03937	2.6771654	149.22567	0.004380189	0.648408324	0.6299213	x	2.493	8160.0781	ok	-14355.45	14355.4533	9.5431685	18.509878	38400.367
116	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	274,384.28	4,185.53	15.03937	2.6771654	145.00224	[illegible]	0.629660676	0.6299213	x	2.493	8160.0781	ok	-14225.98	14225.9782	9.5962954	18.509878	38400.367
117	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	140,787.40	2,581.62	15.03937	2.6771654	[illegible]	[illegible]	0.785125127	0.6299213	x	2.493	8160.0781	ok	-16162.95	16162.9545	8.4759571	18.509878	38400.367
118	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	292,676.73	2,174.35	15.03937	2.6771654	154.66916	0.004543833	0.672608094	0.6299213	x	2.493	8160.0781	ok	-16642.13	16642.1292	8.23191	18.509878	38400.367
119	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	141,041.70	1,718.46	15.03937	2.6771654	74.535476	0.002164865	[illegible]	0.6299213	x	2.493	8160.0781	ok	-17119.65	17119.6477	8.0032922	18.509878	38400.367
120	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	321,181.36	4,827.12	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	x	2.493	8160.0781	ok	-13512.98	13512.9824	10.123157	18.509878	38400.367
121	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	283,001.64	4,155.25	15.03937	2.6771654	149.55621	0.004390508	0.649826609	0.6299213	x	2.493	8160.0781	ok	-14264.72	14264.7177	9.663671	18.509878	38400.367
122	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	272,696.68	4,369.91	15.03937	2.6771654	144.11041	0.00422701	0.625704337	0.6299213	x	2.493	8160.0781	ok	-14059.11	14059.1113	9.7443221	18.509878	38400.367
123	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	344,439.54	2,199.82	15.03937	2.6771654	182.02393	0.005369873	0.794832676	0.6299213	x	2.493	8160.0781	ok	-16612.16	16612.1636	8.246759	18.509878	38400.367
124	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	291,300.84	2,666.40	15.03937	2.6771654	153.94204	0.004522019	0.669373212	0.6299213	x	2.493	8160.0781	ok	-16063.24	16063.2377	8.5285738	18.509878	38400.367
A1/125	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	141,334.37	1,902.85	15.03937	2.6771654	74.690141	0.002168605	0.321008353	0.6299213	x	2.493	8160.0781	ok	-16962.72	16962.7163	8.0763108	18.509878	38400.367
A2/126	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	614,620.51	6,229.25	22.913386	2.6771654	99.948266	0.002912629	0.919820625	0.6299213	6	1.870	13405.318	ok	33625.17	33625.1660	6.2073279	13.221341	81902.381
127	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	802,698.19	5,129.04	22.913386	2.6771654	136.53305	0.003821053	1.296442256	0.6299213	6	1.870	13405.318	ok	-34920.11	34920.1098	5.9754301	13.221341	81902.381

sk 10
tul 16 tul sengkang 10 Av 0.1308452
jml tul 8

Perhitungan Lentur dan Geser Lapangan Lantai 1

	b	h		fc	fy	sv		sk	tul	mu	Vu	d	d'	Rn	ρ	As	tul pakai	jml tul	as pakai	øVs		Vc	Vs	s	S Av min	vs
BP1/1	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	522,861.81	23,689.72	26.850394	2.6771654	48.160156	0.001392999	0.662644081	0.7480315	9	3.955	26223.329	ok	-33831.7	33831.6922	7.2294243	10.283266	123403.9
2	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	827,994.29	20,483.47	26.850394	2.6771654	76.265532	0.00221485	1.053595066	0.7480315	9	3.955	26223.329	ok	-37603.76	37603.7572	6.5042806	10.283266	123403.9
3	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	789,216.15	21,405.46	26.850394	2.6771654	72.693226	0.002110031	1.003233365	0.7480315	9	3.955	26223.329	ok	-36519.05	36519.0532	6.6974735	10.283266	123403.9
4	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	189,065.46	19,374.94	26.850394	2.6771654	17.414585	0.000501513	0.238562934	0.7480315	9	3.955	26223.329	ok	-38907.9	38907.9016	6.2862649	10.283266	123403.9
5	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	872,697.63	20,512.82	26.850394	2.6771654	80.383101	0.00233582	1.111359991	0.7480315	9	3.955	26223.329	ok	-37569.23	37569.2167	6.5102606	10.283266	123403.9
6	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	774,952.70	20,173.77	26.850394	2.6771654	71.379932	0.002071504	0.985406622	0.7480315	9	3.955	26223.329	ok	-37968.11	37968.1069	6.4418642	10.283266	123403.9
7	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	974,914.76	21,456.27	26.850394	2.6771654	89.298195	0.002612925	1.242981209	0.7480315	9	3.955	26223.329	ok	-36459.29	36459.2855	6.7084526	10.283266	123403.9
BP1/8	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,526,724.56	18,397.46	26.850394	2.6771654	140.62471	0.004122629	1.961118013	0.7480315	9	3.955	26223.329	ok	-40163.22	40163.2171	6.0897024	10.283266	123403.9
BP2/9	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	265,131.64	18,032.61	17.007874	2.6771654	91.296691	0.002657158	0.533770912	0.7086614	8	3.155	11073.781	perlu	4841.117	4841.1174	32.002527	15.424898	52111.912
10	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	102,295.77	17,740.39	17.007874	2.6771654	35.225011	0.001010985	0.364292313	0.7086614	8	3.155	11073.781	perlu	-5184.908	5184.9077	29.880568	15.424898	52111.912
11	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	257,297.43	17,498.32	17.007874	2.6771654	88.599027	0.002572632	0.51779577	0.7086614	8	3.155	11073.781	perlu	-5469.695	5469.6951	28.324794	15.424898	52111.912
12	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	156,593.45	16,480.55	17.007874	2.6771654	53.922135	0.001560945	0.313563334	0.7086614	8	3.155	11073.781	perlu	-6662.073	6662.0718	23.232186	15.424898	52111.912
13	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	187,351.34	16,010.41	17.007874	2.6771654	64.513452	0.001826383	0.375223365	0.7086614	8	3.155	11073.781	perlu	-7220.175	7220.1752	21.45765	15.424898	52111.912
14	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	201,426.93	16,438.99	17.007874	2.6771654	69.356663	0.002012206	0.404212809	0.7086614	8	3.155	11073.781	perlu	-6645.385	6645.3851	23.313621	15.424898	52111.912
15	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	224,219.98	18,844.55	17.007874	2.6771654	42.7245	0.001236273	0.348343046	0.7086614	8	3.155	11073.781	perlu	-3885.852	3885.8520	39.86976	15.424898	52111.912
16	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	251,145.65	18,750.26	17.007874	2.6771654	87.169328	0.002535513	0.509334789	0.7086614	8	3.155	11073.781	perlu	3996.812	3996.8315	38.762702	15.424898	52111.912
17	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	92,327.35	18,948.76	17.007874	2.6771654	31.792438	0.000917436	0.184294873	0.7086614	8	3.155	11073.781	perlu	3763.295	3763.2950	41.168176	15.424898	52111.912
BP2/18	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	223,589.16	19,809.32	17.007874	2.6771654	26.991754	0.002236125	0.449203683	0.7086614	8	3.155	11073.781	perlu	2250.817	2250.8171	56.320711	15.424898	52111.912
BP3/19	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,008,910.68	37,601.89	26.850394	2.6771654	208.16802	0.006165331	2.606953801	0.984252	9	6.848	23309.626	perlu	-10606.31	10606.3066	23.060125	11.568674	109692.36
20	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,106,705.51	37,970.08	26.850394	2.6771654	[illegible]	[illegible]	2.758124656	0.984252	9	6.848	23309.626	perlu	-10175.5	10175.5009	24.036693	11.568674	109692.36
21	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,469,590.99	29,330.22	26.850394	2.6771654	[illegible]	0.004472216	1.891507026	0.984252	9	6.848	23309.626	perlu	-19634.16	19634.1596	12.457136	11.568674	109692.36
22	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,295,970.96	41,332.46	26.850394	2.6771654	[illegible]	0.007078768	2.993119239	0.984252	9	6.848	23309.626	perlu	-6231.522	6231.5224	39.249201	11.568674	109692.36
23	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,146,718.50	52,589.60	26.850394	2.6771654	222.44801	0.006602758	2.791915589	0.984252	9	6.848	23309.626	perlu	7023.2271	7023.2271	34.825214	11.568674	109692.36
24	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,235,982.77	36,094.52	26.850394	2.6771654	[illegible]	0.006886216	2.912123502	0.984252	9	6.848	23309.626	perlu	-12382.04	12382.0451	19.753246	11.568674	109692.36
25	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,310,992.63	34,839.32	26.850394	2.6771654	[illegible]	[illegible]	3.033505618	0.984252	9	6.848	23309.626	perlu	-13858.74	13858.7399	17.648458	11.568674	109692.36
26	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,189,225.85	35,529.37	26.850394	2.6771654	226.55122	[illegible]	2.849124401	0.984252	9	6.848	23309.626	perlu	12988.1	12988.1002	18.831498	11.568674	109692.36
27	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,482,923.80	34,999.12	26.850394	2.6771654	[illegible]	[illegible]	1.908562381	0.984252	9	6.848	23309.626	perlu	-14826.03	14826.0332	16.497021	11.568674	109692.36
28	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,512,375.95	52,255.64	26.850394	2.6771654	[illegible]	0.004605415	1.947357409	0.984252	9	6.848	23309.626	perlu	6631.0475	6631.0475	36.88488	11.568674	109692.36
29	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,175,523.09	34,224.57	26.850394	2.6771654	[illegible]	0.006669448	2.830682268	0.984252	9	6.848	23309.626	perlu	-13934.92	13934.9181	17.551929	11.568674	109692.36
30	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	[illegible]	[illegible]	26.850394	2.6771654	264.40063	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-15662.46	15662.4559	[illegible]	11.568674	109692.36
31	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,788,102.16	[illegible]	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	ok	-52268.84	52258.8435	4.6793225	11.568674	109692.36
32	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,897,018.32	[illegible]	26.850394	2.6771654	300.19796	[illegible]	1.814122127	0.984252	9	6.848	23309.626	ok	-35614.25	35614.2529	6.8676266	11.568674	109692.36
33	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,717,045.41	40,125.73	26.850394	2.6771654	281.54666	[illegible]	1.566516858	0.984252	9	6.848	23309.626	perlu	-7639.462	7639.4612	32.01805	11.568674	109692.36
34	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,666,220.21	38,516.78	26.850394	2.6771654	225.24381	[illegible]	1.481190288	0.984252	9	6.848	23309.626	perlu	-9532.324	9532.3235	25.658528	11.568674	109692.36
BP3/35	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,523,990.85	43,769.62	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-3152.508	3152.5081	22.955947	11.568674	109692.36
BP4/36	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	291,916.82	12,825.97	17.007874	2.6771654	[illegible]	[illegible]	0.590024284	0.6299213	8	2.493	9228.1511	perlu	-6623.919	6623.9194	[illegible]	18.509878	43426.594
37	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	290,273.00	[illegible]	17.007874	2.6771654	119.94438	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-5525.917	5525.9366	[illegible]	18.509878	43426.594
38	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	339,281.90	[illegible]	17.007874	2.6771654	140.19543	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	7021.672	7021.6724	22.064275	18.509878	43426.594
39	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	352,611.60	7,504.89	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	ok	-12884.02	12884.0155	12.024822	18.509878	43426.594
40	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	312,977.74	14,158.80	17.007874	2.6771654	129.32669	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-5055.89	5055.8804	30.643067	18.509878	43426.594
41	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	323,532.67	13,855.21	17.007874	2.6771654	133.56881	0.003915239	0.655412903	0.6299213	8	2.493	9228.1511	perlu	-5413.05	5413.0505	28.621198	18.509878	43426.594
42	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	314,480.85	14,666.01	17.007874	2.6771654	[illegible]	0.003813597	0.636172234	0.6299213	8	2.493	9228.1511	perlu	-4459.139	4459.1355	34.743929	18.509878	43426.594
43	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	300,342.61	14,616.23	17.007874	2.6771654	[illegible]	0.003629456	0.607822201	0.6299213	8	2.493	9228.1511	perlu	-4494.201	4494.2042	34.472541	18.509878	43426.594
44	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	226,722.83	15,407.37	17.007874	2.6771654	[illegible]	0.002722494	0.456563399	0.6299213	8	2.493	9228.1511	perlu	-3586.975	3586.9752	43.19182	18.509878	43426.594
45	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	315,499.51	14,994.98	17.007874	2.6771654	136.36207	[illegible]	0.638816323	0.6299213	8	2.493	9228.1511	perlu	-4022.141	4022.1406	38.045835	18.509878	43426.594
46	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	284,117.73	15,245.18	17.007874	2.6771654	117.40131	0.003429998	0.574182789	0.6299213	8	2.493	9228.1511	perlu	-3727.79	3727.7898	[illegible]	18.509878	43426.594
47	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	291,803.67	15,056.70	17.007874	2.6771654	120.52219	0.003524433	0.589991326	0.6299213	8	2.493	9228.1511	perlu	-3999.527	3999.5273	38.736575	18.509878	43426.594
BP4/48	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	295,302.99	15,599.76	17.007874	2.6771654	122.02424	0.003567746	0.597193916	0.6299213	8	2.493	9228.1511	perlu	3360.641	3360.6412	46.100723	18.509878	43426.594
BP5/49	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	5,379,343.67	83,183.28	36.692913	2.6771654	[illegible]	0.007105694	5.1324527	0.984252	9	6.848	39817.763	perlu	4173.7081	4173.7081	[illegible]	9.254939	182377.21
50	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	5,427,769.90	86,719.65	36.692913	2.6771654	236.49713	0.007033063	5.081436165	0.984252	9	6.848	39817.763	perlu	8334.2574	8334.2574	40.104685	9.254939	182377.21
BP6/51	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	616,642.41	4,545.72	36.692913	2.6771654	[illegible]	0.000789094	0.570180423	0.8661417	8	4.714	39817.763	ok	88340.95	88340.9524	3.2815543	9.254939	182377.21
52	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,695,695.00	9,766.92	36.692913	2.6771654	208.43785	[illegible]	4.43918328	0.8661417	8	4.714	39817.763	ok	-82198.16	82198.3669	4.0662951	9.254939	182377.21
BP7/53	11.811024	21.653543	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	93,084.87	11,555.04	18.976378	2.6771654	25.748117	0.000734238	0.166389948	0.6299213	8	1.558	12355.469	ok	15427.53	15427.5266	11.158417	15.424898	58143.384
A1/54	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	309,138.71	6,363.71	15.03937	2.6771654	[illegible]	0.004805212	0.711366985	0.6299213	8	2.493	8160.0781	ok	-11713.47	11713.4211	11.695633	18.509878	38400.367
55	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	287,093.28	5,932.69	15.03937	2.6771654	[illegible]	0.00445519	0.659480787	0.6299213	8	2.493	8160.0781	ok	-12255.84	12255.8433	11.178052	18.509878	38400.367
56	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	280,662.50	5,296.08	15.03937	2.6771654	[illegible]	0.004353217	0.644386128	0.6299213	8	2.493	8160.0781	ok	-12969.51	12969.5069	10.56292	18.509878	38400.367
57	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	299,473.12	6,374.96	15.03937	2.6771654	158.20679	0.004651889	0.688592256	0.6299213	8	2.493	8160.0781	ok	-11701.28	11701.2849	11.707818	18.509878	38400.367
58	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	66,631.49	8,470.10	15.03937	2.6771654	35.212352	0.001015627	0.156485102	0.6299213	8	2.493	8160.0781	perlu	9235.361	9235.3614	14.833909	18.509878	38400.367
59	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	295,397.57	5,894.83	15.03937	2.6771654	158.22087	0.004659688	0.68841942	0.6299213	8	2.493	8160.0781	ok	12265.09	12265.0896	11.16961	18.509878	38400.367
60	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	298,359.28	5,639.40	15.03937	2.6771654	157.62217	0.004634178	0.685973624	0.6299213	8	2.493	8160.0781	ok	-12565.6	12565.5966	10.902501	18.509878	38400.367
61	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	270,413.60	4,750.46	15.03937	2.6771654	142.96588	0.004190867	0.620354356	0.6299213	8	2.493	8160.0781	ok	-13611.41	13611.4094	10.064829	18.509878	38400.367
62	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	279,129.88	7,564.52	15.03937	2.6771654	147.51012	0.004328922	0.640789938	0.6299213	8	2.493	8160.0781	ok	-10300.25	10300.7484	13.299666	18.509878	38400.367
63	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	168,172.62	1,507.22	15.03937	2.6771654	88.83319	0.002582711	0.382250208	0.6299213	8	2.493	8160.0781	ok	-17426.98	17426.9837	7.8631716	18.509878	38400.367
64	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	316,822.61	5,563.65	15.03937	2.6771654	167.42932	0.004928121	0.729493901	0.6299213	8	2.493	8160.0781	ok	-12654.72	12654.7134	10.825726	18.509878	38400.367
65	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	288,957.87	5,566.84	15.03937	2.6771654	152.70386	0.004484812	0.663866416	0.6299213	8	2.493	8160.0781	ok	-12650.96	12650.9601	10.828943	18.509878	38400.367
66	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	308,004.78	5,277.28	15.03937	2.6771654	162.76947	0.004787654	0.708693875	0.6299213	8	2.493	8160.0781	ok	-12991.61	12991.6135	10.544996	18.509878	38400.367
67	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	317,192.31	6,058.54	15.03937	2.6771654	153.62425	0.004934066	0.73016663	0.6299213	8	2.493	8160.0781	ok	-12072.49	12072.4892	11.347826	18.509878	38400.367
68	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	292,915.78	5,659.26	15.03937	2.6771654	154.79548	0.004547669	0.673170102	0.6299213	8	2.493	8160.0781	ok	12542.23	12542.2303	10.922819	18.509878	38400.367
69	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	374,684.88	3,778.91	15.03937	2.6771654	198.00751	0.005855294	0.866731624	0.6299213	8	2.493	8160.0781	ok	-14754.4	14754.4023	9.2851227	18.509878	38400.367
70	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	323,106.79	5,894.21	15.03937	2.6771654	170.75014	0.005028436	0.744335662	0.6299213	8	2.493	8160.0781	ok	-12265.8	12265.7997	11.168983	18.509878	38400.367
71	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	284,846.63	6,159.97	15.03937	2.6771654	150.53122	0.004419573	0.654208622	0.6299213	8	2.493	8160.0781	ok	-11953.16	11953.1559	11.461116	18.509878	38400.367
72	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	320,770.39	6,259.04	15.03937	2.6771654	169.51563	0.004991146	0.738815857	0.6299213	8	2.493	8160.0781	ok	-11836.6	11836.6033	11.573971	18.509878	38400.367
73	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	278,286.47	6,348.30	15.03937	2.6771654	147.06441	0.004315555	0.638811298	0.6299213	8	2.493	8160.0781	ok	-11731.6	11731.5997	11.677564	18.509878	38400.367
74	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	71,754.13	11,401.22	15.03937	2.6771654	37.919482	0.001095196	0.162116737	0.6299213	8	2.493	8160.0781	perlu	-5786.988	5786.9880	23.673197	18.509878	38400.367

75	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	321,504.68	6,069.92	15.03937	2.6771654	169.90368	0.005012864	0.740550406	0.6299213	8	2.493	8160.0781	ok	-12059.1	12059.1043	11.160422	18.509878	38400.367
76	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	261,781.87	6,371.44	15.03937	2.6771654	138.34232	0.004054342	0.600145171	0.6299213	8	2.493	8160.0781	ok	-11704.37	11704.3685	11.304733	18.509878	38400.367
77	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	448,024.96	118.22	15.03937	2.6771654	236.76511	0.007043328	1.042590742	0.6299213	8	2.493	8160.0781	ok	-19061.11	19061.1056	7.1472278	18.509878	38400.367
78	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	76,687.53	6,992.82	15.03937	2.6771654	40.526606	0.00117093	0.173327191	0.6299213	8	2.493	8160.0781	ok	-10973.33	10973.3341	12.484493	18.509878	38400.367
79	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	116,457.18	12,936.37	15.03937	2.6771654	61.543438	0.001783515	0.264005357	0.6299213	8	2.493	8160.0781	patah	-3980.928	3980.9281	34.413209	18.509878	38400.367
80	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	319,032.80	6,405.61	15.03937	2.6771654	168.59738	0.004963423	0.734712133	0.6299213	8	2.493	8160.0781	ok	-11664.17	11664.1706	11.245071	18.509878	38400.367
81	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	264,652.31	6,381.74	15.03937	2.6771654	139.85925	0.004099722	0.606862533	0.6299213	8	2.493	8160.0781	ok	-11692.25	11692.2520	11.216862	18.509878	38400.367
82	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	359,041.11	3,590.17	15.03937	2.6771654	189.74034	0.005603762	0.829498502	0.6299213	8	2.493	8160.0781	ok	-14976.46	14976.4560	9.1474584	18.509878	38400.367
83	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.984252	196,680.63	7,033.05	14.862205	2.8543307	106.41145	0.003104498	0.454130806	0.984252	8	6.087	8061.9515	ok	-10699.82	10699.8249	12.652794	18.509878	17948.002
84	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	318,618.62	6,185.65	15.03937	2.6771654	168.3285	0.004956816	0.733734106	0.6299213	8	2.493	8160.0781	ok	-11923	11922.9996	11.490104	18.509878	38400.367
85	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	283,494.07	6,185.28	15.03937	2.6771654	149.81644	0.004398118	0.651032314	0.6299213	8	2.493	8160.0781	ok	-11923.39	11923.3861	11.489732	18.509878	38400.367
86	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	274,559.42	6,407.94	15.03937	2.6771654	145.0948	0.004256507	0.630076725	0.6299213	8	2.493	8160.0781	ok	-11661.43	11661.4266	11.247834	18.509878	38400.367
87	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	371,205.44	4,168.28	15.03937	2.6771654	196.16875	0.005799293	0.858442	0.6299213	8	2.493	8160.0781	ok	-14296.33	14296.3294	9.5826352	18.509878	38400.367
88	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	313,771.35	6,550.49	15.03937	2.6771654	165.81689	0.004879524	0.722293029	0.6299213	8	2.493	8160.0781	ok	-11493.23	11493.2251	11.919244	18.509878	38400.367
89	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	283,438.69	6,276.04	15.03937	2.6771654	149.78717	0.00439724	0.650902688	0.6299213	8	2.493	8160.0781	ok	-11816.6	11816.6028	11.593561	18.509878	38400.367
90	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	271,814.04	6,442.43	15.03937	2.6771654	143.64396	0.004213035	0.623635279	0.6299213	8	2.493	8160.0781	ok	-11620.85	11620.8528	11.788852	18.509878	38400.367
A1/91	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	364,034.16	4,318.09	15.03937	2.6771654	192.37898	0.005683971	0.841371773	0.6299213	8	2.493	8160.0781	ok	-14120.08	14120.0794	9.7022478	18.509878	38400.367
A2/92	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	280,822.58	19,729.57	22.913386	2.6771654	45.666764	0.00132041	0.416900417	0.6299213	6	1.870	17405.318	patah	-17742.43	17742.4331	11.764025	13.221141	81907.381
A2/93	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	219,448.64	20,399.07	22.913386	2.6771654	35.686265	0.001030369	0.325324257	0.6299213	6	1.870	17405.318	patah	-16954.79	16954.7856	12.310532	13.221141	81907.381

sk 10
tul 16 tul sengkang 10 As 0.1308452
jml tul 8

Perhitungan Lentur dan Geser Tumpuan Lantai 1

	b	h		fc	fy	cv		sk	tul	mu	vu	d	d'	Rn	p	As	tul pakai	jml tul	as pakai	φvc		vs	|VS|	s	S As min	vs
BP1/1	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,925,604.51	28,549.95	26.850394	2.6771654	269.47382	0.008057548	3.832943071	0.7480315	9	3.955	26223.329						
2	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,089,458.82	37,222.31	26.850394	2.6771654	192.45747	0.00568636	2.704978367	0.7480315	9	3.955	26223.329	perlu	-28113.77	28113.7713	8.6548428	10.283266	123403.9
3	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,984,898.04	38,835.96	26.850394	2.6771654	182.82651	0.005393905	2.565858667	0.7480315	9	3.955	26223.329	perlu	-17910.99	17910.9935	13.655602	10.283266	123403.9
4	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,740,769.77	24,196.45	26.850394	2.6771654	160.34015	0.004714479	2.242658665	0.7480315	9	3.955	26223.329	perlu	-16012.59	16012.5899	15.274568	10.283266	123403.9
5	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,014,365.73	38,335.51	26.850394	2.6771654	185.54074	0.005476237	2.605023531	0.7480315	9	3.955	26223.329	ok	-33235.54	33235.5397	7.3541521	10.283266	123403.9
6	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,020,744.93	36,294.39	26.850394	2.6771654	186.12817	0.005494069	2.613506351	0.7480315	9	3.955	26223.329	perlu	-16601.36	16601.3561	14.732856	10.283266	123403.9
7	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,209,069.53	38,927.95	26.850394	2.6771654	203.47467	0.006021994	2.864638227	0.7480315	9	3.955	26223.329	perlu	-19002.66	19002.6641	12.871111	10.283266	123403.9
BP1/8	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,220,023.90	46,967.67	26.850394	2.6771654	204.48366	0.006052791	2.879288155	0.7480315	9	3.955	26223.329	perlu	-15904.36	15904.3589	15.378513	10.283266	123403.9
BP2/9	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,136,418.34	24,590.26	17.007874	2.6771654	391.3197	0.011935381	2.397584078	0.7086614	8	3.155	11073.781	perlu	6445.868	6445.8681	37.944523	10.283266	123403.9
10	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,073,500.09	20,329.72	17.007874	2.6771654	369.65413	0.011233841	2.256658526	0.7086614	8	3.155	11073.781	perlu	2873.7645	2873.7645	53.911165	15.424898	52111.912
11	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,097,031.52	24,055.97	17.007874	2.6771654	377.75705	0.011495585	2.309237792	0.7086614	8	3.155	11073.781	perlu	-2138.638	2138.6382	72.442353	15.424898	52111.912
12	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,053,397.81	19,069.88	17.007874	2.6771654	362.73202	0.011010832	2.211860292	0.7086614	8	3.155	11073.781	perlu	2245.1867	2245.1867	69.1045	15.424898	52111.912
13	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	951,776.92	22,568.06	17.007874	2.6771654	327.7394	0.009891677	1.987043956	0.7086614	8	3.155	11073.781	perlu	-3620.802	3620.8023	42.788304	15.424898	52111.912
14	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,099,309.89	19,088.31	17.007874	2.6771654	378.5436	0.011520968	2.314336662	0.7086614	8	3.155	11073.781	perlu	494.70667	494.7067	313.17742	15.424898	52111.912
15	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,160,632.81	21,433.92	17.007874	2.6771654	399.65783	0.012206822	2.452111244	0.7086614	8	3.155	11073.781	perlu	-3599.116	3599.1156	43.046127	15.424898	52111.912
16	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,166,812.84	25,307.91	17.007874	2.6771654	401.78589	0.01227623	2.466053917	0.7086614	8	3.155	11073.781	perlu	839.5825	839.5825	184.5298	15.424898	52111.912
17	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,134,892.15	21,538.09	17.007874	2.6771654	390.79417	0.0119183	2.394152806	0.7086614	8	3.155	11073.781	perlu	3718.0503	3718.0503	41.669148	15.424898	52111.912
BP2/18	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,199,802.34	26,367.02	17.007874	2.6771654	413.14555	0.012647639	2.540662765	0.7086614	8	3.155	11073.781	perlu	-717.0255	717.0255	216.07041	15.424898	52111.912
BP3/19	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,838,845.49	74,511.93	26.850394	2.6771654	397.79023	0.012145953	5.135805064	0.984252	9	6.848	23309.626	perlu	4964.0645	4964.0645	31.209907	15.424898	52111.912
20	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,836,012.69	86,095.23	26.850394	2.6771654	397.49669	0.01213639	5.131761263	0.984252	9	6.848	23309.626	perlu	32814.913	32814.9126	7.3534829	11.568674	109692.36
21	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,893,687.90	78,243.15	26.850394	2.6771654	299.85077	0.009009297	3.809498946	0.984252	9	6.848	23309.626	perlu	46442.33	46442.3297	5.2664324	11.568674	109692.36
22	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,441,327.78	87,857.16	26.850394	2.6771654	460.22087	0.014203382	6.005770238	0.984252	9	6.848	23309.626	perlu	37204.581	37204.5810	6.5740665	11.568674	109692.36
23	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,093,760.31	[illegible]	26.850394	2.6771654	320.58275	0.009664446	4.086522698	0.984252	9	6.848	23309.626	perlu	48515.19	48515.1897	5.0414188	11.568674	109692.36
24	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,792,288.16	83,557.47	26.850394	2.6771654	392.96585	0.011988906	5.069398988	0.984252	9	6.848	23309.626	perlu	59699.23	59699.2297	4.0969606	11.568674	109692.36
25	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,708,594.56	82,992.92	26.850394	2.6771654	384.29311	0.011712271	4.950312542	0.984252	9	6.848	23309.626	perlu	43456.725	43456.7250	5.6282518	11.568674	109692.36
26	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,721,534.84	82,724.10	26.850394	2.6771654	385.63423	0.011750759	4.968200999	0.984252	9	6.848	23309.626	perlu	42792.55	42792.5499	5.7156068	11.568674	109692.36
27	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,318,271.03	69,190.45	26.850394	2.6771654	343.84705	0.010403557	4.399225226	0.984252	9	6.848	23309.626	perlu	42535.116	42535.1159	5.7511992	11.568674	109692.36
28	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,486,724.03	60,612.93	26.850394	2.6771654	361.30258	0.010964847	4.636385205	0.984252	9	6.848	23309.626	perlu	26554.147	26554.1469	9.2117477	11.568674	109692.36
29	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,626,807.32	81,898.86	26.850394	2.6771654	375.81834	0.011443289	4.834293636	0.984252	9	6.848	23309.626	perlu	16463.145	16463.1450	14.856541	11.568674	109692.36
30	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,517,876.40	86,620.96	26.850394	2.6771654	364.53066	0.011058726	4.680309608	0.984252	9	6.848	23309.626	perlu	41505.418	41505.4184	5.8928545	11.568674	109692.36
31	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,660,405.82	46,109.41	26.850394	2.6771654	275.64645	0.008255168	3.485598125	0.984252	9	6.848	23309.626	perlu	47059.276	47059.2757	5.1973344	11.568674	109692.36
32	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,073,691.78	89,818.97	26.850394	2.6771654	318.50315	0.009598521	4.058646814	0.984252	9	6.848	23309.626	perlu	-699.811	699.8110	345.50207	11.568674	109692.36
33	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,642,418.82	87,589.58	26.850394	2.6771654	481.0584	0.014961822	6.308676283	0.984252	9	6.848	23309.626	perlu	50823.2	50823.1996	4.8124252	11.568674	109692.36
34	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,449,618.60	85,234.82	26.850394	2.6771654	461.07999	0.014232929	6.017883036	0.984252	9	6.848	23309.626	perlu	48200.391	48200.3912	5.0743445	11.568674	109692.36
BP3/35	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,750,157.89	93,948.01	26.850394	2.6771654	492.72258	0.015327628	6.459646677	0.984252	9	6.848	23309.626	perlu	46018.319	46018.3190	5.3149571	11.568674	109692.36
BP4/36	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	832,487.10	25,906.25	17.007874	2.6771654	343.9025	0.010409889	1.712618945	0.6299213	8	2.493	9228.1511	perlu	55680.894	55680.8938	4.3926269	11.568674	109692.36
37	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	879,441.17	27,555.04	17.007874	2.6771654	363.2929	0.011022263	1.846044439	0.6299213	8	2.493	9228.1511	perlu	2176.4148	2176.4148	71.184956	18.509878	43426.594
38	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	855,880.64	19,906.45	17.007874	2.6771654	353.66162	0.010729429	1.794436076	0.6299213	8	2.493	9228.1511	perlu	3224.3973	3224.3973	48.448666	18.509878	43426.594
39	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	365,858.74	9,498.93	17.007874	2.6771654	[illegible]	[illegible]	0.743082895	0.6299213	8	2.493	9228.1511	perlu	1728.6618	1728.6618	87.031629	18.509878	43426.594
40	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	928,252.58	21,649.08	17.007874	2.6771654	383.56665	0.011681214	1.955857364	0.6299213	8	2.493	9228.1511	perlu	-10538.08	10538.0816	14.701726	18.509878	43426.594
41	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	923,879.16	21,170.49	17.007874	2.6771654	380.5199	0.011585034	1.939033507	0.6299213	8	2.493	9228.1511	perlu	3744.4437	3744.4437	41.373435	18.509878	43426.594
42	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	959,210.72	22,149.32	17.007874	2.6771654	396.5659	0.012106065	2.028588974	0.6299213	8	2.493	9228.1511	perlu	3387.2837	3382.2837	45.73812	18.509878	43426.594
43	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	941,812.36	22,126.51	17.007874	2.6771654	389.39663	0.011892369	1.990586597	0.6299213	8	2.493	9228.1511	perlu	4341.1957	4341.1957	35.687861	18.509878	43426.594
44	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	915,722.55	22,887.66	17.007874	2.6771654	378.38911	0.011516014	1.927787933	0.6299213	8	2.493	9228.1511	perlu	4306.13	4306.1300	35.978425	18.509878	43426.594
45	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	985,151.45	[illegible]	17.007874	2.6771654	407.30202	[illegible]	2.072696148	0.6299213	8	2.493	9228.1511	perlu	5213.359	5213.3590	29.712499	18.509878	43426.594
46	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	963,549.14	[illegible]	17.007874	2.6771654	398.15171	0.012157731	2.035208226	0.6299213	8	2.493	9228.1511	perlu	4728.1936	4728.1936	32.766846	18.509878	43426.594
47	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	960,104.52	22,538.99	17.007874	2.6771654	396.72845	0.012111362	2.0274461	0.6299213	8	2.493	9228.1511	perlu	5022.5444	5022.5444	30.846515	18.509878	43426.594
BP4/48	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	995,673.97	23,086.04	17.007874	2.6771654	411.43264	0.012591321	2.107791312	0.6299213	8	2.493	9228.1511	perlu	4800.8069	4800.8069	32.27124	18.509878	43426.594
BP5/49	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	5,505,265.29	92,702.15	36.692913	2.6771654	244.7605	0.007227836	5.52172442	0.984252	9	6.848	39817.763	perlu	5439.693	5439.6930	28.481027	18.509878	43426.594
50	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	6,808,422.68	98,565.08	36.692913	2.6771654	302.2225	0.009084106	6.361598144	0.984252	9	6.848	39817.763	perlu	15328.378	15328.3776	21.334594	9.254939	187327.71
BP6/51	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	635,184.18	12,114.08	36.692913	2.6771654	28.19558	0.000811725	0.587393519	0.8661417	8	4.714	39817.763	perlu	22270.065	22270.0652	15.608613	9.254939	187327.71
52	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	695,655.00	14,350.26	36.692913	2.6771654	30.879788	0.000889884	0.643559153	0.8661417	8	4.714	39817.763	ok	-79440.52	79440.5241	4.2674595	9.254939	187327.71
BP7/53	11.811024	21.653543	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	777,877.50	13,257.45	18.976378	2.6771654	215.16837	0.006379512	1.129842966	0.6299213	5	1.558	12155.469	ok	76806.2	76806.2102	4.3317684	9.254939	187327.71
A1/54	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	467,588.82	13,224.94	15.03937	2.6771654	247.1034	0.007362744	1.089822128	0.6299213	8	2.493	8160.0781	perlu	13474.69	13474.6919	12.328454	15.424898	58143.384
55	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	418,316.01	13,263.92	15.03937	2.6771654	221.1965	0.006560305	0.971091067	0.6299213	8	2.493	8160.0781	perlu	-3053.195	3053.1953	44.359881	18.509878	38400.367
56	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	376,063.57	12,657.31	15.03937	2.6771654	198.73609	0.005877493	0.870012625	0.6299213	8	2.493	8160.0781	perlu	-3595.567	3595.5673	38.101499	18.509878	38400.367
57	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	458,534.94	11,735.36	15.03937	2.6771654	242.31935	0.007221479	1.067921419	0.6299213	8	2.493	8160.0781	perlu	-4309.231	4309.2311	31.791465	18.509878	38400.367
58	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	483,597.70	12,671.47	15.03937	2.6771654	255.76403	0.007624916	1.128680485	0.6299213	8	2.493	8160.0781	perlu	-3041.009	3041.0091	45.049682	18.509878	38400.367
59	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	430,258.17	13,256.06	15.03937	2.6771654	227.32315	0.006752549	0.999548109	0.6299213	8	2.493	8160.0781	perlu	4292.522	4292.5220	31.914784	18.509878	38400.367
60	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	414,035.37	13,000.63	15.03937	2.6771654	218.80283	0.006490908	0.960818563	0.6299213	8	2.493	8160.0781	perlu	-3604.814	3604.8138	38.003769	18.509878	38400.367
61	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	333,593.19	12,111.69	15.03937	2.6771654	176.29202	0.005195977	0.769136671	0.6299213	8	2.493	8160.0781	perlu	-3905.321	3905.3208	35.079451	18.509878	38400.367
62	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	508,494.22	14,925.75	15.03937	2.6771654	268.72094	0.008034081	1.189247215	0.6299213	8	2.493	8160.0781	perlu	-4951.134	4951.1336	27.669726	18.509878	38400.367
63	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	182,545.01	2,974.67	15.03937	2.6771654	96.468487	0.002809796	0.415920922	0.6299213	8	2.493	8160.0781	perlu	-1640.473	1640.4726	83.510391	18.509878	38400.367
64	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	428,025.11	12,924.88	15.03937	2.6771654	226.15591	0.006717893	0.994418111	0.6299213	8	2.493	8160.0781	ok	-15700.58	15700.5720	8.7255216	18.509878	38400.367
65	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	400,348.98	12,978.07	15.03937	2.6771654	211.57086	0.006269362	0.928024093	0.6299213	8	2.493	8160.0781	perlu	-3994.442	3994.4416	34.296236	18.509878	38400.367
66	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	402,296.16	12,638.52	15.03937	2.6771654	212.59908	0.00630085	0.932685213	0.6299213	8	2.493	8160.0781	perlu	-3990.684	3990.6842	34.329018	18.509878	38400.367
67	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	457,620.84	13,419.77	15.03937	2.6771654	241.83618	0.007199865	1.065762137	0.6299213	8	2.493	8160.0781	perlu	-4331.338	4331.3377	31.629145	18.509878	38400.367
68	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	409,764.79	13,020.49	15.03937	2.6771654	216.54598	0.006421724	0.95057256	0.6299213	8	2.493	8160.0781	perlu	-3412.213	3412.2134	40.148869	18.509878	38400.367
69	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	380,489.82	11,140.15	15.03937	2.6771654	201.07521	0.005948796	0.880572359	0.6299213	8	2.493	8160.0781	perlu	3881.954	3881.9545	35.290602	18.509878	38400.367
70	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	453,831.74	13,255.46	15.03937	2.6771654	239.83378	0.007138023	1.056607976	0.6299213	8	2.493	8160.0781	perlu	6094.126	6094.1265	22.48009	18.509878	38400.367
71	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	431,265.31	13,521.21	15.03937	2.6771654	227.90824	0.006720542	1.002211528	0.6299213	8	2.493	8160.0781	perlu	-3605.524	3605.5239	37.996284	18.509878	38400.367
72	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	473,039.65	13,620.28	15.03937	2.6771654	249.98447	0.007451929	1.103074043	0.6299213	8	2.493	8160.0781	perlu	-3292.88	3292.8801	41.603856	18.509878	38400.367
73	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	435,826.58	13,709.53	15.03937	2.6771654	230.3187	0.006844706	1.013189668	0.6299213	8	2.493	8160.0781	perlu	-3176.127	3176.1275	43.130474	18.509878	38400.367
74	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	478,443.79	23,101.86	15.03937	2.6771654	252.84037	0.007540433	1.116174892	0.6299213	8	2.493	8160.0781	perlu	-3071.324	3071.3239	44.605034	18.509878	38400.367
																					perlu	7978.4738	7978.4738	17.120766	18.509878	38400.367

