BAB VI

KESIMPULAN DAN SARAN

6.1. Kesimpulan

Setalah dilakukan perhitungan gempa, estimasi dimensi, analisis struktur, dan perhitungan elemen struktur gedung *Alam Sutera office tower*, dapat disimpulkan :

1. Atap dan pelat lantai direncanakan menggunakan pelat beton dua arah dengan tebal 125 mm, tulangan lapangan arah x dan y P8-150, tulangan tumpuan arah x P8-100 dan tulangan tumpuan arah y P8-75. tulangan susut P8-150. Tidak diperlukan tulangan geser karena beton sudah mampu menahan gaya geser.
2. Plat lantai didekat *shearwall* direncanakan menggunakan pelat satu arah dengan tebal 150 mm, tulangan lapangan arah X P8-150, tulangan tumpuan arah X P8-100. Tulangan susut P8-150.
3. Dimensi komponen struktur tidak semua sesuai dengan estimasi awal.
   a. Dimensi balok induk yang digunakan adalah :
      - B400x750 mm^2
      - B350x600 mm^2
      - B250x400 mm^2
   b. Dimensi balok anak dan bordes yang digunakan adalah :
      - B300x500 mm^2
   c. Dimensi kolom yang digunakan adalah :

- Kolom K1100x1100 mm^2
- Kolom K1000x1000 mm^2
- Kolom K900x900 mm^2
- Kolom K800x800 mm^2
- Kolom K700x700 mm^2
- Kolom K650x650 mm^2

4. Tangga dengan tinggi 5 m dan 4,05 m menggunakan tulangan tumpuan D16-200 , tulangan lapangan D16-100 pada pelat tangga dan bordes, P10-250 untuk tulangan susut.
5. Hasil Perhitungan:

Tabel 6.1. Hasil perhitungan balok

Dimensi balok	Tulangan tumpuan tarik	Tulangan tumpuan tekan	Tulangan lapangan tarik	Tulangan lapangan tekan	Sengkang tumpuan	Sengkang lapangan
B400x750	7D25	4D25	3D25	2D25	3P10-80	2P10-150
B350x600	5D25	3D25	2D25	2D25	2P10-80	2P10-250
B300x500	4D25	2D25	2D25	2D25	2P10-70	2P10-200
B250x400	2D19	2D19	2D19	2D19	2P10-80	2P10-150

Tabel 6.2. Hasil perhitungan kolom

Dimensi kolom	Tulangan	Spasi sepanjang l_o	Spasi diluar l_o
K1100x1100	28D25	7D13-100	7D13-150
K1000x1000	24D25	6D13-100	6D13-150
K900x900	20D25	6D13-100	6D13-150
K800x800	20D25	5D13-100	5D13-150
K700x700	20D25	5D13-100	5D13-150
K650x650	20D25	3D16-100	3D16-150
K650x650	12D25	3D16-100	3D16-150

6. Kolom K500x500 mengalami perbesaran dimensi menjadi 650x650 mm karena rasio perbandingan tulangan terlalu besar, sehingga dilakukan pembesaran dimensi.

6.2. Saran

1. Dalam melakukan *input* data pada software ETABS harus sangat hati-hati, jangan sampai terjadi salah *input*.
2. Dalam melakukan perancangan gedung, pemahaman mengenai peraturan-peraturan yang berlaku sangat penting terutama SNI.
3. Dalam mendesain kolom harus diperhatikan momen yang digunakan untuk mendesain kolom, dibandingkan dengan momen yang dihasilkan oleh balok guna memenuhi syarat kolom SRPMK.

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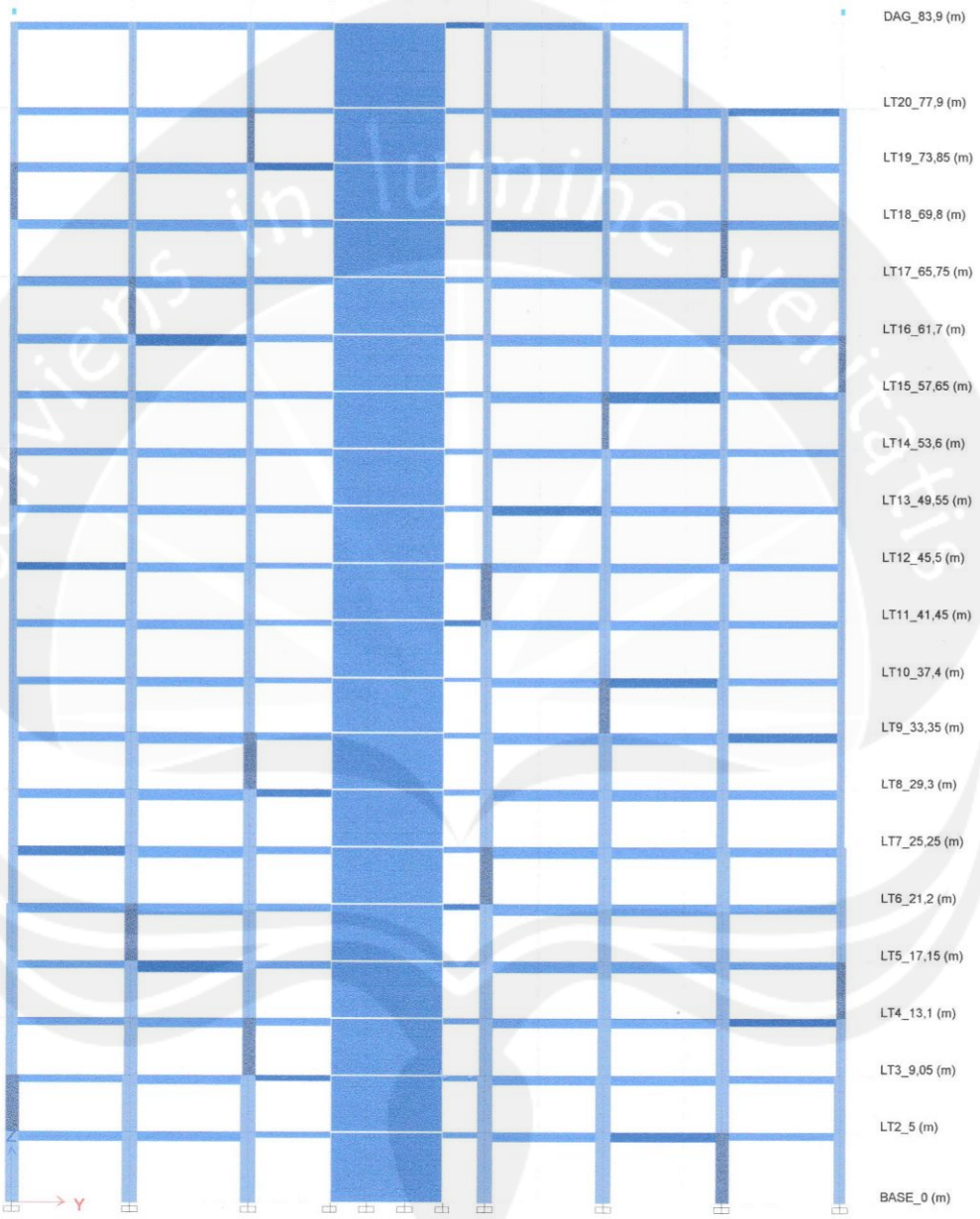
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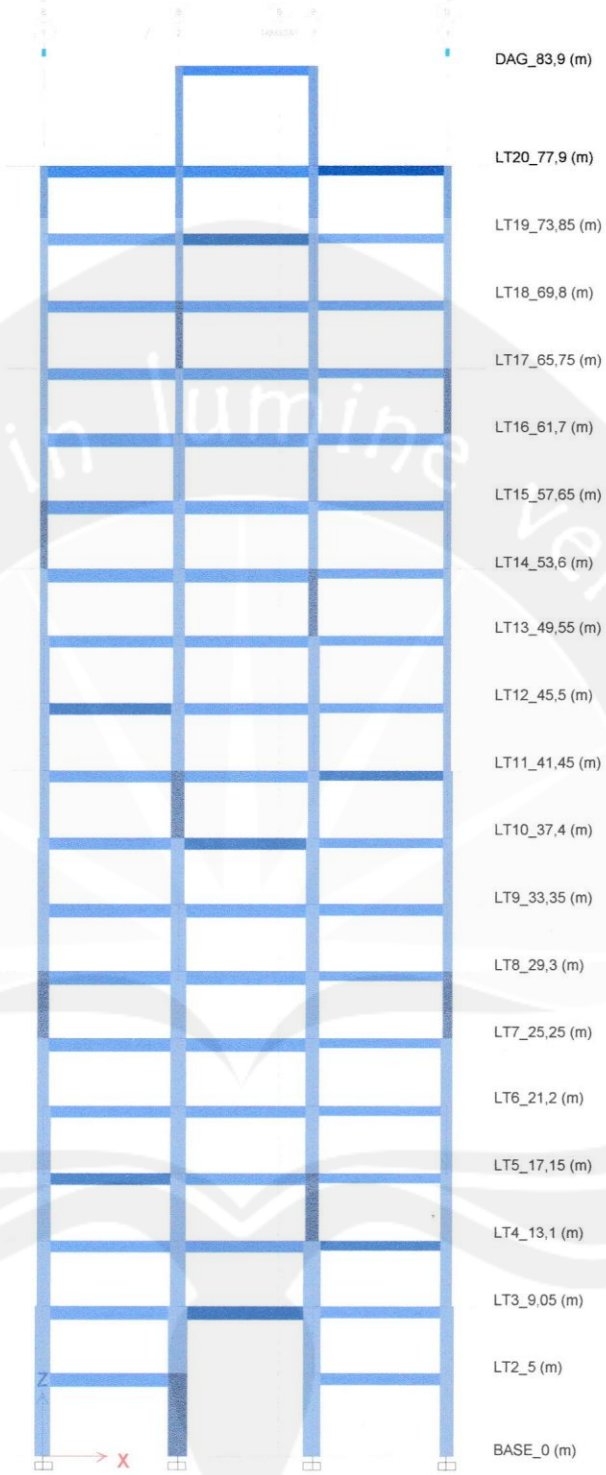
LT20_77,9 (m)
LT19_73,85 (m)
LT18_69,8 (m)
LT17_65,75 (m)
LT16_61,7 (m)
LT15_57,65 (m)
LT14_53,6 (m)
LT13_49,55 (m)
LT12_45,5 (m)
LT11_41,45 (m)
LT10_37,4 (m)
LT9_33,35 (m)
LT8_29,3 (m)
LT7_25,25 (m)
LT6_21,2 (m)
LT5_17,15 (m)
LT4_13,1 (m)
LT3_9,05 (m)
LT2_5 (m)
BASE_0 (m)
Z
Y

Portal As 2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LT14_53,6 (m)
LT13_49,55 (m)
LT12_45,5 (m)
LT11_41,45 (m)
LT10_37,4 (m)
LT9_33,35 (m)
LT8_29,3 (m)
LT7_25,25 (m)
LT6_21,2 (m)
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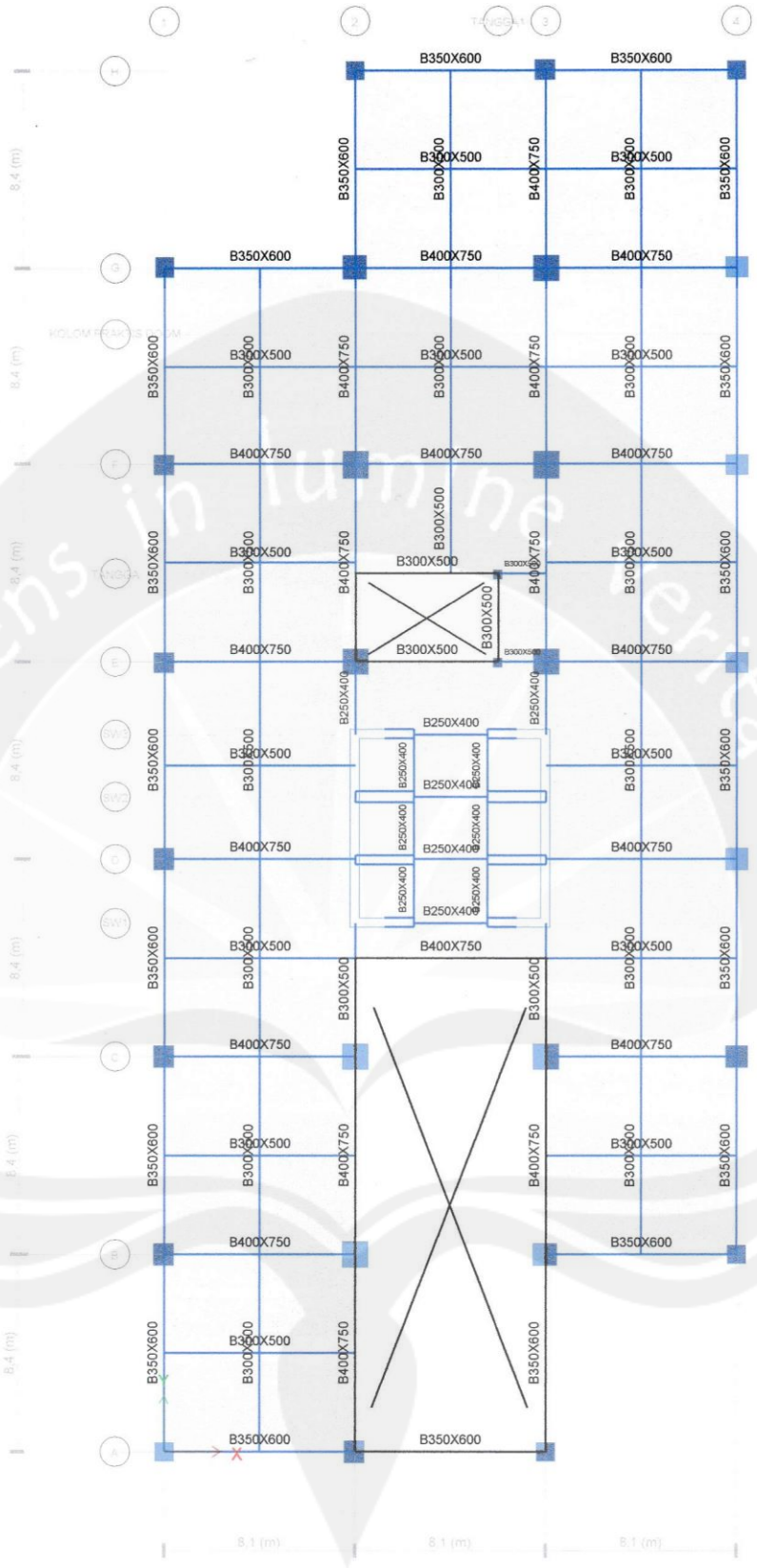
LT2_5 (m)
BASE_0 (m)
Z
X

