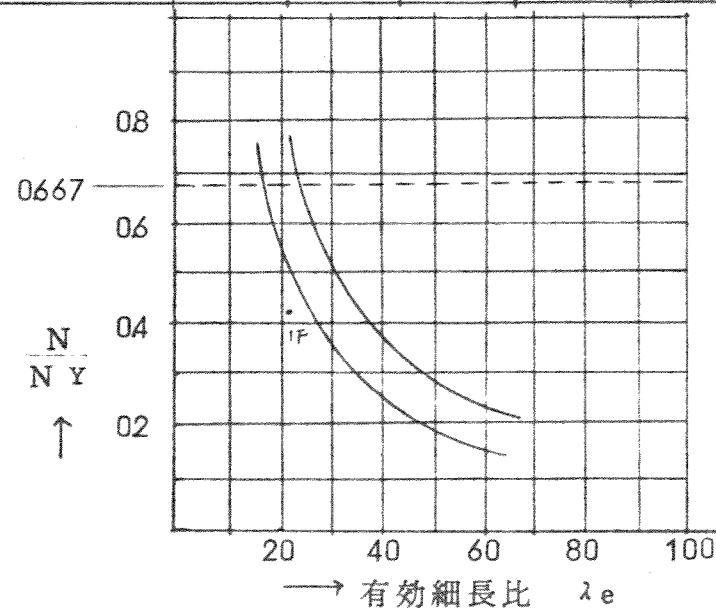


B-9. 柱断面算定

C/A Y 方向 X10-Y6

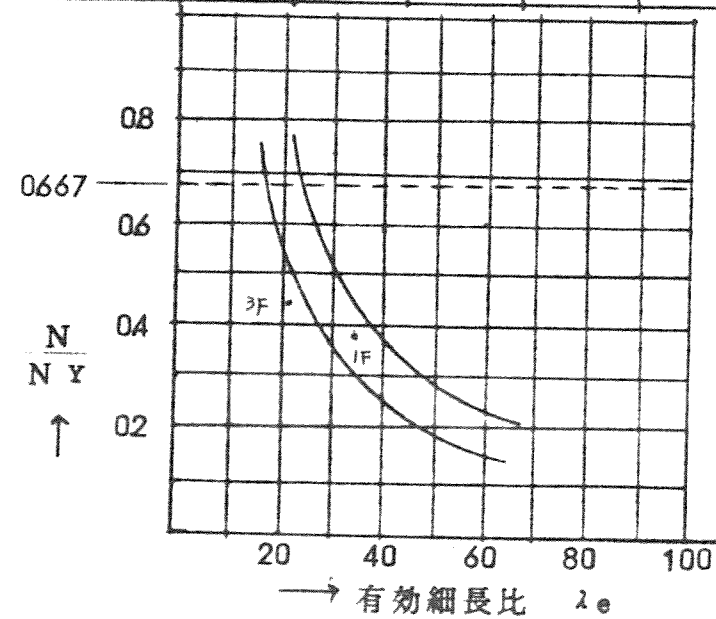
階	断面	A (cm^2)	Z (cm^3)	L_K	i	λ	f_c	N_L	N_E	N_S	N_Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M_L	M_E	M_S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
15	□-550×550×19	404.0	6.91	600	21.7	27.6	3.11	58	0.9	58.9					柱頭 柱脚	17.8 18.6	48.5 45.2	66.0			
14				450		20.7	3.18	161	0.3	161.3						22.1 20.1	71.8 60.8	93.7			
13				380		17.5	0.21	225	2.5	222.5						15.6 12.8	68.2 66.6	83.8			
12				"		"	"	277	5.8	271.2	1333.2	0.21	0.67	0.21		10.3 9.9	69.3 67.7	79.6	1.15	0.35	0.21+0.35=0.56
11	□-550×550×22	465.0	7.86	"	21.6	17.6	"	329	8.0	321.0						11.7 11.1	79.2 73.9	90.9			
10				"		"	"	382	11.5	370.5			0.80	0.25		11.3 10.9	100.4 100.9	111.7	1.42	0.43	0.25+0.43=0.68
9				"		"	"	434	15.4	418.6	1534.5	0.29	0.90	0.28		11.2 10.5	75.9 80.4	90.9	1.16	0.35	0.28+0.35=0.63
8	□-550×550×25	525.0	8.79	"	21.5	17.7	"	487	18.8	468.2						11.8 11.5	78.4 78.0	90.2			
7				"		"	"	539	24.1	514.9						11.8 11.2	75.3 77.7	88.9			
6				"		"	"	592	29.8	562.2	1732.5	0.36	1.07	0.33		11.9 11.2	72.9 74.7	85.9			
5	□-550×550×28	585.0	9.68	"	21.3	17.8	"	645	35.7	609.3			1.04	0.32		12.1 9.3	73.2 77.8	87.1	0.90	0.27	0.32+0.27=0.59
4				"		"	"	701	42.4	658.6						11.6 13.5	63.1 71.4	84.9			
3				"		"	"	751	43.8	707.2	1930.5	0.41	1.21	0.38		11.6 10.4	33.0 40.9	51.3	0.53	0.16	0.38+0.16=0.54
2	□-550×550×32	663.0	10.8	450	21.2	21.2	3.18	816	46.1	769.9						10.5 6.3	68.7 62.2	79.2			
1				"		"	"	878	49.1	828.9 (927.1)	2187.9	0.42	1.25 (1.40)	0.39 (0.44)		3.5 2.1	58.6 91.4	(89.3) 93.5	(0.83) 0.87	(0.25) 0.26	(0.44+0.25=0.69) 0.39+0.26=0.65



C2 Y 方向 X11-Y3

No. 3

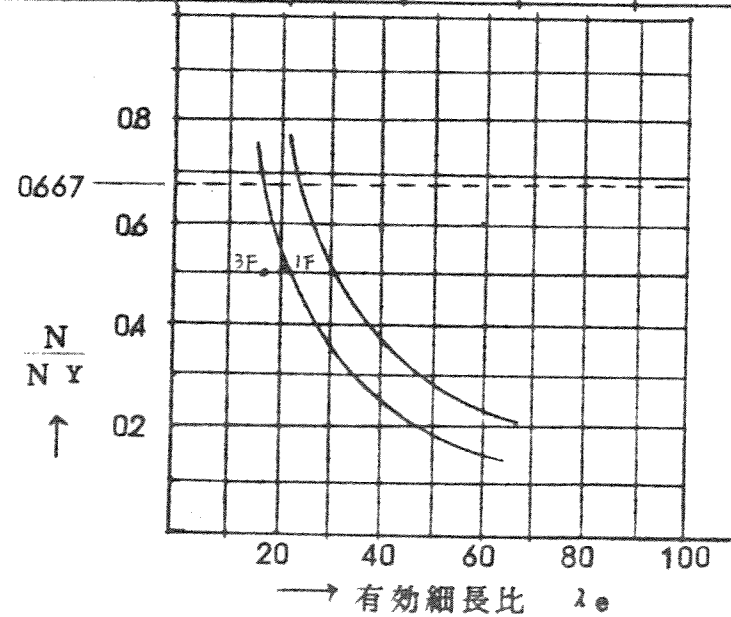
階	断面	A	Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ_C	$\frac{\sigma_C}{f_C}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_C}{f_C} + \frac{\sigma_b}{f_b}$
15	□-550×550×19	404	6.91 ^{×10³}	600	21.7	27.6	2.07	54	7.6				0.13	0.06	柱頭 柱脚	93.0 55.0	42.5 36.6		1.35	0.61	0.06+0.61=0.67
14				450	"	20.7	3.18	138	22.8	160.8			0.40	0.13		47.8 32.2	41.2 34.6	89.0	1.29	0.39	0.13+0.39=0.52
13				380	"	17.5	3.21	192	37.1	229.1						33.6 30.1	41.5 38.4	75.1			
12				"	"	"	"	239	52.9	291.9	1333.2	0.22	0.72	0.23		26.6 26.8	42.8 42.3	69.4	1.00	0.30	0.23+0.30=0.53
11	□-550×550×22	465	7.86	"	21.6	17.6	"	287	70.0	357.0						29.0 28.5	45.8 45.0	74.8			
10				"	"	"	"	334	87.6	421.6						27.0 27.5	45.8 45.6	73.1			
9				"	"	"	"	382	105.5	487.5	1534.5	0.32	1.05	0.33		26.1 25.9	46.4 46.4	72.5	0.92	0.28	0.33+0.28=0.61
8	□-550×550×25	525	8.79	"	21.5	17.7	"	429	123.6	552.6						26.7 26.7	46.8 49.1	75.8			
7				"	"	"	"	476	142.4	618.4						25.0 25.7	47.6 49.3	75.0			
6				"	"	"	"	524	160.8	684.8	1732.5	0.40	1.30	0.41		23.9 23.8	45.4 48.0	71.8	0.82	0.25	0.41+0.25=0.66
5	□-550×550×28	585	9.68	"	21.3	17.8	"	571	178.8	749.8						24.5 25.7	44.0 47.9	73.6			
4				"	"	"	"	620	195.5	815.5			1.39	0.43		22.6 22.1	37.6 51.8	73.9	0.76	0.23	0.43+0.23=0.67
3				"	"	"	"	667	208.9	875.9	1930.5	0.45				26.1 30.1	14.3 26.2	56.3			
2	□-550×700×36	848	16.7	900	26.3	34.2	3.00	717	221.1	938.1						9.0	44.2	53.2			
1								738	221.1	959.1	2798.4	0.34	1.13	0.38		4.7	60.3	65.0	0.39	0.12	0.38+0.12=0.50



C2A Y 方向 X15-Y3

No.4

階	断面	(cm^2) A	(cm^3) Z	L_K	i	λ	f_c	N_L	N_E	N_S	N_Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M_L	M_E	M_S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
15	D-550×550×19	404.0	6.91	600	21.7	27.6	3.11	84	32.2	116.2 51.8					柱頭 柱脚	34.8 33.3	5.2 0.2	40.0 33.5			
14				450		20.7	3.18	203	48.4	251.4						53.4 30.6	61.2 47.4	114.6			
13				380		17.5	3.21	257	61.6	318.6						13.8 14.7	28.5 36.1	50.8			
12				"		"	"	304	77.6	381.6	1333.2	0.29	0.95	0.30		15.9 15.6	45.8 43.5	61.7	0.90	0.28	0.30+0.28=0.58
11	D-550×550×22	465.0	7.86	"	21.6	17.6	"	352	94.9	446.9						17.7 17.6	45.8 45.7	63.5			
10				"		"	"	399	112.8	511.8						17.8 18.4	45.9 45.9	64.3			
9				"		"	"	446	130.9	576.9	1534.5	0.38	1.24	0.39		18.3 18.3	46.6 47.2	65.5	0.84	0.26	0.39+0.26=0.65
8	D-550×550×25	525.0	8.79	"	21.5	17.7	"	494	149.1	643.1						19.8 20.0	46.5 44.9	64.9			
7				"		"	"	541	166.2	707.2						19.6 20.3	41.8 44.4	64.7			
6				"		"	"	589	182.7	771.7	1732.5	0.45	1.47	0.46		19.5 19.6	40.4 43.3	62.9	0.72	0.22	0.46+0.22=0.68
5	D-550×550×28	585.0	9.68	"	21.3	17.8	"	636	198.8	834.8						20.9 21.8	39.0 43.5	65.3			
4				"		"	"	685	213.9	898.9			1.54	0.48		21.1 20.8	32.7 47.9	68.7	0.71	0.22	0.48+0.22=0.70
3				"		"	"	734	225.7	959.7	1930.5	0.50	1.64	0.52		23.7 24.4	12.9 20.2	44.6	0.47	0.15	0.52+0.15=0.67
2	D-550×550×32	663.0	10.8	450	21.2	21.2	3.18	782	237.5	1019.5						18.9 20.8	43.8 31.7	62.7			
1				"		"	"	812	250.8	1062.8	2187.9	0.49	1.61	0.51		13.4 6.2	34.3 82.0	88.2	0.82	0.25	0.51+0.25=0.76

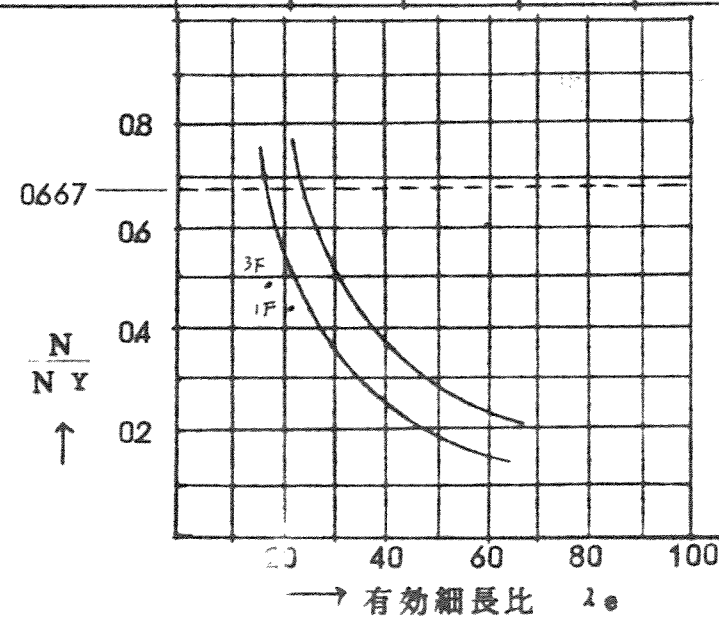


C3

Y 方向

x14 - Y7

階	断面	(cm^2) A	(cm^3) Z	L_K	i	λ	f_c	N_L	N_E	N_S	N_Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M_L	M_E	M_S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
15	$\square-550 \times 550 \times 19$	404.0	6.91 ^{$\times 10^3$}	600	21.7	27.6	3.11	84	30.8	114.8 53.2					柱頭 柱脚	32.8 24.8	1.2 12.2	34.0 37.0			
14				450		20.7	3.18	211	381.4	249.4			0.62	0.20		26.8 13.7	41.6 29.8	68.4	0.99	0.30	0.20+0.30=0.50
13				380		17.5	3.21	255	51.1	203.9 306.1						3.8 0.6	28.4 30.0	32.2 30.6			
12				"		"	"	294	69.7	363.7	1333.2	0.27	0.90	0.28		2.9 2.6	39.8 38.3	42.7	0.62	0.19	0.28+0.19=0.47
11	$\square-550 \times 550 \times 22$	465.0	7.86	"	21.6	17.6	"	333	90.6	423.6						3.1 3.4	41.5 41.3	44.6			
10				"		"	"	372	112.9	484.9						4.1 4.1	42.4 54.6	58.7			
9				"		"	"	410	122.8	532.8	1534.5	0.35	1.15	0.36		4.6 4.6	43.8 44.5	49.1	0.63	0.19	0.36+0.19=0.55
8	$\square-550 \times 550 \times 25$	525.0	8.79	"	21.5	17.7	"	449	146.7	595.7						5.5 5.2	44.7 46.0	51.2			
7				"		"	"	488	170.8	658.8						5.7 5.3	44.2 46.4	51.7			
6				"		"	"	527	194.8	721.8	1732.5	0.42	1.38	0.43		5.8 5.1	43.5 47.0	52.1	0.60	0.19	0.43+0.19=0.62
5	$\square-550 \times 550 \times 28$	585.0	9.68	"	21.3	17.8	"	566	218.7	784.7						6.5 6.4	41.3 42.8	49.2			
4				"		"	"	606	255.1	861.1						5.6 3.0	41.9 73.0	76.0			
3				"		"	"	675	250.1	925.1	1930.5	0.48	1.59	0.50		0.7 3.6	44.4 45.8	49.4	0.52	0.16	0.50+0.16=0.66
2	$\square-550 \times 550 \times 32$	663.0	10.8	450	21.2	21.2	3.18	724	240.0	964.0						4.9 0.2	65.7 44.9	70.6			
1				"		"	"	758	211.9	969.9	2187.9	0.44	1.47	0.47		0.7 0.1	45.6 89.4	89.5	0.83	0.26	0.47+0.26=0.73

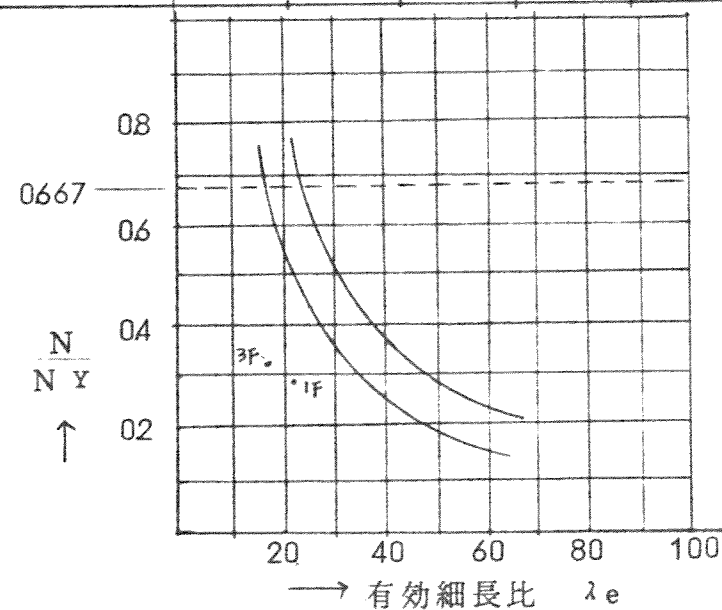


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(構造計算用)

C4 Y 方向 x9-Y6

階	断面	A	Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ_C	$\frac{\sigma_C}{f_C}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_C}{f_C} + \frac{\sigma_b}{f_b}$
15	□-550×550×19	404	6.91 ^{×10³}	600	21.7	27.6	2.07	89	16	87.4					柱頭 柱脚	13.0 4.3	31.8 26.0	44.8			
14				450	"	20.7	3.18	143	19.7	123.3						5.2 4.5	33.3 18.7	38.5			
13				380	"	17.5	3.21	180	14.7	165.3						4.2 4.1	47.1 44.1	51.3			
12				"	"	"	"	216	24.4	191.6	1333.2	0.18	0.47	0.15		4.1 4.0	48.6 47.6	52.7	0.76	0.23	0.15+0.23=0.38
11	□-550×550×22	465	7.86	"	21.6	17.6	"	252	31.8	220.2						4.4 4.2	44.7 54.4	58.6			
10				"	"	"	"	288	39.3	248.7						4.1 4.0	55.7 56.3	60.3			
9				"	"	"	"	323	45.8	277.2	1534.5	0.24	0.60	0.19		4.0 3.8	60.0 60.2	64.0	0.81	0.25	0.19+0.25=0.44
8	□-550×550×25	525	8.79	"	21.5	17.7	"	359	51.0	308.0						4.2 4.0	64.5 65.5	68.7			
7				"	"	"	"	395	56.3	338.7						3.8 3.5	65.4 69.0	72.5			
6				"	"	"	"	431	58.1	372.9	1732.5	0.28	0.71	0.22		3.4 3.3	61.5 64.7	68.0	0.77	0.23	0.22+0.23=0.45
5	□-550×550×28	585	9.68	"	21.3	17.8	"	468	54.3	413.7						3.6 3.4	66.4 70.3	73.7			
4				"	"	"	"	505	48.0	457.0			0.78	0.24		3.0 2.3	60.0 71.2	73.5	0.76	0.23	0.24+0.23=0.47
3				"	"	"	"	572	32.1	539.9	1930.5	0.31				5.5 4.6	36.8 40.6	45.2			
2	□-550×550×32	663	10.8	450	21.2	21.2	3.18	580	31.0	549.0						3.0 0.9	67.3 62.8	70.3			
1				"	"	"	"	625	6.7	618.3	2188	0.29	0.93	0.29		1.5 0.7	67.3 97.7	18.4	0.91	0.28	0.29+0.28=0.57



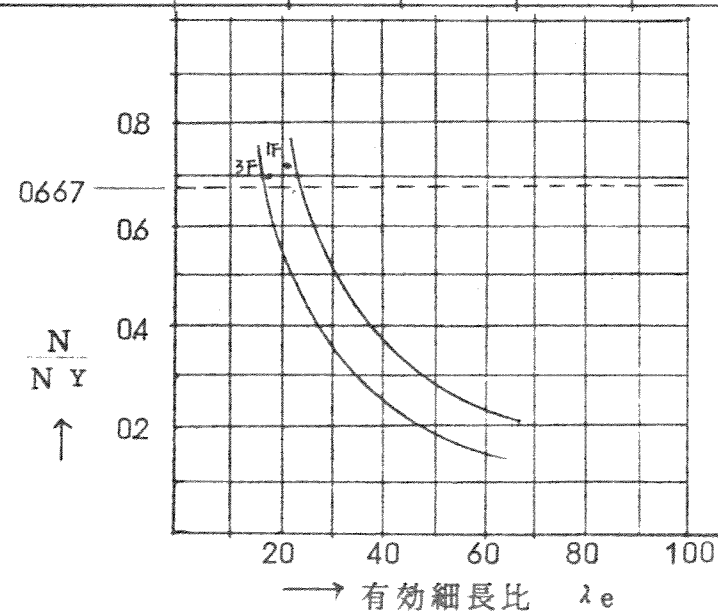
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C5

方向

x9-y3

階	断面	A	Z	L _K	i	λ	f_c	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
15	□-550×550×19	408	6.91 ¹⁰³	600	21.7	27.6	2.07	82	20.5				0.20	0.10	柱頭 柱脚	19.4 4.9	4.7 4.2		0.28	0.13	0.10+0.13=0.23
14				450	"	20.7	3.18	150	37.3	187.3						8.5 1.0	4.8 2.8	13.3			
13				380	"	17.5	3.21	197	86.1	280.1						1.0 2.3	12.6 8.1	11.6			
12				"	"	"	"	244	128.4	372.4	1333.2	0.28	0.92	0.29		3.2 3.0	11.2 9.9	8.0	0.12	0.04	0.29+0.04=0.33
11	□-550×550×22	465	7.86	"	21.6	17.6	"	289	177.3	466.3						3.1 3.2	11.5 11.1	8.4			
10				"	"	"	"	334	229.4	563.4						3.3 3.5	11.3 10.6	8.0			
9				"	"	"	"	379	285.2	664.2	1534.5	0.43	1.43	0.44		3.4 3.4	13.2 13.4	10.0	0.13	0.04	0.44+0.04=0.48
8	□-550×550×25	525	8.79	"	21.5	17.7	"	424	346.6	770.6						3.6 3.7	12.1 13.2	9.5			
7				"	"	"	"	482	409.8	891.8						3.8 4.1	12.9 16.2	12.1			
6				"	"	"	"	527	475.6	1002.6	1732.5	0.58	1.91	0.59		4.1 4.1	9.4 13.8	9.7	0.11	0.03	0.59+0.03=0.62
5	□-550×550×28	585	9.68	"	21.3	17.8	"	573	546.8	1119.8						4.1 4.1	11.7 15.8	11.7			
4				"	"	"	"	619	619.0	1238.0			2.12	0.66		4.5 5.3	9.0 24.5	19.2	0.20	0.06	0.66+0.06=0.72
3				"	"	"	"	665	685.8	1350.8	1930.5	0.70	2.31	0.72		3.1 4.7	5.3 0.4	4.3	0.04	0.01	0.72+0.01=0.73
2	□-550×550×32	663	10.8	450	21.2	21.2	3.18	709	739.4	1448.4						3.4 2.8	20.5 6.4	17.1			
1				"	"	"	"	747	828.5	1575.5	2187.9	0.72	2.38	0.75		2.4 1.3	23.0 81.7	83.0	0.77	0.23	0.75+0.23=0.98



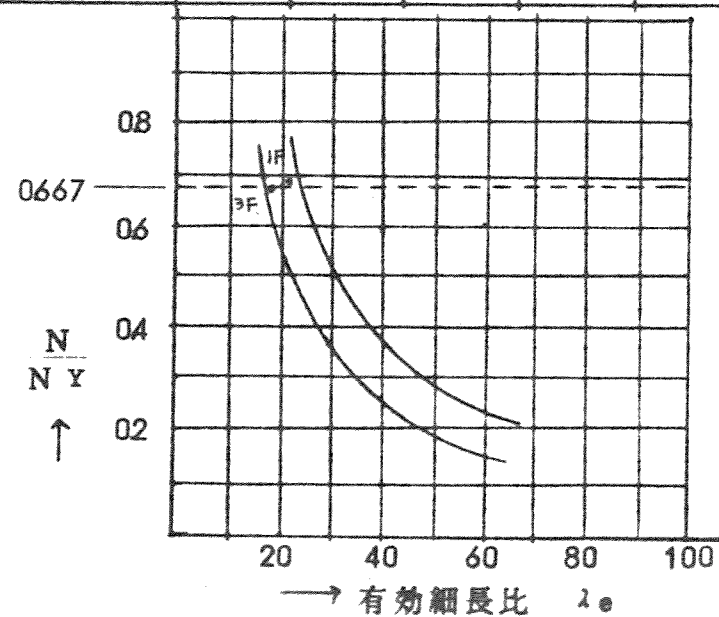
C5

Y 方向

x9-Y7

No.8

階	断面	A	Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ_C	$\frac{\sigma_C}{f_C}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_C}{f_C} + \frac{\sigma_b}{f_b}$
15	□-550×550×19	404	6.91 ^{×10³}	600	21.7	27.6	2.07	63	20.9						柱頭 柱脚	15.3 8.7	4.9 4.3				
14				450	"	20.7	2.12	123	38.0				0.30	0.14		10.1 1.0	4.8 2.9		0.15	0.07	0.14+0.07=0.21
13				380	"	17.5	3.21	168	89.5	255.5						2.0 2.4	12.7 8.3	10.7			
12				"	"	"	"	211	130.2	341.2	1333.2	0.26	0.84	0.26		2.8 2.6	11.3 10.3	8.5	0.12	0.04	0.26+0.04=0.30
11	□-550×550×22	465	7.86	"	21.6	17.6	"	258	179.6	437.6						2.9 2.8	11.6 11.2	8.7			
10				"	"	"	"	298	232.4	530.4						3.1 3.1	11.4 10.8	8.3			
9				"	"	"	"	341	288.9	629.9	1534.5	0.41	1.35	0.42		3.2 3.0	12.3 13.6	10.6	0.13	0.04	0.42+0.04=0.46
8	□-550×550×25	525	8.79	"	21.5	17.7	"	384	351.1	735.1						3.4 3.2	13.4 13.6	10.4			
7				"	"	"	"	362	415.3	777.3						3.6 3.7	13.1 16.1	12.4			
6				"	"	"	"	471	482.4	953.4	1732.5	0.55	1.82	0.57		4.0 3.8	10.2 16.0	12.2	0.14	0.04	0.57+0.04=0.61
5	□-550×550×28	585	9.68	"	21.3	17.8	"	518	554.7	1072.7						3.9 3.4	9.8 6.9	5.9			
4				"	"	"	"	557	629.8	1186.8						4.7 5.9	19.8 66.4	60.5			
3				"	"	"	"	630	662.3	1292.3	1930.5	0.67	2.21	0.69		7.4 2.8	55.6 54.0	51.2	0.53	0.16	0.69+0.16=0.85
2	□-550×550×32	663	10.8	450	21.2	21.2	3.18	678	682.1	1360.1						0.2 2.6	173.3 64.8	70.1			
1				"	"	"	"	731	738.0	1469.0	2187.9	0.67	2.22	0.70		2.7 1.4	66.4 91.4	96.0	0.89	0.27	0.70+0.27=0.97



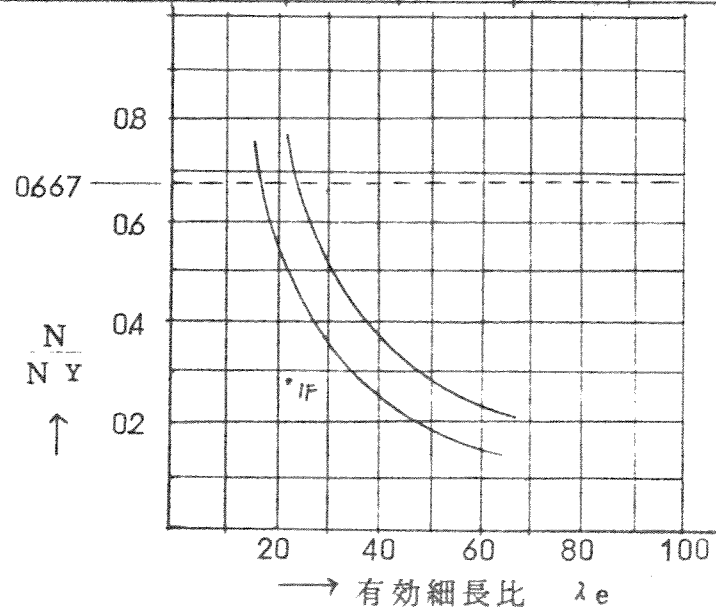
C 6

Y 方向

X17-Y6

No.9

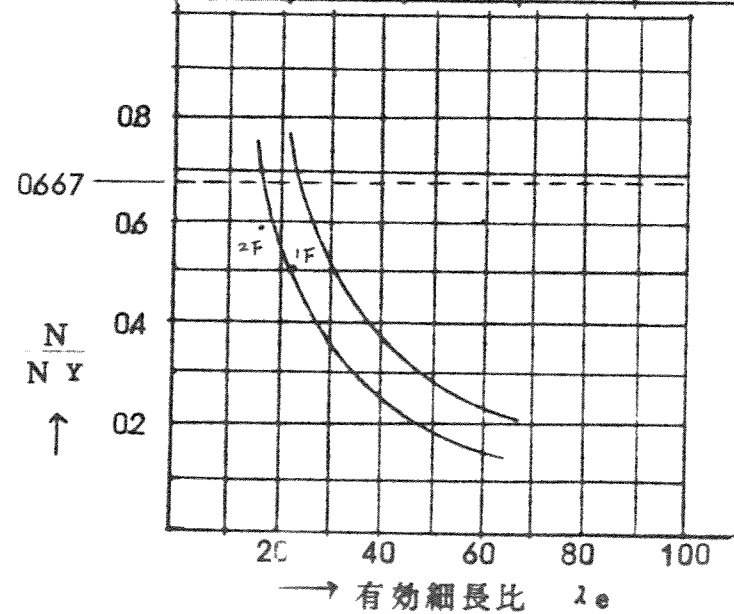
階	断面	A (cm^2)	Z (cm^2)	L_K	i	λ	f_c	N_L	N_E	N_S	N_Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M_L	M_E	M_S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
15	$\square-550 \times 550 \times 19$	404.0	6.91×10^3	600	21.7	27.6	3.11	85	1.9	86.9					柱頭 柱脚	8.4 1.5	32.6 26.7	41.0			
14				450		20.7	3.18	114	25.2	139.2						2.9 2.7	34.2 31.5	37.1			
13				380		17.5	3.21	140	21.0	161.0						2.9 2.6	47.5 44.9	50.4			
12				"		"	"	168	29.9	197.9	1333.2	0.15	0.49	0.16		2.4 2.4	49.3 48.5	51.7	0.75	0.23	$0.16 + 0.23 = 0.39$
11	$\square-550 \times 550 \times 22$	465.0	7.86	"	21.6	17.6	"	195	36.3	231.3						2.6 2.5	55.8 55.6	58.4			
10				"		"	"	223	42.4	265.4						2.3 2.3	59.0 57.7	61.3			
9				"		"	"	251	47.1	298.1	1534.5	0.19	0.65	0.21		2.3 2.2	61.3 61.6	63.8	0.82	0.25	$0.21 + 0.25 = 0.46$
8	$\square-550 \times 550 \times 25$	525.0	8.79	"	21.5	17.7	"	279	49.7	328.7						2.2 2.4	66.0 67.1	69.5			
7				"		"	"	307	51.8	358.8						2.1 1.6	67.0 70.6	72.2			
6				"		"	"	335	49.9	384.9	1732.5	0.22	0.74	0.24		1.6 1.7	63.1 66.2	67.9	0.78	0.24	$0.24 + 0.24 = 0.48$
5	$\square-550 \times 550 \times 28$	585.0	9.68	"	21.3	17.8	"	363	42.0	405.0						2.0 2.1	68.0 72.1	74.2			
4				"		"	"	392	30.4	422.4						1.1 0.5	61.6 71.9	72.4			
3				"		"	"	420	11.1	431.1	1930.5	0.22	0.74	0.24		4.3 6.1	38.4 44.3	50.4	0.53	0.16	$0.24 + 0.16 = 0.40$
2	$\square-550 \times 550 \times 32$	663.0	10.8	450	21.2	21.2	3.18	469	3.5	472.5						3.7 0.9	60.5 58.3	64.2			
1				"		"	"	589	27.3	616.3	2187.9	0.28	0.93	0.30		1.7 0.8	62.0 90.0	90.8	0.84	0.26	$0.30 + 0.26 = 0.56$



C7 Y 方向 X17-Y17

ND.11

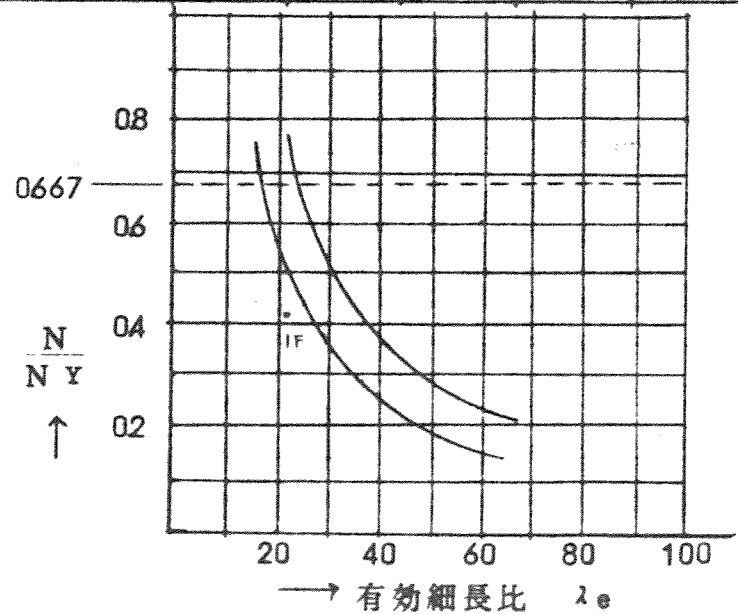
階	断面	(cm ²) A	(cm ³) Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ_C	$\frac{\sigma_C}{f_C}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_C}{f_C} + \frac{\sigma_b}{f_b}$
15	□-550×550×19	404.0	6.91 ^{×10³}	600	21.7	27.6	3.11	52	20.9	72.9					柱頭 柱脚	11.9 2.8 5.3 3.1	4.6 3.9	19.3			
14				450		20.7	3.18	89	38.0	127.0						6.6 2.5 6.5 2.3	4.4 2.5	13.5			
13				380		17.5	3.21	122	87.5	209.5						6.9 3.6 6.4 3.4	11.6 7.2	22.1			
12				"		"	"	156	130.2	286.2	1333.2	0.21	0.71	0.23		5.8 3.1 5.8 3.1	10.1 8.8	19.0	0.28	0.09	0.23+0.09=0.32
11	□-550×550×22	465.0	7.86	"	21.6	17.6	"	190	179.6	369.6						6.3 3.4 6.0 3.2	10.4 10.0	20.1			
10				"		"	"	223	232.4	455.4						5.7 3.1 5.7 3.1	10.3 9.7	19.1			
9				"		"	"	257	288.9	545.9	1534.5	0.36	1.18	0.37		5.4 3.1 5.3 3.0	12.0 12.2	20.5	0.27	0.09	0.37+0.09=0.46
8	□-550×550×25	525.0	8.79	"	21.5	17.7	"	291	351.1	642.1						5.9 3.2 5.6 3.1	11.0 12.1	20.8			
7				"		"	"	325	415.3	740.3						5.2 3.0 5.0 3.0	11.6 14.6	22.6			
6				"		"	"	358	482.4	840.4	1732.5	0.49	1.61	0.51		4.4 3.0 4.4 3.1	8.8 14.6	22.1	0.26	0.08	0.51+0.08=0.59
5	□-550×550×28	585.0	9.68	"	21.3	17.8	"	392	554.7	946.7						5.0 2.9 5.1 2.4	8.9 6.0	16.8			
4				"		"	"	426	629.8	1055.8						3.5 3.7 1.5 5.5	15.3 61.9	68.9			
3				"		"	"	486	662.3	1148.3	1930.5	0.59	1.97	0.62		0.7 3.8 4.4 0.1	49.8 48.2	54.3	0.57	0.18	0.62+0.18=0.80
2	□-550×550×40	816.0	12.9	450	20.9	21.6	3.18	551	682.1	1233.1 -131.1			1.51 (0.16)	0.47 (0.05)		4.1 2.6 0.6 1.4	67.2 58.7	73.9 60.7	0.57 0.47	0.17 0.14	0.47+0.17=0.64
1				"			"	604	738.0	-134.0	2692.8	0.50	0.16	0.05		3.1 0.1 1.5 0.1	58.7 97.4	61.9 99.0	0.48 0.77	0.15 0.23	0.05+0.23=0.28
										(1342.0)			(1.64)	(0.52)				(95.8)	(0.74)	(0.24)	(0.52+0.24=0.76)