75	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	462,605.09	13,431.15	15.03937	2.6771654	244.47018	0.007281274	1.077812718	0.6299213	8	2.493	8160.0781	perlu	-3398.828	3398.8285	40.306979	18.509878	38400.367
76	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	420,688.90	13,732.68	15.03937	2.6771654	222.31898	0.006598795	0.976788636	0.6299213	8	2.493	8160.0781	perlu	-3044.093	3044.0927	45.004053	18.509878	38400.367
77	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	223,684.39	7,243.02	15.03937	2.6771654	118.20917	0.00345401	0.511280893	0.6299213	8	2.493	8160.0781	ok	-10678.99	10678.9860	12.828606	18.509878	38400.367
78	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	272,290.18	14,354.06	15.03937	2.6771654	143.89559	0.004220571	0.624751638	0.6299213	8	2.493	8160.0781	perlu	-2313.058	2313.0582	59.227436	18.509878	38400.367
79	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	388,920.90	23,744.14	15.03937	2.6771654	205.53074	0.006084761	0.900698476	0.6299213	8	2.493	8160.0781	perlu	8734.0959	8734.0959	15.685254	18.509878	38400.367
80	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	479,957.64	13,766.85	15.03937	2.6771654	253.64018	0.007365241	1.119846992	0.6299213	8	2.493	8160.0781	perlu	-3003.895	3003.8947	45.606295	18.509878	38400.367
81	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	424,167.55	13,742.98	15.03937	2.6771654	224.15733	0.00665525	0.985145374	0.6299213	8	2.493	8160.0781	perlu	-3031.976	3031.9762	45.1839	18.509878	38400.367
82	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	353,699.65	10,951.40	15.03937	2.6771654	186.91757	0.005518027	0.816802575	0.6299213	8	2.493	8160.0781	perlu	6316.18	6316.1802	21.689272	18.509878	38400.367
83	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.984252	394,659.06	14,394.29	14.862205	2.8543307	213.56515	0.006330422	0.926023876	0.984252	8	6.087	8063.9515	perlu	-2039.549	2039.5491	66.378728	18.509878	17948.007
84	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	466,551.05	13,546.84	15.03937	2.6771654	246.55548	0.007345774	1.087360306	0.6299213	8	2.493	8160.0781	perlu	-3262.724	3262.7238	41.988357	18.509878	38400.367
85	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	431,407.11	13,546.51	15.03937	2.6771654	227.98317	0.006772847	1.002552675	0.6299213	8	2.493	8160.0781	perlu	-3263.11	3263.1103	41.983413	18.509878	38400.367
86	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	435,622.00	13,769.18	15.03937	2.6771654	230.21059	0.006841379	1.012697084	0.6299213	8	2.493	8160.0781	perlu	-3001.151	3001.1508	45.647993	18.509878	38400.367
87	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	400,004.20	11,529.51	15.03937	2.6771654	211.38786	0.006263787	0.927198929	0.6299213	8	2.493	8160.0781	perlu	5636.054	5636.0538	24.307169	18.509878	38400.367
88	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	483,252.01	13,911.72	15.03937	2.6771654	255.38334	0.007619247	1.127841342	0.6299213	8	2.493	8160.0781	perlu	-2833.449	2833.4493	48.34973	18.509878	38400.367
89	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	436,711.91	13,637.28	15.03937	2.6771654	230.78652	0.006859108	1.015321485	0.6299213	8	2.493	8160.0781	perlu	-3156.327	3156.3270	43.403776	18.509878	38400.367
90	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	434,913.29	13,803.67	15.03937	2.6771654	229.83606	0.006829852	1.010990855	0.6299213	8	2.493	8160.0781	perlu	-2960.577	2960.5770	46.273584	18.509878	38400.367
A1/91	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	401,680.11	11,679.32	15.03937	2.6771654	212.27352	0.006290887	0.93121036	0.6299213	8	2.493	8160.0781	perlu	-5459.804	5459.8036	25.091838	18.509878	38400.367
A2/92	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	493,461.58	20,039.15	22.913386	2.6771654	80.245661	0.00233178	0.73622588	0.6299213	6	1.870	17405.318	perlu	-17378.21	17378.2144	12.30058	13.221341	81907.381
A2/93	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	476,878.11	21,368.65	22.913386	2.6771654	77.548892	0.002252538	0.711206459	0.6299213	6	1.870	17405.318	perlu	-15814.1	15814.0962	13.198505	13.221341	81907.381

sk tul | 10 16 | tul sengkang jml tul | 10 8 | Av 0.1308452

Perhitungan Lentur dan Geser Lapangan Lantai 2

	b	h		fc	fy	εcy		sk	tul	mu	V	d	d'	Rn	ρ	As	tul pakai	jml tul	as pakai	φvc		vs	|VS|	s	s Av min	vs
BP1/1	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	563,592.81	21,930.48	26.791339	2.7362205	52.140945	0.001308999	0.716245783	0.7480315	9	3.955	26165.653	ok	-35765.68	35765.6819	6.8235088	10.283266	123132.49
2	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	843,339.78	18,438.21	26.791339	2.7362205	78.021817	0.00226643	1.075760129	0.7480315	9	3.955	26165.653	ok	-39874.24	39874.2368	6.1204293	10.283266	123132.49
3	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	522,765.00	18,465.00	26.791339	2.7362205	48.363749	0.001398929	0.664001054	0.7480315	9	3.955	26165.653	ok	-39842.71	39842.7141	6.1252716	10.283266	123132.49
4	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	184,868.83	18,980.58	26.791339	2.7362205	17.103191	0.000492524	0.233776444	0.7480315	9	3.955	26165.653	ok	-39236.15	39236.1504	6.2199641	10.283266	123132.49
5	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	886,873.19	18,455.38	26.791339	2.7362205	82.049318	0.002384813	1.131950768	0.7480315	9	3.955	26165.653	ok	-39854.03	39854.0313	6.1235322	10.283266	123132.49
6	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	780,261.55	18,156.85	26.791339	2.7362205	72.186114	0.002095144	0.994459377	0.7480315	9	3.955	26165.653	ok	-40205.24	40205.2449	[illegible]	10.283266	123132.49
7	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	976,636.92	19,265.84	26.791339	2.7362205	90.353835	0.002629356	1.2480229	0.7480315	9	3.955	26165.653	ok	-38900.55	38900.5545	6.2736278	10.283266	123132.49
BP1/8	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,497,634.99	16,927.86	26.791339	2.7362205	138.55412	0.004060677	1.92739895	0.7480315	9	3.955	26165.653	ok	-41651.11	41651.1098	5.8593264	10.283266	123132.49
BP2/9	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	252,864.49	17,195.30	17.007874	2.6771654	87.072563	0.002532661	0.508761939	0.7086614	8	3.155	11073.781	perlu	-5826.192	5826.1925	26.391616	15.424898	52111.912
10	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	100,152.55	17,313.60	17.007874	2.6771654	34.487086	0.000995573	0.199991201	0.7086614	8	3.155	11073.781	perlu	-5687.018	5687.0182	27.242394	15.424898	52111.912
11	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	258,660.96	17,071.73	17.007874	2.6771654	89.068544	0.002591469	0.520575285	0.7086614	8	3.155	11073.781	perlu	-5971.564	5971.5641	25.94429	15.424898	52111.912
12	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	148,840.42	16,383.72	17.007874	2.6771654	51.252417	0.001483096	0.297924848	0.7086614	8	3.155	11073.781	perlu	-6780.991	6780.9910	22.847396	15.424898	52111.912
13	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	204,614.88	16,288.53	17.007874	2.6771654	70.458063	0.002044479	0.410695777	0.7086614	8	3.155	11073.781	perlu	-6892.985	6892.9853	22.476182	15.424898	52111.912
14	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	184,009.36	17,225.52	17.007874	2.6771654	63.362657	0.001836776	0.368980161	0.7086614	8	3.155	11073.781	perlu	-5290.639	5290.6390	26.254904	15.424898	52111.912
15	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	123,642.75	18,256.32	17.007874	2.6771654	42.575734	0.001230494	0.24718204	0.7086614	8	3.155	11073.781	perlu	-4577.93	4577.9304	33.842364	15.424898	52111.912
16	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	254,892.12	18,325.00	17.007874	2.6771654	87.770762	0.002553228	0.512893515	0.7086614	8	3.155	11073.781	perlu	-4497.137	4497.1368	34.450362	15.424898	52111.912
17	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	95,704.42	18,409.62	17.007874	2.6771654	32.955315	0.00095115	0.191067354	0.7086614	8	3.155	11073.781	perlu	-4397.574	4397.5741	[illegible]	15.424898	52111.912
BP2/18	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	237,961.19	18,823.46	17.007874	2.6771654	81.941372	0.002381638	0.478424475	0.7086614	8	3.155	11073.781	perlu	-3910.704	3910.7039	39.616395	15.424898	52111.912
BP3/19	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,969,716.41	35,524.31	26.850394	2.6771654	204.10667	0.006041283	2.354501227	0.984252	9	6.848	23309.626	perlu	-13052.87	13052.8680	18.738057	11.568674	109692.36
20	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,143,509.78	35,229.54	26.850394	2.6771654	[illegible]	0.00659255	2.787599355	0.984252	9	6.848	23309.626	perla	-13340.84	13340.8430	18.33358	11.568674	109692.36
21	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,720,771.92	24,840.63	26.850394	2.6771654	[illegible]	0.005257072	2.222904705	0.984252	9	6.848	23309.626	perla	-25621.91	25621.9053	9.5459486	11.568674	109692.36
22	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,294,137.29	18,148.09	26.850394	2.6771654	[illegible]	0.007072906	2.990713485	0.984252	9	6.848	23309.626	perlu	-9966.07	9966.0697	24.54181	11.568674	109692.36
23	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,289,675.00	35,706.00	26.850394	2.6771654	[illegible]	0.007058641	2.984681615	0.984252	9	6.848	23309.626	perlu	-12839.12	12839.1204	19.050017	11.568674	109692.36
24	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,239,064.96	32,298.91	26.850394	2.6771654	[illegible]	0.006896999	2.916312933	0.984252	9	6.848	23309.626	perlu	-16259.23	16259.2267	15.042867	11.568674	109692.36
25	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,304,494.28	31,609.15	26.850394	2.6771654	[illegible]	0.007106023	3.004716897	0.984252	9	6.848	23309.626	perlu	-17658.94	17658.9384	13.850515	11.568674	109692.36
26	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,192,462.14	31,985.59	26.850394	2.6771654	227.20622	[illegible]	2.8602147	0.984252	9	6.848	23309.626	perlu	-17216.07	17216.0724	14.206805	11.568674	109692.36
27	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,512,256.71	30,986.76	26.850394	2.6771654	[illegible]	[illegible]	1.947252977	0.984252	9	6.848	23309.626	perlu	-18391.17	18391.1676	13.299068	11.568674	109692.36
28	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,581,625.79	30,777.91	26.850394	2.6771654	163.8918	0.004821479	2.038718085	0.984252	9	6.848	23309.626	perlu	-4892.5578	4892.5578	49.991373	11.568674	109692.36
29	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,174,132.49	[illegible]	26.850394	2.6771654	225.28926	0.006698008	2.828817081	0.984252	9	6.848	23309.626	perlu	-18602.03	18602.0325	13.148315	11.568674	109692.36
30	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,534,739.45	[illegible]	26.850394	2.6771654	262.65869	0.007845239	3.317287679	0.984252	9	6.848	23309.626	perlu	-23041.68	23041.6828	10.61491	11.568674	109692.36
31	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,712,858.25	[illegible]	26.850394	2.6771654	384.73511	0.011721598	4.956370246	0.984252	9	6.848	23309.626	ok	-50481.99	50481.9863	4.8450013	11.568674	109692.36
32	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,965,369.44	12,802.60	26.850394	2.6771654	307.35691	[illegible]	3.908238132	0.984252	9	6.848	23309.626	ok	-39784.3	39784.2995	6.1477868	11.568674	109692.36
33	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,681,740.23	34,536.17	26.850394	2.6771654	277.88826	[illegible]	3.518129864	0.984252	9	6.848	23309.626	perlu	-13768.33	13768.3284	17.764149	11.568674	109692.36
34	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,638,544.42	33,177.58	26.850394	2.6771654	273.4122	[illegible]	3.459008185	0.984252	9	6.848	23309.626	perlu	-15528.43	15528.4328	[illegible]	11.568674	109692.36
BP3/35	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,605,032.44	38,262.55	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-9243.179	9243.1295	26.461175	11.568674	109692.36
BP4/36	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	295,956.40	11,983.21	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	7615.401	7615.4012	20.344035	18.509878	43426.594
37	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	290,026.99	11,627.68	17.007874	2.6771654	119.84313	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-6156.03	6156.0297	25.166868	18.509878	43426.594
38	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	325,530.73	12,413.94	17.007874	2.6771654	134.53376	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	7085.147	7085.1470	21.866588	18.509878	43426.594
39	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	349,000.22	7,867.76	17.007874	2.6771654	[illegible]	[illegible]	0.708110844	0.6299213	8	2.493	9228.1511	ok	-12462.99	12462.9880	2.431047	18.509878	43426.594
40	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	314,517.25	13,709.13	17.007874	2.6771654	129.96284	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-5595.502	5595.5018	27.687953	18.509878	43426.594
41	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	331,194.95	14,642.65	17.007874	2.6771654	136.85429	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-5698.409	5698.4091	[illegible]	18.509878	43426.594
42	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	315,204.94	14,887.34	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-4669.17	4669.1701	33.179633	18.509878	43426.594
43	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	313,688.31	[illegible]	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-4708.51	4708.5103	32.903822	18.509878	43426.594
44	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	239,592.14	15,611.52	17.007874	2.6771654	[illegible]	0.002854627	0.482895902	0.6299213	8	2.493	9228.1511	perlu	-3346.802	3346.8024	46.291346	18.509878	43426.594
45	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	315,148.93	14,706.91	17.007874	2.6771654	130.22386	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	4411.022	4411.0221	35.122923	18.509878	43426.594
46	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	286,501.29	15,226.95	17.007874	2.6771654	118.38626	0.003459275	0.579083226	0.6299213	8	2.493	9228.1511	perlu	-3800.474	3800.4741	[illegible]	18.509878	43426.594
47	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	293,174.90	14,905.12	17.007874	2.6771654	121.14389	0.003541292	0.592813409	0.6299213	8	2.493	9228.1511	perlu	-4177.86	4177.8600	[illegible]	18.509878	43426.594
BP4/48	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	291,111.88	15,785.44	17.007874	2.6771654	120.29969	0.003516376	0.588609101	0.6299213	8	2.493	9228.1511	perlu	-3142.195	3142.1954	49.30563	18.509878	43426.594
BP5/49	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	5,526,911.06	81,989.19	36.692913	2.6771654	[illegible]	[illegible]	5.278634354	0.984252	9	6.848	39817.763	perlu	2769.0104	2769.0104	[illegible]	9.254939	187377.71
50	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	5,342,217.66	85,262.07	36.692913	2.6771654	[illegible]	0.006781178	4.85819941	0.984252	9	6.848	39817.763	perlu	6619.4631	6619.4631	50.493943	9.254939	187377.71
BP6/51	17.716535	35.433071	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	504,796.30	6,372.67	[illegible]	2.6771654	[illegible]	[illegible]	0.523149248	0.8661417	8	4.714	31990.924	ok	67769.62	67769.6193	[illegible]	10.283266	150545.52
52	17.716535	35.433071	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	309,863.14	37,769.31	[illegible]	2.6771654	[illegible]	[illegible]	0.320581714	0.8661417	8	4.714	31990.924	perlu	30838.28	30838.2843	[illegible]	10.283266	150545.52
BP7/53	11.811024	21.653543	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	79,153.95	11,490.52	18.976378	2.6771654	[illegible]	[illegible]	0.141411326	0.6299213	5	1.558	12355.469	ok	15553.43	[illegible]	[illegible]	15.424898	58143.384
A1/54	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	305,886.42	6,083.95	15.03937	2.6771654	[illegible]	0.004753927	0.707701403	0.6299213	8	2.493	8160.0781	ok	[illegible]	12042.5997	11.575996	18.509878	38400.367
55	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	286,091.94	5,669.29	15.03937	2.6771654	[illegible]	0.004439331	0.657133346	0.6299213	8	2.493	8160.0781	ok	-12540.43	12540.4278	10.924389	18.509878	38400.367
56	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	286,197.61	5,349.23	15.03937	2.6771654	[illegible]	0.004441608	0.657181533	0.6299213	8	2.493	8160.0781	ok	-12911.09	12911.0859	10.610266	18.509878	38400.367
57	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	288,527.74	6,552.69	15.03937	2.6771654	152.50298	0.004478283	0.662973188	0.6299213	8	2.493	8160.0781	ok	-11491.16	11491.1603	[illegible]	18.509878	38400.367
58	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	49,199.02	7,945.09	15.03937	2.6771654	25.999918	0.000749666	0.110969499	0.6299213	8	2.493	8160.0781	ok	9853.024	9853.0243	[illegible]	18.509878	38400.367
59	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	299,062.00	5,675.91	15.03937	2.6771654	158.04353	0.004645352	0.687629547	0.6299213	8	2.493	8160.0781	ok	-12522.64	12522.6440	[illegible]	18.509878	38400.367
60	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	294,757.10	5,505.21	15.03937	2.6771654	155.76855	0.004576923	0.677500436	0.6299213	8	2.493	8160.0781	ok	-12723.47	12723.4710	10.767228	18.509878	38400.367
61	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	278,906.99	4,873.55	15.03937	2.6771654	147.39213	0.004325389	0.640267001	0.6299213	8	2.493	8160.0781	ok	-13466.6	13466.6005	[illegible]	18.509878	38400.367
62	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	267,417.39	2,819.23	15.03937	2.6771654	141.32049	0.004143456	0.613336245	0.6299213	8	2.493	8160.0781	ok	-10001.09	10001.0857	13.698164	18.509878	38400.367
63	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	174,948.81	809.36	15.03937	2.6771654	92.454168	0.002691299	[illegible]	0.6299213	8	2.493	8160.0781	ok	18248	18247.9983	7.5074814	18.509878	38400.367
64	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	321,530.68	5,297.24	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	ok	-12968.14	[illegible]	[illegible]	18.509878	38400.367
65	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	291,733.06	5,413.23	15.03937	2.6771654	154.17045	0.004528883	0.670389104	0.6299213	8	2.493	8160.0781	ok	-12831.68	12831.6834	10.676425	18.509878	38400.367
66	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	300,105.89	5,262.52	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	ok	-13008.98	[illegible]	[illegible]	18.509878	38400.367
67	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	321,392.53	5,830.30	15.03937	2.6771654	169.84417	[illegible]	0.740285491	0.6299213	8	2.493	8160.0781	ok	-12341	[illegible]	[illegible]	18.509878	38400.367
68	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	297,161.59	5,561.40	15.03937	2.6771654	157.03923	0.004615138	0.683152141	0.6299213	8	2.493	8160.0781	ok	-12652.36	[illegible]	[illegible]	18.509878	38400.367
69	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	367,127.93	3,660.16	15.03937	2.6771654	194.01393	0.005733706	0.848733558	0.6299213	8	2.493	8160.0781	ok	-14894.11	14894.1148	9.1980296	18.509878	38400.367
70	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	325,295.06	5,762.32	15.03937	2.6771654	171.90676	0.005063374	0.749507426	0.6299213	8	2.493	8160.0781	ok	-12420.98	12420.9824	11.029442	18.509878	38400.367
71	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	291,944.86	6,060.43	15.03937	2.6771654	154.28218	0.004532247	0.670887257	0.6299213	8	2.493	8160.0781	ok	-12070.27	12070.2711	11.349911	18.509878	38400.367
72	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	322,755.21	6,153.41	15.03937	2.6771654	170.56455	0.005022824	0.743504957	0.6299213	8	2.493	8160.0781	ok	-11960.88	11960.8775	11.453717	18.509878	38400.367
73	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	286,646.29	6,247.11	15.03937	2.6771654	151.48227	0.004448128	0.658435462	0.6299213	8	2.493	8160.0781	ok	-11850.64	11850.6408	11.560262	18.509878	38400.367
74	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	14,951.68	11,078.77	15.03937	2.6771654	18.470709	0.000532007	0.078750551	0.6299213	8	2.493	8160.0781	perlu	-6166.332	6166.3322	22.216855	18.509878	38400.367

75	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	323,020.25	5,995.29	15.03937	2.6771654	170.70461	0.005027054	0.74431189	0.6299213	8	2.493	8160.0781	ok	-12146.9	12146.9010	1.278309	18.509878	38400.367
76	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	268,621.57	6,329.87	15.03937	2.6771654	141.95686	0.004162508	0.616156419	0.6299213	8	2.493	8160.0781	ok	-11253.27	11253.2748	1.656029	18.509878	38400.367
77	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	445,125.55	104.80	15.03937	2.6771654	235.23288	0.006996081	1.035596943	0.6299213	8	2.493	8160.0781	ok	-19076.89	19076.8903	2.181281	18.509878	38400.367
78	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	65,773.18	6,860.45	15.03937	2.6771654	34.758764	0.001003457	0.148537066	0.6299213	8	2.493	8160.0781	ok	-11129.07	11129.0657	2.309794	18.509878	38400.367
79	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	95,602.33	12,753.41	15.03937	2.6771654	50.522397	0.001461818	0.216386113	0.6299213	8	2.493	8160.0781	perlu	-4196.167	4196.1668	12.648013	18.509878	38400.367
80	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	320,668.06	6,291.00	15.03937	2.6771654	169.46156	0.004989513	0.738574145	0.6299213	8	2.493	8160.0781	ok	-11799	11799.0025	11.610855	18.509878	38400.367
81	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	268,926.08	6,375.65	15.03937	2.6771654	142.11778	0.004162326	0.616869659	0.6299213	8	2.493	8160.0781	ok	-11699.42	11699.4224	11.709681	18.509878	38400.367
82	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	359,534.27	3,523.28	15.03937	2.6771654	190.00095	0.005611681	0.830670774	0.6299213	8	2.493	8160.0781	ok	-15055.15	15055.1454	9.099647	18.509878	38400.367
83	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.984252	184,056.47	7,033.50	14.862205	2.5543307	99.600011	0.002912332	0.424557661	0.984252	8	6.087	8063.9515	ok	-10699.3	10699.2983	12.653416	18.509878	17948.807
84	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	320,000.21	6,064.29	15.03937	2.6771654	169.10863	0.004978857	0.736996765	0.6299213	8	2.493	8160.0781	ok	-12065.72	12065.7236	11.354189	18.509878	38400.367
85	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	284,889.20	6,160.43	15.03937	2.6771654	150.55371	0.004420249	0.654308594	0.6299213	8	2.493	8160.0781	ok	-11952.62	11952.6210	11.461629	18.509878	38400.367
86	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	276,077.41	6,270.72	15.03937	2.6771654	145.897	0.004280553	0.633630073	0.6299213	8	2.493	8160.0781	ok	-11822.86	11822.8613	11.587424	18.509878	38400.367
87	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	372,819.37	4,231.77	15.03937	2.6771654	197.03222	0.005825587	0.862334183	0.6299213	8	2.493	8160.0781	ok	-14245.17	14245.1658	8.6170526	18.509878	38400.367
88	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	315,280.55	6,391.85	15.03937	2.6771654	166.61445	0.004903582	0.725854243	0.6299213	8	2.493	8160.0781	ok	-11680.36	11680.3627	11.728789	18.509878	38400.367
89	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	284,584.78	6,183.09	15.03937	2.6771654	150.39284	0.004415419	0.65359373	0.6299213	8	2.493	8160.0781	ok	-11925.96	11925.9610	11.487251	18.509878	38400.367
90	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	273,323.47	6,254.87	15.03937	2.6771654	144.44164	0.004236934	0.62717345	0.6299213	8	2.493	8160.0781	ok	-11841.52	11841.5162	11.56917	18.509878	38400.367
A3/91	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	367,945.54	4,142.57	15.03937	2.6771654	194.44601	0.005746854	0.850679747	0.6299213	8	2.493	8160.0781	ok	-14326.58	14326.5774	4.5624032	18.509878	38400.367
A2/92	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	285,641.00	16,182.82	22.913386	2.6771654	46.450325	0.001343216	0.424101076	0.6299213	6	1.870	17405.318	ok	-21915.07	21915.0749	4.5241486	11.221341	81907.381
A2/93	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	265,412.05	14,922.36	22.913386	2.6771654	43.160237	0.001247505	0.39388173	0.6299213	6	1.870	17405.318	ok	-23397.97	23397.9700	8.9205358	11.221341	81907.381

φs 10 · tul 16 · tul sengkang 10 · jml tul 8 · As [illegible]

	b	h	β1	fc	fy	cv	φ	sk	tul	Mu	Vu
BP1/1	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	2,735,669.49	27,388.40
2	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,914,209.88	35,497.30
3	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,894,800.00	36,939.00
4	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,710,032.80	23,802.09
5	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,841,224.64	36,432.62
6	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,841,742.48	34,363.95
7	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	2,008,958.50	36,883.90
BP1/8	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	2,072,523.53	45,656.74
BP2/9	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,274,703.53	23,252.95
10	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,046,152.51	19,902.93
11	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,073,202.79	23,629.38
12	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,039,926.39	18,973.05
13	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	972,904.28	22,846.17
14	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,124,807.88	19,814.85
15	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,125,315.43	20,845.65
16	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,143,445.57	24,882.65
17	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,106,430.41	20,998.95
BP2/18	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,155,953.72	25,381.11
BP3/19	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,623,863.43	72,159.91
20	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,634,264.57	81,376.58
21	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,257,245.74	72,736.11
22	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,158,037.84	84,541.82
23	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,391,786.00	85,125.64
24	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,505,461.49	80,124.83
25	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,413,584.22	79,580.40
26	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,408,833.50	29,145.[illegible]
27	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,081,594.36	66,036.[illegible]
28	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,286,574.13	59,135.21
29	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,275,067.07	[illegible]
30	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,157,983.64	87,839.70
31	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,632,339.47	43,022.72
32	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	[illegible]	85,450.29
33	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	9,144,403.13	82,261.88
34	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,958,854.01	80,737.93
BP3/35	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,336,351.36	88,196.70
BP4/36	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	786,757.52	19,463.50
37	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	850,038.27	20,703.96
38	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	838,943.25	19,914.25
39	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	[illegible]	[illegible]
40	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	[illegible]	21,180.43
41	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	954,217.34	21,092.90
42	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	945,881.85	21,967.62
43	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	946,400.50	22,934.75
44	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	940,657.78	[illegible]
45	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	962,794.09	[illegible]
46	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	964,794.03	22,706.19
47	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	[illegible]	22,385.41
BP4/48	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	[illegible]	[illegible]
BP5/49	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	5,288,073.54	[illegible]
50	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	5,595,656.88	[illegible]
BP6/51	17.716535	35.433071	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	773,081.19	[illegible]
52	17.716535	35.433071	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,320,539.38	[illegible]
BP7/53	11.811024	21.653543	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	759,818.96	[illegible]
54	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	447,815.31	13,445.18
55	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	409,031.43	13,022.03
56	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	384,531.21	12,706.97
57	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	458,187.15	[illegible]
58	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	445,495.41	[illegible]
59	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	416,894.18	[illegible]
60	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	402,508.39	12,866.44
61	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	349,355.52	[illegible]
62	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	511,823.85	15,180.47
63	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	365,238.85	1,771.83
64	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	437,000.30	12,658.47
65	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	394,052.43	17,774.46
66	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	393,725.54	12,623.76
67	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	448,342.48	13,191.54
68	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	408,231.67	12,922.64
69	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	365,919.74	11,021.39
70	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	448,230.33	13,123.56
71	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	432,484.73	13,421.66
72	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	468,786.32	13,514.64
73	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	438,210.95	13,608.35
74	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	524,503.65	22,779.42
75	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	459,713.54	13,356.52
76	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	425,073.66	13,691.12
77	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	221,577.33	7,466.03
78	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	556,730.81	14,221.68
79	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	558,342.18	23,561.18
80	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	474,824.76	13,652.24
81	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	428,083.39	13,736.88
82	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	350,242.85	10,884.52

	d	d'	Rn	ρ	As	tul pakai	jml tul	as pakai	φvc		vs	|VS|	s	S Av min	sv
BP1/1	26.791339	2.7362205	253.09122	0.007548211	3.58275621	0.7480315	9	3.955	26165.653	perlu	-29344.59	29344.5930	8.3166069	10.283266	123132.49
2	26.791339	2.7362205	177.09364	0.005220236	2.47778359	0.7480315	9	3.955	26165.653	perlu	-19804.71	19804.7083	12.322698	10.283266	123132.49
3	26.791339	2.7362205	175.29795	0.005165802	2.45199391	0.7480315	9	3.955	26165.653	perlu	-18108.6	18108.5965	13.476884	10.283266	123132.49
4	26.791339	2.7362205	158.20436	0.004650185	2.20720881	0.7480315	9	3.955	26165.653	ok	-13563.79	13563.7864	7.2715536	10.283266	123132.49
5	26.791339	2.7362205	170.34141	[illegible]	2.38088266	0.7480315	9	3.955	26165.653	perlu	-18704.34	18704.3460	13.047637	10.283266	123132.49
6	26.791339	2.7362205	[illegible]	[illegible]	2.38156947	0.7480315	9	3.955	26165.653	perlu	-21138.06	21138.0630	11.545405	10.283266	123132.49
7	26.791339	2.7362205	[illegible]	[illegible]	2.60388344	0.7480315	9	3.955	26165.653	perlu	-18173.43	18173.4251	13.428809	10.283266	123132.49
BP1/8	26.791339	2.7362205	[illegible]	[illegible]	2.68867472	0.7480315	9	3.955	26165.653	perlu	-2852.415	2852.4148	[illegible]	10.283266	123132.49
BP2/9	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.7086614	8	3.155	11073.781	perlu	1888.6893	1888.6893	[illegible]	13.424808	52111.912
10	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.7086614	8	3.155	11073.781	perlu	-2640.249	2640.7487	58.668203	13.424808	52111.912
11	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.7086614	8	3.155	11073.781	perlu	1743.3177	[illegible]	88.866922	13.424808	52111.912
12	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.7086614	8	3.155	11073.781	perlu	[illegible]	[illegible]	41.483144	13.424808	52111.912
13	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.7086614	8	3.155	11073.781	perlu	821.89637	821.8966	188.50459	13.424808	52111.912
14	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.7086614	8	3.155	11073.781	perlu	2744.369	2744.3694	[illegible]	13.424808	52111.912
15	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.7086614	8	3.155	11073.781	perlu	[illegible]	[illegible]	[illegible]	13.424808	52111.912
16	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.7086614	8	3.155	11073.781	perlu	3217.745	3217.7450	48.148	13.424808	52111.912
17	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.7086614	8	3.155	11073.781	perlu	[illegible]	[illegible]	114.15068	13.424808	52111.912
BP2/18	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.7086614	8	3.155	11073.781	perlu	3864.1779	[illegible]	[illegible]	13.424808	52111.912
BP3/19	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
20	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	43243.915	43243.9146	[illegible]	11.368674	109692.36
21	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
22	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	44614.782	[illegible]	[illegible]	11.368674	109692.36
23	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
24	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
25	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
26	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
27	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	22843.355	22843.3549	[illegible]	11.368674	109692.36
28	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
29	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
30	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
31	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
32	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
33	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
34	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
BP3/35	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	[illegible]	[illegible]	[illegible]	11.368674	109692.36
BP4/36	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
37	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
38	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
39	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	ok	[illegible]	[illegible]	[illegible]	18.509878	43426.394
40	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
41	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
42	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
43	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
44	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
45	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
46	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
47	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
BP4/48	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	[illegible]	[illegible]	[illegible]	18.509878	43426.394
BP5/49	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	39817.763	perlu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	39817.763	perlu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BP6/51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.8661417	8	4.714	31397.924	ok	[illegible]	[illegible]	[illegible]	10.283266	[illegible]
52	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.8661417	8	4.714	31397.924	perlu	[illegible]	[illegible]	12.955478	10.283266	[illegible]
BP7/53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.358	12355.461	perlu	[illegible]	[illegible]	[illegible]	13.424808	[illegible]
54	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
55	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	-3880.157	[illegible]	[illegible]	18.509878	38400.367
56	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	-4256.81	[illegible]	32.228329	18.509878	38400.367
57	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	-2830.884	[illegible]	[illegible]	18.509878	38400.367
58	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
59	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	-3862.368	3862.3682	33.469562	18.509878	38400.367
60	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	37.716448	18.509878	38400.367
61	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
62	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
63	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	ok	[illegible]	[illegible]	[illegible]	18.509878	38400.367
64	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
65	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	-4171.408	4171.4076	[illegible]	18.509878	38400.367
66	15.03937	2.6771654	208.06981	[illegible]	0.91218046	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
67	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
68	15.03937	2.6771654	213.21378	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
69	15.03937	2.6771654	191.37544	[illegible]	0.84585816	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
70	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	6231.816	[illegible]	[illegible]	18.509878	38400.367
71	15.03937	2.6771654	228.85266	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
72	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
73	15.03937	2.6771654	231.37874	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
74	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	42.940701	18.509878	38400.367
75	15.03937	2.6771654	[illegible]	[illegible]	1.07682649	0.6299213	8	2.493	8160.0781	perlu	7599.1295	7599.1295	[illegible]	18.509878	38400.367
76	15.03937	2.6771654	224.63617	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
77	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	ok	[illegible]	[illegible]	[illegible]	18.509878	38400.367
78	15.03937	2.6771654	294.21225	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
79	15.03937	2.6771654	[illegible]	[illegible]	1.11130794	0.6299213	8	2.493	8160.0781	perlu	8518.8572	8518.8572	[illegible]	18.509878	38400.367
80	15.03937	2.6771654	250.92784	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
81	15.03937	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	[illegible]	18.509878	38400.367
82	15.03937	2.6771654	185.09677	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	perlu	[illegible]	[illegible]	21.422878	18.509878	38400.367

83	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.1937008	0.984252	448,666.96	14,394.73	14.862205	2.8543307	242.78089	0.000729394	1.0752253	0.984252	8	6.187	8067.9513	perlu	-2039.022	2039.0225	66.355872	18.509878	17948.087
84	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.1937008	0.6299213	460,768.35	13,425.53	15.03937	2.6771654	243.49953	0.000731266	1.0733708	0.6299213	8	2.493	8160.0781	perlu	-3405.448	3405.4478	40.228633	18.509878	38400.367
85	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.1937008	0.6299213	431,334.73	13,521.66	15.03937	2.6771654	227.94492	0.000677167	1.0237854	0.6299213	8	2.493	8160.0781	perlu	-3292.345	3292.3452	41.610615	18.509878	38400.367
86	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.1937008	0.6299213	429,036.48	13,631.96	15.03937	2.6771654	226.73038	0.000673437	0.9668021	0.6299213	8	2.493	8160.0781	perlu	-3162.585	3162.5855	43.317883	18.509878	38400.367
87	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.1937008	0.6299213	404,206.38	11,573.00	15.03937	2.6771654	213.60856	0.000634251	0.93725933	0.6299213	8	2.493	8160.0781	perlu	-5584.89	5584.8892	24.529849	18.509878	38400.367
88	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.1937008	0.6299213	475,392.59	13,753.08	15.03937	2.6771654	251.22292	0.000746454	1.0877161	0.6299213	8	2.493	8160.0781	perlu	-3020.087	3020.0869	45.361778	18.509878	38400.367
89	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.1937008	0.6299213	432,368.56	13,544.32	15.03937	2.6771654	228.49126	0.000678473	1.0486647	0.6299213	8	2.493	8160.0781	perlu	-3263.685	3263.6852	41.959311	18.509878	38400.367
90	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.1937008	0.6299213	425,346.12	13,616.10	15.03937	2.6771654	224.78016	0.000667438	0.98792776	0.6299213	8	2.493	8160.0781	perlu	-3181.24	3181.2463	43.063866	18.509878	38400.367
A1/91	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.1937008	0.6299213	395,225.94	11,503.80	15.03937	2.6771654	208.86272	0.000620564	0.91571296	0.6299213	8	2.493	8160.0781	perlu	-5666.302	5666.3016	24.177412	18.509878	38400.367
A2/92	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.1937008	0.6299213	457,809.00	19,902.41	22.913386	2.6771654	74.447915	0.0002161496	0.68246135	0.6299213	6	1.870	17405.318	perlu	-17539.09	17539.0914	11.900413	13.221341	81907.381
A2/93	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.1937008	0.6299213	447,679.00	18,631.95	22.913386	2.6771654	72.806596	0.0002113166	0.66720179	0.6299213	6	1.870	17405.318	perlu	-19033.75	19033.7512	10.965911	13.221341	81907.381

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Perhitungan Lentur dan Geser Lapangan Lantai 3

	b	h		fc	fy	cv		sk	tul	mu	V	d	d'
BP1/1	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	629,440.51	18,281.10	26.791339	2.7362205
2	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	880,044.68	14,771.66	26.791339	2.7362205
3	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	863,258.73	12,257.76	26.791339	2.7362205
4	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	183,283.87	17,024.47	26.791339	2.7362205
5	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	926,699.15	14,489.67	26.791339	2.7362205
6	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	839,334.89	14,197.79	26.791339	2.7362205
7	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	991,253.63	14,962.62	26.791339	2.7362205
BP1/8	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,390,858.37	13,780.49	26.791339	2.7362205
BP2/9	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	253,966.04	14,986.23	17.007874	2.6771654
10	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	99,139.32	15,036.33	17.007874	2.6771654
11	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	255,637.07	14,902.72	17.007874	2.6771654
12	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	146,981.82	14,439.81	17.007874	2.6771654
13	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	199,391.43	14,591.28	17.007874	2.6771654
14	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	167,442.71	16,348.77	17.007874	2.6771654
15	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	115,530.08	14,195.72	17.007874	2.6771654
16	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	255,685.75	14,571.63	17.007874	2.6771654
17	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	97,804.84	14,592.70	17.007874	2.6771654
BP2/18	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	243,695.10	14,820.03	17.007874	2.6771654
BP3/19	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,980,712.54	29,961.89	26.850394	2.6771654
20	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,186,117.99	30,044.73	26.850394	2.6771654
21	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,661,958.92	21,255.36	26.850394	2.6771654
22	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,292,577.35	31,712.45	26.850394	2.6771654
23	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	893,227.45	27,590.45	26.850394	2.6771654
24	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,242,021.54	27,017.91	26.850394	2.6771654
25	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,313,662.60	26,380.75	26.850394	2.6771654
26	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,193,082.85	25,705.00	26.850394	2.6771654
27	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,465,520.64	25,269.67	26.850394	2.6771654
28	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,620,361.05	45,423.89	26.850394	2.6771654
29	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,213,491.26	24,527.01	26.850394	2.6771654
30	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,539,037.19	[illegible]	26.850394	2.6771654
31	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,480,001.89	6,430.89	26.850394	2.6771654
32	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,968,630.40	5,849.23	26.850394	2.6771654
33	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,574,774.77	27,223.05	26.850394	2.6771654
34	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,539,486.17	29,014.09	26.850394	2.6771654
BP3/35	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,530,448.62	30,485.12	26.850394	2.6771654
BP4/36	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	295,925.62	[illegible]	17.007874	2.6771654
37	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	290,310.06	11,694.24	17.007874	2.6771654
38	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	330,191.31	10,963.72	17.007874	2.6771654
39	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	311,057.05	6,978.22	17.007874	2.6771654
40	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	311,118.15	11,194.00	17.007874	2.6771654
41	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	321,915.92	[illegible]	17.007874	2.6771654
42	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	322,304.09	11,925.45	17.007874	2.6771654
43	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	305,486.98	12,300.32	17.007874	2.6771654
44	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	251,542.98	11,795.83	17.007874	2.6771654
45	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	332,947.67	11,980.79	17.007874	2.6771654
46	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	285,671.16	12,787.77	17.007874	2.6771654
47	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	292,225.62	12,495.62	17.007874	2.6771654
BP4/48	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	289,671.31	13,617.37	17.007874	2.6771654
BP5/49	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	5,387,468.98	24,539.88	16.692913	2.6771654
50	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,921,752.96	25,764.17	16.692913	2.6771654
BP6/51	17.716535	35.433071	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	498,565.54	6,809.89	12.755905	2.6771654
52	17.716535	35.433071	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	478,639.93	11,758.43	12.755905	2.6771654
BP7/53	11.811024	21.653543	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	78,335.82	10,709.46	18.976378	2.6771654
A1/54	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	306,877.16	5,332.66	15.03937	2.6771654
55	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	286,756.14	5,006.40	15.03937	2.6771654
56	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	285,272.49	4,579.91	15.03937	2.6771654
57	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	283,503.45	6,084.42	15.03937	2.6771654
58	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	19,711.51	6,901.70	15.03937	2.6771654
59	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	100,891.63	5,020.38	15.03937	2.6771654
60	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	296,863.55	4,880.16	15.03937	2.6771654
61	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	277,574.59	4,250.18	15.03937	2.6771654
62	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	263,636.67	7,350.19	15.03937	2.6771654
63	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	129,969.35	113.19	15.03937	2.6771654
64	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	327,121.09	4,609.41	15.03937	2.6771654
65	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	290,803.53	4,782.06	15.03937	2.6771654
66	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	303,170.64	4,557.95	15.03937	2.6771654
67	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	127,162.67	4,963.66	15.03937	2.6771654
68	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	294,410.43	4,850.17	15.03937	2.6771654
69	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	359,565.69	1,013.38	15.03937	2.6771654
70	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	330,418.52	4,900.21	15.03937	2.6771654
71	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	293,029.80	5,186.57	15.03937	2.6771654
72	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	328,538.65	5,199.38	15.03937	2.6771654
73	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	288,258.66	5,310.82	15.03937	2.6771654
74	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	117,388.51	11,713.96	15.03937	2.6771654

	Ru	ρ	As	tul pakai	jml tul	as pakai	øVc		Vs	|Vs|	s	S As min	ss
BP1/1	58.232863	0.001686774	0.800626804	0.7480315	9	1.955	26165.653	ok	40059.06	40059.0644	6.3921904	10.283266	123132.49
2	81.417522	0.002366235	1.123132504	0.7480315	9	1.955	26165.653	ok	44187.82	44187.8190	5.5229575	10.283266	123132.49
3	79.864621	0.002320579	1.101462252	0.7480315	9	1.955	26165.653	ok	47145.35	47145.3501	5.1764907	10.283266	123132.49
4	16.956558	0.000488291	0.231767394	0.7480315	9	1.955	26165.653	ok	41537.45	41537.4536	5.8753588	10.283266	123132.49
5	85.733828	0.002493237	1.183414168	0.7480315	9	1.955	26165.653	ok	44519.57	44519.5733	5.4828011	10.283266	123132.49
6	77.651299	0.002255546	1.070594155	0.7480315	9	1.955	26165.653	ok	44862.96	44862.9616	5.4398425	10.283266	123132.49
7	91.766104	0.002669237	1.266950409	0.7480315	9	1.955	26165.653	ok	43963.16	43963.1636	5.5513800	10.283266	123132.49
BP1/8	128.62365	0.002765646	1.287362644	0.7480315	9	1.955	26165.653	ok	45353.91	45353.9078	5.3809574	10.283266	123132.49
BP2/9	87.451876	0.002343834	0.511008394	0.7086614	8	3.155	11073.781	perlu	8542.749	8542.7493	12.135612	15.424898	52111.912
10	34.138106	0.000985451	0.197958128	0.7086614	8	3.155	11073.781	perlu	8366.151	8366.1535	12.518425	15.424898	52111.912
11	88.027286	0.002560786	0.514411668	0.7086614	8	3.155	11073.781	perlu	8523.339	8523.3359	12.126913	15.424898	52111.912
12	59.612421	0.001464442	0.294177211	0.7086614	8	3.155	11073.781	perlu	9067.946	9067.9456	17.085236	15.424898	52111.912
13	68.659354	0.001991721	0.400110775	0.7086614	8	3.155	11073.781	perlu	8889.741	8889.7430	17.422728	15.424898	52111.912
14	57.658021	0.001669986	0.33546737	0.7086614	8	3.155	11073.781	perlu	-6822.104	6822.1039	22.709308	15.424898	52111.912
15	39.282126	0.001149299	0.230871167	0.7086614	8	3.155	11073.781	perlu	-9355.124	9355.1236	16.560264	15.424898	52111.912
16	88.044046	0.00256128	0.514510862	0.7086614	8	3.155	11073.781	perlu	-8912.86	8912.8604	17.382522	15.424898	52111.912
17	33.628584	0.000972124	0.195280736	0.7086614	8	3.155	11073.781	perlu	8888.028	8888.0283	17.430988	15.424898	52111.912
BP2/18	83.915139	0.002439707	0.490088616	0.7086614	8	3.155	11073.781	perlu	-8620.63	8620.6302	17.973721	15.424898	52111.912
BP3/19	205.2461	0.006076069	2.569210233	0.984252	9	6.848	23309.626	perlu	-19596.9	19596.8961	12.480823	11.568674	109692.36
20	[illegible]	0.006728185	2.944951472	0.984252	9	6.848	23309.626	perlu	-19499.43	19499.4331	12.543205	11.568674	109692.36
21	[illegible]	0.005078986	2.147602522	0.984252	9	6.848	23309.626	ok	-29839.88	29839.8358	8.1965954	11.568674	109692.36
22	[illegible]	0.007067919	2.988604751	0.984252	9	6.848	23309.626	perlu	17537.42	17537.4160	13.94649	11.568674	109692.36
23	[illegible]	0.002694372	1.139290549	0.984252	9	6.848	23309.626	ok	28563.65	28563.6512	8.5628195	11.568674	109692.36
24	[illegible]	0.006906435	2.920322622	0.984252	9	6.848	23309.626	perlu	23060.38	23060.3267	10.606305	11.568674	109692.36
25	[illegible]	[illegible]	3.017117195	0.984252	9	6.848	23309.626	perlu	-23810	23810.0030	10.27228	11.568674	109692.36
26	[illegible]	[illegible]	2.851639562	0.984252	9	6.848	23309.626	perlu	-24605	24604.9985	9.9404257	11.568674	109692.36
27	[illegible]	[illegible]	1.885642433	0.984252	9	6.848	23309.626	perlu	-25121.98	25121.9833	9.7359109	11.568674	109692.36
28	[illegible]	[illegible]	2.089989215	0.984252	9	6.848	23309.626	perlu	1406.364	1406.3637	173.92075	11.568674	109692.36
29	[illegible]	0.006815424	2.881839558	0.984252	9	6.848	23309.626	perlu	-25990.87	25990.8696	9.4104351	11.568674	109692.36
30	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	ok	30051.33	30051.3343	8.1389195	11.568674	109692.36
31	360.6060	[illegible]	4.626913607	0.984252	9	6.848	23309.626	ok	-47315.73	47315.7261	5.1692198	11.568674	109692.36
32	307.61649	[illegible]	3.910098158	0.984252	9	6.848	23309.626	ok	47968.26	47968.2575	5.0989009	11.568674	109692.36
33	266.80424	[illegible]	3.371886726	0.984252	9	6.848	23309.626	perlu	22819.06	22819.0600	10.718469	11.568674	109692.36
34	263.11255	[illegible]	3.323757244	0.984252	9	6.848	23309.626	perlu	24241.36	24241.3624	10.089589	11.568674	109692.36
BP3/35	[illegible]	[illegible]	3.311440361	0.984252	9	6.848	23309.626	perlu	18981.34	18981.3428	12.885568	11.568674	109692.36
BP4/36	[illegible]	[illegible]	0.598455129	0.6299213	8	2.493	9228.1511	perlu	-9804.221	9804.2205	15.802173	18.509878	43426.594
37	119.9661	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-7955.366	7955.3659	[illegible]	18.509878	43426.594
38	131.52223	0.00399992	[illegible]	0.6299213	8	2.493	9228.1511	perlu	8887.745	8887.2454	17.431641	18.509878	43426.594
39	[illegible]	[illegible]	0.613728505	0.6299213	8	2.493	9228.1511	ok	13503.57	13503.5720	[illegible]	18.509878	43426.594
40	128.55879	[illegible]	0.629784590	0.6299213	8	2.493	9228.1511	perlu	8546.242	8546.2422	[illegible]	18.509878	43426.594
41	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	7933.831	7933.8354	[illegible]	18.509878	43426.594
42	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-7805.214	7805.2137	[illegible]	18.509878	43426.594
43	126.2314	[illegible]	0.618172885	0.6299213	8	2.493	9228.1511	perlu	7242.33	7242.3296	21.39201	18.509878	43426.594
44	107.94120	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	5482.989	5482.9089	[illegible]	18.509878	43426.594
45	129.31477	[illegible]	0.633558247	0.6299213	8	2.493	9228.1511	perlu	-7618.247	7618.2471	[illegible]	18.509878	43426.594
46	115.04324	0.003449078	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-6668.866	6668.8667	23.231534	18.509878	43426.594
47	120.7516	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-7012.567	7012.5666	22.092908	18.509878	43426.594
BP4/48	119.6961	0.003498225	0.585604049	0.6299213	8	2.493	9228.1511	perlu	-5692.857	5692.8568	27.214454	18.509878	43426.594
BP5/49	[illegible]	0.007116826	[illegible]	0.984252	9	6.848	19817.763	perlu	5994.878	5994.8225	55.254737	9.254939	187177.71
50	[illegible]	0.006483554	4.683080008	0.984252	9	6.848	19817.763	perlu	-4554.537	4554.5321	[illegible]	9.254939	187177.71
BP6/51	[illegible]	[illegible]	0.516663715	0.8661417	8	4.714	31990.924	ok	-67261.12	67261.1231	4.4361431	10.283266	150545.52
52	[illegible]	[illegible]	0.499928154	0.8661417	8	4.714	31990.924	ok	-17956.96	17956.9595	7.8610045	10.283266	150545.52
BP7/53	[illegible]	[illegible]	0.139945225	0.6299213	8	1.558	12355.469	ok	-16472.33	16472.3297	11.49393	15.424898	58143.384
A1/54	[illegible]	0.004769699	0.706036134	0.6299213	8	2.493	8160.0781	ok	-12926.46	12926.4623	13.598144	18.509878	38400.367
55	[illegible]	0.004449821	0.658693509	0.6299213	8	2.493	8160.0781	ok	-13310.65	13310.6505	11.292247	18.509878	38400.367
56	[illegible]	0.004426329	0.655208732	0.6299213	8	2.493	8160.0781	ok	-13812.06	13812.0584	9.9186164	18.509878	38400.367
57	149.8214	0.004398267	0.651054734	0.6299213	8	2.493	8160.0781	ok	-12042.05	12042.0469	11.376513	18.509878	38400.367
58	10.416826	0.000299694	0.044362219	0.6299213	8	2.493	8160.0781	ok	-11080.53	11080.5345	12.363109	18.509878	38400.367
59	159.61043	0.004674449	0.691936678	0.6299213	8	2.493	8160.0781	ok	-11293.85	11293.8512	11.305254	18.509878	38400.367
60	156.88171	0.0046104	0.682455877	0.6299213	8	2.493	8160.0781	ok	-13458.59	13458.5927	11.179116	18.509878	38400.367
61	146.6882	0.004304224	0.637141417	0.6299213	8	2.493	8160.0781	ok	-14199.97	14199.9690	9.6476625	18.509878	38400.367
62	139.12251	0.004083663	0.604485376	0.6299213	8	2.493	8160.0781	ok	-10552.9	10552.9019	12.98188	18.509878	38400.367
63	68.68413	0.001992496	0.29493977	0.6299213	8	2.493	8160.0781	ok	-19067.02	19067.0158	7.185	18.509878	38400.367
64	172.87176	0.005092538	0.753824501	0.6299213	8	2.493	8160.0781	ok	-13777.35	13777.3475	9.9436055	18.509878	38400.367
65	153.67922	0.004514122	0.668204185	0.6299213	8	2.493	8160.0781	ok	-13574.23	13574.2312	11.052395	18.509878	38400.367
66	160.2148	0.004710705	0.697303421	0.6299213	8	2.493	8160.0781	ok	-12837.89	12837.8854	9.9091043	18.509878	38400.367
67	122.89175	0.005253203	0.753922809	0.6299213	8	2.493	8160.0781	ok	-13360.59	13360.5866	11.25328	18.509878	38400.367
68	155.58574	0.004571415	0.676685041	0.6299213	8	2.493	8160.0781	ok	-13494.1	13494.1011	11.152126	18.509878	38400.367
69	190.01356	0.005612186	0.830745458	0.6299213	8	2.493	8160.0781	ok	-15655.03	15655.0344	8.7509554	18.509878	38400.367
70	174.61433	0.005145225	0.761623474	0.6299213	8	2.493	8160.0781	ok	-13435.23	13435.2316	11.19681	18.509878	38400.367
71	154.85573	0.004549481	0.673438204	0.6299213	8	2.493	8160.0781	ok	-13098.34	13098.3325	11.459076	18.509878	38400.367
72	173.62088	0.005115185	0.757176754	0.6299213	8	2.493	8160.0781	ok	-13083.27	13083.2694	11.471122	18.509878	38400.367
73	152.13436	0.004473718	0.662223452	0.6299213	8	2.493	8160.0781	ok	-12952.16	12952.1588	11.577118	18.509878	38400.367
74	62.035612	0.001797905	0.266135464	0.6299213	8	2.493	8160.0781	perlu	-5419.05	5419.0498	25.280541	18.509878	38400.367