Portal As B



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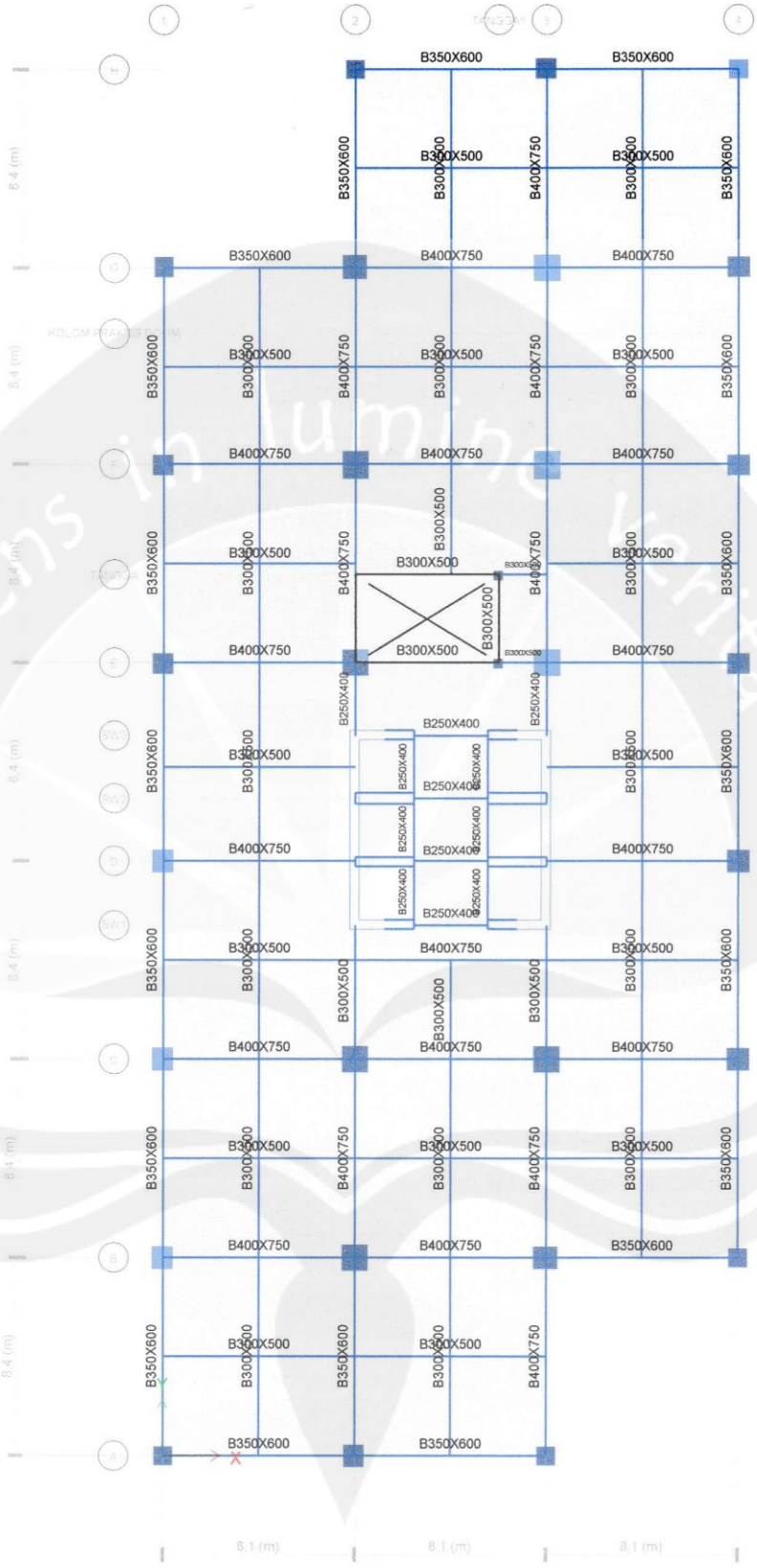

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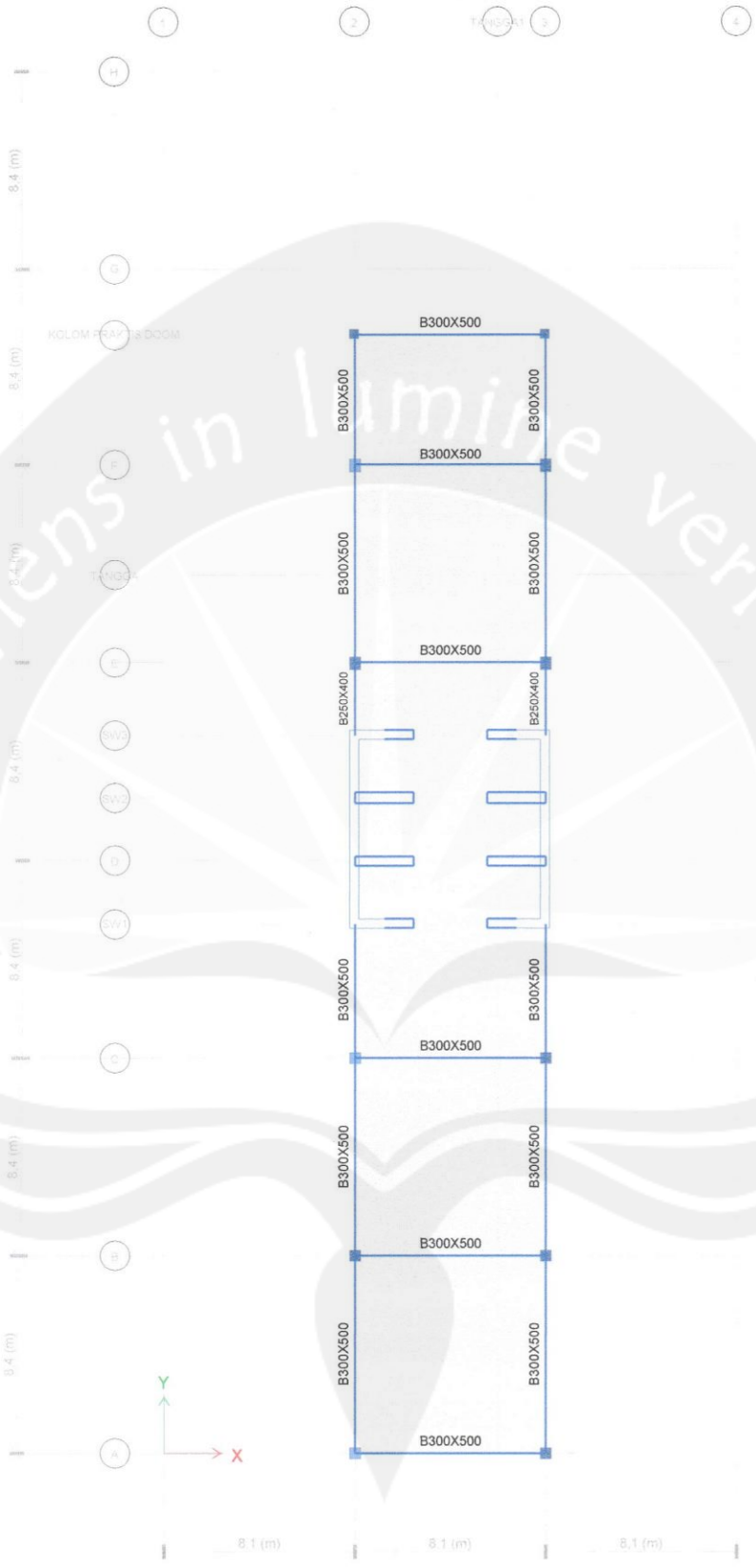
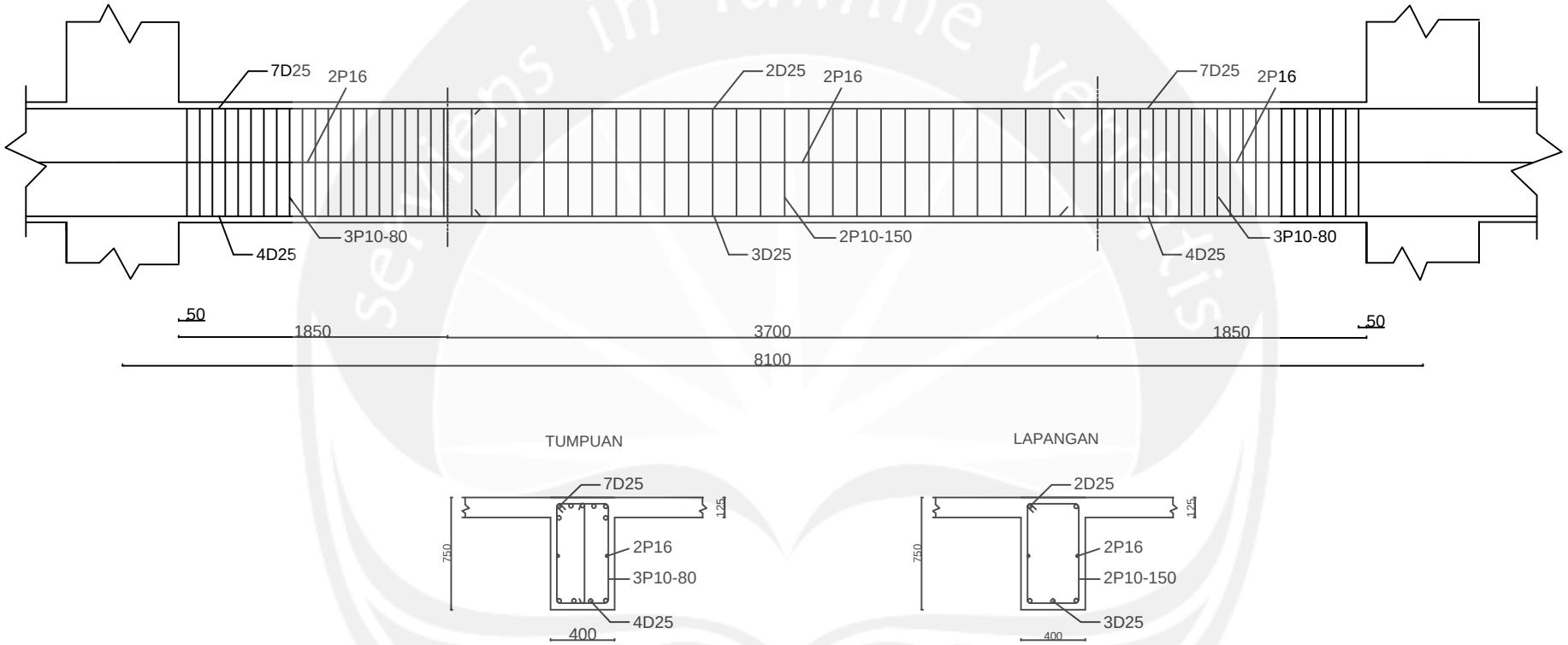
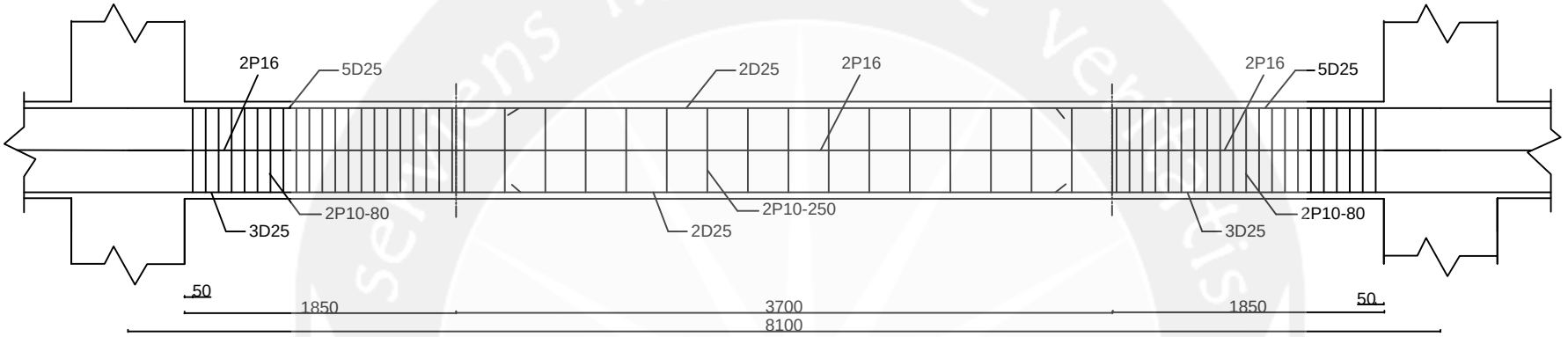