C I A x 方向 x10 - Y6

NO.13

階	断 面	A	Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ _C	$\frac{\sigma_C}{f_C}$		M _L	M _E	M _S	σ _b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_C}{f_C} + \frac{\sigma_b}{f_b}$	
15	□-550×550×19	404	6.91 ^{×10²}	600	21.7	27.6	3.11	58	12.1	20.1					柱頭 柱脚	1.5 1.4	148.1 142.0	149.6				23.9
14				450	"	20.7	3.18	161	13.4	174.4						0.5 0.2	32.3 39.8	40.0				24.4
13				380	"	17.5	3.21	225	17.5	242.5						0.1 0.2	74.0 68.8	74.1				24.4
12				"	"	"	"	277	16.1	293.1	1333.2	0.22	0.73	0.23		0.3 0.3	85.9 86.4	86.7	1.25	0.38	0.23+0.38=0.61	24.8
11	□-550×550×22	465	7.86	"	21.6	17.6	"	329	15.2	344.2						0.3 0.2	95.5 94.8	95.8				27.4
10				"	"	"	"	382	15.0	397.0						0.2 0.2	100.9 100.7	101.1				29.1
9				"	"	"	"	434	15.1	449.1	1534.5	0.29	0.97	0.30		0.2 0.2	104.8 106.5	106.7	1.36	0.41	0.30+0.41=0.71	30.2
8	□-550×550×25	525	8.79	"	21.5	17.7	"	487	15.6	502.6						0.2 0.2	109.3 109.2	109.5				31.5
7				"	"	"	"	539	16.2	555.2						0.2 0.2	115.1 115.7	115.9				33.2
6				"	"	"	"	592	16.9	608.9	1732.5	0.35	1.16	0.36		0.2 0.2	112.7 114.2	114.4	1.30	0.39	0.36+0.39=0.75	32.7
5	□-550×550×28	585	9.68	"	21.3	17.8	"	645	17.8	662.8						0.1 0.1	113.0 116.3	116.4				33.0
4				"	"	"	"	701	18.6	682.4			1.17	0.36		0.1 1.4	100.6 107.9	109.1	1.13	0.34	0.36+0.34=0.70	31.1
3				"	"	"	"	751	15.0	766.0	1930.5	0.40				1.1 0	50.7 54.7	54.7				15.2
2	□-550×550×32	663	10.8	450	21.2	21.2	3.18	816	17.2	889.2						1.5 3.2	99.6 71.3	98.1				17.9
1				"	"	"	"	878	29.6	907.6	2187.9	0.41	1.37	0.43		2.8 1.4	58.8 112.3	110.9	1.03	0.31	0.43+0.31=0.74	



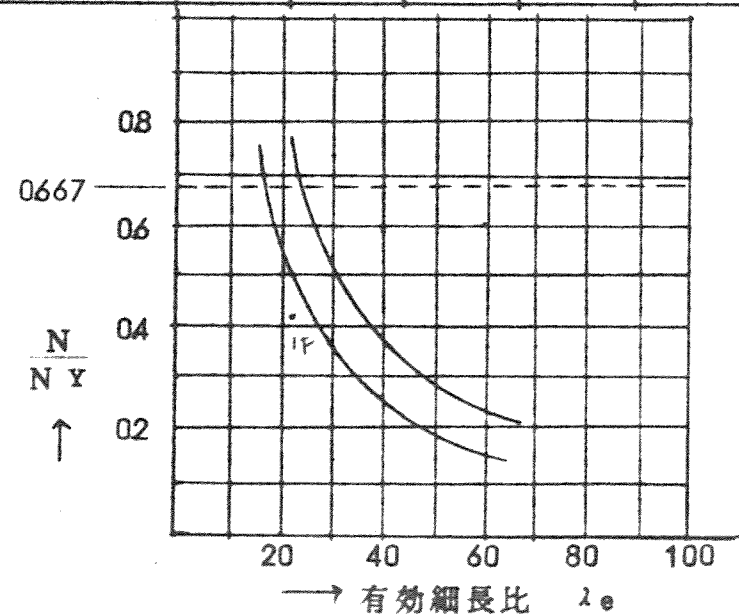
C2

x 方向

x15 - Y3

No. 14

階	断面	(cm ²) A	(cm ³) Z	L _K	i	λ	f_c	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
15	D-550×550×19	404.0	6.91 ^{×10³}	600	21.7	27.6	3.10	84	12.0	96.0					柱頭 柱脚	2.6 3.6	55.6 49.3	59.2			
14				450		20.7	3.19	203	51.7	254.7						7.8 8.9	89.3 78.7	97.1			
13				380		17.6	3.22	257	53.6	310.6						9.3 7.9	79.0 78.9	88.3			
12				"		"	"	304	51.4	355.4	1333.2	0.57	0.88	0.28		6.5 6.7	86.2 87.0	93.7	1.36	0.42	0.28+0.42=0.70
11	D-550×550×22	465.0	7.86	"	21.6	"	"	352	50.8	402.8						7.5 7.3	97.9 96.0	105.4			
10				"		"	"	399	51.3	450.3						7.0 7.0	100.0 99.5	107.0			
9				"		"	"	446	53.1	499.1	1534.5	0.33	1.07	0.34		6.7 6.5	102.1 101.1	108.8	1.39	0.42	0.34+0.42=0.76
8	D-550×550×25	525.0	8.79	"	21.5	17.7	"	494	55.9	549.9						6.8 6.6	107.1 106.4	113.9			
7				"		"	"	541	59.1	600.1						6.3 6.2	105.0 107.8	114.0			
6				"		"	"	589	63.6	652.6	1732.5	0.38	1.25	0.39		5.8 5.6	107.2 106.9	113.0	1.29	0.39	0.39+0.39=0.78
5	D-550×550×28	585.0	9.68	"	21.3	17.9	3.21	636	68.4	704.4						5.7 5.5	108.0 108.0	113.7			
4				"		"	"	685	73.5	752.5						4.8 4.4	114.0 118.3	122.7			
3				"		"	"	734	78.4	812.4	1930.5	0.42	1.39	0.44		3.8 3.8	90.7 91.6	95.4	0.99	0.30	0.44+0.30=0.74
2	D-550×550×32	663.0	10.8	450	21.2	21.3	3.18	782	84.5	866.5						3.8 3.6	144.4 142.7	148.2			
1				450		"	"	812	101.9	913.9	2187.9	0.42	1.38	0.44		2.1 1.1	115.1 162.6	163.7	1.52	0.46	0.44+0.46=0.90



() ()

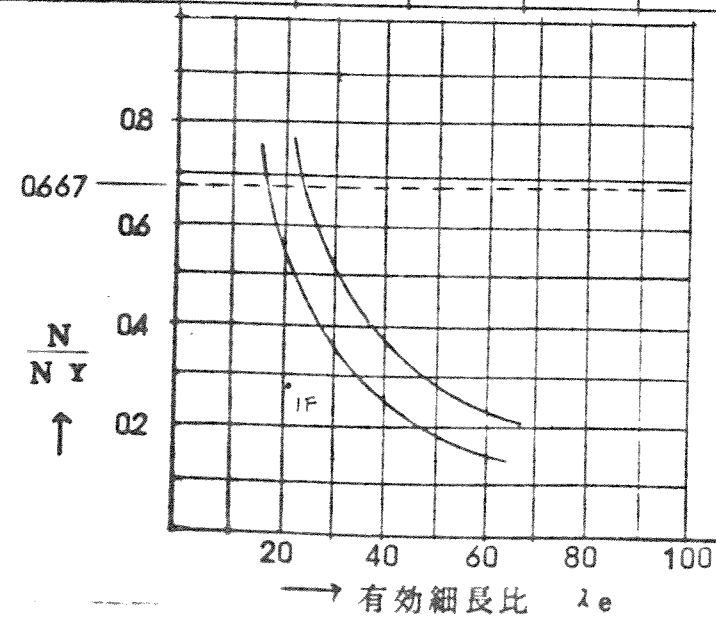
(構造計算用)

C2

X 方向 X12-Y3

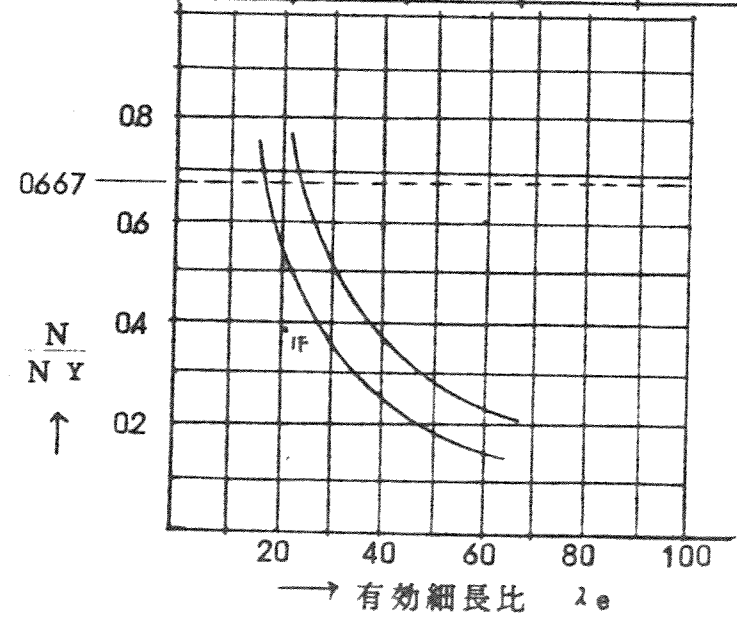
NO. 15

階	断 面	A (cm^2)	Z (cm^3)	L_K	i	λ	f_c	N_L	N_E	N_S	N_Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M_L	M_E	M_S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
15	$\square-550 \times 550 \times 19$	404.0	6.91×10^3	500	21.7	23.0	3.16		3.4						柱頭 柱脚	0.5 0.2	70.4 72.9				
14				550		26.6	3.12	153	1.0	154.0						0.6 0.5	59.1 53.3	72.7 59.7			
13				380		17.6	3.22	207	3.4	210.4						0.1 0.2	88.0 80.9	88.1			
12				"		"	"	255	3.6	258.6	1333.2	0.19	0.64	0.20		0.2 0.2	83.8 84.9				
11	$\square-550 \times 550 \times 22$	465.0	7.86	"	21.6	"	"	302	3.9	305.9						0.2 0.2	95.3 93.1	85.1 95.5	1.24	0.38	$0.20 + 0.38 = 0.58$
10				"		"	"	349	4.3	353.3						0.2 0.2	96.8 95.9	97.0			
9				"		"	"	397	4.6	401.6	1534.5	0.26	0.87	0.27		0.2 0.2	97.1 96.5	97.3	1.24	0.38	$0.27 + 0.38 = 0.65$
8	$\square-550 \times 550 \times 25$	525.0	8.79	"	21.5	17.7	"	444	4.8	448.8						0.2 0.2	102.3 101.6	102.5			
7				"		"	"	492	5.2	497.2						0.2 0.1	99.9 102.4				
6				"		"	"	539	5.4	544.4	1732.5	0.31	1.04	0.33		0.1 0.1	101.5 101.4	101.6	1.16	0.36	$0.33 + 0.36 = 0.69$
5	$\square-550 \times 550 \times 28$	585.0	9.68	"	21.3	17.9	3.21	586	5.6	591.6						0 0	102.1 102.2				
4				"		"	"	635	5.8	640.8						0 0	108.1 112.5	102.2			
3				"		"	"	684	6.0	690.0	1930.5	0.36	1.10 1.18	0.34 0.37		0 0	85.8 87.8	112.5 87.8	1.16 0.91	0.35 0.28	$0.34 + 0.35 = 0.69$ $0.37 + 0.28 = 0.65$
2	$\square-550 \times 750 \times 36$	848	14.5	450	21.7	20.7	3.18	732	5.9	737.9						0 0	134.0 113.6	134.0			
1				"	"	"	"	752	6.1	758.1	2798.4	0.27	0.89	0.28		0.1 0	92.6 155.7		1.07	0.32	$0.28 + 0.32 = 0.60$



C3 X 方向 X15-Y7

階	断 面	(cm ²) A	(cm ³) Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ _C	$\frac{\sigma_C}{f_C}$		M _L	M _E	M _S	σ _b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_C}{f_C} + \frac{\sigma_b}{f_b}$	
15	D-550×550×19	404.0	6.91 ^{×10³}	600	21.7	27.6	3.10	84	12.0	96.0						柱 頭 柱 脚	3.6 3.6	56.1 49.7	59.7			
14				450		20.7	3.19	203	52.5	255.5							7.8 8.9	89.6 79.3	97.4			
13				380		17.6	3.22	246	51.9	297.9							9.3 7.9	79.4 79.4	88.7			
12				"		"	"	285	50.0	335.0	1333.2	0.25	0.83	0.26			6.5 6.7	86.6 87.2	93.9	1.36	0.42	0.26+0.42=0.68
11	D-550×550×22	465.0	7.86	"	21.6	"	"	324	50.0	374.0							7.5 7.3	92.0 96.2	103.5			
10				"		"	"	363	51.1	414.1							7.0 7.0	100.3 99.0	107.3			
9				"		"	"	402	53.4	455.4	1534.5	0.30	0.98	0.31			6.7 6.5	100.6 101.3	107.8	1.37	0.42	0.31+0.42=0.73
8	D-550×550×25	525.0	8.79	"	21.5	17.7	"	441	56.5	497.5							6.8 6.6	107.4 106.7	114.2			
7				"		"	"	480	60.0	540.0							6.3 6.2	105.2 108.2	114.4			
6				"		"	"	519	64.8	583.8	1732.5	0.34	1.12	0.35			5.8 5.6	107.5 107.3	113.3	1.29	0.39	0.35+0.39=0.74
5	D-550×550×28	585.0	9.68	"	21.3	17.9	3.21	558	74.9	632.9							5.7 5.5	107.7 109.5	115.0			
4				"		"	"	597	80.0	677.0			1.16	0.37			4.8 4.4	103.2 113.4	117.8	1.22	0.37	0.37+0.37=0.74
3				"		"	"	666	84.5	750.5	1930.5	0.38	1.29	0.40			3.8 3.8	70.7 71.4	75.2	0.78	0.24	0.40+0.24=0.64
2	D-550×550×32	663.0	10.8	450	21.2	21.3	3.18	715	89.2	804.2							3.8 3.6	113.4 110.3	117.2			
1				"		"	"	759	95.2	854.2	2187.9	0.39	1.29	0.41			2.1 1.1	91.2 123.2	124.3	1.15	0.35	0.41+0.35=0.76
15	D-550×550×19	404.0	6.91	500	21.7	23.1	3.16	84	4.1	88.1			0.22	0.07			4.6 3.2	81.8 80.6	86.4	1.25	0.38	0.07+0.38=0.45

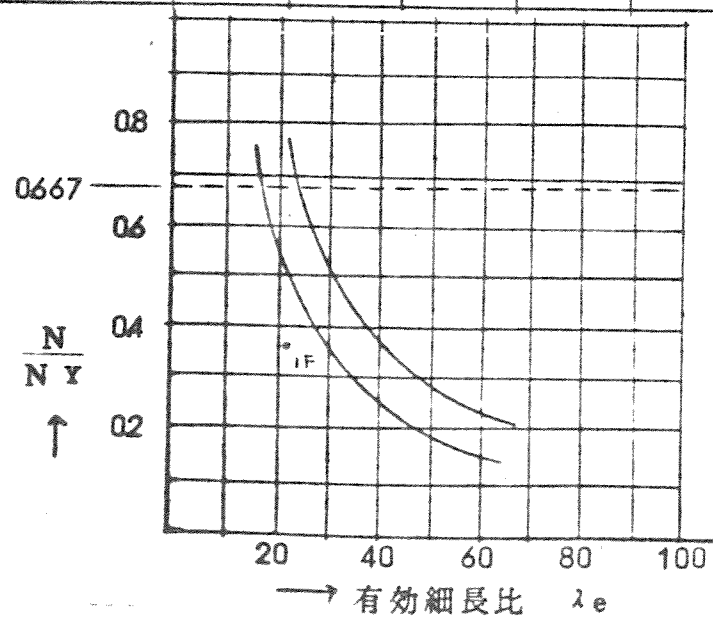


X14-Y7

C4 x 方向 x9-Y6

No. 17

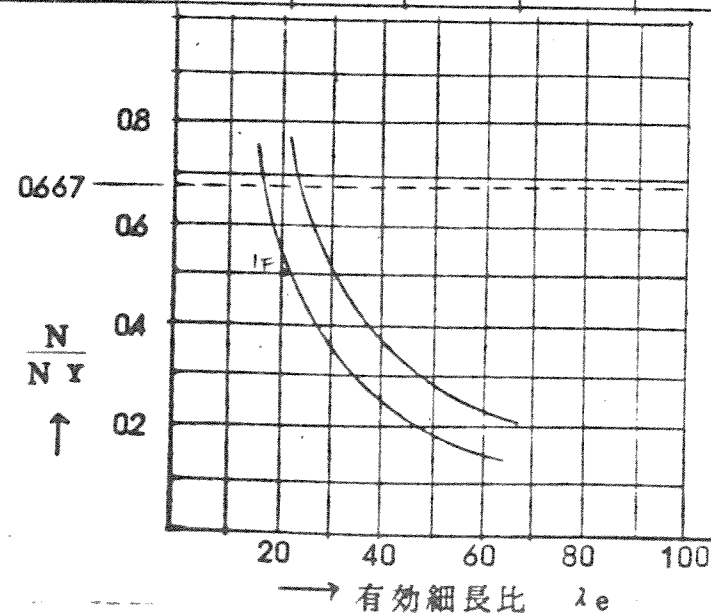
階	断面	A	Z	L _K	i	λ	f_c	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
15	□-550×500×19	404	6.91 ^{×10³}	600	21.7	27.6	3.11	89	8.3	97.3					柱頭 柱脚	0.8 2.5	143.9 137.7	143.1			
14				450	"	20.7	3.18	143	10.3	153.3						4.3 2.0	28.3 37.9	35.9			
13				380	"	17.5	3.21	180	107.8	287.8						0.3 0.9	73.2 66.7	72.9			
12				"	"	"	"	216	109.2	325.2	1333.2	0.24	0.80	0.25		1.4 1.2	82.5 82.4	81.2	1.18	0.36	0.25+0.36=0.61
11	□-550×550×22	465	7.86	"	21.6	17.6	"	252	111.8	363.8						1.3 1.3	90.1 88.8	88.8			
10				"	"	"	"	288	115.3	403.3						1.3 1.4	94.1 93.8	92.8			
9				"	"	"	"	323	119.1	442.1	1534.5	0.29	0.95	0.30		1.4 1.4	97.5 94.1	97.7	1.24	0.38	0.30+0.38=0.68
8	□-550×550×25	525	8.79	"	21.5	17.7	"	359	123.3	482.3						1.5 1.5	100.9 100.8	99.4			
7				"	"	"	"	395	128.0	523.0						1.5 1.5	101.5 107.3	105.8			
6				"	"	"	"	431	132.3	563.3	1732.5	0.33	1.07	0.33		1.6 1.6	104.5 106.3	105.7	1.20	0.36	0.33+0.36=0.69
5	□-550×550×28	585	9.68	"	21.3	17.8	"	468	136.7	604.7						1.5 1.3	104.6 108.3	107.0			
4				"	"	"	"	505	140.8	645.8			1.10	0.34		1.1 1.1	93.4 101.3	100.2	1.04	0.31	0.34+0.31=0.65
3				"	"	"	"	572	143.6	715.6	1930.5	0.37	1.22	0.38		1.5 1.4	82.4 85.7	84.3	0.87	0.26	
2	□-550×550×32	663	10.8	450	21.2	21.2	3.18	580	143.4	723.4						1.8 2.2	110.6 108.9	108.8			
1				"	"	"	"	625	152.6	777.6	2187.9	0.36	1.17	0.37		1.3 0.6	98.7 127.7	127.1	1.18	0.36	0.37+0.36=0.73



C5 X方向 X9-Y3

No. 18

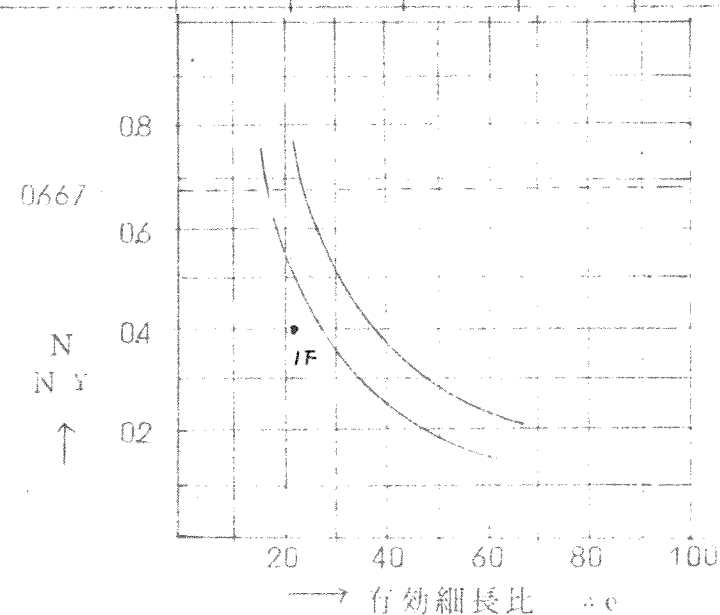
階	断面	A (cm^2)	Z (cm^3)	L_K	i	λ	f_c	N_L	N_E	N_S	N_Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M_L	M_E	M_S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
15	$\square-550 \times 550 \times 19$	404.0	6.91×10^3	600	21.7	27.6	3.10	82	25.8	107.8					柱頭 柱脚	5.1 3.4	21.3 17.4	26.4			
14				450		20.7	3.19	150	105.8	255.8						3.7 3.9	50.9 44.0	54.6			
13				380		17.6	3.22	197	117.5	274.5						3.9 3.8	44.1 43.6	48.0			
12				"		"	"	244	111.9	315.9	1333.2	0.24	0.79	0.25		3.8 3.8	50.2 50.7	54.5	0.79	0.24	$0.25+0.24=0.49$
11	$\square-550 \times 550 \times 22$	465.0	7.86	"	21.6	"	"	289	65.8	354.8						4.2 4.1	56.9 56.0	61.1			
10				"		"	"	334	59.9	393.9						3.9 3.8	57.4 61.1	64.9			
9				"		"	"	379	48.8	427.8	1534.5	0.28	0.92	0.29		3.6 3.5	64.1 64.1	67.7	0.87	0.27	$0.29+0.27=0.56$
8	$\square-550 \times 550 \times 25$	525.0	8.79	"	21.5	17.7	"	424	32.8	456.8						3.6 3.4	67.7 68.2	71.6			
7				"		"	"	482	15.2	497.2						3.2 3.1	68.2 71.2	74.3			
6				"		"	"	527	5.2	532.2	1732.5	0.31	1.02	0.32		2.9 2.8	71.7 73.2	76.0	0.87	0.27	$0.32+0.27=0.59$
5	$\square-550 \times 550 \times 28$	585.0	9.68	"	21.3	17.9	3.21	573	32.2	540.8						0.8 0.6	73.5 75.3	75.9			
4				"		"	"	619	90.1	528.9						0.1 0	81.4 88.1	88.1			
3				"		"	"	665	172.7	492.3	1930.5	0.26	0.84	0.27		0.7 1.3	63.9 66.0	67.3	0.70	0.22	$0.27+0.22=0.49$
2	$\square-550 \times 550 \times 32$	663.0	10.8	450	21.2	21.3	3.18	709	222.2	931.2						0.8 0	120.0 119.5	120.8			
1				"		"	"	747	343.2	1090.2	2187.9	0.50	1.65	0.52		0.6 0.3	106.3 161.1	161.4	1.50	0.46	$0.52+0.46=0.98$



C 6 X 方向 X17-Y6

No. 19

階	断 面	A	Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ _C	$\frac{\sigma_C}{f_C}$		M _L	M _E	M _S	σ _b	$\frac{\sigma'_b}{f_b}$	$\frac{\sigma_C}{f_C} + \frac{\sigma_b}{f_b}$	
15	□-550×550×19	404	6.91 ^{×10³}	600	21.7	27.6	3.11	85	26.2	111.2					柱頭 柱脚	5.4 6.0	101.1 101.9				16.7	
14				450	"	20.7	3.18	114	51.5	165.5						7.1 5.0	11.6 5.9				15	
13				380	"	17.5	3.21	140	66.6	206.6						3.9 4.3	44.4 31.0	10.9 48.3			10.9	
12				"	"	"	"	168	103.4	271.4	1333.2	0.20	0.67	0.21		4.4 4.2	46.8 46.2	51.2	0.74	0.22	0.21+0.22=0.43	13.4
11	□-550×550×22	465	7.86	"	21.6	17.6	"	195	133.5	328.5						4.5 4.4	48.4 47.0	52.9			13.8	
10				"	"	"	"	223	164.8	387.8						4.3 4.4	51.6 49.9	55.9			14.6	
9				"	"	"	"	251	197.7	448.7	1534.5	0.29	0.96	0.30		4.3 4.2	52.9 55.1	59.3	0.75	0.23	0.30+0.23=0.53	15.6
8	□-550×550×25	525	8.79	"	21.5	17.7	"	279	231.7	510.7						4.5 4.4	52.2 52.3				15.0	
7				"	"	"	"	307	266.7	573.7						4.3 4.3	57.8 57.8	62.1			16.7	
6				"	"	"	"	335	302.9	637.9	1732.5	0.37	1.22	0.38		4.2 4.2	55.3 58.3	62.5	0.71	0.22	0.38+0.22=0.60	16.4
5	□-550×550×28	585	9.68	"	21.3	17.8	"	363	338.9	701.9						4.3 4.1	53.8 59.1				16.3	
4				"	"	"	"	392	349.7	781.7			1.27	0.39		4.4 4.9	46.5 53.7	58.6	0.61	0.18	0.39+0.18=0.57	
3				"	"	"	"	420	377.0	797.0	1930.5	0.41	1.36	0.42		2.7 0.4	20.1 42.0	41.6	0.43	0.13		8.9
2	□-550×500×32	663	10.8	450	21.2	21.2	3.18	469	379.0	848.0						1.8 0.1	102.8 94.4	101.0			23.0	
1				"	"	"	"	509	369.0	878.0	2187.9	0.40	1.32	0.42		1.4 1.0	90.9 126.4	127.4	1.18	0.36	0.42+0.36=0.78	

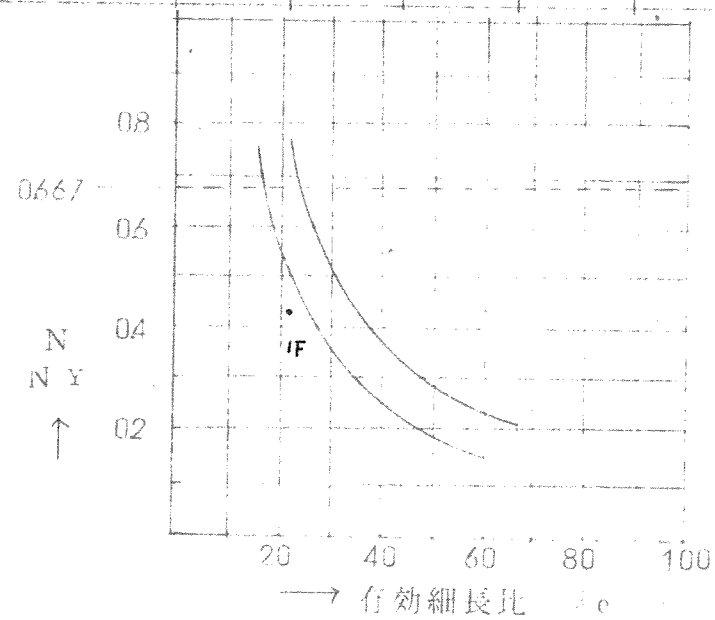


C 6

方向 X8-Y6

No. 20

階	断面	A	Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ'_C	$\frac{\sigma'_C}{f_C}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
15	□-550×550×19	404	6.91 ^{×10³}	600	21.7	27.6	3.11	84	28.7	112.7						5.8	105.4	111.2			
14				450	"	20.7	3.18	115	58.0	173.0						6.8	104.1				17.3
13				380	"	17.5	3.21	144	76.8	220.8						7.1	1.2				1.2
12				"	"	"	"	165	103.4	268.4	1333.2	0.20	0.66	0.21		4.9	13.9	18.8			12.0
11	□-550×550×22	465	7.86	"	21.6	17.6	"	191	133.5	324.5						3.7	48.2	51.9			
10				"	"	"	"	216	164.8	380.8						4.2	35.4				
9				"	"	"	"	241	197.7	438.7	1534.5	0.29	0.94	0.29		4.6	46.8	51.4	0.74	0.23	0.21+0.23=0.44
8	□-550×550×25	525	8.79	"	21.5	17.7	"	266	231.7	497.7						4.3	46.2				
7				"	"	"	"	271	266.7	537.7						4.6	48.4	53.0			
6				"	"	"	"	316	302.9	618.9	1732.5	0.36	1.18	0.37		4.5	47.0	56.1			
5	□-550×550×28	585	9.68	"	21.3	17.8	"	344	338.9	682.9						4.5	51.6	56.1			
4				"	"	"	"	379	373.7	752.7						4.5	49.9				
3				"	"	"	"	413	403.2	816.2	1930.5	0.42				4.4	52.9	59.4	0.76	0.23	0.29+0.23=0.52
2	□-550×550×32	663	10.8	450	21.2	21.2	3.18	436	435.9	871.9						4.3	55.1	59.4			
1				"	"	"	"	480	470.3	950.3	2187.9	0.43	1.43	0.45		4.6	52.2	56.8			
																4.4	57.8	62.2			
																4.4	57.8	62.2			
																4.4	55.3				
																4.3	58.3	62.6	0.71	0.22	0.37+0.22=0.59
																4.5	53.8				
																4.4	59.1	63.5			
																4.4	47.8				
																4.4	59.5	63.9	0.66	0.20	0.40+0.20=0.60
																4.0	28.3				15.4
																4.0	37.4	41.4			9.5
																4.2	69.1	73.3			14.3
																4.9	54.1				
																4.3	53.5				
																2.2	110.2	112.4	1.04	0.32	0.45+0.32=0.77

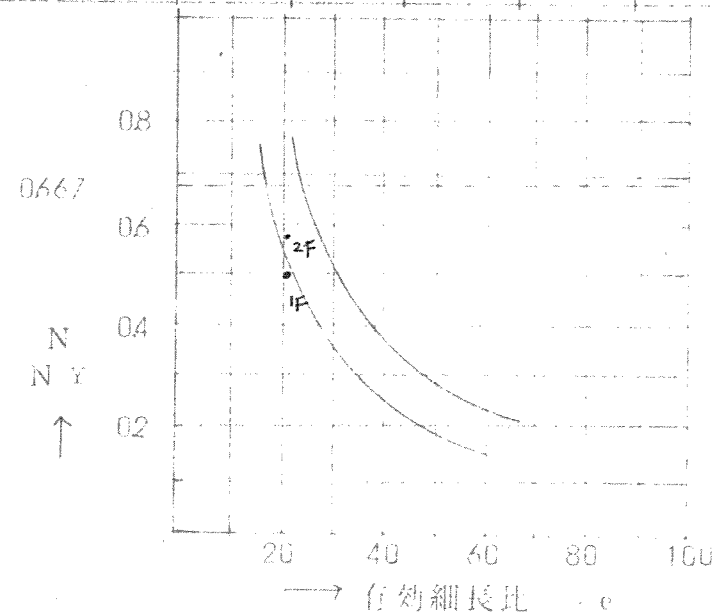


C 7

X 方向 X17-Y7

No. 22

階	断 面	A (cm^2)	Z (cm^3)	L_K	i	λ	f_c	N_L	N_E	N_S	N_Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M_L	M_E	M_S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$	
15	$\square-550 \times 550 \times 19$	404.0	6.91×10^3	600	21.7	27.6	3.10	52	1.6	50.4						2.8	11.9	3.9	18.6			1.1
14				450		20.7	3.19	89	0.5	89.5						3.1	5.3	8.9				3.8
13				380		17.6	3.22	122	56.3	178.3						2.5	6.6	19.5	28.6			
12				"		"	"	156	91.3	247.3	1333.2	0.19	0.62	0.20		2.3	6.5	12.8				2.1
11	$\square-550 \times 550 \times 22$	465.0	7.86	"	21.6	"	"	190	133.0	323.0						3.6	6.9	7.2	17.7			
10				"		"	"	223	175.7	398.7						3.4	6.4	7.0				3.4
9				"		"	"	257	225.8	482.8	1534.5	0.31	1.04	0.33		3.1	5.8	12.7	21.6	0.32	0.10	$0.20 + 0.10 = 0.30$
8	$\square-550 \times 550 \times 25$	525.0	8.79	"	21.5	17.7	"	291	282.7	573.7						3.1	5.8	11.3				2.9
7				"		"	"	325	341.3	666.3						3.4	6.3	10.7	20.4			
6				"		"	"	358	405.2	763.2	1732.5	0.44	1.46	0.46		3.2	6.0	10.0				3.8
5	$\square-550 \times 550 \times 28$	585.0	9.68	"	21.3	17.9	3.21	392	475.9	867.9						3.1	5.7	13.9	22.7			
4				"		"	"	426	548.6	974.6						3.1	5.7	12.3				4.4
3				"		"	"	486	634.2	1120.2	1930.5	0.58	1.92	0.60		3.1	5.4	15.1	24.0	0.31	0.10	$0.33 + 0.10 = 0.43$
2	$\square-550 \times 550 \times 40$	816.0	12.9	450	20.9	21.5	3.18	551	657.1	1208.1						3.0	5.3	15.7	24.8			
1				"		"	"	604	742.0	1346.0	2692.8	0.50	1.65	0.52		3.2	5.9	14.4				4.6
																3.1	5.6	16.1	24.9			
																3.0	5.2	15.4				5.4
																3.0	5.0	16.9	24.9			
																3.1	4.4	17.3				5.9
																2.9	4.4	20.1	27.6	0.32	0.10	$0.46 + 0.1 = 0.56$
																2.4	5.0	17.1				6.1
																3.7	5.1	23.4	30.9			
																5.5	3.5	14.5				8.9
																3.8	1.5	27.4	34.4			
																0.1	19.6					22.3
																2.6	42.3	42.4	0.44	0.14	$0.60 + 0.14 = 0.74$	
																1.4	95.9					
																0.1	95.7	94.3				
																0.1	82.5					
																0.1	119.9	119.8	0.93	0.28	$0.52 + 0.28 = 0.80$	