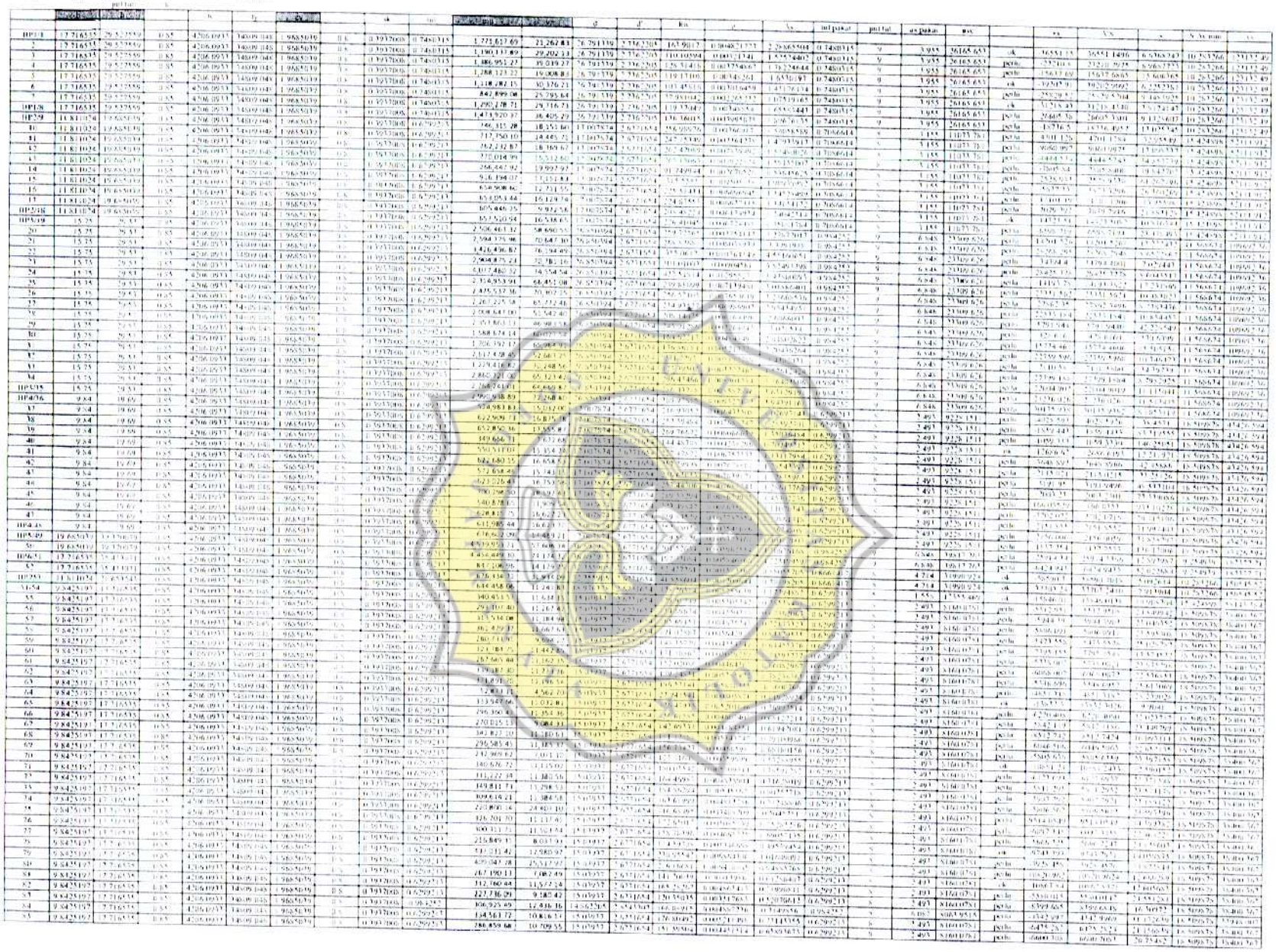
75	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	328,582.56	5,087.59	15.03937	2.6771654	173.64409	0.005115886	0.75728059	0.6299213	8	2.493	8160.0781	ok	-13214.78	13214.7787	10.366917	18.509878	38400.367
76	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	268,483.54	5,393.33	15.03937	2.6771654	141.88391	0.004760324	0.61587137	0.6299213	8	2.493	8160.0781	ok	-12855.1	12855.0951	10.656981	18.509878	38400.367
77	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	423,809.39	289.99	15.03937	2.6771654	223.96805	0.006649436	0.98428473	0.6299213	8	2.493	8160.0781	ok	-18859.01	18859.0137	7.2642457	18.509878	38400.367
78	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	85,329.08	6,298.31	15.03937	2.6771654	45.093357	0.001303724	0.19298408	0.6299213	8	2.493	8160.0781	ok	-11790.41	11790.4085	11.619318	18.509878	38400.367
79	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	194,357.87	13,529.31	15.03937	2.6771654	102.71116	0.002994351	0.44323974	0.6299213	8	2.493	8160.0781	perlu	-3283.351	3283.3511	41.724599	18.509878	38400.367
80	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	326,891.88	5,309.06	15.03937	2.6771654	172.75062	0.005088877	0.75328251	0.6299213	8	2.493	8160.0781	ok	-12954.23	12954.2340	10.575423	18.509878	38400.367
81	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	269,768.56	5,398.45	15.03937	2.6771654	142.563	0.004180658	0.61884315	0.6299213	8	2.493	8160.0781	ok	-12849.07	12849.0676	10.661981	18.509878	38400.367
82	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	350,120.63	2,877.30	15.03937	2.6771654	185.02618	0.005460623	0.80831032	0.6299213	8	2.493	8160.0781	ok	-15815.12	15815.1235	8.6623736	18.509878	38400.367
83	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.984252	194,958.71	6,185.71	14.862205	2.8543307	105.49963	0.003076899	0.45009352	0.984252	8	6.087	8063.9515	ok	-11696.7	11696.6958	11.574438	18.509878	37948.007
84	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	325,429.40	5,095.85	15.03937	2.6771654	171.97726	0.005065519	0.74982500	0.6299213	8	2.493	8160.0781	ok	-13205.07	13205.0677	10.37454	18.509878	38400.367
85	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	284,306.65	5,109.19	15.03937	2.6771654	150.24586	0.004411007	0.65294062	0.6299213	8	2.493	8160.0781	ok	-13189.37	13189.3671	10.38689	18.509878	38400.367
86	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	277,281.35	5,169.62	15.03937	2.6771654	146.53124	0.004299627	0.63645359	0.6299213	8	2.493	8160.0781	ok	-13118.28	13118.2794	10.443177	18.509878	38400.367
87	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	368,043.33	3,415.82	15.03937	2.6771654	194.49769	0.005748427	0.85091254	0.6299213	8	2.493	8160.0781	ok	-15181.58	15181.5844	9.0238611	18.509878	38400.367
88	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	320,525.38	5,252.17	15.03937	2.6771654	169.38615	0.004987236	0.73823713	0.6299213	8	2.493	8160.0781	ok	-13021.16	13021.1560	10.521071	18.509878	38400.367
89	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	284,454.54	4,994.29	15.03937	2.6771654	150.32401	0.004413353	0.65328789	0.6299213	8	2.493	8160.0781	ok	-13324.54	13324.5426	10.281517	18.509878	38400.367
90	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	274,942.74	5,029.67	15.03937	2.6771654	145.29737	0.004262579	0.63096947	0.6299213	8	2.493	8160.0781	ok	-13282.93	13282.9279	10.313728	18.509878	38400.367
A1/91	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	363,780.49	3,119.23	15.03937	2.6771654	192.24493	0.005679896	0.84076832	0.6299213	8	2.493	8160.0781	ok	-15530.5	15530.5048	8.821124	18.509878	38400.367
A2/92	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	454,754.50	15,235.14	22.913386	2.6771654	73.951198	0.002146921	0.67785935	0.6299213	6	1.870	17405.318	ok	-23030	23030.0001	9.0630668	13.221341	81907.381
A2/93	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	286,707.75	14,370.22	22.913386	2.6771654	46.623797	0.001348265	0.42569544	0.6299213	6	1.870	17405.318	ok	-24047.55	24047.5473	8.6795725	13.221341	81907.381

sk 10 | tul 16 | tul sengkang 10 | jml tul 8 | As 0.1308452

Perhitungan Lentur dan Geser Tumpuan Lantai 3

	b	h		fc	fy	cv		sk	tul	mu	Vu	d	d'	Rn	ρ	As	tul pakai	jml tul	as pakai	øvc		vs	|Vs|	s	S Av min	vs
BP1/1	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	2,322,955.84	24,774.26	26.791339	2.7362205	214.9089	0.00637157	3.02426375	0.7480315	9	1.955	26165.653	ok	-32420.06	32420.0591	7.5276683	10.283266	123132.49
2	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,592,607.67	32,663.48	26.791339	2.7362205	147.34054	0.004323836	2.052307387	0.7480315	9	1.955	26165.653	perlu	-23138.63	23138.6257	10.547188	10.283266	123132.49
3	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,836,110.01	38,793.50	26.791339	2.7362205	169.86823	0.005001793	2.374099646	0.7480315	9	1.955	26165.653	perlu	-15926.84	15926.8353	15.323034	10.283266	123132.49
4	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,538,340.49	21,845.98	26.791339	2.7362205	142.32	0.004173381	1.980894134	0.7480315	9	1.955	26165.653	ok	-35865.09	35865.0897	6.804596	10.283266	123132.49
5	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,492,856.41	33,513.36	26.791339	2.7362205	138.11202	0.004047454	1.921122944	0.7480315	9	1.955	26165.653	perlu	-22138.76	22138.7647	11.023535	10.283266	123132.49
6	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,512,053.38	31,507.95	26.791339	2.7362205	139.88802	0.004100583	1.946340346	0.7480315	9	1.955	26165.653	perlu	-24498.07	24498.0661	9.3619066	10.283266	123132.49
7	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,598,174.04	33,758.92	26.791339	2.7362205	147.85551	0.004339282	2.059638663	0.7480315	9	1.955	26165.653	perlu	-21849.87	21849.8691	11.169286	10.283266	123132.49
BP1/8	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,720,754.15	41,537.16	26.791339	2.7362205	159.19605	0.004680036	2.221377605	0.7480315	9	1.955	26165.653	perlu	-12699	12698.9975	19.217851	10.283266	123132.49
BP2/9	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	939,442.48	21,443.88	17.007874	2.6771654	321.49209	0.009756254	1.959940629	0.7086614	8	3.155	11073.781	perlu	827.8674	827.8674	187.14106	15.424898	52111.912
10	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	910,655.12	17,625.66	17.007874	2.6771654	311.57932	0.009442617	1.896836686	0.7086614	8	3.155	11073.781	perlu	5319.884	5319.8843	29.122436	15.424898	52111.912
11	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	942,087.85	21,460.17	17.007874	2.6771654	324.40101	0.009785674	1.965750165	0.7086614	8	3.155	11073.781	perlu	808.4571	808.4571	191.63415	15.424898	52111.912
12	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	923,269.88	17,029.14	17.007874	2.6771654	317.92314	0.009580143	1.924462944	0.7086614	8	3.155	11073.781	perlu	6021.676	6021.6760	25.728383	15.424898	52111.912
13	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	867,449.98	21,148.53	17.007874	2.6771654	298.70185	0.008973724	1.802524843	0.7086614	8	3.155	11073.781	perlu	1174.859	1174.8592	131.8694	15.424898	52111.912
14	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,056,464.95	18,938.10	17.007874	2.6771654	363.78812	0.011044823	2.218688403	0.7086614	8	3.155	11073.781	perlu	3775.834	3775.8344	41.031458	15.424898	52111.912
15	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	877,402.70	16,785.04	17.007874	2.6771654	302.12902	0.009081068	1.824708572	0.7086614	8	3.155	11073.781	perlu	-6308.854	6308.8540	24.557231	15.424898	52111.912
16	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	922,583.77	21,129.28	17.007874	2.6771654	317.68689	0.009572658	1.922959121	0.7086614	8	3.155	11073.781	perlu	1197.979	1197.9786	129.32451	15.424898	52111.912
17	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	883,121.67	17,282.03	17.007874	2.6771654	304.09832	0.009143115	1.836679645	0.7086614	8	3.155	11073.781	perlu	-5841.809	5841.8088	26.520551	15.424898	52111.912
BP2/18	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	925,262.16	21,377.68	17.007874	2.6771654	318.60918	0.009601881	1.928829752	0.7086614	8	3.155	11073.781	perlu	905.7483	905.7483	171.04971	15.424898	52111.912
BP3/19	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,151,876.60	66,427.77	26.850394	2.6771654	326.6049	0.009855618	4.167357874	0.984252	9	6.848	23309.626	perlu	23304.135	23304.1354	10.495364	11.568674	109692.36
20	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,211,029.38	78,008.02	26.850394	2.6771654	332.73445	0.010050604	4.249805983	0.984252	9	6.848	23309.626	perlu	36927.96	36927.9599	6.6233117	11.568674	109692.36
21	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,934,177.31	69,321.53	26.850394	2.6771654	198.35157	0.005865776	2.480289882	0.984252	9	6.848	23309.626	perlu	26708.566	26708.5663	9.1575634	11.568674	109692.36
22	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,587,315.93	77,692.25	26.850394	2.6771654	371.72615	0.011300701	4.778397972	0.984252	9	6.848	23309.626	perlu	36556.472	36556.4717	6.6906183	11.568674	109692.36
23	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,789,094.06	63,443.25	26.850394	2.6771654	289.10251	0.008668615	3.665444689	0.984252	9	6.848	23309.626	perlu	19792.943	19792.9408	12.357201	11.568674	109692.36
24	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,997,414.12	74,274.12	26.850394	2.6771654	[illegible]	0.009348381	3.95287741	0.984252	9	6.848	23309.626	perlu	32535.136	32535.1355	7.5175771	11.568674	109692.36
25	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,959,106.96	74,426.23	26.850394	2.6771654	306.62909	0.009222991	3.899857408	0.984252	9	6.848	23309.626	perlu	32714.091	32714.0909	7.4764538	11.568674	109692.36
26	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,842,049.40	72,874.80	26.850394	2.6771654	294.49987	0.008840942	3.738313294	0.984252	9	6.848	23309.626	perlu	30887.704	30887.7040	7.9185338	11.568674	109692.36
27	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,560,289.03	59,220.27	26.850394	2.6771654	265.39423	[illegible]	3.352136573	0.984252	9	6.848	23309.626	perlu	14824.724	14824.7236	16.498479	11.568674	109692.36
28	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,840,477.13	51,781.18	26.850394	2.6771654	294.33698	0.008835835	3.736147872	0.984252	9	6.848	23309.626	perlu	8425.7939	8425.7939	29.028172	11.568674	109692.36
29	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,753,246.07	71,645.47	26.850394	2.6771654	285.29786	0.008552135	3.616192156	0.984252	9	6.848	23309.626	perlu	29442.614	29442.6135	8.3071902	11.568674	109692.36
30	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,654,402.04	75,883.09	26.850394	2.6771654	275.05534	0.008231708	3.480202194	0.984252	9	6.848	23309.626	perlu	34425.689	34425.6890	7.1043148	11.568674	109692.36
31	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,625,459.99	49,921.97	26.850394	2.6771654	272.05636	0.008137809	3.441116911	0.984252	9	6.848	23309.626	perlu	3945.555	3945.5550	61.990111	11.568674	109692.36
32	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,163,697.08	78,813.67	26.850394	2.6771654	224.2024	0.006656788	2.814762042	0.984252	9	6.848	23309.626	perlu	37993.429	37993.4291	6.4375308	11.568674	109692.36
33	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,348,089.80	74,698.97	26.850394	2.6771654	346.93692	0.010503983	4.441513076	0.984252	9	6.848	23309.626	perlu	32999.67	32999.6701	7.4117526	11.568674	109692.36
34	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,250,005.32	73,443.30	26.850394	2.6771654	336.77833	0.01004722	4.248172158	0.984252	9	6.848	23309.626	perlu	31557.708	31557.7082	7.7504167	11.568674	109692.36
BP3/35	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,531,320.93	80,018.28	26.850394	2.6771654	365.92978	0.011113561	4.699262463	0.984252	9	6.848	23309.626	perlu	39316.498	39316.4984	6.2209352	11.568674	109692.36
BP4/36	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	676,844.90	17,661.00	17.007874	2.6771654	229.8815	0.0069763	1.492195363	0.6299213	8	2.493	9228.1511	perlu	-1003.886	1003.8863	154.32822	18.509878	43426.594
37	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	760,040.33	20,174.53	17.007874	2.6771654	314.65908	[illegible]	1.58?13?04	0.6299213	8	2.493	9228.1511	perlu	844.96833	844.9683	183.3536	18.509878	43426.594
38	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	753,319.08	18,382.??	17.007874	2.6771654	311.28177	0.009369959	1.565504189	0.6299213	8	2.493	9228.1511	perlu	87.41121	87.4112	1772.404	18.509878	43426.594
39	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	284,593.21	8,267.97	17.007874	2.6771654	[illegible]	[illegible]	0.575160382	0.6299213	8	2.493	9228.1511	ok	11986.22	11986.2230	12.925451	18.509878	43426.594
40	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	751,388.93	18,672.28	17.007874	2.6771654	310.4803	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	254.09204	254.0920	609.73178	18.509878	43426.594
41	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	792,226.78	19,292.84	17.007874	2.6771654	327.56557	0.009886155	1.654944978	0.6299213	8	2.493	9228.1511	perlu	866.50275	866.5028	178.79885	18.509878	43426.594
42	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	289,546.43	19,166.71	17.007874	2.6771654	376.38541	[illegible]	1.647959488	0.6299213	8	2.493	9228.1511	perlu	994.6205	994.6205	155.76593	18.509878	43426.594
43	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	811,009.42	19,780.61	17.007874	2.6771654	[illegible]	0.010126608	1.695197647	0.6299213	8	2.493	9228.1511	perlu	1558.0046	1558.0046	99.440802	18.509878	43426.594
44	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	845,182.80	21,276.11	17.007874	2.6771654	349.12377	0.010580194	1.771161543	0.6299213	8	2.493	9228.1511	perlu	3317.4253	3317.4253	46.701275	18.509878	43426.594
45	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	799,600.24	19,461.08	17.007874	2.6771654	330.40528	0.009970427	1.670065941	0.6299213	8	2.493	9228.1511	perlu	1182.0871	1182.0871	131.06309	18.509878	43426.594
46	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	819,979.66	20,??6.05	17.007874	2.6771654	338.82654	0.010244816	1.714985583	0.6299213	8	2.493	9228.1511	perlu	2131.468	2131.4680	72.68605	18.509878	43426.594
47	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	809,281.44	19,9??.90	17.007874	2.6771654	334.40612	0.010101855	1.69??88703	0.6299213	8	2.493	9228.1511	perlu	1787.7676	1787.7676	86.660029	18.509878	43426.594
BP4/48	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	872,972.40	21,093.66	17.007874	2.6771654	360.72417	0.010946245	1.837405298	0.6299213	8	2.493	9228.1511	perlu	3107.4773	3107.4773	49.856514	18.509878	43426.594
BP5/49	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,659,848.93	84,061.85	36.692913	2.6771654	[illegible]	0.006125008	4.42410194	0.984252	9	6.848	39817.263	perlu	5209.792	5209.7920	64.156648	9.254939	187377.71
50	19.685039	39.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	5,716,794.58	87,029.24	36.692913	2.6771654	253.76574	[illegible]	5.467192262	0.984252	9	6.848	39817.263	perlu	8698.4861	8698.4861	38.425398	9.254939	187377.71
BP6/51	17.716535	35.433071	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	817,227.43	14,045.84	32.755905	2.6771654	[illegible]	[illegible]	0.849325456	0.8661417	8	4.714	31990.924	ok	-58748.71	58748.7105	5.0789171	10.283266	150545.52
52	17.716535	35.433071	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,560,959.72	39,362.31	32.755905	2.6771654	[illegible]	[illegible]	2.795048026	0.8661417	8	4.714	31990.924	perlu	-28958.22	28958.2179	11.362805	10.283266	150545.52
BP7/53	11.811024	21.653543	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	709,031.14	12,411.87	18.976378	2.6771654	196.12466	0.00579795	1.299497152	0.6299213	5	1.558	12355.469	perlu	-14469.5	14469.4950	11.946476	15.424898	58143.384
A1/54	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	404,438.93	12,693.90	15.03937	2.6771654	[illegible]	0.006335514	0.937816283	0.6299213	8	2.493	8160.0781	perlu	-4266.186	4266.1864	32.112171	18.509878	38400.367
55	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	365,032.88	12,367.34	15.03937	2.6771654	192.96077	0.005700025	0.843747863	0.6299213	8	2.493	8160.0781	perlu	-4650.375	4650.3747	29.459241	18.509878	38400.367
56	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	338,380.13	11,941.14	15.03937	2.6771654	178.82173	0.005272554	0.780471392	0.6299213	8	2.493	8160.0781	perlu	-5151.283	5151.2826	26.59206	18.509878	38400.367
57	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	425,460.09	13,445.65	15.03937	2.6771654	224.84038	0.006676235	0.988251674	0.6299213	8	2.493	8160.0781	perlu	-3381.721	3381.7711	41.510284	18.509878	38400.367
58	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	374,929.80	11,103.07	15.03937	2.6771654	198.11694	0.005859237	0.86731533	0.6299213	8	2.493	8160.0781	perlu	-6137.745	6137.7451	22.320332	18.509878	38400.367
59	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	380,011.63	12,381.62	15.03937	2.6771654	200.82251	0.005941091	0.879431721	0.6299213	8	2.493	8160.0781	perlu	-4633.575	4633.5754	29.566042	18.509878	38400.367
60	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	367,714.35	12,241.59	15.03937	2.6771654	194.32384	0.005743136	0.850129418	0.6299213	8	2.493	8160.0781	perlu	-4798.311	4798.3109	28.550986	18.509878	38400.367
61	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	311,210.34	11,611.42	15.03937	2.6771654	164.46349	0.004838313	0.716251188	0.6299213	8	2.493	8160.0781	perlu	-5539.693	5539.6932	24.729981	18.509878	38400.367
62	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	480,343.69	14,211.42	15.03937	2.6771654	253.8444	0.007571568	1.120783567	0.6299213	8	2.493	8160.0781	perlu	-1892.626	1892.6261	72.384348	18.509878	38400.367
63	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	106,212.75	2,694.38	15.03937	2.6771654	56.129624	0.001625362	0.240594642	0.6299213	8	2.493	8160.0781	ok	-16030.33	16030.3267	8.5460834	18.509878	38400.367
64	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	381,971.10	11,970.65	15.03937	2.6771654	201.85802	0.005972671	0.884106338	0.6299213	8	2.493	8160.0781	perlu	-5117.072	5117.0717	26.772443	18.509878	38400.367
65	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	355,849.34	12,143.29	15.03937	2.6771654	188.0536	0.005552522	0.821913712	0.6299213	8	2.493	8160.0781	perlu	-4913.955	4913.9554	27.879071	18.509878	38400.367
66	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	354,981.84	11,919.19	15.03937	2.6771654	187.59516	0.0055386	0.819852934	0.6299213	8	2.493	8160.0781	perlu	5127.61	5127.6066	26.459413	18.509878	38400.367
67	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	402,932.77	12,324.89	15.03937	2.6771654	212.9355	0.006311147	0.934209436	0.6299213	8	2.493	8160.0781	perlu	-4700.311	4700.3108	29.146256	18.509878	38400.367
68	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	363,478.51	12,211.40	15.03937	2.6771654	192.08535	0.005675043	0.840049987	0.6299213	8	2.493	8160.0781	perlu	-4833.825	4833.8253	28.341221	18.509878	38400.367
69	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	320,161.73	10,374.61	15.03937	2.6771654	169.19398	0.004981434	0.73737823	0.6299213	8	2.493	8160.0781	perlu	-6994.759	6994.7586	19.585595	18.509878	38400.367
70	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	402,441.68	12,261.44	15.03937	2.6771654	212.67598	0.006301204	0.933033601	0.6299213	8	2.493	8160.0781	perlu	-4774.956	4774.9558	28.690634	18.509878	38400.367
71	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	381,963.98	12,547.80	15.03937	2.6771654	201.85425	0.005972556	0.88408933	0.6299213	8	2.493	8160.0781	perlu	-4438.062	4438.0616	30.868546	18.509878	38400.367
72	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	418,229.20	12,560.61	15.03937	2.6771654	221.01912	0.006558897	0.970882671	0.6299213	8	2.493	8160.0781	perlu	-4422.994	4422.9936	30.973707	18.509878	38400.367
73	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	384,530.57	12,672.06	15.03937	2.6771654	203.2106	0.006013936	0.890214638	0.6299213	8	2.493	8160.0781	perlu	-4291.883	4291.8826	31.919911	18.509878	38400.367
74	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	400,700.57	23,414.61	15.03937	2.6771654	211.25587	0.006275047	0.928865616	0.6299213	8	2.493	8160.0781	perlu	8346.4119	8346.4119	16.413821	18.509878	38400.367

75	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	411,671.75	12,448.83	15.03937	2.6771654	217.55374	0.0064532611	0.9955149699	0.6299213	8	2.493	81601.781	perlu	-4554.503	4554.5029	30.1074355	18.509878	384001.367					
76	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	369,627.72	12,354.56	15.03937	2.6771654	195.33498	0.0105727391	0.8546684717	0.6299213	8	2.493	81601.781	perlu	-4194.819	4194.8193	32.6585011	18.509878	384001.367					
77	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	223,575.77	7,651.23	15.03937	2.6771654	118.15127	0.0034523004	0.5110283103	0.6299213	8	2.493	81601.781	ok	-10198.74	10198.7378	13.432692	18.509878	384001.367					
78	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	503,977.58	13,659.54	15.03937	2.6771654	266.33486	0.0037959721	1.17824	0.6299213	8	2.493	81601.781	perlu	3130.1333	3130.1332	43.766998	18.509878	384001.367					
79	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	498,336.14	24,337.08	15.03937	2.6771654	263.35236	0.0037866924	1.1645037318	0.6299213	8	2.493	81601.781	perlu	9431.6729	9431.6729	12.525155	18.509878	384001.367					
80	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	423,059.59	12,630.29	15.03937	2.6771654	223.57181	0.0031866372266	0.9824853198	0.6299213	8	2.493	81601.781	perlu	4293.958	4293.9585	31.984483	18.509878	384001.367					
81	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	373,235.29	12,759.68	15.03937	2.6771654	196.77396	0.0035799451	0.8584654655	0.6299213	8	2.493	81601.781	perlu	-4188.792	4188.7918	32.705495	18.509878	384001.367					
82	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	302,680.71	10,238.54	15.03937	2.6771654	159.95569	0.0047029291	0.6961549572	0.6299213	8	2.493	81601.781	perlu	-7154.848	7154.8477	19.147369	18.509878	384001.367					
83	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.984252	387,698.50	13,546.95	14.862205	2.8543307	209.29852	0.0062215125	0.9099165411	0.984252	8	6.087	8063.9515	perlu	-3036.42	3036.4201	44.566281	18.509878	37948.1007					
84	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	409,006.06	12,457.08	15.03937	2.6771654	216.14502	0.0064094432	0.9487588827	0.6299213	8	2.493	81601.781	perlu	4544.792	4544.7918	30.143622	18.509878	384001.367					
85	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	368,671.41	12,470.43	15.03937	2.6771654	194.82961	0.0057758528	0.8524017816	0.6299213	8	2.493	81601.781	perlu	-4529.091	4529.0913	30.248123	18.509878	384001.367					
86	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	365,214.50	12,530.85	15.03937	2.6771654	193.00275	0.0057202944	0.8448180021	0.6299213	8	2.493	81601.781	perlu	4458.004	4458.0036	31.230462	18.509878	384001.367					
87	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	352,405.08	10,777.04	15.03937	2.6771654	186.23343	0.0055217259	0.8137733442	0.6299213	8	2.493	81601.781	perlu	-6521.309	6521.3095	21.607515	18.509878	384001.367					
88	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	413,333.82	12,611.43	15.03937	2.6771654	218.43209	0.0064795539	0.9549135203	0.6299213	8	2.493	81601.781	perlu	-4360.88	4360.8802	9.4134876	18.509878	384001.367					
89	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	362,033.93	12,355.53	15.03937	2.6771654	191.32194	0.0056751832	0.8366614129	0.6299213	8	2.493	81601.781	perlu	4664.267	4664.2668	29.321499	18.509878	384001.367					
90	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	354,611.06	5,029.67	15.03937	2.6771654	187.39921	0.005553265	0.8189772212	0.6299213	8	2.493	81601.781	ok	13282.93	13282.9279	10.313728	18.509878	384001.367					
A1991	9.84251197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	330,627.53	10,480.46	15.03937	2.6771654	174.72458	0.0051485566	0.7621117948	0.6299213	8	2.493	81601.781	perlu	-6870.229	6870.2290	19.940603	18.509878	384001.367					
A2092	11.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	794,013.47	15,844.72	22.913386	2.6771654	129.12076	0.0038278921	1.1933139913	0.6299213	6	1.870	17405.518	ok	-22312.84	22312.8401	9.3543641	13.231341	81907.381					
A2093	11.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	687,520.34	14,079.81	22.913386	2.6771654	111.80398	0.0033163753	1.0304833131	0.6299213	6	1.870	17405.518	ok	24389.21	24389.2108	8.5579821	13.231341	81907.381					



86	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	283,969.94	10,806.83	15.03937	2.6771654	150.06792	0.0004465666	0.65215002	0.6299213	8	2.493	8160.0781	perlu	-6480.262	6480.2621	21.121026	18.509878	38400.367
87	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	268,695.20	9,243.87	15.03937	2.6771654	141.99577	0.0004167673	0.61632887	0.6299213	8	2.493	8160.0781	perlu	-6325.039	6325.0388	16.15596	18.509878	38400.367
88	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	343,368.85	10,941.90	15.03937	2.6771654	151.4579	0.0005352417	0.79229307	0.6299213	8	2.493	8160.0781	perlu	-6327.361	6327.3611	21.651445	18.509878	38400.367
89	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	272,508.14	10,462.62	15.03937	2.6771654	144.01077	0.0004220024	0.62526244	0.6299213	8	2.493	8160.0781	perlu	-6391.225	6391.2246	19.87985	18.509878	38400.367
90	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	265,409.17	10,547.60	15.03937	2.6771654	140.25922	0.0004114601	0.60863422	0.6299213	8	2.493	8160.0781	perlu	-6791.247	6791.2468	20.172512	18.509878	38400.367
X1/91	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	243,723.04	8,885.68	15.03937	2.6771654	128.79885	0.0003760321	0.55795483	0.6299213	8	2.493	8160.0781	perlu	-8746.446	8746.4461	15.663106	18.509878	38400.367
X2/92	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	902,633.21	17,510.35	22.913386	2.6771654	146.78427	0.0003307183	1.3992211	0.6299213	6	1.870	17405.318	perlu	-20353.41	20353.4101	10.254861	13.221341	51907.351
X2/93	13.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	411,557.22	13,916.34	22.913386	2.6771654	66.925333	0.0001946994	0.6128098	0.6299213	6	1.870	17405.318	ok	-24551.53	24551.5304	8.4910266	13.221341	51907.351

sk tul 19 16
tul sengkang jml tul 10 8
As 0.1308452

Perhitungan Lentur dan Geser lapangan lantai 4

	b	h		fc	fy	cv		sk	tul	mu	Vu	d	d'	Ru	ρ	As	tul pakai	jml tul	as pakai	φVc		Vs	|Vs|	s	S Av min	vs
BP1/1	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	717,070.05	13,427.34	26.791339	2.7362205	66.339934	0.001923842	0.911151163	0.7480315	9	3.955	26165.653	ok	-45769.37	45769.3704	5.3321128	10.283266	123132.49
2	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	929,138.66	10,171.77	26.791339	2.7362205	85.959521	0.002499882	1.186568336	0.7480315	9	3.955	26165.653	ok	-49599.45	49599.4497	4.920366	10.283266	123132.49
3	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	989,042.05	13,269.94	26.791339	2.7362205	91.501499	0.002663198	1.264086105	0.7480315	9	3.955	26165.653	ok	-45954.54	45954.5449	5.310627	10.283266	123132.49
4	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	182,179.10	14,187.32	26.791339	2.7362205	16.85435	0.000485341	0.230367073	0.7480315	9	3.955	26165.653	ok	-44875.27	44875.2731	5.4383561	10.283266	123132.49
5	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,002,086.16	9,957.07	26.791339	2.7362205	92.708279	0.002698796	1.280982573	0.7480315	9	3.955	26165.653	ok	-49852.04	49852.0395	4.8954355	10.283266	123132.49
6	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	705,067.94	6,888.31	26.791339	2.7362205	65.229536	0.001891339	0.897223717	0.7480315	9	3.955	26165.653	ok	-53462.35	53462.3450	4.5648474	10.283266	123132.49
7	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,126,372.58	10,171.78	26.791339	2.7362205	104.20667	0.003038615	1.442277585	0.7480315	9	3.955	26165.653	ok	-49599.45	49599.4475	4.9203662	10.283266	123132.49
BP1/8	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.7480315	1,358,953.53	10,682.15	26.791339	2.7362205	125.72396	0.003677661	1.745600771	0.7480315	9	3.955	26165.653	ok	-48999.01	48999.0057	4.9806612	10.283266	123132.49
BP2/9	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	255,264.35	11,593.95	17.007874	2.6771654	82.89894	0.002557064	0.513652064	0.7086614	8	3.155	11073.781	perlu	-12416.01	12416.0103	12.478082	15.424898	52111.912
10	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	94,026.41	11,856.39	17.007874	2.6771654	32.377612	0.000934397	0.167201946	0.7086614	8	3.155	11073.781	perlu	-12107.27	12107.2670	12.796281	15.424898	52111.912
11	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	258,301.71	11,822.02	17.007874	2.6771654	88.945515	0.002587844	0.519847043	0.7086614	8	3.155	11073.781	perlu	-12159.46	12159.4562	12.741358	15.424898	52111.912
12	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	83,286.35	12,923.27	17.007874	2.6771654	28.679218	0.000822233	0.166174812	0.7086614	8	3.155	11073.781	perlu	-10852.11	10852.1095	14.276502	15.424898	52111.912
13	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	866,536.23	13,440.32	17.007874	2.6771654	298.38721	0.00896322	1.800535331	0.7086614	8	3.155	11073.781	perlu	-10243.81	10243.8148	15.124052	15.424898	52111.912
14	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	132,860.28	14,562.50	17.007874	2.6771654	45.749742	0.001322825	0.265329542	0.7086614	8	3.155	11073.781	perlu	-8923.399	8923.3991	17.361603	15.424898	52111.912
15	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	133,596.17	10,122.22	17.007874	2.6771654	46.003142	[illegible]	0.262211013	0.7086614	8	3.155	11073.781	ok	-14147.46	14147.4602	10.95094	15.424898	52111.912
16	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	246,251.46	9,968.92	17.007874	2.6771654	84.2954	0.002465611	0.495292872	0.7086614	8	3.155	11073.781	ok	-14127.81	14127.8122	[illegible]	15.424898	52111.912
17	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	92,970.89	9,972.58	17.007874	2.6771654	32.014033	0.000922186	0.185585272	0.7086614	8	3.155	11073.781	ok	-14123.51	14123.5082	10.976344	15.424898	52111.912
BP2/18	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	226,560.64	10,377.83	17.007874	2.6771654	78.014971	0.002266229	0.455240913	0.7086614	8	3.155	11073.781	ok	-13846.74	13846.7400	11.18877	15.424898	52111.912
BP3/19	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,999,371.72	22,340.72	26.850394	2.6771654	207.12962	0.006135126	2.594181885	0.984252	9	6.848	23309.626	ok	-28562.98	28562.9833	8.5630197	11.568674	109692.36
20	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,238,098.17	22,640.83	26.850394	2.6771654	231.91702	0.006893914	2.915028409	0.984252	9	6.848	23309.626	ok	-28209.91	28209.9056	8.5701953	11.568674	109692.36
21	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,491,845.04	28,783.42	26.850394	2.6771654	[illegible]	0.007707088	3.258871749	0.984252	9	6.848	23309.626	perlu	-20983.27	20983.2229	11.656268	11.568674	109692.36
22	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,435,137.01	23,512.14	26.850394	2.6771654	[illegible]	0.007524355	3.181273834	0.984252	9	6.848	23309.626	perlu	-27178.95	27178.9544	8.9990728	11.568674	109692.36
23	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	991,405.96	51,637.06	26.850394	2.6771654	[illegible]	0.002994961	1.266392701	0.984252	9	6.848	23309.626	perlu	5903.3032	5903.3032	41.431955	11.568674	109692.36
24	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,231,600.57	19,126.67	26.850394	2.6771654	[illegible]	0.006873182	2.906262058	0.984252	9	6.848	23309.626	ok	-32050.1	32050.0999	7.5313456	11.568674	109692.36
25	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,472,449.03	20,201.23	26.850394	2.6771654	[illegible]	[illegible]	3.232485099	0.984252	9	6.848	23309.626	ok	-31080.03	31080.0252	7.8695363	11.568674	109692.36
26	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,252,069.95	18,593.89	26.850394	2.6771654	[illegible]	[illegible]	2.933885116	0.984252	9	6.848	23309.626	ok	-32971.01	32971.0142	7.4181943	11.568674	109692.36
27	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,420,025.95	19,045.41	26.850394	2.6771654	147.11644	[illegible]	1.825833079	0.984252	9	6.848	23309.626	ok	-32439.81	32439.8148	7.5396662	11.568674	109692.36
28	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,666,572.36	38,626.29	26.850394	2.6771654	174.56661	[illegible]	2.172558804	0.984252	9	6.848	23309.626	perlu	-9403.482	9403.4815	26.010069	11.568674	109692.36
29	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,887,352.67	[illegible]	26.850394	2.6771654	[illegible]	[illegible]	2.44449494	0.984252	9	6.848	23309.626	ok	-39560.33	39560.3338	[illegible]	11.568674	109692.36
30	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,370,544.32	[illegible]	26.850394	2.6771654	[illegible]	[illegible]	3.094135844	0.984252	9	6.848	23309.626	ok	-40405.2	40405.2024	6.0533143	11.568674	109692.36
31	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,242,151.13	[illegible]	26.850394	2.6771654	115.95949	[illegible]	[illegible]	0.984252	9	6.848	23309.626	ok	-44174.03	44174.0349	5.5368582	11.568674	109692.36
32	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,836,908.77	[illegible]	26.850394	2.6771654	293.96719	[illegible]	[illegible]	0.984252	9	6.848	23309.626	ok	-50529.44	50529.4399	4.8404532	11.568674	109692.36
33	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,770,992.31	[illegible]	26.850394	2.6771654	287.13622	[illegible]	3.640566583	0.984252	9	6.848	23309.626	ok	-32346.96	32346.9604	7.5613098	11.568674	109692.36
34	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,996,765.95	18,193.85	26.850394	2.6771654	279.44526	[illegible]	[illegible]	0.984252	9	6.848	23309.626	ok	-32856.94	32856.9406	7.443949	11.568674	109692.36
BP3/35	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,488,362.52	[illegible]	26.850394	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	23309.626	perlu	-26276.26	26276.2607	9.3082267	11.568674	109692.36
BP4/36	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	295,885.28	[illegible]	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	ok	-12828.93	12828.9268	12.076457	18.509878	43426.594
37	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	288,932.40	[illegible]	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-10659.78	10659.7725	14.533886	18.509878	43426.594
38	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	278,710.02	[illegible]	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-9859.667	9859.6671	15.713308	18.509878	43426.594
39	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	297,328.44	[illegible]	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	ok	-14203.92	14203.9183	10.907412	18.509878	43426.594
40	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	306,358.66	[illegible]	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	ok	-12449.23	12449.2308	12.444784	18.509878	43426.594
41	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	301,532.05	[illegible]	17.007874	2.6771654	124.59218	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	ok	-10915.36	10915.3557	14.193581	18.509878	43426.594
42	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	305,568.76	[illegible]	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	ok	-11992.28	11992.2838	12.918927	18.509878	43426.594
43	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	296,266.76	[illegible]	17.007874	2.6771654	[illegible]	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-10803.56	10803.5643	14.340451	18.509878	43426.594
44	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	264,648.53	11,112.15	17.007874	2.6771654	109.3564	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-8634.299	8634.2989	17.94327	18.509878	43426.594
45	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	248,658.42	[illegible]	17.007874	2.6771654	61.427692	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	ok	-11833.29	11833.2937	13.091992	18.509878	43426.594
46	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	274,364.14	[illegible]	17.007874	2.6771654	113.57102	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-10485.33	10485.3282	14.775691	18.509878	43426.594
47	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	292,894.63	[illegible]	17.007874	2.6771654	121.02808	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	ok	-10956.34	10956.3401	14.140487	18.509878	43426.594
BP4/48	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	271,245.78	10,405.76	17.007874	2.6771654	112.0824	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	perlu	-9471.227	9471.2263	16.357253	18.509878	43426.594
BP5/49	19.685039	19.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,499,996.08	48,088.37	16.692913	2.6771654	[illegible]	[illegible]	2.339659099	0.984252	9	6.848	39817.763	perlu	-32119.01	32119.0081	[illegible]	9.254939	187327.71
50	19.685039	19.370079	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,650,450.52	[illegible]	16.692913	2.6771654	[illegible]	[illegible]	4.414899289	0.984252	9	6.848	39817.763	perlu	-19622.97	19622.9664	16.585637	9.254939	187327.71
BP6/51	17.716535	35.433071	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	541,078.30	6,787.34	32.755905	2.6771654	33.48755	0.000966584	0.560928909	0.8661417	8	4.714	31990.924	ok	-67282.66	67282.6595	4.4344916	10.283266	150545.52
52	17.716535	35.433071	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	584,244.46	23,126.26	32.755905	2.6771654	36.139104	[illegible]	0.605908415	0.8661417	8	4.714	31990.924	ok	-48065.4	48065.3959	6.2077859	10.283266	150545.52
BP7/53	11.811024	21.653543	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	88,617.72	9,539.42	18.976378	2.6771654	24.512491	[illegible]	0.158377215	0.6299213	5	1.558	12355.469	ok	-17848.85	17848.8484	9.1846287	15.424898	58143.384
A1/54	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	305,475.44	4,272.91	15.03937	2.6771654	161.4328	0.004743165	0.702233027	0.6299213	8	2.493	8160.0781	ok	-14173.23	14173.2266	7.665866	18.509878	38400.367
55	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	279,786.17	3,906.19	15.03937	2.6771654	147.85609	0.004339325	0.642329298	0.6299213	8	2.493	8160.0781	ok	-14604.67	14604.6661	9.3803246	18.509878	38400.367
56	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	293,270.67	4,023.74	15.03937	2.6771654	154.79302	0.004553307	0.674004615	0.6299213	8	2.493	8160.0781	ok	-14466.37	14466.3669	9.470981	18.509878	38400.367
57	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	324,523.83	4,306.40	15.03937	2.6771654	171.49519	0.005051059	0.747684499	0.6299213	8	2.493	8160.0781	ok	-14133.83	14133.8336	9.6928061	18.509878	38400.367
58	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	19,019.89	5,492.90	15.03937	2.6771654	10.051328	0.000289163	0.042803476	0.6299213	8	2.493	8160.0781	ok	-12732.94	12732.9442	10.754974	18.509878	38400.367
59	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	300,103.49	4,081.62	15.03937	2.6771654	158.59392	0.004560914	0.690081157	0.6299213	8	2.493	8160.0781	ok	-14398.28	14398.2779	9.5147843	18.509878	38400.367
60	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	280,549.40	3,801.12	15.03937	2.6771654	148.26029	0.004351424	0.64412077	0.6299213	8	2.493	8160.0781	ok	-14728.28	14728.2831	9.301594	18.509878	38400.367
61	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	295,964.08	4,412.53	15.03937	2.6771654	156.40639	0.004596104	0.680339655	0.6299213	8	2.493	8160.0781	ok	-14008.97	14008.9715	9.7791982	18.509878	38400.367
62	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	301,701.70	4,835.30	15.03937	2.6771654	160.49545	0.004719155	0.698554332	0.6299213	8	2.493	8160.0781	ok	-13511.59	13511.5940	10.139182	18.509878	38400.367
63	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	13,148.71	1,981.51	15.03937	2.6771654	6.948623	0.000199816	0.029577754	0.6299213	8	2.493	8160.0781	ok	-16868.99	16868.9918	8.1212631	18.509878	38400.367
64	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	334,481.65	3,671.57	15.03937	2.6771654	176.76155	0.005210186	0.77123926	0.6299213	8	2.493	8160.0781	ok	-14880.68	14880.6839	9.2063115	18.509878	38400.367
65	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	277,905.49	3,993.12	15.03937	2.6771654	146.86308	0.004309517	0.637917591	0.6299213	8	2.493	8160.0781	ok	-14502.39	14502.3944	9.4464752	18.509878	38400.367
66	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	385,617.10	1,723.09	15.03937	2.6771654	203.78479	0.006032459	0.892808478	0.6299213	8	2.493	8160.0781	ok	-17173.02	17173.0182	7.9774276	18.509878	38400.367
67	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	314,631.77	3,819.39	15.03937	2.6771654	176.84088	0.005212586	0.771594555	0.6299213	8	2.493	8160.0781	ok	-14706.78	14706.7821	9.3151927	18.509878	38400.367
68	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	276,299.20	4,024.11	15.03937	2.6771654	146.01421	0.004284066	0.634150173	0.6299213	8	2.493	8160.0781	ok	-14465.91	14465.9117	9.470299	18.509878	38400.367
69	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	433,194.94	290.14	15.03937	2.6771654	228.92798	0.00680191	1.006854759	0.6299213	8	2.493	8160.0781	ok	-18858.85	18858.8483	7.2643094	18.509878	38400.367
70	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	336,355.96	3,753.78	15.03937	2.6771654	172.75205	0.005240166	0.775677151	0.6299213	8	2.493	8160.0781	ok	-14783.97	14783.9696	9.2665578	18.509878	38400.367
71	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	291,220.16	4,019.32	15.03937	2.6771654	153.8994	0.004520738	0.669183562	0.6299213	8	2.493	8160.0781	ok	-14471.57	14471.5711	9.4665955	18.509878	38400.367
72	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	334,653.39	3,937.30	15.03937	2.6771654	176.85231	0.005212932	0.771645842	0.6299213	8	2.493	8160.0781	ok	-14568.07	14568.0679	9.4038901	18.509878	38400.367
73	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	289,374.42	4,023.34	15.03937	2.6771654	152.92399	0.00449143	0.664845313	0.6299213	8	2.493	8160.0781	ok	-14466.84	14466.8375	9.4696929	18.509878	38400.367
74	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	244,737.27	12,706.46	15.03937	2.6771654	129.33486	0.003785307	0.560121126	0.6299213	8	2.493	8160.0781	perlu	-4251.407	4251.4069	32.223806	18.509878	38400.367

