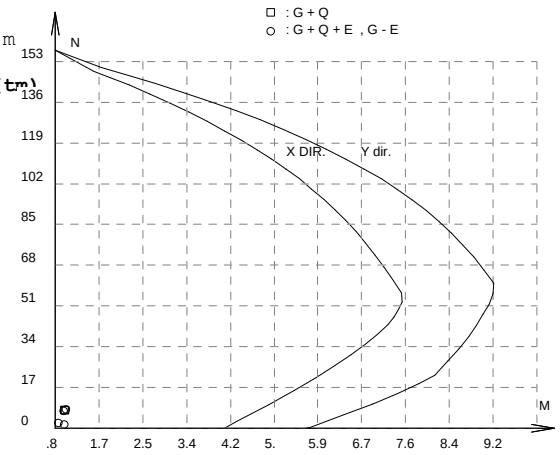
CB01 COLUMN

I/J :1/ Bx/By :25/35 βx:1.000 βy:1.000 Hk :3.0 m
Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	4.86	0.01	0.01	0.03	0.01
2.(Q+Q+Q+Q)	0.59	0.00	0.00	0.00	0.00
3.(o+Q+o+Q)	0.33	0.00	0.00	0.00	0.00
4.(Q+o+Q+o)	0.25	0.00	0.00	0.00	0.00
5.(Q+Q+o+Q)	0.46	0.00	0.00	0.00	0.00
6.(o+Q+Q+o)	0.37	0.00	0.00	0.00	0.00
7.(o+o+Q+Q)	0.33	0.00	0.00	0.00	0.00
Soil	0.07	0.00	0.00	0.00	-0.01
X-Seismic+%5	-2.14	0.04	0.05	-0.02	-0.01
X-Seismic-%5	-1.97	0.04	0.05	-0.02	-0.01
Y-Seismic+%5	-2.45	-0.01	-0.01	0.13	0.16
Y-Seismic-%5	-2.71	-0.02	-0.01	0.13	0.16
X-Wind +%5	-0.23	0.00	0.01	0.00	0.00
X-Wind -%5	-0.21	0.00	0.01	0.00	0.00
Y-Wind +%5	-0.35	0.00	0.00	0.02	0.02
Y-Wind -%5	-0.38	0.00	0.00	0.02	0.02

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)	
max. Nd (t) :	7.466	7.245	7.466	7.980	2.227	1.664	
minor M (tm):	0.046	0.010	0.016	-0.004	0.005	-0.005	
major M (tm):	0.168	0.163	0.190	0.203	0.056	0.176	
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667	
μ :	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	
As (cm²):	2.188	2.188	2.188	2.188	2.188	2.188	Cqa=0.600

REINF :2x2ø14+2x1ø14 (web) + ø8/10(stirrup)



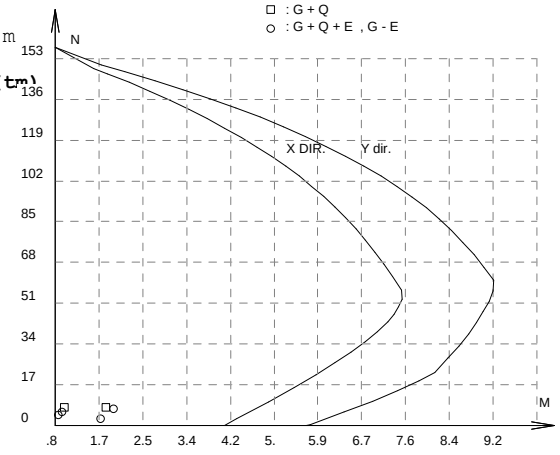
CB02 COLUMN

I/J :8/ Bx/By :25/35 βx:1.000 βy:1.000 Hk :3.0 m
Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	4.92	0.00	0.00	-0.46	-0.22
2.(Q+Q+Q+Q)	0.80	0.00	0.00	-0.18	-0.09
3.(o+Q+o+Q)	0.43	0.00	0.00	-0.20	-0.10
4.(Q+o+Q+o)	0.36	0.00	0.00	0.02	0.01
5.(Q+Q+o+Q)	0.58	0.00	0.00	-0.14	-0.07
6.(o+Q+Q+o)	0.52	0.00	0.00	-0.01	-0.01
7.(o+o+Q+Q)	0.48	0.00	0.00	-0.20	-0.10
Soil	0.01	0.00	0.00	0.00	-0.01
X-Seismic+%5	-0.15	0.05	0.06	-0.09	-0.04
X-Seismic-%5	0.13	0.06	0.06	0.06	0.03
Y-Seismic+%5	-1.09	0.00	0.00	-0.23	0.00
Y-Seismic-%5	-1.50	-0.01	0.00	-0.45	-0.11
X-Wind +%5	-0.02	0.01	0.01	-0.01	-0.01
X-Wind -%5	0.01	0.01	0.01	0.01	0.00
Y-Wind +%5	-0.15	0.00	0.00	-0.03	0.00
Y-Wind -%5	-0.21	0.00	0.00	-0.07	-0.02

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)	
max. Nd (t) :	7.665	5.533	7.665	6.904	4.278	2.931	
minor M (tm):	-0.663	-0.193	-0.003	-0.009	-0.243	-0.007	
major M (tm):	-0.172	0.124	-0.971	-1.118	0.058	-0.866	
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667	
μ :	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	
As (cm²):	2.188	2.188	2.188	2.188	2.188	2.188	Cqa=0.600

REINF :2x2ø14+2x1ø14 (web) + ø8/10/8(stirrup)



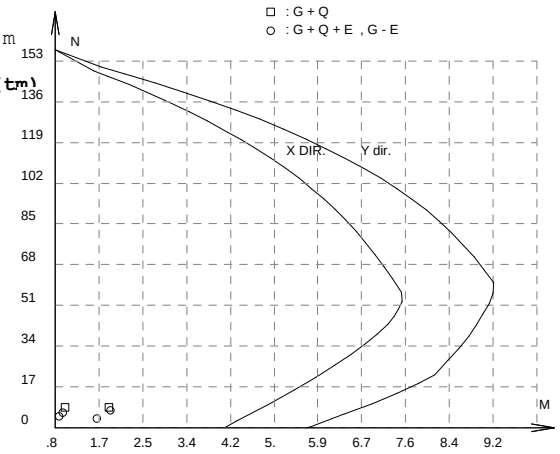
CB03 COLUMN

I/J :25/ Bx/By :25/35 βx:1.000 βy:1.000 Hk :3.0 m
Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	5.49	0.00	0.00	-0.48	-0.23
2.(Q+Q+Q+Q)	0.96	0.00	0.00	-0.19	-0.09
3.(o+Q+o+Q)	0.52	0.00	0.00	-0.21	-0.10
4.(Q+o+Q+o)	0.43	0.00	0.00	0.02	0.01
5.(Q+Q+o+Q)	0.67	0.00	0.00	-0.15	-0.07
6.(o+Q+Q+o)	0.62	0.00	0.00	-0.01	-0.01
7.(o+o+Q+Q)	0.62	0.00	0.00	-0.22	-0.11
Soil	0.00	0.00	0.00	0.00	-0.01
X-Seismic+%5	0.06	0.06	0.06	-0.05	-0.02
X-Seismic-%5	0.22	0.06	0.06	0.04	0.02
Y-Seismic+%5	-1.00	0.00	0.00	-0.23	0.00
Y-Seismic-%5	-1.24	0.00	0.00	-0.36	-0.06
X-Wind +%5	0.01	0.01	0.01	-0.01	0.00
X-Wind -%5	0.02	0.01	0.01	0.00	0.00
Y-Wind +%5	-0.14	0.00	0.00	-0.04	0.00
Y-Wind -%5	-0.17	0.00	0.00	-0.06	-0.01

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)	
max. Nd (t) :	8.610	6.290	8.610	7.307	4.720	3.702	
minor M (tm):	-1.013	-0.417	-0.004	-0.005	-0.471	-0.004	
major M (tm):	-0.194	0.142	-1.025	-1.057	-0.066	-0.791	
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667	
μ :	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	
As (cm²):	2.188	2.188	2.188	2.188	2.188	2.188	Cqa=0.600

REINF :2x2ø14+2x1ø14 (web) + ø8/10(stirrup)



CB07 COLUMN

I/J :16/ Bx/By :40/ βx:1.000 βy:1.000 Hk :3.0 m

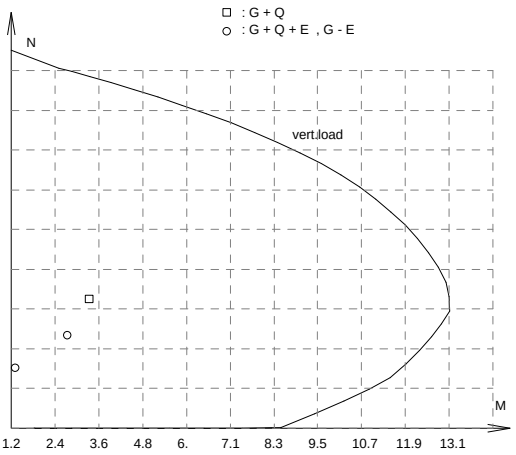
Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	43.11	-0.34	-0.17	-0.14	-0.07
2.(Q+Q+Q+Q)	12.59	-0.11	-0.05	-0.04	-0.02
3.(o+Q+o+Q)	6.07	0.07	0.04	0.16	0.08
4.(Q+o+Q+o)	6.39	-0.18	-0.09	-0.20	-0.10
5.(Q+Q+o+Q)	8.69	-0.12	-0.06	-0.06	-0.03
6.(o+Q+Q+o)	8.80	-0.14	-0.07	-0.15	-0.07
7.(o+o+Q+Q)	7.42	0.05	0.02	0.14	0.07
Soil	0.00	0.00	0.00	-0.01	-0.01
X-Seismic+%5	2.23	-0.30	-0.05	-0.09	-0.04
X-Seismic-%5	2.26	-0.37	-0.08	0.07	0.03
Y-Seismic+%5	0.94	-0.02	-0.01	-0.15	0.08
Y-Seismic-%5	0.90	0.08	0.04	-0.39	-0.03
X-Wind +%5	0.25	-0.04	-0.01	-0.01	-0.01
X-Wind -%5	0.25	-0.04	-0.01	0.01	0.00
Y-Wind +%5	0.13	0.00	0.00	-0.02	0.01
Y-Wind -%5	0.13	0.01	0.01	-0.06	-0.01

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)
max. Nd (t) :	78.042	56.421	78.042	55.061	36.540	37.900
minor M (tm):	-0.520	-0.267	-0.773	-0.445	-0.193	-0.388
major M (tm):	-2.107	1.523	-2.107	1.487	0.061	0.269
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667
μ :	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110
As (cm²):	13.757	13.757	13.757	13.757	13.757	13.757

Cqa=0.878

REINF :9ø14 + ø8/15/5(stirrup)



CB08 COLUMN

I/J :31/ Bx/By :40/ βx:1.000 βy:1.000 Hk :3.0 m

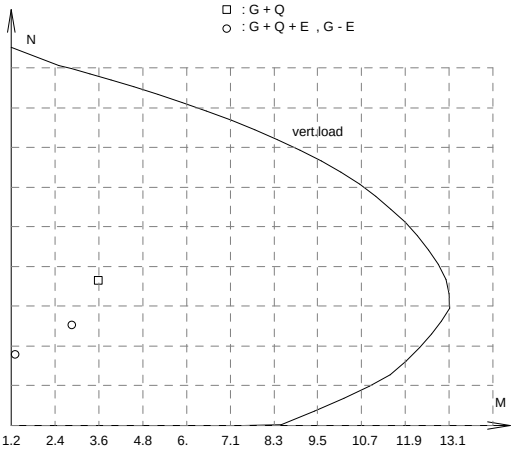
Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	47.82	0.01	0.01	-0.15	-0.07
2.(Q+Q+Q+Q)	14.70	0.00	0.00	-0.04	-0.02
3.(o+Q+o+Q)	7.32	-0.18	-0.09	0.17	0.08
4.(Q+o+Q+o)	7.23	0.18	0.09	-0.21	-0.10
5.(Q+Q+o+Q)	9.51	0.15	0.07	-0.06	-0.03
6.(o+Q+Q+o)	10.20	-0.03	-0.01	-0.16	-0.08
7.(o+o+Q+Q)	9.38	-0.12	-0.06	0.14	0.07
Soil	0.00	0.00	0.00	-0.01	-0.01
X-Seismic+%5	0.09	-0.34	-0.07	-0.03	-0.01
X-Seismic-%5	0.09	-0.42	-0.10	0.07	0.03
Y-Seismic+%5	-0.45	0.03	0.01	-0.17	0.07
Y-Seismic-%5	-0.46	0.14	0.07	-0.31	0.00
X-Wind +%5	0.01	-0.04	-0.01	0.00	0.00
X-Wind -%5	0.01	-0.05	-0.01	0.01	0.00
Y-Wind +%5	-0.06	0.00	0.00	-0.03	0.01
Y-Wind -%5	-0.06	0.02	0.01	-0.05	0.00

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)
max. Nd (t) :	87.681	60.688	87.681	60.321	42.951	42.584
minor M (tm):	-0.539	-0.422	0.295	0.330	-0.197	0.153
major M (tm):	2.367	1.639	-2.367	1.629	0.435	-0.440
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667
μ :	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110
As (cm²):	13.757	13.757	13.757	13.757	13.757	13.757

Cqa=0.881

REINF :9ø14 + ø8/15/5(stirrup)



CB09 COLUMN

I/J :51/ Bx/By :40/ βx:1.000 βy:1.000 Hk :3.0 m

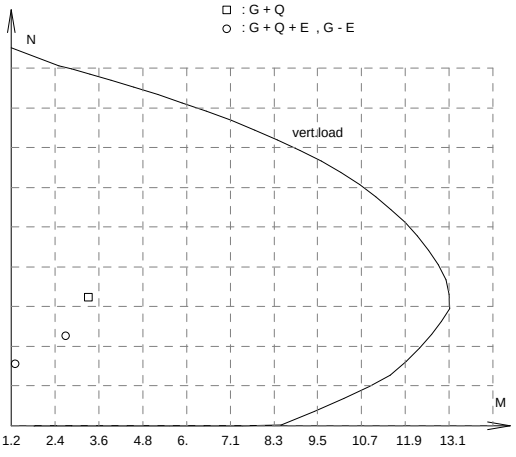
Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	42.52	0.03	0.02	0.13	0.06
2.(Q+Q+Q+Q)	12.77	0.01	0.01	0.06	0.03
3.(o+Q+o+Q)	6.48	0.19	0.09	0.16	0.08
4.(Q+o+Q+o)	6.11	-0.18	-0.09	-0.10	-0.05
5.(Q+Q+o+Q)	8.92	-0.13	-0.07	0.05	0.02
6.(o+Q+Q+o)	7.97	0.16	0.08	-0.08	-0.04
7.(o+o+Q+Q)	8.30	-0.01	0.00	0.16	0.08
Soil	0.01	0.00	0.00	-0.01	-0.01
X-Seismic+%5	-0.51	-0.38	-0.09	0.02	0.01
X-Seismic-%5	-0.61	-0.46	-0.12	0.03	0.02
Y-Seismic+%5	-9.13	0.03	0.01	0.02	0.17
Y-Seismic-%5	-8.99	0.13	0.06	0.00	0.15
X-Wind +%5	-0.05	-0.05	-0.01	0.00	0.00
X-Wind -%5	-0.06	-0.05	-0.02	0.00	0.00
Y-Wind +%5	-1.28	0.00	0.00	0.00	0.02
Y-Wind -%5	-1.26	0.02	0.01	0.00	0.02

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)
max. Nd (t) :	77.600	54.427	77.600	53.202	37.652	29.133
minor M (tm):	0.436	0.255	0.347	-0.236	0.151	0.029
major M (tm):	2.095	1.470	2.095	1.436	-0.429	0.225
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667
μ :	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110
As (cm²):	13.757	13.757	13.757	13.757	13.757	13.757

Cqa=0.884

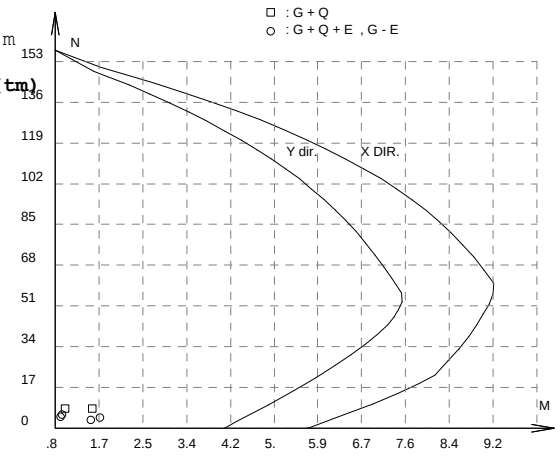
REINF :9ø14 + ø8/15/5(stirrup)



CB16 COLUMN

I/J :151/ Bx/By :35/25 βx:1.000 βy:1.000 Hk :3.0 m
Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	5.24	0.34	0.17	0.00	0.00
2.(Q+Q+Q+Q)	0.86	0.13	0.07	0.00	0.00
3.(o+Q+o+Q)	0.45	0.10	0.05	0.00	0.00
4.(Q+o+Q+o)	0.40	0.04	0.02	0.00	0.00
5.(Q+Q+o+Q)	0.57	0.09	0.05	0.00	0.00
6.(o+Q+Q+o)	0.56	0.03	0.02	0.00	0.00
7.(o+o+Q+Q)	0.57	0.14	0.07	0.00	0.00
Soil	0.00	0.00	0.00	0.00	0.00
X-Seismic+%5	1.40	-0.37	-0.11	0.00	0.00
X-Seismic-%5	1.40	-0.37	-0.11	0.00	0.00
Y-Seismic+%5	0.00	0.00	0.00	0.10	0.10
Y-Seismic-%5	0.00	0.00	0.00	0.09	0.09
X-Wind +%5	0.15	-0.04	-0.01	0.00	0.00
X-Wind -%5	0.15	-0.04	-0.01	0.00	0.00
Y-Wind +%5	0.00	0.00	0.00	0.01	0.01
Y-Wind -%5	0.00	0.00	0.00	0.01	0.01



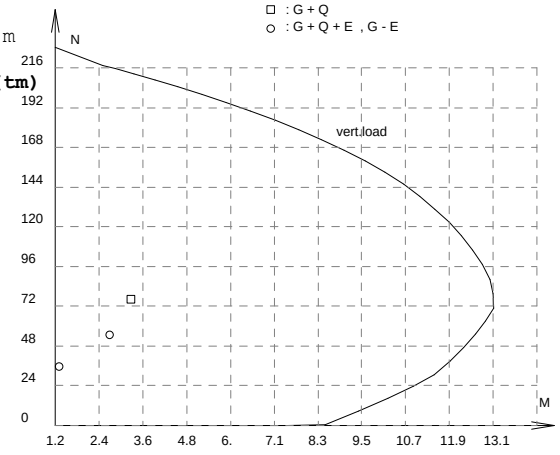
DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)	
max. Nd (t) :	8.161	4.355	8.161	5.756	3.315	4.716	
minor M (tm):	0.000	0.003	0.629	0.435	-0.003	0.308	
major M (tm):	0.704	0.854	-0.184	0.130	0.679	-0.100	
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667	
μ :	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	
As (cm²):	2.188	2.188	2.188	2.188	2.188	2.188	Cqa=0.600