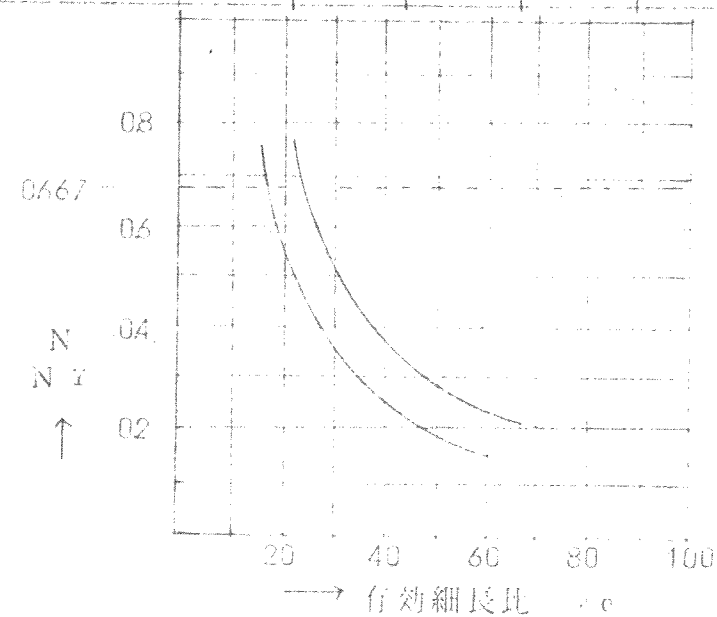
C 8

方向

No.23

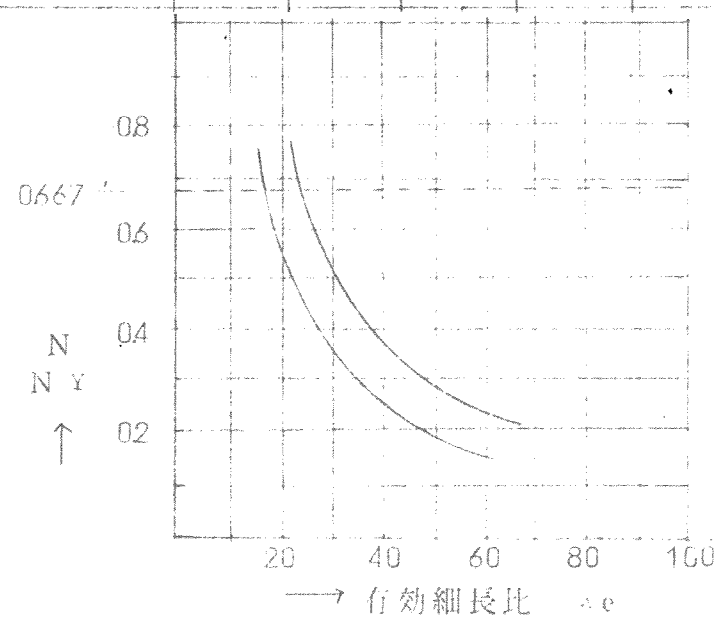
№.23

階	断 面	A	Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	$\frac{\sigma_C}{f_C}$	$\frac{\sigma_C}{f_C}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_C}{f_C} + \frac{\sigma_b}{f_b}$
c8	Y方向 x9 - Y8														柱頭側						
	3	□-500×500×22	421	6.42	380	19.5	19.5	3.20	101	25.2	126.2		0.30	0.09		2.6 0.5	82.4 68.7	85.0 68.2	1.32 0.40		0.09+0.40=0.49
	2			450	"	23.1	3.17	143	45.2	188.2			0.45	0.14		0.5 0.5	66.9 66.2	66.4 65.7	1.03 0.31		0.14+0.31=0.45
	1			"	"	"	"	185	63.5	248.5	1389.3	0.18	0.59	0.18		0.2 0.1	58.5 63.0	58.7 63.1	0.98 0.30		0.18+0.30=0.48
c8	X10 - Y8																				
	3	□-500×500×22	421	6.42	380	19.5	19.5	3.20	101	15.1	116.1		0.28	0.09		0.1 1.7	56.4 48.0	56.5 49.7	0.88 0.27		0.09+0.27=0.36
	2			450	"	23.1	3.17	146	26.8	172.8			0.41	0.13		0.6 1.2	50.9 51.3	51.5 52.5	0.82 0.25		0.13+0.25=0.38
	1			"	"	"	"	188	39.5	227.5	1389.3	0.16	0.54	0.17		0.1 0	44.8 49.9	44.9 49.9	0.78 0.24		0.17+0.24=0.41
c8	X方向 x8 - Y8																				
	3	□-500×500×22	421	6.42	380	19.5	19.5	3.20	63	9.6	72.6		0.17	0.05		8.4 4.7	30.3 23.0	38.7 27.7	0.60 0.18		0.05+0.18=0.23
	2			450	"	23.1	3.17	138	27.0	165.0			0.39	0.12		1.8 2.4	50.8 47.9	52.6 50.3	0.82 0.25		0.12+0.25=0.37
	1			"	"	"	"	185	59.0	244.0	1389.3	0.18	0.58	0.18		1.9 1.0	45.9 69.6	47.8 70.6	1.10 0.33		0.18+0.33=0.51
c8	x9 - Y8																				
	3	□-500×500×22	421	6.42	380	19.5	19.5	3.20	101	1.0	102.0		0.24	0.08		2.2 1.1	51.0 43.9	53.1 45.0	0.83 0.25		0.08+0.25=0.33
	2			450	"	23.1	3.17	143	4.2	147.2			0.35	0.11		0.3 0.4	68.0 68.1	68.3 68.5	1.06 0.32		0.11+0.32=0.43
	1			"	"	"	"	185	9.4	194.4	1389.3	0.14	0.46	0.15		0.4 0.2	64.3 75.0	64.7 75.2	1.17 0.35		0.15+0.35=0.50

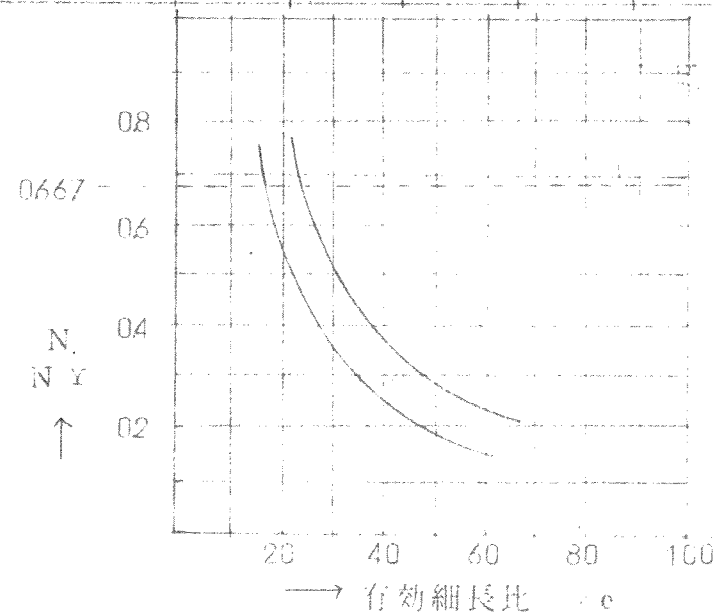


No. 24

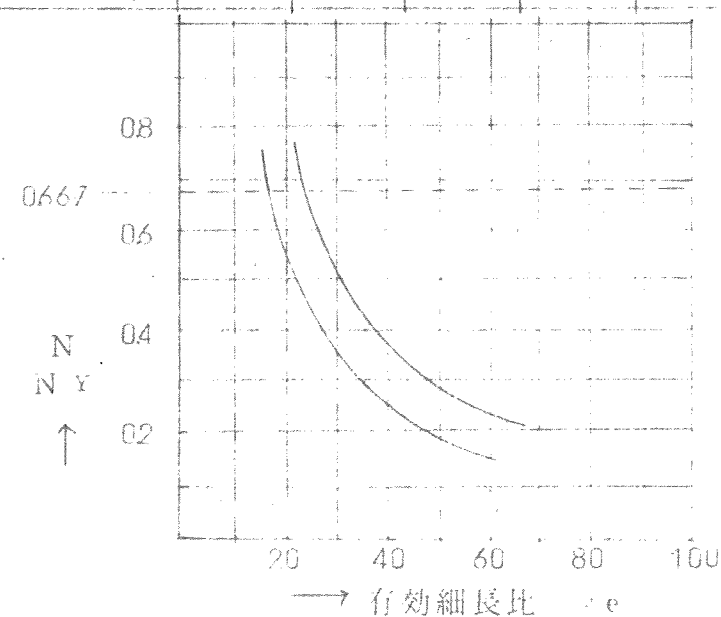
C 8 方向		A	Z	L _K	I	λ	f_c	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
c8	Y 方向 x9-Y9														柱頭 柱脚						
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	102	0.9	102.9		0.24	0.08		8.3 6.8	49.1 44.4	57.4 51.2	0.89	0.27	0.08+0.27=0.35
	2			450	"	23.1	3.17	145	64.8	209.8			0.50	0.16		5.0 4.6	50.7 51.0	55.7 55.6	0.87	0.26	0.16+0.26=0.42
	1			"	"	"	"	190	158.3	348.3	1389.3	0.25	0.83	0.26		3.3 1.6	47.8 58.9	51.1 60.5	0.94	0.28	0.26+0.28=0.54
c8	x10-Y9																				
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	101	5.8	106.8		0.25	0.08		2.9 0.8	46.2 42.1	49.1 42.9	0.76	0.23	0.08+0.23=0.31
	2			450	"	23.1	3.17	143	13.9	156.9			0.37	0.12		3.4 2.9	48.2 48.5	51.6 51.4	0.80	0.24	0.12+0.24=0.36
	1			"	"	"	"	184	23.8	207.8	1389.3	0.15	0.49	0.15		2.6 1.5	42.9 49.2	45.5 50.7	0.79	0.24	0.15+0.24=0.39
c8	x 方向 x8-Y9																				
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	61	9.4	70.4		0.17	0.05		8.4 4.7	30.1 22.9	38.5 27.6	0.60	0.18	0.05+0.18=0.23
	2			450	"	23.1	3.17	124	30.5	154.5			0.37	0.12		1.8 2.4	44.5 42.0	46.3 44.4	0.72	0.22	0.12+0.22=0.34
	1			"	"	"	"	161	57.0	218.0	1389.3	0.16	0.52	0.16		1.9 1.0	46.3 70.4	48.2 71.4	1.11	0.34	0.16+0.34=0.40
c8	x9-Y9																				
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	102	1.0	103.0		0.24	0.08		2.2 1.1	49.0 43.0	51.2 44.2	0.80	0.24	0.08+0.24=0.32
	2			450	"	23.1	3.17	145	3.1	148.1			0.35	0.11		0.3 0.4	68.6 68.7	68.9 69.1	1.07	0.32	0.11+0.32=0.43
	1			"	"	"	"	190	7.4	197.4	1389.3	0.14	0.47	0.15		0.4 0.2	64.9 75.8	65.3 76.0	1.18	0.36	0.15+0.36=0.51



C 9		方 向															No.25				
階	断 面	A	Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ'_C	$\frac{\sigma'_C}{f_C}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma'_C}{f_C} + \frac{\sigma_b}{f_b}$
c9	Y 方向 x9 - Y10																				
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	39	11.3	50.3		0.12	0.04		9.9 5.0	32.7	47.6	0.74	0.22	
	2			450	"	23.1	3.17	60	91.4	151.4			0.36	0.11		5.7 4.4	25.0	35.1			0.04+0.22=0.26
	1			"	"	"	"	72	198.6	270.6	1389.3	0.19	0.64	0.20		3.1 1.0	31.8	35.9			0.11+0.18=0.29
c9	x15 - Y10																				
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	54	10.5	64.5		0.15	0.05		26.3 12.6	33.6	59.9	0.93	0.28	
	2			450	"	23.1	3.17	92	29.9	121.9			0.29	0.09		1.2 0.2	33.0	34.2	0.53	0.16	0.05+0.28=0.33
	1			"	"	"	"	129	50.2	179.2	1389.3	0.13	0.43	0.14		0.3 0.4	31.3	31.6			0.09+0.16=0.25
c9	X 方向 x17 - Y10																				
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	36	9.1	45.1		0.11	0.03		5.0 3.4	30.4	45.1	0.70	0.21	
	2			450	"	23.1	3.17	59	28.9	87.9			0.21	0.07		1.0 1.9	41.1	46.9	0.73	0.22	0.03+0.21=0.24
	1			"	"	"	"	92	53.3	146.3	1389.3	0.11	0.22	0.07		1.9 1.4	37.9	45.3			0.07+0.22=0.29
c9	x11 - Y10																				
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	54	0.1	54.1		0.13	0.04		0.1 0	45.1	45.2	0.70	0.21	
	2			450	"	23.1	3.17	92	0.2	92.2			0.22	0.07		0 0	38.4	38.4			0.04+0.21=0.25
	1			"	"	"	"	132	0.3	132.3	1389.3	0.10	0.31	0.10		0 0	63.3	63.3	0.98	0.30	0.07+0.30=0.37

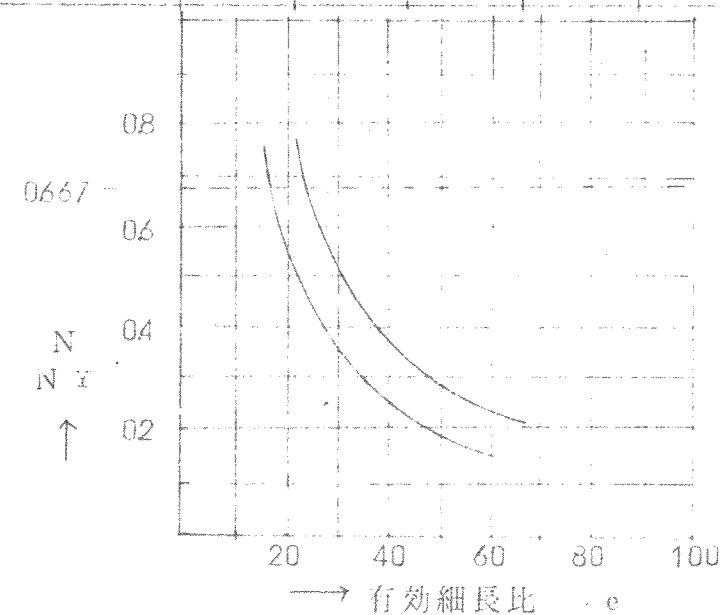


C 8 方向																					
階	断面	A	Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ_c	$\frac{\sigma_c}{f_c}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c}{f_c} + \frac{\sigma_b}{f_b}$
C8	Y方向 x15 - Y9																				
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	152	5.9	157.9		0.38	0.12	柱頭 柱脚	9.7 7.3	46.2 42.1	55.9 49.4	0.87	0.26	0.12+0.26=0.38
	2			450	"	23.1	3.17	215	14.0	229.0			0.54	0.17		7.2 7.1	48.3 48.5	55.5 55.6	0.86	0.26	0.17+0.26=0.43
	1			"	"	"	"	277	23.9	300.9	1389.3	0.22	0.71	0.22		5.6 3.0	42.9 49.2	48.5 52.2	0.81	0.25	0.22+0.25=0.47
C8	X方向 x15 - Y9																				
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	152	5.4	157.4		0.37	0.12		19.9 12.5	44.5 39.2	64.4 51.7	1.00	0.30	0.12+0.30=0.42
	2			450	"	23.1	3.17	215	17.4	232.4			0.55	0.17		4.9 3.1	60.7 60.5	65.6 68.6	1.07	0.32	0.17+0.32=0.49
	1			"	"	"	"	277	30.7	307.7	1389.3	0.22	0.73	0.23		4.7 2.3	52.7 61.8	57.4 64.1	1.00	0.30	0.23+0.30=0.53
C8	Y方向 x17 - Y9																				
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	119	9.6	128.6		0.31	0.10		15.3 6.5	41.4 32.3	56.7 38.8	0.88	0.27	0.10+0.27=0.37
	2			450	"	23.1	3.17	178	92.6	270.6			0.64	0.20		0.8 0.1	33.4 35.9	34.2 36.0	0.56	0.17	0.20+0.17=0.37
	1			"	"	"	"	238	135.0	373.0	1389.3	0.27	0.89	0.28		0.4 0.2	36.5 48.1	36.4 48.3	0.75	0.23	0.28+0.23=0.51
C8	X方向 x17 - Y9																				
	3	□-500×500×22	421	6.43	380	19.5	19.5	3.20	119	16.7	135.7		0.32	0.10		39.7 20.8	29.8 21.4	67.5 44.2	1.05	0.32	0.10+0.32=0.42
	2			450	"	23.1	3.17	178	21.8	199.8			0.47	0.15		7.6 10.2	40.7 38.7	48.3 48.9	0.76	0.23	0.15+0.23=0.38
	1			"	"	"	"	238	27.2	265.2	1389.3	0.19	0.63	0.20		8.4 4.2	38.6 58.6	47.0 62.8	0.98	0.30	0.20+0.30=0.50



No. 27

C 方向		A	Z	L _K	i	λ	f _C	N _L	N _E	N _S	N _Y	$\frac{N_S}{N_Y}$	σ_C	$\frac{\sigma_C}{f_C}$		M _L	M _E	M _S	σ_b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_C}{f_C} + \frac{\sigma_b}{f_b}$
c8	Y 方向 x16-Y8															(x15-Y10) 代替					
3	□-500x500x22	421	6.43	380	19.5	19.5	3.20	101	29.6	130.6			0.31	0.10		26.4 12.6 1.2 0.2	63.2 48.8 52.2 52.2	89.6 61.4 54.4 52.4	1.39 0.85	0.44 0.26	0.10+0.44=0.54 0.16+0.26=0.42
2				450	"	23.1	3.17	146	66.4	212.4			0.50	0.16		0.3 0.4	41.4 66.3	41.7 66.7	1.04	0.32	0.22+0.32=0.54
1				"	"	"	"	191	110.0	301.0	1389.3	0.22	0.71	0.22							
c10	Y 方向 x18-Y7																56.0 48.3 48.3 55.6				
2	□-500x500x22	421	6.43	450	19.5	19.5	3.17	47	49	51.9			0.12	0.04							
1				"	"	"	"	73	14.0	87.0	1389.3	0.06	0.21	0.07							
c10	X 方向 x18-Y7																				
2	□-500x500x22	421	6.43	450	19.5	19.5	3.17	47	33.6	80.6			0.19	0.06		7.1 5.0 2.0 1.0	85.1 69.3 48.2 61.4	92.2 74.3 50.2 62.4	1.43	0.44	0.06+0.44=0.50 0.11+0.29=0.40
1				"	"	"	"	73	76.6	149.6	1389.3	0.11	0.36	0.11							



符 号	, G1				, G1			
	Y4E	C	Y6E		Y3E	C	Y4E	
b (mm)	70				70			
D (mm)	100				100			
r _d (mm)	95				95			
r _f (mm)	83.1				83.1			
M (t/m)	長期	21.9	25.2	36.8	69.0	10.9	19.4	
	地震	(29.2) 19.8	(28.3) 26.1	(83.7) 72.1	(29.2) 20.2			
	短期	上	112.9	141.1	39.6			
	短期	下	39.3					
鉄骨	部材	BH-750×250 ×9×23		BH-750×250 ×9×19	BH-750×250 ×9×22	同左		
	sZ (mm ³)		3680	3888				
	sM (t/m)		80.9	128	128	80.9		
M (t/m)	上				13.1			
	下							
C (kg/cm ²)								
Y								
Pr (%)								
at (mm ²)	上				4.5			
	下							
m	上	2-025	2-025	2-025	2-025			
	下	2-025	2-025	2-025	2-025			
Q (t)	長期			25.2	30.1			
	地震			18.7	18.0			
	短期							
l' (mm)				515	520			
at·r _f (mm ³)				843	843			
sZ / (sZ + at·r _f)				0.82	0.82			
(sMa + sMb) / l'				49.7	49.2			
LrMa + LrMb / l'				11.8	11.5			
長期	α							
	sQ _D (t)			20.7	24.7			
	rQ _D (t)			4.5	5.4			
	sQ _A (t)			51.5	51.5			
短期	rQ _A (t)			39.3	39.3			
	α							
	sQ _D (t)			70.4	70.9			
	rQ _D (t)			16.3	16.9			
力	sQ _A (t)			22.3	22.3			
	rQ _A (t)			23.3	23.3			
	rQ _{A2} (t)			59.0	59.0			
	α							
ΔQ								
ΔQ / b·r _f								
p _w (t)								
ST		013-250t				013-250t		
断面		2-025	2-025	2-025	-	2-025	2-025	2-025
		2-025	2-025	2-025	-	2-025	2-025	2-025

符 号	, G2				, G8				, G8A	
	Y6E	G	Y7E		Y1E	C	Y3E		Y3E	
b (mm)	70				70					
D (mm)	100				100					
r _d (mm)	95				95					
r _f (mm)	83.1				83.1					
M (t/m)	長期	63.8	33.7	63.2	119.7	99.3	166.2	141.2		
	地震	(63.1) 51.7		(95.0) 84.5	(29.6)		(41.9)	(41.9)		
	短期	上	115.5	147.7						
	短期	下		21.3						
鉄骨	部材	同左			BH-750×300 ×12×33	BH-750×300 ×12×33	BH-750×300 ×12×33	同左		
	sZ (mm ³)					6955	6603			
	sM (t/m)	128	80.9	128		153.0	145.3	145.3		
M (t/m)	上			19.7			20.9			
	下									
C (kg/cm ²)										
Y										
Pr (%)										
at (mm ²)	上			6.8			11.5			
	下									
m	上			2-025	2-025	2-025	4-025	2-025		
	下			2-025	2-025	2-025	2-025	2-025		
Q (t)	長期			36.6			67.5	57.4		
	地震			17.6			5.5	5.5		
	短期									
l' (mm)				790			1190			
at·r _f (mm ³)				843			1685			
sZ / (sZ + at·r _f)				0.82			0.80			
(sMa + sMb) / l'				32.4			24.4			
LrMa + LrMb / l'				7.6			7.6			
長期	α									
	sQ _D (t)			30.0			54.0			
	rQ _D (t)			6.6			13.5			
	sQ _A (t)			51.5			66.5			
短期	rQ _A (t)			39.3			36.2			
	α									
	sQ _D (t)			62.4			78.4			
	rQ _D (t)			14.2			21.1			
力	sQ _A (t)			22.3			29.8			
	rQ _A (t)			23.3			23.3			
	rQ _{A2} (t)			59.0			54.3			
	α									
ΔQ										
ΔQ / b·r _f										
p _w (t)										
ST		013-250t				013-250t				
断面		2-025	2-025	2-025	-	2-025	2-025	(2-025) 4-025	← (1) 1440A	
		2-025	2-025	2-025	-	2-025	2-025	2-025	-	

符 号		.66, 67		.611																
		E	C																	
b	(cm)	70		70																
D	(cm)	100		100																
r _d	(cm)	95		95																
r _f	(cm)	83.1		83.1																
M (t-m)	長期	壁 付																		
	短期																			
	長期																			
	短期																			
鉄骨	部 材	BH-750×250 ×9×(22)		BH-750×250 ×9×(19)		BH-750×250 ×9×(19)														
	sZ (cm ³)																			
	sM (t-m)																			
M (t-m)	上																			
	下																			
C (kg/cm ²)																				
Y																				
P _r (%)																				
Q _t (cm ²)	上																			
	下																			
n	上																			
	下																			
Q _t (t)	長期																			
	短期																			
	長期																			
Q' (cm)																				
Q _t ·r _f (cm ³)																				
sZ / (sZ + Q _t ·r _f)																				
(sMa + sMb) / Q'																				
(vMa + vMb) / Q'																				
新 期 断 面	長期	α																		
		sQ _D (t)																		
	短期	rQ _D (t)																		
		sQ _A (t)																		
	長期	rQ _A (t)																		
		α																		
	短期	sQ _D (t)																		
		rQ _D (t)																		
	長期	sQ _A (t)																		
		rQ _A (t)																		
短期	rQ _A (t)																			
	α																			
ΔQ																				
ΔQ / b·r _f																				
P _w (%)																				
S _T		0.13-250.7c		0.13-250.7c																
断 面	2-025																			

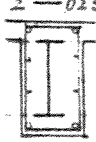
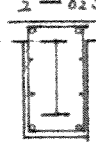
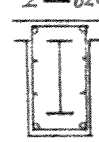
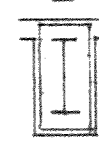
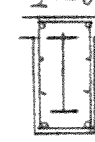
符 号																			
b	(cm)																		
D	(cm)																		
r _d	(cm)																		
r _f	(cm)																		
M (t-m)	長期																		
	短期																		
	長期																		
	短期																		
鉄骨	部 材																		
	sZ (cm ³)																		
	sM (t-m)																		
M (t-m)	上																		
	下																		
C (kg/cm ²)																			
Y																			
P _r (%)																			
Q _t (cm ²)	上																		
	下																		
n	上																		
	下																		
Q _t (t)	長期																		
	短期																		
	長期																		
Q' (cm)																			
Q _t ·r _f (cm ³)																			
sZ / (sZ + Q _t ·r _f)																			
(sMa + sMb) / Q'																			
(vMa + vMb) / Q'																			
新 期 断 面	長期	α																	
		sQ _D (t)																	
	短期	rQ _D (t)																	
		sQ _A (t)																	
	長期	rQ _A (t)																	
		α																	
	短期	sQ _D (t)																	
		rQ _D (t)																	
	長期	sQ _A (t)																	
		rQ _A (t)																	
短期	rQ _A (t)																		
	α																		
ΔQ																			
ΔQ / b·r _f																			
P _w (%)																			
S _T																			
断 面																			

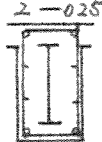
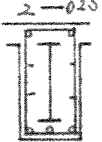
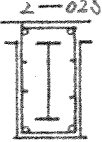
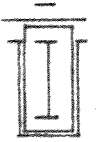
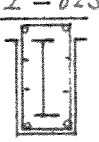
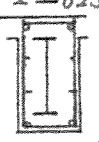
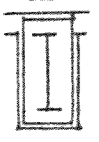
符 号	, G9			, G10		
	Y7E	C	Y8E	Y10E	C	他E
b (mm)	70			70		
D (mm)	100			100		
r _d (mm)	95			95		
r _f (mm)	83.1			83.1		
M (t/m)	長期	45.4	21.1	42.2	31.7	26.3
	地震	(113.9) 99.1	(63.8) 51.5	(90.3) 79.7	(53.2) 42.4	
	短期	144.5	93.7	111.4	95.8	
	下	53.7	9.3	48.0		
鉄骨	部 材	G11: 同11		G11: 同11		
	sZ (mm ²)	3888	3680			
	sM (t/m)	128	80.9	128		
rM (t/m)	上	16.5				
	下					
C (kg/cm ²)						
Y						
P _r (%)						
at (mm ²)	上	5.7				
	下					
n	上	2-025		2-025		
	下	2-025		2-025		
Q (t)	長期	27.7		28.2		
	地震	24.7		21.2		
	短期					
l' (mm)		610		620		
at·r _f (mm ²)		843		843		
sZ / (sZ + at·r _f)		0.82		0.82		
(sMa + sMb) / l'		42.0		41.3		
(rMa + rMb) / l'		9.9		9.8		
新 期	α					
	sQ _D (t)	22.7		23.1		
	rQ _D (t)	5.0		5.1		
	sQA (t)	51.5		51.5		
力 短 期	rQA (t)	39.3		39.3		
	α					
	sQ _D (t)	64.7		64.4		
	rQ _D (t)	14.9		14.9		
(t)	sQA (t)	77.3		77.3		
	rQA (t)	73.3		73.3		
	sQA ₁ (t)	73.3		73.3		
	rQA ₁ (t)	59.0		59.0		
ΔQ						
ΔQ / b·r _f						
P _w (%)						
ST		013-250/t		013-250/t		
断 面	2-025		2-025	2-025	2-025	2-025
	2-025		2-025	2-025	2-025	2-025

符 号	, G5		, G5A		, G3, Gk	
	E	C			E	C
b (mm)	70		70		70	
D (mm)	100		100		100	
r _d (mm)	95		95		95	
r _f (mm)	83.1		83.1		83.1	
M (t/m)	長期		壁付		壁付	
	地震	(155.1) 99.0				
	短期	99.0				
	下	99.0				
鉄骨	部 材	BH-750x250 x12x22		BH-750x250 x9x22		BH-750x250 x9x22
	sZ (mm ²)	3888				
	sM (t/m)	128				
rM (t/m)	上					
	下					
C (kg/cm ²)						
Y						
P _r (%)						
at (mm ²)	上					
	下					
n	上	2-025				
	下	2-025				
Q (t)	長期	7.0				
	地震	86.2				
	短期					
l' (mm)		230				
at·r _f (mm ²)		843				
sZ / (sZ + at·r _f)		0.82				
(sMa + sMb) / l'		111.3				
(rMa + rMb) / l'		26.4				
新 期	α					
	sQ _D (t)	5.7				
	rQ _D (t)	1.3				
	sQA (t)	68.7				
力 短 期	rQA (t)	39.3				
	α					
	sQ _D (t)	117.0				
	rQ _D (t)	27.7				
(t)	sQA (t)	103.1				
	rQA (t)	73.3				
	sQA ₁ (t)	73.3				
	rQA ₁ (t)	59.0				
ΔQ		13.9				
ΔQ / b·r _f		2.39				
P _w (%)		0.359				
ST		013-100/t		013-250/t		013-250/t
断 面	2-025		2-025	2-025	2-025	2-025
	2-025		2-025	2-025	2-025	2-025

符 号		19101		19102	
		E	C	E	C
b (mm)		80	70	70	
D (mm)		100		100	
r _d (mm)		95		95	
r _f (mm)		83.1		83.1	
M (t/m)	長期	33.0	25.4	20.7	10.7
	地震	(120.6)		(152.9)	
	短期	102.2		131.1	
	平均	135.2		151.8	
鉄骨	部 材	BM-750x250	BM-750x250	同	左
	部 材	9x(2)	9x(2)		
	SZ (mm ²)	3888	3680		
	SM (t/m)	128	80.9	128	80.9
M (t/m)	上	7.2		23.8	
	下				
C (kg/cm ²)					
Y					
P _r (%)					
α _t (mm ²)	上	2.5		8.2	
	下				
n	上	2-025	2-025	2-025	2-025
	下	2-025	2-025	2-025	2-025
Q (t)	長期	23.8		15.6	
	地震	33.0		41.2	
	短期				
Q' (mm ²)		590		600	
α _t ·r _f (mm ²)		843		843	
SZ / (SZ + α _t ·r _f)		0.82		0.82	
(S _M + S _M) / Q'		43.4		42.7	
L _r M _a + M _b / Q'		10.3		10.1	
新 期	α				
	S _{QD} (t)	19.5		12.8	
	r _{QD} (t)	4.3		2.8	
	S _{QA} (t)	51.5		51.5	
旧 期	α				
	S _{QD} (t)	62.9		55.5	
	r _{QD} (t)	14.6		12.9	
	S _{QA} (t)	77.3		77.3	
力 期	r _{QA1} (t)	73.3		73.3	
	r _{QA2} (t)	59.0		59.0	
ΔQ					
ΔQ / b·r _f					
P _w (t)					
S _r		013-250 ₀ ft		013-250 ₀ ft	
断 面	2-025				
	2-025				

符 号		19103		19104	
		OE	C	E	C
b (mm)		70		70	
D (mm)		100		100	
r _d (mm)		95		95	
r _f (mm)		83.1		83.1	
M (t/m)	長期	12.4	9.6	20.4	
	地震	(171.6)		(123.6)	
	短期	149.2		122.8	
	平均	161.6		82.0	
鉄骨	部 材	BM-750x250	BM-750x250	BM-750x250	
	部 材	9x(2)	9x(2)	9x(2)	
	SZ (mm ²)	4382	4176	4382	
	SM (t/m)	142.6	91.9	142.6	
M (t/m)	上	19.0			
	下				
C (kg/cm ²)					
Y					
P _r (%)					
α _t (mm ²)	上	6.5			
	下				
n	上	2-025			
	下				
Q (t)	長期	11.2		13.2	
	地震	37.3		32.6	
	短期				
Q' (mm ²)		625			
α _t ·r _f (mm ²)		843			
SZ / (SZ + α _t ·r _f)		0.84			
(S _M + S _M) / Q'		45.6			
L _r M _a + M _b / Q'		9.7			
新 期	α				
	S _{QD} (t)	9.4			
	r _{QD} (t)	1.8			
	S _{QA} (t)	51.0			
旧 期	α				
	S _{QD} (t)	55.0			
	r _{QD} (t)	11.5			
	S _{QA} (t)	76.5			
力 期	r _{QA1} (t)	73.3			
	r _{QA2} (t)	59.0			
ΔQ					
ΔQ / b·r _f					
P _w (t)					
S _r		013-250 ₀ ft		013-250 ₀ ft	
断 面	2-025				
	2-025				

符 号		, G105			, G105A				
		OE	C	IE	x14E	C	x15E		
b (mm)		70			70				
D (mm)		100			100				
rd (mm)		95			95				
rf (mm)		83.1			83.1				
M (t·m)	長期	12.5	14.7	27.7	0.7	11.9	72.7		
	地震	(123.7) 110.3		(21.3) 70.7	(78.2) 67.1		(81.5) 70.4		
	短期	122.8		98.4	67.8		143.1		
	下	97.8		43.0	66.4				
鉄骨	部 材	G101111			G101111				
	sz (mm ²)								
	SM (Tm)	128	80.9	128	128	80.9	128		
RM (mm)	上						15.1		
	下								
C (kg/cm ²)									
Y									
Pr (%)									
at (mm ²)	上						5.2		
	下								
n	上	2-025			2-025	2-025	2-025		
	下	2-025			2-025	2-025	2-025		
Q (t)	長期	17.1		18.5			22.6		
	地震	26.9		21.2			22.2		
	短期								
e' (mm)		620					620		
at·rf (mm ²)		843					843		
sz / (sz + at·rf)		0.82					0.82		
(sMa + sMb) / e'		41.3					41.3		
(rMa + rMb) / e'		9.8					9.8		
新断面	長期	α							
		sQD (t)	14.0				18.5		
		rQD (t)	3.1				4.1		
		sQA (t)	51.5				51.5		
	短期	rQA (t)	39.3				39.3		
		α							
		sQD (t)	55.3				59.8		
		rQD (t)	12.9				13.9		
	旧断面	sQA (t)	77.3				77.3		
		rQA (t)	73.3				73.3		
sQA (t)		59.0				59.0			
rQA (t)									
ΔQ									
ΔQ / b·rf									
ρw (%)									
ST		013-250 ₁			013-250 ₁				
断 面		2-025	2-025	2-025	-	2-025	2-025	2-025	-
									