75	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	321,058.14	3,776.18	15.03937	2.6771654	169.662781	0.004995741	0.739496641	0.6299213	8	2.493	81601.0781	ok	14757.62	14757.6213	9.2831023	18.5098578	38400.367			
76	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	273,052.55	4,142.21	15.03937	2.6771654	144.29847	0.004232644	0.626538428	0.6299213	8	2.493	81601.0781	ok	14327	14327.0005	9.5621207	18.5098578	38400.367			
78	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	394,246.14	676.70	15.03937	2.6771654	208.34493	0.006170737	0.913425122	0.6299213	8	2.493	81601.0781	ok	-18404.07	18404.0689	7.4438163	18.5098578	38400.367			
79	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	112,201.85	5,619.73	15.03937	2.6771654	59.294648	0.001757291	0.254276563	0.6299213	8	2.493	81601.0781	ok	-12588.73	12588.7314	10.88247	18.5098578	38400.367			
80	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	342,304.84	14,710.20	15.03937	2.6771654	180.89582	0.005335383	0.7897716	0.6299213	8	2.493	81601.0781	ok	-18948.062	18948.0616	72.32949	18.5098578	38400.367			
81	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	149,485.98	3,689.58	15.03937	2.6771654	78.997925	0.002295[illegible]	0.339271431	0.6299213	8	2.493	81601.0781	[illegible]	-18948.062	18948.0616	72.32949	18.5098578	38400.367			
82	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	283,148.71	4,235.91	15.03937	2.6771654	148.577	0.004380935	0.648522246	0.6299213	8	2.493	81601.0781	ok	-14859.5	14859.5006	9.2394558	18.5098578	38400.367			
83	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	337,662.91	1,819.19	15.03937	2.6771654	177.14473	0.005261077	0.778772488	0.6299213	8	2.493	81601.0781	ok	-14240.29	14240.2905	9.2013451	18.5098578	38400.367			
84	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.984252	210,145.67	5,075.12	14.362205	2.8543307	113.71788	0.003320583	0.485740859	0.984252	8	6.087	80631.9515	ok	-17059.96	17059.9606	8.5302946	18.5098578	38400.367			
85	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	312,739.16	3,851.76	15.03937	2.6771654	165.27142	0.004863074	0.719857914	0.6299213	8	2.493	81601.0781	ok	-13003.27	13003.2727	10.411431	18.5098578	37948.802			
86	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	271,331.11	3,745.15	15.03937	2.6771654	143.38825	0.004210539	0.622504123	0.6299213	8	2.493	81601.0781	ok	-14668.7	14668.69761	9.3303287	18.5098578	38400.367			
87	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	262,696.53	3,842.43	15.03937	2.6771654	138.83569	0.004076088	0.6022851	0.6299213	8	2.493	81601.0781	ok	-14794.12	14794.1228	9.2601981	18.5098578	38400.367			
88	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	339,722.59	2,279.47	15.03937	2.6771654	179.53139	0.005529404	0.783651895	0.6299213	8	2.493	81601.0781	ok	-14679.68	14679.6767	9.3133928	18.5098578	38400.367			
89	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	314,118.71	3,977.50	15.03937	2.6771654	166.00846	0.004885061	0.723312608	0.6299213	8	2.493	81601.0781	ok	-16518.45	16518.4534	8.2938433	18.5098578	38400.367			
90	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	271,562.57	3,498.21	15.03937	2.6771654	143.51102	0.004209054	0.623046505	0.6299213	8	2.493	81601.0781	ok	-14520.78	14520.7757	9.2345173	18.5098578	38400.367			
A1/91	9.8425197	17.716535	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	259,445.02	3,583.19	15.03937	2.6771654	137.10738	0.004011743	0.594678788	0.6299213	8	2.493	81601.0781	ok	-15084.64	15084.6392	9.0818552	18.5098578	38400.367			
A2/92	13.779528	25.590551	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	335,903.75	1,921.27	15.03937	2.6771654	177.53467	0.005212932	0.774606307	0.6299213	8	2.493	81601.0781	ok	-14984.66	14984.6613	9.1424495	18.5098578	38400.367			
A2/93	13.779528	25.590551	0.85	4206.0933	34809.048	1.96850039	0.8	0.3937008	0.6299213	349,611.81	13,800.57	22.913386	2.6771654	56.851121	0.001646483	0.519853296	0.6299213	6	1.870	17405.518	ok	-16939.86	16939.8607	8.0872236	18.5098578	38400.367			
										322,926.97	10,206.75	22.913386	2.6771654	52.513689	0.001519867	0.479876241	0.6299213	6	1.870	17405.518	ok	-24717.73	24717.7297	8.4442395	13.221341	81907.381			
																						-28945.75	28945.7492	7.2108146	13.221341	81907.381			

sk 10 · tul 16 · tul sengkang 10 · jml tul 8 · As 0.1308452

Perhitungan Lentur dan Geser Tumpuan Lantai 5

	b	h		Ix	Iy	cv		sk	tul	mu	v	d	d'	Ru	ρ	As	tul pakai	jml tul	as pakai	øvs		vs	|VS|	s	S As min	sv
BP1/1	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,213,106.43	15,183.08	26.850394	2.6771654	105.51008	0.001075164	1.462843171	0.7480315	9	3.955	27765.878	ok	44811.86	44811.8644	5.455615	10.283266	123403.9
2	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	684,920.31	26,831.24	26.850394	2.6771654	59.587322	0.001725378	0.820755175	0.7480315	9	3.955	27765.878	ok	31889.46	31889.4613	7.6697874	10.283266	123403.9
3	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,264,102.99	36,388.64	26.850394	2.6771654	109.96636	0.0022064	1.525271684	0.7480315	9	3.955	27765.878	perlu	21270.13	21270.1307	11.499007	10.283266	123403.9
4	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	884,223.45	15,258.67	26.850394	2.6771654	76.920024	0.00223269	1.062081626	0.7480315	9	3.955	27765.878	ok	44747.87	44747.8707	5.4658554	10.283266	123403.9
5	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	587,307.46	24,346.07	26.850394	2.6771654	51.090823	0.001477786	0.702976902	0.7480315	9	3.955	27765.878	ok	34650.77	34650.7628	7.058585	10.283266	123403.9
BP1/6	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,005,559.48	27,400.26	26.850394	2.6771654	87.47524	0.002542729	1.209566004	0.7480315	9	3.955	27765.878	ok	31257.28	31257.2819	7.8249091	10.283266	123403.9
BP2/7	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	455,224.49	9,962.00	17.007874	2.6771654	148.04235	0.004339568	0.871774152	0.7086614	9	3.955	27765.878	ok	14987.06	14987.0650	10.337447	10.283266	123403.9
8	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	509,127.78	14,032.97	17.007874	2.6771654	165.53523	0.00486553	0.972389573	0.7086614	8	3.155	11725.18	perlu	10397.1	10397.0986	4.961079	15.424898	52111.912
9	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	461,650.33	7,524.53	17.007874	2.6771654	150.13518	0.004402215	0.884318655	0.7086614	8	3.155	11725.18	ok	17695.36	17695.3639	8.755257	15.424898	52111.912
10	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	560,255.24	14,950.43	17.007874	2.6771654	182.20311	0.005366286	1.078082093	0.7086614	8	3.155	11725.18	perlu	9444.363	9444.3630	6.404281	15.424898	52111.912
11	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	581,494.00	12,189.83	17.007874	2.6771654	189.11028	0.005575728	1.120054389	0.7086614	8	3.155	11725.18	perlu	12511.7	12511.7041	2.382645	15.424898	52111.912
12	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	768,817.30	18,302.00	17.007874	2.6771654	250.10655	0.007437227	1.493993229	0.7086614	8	3.155	11725.18	perlu	5720.406	5720.4060	27.08333	15.424898	52111.912
13	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	464,983.77	9,592.70	17.007874	2.6771654	151.21946	0.004434677	0.890839226	0.7086614	8	3.155	11725.18	ok	15397.4	15397.4019	4.061957	15.424898	52111.912
14	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	536,679.48	14,191.65	17.007874	2.6771654	174.53395	0.005135347	1.031590495	0.7086614	8	3.155	11725.18	perlu	10287.46	10287.4594	5.059888	15.424898	52111.912
15	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	471,358.20	10,545.48	17.007874	2.6771654	153.29252	0.004496283	0.903315534	0.7086614	8	3.155	11725.18	ok	14894.31	14894.3065	11.401526	15.424898	52111.912
BP2/16	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	579,710.80	14,907.59	17.007874	2.6771654	188.53036	0.005558169	1.116527151	0.7086614	8	3.155	11725.18	perlu	9491.965	9491.9646	16.322015	15.424898	52111.912
BP1/17	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,751,166.83	48,719.23	26.850394	2.6771654	171.77893	0.0050402	2.131202424	0.984252	9	6.848	24680.781	perlu	213.7001	213.7001	142.20053	11.568674	109692.36
18	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,802,251.49	60,617.62	26.850394	2.6771654	126.17836	0.005190914	2.394910441	0.984252	9	6.848	24680.781	perlu	12506.733	12506.7328	3.556298	11.568674	109692.36
19	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,284,031.71	64,509.72	26.850394	2.6771654	223.52805	0.006623239	2.80052595	0.984252	9	6.848	24680.781	perlu	16831.292	16831.2920	14.531582	11.568674	109692.36
20	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,015,611.02	59,449.00	26.850394	2.6771654	197.25891	0.005822769	2.462104763	0.984252	9	6.848	24680.781	perlu	11208.266	11208.2656	21.821837	11.568674	109692.36
21	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,843,091.78	38,480.42	26.850394	2.6771654	278.24078	0.008370916	3.51419462	0.984252	9	6.848	24680.781	perlu	12090.16	12090.1592	21.230121	11.568674	109692.36
22	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,557,752.36	57,983.41	26.850394	2.6771654	152.45031	0.004471547	1.890752803	0.984252	9	6.848	24680.781	perlu	9584.2774	9584.2774	25.51944	11.568674	109692.36
23	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,759,181.44	61,615.29	26.850394	2.6771654	172.16328	0.005063831	2.141194514	0.984252	9	6.848	24680.781	perlu	13615.255	13615.2552	17.96407	11.568674	109692.36
24	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,153,633.60	55,136.83	26.850394	2.6771654	112.901	0.003293304	1.392543601	0.984252	9	6.848	24680.781	perlu	6416.9676	6416.9676	34.115416	11.568674	109692.36
25	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	748,384.52	19,376.68	26.850394	2.6771654	73.24029	0.002124831	0.898465436	0.984252	9	6.848	24680.781	perlu	11094.32	11094.3121	22.046007	11.568674	109692.36
26	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,212,912.62	34,667.37	26.850394	2.6771654	118.70228	0.003465109	1.465274117	0.984252	9	6.848	24680.781	perlu	16126.88	16126.8805	14.980534	11.568674	109692.36
27	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,628,874.93	61,426.54	26.850394	2.6771654	257.27633	0.007206093	3.239747101	0.984252	9	6.848	24680.781	perlu	13461.089	13461.0886	15.159808	11.568674	109692.36
28	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,612,496.80	63,686.53	26.850394	2.6771654	255.6734	0.007611789	3.218406088	0.984252	9	6.848	24680.781	perlu	15872.186	15872.1860	15.409685	11.568674	109692.36
29	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,419,259.09	42,631.79	26.850394	2.6771654	305.26865	0.009155155	3.821173527	0.984252	9	6.848	24680.781	perlu	7477.521	7477.5213	32.709421	11.568674	109692.36
BP3/30	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,550,643.64	74,833.87	26.850394	2.6771654	151.55461	0.004430706	1.881940336	0.984252	9	6.848	24680.781	perlu	28302.564	28302.5635	8.6418105	11.568674	109692.36
BP4/31	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	113,059.89	11,438.01	17.007874	2.6771654	122.17394	0.003568377	0.592147449	0.6299213	8	2.493	9770.9835	perlu	9004.397	9004.3970	17.205815	18.509878	43426.594
32	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	435,891.23	13,220.06	17.007874	2.6771654	170.10977	0.005001925	0.817332227	0.6299213	8	2.493	9770.9835	perlu	6468.789	6468.7887	23.950077	18.509878	43426.594
33	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	466,817.85	14,186.31	17.007874	2.6771654	187.12912	0.005536606	0.898280299	0.6299213	8	2.493	9770.9835	perlu	5950.725	5950.7245	25.035147	18.509878	43426.594
34	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	229,613.01	6,515.68	17.007874	2.6771654	89.608175	0.00266549	0.436159914	0.6299213	8	2.493	9770.9835	ok	15562.54	15562.5356	9.9551874	18.509878	43426.594
35	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	310,325.16	11,380.53	17.007874	2.6771654	123.26262	0.003537261	0.552138612	0.6299213	8	2.493	9770.9835	perlu	9068.268	9068.2684	17.084628	18.509878	43426.594
36	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	400,405.41	12,930.93	17.007874	2.6771654	[illegible]	0.004585783	0.767661659	0.6299213	8	2.493	9770.9835	perlu	7345.599	7345.5995	21.091266	18.509878	43426.594
37	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	332,474.35	11,234.21	17.007874	2.6771654	[illegible]	0.003793665	0.637066833	0.6299213	8	2.493	9770.9835	perlu	8675.286	8675.2857	17.858546	18.509878	43426.594
38	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	397,473.15	12,894.24	17.007874	2.6771654	155.11684	0.004551467	0.761947106	0.6299213	8	2.493	9770.9835	perlu	7453.032	7453.0316	21.782244	18.509878	43426.594
BP4/39	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	536,375.88	15,495.46	17.007874	2.6771654	204.12465	0.006189659	1.036151927	0.6299213	8	2.493	9770.9835	perlu	4540.899	4540.8992	4.11835	18.509878	43426.594
BP5/40	19.69	39.37	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,748,931.08	42,733.52	36.692913	2.6771654	115.24462	[illegible]	2.428924742	0.984252	9	6.848	42159.985	perlu	46207.36	46207.3625	7.233521	9.254939	182177.71
41	19.69	39.37	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,825,287.85	14,936.16	36.692913	2.6771654	118.44574	0.003457692	2.497499874	0.984252	9	6.848	42159.985	perlu	21544.21	21544.2033	15.514377	9.254939	182177.71
BP6/42	17.716535	35.433071	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	877,892.26	14,134.49	32.755905	2.6771654	51.31145	0.001484303	0.861372309	0.8661417	8	4.714	33872.743	ok	59145.56	59145.5559	5.0278525	10.283266	150545.52
43	17.716535	35.433071	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,168,488.04	21,650.03	32.755905	2.6771654	[illegible]	0.001044461	2.149726876	0.8661417	8	4.714	33872.743	ok	51122.73	51122.7265	5.916071	10.283266	150545.52
BP7/44	11.811024	21.653543	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	444,230.48	8,196.70	18.976378	2.6771654	116.05174	0.00338668	0.590597753	0.6299213	5	1.558	13082.261	ok	19964.25	19964.2476	8.6584515	15.424898	58143.384
A1/45	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	251,541.53	10,123.55	15.03937	2.6771654	125.54663	0.003666698	0.543046027	0.6299213	8	2.493	8640.0827	perlu	7896.239	7896.2389	7.34957	18.509878	38400.367
46	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	219,407.09	9,913.14	15.03937	2.6771654	109.30717	0.003192809	0.472616502	0.6299213	8	2.493	8640.0827	perlu	8185.361	8185.3614	6.25627	18.509878	38400.367
47	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	218,769.04	9,904.71	15.03937	2.6771654	109.18872	0.003183384	0.471221371	0.6299213	8	2.493	8640.0827	perlu	8194.955	8194.9550	16.712176	18.509878	38400.367
48	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	282,215.90	10,586.33	15.03937	2.6771654	140.85338	0.004174739	0.615565651	0.6299213	8	2.493	8640.0827	perlu	7437.6	7437.6003	18.41945	18.509878	38400.367
49	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	165,986.84	8,690.14	15.03937	2.6771654	82.34855	0.002460009	0.362398062	0.6299213	8	2.493	8640.0827	ok	9644.471	9644.4711	14.204665	18.509878	38400.367
50	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	243,392.99	10,095.81	15.03937	2.6771654	121.47965	0.003547727	0.52515332	0.6299213	8	2.493	8640.0827	perlu	7982.614	7982.6142	7.16186	18.509878	38400.367
51	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	229,352.26	9,891.89	15.03937	2.6771654	109.47961	0.003193994	0.472496604	0.6299213	8	2.493	8640.0827	perlu	8209.194	8209.1945	16.688129	18.509878	38400.367
52	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	245,011.01	10,349.11	15.03937	2.6771654	122.31616	0.003572601	0.528835374	0.6299213	8	2.493	8640.0827	perlu	7716.725	7716.7252	17.753193	18.509878	38400.367
53	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	306,222.73	11,237.85	15.03937	2.6771654	152.83725	0.00448514	0.663618334	0.6299213	8	2.493	8640.0827	perlu	6713.682	6713.6818	20.465571	18.509878	38400.367
54	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	110,960.08	5,469.34	15.03937	2.6771654	55.18971	0.001602798	0.237254644	0.6299213	8	2.493	8640.0827	ok	13123.14	13123.1415	10.439767	18.509878	38400.367
55	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	272,707.01	9,869.67	15.03937	2.6771654	136.10944	0.003983118	0.589602174	0.6299213	8	2.493	8640.0827	perlu	8233.888	8233.8883	16.63813	18.509878	38400.367
56	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	216,393.77	9,987.46	15.03937	2.6771654	108.10121	0.003148305	0.466028845	0.6299213	8	2.493	8640.0827	perlu	8102.985	8102.9850	16.906919	18.509878	38400.367
57	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	191,079.15	8,029.62	15.03937	2.6771654	95.368557	0.002775173	0.410795806	0.6299213	8	2.493	8640.0827	ok	10278.18	10278.3801	13.328699	18.509878	38400.367
58	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	269,762.40	9,820.91	15.03937	2.6771654	134.63976	0.0039391	0.583116103	0.6299213	8	2.493	8640.0827	perlu	8288.065	8288.0650	16.529172	18.509878	38400.367
59	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	209,293.14	9,878.42	15.03937	2.6771654	104.45925	0.003043511	0.450516561	0.6299213	8	2.493	8640.0827	perlu	8224.164	8224.1638	16.657804	18.509878	38400.367
60	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	227,522.66	8,219.97	15.03937	2.6771654	113.55769	0.003312761	0.490722409	0.6299213	8	2.493	8640.0827	ok	10066.88	10066.8793	13.608638	18.509878	38400.367
61	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	268,508.80	9,786.94	15.03937	2.6771654	134.10408	0.003920652	0.580155666	0.6299213	8	2.493	8640.0827	perlu	8325.806	8325.8065	16.454443	18.509878	38400.367
62	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	219,018.10	9,709.31	15.03937	2.6771654	109.31103	0.003187063	0.471265943	0.6299213	8	2.493	8640.0827	perlu	8412.659	8412.0590	16.285729	18.509878	38400.367
63	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	273,914.72	9,885.33	15.03937	2.6771654	136.3122	0.004001094	0.592263106	0.6299213	8	2.493	8640.0827	perlu	8216.486	8216.4859	16.67337	18.509878	38400.367
64	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	218,358.40	9,771.29	15.03937	2.6771654	108.98376	0.003177319	0.470323549	0.6299213	8	2.493	8640.0827	perlu	8343.19	8343.1895	16.42018	18.509878	38400.367
65	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	443,235.65	5,630.44	15.03937	2.6771654	221.22112	0.006552691	0.969964084	0.6299213	8	2.493	8640.0827	ok	12944.14	12944.1353	10.583674	18.509878	38400.367
66	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	269,290.92	2,573.28	15.03937	2.6771654	134.40444	0.003932286	0.582072851	0.6299213	8	2.493	8640.0827	ok	16340.99	16340.9855	8.3836136	18.509878	38400.367
67	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	202,821.09	9,640.18	15.03937	2.6771654	101.22962	0.002948083	0.436390892	0.6299213	8	2.493	8640.0827	perlu	8488.869	8488.8692	16.13837	18.509878	38400.367
68	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	219,961.51	8,259.26	15.03937	2.6771654	109.78388	0.003200999	0.47382885	0.6299213	8	2.493	8640.0827	ok	10023.23	10023.2263	13.662905	18.509878	38400.367
69	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	469,394.81	12,987.94	15.03937	2.6771654	234.27729	0.006952603	1.029161117	0.6299213	8	2.493	8640.0827	perlu	4769.14	4769.1404	28.725619	18.509878	38400.367
70	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	392,374.90	5,125.95	15.03937	2.6771654	195.83627	0.005779597	0.855526489	0.6299213	8	2.493	8640.0827	ok	13504.69	13504.6857	10.144369	18.509878	38400.367
71	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	286,467.37	9,825.39	15.03937	2.6771654	142.97729	0.00418812	0.619947312	0.6299213	8	2.493	8640.0827	perlu	8283.089	8283.0893	16.539302	18.509878	38400.367
72	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	217,525.32	9,789.25	15.03937	2.6771654	108.56797	0.003165015	0.468502285	0.6299213	8	2.493	8640.0827	perlu	8323.236	8323.2357	16.459525	18.509878	38400.367
73	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	144,041.84	7,604.86	15.03937	2.6771654	71.892	0.002085318	0.308679877	0.6299213	8	2.493	8640.0827	ok	10750.34	10750.3376	12.743461	18.509878	38400.367
74	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	283,206.82	11,639.25	15.03937	2.6771654	141.34994	0.004139508	0.6127519	0.6299213	8	2.493	8640.0827	perlu	6267.688	6267.6879	21.857583	18.509878	38400.367

A2/75	13.779528	25.590551	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	580,694.34	17,775.14	22.913386	2.6771654	89.185084	0.002593038	0.818714439	0.6299213	6	1.870	18429.161	ok	-21203.54	21203.5351	9.8437562	13.221341	81907.381
A2/76	13.779528	25.590551	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	438,857.83	14,204.57	22.913386	2.6771654	67.401331	0.001953869	0.616905943	0.6299213	6	1.870	18429.161	ok	-25170.83	25170.8299	8.2922347	13.221341	81907.381

Perhitungan Lentur dan Geser Lapangan lantai 5

sk 10
tul 16 tul sengkang 10 As 0.1308452
jml tul 8

	b	h		k	fy	ey		sk	tul	mu	v	d	d'	Rn	ρ	As	tul pakai	jml tul	as pakai	φvc		vs	|VS|	s	S Av min	vs
BP1/1	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	722,602.38	9,431.53	26.850394	2.6771654	62.860346	0.00182111	0.866294775	0.7480315	9	3.955	27765.878	ok	-51222.48	51222.4757	4.7249623	10.283266	123403.9
2	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,072,852.05	4,898.55	26.850394	2.6771654	93.329129	0.002715067	1.291546272	0.7480315	9	3.955	27765.878	ok	-56259.12	56259.1189	4.3474799	10.283266	123403.9
3	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,221,798.82	10,465.57	26.850394	2.6771654	106.28625	0.003097522	1.47347866	0.7480315	9	3.955	27765.878	ok	-50073.54	50073.5410	4.8845236	10.283266	123403.9
4	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	173,222.67	10,437.16	26.850394	2.6771654	15.06892	0.000433767	0.206341421	0.7480315	9	3.955	27765.878	ok	-50105.1	50105.1033	4.8814467	10.283266	123403.9
5	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	942,328.47	3,797.69	26.850394	2.6771654	81.974672	0.002381048	1.132654842	0.7480315	9	3.955	27765.878	ok	-57482.3	57482.2990	4.2549688	10.283266	123403.9
BP1/6	17.716535	29.527559	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,224,562.84	6,305.04	26.850394	2.6771654	106.5267	0.003104612	1.476861023	0.7480315	9	3.955	27765.878	ok	-54696.35	54696.3501	4.4716949	10.283266	123403.9
BP2/7	13.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	96,276.99	7,372.67	17.007874	2.6771654	31.310672	0.000903249	0.181445055	0.7086614	8	3.155	11725.18	ok	-17864.1	17864.0923	8.6725899	15.424898	52111.912
8	13.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	257,759.82	7,535.32	17.007874	2.6771654	83.827231	0.002435474	0.489238944	0.7086614	8	3.155	11725.18	ok	-17683.38	17683.3759	8.7612224	15.424898	52111.912
9	13.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	93,744.71	7,524.53	17.007874	2.6771654	30.487139	0.000879395	0.17665323	0.7086614	8	3.155	11725.18	ok	-17695.36	17695.3639	8.755287	15.424898	52111.912
10	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	258,249.76	8,392.78	17.007874	2.6771654	83.986566	0.002440156	0.490179542	0.7086614	8	3.155	11725.18	ok	-16730.64	16730.6403	9.2600351	15.424898	52111.912
11	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	90,992.04	9,600.50	17.007874	2.6771654	29.591931	0.000853471	0.171445562	0.7086614	8	3.155	11725.18	ok	-15388.34	15388.3365	10.067622	15.424898	52111.912
12	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	268,864.97	11,744.35	17.007874	2.6771654	87.445289	0.002541848	0.510607489	0.7086614	8	3.155	11725.18	perlu	-13006.68	13006.6835	11.911414	15.424898	52111.912
13	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	127,855.52	7,003.37	17.007874	2.6771654	41.580467	0.001201164	0.2412903	0.7086614	8	3.155	11725.18	ok	-18274.43	18274.4343	8.4778542	15.424898	52111.912
14	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	244,331.80	8,030.83	17.007874	2.6771654	79.460242	0.002307222	0.463475595	0.7086614	8	3.155	11725.18	ok	-17132.81	17132.8122	9.0427647	15.424898	52111.912
15	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	107,490.62	7,456.16	17.007874	2.6771654	34.957508	0.001008945	0.202677336	0.7086614	8	3.155	11725.18	ok	-17771.34	17771.3388	8.7176569	15.424898	52111.912
BP2/16	11.811024	19.685039	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	245,082.89	8,746.77	17.007874	2.6771654	79.704507	0.002314391	0.464915835	0.7086614	8	3.155	11725.18	ok	-16337.32	16337.3174	9.483074	15.424898	52111.912
BP3/17	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,956,593.14	14,438.74	26.850394	2.6771654	191.48309	0.005642603	2.388037221	0.984252	9	6.848	24680.781	ok	38803.11	38803.1294	6.3032388	11.568674	109692.36
18	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,325,779.57	12,743.24	26.850394	2.6771654	227.61373	0.006748302	2.85145755	0.984252	9	6.848	24680.781	ok	40682.02	40682.0197	6.0113862	11.568674	109692.36
19	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,415,857.04	16,930.44	26.850394	2.6771654	236.42921	0.007018667	2.967779259	0.984252	9	6.848	24680.781	ok	36014.58	36014.5815	6.7875185	11.568674	109692.36
20	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,496,706.62	12,717.92	26.850394	2.6771654	244.3416	0.007261949	3.070648746	0.984252	9	6.848	24680.781	ok	40716.16	40716.1594	6.007084	11.568674	109692.36
21	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,433,121.59	31,380.15	26.850394	2.6771654	140.27283	0.004107345	1.736753266	0.984252	9	6.848	24680.781	perlu	-19979.35	19979.3494	12.24191	11.568674	109692.36
22	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,257,980.52	10,662.86	26.850394	2.6771654	220.97854	0.006545276	2.767609951	0.984252	9	6.848	24680.781	ok	42998.55	42998.5547	5.6882235	11.568674	109692.36
23	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,470,636.79	11,849.75	26.850394	2.6771654	241.79626	0.00718344	3.037451208	0.984252	9	6.848	24680.781	ok	-41679.79	41679.7869	5.8682016	11.568674	109692.36
24	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,133,420.26	7,542.44	26.850394	2.6771654	208.78838	0.006173125	2.610333771	0.984252	9	6.848	24680.781	ok	-46465.69	46465.6947	5.2637842	11.568674	109692.36
25	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,259,244.26	7,487.98	26.850394	2.6771654	123.23664	0.003599947	1.522204494	0.984252	9	6.848	24680.781	ok	-46526.2	46526.2019	5.2569387	11.568674	109692.36
26	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,573,661.40	26,310.09	26.850394	2.6771654	154.00726	0.004518204	1.910481144	0.984252	9	6.848	24680.781	perlu	-25612.75	25612.7504	9.5493606	11.568674	109692.36
27	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,852,890.50	15,496.92	26.850394	2.6771654	279.19924	0.008340749	3.52680926	0.984252	9	6.848	24680.781	ok	-37627.37	37627.3746	6.500198	11.568674	109692.36
28	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,206,427.51	12,425.76	26.850394	2.6771654	313.79883	0.009423118	3.984478993	0.984252	9	6.848	24680.781	ok	-41039.78	41039.7808	5.9597148	11.568674	109692.36
29	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,325,125.43	1,536.95	26.850394	2.6771654	423.28084	0.012928578	5.466730829	0.984252	9	6.848	24680.781	ok	-53138.45	53138.4534	4.6027947	11.568674	109692.36
BP3/30	15.75	29.53	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,743,951.58	12,113.46	26.850394	2.6771654	366.40093	0.01[illegible]	4.700646263	0.984252	9	6.848	24680.781	ok	-41386.75	41386.7521	5.9092508	11.568674	109692.36
BP4/31	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	282,510.12	4,952.24	17.007874	2.6771654	110.25106	0.003214846	0.538466297	0.6299213	8	2.493	9770.9835	ok	-17315.82	17315.8231	8.9471914	18.509878	43426.594
32	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	288,276.21	6,239.77	17.007874	2.6771654	112.50153	0.003281471	0.549719285	0.6299213	8	2.493	9770.9835	ok	-14780.22	14780.2154	10.48212	18.509878	43426.594
33	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	291,666.93	6,706.03	17.007874	2.6771654	113.82518	0.003320687	0.555884096	0.6299213	8	2.493	9770.9835	ok	-14262.15	14262.1513	10.862877	18.509878	43426.594
34	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	242,620.37	4,225.98	17.007874	2.6771654	94.684395	0.002755063	0.461188846	0.6299213	8	2.493	9770.9835	ok	-16995.54	16995.5432	9.1158009	18.509878	43426.594
35	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	300,920.47	3,900.24	17.007874	2.6771654	117.43644	0.003422754	0.572837122	0.6299213	8	2.493	9770.9835	ok	-17329.7	17329.6951	8.91431	18.509878	43426.594
36	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	299,391.54	5,450.64	17.007874	2.6771654	116.83926	0.00340[illegible]	0.570644518	0.6299213	8	2.493	9770.9835	ok	-15652.03	15652.0262	9.8951095	18.509878	43426.594
37	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	302,192.79	4,253.93	17.007874	2.6771654	117.9309	[illegible]	0.57761566	0.6299213	8	2.493	9770.9835	ok	-16986.73	16986.7125	9.1203399	18.509878	43426.594
38	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	267,016.82	[illegible]	17.007874	2.6771654	104.20529	[illegible]	0.508228244	0.6299213	8	2.493	9770.9835	ok	-15323.53	15323.5338	10.110461	18.509878	43426.594
BP4/39	9.84	19.69	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	286,293.29	7,974.87	17.007874	2.6771654	111.72807	[illegible]	0.545484452	0.6299213	8	2.493	9770.9835	ok	-12852.33	12852.3359	12.054471	18.509878	43426.594
BP5/40	19.69	39.37	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,132,030.68	3,209.55	36.692913	2.6771654	[illegible]	[illegible]	[illegible]	0.984252	9	6.848	42159.985	ok	-36789.35	36789.3504	5.8856092	9.254939	187377.21
41	19.69	39.37	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	4,699,337.19	48,307.88	36.692913	2.6771654	[illegible]	[illegible]	4.200789434	0.984252	9	6.848	42159.985	perlu	40013.43	40013.4370	8.3532647	9.254939	187377.21
BP6/42	17.716535	35.433071	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	583,751.61	6,276.39	[illegible]	2.6771654	34.12146	[illegible]	0.521445146	0.8661417	8	4.714	33872.243	ok	62743.44	62743.4432	4.4043566	10.283266	150545.52
43	17.716535	35.433071	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	634,121.[illegible]	[illegible]	[illegible]	2.6771654	[illegible]	[illegible]	[illegible]	0.8661417	8	4.714	33872.243	ok	-56368.11	56368.1131	5.2934153	10.283266	150545.52
BP7/44	11.811024	21.653543	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	83,206.31	6,094.29	18.976378	2.6771654	[illegible]	[illegible]	0.140165563	0.6299213	5	1.558	13082.261	ok	-21855.81	21855.8137	7.9096841	15.424898	58143.384
A1/45	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	302,821.17	2,812.32	15.03937	2.6771654	151.13956	0.004432284	0.656098191	0.6299213	8	2.493	8640.0827	ok	-16075.39	16075.3903	8.5221225	18.509878	38400.367
46	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	286,051.48	2,555.11	15.03937	2.6771654	142.76932	[illegible]	0.6190297	0.6299213	8	2.493	8640.0827	ok	-16364.51	16364.5106	8.3715625	18.509878	38400.367
47	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	285,923.32	[illegible]	15.03937	2.6771654	142.70539	0.004180507	0.618524682	0.6299213	8	2.493	8640.0827	ok	-16374.1	16374.1044	8.3666566	18.509878	38400.367
48	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	309,117.06	[illegible]	15.03937	2.6771654	154.28187	0.004536435	0.670026896	0.6299213	8	2.493	8640.0827	ok	-15616.75	15616.7494	8.7724087	18.509878	38400.367
49	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	88,192.40	4,122.80	15.03937	2.6771654	44.017226	0.001271974	0.188284312	0.6299213	8	2.493	8640.0827	ok	-14619.29	14619.2899	9.3709414	18.509878	38400.367
50	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	299,261.84	2,734.56	15.03937	2.6771654	149.36288	0.004379088	0.648215866	0.6299213	8	2.493	8640.0827	ok	-16161.76	16161.7636	8.4765816	18.509878	38400.367
51	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	287,263.36	2,530.66	15.03937	2.6771654	143.37245	[illegible]	0.621704957	0.6299213	8	2.493	8640.0827	ok	-16388.34	16388.3438	8.359187	18.509878	38400.367
52	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	286,802.57	2,973.88	15.03937	2.6771654	143.14209	0.004193394	0.620698731	0.6299213	8	2.493	8640.0827	ok	-15895.87	15895.8746	8.6183687	18.509878	38400.367
53	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	294,647.93	1,876.62	15.03937	2.6771654	147.06024	[illegible]	0.638016421	0.6299213	8	2.493	8640.0827	ok	-14892.83	14892.8311	9.1988224	18.509878	38400.367
54	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	26,644.85	2,888.15	15.03937	2.6771654	13.298547	0.000382717	0.056653823	0.6299213	8	2.493	8640.0827	ok	-15991.13	15991.1257	8.5670335	18.509878	38400.367
55	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	341,930.60	2,508.43	15.03937	2.6771654	170.66923	0.005018523	0.742868354	0.6299213	8	2.493	8640.0827	ok	-16413.04	16413.0377	8.3468101	18.509878	38400.367
56	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	278,659.88	2,620.29	15.03937	2.6771654	139.08034	0.004071754	0.602222659	0.6299213	8	2.493	8640.0827	ok	-16282.13	16282.1344	8.4139159	18.509878	38400.367
57	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	368,966.65	668.36	15.03937	2.6771654	184.1511	0.00542573	0.803145254	0.6299213	8	2.493	8640.0827	ok	-18457.53	18457.5295	7.422256	18.509878	38400.367
58	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	341,865.43	2,459.67	15.03937	2.6771654	170.62674	0.005011543	0.742723342	0.6299213	8	2.493	8640.0827	ok	-16467.21	16467.2143	8.3193493	18.509878	38400.367
59	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	277,999.86	2,517.18	15.03937	2.6771654	138.75112	0.004061923	0.601267371	0.6299213	8	2.493	8640.0827	ok	-16403.31	16403.3132	8.3517584	18.509878	38400.367
60	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	394,168.97	858.74	15.03937	2.6771654	196.7312	0.005806768	0.85954857	0.6299213	8	2.493	8640.0827	ok	-18246.03	18246.0285	7.5082919	18.509878	38400.367
61	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	342,617.79	2,425.71	15.03937	2.6771654	171.00224	0.005028853	0.744397495	0.6299213	8	2.493	8640.0827	ok	-16504.96	16504.9558	8.3003257	18.509878	38400.367
62	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	297,711.38	2,348.08	15.03937	2.6771654	148.58923	0.004355933	0.644788289	0.6299213	8	2.493	8640.0827	ok	-16591.21	16591.2084	8.2571749	18.509878	38400.367
63	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	342,213.36	2,524.09	15.03937	2.6771654	170.80019	0.005022734	0.743497534	0.6299213	8	2.493	8640.0827	ok	-16395.64	16395.6353	8.3556695	18.509878	38400.367
64	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	293,391.29	2,410.06	15.03937	2.6771654	146.43305	0.004291425	0.635219513	0.6299213	8	2.493	8640.0827	ok	-16522.34	16522.3359	8.2915929	18.509878	38400.367
65	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	402,152.70	13,929.80	15.03937	2.6771654	200.71642	0.00592777	0.877459922	0.6299213	8	2.493	8640.0827	perlu	3722.62	3722.6269	36.801031	18.509878	38400.367
66	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	322,967.46	2,573.28	15.03937	2.6771654	161.19967	0.004733859	0.700730815	0.6299213	8	2.493	8640.0827	ok	-16340.99	16340.9855	8.3836136	18.509878	38400.367
67	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	250,444.35	2,675.78	15.03937	2.6771654	124.99807	0.003652293	0.54063182	0.6299213	8	2.493	8640.0827	ok	-16222.09	16222.0904	8.4424518	18.509878	38400.367
68	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	349,115.24	1,294.86	15.03937	2.6771654	174.25514	0.00512688	0.758902949	0.6299213	8	2.493	8640.0827	ok	-17761.45	17761.4515	7.7131372	18.509878	38400.367
69	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	91,967.65	6,023.54	15.03937	2.6771654	45.901515	0.001326759	0.196393965	0.6299213	8	2.493	8640.0827	ok	-12507.32	12507.3653	10.953267	18.509878	38400.367
70	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	328,866.34	10,300.25	15.03937	2.6771654	164.13883	0.004822326	0.713826199	0.6299213	8	2.493	8640.0827	perlu	7255.458	7255.4577	17.664529	18.509878	38400.367
71	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	323,153.50	2,860.98	15.03937	2.6771654	161.28752	0.004736647	0.70114363	0.6299213	8	2.493	8640.0827	ok	-16021.31	16021.3140	8.550891	18.509878	38400.367
72	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	256,345.23	2,824.85	15.03937	2.6771654	127.94318	0.003739879	0.553596718	0.6299213	8	2.493	8640.0827	ok	-16061.46	16061.4606	8.5295175	18.509878	38400.367
73	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	311,861.26	640.46	15.03937	2.6771654	155.65151	0.004567499	0.676105441	0.6299213	8	2.493	8640.0827	ok	-18488.56	18488.5625	7.4097977	18.509878	38400.367
74	9.8425197	17.716535	0.9	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	198,508.44	4,674.84	15.03937	2.6771654	99.07655	0.002884543	0.426985305	0.6299213	8	2.493	8640.0827	ok	-14005.91	14005.9128	9.7813338	18.509878	38400.367