REINF :2x2ø14+2x1ø14 (web) + ø8/10(stirrup)

CB17 COLUMN

I/J :101/ Bx/By :40/ βx:1.000 βy:1.000 Hk :3.0 m
Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	42.10	0.31	0.15	-0.12	-0.06
2.(Q+Q+Q+Q)	12.23	0.10	0.05	-0.03	-0.02
3.(o+Q+o+Q)	6.64	0.09	0.05	0.16	0.08
4.(Q+o+Q+o)	5.44	0.00	0.00	-0.19	-0.10
5.(Q+Q+o+Q)	8.43	0.09	0.04	-0.06	-0.03
6.(o+Q+Q+o)	8.57	0.17	0.08	-0.15	-0.07
7.(o+o+Q+Q)	7.17	-0.06	-0.03	0.14	0.07
Soil	0.00	0.00	0.00	-0.01	-0.01
X-Seismic+%5	-1.86	-0.29	-0.04	0.07	0.03
X-Seismic-%5	-2.03	-0.37	-0.08	-0.06	-0.02
Y-Seismic+%5	-0.35	-0.06	-0.03	-0.22	0.05
Y-Seismic-%5	-0.09	0.05	0.02	-0.04	0.13
X-Wind +%5	-0.21	-0.04	-0.01	0.01	0.00
X-Wind -%5	-0.23	-0.04	-0.01	-0.01	0.00
Y-Wind +%5	-0.05	-0.01	0.00	-0.03	0.01
Y-Wind -%5	-0.01	0.01	0.00	-0.01	0.02



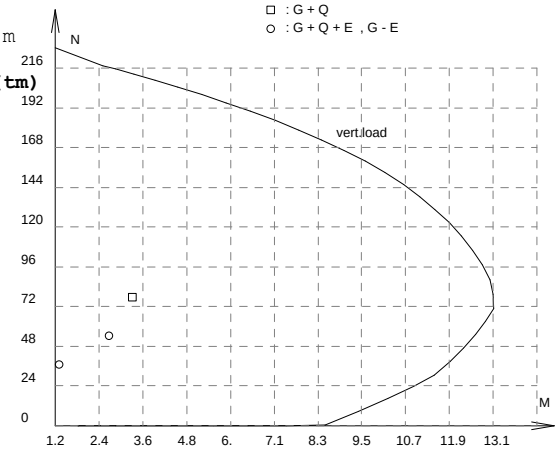
DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)	
max. Nd (t) :	76.141	54.884	76.141	52.502	35.860	37.544	
minor M (tm):	-0.403	-0.211	0.437	0.252	-0.165	0.222	
major M (tm):	2.056	1.482	-2.056	1.418	-0.085	-0.330	
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667	
μ :	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	
As (cm²):	13.757	13.757	13.757	13.757	13.757	13.757	Cqa=0.879

REINF :9ø14 + ø8/15/5(stirrup)

CB18 COLUMN

I/J :75/ Bx/By :40/ βx:1.000 βy:1.000 Hk :3.0 m
Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	42.51	-0.03	-0.01	0.10	0.05
2.(Q+Q+Q+Q)	12.76	0.00	0.00	0.05	0.02
3.(o+Q+o+Q)	6.40	-0.16	-0.08	0.15	0.08
4.(Q+o+Q+o)	6.17	0.16	0.08	-0.10	-0.05
5.(Q+Q+o+Q)	9.03	0.01	0.01	0.04	0.02
6.(o+Q+Q+o)	8.61	-0.16	-0.08	-0.09	-0.04
7.(o+o+Q+Q)	7.50	0.14	0.07	0.15	0.07
Soil	0.01	0.00	0.00	-0.01	-0.01
X-Seismic+%5	1.35	-0.35	-0.07	-0.05	-0.03
X-Seismic-%5	0.47	-0.43	-0.11	-0.08	-0.04
Y-Seismic+%5	-9.25	-0.07	-0.03	-0.01	0.16
Y-Seismic-%5	-7.96	0.05	0.02	0.04	0.17
X-Wind +%5	0.14	-0.04	-0.01	0.00	0.00
X-Wind -%5	0.05	-0.05	-0.01	-0.01	0.00
Y-Wind +%5	-1.30	-0.01	0.00	0.00	0.02
Y-Wind -%5	-1.12	0.01	0.00	0.00	0.02



DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)	
max. Nd (t) :	77.548	54.252	77.548	53.310	36.912	29.008	
minor M (tm):	0.376	0.167	-0.291	0.247	0.135	-0.042	
major M (tm):	-2.094	1.465	2.094	1.439	0.331	0.199	
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667	
μ :	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	
As (cm²):	13.757	13.757	13.757	13.757	13.757	13.757	Cqa=0.883

REINF :9ø14 + ø8/15/5(stirrup)

CB25 COLUMN

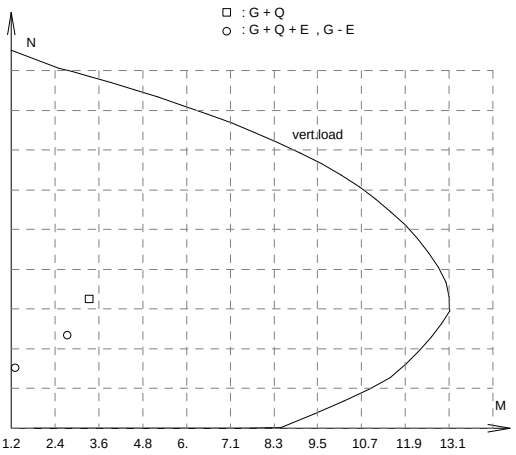
I/J :53/ Bx/By :40/ βx:1.000 βy:1.000 Hk :3.0 m

Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	43.10	-0.34	-0.17	0.14	0.07
2.(Q+Q+Q+Q)	12.59	-0.11	-0.05	0.04	0.02
3.(o+Q+o+Q)	6.10	0.07	0.04	0.20	0.10
4.(Q+o+Q+o)	6.36	-0.18	-0.09	-0.16	-0.08
5.(Q+Q+o+Q)	8.62	-0.12	-0.06	-0.13	-0.06
6.(o+Q+Q+o)	8.08	-0.14	-0.07	0.18	0.09
7.(o+o+Q+Q)	8.21	0.04	0.02	0.02	0.01
Soil	0.00	0.00	0.00	-0.01	-0.01
X-Seismic+%5	2.26	-0.37	-0.08	-0.07	-0.03
X-Seismic-%5	2.23	-0.30	-0.05	0.09	0.04
Y-Seismic+%5	-0.94	0.02	0.01	-0.15	0.08
Y-Seismic-%5	-0.90	-0.08	-0.04	-0.39	-0.03
X-Wind +%5	0.25	-0.04	-0.01	-0.01	0.00
X-Wind -%5	0.25	-0.04	-0.01	0.01	0.01
Y-Wind +%5	-0.13	0.00	0.00	-0.02	0.01
Y-Wind -%5	-0.13	-0.01	-0.01	-0.06	-0.01

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)	
max. Nd (t) :	78.033	56.415	78.033	55.055	36.536	37.896	
minor M (tm):	-0.076	-0.096	-0.367	-0.194	0.194	-0.388	
major M (tm):	-2.107	1.523	2.107	1.486	0.061	-0.269	
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667	
μ :	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	
As (cm²):	13.757	13.757	13.757	13.757	13.757	13.757	Cqa=0.878

REINF :9ø14 + ø8/15/5(stirrup)



CB26 COLUMN

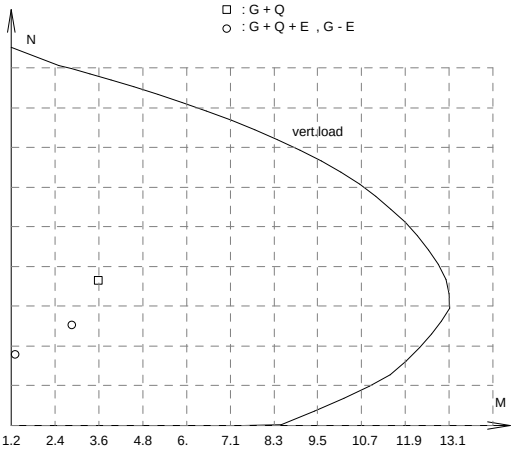
I/J :77/ Bx/By :40/ βx:1.000 βy:1.000 Hk :3.0 m

Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	47.82	0.01	0.01	0.15	0.07
2.(Q+Q+Q+Q)	14.70	0.00	0.00	0.04	0.02
3.(o+Q+o+Q)	7.39	-0.18	-0.09	0.21	0.10
4.(Q+o+Q+o)	7.16	0.18	0.09	-0.17	-0.08
5.(Q+Q+o+Q)	9.42	0.15	0.07	-0.14	-0.07
6.(o+Q+Q+o)	9.45	-0.03	-0.02	0.19	0.09
7.(o+o+Q+Q)	10.22	-0.12	-0.06	0.03	0.01
Soil	0.00	0.00	0.00	-0.01	-0.01
X-Seismic+%5	0.09	-0.42	-0.10	-0.07	-0.03
X-Seismic-%5	0.09	-0.34	-0.07	0.03	0.01
Y-Seismic+%5	0.45	-0.03	-0.01	-0.17	0.07
Y-Seismic-%5	0.46	-0.14	-0.07	-0.31	0.00
X-Wind +%5	0.01	-0.05	-0.01	-0.01	0.00
X-Wind -%5	0.01	-0.04	-0.01	0.00	0.00
Y-Wind +%5	0.06	0.00	0.00	-0.03	0.01
Y-Wind -%5	0.06	-0.02	-0.01	-0.05	0.00

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)	
max. Nd (t) :	87.676	60.684	87.676	60.317	42.948	42.582	
minor M (tm):	-0.063	0.045	-0.266	-0.023	0.197	0.153	
major M (tm):	2.367	1.638	2.367	1.629	0.435	0.440	
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667	
μ :	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	
As (cm²):	13.757	13.757	13.757	13.757	13.757	13.757	Cqa=0.881

REINF :9ø14 + ø8/15/5(stirrup)



CB27 COLUMN

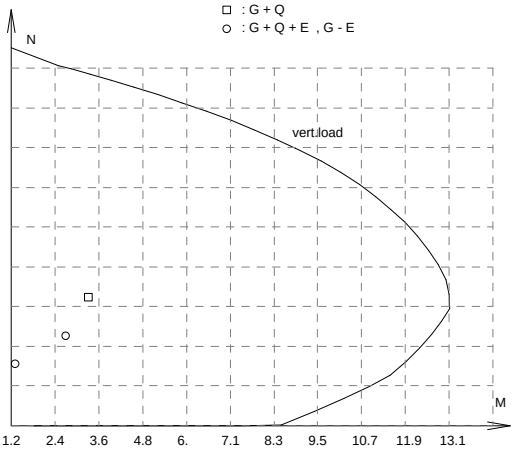
I/J :103/ Bx/By :40/ βx:1.000 βy:1.000 Hk :3.0 m

Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	42.51	0.03	0.02	-0.13	-0.06
2.(Q+Q+Q+Q)	12.77	0.01	0.01	-0.06	-0.03
3.(o+Q+o+Q)	6.91	0.19	0.09	-0.06	-0.03
4.(Q+o+Q+o)	5.68	-0.18	-0.09	0.00	0.00
5.(Q+Q+o+Q)	8.88	-0.13	-0.07	-0.14	-0.07
6.(o+Q+Q+o)	7.50	0.16	0.08	0.09	0.05
7.(o+o+Q+Q)	8.80	0.00	0.00	-0.08	-0.04
Soil	-0.01	0.00	0.00	-0.01	-0.01
X-Seismic+%5	-0.61	-0.46	-0.12	-0.03	-0.02
X-Seismic-%5	-0.51	-0.38	-0.09	-0.02	-0.01
Y-Seismic+%5	9.13	-0.03	-0.01	0.02	0.17
Y-Seismic-%5	8.99	-0.13	-0.06	0.00	0.15
X-Wind +%5	-0.06	-0.05	-0.02	0.00	0.00
X-Wind -%5	-0.05	-0.05	-0.01	0.00	0.00
Y-Wind +%5	1.28	0.00	0.00	0.00	0.02
Y-Wind -%5	1.26	-0.02	-0.01	0.00	0.02

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)	
max. Nd (t) :	77.584	54.417	77.584	53.192	37.649	29.130	
minor M (tm):	-0.286	-0.162	-0.176	-0.561	-0.151	0.029	
major M (tm):	2.095	1.469	-2.095	1.436	-0.429	-0.225	
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667	
μ :	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110	
As (cm²):	13.757	13.757	13.757	13.757	13.757	13.757	Cqa=0.884

REINF :9ø14 + ø8/15/5(stirrup)

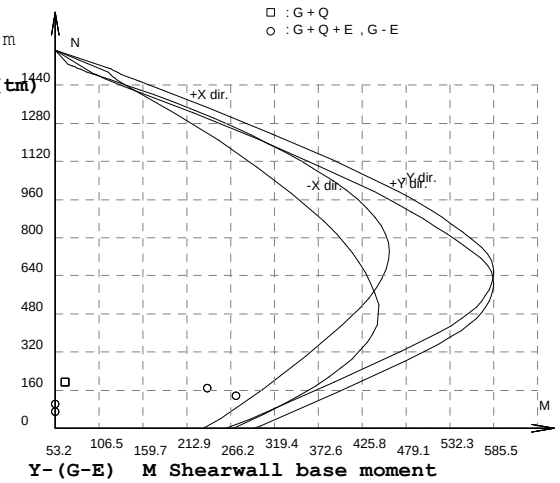


CB34 COLUMN

I/J :76/ Bx/By :/ βx:1.000 βy:1.000 Hk :3.0 m

Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	114.19	-0.80	-0.20	0.01	0.00
2.(Q+Q+Q+Q)	25.44	-0.19	-0.05	0.00	0.00
3.(o+Q+o+Q)	11.48	0.76	0.21	-0.46	-0.05
4.(Q+o+Q+o)	11.35	-0.89	-0.24	0.46	0.05
5.(Q+Q+o+Q)	14.92	-0.89	-0.24	0.42	0.04
6.(o+Q+Q+o)	14.75	0.79	0.22	0.34	0.04
7.(o+o+Q+Q)	15.99	-0.16	-0.04	-0.75	-0.08
Soil	0.01	-0.15	-0.39	-0.30	-0.97
X-Seismic+%5	-33.34	-168.99	-35.83	-1.77	-0.48
X-Seismic-%5	-33.34	-168.99	-35.83	1.77	0.48
Y-Seismic+%5	0.00	0.00	0.00	-203.72	-6.70
Y-Seismic-%5	0.00	0.00	0.00	-208.90	-8.11
X-Wind +%5	-3.57	-19.74	-4.32	-0.22	-0.06
X-Wind -%5	-3.57	-19.74	-4.32	0.22	0.06
Y-Wind +%5	0.00	0.00	0.00	-30.54	-1.20
Y-Wind -%5	0.00	0.00	0.00	-31.38	-1.42



DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)	M Shearwall base moment
max. Nd (t) :	194.961	169.469	194.961	136.124	69.425	102.770	Mxu: 184.2
minor M (tm):	0.458	2.119	-0.736	-1.693	1.781	-0.720	Mxa: 184.2
major M (tm):	-11.844	184.220	12.283	219.150	-169.708	208.911	Myu: 219.1
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667	Mya: 219.1
μ :	0.0083	0.0083	0.0083	0.0083	0.0083	0.0083	
As (cm²):	75.695	75.695	75.695	75.695	75.695	75.695	Cqa=0.862

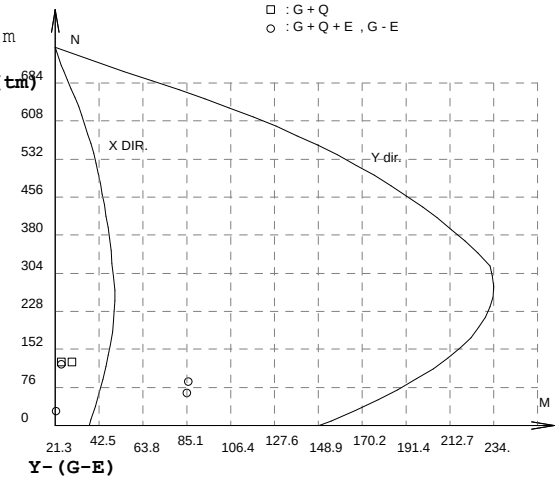
REINF :15ø12+42ø14 + ø10/15(stirrup)

CB35 COLUMN

I/J :102/ Bx/By :25/165 βx:1.000 βy:1.000 Hk :3.0 m

Material:E1 C25 S420

COMBINATION	maxNd (t)	topMx	botMx	topMy	botMy (tm)
1.(G+G+G+G)	71.71	-0.26	-0.13	0.00	0.00
2.(Q+Q+Q+Q)	18.51	-0.09	-0.04	0.00	0.00
3.(o+Q+o+Q)	8.76	-0.15	-0.07	-0.59	-0.16
4.(Q+o+Q+o)	8.52	0.05	0.03	0.59	0.16
5.(Q+Q+o+Q)	11.05	-0.08	-0.04	0.55	0.15
6.(o+Q+Q+o)	12.29	-0.16	-0.08	0.05	0.01
7.(o+o+Q+Q)	11.20	0.05	0.03	-0.61	-0.16
Soil	-0.01	-0.01	-0.01	-0.12	-0.31
X-Seismic+%5	35.10	-0.68	-0.16	4.73	1.23
X-Seismic-%5	35.10	-0.68	-0.16	-4.73	-1.23
Y-Seismic+%5	0.00	0.00	0.00	-63.83	-8.82
Y-Seismic-%5	0.00	0.00	0.00	-49.97	-5.21
X-Wind +%5	3.77	-0.08	-0.02	0.56	0.15
X-Wind -%5	3.77	-0.08	-0.02	-0.56	-0.15
Y-Wind +%5	0.00	0.00	0.00	-9.60	-1.39
Y-Wind -%5	0.00	0.00	0.00	-7.46	-0.83



DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(G-E)	Y-(G-E)	
max. Nd (t) :	126.124	122.891	126.124	87.791	29.435	64.536	
minor M (tm):	-0.023	4.791	-0.287	-0.207	4.734	-0.234	
major M (tm):	-2.838	2.765	8.135	-64.431	0.443	63.830	
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667	166.667	
μ :	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	
As (cm²):	10.313	10.313	10.313	10.313	10.313	10.313	Cqa=0.869