符 号		, G106			, G107				
		x15E	C	x17E	E	C			
b	(mm)	70			50				
D	(mm)	130			100				
rd	(mm)	125			95				
rf	(mm)	109.4			83.1				
M (Tm)	長期	147.7	142.3	121.6	壁 付				
	地震	(140.8)		(89.2)		84.8			
	短期					206.4			
	下								
鉄骨	部 材	BH-1050×250 ×9×(22)	BH-1050×250 ×9×(22)	BH-1050×250 ×9×(22)	BH-750×250 ×9×(22)	BH-750×250 ×9×(19)			
	sZ (mm ²)	5536	6131	5536					
	sM (Tm)	121.8	134.9	182.7					
	rM (Tm)	12.0		23.7					
C (kg/mm ²)									
Y									
Pr (%)									
at (mm ²)	上	5.0		6.2					
	下		3.1						
n	上	2-025	2-025	2-025					
	下	2-025	2-025	2-025					
Q (t)	長期	53.7							
	地震	8.8							
	短期								
e' (mm)		1370							
at·rf (mm ²)		1109							
sZ/(sZ+at·rf)		0.83							
(sMa+sMb)/e'		26.7							
(rMa+rMb)/e'		5.8							
新 断 面	長期	α							
		sQD (t)	44.6						
		rQD (t)	9.1						
		sQA (t)	75.8						
	短期	rQA (t)	51.7						
		α							
		sQD (t)	71.3						
		rQD (t)	14.9						
旧 断 面	sQA (t)	113.7							
	rQA (t)	96.5							
	sQA (t)	77.6							
	rQA (t)								
ΔQ									
ΔQ/b·rf									
Pw (%)									
ST		013-250 ₁ ㊦			013-250 ₁ ㊦				
断 面		2-025	2-025	2-025	—	2-025	2-025	—	—
									
		2-025	U-025	2-025	—	2-025	2-025	—	—

符 号		19108											
		E	C										
b	(mm)	50											
D	(mm)	100											
r _d	(mm)	95											
r _f	(mm)	83.1											
M (t/m)	長期	壁付											
	地震												
	短期	上	下										
鉄骨	部材	BH-750×250 ×9×(19)	BH-750×250 ×9×(16)										
	sZ (mm ³)												
	sM (t/m)												
rM (t/m)	上												
	下												
c (kg/cm ³)													
γ													
P _r (%)													
a _t (mm ²)	上												
	下												
n	上												
	下												
Q (t)	長期												
	地震												
	短期												
l' (mm)													
a _t ·r _f (mm ³)													
sZ / (sZ + a _t ·r _f)													
(sM _a + sM _b) / l'													
(rM _a + rM _b) / l'													
剪断 力 (t)	長期	α											
		sQ _D (t)											
		rQ _D (t)											
		sQ _A (t)											
	地震	α											
		sQ _D (t)											
		rQ _D (t)											
		sQ _A (t)											
短期	α												
	sQ _D (t)												
	rQ _D (t)												
	sQ _A (t)												
ΔQ													
ΔQ / b·r _f													
p _w (kg)													
s _r		013-250φ											
断面		2-025	2-025	-	-	-	-	-	-	-	-	-	-

符 号														
b	(mm)													
D	(mm)													
r _d	(mm)													
r _f	(mm)													
M (t/m)	長期													
	地震													
	短期	上	下											
鉄骨	部材													
	sZ (mm ³)													
	sM (t/m)													
rM (t/m)	上													
	下													
c (kg/cm ³)														
γ														
P _r (%)														
a _t (mm ²)	上													
	下													
n	上													
	下													
Q (t)	長期													
	地震													
	短期													
l' (mm)														
a _t ·r _f (mm ³)														
sZ / (sZ + a _t ·r _f)														
(sM _a + sM _b) / l'														
(rM _a + rM _b) / l'														
剪断 力 (t)	長期	α												
		sQ _D (t)												
		rQ _D (t)												
		sQ _A (t)												
	地震	α												
		sQ _D (t)												
		rQ _D (t)												
		sQ _A (t)												
短期	α													
	sQ _D (t)													
	rQ _D (t)													
	sQ _A (t)													
ΔQ														
ΔQ / b·r _f														
p _w (kg)														
s _r														
断面		-	-	-	-	-	-	-	-	-	-	-	-	-

符 号	B/G1			B/G2				
	Y3, Y6E	C	Y4E	Y6E	C	Y7E		
L (m)	6.3			9.0				
b × D (mm)	50 × 100			50 × 100				
d, j (mm)	95, 83.1			95, 83.1				
M (t/m)	長期	24.6	25.5	26.1	28.8	52.1		
	地震	(28.0) 61.8	(28.5) 35.8	(51.8) 51.4		(7.4)		
	±	85.9		61.9	100.7			
	F	36.7		9.7	2.1			
c (kg/cm ²)	19.0		13.7	22.3		11.5		
r	0.43							
Pr (%)	0.62		0.44	0.72		0.65		
at (cm ²)	±	29.5		20.9	34.2	30.9		
	F	12.7	14.0		13.0			
n	±	6-025		5-025	7-025	7-025		
	F	3-025	4-025	2-025	3-025	4-025	3-025	
Q (t)	長期	21.1		28.3				
	地震	19.5		6.6				
	1.5 × 地震	29.3		9.9				
	My	±						
		F						
	l' (m)							
	IMy/l' (t)							
	短期							
	φ (mm)							
	Ta (kg/cm ²)							
許容力	長期	d, b, j, fs (t)	30.8		30.8			
	短期	ΔQ (t)						
	斷面	ΔQ/bj (kg/cm ²)						
	期	Pw (%)						
期	長期	d						
	短期	d, b, j, fs (t)	46.1					
	斷面	ΔQ (t)						
	期	ΔQ/bj (kg/cm ²)						
		Pw (%)	0.2					
	λ = a _w /b · Pw	254						
	ST	013-250 ₁		013-250 ₁				
斷 面		6-025	3-025	5-025	7-025	3-025	7-025	-
		3-025	4-025	2-025	3-025	4-025	-	-

符 号	B/G6			B/G6A	B/G7			B/G7A
	Y2E	C	Y3E		Y1E	C	Y2E	
L (m)	7.5				5.5			
b × D (mm)	50 × 100			50 × 250	50 × 100			50 × 250
d, j (mm)	95, 83.1				95, 83.1			
M (t/m)	長期	38.0	20.0	48.6	29.5	9.2	31.9	壁付
	地震	(23.7)		(41.9) 54.5	(20.7) 61.4		(34.6) 22.3	
	±			103.1	90.9		54.2	
	F			5.9	31.9			
c (kg/cm ²)	8.4		22.8		20.1		12.0	
r					0.35			
Pr (%)	0.48		0.74		0.63		0.39	
at (cm ²)	±	22.8	35.2		29.9		18.1	
	F		11.0		10.5	5.0		
n	±	5-025		8-025	6-025		3-025	
	F		3-025		3-025	2-025		
Q (t)	長期	29.0			18.6			
	地震	11.5			18.6			
	1.5 × 地震	17.3			27.9			
	My	±						
		F						
	l' (m)							
	IMy/l' (t)							
	短期							
	φ (mm)							
	Ta (kg/cm ²)							
許容力	長期	d						
	短期	d, b, j, fs (t)	30.8		30.8			
	斷面	ΔQ (t)						
	期	ΔQ/bj (kg/cm ²)						
期	長期	d						
	短期	d, b, j, fs (t)	46.1		46.1			
	斷面	ΔQ (t)	0.2		0.4			
	期	ΔQ/bj (kg/cm ²)	0.048		0.096			
		Pw (%)	0.203		0.206			
	λ = a _w /b · Pw	250.2			246			
	ST	013-200 ₁		013-250 ₁	013-200 ₁		013-250 ₁	
斷 面		5-025	3-025	8-025	4-025	6-025	4-025	4-025
		3-025	4-025	3-025	4-025	3-025	4-025	4-025

符 号		B/G5		B/G5A		B/G3, G4			
		E	C		E	C			
L (m)		3.6			2.0				
b × D (cm)		70 × 100		50 × 100	50 × 100				
d, j (cm)		95, 83.1			95, 83.1				
M	長期			壁付	壁付				
	短期								
	重量	85.5							
	(t/m)								
c (kg/cm ²)		18.9							
γ		1.0							
Pr (%)		0.61							
at (cm ²)		29.0							
n		6-025							
Q	長期	5.0							
	重量	74.3							
	1.5 × 重量								
	My	182.1							
	l' (m)	23.0							
	IMy/l' (t)	7.9.2							
	短期	84.2							
	φ (cm)								
Ta (kg/cm ²)									
許容力	d								
	d · b · j · fs (t)								
	ΔQ (t)								
	ΔQ/bj (kg/cm ²)								
	Pw (%)								
	d								
	d · b · j · fs (t)	64.6							
	ΔQ (t)	19.6							
	ΔQ/bj (kg/cm ²)	3.37							
	Pw (%)	0.425							
x = aw/b · Pw									
ST		0.13-100 寸							
断 面	6-025	6-025	4-025	4-025	3-025	-	-	-	
	6-025	6-025	4-025	3-025	4-025	-	-	-	

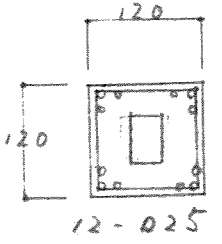
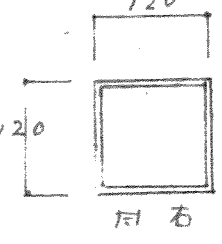
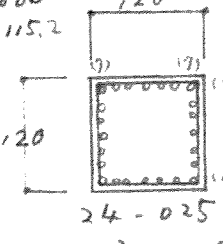
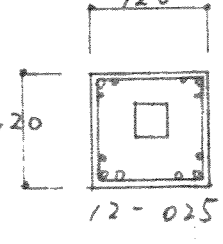
符 号																	
L (m)																	
b × D (cm)																	
d, j (cm)																	
M	長期																
	短期																
	重量																
	(t/m)																
c (kg/cm ²)																	
γ																	
Pr (%)																	
at (cm ²)																	
n																	
Q	長期																
	重量																
	1.5 × 重量																
	My																
	l' (m)																
	IMy/l' (t)																
	短期																
	φ (cm)																
Ta (kg/cm ²)																	
許容力	d																
	d · b · j · fs (t)																
	ΔQ (t)																
	ΔQ/bj (kg/cm ²)																
	Pw (%)																
	d																
	d · b · j · fs (t)																
	ΔQ (t)																
	ΔQ/bj (kg/cm ²)																
	Pw (%)																
x = aw/b · Pw																	
ST																	
断 面	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

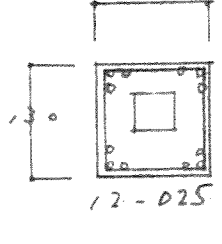
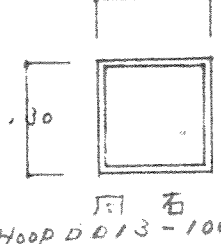
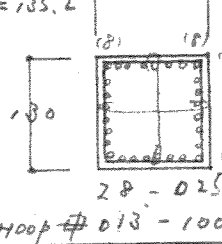
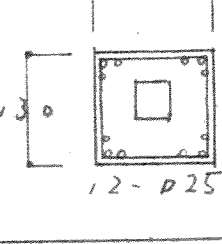
符 号	B/G101		B/G102		B/G102A		B/G103	
	E	C	E	C			E	C
L (m)	7.2		7.2				7.5	
b × D (cm)	50 × 100		50 × 100		50 × 250		50 × 100	
d, j (cm)	95, 83.1		95, 83.1				95, 83.1	
M (t/m)	長期	7.2	9.0	壁付	壁付		壁付	
	地震	(7.2) 59.6						
	短期	±	76.8					
		F	42.4					
c (kg/cm ²)	17.0							
γ	0.55							
Pt (%)	0.55							
at (cm ²)	±	26.1						
	F	14.4	4.9					
n	±	6-025						
	F	3-025	2-025					
Q (t)	長期	12.9						
	地震	20.2						
	1.5 × 地震	30.3						
	My	±						
		F						
	l' (m)							
	IMy/l' (t)							
許 容 力 断 面	長期	d						
	短期	d · b · j · fs (t)	30.8					
	長期	ΔQ (t)						
	短期	ΔQ/bj (kg/cm ²)						
	長期	Pw (%)						
	短期	d						
	長期	d · b · j · fs (t)	46.1					
期	短期	ΔQ (t)						
	長期	ΔQ/bj (kg/cm ²)						
	短期	Pw (%)						
	長期	α = aw/b · Pw						
ST	0.13 - 250 t _c		0.13 - 250 t _c		0.13 - 250 t _c		0.13 - 250 t _c	
断 面	6-025	3-025	—	4-025	3-025	4-025	4-025	3-025
	3-025	4-025	—	3-025	4-025	4-025	3-025	4-025

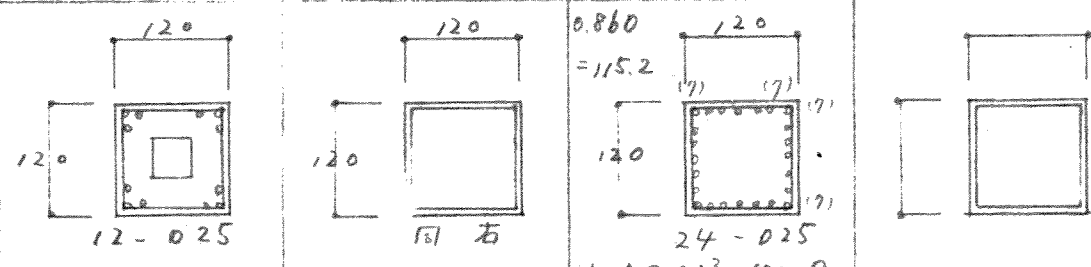
符 号	B/G107, 108		B/G104	B/G109			
	E	C		× 9.1 × 16 E	C	他 E	
L (m)	7.2		7.5	7.2			
b × D (cm)	50 × 100		50 × 250	50 × 100			
d, j (cm)	95, 83.1			95, 83.1			
M (t/m)	長期	壁付	壁付	9.1	9.3	18.6	
	地震			(4.1)		(28.3) 28.4	
	短期	±				43.0	
		F				5.8	
c (kg/cm ²)				4.2		9.5	
γ							
Pt (%)				0.21		0.30	
at (cm ²)	±			10.5		14.3	
	F				5.4		
n	±			3-025		3-025	
	F				2-025		
Q (t)	長期			14.3			
	地震			7.9			
	1.5 × 地震			11.9			
	My	±					
		F					
	l' (m)						
	IMy/l' (t)						
許 容 力 断 面	長期	d					
	短期	d · b · j · fs (t)		30.8			
	長期	ΔQ (t)					
	短期	ΔQ/bj (kg/cm ²)					
	長期	Pw (%)					
	短期	d					
	長期	d · b · j · fs (t)		46.1			
期	短期	ΔQ (t)					
	長期	ΔQ/bj (kg/cm ²)					
	短期	Pw (%)					
	長期	α = aw/b · Pw					
ST	0.13 - 250 t _c		0.13 - 250 t _c		0.13 - 250 t _c		
断 面	4-025	3-025	4-025	4-025	3-025	4-025	—
	3-025	4-025	4-025	3-025	4-025	3-025	—

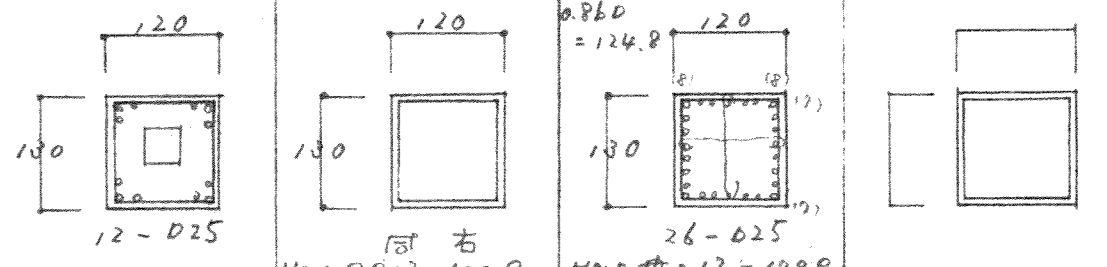
符 号	$(Y_2 - X_{11})$ B2 C ₁₂		$(Y_1 - X_{11})$ B1 C ₁₃ (T)		$(Y_1 - X_{11})$ B1 C ₁₃ (B)		$(Y_1 - X_{11})$ B2 C ₁₃	
荷重方向	→	←						
部 材 断 面	x	y	x	y	x	y	x	y
b × D (mm)	100	100	100	100	100	100	100	100
鉄 骨			H-100×200×11×7 FR-16×200 WR-12					
H00P (Pw)	0.13-100 ⁰	(0.254 ⁰)	0.13-100 ⁰				0.13-100 ⁰	
ℓ, ℓ' (mm)								
r _d , r _i (mm)								
sA, sA' (mm ²)								
sA, sA' (mm ²)								
sZ (mm ³)				2590				
f _c , f _{c'} (kg/cm ²)	160	160		80, 76.2		160		160
部材分率比 (s)								
N (t)	長期	107.0	107.0	120.0	120.0	120.0	234.0	234.0
	地震	3.4	7.1		5.5		5.5	24.1
	短期	103.6	99.9			114.5		209.9
M (t·m)	長期	0.3	6.1		119.7		39.8	5.2
	地震	69.1	67.6	壁付	29.6	壁付	29.6	壁付
	Face M							
Q (t)	長期	69.4	73.7		149.3		69.4	66.8
	地震	0	1.4		39.9		2.3	
	短期	18.6(27.9)	18.2(27.3)		14.8(22.2)		15.2(22.8)	
sN (t)								
sM (t·m)				36.2				
sDc (t/mm ²)								
sDb (t/mm ²)								
sDc+sDb (t/mm ²)								
sM' (t·m)								
sM'/ℓ' (t)								
sM'/ℓ' (t)								
rcN (t)	103.6	99.9		120.0		114.5		209.9
rcM (t·m)	69.4	73.7		83.5		69.4		66.8
rcN/bD (kg/cm ²)	10.4	10.0		12.0		11.5		21.0
rcM/bD ² (kg/cm ²)	7.0	7.4		8.4		7.0		6.7
Pt (%)	0.1	0.12		0.14		0.08		—
αt (mm ²)	10.0	12.0		14.0		8.0		
主筋	3-022	4-022		7-025		2-025		
Pt (t)								
rcM'/bD ² (kg/cm ²)								
rcM' (t·m)								
IrcM'/ℓ' (t)								
2(Q-sQ0) (t)				55.8				
長期	Q ₀₁ (t)	61.5						
	sQA (t)			61.8				
	rcQ ₁ (t)			82.6				
短期	rcQ ₀ (t)			40.6				
	QAS = f _s b ₀	92.2						
断面								

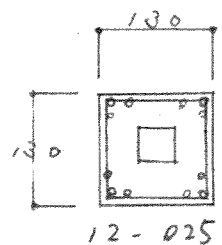
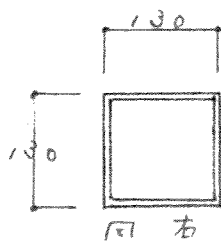
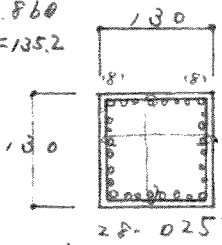
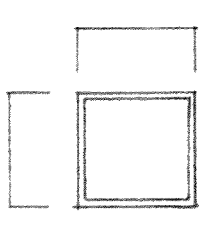
符 号	$(Y_4 - X_{11})$ B1 C ₁₁ (T)		$(Y_4 - X_{11})$ B1 C ₁₁ (B)		$(Y_4 - X_{11})$ B2 C ₁₁		C	
荷重方向								
部 材 断 面	x	y	x	y	x	y	x	y
b × D (mm)	100	100	100	100	100	100		
鉄 骨								
H00P (Pw)	0.13-100 ⁰	(0.254 ⁰)						
ℓ, ℓ' (mm)								
r _d , r _i (mm)								
sA, sA' (mm ²)								
sA, sA' (mm ²)								
sZ (mm ³)								
f _c , f _{c'} (kg/cm ²)		1190		160	160	160		
部材分率比 (s)								
N (t)	長期	91.0	91.0	91.0	91.0	198.0	198.0	
	地震		0.7		0.7	0	1.5	
	短期		90.3		90.3	198.0	196.5	
M (t·m)	長期		4.8		1.7	0	0.7	
	地震	壁付	58.3	壁付	47.7	75.4	73.8	
	Face M							
Q (t)	長期		63.1		49.4	75.4	74.5	
	地震		0.8		0	0	0	
	短期		26.5		18.6(27.9)	18.2(27.3)		
sN (t)								
sM (t·m)			24.9					
sDc (t/mm ²)								
sDb (t/mm ²)								
sDc+sDb (t/mm ²)								
sM' (t·m)								
sM'/ℓ' (t)								
sM'/ℓ' (t)								
rcN (t)		90.3		90.3	198.0	196.5		
rcM (t·m)		38.2		49.4	75.4	74.5		
rcN/bD (kg/cm ²)		9.1		9.1	19.8	19.7		
rcM/bD ² (kg/cm ²)		3.9		5.0	7.6	7.5		
Pt (%)		0.02		0.04	0	0		
αt (mm ²)		2.0		4.0				
主筋								
Pt (t)								
rcM'/bD ² (kg/cm ²)								
rcM' (t·m)								
IrcM'/ℓ' (t)								
2(Q-sQ0) (t)		38.0						
長期	Q ₀₁ (t)							
	sQA (t)		40.3					
	rcQ ₁ (t)		123.9					
短期	rcQ ₀ (t)							
	QAS = f _s b ₀							
断面								

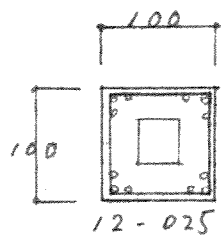
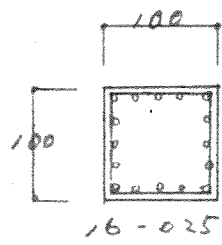
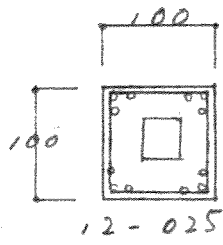
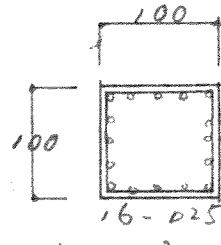
符 号	(Y3-X11) B1 C2 (T)	(Y3-X11) B1 C2 (D)	(Y3-X11) B2 C2	(Y3-X10) B1, B2 C2A (T)
断面方向	→			
部 位 詳 細	X	Y	X	Y
b × D (mm)	120	120	120	120
鉄 骨	□ 4-550×700×36			□ 4-550×550×32
H00P (Pw)	D 013-100			D 013-100 (0.211 ¹)
g, g' (mm)				
rd, rj (mm)				
sA, sA' (mm ²)				
sA, sAw (mm ²)	848.0	848.0		663.0 663.0
sE (mm ²)	14.5×10 ³	16.7×10 ³		10.8×10 ³ 10.8×10 ³
fc, fc' (kg/cm ²)			160	160
配 分 担 比 (S)				
N (t)	長期	934.0	934.0	934.0 1033.0
	地震	98.6	233.6	98.6 233.6
	短期	1032.6	700.4	1032.6 700.4
M (tm)	長期	0	97.2	0 29.5
	地震	77.9	59.0	63.8 59.0
	Face M			
Q (t)	長期	77.9	156.2	63.8 188.5
	地震	0	31.7	0 1.5
	短期	35.4	29.5	30.3(45.4)
sN (t)				
sM (t·m)				
sEc (T/mm ²)				
sEb (T/mm ²)				
sEc+sEb (T/mm ²)				
sM' (t·m)				
EsM/L' (t)				
EsM'/L' (t)				
rcN (t)			1032.6	700.4
rcM (t·m)			63.8	88.5
rcN/bD (kg/cm ²)			71.7	48.7
rcM/bD ² (kg/cm ²)			3.7	5.2
Pt (%)			0	0
Qt (mm ²)				
主 筋				
Pt (t)				
rcM'/bD ² (kg/cm ²)				
rcM' (t·m)				
IrcM'/L' (t)				
2(Q-sQ0) (t)				
長期	QA (t)			
短期	sQA (t)			
	rcQ1 (t)			
	rcQ2 (t)			
fs, b, d			134.0	
gc = N/sA, gc/fc	1.22, 0.37	0.83, 0.26		1.56, 0.48
gb = M/sE, gb/fb	0.54, 0.17	0.94, 0.29		0.72, 0.22
gc/fc + gb/fb	0.54	0.55		0.70
				0.77
断 面				

符 号	(Y6-X11) B1 C1 (T)	(Y6-X11) B1 C1 (B)	(Y6-X11) B2 C1	(Y6-X10) B1, B2 C1A (T)
断面方向	→			
部 位 詳 細	X	Y	X	Y
b × D (mm)	130	130	130	130
鉄 骨	□ 4-650×650×36			□ 4-550×550×32
H00P (Pw)	D 013-100			D 013-100 (0.2930)
g, g' (mm)				
rd, rj (mm)				
sA, sA' (mm ²)				
sA, sAw (mm ²)	884.0	884.0		663.0 663.0
sE (mm ²)	17.1×10 ³	17.1×10 ³		10.8×10 ³ 10.8×10 ³
fc, fc' (kg/cm ²)			160	160
配 分 担 比 (S)				
N (t)	長期	983.0	983.0	983.0 1101.0
	地震	24.0	49.7	24.0 49.7
	短期	1007.0	1032.7	1007.0 1032.7
M (tm)	長期	9.1	27.1	4.5 19.9
	地震	85.8	78.0	70.2 52.0
	Face M			
Q (t)	長期	94.9	105.1	74.7 71.9
	地震	3.4	11.8	0 1.1
	短期	39.0	32.5	37.1(55.7) 36.4(54.6)
sN (t)				
sM (t·m)				
sEc (T/mm ²)				
sEb (T/mm ²)				
sEc+sEb (T/mm ²)				
sM' (t·m)				
EsM/L' (t)				
EsM'/L' (t)				
rcN (t)			1007.0	1032.7
rcM (t·m)			74.7	71.9
rcN/bD (kg/cm ²)			59.6	61.1
rcM/bD ² (kg/cm ²)			3.5	3.3
Pt (%)			0	0
Qt (mm ²)				
主 筋				
Pt (t)				
rcM'/bD ² (kg/cm ²)				
rcM' (t·m)				
IrcM'/L' (t)				
2(Q-sQ0) (t)				
長期	QA (t)			
短期	sQA (t)			
	rcQ1 (t)			
	rcQ2 (t)			
fs, b, d			157.8	
gc = N/sA, gc/fc	1.14, 0.35	1.17, 0.36		1.52, 0.46
gb = M/sE, gb/fb	0.56, 0.17	0.62, 0.19		0.88, 0.27
gc/fc + gb/fb	0.52	0.55		0.73
				0.78
断 面				

符 号	(Y_7-X_{11}) B1 C3 (T)		(Y_7-X_{11}) B1 C3 (B)		(Y_7-X_{11}) B2 C3		C	
断面方向	X	Y	X	Y	X	Y	X	Y
部 材 種 別	120	120	120	120	120	120		
b × D (mm)								
鉄 骨	□ D-550×550×32							
Hoop (Pw)	D 013-100 e				D 013-100 e			
l, l' (mm)								
rd, rj (mm)								
sA, sAw (mm ²)	663.0	663.0						
sE (mm ²)	10.8 × 10 ³	10.8 × 10 ³						
fc, fb (kg/cm ²)			160		160			
部材分率比 (s)								
N (t)	長期	86.8	86.8.0	86.8	86.8.0	98.3	98.3.0	
	地震		196.4		196.4		167.8	
	短期		1064.4		1064.4		1150.8	
M (tm)	長期		17.6		8.8		0	
	地震	壁付	101.0	壁付	123.1	壁付	112.3	
	Face M							
Q (t)	長期		118.6		131.9		112.3	
	地震		6.6		0		0	
	短期		56.0		30.3 (45.4)			
sN (t)								
sM (tm)								
sEc (t/mm ²)								
sEb (t/mm ²)								
sEc+sEb (t/mm ²)								
sM' (tm)								
ΣsM/l' (t)								
ΣsM/l' (t)								
rcN (t)			1064.4		1150.8			
rcM (tm)			131.9		112.3			
rcN/bD (kg/cm ²)			74.0		80.0			
rcM/bD ² (kg/cm ²)			7.7		4.7			
Pt (t)			0		0			
Qt (mm ²)								
主 筋								
Pt (t)								
rcM'/bD ² (kg/cm ²)								
rcM' (tm)								
ΣrcM'/l' (t)								
Σ(Q-sQd) (t)								
長期	QAL (t)							
短期	sQA (t)							
	rcQ1 (t)							
	rcQ2 (t)							
fs, b, d					134.0			
fc = N/sA, fb/fc		1.61, 0.49						
fb = M/sE, fb/fb		1.10, 0.34						
fb/fc + fb/fb		0.83						
断 面								

符 号	(Y_6-X_{17}) B1 C6 (T)		(Y_6-X_{17}) B1 C6 (B)		(Y_6-X_{17}) B2 C6		C	
断面方向	X	Y	X	Y	X	Y	X	Y
部 材 種 別	120	130	120	130	120	130		
b × D (mm)								
鉄 骨	□ D-550×550×32							
Hoop (Pw)	D 013-100 e							
l, l' (mm)								
rd, rj (mm)								
sA, sAw (mm ²)	663.0	663.0						
sE (mm ²)	10.8 × 10 ³	10.8 × 10 ³						
fc, fb (kg/cm ²)			160					
部材分率比 (s)								
N (t)	長期	633.0	633.0	633.0	633.0	756	756	
	地震	371.5		371.5				
	短期	261.5		261.5				
M (tm)	長期	12.1		6.1				
	地震	95.7	壁付	31.9	壁付	壁付	壁付	
	Face M							
Q (t)	長期	107.8		38.0				
	地震	4.6						
	短期	31.9						
sN (t)								
sM (tm)								
sEc (t/mm ²)								
sEb (t/mm ²)								
sEc+sEb (t/mm ²)								
sM' (tm)								
ΣsM/l' (t)								
ΣsM/l' (t)								
rcN (t)				261.5				
rcM (tm)				38.0				
rcN/bD (kg/cm ²)				16.8				
rcM/bD ² (kg/cm ²)				2.1				
Pt (t)				0				
Qt (mm ²)								
主 筋								
Pt (t)								
rcM'/bD ² (kg/cm ²)								
rcM' (tm)								
ΣrcM'/l' (t)								
Σ(Q-sQd) (t)								
長期	QAL (t)							
短期	sQA (t)							
	rcQ1 (t)							
	rcQ2 (t)							
fs, b, d								
fc = N/sA, fb/fc	0.40, 0.13							
fb = M/sE, fb/fb	1.00, 0.31							
fb/fc + fb/fb	0.44							
断 面								

符 号		(Y5-X9) B1 C4 (T)		(Y5-X9) B1 C4 (B)		(Y5-X9) B2 C4		(Y5-X9) B1, B2 C5, 7	
断面形状		x	y	x	y	x	y	x	y
部 材 数									
b × D (mm)		130	130	130	130	130	130		
鉄 骨		□ 0-550×550×32							
Hoop (Pw)		0.013-100C							
s, s' (mm)									
rd, rf (mm)									
cA, cA' (mm²)									
sA, sA' (mm²)		663.0	663.0						
sE (mm²)		10.8×10	10.8×10						
fc, ft' (kg/cm²)		160		160		160			
配分率比 (%)									
N (t)	長期	760.0	760.0	760.0	760.0	898.0	898.0		
	地震	328.5		328.5					
	短期	431.5		431.5					
M (t-m)	長期	10.5		5.3					
	地震	62.5	壁付	51.2	壁付	壁付	壁付		
	Face M								
Q (t)	長期	73.0		56.5					
	地震	4.0							
	短期	28.4							
sN (t)									
sM (t-m)									
sSc (T/mm²)									
sSb (t/mm²)									
sSc+sSb (T/mm²)									
sM' (t-m)									
ΣsM'/L' (t)									
ΣsM'/L' (T)									
rcN (t)				431.5					
rcM (t-m)				56.5					
rcN/bD (kg/cm²)				25.5					
rcM/bD² (kg/cm²)				2.6					
Pt (%)				0					
Qt (mm²)									
主 筋									
Pt' (%)									
rcM'/bD² (kg/cm²)									
rcM' (t-m)									
IrcM'/L' (t)									
Σ(Q-sQD) (t)									
長期	QsL (t)								
	sQA (t)								
短期	rcQs (t)								
	rcQs (t)								
σc = N/sA, σc'/fc		0.65, 0.20							
σc = M/sZ, σc'/ft		0.68, 0.21							
σc'/fc + σc'/ft		0.41							
断 面									
									
									
									