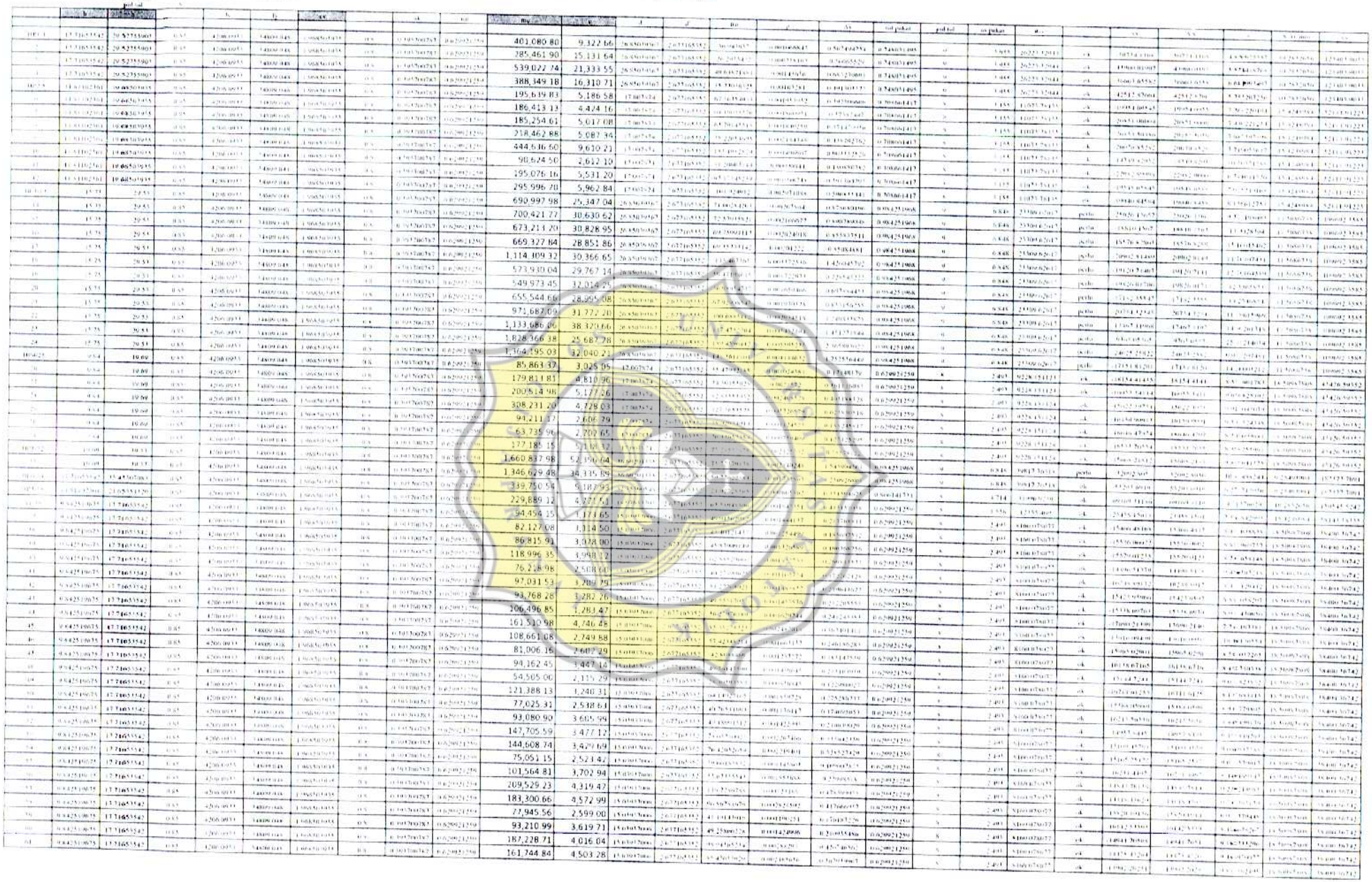
A2/75	13.779528	25.590551	0.9	4206.0933	14809.048	1.9685039	0.8	0.3937008	0.6299213	527.609.49	14.065.35	22.913386	2.6771654	81.032124	0.0023333 68	0.7430420 33	0.6299213	6	1.870	18429.161	ok	-25325.3	25325.2972	> 2416576	13.221341	X19017.381
A2/76	13.779528	25.590551	0.9	4206.0933	14809.048	1.9685039	0.8	0.3937008	0.6299213	294.860.74	10.494 99	22.913386	2.6771654	45.285752	0.0013088 53	0.4175145 3	0.6299213	6	1.870	18429.161	ok	-29292.59	29292.5921	> 1254339	13.221341	X19017.381

sk tul 10 16 tul sengkang jml tul 10 8 As 0.1308452

Perhitungan Lentur dan Geser Lapangan Atap

	b	[illegible]		fc	fy	cv		sk	tul	mu	[illegible]	d	d'	Rn	ρ	As	tul pakai	jml tul	as pakai	φvc		vs	|VS|	s	S Av min	vs
BP1/1	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	699,528.48	1,494.34	26.850394	2.6771654	64.412704	0.001868021	0.888609861	0.7480315	9	3.955	26223.329	ok	-59943.91	59943.9077	4.1802177	10.283266	123403.9
2	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	716,309.75	792.87	26.850394	2.6771654	65.978407	0.001911259	0.910129359	0.7480315	9	3.955	26223.329	ok	-60769.17	60769.1690	4.024827	10.283266	123403.9
3	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	698,231.72	4,771.04	26.850394	2.6771654	64.311262	0.001864526	0.886947364	0.7480315	9	3.955	26223.329	ok	-56088.96	56088.9604	4.360669	10.283266	123403.9
4	17.716535	29.527559	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	774,231.22	1,571.65	26.850394	2.6771654	71.313482	0.002069556	0.984479374	0.7480315	9	3.955	26223.329	ok	-59852.95	59852.9500	4.1864383	10.283266	123403.9
BP2/5	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	96,745.07	2,845.27	17.007874	2.6771654	33.311657	0.000961541	0.193154254	0.7086614	8	3.155	11073.781	ok	22708.58	22708.5767	6.5224438	15.424898	52111.912
6	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	62,238.27	2,876.52	17.007874	2.6771654	21.431424	0.000617542	0.124052072	0.7086614	8	3.155	11073.781	ok	22671.82	22671.8188	6.5335051	15.424898	52111.912
7	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	96,369.53	2,675.78	17.007874	2.6771654	33.184341	0.000957791	0.192401445	0.7086614	8	3.155	11073.781	ok	-22907.99	22907.9851	6.2630561	15.424898	52111.912
8	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	55,124.08	3,539.69	17.007874	2.6771654	18.981688	0.000546764	0.109834243	0.7086614	8	3.155	11073.781	ok	-21891.61	21891.6116	7.1720481	15.424898	52111.912
9	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	14,199.19	8,062.56	17.007874	2.6771654	4.8894163	[illegible]	0.028235275	0.7086614	8	3.155	11073.781	ok	-16570.59	16570.5883	9.3495769	15.424898	52111.912
10	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	73,461.30	1,064.45	17.007874	2.6771654	25.296012	0.000729292	0.146501516	0.7086614	8	3.155	11073.781	ok	-24800.66	24800.6588	6.2461748	15.424898	52111.912
11	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	75,829.74	3,189.89	17.007874	2.6771654	29.111577	0.000752897	0.151242257	0.7086614	8	3.155	11073.781	ok	-22307.14	22307.1397	6.9464654	15.424898	52111.912
12	11.811024	19.685039	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	10,570.59	4,417.56	17.007874	2.6771654	3.6399284	0.000104622	0.021016457	0.7086614	8	3.155	11073.781	ok	20858.83	20858.8309	7.4274531	15.424898	52111.912
BP3/13	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,401,920.17	2,249.20	26.850394	2.6771654	145.27028	0.004261767	1.802049092	0.984252	9	6.848	23309.626	ok	52199.47	52199.4736	4.5855911	11.568674	109692.36
14	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,583,572.83	1,432.16	26.850394	2.6771654	164.09356	0.00482756	2.041289709	0.984252	9	6.848	23309.626	ok	-53161.29	53161.2884	4.5008176	11.568674	109692.36
15	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,521,178.02	1,833.36	26.850394	2.6771654	157.62806	0.00463285	1.958958733	0.984252	9	6.848	23309.626	ok	-52689.29	52689.2873	4.5420126	11.568674	109692.36
16	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,523,557.53	1,385.30	26.850394	2.6771654	157.87463	0.00464027	1.962095532	0.984252	9	6.848	23309.626	ok	-53216.42	53216.4192	4.5960513	11.568674	109692.36
17	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,509,677.06	6,387.22	26.850394	2.6771654	156.4363	0.004592004	1.943800861	0.984252	9	6.848	23309.626	ok	-47331.8	47331.8048	5.1674638	11.568674	109692.36
18	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,392,961.33	1,238.28	26.850394	2.6771654	144.34194	0.004233947	1.790285661	0.984252	9	6.848	23309.626	ok	-52801.15	52801.1467	4.5321985	11.568674	109692.36
19	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,521,575.23	1,439.85	26.850394	2.6771654	157.87646	0.004640325	1.962118876	0.984252	9	6.848	23309.626	ok	-53152.23	53152.2329	4.6016014	11.568674	109692.36
20	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	920,752.01	5,497.08	26.850394	2.6771654	95.410497	0.002778552	1.174885348	0.984252	9	6.848	23309.626	ok	-48379.03	48379.0293	5.0556076	11.568674	109692.36
21	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,575,780.92	4,159.39	26.850394	2.6771654	163.28614	0.004801224	2.030999213	0.984252	9	6.848	23309.626	ok	-49952.28	49952.2780	4.896332	11.568674	109692.36
22	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,884,014.58	4,426.19	26.850394	2.6771654	195.22634	0.005770594	2.440042751	0.984252	9	6.848	23309.626	ok	-49638.89	49638.8924	4.9272935	11.568674	109692.36
23	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	2,440,513.93	2,503.13	26.850394	2.6771654	252.89182	0.007542029	3.189077737	0.984252	9	6.848	23309.626	ok	-51901.09	51901.0879	4.7125292	11.568674	109692.36
24	15.75	29.53	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	1,267,924.65	10,005.71	26.850394	2.6771654	183.19654	0.005405125	2.285507447	0.984252	9	6.848	23309.626	ok	-43070.64	43070.6419	5.6787032	11.568674	109692.36
BP4/25	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	103,661.51	802.79	17.007874	2.6771654	42.814102	0.001238014	0.207243958	0.6299213	8	2.493	9228.1511	ok	-20768.84	20768.8372	2.4596171	18.509878	43426.594
26	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	92,555.55	2,588.70	17.007874	2.6771654	38.245223	0.001104655	0.18491969	0.6299213	8	2.493	9228.1511	ok	-18667.76	18667.7640	8.2992258	18.509878	43426.594
27	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	91,624.71	2,955.00	17.007874	2.6771654	37.860988	0.001091486	0.183049931	0.6299213	8	2.493	9228.1511	ok	-18236.82	18236.8204	8.49534	18.509878	43426.594
28	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	101,665.25	4,728.01	17.007874	2.6771654	42.009473	[illegible]	0.21022903	0.6299213	8	2.493	9228.1511	ok	-16150.91	16150.9091	9.5925243	18.509878	43426.594
29	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	136,860.27	1,244.85	17.007874	2.6771654	56.552539	0.001637702	0.274152759	0.6299213	8	2.493	9228.1511	ok	-20248.77	20248.7669	7.6512308	18.509878	43426.594
30	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	100,984.19	480.39	17.007874	2.6771654	41.728052	0.001205849	0.201859511	0.6299213	8	2.493	9228.1511	ok	-21148.13	21148.1284	7.3258487	18.509878	43426.594
31	9.84	19.69	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	60,640.86	2,916.06	17.007874	2.6771654	25.057632	[illegible]	[illegible]	0.6299213	8	2.493	9228.1511	ok	-18282.64	18282.6410	8.4740486	18.509878	43426.594
BP5/32	19.69	39.37	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	5,911,289.20	41,285.03	36.692913	2.6771654	262.39926	[illegible]	[illegible]	0.984252	9	6.848	39817.763	perlu	-45118.23	45118.2335	7.4063533	9.254939	187327.71
33	19.69	39.37	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	3,584,310.32	23,442.85	36.692913	2.6771654	159.1055	[illegible]	1.178434515	0.984252	9	6.848	39817.763	ok	-66109.03	66109.0332	5.0559323	9.254939	187327.71
BP6/34	17.716535	35.433071	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	393,601.23	1,940.97	32.755905	2.6771654	24.360125	[illegible]	0.407514098	0.8661417	8	4.714	31990.924	ok	72989.27	72989.2685	4.4079959	10.283266	150545.52
BP7/35	11.811024	21.653543	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	87,996.48	1,069.10	18.976378	2.6771654	24.340231	0.000701659	0.157263123	0.6299213	5	1.558	12155.469	ok	25460.99	25460.9908	6.7891886	15.424898	58143.384
A1/36	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	93,342.01	1,070.44	15.03937	2.6771654	49.127012	0.001422014	0.211254118	0.6299213	8	2.493	8160.0781	ok	-17940.85	17940.8462	7.6360116	18.509878	38400.367
37	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	84,507.58	1,001.90	15.03937	2.6771654	44.659223	0.001291092	[illegible]	0.6299213	8	2.493	8160.0781	ok	-18010.42	18010.4247	7.6065118	18.509878	38400.367
38	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	91,352.47	974.79	15.03937	2.6771654	48.276501	0.001396388	0.206700687	0.6299213	8	2.493	8160.0781	ok	-18053.38	18053.3769	7.5884146	18.509878	38400.367
39	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	69,194.89	1,894.91	15.03937	2.6771654	36.567014	0.001055931	0.156004512	0.6299213	8	2.493	8160.0781	ok	-16970.88	16970.8783	8.0724466	18.509878	38400.367
40	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	50,647.96	1,227.25	15.03937	2.6771654	26.765629	[illegible]	0.114249979	0.6299213	8	2.493	8160.0781	ok	-17756.36	17756.3594	7.7153439	18.509878	38400.367
41	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	93,284.93	1,109.58	15.03937	2.6771654	49.562921	[illegible]	0.21224154	0.6299213	8	2.493	8160.0781	ok	-17898.12	17898.1242	7.6541525	18.509878	38400.367
42	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	86,241.77	[illegible]	15.03937	2.6771654	45.57568	[illegible]	[illegible]	0.6299213	8	2.493	8160.0781	ok	-17813.06	17813.0613	7.6907596	18.509878	38400.367
43	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	92,803.78	1,281.47	15.03937	2.6771654	49.043465	0.001418722	0.216002515	0.6299213	8	2.493	8160.0781	ok	-17690.21	17690.2140	7.7441974	18.509878	38400.367
44	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	56,690.03	2,641.27	15.03937	2.6771654	29.935645	0.000864291	0.127932281	0.6299213	8	2.493	8160.0781	ok	16090.46	16090.4595	8.5141452	18.509878	38400.367
45	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	59,979.06	2,073.94	15.03937	2.6771654	31.69628	0.000914663	0.135391267	0.6299213	8	2.493	8160.0781	ok	-16261.78	16261.7760	8.4221335	18.509878	38400.367
46	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	113,615.85	499.18	15.03937	2.6771654	60.05247	[illegible]	0.25755417	0.6299213	8	2.493	8160.0781	ok	-18613.04	18613.0352	7.3602451	18.509878	38400.367
47	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	76,899.13	1,349.93	15.03937	2.6771654	40.638425	0.001174279	0.176008206	0.6299213	8	2.493	8160.0781	ok	-17619.09	17619.0889	7.7754593	18.509878	38400.367
48	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	115,894.52	12.08	15.03937	2.6771654	61.246095	0.001774822	0.262218618	0.6299213	8	2.493	8160.0781	ok	-19185.98	19185.9770	7.14045	18.509878	38400.367
49	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	116,339.48	[illegible]	15.03937	2.6771654	61.481241	0.001781697	0.263736194	0.6299213	8	2.493	8160.0781	ok	-17862.42	17862.4244	7.6695361	18.509878	38400.367
50	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	113,414.44	435.42	15.03937	2.6771654	59.935462	[illegible]	0.25704823	0.6299213	8	2.493	8160.0781	ok	-18687.93	18687.9301	7.330748	18.509878	38400.367
51	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	66,436.79	2,502.78	15.03937	2.6771654	35.109367	0.001011563	0.150043188	0.6299213	8	2.493	8160.0781	ok	-17432.21	17432.2090	7.8588152	18.509878	38400.367
52	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	128,671.99	1,373.91	15.03937	2.6771654	67.99855	0.001972412	0.291966862	0.6299213	8	2.493	8160.0781	ok	-17583.82	17583.8224	7.7910539	18.509878	38400.367
53	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	128,375.82	1,126.48	15.03937	2.6771654	67.842012	0.001962828	0.291288253	0.6299213	8	2.493	8160.0781	ok	17639.62	17639.6162	7.766411	18.509878	38400.367
54	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	112,338.01	420.21	15.03937	2.6771654	59.366656	0.001719894	0.254587773	0.6299213	8	2.493	8160.0781	ok	-18705.81	18705.8142	7.3233394	18.509878	38400.367
55	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	55,010.21	1,599.73	15.03937	2.6771654	29.070924	0.000838578	0.124130693	0.6299213	8	2.493	8160.0781	ok	-17318.15	17318.1459	7.910576	18.509878	38400.367
56	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	140,750.48	2,216.26	15.03937	2.6771654	74.381577	0.002159549	0.319667945	0.6299213	8	2.493	8160.0781	ok	-16592.82	16592.8208	8.2563725	18.509878	38400.367
57	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	99,549.94	2,469.76	15.03937	2.6771654	[illegible]	0.001522634	0.22538835	0.6299213	8	2.493	8160.0781	ok	-16294.56	16294.5559	8.4075019	18.509878	38400.367
58	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	110,269.23	495.79	15.03937	2.6771654	[illegible]	0.001695624	0.251002654	0.6299213	8	2.493	8160.0781	ok	-18616.9	18616.9060	7.3592171	18.509878	38400.367
59	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	58,448.57	1,516.50	15.03937	2.6771654	30.887972	0.000891221	0.131923301	0.6299213	8	2.493	8160.0781	ok	-17416.07	17416.0696	7.8660979	18.509878	38400.367
60	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	136,369.05	1,912.83	15.03937	2.6771654	72.066145	0.002091626	0.309613504	0.6299213	8	2.493	8160.0781	ok	-16949.8	16949.7972	8.0824866	18.509878	38400.367
61	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	82,110.82	2,400.07	15.03937	2.6771654	43.392621	0.001254249	0.185690524	0.6299213	8	2.493	8160.0781	ok	-16326.52	16326.5670	8.3653985	18.509878	38400.367
62	9.8425197	17.716535	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	162,307.77	3,119.01	15.03937	2.6771654	85.72383	0.002494415	0.369236479	0.6299213	8	2.493	8160.0781	ok	-15530.76	15530.7583	8.82098	18.509878	38400.367
A2/63	11.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	160,879.07	11,824.66	22.913386	2.6771654	26.161868	0.000754351	0.238125451	0.6299213	6	1.870	17405.318	ok	-27042.32	27042.3234	7.7193616	13.221341	83907.381
A2/64	11.779528	25.590551	0.85	4206.0933	34809.048	1.9685039	0.8	0.3937008	0.6299213	28,965.21	17,795.53	22.913386	2.6771654	4.7102595	0.000135406	0.042752612	0.6299213	6	1.870	17405.318	perlu	20017.77	20017.7693	11.426858	13.221341	83907.381

Perhitungan Lentur dan Geser Tumpuan Atap



02	9.842519685	17.71653542	0.85	4200.0933	34809.048	1.968503935	0.8	0.393700787	0.629921259	359,823.49	4,314.86	[illegible]	2.677165352	[illegible]	[illegible]	0.811158329	0.629921259	8	2.493	[illegible]	ok	-14123.87203	14123.8720	[illegible]	[illegible]	[illegible]
[illegible]	13.77952755	25.59055116	0.85	4200.0933	34809.048	1.968503935	0.8	0.393700787	0.629921259	712,904.31	15,534.25	[illegible]	2.677165352	[illegible]	[illegible]	[illegible]	0.629921259	6	1.870	17405.31857	ok	-22678.10457	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	13.77952755	25.59055116	0.85	4200.0933	34809.048	1.968503935	0.8	0.393700787	0.629921259	652,047.18	10,059.54	[illegible]	2.677165352	[illegible]	[illegible]	[illegible]	0.629921259	6	1.870	17405.31857	ok	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Perhitungan Torsi Tumpuan dan Lapangan Balok Lantai dasar

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240.00	240.00	340.00	640.00	41,563,030.99	54,524,793.67	40,893,595.25	PERLU	669,435.74	218,099,174.69	OK	1.29	25.89	12.94
0.75	240.00	240.00	340.00	640.00	31,055,915.90	54,524,793.67	40,893,595.25	X	-9,837,679.36	218,099,174.69	OK	1.29	-380.40	-190.20
0.75	240.00	240.00	340.00	640.00	112,748,320.87	54,524,793.67	40,893,595.25	PERLU	71,854,725.62	218,099,174.69	OK	1.29	2,778.47	1,389.24
0.75	240.00	240.00	340.00	640.00	30,817,054.97	54,524,793.67	40,893,595.25	X	-10,076,540.29	218,099,174.69	OK	1.29	-389.64	-194.82
0.75	240.00	240.00	340.00	640.00	56,481,633.68	54,524,793.67	40,893,595.25	PERLU	15,588,038.43	218,099,174.69	OK	1.29	602.76	301.38
0.75	240.00	240.00	340.00	640.00	24,715,200.09	54,524,793.67	40,893,595.25	X	-16,178,395.16	218,099,174.69	OK	1.29	-625.59	-312.79
0.75	240.00	240.00	340.00	640.00	58,044,674.87	54,524,793.67	40,893,595.25	PERLU	17,151,079.62	218,099,174.69	OK	1.29	663.20	331.60
0.75	240.00	240.00	340.00	640.00	29,647,161.09	54,524,793.67	40,893,595.25	X	-11,246,434.16	218,099,174.69	OK	1.29	-434.88	-217.44
0.75	240.00	240.00	340.00	640.00	46,121,940.23	54,524,793.67	40,893,595.25	PERLU	5,228,344.98	218,099,174.69	OK	1.29	202.17	101.08
0.75	240.00	240.00	340.00	640.00	28,227,904.99	54,524,793.67	40,893,595.25	X	-12,665,690.26	218,099,174.69	OK	1.29	-489.76	-244.88
0.75	240.00	240.00	340.00	640.00	45,507,127.20	54,524,793.67	40,893,595.25	PERLU	4,613,531.95	218,099,174.69	OK	1.29	178.40	89.20
0.75	240.00	240.00	190.00	390.00	10,555,191.35	16,155,494.42	12,116,620.82	X	-1,561,429.47	64,621,977.69	OK	1.35	-100.52	-50.26
0.75	240.00	240.00	190.00	390.00	471,074.72	16,155,494.42	12,116,620.82	X	-11,645,546.10	64,621,977.69	OK	1.35	-749.74	-374.87
0.75	240.00	240.00	190.00	390.00	139,983.70	16,155,494.42	12,116,620.82	X	-11,976,637.12	64,621,977.69	OK	1.35	-771.06	-385.53
0.75	240.00	240.00	190.00	390.00	139,227.23	16,155,494.42	12,116,620.82	X	-11,977,393.59	64,621,977.69	OK	1.35	-771.11	-385.55
0.75	240.00	240.00	190.00	390.00	1,934,949.29	16,155,494.42	12,116,620.82	X	-10,181,671.53	64,621,977.69	OK	1.35	-655.50	-327.75
0.75	240.00	240.00	190.00	390.00	875,977.81	16,155,494.42	12,116,620.82	X	-11,240,643.01	64,621,977.69	OK	1.35	-723.67	-361.84
0.75	240.00	240.00	190.00	390.00	1,068,294.50	16,155,494.42	12,116,620.82	X	-11,048,326.32	64,621,977.69	OK	1.35	-711.29	-355.65
0.75	240.00	240.00	190.00	390.00	34,387.01	16,155,494.42	12,116,620.82	X	-12,082,233.80	64,621,977.69	OK	1.35	-777.85	-388.93
0.75	240.00	240.00	190.00	390.00	316,230.73	16,155,494.42	12,116,620.82	X	-11,800,390.08	64,621,977.69	OK	1.35	-759.71	-379.85
0.75	240.00	240.00	190.00	390.00	621,628.64	16,155,494.42	12,116,620.82	X	-11,494,992.17	64,621,977.69	OK	1.35	-740.05	-370.02
0.75	240.00	240.00	190.00	390.00	1,594,957.68	16,155,494.42	12,116,620.82	X	-10,521,663.13	64,621,977.69	OK	1.35	-677.39	-338.69
0.75	240.00	240.00	190.00	390.00	3,777,996.66	16,155,494.42	12,116,620.82	X	-8,338,624.16	64,621,977.69	OK	1.35	-536.84	-268.42
0.75	240.00	240.00	190.00	390.00	1,696,979.50	16,155,494.42	12,116,620.82	X	-10,419,641.31	64,621,977.69	OK	1.35	-670.82	-335.41
0.75	240.00	240.00	190.00	390.00	1,199,458.17	16,155,494.42	12,116,620.82	X	-10,917,162.64	64,621,977.69	OK	1.35	-702.85	-351.42
0.75	240.00	240.00	190.00	390.00	1,961,612.43	16,155,494.42	12,116,620.82	X	-10,155,008.39	64,621,977.69	OK	1.35	-653.78	-326.89
0.75	240.00	240.00	290.00	640.00	157,691,733.06	43,081,318.46	32,310,988.84	PERLU	125,380,744.22	172,325,273.83	OK	1.40	4,977.98	2,488.99
0.75	240.00	240.00	290.00	640.00	145,698,644.33	43,081,318.46	32,310,988.84	PERLU	113,387,655.49	172,325,273.83	OK	1.40	4,501.82	2,250.91
0.75	240.00	240.00	290.00	640.00	156,850,009.83	43,081,318.46	32,310,988.84	PERLU	124,539,020.99	172,325,273.83	OK	1.40	4,944.56	2,472.28
0.75	240.00	240.00	290.00	640.00	168,772,264.69	43,081,318.46	32,310,988.84	PERLU	136,461,275.85	172,325,273.83	OK	1.40	5,417.90	2,708.95
0.75	240.00	240.00	290.00	640.00	192,248,122.72	43,081,318.46	32,310,988.84	PERLU	159,937,133.88	172,325,273.83	OK	1.40	6,349.96	3,174.98
0.75	240.00	240.00	290.00	640.00	153,614,582.27	43,081,318.46	32,310,988.84	PERLU	121,303,593.43	172,325,273.83	OK	1.40	4,816.10	2,408.05
0.75	240.00	240.00	290.00	640.00	154,526,871.34	43,081,318.46	32,310,988.84	PERLU	122,215,882.49	172,325,273.83	OK	1.40	4,852.32	2,426.16
0.75	240.00	240.00	290.00	640.00	143,639,773.27	43,081,318.46	32,310,988.84	PERLU	111,328,784.43	172,325,273.83	OK	1.40	4,420.07	2,210.04

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240.00	240.00	290.00	640.00	130,551,732.64	43,081,318.46	32,310,988.84	PERLU	98,240,743.80	172,325,273.83	OK	1.40	3,900.44	1,950.22
0.75	240.00	240.00	290.00	640.00	125,494,428.69	43,081,318.46	32,310,988.84	PERLU	93,183,439.84	172,325,273.83	OK	1.40	3,699.65	1,849.82
0.75	240.00	240.00	290.00	640.00	174,364,057.23	43,081,318.46	32,310,988.84	PERLU	142,053,068.39	172,325,273.83	OK	1.40	5,639.91	2,819.96
0.75	240.00	240.00	290.00	640.00	172,986,389.66	43,081,318.46	32,310,988.84	PERLU	140,675,400.81	172,325,273.83	OK	1.40	5,585.22	2,792.61
0.75	240.00	240.00	290.00	640.00	147,528,658.18	43,081,318.46	32,310,988.84	PERLU	115,217,669.34	172,325,273.83	OK	1.40	4,574.47	2,287.24
0.75	240.00	240.00	290.00	640.00	154,558,514.39	43,081,318.46	32,310,988.84	PERLU	122,247,525.55	172,325,273.83	OK	1.40	4,853.58	2,426.79
0.75	240.00	240.00	290.00	640.00	189,388,650.61	43,081,318.46	32,310,988.84	PERLU	157,077,661.77	172,325,273.83	OK	1.40	6,236.43	3,118.22
0.75	240.00	240.00	290.00	640.00	155,156,843.48	43,081,318.46	32,310,988.84	PERLU	122,845,854.64	172,325,273.83	OK	1.40	4,877.33	2,438.67
0.75	240.00	240.00	290.00	640.00	170,587,976.19	43,081,318.46	32,310,988.84	PERLU	138,276,987.35	172,325,273.83	OK	1.40	5,489.99	2,745.00
0.75	240.00	240.00	290.00	640.00	150,458,221.42	43,081,318.46	32,310,988.84	PERLU	118,147,232.57	172,325,273.83	OK	1.40	4,690.78	2,345.39
0.75	240.00	240.00	290.00	640.00	145,687,180.30	43,081,318.46	32,310,988.84	PERLU	113,376,191.45	172,325,273.83	OK	1.40	4,501.36	2,250.68
0.75	240.00	240.00	290.00	640.00	128,597,050.22	43,081,318.46	32,310,988.84	PERLU	96,286,061.38	172,325,273.83	OK	1.40	3,822.83	1,911.42
0.75	240.00	240.00	290.00	640.00	79,423,961.37	43,081,318.46	32,310,988.84	PERLU	47,112,972.53	172,325,273.83	OK	1.40	1,870.52	935.26
0.75	240.00	240.00	290.00	640.00	104,456,134.48	43,081,318.46	32,310,988.84	PERLU	72,145,145.64	172,325,273.83	OK	1.40	2,864.37	1,432.18
0.75	240.00	240.00	140.00	390.00	848,699.04	11,219,093.35	8,414,320.01	X	-7,565,620.97	44,876,373.39	OK	1.60	-511.52	-255.76
0.75	240.00	240.00	140.00	390.00	165,106.58	11,219,093.35	8,414,320.01	X	-8,249,213.43	44,876,373.39	OK	1.60	-557.73	-278.87
0.75	240.00	240.00	140.00	390.00	1,361,543.74	11,219,093.35	8,414,320.01	X	-7,052,776.27	44,876,373.39	OK	1.60	-476.84	-238.42
0.75	240.00	240.00	140.00	390.00	3,833,960.89	11,219,093.35	8,414,320.01	X	-4,580,359.12	44,876,373.39	OK	1.60	-309.68	-154.84
0.75	240.00	240.00	140.00	390.00	733,183.81	11,219,093.35	8,414,320.01	X	-7,681,136.21	44,876,373.39	OK	1.60	-519.33	-259.66
0.75	240.00	240.00	140.00	390.00	155,375.62	11,219,093.35	8,414,320.01	X	-8,258,944.39	44,876,373.39	OK	1.60	-558.39	-279.20
0.75	240.00	240.00	140.00	390.00	1,068,294.50	11,219,093.35	8,414,320.01	X	-7,346,025.51	44,876,373.39	OK	1.60	-496.67	-248.33
0.75	240.00	240.00	140.00	390.00	1,897,471.09	11,219,093.35	8,414,320.01	X	-6,516,848.92	44,876,373.39	OK	1.60	-440.61	-220.30
0.75	240.00	240.00	140.00	390.00	365,517.16	11,219,093.35	8,414,320.01	X	-8,048,802.85	44,876,373.39	OK	1.60	-544.18	-272.09
0.75	240.00	240.00	140.00	390.00	724,688.39	11,219,093.35	8,414,320.01	X	-7,689,631.62	44,876,373.39	OK	1.60	-519.90	-259.95
0.75	240.00	240.00	140.00	390.00	142,777.12	11,219,093.35	8,414,320.01	X	-8,271,542.89	44,876,373.39	OK	1.60	-559.24	-279.62
0.75	240.00	240.00	140.00	390.00	210,386.08	11,219,093.35	8,414,320.01	X	-8,203,933.93	44,876,373.39	OK	1.60	-554.67	-277.34
0.75	240.00	240.00	140.00	390.00	210,386.08	11,219,093.35	8,414,320.01	X	-8,203,933.93	44,876,373.39	OK	1.60	-554.67	-277.34
0.75	240.00	240.00	140.00	390.00	524,458.68	11,219,093.35	8,414,320.01	X	-7,889,861.33	44,876,373.39	OK	1.60	-533.44	-266.72
0.75	240.00	240.00	140.00	390.00	2,285,296.04	11,219,093.35	8,414,320.01	X	-6,129,023.97	44,876,373.39	OK	1.60	-414.39	-207.19
0.75	240.00	240.00	140.00	390.00	812,262.67	11,219,093.35	8,414,320.01	X	-7,602,057.34	44,876,373.39	OK	1.60	-513.98	-256.99
0.75	240.00	240.00	140.00	390.00	149,448.77	11,219,093.35	8,414,320.01	X	-8,264,871.24	44,876,373.39	OK	1.60	-558.79	-279.40
0.75	240.00	240.00	140.00	390.00	414,325.61	11,219,093.35	8,414,320.01	X	-7,999,994.40	44,876,373.39	OK	1.60	-540.88	-270.44
0.75	240.00	240.00	140.00	390.00	1,021,588.33	11,219,093.35	8,414,320.01	X	-7,392,731.69	44,876,373.39	OK	1.60	-499.83	-249.91
0.75	240.00	240.00	140.00	390.00	2,644,037.92	11,219,093.35	8,414,320.01	X	-5,770,282.09	44,876,373.39	OK	1.60	-390.13	-195.07
0.75	240.00	240.00	140.00	390.00	130,312.90	11,219,093.35	8,414,320.01	X	-8,284,007.11	44,876,373.39	OK	1.60	-560.09	-280.04
0.75	240.00	240.00	190.00	440.00	14,519,210.45	17,771,043.86	13,328,282.90	PERLU	1,190,927.55	71,084,175.45	OK	1.44	69.32	34.66
0.75	240.00	240.00	140.00	340.00	393,067.95	10,097,184.01	7,572,888.01	X	-7,179,820.06	40,388,736.05	OK	1.48	-544.96	-272.48

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240.00	240.00	140.00	340.00	23,979.95	10,097,184.01	7,572,888.01	X	-7,548,908.06	40,388,736.05	OK	1.48	-572.97	-286.49
0.75	240.00	240.00	140.00	340.00	337,935.91	10,097,184.01	7,572,888.01	X	-7,234,952.10	40,388,736.05	OK	1.48	-549.14	-274.57
0.75	240.00	240.00	140.00	340.00	337,292.22	10,097,184.01	7,572,888.01	X	-7,235,595.79	40,388,736.05	OK	1.48	-549.19	-274.60
0.75	240.00	240.00	140.00	340.00	1,836,547.65	10,097,184.01	7,572,888.01	X	-5,736,340.36	40,388,736.05	OK	1.48	-435.40	-217.70
0.75	240.00	240.00	140.00	340.00	11,865,216.99	10,097,184.01	7,572,888.01	PERLU	4,292,328.98	40,388,736.05	OK	1.48	325.79	162.90
0.75	240.00	240.00	140.00	340.00	313,551.12	10,097,184.01	7,572,888.01	X	-7,259,336.89	40,388,736.05	OK	1.48	-550.99	-275.50
0.75	240.00	240.00	140.00	340.00	44,853.15	10,097,184.01	7,572,888.01	X	-7,528,034.86	40,388,736.05	OK	1.48	-571.39	-285.69
0.75	240.00	240.00	140.00	340.00	12,530.21	10,097,184.01	7,572,888.01	X	-7,560,357.80	40,388,736.05	OK	1.48	-573.84	-286.92
0.75	240.00	240.00	140.00	340.00	191,494.92	10,097,184.01	7,572,888.01	X	-7,381,393.09	40,388,736.05	OK	1.48	-560.26	-280.13
0.75	240.00	240.00	140.00	340.00	183,141.18	10,097,184.01	7,572,888.01	X	-7,389,746.83	40,388,736.05	OK	1.48	-560.89	-280.45
0.75	240.00	240.00	140.00	340.00	1,242,627.91	10,097,184.01	7,572,888.01	X	-6,330,260.10	40,388,736.05	OK	1.48	-480.48	-240.24
0.75	240.00	240.00	140.00	340.00	2,029,521.05	10,097,184.01	7,572,888.01	X	-5,543,366.96	40,388,736.05	OK	1.48	-420.75	-210.37
0.75	240.00	240.00	140.00	340.00	190,697.04	10,097,184.01	7,572,888.01	X	-7,382,190.97	40,388,736.05	OK	1.48	-560.32	-280.16
0.75	240.00	240.00	140.00	340.00	56,575.70	10,097,184.01	7,572,888.01	X	-7,516,312.31	40,388,736.05	OK	1.48	-570.50	-285.25
0.75	240.00	240.00	140.00	340.00	32,518.93	10,097,184.01	7,572,888.01	X	-7,540,369.08	40,388,736.05	OK	1.48	-572.32	-286.16
0.75	240.00	240.00	140.00	340.00	609,807.67	10,097,184.01	7,572,888.01	X	-6,963,080.34	40,388,736.05	OK	1.48	-528.51	-264.25
0.75	240.00	240.00	140.00	340.00	543,052.30	10,097,184.01	7,572,888.01	X	-7,029,835.71	40,388,736.05	OK	1.48	-533.57	-266.79
0.75	240.00	240.00	140.00	340.00	294,199.86	10,097,184.01	7,572,888.01	X	-7,278,688.15	40,388,736.05	OK	1.48	-552.46	-276.23
0.75	240.00	240.00	140.00	340.00	119,178.41	10,097,184.01	7,572,888.01	X	-7,453,709.60	40,388,736.05	OK	1.48	-565.75	-282.87
0.75	240.00	240.00	140.00	340.00	261,532.14	10,097,184.01	7,572,888.01	X	-7,311,355.87	40,388,736.05	OK	1.48	-554.94	-277.47
0.75	240.00	240.00	140.00	340.00	611,381.98	10,097,184.01	7,572,888.01	X	-6,961,506.03	40,388,736.05	OK	1.48	-528.39	-264.19
0.75	240.00	240.00	140.00	340.00	565,570.13	10,097,184.01	7,572,888.01	X	-7,007,317.88	40,388,736.05	OK	1.48	-531.86	-265.93
0.75	240.00	240.00	140.00	340.00	252,289.95	10,097,184.01	7,572,888.01	X	-7,320,598.06	40,388,736.05	OK	1.48	-555.64	-277.82
0.75	240.00	240.00	140.00	340.00	116,702.33	10,097,184.01	7,572,888.01	X	-7,456,185.68	40,388,736.05	OK	1.48	-565.93	-282.97
0.75	240.00	240.00	140.00	340.00	349,742.23	10,097,184.01	7,572,888.01	X	-7,223,145.78	40,388,736.05	OK	1.48	-548.25	-274.12
0.75	240.00	240.00	140.00	340.00	682,977.21	10,097,184.01	7,572,888.01	X	-6,889,910.80	40,388,736.05	OK	1.48	-522.95	-261.48
0.75	240.00	240.00	140.00	340.00	212,087.38	10,097,184.01	7,572,888.01	X	-7,360,800.63	40,388,736.05	OK	1.48	-558.69	-279.35
0.75	240.00	240.00	140.00	340.00	135,309.05	10,097,184.01	7,572,888.01	X	-7,437,578.96	40,388,736.05	OK	1.48	-564.52	-282.26
0.75	240.00	240.00	140.00	340.00	254,836.75	10,097,184.01	7,572,888.01	X	-7,318,051.26	40,388,736.05	OK	1.48	-555.45	-277.72
0.75	240.00	240.00	140.00	340.00	655,382.97	10,097,184.01	7,572,888.01	X	-6,917,505.04	40,388,736.05	OK	1.48	-525.05	-262.52
0.75	240.00	240.00	140.00	340.00	226,235.08	10,097,184.01	7,572,888.01	X	-7,346,652.93	40,388,736.05	OK	1.48	-557.62	-278.81
0.75	240.00	240.00	140.00	340.00	31,702.45	10,097,184.01	7,572,888.01	X	-7,541,185.56	40,388,736.05	OK	1.48	-572.39	-286.19
0.75	240.00	240.00	140.00	340.00	339,207.16	10,097,184.01	7,572,888.01	X	-7,233,680.85	40,388,736.05	OK	1.48	-549.05	-274.52
0.75	240.00	240.00	140.00	340.00	460,087.81	10,097,184.01	7,572,888.01	X	-7,112,800.20	40,388,736.05	OK	1.48	-539.87	-269.94
0.75	240.00	240.00	140.00	340.00	758,337.79	10,097,184.01	7,572,888.01	X	-6,814,550.22	40,388,736.05	OK	1.48	-517.23	-258.62
0.75	240.00	240.00	140.00	340.00	826,071.82	10,097,184.01	7,572,888.01	X	-6,746,816.19	40,388,736.05	OK	1.48	-512.09	-256.05
0.75	240.00	240.00	140.00	340.00	283,392.94	10,097,184.01	7,572,888.01	X	-7,289,495.07	40,388,736.05	OK	1.48	-553.28	-276.64

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240.00	240.00	140.00	340.00	36,544.78	10,097,184.01	7,572,888.01	X	-7,536,343.23	40,388,736.05	OK	1.48	-572.02	-286.01
0.75	240.00	240.00	140.00	340.00	63,088.54	10,097,184.01	7,572,888.01	X	-7,509,799.47	40,388,736.05	OK	1.48	-570.00	-285.00
0.75	240.00	240.00	140.00	340.00	87,749.63	10,097,184.01	7,572,888.01	X	-7,485,138.38	40,388,736.05	OK	1.48	-568.13	-284.07
0.75	240.00	240.00	140.00	340.00	45,881.01	10,097,184.01	7,572,888.01	X	-7,527,007.00	40,388,736.05	OK	1.48	-571.31	-285.65
0.75	240.00	240.00	140.00	340.00	433,288.00	10,097,184.01	7,572,888.01	X	-7,139,600.01	40,388,736.05	OK	1.48	-541.91	-270.95
0.75	240.00	240.00	140.00	340.00	184,750.03	10,097,184.01	7,572,888.01	X	-7,388,137.98	40,388,736.05	OK	1.48	-560.77	-280.38
0.75	240.00	240.00	140.00	340.00	81,677.46	10,097,184.01	7,572,888.01	X	-7,491,210.55	40,388,736.05	OK	1.48	-568.59	-284.30
0.75	240.00	240.00	140.00	340.00	104,906.59	10,097,184.01	7,572,888.01	X	-7,467,981.42	40,388,736.05	OK	1.48	-566.83	-283.41
0.75	240.00	240.00	140.00	340.00	1,446,199.80	10,097,184.01	7,572,888.01	X	-6,126,688.21	40,388,736.05	OK	1.48	-465.02	-232.51
0.75	240.00	240.00	140.00	340.00	1,650,439.04	10,097,184.01	7,572,888.01	X	-5,922,448.97	40,388,736.05	OK	1.48	-449.52	-224.76
0.75	240.00	240.00	140.00	340.00	30,720.87	10,097,184.01	7,572,888.01	X	-7,542,167.14	40,388,736.05	OK	1.48	-572.46	-286.23
0.75	240.00	240.00	140.00	340.00	351,917.65	10,097,184.01	7,572,888.01	X	-7,220,970.36	40,388,736.05	OK	1.48	-548.08	-274.04
0.75	240.00	240.00	140.00	340.00	41,446.69	10,097,184.01	7,572,888.01	X	-7,531,441.32	40,388,736.05	OK	1.48	-571.65	-285.82
0.75	240.00	240.00	140.00	340.00	190,269.56	10,097,184.01	7,572,888.01	X	-7,382,618.45	40,388,736.05	OK	1.48	-560.35	-280.18
0.75	240.00	240.00	140.00	340.00	585,056.64	10,097,184.01	7,572,888.01	X	-6,987,831.37	40,388,736.05	OK	1.48	-530.39	-265.19
0.75	240.00	240.00	140.00	340.00	583,849.19	10,097,184.01	7,572,888.01	X	-6,989,038.82	40,388,736.05	OK	1.48	-530.48	-265.24
0.75	240.00	240.00	240.00	340.00	112,250.29	19,790,480.67	14,842,860.50	X	-14,730,610.20	79,161,922.66	OK	1.14	-1,021.49	-510.75
0.75	240.00	240.00	240.00	540.00	50,298,028.98	28,586,249.85	21,439,687.39	PERLU	28,858,341.59	114,344,999.40	OK	1.42	1,362.23	681.12
0.75	240.00	240.00	140.00	540.00	68,755,963.59	14,584,821.35	10,938,616.01	PERLU	57,817,347.58	58,339,285.41	OK	1.95	2,959.64	1,479.82

Perhitungan Torsi Tumpuan dan Lapangan Balok Lantai 1

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240	240	340	640	35,336,463.92	54,524,793.67	40,893,595.25	X	-5557131.34	218,099,174.69	OK	1.29	-214.88	-107.44
0.75	240	240	340	640	52,568,901.92	54,524,793.67	40,893,595.25	PERLU	11675306.66	218,099,174.69	OK	1.29	451.46	225.73
0.75	240	240	340	640	47,567,877.75	54,524,793.67	40,893,595.25	PERLU	6674282.49	218,099,174.69	OK	1.29	258.08	129.04
0.75	240	240	340	640	2,247,190.64	54,524,793.67	40,893,595.25	X	-38646404.61	218,099,174.69	OK	1.29	-1494.38	-747.19
0.75	240	240	340	640	53,757,933.57	54,524,793.67	40,893,595.25	PERLU	12864338.32	218,099,174.69	OK	1.29	497.44	248.72
0.75	240	240	340	640	55,372,086.01	54,524,793.67	40,893,595.25	PERLU	14478490.76	218,099,174.69	OK	1.29	559.85	279.93
0.75	240	240	340	640	56,433,462.57	54,524,793.67	40,893,595.25	PERLU	15539867.31	218,099,174.69	OK	1.29	600.89	300.45
0.75	240	240	340	640	129,401,455.92	54,524,793.67	40,893,595.25	PERLU	88507860.66	218,099,174.69	OK	1.29	3422.42	1711.21
0.75	240	240	190	390	699,963.30	16,155,494.42	12,116,620.82	X	-11416657.52	64,621,977.69	OK	1.35	-735.01	-367.50
0.75	240	240	190	390	394,338.58	16,155,494.42	12,116,620.82	X	-11722282.24	64,621,977.69	OK	1.35	-754.68	-377.34
0.75	240	240	190	390	23,576.77	16,155,494.42	12,116,620.82	X	-12093044.05	64,621,977.69	OK	1.35	-778.55	-389.28
0.75	240	240	190	390	1,996,154.25	16,155,494.42	12,116,620.82	X	-10120466.57	64,621,977.69	OK	1.35	-651.56	-325.78
0.75	240	240	190	390	4,539,943.05	16,155,494.42	12,116,620.82	X	-7576677.76	64,621,977.69	OK	1.35	-487.79	-243.89
0.75	240	240	190	390	3,068,023.86	16,155,494.42	12,116,620.82	X	-9048596.95	64,621,977.69	OK	1.35	-582.55	-291.27
0.75	240	240	190	390	969,700.38	16,155,494.42	12,116,620.82	X	-11146920.44	64,621,977.69	OK	1.35	-717.64	-358.82
0.75	240	240	190	390	274,657.56	16,155,494.42	12,116,620.82	X	-11841963.26	64,621,977.69	OK	1.35	-762.39	-381.19
0.75	240	240	190	390	448,095.66	16,155,494.42	12,116,620.82	X	-11668525.15	64,621,977.69	OK	1.35	-751.22	-375.61
0.75	240	240	190	390	539,424.96	16,155,494.42	12,116,620.82	X	-11577195.86	64,621,977.69	OK	1.35	-745.34	-372.67
0.75	240	240	290	640	174,989,883.39	43,081,318.46	32,310,988.84	PERLU	142678894.55	172,325,273.83	OK	1.40	5664.76	2832.38
0.75	240	240	290	640	184,801,691.01	43,081,318.46	32,310,988.84	PERLU	152490702.17	172,325,273.83	OK	1.40	6054.32	3027.16
0.75	240	240	290	640	163,044,498.10	43,081,318.46	32,310,988.84	PERLU	130733509.26	172,325,273.83	OK	1.40	5190.50	2595.25
0.75	240	240	290	640	193,174,331.52	43,081,318.46	32,310,988.84	PERLU	160863342.67	172,325,273.83	OK	1.40	6386.74	3193.37
0.75	240	240	290	640	137,967,738.02	43,081,318.46	32,310,988.84	PERLU	105656749.17	172,325,273.83	OK	1.40	4194.88	2097.44
0.75	240	240	290	640	202,154,641.23	43,081,318.46	32,310,988.84	PERLU	169843652.39	172,325,273.83	OK	1.40	6743.28	3371.64
0.75	240	240	290	640	191,855,650.54	43,081,318.46	32,310,988.84	PERLU	159544661.69	172,325,273.83	OK	1.40	6334.38	3167.19
0.75	240	240	290	640	161,168,596.52	43,081,318.46	32,310,988.84	PERLU	128857607.68	172,325,273.83	OK	1.40	5116.02	2558.01
0.75	240	240	290	640	182,494,041.31	43,081,318.46	32,310,988.84	PERLU	150183052.47	172,325,273.83	OK	1.40	5962.70	2981.35
0.75	240	240	290	640	196,470,955.80	43,081,318.46	32,310,988.84	PERLU	164159966.95	172,325,273.83	OK	1.40	6517.62	3258.81
0.75	240	240	290	640	201,156,946.36	43,081,318.46	32,310,988.84	PERLU	168845957.52	172,325,273.83	OK	1.40	6703.67	3351.83
0.75	240	240	290	640	178,698,774.57	43,081,318.46	32,310,988.84	PERLU	146387785.73	172,325,273.83	OK	1.40	5812.02	2906.01
0.75	240	240	290	640	152,228,086.27	43,081,318.46	32,310,988.84	PERLU	119917097.42	172,325,273.83	OK	1.40	4761.05	2380.53
0.75	240	240	290	640	126,272,951.43	43,081,318.46	32,310,988.84	PERLU	93961962.59	172,325,273.83	OK	1.40	3730.56	1865.28
0.75	240	240	290	640	176,252,616.29	43,081,318.46	32,310,988.84	PERLU	143941627.44	172,325,273.83	OK	1.40	5714.90	2857.45
0.75	240	240	290	640	158,481,487.36	43,081,318.46	32,310,988.84	PERLU	126170498.51	172,325,273.83	OK	1.40	5009.33	2504.67
0.75	240	240	290	640	201,407,343.89	43,081,318.46	32,310,988.84	PERLU	169096355.05	172,325,273.83	OK	1.40	6713.61	3356.81