REINF :2x4ø20+2x7ø14 (web) + ø8/12/9(stirrup)

βx,βy : Column moment magnification factor A4 : A4 Irregularity (Ba=Bax+0.3*Bay,Ba=0.3*Bax+Bay)
Cx,Cy : Strong column magnification factor
Ck : Column support beam magnification factor

PB13 PANEL

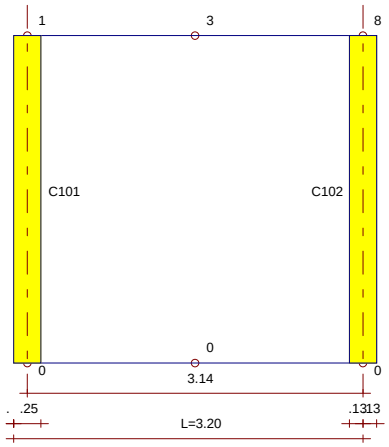
I/K:1/0 Io/Jo:3/0 J/L:8/ Bx/By :282.6/25. Hk :3.0 m Cqa=1.000

COMBINATION	maxNd	upMx	dwMx	upMy	dwMy	Tx	Ty
1.(G+G+G+G)	30.38	0.16	0.04	0.00	0.00	0.07	0.00
2.(Q+Q+Q+Q)	4.37	-0.69	0.12	0.00	0.00	-0.19	0.00
3.(o+Q+o+Q)	2.43	-0.34	0.03	0.00	0.00	-0.10	0.00
4.(Q+o+Q+o)	1.88	-0.35	0.09	0.00	0.00	-0.09	0.00
5.(Q+Q+o+Q)	3.27	-0.37	0.10	0.00	0.00	-0.09	0.00
6.(o+Q+Q+o)	2.76	-0.52	0.05	0.00	0.00	-0.16	0.00
7.(o+o+Q+Q)	2.60	-0.48	0.09	0.00	0.00	-0.13	0.00
Soil	0.19	-0.29	-0.73	0.00	-0.01	-0.34	0.00
X-Seismic+%5	-5.74	11.73	27.67	0.00	0.01	13.13	0.00
X-Seismic-%5	-4.22	12.52	29.36	0.00	-0.01	13.96	0.00
Y-Seismic+%5	-10.15	-4.36	1.75	0.00	0.38	-0.87	0.13
Y-Seismic-%5	-12.39	-5.43	-0.61	0.00	0.40	-2.02	0.13
X-Wind +%5	-0.62	1.25	2.96	0.00	0.00	1.40	0.00
X-Wind -%5	-0.45	1.33	3.13	0.00	0.00	1.49	0.00
Y-Wind +%5	-1.43	-0.63	0.24	0.00	0.05	-0.13	0.02
Y-Wind -%5	-1.75	-0.78	-0.09	0.00	0.06	-0.29	0.02

Material:E1 C25 S420 (t,m)

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	Y-(Soil)
max. Nd (t) :	49.824	39.153	49.824	47.328	49.824
max. M (tm):	-1.331	29.523	1.246	1.183	0.924
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667
μ :	0.0010	0.0010	0.0013	0.0013	0.001
As (cm²):	7.065	7.065	8.831	8.831	3.125

REINF :2x13ø12 (vertical) + ø8/15 (vertical)



PB14 PANEL

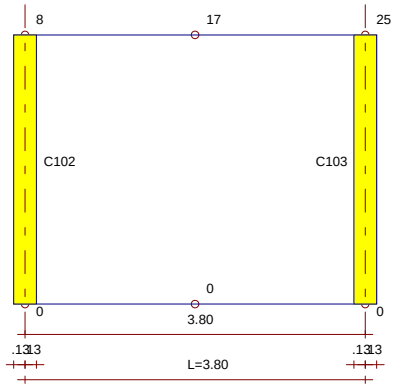
I/K:8/0 Io/Jo:17/0 J/L:25/ Bx/By :355./25. Hk :3.0 m Cqa=1.000

COMBINATION	maxNd	upMx	dwMx	upMy	dwMy	Tx	Ty
1.(G+G+G+G)	37.15	-2.32	0.79	0.00	0.00	-0.51	0.00
2.(Q+Q+Q+Q)	6.36	-0.67	0.23	0.00	0.00	-0.15	0.00
3.(o+Q+o+Q)	3.36	-0.40	0.08	0.00	0.00	-0.10	0.00
4.(Q+o+Q+o)	2.93	-0.28	0.14	0.00	0.00	-0.05	0.00
5.(Q+Q+o+Q)	4.53	-0.33	0.16	0.00	0.00	-0.06	0.00
6.(o+Q+Q+o)	4.13	-0.44	0.08	0.00	0.00	-0.12	0.00
7.(o+o+Q+Q)	3.92	-0.58	0.21	0.00	0.00	-0.13	0.00
Soil	-0.01	-0.53	-0.99	0.00	-0.01	-0.51	0.00
X-Seismic+%5	0.72	20.67	37.78	0.00	0.01	19.48	0.00
X-Seismic-%5	2.39	22.46	39.94	0.00	-0.01	20.80	0.00
Y-Seismic+%5	-6.80	0.45	1.49	0.00	0.48	0.65	0.16
Y-Seismic-%5	-9.27	-2.08	-1.53	0.00	0.49	-1.20	0.16
X-Wind +%5	0.08	2.21	4.04	0.00	0.00	2.08	0.00
X-Wind -%5	0.26	2.40	4.26	0.00	0.00	2.22	0.00
Y-Wind +%5	-0.95	0.06	0.20	0.00	0.07	0.09	0.02
Y-Wind -%5	-1.30	-0.30	-0.22	0.00	0.07	-0.17	0.02

Material:E1 C25 S420 (t,m)

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	Y-(Soil)
max. Nd (t) :	62.174	45.897	62.174	52.775	62.174
max. M (tm):	-5.173	40.964	1.554	1.319	0.924
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667
μ :	0.0010	0.0010	0.0013	0.0013	0.001
As (cm²):	8.875	8.875	11.094	11.094	3.125

REINF :2x16ø12 (vertical) + ø8/15 (vertical)



PB15 PANEL

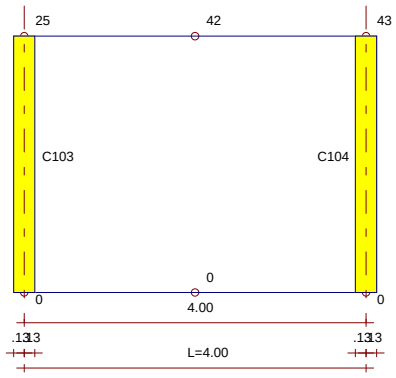
I/K:25/0 Io/Jo:42/0 J/L:43/ Bx/By :375./25. Hk :3.0 m Cqa=1.000

COMBINATION	maxNd	upMx	dwMx	upMy	dwMy	Tx	Ty
1.(G+G+G+G)	40.65	-0.82	0.38	0.00	0.00	-0.15	0.00
2.(Q+Q+Q+Q)	7.19	-0.20	0.10	0.00	0.00	-0.03	0.00
3.(o+Q+o+Q)	3.99	-0.11	0.00	0.00	0.00	-0.04	0.00
4.(Q+o+Q+o)	3.14	-0.09	0.09	0.00	0.00	0.00	0.00
5.(Q+Q+o+Q)	5.01	-0.28	0.16	0.00	0.00	-0.04	0.00
6.(o+Q+Q+o)	4.51	-0.01	-0.05	0.00	0.00	-0.02	0.00
7.(o+o+Q+Q)	4.72	-0.11	0.07	0.00	0.00	-0.01	0.00
Soil	0.00	-0.57	-1.07	0.00	-0.02	-0.55	-0.01
X-Seismic+%5	0.22	22.02	40.83	0.00	0.00	20.95	0.00
X-Seismic-%5	0.88	23.99	43.12	0.00	0.00	22.37	0.00
Y-Seismic+%5	-7.43	1.08	1.42	0.00	0.51	0.83	0.17
Y-Seismic-%5	-8.40	-1.73	-1.78	0.00	0.51	-1.17	0.17
X-Wind +%5	0.02	2.35	4.36	0.00	0.00	2.24	0.00
X-Wind -%5	0.09	2.56	4.60	0.00	0.00	2.39	0.00
Y-Wind +%5	-1.04	0.15	0.19	0.00	0.07	0.11	0.02
Y-Wind -%5	-1.18	-0.24	-0.26	0.00	0.07	-0.17	0.02

Material:E1 C25 S420 (t,m)

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	Y-(Soil)
max. Nd (t) :	68.417	48.719	68.417	56.239	68.417
max. M (tm):	-2.524	43.671	1.710	1.406	0.924
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667
μ :	0.0010	0.0010	0.0013	0.0013	0.001
As (cm²):	9.375	9.375	11.719	11.719	3.125

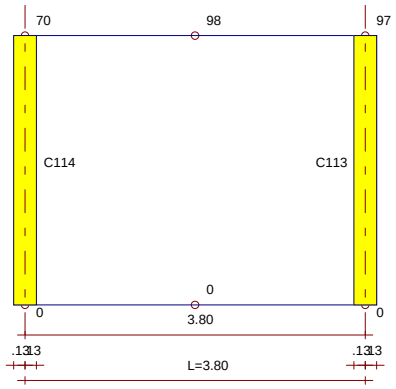
REINF :2x17ø12 (vertical) + ø8/15 (vertical)



PB29 PANEL

I/K:70/0 Io/Jo:98/0 J/L:97/ Bx/By :355./25. Hk :3.0 m Cqa=1.000

COMBINATION	maxNd	upMx	dwMx	upMy	dwMy	Tx	Ty
1.(G+G+G+G)	37.31	2.55	-0.66	0.00	0.00	0.63	0.00
2.(Q+Q+Q+Q)	6.41	0.75	-0.20	0.00	0.00	0.18	0.00
3.(o+Q+o+Q)	3.66	0.24	-0.10	0.00	0.00	0.04	0.00
4.(Q+o+Q+o)	2.69	0.50	-0.09	0.00	0.00	0.14	0.00
5.(Q+Q+o+Q)	4.71	0.58	-0.11	0.00	0.00	0.16	0.00
6.(o+Q+Q+o)	4.24	0.43	-0.18	0.00	0.00	0.08	0.00
7.(o+o+Q+Q)	3.75	0.48	-0.11	0.00	0.00	0.12	0.00
Soil	0.01	-0.57	-0.98	0.00	-0.01	-0.52	0.00
X-Seismic+%5	-0.89	20.64	37.79	0.00	-0.01	19.48	0.00
X-Seismic-%5	-2.31	22.45	39.94	0.00	0.01	20.80	0.00
Y-Seismic+%5	-8.10	1.65	1.13	0.00	0.50	0.92	0.17
Y-Seismic-%5	-6.01	-0.93	-1.87	0.00	0.47	-0.93	0.16
X-Wind +%5	-0.10	2.21	4.04	0.00	0.00	2.08	0.00
X-Wind -%5	-0.25	2.40	4.26	0.00	0.00	2.22	0.00
Y-Wind +%5	-1.14	0.23	0.15	0.00	0.07	0.13	0.02
Y-Wind -%5	-0.85	-0.13	-0.27	0.00	0.07	-0.13	0.02



Material:E1 C25 S420 (t,m)

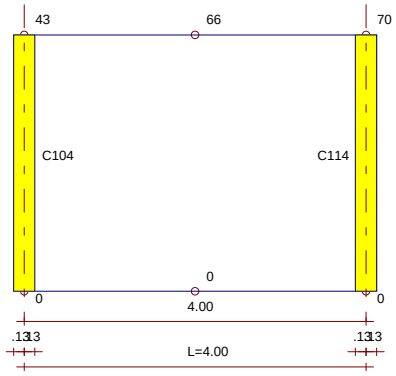
DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	Y-(Soil)
max. Nd (t) :	62.513	46.048	62.513	51.834	62.513
max. M (tm):	4.756	39.283	1.563	1.296	0.924
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667
μ :	0.0010	0.0010	0.0013	0.0013	0.001
As (cm²):	8.875	8.875	11.094	11.094	3.125

REINF :2x16ø12 (vertical) + ø8/15 (vertical)

PB30 PANEL

I/K:43/0 Io/Jo:66/0 J/L:70/ Bx/By :375./25. Hk :3.0 m Cqa=1.000

COMBINATION	maxNd	upMx	dwMx	upMy	dwMy	Tx	Ty
1.(G+G+G+G)	40.81	0.76	-0.15	0.00	0.00	0.21	0.00
2.(Q+Q+Q+Q)	7.25	0.17	-0.03	0.00	0.00	0.05	0.00
3.(o+Q+o+Q)	3.79	0.05	-0.05	0.00	0.00	0.00	0.00
4.(Q+o+Q+o)	3.39	0.12	0.02	0.00	0.00	0.05	0.00
5.(Q+Q+o+Q)	5.39	0.12	0.03	0.00	0.00	0.05	0.00
6.(o+Q+Q+o)	4.42	-0.10	-0.02	0.00	0.00	-0.04	0.00
7.(o+o+Q+Q)	4.57	0.30	-0.07	0.00	0.00	0.08	0.00
Soil	0.01	-0.57	-1.07	0.00	-0.02	-0.55	-0.01
X-Seismic+%5	-0.34	22.11	40.80	0.00	0.00	20.97	0.00
X-Seismic-%5	-0.73	24.06	43.10	0.00	0.00	22.39	0.00
Y-Seismic+%5	-7.80	0.99	1.45	0.00	0.52	0.81	0.17
Y-Seismic-%5	-7.22	-1.79	-1.76	0.00	0.51	-1.18	0.17
X-Wind +%5	-0.04	2.36	4.36	0.00	0.00	2.24	0.00
X-Wind -%5	-0.08	2.57	4.59	0.00	0.00	2.39	0.00
Y-Wind +%5	-1.09	0.14	0.19	0.00	0.07	0.11	0.02
Y-Wind -%5	-1.01	-0.25	-0.25	0.00	0.07	-0.17	0.02



Material:E1 C25 S420 (t,m)

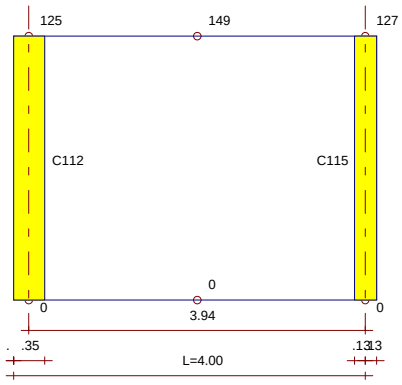
DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	Y-(Soil)
max. Nd (t) :	68.740	48.796	68.740	55.867	68.740
max. M (tm):	-2.021	42.980	1.718	1.397	0.924
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667
μ :	0.0010	0.0010	0.0013	0.0013	0.001
As (cm²):	9.375	9.375	11.719	11.719	3.125

REINF :2x17ø12 (vertical) + ø8/15 (vertical)

PB31 PANEL

I/K:125/0 Io/Jo:149/0 J/L:127/ Bx/By :25./352.6 Hk :3.0 m Cqa=1.000

COMBINATION	maxNd	upMx	dwMx	upMy	dwMy	Tx	Ty
1.(G+G+G+G)	31.64	0.00	0.00	-0.34	0.11	0.00	-0.08
2.(Q+Q+Q+Q)	4.46	0.00	0.00	-0.77	0.24	0.00	-0.18
3.(o+Q+o+Q)	2.50	0.00	0.00	-0.26	0.18	0.00	-0.03
4.(Q+o+Q+o)	1.91	0.00	0.00	-0.51	0.06	0.00	-0.15
5.(Q+Q+o+Q)	3.31	0.00	0.00	-0.44	0.03	0.00	-0.13
6.(o+Q+Q+o)	2.80	0.00	0.00	-0.61	0.14	0.00	-0.16
7.(o+o+Q+Q)	2.71	0.00	0.00	-0.49	0.30	0.00	-0.06
Soil	0.04	0.00	-0.01	-0.94	-1.84	0.00	-0.93
X-Seismic+%5	9.94	0.00	0.31	2.51	-3.00	0.10	-0.16
X-Seismic-%5	10.56	0.00	0.33	3.17	1.23	0.11	1.46
Y-Seismic+%5	-4.82	0.00	0.01	23.19	66.30	0.00	29.83
Y-Seismic-%5	-5.75	0.00	-0.01	22.34	60.32	0.00	27.55
X-Wind +%5	1.07	0.00	0.03	0.27	-0.32	0.01	-0.02
X-Wind -%5	1.14	0.00	0.03	0.33	0.13	0.01	0.15
Y-Wind +%5	-0.68	0.00	0.00	3.33	9.49	0.00	4.27
Y-Wind -%5	-0.82	0.00	0.00	3.21	8.64	0.00	3.95



Material:E1 C25 S420 (t,m)

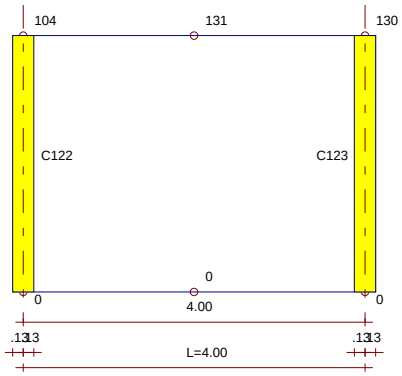
DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(Soil)
max. Nd (t) :	51.502	46.709	51.502	40.967	51.502
max. M (tm):	1.288	1.168	-3.222	66.703	-1.108
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667
μ :	0.0013	0.0013	0.0010	0.0010	0.001
As (cm²):	11.019	11.019	8.815	8.815	3.125

REINF :2x16ø12 (vertical) + ø8/15 (vertical)

PB44 PANEL

I/K:104/0 Io/Jo:131/0 J/L:130/ Bx/By :375./25. Hk :3.0 m Cqa=1.000

COMBINATION	maxNd	upMx	dwMx	upMy	dwMy	Tx	Ty
1.(G+G+G+G)	40.65	-0.82	0.38	0.00	0.00	-0.15	0.00
2.(Q+Q+Q+Q)	7.19	-0.20	0.10	0.00	0.00	-0.03	0.00
3.(o+Q+o+Q)	3.67	-0.39	0.08	0.00	0.00	-0.11	0.00
4.(Q+o+Q+o)	3.46	0.19	0.02	0.00	0.00	0.07	0.00
5.(Q+Q+o+Q)	5.06	-0.27	0.18	0.00	0.00	-0.03	0.00
6.(o+Q+Q+o)	4.48	0.00	-0.05	0.00	0.00	-0.02	0.00
7.(o+o+Q+Q)	4.72	-0.13	0.06	0.00	0.00	-0.02	0.00
Soil	-0.01	-0.58	-1.08	0.00	-0.02	-0.55	-0.01
X-Seismic+%5	0.88	23.99	43.12	0.00	0.00	22.37	0.00
X-Seismic-%5	0.22	22.02	40.83	0.00	0.00	20.95	0.00
Y-Seismic+%5	7.43	-1.08	-1.42	0.00	0.51	-0.83	0.17
Y-Seismic-%5	8.40	1.73	1.78	0.00	0.51	1.17	0.17
X-Wind +%5	0.09	2.56	4.60	0.00	0.00	2.39	0.00
X-Wind -%5	0.02	2.35	4.36	0.00	0.00	2.24	0.00
Y-Wind +%5	1.04	-0.15	-0.19	0.00	0.07	-0.11	0.02
Y-Wind -%5	1.18	0.24	0.26	0.00	0.07	0.17	0.02