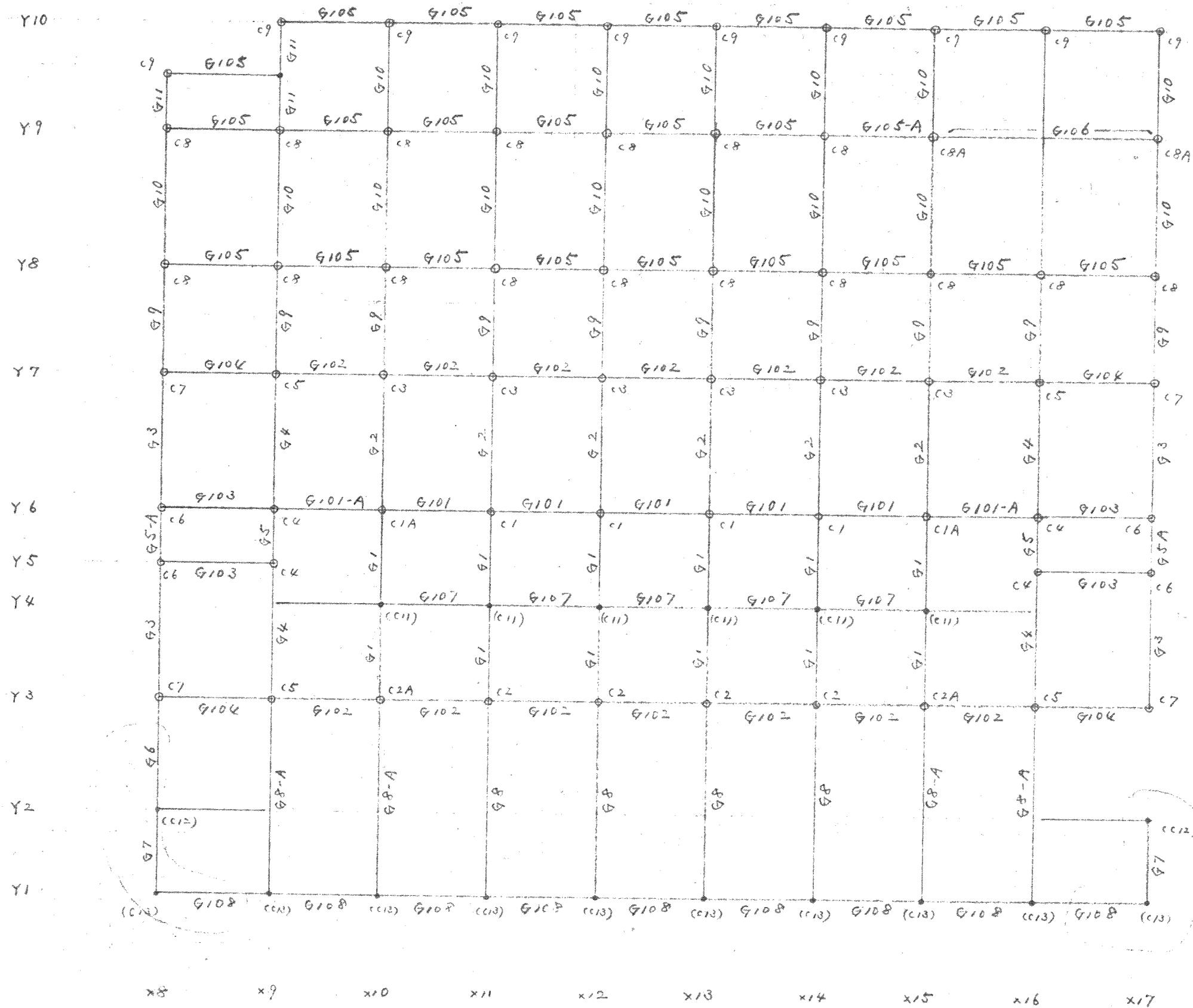
符 号		(Y8-X11) B1 C8 (T)	(Y8-X11) B1 C8 (B)	(Y9-X17) B1 C8A (T)	(Y9-X17) B1 C8A (B)
断面形状		x	y	x	y
b × D (mm)		100	100	100	100
鉄 骨		□ 0-500×500×22			
Hoop (Pw)		0.013-100C			
s, s' (mm)					
rd, rf (mm)					
cA, cA' (mm²)					
sA, sA' (mm²)		421.0	421.0	663.0	663.0
sE (mm²)		6.42 × 10³	6.42 × 10³	10.8 × 10³	10.8 × 10³
fc, ft' (kg/cm²)			160	160	
配分率比 (%)					
N (t)	長期	313.0	313.0	313.0	313.0
	地震	14.6	55.8	14.6	55.8
	短期	327.6	368.8	327.6	368.8
M (t-m)	長期	2.8	8.4	1.2	4.2
	地震	62.4	49.6	93.6	92.1
	Face M				
Q (t)	長期	64.7	58.0	94.8	96.3
	地震	0.9	3.2	45.6	45.6
	短期	39.0	35.4	21.2	21.2
sN (t)					
sM (t-m)					
sSc (t/mm²)					
sSb (t/mm²)					
sSc+sSb (t/mm²)					
sM' (t-m)					
IsM'/L' (t)					
ΣsM'/L' (t)					
rcN (t)					
rcM (t-m)					
rcN/bD (kg/cm²)					
rcM/bD² (kg/cm²)					
Pt (%)					
Qt (mm²)					
主 筋					
Pt (%)					
rcM'/bD² (kg/cm²)					
rcM' (t-m)					
IrcM'/L' (t)					
ΣrcM'/L' (t)					
Σ(Q-sQD) (t)					
長期	QsL (t)				
	sQA (t)				
	rcQs (t)				
	rcQs (t)				
短期	QsL (t)				
	sQA (t)				
	rcQs (t)				
	rcQs (t)				
σc = N/sA, σc'/ft		0.78, 0.24, 0.88, 0.27			
σc = M/sZ, σc'/ft		1.01, 0.31, 0.91, 0.28			
σc'/ft + σc'/ft		0.55, 0.55			
断面					
					

B-10. 断面リスト

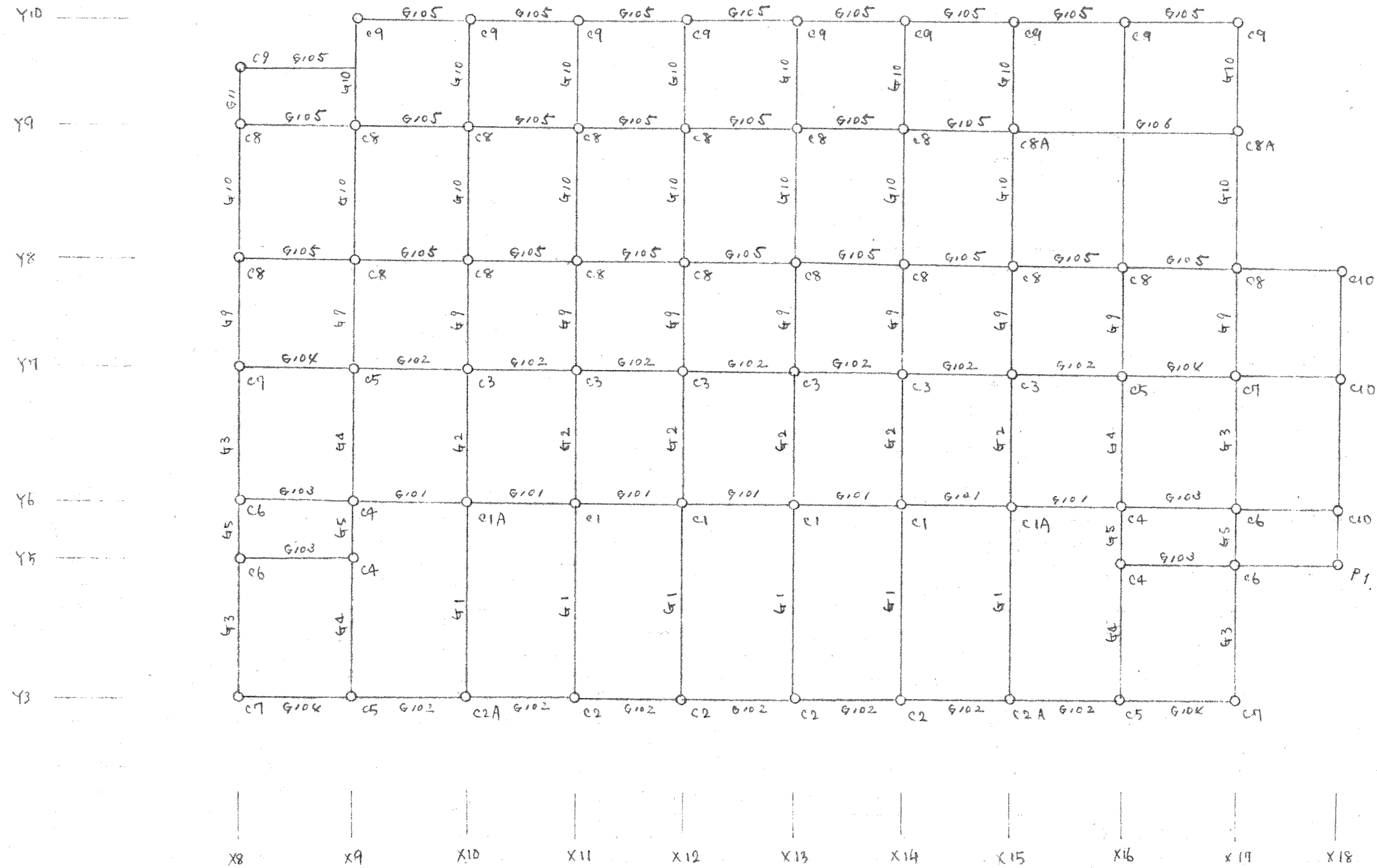
10-1) 梁柱 Key Plan

10-2) 梁断面リスト

10-3) 柱断面リスト



1階梁伏図



	G101, G103	G101-A	G102	G104	G105	G106	G102-A
R	端 BH-850×250×16×19 中 BH-850×250×12×16		BH-850×300×16×23 BH-850×300×12×19	BH-850×300×16×22 BH-850×300×16×22			
M15	端 同 上 中 (G103のH)			同 上			
15	端 同 上 中 同 上	BH-500×300×12×23 BH-500×300×12×19	同 上	同 上			
14	端 BH-850×250×16×22 中 BH-850×250×12×19		BH-850×250×16×22 BH-850×250×12×19	同 上			
13	端 同 上 中 同 上		同 上	同 上			
12	端 BH-850×300×16×22 中 BH-850×300×12×19		BH-850×300×16×22 BH-850×300×12×19	同 上			
11	端 同 上 中 同 上		同 上	同 上			
10	端 同 上 中 同 上		同 上	同 上			
9	端 BH-850×300×16×25 中 BH-850×300×12×22		同 上	同 上			
8	端 同 上 中 同 上		同 上	同 上			
7	端 同 上 中 同 上		BH-850×300×16×23 BH-850×300×12×22	同 上			
6	端 同 上 中 同 上		同 上	同 上			
5	端 同 上 中 同 上		同 上	同 上			
4	端 同 上 中 同 上		同 上	同 上	BH-850×300×16×22 BH-850×300×12×19	BH-850×300×16×22 BH-850×300×12×19	
3	端 同 上 中 同 上		同 上	同 上	同 上	同 上	
2	端 同 上 中 同 上		同 上	同 上	同 上	同 上	□-600×550×25

	91	91-A, 92-A	92	93	94	95	99, 910	911
R	端 BH-850×300×16×22 中 BH-850×300×12×22		BH-850×250×16×22 BH-850×250×12×22	BH-850×300×16×22 BH-850×300×16×22	BH-500×300×12×22 BH-500×300×12×22	BH-600×400×12×22 BH-600×400×12×22		
115	端 中			同 上	同 上	同 上		
15	端 BH-1000×300×19×25 中 BH-1000×300×16×25	BH-1350×200×19×22 BH-1350×200×19×19	BH-1000×300×19×25 BH-1000×300×16×22	同 上	同 上	同 上		
14	端 BH-850×300×16×22 中 BH-850×300×12×22		BH-850×250×16×22 BH-850×250×12×19	同 上	同 上	同 上		
13	端 中		同 上	同 上	同 上	同 上		
12	端 BH-850×300×16×25 中 BH-850×300×12×25		BH-850×300×16×22 BH-850×300×12×19	同 上	同 上	同 上		
11	端 中		同 上	同 上	同 上	同 上		
10	端 中		同 上	同 上	同 上	同 上		
9	端 中		同 上	同 上	同 上	同 上		
8	端 BH-850×300×16×28 中 BH-850×300×12×28		同 上	同 上	同 上	同 上		
7	端 中		同 上	同 上	同 上	同 上		
6	端 中		同 上	同 上	同 上	同 上		
5	端 中		同 上	同 上	同 上	同 上		
4	端 中		同 上	同 上	同 上	同 上	BH-850×300×16×22 BH-850×300×12×19	BH-850×250×16×19 BH-850×250×16×19
3	端 中	BH-1000×300×19×29 BH-1000×300×16×22	同 上	同 上	同 上	同 上	同 上	同 上
2	端 中		同 上	同 上	同 上	同 上	同 上	同 上

柱断面リスト

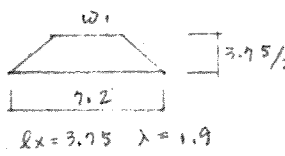
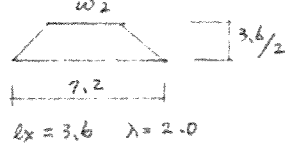
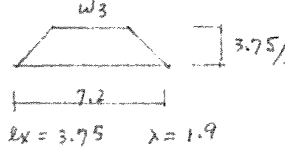
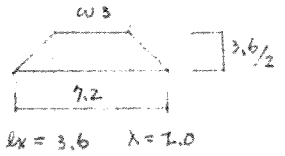
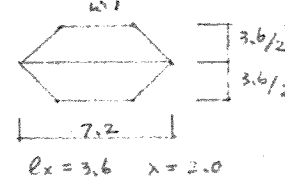
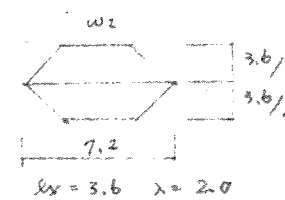
	c1. c1A (174)	c2. c2A (174)	c3	c4	c5	c6	c7	c8	c9	c10	P1
15	550 ² × 19	550 ² × 19	550 ² × 19	550 ² × 19	550 ² × 19	550 ² × 19	550 ² × 19				
14	"	"	"	"	"	"	"				
13	"	"	"	"	"	"	"				
12	"	"	"	"	"	"	"				
11	550 ² × 22	550 ² × 22	550 ² × 22	550 ² × 22	550 ² × 22	550 ² × 22	550 ² × 22				
10	"	"	"	"	"	"	"				
9	"	"	"	"	"	"	"				
8	550 ² × 25	550 ² × 25	550 ² × 25	550 ² × 25	550 ² × 25	550 ² × 25	550 ² × 25				
7	"	"	"	"	"	"	"				
6	"	"	"	"	"	"	"				
5	550 ² × 28	550 ² × 28	550 ² × 28	550 ² × 28	550 ² × 28	550 ² × 28	550 ² × 28				
4	"	"	"	"	"	"	"				
3	"	"	"	"	"	"	"	500 ² × 22	500 ² × 22		
2	650 ² × 36 (550 ² × 32)	550 × 700 × 36 (550 ² × 32)	550 ² × 32	550 ² × 32	550 ² × 32	550 ² × 32	550 ² × 40	"	"	500 ² × 22	H-300 × 300 × 10 × 15
1	"	"	"	"	"	"	"	"	"	"	

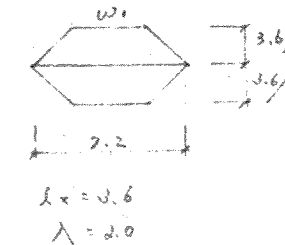
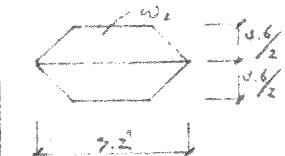
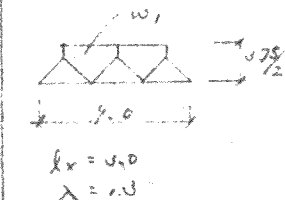
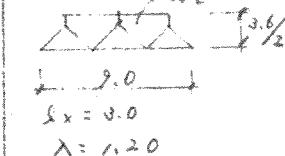
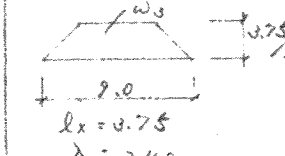
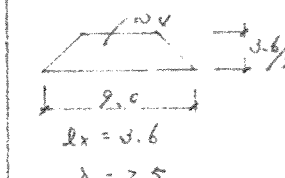
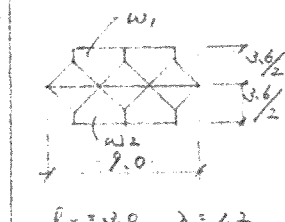
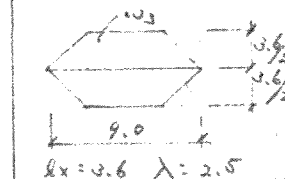
B-11. 基礎の設計

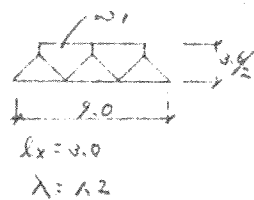
- 11-1) C, M_0, Q の計算
- 11-2) 基礎梁応力 (鉛直時, 水圧時, 抗偏心)
- 11-3) 基礎梁断面算定
- 11-4) 地中小梁応力
- 11-5) 地中小梁断面算定
- 11-6) 地中連続壁の設計
- 11-7) 地下外壁の設計
- 11-8) 耐水盤の設計

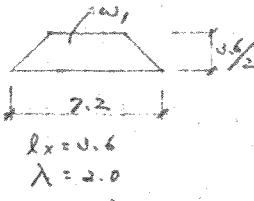
C. No. 8. (F1)

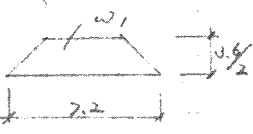
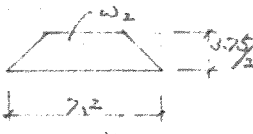
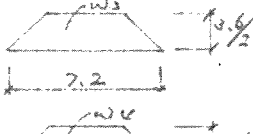
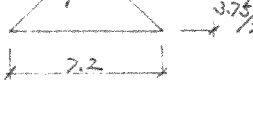
注) w_1, w_2, w_3, w_4 は床荷重又は基礎自重を示す。

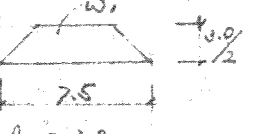
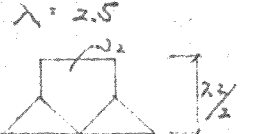
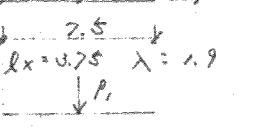
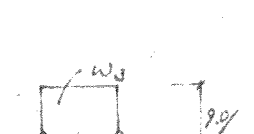
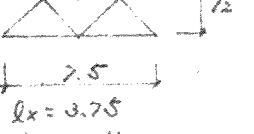
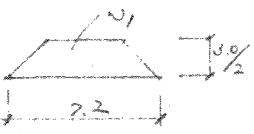
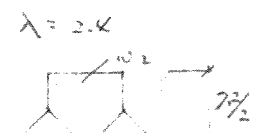
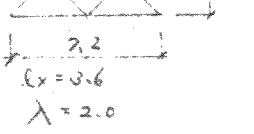
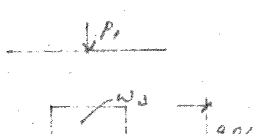
場所	内容	C	M ₀	Q
Y7-Y8 x9 (B1F)	 $w_1 = 0.78$ $C/w = 8.11$ $M_0/w = 12.51$ $Q_0/w = 5.42$	6.3	9.8	4.2
	 $w_2 = 0.69$ $C/w = 6.89$ $M_0/w = 10.63$ $Q_0/w = 4.86$	4.8	7.3	3.4
	 $w_3 = 2.30$ $C/w = 8.11$ $M_0/w = 12.51$ $Q_0/w = 5.42$	18.7	28.8	12.5
	 $w_3 = 2.30$ $C/w = 6.89$ $M_0/w = 10.63$ $Q_0/w = 4.86$	15.8 45.6	24.4 70.3	11.2 31.3
Y7-Y8 x10 (B1F)	 $w_1 = 0.69$ $C/w = 6.89 \times 2$ $M_0/w = 10.63 \times 2$ $Q_0/w = 4.86 \times 2$	9.5	14.7	6.7
	 $w_2 = 2.30$ $C/w = 6.89 \times 2$ $M_0/w = 10.63 \times 2$ $Q_0/w = 4.86 \times 2$	31.7 41.2	48.9 63.6	22.4 29.1

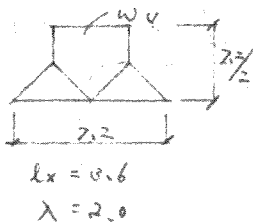
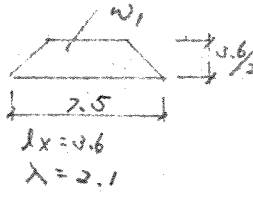
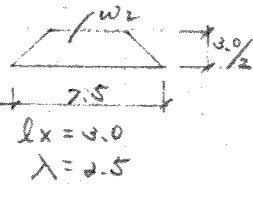
場所	内容	C	M ₀	Q
Y7-Y8 x16 (B1F)	 $w_1 = \frac{1}{2}(0.69 + 1.08) = 0.89$ $C/w = 6.89 \times 2$ $M_0/w = 10.63 \times 2$ $Q_0/w = 4.86 \times 2$	12.3	19.0	8.6
	 $w_2 = 2.30$	31.7 44.0	48.9 67.9	22.4 31.0
Y8-Y9 x9 (B1F)	 $w_1 = 0.78$ $C/w = 12.50$ $M_0/w = 18.05$ $Q_0/w = 6.98$	9.8	14.1	5.4
	 $w_2 = 0.69$ $C/w = 11.60$ $M_0/w = 16.70$ $Q_0/w = 6.53$	8.0	11.5	4.5
	 $w_3 = 2.30$ $C/w = 12.10$ $M_0/w = 18.54$ $Q_0/w = 6.85$	27.8	42.6	15.8
	 $w_4 = 2.30$ $C/w = 11.23$ $M_0/w = 17.18$ $Q_0/w = 6.48$	25.8 71.4	39.5 107.7	14.9 40.6
Y8-Y9 x10 x11 (B1F)	 $w_1 = 0.69$ $w_2 = 1.24$	8.0 14.4	11.5 20.7	4.5 8.1
	 $w_3 = 2.30$	51.7 74.1	79.0 111.2	29.8 42.4

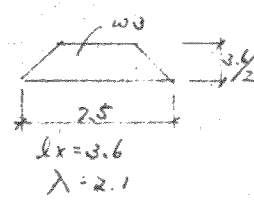
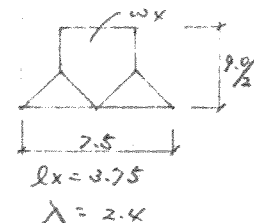
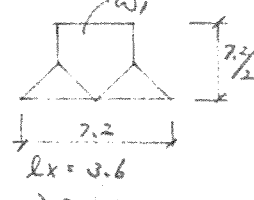
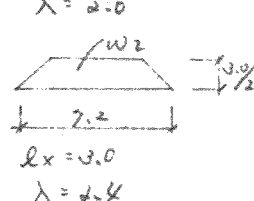
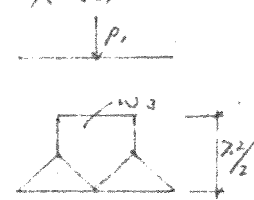
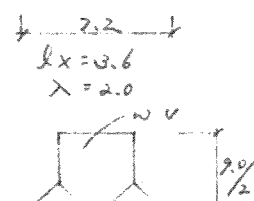
階	内 容	C	M ₀	Q
Y8-Y9				
x12	同上			
?				
x14				
(BIF)	$w_1 = 0.69$	8.0	11.5	4.5
	$w_2 = 0.69$	8.0	11.5	4.5
	$w_3 = 2.30$	51.7	79.0	29.8
		67.7	102.0	38.8
Y8-Y9				
x15	同上			
?				
(BIF)	$w_1 = 0.69$	8.0	11.5	4.5
	$w_2 = 0.78$	9.0	13.0	5.1
	$w_3 = 2.30$	51.7	79.0	29.8
		68.7	103.5	39.4
Y8-Y9				
x16				
?				
(BIF)				
	$w_1 = 0.78$	9.0	13.0	5.1
	$w_2 = 0.78$	9.8	14.1	5.4
	$w_3 = 2.30$	51.7	79.0	29.8
		70.5	106.1	40.3

階	内 容	C	M ₀	Q
Y9-Y10				
x11				
?				
(BIF)				
	$w_1 = 1.24$	8.5	13.2	6.0
	$w_2 = 0.69$	4.8	7.3	3.4
	$w_3 = 2.30$	31.7	48.9	22.4
		45.0	69.4	31.8
Y9-Y10				
x12	Y7-Y8 $1: \sqrt{3} (1'')$ x10			
?				
(BIF)				
	$w_1 = 0.69$	4.8	7.3	3.4
	$w_2 = 0.78$	5.4	8.3	3.8
	$w_3 = 2.30$	31.7	48.9	22.4
		41.9	64.5	29.6

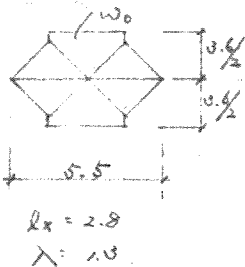
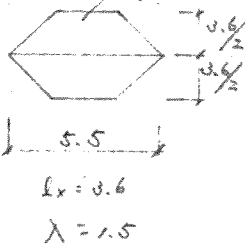
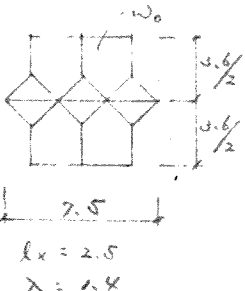
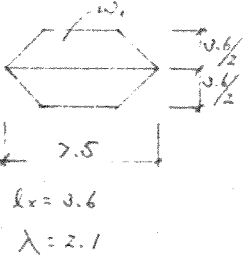
場所	内容	C	M ₀	Q
Y9-Y10				
x16		5.4	8.0	3.8
(B/F)		6.0	9.8	4.2
		15.8	24.4	11.2
		18.7	28.8	12.5
		46.2	71.0	31.7

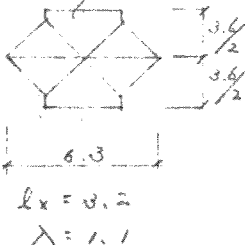
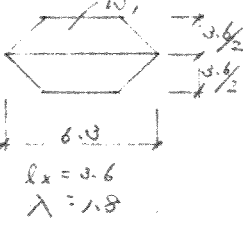
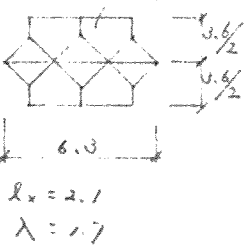
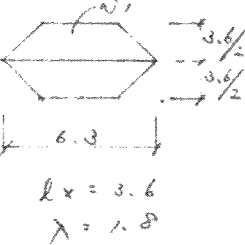
場所	内容	C	M ₀	Q
x8-x9				
Y8		5.1	7.8	3.5
(B/F)		11.3	20.4	6.8
x16-x17		8.3	16.5	4.4
Y8		41.2	75.7	24.1
同1		33.3	59.9	19.7
		99.2	180.2	58.7
x9-x10				
Y8		4.1	6.3	3.0
(B/F)		8.9	16.1	5.6
x11-x15		6.8	13.5	3.8
同1		36.4	67.1	22.4

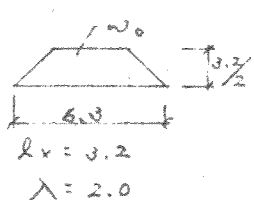
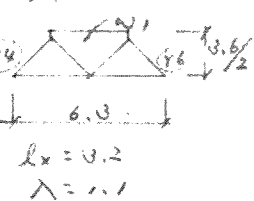
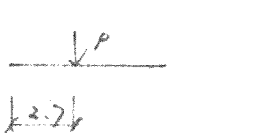
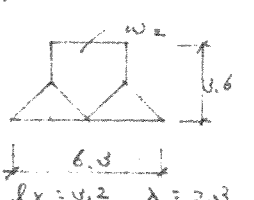
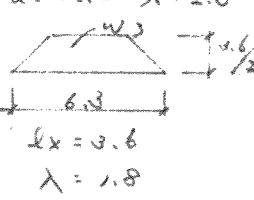
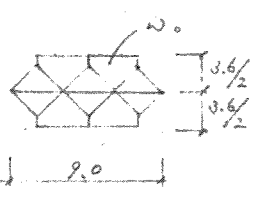
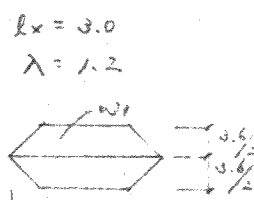
場所	内容	C	M ₀	Q
	 $w_4 = 2.00$	29.7	53.7	18.6
		85.9	156.7	53.4
x10-x11				
Y8	同上	7.4	11.3	5.3
(B/F)		8.9	16.1	5.6
	$w_1 = 1.24$	12.2	24.3	6.8
	$w_2 = 0.69$	36.4	67.1	22.4
	$p_1 = 13.5$	29.7	53.7	18.6
	$w_3 = 2.3$	94.6	172.5	58.7
	$w_4 = 2.3$			
x15-x16				
Y8	同上	4.6	7.1	3.3
	$w_2 = (0.78 + 1.08) \times \frac{1}{2} = 0.93$	12.0	21.7	7.5
	$p_1 = 0.78 \times 3.6 \times 3.0 = 8.4$	7.6	15.1	4.2
	$w_3 = 2.30$	36.4	67.1	22.4
	$w_4 = 2.30$	29.7	53.7	18.6
		90.3	164.7	56.0
x8-x9				
Y9	 $w_1 = 0.78$ $\frac{C}{W} = 7.68$ $\frac{M_0}{W} = 11.84$ $\frac{Q}{W} = 5.18$	6.0	9.2	4.0
	 $w_2 = 0.78$	5.1	7.8	3.5
	$p_1 = 0.78 \times 3.75 \times 3 = 8.8$	8.3	16.5	4.4

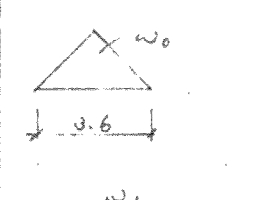
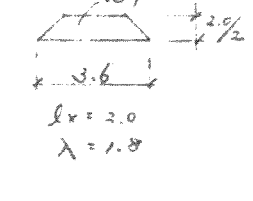
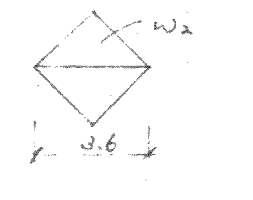
場所	内容	C	M ₀	Q
	 $w_3 = 2.3$	17.7	27.2	11.9
	 $w_4 = 2.3$	41.2	75.7	24.1
		78.3	136.4	47.9
x9-x10				
Y9	$\frac{x9-x10}{Y8}$ 1:同1	85.9	156.7	53.4
(B/F)				
x11-x15	同1			
x10-x11				
Y9	 $w_1 = 1.24$	16.0	28.7	10.0
(B/F)				
	 $w_2 = 1.24$	7.4	11.3	5.3
	$p_1 = 1.24 \times 3.6 \times 3.0 = 13.4$	12.1	24.1	6.7
	 $w_3 = 2.3$	29.7	53.7	18.6
	 $w_4 = 2.3$	36.4	67.1	22.4
		101.6	185.1	63.0

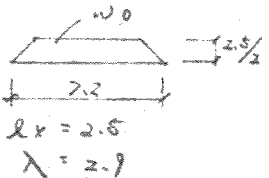
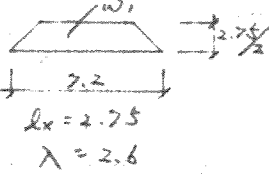
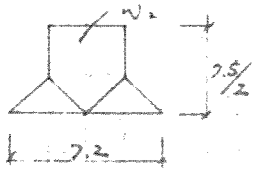
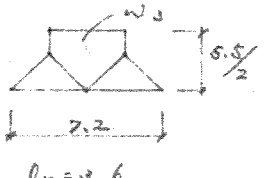
C. M. Q. (B2)

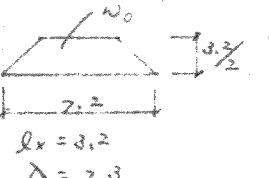
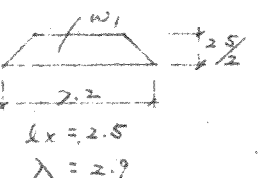
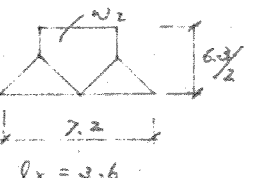
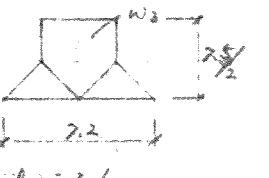
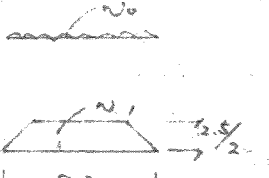
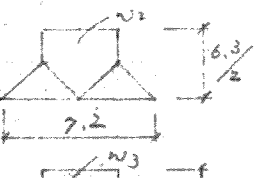
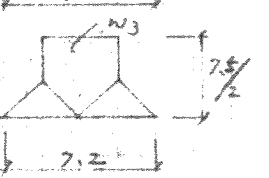
場所	内容	C	M ₀	Q	
Y1-Y2 x11 x12 (B2F)	 $w_0 = 1.29$ $C/w = 4.15$ $M_0/w = 7.13$ $Q/w = 3.53$	10.7	18.4	9.1	
	 $w_1 = 2.60$ $C/w = 3.55$ $M_0/w = 5.57$ $Q/w = 3.24$	$\frac{18.5}{29.2}$	$\frac{29.0}{47.4}$	$\frac{16.8}{25.9}$	
Y1-Y2 x14 x15 (B2F)	同上	$w_0 = 0.95$ $w_1 = 2.60$	7.9 $\frac{18.5}{26.4}$	13.5 $\frac{29.0}{42.5}$	6.7 $\frac{16.8}{23.5}$
Y2-Y3 x11 x12 (B2F)	 $w_0 = 1.29$ $C/w = 7.75$ $M_0/w = 11.22$ $Q/w = 5.16$	20.0	28.9	13.3	
	 $w_1 = 2.60$ $C/w = 7.68$ $M_0/w = 11.84$ $Q/w = 5.18$	$\frac{39.9}{59.9}$	$\frac{61.6}{90.5}$	$\frac{26.9}{40.2}$	

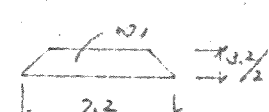
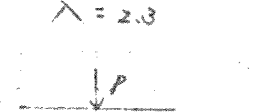
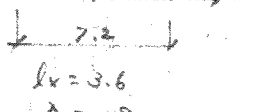
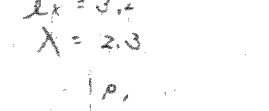
場所	内容	C	M ₀	Q
Y2-Y3 x15 (B2F)	同上 $w_0 = 0.95$ $w_1 = 2.60$	14.7 39.9 54.6	21.3 61.6 82.9	9.8 26.9 36.7
Y3-Y4 x10 x13 (B2F)	 $w_0 = 1.29$ $C/w = 5.37$ $M_0/w = 9.01$ $Q/w = 4.10$	13.9	23.2	10.6
	 $w_1 = 2.60$ $C/w = 5.44$ $M_0/w = 8.46$ $Q/w = 4.21$	28.3 42.2	44.0 67.2	21.9 32.5
Y3-Y4 x15 (B2F)	 $w_0 = 1.29$ $C/w = 5.52$ $M_0/w = 8.04$ $Q/w = 4.30$	14.2	20.7	11.1
	 $w_1 = 2.60$ $C/w = 5.52$ $M_0/w = 8.04$ $Q/w = 4.30$	28.3 42.5	44.0 64.7	21.9 33.0