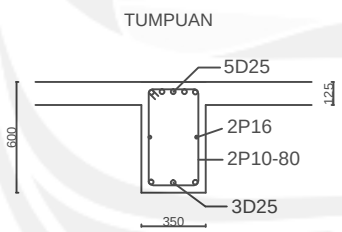
Denah balok lantai dag

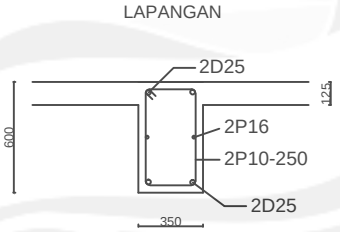


Detail penulangan Balok 400x750

satuan dalam milimeter

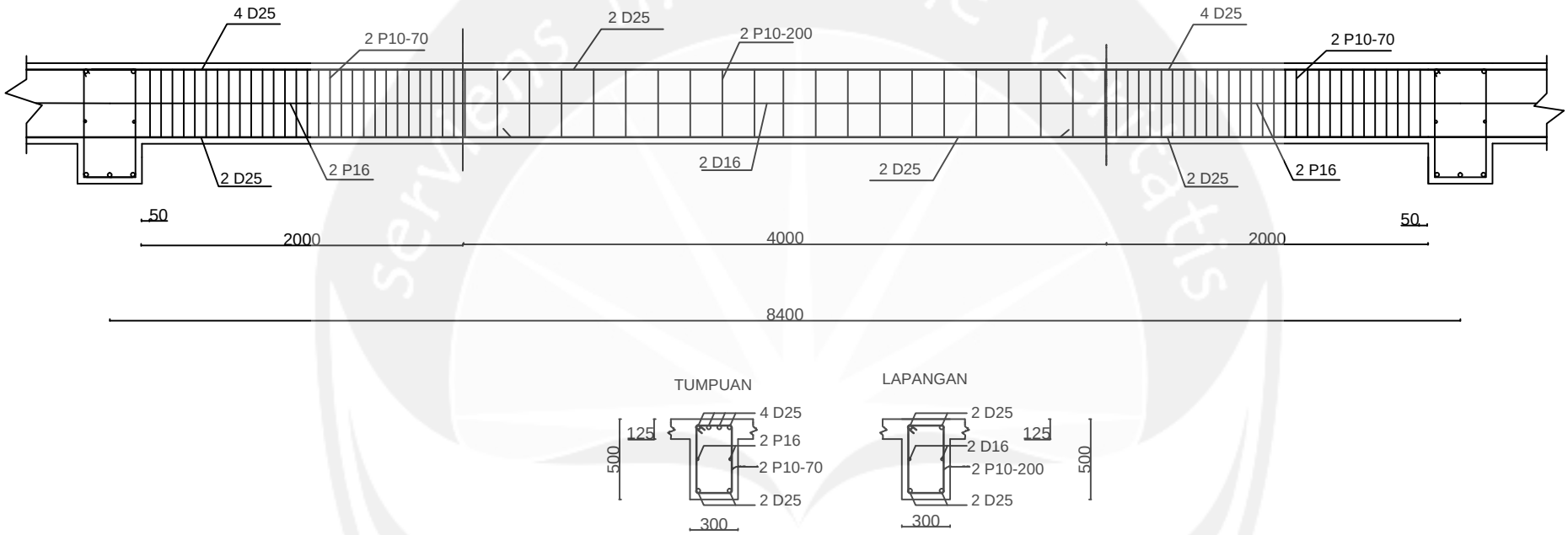






Detail penulangan Balok 350x600

satuan dalam milimeter



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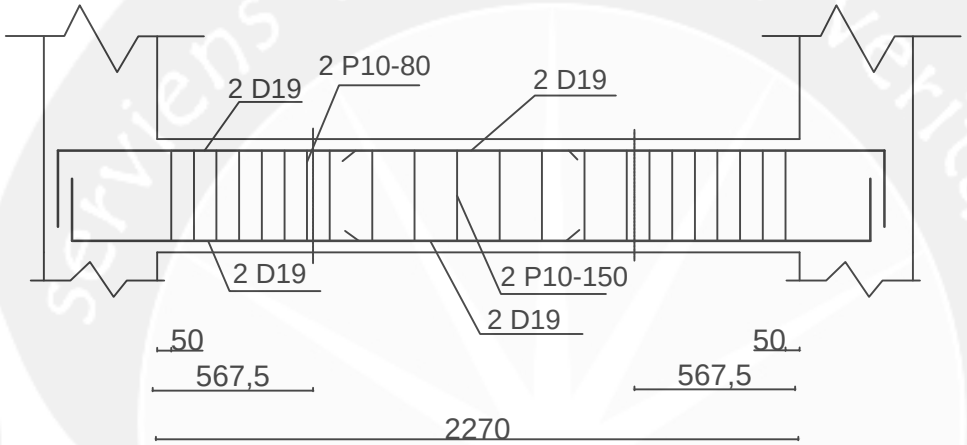

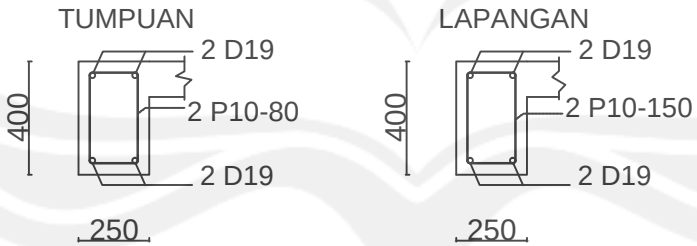

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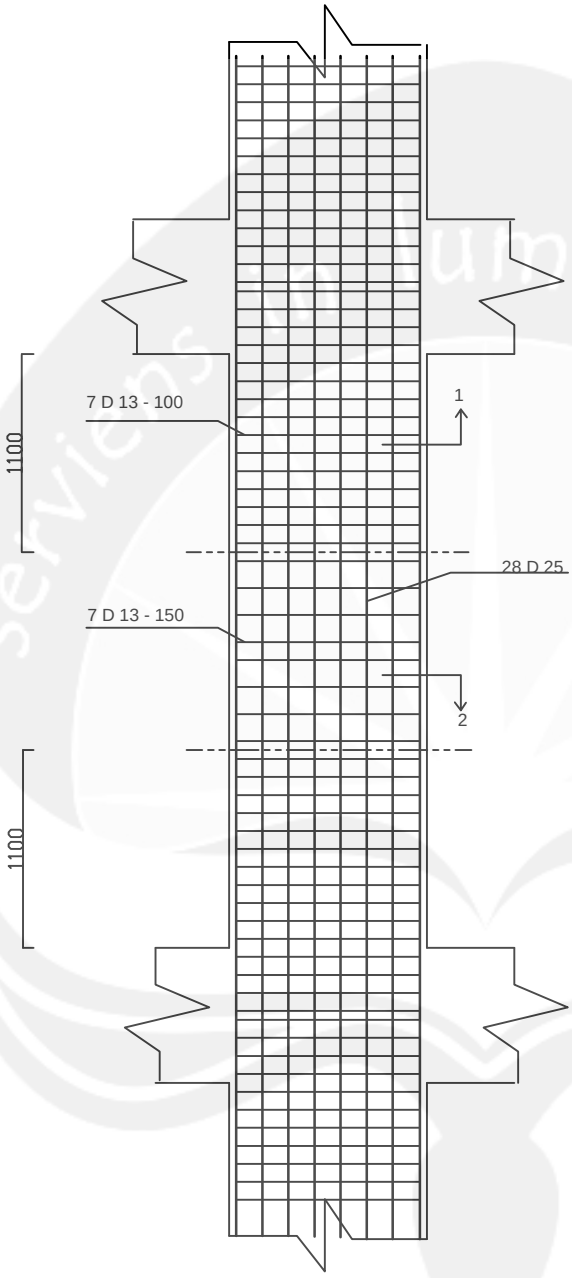

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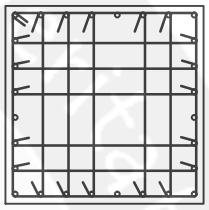
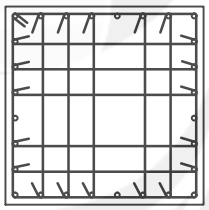


1100

TUL. POKOK 28 D 25
TUL. SENGKANG 7 D 13 - 100

Pot 2

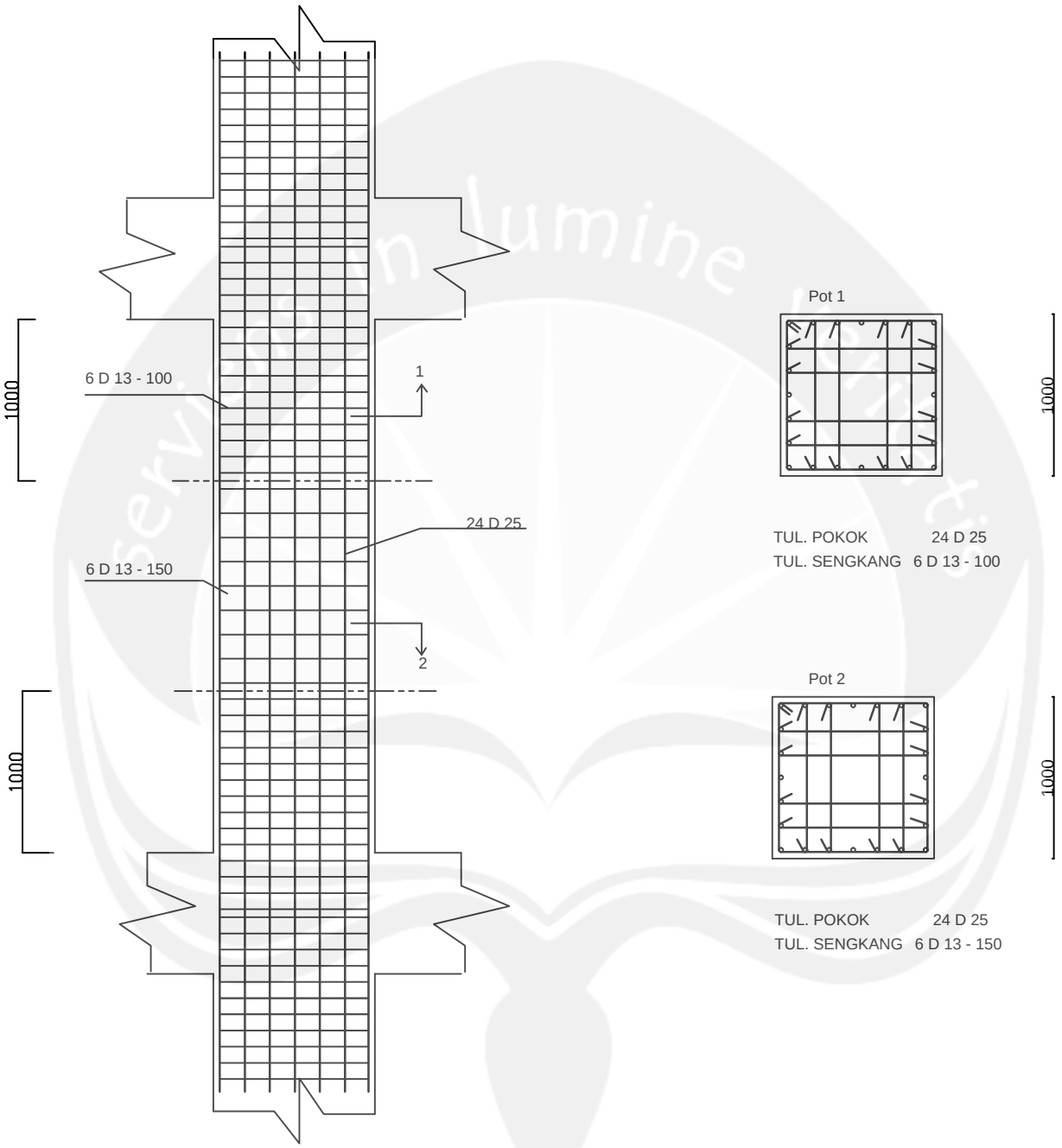


1100

TUL. POKOK 28 D 25
TUL. SENGKANG 7 D 13 - 100

Detail penulangan Kolom 1100x1100

satuan dalam milimeter



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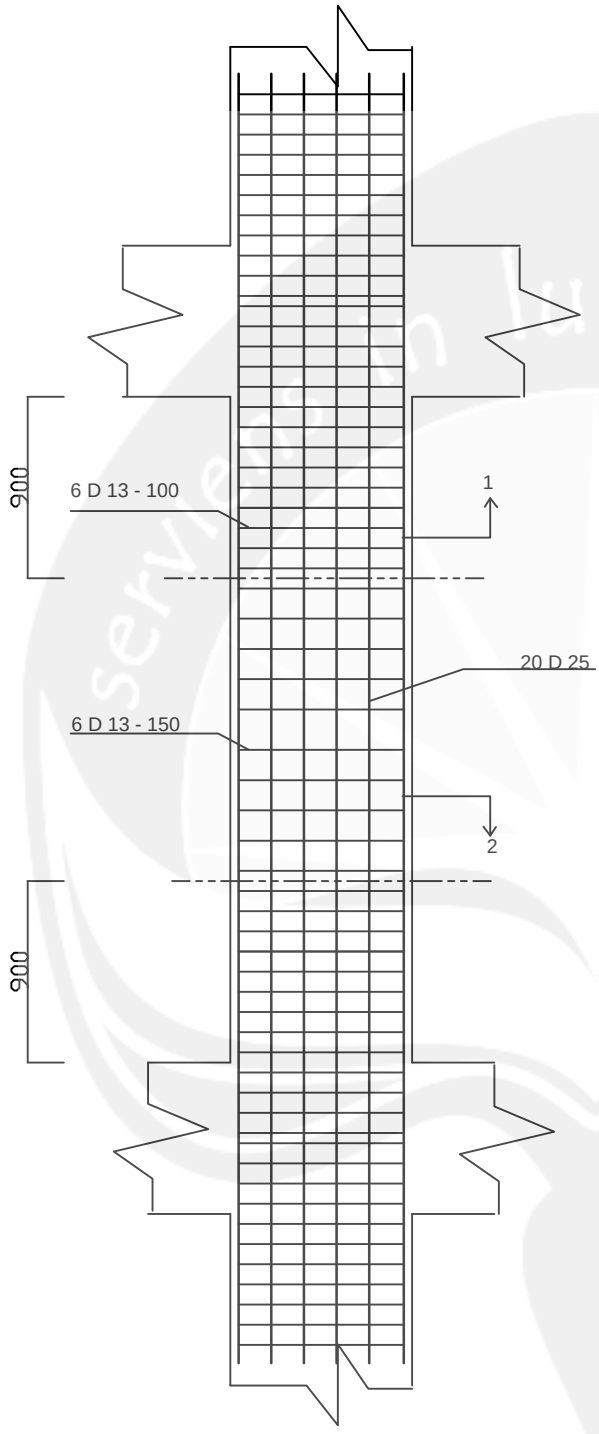