Material:E1 C25 S420 (t,m)

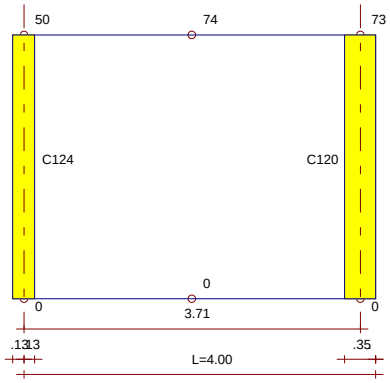
DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	Y-(Soil)
max. Nd (t) :	68.421	48.721	68.421	56.241	68.421
max. M (tm):	-2.702	43.685	1.711	1.406	-1.108
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667
μ :	0.0010	0.0010	0.0013	0.0013	0.001
As (cm²):	9.375	9.375	11.719	11.719	3.125

REINF :2x17ø12 (vertical) + ø8/15 (vertical)

PB45 PANEL

I/K:50/0 Io/Jo:74/0 J/L:73/ Bx/By :25./352.6 Hk :3.0 m Cqa=1.000

COMBINATION	maxNd	upMx	dwMx	upMy	dwMy	Tx	Ty
1.(G+G+G+G)	31.46	0.00	0.00	0.28	-0.09	0.00	0.06
2.(Q+Q+Q+Q)	4.41	0.00	0.00	0.75	-0.24	0.00	0.17
3.(o+Q+o+Q)	2.17	0.00	0.00	0.53	-0.09	0.00	0.15
4.(Q+o+Q+o)	2.19	0.00	0.00	0.21	-0.14	0.00	0.02
5.(Q+Q+o+Q)	3.33	0.00	0.00	0.35	-0.19	0.00	0.05
6.(o+Q+Q+o)	2.55	0.00	0.00	0.38	-0.16	0.00	0.07
7.(o+o+Q+Q)	2.84	0.00	0.00	0.76	-0.12	0.00	0.21
Soil	-0.04	0.00	-0.01	-0.95	-1.86	0.00	-0.94
X-Seismic+%5	-10.58	0.00	0.33	2.82	0.74	0.11	1.19
X-Seismic-%5	-9.94	0.00	0.31	2.82	-2.50	0.10	0.11
Y-Seismic+%5	5.35	0.00	-0.01	22.33	61.94	0.00	28.09
Y-Seismic-%5	4.41	0.00	0.01	22.20	66.48	0.00	29.56
X-Wind +%5	-1.14	0.00	0.03	0.29	0.07	0.01	0.12
X-Wind -%5	-1.07	0.00	0.03	0.31	-0.26	0.01	0.02
Y-Wind +%5	0.76	0.00	0.00	3.23	8.90	0.00	4.04
Y-Wind -%5	0.62	0.00	0.00	3.20	9.52	0.00	4.24



Material:E1 C25 S420 (t,m)

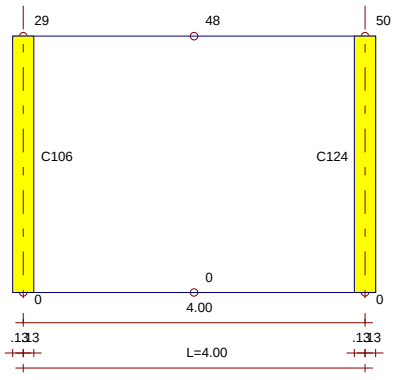
DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(Soil)
max. Nd (t) :	51.102	46.451	51.102	40.281	51.102
max. M (tm):	1.278	1.161	-3.472	66.390	0.924
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667
μ :	0.0013	0.0013	0.0010	0.0010	0.001
As (cm²):	11.019	11.019	8.815	8.815	3.125

REINF :2x16ø12 (vertical) + ø8/15 (vertical)

PB46 PANEL

I/K:29/0 Io/Jo:48/0 J/L:50/ Bx/By :25./375. Hk :3.0 m Cqa=1.000

COMBINATION	maxNd	upMx	dwMx	upMy	dwMy	Tx	Ty
1.(G+G+G+G)	36.73	0.00	0.00	1.26	-0.42	0.00	0.28
2.(Q+Q+Q+Q)	5.89	0.00	0.00	0.34	-0.11	0.00	0.08
3.(o+Q+o+Q)	3.22	0.00	0.00	0.22	0.01	0.00	0.08
4.(Q+o+Q+o)	2.60	0.00	0.00	0.11	-0.12	0.00	0.00
5.(Q+Q+o+Q)	3.96	0.00	0.00	0.03	-0.09	0.00	-0.02
6.(o+Q+Q+o)	3.73	0.00	0.00	0.38	-0.17	0.00	0.07
7.(o+o+Q+Q)	3.97	0.00	0.00	0.27	0.04	0.00	0.10
Soil	0.01	0.00	-0.01	-1.03	-1.93	0.00	-0.99
X-Seismic+%5	-10.42	0.00	0.34	0.97	1.39	0.11	0.79
X-Seismic-%5	-9.52	0.00	0.34	-1.46	-1.23	0.11	-0.89
Y-Seismic+%5	-0.89	0.00	0.00	33.10	61.84	0.00	31.65
Y-Seismic-%5	-2.22	0.00	0.00	36.54	65.45	0.00	34.00
X-Wind +%5	-1.13	0.00	0.04	0.10	0.14	0.01	0.08
X-Wind -%5	-1.03	0.00	0.04	-0.15	-0.12	0.01	-0.09
Y-Wind +%5	-0.12	0.00	0.00	4.75	8.89	0.00	4.55
Y-Wind -%5	-0.31	0.00	0.00	5.23	9.38	0.00	4.87



Material:E1 C25 S420 (t,m)

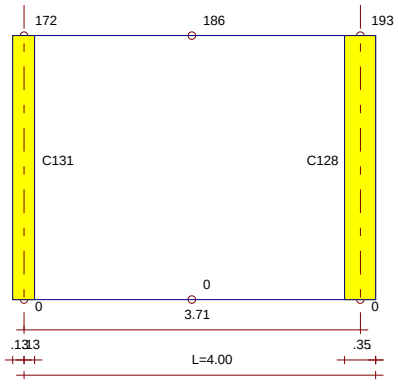
DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(Soil)
max. Nd (t) :	60.865	53.050	60.865	44.849	60.865
max. M (tm):	1.522	1.326	-3.960	65.060	0.924
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667
μ :	0.0013	0.0013	0.0010	0.0010	0.001
As (cm²):	11.719	11.719	9.375	9.375	3.125

REINF :2x17ø12 (vertical) + ø8/15 (vertical)

PB57 PANEL

I/K:172/0 Io/Jo:186/0 J/L:193/ Bx/By :25./352.6 Hk :3.0 m Cqa=1.000

COMBINATION	maxNd	upMx	dwMx	upMy	dwMy	Tx	Ty
1.(G+G+G+G)	31.64	0.00	0.00	0.34	-0.11	0.00	0.08
2.(Q+Q+Q+Q)	4.46	0.00	0.00	0.77	-0.24	0.00	0.18
3.(o+Q+o+Q)	2.17	0.00	0.00	0.53	-0.06	0.00	0.16
4.(Q+o+Q+o)	2.23	0.00	0.00	0.23	-0.18	0.00	0.02
5.(Q+Q+o+Q)	3.36	0.00	0.00	0.35	-0.21	0.00	0.05
6.(o+Q+Q+o)	2.58	0.00	0.00	0.40	-0.17	0.00	0.08
7.(o+o+Q+Q)	2.87	0.00	0.00	0.78	-0.09	0.00	0.23
Soil	-0.17	0.00	-0.01	-0.75	-1.90	0.00	-0.88
X-Seismic+%5	10.56	0.00	0.33	-3.17	-1.23	0.11	-1.46
X-Seismic-%5	9.94	0.00	0.31	-2.51	3.00	0.10	0.16
Y-Seismic+%5	4.82	0.00	-0.01	23.19	66.30	0.00	29.83
Y-Seismic-%5	5.75	0.00	0.01	22.34	60.32	0.00	27.55
X-Wind +%5	1.14	0.00	0.03	-0.33	-0.13	0.01	-0.15
X-Wind -%5	1.07	0.00	0.03	-0.27	0.32	0.01	0.02
Y-Wind +%5	0.68	0.00	0.00	3.33	9.49	0.00	4.27
Y-Wind -%5	0.82	0.00	0.00	3.21	8.64	0.00	3.95



Material:E1 C25 S420 (t,m)

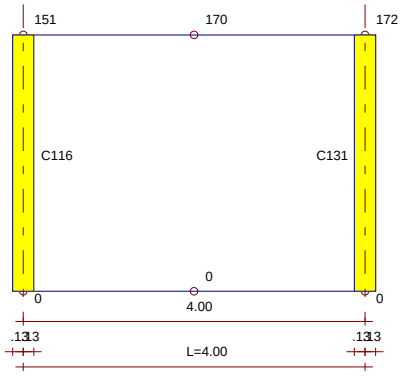
DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(Soil)
max. Nd (t) :	51.436	46.667	51.436	40.925	51.436
max. M (tm):	1.286	1.167	-3.575	66.188	-1.108
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667
μ :	0.0013	0.0013	0.0010	0.0010	0.001
As (cm²):	11.019	11.019	8.815	8.815	3.125

REINF :2x16ø12 (vertical) + ø8/15 (vertical)

PB58 PANEL

I/K:151/0 Io/Jo:170/0 J/L:172/ Bx/By :25./375. Hk :3.0 m Cqa=1.000

COMBINATION	maxNd	upMx	dwMx	upMy	dwMy	Tx	Ty
1.(G+G+G+G)	37.09	0.00	0.00	1.37	-0.46	0.00	0.30
2.(Q+Q+Q+Q)	6.01	0.00	0.00	0.38	-0.13	0.00	0.08
3.(o+Q+o+Q)	3.25	0.00	0.00	0.26	0.02	0.00	0.09
4.(Q+o+Q+o)	2.70	0.00	0.00	0.11	-0.15	0.00	-0.01
5.(Q+Q+o+Q)	4.03	0.00	0.00	0.04	-0.12	0.00	-0.03
6.(o+Q+Q+o)	3.81	0.00	0.00	0.40	-0.18	0.00	0.07
7.(o+o+Q+Q)	4.04	0.00	0.00	0.31	0.05	0.00	0.12
Soil	0.01	0.00	-0.01	-1.00	-1.92	0.00	-0.97
X-Seismic+%5	10.33	0.00	0.34	-1.28	-1.92	0.11	-1.07
X-Seismic-%5	9.46	0.00	0.34	1.68	1.78	0.11	1.15
Y-Seismic+%5	-1.71	0.00	0.00	36.08	65.73	0.00	33.94
Y-Seismic-%5	-0.42	0.00	0.00	31.85	60.54	0.00	30.80
X-Wind +%5	1.12	0.00	0.04	-0.14	-0.20	0.01	-0.11
X-Wind -%5	1.03	0.00	0.04	0.18	0.19	0.01	0.12
Y-Wind +%5	-0.24	0.00	0.00	5.17	9.41	0.00	4.86
Y-Wind -%5	-0.06	0.00	0.00	4.57	8.68	0.00	4.42

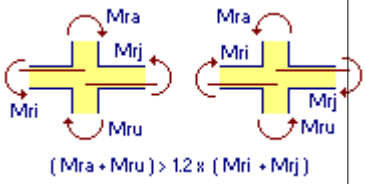


Material:E1 C25 S420 (t,m)

DESIGN :	X-(G+Q)	X-(G+Q+E)	Y-(G+Q)	Y-(G+Q+E)	X-(Soil)
max. Nd (t) :	61.552	53.438	61.552	44.813	61.552
max. M (tm):	1.539	1.336	-4.010	65.326	-1.108
fcd (kg/cm²):	166.667	166.667	166.667	166.667	166.667
μ :	0.0013	0.0013	0.0010	0.0010	0.001
As (cm²):	11.719	11.719	9.375	9.375	3.125

REINF :2x17ø12 (vertical) + ø8/15 (vertical)

SHEAR CHECK OF STRONG COLUMNS (t)



Sto	Vsx	Vkx	αx	Vsy	Vky	αy
1	151.46	151.46	1.00	154.26	154.26	1.00
2	117.13	128.95	0.91	131.79	137.83	0.96
3	81.86	114.97	0.71	114.66	122.98	0.93
4	90.03	90.03	1.00	97.28	97.28	1.00
5	54.82	54.82	1.00	60.54	60.54	1.00
6	3.75	3.75	1.00	4.92	4.92	1.00

Vs/Vk> .70 CONDITION IS SATISFIED STRONG COLUMNS NOT MULTIPLIED BY (1/α)

STRONG COLUMN CHECK (tm)

Dir	Column	Mrc	Beam	Mrb	EXPLANATION
+X	C501(3.74)	3.74	B513(6.35)	7.62	Bldg. upper level cnd.
-X	C501(3.74)	3.74	B513(7.08)	8.5	Bldg. upper level cnd.
+Y	C501(5.57)	5.57	B516(4.29)	5.14	Bldg. upper level cnd.
-Y	C501(5.57)	5.57	B516(8.35)	10.02	Bldg. upper level cnd.
+X	C501(3.74)+C401(4.32)	8.06	B413(6.35)	7.62	Nd < 0,10.Ac.fck conditio
-X	C501(3.74)+C401(4.32)	8.06	B413(7.08)	8.5	Nd < 0,10.Ac.fck conditio
+Y	C501(5.57)+C401(6.4)	11.97	B416(4.29)	5.14	Nd < 0,10.Ac.fck conditio
-Y	C501(5.57)+C401(6.4)	11.97	B416(8.35)	10.02	Nd < 0,10.Ac.fck conditio
+X	C401(4.32)+C301(4.89)	9.21	B313(6.35)	7.62	Nd < 0,10.Ac.fck conditio
-X	C401(4.32)+C301(4.89)	9.21	B313(7.08)	8.5	Nd < 0,10.Ac.fck conditio
+Y	C401(6.4)+C301(7.13)	13.53	B316(6.35)	7.62	Nd < 0,10.Ac.fck conditio
-Y	C401(6.4)+C301(7.13)	13.53	B316(8.35)	10.02	Nd < 0,10.Ac.fck conditio
+X	C301(4.89)+CZ01(5.38)	10.26	BZ13(6.35)	7.62	✓
-X	C301(4.89)+CZ01(5.38)	10.26	BZ13(7.08)	8.5	✓
+Y	C301(7.13)+CZ01(7.49)	14.62	BZ16(6.35)	7.62	✓
-Y	C301(7.13)+CZ01(7.49)	14.62	BZ16(8.35)	10.02	✓
+X	CZ01(5.38)+CB01(3.88)	9.25	BB13(6.35)	7.62	Panel end zone
-X	CZ01(5.38)+CB01(3.88)	9.25	BB13(7.08)	8.5	Panel end zone
+Y	CZ01(7.49)+CB01(5.82)	13.31	BB16(6.35)	7.62	Panel end zone
-Y	CZ01(7.49)+CB01(5.82)	13.31	BB16(8.35)	10.02	Panel end zone
+X	C502(3.95)	3.95	B513(8.35)+B514(4.29)	15.17	Bldg. upper level cnd.
-X	C502(3.95)	3.95	B513(6.35)+B514(8.35)	17.65	Bldg. upper level cnd.
+Y	C502(5.99)	5.99	B509(4.29)	5.14	Bldg. upper level cnd.
-Y	C502(5.99)	5.99	B509(8.35)	10.02	Bldg. upper level cnd.
+X	C502(3.95)+C402(4.6)	8.55	B413(8.35)+B414(4.29)	15.17	Nd < 0,10.Ac.fck conditio
-X	C502(3.95)+C402(4.6)	8.55	B413(6.35)+B414(8.35)	17.65	Nd < 0,10.Ac.fck conditio
+Y	C502(5.99)+C402(7.13)	13.11	B409(4.29)	5.14	Nd < 0,10.Ac.fck conditio
-Y	C502(5.99)+C402(7.13)	13.11	B409(8.35)	10.02	Nd < 0,10.Ac.fck conditio
+X	C402(4.6)+C302(5.17)	9.76	B313(8.35)+B314(4.29)	15.17	INSUFFICIENT!
-X	C402(4.6)+C302(5.17)	9.76	B313(6.35)+B314(8.35)	17.65	INSUFFICIENT!
+Y	C402(7.13)+C302(7.69)	14.82	B309(6.35)	7.62	✓
-Y	C402(7.13)+C302(7.69)	14.82	B309(9.06)	10.88	✓
+X	C302(5.17)+CZ02(6.04)	11.21	BZ13(8.35)+BZ14(4.29)	15.17	INSUFFICIENT!
-X	C302(5.17)+CZ02(6.04)	11.21	BZ13(6.35)+BZ14(8.35)	17.65	INSUFFICIENT!
+Y	C302(7.69)+CZ02(8.11)	15.8	BZ09(6.35)	7.62	✓
-Y	C302(7.69)+CZ02(8.11)	15.8	BZ09(9.06)	10.88	✓
+X	CZ02(6.04)+CB02(3.73)	9.77	BB13(8.35)+BB14(4.29)	15.17	Panel end zone
-X	CZ02(6.04)+CB02(3.73)	9.77	BB13(6.35)+BB14(8.35)	17.65	Panel end zone
+Y	CZ02(8.11)+CB02(5.69)	13.8	BB09(4.29)	5.14	Panel end zone
-Y	CZ02(8.11)+CB02(5.69)	13.8	BB09(8.35)	10.02	Panel end zone
+X	C503(4.08)	4.08	B514(8.35)+B515(4.29)	15.17	Bldg. upper level cnd.
-X	C503(4.08)	4.08	B514(4.29)+B515(8.35)	15.17	Bldg. upper level cnd.
+Y	C503(6.13)	6.13	B511(4.29)	5.14	Bldg. upper level cnd.
-Y	C503(6.13)	6.13	B511(8.35)	10.02	Bldg. upper level cnd.
+X	C503(4.08)+C403(4.88)	8.96	B414(8.35)+B415(4.29)	15.17	Nd < 0,10.Ac.fck conditio
-X	C503(4.08)+C403(4.88)	8.96	B414(4.29)+B415(8.35)	15.17	Nd < 0,10.Ac.fck conditio
+Y	C503(6.13)+C403(7.3)	13.43	B411(4.29)	5.14	✓
-Y	C503(6.13)+C403(7.3)	13.43	B411(8.35)	10.02	✓
+X	C403(4.88)+C303(5.6)	10.47	B314(8.35)+B315(4.29)	15.17	INSUFFICIENT!
-X	C403(4.88)+C303(5.6)	10.47	B314(4.29)+B315(8.35)	15.17	INSUFFICIENT!
+Y	C403(7.3)+C303(7.81)	15.12	B311(6.35)	7.62	✓
-Y	C403(7.3)+C303(7.81)	15.12	B311(8.35)	10.02	✓
+X	C303(5.6)+CZ03(6.18)	11.77	BZ14(8.35)+BZ15(4.29)	15.17	INSUFFICIENT!
-X	C303(5.6)+CZ03(6.18)	11.77	BZ14(4.29)+BZ15(8.35)	15.17	INSUFFICIENT!
+Y	C303(7.81)+CZ03(8.21)	16.03	BZ11(6.35)	7.62	✓
-Y	C303(7.81)+CZ03(8.21)	16.03	BZ11(8.35)	10.02	✓