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240	240	140	390	1,289,201.56	11,219,093.35	8,414,320.01	X	-7125118.45	44,876,373.39	OK	1.60	-481.73	-240.87
0.75	240	240	140	390	119,178.39	11,219,093.35	8,414,320.01	X	-8295141.62	44,876,373.39	OK	1.60	-560.84	-280.42
0.75	240	240	140	390	1,720,335.11	11,219,093.35	8,414,320.01	X	-6693984.91	44,876,373.39	OK	1.60	-452.58	-226.29
0.75	240	240	140	390	3,333,103.74	11,219,093.35	8,414,320.01	X	-5081216.27	44,876,373.39	OK	1.60	-343.54	-171.77
0.75	240	240	140	390	1,403,654.24	11,219,093.35	8,414,320.01	X	-7010665.77	44,876,373.39	OK	1.60	-474.00	-237.00
0.75	240	240	140	390	20,371.40	11,219,093.35	8,414,320.01	X	-8393948.61	44,876,373.39	OK	1.60	-567.52	-283.76
0.75	240	240	140	390	1,339,940.89	11,219,093.35	8,414,320.01	X	-7074379.12	44,876,373.39	OK	1.60	-478.30	-239.15
0.75	240	240	140	390	436,470.73	11,219,093.35	8,414,320.01	X	-7977849.28	44,876,373.39	OK	1.60	-539.39	-269.69
0.75	240	240	140	390	2,441,540.50	11,219,093.35	8,414,320.01	X	-5972779.51	44,876,373.39	OK	1.60	-403.82	-201.91
0.75	240	240	140	390	1,348,681.59	11,219,093.35	8,414,320.01	X	-7065638.42	44,876,373.39	OK	1.60	-477.71	-238.86
0.75	240	240	140	390	35,902.52	11,219,093.35	8,414,320.01	X	-8378417.50	44,876,373.39	OK	1.60	-566.47	-283.24
0.75	240	240	140	390	865,802.42	11,219,093.35	8,414,320.01	X	-7548517.59	44,876,373.39	OK	1.60	-510.36	-255.18
0.75	240	240	140	390	626,296.96	11,219,093.35	8,414,320.01	X	-7788023.05	44,876,373.39	OK	1.60	-526.55	-263.28
0.75	240	240	390	890	68,702,431.50	89,752,746.79	67,314,560.09	PERLU	1387871.41	359,010,987.14	OK	1.43	39.84	19.92
0.75	240	240	390	890	73,649,524.50	89,752,746.79	67,314,560.09	PERLU	6334964.41	359,010,987.14	OK	1.43	181.86	90.93
0.75	240	240	340	790	39,362,177.26	65,429,752.41	49,072,314.31	X	-9710137.05	261,719,009.63	OK	1.44	-314.95	-157.47
0.75	240	240	340	790	44,821,283.59	65,429,752.41	49,072,314.31	X	-4251030.71	261,719,009.63	OK	1.44	-137.88	-68.94
0.75	240	240	190	440	208,583.01	17,771,043.86	13,328,282.90	X	-13119699.89	71,084,175.45	OK	1.44	-763.62	-381.81
0.75	240	240	140	340	102,769.63	10,097,184.01	7,572,888.01	X	-7470118.38	40,388,736.05	OK	1.48	-566.99	-283.50
0.75	240	240	140	340	458,997.34	10,097,184.01	7,572,888.01	X	-7113890.67	40,388,736.05	OK	1.48	-539.95	-269.98
0.75	240	240	140	340	311,308.70	10,097,184.01	7,572,888.01	X	-7261579.31	40,388,736.05	OK	1.48	-551.16	-275.58
0.75	240	240	140	340	2,101,195.77	10,097,184.01	7,572,888.01	X	-5471692.24	40,388,736.05	OK	1.48	-415.31	-207.65
0.75	240	240	140	340	2,887,671.96	10,097,184.01	7,572,888.01	X	-4685216.05	40,388,736.05	OK	1.48	-355.61	-177.81
0.75	240	240	140	340	20,977.93	10,097,184.01	7,572,888.01	X	-7551910.08	40,388,736.05	OK	1.48	-573.20	-286.60
0.75	240	240	140	340	77,428.93	10,097,184.01	7,572,888.01	X	-7495459.08	40,388,736.05	OK	1.48	-568.92	-284.46
0.75	240	240	140	340	384,471.90	10,097,184.01	7,572,888.01	X	-7188416.11	40,388,736.05	OK	1.48	-545.61	-272.81
0.75	240	240	140	340	214,014.65	10,097,184.01	7,572,888.01	X	-7358873.36	40,388,736.05	OK	1.48	-558.55	-279.27
0.75	240	240	140	340	2,930,990.37	10,097,184.01	7,572,888.01	X	-4641897.64	40,388,736.05	OK	1.48	-352.33	-176.16
0.75	240	240	140	340	329,605.84	10,097,184.01	7,572,888.01	X	-7243282.17	40,388,736.05	OK	1.48	-549.77	-274.89
0.75	240	240	140	340	65,637.08	10,097,184.01	7,572,888.01	X	-7507250.93	40,388,736.05	OK	1.48	-569.81	-284.91
0.75	240	240	140	340	1,213,855.61	10,097,184.01	7,572,888.01	X	-6359032.40	40,388,736.05	OK	1.48	-482.66	-241.33
0.75	240	240	140	340	471,386.69	10,097,184.01	7,572,888.01	X	-7101501.32	40,388,736.05	OK	1.48	-539.01	-269.51
0.75	240	240	140	340	128,792.95	10,097,184.01	7,572,888.01	X	-7444095.06	40,388,736.05	OK	1.48	-565.02	-282.51
0.75	240	240	140	340	994,000.37	10,097,184.01	7,572,888.01	X	-6578887.64	40,388,736.05	OK	1.48	-499.35	-249.67
0.75	240	240	140	340	384,187.19	10,097,184.01	7,572,888.01	X	-7188700.82	40,388,736.05	OK	1.48	-545.63	-272.82
0.75	240	240	140	340	254,148.46	10,097,184.01	7,572,888.01	X	-7318739.55	40,388,736.05	OK	1.48	-555.50	-277.75
0.75	240	240	140	340	454,208.56	10,097,184.01	7,572,888.01	X	-7118679.45	40,388,736.05	OK	1.48	-540.32	-270.16

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240	240	140	340	308,644.19	10,097,184.01	7,572,888.01	X	-7264243.82	40,388,736.05	OK	1.48	-551.37	-275.68
0.75	240	240	140	340	1,105,877.28	10,097,184.01	7,572,888.01	X	-6467010.73	40,388,736.05	OK	1.48	-490.85	-245.43
0.75	240	240	140	340	339,746.78	10,097,184.01	7,572,888.01	X	-7233141.23	40,388,736.05	OK	1.48	-549.01	-274.50
0.75	240	240	140	340	73,111.20	10,097,184.01	7,572,888.01	X	-7499776.81	40,388,736.05	OK	1.48	-569.24	-284.62
0.75	240	240	140	340	1,414,500.57	10,097,184.01	7,572,888.01	X	-6158387.44	40,388,736.05	OK	1.48	-467.43	-233.71
0.75	240	240	140	340	1,191,931.29	10,097,184.01	7,572,888.01	X	-6380956.72	40,388,736.05	OK	1.48	-484.32	-242.16
0.75	240	240	140	340	1,133,249.81	10,097,184.01	7,572,888.01	X	-6439638.20	40,388,736.05	OK	1.48	-488.78	-244.39
0.75	240	240	140	340	542,092.17	10,097,184.01	7,572,888.01	X	-7030795.84	40,388,736.05	OK	1.48	-533.65	-266.82
0.75	240	240	140	340	243,513.72	10,097,184.01	7,572,888.01	X	-7329374.29	40,388,736.05	OK	1.48	-556.31	-278.15
0.75	240	240	140	340	2,487,484.70	10,097,184.01	7,572,888.01	X	-5085403.31	40,388,736.05	OK	1.48	-385.99	-192.99
0.75	240	240	140	340	1,934,959.10	10,097,184.01	7,572,888.01	X	-5637928.91	40,388,736.05	OK	1.48	-427.93	-213.96
0.75	240	240	140	340	383,646.44	10,097,184.01	7,572,888.01	X	-7189241.57	40,388,736.05	OK	1.48	-545.67	-272.84
0.75	240	240	140	340	90,094.30	10,097,184.01	7,572,888.01	X	-7482793.71	40,388,736.05	OK	1.48	-567.95	-283.98
0.75	240	240	140	340	5,129.77	10,097,184.01	7,572,888.01	X	-7567758.24	40,388,736.05	OK	1.48	-574.40	-287.20
0.75	240	240	140	340	814,087.12	10,097,184.01	7,572,888.01	X	-6758800.89	40,388,736.05	OK	1.48	-513.00	-256.50
0.75	240	240	140	340	683,267.18	10,097,184.01	7,572,888.01	X	-6889620.83	40,388,736.05	OK	1.48	-522.93	-261.47
0.75	240	240	140	340	38,881.77	10,097,184.01	7,572,888.01	X	-7534006.24	40,388,736.05	OK	1.48	-571.84	-285.92
0.75	240	240	140	340	74,363.77	10,097,184.01	7,572,888.01	X	-7498524.24	40,388,736.05	OK	1.48	-569.15	-284.57
0.75	240	240	140	340	227,949.37	10,097,184.01	7,572,888.01	X	-7344938.64	40,388,736.05	OK	1.48	-557.49	-278.75
0.75	240	240	240	540	1,941,433.38	28,586,249.85	21,439,687.39	X	-19498254.01	114,344,999.40	OK	1.42	-920.40	-460.20
0.75	240	240	240	540	1,062,785.40	28,586,249.85	21,439,687.39	X	-20376901.99	114,344,999.40	OK	1.42	-961.87	-480.94

Perhitungan Torsi Tumpuan dan Lapangan Balok Lantai 2

Ø torsi	fy tul	fy sengkang	bl	hl	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240.00	240.00	340.00	640.00	34,696,341.55	54,524,793.67	40,893,595.25	X	-6,197,253.70	218,099,174.69	OK	1.29	-239.63	-119.82
0.75	240.00	240.00	340.00	640.00	49,968,939.20	54,524,793.67	40,893,595.25	PERLU	9,075,343.95	218,099,174.69	OK	1.29	350.92	175.46
0.75	240.00	240.00	340.00	640.00	44,030,111.00	54,524,793.67	40,893,595.25	PERLU	3,136,515.75	218,099,174.69	OK	1.29	121.28	60.64
0.75	240.00	240.00	340.00	640.00	2,747,438.40	54,524,793.67	40,893,595.25	X	-38,146,156.85	218,099,174.69	OK	1.29	-1,475.03	-737.52
0.75	240.00	240.00	340.00	640.00	52,758,007.30	54,524,793.67	40,893,595.25	PERLU	11,864,412.04	218,099,174.69	OK	1.29	458.77	229.39
0.75	240.00	240.00	340.00	640.00	53,132,492.84	54,524,793.67	40,893,595.25	PERLU	12,238,897.59	218,099,174.69	OK	1.29	473.25	236.63
0.75	240.00	240.00	340.00	640.00	53,457,418.21	54,524,793.67	40,893,595.25	PERLU	12,563,822.96	218,099,174.69	OK	1.29	485.82	242.91
0.75	240.00	240.00	340.00	540.00	123,500,418.81	47,254,821.18	35,441,115.89	PERLU	88,059,302.92	189,019,284.73	OK	1.20	3,920.88	1,960.44
0.75	240.00	240.00	190.00	390.00	448,415.78	16,155,494.42	12,116,620.82	X	-11,668,205.03	64,621,977.69	OK	1.35	-751.20	-375.60
0.75	240.00	240.00	190.00	390.00	468,506.52	16,155,494.42	12,116,620.82	X	-11,648,114.29	64,621,977.69	OK	1.35	-749.91	-374.95
0.75	240.00	240.00	190.00	390.00	1,126,636.85	16,155,494.42	12,116,620.82	X	-10,989,983.96	64,621,977.69	OK	1.35	-707.54	-353.77
0.75	240.00	240.00	190.00	390.00	1,334,429.58	16,155,494.42	12,116,620.82	X	-10,782,191.24	64,621,977.69	OK	1.35	-694.16	-347.08
0.75	240.00	240.00	190.00	390.00	4,413,678.28	16,155,494.42	12,116,620.82	X	-7,702,942.53	64,621,977.69	OK	1.35	-495.92	-247.96
0.75	240.00	240.00	190.00	390.00	2,434,648.74	16,155,494.42	12,116,620.82	X	-9,681,972.08	64,621,977.69	OK	1.35	-623.33	-311.66
0.75	240.00	240.00	190.00	390.00	853,702.73	16,155,494.42	12,116,620.82	X	-11,262,918.08	64,621,977.69	OK	1.35	-725.11	-362.55
0.75	240.00	240.00	190.00	390.00	217,688.10	16,155,494.42	12,116,620.82	X	-11,898,932.72	64,621,977.69	OK	1.35	-766.05	-383.03
0.75	240.00	240.00	190.00	390.00	655,065.43	16,155,494.42	12,116,620.82	X	-11,461,555.39	64,621,977.69	OK	1.35	-737.90	-368.95
0.75	240.00	240.00	190.00	390.00	421,659.44	16,155,494.42	12,116,620.82	X	-11,694,961.38	64,621,977.69	OK	1.35	-752.92	-376.46
0.75	240.00	240.00	290.00	640.00	158,565,919.67	43,081,318.46	32,310,988.84	PERLU	126,254,930.83	172,325,273.83	OK	1.40	5,012.68	2,506.34
0.75	240.00	240.00	290.00	640.00	107,175,845.33	43,081,318.46	32,310,988.84	PERLU	74,864,856.48	172,325,273.83	OK	1.40	2,972.35	1,486.17
0.75	240.00	240.00	290.00	640.00	176,052,678.93	43,081,318.46	32,310,988.84	PERLU	143,741,690.09	172,325,273.83	OK	1.40	5,706.96	2,853.48
0.75	240.00	240.00	290.00	640.00	156,042,206.80	43,081,318.46	32,310,988.84	PERLU	123,731,217.96	172,325,273.83	OK	1.40	4,912.48	2,456.24
0.75	240.00	240.00	290.00	640.00	187,883,501.00	43,081,318.46	32,310,988.84	PERLU	155,572,512.16	172,325,273.83	OK	1.40	6,176.68	3,088.34
0.75	240.00	240.00	290.00	640.00	200,262,356.09	43,081,318.46	32,310,988.84	PERLU	167,951,367.24	172,325,273.83	OK	1.40	6,668.15	3,334.08
0.75	240.00	240.00	290.00	640.00	186,761,544.06	43,081,318.46	32,310,988.84	PERLU	154,450,555.21	172,325,273.83	OK	1.40	6,132.13	3,066.07
0.75	240.00	240.00	290.00	640.00	201,013,200.66	43,081,318.46	32,310,988.84	PERLU	168,702,211.81	172,325,273.83	OK	1.40	6,697.96	3,348.98
0.75	240.00	240.00	290.00	640.00	179,470,463.88	43,081,318.46	32,310,988.84	PERLU	147,159,475.04	172,325,273.83	OK	1.40	5,842.65	2,921.33
0.75	240.00	240.00	290.00	640.00	183,884,857.17	43,081,318.46	32,310,988.84	PERLU	151,573,868.32	172,325,273.83	OK	1.40	6,017.92	3,008.96
0.75	240.00	240.00	290.00	640.00	203,927,798.52	43,081,318.46	32,310,988.84	PERLU	171,616,809.68	172,325,273.83	OK	1.40	6,813.68	3,406.84
0.75	240.00	240.00	290.00	640.00	180,782,291.60	43,081,318.46	32,310,988.84	PERLU	148,471,302.76	172,325,273.83	OK	1.40	5,894.74	2,947.37
0.75	240.00	240.00	290.00	640.00	203,250,563.66	43,081,318.46	32,310,988.84	PERLU	170,939,574.82	172,325,273.83	OK	1.40	6,786.79	3,393.40
0.75	240.00	240.00	290.00	640.00	121,249,718.76	43,081,318.46	32,310,988.84	PERLU	88,938,729.92	172,325,273.83	OK	1.40	3,531.12	1,765.56
0.75	240.00	240.00	290.00	640.00	202,379,939.45	43,081,318.46	32,310,988.84	PERLU	170,068,950.61	172,325,273.83	OK	1.40	6,752.23	3,376.11
0.75	240.00	240.00	290.00	640.00	203,864,939.96	43,081,318.46	32,310,988.84	PERLU	171,553,951.11	172,325,273.83	OK	1.40	6,811.18	3,405.59

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α1 HRS < 1.5	At	jarak
0.75	240.00	240.00	290.00	640.00	198,577,292.08	43,081,318.46	32,310,988.84	PERLU	166,266,303.24	172,325,273.83	OK	1.40	6,601.25	3,300.62
0.75	240.00	240.00	140.00	390.00	1,125,279.69	11,219,093.35	8,414,320.01	X	-7,289,040.32	44,876,373.39	OK	1.60	-492.82	-246.41
0.75	240.00	240.00	140.00	390.00	90,778.37	11,219,093.35	8,414,320.01	X	-8,323,541.64	44,876,373.39	OK	1.60	-562.76	-281.38
0.75	240.00	240.00	140.00	390.00	1,594,477.54	11,219,093.35	8,414,320.01	X	-6,819,842.47	44,876,373.39	OK	1.60	-461.09	-230.55
0.75	240.00	240.00	140.00	390.00	3,209,860.91	11,219,093.35	8,414,320.01	X	-5,204,459.11	44,876,373.39	OK	1.60	-351.88	-175.94
0.75	240.00	240.00	140.00	390.00	1,237,895.60	11,219,093.35	8,414,320.01	X	-7,176,424.41	44,876,373.39	OK	1.60	-485.20	-242.60
0.75	240.00	240.00	140.00	390.00	30,288.81	11,219,093.35	8,414,320.01	X	-8,384,031.20	44,876,373.39	OK	1.60	-566.85	-283.42
0.75	240.00	240.00	140.00	390.00	1,210,408.15	11,219,093.35	8,414,320.01	X	-7,203,911.86	44,876,373.39	OK	1.60	-487.06	-243.53
0.75	240.00	240.00	140.00	390.00	371,190.38	11,219,093.35	8,414,320.01	X	-8,043,129.63	44,876,373.39	OK	1.60	-543.80	-271.90
0.75	240.00	240.00	140.00	390.00	1,679,103.05	11,219,093.35	8,414,320.01	X	-6,735,216.96	44,876,373.39	OK	1.60	-455.37	-227.69
0.75	240.00	240.00	140.00	390.00	1,218,360.50	11,219,093.35	8,414,320.01	X	-7,195,959.51	44,876,373.39	OK	1.60	-486.52	-243.26
0.75	240.00	240.00	140.00	390.00	24,982.56	11,219,093.35	8,414,320.01	X	-8,389,337.46	44,876,373.39	OK	1.60	-567.21	-283.60
0.75	240.00	240.00	140.00	390.00	821,600.76	11,219,093.35	8,414,320.01	X	-7,592,719.25	44,876,373.39	OK	1.60	-513.35	-256.67
0.75	240.00	240.00	140.00	390.00	398,539.46	11,219,093.35	8,414,320.01	X	-8,015,780.55	44,876,373.39	OK	1.60	-541.95	-270.98
0.75	240.00	240.00	390.00	890.00	64,943,010.74	89,752,746.79	67,314,560.09	X	-2,371,549.35	359,010,987.14	OK	1.43	-68.08	-34.04
0.75	240.00	240.00	390.00	890.00	70,363,767.82	89,752,746.79	67,314,560.09	PERLU	3,049,207.74	359,010,987.14	OK	1.43	87.53	43.77
0.75	240.00	240.00	340.00	790.00	41,072,665.85	65,429,752.41	49,072,314.31	X	-7,999,648.46	261,719,009.63	OK	1.44	-259.47	-129.73
0.75	240.00	240.00	340.00	790.00	126,998,197.06	65,429,752.41	49,072,314.31	PERLU	77,925,882.75	261,719,009.63	OK	1.44	2,527.52	1,263.76
0.75	240.00	240.00	190.00	440.00	37,817.85	17,771,043.86	13,328,282.90	X	-13,290,465.05	71,084,175.45	OK	1.44	-773.56	-386.78
0.75	240.00	240.00	140.00	340.00	130,026.92	10,097,184.01	7,572,888.01	X	-7,442,861.09	40,388,736.05	OK	1.48	-564.92	-282.46
0.75	240.00	240.00	140.00	340.00	431,260.16	10,097,184.01	7,572,888.01	X	-7,141,627.85	40,388,736.05	OK	1.48	-542.06	-271.03
0.75	240.00	240.00	140.00	340.00	132,134.08	10,097,184.01	7,572,888.01	X	-7,440,753.93	40,388,736.05	OK	1.48	-564.76	-282.38
0.75	240.00	240.00	140.00	340.00	2,237,084.42	10,097,184.01	7,572,888.01	X	-5,335,803.59	40,388,736.05	OK	1.48	-404.99	-202.50
0.75	240.00	240.00	140.00	340.00	2,594,814.87	10,097,184.01	7,572,888.01	X	-4,978,073.14	40,388,736.05	OK	1.48	-377.84	-188.92
0.75	240.00	240.00	140.00	340.00	15,752.67	10,097,184.01	7,572,888.01	X	-7,557,135.34	40,388,736.05	OK	1.48	-573.60	-286.80
0.75	240.00	240.00	140.00	340.00	75,330.91	10,097,184.01	7,572,888.01	X	-7,497,557.10	40,388,736.05	OK	1.48	-569.07	-284.54
0.75	240.00	240.00	140.00	340.00	350,617.82	10,097,184.01	7,572,888.01	X	-7,222,270.19	40,388,736.05	OK	1.48	-548.18	-274.09
0.75	240.00	240.00	140.00	340.00	369,361.21	10,097,184.01	7,572,888.01	X	-7,203,526.80	40,388,736.05	OK	1.48	-546.76	-273.38
0.75	240.00	240.00	140.00	340.00	2,990,884.98	10,097,184.01	7,572,888.01	X	-4,582,003.03	40,388,736.05	OK	1.48	-347.78	-173.89
0.75	240.00	240.00	140.00	340.00	307,074.16	10,097,184.01	7,572,888.01	X	-7,265,813.85	40,388,736.05	OK	1.48	-551.48	-275.74
0.75	240.00	240.00	140.00	340.00	75,828.53	10,097,184.01	7,572,888.01	X	-7,497,059.48	40,388,736.05	OK	1.48	-569.04	-284.52
0.75	240.00	240.00	140.00	340.00	1,061,284.59	10,097,184.01	7,572,888.01	X	-6,511,603.42	40,388,736.05	OK	1.48	-494.24	-247.12
0.75	240.00	240.00	140.00	340.00	419,201.40	10,097,184.01	7,572,888.01	X	-7,153,686.61	40,388,736.05	OK	1.48	-542.97	-271.49
0.75	240.00	240.00	140.00	340.00	130,917.54	10,097,184.01	7,572,888.01	X	-7,441,970.47	40,388,736.05	OK	1.48	-564.86	-282.43
0.75	240.00	240.00	140.00	340.00	1,106,192.52	10,097,184.01	7,572,888.01	X	-6,466,695.49	40,388,736.05	OK	1.48	-490.83	-245.42
0.75	240.00	240.00	140.00	340.00	370,341.86	10,097,184.01	7,572,888.01	X	-7,202,546.15	40,388,736.05	OK	1.48	-546.68	-273.34
0.75	240.00	240.00	140.00	340.00	211,155.72	10,097,184.01	7,572,888.01	X	-7,361,732.29	40,388,736.05	OK	1.48	-558.77	-279.38

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α1 HRS < 1.5	At	jarak
0.75	240.00	240.00	140.00	340.00	417,515.83	10,097,184.01	7,572,888.01	X	-7,155,372.18	40,388,736.05	OK	1.48	-543.10	-271.55
0.75	240.00	240.00	140.00	340.00	333,849.13	10,097,184.01	7,572,888.01	X	-7,239,038.88	40,388,736.05	OK	1.48	-549.45	-274.73
0.75	240.00	240.00	140.00	340.00	1,187,650.46	10,097,184.01	7,572,888.01	X	-6,385,237.55	40,388,736.05	OK	1.48	-484.65	-242.32
0.75	240.00	240.00	140.00	340.00	344,444.45	10,097,184.01	7,572,888.01	X	-7,228,443.56	40,388,736.05	OK	1.48	-548.65	-274.32
0.75	240.00	240.00	140.00	450.00	53,025.09	10,097,184.01	7,572,888.01	X	-7,519,862.92	40,388,736.05	OK	1.74	-450.20	-225.10
0.75	240.00	240.00	140.00	340.00	1,355,895.08	10,097,184.01	7,572,888.01	X	-6,216,992.93	40,388,736.05	OK	1.48	-471.88	-235.94
0.75	240.00	240.00	140.00	340.00	1,038,322.19	10,097,184.01	7,572,888.01	X	-6,534,565.82	40,388,736.05	OK	1.48	-495.98	-247.99
0.75	240.00	240.00	140.00	340.00	4,049,696.88	10,097,184.01	7,572,888.01	X	-3,523,191.13	40,388,736.05	OK	1.48	-267.41	-133.71
0.75	240.00	240.00	140.00	340.00	534,466.46	10,097,184.01	7,572,888.01	X	-7,038,421.55	40,388,736.05	OK	1.48	-534.23	-267.11
0.75	240.00	240.00	140.00	340.00	250,588.08	10,097,184.01	7,572,888.01	X	-7,322,299.93	40,388,736.05	OK	1.48	-555.77	-277.89
0.75	240.00	240.00	140.00	340.00	2,347,826.35	10,097,184.01	7,572,888.01	X	-5,225,061.66	40,388,736.05	OK	1.48	-396.59	-198.29
0.75	240.00	240.00	140.00	340.00	1,660,641.04	10,097,184.01	7,572,888.01	X	-5,912,246.97	40,388,736.05	OK	1.48	-448.75	-224.37
0.75	240.00	240.00	140.00	340.00	458,170.12	10,097,184.01	7,572,888.01	X	-7,114,717.89	40,388,736.05	OK	1.48	-540.02	-270.01
0.75	240.00	240.00	140.00	340.00	94,981.64	10,097,184.01	7,572,888.01	X	-7,477,906.37	40,388,736.05	OK	1.48	-567.58	-283.79
0.75	240.00	240.00	140.00	340.00	3,224.37	10,097,184.01	7,572,888.01	X	-7,569,663.64	40,388,736.05	OK	1.48	-574.55	-287.27
0.75	240.00	240.00	140.00	340.00	881,146.61	10,097,184.01	7,572,888.01	X	-6,691,741.40	40,388,736.05	OK	1.48	-507.91	-253.96
0.75	240.00	240.00	140.00	340.00	724,446.05	10,097,184.01	7,572,888.01	X	-6,848,441.96	40,388,736.05	OK	1.48	-519.81	-259.90
0.75	240.00	240.00	140.00	340.00	58,612.40	10,097,184.01	7,572,888.01	X	-7,514,275.61	40,388,736.05	OK	1.48	-570.34	-285.17
0.75	240.00	240.00	140.00	340.00	24,991.45	10,097,184.01	7,572,888.01	X	-7,547,896.56	40,388,736.05	OK	1.48	-572.90	-286.45
0.75	240.00	240.00	240.00	540.00	73,621.23	28,586,249.85	21,439,687.39	X	-21,366,066.16	114,344,999.40	OK	1.42	-1,068.57	-504.28
0.75	240.00	240.00	240.00	540.00	893,835.61	28,586,249.85	21,439,687.39	X	-20,545,851.78	114,344,999.40	OK	1.42	-969.85	-484.92
0.75	240.00	240.00	240.00	540.00	1,073,275.96	28,586,249.85	21,439,687.39	X	-20,366,411.42	114,344,999.40	OK	1.42	-961.38	-480.69

Perhitungan Torsi Tumpuan dan Lapangan Balok Lantai 3

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			a t HRS < 1.5	At	jarak
0.75	240.00	240.00	340.00	640.00	30,451,988.11	54,524,793.67	40,893,595.25	X	-10,441,607.15	218,099,174.69	OK	1.29	-403.76	-201.88
0.75	240.00	240.00	340.00	640.00	34,358,101.98	54,524,793.67	40,893,595.25	X	-6,535,493.27	218,099,174.69	OK	1.29	-252.71	-126.36
0.75	240.00	240.00	340.00	640.00	44,199,884.46	54,524,793.67	40,893,595.25	PERLU	3,306,289.21	218,099,174.69	OK	1.29	127.85	63.92
0.75	240.00	240.00	340.00	640.00	4,110,645.36	54,524,793.67	40,893,595.25	X	-36,782,949.89	218,099,174.69	OK	1.29	-1,422.32	-711.16
0.75	240.00	240.00	340.00	640.00	36,883,563.22	54,524,793.67	40,893,595.25	X	-4,010,032.03	218,099,174.69	OK	1.29	-155.06	-77.53
0.75	240.00	240.00	340.00	640.00	36,931,156.43	54,524,793.67	40,893,595.25	X	-3,962,438.83	218,099,174.69	OK	1.29	-153.22	-76.61
0.75	240.00	240.00	340.00	640.00	39,359,148.09	54,524,793.67	40,893,595.25	X	-1,534,447.16	218,099,174.69	OK	1.29	-59.33	-29.67
0.75	240.00	240.00	340.00	540.00	106,208,076.37	47,254,821.18	35,441,115.89	PERLU	70,766,960.49	189,019,284.73	OK	1.20	3,150.93	1,575.46
0.75	240.00	240.00	190.00	390.00	421,767.01	16,155,494.42	12,116,620.82	X	-11,694,853.80	64,621,977.69	OK	1.35	-752.92	-376.46
0.75	240.00	240.00	190.00	390.00	68,261.96	16,155,494.42	12,116,620.82	X	-12,048,358.86	64,621,977.69	OK	1.35	-775.67	-387.84
0.75	240.00	240.00	190.00	390.00	669,988.79	16,155,494.42	12,116,620.82	X	-11,446,632.03	64,621,977.69	OK	1.35	-736.93	-368.47
0.75	240.00	240.00	190.00	390.00	645,068.43	16,155,494.42	12,116,620.82	X	-11,471,552.39	64,621,977.69	OK	1.35	-738.54	-369.27
0.75	240.00	240.00	190.00	390.00	4,281,635.27	16,155,494.42	12,116,620.82	X	-7,834,985.55	64,621,977.69	OK	1.35	-504.42	-252.21
0.75	240.00	240.00	190.00	390.00	1,485,152.21	16,155,494.42	12,116,620.82	X	-10,631,468.60	64,621,977.69	OK	1.35	-684.45	-342.23
0.75	240.00	240.00	190.00	390.00	366,103.66	16,155,494.42	12,116,620.82	X	-11,750,517.16	64,621,977.69	OK	1.35	-756.50	-378.25
0.75	240.00	240.00	190.00	390.00	130,248.58	16,155,494.42	12,116,620.82	X	-11,986,372.24	64,621,977.69	OK	1.35	-771.68	-385.84
0.75	240.00	240.00	190.00	390.00	648,375.93	16,155,494.42	12,116,620.82	X	-11,468,244.89	64,621,977.69	OK	1.35	-738.33	-369.16
0.75	240.00	240.00	190.00	390.00	224,241.53	16,155,494.42	12,116,620.82	X	-11,892,379.29	64,621,977.69	OK	1.35	-765.63	-382.82
0.75	240.00	240.00	290.00	640.00	130,571,186.27	43,081,318.46	32,310,988.84	PERLU	98,260,197.43	172,325,273.83	OK	1.40	3,901.21	1,950.61
0.75	240.00	240.00	290.00	640.00	179,185,785.76	43,081,318.46	32,310,988.84	PERLU	146,874,796.92	172,325,273.83	OK	1.40	5,831.35	2,915.68
0.75	240.00	240.00	290.00	640.00	190,743,395.54	43,081,318.46	32,310,988.84	PERLU	158,432,406.70	172,325,273.83	OK	1.40	6,290.22	3,145.11
0.75	240.00	240.00	290.00	640.00	192,643,143.71	43,081,318.46	32,310,988.84	PERLU	160,332,154.86	172,325,273.83	OK	1.40	6,365.65	3,182.82
0.75	240.00	240.00	290.00	640.00	154,886,052.21	43,081,318.46	32,310,988.84	PERLU	122,575,063.36	172,325,273.83	OK	1.40	4,866.58	2,433.29
0.75	240.00	240.00	290.00	640.00	167,465,599.60	43,081,318.46	32,310,988.84	PERLU	135,154,610.76	172,325,273.83	OK	1.40	5,366.03	2,683.01
0.75	240.00	240.00	290.00	640.00	164,977,959.03	43,081,318.46	32,310,988.84	PERLU	132,666,970.19	172,325,273.83	OK	1.40	5,267.26	2,633.63
0.75	240.00	240.00	290.00	640.00	176,637,847.68	43,081,318.46	32,310,988.84	PERLU	144,326,858.84	172,325,273.83	OK	1.40	5,730.19	2,865.10
0.75	240.00	240.00	290.00	640.00	160,996,960.31	43,081,318.46	32,310,988.84	PERLU	128,685,971.47	172,325,273.83	OK	1.40	5,109.20	2,554.60
0.75	240.00	240.00	290.00	640.00	195,344,469.55	43,081,318.46	32,310,988.84	PERLU	163,033,480.70	172,325,273.83	OK	1.40	6,472.90	3,236.45
0.75	240.00	240.00	290.00	640.00	174,222,096.97	43,081,318.46	32,310,988.84	PERLU	141,911,108.12	172,325,273.83	OK	1.40	5,634.28	2,817.14
0.75	240.00	240.00	290.00	640.00	148,245,057.68	43,081,318.46	32,310,988.84	PERLU	115,934,068.83	172,325,273.83	OK	1.40	4,602.92	2,301.46
0.75	240.00	240.00	290.00	640.00	182,443,392.71	43,081,318.46	32,310,988.84	PERLU	150,132,403.87	172,325,273.83	OK	1.40	5,960.69	2,980.34
0.75	240.00	240.00	290.00	640.00	95,510,893.17	43,081,318.46	32,310,988.84	PERLU	63,199,904.33	172,325,273.83	OK	1.40	2,509.22	1,254.61
0.75	240.00	240.00	290.00	640.00	177,082,731.81	43,081,318.46	32,310,988.84	PERLU	144,771,742.97	172,325,273.83	OK	1.40	5,747.85	2,873.93
0.75	240.00	240.00	290.00	640.00	163,234,598.89	43,081,318.46	32,310,988.84	PERLU	130,923,610.05	172,325,273.83	OK	1.40	5,198.04	2,599.02

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α1 HRS < 1.5	At	jarak
0.75	240.00	240.00	290.00	640.00	165,039,360.67	43,081,318.46	32,310,988.84	PERLU	132,728,371.82	172,325,273.83	OK	1.40	5,269.70	2,634.85
0.75	240.00	240.00	140.00	390.00	822,183.23	11,219,093.35	8,414,320.01	X	-7,592,136.78	44,876,373.39	OK	1.60	-513.31	-256.65
0.75	240.00	240.00	140.00	390.00	51,484.67	11,219,093.35	8,414,320.01	X	-8,362,835.34	44,876,373.39	OK	1.60	-565.42	-282.71
0.75	240.00	240.00	140.00	390.00	1,568,891.15	11,219,093.35	8,414,320.01	X	-6,845,428.86	44,876,373.39	OK	1.60	-462.82	-231.41
0.75	240.00	240.00	140.00	390.00	3,250,160.97	11,219,093.35	8,414,320.01	X	-5,164,159.04	44,876,373.39	OK	1.60	-349.15	-174.58
0.75	240.00	240.00	140.00	390.00	902,988.79	11,219,093.35	8,414,320.01	X	-7,511,331.22	44,876,373.39	OK	1.60	-507.85	-253.92
0.75	240.00	240.00	140.00	390.00	9,764.14	11,219,093.35	8,414,320.01	X	-8,404,555.87	44,876,373.39	OK	1.60	-568.24	-284.12
0.75	240.00	240.00	140.00	390.00	861,601.58	11,219,093.35	8,414,320.01	X	-7,552,718.43	44,876,373.39	OK	1.60	-510.64	-255.32
0.75	240.00	240.00	140.00	390.00	320,608.49	11,219,093.35	8,414,320.01	X	-8,093,711.52	44,876,373.39	OK	1.60	-547.22	-273.61
0.75	240.00	240.00	140.00	390.00	1,178,990.13	11,219,093.35	8,414,320.01	X	-7,235,329.88	44,876,373.39	OK	1.60	-489.19	-244.59
0.75	240.00	240.00	140.00	390.00	851,701.48	11,219,093.35	8,414,320.01	X	-7,562,618.53	44,876,373.39	OK	1.60	-511.31	-255.66
0.75	240.00	240.00	140.00	390.00	4,738.24	11,219,093.35	8,414,320.01	X	-8,409,581.77	44,876,373.39	OK	1.60	-568.58	-284.29
0.75	240.00	240.00	140.00	390.00	700,831.30	11,219,093.35	8,414,320.01	X	-7,713,488.71	44,876,373.39	OK	1.60	-521.51	-260.76
0.75	240.00	240.00	140.00	390.00	240,722.97	11,219,093.35	8,414,320.01	X	-8,173,597.04	44,876,373.39	OK	1.60	-552.62	-276.31
0.75	240.00	240.00	390.00	890.00	56,484,002.64	89,752,746.79	67,314,560.09	X	-10,830,557.45	359,010,987.14	OK	1.43	-310.91	-155.45
0.75	240.00	240.00	390.00	890.00	59,511,302.22	89,752,746.79	67,314,560.09	X	-7,803,257.87	359,010,987.14	OK	1.43	-224.01	-112.00
0.75	240.00	240.00	340.00	790.00	38,219,754.54	65,429,752.41	49,072,314.31	X	-10,852,559.76	261,719,009.63	OK	1.44	-352.00	-176.00
0.75	240.00	240.00	340.00	790.00	90,799,628.53	65,429,752.41	49,072,314.31	PERLU	41,727,314.23	261,719,009.63	OK	1.44	1,353.42	676.71
0.75	240.00	240.00	190.00	440.00	470,245.28	17,771,043.86	13,328,282.90	X	-12,858,037.62	71,084,175.45	OK	1.44	-748.39	-374.19
0.75	240.00	240.00	140.00	340.00	158,190.15	10,097,184.01	7,572,888.01	X	-7,414,697.86	40,388,736.05	OK	1.48	-562.79	-281.39
0.75	240.00	240.00	140.00	340.00	459,697.72	10,097,184.01	7,572,888.01	X	-7,113,190.29	40,388,736.05	OK	1.48	-539.90	-269.95
0.75	240.00	240.00	140.00	340.00	22,295.36	10,097,184.01	7,572,888.01	X	-7,550,592.65	40,388,736.05	OK	1.48	-573.10	-286.55
0.75	240.00	240.00	140.00	340.00	2,201,647.07	10,097,184.01	7,572,888.01	X	-5,371,240.94	40,388,736.05	OK	1.48	-407.68	-203.84
0.75	240.00	240.00	140.00	340.00	2,135,856.37	10,097,184.01	7,572,888.01	X	-5,437,031.64	40,388,736.05	OK	1.48	-412.68	-206.34
0.75	240.00	240.00	140.00	340.00	14,205.61	10,097,184.01	7,572,888.01	X	-7,558,682.40	40,388,736.05	OK	1.48	-573.71	-286.86
0.75	240.00	240.00	140.00	340.00	20,059.59	10,097,184.01	7,572,888.01	X	-7,552,828.42	40,388,736.05	OK	1.48	-573.27	-286.63
0.75	240.00	240.00	140.00	340.00	506,977.52	10,097,184.01	7,572,888.01	X	-7,065,910.49	40,388,736.05	OK	1.48	-536.31	-268.16
0.75	240.00	240.00	140.00	340.00	441,140.29	10,097,184.01	7,572,888.01	X	-7,131,747.72	40,388,736.05	OK	1.48	-541.31	-270.65
0.75	240.00	240.00	140.00	340.00	3,019,015.75	10,097,184.01	7,572,888.01	X	-4,553,872.26	40,388,736.05	OK	1.48	-345.64	-172.82
0.75	240.00	240.00	140.00	340.00	263,519.69	10,097,184.01	7,572,888.01	X	-7,309,368.32	40,388,736.05	OK	1.48	-554.79	-277.40
0.75	240.00	240.00	140.00	340.00	49,986.63	10,097,184.01	7,572,888.01	X	-7,522,901.38	40,388,736.05	OK	1.48	-571.00	-285.50
0.75	240.00	240.00	140.00	340.00	781,736.54	10,097,184.01	7,572,888.01	X	-6,791,151.47	40,388,736.05	OK	1.48	-515.46	-257.73
0.75	240.00	240.00	140.00	340.00	300,999.54	10,097,184.01	7,572,888.01	X	-7,271,888.47	40,388,736.05	OK	1.48	-551.95	-275.97
0.75	240.00	240.00	140.00	340.00	110,305.68	10,097,184.01	7,572,888.01	X	-7,462,582.33	40,388,736.05	OK	1.48	-566.42	-283.21
0.75	240.00	240.00	140.00	340.00	1,273,988.31	10,097,184.01	7,572,888.01	X	-6,298,899.70	40,388,736.05	OK	1.48	-478.09	-239.05
0.75	240.00	240.00	140.00	340.00	337,571.02	10,097,184.01	7,572,888.01	X	-7,235,316.99	40,388,736.05	OK	1.48	-549.17	-274.59
0.75	240.00	240.00	140.00	340.00	208,403.13	10,097,184.01	7,572,888.01	X	-7,364,484.88	40,388,736.05	OK	1.48	-558.97	-279.49

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α1 HRS < 1.5	At	jarak
0.75	240.00	240.00	140.00	340.00	295,678.12	10,097,184.01	7,572,888.01	X	-7,277,209.89	40,388,736.05	OK	1.48	-552.35	-276.17
0.75	240.00	240.00	140.00	340.00	370,622.68	10,097,184.01	7,572,888.01	X	-7,202,265.33	40,388,736.05	OK	1.48	-546.66	-273.33
0.75	240.00	240.00	140.00	340.00	7,836,466.99	10,097,184.01	7,572,888.01	PERLU	263,578.98	40,388,736.05	OK	1.48	20.01	10.00
0.75	240.00	240.00	140.00	340.00	328,961.17	10,097,184.01	7,572,888.01	X	-7,243,926.84	40,388,736.05	OK	1.48	-549.82	-274.91
0.75	240.00	240.00	140.00	450.00	22,374.38	10,097,184.01	7,572,888.01	X	-7,550,513.63	40,388,736.05	OK	1.74	-452.03	-226.02
0.75	240.00	240.00	140.00	340.00	1,364,597.59	10,097,184.01	7,572,888.01	X	-6,208,290.42	40,388,736.05	OK	1.48	-471.22	-235.61
0.75	240.00	240.00	140.00	340.00	949,347.19	10,097,184.01	7,572,888.01	X	-6,623,540.82	40,388,736.05	OK	1.48	-502.74	-251.37
0.75	240.00	240.00	140.00	340.00	254,155.27	10,097,184.01	7,572,888.01	X	-7,318,732.74	40,388,736.05	OK	1.48	-555.50	-277.75
0.75	240.00	240.00	140.00	340.00	427,972.75	10,097,184.01	7,572,888.01	X	-7,144,915.26	40,388,736.05	OK	1.48	-542.31	-271.15
0.75	240.00	240.00	140.00	340.00	251,722.95	10,097,184.01	7,572,888.01	X	-7,321,165.06	40,388,736.05	OK	1.48	-555.69	-277.84
0.75	240.00	240.00	140.00	340.00	2,156,854.17	10,097,184.01	7,572,888.01	X	-5,416,033.84	40,388,736.05	OK	1.48	-411.08	-205.54
0.75	240.00	240.00	140.00	340.00	1,372,688.31	10,097,184.01	7,572,888.01	X	-6,200,199.70	40,388,736.05	OK	1.48	-470.60	-235.30
0.75	240.00	240.00	140.00	340.00	487,885.51	10,097,184.01	7,572,888.01	X	-7,085,002.50	40,388,736.05	OK	1.48	-537.76	-268.88
0.75	240.00	240.00	140.00	340.00	96,398.03	10,097,184.01	7,572,888.01	X	-7,476,489.98	40,388,736.05	OK	1.48	-567.48	-283.74
0.75	240.00	240.00	140.00	340.00	33,750.82	10,097,184.01	7,572,888.01	X	-7,539,137.19	40,388,736.05	OK	1.48	-572.23	-286.12
0.75	240.00	240.00	140.00	340.00	848,038.39	10,097,184.01	7,572,888.01	X	-6,724,849.62	40,388,736.05	OK	1.48	-510.43	-255.21
0.75	240.00	240.00	140.00	340.00	633,382.97	10,097,184.01	7,572,888.01	X	-6,939,505.04	40,388,736.05	OK	1.48	-526.72	-263.36
0.75	240.00	240.00	140.00	340.00	66,686.41	10,097,184.01	7,572,888.01	X	-7,506,201.60	40,388,736.05	OK	1.48	-569.73	-284.87
0.75	240.00	240.00	140.00	340.00	26,141.55	10,097,184.01	7,572,888.01	X	-7,546,746.46	40,388,736.05	OK	1.48	-572.81	-286.40
0.75	240.00	240.00	240.00	540.00	54,868.85	28,586,249.85	21,439,687.39	X	-21,384,818.54	114,344,999.40	OK	1.42	-1,009.45	-504.73
0.75	240.00	240.00	240.00	540.00	64,144,466.67	28,586,249.85	21,439,687.39	PERLU	42,704,779.28	114,344,999.40	OK	1.42	2,015.84	1,007.92
0.75	240.00	240.00	240.00	540.00	49,841,547.57	28,586,249.85	21,439,687.39	PERLU	28,401,860.18	114,344,999.40	OK	1.42	1,340.68	670.34