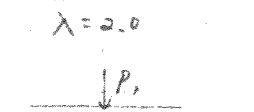
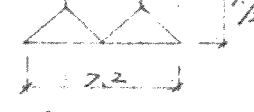
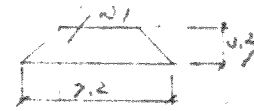
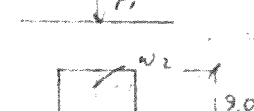
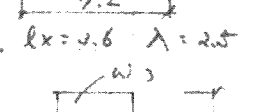
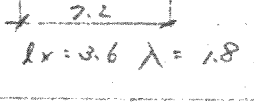
場所	内容	C	M ₀	Q
Y4-Y6				
x10 x15 (B2F)	 $w_0 = 1.29$ $\frac{c}{w} = 4.85$ $\frac{H}{w} = 2.47$ $\frac{Q}{w} = 3.84$	6.3	9.6	5.0
	 $w_1 = 1.29$	6.9	11.6	5.3
	 $P = 1.29 \times 2 \times \frac{6.3}{2} = 8.1$	Y4 7.1 Y6 5.4	12.5	4.6 3.5
	 $w_2 = 2.60$ $\frac{c}{w} = 10.29$ $\frac{H}{w} = 18.84$ $\frac{Q}{w} = 7.17$	26.8	49.0	18.6
	 $w_3 = 2.60$	14.1	22.0	10.9
		Y4 61.2 Y6 57.5	104.7	44.4 43.3
Y4-Y6	Y3-Y4 x10	42.2	67.2	32.5
Y6-Y7				
x10 x15 (B2F)	 $w_0 = 1.29$ $\frac{c}{w} = 11.60$ $\frac{H}{w} = 16.70$ $\frac{Q}{w} = 6.53$	29.9	43.1	16.8
	 $w_1 = 2.60$ $\frac{c}{w} = 11.23$ $\frac{H}{w} = 17.18$ $\frac{Q}{w} = 6.48$	58.4 88.3	89.3 132.4	33.7 50.5

場所	内容	C	M ₀	Q
Y5-Y6				
x9 x16	 $w_0 = 1.29$ $\frac{c}{w} = 1.21$ $\frac{H}{w} = 1.94$ $\frac{Q}{w} = 1.62$	1.6	2.5	2.1
	 $w_1 = 0.69$ $\frac{c}{w} = 0.93$ $\frac{H}{w} = 1.45$ $\frac{Q}{w} = 1.30$	0.6	1.0	0.9
	 $w_2 = 2.60$	6.3 8.5	10.1 13.6	3.4 11.4

場所	内容	C	M ₀	Q
x9-x10 Y2 (B2F)	 $w_0 = 1.29$ $c/w = 5.16$ $M_0/w = 7.86$ $Q/w = 3.75$	6.7	10.1	4.8
x10-x14 同1"	 $w_1 = 1.29$ $c/w = 5.75$ $M_0/w = 8.78$ $Q/w = 4.12$	7.4	11.3	5.3
	$P_1 = 1.29 \times 3.6 \times (2.5 + \frac{2.75}{2}) = 18.0$	16.2	32.4	9.0
	 $w_2 = 2.60$ $c/w = 13.48$ $M_0/w = 24.49$ $Q/w = 8.42$	35.0	63.7	21.9
	 $w_3 = 2.60$ $c/w = 9.98$ $M_0/w = 17.50$ $Q/w = 6.48$	25.9	45.5	16.8
		91.2	163.0	57.8
x14-x15 Y2 (B2F)	同上	4.9	7.5	3.6
		5.5	8.0	3.9
x15-x16 同1"		12.0	23.9	6.7
		35.0	63.7	21.9
		25.9	45.5	16.8
		80.3	148.9	52.9

場所	内容	C	M ₀	Q
x9-x10 Y3 (B2F)	 $w_0 = 1.29$ $c/w = 6.59$ $M_0/w = 10.11$ $Q/w = 4.61$	8.5	13.0	5.9
x10-x14 同1"	 $w_1 = 1.29$	6.7	10.1	4.8
	$P_1 = 1.29 \times 3.6 \times (\frac{3.15}{2} + 2.5) = 18.9$	17.0	34.0	9.5
	 $w_2 = 2.60$ $c/w = 11.73$ $M_0/w = 21.00$ $Q/w = 7.45$	30.5	54.6	19.4
	 $w_3 = 2.60$	35.0	63.7	21.9
		97.7	175.4	61.5
x14-x15 Y3 (B2F)	 $w_0 = 0.69 \times 1.0 = 0.69$ $w_1 = 0.95$	3.0	4.5	2.5
x15-x16 同1"	$P_1 = 1.29 \times 3.6 \times 2.15 + 0.95 \times 3.6 \times 2.5 = 18.5$	16.7	33.3	9.3
	 $w_2 = 2.60$	30.5	54.6	19.4
	 $w_3 = 2.60$	35.0	63.7	21.9
		90.1	163.6	56.7

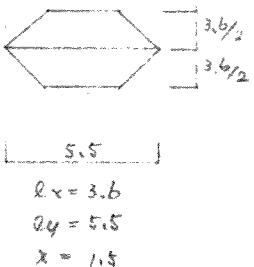
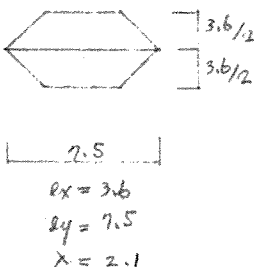
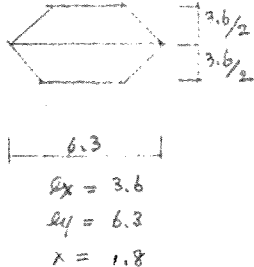
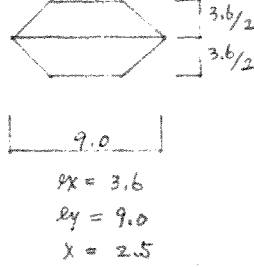
場所	内容	C	M ₀	Q
x9-x10				
Y4 (B2F)	 $w_0 = 1.29$ $c/w = 5.58$ $M_0/w = 8.53$ $Q/w = 4.01$ $l_x = 2.7$ $\lambda = 2.7$	7.2	11.0	5.2
	 $w_1 = 1.29$ $l_x = 3.2$ $\lambda = 2.3$	8.5	13.0	5.9
	 $w_2 = 2.60$ $P = 1.29 \times 3.6 \times \frac{3.15}{2} = 7.3$	6.6	13.1	3.7
	 $w_3 = 2.60$ $l_x = 3.6$ $\lambda = 1.8$	14.5	22.2	10.4
	 $w_4 = 2.60$ $l_x = 3.6$ $\lambda = 1.8$	30.5	54.6	19.4
		67.3	113.9	44.6
x10-x11				
Y4 (B2F)	 $w_0 = 1.29$ $l_x = 3.2$ $\lambda = 2.3$	17.0	26.1	11.9
x11-x16 同1	 $w_1 = 1.29$ $P_1 = 1.29 \times 3.6 \times 3.15 = 14.6$	13.1	26.3	7.3
	 $w_2 = 2.60$ $l_x = 3.6$ $\lambda = 1.8$	61.0	109.2	38.7
		91.1	161.6	57.9

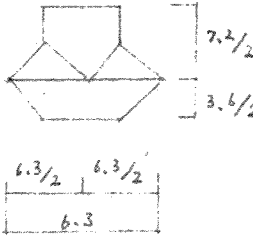
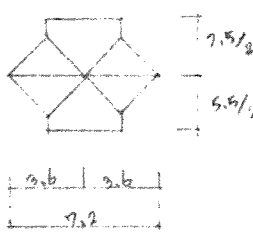
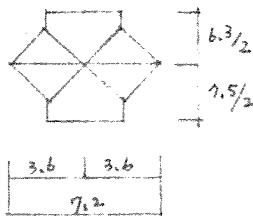
場所	内容	C	M ₀	Q
x9-x10				
Y6	 $w_0 = 1.29$ $c/w = 5.15$ $M_0/w = 9.12$ $Q/w = 4.28$ $l_x = 3.0$ $\lambda = 2.4$	7.7	11.8	5.5
	 $w_1 = 1.29$ $c/w = 6.89$ $M_0/w = 10.63$ $Q/w = 4.86$ $l_x = 3.6$ $\lambda = 2.0$	8.9	13.7	6.3
	 $w_2 = 2.60$ $P_1 = 1.29 \times 3.6 \times 3.0 = 13.9$	12.5	25.0	7.0
	 $w_3 = 2.60$ $c/w = 15.82$ $M_0/w = 29.16$ $Q/w = 9.72$ $l_x = 3.6$ $\lambda = 2.5$	41.1	75.8	25.3
	 $w_4 = 2.60$ $l_x = 3.6$ $\lambda = 2.0$	17.9	27.6	12.6
		88.1	153.9	56.7
x10-x11				
Y6	 $w_0 = 1.29$ $l_x = 3.0$ $\lambda = 2.4$	7.7	11.8	5.5
(B2F)	 $w_1 = 1.29$ $l_x = 3.2$ $\lambda = 2.3$	8.5	13.0	6.0
x11-x16	 $w_2 = 2.60$ $P_1 = 1.29 \times 3.6 \times (3.0 + \frac{3.15}{2}) = 21.2$	19.1	38.2	10.6
	 $w_3 = 2.60$ $l_x = 3.6$ $\lambda = 2.5$	41.1	75.8	25.3
	 $w_4 = 2.60$ $l_x = 3.6$ $\lambda = 1.8$	30.5	54.6	19.4
		106.9	193.4	66.8

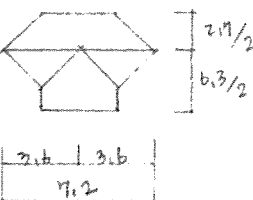
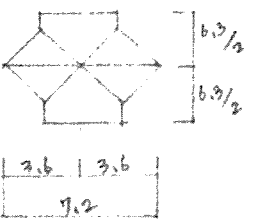
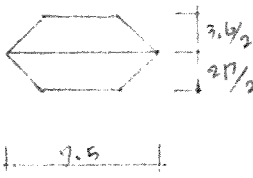
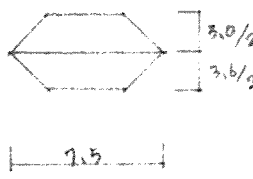
C. M₀. Q₀. (水压)

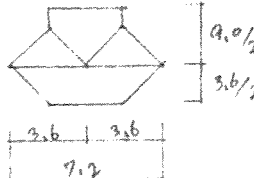
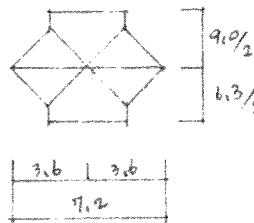
X B1 (2.3 - 2.3)

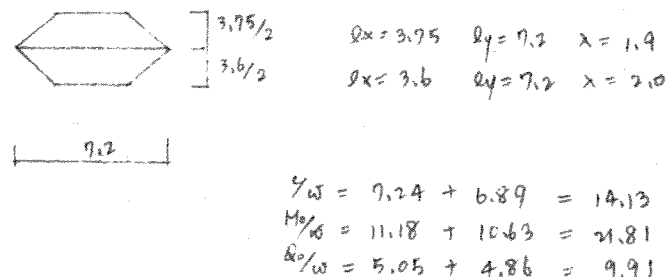
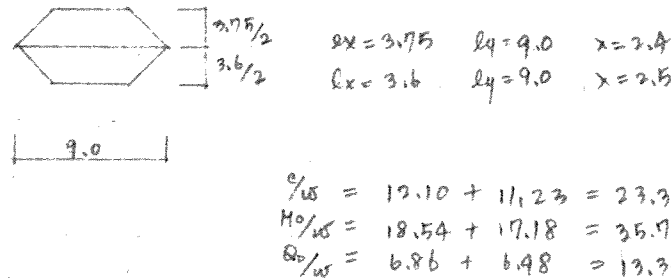
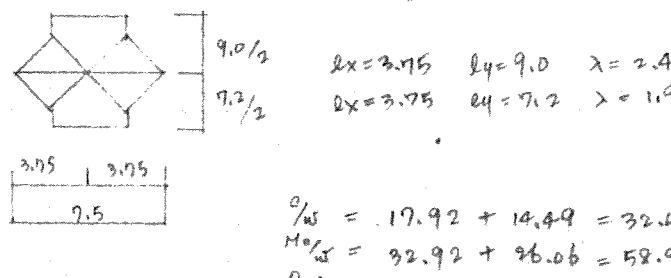
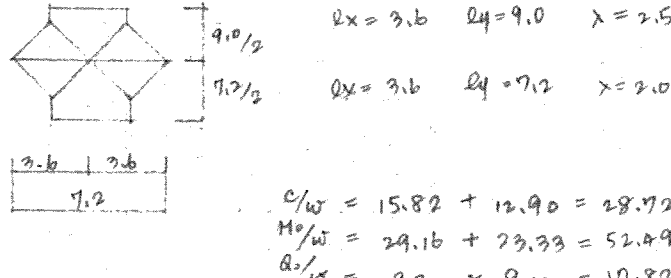
B2F (9.3 - 3.4) = 5.9

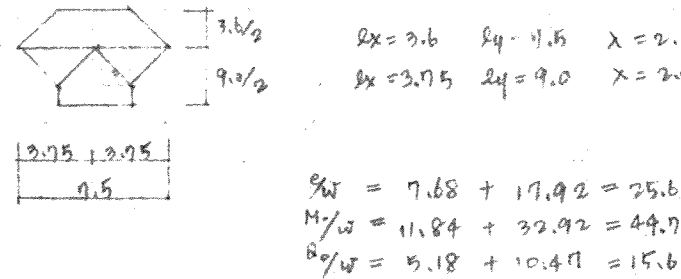
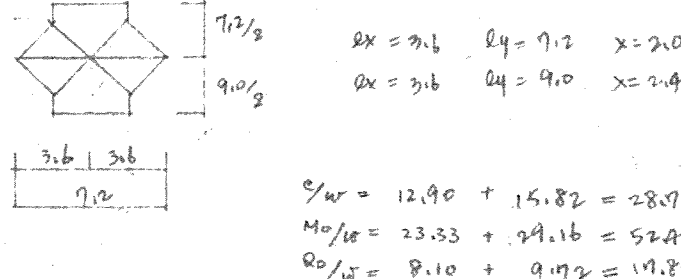
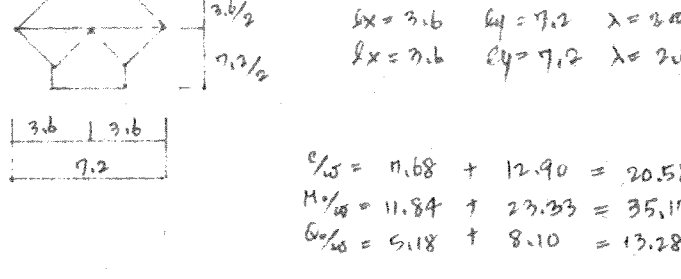
場所	内容	C	M ₀	Q ₀
Y1-Y2 x10	 $w = 9.3$ $q/w = 3.55 \times 2$ $M_0/w = 5.57$ $Q_0/w = 3.24$ $l_x = 3.6$ $l_y = 5.5$ $\lambda = 1.5$	66.0 (41.9)	103.6 (65.8)	60.3 (38.3)
Y2-Y3 x10	 $w = 9.3$ $q/w = 7.68 \times 2$ $M_0/w = 11.84$ $Q_0/w = 5.18$ $l_x = 3.6$ $l_y = 7.5$ $\lambda = 2.1$	142.8 (90.6)	220.2 (139.7)	96.3 (61.1)
Y3-Y4 x10	 $w = 9.3$ $q/w = 5.44 \times 2$ $M_0/w = 8.46$ $Q_0/w = 4.21$ $l_x = 3.6$ $l_y = 6.3$ $\lambda = 1.8$	101.2 (64.2)	157.4 (99.9)	78.3 (49.7)
Y6-Y7 x10	 $w = 9.3$ $q/w = 11.23 \times 2$ $M_0/w = 17.18$ $Q_0/w = 6.48$ $l_x = 3.6$ $l_y = 9.0$ $\lambda = 2.5$	208.9 (132.6)	319.5 (202.7)	120.5 (76.5)

場所	内容	C	M ₀	Q ₀
Y4-Y6 x10	 $w = 9.3$ $q_x = 3.15$ $q_y = 7.2$ $\lambda = 2.3$ $q/w = 10.29 + 5.84 = 15.73$ $M_0/w = 18.84 + 8.46 = 27.30$ $Q_0/w = 7.17 + 4.21 = 11.38$	146.3 (92.9)	253.9 (161.0)	105.8 (67.2)
Y5-Y6 x9	 $w = 9.3$ $q/w = 1.21 \times 2$ $M_0/w = 1.94$ $Q_0/w = 1.62$ $l_x = 3.6$ $\lambda = 1.0$	22.5 (14.3)	36.1 (23.0)	30.1 (19.1)
x9~x16 Y2	 $w = 9.3$ $q_x = 3.6$ $q_y = 7.5$ $\lambda = 2.1$ $q/w = 13.48 + 9.98 = 23.46$ $M_0/w = 24.49 + 17.50 = 41.99$ $Q_0/w = 8.42 + 6.48 = 14.90$	218.2 (138.5)	390.5 (247.8)	138.6 (88.0)
x9~x16 Y3	 $w = 9.3$ $q_x = 3.6$ $q_y = 6.3$ $\lambda = 1.8$ $q/w = 11.73 + 13.48 = 25.21$ $M_0/w = 21.00 + 24.49 = 45.49$ $Q_0/w = 7.45 + 8.42 = 15.87$	234.5 (148.8)	423.1 (268.4)	147.6 (93.7)

場所	内 容	C	M ₀	R ₀
X9-Y10 Y4	 $\omega = 9.3$ $l_x = 3.7 \quad l_y = 7.2 \quad \lambda = 2.7$ $l_x = 3.6 \quad l_y = 6.2 \quad \lambda = 1.8$ $c/w = 5.58 + 11.73 = 17.31$ $M_0/w = 8.53 + 21.00 = 29.53$ $R_0/w = 4.01 + 7.45 = 11.46$	161.0 (102.2)	274.6 (174.3)	146.6 (67.7)
Y10-Y15 Y4	 $\omega = 9.3$ $l_x = 3.6 \quad l_y = 7.2 \quad \lambda = 1.8$ $c/w = 11.78 \times 2$ $M_0/w = 21.00$ $R_0/w = 7.45$	218.2 (138.5)	390.6 (247.8)	138.6 (88.0)
X8-X9 Y5	 $\omega = 9.3$ $l_x = 3.6 \quad l_y = 7.5 \quad \lambda = 2.1$ $l_x = 2.7 \quad l_y = 7.5 \quad \lambda = 2.8$ $c/w = 7.68 + 6.04 = 13.72$ $M_0/w = 11.84 + 9.20 = 21.04$ $R_0/w = 5.18 + 4.19 = 9.37$	127.6 (81.0)	195.7 (124.2)	87.1 (55.3)
X8-X9 Y6	 $\omega = 9.3$ $l_x = 3.0 \quad l_y = 7.5 \quad \lambda = 2.5$ $l_x = 3.6 \quad l_y = 7.5 \quad \lambda = 2.1$ $c/w = 6.50 + 7.68 = 14.18$ $M_0/w = 9.94 + 11.84 = 21.78$ $R_0/w = 4.50 + 5.18 = 9.68$	131.4 (83.7)	202.6 (128.6)	90.0 (57.1)

場所	内 容	C	M ₀	R ₀
X9-X10 Y6	 $\omega = 9.3$ $l_x = 3.6 \quad l_y = 9.0 \quad \lambda = 2.5$ $l_x = 3.6 \quad l_y = 7.2 \quad \lambda = 2.0$ $c/w = 15.82 + 6.89 = 22.71$ $M_0/w = 29.16 + 10.63 = 39.79$ $R_0/w = 9.72 + 4.86 = 14.58$	211.2 (134.0)	370.0 (234.8)	135.6 (86.1)
Y10-Y15 Y6	 $\omega = 9.3$ $l_x = 3.6 \quad l_y = 9.0 \quad \lambda = 2.5$ $l_x = 3.6 \quad l_y = 6.3 \quad \lambda = 1.8$ $c/w = 15.82 + 11.73 = 27.55$ $M_0/w = 29.16 + 21.00 = 50.16$ $R_0/w = 9.72 + 7.45 = 17.17$	256.2 (162.6)	466.5 (296.0)	159.7 (101.4)

場所	内容	C	M ₀	R ₀
Y7-Y8 x9		32.5	50.2	22.8
Y8-Y9 x9		53.9	82.2	30.9
x8-x9 Y8		74.5	135.7	44.0
x9-x16 Y8		66.1	120.7	41.0

場所	内容	C	M ₀	R ₀
x8-x9 Y9		58.9	102.9	36.0
x9-x16 Y9		66.1	120.7	41.0
x10-x11 Y10		47.3	80.9	30.5

ワザリ梁取比表

B × O	I ¹⁰⁵	φ	I ¹⁰⁵	l	K ¹⁰⁵	R
80 × 250 (B2F)	1042	2.0	2083	360	580	2.0
				550	380	1.3
				630	332	1.1
				720	290	1.0
				750	278	1.0
				900	232	0.8
70 × 250 (B1F)	911	2.0	1823	720	253	1.0
				750	244	1.0
				900	203	0.8
				1470	124	0.5

(鉛直時)

×10⁻³ (B2F)

Y1	Y2	Y3	Y4	Y6	Y7
-29.2 (25.9)	29.2	-59.9 (40.2)	59.9	-42.2 (32.5)	42.2
29.2	47.4	15.3	-8.4	-9.3	9.5
47.4	14.6	-4.2	90.5	4.7	67.2
27.0	-5.2	-5.2	53.6	-6.4	48.9
0	20.4	53.9	-54.0	53.2	-53.2

×10⁻³ (B2F)

Y1	Y2	Y3	Y4	Y6	Y7
-29.2 (25.9)	29.2	-59.9 (40.2)	59.9	-42.2 (32.5)	42.2
29.2	47.4	15.3	-8.4	-9.3	9.5
47.4	14.6	-4.2	90.5	4.7	67.2
27.0	-5.2	-5.2	53.6	-6.4	48.9
0	20.4	53.9	-54.0	53.2	-53.2

Y2³-X³ (B2F)

X9	X10	X11	X12	X13	X14	X15	X16
-91.2 (57.8)	91.2	-91.2 (57.8)	91.2	-91.2	91.2	-83.3 (52.9)	83.3
91.2	163.0	0	0	163.0	0	0	148.9
45.6	0	0	0	0	-2.0	-41.6	-83.3
58.6	-19.5	-26.1	104.2	0	0	96.7	24.9
0	104.4	117.3	-117.3	58.8	91.2	-91.2	71.8

Y4³-X³ (B2F)

X9	X10	X11	X12	X13	X14	X15	X16
-67.3 (44.6)	67.3	-91.1 (57.9)	91.1	-91.1	91.1	-91.1 (57.9)	91.1
67.3	113.9	10.2	13.6	161.6	0	0	161.6
33.7	0	6.8	0	0	0	-45.5	-91.1
48.4	-24.4	-19.3	95.6	-3.4	-3.4	92.8	0
0	65.5	96.8	-96.8	66.0	94.5	-94.5	68.8

Y6³-X³ (B2F)

X9	X10	X11	X12	X13	X14	X15	X16
-88.1 (56.7)	88.1	-106.9 (66.8)	106.9	-106.9	106.9	-106.9 (66.8)	106.9
88.1	153.9	2.0	10.8	193.4	0	0	193.4
44.0	0	5.4	0	0	0	-53.4	-106.9
60.6	-18.9	-25.1	115.4	-2.7	-2.7	108.2	0
0	93.3	121.2	-121.2	78.0	109.6	-109.6	85.2

X₁₁ 7-X₂ (B1F)

Y ₇	1.0	0.75	Y ₈	0.8	Y ₉	0.75	Y ₁₀
-41.2 (29.1)	41.2	-74.1 (42.4)	74.1	-45.0 (31.8)	45.0		
41.2	13.6	15.9	17.0	111.2	-15.0	-14.1	69.4 -45.0
		20.6	-7.5	8.5	-22.5		
	35.7	-6.3	-4.8	73.1	7.2	6.8	37.4
0	27.9	71.4	-71.4	38.1	74.8	-74.8	32.0 0

Y₈ 7-X₂ (B1F)

X ₈	0.75	X ₉	1.0	X ₁₀	1.0	X ₁₁	1.0	X ₁₂	1.0	X ₁₃	1.0	X ₁₄	1.0	X ₁₅	1.0	X ₁₆	0.75	X ₁₇							
-99.2 (58.7)	99.2	-85.9 (53.4)	85.9	-94.6 (58.7)	94.6	-85.9 (53.4)	85.9	-85.9	85.9	-85.9	85.9	-85.9	85.9	-90.3 (56.0)	90.3	-99.2 (58.7)	99.2								
99.2	180.2	-5.7	-7.6	156.7	4.4	4.4	172.5	-4.4	-4.4	156.7	0	0	156.7	0	0	156.7	2.2	2.2	164.7	5.1	3.8	180.2	-99.2		
	49.6	2.2	-3.8	-2.2	2.2	0	-2.2	0	0	0	0	0	1.1	0	2.5	1.1	-49.6								
60.4	-22.2	-29.6	105.2	3.0	3.0	90.3	-1.1	-1.1	88.1	1.1	1.1	85.3	0	0	85.6	-0.5	-0.5	86.0	-1.3	-1.3	105.5	27.7	20.8	62.1	
0	119.8	120.9	-120.9	51.5	89.5	-89.4	82.2	91.3	-91.4	68.6	84.8	-84.8	71.4	85.9	-85.9	71.1	85.4	-85.3	70.7	86.8	-86.9	59.2	124.2	-124.2	118.1 0

(木圧時) --- (木圧荷重 - 鉛直荷重)

X₁₁ 7-X₂ (B2F)

Y_1 Δ	1.0	Y_2 Δ	1.0	Y_3 Δ	1.1	Y_4 Δ	1.1	Y_6 Δ	0.6	Y_7 Δ					
-41.9 (28.3)	41.9	-90.6 (61.1)	90.6	-64.2 (49.7)	64.2	-92.9 (67.2)	92.9	-132.6 (76.5)	132.6						
41.9	65.8	24.4	24.4	139.7	-12.6	-12.8	99.9	14.4	14.4	161.0	25.7	14.0	202.7	-132.6	
	21.0	-6.3		12.2	7.2	-6.9	12.9		7.2	-66.3					
	39.9	-7.4	-7.4	80.4	-9.2	-10.2	74.8	-3.0	-3.0	116.3	28.2	20.9	82.0		
0	25.9	79.9	-79.9	59.3	81.0	-81.0	25.1	68.7	-68.6	44.7	164.0	-164.0	120.7	0	

Y₂ 7-X₂ (B2F)

X ₉	0.75	X ₁₀	1.0	X ₁₁	1.0	X ₁₂	1.0	X _{13-X14}	1.0	X ₁₅	0.25	X ₁₆
-138.5 (88.0)	138.5	-138.5 (88.0)	138.5									
138.5	247.8	0	0	247.8	0							
	69.2	0	0									
89.0	-29.6	-39.6	158.3	0								
0	158.8	178.1	-178.1	89.5	138.5	-138.5	109.3					

Y₄ 7-X₂ (B2F)

X ₉	0.75	X ₁₀	1.0	X ₁₁	1.0	X ₁₂	1.0	X _{13-X14}	1.0	X ₁₅	0.25	X ₁₆
-102.2 (67.7)	102.2	-138.5 (88.0)	138.5	-138.5								
102.2	174.3	15.5	20.8	247.8	0	0						
	51.1	0	10.4	0								
73.4	-21.9	-29.3	145.3	-5.2	-5.2							
0	100.9	146.9	-146.9	102.5	143.7	-143.7	109.3	138.5	-138.5			

(抗偏芯時) --- 偏芯を、基礎壁について、10cmの偏芯量を考慮する。

X₁₁ 7-X₂ (B2F)

偏芯曲げモーメント (X₁₁ ~ Y₁): $M = N \cdot e = 312.0 \times (0.4 + 0.65 - 0.5 + 0.1) = 202.8 \text{ t}\cdot\text{m}$

Y ₁	1.0	Y ₂	1.0	Y ₃	1.1	Y ₄	1.1	Y ₅	0.6	Y ₇	110.0
202.8											
-202.8		-13.7 -13.7		-55.7 -61.3		-18.8 -18.8		-81.5 -44.5		-110.0	
		-101.4 -27.9		-6.9 -9.4		-30.7 -40.7		-9.4 -55.0			
		64.7 64.7		7.8 8.5		35.7 35.7		41.6 22.8			
202.8 - 202.8		-50.4 23.1		-54.8 -62.2		-13.8 -23.8		-49.3 -76.7		-110.0 110.0	

Y₂ 7-X₂ (B2F)

X ₉	0.75	X ₁₀	1.0	X ₁₁	1.0	X ₁₂	1.0	X ₁₃	1.0	X ₁₄	1.0	X ₁₅	0.75	X ₁₆	23.1
23.6															
-23.6		-12.5 -16.7		-13.7 -13.7		-12.7 -13.7		-13.7 -13.7		-13.8 -13.8		-15.7 -11.9		-23.1	
		-11.8 -6.9		-8.4 -6.9		-6.9 -6.9		-6.9 -6.9		-6.9 -7.9		-6.9 -11.5			
		8.0 10.7		7.6 7.6		6.9 6.9		6.9 6.9		7.4 7.4		10.5 7.9			
23.6 - 23.6		-16.3 -12.9		-14.5 -13.0		-13.7 -13.7		-13.7 -13.7		-13.3 -14.3		-12.1 -15.5		-23.1 23.1	

Y₄ 7-X₂ (B2F)

X ₉	0.75	X ₁₀	1.0	X ₁₁	1.0	X ₁₂	1.0	X ₁₃	1.0	X ₁₄	1.0	X ₁₅	0.75	X ₁₆
		-16.1 -21.4		-18.7 -18.7		-18.7 -18.7		-18.7 -18.7		-19.5 -19.5		-21.4 -16.1		
		0 -9.4		-10.7 -9.4		-9.4 -9.4		-9.4 -9.8		-9.4 -10.7		-9.8 0		
		4.0 5.4		10.0 10.0		9.4 9.4		9.6 9.6		10.0 10.0		5.6 4.2		
0		-12.1 -25.4		-19.4 -18.1		-18.7 -18.7		-18.5 -18.9		-18.9 -20.2		-25.6 -11.9		0

Y₆ 7-X₂ (B2F)

偏芯曲げモーメント (X₈ ~ Y₆): $M = N \cdot e = 785.0 \times (0.6 + 0.1) = 549.5 \text{ t}\cdot\text{m}$
 (X₁₇ ~ Y₆): $M = N \cdot e = 837.0 \times (0.6 + 0.1) = 585.9$

X ₈	0.75	X ₉	1.0	X ₁₀	1.0	X ₁₁	1.0	X ₁₂	1.0	X ₁₃	1.0	X ₁₄	1.0	X ₁₅	1.0	X ₁₆	0.75	X ₁₇	-585.9
549.5																			
-549.5		-44.9 -59.9		-66.5 -66.5		-63.0 -63.0		-54.0 -54.0		-54.0 -54.0		-54.8 -54.8		-58.5 -58.5		-58.7 -44.1		585.9	
		-274.8 -33.2		-30.0 -31.5		-33.2 -27.0		-31.5 -27.0		-27.0 -27.4		-27.0 -29.2		-27.4 -29.4		-29.2 293.0			
		132.0 176.0		30.7 30.7		30.1 30.1		29.2 29.2		27.2 27.2		28.1 28.1		28.4 28.4		-150.7 -113.1			
549.5 - 549.5		-187.7 82.9		-65.8 -67.3		-46.1 -59.9		-56.3 -51.8		-53.8 -54.2		-53.7 -55.9		-57.5 -59.5		-238.6 135.8		585.9 -585.9	

X₁₁ 7-x (BIF)

$\frac{Y_7}{A}$	0.75	$\frac{Y_8}{A}$	0.8	$\frac{Y_9}{A}$	0.75	$\frac{Y_{10}}{A}$
						-52.2
		23.0 24.4		23.8 22.2		52.2
		0 11.9		12.2 26.1		
		-5.8 -6.1		-19.7 -18.6		
0		17.2 30.2		16.3 29.7		52.2 -52.2

Y₈ 7-x (BIF)

$\frac{X_8}{A}$	0.75	$\frac{X_9}{A}$	1.0	$\frac{X_{10}}{A}$	1.0	$\frac{X_{11}}{A}$	1.0	$\frac{X_{12}}{A}$	1.0	$\frac{X_{13}}{A}$	1.0	$\frac{X_{14}}{A}$	1.0	$\frac{X_{15}}{A}$	1.0	$\frac{X_{16}}{A}$	0.75	$\frac{X_{17}}{A}$
294.0																		47.5
-294.0		-20.7 -27.6		-24.3 -24.3		-23.7 -23.7		-22.9 -22.9		-24.2 -24.2		-22.9 -22.9		-24.7 -24.7		-24.0 -24.0		-47.5
		-147.0 -12.1		-13.8 -11.8		-12.1 -11.4		-11.8 -12.1		-11.4 -11.4		-12.1 -12.3		-11.4 -12.0		-12.3 -23.7		
		68.1 91.0		12.8 12.8		11.7 11.7		11.9 11.8		11.4 11.4		12.2 12.2		11.7 11.7		20.6 15.4		
294.0	-294.0	-99.6 51.3		-25.3 -23.3		-24.1 -23.4		-22.8 -23.1		-24.2 -24.2		-22.8 -23.0		-24.4 -25.0		-15.7 -32.3		-47.5 47.5

山下設計

Y27-X1											
符号		(X9~X10) FG 10.1			(X10~X11) FG 10.1			(X13~X14) FG 10.1			
		外端	中央	内端	X10端	中央	X11端	内端	中央	端	
L (mm)		7.2			7.2			7.2			
b x D (mm)		70 x 250			70 x 250			70 x 250			
d (mm)		240			240			240			
i (mm)		210			210			210			
M (mm)	長期	A	上	0	117.3	117.3		91.2	92.2		
			下		104.4			58.8	73.3		
	短期	B	上		158.8			89.5	109.3		
			下			178.1	178.1	138.5	138.5		
	長期	C	上	23.6		12.9		13.7			
			下			16.3		14.5			
	短期	Z	上	23.6	158.8	133.6	130.2	89.5	105.7	109.3	
			下		104.4	194.4	191.0	58.8	153.0	73.3	
	地盤			114.8 (104.4)	34.6 (24.2)	34.6 (29.8)		34.6 (29.8)	34.6 (29.8)		
	短期		上	128.0							
		下	128.0								
長期	C (kg/mm²)										
	Pt (%)										
	at (mm²)		34.4	42.1	41.4	19.4	33.2	33.0	23.7		
短期	C (kg/mm²)										
	Pt (%)										
	at (mm²)		17.5								
n	上	4-025	7-025	6-025	6-025	4-025	5-025	5-025	5-025		
	下	4-025	5-025	9-025	9-025	3-025	7-025	7-025	4-025		
Q (mm)	長期	A	41.5		74.1	61.4		54.2	57.8		
		B	63.3		112.7	93.5		82.5	88.0		
		C	5.6		5.6	3.8		3.8	3.8		
		Z	68.9		118.3	97.3		86.3	91.8		
	地盤		20.8		20.8	9.7		9.7	9.7		
短期											
許容断面力	長期	a	2.37→2.0								
		at/bj (mm)	217.4			108.7		108.7	108.7		
		ΔQ (mm)									
	短期	Pw (mm)	0.2		0.2	0.2		0.2	0.2		
		a									
ST	長期	at/bj (mm)									
		ΔQ (mm)									
		Pw (mm)									
$X = \frac{1.27 \times 3}{0.002 \times 70} = 27.2$											
ST 013-250 C											
											