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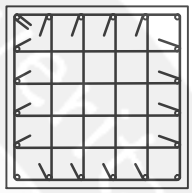

TUL. POKOK 20 D 25
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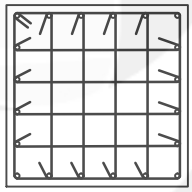
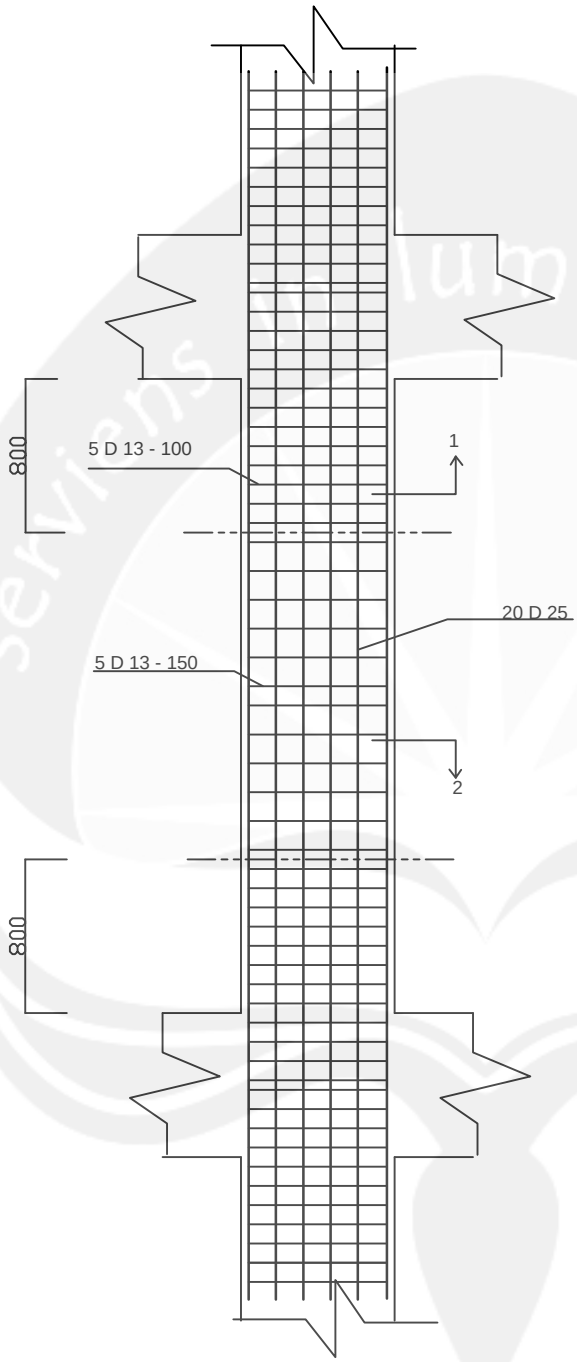
Pot 2



TUL. POKOK 20 D 25
TUL. SENGKANG 6 D 13 - 150

Detail penulangan Kolom 900x900

satuan dalam milimeter



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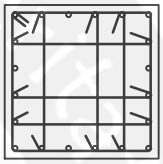

800

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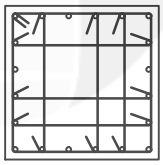

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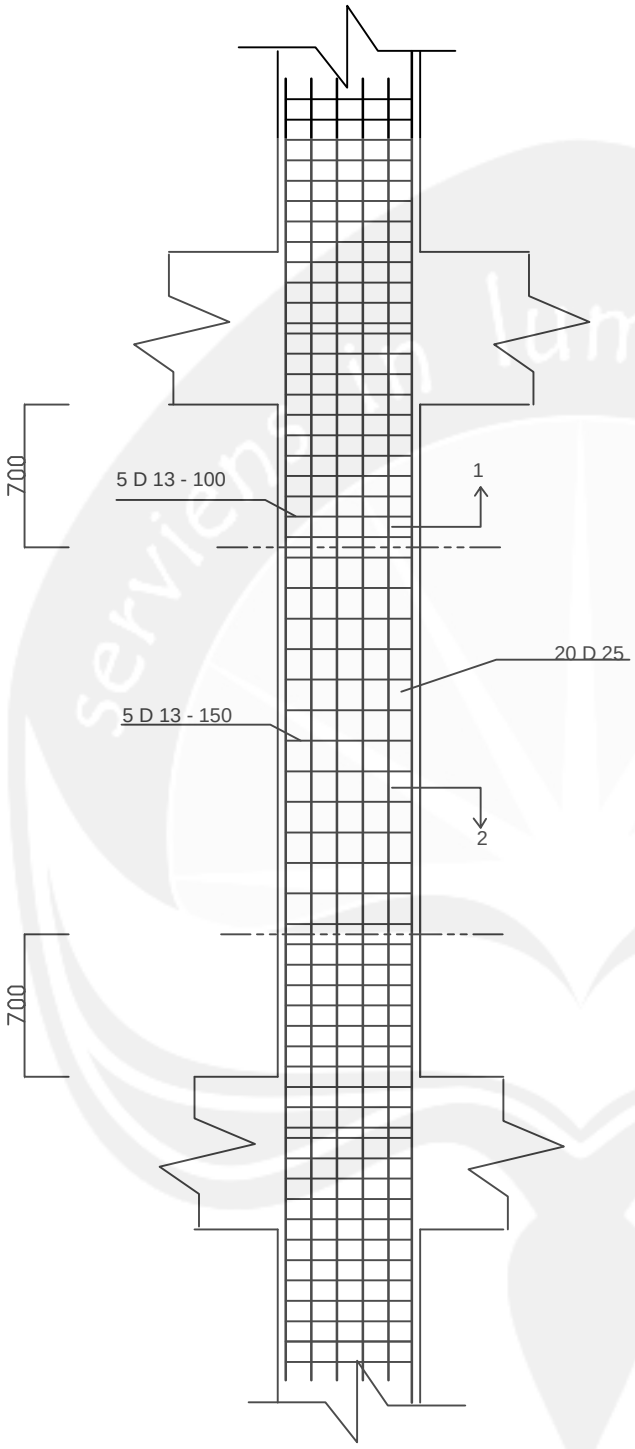
Detail penulangan Kolom 800x800

satuan dalam milimeter



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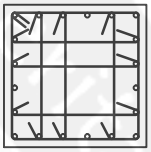

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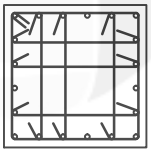

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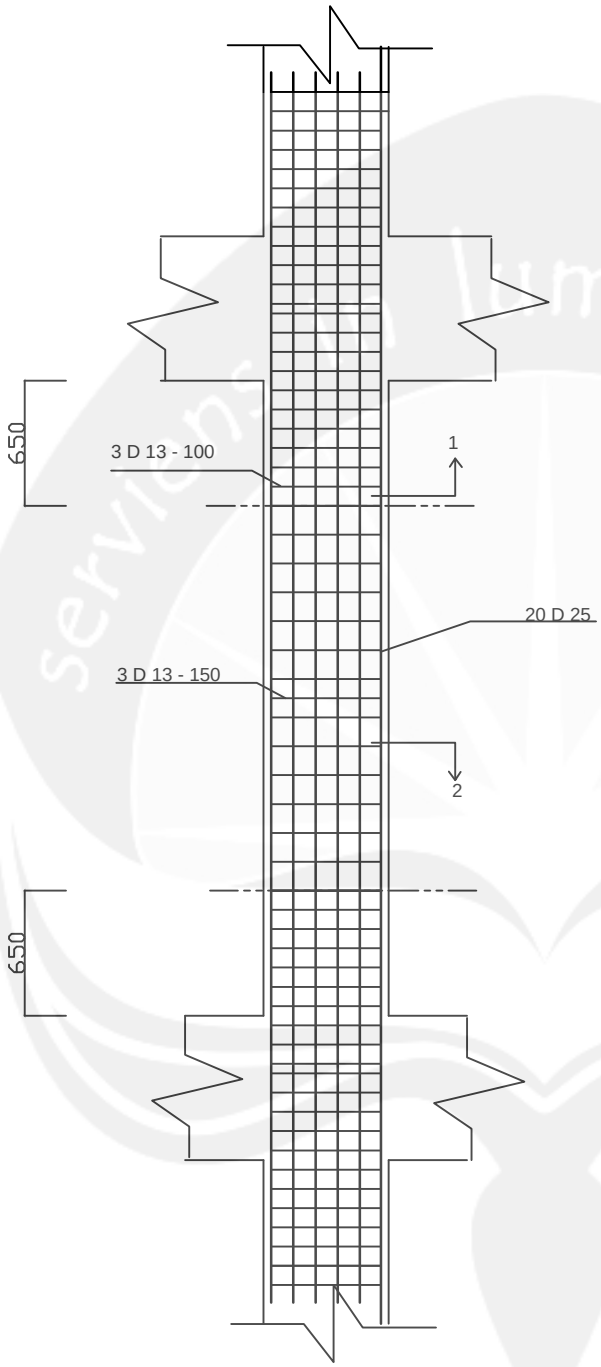
Detail penulangan Kolom 700x700

satuan dalam milimeter



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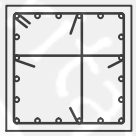

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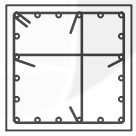

650

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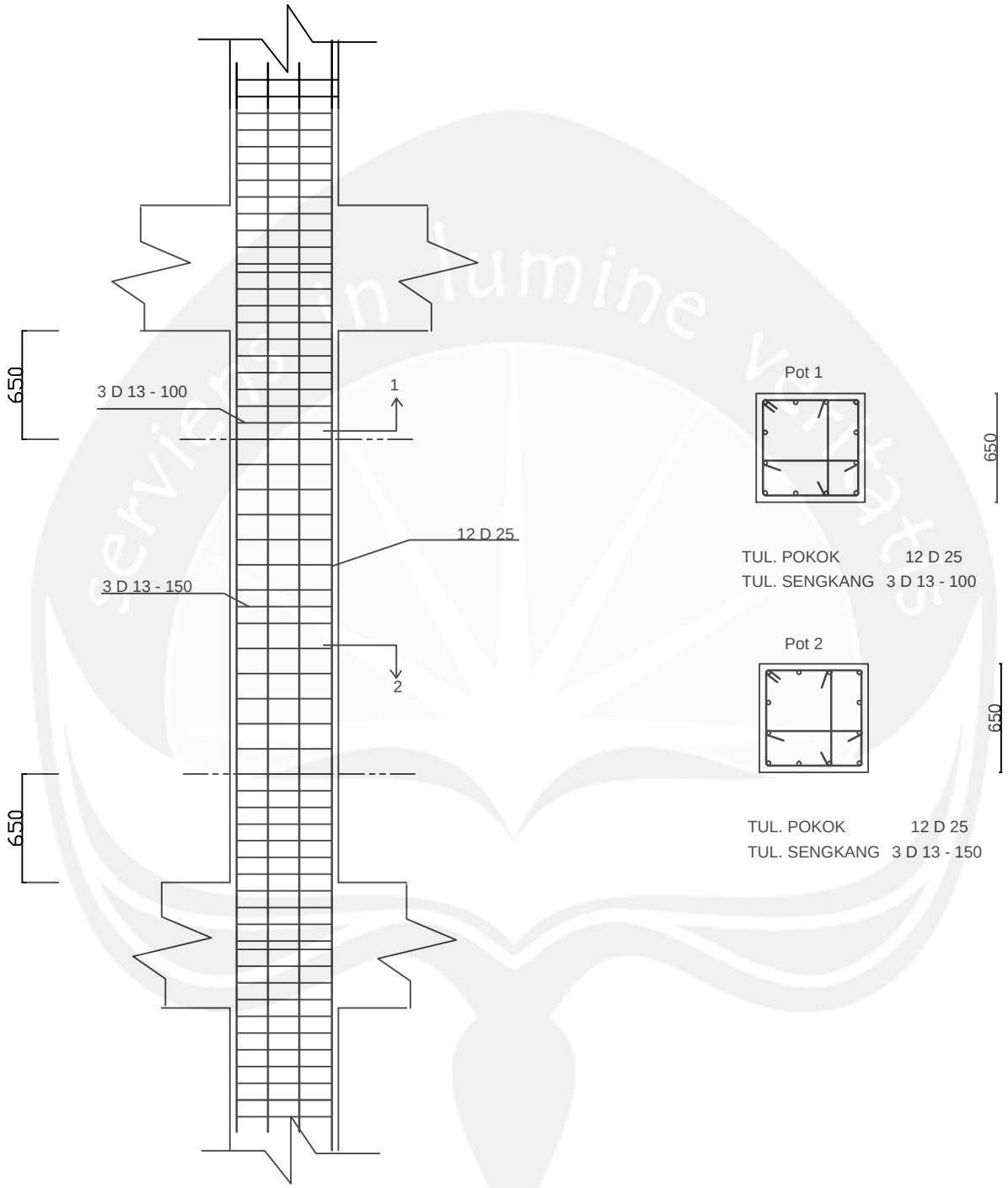
TUL. SENGKANG 3 D 13 - 150