Perhitungan Torsi Tumpuan dan Lapangan Balok Lantai 4

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240	240	340	640	24,201,680.30	54,524,793.67	40,893,595.25	X	(16,691,914.96)	218,099,174.69	OK	1.29	-645.44	-322.72
0.75	240	240	340	640	13,907,743.57	54,524,793.67	40,893,595.25	X	(26,985,851.69)	218,099,174.69	OK	1.29	-1043.49	-521.74
0.75	240	240	340	640	106,390,411.93	54,524,793.67	40,893,595.25	PERLU	65,496,816.68	218,099,174.69	OK	1.29	2532.63	1266.31
0.75	240	240	340	640	3,631,699.12	54,524,793.67	40,893,595.25	X	(37,261,896.13)	218,099,174.69	OK	1.29	-1440.84	-720.42
0.75	240	240	340	640	15,418,248.99	54,524,793.67	40,893,595.25	X	(25,475,346.27)	218,099,174.69	OK	1.29	-985.08	-492.54
0.75	240	240	340	640	28,063,289.19	54,524,793.67	40,893,595.25	X	(12,830,306.06)	218,099,174.69	OK	1.29	-496.12	-248.06
0.75	240	240	340	640	19,075,542.74	54,524,793.67	40,893,595.25	X	(21,818,052.52)	218,099,174.69	OK	1.29	-843.66	-421.83
0.75	240	240	340	540	86,265,020.80	47,254,821.18	35,441,115.89	PERLU	50,823,904.92	189,019,284.73	OK	1.20	2262.95	1131.48
0.75	240	240	190	390	403,525.67	16,155,494.42	12,116,620.82	X	(11,713,095.15)	64,621,977.69	OK	1.35	-754.09	-377.04
0.75	240	240	190	390	359,480.43	16,155,494.42	12,116,620.82	X	(11,757,140.38)	64,621,977.69	OK	1.35	-756.93	-378.46
0.75	240	240	190	390	314,687.28	16,155,494.42	12,116,620.82	X	(11,801,933.54)	64,621,977.69	OK	1.35	-759.81	-379.90
0.75	240	240	190	390	3,854,702.65	16,155,494.42	12,116,620.82	X	(8,261,918.17)	64,621,977.69	OK	1.35	-531.90	-265.95
0.75	240	240	190	390	48,833.70	16,155,494.42	12,116,620.82	X	(12,067,787.12)	64,621,977.69	OK	1.35	-776.92	-388.46
0.75	240	240	190	390	3,230,528.59	16,155,494.42	12,116,620.82	X	(8,886,092.22)	64,621,977.69	OK	1.35	-572.09	-286.04
0.75	240	240	190	390	168,498.43	16,155,494.42	12,116,620.82	X	(11,948,122.38)	64,621,977.69	OK	1.35	-769.22	-384.61
0.75	240	240	190	390	61,289.80	16,155,494.42	12,116,620.82	X	(12,055,331.02)	64,621,977.69	OK	1.35	-776.12	-388.06
0.75	240	240	190	390	378,638.03	16,155,494.42	12,116,620.82	X	(11,737,982.79)	64,621,977.69	OK	1.35	-755.69	-377.85
0.75	240	240	190	390	227,970.17	16,155,494.42	12,116,620.82	X	(11,888,650.64)	64,621,977.69	OK	1.35	-765.39	-382.70
0.75	240	240	290	640	98,743,255.72	43,081,318.46	32,310,988.84	PERLU	66,432,266.88	172,325,273.83	OK	1.40	2637.55	1318.78
0.75	240	240	290	640	136,444,779.12	43,081,318.46	32,310,988.84	PERLU	104,133,790.28	172,325,273.83	OK	1.40	4134.41	2067.21
0.75	240	240	290	640	142,296,263.02	43,081,318.46	32,310,988.84	PERLU	109,985,274.18	172,325,273.83	OK	1.40	4366.73	2183.37
0.75	240	240	290	640	155,169,085.78	43,081,318.46	32,310,988.84	PERLU	122,858,096.93	172,325,273.83	OK	1.40	4877.82	2438.91
0.75	240	240	290	640	100,784,894.27	43,081,318.46	32,310,988.84	PERLU	68,473,905.43	172,325,273.83	OK	1.40	2718.61	1359.31
0.75	240	240	290	640	124,781,593.64	43,081,318.46	32,310,988.84	PERLU	92,470,604.80	172,325,273.83	OK	1.40	3671.35	1835.67
0.75	240	240	290	640	112,071,902.65	43,081,318.46	32,310,988.84	PERLU	79,760,913.80	172,325,273.83	OK	1.40	3166.74	1583.37
0.75	240	240	290	640	130,878,384.81	43,081,318.46	32,310,988.84	PERLU	98,567,395.96	172,325,273.83	OK	1.40	3913.41	1956.70
0.75	240	240	290	640	131,654,985.50	43,081,318.46	32,310,988.84	PERLU	99,343,996.66	172,325,273.83	OK	1.40	3944.24	1972.12
0.75	240	240	290	640	117,574,629.95	43,081,318.46	32,310,988.84	PERLU	85,263,641.11	172,325,273.83	OK	1.40	3385.21	1692.61
0.75	240	240	290	640	120,647,099.91	43,081,318.46	32,310,988.84	PERLU	88,336,111.07	172,325,273.83	OK	1.40	3507.20	1753.60
0.75	240	240	290	640	102,971,261.74	43,081,318.46	32,310,988.84	PERLU	70,660,272.89	172,325,273.83	OK	1.40	2805.42	1402.71
0.75	240	240	290	640	110,051,663.24	43,081,318.46	32,310,988.84	PERLU	77,740,674.40	172,325,273.83	OK	1.40	3086.53	1543.26
0.75	240	240	290	640	95,582,453.59	43,081,318.46	32,310,988.84	PERLU	63,271,464.75	172,325,273.83	OK	1.40	2512.06	1256.03
0.75	240	240	290	640	136,898,933.72	43,081,318.46	32,310,988.84	PERLU	104,587,944.88	172,325,273.83	OK	1.40	4152.44	2076.22
0.75	240	240	290	640	141,918,121.95	43,081,318.46	32,310,988.84	PERLU	109,607,133.10	172,325,273.83	OK	1.40	4351.72	2175.86

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α1 HRS < 1.5	At	jarak
0.75	240	240	290	640	123,664,552.17	43,081,318.46	32,310,988.84	PERLU	91,353,563.32	172,325,273.83	OK	1.40	3627.00	1813.50
0.75	240	240	140	390	466,068.98	11,219,093.35	8,414,320.01	X	(7,948,251.03)	44,876,373.39	OK	1.60	-537.39	-268.69
0.75	240	240	140	390	44,145.64	11,219,093.35	8,414,320.01	X	(8,370,174.37)	44,876,373.39	OK	1.60	-565.91	-282.96
0.75	240	240	140	390	1,084,933.65	11,219,093.35	8,414,320.01	X	(7,329,386.36)	44,876,373.39	OK	1.60	-495.54	-247.77
0.75	240	240	140	390	937,508.48	11,219,093.35	8,414,320.01	X	(7,476,811.53)	44,876,373.39	OK	1.60	-505.51	-252.76
0.75	240	240	140	390	535,799.76	11,219,093.35	8,414,320.01	X	(7,878,520.25)	44,876,373.39	OK	1.60	-532.67	-266.34
0.75	240	240	140	390	169,909.24	11,219,093.35	8,414,320.01	X	(8,244,410.78)	44,876,373.39	OK	1.60	-557.41	-278.71
0.75	240	240	140	390	439,552.16	11,219,093.35	8,414,320.01	X	(7,974,767.85)	44,876,373.39	OK	1.60	-539.18	-269.59
0.75	240	240	140	390	296,672.89	11,219,093.35	8,414,320.01	X	(8,117,647.13)	44,876,373.39	OK	1.60	-548.84	-274.42
0.75	240	240	140	390	718,890.99	11,219,093.35	8,414,320.01	X	(7,695,429.02)	44,876,373.39	OK	1.60	-520.29	-260.15
0.75	240	240	140	390	441,250.44	11,219,093.35	8,414,320.01	X	(7,973,069.57)	44,876,373.39	OK	1.60	-539.06	-269.53
0.75	240	240	140	390	130,726.17	11,219,093.35	8,414,320.01	X	(8,283,593.84)	44,876,373.39	OK	1.60	-560.06	-280.03
0.75	240	240	140	390	1,101,448.95	11,219,093.35	8,414,320.01	X	(7,312,871.06)	44,876,373.39	OK	1.60	-494.43	-247.21
0.75	240	240	140	390	533,949.76	11,219,093.35	8,414,320.01	X	(7,880,370.25)	44,876,373.39	OK	1.60	-532.80	-266.40
0.75	240	240	390	890	3,811,950.57	89,752,746.79	67,314,560.09	X	(63,502,609.52)	359,010,987.14	OK	1.43	-1822.95	-911.47
0.75	240	240	390	890	47,594,375.73	89,752,746.79	67,314,560.09	X	(19,720,184.36)	359,010,987.14	OK	1.43	-566.10	-283.05
0.75	240	240	340	790	34,313,296.35	65,429,752.41	49,072,314.31	X	(14,759,017.95)	261,719,009.63	OK	1.44	-478.71	-239.35
0.75	240	240	340	790	58,430,817.41	65,429,752.41	49,072,314.31	PERLU	9,358,503.10	261,719,009.63	OK	1.44	303.54	151.77
0.75	240	240	190	440	293,481.53	17,771,043.86	13,328,282.90	X	(13,034,801.37)	71,084,175.45	OK	1.44	-758.68	-379.34
0.75	240	240	140	340	183,918.61	10,097,184.01	7,572,888.01	X	(7,388,969.40)	40,388,736.05	OK	1.48	-560.83	-280.42
0.75	240	240	140	340	169,016.17	10,097,184.01	7,572,888.01	X	(7,403,871.84)	40,388,736.05	OK	1.48	-561.96	-280.98
0.75	240	240	140	340	654,621.76	10,097,184.01	7,572,888.01	X	(6,918,266.25)	40,388,736.05	OK	1.48	-525.11	-262.55
0.75	240	240	140	340	1,150,925.24	10,097,184.01	7,572,888.01	X	(6,421,962.77)	40,388,736.05	OK	1.48	-487.44	-243.72
0.75	240	240	140	340	1,519,754.31	10,097,184.01	7,572,888.01	X	(6,053,133.70)	40,388,736.05	OK	1.48	-459.44	-229.72
0.75	240	240	140	340	16,532.17	10,097,184.01	7,572,888.01	X	(7,556,355.84)	40,388,736.05	OK	1.48	-573.54	-286.77
0.75	240	240	140	340	44,629.07	10,097,184.01	7,572,888.01	X	(7,528,258.94)	40,388,736.05	OK	1.48	-571.40	-285.70
0.75	240	240	140	340	606,875.75	10,097,184.01	7,572,888.01	X	(6,966,012.26)	40,388,736.05	OK	1.48	-528.73	-264.36
0.75	240	240	140	340	57,427.28	10,097,184.01	7,572,888.01	X	(7,515,460.73)	40,388,736.05	OK	1.48	-570.43	-285.22
0.75	240	240	140	340	2,991,838.09	10,097,184.01	7,572,888.01	X	(4,581,049.92)	40,388,736.05	OK	1.48	-347.71	-173.85
0.75	240	240	140	340	223,799.16	10,097,184.01	7,572,888.01	X	(7,349,088.85)	40,388,736.05	OK	1.48	-557.81	-278.90
0.75	240	240	140	340	75,216.23	10,097,184.01	7,572,888.01	X	(7,497,671.78)	40,388,736.05	OK	1.48	-569.08	-284.54
0.75	240	240	140	340	1,125,985.10	10,097,184.01	7,572,888.01	X	(6,446,902.91)	40,388,736.05	OK	1.48	-489.33	-244.66
0.75	240	240	140	340	149,332.10	10,097,184.01	7,572,888.01	X	(7,423,555.91)	40,388,736.05	OK	1.48	-563.46	-281.73
0.75	240	240	140	340	127,569.04	10,097,184.01	7,572,888.01	X	(7,445,318.97)	40,388,736.05	OK	1.48	-565.11	-282.55
0.75	240	240	140	340	1,128,414.11	10,097,184.01	7,572,888.01	X	(6,444,473.90)	40,388,736.05	OK	1.48	-489.14	-244.57
0.75	240	240	140	340	299,857.31	10,097,184.01	7,572,888.01	X	(7,273,030.70)	40,388,736.05	OK	1.48	-552.03	-276.02
0.75	240	240	140	340	237,121.23	10,097,184.01	7,572,888.01	X	(7,335,766.78)	40,388,736.05	OK	1.48	-556.79	-278.40

Ø torsi	fy tul	fy sengkang	bl	hl	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240	240	140	340	150,884.62	10,097,184.01	7,572,888.01	X	(7,422,003.39)	40,388,736.05	OK	1.48	-563.34	-281.67
0.75	240	240	140	340	431,549.80	10,097,184.01	7,572,888.01	X	(7,141,338.21)	40,388,736.05	OK	1.48	-542.04	-271.02
0.75	240	240	140	340	1,023,445.66	10,097,184.01	7,572,888.01	X	(6,549,442.35)	40,388,736.05	OK	1.48	-497.11	-248.56
0.75	240	240	140	340	232,952.35	10,097,184.01	7,572,888.01	X	(7,339,935.66)	40,388,736.05	OK	1.48	-557.11	-278.56
0.75	240	240	140	450	92208.15978	10,097,184.01	7,572,888.01	X	(7,480,679.85)	40,388,736.05	OK	1.74	-447.85	-223.93
0.75	240	240	140	340	1225757.461	10,097,184.01	7,572,888.01	X	(6,347,130.55)	40,388,736.05	OK	1.48	-481.76	-240.88
0.75	240	240	140	340	774046.3649	10,097,184.01	7,572,888.01	X	(6,798,841.65)	40,388,736.05	OK	1.48	-516.04	-258.02
0.75	240	240	140	340	915925.444	10,097,184.01	7,572,888.01	X	(6,656,962.57)	40,388,736.05	OK	1.48	-505.27	-252.64
0.75	240	240	140	340	339534.6156	10,097,184.01	7,572,888.01	X	(7,233,353.39)	40,388,736.05	OK	1.48	-549.02	-274.51
0.75	240	240	140	340	314620.919	10,097,184.01	7,572,888.01	X	(7,258,267.09)	40,388,736.05	OK	1.48	-550.91	-275.46
0.75	240	240	140	340	1959617.306	10,097,184.01	7,572,888.01	X	(5,613,270.70)	40,388,736.05	OK	1.48	-426.05	-213.03
0.75	240	240	140	340	1108030.794	10,097,184.01	7,572,888.01	X	(6,464,857.22)	40,388,736.05	OK	1.48	-490.69	-245.35
0.75	240	240	140	340	484362.4402	10,097,184.01	7,572,888.01	X	(7,088,525.57)	40,388,736.05	OK	1.48	-538.03	-269.01
0.75	240	240	140	340	104484.1074	10,097,184.01	7,572,888.01	X	(7,468,403.90)	40,388,736.05	OK	1.48	-566.86	-283.43
0.75	240	240	140	340	101906.8536	10,097,184.01	7,572,888.01	X	(7,470,981.16)	40,388,736.05	OK	1.48	-567.06	-283.53
0.75	240	240	140	340	804956.978	10,097,184.01	7,572,888.01	X	(6,767,931.03)	40,388,736.05	OK	1.48	-513.69	-256.85
0.75	240	240	140	340	507420.3764	10,097,184.01	7,572,888.01	X	(7,065,467.63)	40,388,736.05	OK	1.48	-536.28	-268.14
0.75	240	240	140	340	41988.36031	10,097,184.01	7,572,888.01	X	(7,530,899.65)	40,388,736.05	OK	1.48	-571.61	-285.80
0.75	240	240	140	340	73561.8113	10,097,184.01	7,572,888.01	X	(7,499,326.20)	40,388,736.05	OK	1.48	-569.21	-284.60
0.75	240	240	240	540	45867.32354	28,586,249.85	21,439,687.39	X	(21,393,820.06)	114,344,999.40	OK	1.42	-1009.88	-504.94
0.75	240	240	240	540	1704996.152	28,586,249.85	21,439,687.39	X	(19,734,691.24)	114,344,999.40	OK	1.42	-931.56	-465.78
0.75	240	240	240	540	2007421.499	28,586,249.85	21,439,687.39	X	(19,432,265.89)	114,344,999.40	OK	1.42	-917.28	-458.64

Perhitungan Torsi Tumpuan dan Lapangan Balok Lantai 5

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240	240	340	640	13517300.68	54,524,793.67	40,893,595.25	X	-27376294.58	218,099,174.69	OK	1.29	-1058.58	-529.29
0.75	240	240	340	640	10147325.03	54,524,793.67	40,893,595.25	X	-30746270.23	218,099,174.69	OK	1.29	-1188.89	-594.45
0.75	240	240	340	640	77317306.94	54,524,793.67	40,893,595.25	PERLU	36423711.69	218,099,174.69	OK	1.29	1408.43	704.21
0.75	240	240	340	640	3712374.327	54,524,793.67	40,893,595.25	X	-37181220.93	218,099,174.69	OK	1.29	-1437.72	-718.86
0.75	240	240	340	640	9545217.435	54,524,793.67	40,893,595.25	X	-31348377.82	218,099,174.69	OK	1.29	-1212.18	-606.09
0.75	240	240	340	640	6655089.929	54,524,793.67	40,893,595.25	X	-34238505.33	218,099,174.69	OK	1.29	-1323.93	-661.97
0.75	240	240	190	390	36584.7905	16,155,494.42	12,116,620.82	X	-12080036.03	64,621,977.69	OK	1.35	-777.71	-388.86
0.75	240	240	190	390	533025.1782	16,155,494.42	12,116,620.82	X	-11583595.64	64,621,977.69	OK	1.35	-745.75	-372.88
0.75	240	240	190	390	104899.4428	16,155,494.42	12,116,620.82	X	-12011721.37	64,621,977.69	OK	1.35	-773.32	-386.66
0.75	240	240	190	390	3222786.129	16,155,494.42	12,116,620.82	X	-8893834.69	64,621,977.69	OK	1.35	-572.59	-286.29
0.75	240	240	190	390	618360.7911	16,155,494.42	12,116,620.82	X	-11498260.02	64,621,977.69	OK	1.35	-740.26	-370.13
0.75	240	240	190	390	2815331.061	16,155,494.42	12,116,620.82	X	-9301289.76	64,621,977.69	OK	1.35	-598.82	-299.41
0.75	240	240	190	390	674491.5907	16,155,494.42	12,116,620.82	X	-11442129.23	64,621,977.69	OK	1.35	-736.65	-368.32
0.75	240	240	190	390	281511.7266	16,155,494.42	12,116,620.82	X	-11835109.09	64,621,977.69	OK	1.35	-761.95	-380.97
0.75	240	240	190	390	3486588.45	16,155,494.42	12,116,620.82	X	-8630032.37	64,621,977.69	OK	1.35	-555.60	-277.80
0.75	240	240	190	390	3645379.768	16,155,494.42	12,116,620.82	X	-8471241.05	64,621,977.69	OK	1.35	-545.38	-272.69
0.75	240	240	290	640	56835170.32	43,081,318.46	32,310,988.84	PERLU	24524181.48	172,325,273.83	OK	1.40	973.68	486.84
0.75	240	240	290	640	90526888.68	43,081,318.46	32,310,988.84	PERLU	58215899.84	172,325,273.83	OK	1.40	2311.34	1155.67
0.75	240	240	290	640	93905669.51	43,081,318.46	32,310,988.84	PERLU	61594680.67	172,325,273.83	OK	1.40	2445.49	1222.74
0.75	240	240	290	640	115939112	43,081,318.46	32,310,988.84	PERLU	83628123.20	172,325,273.83	OK	1.40	3320.28	1660.14
0.75	240	240	290	640	167990948.7	43,081,318.46	32,310,988.84	PERLU	135679959.84	172,325,273.83	OK	1.40	5386.88	2693.44
0.75	240	240	290	640	82944262.38	43,081,318.46	32,310,988.84	PERLU	50633273.53	172,325,273.83	OK	1.40	2010.29	1005.14
0.75	240	240	290	640	73480063.7	43,081,318.46	32,310,988.84	PERLU	41169074.86	172,325,273.83	OK	1.40	1634.53	817.27
0.75	240	240	290	640	77343763.93	43,081,318.46	32,310,988.84	PERLU	45032775.09	172,325,273.83	OK	1.40	1787.93	893.97
0.75	240	240	290	640	108089673.8	43,081,318.46	32,310,988.84	PERLU	75778684.93	172,325,273.83	OK	1.40	3008.63	1504.32
0.75	240	240	290	640	200768356.8	43,081,318.46	32,310,988.84	PERLU	168457367.93	172,325,273.83	OK	1.40	6688.24	3344.12
0.75	240	240	290	640	94154516.38	43,081,318.46	32,310,988.84	PERLU	61843527.53	172,325,273.83	OK	1.40	2455.37	1227.68
0.75	240	240	290	640	62288794.13	43,081,318.46	32,310,988.84	PERLU	29977805.29	172,325,273.83	OK	1.40	1190.20	595.10
0.75	240	240	290	640	147513399.8	43,081,318.46	32,310,988.84	PERLU	115202410.96	172,325,273.83	OK	1.40	4573.87	2286.93
0.75	240	240	290	640	180920293.7	43,081,318.46	32,310,988.84	PERLU	148609304.82	172,325,273.83	OK	1.40	5900.22	2950.11
0.75	240	240	140	390	121958.4601	11,219,093.35	8,414,320.01	X	-8292361.55	44,876,373.39	OK	1.60	-560.65	-280.33
0.75	240	240	140	390	41022.99242	11,219,093.35	8,414,320.01	X	-8373297.02	44,876,373.39	OK	1.60	-566.12	-283.06
0.75	240	240	140	390	668587.4271	11,219,093.35	8,414,320.01	X	-7745732.58	44,876,373.39	OK	1.60	-523.69	-261.85
0.75	240	240	140	390	1471964.245	11,219,093.35	8,414,320.01	X	-6942355.77	44,876,373.39	OK	1.60	-469.38	-234.69

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			a t HRS - 1.5	At	jerak
0.75	240	240	140	390	61432.13431	11,219,093.35	8,414,320.01	X	-8352887.88	44,876,373.39	OK	1.60	-564.74	-282.37
0.75	240	240	140	390	196148.9083	11,219,093.35	8,414,320.01	X	-8218171.10	44,876,373.39	OK	1.60	-555.64	-277.82
0.75	240	240	140	390	106351.949	11,219,093.35	8,414,320.01	X	-8307968.06	44,876,373.39	OK	1.60	-561.71	-280.85
0.75	240	240	140	390	396400.3888	11,219,093.35	8,414,320.01	X	-8017919.62	44,876,373.39	OK	1.60	-542.10	-271.05
0.75	240	240	140	390	743078.7635	11,219,093.35	8,414,320.01	X	-7671241.25	44,876,373.39	OK	1.60	-518.66	-259.33
0.75	240	240	390	890	13229078.81	89,752,746.79	67,314,560.09	X	-54085481.28	359,010,987.14	OK	1.43	-1552.61	-776.31
0.75	240	240	390	890	42359831.96	89,752,746.79	67,314,560.09	X	-24954728.13	359,010,987.14	OK	1.43	-716.37	-358.18
0.75	240	240	340	790	29973925.1	65,429,752.41	49,072,314.31	X	-19098389.21	261,719,009.63	OK	1.44	-619.45	-309.73
0.75	240	240	340	790	48665226.23	65,429,752.41	49,072,314.31	X	-407088.08	261,719,009.63	OK	1.44	-13.20	-6.60
0.75	240	240	190	440	718537.4137	17,771,043.86	13,328,282.90	X	-12609745.48	71,084,175.45	OK	1.44	-733.94	-366.97
0.75	240	240	140	340	211769.1152	10,097,184.01	7,572,888.01	X	-7361118.89	40,388,736.05	OK	1.48	-558.72	-279.36
0.75	240	240	140	340	35161.56578	10,097,184.01	7,572,888.01	X	-7537726.44	40,388,736.05	OK	1.48	-572.12	-286.06
0.75	240	240	140	340	587005.4211	10,097,184.01	7,572,888.01	X	-6985882.59	40,388,736.05	OK	1.48	-530.24	-265.12
0.75	240	240	140	340	1130026.263	10,097,184.01	7,572,888.01	X	-6442861.75	40,388,736.05	OK	1.48	-489.02	-244.51
0.75	240	240	140	340	908848.9948	10,097,184.01	7,572,888.01	X	-6664039.02	40,388,736.05	OK	1.48	-505.81	-252.90
0.75	240	240	140	340	98947.88141	10,097,184.01	7,572,888.01	X	-7473940.13	40,388,736.05	OK	1.48	-567.28	-283.64
0.75	240	240	140	340	40680.25219	10,097,184.01	7,572,888.01	X	-7532207.76	40,388,736.05	OK	1.48	-571.70	-285.85
0.75	240	240	140	340	655077.6995	10,097,184.01	7,572,888.01	X	-6917810.31	40,388,736.05	OK	1.48	-525.07	-262.54
0.75	240	240	140	340	266574.8579	10,097,184.01	7,572,888.01	X	-7306313.15	40,388,736.05	OK	1.48	-554.56	-277.28
0.75	240	240	140	340	2785466.976	10,097,184.01	7,572,888.01	X	-4787421.03	40,388,736.05	OK	1.48	-363.37	-181.69
0.75	240	240	140	340	221500.3816	10,097,184.01	7,572,888.01	X	-7351387.63	40,388,736.05	OK	1.48	-557.98	-278.99
0.75	240	240	140	340	103890.9451	10,097,184.01	7,572,888.01	X	-7468997.06	40,388,736.05	OK	1.48	-566.91	-283.45
0.75	240	240	140	340	1237562.118	10,097,184.01	7,572,888.01	X	-6335325.89	40,388,736.05	OK	1.48	-480.86	-240.43
0.75	240	240	140	340	71212.99197	10,097,184.01	7,572,888.01	X	-7501675.02	40,388,736.05	OK	1.48	-569.39	-284.69
0.75	240	240	140	340	75157.56889	10,097,184.01	7,572,888.01	X	-7497730.44	40,388,736.05	OK	1.48	-569.09	-284.54
0.75	240	240	140	340	810880.0493	10,097,184.01	7,572,888.01	X	-6762007.96	40,388,736.05	OK	1.48	-513.25	-256.62
0.75	240	240	140	340	220291.5962	10,097,184.01	7,572,888.01	X	-7352596.41	40,388,736.05	OK	1.48	-558.07	-279.04
0.75	240	240	140	340	288945.5485	10,097,184.01	7,572,888.01	X	-7283942.46	40,388,736.05	OK	1.48	-552.86	-276.43
0.75	240	240	140	340	35441.57356	10,097,184.01	7,572,888.01	X	-7537446.44	40,388,736.05	OK	1.48	-572.10	-286.05
0.75	240	240	140	340	439863.3005	10,097,184.01	7,572,888.01	X	-7133024.71	40,388,736.05	OK	1.48	-541.41	-270.70
0.75	240	240	140	340	3649588.287	10,097,184.01	7,572,888.01	X	-3923299.72	40,388,736.05	OK	1.48	-297.78	-148.89
0.75	240	240	140	340	242194.208	10,097,184.01	7,572,888.01	X	-7330693.80	40,388,736.05	OK	1.48	-556.41	-278.20
0.75	240	240	140	340	13629.54493	10,097,184.01	7,572,888.01	X	-7559258.47	40,388,736.05	OK	1.48	-573.76	-286.88
0.75	240	240	140	340	983441.5673	10,097,184.01	7,572,888.01	X	-6589446.44	40,388,736.05	OK	1.48	-500.15	-250.07
0.75	240	240	140	340	461597.5419	10,097,184.01	7,572,888.01	X	-7111290.47	40,388,736.05	OK	1.48	-539.76	-269.88
0.75	240	240	140	340	2434301.784	10,097,184.01	7,572,888.01	X	-5138586.23	40,388,736.05	OK	1.48	-390.03	-195.01
0.75	240	240	140	340	127856.8098	10,097,184.01	7,572,888.01	X	-7445031.20	40,388,736.05	OK	1.48	-565.09	-282.54

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240	240	140	340	311294.2978	10,097,184.01	7,572,888.01	X	-7261593.71	40,388,736.05	OK	1.48	-551.16	-275.58
0.75	240	240	140	340	1925342.791	10,097,184.01	7,572,888.01	X	-5647545.22	40,388,736.05	OK	1.48	-428.66	-214.33
0.75	240	240	140	340	921511.8355	10,097,184.01	7,572,888.01	X	-6651376.17	40,388,736.05	OK	1.48	-504.85	-252.42
0.75	240	240	240	540	1243067.196	28,586,249.85	21,439,687.39	X	-20196620.19	114,344,999.40	OK	1.42	-953.36	-476.68
0.75	240	240	240	650	2,466,300.44	28,586,249.85	21,439,687.39	X	-18973386.95	114,344,999.40	OK	1.57	-766.34	-383.17

Perhitungan Torsi Tumpuan dan Lapangan Balok Atap

Ø torsi	fy tul	fy sengkang	b1	h1	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240	240	340	640	8006982.008	54,524,793.67	40,893,595.25	X	-32886613.25	218,099,174.69	OK	1.29	-1271.66	-635.83
0.75	240	240	340	640	6761184.707	54,524,793.67	40,893,595.25	X	-34132410.55	218,099,174.69	OK	1.29	-1319.83	-659.91
0.75	240	240	340	640	43390772.85	54,524,793.67	40,893,595.25	PERLU	2497177.60	218,099,174.69	OK	1.29	96.56	48.28
0.75	240	240	340	640	5645672.487	54,524,793.67	40,893,595.25	X	-35247922.77	218,099,174.69	OK	1.29	-1362.96	-681.48
0.75	240	240	190	390	121288.4194	16,155,494.42	12,116,620.82	X	-11995332.40	64,621,977.69	OK	1.35	-772.26	-386.13
0.75	240	240	190	390	137764.6383	16,155,494.42	12,116,620.82	X	-11978856.18	64,621,977.69	OK	1.35	-771.20	-385.60
0.75	240	240	190	390	936089.3026	16,155,494.42	12,116,620.82	X	-11180531.51	64,621,977.69	OK	1.35	-719.80	-359.90
0.75	240	240	190	390	2183239.028	16,155,494.42	12,116,620.82	X	-9933381.79	64,621,977.69	OK	1.35	-639.51	-319.76
0.75	240	240	190	390	2897860.279	16,155,494.42	12,116,620.82	X	-9218760.54	64,621,977.69	OK	1.35	-593.50	-296.75
0.75	240	240	190	390	389095.7151	16,155,494.42	12,116,620.82	X	-11727525.10	64,621,977.69	OK	1.35	-755.02	-377.51
0.75	240	240	190	390	125934.9165	16,155,494.42	12,116,620.82	X	-11990685.90	64,621,977.69	OK	1.35	-771.96	-385.98
0.75	240	240	190	390	1866612.416	16,155,494.42	12,116,620.82	X	-10250008.40	64,621,977.69	OK	1.35	-659.90	-329.95
0.75	240	240	290	640	24687708.58	43,081,318.46	32,310,988.84	X	-7623280.26	172,325,273.83	OK	1.40	-302.67	-151.33
0.75	240	240	290	640	40675092.41	43,081,318.46	32,310,988.84	PERLU	8364103.56	172,325,273.83	OK	1.40	332.08	166.04
0.75	240	240	290	640	42284551.62	43,081,318.46	32,310,988.84	PERLU	9973562.77	172,325,273.83	OK	1.40	395.98	197.99
0.75	240	240	290	640	58165185.06	43,081,318.46	32,310,988.84	PERLU	25854196.22	172,325,273.83	OK	1.40	1026.49	513.24
0.75	240	240	290	640	65404692.47	43,081,318.46	32,310,988.84	PERLU	33093703.63	172,325,273.83	OK	1.40	1313.91	656.96
0.75	240	240	290	640	29670507.71	43,081,318.46	32,310,988.84	X	-2640481.14	172,325,273.83	OK	1.40	-104.83	-52.42
0.75	240	240	290	640	29981009.27	43,081,318.46	32,310,988.84	X	-2329979.57	172,325,273.83	OK	1.40	-92.51	-46.25
0.75	240	240	290	640	23071993.18	43,081,318.46	32,310,988.84	X	-9238995.66	172,325,273.83	OK	1.40	-366.81	-183.41
0.75	240	240	290	640	28829125.13	43,081,318.46	32,310,988.84	X	-3481863.72	172,325,273.83	OK	1.40	-138.24	-69.12
0.75	240	240	290	640	7371567.951	43,081,318.46	32,310,988.84	X	-24939420.89	172,325,273.83	OK	1.40	-990.17	-495.08
0.75	240	240	290	640	5448096.114	43,081,318.46	32,310,988.84	X	-26862892.73	172,325,273.83	OK	1.40	-1066.53	-533.27
0.75	240	240	290	640	40657348.33	43,081,318.46	32,310,988.84	PERLU	8346359.49	172,325,273.83	OK	1.40	331.37	165.69
0.75	240	240	140	390	48821.71315	11,219,093.35	8,414,320.01	X	-8365498.30	44,876,373.39	OK	1.60	-565.60	-282.80
0.75	240	240	140	390	92475.36257	11,219,093.35	8,414,320.01	X	-8321844.65	44,876,373.39	OK	1.60	-562.65	-281.32
0.75	240	240	140	390	270741.7268	11,219,093.35	8,414,320.01	X	-8143578.28	44,876,373.39	OK	1.60	-550.59	-275.30
0.75	240	240	140	390	1194772.286	11,219,093.35	8,414,320.01	X	-7219547.73	44,876,373.39	OK	1.60	-488.12	-244.06
0.75	240	240	140	390	2206217.287	11,219,093.35	8,414,320.01	X	-6208102.72	44,876,373.39	OK	1.60	-419.73	-209.87
0.75	240	240	140	390	10004.21101	11,219,093.35	8,414,320.01	X	-8404315.80	44,876,373.39	OK	1.60	-568.22	-284.11
0.75	240	240	140	390	141709.996	11,219,093.35	8,414,320.01	X	-8272610.02	44,876,373.39	OK	1.60	-559.32	-279.66
0.75	240	240	390	890	18692359.59	89,752,746.79	67,314,560.09	X	-48622200.50	359,010,987.14	OK	1.43	-1395.78	-697.89
0.75	240	240	390	890	27609930.03	89,752,746.79	67,314,560.09	X	-39704630.06	359,010,987.14	OK	1.43	-1139.79	-569.89
0.75	240	240	340	790	25819183.59	65,429,752.41	49,072,314.31	X	-23253130.71	261,719,009.63	OK	1.44	-754.21	-377.11

Ø torsi	fy tul	fy sengkang	bl	hl	Tu Nmm	Tc Nmm	Ø Tc	cek tul geser	cek penampang			α t HRS < 1.5	At	jarak
0.75	240	240	340	640	2343148.293	54,524,793.67	40,893,595.25	X	-38550446.96	218,099,174.69	OK	1.29	-1490.67	-745.33
0.75	240	240	140	340	136261.1053	10,097,184.01	7,572,888.01	X	-7436626.90	40,388,736.05	OK	1.48	-564.45	-282.22
0.75	240	240	140	340	201320.2576	10,097,184.01	7,572,888.01	X	-7371567.75	40,388,736.05	OK	1.48	-559.51	-279.76
0.75	240	240	140	340	522745.6386	10,097,184.01	7,572,888.01	X	-7050142.37	40,388,736.05	OK	1.48	-535.12	-267.56
0.75	240	240	140	340	837027.789	10,097,184.01	7,572,888.01	X	-6735860.22	40,388,736.05	OK	1.48	-511.26	-255.63
0.75	240	240	140	340	267248.8392	10,097,184.01	7,572,888.01	X	-7305639.17	40,388,736.05	OK	1.48	-554.51	-277.25
0.75	240	240	140	340	16565.54648	10,097,184.01	7,572,888.01	X	-7556322.46	40,388,736.05	OK	1.48	-573.53	-286.77
0.75	240	240	140	340	148793.2445	10,097,184.01	7,572,888.01	X	-7424094.77	40,388,736.05	OK	1.48	-563.50	-281.75
0.75	240	240	140	340	524748.8268	10,097,184.01	7,572,888.01	X	-7048139.18	40,388,736.05	OK	1.48	-534.96	-267.48
0.75	240	240	140	340	825437.0249	10,097,184.01	7,572,888.01	X	-6747450.99	40,388,736.05	OK	1.48	-512.14	-256.07
0.75	240	240	140	340	2260629.873	10,097,184.01	7,572,888.01	X	-5312258.14	40,388,736.05	OK	1.48	-403.21	-201.60
0.75	240	240	140	340	194781.6887	10,097,184.01	7,572,888.01	X	-7378106.32	40,388,736.05	OK	1.48	-560.01	-280.00
0.75	240	240	140	340	82567.7869	10,097,184.01	7,572,888.01	X	-7490320.22	40,388,736.05	OK	1.48	-568.53	-284.26
0.75	240	240	140	340	2267345.153	10,097,184.01	7,572,888.01	X	-5305542.86	40,388,736.05	OK	1.48	-402.70	-201.35
0.75	240	240	140	340	1183423.013	10,097,184.01	7,572,888.01	X	-6389465.00	40,388,736.05	OK	1.48	-484.97	-242.48
0.75	240	240	140	340	121957.3226	10,097,184.01	7,572,888.01	X	-7450930.69	40,388,736.05	OK	1.48	-565.54	-282.77
0.75	240	240	140	340	27389.4134	10,097,184.01	7,572,888.01	X	-7545498.60	40,388,736.05	OK	1.48	-572.71	-286.36
0.75	240	240	140	340	1645135.258	10,097,184.01	7,572,888.01	X	-5927752.75	40,388,736.05	OK	1.48	-449.92	-224.96
0.75	240	240	140	340	717697.6584	10,097,184.01	7,572,888.01	X	-6855190.35	40,388,736.05	OK	1.48	-520.32	-260.16
0.75	240	240	140	340	230298.7982	10,097,184.01	7,572,888.01	X	-7342589.21	40,388,736.05	OK	1.48	-557.31	-278.66
0.75	240	240	140	340	195361.5313	10,097,184.01	7,572,888.01	X	-7377526.48	40,388,736.05	OK	1.48	-559.96	-279.98
0.75	240	240	140	340	186352.7799	10,097,184.01	7,572,888.01	X	-7386535.23	40,388,736.05	OK	1.48	-560.65	-280.32
0.75	240	240	140	340	486212.6497	10,097,184.01	7,572,888.01	X	-7086675.36	40,388,736.05	OK	1.48	-537.89	-268.94
0.75	240	240	140	340	41930.7905	10,097,184.01	7,572,888.01	X	-7530957.22	40,388,736.05	OK	1.48	-571.61	-285.80
0.75	240	240	140	340	64124.70149	10,097,184.01	7,572,888.01	X	-7508763.31	40,388,736.05	OK	1.48	-569.93	-284.96
0.75	240	240	140	340	654841.2689	10,097,184.01	7,572,888.01	X	-6918046.74	40,388,736.05	OK	1.48	-525.09	-262.54
0.75	240	240	140	340	1047614.253	10,097,184.01	7,572,888.01	X	-6525273.76	40,388,736.05	OK	1.48	-495.28	-247.64
0.75	240	240	140	340	11871543.11	10,097,184.01	7,572,888.01	PERLU	4298655.10	40,388,736.05	OK	1.48	326.27	163.14
0.75	240	240	240	540	54705477.58	28,586,249.85	21,439,687.39	PERLU	33265790.20	114,344,999.40	OK	1.42	1570.28	785.14
0.75	240	240	240	540	12151908.96	28,586,249.85	21,439,687.39	X	-9287778.43	114,344,999.40	OK	1.42	-438.42	-219.21


UNIVERSITAS KATOLIK
SOEGIJAPRANATA

LAMPIRAN 04

Perhitungan Momen Lentur dan Geser Pada Kolom Lantai *Basement* – Lantai5

Penulangan Geser Kolom A

Ø geser	Vu	Vc	Vs	Vs maks	cek	cek tul geser	jrk tul geser
	N	N	N	N	tampang		mm
0.75	10,810.73	545,937.08	(531,522.77)	2,118,164.82	OK	TDK PERLU	368.75
0.75	109,705.57	551,288.65	(405,014.56)	2,118,164.82	OK	TDK PERLU	368.75
0.75	105,159.36	553,404.21	(413,191.73)	2,118,164.82	OK	TDK PERLU	368.75
0.75	132,668.03	549,785.37	(372,894.67)	2,118,164.82	OK	TDK PERLU	368.75
0.75	27,676.31	805,862.02	(768,960.27)	2,118,164.82	OK	TDK PERLU	368.75
0.75	17,389.98	826,589.23	(803,402.59)	2,118,164.82	OK	TDK PERLU	368.75
0.75	8,325.46	534,026.92	(522,926.30)	2,118,164.82	OK	TDK PERLU	368.75
0.75	6,695.86	537,127.85	(528,200.04)	2,118,164.82	OK	TDK PERLU	368.75
0.75	37,241.90	553,719.19	(504,063.33)	2,118,164.82	OK	TDK PERLU	368.75
0.75	53,226.81	585,207.75	(514,238.68)	2,118,164.82	OK	TDK PERLU	368.75
0.75	53,232.66	627,998.97	(557,022.09)	2,118,164.82	OK	TDK PERLU	368.75
0.75	67,092.32	681,245.70	(591,789.27)	2,118,164.82	OK	TDK PERLU	368.75
0.75	143,814.72	740,925.99	(549,173.04)	2,118,164.82	OK	TDK PERLU	368.75
0.75	59,150.32	538,438.77	(459,571.67)	2,118,164.82	OK	TDK PERLU	368.75
0.75	23,418.46	551,773.53	(520,548.92)	2,118,164.82	OK	TDK PERLU	368.75
0.75	79,113.69	572,718.14	(467,233.22)	2,118,164.82	OK	TDK PERLU	368.75
0.75	88,108.65	602,280.40	(484,802.20)	2,118,164.82	OK	TDK PERLU	368.75
0.75	75,301.93	653,558.80	(553,156.22)	2,118,164.82	OK	TDK PERLU	368.75
0.75	105,406.07	713,181.07	(572,639.64)	2,118,164.82	OK	TDK PERLU	368.75
0.75	123,553.38	775,590.34	(610,852.49)	2,118,164.82	OK	TDK PERLU	368.75

Penulangan Lentur Kolom A

fc'	fy	b	h	Diul	Cv	d	d'	Pu	Mu	e	$\rho + \rho'$	As=As'	A_s						xb	ab	Fs'	Fs' ambil	Pnb	Mnb	eb	cek	Pn	Pr	cek	0,1*b*h*fc'	cek
MPa	MPa	mm	mm	mm	mm	mm	mm	N	Nmm	mm	%	mm2						(mm^2)	mm	mm	MPa	MPa	MPa	MPa	mm	tampang	N	N			syarat
29	240	800	800	25	40	737.5	62.5	277,423.26	146,851,015.69	529.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	3,601,894	2,341,231	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	367,973.44	52,615,814.24	143.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,903,007	7,736,955	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	403,769.32	66,580,311.73	164.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,311,484	7,352,465	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	342,537.55	66,981,446.28	195.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,576,442	6,874,687	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,675,433.10	233,082,838.84	49.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	15,309,278	9,951,030	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	5,026,143.83	245,942,007.48	48.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	15,352,723	9,979,270	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	75,899.66	17,548,163.23	231.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,833,244	6,391,608	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	128,368.42	67,750,860.89	527.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	3,619,907	2,352,939	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	409,098.87	173,694,262.32	424.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	5,135,142	3,337,842	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	941,895.09	144,668,655.98	153.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,609,123	7,545,930	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,665,935.63	139,578,925.85	83.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	13,863,158	9,011,053	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,566,886.75	157,236,584.37	61.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	14,782,096	9,608,362	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,576,695.60	526,490,413.60	147.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,784,533	7,659,946	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	150,549.49	54,593,207.81	362.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,384,184	4,149,720	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	376,177.83	129,159,220.53	343.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,826,467	4,437,203	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	730,567.04	260,655,408.81	356.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,515,465	4,235,052	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,230,769.58	236,923,159.07	192.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,645,156	6,919,352	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,098,415.77	188,139,075.24	89.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	13,640,215	8,866,140	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,107,242.97	249,043,207.78	80.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	14,004,840	9,103,146	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,163,226.94	424,833,561.55	102.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	13,192,861	8,575,360	OK	1,856,000	OK