断面		端	中央	端	外端	中央	内端	端	中央	端	
					4-025	7-025	6-025				
					70 x 250						
					4-025	5-025	9-025				
					ST 013-250 C						

注: A: 鉛直時 B: 水圧 C: 偏傾

山下設計

Y45-X1											
符 号		(X15~X16) FG 10.1			(X14~X15) FG 10.1			FG 10.1			
		X15 X10 端	中 央	X16 X9 端	X14 X11 端	中 央	X15 X10 端	内 端	中 央	端	
L (mm)			7.2			7.2			7.2		
b x D (mm)			70 x 250			70 x 250			70 x 250		
d (mm)			240			240			240		
i (mm)			210			210			210		
M (Tm)	長 期	A	E	117.1		0	91.1		117.1	94.5	
			F		103.1			57.5		70.5	
		B	E		100.9			102.5			109.3
			F	146.9		0	143.7		146.9	143.7	
		C	E	12.1		0	20.2			18.9	
			F						25.6		
	Z	E	129.2	100.9	0	111.3	102.5	142.7	113.4	109.3	
		F	159.0	103.1	0	162.9	52.5	172.5	162.6	70.5	
	地 盤		29.7 (27.6)			0	34.6 (29.5)		34.6 (34.3)	34.6 (29.8)	
	短 期		Z								
		F									
長 期	C (kg/mm²)										
	Pt (%)										
	at (mm²)		34.5	22.4		35.5	22.2	37.4	35.2	23.7	
短 期	C (kg/mm²)										
	Pt (%)										
	at (mm²)										
n	E		6-025	5-025	4-025	5-025	5-025	6-025	5-025	5-025	
	F		7-025	5-025	4-025	7-025	3-025	8-025	7-025	4-025	
Q (N)	長 期	A	74.2		41.6	54.3		61.5	58.4		
		B	88.1		47.3	87.5		88.5	88.8		
		C	1.7		1.7	6.4		6.4	5.3		
		Z	89.8		49.0	93.9		94.9			
	地 盤		4.2		4.2	10.3		10.3	9.7		
	短 期										
許 容 断 面 力	長 期	a									
		at/bj (N)	108.7		108.7	108.7		108.7	108.7		
		ΔQ (N)									
	短 期	Pd (N)	0.2		0.2	0.2		0.2	0.2		
		a									
		at/bj (N)									
		ΔQ (N)									
		Pd (N)									
ST											
断 面		端 中 央 端			端 中 央 端			端 中 央 端			
		_____			_____			_____			
		_____			_____			_____			

(構造計算用)

Y67-X

符 号		FG ₁₀₃			FG ₁₀₂			(X ₁₄ ~X ₁₅) FG ₁₀₂			
		X ₈ 端	中 央	X ₉ 端	X ₉ 端	中 央	X ₁₀ 端	内 端	中 央	端	
L	(mm)	7.5			7.2			7.2			
b × D	(mm)	100 × 250			80 × 250			80 × 250			
d	(mm)	240			240			240			
i	(mm)	210			210			210			
M (mm)	長 期	A	上		0		121.2	137.4			
			下		93.3			86.5			
		B	上		142.6			131.3			
			下		0		184.5	184.5			
		C	上	549.5				67.3			
			下		187.7	82.9		65.8			
	I	上		0	142.6	187.0	204.7	131.3			
		下		82.9	93.3	250.3	251.8	86.5			
	地 表			100.2 (83.3)		87.7 (70.8)	87.7 (71.9)				
	短 期	上		0							
		下		166.2							
	長 期	C (kg/cm ²)									
Pr (%)											
at (mm ²)		119.0		30.9	54.2	54.5	28.5				
短 期	C (kg/cm ²)										
	Pr (%)										
	at (mm ²)										
n	E	24-025	16-025	8-025	6-025	7-025	8-025	9-025	9-025		
	F	16-025	10-025	10-025	9-025	4-025	11-025	11-025	4-025		
Q (%)	長 期	A			39.9		73.5	71.1			
		B			60.5		111.7	103.9			
		C	98.2	98.2	2.4		2.4	18.6			
		Z			62.9		114.1	122.5			
	地 表			26.1		26.1	24.4				
	短 期			102.1							
斷 面 斷 力	長 期	a									
		Δf _{abj} (t)	155.4	155.4	124.3		124.3	124.3			
		ΔQ (t)									
	短 期	a									
		Δf _{abj} (t)			186.4						
		ΔQ (t)									
P _w (t)		0.2	0.2	0.2		0.2	0.2				
ST											
		$\alpha = \frac{1.27 \times 4}{0.002 \times 100} = 25.4$ 			$\alpha = \frac{1.27 \times 4}{0.002 \times 80} = 31.7$ 						
斷 面	外 端		中 央	内 端	X ₉ 端	中 央	X ₁₀ ~15端	端	中 央	端	
	26-025		16-025	8-025	8-025	9-025	9-025				
	100 × 250				80 × 250						
18-025		10-025	10-025	11-025	6-025	11-025					
ST 4 013-250 C				ST 4 013-250 C							

注) A: 鉛直時 B: 水平 C: 球偏近

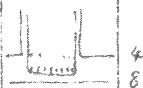
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$$\left(\begin{array}{c} 1 \\ 2 \end{array} \right)$$

(構造計算用)

X117-X1												
符 号		FG ₁			FG ₁			FG ₁				
		Y ₁ 端	中 央	Y ₂ 端	Y ₂ 端	中 央	Y ₃ 端	Y ₃ 端	中 央	Y ₄ 端		
L (mm)		5.5			7.5			6.3				
b × D (mm)		80 × 250			80 × 250			80 × 250				
d (mm)		240			240			240				
i (mm)		210			210			210				
M (Tm)	長 期	A	上	0	53.9	54.0		55.5	55.5		32.5	
			下		20.4			35.8		23.2		
	B		上		25.9			59.3		25.1		
			下	0		79.9	79.9		81.0	81.0		68.7
	C		上	202.8	138.0				62.2	25.1		
			下			50.4	23.1		54.8		23.2	13.8
	I		上	202.8	163.9		54.0	59.3	110.3	117.7		46.3
			下			130.3	103.0	35.8	135.8	143.2		82.5
	地震		61.6 (52.5)		39.0 (29.9)	28.6 (22.6)		60.8 (53.6)	72.2 (61.8)		26.9 (28.2)	
	短 期		上						179.5		74.5	
			下									
長 期	c (kg/cm ²)											
	Pr (%)											
	at (mm ²)		43.9	35.5	28.2	22.3	12.9	29.4	31.0	5.5	17.9	
	at (mm ²)											
短 期	c (kg/cm ²)											
	Pr (%)											
	at (mm ²)											
	at (mm ²)											
n	上	9-025	8-025	4-025	4-025	3-025	5-025	5-025	2-025	2-025		
	下	4-025	4-025	6-025	7-025	3-025	6-025	7-025	2-025	4-025		
Q· (T)	長 期	A	16.1		35.7	40.0		40.4	36.2		28.8	
		B	13.7		42.9	61.1		61.1	51.7		47.7	
		C	46.0		46.0	4.3		4.3	12.1		12.1	
		Z	62.1		81.7	65.4		65.4	63.8		59.8	
	地震		18.3		18.3	12.0		12.0	17.4		17.4	
	短 期											
許 容 剪 断 力	長 期	a										
		at b j (T)	124.3		124.3		124.3	124.3		124.3		
		ΔQ (T)										
	短 期	a										
		at b j (T)										
		ΔQ (T)										
Pw (k)		0.2		0.2		0.2		0.2		0.2		
ST												

注) A: 鉛直筋 B: 水平筋 C: ねじり筋

符 号		FG ₂			FG ₃			FG			
		Y ₄ 端	中 央	Y ₆ 端	Y ₆ 端	中 央	Y ₇ 端	端	中 央	端	
L (cm)		6.3			9.0						
b × D (cm)		80 × 250			80 × 250						
d (cm)		240			240						
i (cm)		210			210						
M (Tm)	長 期	A	E	32.4		100.5	100.5		0		
			F		0.8			82.2			
		B	E		44.7			120.7			
			F	68.6		164.0	164.0		0		
		C	E	23.8			76.7				
			F			49.3			110.0		
	I	E	56.2	44.7	149.8	177.2	120.7				
		F	92.4	0.8	213.3	240.7	82.2	110.0			
	地 震		36.9 (25.9)		101.2 (86.9)	70.8 (51.0)		202.8 (184.6)			
	短 期	E			236.7						
		F						294.6			
長 期	c (kg/cm ²)										
	Pr (%)										
	at (cm ²)		20.0	9.7	46.2	52.1	26.2				
	at (cm ²)										
短 期	c (kg/cm ²)										
	Pr (%)										
	at (cm ²)					32.3				40.1	
	at (cm ²)										
n		E	3-025	2-025	10-025	8-025	9-025	8-025			
		F	4-025	2-025	12-025	11-025	6-025	8-025			
Q (T)	長 期	A	21.7		43.3	61.7		39.3			
		B	52.0		82.4	94.7		58.3			
		C	11.6		11.6	20.7		20.7			
		I	63.6		94.0	115.4		79.0			
	地 震		22.0		22.0	30.4		30.4			
	短 期		96.6					124.6			
許 容 剪 断 力	長 期	a									
		at b j (T)	124.3		124.3	124.3					
		ΔQ (T)									
	短 期	a									
		at b j (T)	186.4						186.4		
		ΔQ (T)									
Pr (T)											
ST											
											
断 面		Y ₄ 端	中 央	Y ₆ 端	Y ₆ 端	中 央	Y ₇ 端	端	中 央	端	
		5-025	6-025	10-025	10-025	9-025	8-025				
		80 × 250			80 × 250						
		7-025	6-025	12-025	12-025	6-025	8-025				
		ST 4φ 0.13-250C			ST 4φ 0.13-250C						

(構造計算用)

X ₁₁₇ -x											
符 号			FG5			FG5			FG5		
			Y ₇ 端	中 央	Y ₈ 端	Y ₈ 端	中 央	Y ₉ 端	Y ₉ 端	中 央	Y ₁₀ 端
L (cm)			7.2			9.0			7.2		
b × D (cm)			60 × 250			60 × 250			60 × 250		
d (cm)			240			240			240		
i (cm)			210			210			210		
M (+m)	長 期	A	上	0	71.4	71.4		74.8	74.8		0
			下		27.9		38.1		32.0		
		B	上								
			下								
		C	上	0	17.2		16.3				52.2
			下			30.2		29.7			
	I	上	0	88.6	101.6		91.1	74.8		52.2	
		下		27.9		38.1			32.0		
	地 表		329.4 (298.0)		46.1 (20.0)	46.1 (41.0)		46.1 (41.0)	46.1 (37.7)		74.5 (66.1)
	短 期	上	298.0					112.5			118.3
		下	298.0								13.9
	長 期	C (kg/m ²)									
Pr (%)											
α _T (cm ²)			19.2	22.0	8.3			7.0			
短 期	C (kg/m ²)										
	Pr (%)										
	α _T (cm ²)		40.6					15.4		16.1	
n		上	8-025	4-025	5-025	5-025	4-025	5-025	4-025	4-025	4-025
		下	8-025	4-025	4-025	4-025	4-025	4-025	4-025	4-025	4-025
Q (T)	長 期	A	19.1		39.1	42.4		42.4	42.2		21.4
		B									
		C	2.4		2.4	5.2		5.2	11.4		11.4
		Z			41.5	47.6			53.6		
	地 表		52.2		52.2	10.3		10.3	16.8		16.8
	短 期				119.8						
斷 面 力	長 期	α									
		ΔS _{obj} (T)	93.2								
		ΔQ (T)									
	短 期	α									
		ΔS _{obj} (T)	129.8								
		ΔQ (T)									
ST											
			$X = \frac{1.27 \times 3}{0.002 \times 60} = 31.7$								
											
斷 面	Y ₇ 端		中 央	Y ₈ 端	端 中 央		端	端 中 央		端	
	8-025		4-025	5-025							
	60 × 250										
	8-025		4-025	4-025							
			ST Φ 013-250e								

符 号			FG			FG			FG		
			端	中	央	端	中	央	端	中	央
L (mm)											
b × D (mm)											
d (mm)											
r (mm)											
M (Tm)	長 期	A	上								
			下								
		B	上								
			下								
		C	上								
			下								
		Z	上								
			下								
	地 盤										
	短 期		上								
		下									
長 期	c (kg/mm ²)										
	Pr (%)										
	ar (mm ²)										
短 期	c (kg/mm ²)										
	Pr (%)										
	ar (mm ²)										
n		上									
		下									
Q (%)	長 期	A									
		B									
		C									
		Z									
		地 盤									
	短 期										
斷 面 斷 面	長 期	a									
		a to b _g (%)									
		ΔQ (%)									
		P ₀ (%)									
	短 期	a									
		a to b _g (%)									
		ΔQ (%)									
		P ₀ (%)									
		ST									
斷 面			端	中	央	端	中	央	端	中	央

Y8ラ-X

符 号		FG106				FG105		(X10~X11) FG105		端	
		X8端	中 央	X9端	X9端	中 央	X10端	内 端	中 央		
L	(mm)		7.5			7.2			7.2		
b x D	(mm)		80 x 250			60 x 250			60 x 250		
d	(mm)		240			240			240		
i	(mm)		210			210			210		
M (mm)	長	A	E	0	120.9	120.9		89.5	91.3		
			F		119.8		51.5		82.2		
	B	E									
		F									
	C	E	294.0						24.4		
		F			99.6	51.3		25.3			
	Z	E	294.0		120.9	120.9		114.8	115.7		
		F		119.8			51.5			82.2	
	地 盤		E	87.4 (80.4)	45.9 (36.9)	47.7 (41.1)		46.8 (40.2)	46.8 (40.3)		
	短 期		F								
長 期	c (kg/cm²)										
	Pr (%)										
	at (mm²)	63.7	26.0	26.2	26.2	11.2	24.9	25.1	17.8		
短 期	c (kg/cm²)										
	Pr (%)										
	at (mm²)										
n	E	13-025	6-025	6-025	6-025	4-025	5-025	6-025	4-025		
	F	6-025	6-025	4-025	4-025	4-025	4-025	4-025	4-025		
Q (N)	長 期	A	42.6		74.8	57.8		49.0	59.0		
		B									
		C	52.5		52.5	3.7		3.7	6.8		
		Z	95.1		127.3	61.5		52.7			
	地 盤		18.1		18.1	13.2		13.2	13.0		
	短 期										
許 容 剪 断 力	長 期	a			20.3~22.0						
		at/bj (N)			248.6	93.2					
		ΔQ (N)									
	短 期	a									
		at/bj (N)									
		ΔQ (N)									
期		Pw (N)	0.2		0.2		0.2	0.2			
ST											
 											
断 面	外 端		中 央	内 端	内 端	中 央	端	端	中 央	端	
	13-025		7-025	7-025	7-025	4-025					
	80 x 250					60 x 250					
	6-025		6-025	4-025	4-025	4-025					
		STφ013-250 e				STφ013-250 @					

注) A:鉛直筋 B:水圧 C:疎筋

符 号		FG105			FG106			FG		
		X15端	中 央	X16端	X16端	中 央	X17端	端	中 央	端
L (mm)			7.2			7.5				
b x D (mm)			60 x 250			80 x 250				
d (mm)			240			240				
i (mm)			210			210				
M (Tm)	長 期	A	E	86.9	124.2	124.2		0		
			F		59.2		118.1			
	B	E								
		F								
	C	E	25.0		32.3					
		F		15.7		47.5				
	Z	E	111.9	124.2	156.5					
		F		59.2		118.1	47.5			
	地 盤		46.8 (40.2)	47.7 (41.1)	45.9 (36.1)		101.4 (91.6)			
	短 期		E							
		F				139.1				
長 期	c (kg/cm²)									
	Pr (%)									
	at (cm²)		24.3	12.9		33.9	25.6			
短 期	c (kg/cm²)									
	Pr (%)									
	at (cm²)						19.0			
n	E	5-025	4-025	7-025	7-025	4-025	4-025			
	F	4-025	4-025	4-025	4-025	6-025	4-025			
Q (N)	長 期	A	50.8		61.2	75.3		42.1		
		B								
		C	5.7		5.7	10.7		10.7		
		Z			66.9	86.0				
	地 盤		13.2		13.2	19.7		19.7		
	短 期									
許 容 剪 断 力	長 期	a								
		at/bj (N)			93.2	124.3				
		ΔQ (N)								
	短 期	a								
		at/bj (N)								
		ΔQ (N)								
Pr (N)		0.2			0.2					
ST										

(構造計算用)

地中梁の設計

(B2F)

 $X_9 \sim X_{10}$ 間

(全直時)

Y_1	Y_2	Y_3	Y_4
Δ	Δ	Δ	Δ
-29.2 (25.9)	29.2	-59.9 (40.2)	59.9
29.2	15.3	15.3	90.5
47.4	14.6	-4.9	90.5
27.1	-4.8	-4.8	59.7
0	20.3	54.3	-54.3

$1.1 \times 0.75 = 0.8$

(木圧時)

Y_1	Y_2	Y_3	Y_4
Δ	Δ	Δ	Δ
41.9 (32.3)	-41.9	90.6 (61.1)	-90.6
-41.9	65.8	-24.3	24.3
40.1	6.8	6.8	89.8
0	25.7	-80.3	80.4

$0.8 \times 0.75 = 0.6$

(B1F) $X_{13} \sim X_{14}$ 間

(全直時)

Y_7	Y_8	Y_9	Y_{10}
Δ	Δ	Δ	Δ
-41.2 (29.1)	41.2	-74.1 (42.4)	74.1
41.2	63.6	15.9	17.0
35.4	-6.8	-7.4	68.4
0	28.2	70.9	-70.9

$0.8 \times 0.75 = 0.6$

 $X_8 \sim X_9$ 間

Y_7	Y_8	Y_9
Δ	Δ	Δ
-41.2 (29.1)	41.2	-74.1 (42.4)
41.2	63.6	15.9
35.4	-6.8	-7.4
0	28.2	70.9

$0.8 \times 0.75 = 0.6$

符 号		FB ₁				FB ₁			FB ₁			
		Y ₁ 端	中 央	Y ₂ 端	Y ₂ 端	中 央	Y ₃ 端	Y ₃ 端	中 央	Y ₄ 端		
L (cm)		5.5				7.5			6.3			
b × D (cm)		50 × 250				50 × 250			50 × 250			
d (cm)		240				240			240			
i (cm)		210				210			210			
M (mm)	长 期	A	上	0	53.9	54.0	55.5		55.5	32.5		
			下	20.4	35.8		23.2					
		B	上	25.9	59.3		25.1					
			下	0	79.9	79.9	81.0		81.0	68.7		
		C	上									
			下									
	I	上	0	25.9	53.9	54.0	59.3	55.5	55.5	25.1	32.5	
		下	0	20.4	79.9	79.9	35.8	81.0	81.0	23.2	68.7	
	地 表											
	短 期		上									
		下										
长 期	C (kg/cm ²)											
	Pr (%)		0	5.6	11.7	11.7	12.9	12.1	12.1	5.5	7.1	
	Ar (cm ²)		0	4.5	17.3	17.3	7.8	17.6	17.6	5.1	14.9	
短 期	C (kg/cm ²)											
	Pr (%)											
	Ar (cm ²)											
n		上	2-022	2-022	4-022	4-022	4-022	4-022	4-022	2-022	2-022	
		下	2-022	2-022	5-022	5-022	3-022	5-022	5-022	2-022	4-022	
Q (t)	长 期	A	16.1	35.7		40.0	40.4		36.2	28.8		
		B	13.7	42.9		61.1	61.1		51.7	47.7		
		C										
		Z										
	地 表											
	短 期											
許 容 荷 重	长 期	a										
		ΔS _{bj} (t)	77.7				77.7			77.7		
		ΔQ (t)										
	短 期	a										
		ΔS _{bj} (t)										
		ΔQ (t)										
PW (t)		0.2										
ST												
		$x = \frac{1.27 \times 2}{0.002 \times 50} = 25.4$										
断 面		端 中 央				端 外 端 中 央 内 端			端 中 央			端
						4-022 4-022 4-022						
						50 × 250						
						4-022 3-022 6-022						
		ST 013-250C										

注) A: 鉛直時 B: 水平 C: 回転偏り

符 号		FB2			FB3			FB5			
		Y4端	中 央	Y6端	Y6端	中 央	Y7端	X9端	中 央	X10端	
L (cm)			6.3			9.0			7.2		
b × D (cm)			50 × 250			50 × 250			50 × 250		
d (cm)			240			240			240		
i (cm)			210			210			210		
M (Tm)	長 期	A	E	32.4		100.5	100.5	0	46.0		0
			F		0.8		82.2		70.4		
		B	E		44.7		120.7		124.2		
			F	68.6		164.0	164.0	0	81.0		0
	C	E									
		F									
	I	E	32.4	44.7	100.5	100.5	120.7	0	46.0	124.2	0
		F	68.6	0.8	164.0	164.0	82.2	0	81.0	70.4	0
	地 表								58.4 (54.3)		0
	短 期								100.3		
								135.3			
長 期	c (kg/cm²)										
	Pr (%)		7.1	9.7	21.8	21.8	26.2	0	26.9		
	Ar (cm²)		14.9		35.5	35.5	17.8	0	15.3		
短 期	c (kg/cm²)										
	Pr (%)								13.7		
	Ar (cm²)								18.4		
n	E	2-022	3-022	6-022	6-022	7-022	2-022	4-022	7-022	2-022	
		F	4-022	2-022	10-022	10-022	5-022	2-022	5-022	4-022	2-022
	長 期	A	21.7		43.3	61.7		39.3	32.6		32.6
		B	52.0		82.4	94.7		58.3	55.3		55.3
		C									
		Z									
地 表								8.2		8.2	
短 期											
許 容 荷 重 N	長 期	a			21.8-72.0	23.2-72.0					
		ΔQ (t)			155.4	155.4				77.7	
		ΔQ (t)									
	短 期	a									
		ΔQ (t)									
		Pr (t)									
ST											
断 面	Y4端 中 央 Y6端 Y6端 中 央 Y7端 X9端 中 央 X10端										
	4-022 4-022 6-022 6-022 7-022 4-022 4-022 7-022 3-022										
	50 × 250 50 × 250 50 × 250										
	6-022 5-022 10-022 10-022 5-022 3-022 5-022 4-022 3-022										
STA 013-250C STA 013-250C											

(構造計算用)

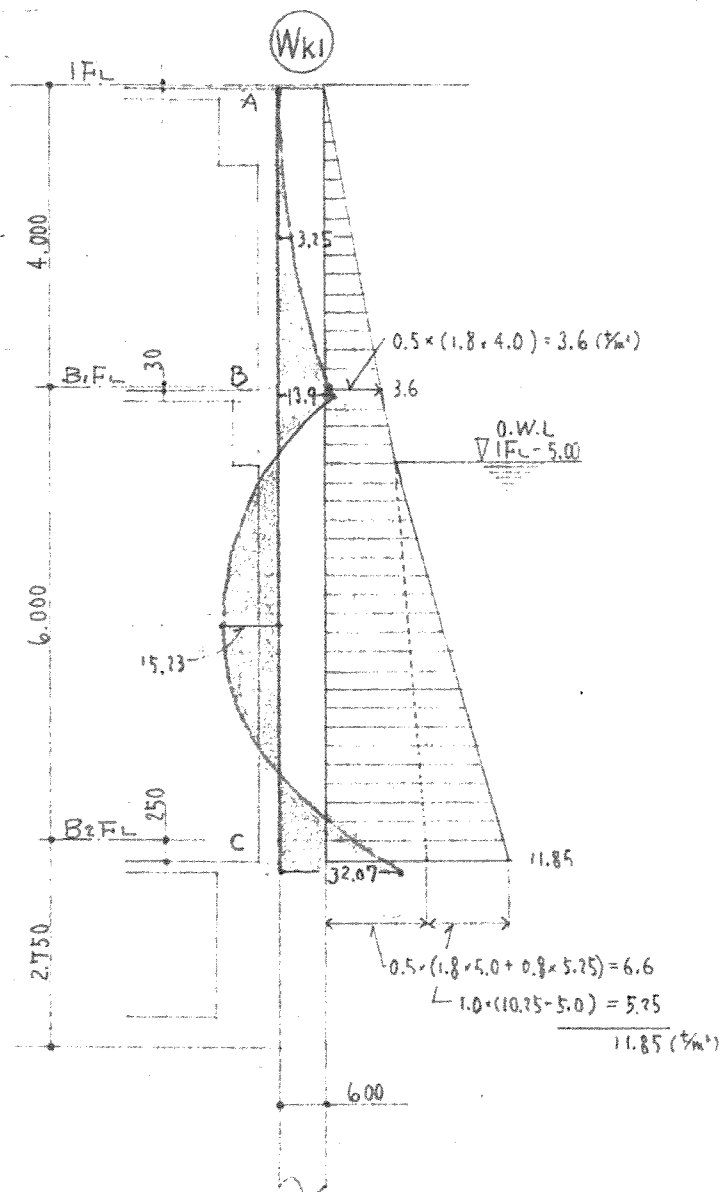
$$X_8 \sim X_9 \quad \boxed{b}$$

注) A: 鉛直時 B: 水压 C: 球偏距

(構造計算用)

地中連続壁の算定

1. 躯体完成時応力の算定

C. M_0 , Q_0

$$C_{AB} = 0$$

$$C_{BA} = \frac{1}{15} \times 3.6 \times 4.0^2 = 3.84 \text{ (t.m)}$$

$$M_{01} = 0.06415 \times 3.6 \times 4.0^2 = 3.70 \text{ (t.m)}$$

$$Q_{AB} = \frac{1}{6} \times 3.6 \times 4.0 = 2.40 \text{ (t)}$$

$$Q_{BA} = \frac{1}{3} \times 3.6 \times 4.0 = 4.80 \text{ (t)}$$

$$C_{BC} = 0.083 \times 3.6 \times 6.25^2 - 0.067 \times (11.85 - 3.6) \times \frac{1}{2} \times 6.25^2 = 11.67 - 10.80 = 0.87 \text{ (t.m)}$$

$$C_{CB} = 11.67 + 0.1 \times (11.85 - 3.6) \times \frac{1}{2} \times 6.25^2 = 11.67 + 16.11 = 27.78 \text{ (t.m)}$$

$$M_{02} = \frac{1}{8} \times 3.6 \times 6.25^2 + 0.128 \times (11.85 - 3.6) \times \frac{1}{2} \times 6.25^2 = 17.58 + 20.63 = 38.21 \text{ (t.m)}$$

$$Q_{0C} = \frac{1}{2} \times 3.6 \times 6.25 - 0.33 \times (11.85 - 3.6) \times \frac{1}{2} \times 6.25 = 11.25 - 8.51 = 2.74 \text{ (t)}$$

$$Q_{CB} = 11.25 + 0.67 \times (11.85 - 3.6) \times \frac{1}{2} \times 6.25 = 11.25 + 17.27 = 28.52 \text{ (t)}$$

曲げモーメント

A	B	C
1.56 × 3/4 = 1.17	1.0	
0.54	0.46	
3.84	-22.47	27.78
10.06	8.57	4.29
0	13.90	32.07

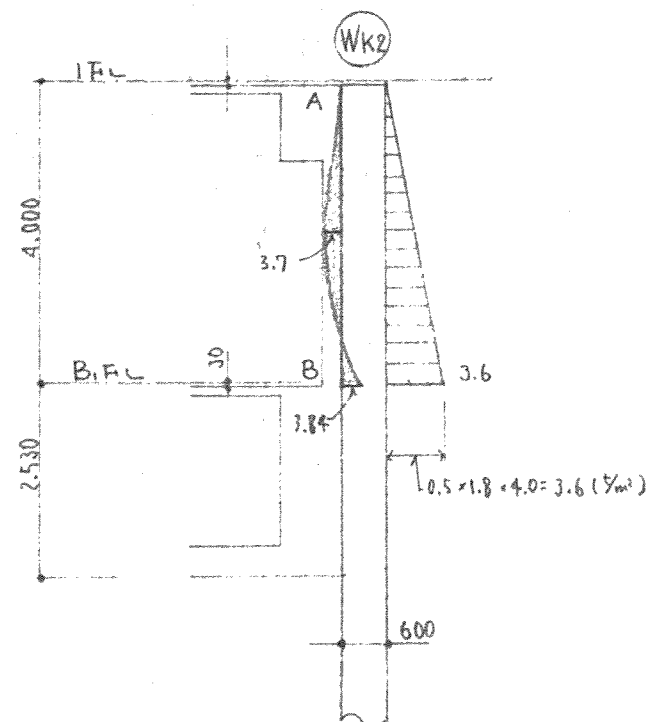
$$M_1 = 3.7 - \frac{1}{2} \times 13.9 = -3.25 \text{ (t.m)}$$

$$M_2 = 38.21 - \frac{1}{2} (13.9 + 32.07) = 15.23 \text{ (t.m)}$$

せん断力

$$Q_{AB} = 2.4 - \frac{13.9}{4.0} = -1.08 \text{ (t)}$$

$$Q_{BA} = -\frac{13.9}{4.0} - 4.8 = -8.78 \text{ (t)}$$



$$Q_{0C} = 19.76 - \left(\frac{-13.9 + 32.07}{6.25} \right) = 16.85 \text{ (t)}$$

$$Q_{CB} = -28.52 - \left(\frac{-13.9 + 32.07}{6.25} \right) = 31.43 \text{ (t)}$$

曲げモーメント

$$M_{0A} = \frac{1}{15} \times 3.6 \times 4.0^2 = 3.84 \text{ (t.m)}$$

$$M_{0B} = 0.06415 \times 3.6 \times 4.0^2 = 3.70 \text{ (t.m)}$$

せん断力

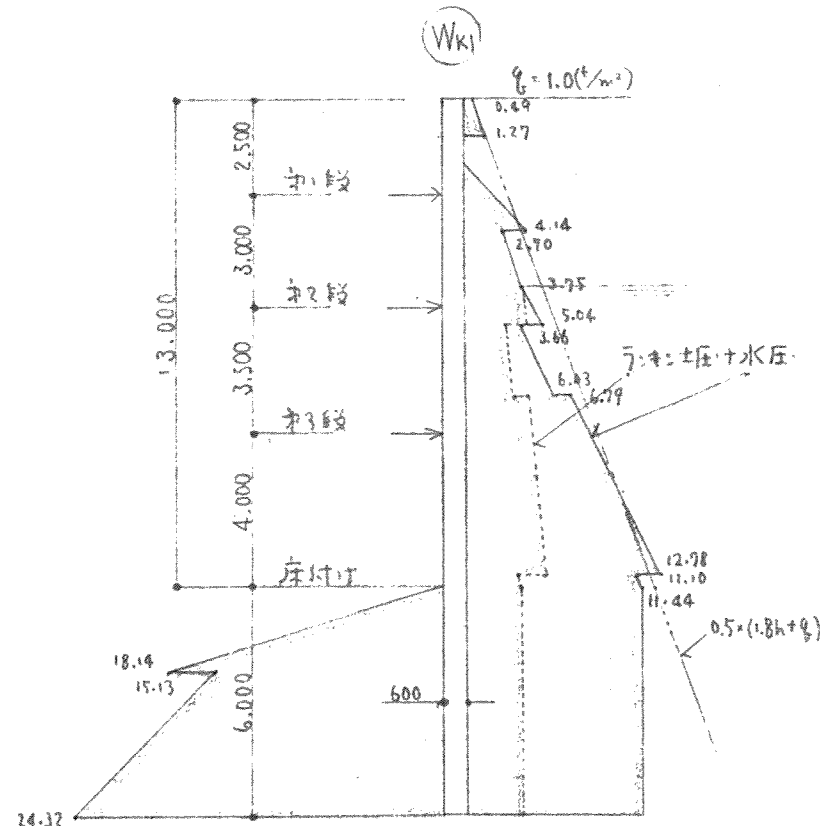
$$Q_A = \frac{1}{6} \times 3.6 \times 4.0 = 2.40 \text{ (t)}$$

$$Q_B = \frac{1}{3} \times 3.6 \times 4.0 = 4.80 \text{ (t)}$$

2. 施工時応力及び根入れ長さの算定

(1). 土質定数と設計側圧

Boring No. 1				
層深度 (-m)	土質 名	平均 N	土質定数	地下水位 (-m)
1.00	表土		$\gamma_s=1.6, \phi=20^\circ$	▽-5.00
3.50	砂質 シルト	3	$\gamma_s=1.6, \phi=15^\circ$ ($C=2.0$)	
6.00	細砂	4	$\gamma_s=1.7, \gamma'=0.7$ $\phi=25^\circ$	
7.90	砂礫	15	$\gamma_s=1.9, \gamma'=0.9$ $\phi=35^\circ$	
12.70	粗砂 細砂	10	$\gamma_s=1.8, \gamma'=0.8$ $\phi=30^\circ$	
15.20	礫混り 粗砂	40	$\gamma_s=1.8, \gamma'=0.8$ $\phi=40^\circ$	
	砂質 シルト	4	$\gamma_s=1.7, \phi=10^\circ$ ($C=4.0$)	



a. ランキン・リザール式による土圧

基本式

$$\left\{ \begin{array}{l} \text{主働土圧} \quad P = (\gamma h + q) \tan^2(45^\circ - \frac{\phi}{2}) - 2C \tan(45^\circ - \frac{\phi}{2}) \\ \text{受働土圧} \quad Pp = (\gamma h + q) \tan^2(45^\circ + \frac{\phi}{2}) + 2C \tan(45^\circ + \frac{\phi}{2}) \end{array} \right.$$

主働土圧 (γ/m^2)

$$P_0 = 1.0 \times \tan^2(45^\circ - \frac{20^\circ}{2}) = 1.0 \times (0.7)^2 = 0.49$$

$$P_{1.0} = (1.6 \times 1.0 + 1.0) \times 0.7^2 = 2.6 \times (0.7)^2 = 1.27$$

$$P_{1.0} = 2.6 \times \tan^2(45^\circ - \frac{15^\circ}{2}) - 2 \times 2.0 \times \tan(45^\circ - \frac{15^\circ}{2}) = 2.6 \times (0.76)^2 - 4.0 \times (0.76) = -1.54$$

$$P_{3.5} = (1.6 \times 2.5 + 2.6) \times (0.76)^2 - 4 \times (0.76) = 6.6 \times 0.58 - 3.04 = 4.4$$

$$P_{3.5} = 6.6 \times \tan^2(45^\circ - \frac{35^\circ}{2}) = 6.6 \times (0.64)^2 = 2.70$$

$$P_{5.0} = (1.7 \times 1.5 + 6.6) \times (0.64)^2 = 9.15 \times 0.41 = 3.75$$

$$P_{6.0} = (0.7 \times 1.0 + 6.6) \times (0.64)^2 = 9.85 \times 0.41 = 4.04$$

$$P_{6.0} = 9.85 \times \tan^2(45^\circ - \frac{35^\circ}{2}) = 9.85 \times (0.52)^2 = 2.66$$

$$P_{7.9} = (0.9 \times 1.9 + 9.85) \times (0.52)^2 = 11.56 \times 0.27 = 3.13$$

$$P_{7.9} = 11.56 \times \tan^2(45^\circ - \frac{30^\circ}{2}) = 11.56 \times (0.58)^2 = 3.89$$

$$P_{12.7} = (0.8 \times 4.8 + 11.56) \times (0.58)^2 = 15.4 \times 0.33 = 5.08$$

$$P_{12.7} = 15.4 \times \tan^2(45^\circ - \frac{40^\circ}{2}) = 15.4 \times (0.47)^2 = 3.40$$

$$P_{13.0} = (0.8 \times 0.3 + 15.4) \times (0.47)^2 = 15.64 \times 0.22 = 3.44$$