Detail penulangan Kolom A 650x650

satuan dalam milimeter



Detail penulangan Kolom B 650x650

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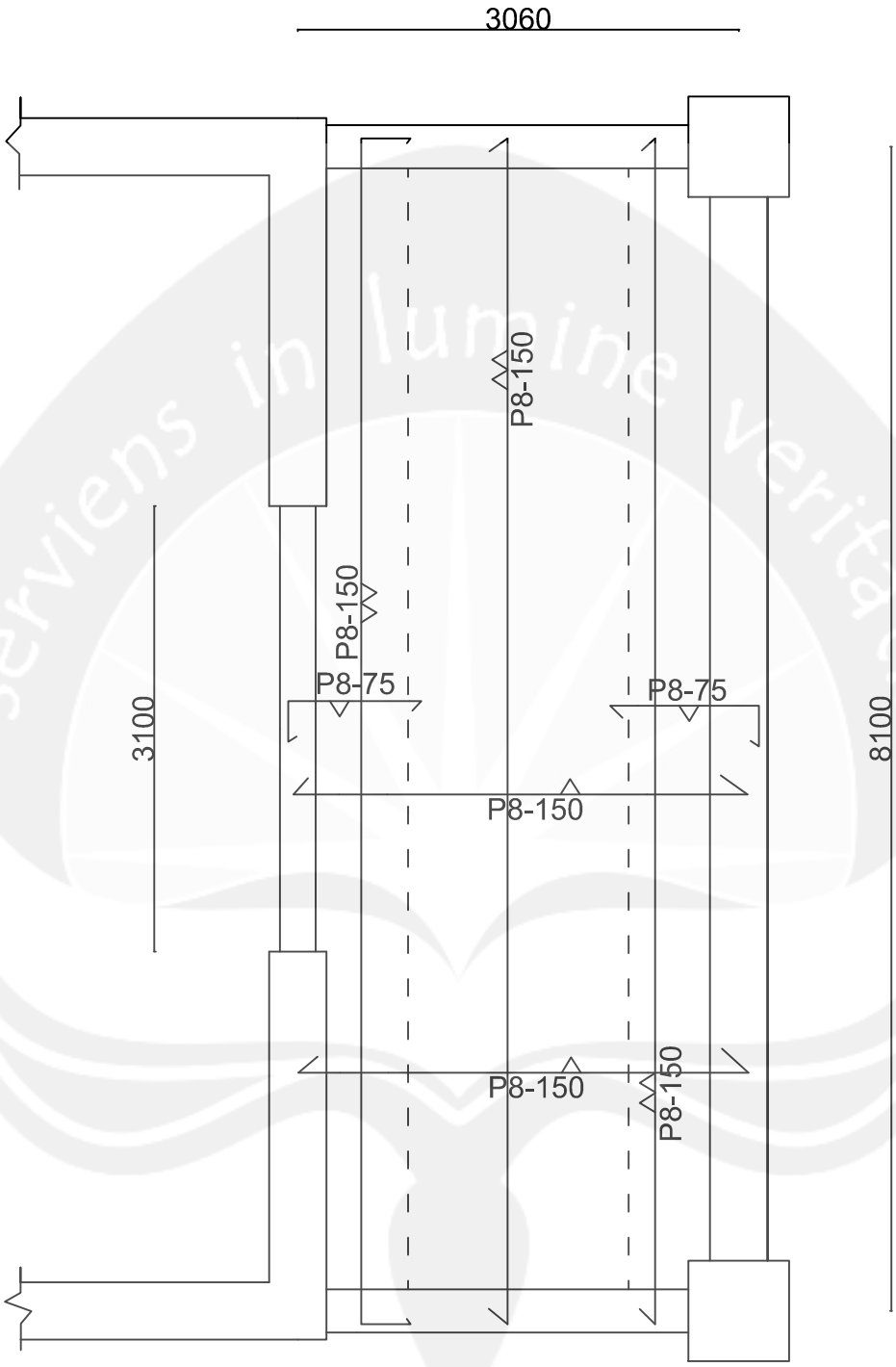
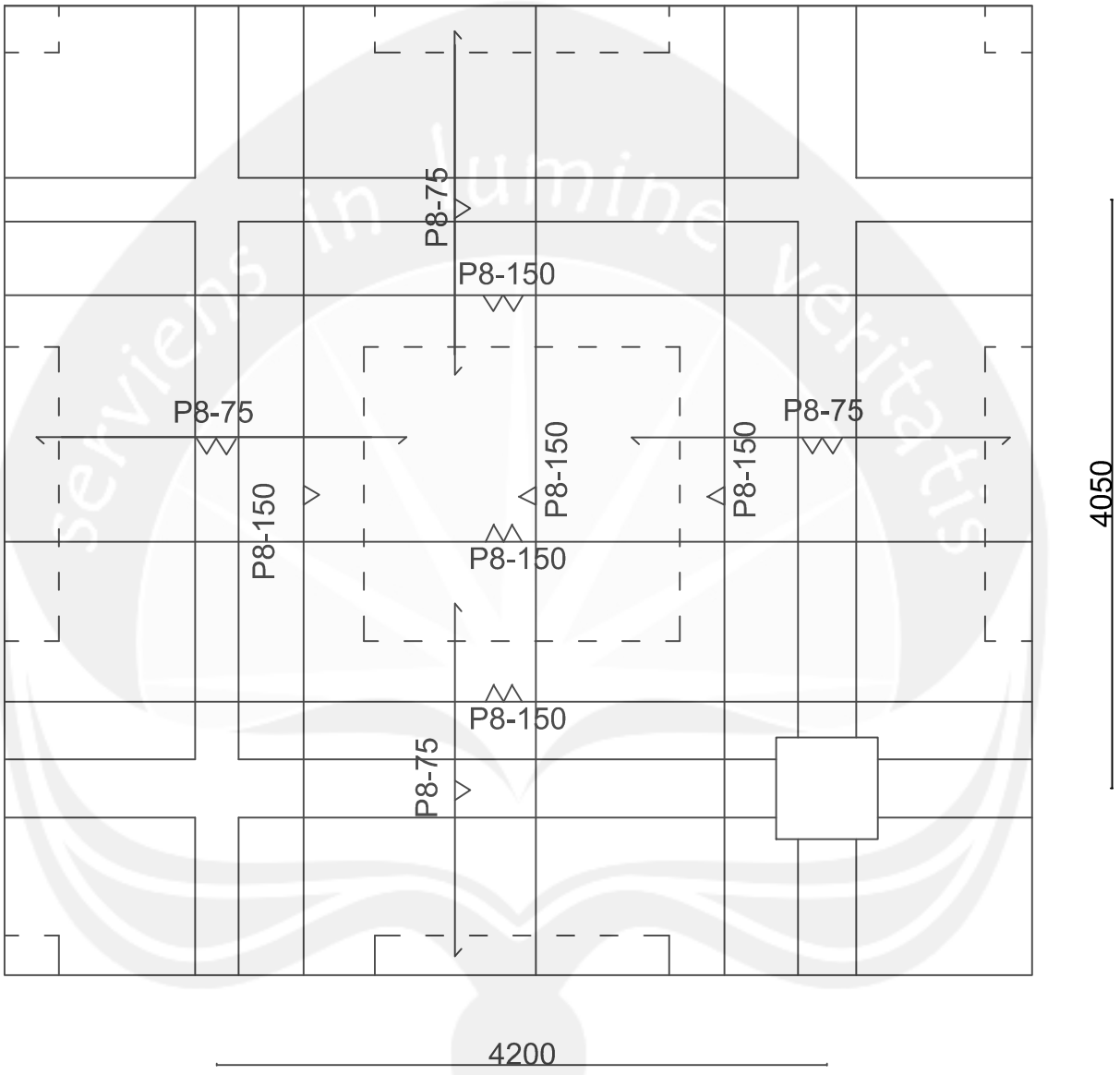


Detail Penulangan Plat Lantai 1 arah

satuan dalam milimeter



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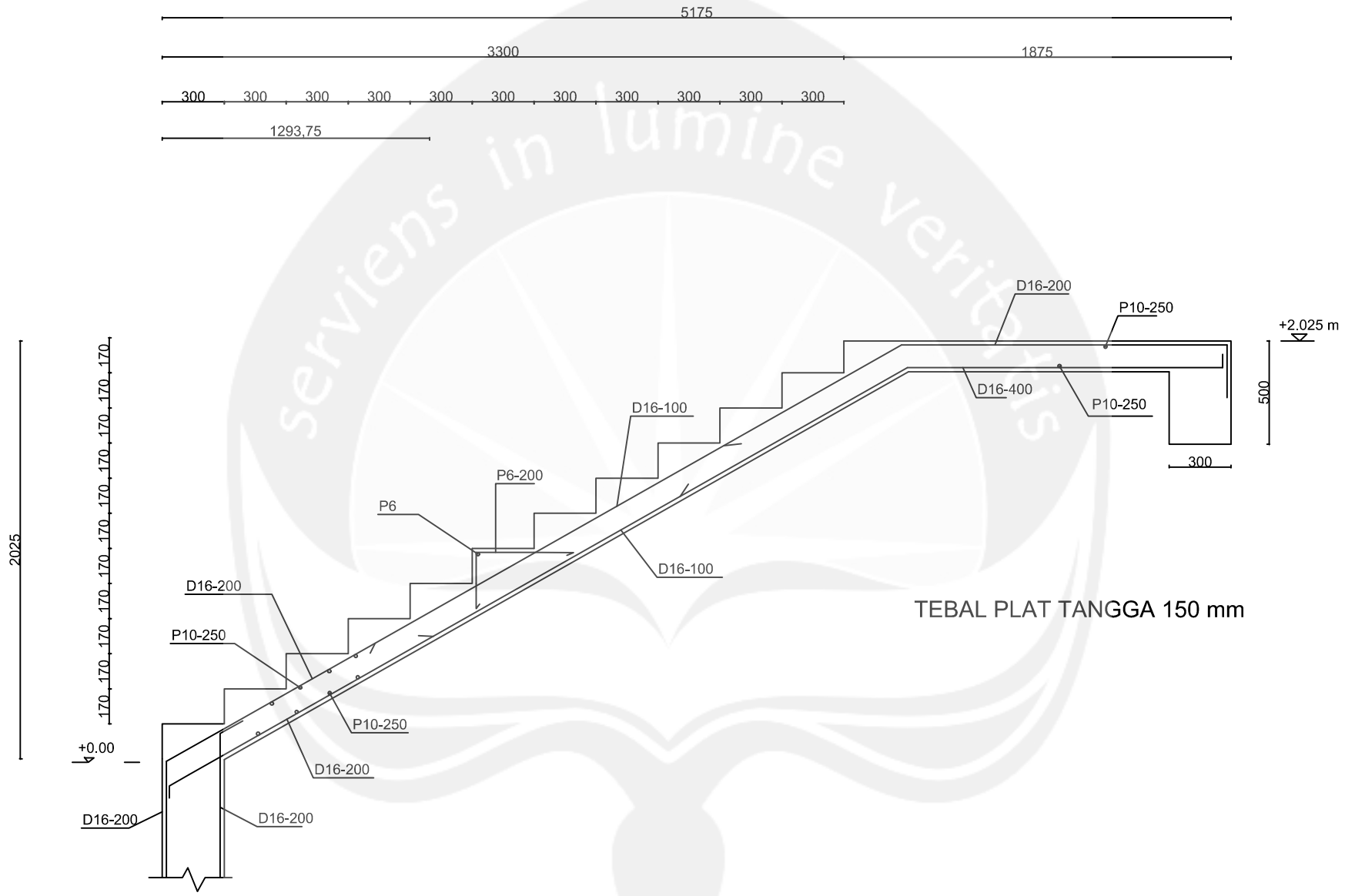
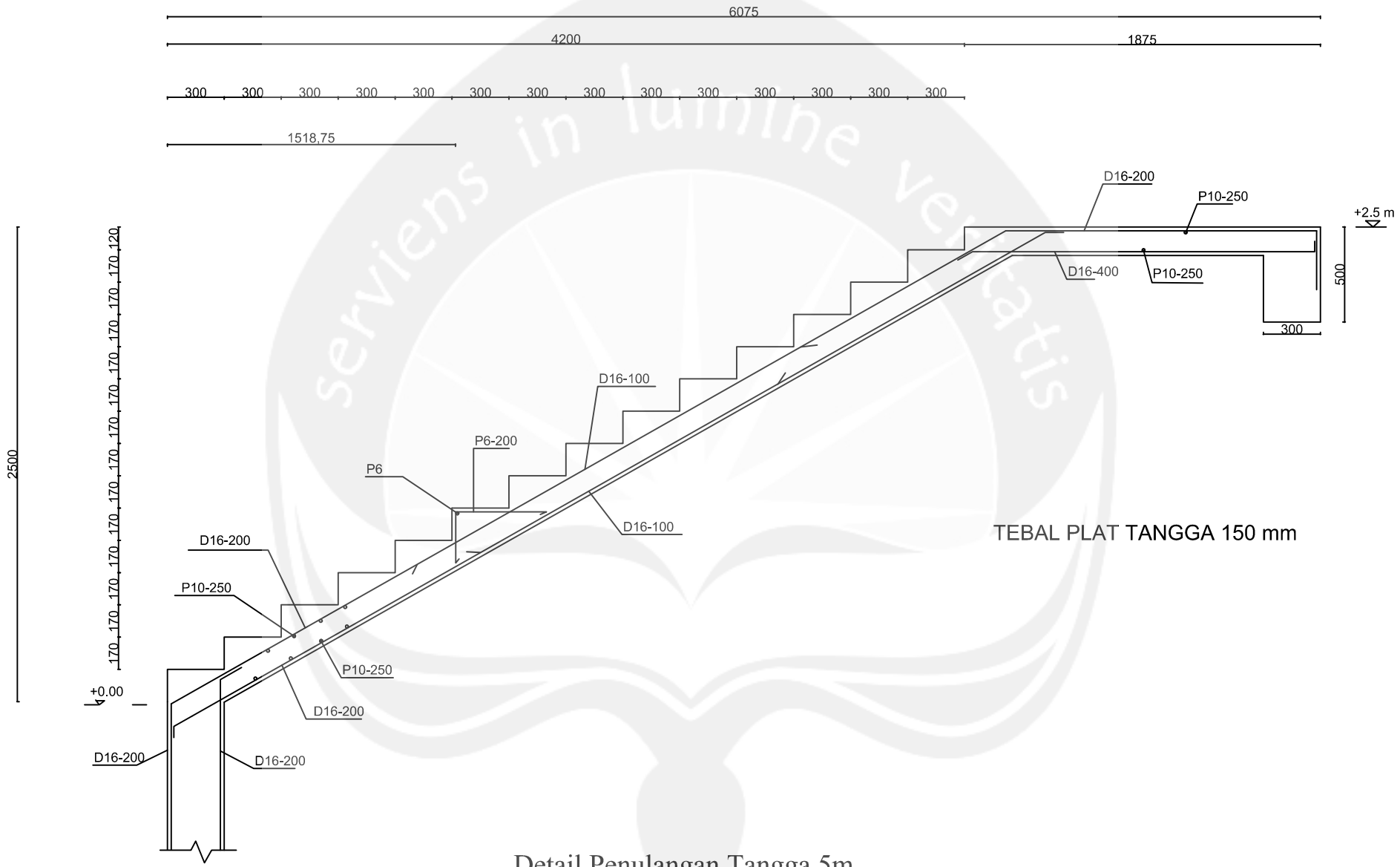