Penulangan Geser Kolom B

Ø geser	Vu	Vc	Vs	Vs maks	cek	cek tul geser	jrk tul geser
	N	N	N	N	tampang		mm
0.75	67,644.90	547,752.92	(457,559.72)	2,118,164.82	OK	TDK PERLU	368.75
0.75	257,228.02	571,946.13	(228,975.43)	2,118,164.82	OK	CUKUP	368.75
0.75	95,900.22	791,686.76	(663,819.80)	2,118,164.82	OK	TDK PERLU	368.75
0.75	291,113.42	573,498.05	(185,346.81)	2,118,164.82	OK	CUKUP	368.75
0.75	284,706.35	636,513.58	(256,905.11)	2,118,164.82	OK	CUKUP	368.75
0.75	234,330.62	707,211.20	(394,770.37)	2,118,164.82	OK	TDK PERLU	368.75
0.75	299,475.86	754,501.60	(355,200.46)	2,118,164.82	OK	CUKUP	368.75
0.75	481,023.00	623,734.69	17,629.31	2,118,164.82	OK	PERLU	368.75
0.75	426,854.95	687,863.74	(118,723.80)	2,118,164.82	OK	CUKUP	368.75
0.75	186,739.34	711,134.14	(462,148.35)	2,118,164.82	OK	TDK PERLU	368.75
0.75	435,904.84	657,580.81	(76,374.35)	2,118,164.82	OK	CUKUP	368.75
0.75	435,904.84	662,388.07	(81,181.61)	2,118,164.82	OK	CUKUP	368.75
0.75	110,309.95	626,231.13	(479,151.20)	2,118,164.82	OK	TDK PERLU	368.75
0.75	148,535.80	667,482.68	(469,434.94)	2,118,164.82	OK	TDK PERLU	368.75
0.75	237,958.25	572,688.93	(255,411.26)	2,118,164.82	OK	CUKUP	368.75
0.75	376,210.90	540,708.34	(39,093.81)	2,118,164.82	OK	CUKUP	368.75
0.75	279,109.47	609,302.23	(237,156.27)	2,118,164.82	OK	CUKUP	368.75
0.75	379,156.11	636,663.93	(131,122.45)	2,118,164.82	OK	CUKUP	368.75
0.75	67,344.58	588,654.23	(498,861.46)	2,118,164.82	OK	TDK PERLU	368.75
0.75	90,875.43	582,666.78	(461,499.54)	2,118,164.82	OK	TDK PERLU	368.75
0.75	183,159.72	587,022.22	(342,809.25)	2,118,164.82	OK	TDK PERLU	368.75
0.75	52,199.36	553,791.74	(484,192.60)	2,118,164.82	OK	TDK PERLU	368.75
0.75	13,530.69	569,944.05	(551,903.13)	2,118,164.82	OK	TDK PERLU	368.75
0.75	91,264.17	562,510.07	(440,824.50)	2,118,164.82	OK	TDK PERLU	368.75
0.75	35,218.26	539,983.88	(493,026.20)	2,118,164.82	OK	TDK PERLU	368.75
0.75	131,955.39	550,086.73	(374,146.21)	2,118,164.82	OK	TDK PERLU	368.75
0.75	203,169.21	544,688.69	(273,796.40)	2,118,164.82	OK	TDK PERLU	368.75

Penulangan Lentur Kolom B

fc'	fy	b	h	Dtul	Cs	d	d'	Pu	Mu	e	ρ + ρ'	As=As'	As						xb	ab	Fs'	Fs' ambil	Pub	Mub	eb	cek	Pn	Pr	cek	0,1*b*h*fc'	cek
MPa	MPa	mm	mm	mm	mm	mm	mm	N	Nmm	mm	%	mm2						(mm²)	mm	mm	MPa	MPa	MPa	MPa	mm	tampang	N	N			syarat
29	240	800	800	25	40	737.5	62.5	308,147.86	185,497,620.76	602.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	2,888,090	1,877,259	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	717,504.28	45,834,872.60	63.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	14,676,206	9,539,534	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,435,583.39	372,982,559.40	84.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	13,851,416	9,003,420	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	743,763.25	47,961,452.21	64.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	14,650,133	9,522,586	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,810,005.48	634,859,822.90	350.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,653,691	4,324,899	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,006,230.96	578,545,250.21	192.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,646,322	6,920,109	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,806,398.97	871,383,284.45	228.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,877,546	6,420,405	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,593,782.71	622,108,674.05	390.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	5,792,719	3,765,267	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,678,865.93	1,009,339,252.07	376.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,075,494	3,949,071	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,072,608.24	475,117,459.55	154.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,581,169	7,527,760	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,166,469.48	1,018,384,043.15	470.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	4,385,141	2,850,342	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,247,809.76	991,247,666.96	441.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	4,848,706	3,151,659	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,636,023.29	313,499,584.56	191.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,665,116	6,932,325	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,334,012.08	397,251,341.87	170.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,177,031	7,265,070	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	730,072.77	150,273,463.99	205.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,350,688	6,727,947	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	188,951.26	2,549,820.31	13.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	17,237,691	11,204,499	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,349,581.09	760,172,135.22	563.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	3,238,983	2,105,339	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,812,549.38	863,320,198.10	476.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	4,292,869	2,790,365	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,000,210.58	233,353,361.69	233.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,792,683	6,365,244	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	898,901.00	279,591,382.56	311.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	7,621,648	4,954,071	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	972,596.37	512,478,757.01	526.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	3,629,998	2,359,499	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	410,326.56	159,231,356.62	388.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	5,839,279	3,795,532	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	683,628.49	123,786,907.55	181.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,911,208	7,092,285	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	557,843.27	277,689,907.44	497.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	3,993,227	2,595,598	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	176,693.21	70,390,915.12	398.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	5,630,927	3,660,103	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	347,636.57	132,077,770.52	379.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,008,614	3,905,599	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	256,300.03	104,117,440.98	406.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	5,477,316	3,560,256	OK	1,856,000	OK

Penulangan Geser Kolom C

Ø geser	Vu	Vc	Vs	Vs maks	cek	cek tul geser	jrk tul geser
	N	N	N	N	tampang		mm
0.75	100,346.31	625,443.41	(491,648.33)	2,118,164.82	OK	TDK PERLU	368.75
0.75	268,871.35	742,601.21	(384,106.08)	2,118,164.82	OK	TDK PERLU	368.75
0.75	301,014.89	958,817.56	(557,464.38)	2,118,164.82	OK	TDK PERLU	368.75
0.75	345,321.47	909,658.42	(449,229.80)	2,118,164.82	OK	CUKUP	368.75
0.75	247,775.41	733,887.83	(403,520.62)	2,118,164.82	OK	TDK PERLU	368.75
0.75	316,283.91	773,547.54	(351,835.66)	2,118,164.82	OK	CUKUP	368.75
0.75	35,668.44	604,822.91	(557,264.98)	2,118,164.82	OK	TDK PERLU	368.75
0.75	295,254.71	700,303.12	(306,630.17)	2,118,164.82	OK	CUKUP	368.75
0.75	357,254.05	897,255.68	(420,916.94)	2,118,164.82	OK	CUKUP	368.75
0.75	349,540.36	853,502.18	(387,448.37)	2,118,164.82	OK	CUKUP	368.75
0.75	219,325.61	702,132.90	(409,698.75)	2,118,164.82	OK	TDK PERLU	368.75
0.75	320,044.93	737,703.61	(310,977.04)	2,118,164.82	OK	CUKUP	368.75
0.75	28,392.25	585,417.71	(547,561.38)	2,118,164.82	OK	TDK PERLU	368.75
0.75	300,135.60	666,964.07	(266,783.27)	2,118,164.82	OK	CUKUP	368.75
0.75	378,882.87	831,400.11	(326,222.96)	2,118,164.82	OK	CUKUP	368.75
0.75	316,281.32	799,037.62	(377,329.20)	2,118,164.82	OK	CUKUP	368.75
0.75	200,318.41	679,621.66	(412,530.44)	2,118,164.82	OK	TDK PERLU	368.75
0.75	299,182.17	699,414.83	(300,505.27)	2,118,164.82	OK	CUKUP	368.75
0.75	26,241.65	547,144.07	(512,155.20)	2,118,164.82	OK	TDK PERLU	368.75
0.75	16,655.17	565,974.19	(543,767.30)	2,118,164.82	OK	TDK PERLU	368.75
0.75	178,333.22	596,791.55	(359,013.92)	2,118,164.82	OK	TDK PERLU	368.75
0.75	238,462.94	632,548.85	(314,598.27)	2,118,164.82	OK	CUKUP	368.75
0.75	252,673.88	704,579.33	(367,680.81)	2,118,164.82	OK	TDK PERLU	368.75
0.75	324,844.66	766,893.79	(333,767.57)	2,118,164.82	OK	CUKUP	368.75
0.75	240,457.82	695,294.46	(374,684.04)	2,118,164.82	OK	TDK PERLU	368.75
0.75	286,146.03	745,680.60	(364,152.55)	2,118,164.82	OK	CUKUP	368.75
0.75	120,230.20	632,480.50	(472,173.56)	2,118,164.82	OK	TDK PERLU	368.75
0.75	167,333.06	656,524.08	(433,413.34)	2,118,164.82	OK	TDK PERLU	368.75
0.75	235,792.79	626,729.50	(312,339.11)	2,118,164.82	OK	CUKUP	368.75
0.75	269,462.17	662,119.33	(302,836.44)	2,118,164.82	OK	CUKUP	368.75
0.75	13,727.23	559,261.80	(540,958.84)	2,118,164.82	OK	TDK PERLU	368.75
0.75	198,175.16	645,207.97	(380,974.42)	2,118,164.82	OK	TDK PERLU	368.75
0.75	176,654.31	652,902.73	(417,363.65)	2,118,164.82	OK	TDK PERLU	368.75
0.75	51,487.81	605,907.45	(537,257.03)	2,118,164.82	OK	TDK PERLU	368.75
0.75	195,141.95	593,584.50	(333,395.24)	2,118,164.82	OK	TDK PERLU	368.75

0.75	28,462.43	580,097.33	(542,147.42)	2,118,164.82	OK	TDK PERLU	368.75
0.75	84,251.38	616,689.11	(504,353.93)	2,118,164.82	OK	TDK PERLU	368.75
0.75	5,690.34	577,837.43	(570,250.31)	2,118,164.82	OK	TDK PERLU	368.75
0.75	105,687.09	563,434.27	(422,518.15)	2,118,164.82	OK	TDK PERLU	368.75
0.75	172,038.76	553,904.10	(324,519.09)	2,118,164.82	OK	TDK PERLU	368.75
0.75	253,646.99	572,003.51	(233,807.53)	2,118,164.82	OK	CUKUP	368.75
0.75	22,256.13	552,871.28	(523,196.44)	2,118,164.82	OK	TDK PERLU	368.75
0.75	152,307.99	544,821.96	(341,744.64)	2,118,164.82	OK	TDK PERLU	368.75

Penulangan Lentur Kolom C

fc'	fy	b	h	Dtul	Cv	d	d'	Pu	Mu	e	$\rho + \rho'$	As=As'	A_s						xb	ab	Es'	Es'.ambil	Pnb	Mnb	cb	cek	Pn	Pr	cek	0,1*b*h*fc'	cek
MPa	MPa	mm	mm	mm	mm	mm	mm	N	Nmm	mm	%	mm2						(mm^2)	mm	mm	MPa	MPa	MPa	MPa	mm	tampang	N	N			syarat
29	240	800	800	25	40	737.5	62.5	1,622,694.72	560,531,343.34	345.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,772,418	4,405,322	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,605,040.84	772,821,898.95	214.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,170,530	6,610,845	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	7,263,487.90	813,919,265.27	112.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	12,852,253	8,353,945	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	6,431,788.16	567,552,374.24	104.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	12,137,729	7,889,524	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,457,607.68	747,958,345.27	216.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,130,268	6,584,674	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,126,662.13	832,281,633.06	201.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,442,200	6,787,930	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,273,789.52	112,694,962.80	88.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	13,684,631	8,895,011	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,889,344.80	679,753,677.92	235.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,755,302	6,340,881	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	6,221,841.89	805,136,217.82	129.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	12,301,947	7,996,265	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	5,483,519.30	850,996,786.65	155.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,567,499	7,518,875	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,920,304.53	542,275,568.44	185.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,802,895	7,021,361	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,522,171.86	771,587,444.87	219.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,074,162	6,548,205	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	945,447.63	81,585,521.13	86.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	13,767,030	8,948,570	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,325,237.19	690,128,323.98	296.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	4,136,708	5,269,360	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	5,107,545.53	856,993,025.33	167.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,237,750	7,304,543	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,559,962.17	739,429,869.43	162.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,433,918	7,431,917	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,539,407.35	467,467,294.24	184	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,839,393	7,045,868	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,874,313.95	690,486,654.01	240.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,661,451	6,279,943	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	297,845.89	86,841,908.30	291.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,131,617	5,285,551	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	616,452.33	91,706,749.88	148.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,741,118	7,631,727	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,137,896.46	454,569,290.16	399.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	5,609,097	3,645,913	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,742,921.05	559,971,538.16	321.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	7,362,371	4,785,541	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,961,695.81	603,375,565.85	203.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,396,138	6,757,489	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,016,078.71	760,855,852.24	189.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,714,835	6,964,643	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,304,596.93	589,326,116.85	255.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,259,276	6,668,529	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,657,144.95	681,924,761.89	186.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,784,063	7,009,640	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,741,764.43	318,275,362.85	182.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,871,776	7,066,654	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,148,589.32	413,822,830.09	192.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,642,838	6,917,845	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,644,455.81	587,321,896.97	357.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,507,222	4,229,694	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,243,262.67	645,457,952.26	287.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,234,634	5,352,512	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	502,881.66	81,454,274.05	161.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,233,936	7,302,058	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,957,117.17	529,422,583.97	270.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,708,625	5,661,606	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,087,314.91	459,524,659.15	220.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,052,138	6,533,890	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,292,140.28	173,533,377.67	134.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	12,155,146	7,900,845	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,083,632.26	512,901,979.46	473.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	4,336,724	2,818,870	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	855,425.08	89,722,619.23	104.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	13,094,330	8,511,314	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,474,569.35	237,534,123.59	161.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,410,076	7,416,549	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	817,186.99	104,211,914.31	127.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	12,359,223	8,033,528	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	573,481.06	272,298,668.87	474.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	4,314,613	2,804,499	OK	1,856,000	OK

29	240	800	800	25	40	737.5	62.5	412,227.71	177,668,595.23	431.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tank	5,020,896	3,263,583	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	718,475.22	322,687,680.38	449.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tank	4,713,264	3,063,622	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	394,751.97	34,320,387.42	86.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	13,742,406	8,932,564	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	258,555.09	91,067,983.11	352.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tank	6,619,852	4,302,903	OK	1,856,000	OK

Penulangan Geser Kolom D

Ø geser	Vu	Vc	Vs	Vs maks	cek	cek tul geser	jrk tul geser
	N	N	N	N	tampang		mm
0.75	46,364.86	621,551.57	(559,731.75)	2,118,164.82	OK	TDK PERLU	368.75
0.75	197,803.02	702,548.33	(438,810.96)	1,602,086.53	OK	TDK PERLU	318.75
0.75	328,803.01	584,334.39	(145,930.38)	2,118,164.82	OK	CUKUP	368.75
0.75	273,676.07	567,131.22	(202,229.80)	2,118,164.82	OK	CUKUP	368.75
0.75	219,924.63	857,156.89	(563,924.04)	2,118,164.82	OK	TDK PERLU	368.75
0.75	337,758.43	771,524.53	(321,179.95)	2,118,164.82	OK	CUKUP	368.75
0.75	121,101.77	602,447.14	(440,978.10)	2,118,164.82	OK	TDK PERLU	368.75
0.75	316,900.24	652,972.25	(230,438.60)	1,602,086.53	OK	CUKUP	318.75
0.75	448,141.56	825,756.53	(228,234.45)	2,118,164.82	OK	CUKUP	368.75
0.75	349,985.14	734,395.68	(267,748.82)	2,118,164.82	OK	CUKUP	368.75
0.75	99,941.54	586,675.64	(453,420.25)	2,118,164.82	OK	TDK PERLU	368.75
0.75	242,441.03	725,434.51	(402,179.80)	2,118,164.82	OK	TDK PERLU	368.75
0.75	531,653.88	768,690.97	(59,819.13)	2,118,164.82	OK	CUKUP	368.75
0.75	239,526.57	698,837.68	(379,468.91)	2,118,164.82	OK	TDK PERLU	368.75
0.75	830.91	549,945.02	(548,837.14)	2,118,164.82	OK	TDK PERLU	368.75
0.75	52,121.36	569,424.65	(499,929.51)	2,118,164.82	OK	TDK PERLU	368.75
0.75	123,193.03	610,027.44	(445,770.07)	2,118,164.82	OK	TDK PERLU	368.75
0.75	187,228.94	666,919.86	(417,281.26)	2,118,164.82	OK	TDK PERLU	368.75
0.75	295,804.98	654,418.43	(260,011.79)	2,118,164.82	OK	CUKUP	368.75
0.75	465,855.97	711,003.53	(89,862.24)	2,118,164.82	OK	CUKUP	368.75
0.75	219,650.54	664,755.12	(371,887.74)	2,118,164.82	OK	TDK PERLU	368.75
0.75	239,881.30	631,636.73	(311,795.01)	2,118,164.82	OK	CUKUP	368.75
0.75	7,070.87	554,805.11	(545,377.28)	2,118,164.82	OK	TDK PERLU	368.75
0.75	115,380.61	620,049.45	(466,208.63)	2,118,164.82	OK	TDK PERLU	368.75
0.75	241,343.53	596,698.10	(274,906.72)	2,118,164.82	OK	CUKUP	368.75
0.75	52,162.54	585,579.92	(516,029.87)	2,118,164.82	OK	TDK PERLU	368.75
0.75	124,714.64	564,937.27	(398,651.08)	2,118,164.82	OK	TDK PERLU	368.75
0.75	421.89	557,475.17	(556,912.65)	2,118,164.82	OK	TDK PERLU	368.75
0.75	142,417.06	545,319.07	(355,429.66)	2,118,164.82	OK	TDK PERLU	368.75

Penulangan Lentur Kolom D

fc'	fy	b	h	Dtul	Cv	d	d'	Pu	Mu	e	$\rho + \rho'$	As=As'	A_s							γb	ab	Fs'	Fs' ambil	Pab	Mub	eb	cek	Pn	Pt	cek	$0,1*b*h*fc'$	cek
MPa	MPa	mm	mm	mm	mm	mm	mm	N	Nmm	mm	%	mm2							(mm^2)	mm	mm	MPa	MPa	MPa	MPa	mm	tampang	N	N			syarat
29	390	800	800	25	40	737.5	62.5	1,556,843.68	377,911,991.74	242.7	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	10,470,747	6,805,986	OK	1,856,000	OK
29	390	700	700	25	40	637.5	62.5	5,173,011.75	556,089,345.43	107.5	1	4462.5	1	x	10	D	25	4906.25	386.36	328.41	502.94	390	5,666,699	2,153,073,454	379.95	desak	10,973,384	7,132,699	OK	1,421,000	OK
29	390	800	800	25	40	737.5	62.5	927,117.48	699,984,977.45	755.0	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	tarik	2,996,724	1,947,871	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	636,034.65	235,184,985.41	369.8	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	tarik	2,996,724	1,947,871	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	5,543,358.04	735,846,809.25	132.7	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	8,427,344	5,477,774	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	4,094,432.24	880,993,296.95	215.2	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	13,257,796	8,617,568	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	1,233,590.77	349,246,126.03	283.1	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	11,052,890	7,184,378	OK	1,856,000	OK
29	390	700	700	25	40	637.5	62.5	4,323,889.45	837,489,943.63	193.7	1	4462.5	1	x	10	D	25	4906.25	386.36	328.41	502.94	390	5,666,699	2,153,073,454	379.95	desak	9,221,352	6,318,879	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	5,012,054.40	1,186,962,408.05	236.8	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	8,802,318	5,221,506	OK	1,421,000	OK
29	390	800	800	25	40	737.5	62.5	3,466,200.66	832,116,123.07	240.1	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	10,590,507	6,883,830	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	966,732.14	237,625,954.75	245.8	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	10,524,549	6,840,957	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	3,314,574.94	565,385,319.25	170.6	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	10,499,894	6,766,431	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	4,046,487.59	1,207,669,716.43	298.4	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	12,145,385	7,894,500	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	2,864,548.34	602,583,604.42	210.4	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	9,464,112	6,151,673	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	345,238.86	29,824,322.53	86.4	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	11,161,145	7,254,744	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	674,840.14	163,215,287.49	241.9	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	14,935,358	9,707,983	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	1,361,851.79	311,102,241.37	228.4	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	10,488,469	6,817,505	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	2,334,488.98	455,113,124.47	195.0	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	10,764,799	6,997,119	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	2,117,961.09	795,556,587.69	375.5	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	11,502,180	7,476,417	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	3,070,398.25	1,079,954,346.51	351.7	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	8,340,947	5,421,615	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	2,287,861.03	514,205,251.76	224.8	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	8,667,432	5,633,831	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	1,727,487.72	551,600,455.48	319.3	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	10,843,307	7,048,150	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	427,472.96	187,232,721.49	438.0	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	8,878,611	5,771,097	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	1,531,427.29	341,208,938.04	222.8	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	tarik	6,427,083	4,177,604	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	1,136,315.93	472,289,987.17	415.6	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	10,885,278	7,075,431	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	948,192.26	515,197,235.86	543.0	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	tarik	6,835,569	4,443,127	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	598,912.28	342,431,138.67	571.8	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	10,796,290	7,017,588	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	472,651.18	52,513,094.41	111.1	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	tarik	4,513,077	2,933,501	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	266,966.31	108,145,222.75	405.1	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	desak	13,991,258	9,094,293	OK	1,856,000	OK
29	390	800	800	25	40	737.5	62.5	1,556,843.68	377,911,991.74	242.7	1	5900	1	x	10	D	25	4906.25	446.97	379.92	516.10	390	7,492,106	2,865,196,377	382.43	tarik	7,037,536	4,574,393	OK	1,856,000	OK

Penulangan Geser Kolom E

Ø geser	Vu	Vc	Vs	Vs maks	cek	cek tul geser	jrk tul geser
	N	N	N	N	tampang		mm
0.75	168,247.18	622,756.50	(398,426.93)	2,118,164.82	OK	TDK PERLU	368.75
0.75	331,192.77	803,686.52	(362,096.16)	2,118,164.82	OK	CUKUP	368.75
0.75	323,627.44	854,572.62	(423,069.36)	2,118,164.82	OK	CUKUP	368.75
0.75	331,940.35	853,460.04	(410,872.90)	2,118,164.82	OK	CUKUP	368.75
0.75	338,843.34	872,674.61	(420,883.49)	2,118,164.82	OK	CUKUP	368.75
0.75	323,439.61	774,937.64	(343,684.83)	2,118,164.82	OK	CUKUP	368.75
0.75	104,898.55	605,741.38	(465,876.65)	2,118,164.82	OK	TDK PERLU	368.75
0.75	337,711.25	754,645.19	(304,363.53)	2,118,164.82	OK	CUKUP	368.75
0.75	358,599.81	821,759.84	(343,626.75)	2,118,164.82	OK	CUKUP	368.75
0.75	331,117.98	818,904.15	(377,413.51)	2,118,164.82	OK	CUKUP	368.75
0.75	350,357.30	825,626.72	(358,483.66)	2,118,164.82	OK	CUKUP	368.75
0.75	315,254.90	740,162.48	(319,822.62)	2,118,164.82	OK	CUKUP	368.75
0.75	73,008.37	589,132.73	(491,788.24)	2,118,164.82	OK	TDK PERLU	368.75
0.75	292,660.46	703,861.11	(313,647.17)	2,118,164.82	OK	CUKUP	368.75
0.75	348,085.17	774,459.28	(310,345.71)	2,118,164.82	OK	CUKUP	368.75
0.75	293,894.92	783,631.00	(391,771.11)	2,118,164.82	OK	CUKUP	368.75
0.75	327,151.65	778,153.51	(341,951.31)	2,118,164.82	OK	CUKUP	368.75
0.75	291,458.28	702,480.44	(313,869.40)	2,118,164.82	OK	CUKUP	368.75
0.75	23,550.80	550,977.73	(519,576.66)	2,118,164.82	OK	TDK PERLU	368.75
0.75	43,138.65	571,067.95	(513,549.76)	2,118,164.82	OK	TDK PERLU	368.75
0.75	190,306.84	603,349.79	(349,607.34)	2,118,164.82	OK	TDK PERLU	368.75
0.75	235,805.79	653,361.93	(338,954.21)	2,118,164.82	OK	TDK PERLU	368.75
0.75	227,648.43	679,518.24	(375,987.00)	2,118,164.82	OK	TDK PERLU	368.75
0.75	296,049.89	727,287.94	(332,554.75)	2,118,164.82	OK	CUKUP	368.75
0.75	184,498.57	708,889.76	(462,891.67)	2,118,164.82	OK	TDK PERLU	368.75
0.75	249,174.19	747,551.32	(415,319.07)	2,118,164.82	OK	TDK PERLU	368.75
0.75	233,233.50	683,909.57	(372,931.57)	2,118,164.82	OK	TDK PERLU	368.75
0.75	283,935.60	731,036.54	(352,455.74)	2,118,164.82	OK	CUKUP	368.75
0.75	238,679.73	630,288.73	(312,049.09)	2,118,164.82	OK	CUKUP	368.75
0.75	268,094.66	665,655.19	(308,195.65)	2,118,164.82	OK	CUKUP	368.75
0.75	23,510.75	553,589.13	(522,241.46)	2,118,164.82	OK	TDK PERLU	368.75
0.75	186,145.20	631,347.14	(383,153.55)	2,118,164.82	OK	TDK PERLU	368.75
0.75	102,185.72	663,269.40	(527,021.77)	2,118,164.82	OK	TDK PERLU	368.75
0.75	165,857.75	636,191.53	(415,047.87)	2,118,164.82	OK	TDK PERLU	368.75
0.75	201,375.80	596,941.23	(328,440.16)	2,118,164.82	OK	TDK PERLU	368.75
0.75	11,224.30	581,144.84	(566,179.10)	2,118,164.82	OK	TDK PERLU	368.75
0.75	4,809.79	620,173.40	(613,760.35)	2,118,164.82	OK	TDK PERLU	368.75
0.75	61,335.96	588,118.55	(506,337.27)	2,118,164.82	OK	TDK PERLU	368.75

0.75	118,773.94	566,282.55	(407,917.29)	2,118,164.82	OK	TDK PERLU	368.75
0.75	214,647.52	554,712.83	(268,516.14)	2,118,164.82	OK	CUKUP	368.75
0.75	97,903.81	574,822.24	(444,283.83)	2,118,164.82	OK	TDK PERLU	368.75
0.75	60,800.91	558,317.64	(477,249.75)	2,118,164.82	OK	TDK PERLU	368.75
0.75	212,708.70	546,138.80	(262,527.20)	2,118,164.82	OK	CUKUP	368.75

Penulangan Lentur Kolom E

fc'	fy	b	h	Dtul	Cv	d	d'	Pu	Mu	e	ρ + ρ'	As=As'	As						xb	ab	Fs'	Fs' ambil	Pub	Mub	eb	cek tampang	Pn	Pr	cek	0.1*b*h*fc'	cek syarat
MPa	MPa	mm	mm	mm	mm	mm	mm	N	Nmm	mm	%	mm2						(mm²)	mm	mm	MPa	MPa	MPa	MPa	mm		N	N			
29	240	800	800	25	40	737.5	62.5	1,577,231.50	646,235,756.80	409.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	tarik	5,410,326	3,516,712	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,638,623.01	848,417,198.99	182.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,867,720	7,064,018	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	5,499,631.41	841,799,121.72	153.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	11,623,425	7,555,226	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	5,480,806.25	854,234,026.83	155.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	11,548,205	7,506,333	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	5,805,922.72	864,651,309.07	148.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	11,736,653	7,628,824	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,152,183.12	846,234,467.86	203.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,394,437	6,756,384	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,289,330.45	267,866,737.59	207.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,309,562	6,701,215	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,808,828.59	799,613,875.84	209.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,263,322	6,671,159	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,944,429.06	814,503,301.27	164.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	11,315,729	7,355,224	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,896,110.00	781,541,622.31	159.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	11,448,372	7,441,442	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	5,009,858.00	813,575,318.66	162.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	11,376,039	7,394,425	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,563,776.76	743,291,652.84	208.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,292,292	6,689,990	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,008,306.91	185,717,835.93	184.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,837,381	7,044,298	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,949,546.45	675,454,384.18	229.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	9,876,042	6,419,428	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,144,089.03	796,987,771.51	192.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,649,266	6,922,023	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,299,277.48	681,789,788.27	158.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	11,475,838	7,459,294	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,206,596.54	755,867,169.04	179.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,944,417	7,113,871	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,926,184.94	683,195,518.79	233.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	9,789,373	6,363,093	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	362,712.51	69,616,654.98	191.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,658,042	6,927,727	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	702,645.35	142,723,267.04	203.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,409,225	6,765,996	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,248,863.99	488,615,552.22	391.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	tarik	5,774,124	3,753,181	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,095,084.67	556,444,211.03	265.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	9,209,230	5,986,000	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,537,652.57	544,673,565.56	214.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,165,065	6,607,292	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,345,935.57	698,286,076.12	208.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,289,570	6,688,220	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,034,632.66	450,496,636.75	148.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	11,749,760	7,637,344	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,688,798.12	592,415,356.15	160.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	11,422,846	7,424,850	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,611,960.18	570,372,710.05	218.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,088,342	6,557,422	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,409,363.07	672,326,475.65	197.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,539,460	6,850,649	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,704,679.02	591,126,391.33	346.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	tarik	6,746,192	4,385,025	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,303,090.50	645,745,650.05	280.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	tarik	8,434,357	5,482,332	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	406,898.32	150,684,606.62	370.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	tarik	6,214,566	4,039,468	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,722,587.72	501,628,394.91	291.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	tarik	8,141,260	5,291,819	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,262,722.14	278,801,275.58	123.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	12,492,774	8,120,303	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,804,556.25	427,234,603.32	236.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	9,726,854	6,322,455	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,140,429.11	525,406,157.85	460.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	tarik	4,528,254	2,943,365	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	873,149.34	61,086,880.48	70.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	14,417,838	9,371,595	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,533,524.63	76,084,063.64	49.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	15,320,530	9,958,345	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	991,146.67	182,736,953.49	184.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,833,111	7,041,522	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	621,674.77	304,948,822.25	490.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	tarik	4,091,386	2,659,401	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	425,911.65	241,776,320.92	567.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	tarik	3,195,879	2,077,321	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	766,169.08	115,738,107.65	151.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	11,677,969	7,590,680	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	486,906.13	92,521,781.87	190.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	desak	10,701,795	6,956,166	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	280,836.47	113,685,579.10	404.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829.982	2,349,914.266	266.13	tarik	5,504,814	3,578,129	OK	1,856,000	OK

Penulangan Geser Kolom F

Ø geser	Vu	Vc	Vs	Vs maks	cek	cek tul gsr	jrk tul gsr
	N	N	N	N	tampang		mm
0.75	187,230.40	621,782.80	(372,142.26)	2,118,164.82	OK	TDK PERLU	368.75
0.75	356,499.38	791,106.64	(315,774.14)	2,118,164.82	OK	CUKUP	368.75
0.75	350,862.86	844,688.96	(376,871.80)	2,118,164.82	OK	CUKUP	368.75
0.75	358,825.44	870,342.57	(391,908.64)	2,118,164.82	OK	CUKUP	368.75
0.75	365,741.55	856,523.53	(368,868.13)	2,118,164.82	OK	CUKUP	368.75
0.75	339,077.77	774,934.27	(322,830.58)	2,118,164.82	OK	CUKUP	368.75
0.75	112,961.59	605,028.07	(454,412.61)	2,118,164.82	OK	TDK PERLU	368.75
0.75	360,428.90	741,707.36	(261,135.50)	2,118,164.82	OK	CUKUP	368.75
0.75	348,735.97	796,509.56	(331,528.26)	2,118,164.82	OK	CUKUP	368.75
0.75	353,279.92	822,156.07	(351,116.17)	2,118,164.82	OK	CUKUP	368.75
0.75	364,460.69	809,664.59	(323,717.00)	2,118,164.82	OK	CUKUP	368.75
0.75	363,847.44	730,876.35	(245,746.44)	2,118,164.82	OK	CUKUP	368.75
0.75	80,268.25	588,619.37	(481,595.03)	2,118,164.82	OK	TDK PERLU	368.75
0.75	320,102.32	692,571.83	(265,768.74)	2,118,164.82	OK	CUKUP	368.75
0.75	316,106.72	749,085.55	(327,609.92)	2,118,164.82	OK	CUKUP	368.75
0.75	322,232.24	774,404.14	(344,761.16)	2,118,164.82	OK	CUKUP	368.75
0.75	341,559.29	763,552.88	(308,140.49)	2,118,164.82	OK	CUKUP	368.75
0.75	379,742.16	694,624.76	(188,301.88)	2,118,164.82	OK	CUKUP	368.75
0.75	20,548.51	551,098.53	(523,700.52)	2,118,164.82	OK	TDK PERLU	368.75
0.75	51,287.05	570,866.02	(502,483.28)	2,118,164.82	OK	TDK PERLU	368.75
0.75	213,912.57	595,724.71	(310,507.95)	2,118,164.82	OK	TDK PERLU	368.75
0.75	260,536.83	643,924.48	(296,542.04)	2,118,164.82	OK	CUKUP	368.75
0.75	190,568.35	654,618.58	(400,527.45)	2,118,164.82	OK	TDK PERLU	368.75
0.75	267,332.82	701,774.22	(345,330.46)	2,118,164.82	OK	CUKUP	368.75
0.75	212,011.63	679,676.58	(396,994.41)	2,118,164.82	OK	TDK PERLU	368.75
0.75	276,003.86	726,854.46	(358,849.31)	2,118,164.82	OK	CUKUP	368.75
0.75	301,447.09	718,037.57	(316,108.12)	2,118,164.82	OK	CUKUP	368.75
0.75	294,054.31	625,092.58	(233,020.16)	2,118,164.82	OK	CUKUP	368.75
0.75	342,622.64	659,073.49	(202,243.30)	2,118,164.82	OK	CUKUP	368.75
0.75	238,902.79	672,871.73	(354,334.67)	2,118,164.82	OK	TDK PERLU	368.75
0.75	4,087.04	551,598.46	(546,149.07)	2,118,164.82	OK	TDK PERLU	368.75
0.75	135,124.92	608,842.79	(428,676.23)	2,118,164.82	OK	TDK PERLU	368.75
0.75	136,313.21	632,695.33	(450,944.39)	2,118,164.82	OK	TDK PERLU	368.75
0.75	165,281.86	628,055.32	(407,679.51)	2,118,164.82	OK	TDK PERLU	368.75
0.75	230,582.49	593,177.48	(285,734.16)	2,118,164.82	OK	CUKUP	368.75

0.75	9,296.28	560,014.86	(547,619.82)	2,118,164.82	OK	TDK PERLU	368.75
0.75	32,762.91	586,262.77	(542,578.89)	2,118,164.82	OK	TDK PERLU	368.75
0.75	73,907.09	583,535.52	(484,992.73)	2,118,164.82	OK	TDK PERLU	368.75
0.75	138,699.61	566,826.71	(381,893.90)	2,118,164.82	OK	TDK PERLU	368.75
0.75	161,612.15	543,673.47	(328,190.60)	2,118,164.82	OK	TDK PERLU	368.75
0.75	74,183.88	557,199.26	(458,287.43)	2,118,164.82	OK	TDK PERLU	368.75
0.75	80,605.54	556,024.47	(448,550.41)	2,118,164.82	OK	TDK PERLU	368.75
0.75	272,455.34	546,289.28	(183,015.49)	2,118,164.82	OK	CUKUP	368.75

Perhitungan Lentur Kolom F

fc'	fy	b	h	Dtul	Cv	d	d'	Pu	Mu	e	ρ = ρ'	As=As'	A_s					xb	ab	Fs'	Fs' ambil	Pub	Mub	eb	cek	Pn	Pr	cek	0,1*b*h*fc'	cek
MPa	MPa	mm	mm	mm	mm	mm	mm	N	Nmm	mm	%	mm2					(mm^2)	mm	mm	MPa	MPa	MPa	MPa	mm	tampang	N	N			syarat
29	240	800	800	25	40	737.5	62.5	1,560,756.12	698,631,646.71	447.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	4,737,952	3,079,669	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,425,267.49	909,272,143.06	205.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,358,939	6,733,310	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	5,332,396.81	905,916,845.60	169.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,184,847	7,270,150	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	5,766,463.79	918,626,232.73	159.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,456,789	7,446,913	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	5,532,641.42	929,810,133.14	168.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,230,942	7,300,112	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,152,126.05	899,574,501.19	216.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,123,456	6,580,247	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,272,760.93	284,262,754.94	223.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,003,665	6,502,382	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,589,916.50	843,215,695.47	234.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,762,411	6,345,567	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,517,186.56	811,742,188.17	179.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,944,065	7,113,642	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,951,133.39	822,473,311.17	166.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,280,240	7,332,156	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,739,773.79	842,269,072.49	177.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,992,262	7,144,970	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,406,652.60	833,865,312.03	244.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,577,116	6,225,125	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	999,620.75	204,444,964.68	204.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,378,915	6,746,295	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,758,528.20	737,921,092.41	267.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,791,313	5,714,354	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,714,757.72	729,355,582.58	196.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,558,643	6,863,118	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	4,143,156.12	744,892,554.98	179.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,941,956	7,112,272	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,959,549.39	790,163,474.19	199.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,487,201	6,816,680	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,293,264.52	871,270,736.09	311.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	7,599,089	4,939,408	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	364,756.59	65,757,371.70	180.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,930,238	7,104,655	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	699,228.62	164,729,130.64	235.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,749,015	6,336,860	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,119,845.16	550,064,541.28	491.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	4,082,213	2,653,439	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,935,400.14	614,055,554.21	317.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	7,463,033	4,850,958	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,116,347.60	462,827,093.24	218.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,083,782	6,553,159	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,914,235.53	637,019,455.00	218.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,083,877	6,554,517	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,540,336.69	522,997,166.13	205.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,349,752	6,727,339	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,338,600.87	655,432,257.88	196.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,559,103	6,863,417	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	3,189,416.42	714,322,214.83	224.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,975,439	6,484,035	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,616,758.61	714,953,175.36	442.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	4,827,965	3,138,177	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,191,726.00	812,314,516.92	370.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,207,977	4,035,185	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,425,196.45	583,614,210.85	240.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,653,611	6,274,847	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	373,215.44	103,809,029.78	278.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,495,665	5,522,182	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,341,807.19	380,234,218.32	283.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,352,678	5,429,241	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,245,199.51	357,324,295.53	287.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,374,578	6,743,476	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,666,889.09	426,145,468.39	255.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,381,308	6,097,850	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,076,745.32	575,711,844.21	534.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	3,541,001	2,301,651	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	515,623.67	29,485,995.81	57.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	14,971,690	9,731,599	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	959,746.27	113,468,029.62	118.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	12,650,924	8,223,099	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	913,600.35	164,195,434.28	179.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,943,521	7,113,289	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	630,882.26	343,148,040.13	543.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	3,439,042	2,235,377	OK	1,856,000	OK

29	240	800	800	25	40	737.5	62.5	239,122.23	17,555,968.65	73.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	14,274,984	9,278,740	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	467,982.85	99,115,935.51	211.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,224,269	6,645,775	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	448,104.90	116,485,789.40	260.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,306,117	6,048,976	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	283,382.58	99,030,120.62	349.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tank	6,683,600	4,344,340	OK	1,856,000	OK

Penulangan Geser Kolom G

Ø geser	Vu	Vc	Vs	Vs maks	cek	cek tul geser	jrk tul geser
	N	N	N	N	tampang		mm
0.75	293,934.41	544,877.68	(152,965.14)	2,118,164.82	OK	CUKUP	368.75
0.75	144,658.00	667,832.52	(474,955.19)	2,118,164.82	OK	TDK PERLU	368.75
0.75	177,838.09	686,705.90	(449,588.44)	2,118,164.82	OK	TDK PERLU	368.75
0.75	188,130.58	670,824.82	(419,984.05)	2,118,164.82	OK	TDK PERLU	368.75
0.75	195,080.75	635,824.53	(375,716.86)	2,118,164.82	OK	TDK PERLU	368.75
0.75	112,640.34	552,459.50	(402,272.38)	2,118,164.82	OK	TDK PERLU	368.75
0.75	95,146.82	547,776.44	(420,914.02)	2,118,164.82	OK	TDK PERLU	368.75
0.75	222,827.12	615,432.19	(318,329.36)	2,118,164.82	OK	TDK PERLU	368.75
0.75	223,816.81	650,497.30	(352,074.89)	2,118,164.82	OK	TDK PERLU	368.75
0.75	232,018.98	666,323.32	(356,964.69)	2,118,164.82	OK	TDK PERLU	368.75
0.75	260,456.10	646,955.54	(299,680.74)	2,118,164.82	OK	CUKUP	368.75
0.75	71,543.67	545,843.96	(450,452.40)	2,118,164.82	OK	TDK PERLU	368.75
0.75	197,924.93	596,947.65	(333,047.75)	2,118,164.82	OK	TDK PERLU	368.75
0.75	195,576.87	632,269.09	(371,499.93)	2,118,164.82	OK	TDK PERLU	368.75
0.75	194,344.09	647,713.20	(388,587.75)	2,118,164.82	OK	TDK PERLU	368.75
0.75	230,495.76	631,723.09	(324,395.41)	2,118,164.82	OK	TDK PERLU	368.75
0.75	7,092.66	537,653.80	(528,196.92)	2,118,164.82	OK	TDK PERLU	368.75
0.75	48,399.96	543,097.34	(478,564.07)	2,118,164.82	OK	TDK PERLU	368.75
0.75	131,917.99	558,336.31	(382,445.66)	2,118,164.82	OK	TDK PERLU	368.75
0.75	153,851.60	578,342.04	(373,306.58)	2,118,164.82	OK	TDK PERLU	368.75
0.75	108,502.28	594,111.75	(449,442.04)	2,118,164.82	OK	TDK PERLU	368.75
0.75	158,664.51	613,914.17	(402,361.49)	2,118,164.82	OK	TDK PERLU	368.75
0.75	118,446.04	608,704.86	(450,776.81)	2,118,164.82	OK	TDK PERLU	368.75
0.75	11,141.84	539,963.46	(525,107.68)	2,118,164.82	OK	TDK PERLU	368.75
0.75	75,430.19	573,107.18	(472,533.60)	2,118,164.82	OK	TDK PERLU	368.75
0.75	72,937.74	586,756.80	(489,506.48)	2,118,164.82	OK	TDK PERLU	368.75
0.75	104,201.31	580,688.80	(441,753.72)	2,118,164.82	OK	TDK PERLU	368.75
0.75	33,598.16	548,678.18	(503,880.63)	2,118,164.82	OK	TDK PERLU	368.75
0.75	4,216.05	562,924.45	(557,303.06)	2,118,164.82	OK	TDK PERLU	368.75
0.75	30,308.53	560,040.78	(519,629.41)	2,118,164.82	OK	TDK PERLU	368.75
0.75	88,059.18	537,941.97	(420,529.73)	2,118,164.82	OK	TDK PERLU	368.75
0.75	30,932.85	545,317.64	(504,073.84)	2,118,164.82	OK	TDK PERLU	368.75
0.75	39,740.32	543,845.53	(490,858.43)	2,118,164.82	OK	TDK PERLU	368.75

Penulangan Lentur Kolom G

fc'	fy	b	h	Dtul	Cv	d	d'	Pu	Mu	e	ρ* ρ	As=As'	A_s					xb	ab	Fs'	Fs' ambil	Pub	Mub	eb	cek tampang	Pn	Pr	cek	0,1*b*h*fc'	cek syarat
MPa	MPa	mm	mm	mm	mm	mm	mm	N	Nmm	mm	%	mm2					(mm^2)	mm	mm	MPa	MPa	MPa	MPa	mm		N	N			
29	240	800	800	25	40	737.5	62.5	259,497.92	135,908,832.53	523.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	3,667,391	2,383,804	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,339,931.47	562,220,271.53	240.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,660,600	6,279,390	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,659,274.98	620,627,924.56	233.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,791,181	6,364,268	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,360,562.17	642,960,261.09	269.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,750,615	5,687,900	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,798,346.44	655,552,537.48	364.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,341,851	4,122,203	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	387,784.66	114,046,288.06	294.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,064,096	5,241,663	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	308,545.80	69,376,835.10	224.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,957,862	6,472,610	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,453,301.77	569,104,330.91	391.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	5,767,094	3,748,611	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,046,614.37	571,382,798.83	279.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,467,189	5,503,673	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	2,314,395.48	593,998,464.86	256.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,363,697	6,086,403	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,986,686.70	637,404,991.29	320.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	7,373,501	4,792,776	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	275,847.58	132,260,650.19	479.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	4,246,917	2,760,496	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,140,537.83	471,644,789.76	413.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	5,338,447	3,469,991	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,738,187.37	466,734,039.29	268.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,762,934	5,695,907	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,999,506.43	468,111,788.26	234.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,777,154	6,355,150	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,728,948.92	551,116,582.80	318.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	7,425,670	4,826,685	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	137,267.58	57,931,856.49	422.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	5,181,164	3,367,757	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	229,374.60	39,090,351.41	170.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,171,503	7,261,477	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	457,222.09	200,896,354.58	412.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	5,361,002	3,484,651	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	825,725.10	398,274,104.72	482.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	4,205,937	2,733,859	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,092,553.42	306,103,322.82	280.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,440,093	5,486,060	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,427,616.46	415,594,859.90	291.1	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,143,812	5,293,478	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	1,339,473.34	336,769,973.73	251.4	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,456,554	6,146,760	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	176,347.79	62,161,909.04	352.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,613,480	4,298,762	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	737,149.74	267,967,560.02	363.5	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,364,321	4,136,809	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	968,105.49	246,116,460.02	254.2	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,406,561	6,114,264	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	865,433.07	311,482,617.73	359.9	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	6,444,871	4,189,166	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	323,803.46	94,653,355.59	292.3	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	8,111,546	5,272,505	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	564,854.78	59,102,649.99	104.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	13,103,049	8,516,982	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	516,062.15	118,511,254.39	229.6	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	9,863,501	6,411,275	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	142,141.55	27,114,086.91	190.8	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	10,685,023	6,945,265	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	266,942.11	44,303,679.30	166.0	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	desak	11,284,089	7,334,658	OK	1,856,000	OK
29	240	800	800	25	40	737.5	62.5	242,033.52	76,656,470.55	316.7	1	5900	1	x	10	D	25	4906.25	526.79	447.77	528.81	240	8,829,982	2,349,914,266	266.13	tarik	7,477,088	4,860,107	OK	1,856,000	OK


UNIVERSITAS KATOLIK
SOEGIJAPRANATA

LAMPIRAN 05
TIME SCHEDULE,
KURVA S, dan NWP