STRONG COLUMN CHECK (tm)

Dir	Column	Mrc	Beam	Mrb	EXPLANATION
+X	C507(8.52)+C407(9.6)	18.11	B401(8.35)+B402(4.29)	15.18	Nd < 0,10.Ac.fck conditio
-X	C507(8.52)+C407(9.6)	18.11	B401(6.35)+B402(8.35)	17.65	Nd < 0,10.Ac.fck conditio
+Y	C507(8.51)+C407(9.64)	18.15	B409(8.35)+B410(4.29)	15.17	Nd < 0,10.Ac.fck conditio
-Y	C507(8.51)+C407(9.64)	18.15	B409(4.29)+B410(8.35)	15.17	Nd < 0,10.Ac.fck conditio
+X	C407(9.6)+C307(10.38)	19.98	B301(8.35)+B302(4.29)	15.18	✓
-X	C407(9.6)+C307(10.38)	19.98	B301(6.35)+B302(8.35)	17.65	✓
+Y	C407(9.64)+C307(10.45)	20.09	B309(10.3)+B310(6.35)	19.98	✓
-Y	C407(9.64)+C307(10.45)	20.09	B309(6.35)+B310(10.3)	19.98	✓
+X	C307(10.38)+CZ07(10.88)	21.26	BZ01(8.35)+BZ02(4.29)	15.18	✓
-X	C307(10.38)+CZ07(10.88)	21.26	BZ01(6.35)+BZ02(8.35)	17.65	✓
+Y	C307(10.45)+CZ07(10.93)	21.39	BZ09(8.35)+BZ10(6.35)	17.64	✓
-Y	C307(10.45)+CZ07(10.93)	21.39	BZ09(6.35)+BZ10(8.35)	17.64	✓
+X	CZ07(10.88)+CB07(11.45)	22.33	BB01(8.35)+BB02(4.29)	15.18	Basement
-X	CZ07(10.88)+CB07(11.45)	22.33	BB01(6.35)+BB02(8.35)	17.65	Basement
+Y	CZ07(10.93)+CB07(11.4)	22.33	BB09(8.35)+BB10(4.29)	15.17	Basement
-Y	CZ07(10.93)+CB07(11.4)	22.33	BB09(4.29)+BB10(8.35)	15.17	Basement
+X	C508(8.61)	8.61	B502(8.35)+B503(4.29)	15.18	Bldg. upper level cnd.
-X	C508(8.61)	8.61	B502(4.29)+B503(8.35)	15.18	Bldg. upper level cnd.
+Y	C508(8.64)	8.64	B511(8.35)+B512(4.29)	15.17	Bldg. upper level cnd.
-Y	C508(8.64)	8.64	B511(4.29)+B512(8.35)	15.17	Bldg. upper level cnd.
+X	C508(8.61)+C408(9.8)	18.41	B402(8.35)+B403(4.29)	15.18	Nd < 0,10.Ac.fck conditio
-X	C508(8.61)+C408(9.8)	18.41	B402(4.29)+B403(8.35)	15.18	Nd < 0,10.Ac.fck conditio
+Y	C508(8.64)+C408(9.85)	18.49	B411(8.35)+B412(4.29)	15.17	Nd < 0,10.Ac.fck conditio
-Y	C508(8.64)+C408(9.85)	18.49	B411(4.29)+B412(8.35)	15.17	Nd < 0,10.Ac.fck conditio
+X	C408(9.8)+C308(10.6)	20.41	B302(8.35)+B303(4.29)	15.18	✓
-X	C408(9.8)+C308(10.6)	20.41	B302(4.29)+B303(8.35)	15.18	✓
+Y	C408(9.85)+C308(10.63)	20.48	B311(8.35)+B312(4.29)	15.17	✓
-Y	C408(9.85)+C308(10.63)	20.48	B311(4.29)+B312(8.35)	15.17	✓
+X	C308(10.6)+CZ08(11.17)	21.77	BZ02(8.35)+BZ03(4.29)	15.18	✓
-X	C308(10.6)+CZ08(11.17)	21.77	BZ02(4.29)+BZ03(8.35)	15.18	✓
+Y	C308(10.63)+CZ08(11.19)	21.82	BZ11(8.35)+BZ12(4.29)	15.17	✓
-Y	C308(10.63)+CZ08(11.19)	21.82	BZ11(4.29)+BZ12(8.35)	15.17	✓
+X	CZ08(11.17)+CB08(11.61)	22.78	BB02(8.35)+BB03(4.29)	15.18	Basement
-X	CZ08(11.17)+CB08(11.61)	22.78	BB02(4.29)+BB03(8.35)	15.18	Basement
+Y	CZ08(11.19)+CB08(11.6)	22.79	BB11(8.35)+BB12(4.29)	15.17	Basement
-Y	CZ08(11.19)+CB08(11.6)	22.79	BB11(4.29)+BB12(8.35)	15.17	Basement
+X	C509(8.39)	8.39	B503(8.35)+B520(4.29)	15.18	Bldg. upper level cnd.
-X	C509(8.39)	8.39	B503(4.29)+B520(8.35)	15.18	Bldg. upper level cnd.
+Y	C509(8.19)	8.19	B506(8.35)+B507(6.35)	17.64	Bldg. upper level cnd.
-Y	C509(8.19)	8.19	B506(4.29)+B507(8.35)	15.17	Bldg. upper level cnd.
+X	C509(8.39)+C409(9.47)	17.86	B403(8.35)+B420(4.29)	15.18	Nd < 0,10.Ac.fck conditio
-X	C509(8.39)+C409(9.47)	17.86	B403(4.29)+B420(8.35)	15.18	Nd < 0,10.Ac.fck conditio
+Y	C509(8.19)+C409(9.15)	17.34	B406(8.35)+B407(8.35)	20.05	Nd < 0,10.Ac.fck conditio
-Y	C509(8.19)+C409(9.15)	17.34	B406(6.35)+B407(8.35)	17.64	Nd < 0,10.Ac.fck conditio
+X	C409(9.47)+C309(10.33)	19.79	B303(10.3)+B320(6.35)	20	INSUFFICIENT!
-X	C409(9.47)+C309(10.33)	19.79	B303(6.35)+B320(10.3)	19.99	INSUFFICIENT!
+Y	C409(9.15)+C309(9.96)	19.11	B306(8.35)+B307(8.35)	20.05	Nd < 0,10.Ac.fck conditio
-Y	C409(9.15)+C309(9.96)	19.11	B306(6.35)+B307(8.35)	17.64	Nd < 0,10.Ac.fck conditio
+X	C309(10.33)+CZ09(10.94)	21.27	BZ03(8.35)+BZ20(4.29)	15.18	✓
-X	C309(10.33)+CZ09(10.94)	21.27	BZ03(4.29)+BZ20(8.35)	15.18	✓
+Y	C309(9.96)+CZ09(10.48)	20.44	BZ06(8.35)+BZ07(6.35)	17.64	✓
-Y	C309(9.96)+CZ09(10.48)	20.44	BZ06(4.29)+BZ07(8.35)	15.17	✓
+X	CZ09(10.94)+CB09(11.37)	22.31	BB03(8.35)+BB20(4.29)	15.18	Basement
-X	CZ09(10.94)+CB09(11.37)	22.31	BB03(4.29)+BB20(8.35)	15.18	Basement
+Y	CZ09(10.48)+CB09(11.32)	21.8	BB06(8.35)+BB07(6.35)	17.64	Basement
-Y	CZ09(10.48)+CB09(11.32)	21.8	BB06(4.29)+BB07(8.35)	15.17	Basement
+X	C510(8.54)	8.54	B504(8.35)+B505(4.29)	15.18	Bldg. upper level cnd.
-X	C510(8.54)	8.54	B504(6.35)+B505(8.35)	17.65	Bldg. upper level cnd.
+Y	C510(8.53)	8.53	B510(8.35)+B539(4.29)	15.17	Bldg. upper level cnd.
-Y	C510(8.53)	8.53	B510(4.29)+B539(8.35)	15.17	Bldg. upper level cnd.
+X	C510(8.54)+C410(9.66)	18.2	B404(8.35)+B405(4.29)	15.18	Nd < 0,10.Ac.fck conditio
-X	C510(8.54)+C410(9.66)	18.2	B404(6.35)+B405(8.35)	17.65	Nd < 0,10.Ac.fck conditio
+Y	C510(8.53)+C410(9.67)	18.2	B410(8.35)+B439(4.29)	15.17	Nd < 0,10.Ac.fck conditio
-Y	C510(8.53)+C410(9.67)	18.2	B410(4.29)+B439(8.35)	15.17	Nd < 0,10.Ac.fck conditio
+X	C410(9.66)+C310(10.44)	20.09	B304(8.35)+B305(4.29)	15.18	✓
-X	C410(9.66)+C310(10.44)	20.09	B304(6.35)+B305(8.35)	17.65	✓
+Y	C410(9.67)+C310(10.48)	20.16	B310(10.3)+B339(6.35)	19.98	✓
-Y	C410(9.67)+C310(10.48)	20.16	B310(6.35)+B339(10.3)	19.98	✓

STRONG COLUMN CHECK (tm)

Dir	Column	Mrc	Beam	Mrb	EXPLANATION
+X	C514(4.06)	4.06	B529(4.29)+B530(8.35)	15.17	Bldg. upper level cnd.
-X	C514(4.06)	4.06	B529(8.35)+B530(4.29)	15.17	Bldg. upper level cnd.
+Y	C514(6.14)	6.14	B526(4.29)	5.14	Bldg. upper level cnd.
-Y	C514(6.14)	6.14	B526(8.35)	10.02	Bldg. upper level cnd.
+X	C514(4.06)+C414(4.82)	8.88	B429(4.29)+B430(8.35)	15.17	Nd < 0,10.Ac.fck conditio
-X	C514(4.06)+C414(4.82)	8.88	B429(8.35)+B430(4.29)	15.17	Nd < 0,10.Ac.fck conditio
+Y	C514(6.14)+C414(7.31)	13.45	B426(4.29)	5.14	✓
-Y	C514(6.14)+C414(7.31)	13.45	B426(8.35)	10.02	✓
+X	C414(4.82)+C314(5.52)	10.34	B329(4.29)+B330(8.35)	15.17	INSUFFICIENT!
-X	C414(4.82)+C314(5.52)	10.34	B329(8.35)+B330(4.29)	15.17	INSUFFICIENT!
+Y	C414(7.31)+C314(7.81)	15.12	B326(6.35)	7.62	✓
-Y	C414(7.31)+C314(7.81)	15.12	B326(8.35)	10.02	✓
+X	C314(5.52)+CZ14(6.2)	11.72	BZ29(4.29)+BZ30(8.35)	15.17	INSUFFICIENT!
-X	C314(5.52)+CZ14(6.2)	11.72	BZ29(8.35)+BZ30(4.29)	15.17	INSUFFICIENT!
+Y	C314(7.81)+CZ14(8.2)	16.01	BZ26(4.29)	5.14	✓
-Y	C314(7.81)+CZ14(8.2)	16.01	BZ26(8.35)	10.02	✓
+X	CZ14(6.2)+CB14(3.8)	10	BB29(4.29)+BB30(8.35)	15.17	Panel end zone
-X	CZ14(6.2)+CB14(3.8)	10	BB29(8.35)+BB30(4.29)	15.17	Panel end zone
+Y	CZ14(8.2)+CB14(5.73)	13.93	BB26(4.29)	5.14	Panel end zone
-Y	CZ14(8.2)+CB14(5.73)	13.93	BB26(8.35)	10.02	Panel end zone
+X	C515(6)	6	B518(7.08)	8.5	Bldg. upper level cnd.
-X	C515(6)	6	B518(6.35)	7.63	Bldg. upper level cnd.
+Y	C515(3.95)	3.95	B531(8.35)+B532(4.29)	15.17	Bldg. upper level cnd.
-Y	C515(3.95)	3.95	B531(4.29)+B532(8.35)	15.17	Bldg. upper level cnd.
+X	C515(6)+C415(7.15)	13.15	B418(7.08)	8.5	Nd < 0,10.Ac.fck conditio
-X	C515(6)+C415(7.15)	13.15	B418(6.35)	7.63	Nd < 0,10.Ac.fck conditio
+Y	C515(3.95)+C415(4.77)	8.73	B431(8.35)+B432(4.29)	15.17	Nd < 0,10.Ac.fck conditio
-Y	C515(3.95)+C415(4.77)	8.73	B431(4.29)+B432(8.35)	15.17	Nd < 0,10.Ac.fck conditio
+X	C415(7.15)+C315(7.73)	14.88	B318(7.91)	9.51	✓
-X	C415(7.15)+C315(7.73)	14.88	B318(6.35)	7.63	✓
+Y	C415(4.77)+C315(5.49)	10.26	B331(8.35)+B332(4.29)	15.17	INSUFFICIENT!
-Y	C415(4.77)+C315(5.49)	10.26	B331(4.29)+B332(8.35)	15.17	INSUFFICIENT!
+X	C315(7.73)+CZ15(8.15)	15.88	BZ18(7.91)	9.51	✓
-X	C315(7.73)+CZ15(8.15)	15.88	BZ18(6.35)	7.63	✓
+Y	C315(5.49)+CZ15(6.09)	11.58	BZ31(8.35)+BZ32(4.29)	15.17	INSUFFICIENT!
-Y	C315(5.49)+CZ15(6.09)	11.58	BZ31(4.29)+BZ32(8.35)	15.17	INSUFFICIENT!
+X	CZ15(8.15)+CB15(5.32)	13.48	BB18(7.08)	8.5	Panel end zone
-X	CZ15(8.15)+CB15(5.32)	13.48	BB18(6.35)	7.63	Panel end zone
+Y	CZ15(6.09)+CB15(3.73)	9.83	BB31(8.35)+BB32(4.29)	15.17	Panel end zone
-Y	CZ15(6.09)+CB15(3.73)	9.83	BB31(4.29)+BB32(8.35)	15.17	Panel end zone
+X	C516(6.03)	6.03	B521(7.08)	8.5	Bldg. upper level cnd.
-X	C516(6.03)	6.03	B521(6.35)	7.63	Bldg. upper level cnd.
+Y	C516(4.01)	4.01	B532(8.35)+B558(4.29)	15.17	Bldg. upper level cnd.
-Y	C516(4.01)	4.01	B532(4.29)+B558(8.35)	15.17	Bldg. upper level cnd.
+X	C516(6.03)+C416(7.22)	13.25	B421(7.08)	8.5	Nd < 0,10.Ac.fck conditio
-X	C516(6.03)+C416(7.22)	13.25	B421(6.35)	7.63	Nd < 0,10.Ac.fck conditio
+Y	C516(4.01)+C416(4.75)	8.76	B432(8.35)+B458(4.29)	15.17	Nd < 0,10.Ac.fck conditio
-Y	C516(4.01)+C416(4.75)	8.76	B432(4.29)+B458(8.35)	15.17	Nd < 0,10.Ac.fck conditio
+X	C416(7.22)+C316(7.76)	14.98	B321(7.08)	8.5	✓
-X	C416(7.22)+C316(7.76)	14.98	B321(6.35)	7.63	✓
+Y	C416(4.75)+C316(5.43)	10.18	B332(8.35)+B358(4.29)	15.17	INSUFFICIENT!
-Y	C416(4.75)+C316(5.43)	10.18	B332(4.29)+B358(8.35)	15.17	INSUFFICIENT!
+X	C316(7.76)+CZ16(8.18)	15.94	BZ21(7.91)	9.51	✓
-X	C316(7.76)+CZ16(8.18)	15.94	BZ21(6.35)	7.63	✓
+Y	C316(5.43)+CZ16(5.99)	11.41	BZ32(8.35)+BZ58(4.29)	15.17	INSUFFICIENT!
-Y	C316(5.43)+CZ16(5.99)	11.41	BZ32(4.29)+BZ58(8.35)	15.17	INSUFFICIENT!
+X	CZ16(8.18)+CB16(5.38)	13.55	BB21(7.08)	8.5	Panel end zone
-X	CZ16(8.18)+CB16(5.38)	13.55	BB21(6.35)	7.63	Panel end zone
+Y	CZ16(5.99)+CB16(3.75)	9.74	BB32(8.35)+BB58(4.29)	15.17	Panel end zone
-Y	CZ16(5.99)+CB16(3.75)	9.74	BB32(4.29)+BB58(8.35)	15.17	Panel end zone
+X	C517(8.49)	8.49	B518(6.35)+B519(8.35)	17.65	Bldg. upper level cnd.
-X	C517(8.49)	8.49	B518(8.35)+B519(4.29)	15.18	Bldg. upper level cnd.
+Y	C517(8.49)	8.49	B524(8.35)+B525(4.29)	15.17	Bldg. upper level cnd.
-Y	C517(8.49)	8.49	B524(4.29)+B525(8.35)	15.17	Bldg. upper level cnd.
+X	C517(8.49)+C417(9.54)	18.03	B418(6.35)+B419(8.35)	17.65	Nd < 0,10.Ac.fck conditio
-X	C517(8.49)+C417(9.54)	18.03	B418(8.35)+B419(4.29)	15.18	Nd < 0,10.Ac.fck conditio
+Y	C517(8.49)+C417(9.58)	18.07	B424(8.35)+B425(4.29)	15.17	Nd < 0,10.Ac.fck conditio
-Y	C517(8.49)+C417(9.58)	18.07	B424(4.29)+B425(8.35)	15.17	Nd < 0,10.Ac.fck conditio

STRONG COLUMN CHECK (tm)