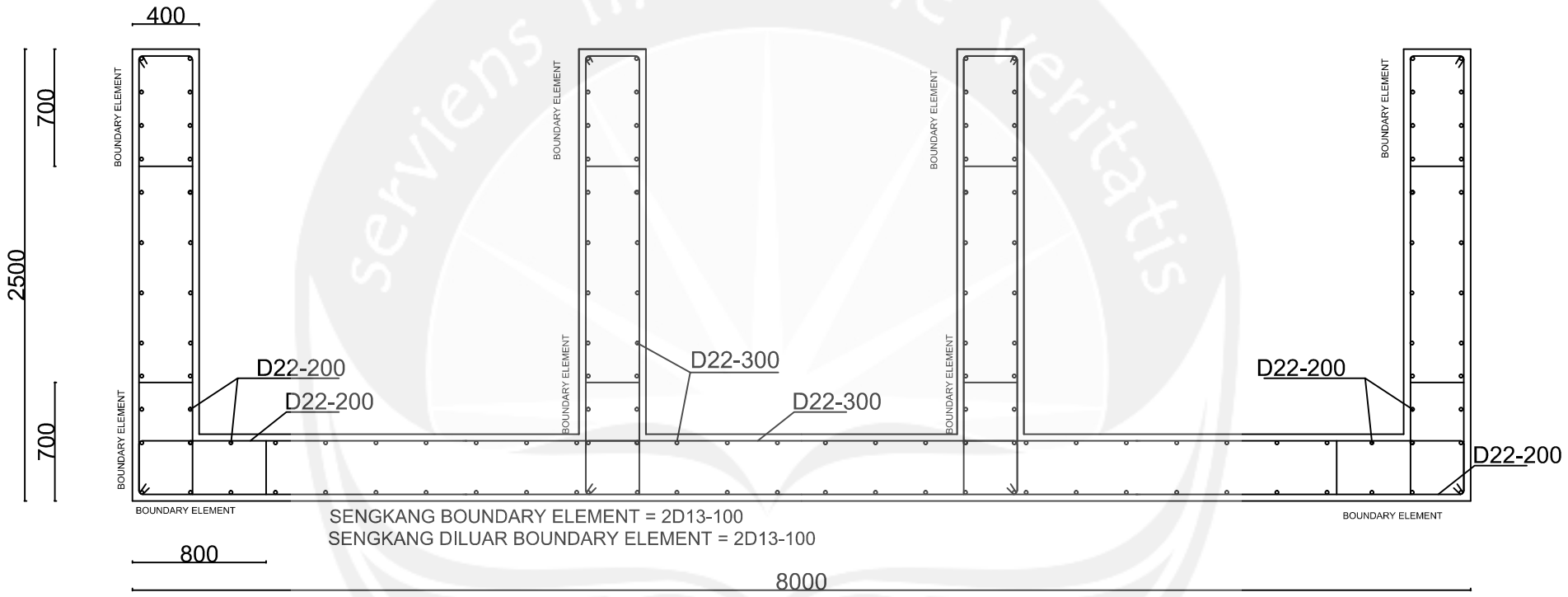
Detail Penulangan Tangga 4,05m

satuan dalam milimeter



Detail Penulangan Tangga 5m

satuan dalam milimeter



Detail Penulangan Shearwall

satuan dalam milimeter

Story	Beam	Load	Loc	P	V2	V3	T	M2	M3
LT11	B34	COMB19 I	0,4	0	-42	0	32	0	153,78
LT11	B34	COMB19 I	0,856	0	-34	0	32	0	171,17
LT11	B34	COMB19 I	1,313	0	-24	0	32	0	184,508
LT11	B34	COMB19 I	1,769	0	-13	0	32	0	193,146
LT11	B34	COMB19 I	2,225	0	-1,1	0	32	0	213,666
LT11	B34	COMB19 I	2,681	0	10,1	0	32	0	256,804
LT11	B34	COMB19 I	3,138	0	19,8	0	32	0	291,566
LT11	B34	COMB19 I	3,594	0	28,2	0	32	0	319,81
LT11	B34	COMB19 I	4,05	0	35,1	0	32	0	348,672
LT11	B34	COMB19 I	4,05	0	165	0	30	0	360,167
LT11	B34	COMB19 I	4,519	0	178	0	30	0	336,472
LT11	B34	COMB19 I	4,988	0	194	0	30	0	335,176
LT11	B34	COMB19 I	5,456	0	214	0	30	0	325,482
LT11	B34	COMB19 I	5,925	0	237	0	30	0	305,693
LT11	B34	COMB19 I	6,394	0	262	0	30	0	274,293
LT11	B34	COMB19 I	6,863	0	284	0	30	0	239,852
LT11	B34	COMB19 I	7,331	0	303	0	30	0	236,605
LT11	B34	COMB19 I	7,8	0	317	0	30	0	229,214
LT11	B34	COMB19 I	0,4	0	-380	0	-27	0	-776,617
LT11	B34	COMB19 I	0,856	0	-365	0	-27	0	-606,632
LT11	B34	COMB19 I	1,313	0	-346	0	-27	0	-444,325
LT11	B34	COMB19 I	1,769	0	-324	0	-27	0	-291,259
LT11	B34	COMB19 I	2,225	0	-299	0	-27	0	-166,171
LT11	B34	COMB19 I	2,681	0	-277	0	-27	0	-79,998
LT11	B34	COMB19 I	3,138	0	-258	0	-27	0	0,333
LT11	B34	COMB19 I	3,594	0	-243	0	-27	0	75,181
LT11	B34	COMB19 I	4,05	0	-230	0	-27	0	145,095
LT11	B34	COMB19 I	4,05	0	-59	0	-21	0	148,545
LT11	B34	COMB19 I	4,519	0	-52	0	-21	0	115,503
LT11	B34	COMB19 I	4,988	0	-43	0	-21	0	52,24
LT11	B34	COMB19 I	5,456	0	-33	0	-21	0	-15,422
LT11	B34	COMB19 I	5,925	0	-22	0	-21	0	-88,186
LT11	B34	COMB19 I	6,394	0	-9,1	0	-21	0	-166,686
LT11	B34	COMB19 I	6,863	0	2	0	-21	0	-258,853
LT11	B34	COMB19 I	7,331	0	11,6	0	-21	0	-396,547
LT11	B34	COMB19 I	7,8	0	19,7	0	-21	0	-542,028
LT10	B12	COMB19 I	0,3	0	-25	0	43	0	95,484
LT10	B12	COMB19 I	0,769	0	-19	0	43	0	105,95
LT10	B12	COMB19 I	1,238	0	-12	0	43	0	113,223
LT10	B12	COMB19 I	1,706	0	-3,9	0	43	0	116,949
LT10	B12	COMB19 I	2,175	0	4,7	0	43	0	126,723
LT10	B12	COMB19 I	2,644	0	12,9	0	43	0	144,815
LT10	B12	COMB19 I	3,113	0	20,4	0	43	0	155,981
LT10	B12	COMB19 I	3,581	0	27,1	0	43	0	162,023
LT10	B12	COMB19 I	4,05	0	33	0	43	0	166,856
LT10	B12	COMB19 I	4,05	0	83,9	0	-8	0	162,278
LT10	B12	COMB19 I	4,506	0	93,9	0	-8	0	162,391
LT10	B12	COMB19 I	4,963	0	106	0	-8	0	167,782
LT10	B12	COMB19 I	5,419	0	119	0	-8	0	167,457
LT10	B12	COMB19 I	5,875	0	134	0	-8	0	160,636
LT10	B12	COMB19 I	6,331	0	150	0	-8	0	146,582
LT10	B12	COMB19 I	6,788	0	165	0	-8	0	136,266
LT10	B12	COMB19 I	7,244	0	178	0	-8	0	134,357
LT10	B12	COMB19 I	7,7	0	190	0	-8	0	129,359

LT10	B12	COMB19 I	0,3	0	-216	0	4,8	0	-438,696
LT10	B12	COMB19 I	0,769	0	-205	0	4,8	0	-339,972
LT10	B12	COMB19 I	1,238	0	-192	0	4,8	0	-247,02
LT10	B12	COMB19 I	1,706	0	-177	0	4,8	0	-160,688
LT10	B12	COMB19 I	2,175	0	-160	0	4,8	0	-91,759
LT10	B12	COMB19 I	2,644	0	-144	0	4,8	0	-42,822
LT10	B12	COMB19 I	3,113	0	-130	0	4,8	0	2,442
LT10	B12	COMB19 I	3,581	0	-118	0	4,8	0	43,431
LT10	B12	COMB19 I	4,05	0	-108	0	4,8	0	77,433
LT10	B12	COMB19 I	4,05	0	-43	0	-47	0	71,915
LT10	B12	COMB19 I	4,506	0	-37	0	-47	0	49,682
LT10	B12	COMB19 I	4,963	0	-31	0	-47	0	14,434
LT10	B12	COMB19 I	5,419	0	-24	0	-47	0	-23,942
LT10	B12	COMB19 I	5,875	0	-16	0	-47	0	-65,771
LT10	B12	COMB19 I	6,331	0	-7,3	0	-47	0	-111,359
LT10	B12	COMB19 I	6,788	0	0,56	0	-47	0	-171,576
LT10	B12	COMB19 I	7,244	0	7,69	0	-47	0	-250,013
LT10	B12	COMB19 I	7,7	0	14,1	0	-47	0	-334,069
LT20	B107	COMB19 I	0	0	-50	0	-19	0	-81,487
LT20	B107	COMB19 I	0,45	0	-48	0	-19	0	-59,379
LT20	B107	COMB19 I	0,9	0	-45	0	-19	0	-38,467
LT20	B107	COMB19 I	1,35	0	-40	0	-19	0	-19,375
LT20	B107	COMB19 I	1,8	0	-34	0	-19	0	-2,726
LT20	B107	COMB19 I	2,25	0	-27	0	-19	0	17,982
LT20	B107	COMB19 I	2,7	0	-21	0	-19	0	45,747
LT20	B107	COMB19 I	3,15	0	-16	0	-19	0	73,14
LT20	B107	COMB19 I	3,6	0	-12	0	-19	0	98,681
LT20	B107	COMB19 I	4,05	0	-7,2	0	-7	0	101,04
LT20	B107	COMB19 I	4,05	0	-10	0	-19	0	123,22
LT20	B107	COMB19 I	4,5	0	-5,2	0	-7	0	108,557
LT20	B107	COMB19 I	4,95	0	-1,9	0	-7	0	113,615
LT20	B107	COMB19 I	5,4	0	5,08	0	-7	0	114,714
LT20	B107	COMB19 I	5,85	0	19,4	0	-7	0	110,352
LT20	B107	COMB19 I	6,3	0	37,2	0	-7	0	99,092
LT20	B107	COMB19 I	6,75	0	52,2	0	-7	0	80,933
LT20	B107	COMB19 I	7,2	0	63,5	0	-7	0	57,315
LT20	B107	COMB19 I	7,65	0	71,1	0	-7	0	29,736
LT20	B107	COMB19 I	8,1	0	74,9	0	-7	0	9,134
LT20	B107	COMB19 I	0	0	-141	0	-78	0	-272,689
LT20	B107	COMB19 I	0,45	0	-137	0	-78	0	-210,047
LT20	B107	COMB19 I	0,9	0	-130	0	-78	0	-149,864
LT20	B107	COMB19 I	1,35	0	-119	0	-78	0	-93,641
LT20	B107	COMB19 I	1,8	0	-106	0	-78	0	-42,878
LT20	B107	COMB19 I	2,25	0	-89	0	-78	0	-6,115
LT20	B107	COMB19 I	2,7	0	-76	0	-78	0	14,184
LT20	B107	COMB19 I	3,15	0	-65	0	-78	0	27,345
LT20	B107	COMB19 I	3,6	0	-58	0	-78	0	34,196
LT20	B107	COMB19 I	4,05	0	-19	0	-17	0	34,13
LT20	B107	COMB19 I	4,05	0	-54	0	-78	0	39,85
LT20	B107	COMB19 I	4,5	0	-15	0	-17	0	37,062
LT20	B107	COMB19 I	4,95	0	-7,6	0	-17	0	38,797
LT20	B107	COMB19 I	5,4	0	0,66	0	-17	0	38,712
LT20	B107	COMB19 I	5,85	0	6,79	0	-17	0	36,184
LT20	B107	COMB19 I	6,3	0	14	0	-17	0	30,614
LT20	B107	COMB19 I	6,75	0	20,1	0	-17	0	22,003
LT20	B107	COMB19 I	7,2	0	24,8	0	-17	0	10,949
LT20	B107	COMB19 I	7,65	0	28,2	0	-17	0	-1,925
LT20	B107	COMB19 I	8,1	0	30,1	0	-17	0	-25,431