受働土圧 (γ/m^2)

$$P_{p-13.0} = 0$$

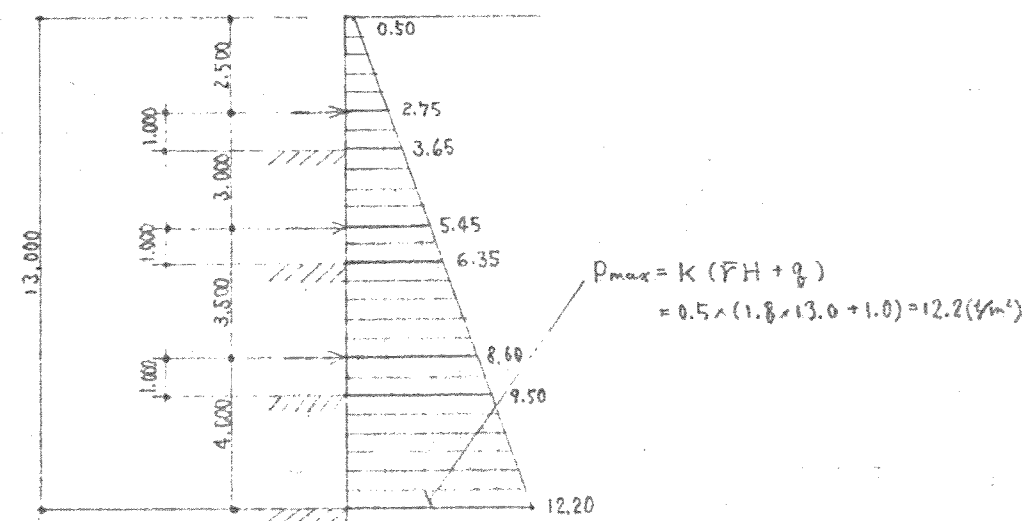
$$P_{p-15.2} = (1.8 \times 2.2) \times \tan^2(45^\circ + \frac{40^\circ}{2}) = 3.96 \times (2.14)^2 = 18.14$$

$$P_{p-15.2} = 3.96 \times \tan^2(45^\circ + \frac{10^\circ}{2}) + 2 \times 4.0 \times \tan(45^\circ + \frac{10^\circ}{2}) = 3.96 \times (1.19)^2 + 8.0 \times (1.19) = 15.13$$

$$P_{p-19.0} = (1.7 \times 3.8 + 3.96) \times (1.19)^2 + 8.0 \times (1.19) = 10.42 \times 1.42 + 9.52 = 24.32$$

b. 設計側圧

建築基礎構造設計規準・同解説 4章49条1項の砂地盤で地下水位の浅い場合の側圧係数 $K=0.3 \sim 0.7$ の範囲で、ランキン・リザール式とを比較して、設計用側圧係数 $K=0.5$ ($\gamma=1.8 \gamma/m^3$) とした三角形分布を採用し、下図の値とする。

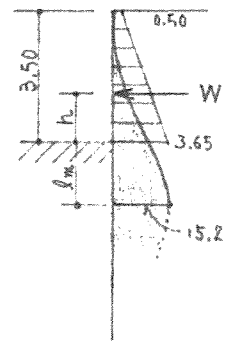


$$P_{max} = K(\gamma H + q) = 0.5 \times (1.8 \times 13.0 + 1.0) = 12.2 (\gamma/m^2)$$

(2) 応力の算定

応力の算定方法としては、床付け以深の良質地盤 (GL-4.000) に仮想支点を設けた「仮想支点法」を用いる。なお、1次根切り時における応力は自立のため Y. L. Chang 式にて算定する。

a. 1次根切り時 (GL-3.5m)



$$\text{荷重: } W = (0.5 + 3.65) \times \frac{1}{2} \times 3.5 = 7.26 \text{ (t)}$$

$$\text{重心: } h = \frac{2 \times 0.5 + 3.65}{3(3.65 + 0.5)} \times 3.5 = 1.31 \text{ (m)}$$

$$EI: 2.1 \times 10^5 \times \frac{100 \times (60)^3}{12} = 3.78 \times 10^{11} \text{ (kg/cm}^2\text{)}$$

K_n : 1.5 (kg/cm³) — 根入れ部の横方向反力係数

$$\beta = \left(\frac{K_n \cdot B}{4EI} \right)^{\frac{1}{4}} = \left(\frac{1.5 \times 100}{4 \times 3.78 \times 10^{11}} \right)^{\frac{1}{4}} = 0.0032 \text{ (cm}^{-1}\text{)}$$

最大曲げモーメント

$$M_{\max} = -W \cdot h \cdot \psi_m(\beta h)$$

$$= -7.26 \times 1.31 \times 1.6 = -15.2 \text{ (t} \cdot \text{m)}$$

$$\therefore \psi_m(\beta h) = \frac{\sqrt{(1+2\beta h)^2 + 1}}{2\beta h} \cdot \exp\left[-\tan^{-1} \frac{1}{1+2\beta h}\right]$$

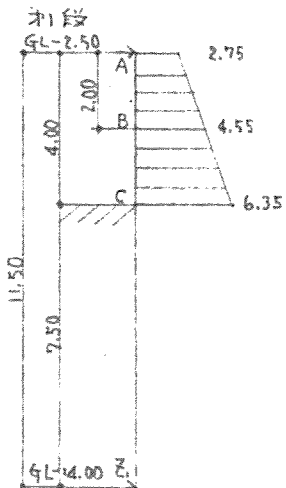
$$\approx 1.6$$

最大曲げを生ずる深さ

$$l_m = \frac{1}{\beta} \tan^{-1} \frac{1}{1+2\beta h}$$

$$= \frac{1}{0.0032} \cdot \tan^{-1} \frac{1}{1+2 \times 0.0032 \times 1.31} = 3.53 \text{ (m)}$$

b. 2次根切り時 (GL-6.5m)



反力

$$R_{21} = \frac{1}{11.5} \left\{ 2.75 \times 4.0 \times \frac{4.0}{2} + (6.35 - 2.75) \times 4.0 \times \frac{1}{2} \times \frac{2 \times 4.0}{3} \right\}$$

$$= \frac{1}{11.5} (22.0 + 19.2) = 3.58 \text{ (t)}$$

$$R_A = (2.75 + 6.35) \times \frac{1}{2} \times 4.0 - 3.58 = 14.62 \text{ (t)}$$

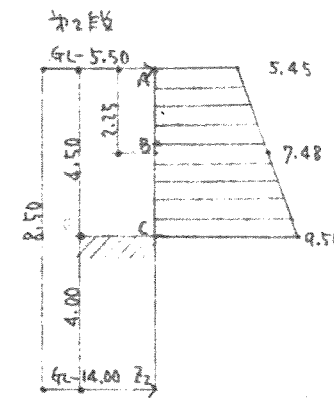
曲げモーメント

$$M_A = M_{21} = 0 \text{ とすると,}$$

$$M_B = 14.62 \times 2.0 - \left\{ 2.75 \times 2.0 \times \frac{2.0}{2} + (6.35 - 2.75) \times 2.0 \times \frac{1}{2} \times \frac{2.0}{3} \right\}$$

$$= 29.24 - (5.50 + 1.20) = 22.54 \text{ (t} \cdot \text{m)}$$

c. 3次根切り時 (GL-10.0m)



反力

$$R_{31} = \frac{1}{8.5} \left\{ 5.45 \times 4.5 \times \frac{4.5}{2} + (9.5 - 5.45) \times 4.5 \times \frac{1}{2} \times \frac{2 \times 4.5}{3} \right\}$$

$$= \frac{1}{8.5} (55.18 + 27.34) = 9.71 \text{ (t)}$$

$$R_A = (5.45 + 9.5) \times \frac{1}{2} \times 4.5 - 9.71 = 23.93 \text{ (t)}$$

曲げモーメント

$$M_A = M_{31} = 0 \text{ とすると,}$$

$$M_B = 23.93 \times 2.25 - \left\{ 5.45 \times 2.25 \times \frac{2.25}{2} + (9.5 - 5.45) \times 2.25 \times \frac{1}{2} \times \frac{2.25}{3} \right\}$$

$$= 53.84 - (13.79 + 1.71) = 38.34 \text{ (t} \cdot \text{m)}$$

$$M_C = 9.71 \times 4.0 = 38.84 \text{ (t} \cdot \text{m)}$$

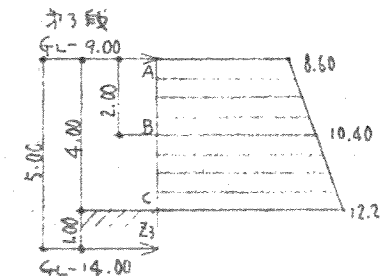
∴ 2 両端の固定度 0.3 を考慮すると,

$$M_{A'} = M_{2'} = -0.3 \times 38.84 = -11.65 \text{ (t} \cdot \text{m)}$$

$$M_{B'} = 38.34 - 11.65 = 26.69 \text{ (t} \cdot \text{m)}$$

$$M_{C'} = 38.84 - 11.65 = 27.19 \text{ (t} \cdot \text{m)}$$

d. 4次根切り時 (GL-13.0m)



反力

$$R_{41} = \frac{1}{5.0} \left\{ 8.6 \times 4.0 \times \frac{4.0}{2} + (12.2 - 8.6) \times 4.0 \times \frac{1}{2} \times \frac{2 \times 4.0}{3} \right\}$$

$$= \frac{1}{5.0} (68.8 + 19.2) = 17.6 \text{ (t)}$$

$$R_A = (8.6 + 12.2) \times \frac{1}{2} \times 4.0 - 17.6 = 24.0 \text{ (t)}$$

$$M_A = M_{41} = 0 \text{ とすると,}$$

$$M_B = 24.0 \times 2.0 - \left\{ 8.6 \times 2.0 \times \frac{2.0}{2} + (12.2 - 8.6) \times 2.0 \times \frac{1}{2} \times \frac{2.0}{3} \right\}$$

$$= 48.0 - (17.2 + 1.2) = 29.6 \text{ (t} \cdot \text{m)}$$

$$M_C = 17.6 \times 1.0 = 17.6 \text{ (t} \cdot \text{m)}$$

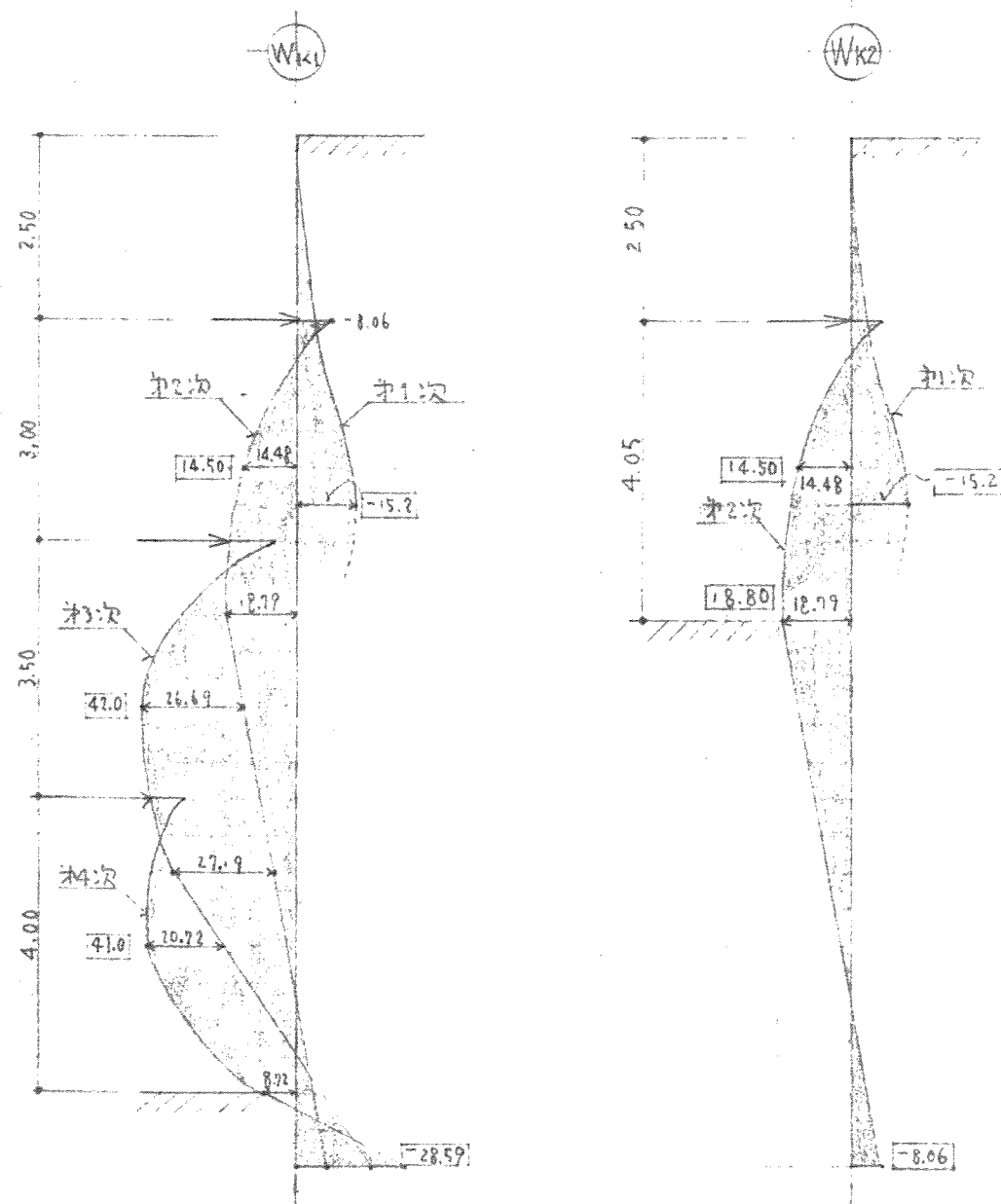
ここで両端に固定度 0.3 考慮すると

$$MA' = ME' = -0.3 \times 29.6 = -8.88 \text{ (t.m)}$$

$$MP' = 29.6 - 8.88 = 20.72 \text{ (t.m)}$$

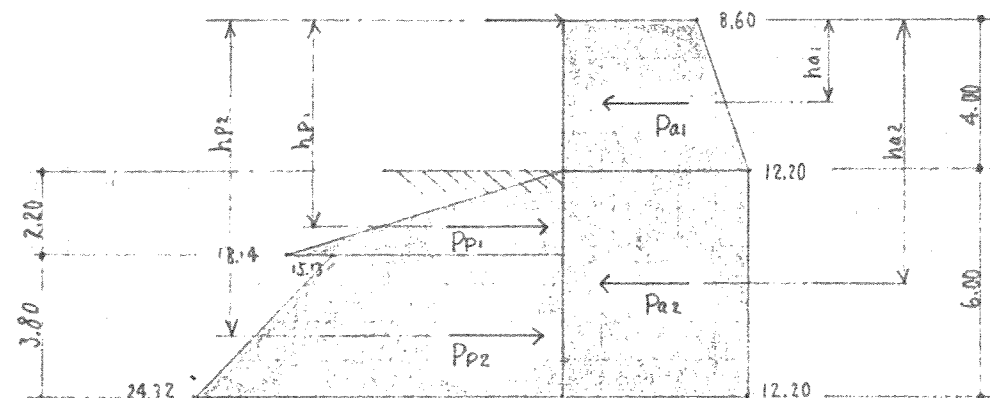
$$MC' = 17.6 - 8.88 = 8.72 \text{ (t.m)}$$

e. 応力のまとめ



(3) 根入れ長さの算定

Ⓐ は根入れ長さが大きいことより十分安全と思われるので、Ⓑ の根入れ長さの算定を行う。



根入れ長さ 6.00 m とし

主働土圧係数 M_a は

$$M_a = Pa_1 \cdot ha_1 + Pa_2 \cdot ha_2 = 41.6 \times 2.12 + 73.2 \times 7.0 = 88.19 + 512.4 = 600.59 \text{ (t.m)}$$

ここで

$$Pa_1 = (8.6 + 12.2) \times \frac{1}{2} \times 4.0 = 41.6 \text{ (t)}$$

$$Pa_2 = 12.2 \times 6.0 = 73.2 \text{ (t)}$$

$$ha_1 = \frac{(2 \times 2.2 + 8.6)}{3(8.6 + 12.2)} \times 4.0 = 2.12 \text{ (m)}$$

$$ha_2 = 4.0 + \frac{1}{2} \times 6.0 = 7.0 \text{ (m)}$$

受働土圧抵抗 M_p は

$$M_p = Pp_1 \cdot hp_1 + Pp_2 \cdot hp_2 = 19.95 \times 5.47 + 74.96 \times 8.25 = 109.13 + 618.42 = 727.55 \text{ (t.m)}$$

ここで

$$Pp_1 = 18.14 \times 2.2 \times \frac{1}{2} = 19.95 \text{ (t)}$$

$$Pp_2 = (15.13 + 24.32) \times \frac{1}{2} \times 3.8 = 74.96 \text{ (t)}$$

$$hp_1 = 4.0 + \frac{2}{3} \times 2.2 = 5.47 \text{ (m)}$$

$$hp_2 = 4.0 + 2.2 \times \frac{(2 \times 24.32 + 15.13)}{3(15.13 + 24.32)} \times 3.8 = 8.25 \text{ (m)}$$

安全率 F_s は

$$F_s = \frac{M_p}{M_a} = \frac{727.55}{600.59} = 1.21 \leq 1.2 \rightarrow O.K.$$

(構造計算用)

3. 断面の算定.

(1) 材料の許容応力度

a. コンクリート

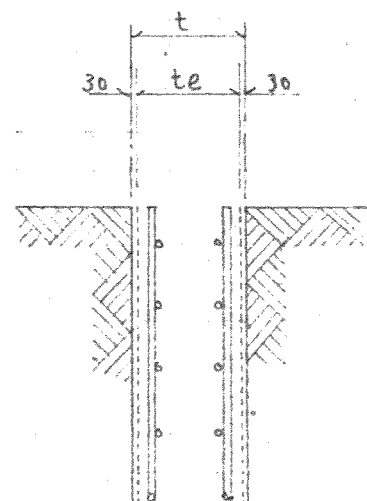
$$F_c = 220 \text{ (kg/cm}^2\text{)}$$

コンクリートの許容応力度 (kg/cm ²)				異形鉄筋の許容付着応力度 f_a (kg/cm ²)	
長期		短期		長期	短期
圧縮 f_c	せん断 f_s	圧縮 f_c	せん断 f_s		
$\frac{1}{4} F_c$	$\frac{1}{40} F_c$ かつ $0.75(5 + \frac{F_c}{100})$ 以下	長期 $\times 2$ 倍	長期 $\times 1.5$ 倍	$0.75 \times \frac{1}{10} F_c$ かつ $0.75(13.5 + \frac{F_c}{25})$ 以下	長期 $\times 1.5$ 倍
55.0	5.5	110.0	8.3	16.5	24.8

b. 鉄筋

材種	長期		短期	
	引張及び圧縮 $s f_c$	せん断補強 $s f_s$	$s f_c$	$s f_s$
SD-30	2,000	2,000	3,000	3,000

(2) 有効断面の算定.



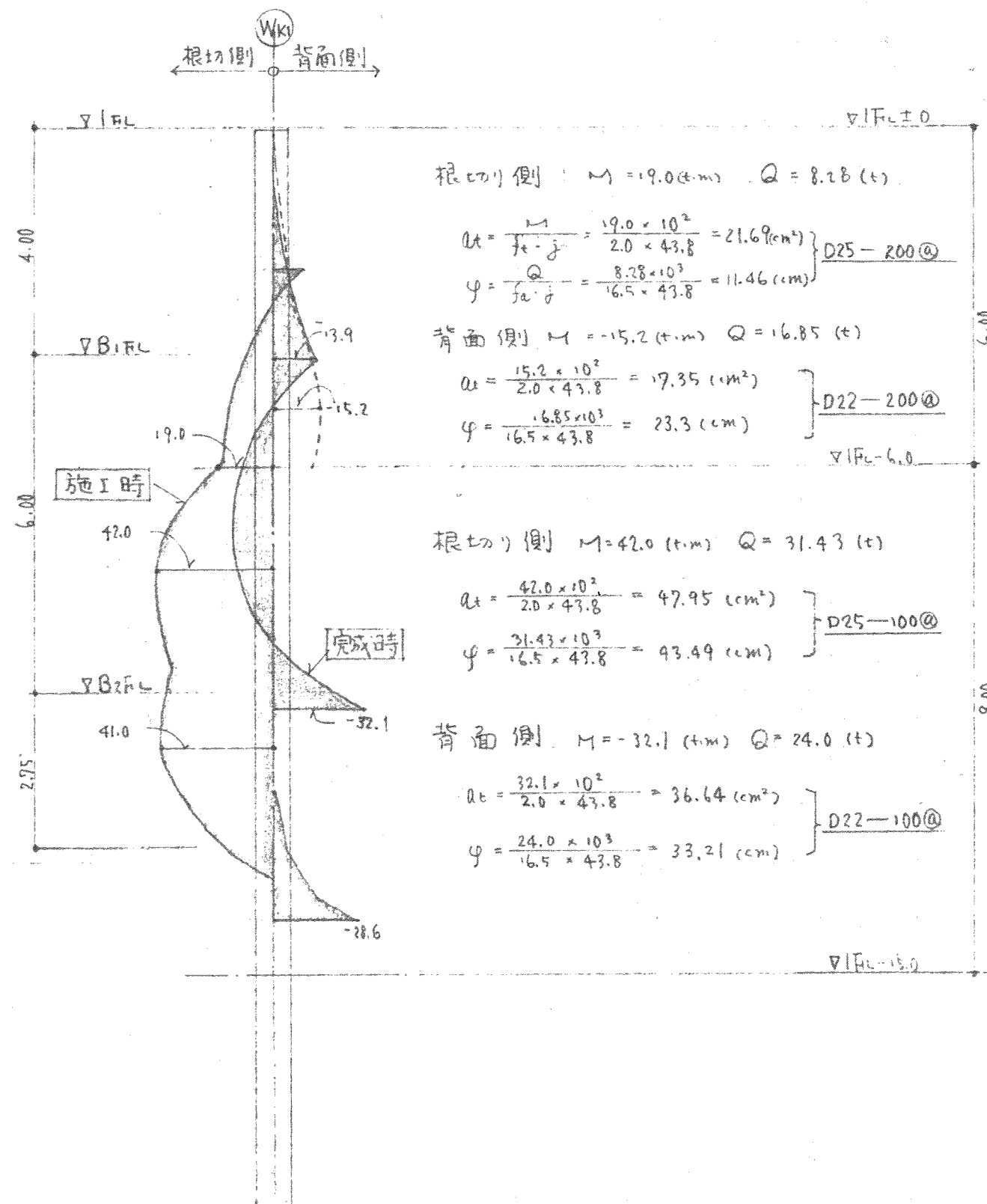
$$t: \text{公称壁厚} = 60 \text{ cm}$$

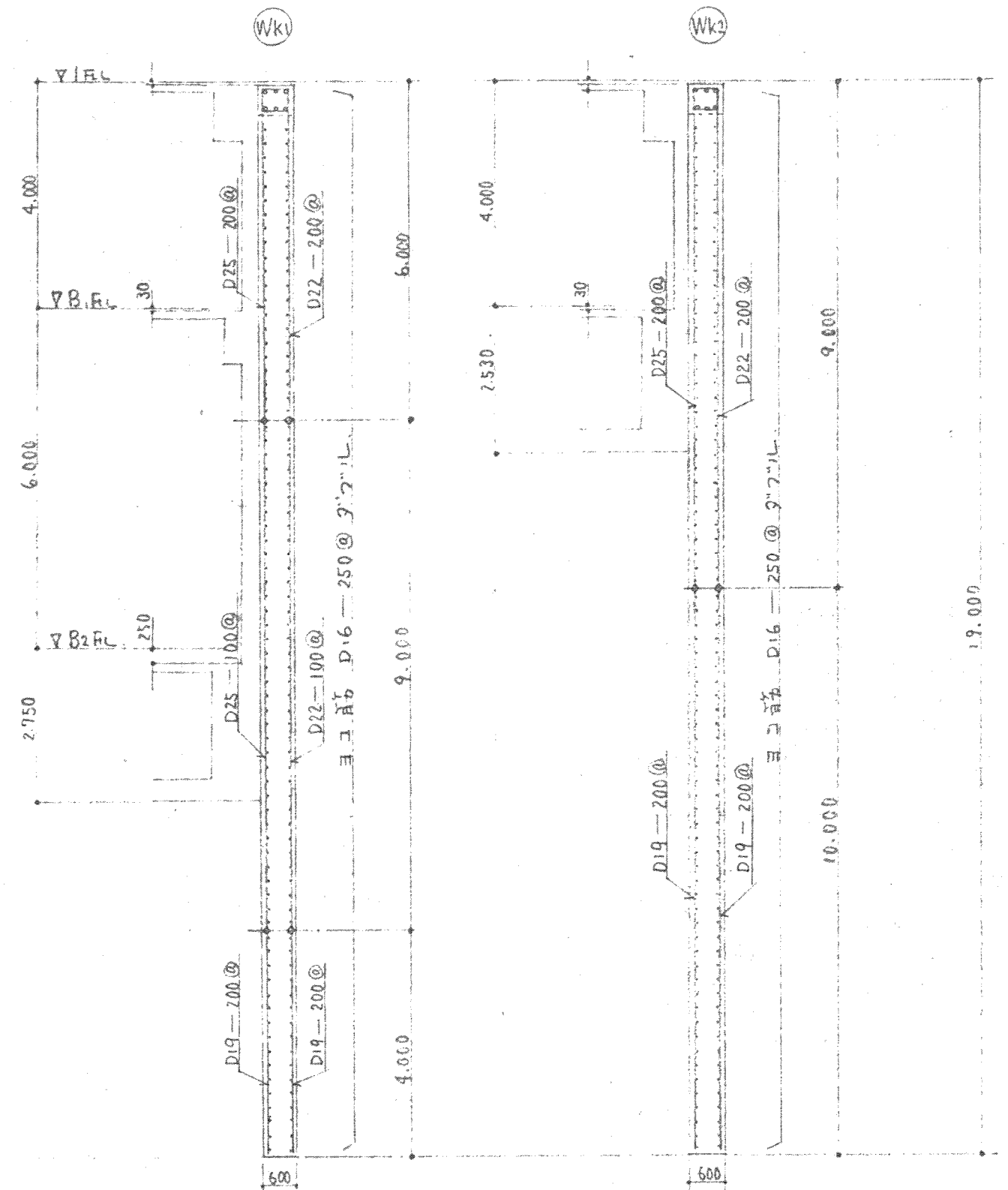
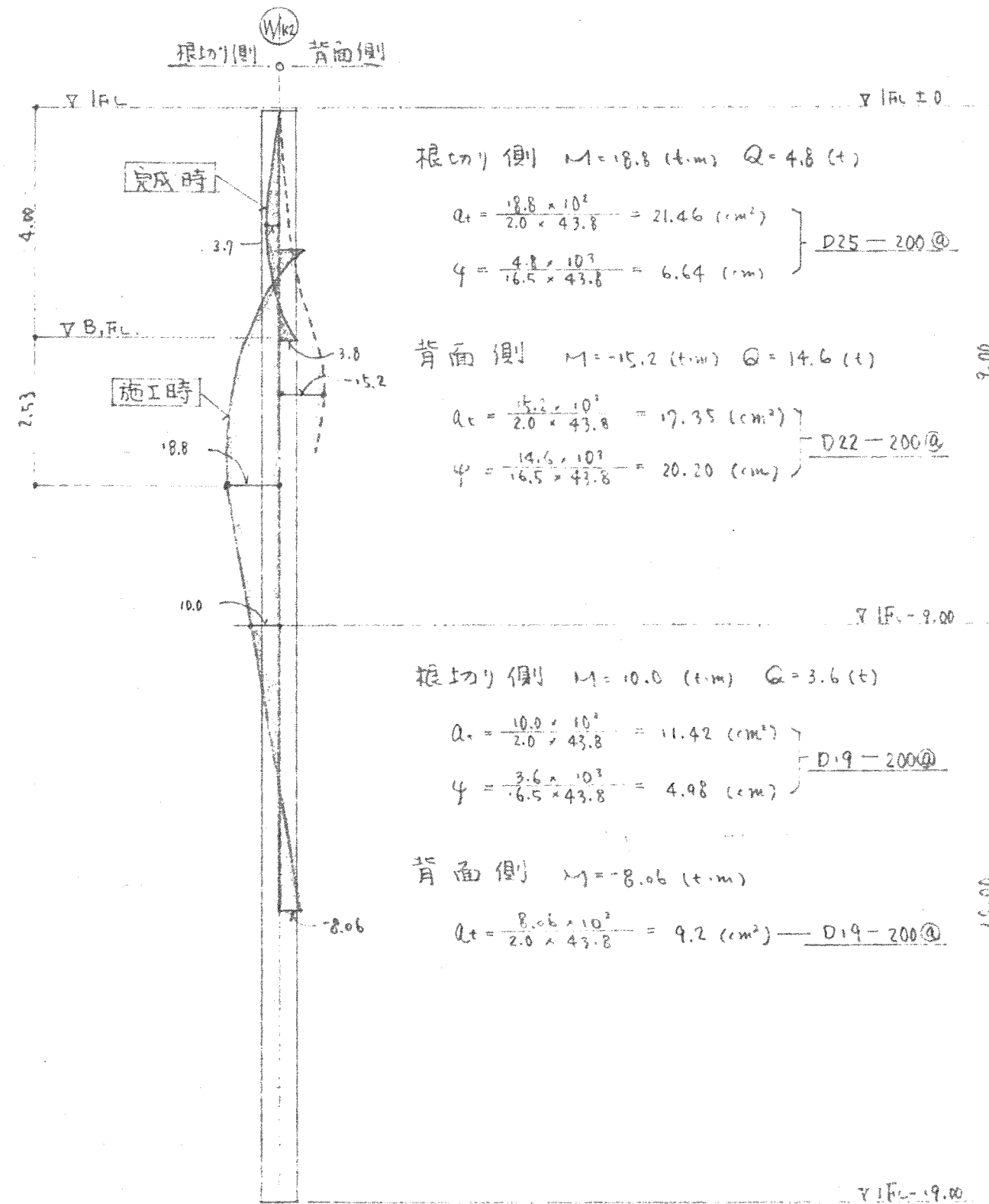
$$t_e: \text{有効壁厚} = 60 - 2 \times 3 = 54 \text{ cm}$$

$$d = t_e - 4 = 54 - 4 = 50 \text{ cm}$$

$$j = \frac{7}{8} d = \frac{7}{8} \times 50 = 43.8 \text{ cm}$$

(3) 鉄筋量の算定.





(4) セル断力に対する壁厚の算定

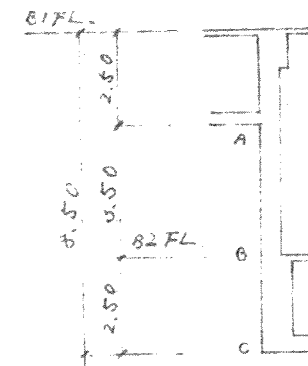
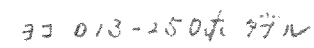
許容セル断力 $Q_a = \alpha \cdot f \cdot j \cdot f_s$

$$= 1.32 \times 100 \times 43.8 \times 5.5 = 31.8 \times 10^3 \text{ (kg)} = 31.8 \text{ (t)} > Q_{\max} = 31.43 \text{ (t)} \rightarrow 0.K$$

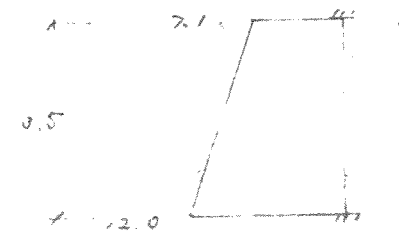
ここで

$$\alpha = \frac{4}{\frac{M}{Q \cdot d} + 1} = \frac{4}{\frac{31.43}{31.43 \times 0.5} + 1} = 1.32$$

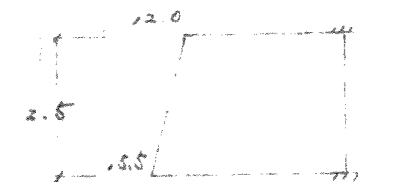
W 4



$$p_c = 0.5 \times 1.8 \times 4.0 + 0.5 \times (1.8 - 1.0) \times 8.5 + 2.5 = 15.5 \text{ kN/m}^2$$



$$Q_B = \frac{1}{2} \times 2.1 \times 3.5 + \frac{2}{6} \times 4.9 \times 3.5 = 18.1 \text{ k}$$



$$G_1 = \frac{1}{2} \times 2.0 \times 2.5 + \frac{3}{2} \times 3.5 \times 2.5 = 17.9 \text{ A}$$

(A)

1.2	1.2	0
-1.2	-1.2	0
0	0	0

(B)

7.0	-10.2	0
3.2	1.0	0
0.6	-4.6	0
0.7	0.3	0
0.2	-1.5	0

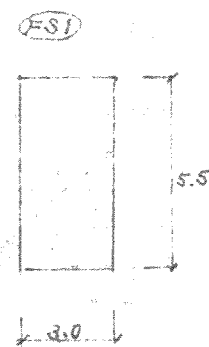
(C)

7.2	-7.2	0
10.8	7.3	0
6.7	-	0
8.1	-	0



$$A_t = 9.7 \text{ cm}^2 \quad 0.9 - 200 \text{ 7c}$$

底盤の設計



$$w = 8.0 - 2.4 \times 0.4 = 7.04 \text{ t/m}^2$$

$$\lambda = 1.83 \quad w_x = 0.919 \times 7.04 = 6.74$$

$$w_x l_x^2 = 60.7$$

$$D = 40 \quad d = 33$$

$$M_{x1} = 60.7 \times 0.017 = 4.67 \text{ t}\cdot\text{m}$$

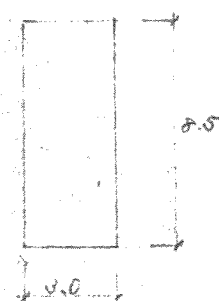
$$A_t = \frac{4.67}{2.0 \times 7/8 \times 33} = 8.09 \text{ cm}^2$$

016-200 $\sqrt{f_c}$

$$M_{y1} = 7.04 \times 3.0^2 \times 0.042 = 2.77 \text{ t}\cdot\text{m}$$

$$A_t = 4.20 \text{ cm}^2$$

013-200 $\sqrt{f_c}$



$$w = 7.04$$

$$\lambda = 2.83 \quad w l_x^2 = 66.66$$

$$D = 40 \quad d = 33$$

$$M_{x1} = 66.66 \times 0.017 = 5.48 \text{ t}\cdot\text{m}$$

$$A_t = 9.49 \text{ cm}^2$$

016-200 $\sqrt{f_c}$