Dir	Column	Mrc	Beam	Mrb	EXPLANATION
+X	CZ20(5.37)+CB20(3.87)	9.25	BB42(6.35)	7.62	Panel end zone
-X	CZ20(5.37)+CB20(3.87)	9.25	BB42(7.08)	8.5	Panel end zone
+Y	CZ20(7.49)+CB20(5.14)	12.63	BB45(8.35)	10.02	Panel end zone
-Y	CZ20(7.49)+CB20(5.14)	12.63	BB45(6.35)	7.62	Panel end zone
+X	C521(3.95)	3.95	B542(8.35)+B543(4.29)	15.17	Bldg. upper level cnd.
-X	C521(3.95)	3.95	B542(6.35)+B543(8.35)	17.64	Bldg. upper level cnd.
+Y	C521(5.99)	5.99	B538(8.35)	10.02	Bldg. upper level cnd.
-Y	C521(5.99)	5.99	B538(4.29)	5.14	Bldg. upper level cnd.
+X	C521(3.95)+C421(4.6)	8.55	B442(8.35)+B443(4.29)	15.17	Nd < 0,10.Ac.fck conditio
-X	C521(3.95)+C421(4.6)	8.55	B442(6.35)+B443(8.35)	17.64	Nd < 0,10.Ac.fck conditio
+Y	C521(5.99)+C421(7.13)	13.11	B438(8.35)	10.02	Nd < 0,10.Ac.fck conditio
-Y	C521(5.99)+C421(7.13)	13.11	B438(4.29)	5.14	Nd < 0,10.Ac.fck conditio
+X	C421(4.6)+C321(5.17)	9.76	B342(8.35)+B343(4.29)	15.17	INSUFFICIENT!
-X	C421(4.6)+C321(5.17)	9.76	B342(6.35)+B343(8.35)	17.64	INSUFFICIENT!
+Y	C421(7.13)+C321(7.69)	14.82	B338(9.06)	10.88	✓
-Y	C421(7.13)+C321(7.69)	14.82	B338(6.35)	7.62	✓
+X	C321(5.17)+CZ21(5.67)	10.84	BZ42(8.35)+BZ43(4.29)	15.17	INSUFFICIENT!
-X	C321(5.17)+CZ21(5.67)	10.84	BZ42(6.35)+BZ43(8.35)	17.64	INSUFFICIENT!
+Y	C321(7.69)+CZ21(8.11)	15.8	BZ38(9.06)	10.88	✓
-Y	C321(7.69)+CZ21(8.11)	15.8	BZ38(6.35)	7.62	✓
+X	CZ21(5.67)+CB21(3.73)	9.4	BB42(8.35)+BB43(4.29)	15.17	Panel end zone
-X	CZ21(5.67)+CB21(3.73)	9.4	BB42(6.35)+BB43(8.35)	17.64	Panel end zone
+Y	CZ21(8.11)+CB21(5.32)	13.43	BB38(8.35)	10.02	Panel end zone
-Y	CZ21(8.11)+CB21(5.32)	13.43	BB38(4.29)	5.14	Panel end zone
+X	C522(4.08)	4.08	B543(8.35)+B544(4.29)	15.17	Bldg. upper level cnd.
-X	C522(4.08)	4.08	B543(4.29)+B544(8.35)	15.17	Bldg. upper level cnd.
+Y	C522(6.13)	6.13	B540(8.35)	10.02	Bldg. upper level cnd.
-Y	C522(6.13)	6.13	B540(4.29)	5.14	Bldg. upper level cnd.
+X	C522(4.08)+C422(4.88)	8.96	B443(8.35)+B444(4.29)	15.17	Nd < 0,10.Ac.fck conditio
-X	C522(4.08)+C422(4.88)	8.96	B443(4.29)+B444(8.35)	15.17	Nd < 0,10.Ac.fck conditio
+Y	C522(6.13)+C422(7.3)	13.43	B440(8.35)	10.02	✓
-Y	C522(6.13)+C422(7.3)	13.43	B440(4.29)	5.14	✓
+X	C422(4.88)+C322(5.6)	10.47	B343(8.35)+B344(4.29)	15.17	INSUFFICIENT!
-X	C422(4.88)+C322(5.6)	10.47	B343(4.29)+B344(8.35)	15.17	INSUFFICIENT!
+Y	C422(7.3)+C322(7.81)	15.12	B340(8.35)	10.02	✓
-Y	C422(7.3)+C322(7.81)	15.12	B340(6.35)	7.62	✓
+X	C322(5.6)+CZ22(6.18)	11.77	BZ43(8.35)+BZ44(4.29)	15.17	INSUFFICIENT!
-X	C322(5.6)+CZ22(6.18)	11.77	BZ43(4.29)+BZ44(8.35)	15.17	INSUFFICIENT!
+Y	C322(7.81)+CZ22(8.21)	16.03	BZ40(8.35)	10.02	✓
-Y	C322(7.81)+CZ22(8.21)	16.03	BZ40(6.35)	7.62	✓
+X	CZ22(6.18)+CB22(3.79)	9.97	BB43(8.35)+BB44(4.29)	15.17	Panel end zone
-X	CZ22(6.18)+CB22(3.79)	9.97	BB43(4.29)+BB44(8.35)	15.17	Panel end zone
+Y	CZ22(8.21)+CB22(5.44)	13.65	BB40(8.35)	10.02	Panel end zone
-Y	CZ22(8.21)+CB22(5.44)	13.65	BB40(4.29)	5.14	Panel end zone
+X	C523(4.1)	4.1	B544(8.35)+B556(4.29)	15.17	Bldg. upper level cnd.
-X	C523(4.1)	4.1	B544(4.29)+B556(8.35)	15.17	Bldg. upper level cnd.
+Y	C523(6.16)	6.16	B536(8.35)	10.02	Bldg. upper level cnd.
-Y	C523(6.16)	6.16	B536(4.29)	5.14	Bldg. upper level cnd.
+X	C523(4.1)+C423(4.9)	9	B444(8.35)+B456(4.29)	15.17	Nd < 0,10.Ac.fck conditio
-X	C523(4.1)+C423(4.9)	9	B444(4.29)+B456(8.35)	15.17	Nd < 0,10.Ac.fck conditio
+Y	C523(6.16)+C423(7.32)	13.47	B436(8.35)	10.02	✓
-Y	C523(6.16)+C423(7.32)	13.47	B436(4.29)	5.14	✓
+X	C423(4.9)+C323(5.62)	10.52	B344(8.35)+B356(4.29)	15.17	INSUFFICIENT!
-X	C423(4.9)+C323(5.62)	10.52	B344(4.29)+B356(8.35)	15.17	INSUFFICIENT!
+Y	C423(7.32)+C323(7.82)	15.14	B336(8.35)	10.02	✓
-Y	C423(7.32)+C323(7.82)	15.14	B336(6.35)	7.62	✓
+X	C323(5.62)+CZ23(6.2)	11.82	BZ44(8.35)+BZ56(4.29)	15.17	INSUFFICIENT!
-X	C323(5.62)+CZ23(6.2)	11.82	BZ44(4.29)+BZ56(8.35)	15.17	INSUFFICIENT!
+Y	C323(7.82)+CZ23(8.21)	16.04	BZ36(8.35)	10.02	✓
-Y	C323(7.82)+CZ23(8.21)	16.04	BZ36(4.29)	5.14	✓
+X	CZ23(6.2)+CB23(3.8)	10	BB44(8.35)+BB56(4.29)	15.17	Panel end zone
-X	CZ23(6.2)+CB23(3.8)	10	BB44(4.29)+BB56(8.35)	15.17	Panel end zone
+Y	CZ23(8.21)+CB23(5.49)	13.7	BB36(8.35)	10.02	Panel end zone
-Y	CZ23(8.21)+CB23(5.49)	13.7	BB36(4.29)	5.14	Panel end zone
+X	C524(5.98)	5.98	B533(6.35)	7.63	Bldg. upper level cnd.
-X	C524(5.98)	5.98	B533(7.08)	8.5	Bldg. upper level cnd.
+Y	C524(3.95)	3.95	B545(4.29)+B546(8.35)	15.17	Bldg. upper level cnd.
-Y	C524(3.95)	3.95	B545(8.35)+B546(4.29)	15.17	Bldg. upper level cnd.

STRONG COLUMN CHECK (tm)

Dir	Column	Mrc	Beam	Mrb	EXPLANATION
+X	C524(5.98)+C424(7.14)	13.12	B433(6.35)	7.63	Nd < 0,10.Ac.fck conditio
-X	C524(5.98)+C424(7.14)	13.12	B433(7.08)	8.5	Nd < 0,10.Ac.fck conditio
+Y	C524(3.95)+C424(4.58)	8.53	B445(4.29)+B446(8.35)	15.17	Nd < 0,10.Ac.fck conditio
-Y	C524(3.95)+C424(4.58)	8.53	B445(8.35)+B446(4.29)	15.17	Nd < 0,10.Ac.fck conditio
+X	C424(7.14)+C324(7.72)	14.85	B333(6.35)	7.63	✓
-X	C424(7.14)+C324(7.72)	14.85	B333(7.91)	9.51	✓
+Y	C424(4.58)+C324(5.14)	9.72	B345(4.29)+B346(8.35)	15.17	INSUFFICIENT!
-Y	C424(4.58)+C324(5.14)	9.72	B345(8.35)+B346(4.29)	15.17	INSUFFICIENT!
+X	C324(7.72)+CZ24(8.15)	15.86	BZ33(6.35)	7.63	✓
-X	C324(7.72)+CZ24(8.15)	15.86	BZ33(7.91)	9.51	✓
+Y	C324(5.14)+CZ24(6.13)	11.27	BZ45(4.29)+BZ46(8.35)	15.17	INSUFFICIENT!
-Y	C324(5.14)+CZ24(6.13)	11.27	BZ45(8.35)+BZ46(4.29)	15.17	INSUFFICIENT!
+X	CZ24(8.15)+CB24(5.68)	13.82	BB33(6.35)	7.63	Panel end zone
-X	CZ24(8.15)+CB24(5.68)	13.82	BB33(7.08)	8.5	Panel end zone
+Y	CZ24(6.13)+CB24(3.74)	9.87	BB45(4.29)+BB46(8.35)	15.17	Panel end zone
-Y	CZ24(6.13)+CB24(3.74)	9.87	BB45(8.35)+BB46(4.29)	15.17	Panel end zone
+X	C525(8.52)	8.52	B533(8.35)+B534(4.29)	15.18	Bldg. upper level cnd.
-X	C525(8.52)	8.52	B533(6.35)+B534(8.35)	17.65	Bldg. upper level cnd.
+Y	C525(8.49)	8.49	B538(4.29)+B539(8.35)	15.17	Bldg. upper level cnd.
-Y	C525(8.49)	8.49	B538(8.35)+B539(4.29)	15.17	Bldg. upper level cnd.
+X	C525(8.52)+C425(9.6)	18.11	B433(8.35)+B434(4.29)	15.18	Nd < 0,10.Ac.fck conditio
-X	C525(8.52)+C425(9.6)	18.11	B433(6.35)+B434(8.35)	17.65	Nd < 0,10.Ac.fck conditio
+Y	C525(8.49)+C425(9.59)	18.08	B438(4.29)+B439(8.35)	15.17	Nd < 0,10.Ac.fck conditio
-Y	C525(8.49)+C425(9.59)	18.08	B438(8.35)+B439(4.29)	15.17	Nd < 0,10.Ac.fck conditio
+X	C425(9.6)+C325(10.38)	19.98	B333(8.35)+B334(4.29)	15.18	✓
-X	C425(9.6)+C325(10.38)	19.98	B333(6.35)+B334(8.35)	17.65	✓
+Y	C425(9.59)+C325(10.4)	19.99	B338(6.35)+B339(10.3)	19.98	✓
-Y	C425(9.59)+C325(10.4)	19.99	B338(10.3)+B339(6.35)	19.98	✓
+X	C325(10.38)+CZ25(10.88)	21.26	BZ33(8.35)+BZ34(4.29)	15.18	✓
-X	C325(10.38)+CZ25(10.88)	21.26	BZ33(6.35)+BZ34(8.35)	17.65	✓
+Y	C325(10.4)+CZ25(10.93)	21.33	BZ38(6.35)+BZ39(8.35)	17.64	✓
-Y	C325(10.4)+CZ25(10.93)	21.33	BZ38(8.35)+BZ39(6.35)	17.64	✓
+X	CZ25(10.88)+CB25(11.45)	22.33	BB33(8.35)+BB34(4.29)	15.18	Basement
-X	CZ25(10.88)+CB25(11.45)	22.33	BB33(6.35)+BB34(8.35)	17.65	Basement
+Y	CZ25(10.93)+CB25(11.4)	22.33	BB38(4.29)+BB39(8.35)	15.17	Basement
-Y	CZ25(10.93)+CB25(11.4)	22.33	BB38(8.35)+BB39(4.29)	15.17	Basement
+X	C526(8.61)	8.61	B534(8.35)+B535(4.29)	15.18	Bldg. upper level cnd.
-X	C526(8.61)	8.61	B534(4.29)+B535(8.35)	15.18	Bldg. upper level cnd.
+Y	C526(8.64)	8.64	B540(4.29)+B541(8.35)	15.17	Bldg. upper level cnd.
-Y	C526(8.64)	8.64	B540(8.35)+B541(4.29)	15.17	Bldg. upper level cnd.
+X	C526(8.61)+C426(9.8)	18.41	B434(8.35)+B435(4.29)	15.18	Nd < 0,10.Ac.fck conditio
-X	C526(8.61)+C426(9.8)	18.41	B434(4.29)+B435(8.35)	15.18	Nd < 0,10.Ac.fck conditio
+Y	C526(8.64)+C426(9.85)	18.49	B440(4.29)+B441(8.35)	15.17	Nd < 0,10.Ac.fck conditio
-Y	C526(8.64)+C426(9.85)	18.49	B440(8.35)+B441(4.29)	15.17	Nd < 0,10.Ac.fck conditio
+X	C426(9.8)+C326(10.6)	20.41	B334(8.35)+B335(4.29)	15.18	✓
-X	C426(9.8)+C326(10.6)	20.41	B334(4.29)+B335(8.35)	15.18	✓
+Y	C426(9.85)+C326(10.63)	20.48	B340(4.29)+B341(8.35)	15.17	✓
-Y	C426(9.85)+C326(10.63)	20.48	B340(8.35)+B341(4.29)	15.17	✓
+X	C326(10.6)+CZ26(11.17)	21.77	BZ34(8.35)+BZ35(4.29)	15.18	✓
-X	C326(10.6)+CZ26(11.17)	21.77	BZ34(4.29)+BZ35(8.35)	15.18	✓
+Y	C326(10.63)+CZ26(11.19)	21.82	BZ40(4.29)+BZ41(8.35)	15.17	✓
-Y	C326(10.63)+CZ26(11.19)	21.82	BZ40(8.35)+BZ41(4.29)	15.17	✓
+X	CZ26(11.17)+CB26(11.61)	22.78	BB34(8.35)+BB35(4.29)	15.18	Basement
-X	CZ26(11.17)+CB26(11.61)	22.78	BB34(4.29)+BB35(8.35)	15.18	Basement
+Y	CZ26(11.19)+CB26(11.6)	22.79	BB40(4.29)+BB41(8.35)	15.17	Basement
-Y	CZ26(11.19)+CB26(11.6)	22.79	BB40(8.35)+BB41(4.29)	15.17	Basement
+X	C527(8.39)	8.39	B535(8.35)+B549(4.29)	15.18	Bldg. upper level cnd.
-X	C527(8.39)	8.39	B535(4.29)+B549(8.35)	15.18	Bldg. upper level cnd.
+Y	C527(8.19)	8.19	B536(4.29)+B537(8.35)	15.17	Bldg. upper level cnd.
-Y	C527(8.19)	8.19	B536(8.35)+B537(6.35)	17.64	Bldg. upper level cnd.
+X	C527(8.39)+C427(9.47)	17.86	B435(8.35)+B449(4.29)	15.18	Nd < 0,10.Ac.fck conditio
-X	C527(8.39)+C427(9.47)	17.86	B435(4.29)+B449(8.35)	15.18	Nd < 0,10.Ac.fck conditio
+Y	C527(8.19)+C427(9.15)	17.34	B436(6.35)+B437(8.35)	17.64	Nd < 0,10.Ac.fck conditio
-Y	C527(8.19)+C427(9.15)	17.34	B436(8.35)+B437(8.35)	20.05	Nd < 0,10.Ac.fck conditio
+X	C427(9.47)+C327(10.33)	19.79	B335(10.3)+B349(6.35)	19.99	INSUFFICIENT!
-X	C427(9.47)+C327(10.33)	19.79	B335(6.35)+B349(10.3)	20	INSUFFICIENT!
+Y	C427(9.15)+C327(9.96)	19.11	B336(6.35)+B337(8.35)	17.64	Nd < 0,10.Ac.fck conditio
-Y	C427(9.15)+C327(9.96)	19.11	B336(8.35)+B337(8.35)	20.05	Nd < 0,10.Ac.fck conditio

STRONG COLUMN CHECK (tm)