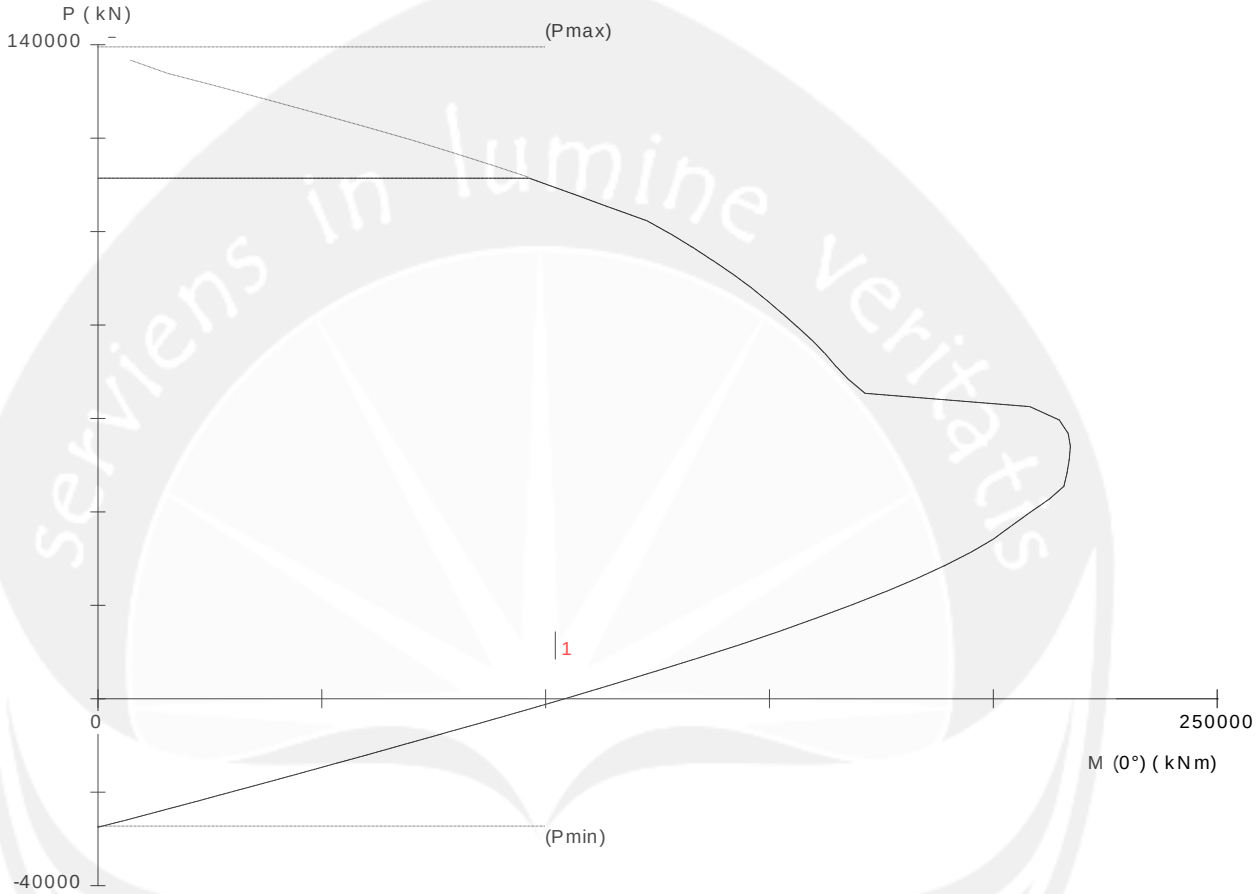
LT10	B118	COMB19 I	0	0	-0,3	0	0,4	0	4,234
LT10	B118	COMB19 I	0,445	0	0,88	0	0,4	0	4,129
LT10	B118	COMB19 I	0,89	0	2,74	0	0,4	0	4,433
LT10	B118	COMB19 I	1,335	0	5,27	0	0,4	0	3,608
LT10	B118	COMB19 I	1,78	0	10,7	0	0,4	0	4,526
LT10	B118	COMB19 I	2,225	0	14,5	0	0,4	0	4,192
LT10	B118	COMB19 I	2,67	0	16,7	0	0,4	0	4,344
LT10	B118	COMB19 I	0	0	-17	0	-0	0	-13,252
LT10	B118	COMB19 I	0,445	0	-15	0	-0	0	-6,116
LT10	B118	COMB19 I	0,89	0	-11	0	-0	0	-1,415
LT10	B118	COMB19 I	1,335	0	-5,5	0	-0	0	1,367
LT10	B118	COMB19 I	1,78	0	-2,8	0	-0	0	-1,339
LT10	B118	COMB19 I	2,225	0	-1	0	-0	0	-5,842
LT10	B118	COMB19 I	2,67	0	0,19	0	-0	0	-12,854

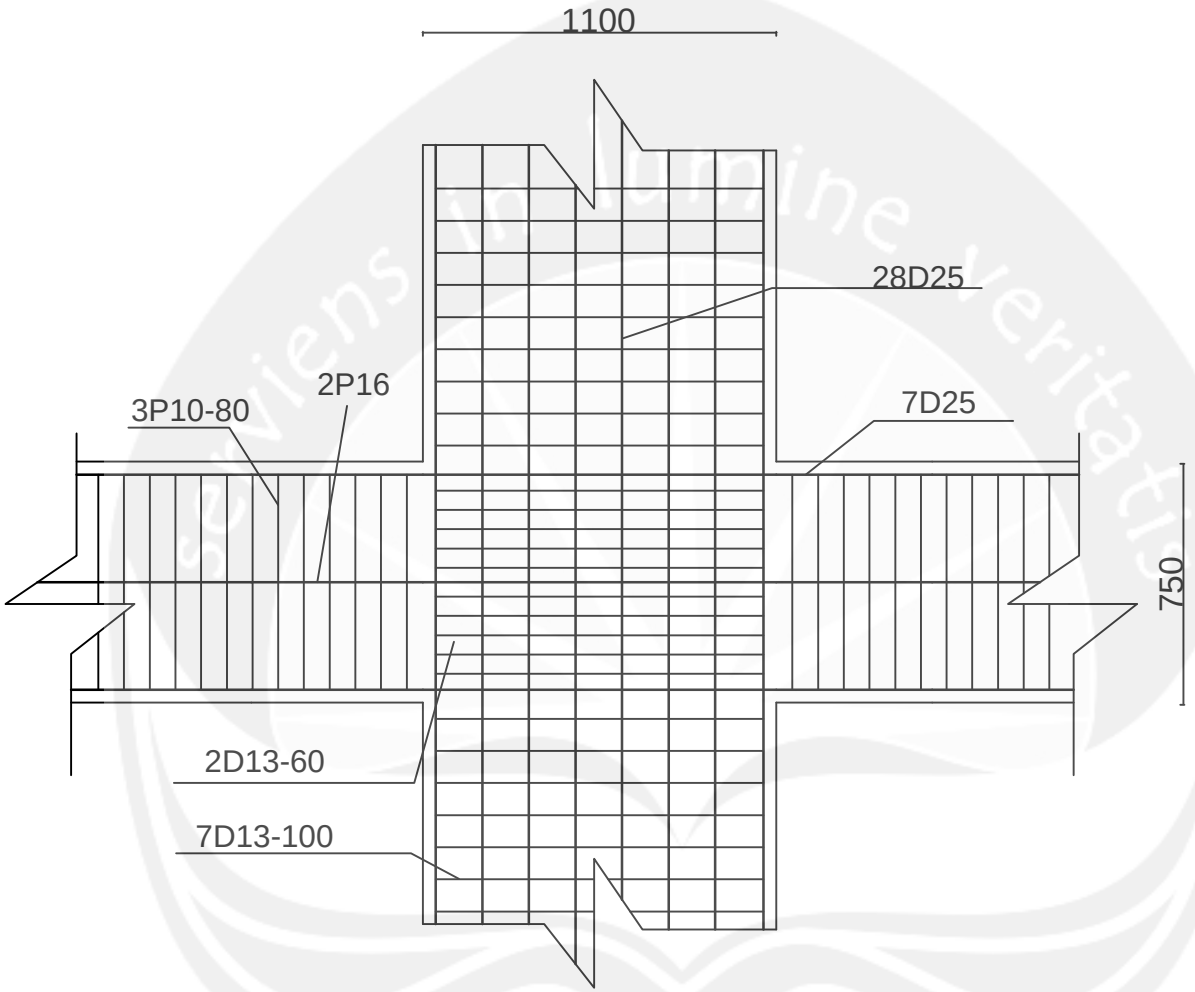
Story	Column	Load	Loc	P	V2	V3	T	M2	M3
DAG	C19	COMB19 MAX	0	-134,37	13,07	28,43	1,51	89,16	82,322
DAG	C19	COMB19 MAX	2,75	-121,42	13,07	28,43	1,51	10,985	63,376
DAG	C19	COMB19 MAX	5,5	-108,47	13,07	28,43	1,51	49,586	179,475
DAG	C19	COMB19 MIN	0	-268,53	-59,42	-27	-1,92	-99,153	-147,32
DAG	C19	COMB19 MIN	2,75	-245,57	-59,42	-27	-1,92	-24,784	-0,933
DAG	C19	COMB19 MIN	5,5	-223,87	-59,42	-27	-1,92	-67,191	10,415
LT20	C19	COMB19 MAX	0	-680,86	112,3	71,83	1,22	147,5	211,962
LT20	C19	COMB19 MAX	1,65	-673,09	112,3	71,83	1,22	29,081	28,462
LT20	C19	COMB19 MAX	3,3	-665,32	112,3	71,83	1,22	115,21	101,48
LT20	C19	COMB19 MIN	0	-1399,29	-81,75	-83,2	-1,53	-159,28	-168,31
LT20	C19	COMB19 MIN	1,65	-1386,27	-81,75	-83,2	-1,53	-22,138	-35,278
LT20	C19	COMB19 MIN	3,3	-1373,25	-81,75	-83,2	-1,53	-89,548	-158,77
LT19	C19	COMB19 MAX	0	-1196,53	100,9	74,84	1,51	150,9	205,614
LT19	C19	COMB19 MAX	1,65	-1188,76	100,9	74,84	1,51	27,419	39,133
LT19	C19	COMB19 MAX	3,3	-1180,99	100,9	74,84	1,51	91,121	118,397
LT19	C19	COMB19 MIN	0	-2445,18	-90,55	-72,1	-1,82	-146,66	-180,41
LT19	C19	COMB19 MIN	1,65	-2432,16	-90,55	-72,1	-1,82	-27,769	-31,008
LT19	C19	COMB19 MIN	3,3	-2419,14	-90,55	-72,1	-1,82	-96,067	-127,35
LT18	C19	COMB19 MAX	0	-1718,07	113,6	75,52	1,82	153,61	229,73
LT18	C19	COMB19 MAX	1,65	-1710,29	113,6	75,52	1,82	29,004	42,324
LT18	C19	COMB19 MAX	3,3	-1702,52	113,6	75,52	1,82	93,855	124,028
LT18	C19	COMB19 MIN	0	-3506,81	-96,56	-73,4	-2,1	-148,33	-194,62
LT18	C19	COMB19 MIN	1,65	-3493,79	-96,56	-73,4	-2,1	-27,235	-35,295
LT18	C19	COMB19 MIN	3,3	-3480,77	-96,56	-73,4	-2,1	-95,604	-145,08
LT17	C19	COMB19 MAX	0	-2247,2	109,4	68,76	2,1	133,63	210,969
LT17	C19	COMB19 MAX	1,65	-2239,43	109,4	68,76	2,1	20,179	30,517
LT17	C19	COMB19 MAX	3,3	-2231,66	109,4	68,76	2,1	89,923	128,127
LT17	C19	COMB19 MIN	0	-4577,19	-92,67	-67,2	-2,36	-131,75	-177,68
LT17	C19	COMB19 MIN	1,65	-4564,17	-92,67	-67,2	-2,36	-20,915	-24,778
LT17	C19	COMB19 MIN	3,3	-4551,15	-92,67	-67,2	-2,36	-93,274	-149,94
LT16	C19	COMB19 MAX	0	-2774,49	189,1	113,4	4,62	222,64	367,333
LT16	C19	COMB19 MAX	1,65	-2763,3	189,1	113,4	4,62	35,607	55,277
LT16	C19	COMB19 MAX	3,3	-2752,1	189,1	113,4	4,62	152,04	217,004
LT16	C19	COMB19 MIN	0	-5667,82	-159,5	-114	-5,2	-224,94	-309,29
LT16	C19	COMB19 MIN	1,65	-5649,08	-159,5	-114	-5,2	-36,448	-46,144
LT16	C19	COMB19 MIN	3,3	-5630,33	-159,5	-114	-5,2	-151,43	-256,78
LT15	C19	COMB19 MAX	0	-3297,05	161,8	91,12	5,11	176,9	311,002
LT15	C19	COMB19 MAX	1,65	-3285,86	161,8	91,12	5,11	26,557	44,115
LT15	C19	COMB19 MAX	3,3	-3274,66	161,8	91,12	5,11	126,92	190,797
LT15	C19	COMB19 MIN	0	-6762,85	-137,1	-94,5	-5,61	-184,86	-261,68
LT15	C19	COMB19 MIN	1,65	-6744,1	-137,1	-94,5	-5,61	-28,973	-35,441
LT15	C19	COMB19 MIN	3,3	-6725,35	-137,1	-94,5	-5,61	-123,79	-222,77
LT14	C19	COMB19 MAX	0	-3824,53	241,7	130,9	9,89	258,7	466,865
LT14	C19	COMB19 MAX	1,65	-3809,3	241,7	130,9	9,89	42,788	68,117

LT14	C19	COMB19 MAX	3,3	-3794,07	241,7	130,9	9,89	182,63	284,19
LT14	C19	COMB19 MIN	0	-7889,45	-211	-137	-10,7	-268,12	-412,18
LT14	C19	COMB19 MIN	1,65	-7863,93	-211	-137	-10,7	-42,743	-63,992
LT14	C19	COMB19 MIN	3,3	-7838,42	-211	-137	-10,7	-173,13	-330,63
LT13	C19	COMB19 MAX	3,3	-4320,82	197,4	105,7	10,1	143,59	247,862
LT13	C19	COMB19 MIN	0	-8999,19	-181,4	-109	-10,6	-217,43	-350,8
LT13	C19	COMB19 MIN	1,65	-8973,67	-181,4	-109	-10,6	-36,918	-51,468
LT13	C19	COMB19 MIN	3,3	-8948,16	-181,4	-109	-10,6	-139,18	-268,86
LT12	C19	COMB19 MAX	0	-4891,52	266	136,3	17,7	269,63	511,379
LT12	C19	COMB19 MAX	1,65	-4871,63	266	136,3	17,7	44,814	72,412
LT12	C19	COMB19 MAX	3,3	-4851,73	266	136,3	17,7	187,6	338,074
LT12	C19	COMB19 MIN	0	-10125,8	-244,8	-142	-18,3	-281,18	-469,63
LT12	C19	COMB19 MIN	1,65	-10092,4	-244,8	-142	-18,3	-46,789	-65,776
LT12	C19	COMB19 MIN	3,3	-10059,1	-244,8	-142	-18,3	-180	-366,56
LT11	C19	COMB19 MAX	0	-5428,1	248,9	121,6	18	261,39	513,376
LT11	C19	COMB19 MAX	1,65	-5408,21	248,9	121,6	18	60,822	102,694
LT11	C19	COMB19 MAX	3,3	-5388,31	248,9	121,6	18	143,26	283,091
LT11	C19	COMB19 MIN	0	-11259,8	-231	-122	-18,8	-259,57	-479,34
LT11	C19	COMB19 MIN	1,65	-11226,5	-231	-122	-18,8	-58,155	-98,124
LT11	C19	COMB19 MIN	3,3	-11193,2	-231	-122	-18,8	-139,75	-307,99
LT10	C19	COMB19 MAX	0	-5971,62	227,8	110	18	225,07	448,444
LT10	C19	COMB19 MAX	1,65	-5951,73	227,8	110	18	43,521	72,525
LT10	C19	COMB19 MAX	3,3	-5931,83	227,8	110	18	135,08	287,806
LT10	C19	COMB19 MIN	0	-12383,3	-215,5	-109	-18,4	-224,43	-423,36
LT10	C19	COMB19 MIN	1,65	-12349,9	-215,5	-109	-18,4	-44,677	-67,778
LT10	C19	COMB19 MIN	3,3	-12316,6	-215,5	-109	-18,4	-138,03	-303,39
LT9	C19	COMB19 MAX	0	-6531,3	283,2	128,8	28,6	273,05	569,447
LT9	C19	COMB19 MAX	1,65	-6506,12	283,2	128,8	28,6	60,574	102,093
LT9	C19	COMB19 MAX	3,3	-6480,94	283,2	128,8	28,6	151,3	340,011
LT9	C19	COMB19 MIN	0	-13531,7	-264,4	-128	-29,2	-270,84	-532,38
LT9	C19	COMB19 MIN	1,65	-13489,5	-264,4	-128	-29,2	-59,767	-96,187
LT9	C19	COMB19 MIN	3,3	-13447,3	-264,4	-128	-29,2	-151,9	-365,26
LT8	C19	COMB19 MAX	0	-7091,4	238	102,1	28,8	230,96	496,367
LT8	C19	COMB19 MAX	1,65	-7066,22	238	102,1	28,8	62,546	103,73
LT8	C19	COMB19 MAX	3,3	-7041,04	238	102,1	28,8	102,58	266,051
LT8	C19	COMB19 MIN	0	-14684,8	-222	-99,5	-29,2	-225,85	-466,46
LT8	C19	COMB19 MIN	1,65	-14642,6	-222	-99,5	-29,2	-61,638	-100,2
LT8	C19	COMB19 MIN	3,3	-14600,4	-222	-99,5	-29,2	-105,86	-288,91
LY7	C19	COMB19 MAX	0	-7667,6	277,9	115,5	41,9	271,47	599,951
LY7	C19	COMB19 MAX	1,65	-7636,51	277,9	115,5	41,9	80,84	141,496
LY7	C19	COMB19 MAX	3,3	-7605,42	277,9	115,5	41,9	99,545	283,192
LY7	C19	COMB19 MIN	0	-15863,9	-256,6	-109	-43	-258,7	-563,64
LY7	C19	COMB19 MIN	1,65	-15811,9	-256,6	-109	-43	-79,577	-140,22
LY7	C19	COMB19 MIN	3,3	-15759,8	-256,6	-109	-43	-109,79	-316,96
LT6	C19	COMB19 MAX	0	-8244,81	233,4	90,34	40,3	242,74	564,465

LT6	C19	COMB19 MAX	1,65	-8213,72	233,4	90,34	40,3	93,684	179,326
LT6	C19	COMB19 MAX	3,3	-8182,64	233,4	90,34	40,3	47,315	188,106
LT6	C19	COMB19 MIN	0	-17036,3	-220,1	-84,3	-40,8	-230,72	-538,09
LT6	C19	COMB19 MIN	1,65	-16984,2	-220,1	-84,3	-40,8	-91,704	-174,99
LT5	C19	COMB19 MAX	3,3	-8765,09	227,4	80,85	38,3	26,542	146,503
LT5	C19	COMB19 MIN	0	-18206,2	-207,4	-71,1	-38,7	-208,24	-538,06
LT5	C19	COMB19 MIN	1,65	-18154,2	-207,4	-71,1	-38,7	-90,846	-195,78
LT5	C19	COMB19 MIN	3,3	-18102,1	-207,4	-71,1	-38,7	-39,059	-173,9
LT4	C19	COMB19 MAX	0	-9413,41	198,8	66,53	34,1	209,18	566,296
LT4	C19	COMB19 MAX	1,65	-9382,33	198,8	66,53	34,1	99,403	238,272
LT4	C19	COMB19 MAX	3,3	-9351,24	198,8	66,53	34,1	-1,52	56,361
LT4	C19	COMB19 MIN	0	-19378,7	-178,3	-58,1	-34,8	-196,56	-531,86
LT4	C19	COMB19 MIN	1,65	-19326,7	-178,3	-58,1	-34,8	-100,78	-237,75
LT4	C19	COMB19 MIN	3,3	-19274,6	-178,3	-58,1	-34,8	-14,963	-89,752
LT3	C19	COMB19 MAX	0	-10020,1	203,6	56,82	40	221,39	721,331
LT3	C19	COMB19 MAX	1,65	-9982,47	203,6	56,82	40	127,65	385,375
LT3	C19	COMB19 MAX	3,3	-9944,86	203,6	56,82	40	36,355	64,288
LT3	C19	COMB19 MIN	0	-20578,5	-173	-46,6	-40,7	-201,8	-659,67
LT3	C19	COMB19 MIN	1,65	-20515,5	-173	-46,6	-40,7	-124,84	-374,21
LT3	C19	COMB19 MIN	3,3	-20452,4	-173	-46,6	-40,7	-50,343	-103,63
LT2	C19	COMB19 MAX	0	-10652,9	111	39,55	21,6	267,78	789,024
LT2	C19	COMB19 MAX	2,13	-10604,4	111	39,55	21,6	183,73	557,256
LT2	C19	COMB19 MAX	4,25	-10556	111	39,55	21,6	101,01	332,15
LT2	C19	COMB19 MIN	0	-21814,6	-97,48	-35,6	-22	-263,87	-772,34
LT2	C19	COMB19 MIN	2,13	-21733,4	-97,48	-35,6	-22	-188,22	-569,22
LT2	C19	COMB19 MIN	4,25	-21652,3	-97,48	-35,6	-22	-113,91	-372,77

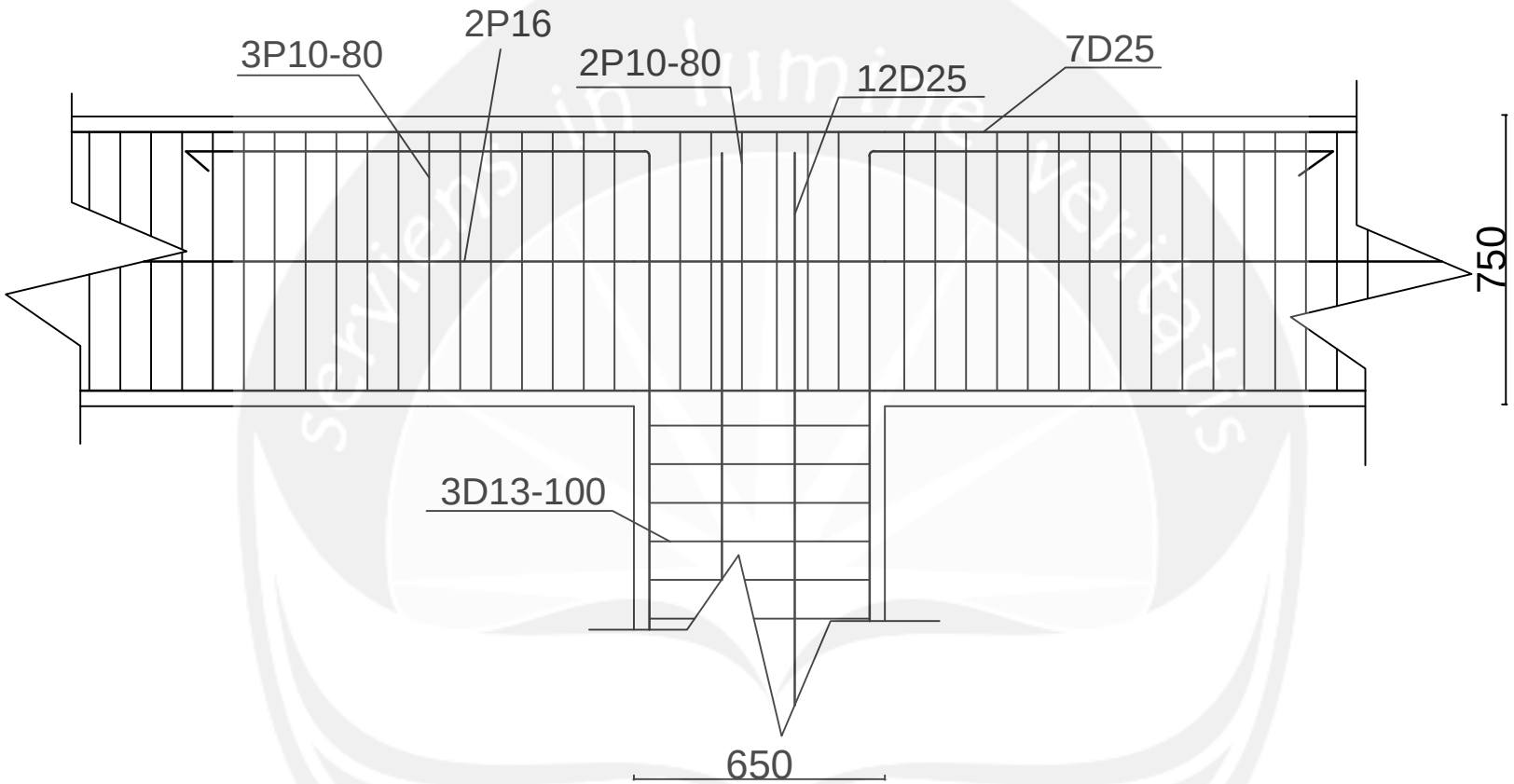
DIAGRAM INTERAKSI *SHEARWALL*





Detail pertemuan balok-kolom lantai tengah

satuan dalam milimeter



Detail pertemuan balok-kolom lantai atas

satuan dalam milimeter