Dir	Column	Mrc	Beam	Mrb	EXPLANATION
+X	C534(194.62)+C434(216.13)	410.75	B408(16.8)+B423(8.35)+B459(8.3	40.23	Nd < 0,10.Ac.fck conditio
-X	C534(179.74)+C434(194.23)	373.97	B408(7.08)+B423(11.36)+B459(11	35.79	Nd < 0,10.Ac.fck conditio
+Y	C534(206.76)+C434(226.14)	432.9	B407(15.04)+B437(8.35)	28.07	Nd < 0,10.Ac.fck conditio
-Y	C534(207.42)+C434(226.27)	433.69	B407(8.35)+B437(15.04)	28.07	Nd < 0,10.Ac.fck conditio
+X	C434(216.13)+C334(237.45)	453.59	B308(16.8)+B323(9.87)+B359(9.8	43.88	Nd < 0,10.Ac.fck conditio
-X	C434(194.23)+C334(226.14)	420.37	B308(7.91)+B323(15.04)+B359(15	45.62	Nd < 0,10.Ac.fck conditio
+Y	C434(226.14)+C334(294.3)	520.44	B307(15.04)+B337(8.35)	28.07	Nd < 0,10.Ac.fck conditio
-Y	C434(226.27)+C334(278.42)	504.69	B307(8.35)+B337(15.04)	28.07	Nd < 0,10.Ac.fck conditio
+X	C334(237.45)+CZ34(284.92)	522.37	BZ08(16.8)+BZ23(11.78)+BZ59(11	48.46	Nd < 0,10.Ac.fck conditio
-X	C334(226.14)+CZ34(219.78)	445.92	BZ08(7.91)+BZ23(15.04)+BZ59(15	45.62	Nd < 0,10.Ac.fck conditio
+Y	C334(294.3)+CZ34(297.64)	591.93	BZ07(15.04)+BZ37(8.35)	28.07	Nd < 0,10.Ac.fck conditio
-Y	C334(278.42)+CZ34(329.18)	607.6	BZ07(8.35)+BZ37(15.04)	28.07	Nd < 0,10.Ac.fck conditio
+X	CZ34(284.92)+CB34(311.29)	596.21	BB08(8.35)+BB23(6.35)+BB59(6.3	25.27	Basement
-X	CZ34(219.78)+CB34(253.2)	472.98	BB08(4.29)+BB23(7.08)+BB59(7.0	22.14	Basement
+Y	CZ34(297.64)+CB34(300.77)	598.41	BB07(7.08)+BB37(6.35)	16.11	Basement
-Y	CZ34(329.18)+CB34(332.15)	661.33	BB07(6.35)+BB37(7.08)	16.11	Basement
+X	C635(16.36)	16.36	B623(7.08)+B659(7.08)	16.98	Bldg. upper level cnd.
-X	C635(16.36)	16.36	B623(6.35)+B659(6.35)	15.23	Bldg. upper level cnd.
+Y	C635(130.55)	130.55		0	Bldg. upper level cnd.
-Y	C635(130.55)	130.55		0	Bldg. upper level cnd.
+X	C635(16.36)+C535(17.53)	33.88	B522(4.29)+B523(7.08)+B559(7.0	22.15	Bldg. upper level cnd.
-X	C635(16.36)+C535(17.53)	33.88	B522(8.35)+B523(6.35)+B559(6.3	25.27	Bldg. upper level cnd.
+Y	C635(130.55)+C535(140.72)	271.28	B527(15.04)+B553(6.35)	25.67	Bldg. upper level cnd.
-Y	C635(130.55)+C535(140.72)	271.28	B527(6.35)+B553(15.04)	25.67	Bldg. upper level cnd.
+X	C535(17.53)+C435(18.53)	36.05	B422(4.29)+B423(7.08)+B459(7.0	22.15	Nd < 0,10.Ac.fck conditio
-X	C535(17.53)+C435(18.53)	36.05	B422(8.35)+B423(6.35)+B459(6.3	25.28	Nd < 0,10.Ac.fck conditio
+Y	C535(140.72)+C435(150.34)	291.06	B427(15.04)+B453(8.35)	28.07	Nd < 0,10.Ac.fck conditio
-Y	C535(140.72)+C435(150.34)	291.06	B427(8.35)+B453(15.04)	28.07	Nd < 0,10.Ac.fck conditio
+X	C435(18.53)+C335(19.24)	37.77	B322(4.29)+B323(7.08)+B359(7.0	22.15	Nd < 0,10.Ac.fck conditio
-X	C435(18.53)+C335(19.24)	37.77	B322(8.35)+B323(6.35)+B359(6.3	25.28	Nd < 0,10.Ac.fck conditio
+Y	C435(150.34)+C335(159.19)	309.53	B327(15.04)+B353(8.35)	28.07	Nd < 0,10.Ac.fck conditio
-Y	C435(150.34)+C335(159.19)	309.53	B327(8.35)+B353(15.04)	28.07	Nd < 0,10.Ac.fck conditio
+X	C335(19.24)+CZ35(19.73)	38.97	BZ22(4.29)+BZ23(7.08)+BZ59(7.0	22.15	Nd < 0,10.Ac.fck conditio
-X	C335(19.24)+CZ35(19.73)	38.97	BZ22(8.35)+BZ23(6.35)+BZ59(6.3	25.28	Nd < 0,10.Ac.fck conditio
+Y	C335(159.19)+CZ35(166.86)	326.05	BZ27(15.04)+BZ53(8.35)	28.07	Nd < 0,10.Ac.fck conditio
-Y	C335(159.19)+CZ35(166.86)	326.05	BZ27(8.35)+BZ53(15.04)	28.07	Nd < 0,10.Ac.fck conditio
+X	CZ35(19.73)+CB35(24.86)	44.59	BB22(4.29)+BB23(7.08)+BB59(7.0	22.14	Basement
-X	CZ35(19.73)+CB35(24.86)	44.59	BB22(8.35)+BB23(6.35)+BB59(6.3	25.27	Basement
+Y	CZ35(166.86)+CB35(173.05)	339.91	BB27(7.08)+BB53(6.35)	16.11	Basement
-Y	CZ35(166.86)+CB35(173.05)	339.91	BB27(6.35)+BB53(7.08)	16.11	Basement

COLUMNS SHEAR CHECK

Vw=(Asw/s) fywd d , Vc=0.65 fctd Ac , Vr=0.8 Vcr + Vw ≥ Vd (t)

Column		Asw/s	Vw	Vcr	Vd	Vr=0.8 Vcr+ Vw
CB01	x	0.1507	13.761	6.631	0.038	19.066 ✓
CB01	y	0.1005	12.844	6.631	0.115	18.148 ✓
CB02	x	0.1884	17.202	6.631	0.040	22.506 ✓
CB02	y	0.1256	16.055	6.631	0.502	21.359 ✓
CB03	x	0.1507	13.761	6.631	0.044	19.066 ✓
CB03	y	0.1005	12.844	6.631	0.473	18.148 ✓
CB04	x	0.1507	13.761	6.631	0.043	19.066 ✓
CB04	y	0.1005	12.844	6.631	0.431	18.148 ✓
CB05	x	0.1005	12.844	6.631	0.412	18.148 ✓
CB05	y	0.1507	13.761	6.631	0.065	19.066 ✓
CB06	x	0.1005	12.844	6.631	0.401	18.148 ✓
CB06	y	0.1507	13.761	6.631	0.066	19.066 ✓
CB07	x	0.2010	29.358	9.518	0.375	36.972 ✓
CB07	y	0.2010	29.358	9.518	0.229	36.972 ✓
CB08	x	0.2010	29.358	9.518	0.182	36.972 ✓
CB08	y	0.2010	29.358	9.518	0.194	36.972 ✓
CB09	x	0.2010	29.358	9.518	0.215	36.972 ✓
CB09	y	0.2010	29.358	9.518	0.157	36.972 ✓
CB10	x	0.2010	29.358	9.518	0.371	36.972 ✓
CB10	y	0.2010	29.358	9.518	0.159	36.972 ✓
CB11	x	0.2010	29.358	9.518	0.176	36.972 ✓
CB11	y	0.2010	29.358	9.518	0.131	36.972 ✓
CB12	x	0.1507	13.761	6.631	0.038	19.066 ✓
CB12	y	0.1005	12.844	6.631	0.118	18.148 ✓
CB13	x	0.1507	13.761	6.631	0.041	19.066 ✓
CB13	y	0.1005	12.844	6.631	0.416	18.148 ✓
CB14	x	0.1507	13.761	6.631	0.044	19.066 ✓
CB14	y	0.1005	12.844	6.631	0.423	18.148 ✓
CB15	x	0.1005	12.844	6.631	0.408	18.148 ✓
CB15	y	0.1507	13.761	6.631	0.065	19.066 ✓
CB16	x	0.1005	12.844	6.631	0.396	18.148 ✓
CB16	y	0.1507	13.761	6.631	0.066	19.066 ✓
CB17	x	0.2010	29.358	9.518	0.351	36.972 ✓
CB17	y	0.2010	29.358	9.518	0.133	36.972 ✓
CB18	x	0.2010	29.358	9.518	0.195	36.972 ✓
CB18	y	0.2010	29.358	9.518	0.143	36.972 ✓
CB19	x	0.2010	29.358	9.518	0.291	36.972 ✓
CB19	y	0.2010	29.358	9.518	0.081	36.972 ✓
CB20	x	0.1507	13.761	6.631	0.038	19.066 ✓
CB20	y	0.1005	12.844	6.631	0.115	18.148 ✓
CB21	x	0.1507	13.761	6.631	0.040	19.066 ✓
CB21	y	0.1005	12.844	6.631	0.502	18.148 ✓
CB22	x	0.1507	13.761	6.631	0.044	19.066 ✓
CB22	y	0.1005	12.844	6.631	0.474	18.148 ✓
CB23	x	0.1507	13.761	6.631	0.043	19.066 ✓
CB23	y	0.1005	12.844	6.631	0.431	18.148 ✓
CB24	x	0.1005	12.844	6.631	0.412	18.148 ✓
CB24	y	0.1507	13.761	6.631	0.065	19.066 ✓
CB25	x	0.2010	29.358	9.518	0.375	36.972 ✓
CB25	y	0.2010	29.358	9.518	0.229	36.972 ✓
CB26	x	0.2010	29.358	9.518	0.182	36.972 ✓
CB26	y	0.2010	29.358	9.518	0.194	36.972 ✓
CB27	x	0.2010	29.358	9.518	0.215	36.972 ✓
CB27	y	0.2010	29.358	9.518	0.157	36.972 ✓
CB28	x	0.1507	13.761	6.631	0.038	19.066 ✓
CB28	y	0.1005	12.844	6.631	0.118	18.148 ✓
CB29	x	0.1507	13.761	6.631	0.041	19.066 ✓
CB29	y	0.1005	12.844	6.631	0.417	18.148 ✓
CB30	x	0.1507	13.761	6.631	0.044	19.066 ✓
CB30	y	0.1005	12.844	6.631	0.423	18.148 ✓
CB31	x	0.1005	12.844	6.631	0.408	18.148 ✓
CB31	y	0.1507	13.761	6.631	0.065	19.066 ✓
CB32	x	0.2010	29.358	9.518	0.351	36.972 ✓
CB32	y	0.2010	29.358	9.518	0.133	36.972 ✓
CB33	x	0.2010	29.358	9.518	0.195	36.972 ✓
CB33	y	0.2010	29.358	9.518	0.143	36.972 ✓
CB35	x	0.5582	50.968	31.259	0.452	75.975 ✓
CB35	y	0.1116	67.278	31.259	24.216	92.285 ✓
CZ01	x	0.1884	17.202	6.631	1.276	22.506 ✓
CZ01	y	0.1256	16.055	6.631	2.522	21.359 ✓
CZ02	x	0.1884	17.202	6.631	1.405	22.506 ✓
CZ02	y	0.1256	16.055	6.631	2.730	21.359 ✓
CZ03	x	0.1884	17.202	6.631	1.350	22.506 ✓
CZ03	y	0.1256	16.055	6.631	2.493	21.359 ✓
CZ04	x	0.1884	17.202	6.631	1.347	22.506 ✓
CZ04	y	0.1256	16.055	6.631	2.203	21.359 ✓
CZ05	x	0.1256	16.055	6.631	2.373	21.359 ✓
CZ05	y	0.1884	17.202	6.631	1.654	22.506 ✓
CZ06	x	0.1256	16.055	6.631	2.246	21.359 ✓
CZ06	y	0.1884	17.202	6.631	1.566	22.506 ✓
CZ07	x	0.2010	29.358	9.518	3.624	36.972 ✓
CZ07	y	0.2010	29.358	9.518	3.723	36.972 ✓

COLUMNS SHEAR CHECK

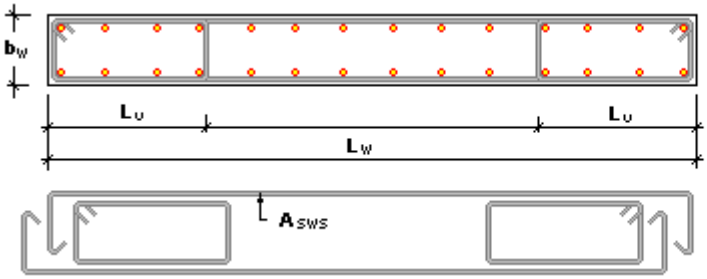
Column		Asw/s	Vw	Vcr	Vd	Vr=0.8 Vcr+ Vw
C316	x	0.1256	16.055	6.631	2.501	21.359 ✓
C316	y	0.1884	17.202	6.631	1.526	22.506 ✓
C317	x	0.2010	29.358	9.518	4.181	36.972 ✓
C317	y	0.2010	29.358	9.518	3.588	36.972 ✓
C318	x	0.2010	29.358	9.518	3.774	36.972 ✓
C318	y	0.2010	29.358	9.518	4.354	36.972 ✓
C319	x	0.2010	29.358	9.518	3.778	36.972 ✓
C319	y	0.2010	29.358	9.518	3.404	36.972 ✓
C320	x	0.1884	17.202	6.631	1.595	22.506 ✓
C320	y	0.1256	16.055	6.631	2.608	21.359 ✓
C321	x	0.1884	17.202	6.631	1.847	22.506 ✓
C321	y	0.1256	16.055	6.631	2.864	21.359 ✓
C322	x	0.1884	17.202	6.631	1.715	22.506 ✓
C322	y	0.1256	16.055	6.631	2.703	21.359 ✓
C323	x	0.1884	17.202	6.631	1.695	22.506 ✓
C323	y	0.1256	16.055	6.631	2.475	21.359 ✓
C324	x	0.1256	16.055	6.631	2.606	21.359 ✓
C324	y	0.1884	17.202	6.631	2.031	22.506 ✓
C325	x	0.2010	29.358	9.518	4.218	36.972 ✓
C325	y	0.2010	29.358	9.518	4.199	36.972 ✓
C326	x	0.2010	29.358	9.518	3.827	36.972 ✓
C326	y	0.2010	29.358	9.518	3.761	36.972 ✓
C327	x	0.2010	29.358	9.518	3.789	36.972 ✓
C327	y	0.2010	29.358	9.518	4.359	36.972 ✓
C328	x	0.1884	17.202	6.631	1.609	22.506 ✓
C328	y	0.1256	16.055	6.631	2.261	21.359 ✓
C329	x	0.1884	17.202	6.631	1.869	22.506 ✓
C329	y	0.1256	16.055	6.631	2.552	21.359 ✓
C330	x	0.1884	17.202	6.631	1.736	22.506 ✓
C330	y	0.1256	16.055	6.631	2.518	21.359 ✓
C331	x	0.1256	16.055	6.631	2.622	21.359 ✓
C331	y	0.1884	17.202	6.631	1.672	22.506 ✓
C332	x	0.2010	29.358	9.518	4.181	36.972 ✓
C332	y	0.2010	29.358	9.518	3.587	36.972 ✓
C333	x	0.2010	29.358	9.518	3.774	36.972 ✓
C333	y	0.2010	29.358	9.518	4.354	36.972 ✓
C335	x	0.6280	57.339	31.259	6.731	82.346 ✓
C335	y	0.1256	75.688	31.259	15.703	100.695 ✓
C401	x	0.1884	17.202	6.631	1.393	22.506 ✓
C401	y	0.1256	16.055	6.631	2.312	21.359 ✓
C402	x	0.1884	17.202	6.631	1.624	22.506 ✓
C402	y	0.1256	16.055	6.631	2.522	21.359 ✓
C403	x	0.1884	17.202	6.631	1.492	22.506 ✓
C403	y	0.1256	16.055	6.631	2.419	21.359 ✓
C404	x	0.1884	17.202	6.631	1.465	22.506 ✓
C404	y	0.1256	16.055	6.631	2.285	21.359 ✓
C405	x	0.1256	16.055	6.631	2.164	21.359 ✓
C405	y	0.1884	17.202	6.631	1.811	22.506 ✓
C406	x	0.1256	16.055	6.631	2.068	21.359 ✓
C406	y	0.1884	17.202	6.631	1.662	22.506 ✓
C407	x	0.2010	29.358	9.518	3.605	36.972 ✓
C407	y	0.2010	29.358	9.518	3.708	36.972 ✓
C408	x	0.2010	29.358	9.518	3.311	36.972 ✓
C408	y	0.2010	29.358	9.518	3.364	36.972 ✓
C409	x	0.2010	29.358	9.518	3.281	36.972 ✓
C409	y	0.2010	29.358	9.518	4.173	36.972 ✓
C410	x	0.2010	29.358	9.518	3.464	36.972 ✓
C410	y	0.2010	29.358	9.518	3.604	36.972 ✓
C411	x	0.2010	29.358	9.518	3.926	36.972 ✓
C411	y	0.2010	29.358	9.518	3.233	36.972 ✓
C412	x	0.1884	17.202	6.631	1.413	22.506 ✓
C412	y	0.1256	16.055	6.631	2.099	21.359 ✓
C413	x	0.1884	17.202	6.631	1.655	22.506 ✓
C413	y	0.1256	16.055	6.631	2.345	21.359 ✓
C414	x	0.1884	17.202	6.631	1.521	22.506 ✓
C414	y	0.1256	16.055	6.631	2.339	21.359 ✓
C415	x	0.1256	16.055	6.631	2.184	21.359 ✓
C415	y	0.1884	17.202	6.631	1.613	22.506 ✓
C416	x	0.1256	16.055	6.631	2.081	21.359 ✓
C416	y	0.1884	17.202	6.631	1.468	22.506 ✓
C417	x	0.2010	29.358	9.518	3.564	36.972 ✓
C417	y	0.2010	29.358	9.518	3.330	36.972 ✓
C418	x	0.2010	29.358	9.518	3.247	36.972 ✓
C418	y	0.2010	29.358	9.518	4.159	36.972 ✓
C419	x	0.2010	29.358	9.518	3.184	36.972 ✓
C419	y	0.2010	29.358	9.518	3.201	36.972 ✓
C420	x	0.1884	17.202	6.631	1.393	22.506 ✓
C420	y	0.1256	16.055	6.631	2.312	21.359 ✓
C421	x	0.1884	17.202	6.631	1.624	22.506 ✓
C421	y	0.1256	16.055	6.631	2.522	21.359 ✓
C422	x	0.1884	17.202	6.631	1.492	22.506 ✓
C422	y	0.1256	16.055	6.631	2.420	21.359 ✓
C423	x	0.1884	17.202	6.631	1.465	22.506 ✓
C423	y	0.1256	16.055	6.631	2.286	21.359 ✓

COLUMNS SHEAR CHECK

Column		Asw/s	Vw	Vcr	Vd	Vr=0.8 Vcr+ Vw
C532	x	0.2010	29.358	9.518	2.835	36.972 ✓
C532	y	0.2010	29.358	9.518	3.018	36.972 ✓
C533	x	0.2010	29.358	9.518	2.588	36.972 ✓
C533	y	0.2010	29.358	9.518	4.119	36.972 ✓
C535	x	0.6280	57.339	31.259	4.297	82.346 ✓
C535	y	0.1256	75.688	31.259	4.391	100.695 ✓
C635	x	0.6280	57.339	31.259	3.138	82.346 ✓
C635	y	0.1256	75.688	31.259	1.987	100.695 ✓

SHEARWALL DESIGN CHECK

Vr = Ach (0.65 fctd + rsh fyd) Wall shear design
Vrh = 0.22 fcd Ach Max. concrete shear design
rshx = Asws.(∑ Letrx/s)/Ach rshy = Asws.(∑ Letry/s)/Ach
Vfr = μ N + fyd Asd = Working point friction shear force
N = Ng - Ne Min. Wall load
μ = 1 (rought surface ≥5mm)



Dikdörtgen perdelerde

$$\rho_{sh} = \frac{2 . A_{sws}}{A_{ch}} \cdot \left[\frac{L_w}{s} + \frac{2 . L_u}{s_u} \right]$$

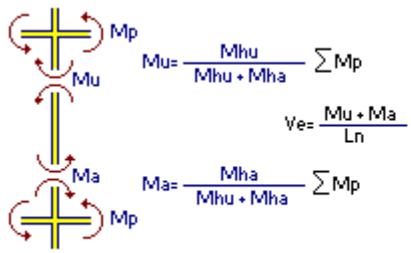
Poligon perdelerde

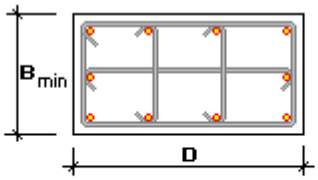
$$\rho_{shx} = \frac{A_{sws}}{A_{ch}} \cdot \left[\sum \frac{L_{etrx}}{s} \right]$$

$$\rho_{shy} = \frac{A_{sws}}{A_{ch}} \cdot \left[\sum \frac{L_{etry}}{s} \right]$$

$$V_r = 0{,}65 . A_{ch} . f_{ctd} + \rho . A_{ch} . f_{yd} > V_d$$

Column	Dir.	Ln	N	Vd	Vr	Vrh	Vfr	EXPLANATION (t)
CB34	X	2.50	80.844	68.983	200.456	333.667	357.296	✓
	Y	2.50	114.189	72.511	172.934	333.667	390.641	✓
CZ34	X	2.50	64.651	59.369	200.456	333.667	357.972	✓
	Y	2.50	94.758	58.817	172.934	333.667	388.080	✓
C334	X	2.50	52.412	29.806	200.456	333.667	309.470	✓
	Y	2.50	74.158	32.504	172.934	333.667	331.215	✓
C434	X	2.50	38.903	17.687	200.456	333.667	249.599	✓
	Y	2.50	52.734	17.266	172.934	333.667	263.429	✓
C534	X	2.50	22.315	1.336	200.456	333.667	233.010	✓
	Y	2.50	30.728	7.867	172.934	333.667	241.423	✓
C634	X	2.50	4.717	1.109	200.456	333.667	215.413	✓
	Y	3.00	9.240	3.314	172.934	333.667	219.936	✓





Ln : Kolon kirişler arası serbest yüksekliği
Hk : Kolon kat yüksekliği
Fk : Kolon boyunca etriye alan toplamı
Letr : hesap doğrultusundaki etriye boylarının toplamı

$$\rho = \frac{Fk \cdot L_{etr}}{Ac \cdot Hk} \geq 0.0025$$

$$Vr = 0.65 \cdot Ac \cdot f_{ctd} + \rho \cdot Ac \cdot f_{yd} > Ve$$

Dikdörtgen kolonlarda $L_{etr} \cong D$ $Ac = B \cdot D$

$$\rho = \frac{Fk \cdot D}{B \cdot D \cdot Hk} = \frac{Fk}{B \cdot Hk}$$

$$Vr = 0.65 \cdot B \cdot D \cdot f_{ctd} + Fk \cdot D \cdot f_{yd} / Hk > Ve$$

SHEAR DESIGN CHECK FOR COLUMNS

Column	+X Mp Mc Mr	-X Mp Mc Mr	+Y Mp Mc Mr	-Y Mp Mc Mr
CB07	10.88 / 12.65 ┼ Mu= 6.49 / 11.45 / 0.00 ┼ Ma= 11.45 / 0.00	10.88 / -14.71 ┼ Mu= 7.54 / 11.45 / 0.00 ┼ Ma= 11.45 / 0.00	10.93 / 12.64 ┼ Mu= 6.45 / 11.40 / 0.00 ┼ Ma= 11.40 / 0.00	10.93 / -12.64 ┼ Mu= 6.45 / 11.40 / 0.00 ┼ Ma= 11.40 / 0.00
Lnx= 2.50 Lny= 2.50 Basement	Ve= 7.17 Vr= 38.88 ✓	Ve= 7.60 Vr= 38.88 ✓	Ve= 7.14 Vr= 38.88 ✓	Ve= 7.14 Vr= 38.88 ✓
CB08	11.17 / 12.65 ┼ Mu= 6.45 / 11.61 / 0.00 ┼ Ma= 11.61 / 0.00	11.17 / -12.65 ┼ Mu= 6.45 / 11.61 / 0.00 ┼ Ma= 11.61 / 0.00	11.19 / 12.64 ┼ Mu= 6.43 / 11.60 / 0.00 ┼ Ma= 11.60 / 0.00	11.19 / -12.64 ┼ Mu= 6.43 / 11.60 / 0.00 ┼ Ma= 11.60 / 0.00
Lnx= 2.50 Lny= 2.50 Basement	Ve= 7.22 Vr= 38.88 ✓	Ve= 7.22 Vr= 38.88 ✓	Ve= 7.22 Vr= 38.88 ✓	Ve= 7.22 Vr= 38.88 ✓
CB09	10.94 / 12.65 ┼ Mu= 6.45 / 11.37 / 0.00 ┼ Ma= 11.37 / 0.00	10.94 / -12.65 ┼ Mu= 6.45 / 11.37 / 0.00 ┼ Ma= 11.37 / 0.00	10.48 / 14.70 ┼ Mu= 7.63 / 11.32 / 0.00 ┼ Ma= 11.32 / 0.00	10.48 / -12.64 ┼ Mu= 6.56 / 11.32 / 0.00 ┼ Ma= 11.32 / 0.00
Lnx= 2.50 Lny= 2.50 Basement	Ve= 7.13 Vr= 38.88 ✓	Ve= 7.13 Vr= 38.88 ✓	Ve= 7.58 Vr= 38.88 ✓	Ve= 7.15 Vr= 38.88 ✓
CB10	10.95 / 12.65 ┼ Mu= 6.49 / 11.54 / 0.00 ┼ Ma= 11.54 / 0.00	10.95 / -14.71 ┼ Mu= 7.55 / 11.54 / 0.00 ┼ Ma= 11.54 / 0.00	11.04 / 12.64 ┼ Mu= 6.43 / 11.44 / 0.00 ┼ Ma= 11.44 / 0.00	11.04 / -12.64 ┼ Mu= 6.43 / 11.44 / 0.00 ┼ Ma= 11.44 / 0.00
Lnx= 2.50 Lny= 2.50 Basement	Ve= 7.21 Vr= 38.88 ✓	Ve= 7.63 Vr= 38.88 ✓	Ve= 7.15 Vr= 38.88 ✓	Ve= 7.15 Vr= 38.88 ✓
CB11	10.98 / 12.65 ┼ Mu= 6.52 / 11.67 / 0.00 ┼ Ma= 11.67 / 0.00	10.98 / -12.65 ┼ Mu= 6.52 / 11.67 / 0.00 ┼ Ma= 11.67 / 0.00	11.11 / 12.64 ┼ Mu= 6.45 / 11.59 / 0.00 ┼ Ma= 11.59 / 0.00	11.11 / -12.64 ┼ Mu= 6.45 / 11.59 / 0.00 ┼ Ma= 11.59 / 0.00
Lnx= 2.50 Lny= 2.50 Basement	Ve= 7.28 Vr= 38.88 ✓	Ve= 7.28 Vr= 38.88 ✓	Ve= 7.22 Vr= 38.88 ✓	Ve= 7.22 Vr= 38.88 ✓
CB17	10.83 / 14.71 ┼ Mu= 7.54 / 11.39 / 0.00 ┼ Ma= 11.39 / 0.00	10.83 / -12.65 ┼ Mu= 6.48 / 11.39 / 0.00 ┼ Ma= 11.39 / 0.00	10.93 / 12.64 ┼ Mu= 6.42 / 11.30 / 0.00 ┼ Ma= 11.30 / 0.00	10.93 / -12.64 ┼ Mu= 6.42 / 11.30 / 0.00 ┼ Ma= 11.30 / 0.00
Lnx= 2.50 Lny= 2.50 Basement	Ve= 7.57 Vr= 38.88 ✓	Ve= 7.15 Vr= 38.88 ✓	Ve= 7.09 Vr= 38.88 ✓	Ve= 7.09 Vr= 38.88 ✓
CB18	10.93 / 12.65 ┼ Mu= 6.45 / 11.36 / 0.00 ┼ Ma= 11.36 / 0.00	10.93 / -12.65 ┼ Mu= 6.45 / 11.36 / 0.00 ┼ Ma= 11.36 / 0.00	10.46 / 14.70 ┼ Mu= 7.64 / 11.33 / 0.00 ┼ Ma= 11.33 / 0.00	10.46 / -12.64 ┼ Mu= 6.57 / 11.33 / 0.00 ┼ Ma= 11.33 / 0.00
Lnx= 2.50 Lny= 2.50 Basement	Ve= 7.13 Vr= 38.88 ✓	Ve= 7.12 Vr= 38.88 ✓	Ve= 7.59 Vr= 38.88 ✓	Ve= 7.16 Vr= 38.88 ✓
CB19	10.82 / 14.71 ┼ Mu= 7.54 / 11.38 / 0.00 ┼ Ma= 11.38 / 0.00	10.82 / -12.65 ┼ Mu= 6.48 / 11.38 / 0.00 ┼ Ma= 11.38 / 0.00	10.88 / 12.64 ┼ Mu= 6.44 / 11.31 / 0.00 ┼ Ma= 11.31 / 0.00	10.88 / -12.64 ┼ Mu= 6.44 / 11.31 / 0.00 ┼ Ma= 11.31 / 0.00
Lnx= 2.50 Lny= 2.50 Basement	Ve= 7.57 Vr= 38.88 ✓	Ve= 7.14 Vr= 38.88 ✓	Ve= 7.10 Vr= 38.88 ✓	Ve= 7.10 Vr= 38.88 ✓
CB25	10.88 / 12.65 ┼ Mu= 6.49 / 11.45 / 0.00 ┼ Ma= 11.45 / 0.00	10.88 / -14.71 ┼ Mu= 7.54 / 11.45 / 0.00 ┼ Ma= 11.45 / 0.00	10.93 / 12.64 ┼ Mu= 6.45 / 11.40 / 0.00 ┼ Ma= 11.40 / 0.00	10.93 / -12.64 ┼ Mu= 6.45 / 11.40 / 0.00 ┼ Ma= 11.40 / 0.00
Lnx= 2.50 Lny= 2.50 Basement	Ve= 7.17 Vr= 38.88 ✓	Ve= 7.60 Vr= 38.88 ✓	Ve= 7.14 Vr= 38.88 ✓	Ve= 7.14 Vr= 38.88 ✓
CB26	11.17 / 12.65 ┼ Mu= 6.45 / 11.61 / 0.00 ┼ Ma= 11.61 / 0.00	11.17 / -12.65 ┼ Mu= 6.45 / 11.61 / 0.00 ┼ Ma= 11.61 / 0.00	11.19 / 12.64 ┼ Mu= 6.43 / 11.60 / 0.00 ┼ Ma= 11.60 / 0.00	11.19 / -12.64 ┼ Mu= 6.43 / 11.60 / 0.00 ┼ Ma= 11.60 / 0.00
Lnx= 2.50 Lny= 2.50 Basement	Ve= 7.22 Vr= 38.88 ✓	Ve= 7.22 Vr= 38.88 ✓	Ve= 7.22 Vr= 38.88 ✓	Ve= 7.22 Vr= 38.88 ✓

SHEAR DESIGN CHECK FOR COLUMNS

Column	+X Mp Mc Mr	-X Mp Mc Mr	+Y Mp Mc Mr	-Y Mp Mc Mr
CZ21 Lnx= 2.50 Lny= 2.50	5.17 12.65 + Mu= 5.67 5.67 0.01 + Ma= 0.00 3.73 Ve= 2.27 Vr= 23.83 ✓	5.17 -14.70 + Mu= 5.67 5.67 0.00 + Ma= 0.00 3.73 Ve= 2.27 Vr= 23.83 ✓	7.69 9.06 + Mu= 4.65 8.11 8.35 + Ma= 5.04 5.32 Ve= 3.88 Vr= 22.69 ✓	7.69 -6.35 + Mu= 3.26 8.11 -4.29 + Ma= 2.59 5.32 Ve= 2.34 Vr= 22.69 ✓
CZ22 Lnx= 2.50 Lny= 2.50	5.60 12.64 + Mu= 6.18 6.18 0.01 + Ma= 0.00 3.79 Ve= 2.47 Vr= 23.83 ✓	5.60 -12.64 + Mu= 6.18 6.18 0.00 + Ma= 0.00 3.79 Ve= 2.47 Vr= 23.83 ✓	7.81 8.35 + Mu= 4.28 8.21 8.35 + Ma= 5.03 5.44 Ve= 3.72 Vr= 22.69 ✓	7.81 -6.35 + Mu= 3.25 8.21 -4.29 + Ma= 2.58 5.44 Ve= 2.33 Vr= 22.69 ✓
CZ23 Lnx= 2.50 Lny= 2.50	5.62 12.64 + Mu= 6.20 6.20 0.01 + Ma= 0.00 3.80 Ve= 2.48 Vr= 23.83 ✓	5.62 -12.64 + Mu= 6.20 6.20 0.00 + Ma= 0.00 3.80 Ve= 2.48 Vr= 23.83 ✓	7.82 8.35 + Mu= 4.28 8.21 8.35 + Ma= 5.01 5.49 Ve= 3.71 Vr= 22.69 ✓	7.82 -4.29 + Mu= 2.19 8.21 -4.29 + Ma= 2.57 5.49 Ve= 1.91 Vr= 22.69 ✓
CZ24 Lnx= 2.50 Lny= 2.50	7.72 6.36 + Mu= 3.26 8.15 6.35 + Ma= 3.74 5.68 Ve= 2.80 Vr= 22.69 ✓	7.72 -7.92 + Mu= 4.07 8.15 -7.08 + Ma= 4.17 5.68 Ve= 3.30 Vr= 22.69 ✓	5.14 12.64 + Mu= 6.13 6.13 0.00 + Ma= 0.00 3.74 Ve= 2.45 Vr= 23.83 ✓	5.14 -12.64 + Mu= 6.13 6.13 0.00 + Ma= 0.00 3.74 Ve= 2.45 Vr= 23.83 ✓
CZ25 Lnx= 2.50 Lny= 2.50	10.38 12.65 + Mu= 6.47 10.88 12.65 + Ma= 6.16 11.45 Ve= 5.05 Vr= 38.88 ✓	10.38 -14.71 + Mu= 7.53 10.88 -14.71 + Ma= 7.17 11.45 Ve= 5.88 Vr= 38.88 ✓	10.40 14.70 + Mu= 7.53 10.93 12.64 + Ma= 6.19 11.40 Ve= 5.49 Vr= 38.88 ✓	10.40 -14.70 + Mu= 7.53 10.93 -12.64 + Ma= 6.19 11.40 Ve= 5.49 Vr= 38.88 ✓
CZ26 Lnx= 2.50 Lny= 2.50	10.60 12.65 + Mu= 6.49 11.17 12.65 + Ma= 6.20 11.61 Ve= 5.08 Vr= 38.88 ✓	10.60 -12.65 + Mu= 6.49 11.17 -12.65 + Ma= 6.20 11.61 Ve= 5.08 Vr= 38.88 ✓	10.63 12.64 + Mu= 6.48 11.19 12.64 + Ma= 6.20 11.60 Ve= 5.07 Vr= 38.88 ✓	10.63 -12.64 + Mu= 6.48 11.19 -12.64 + Ma= 6.20 11.60 Ve= 5.07 Vr= 38.88 ✓
CZ27 Lnx= 2.50 Lny= 2.50	10.33 12.65 + Mu= 6.49 10.88 12.65 + Ma= 6.19 11.37 Ve= 5.07 Vr= 38.88 ✓	10.33 -12.65 + Mu= 6.49 10.88 -12.65 + Ma= 6.19 11.37 Ve= 5.07 Vr= 38.88 ✓	9.96 14.70 + Mu= 7.54 10.48 12.64 + Ma= 6.07 11.32 Ve= 5.44 Vr= 38.88 ✓	9.96 -16.70 + Mu= 8.57 10.48 -14.70 + Ma= 7.07 11.32 Ve= 6.25 Vr= 38.88 ✓
CZ28 Lnx= 2.50 Lny= 2.50	4.90 7.08 + Mu= 3.71 5.39 0.00 + Ma= 0.00 3.54 Ve= 1.48 Vr= 23.83 ✓	4.90 -6.35 + Mu= 3.33 5.39 0.00 + Ma= 0.00 3.54 Ve= 1.33 Vr= 23.83 ✓	7.12 8.35 + Mu= 4.28 7.48 0.00 + Ma= 0.00 5.16 Ve= 1.71 Vr= 22.69 ✓	7.12 -4.29 + Mu= 2.19 7.48 0.00 + Ma= 0.00 5.16 Ve= 0.88 Vr= 22.69 ✓
CZ29 Lnx= 2.50 Lny= 2.50	5.17 14.71 + Mu= 5.68 5.68 0.01 + Ma= 0.00 3.73 Ve= 2.27 Vr= 23.83 ✓	5.17 -12.64 + Mu= 5.68 5.68 0.00 + Ma= 0.00 3.73 Ve= 2.27 Vr= 23.83 ✓	7.67 8.35 + Mu= 4.28 8.07 8.35 + Ma= 5.03 5.34 Ve= 3.72 Vr= 22.69 ✓	7.67 -4.29 + Mu= 2.20 8.07 -4.29 + Ma= 2.58 5.34 Ve= 1.91 Vr= 22.69 ✓
CZ30 Lnx= 2.50 Lny= 2.50	5.52 12.64 + Mu= 6.10 6.10 0.01 + Ma= 0.00 3.80 Ve= 2.44 Vr= 23.83 ✓	5.52 -12.64 + Mu= 6.10 6.10 0.00 + Ma= 0.00 3.80 Ve= 2.44 Vr= 23.83 ✓	7.81 8.35 + Mu= 4.28 8.20 8.35 + Ma= 5.01 5.46 Ve= 3.72 Vr= 22.69 ✓	7.81 -4.29 + Mu= 2.19 8.20 -4.29 + Ma= 2.57 5.46 Ve= 1.91 Vr= 22.69 ✓
CZ31 Lnx= 2.50 Lny= 2.50 CZ32 Lnx= 2.50 Lny= 2.50	7.73 7.92 + Mu= 4.07 8.15 7.08 + Ma= 4.28 5.32 Ve= 3.34 Vr= 22.69 ✓ 10.34 16.71 + Mu= 8.55 10.83 14.71 + Ma= 7.17 11.39 Ve= 6.29 Vr= 38.88 ✓	7.73 -6.36 + Mu= 3.26 8.15 -6.35 + Ma= 3.84 5.32 Ve= 2.84 Vr= 22.69 ✓ 10.34 -14.71 + Mu= 7.53 10.83 -12.65 + Ma= 6.16 11.39 Ve= 5.48 Vr= 38.88 ✓	5.18 12.64 + Mu= 5.71 5.71 0.00 + Ma= 0.00 3.73 Ve= 2.29 Vr= 23.83 ✓ 10.39 12.64 + Mu= 6.48 10.93 12.64 + Ma= 6.22 11.29 Ve= 5.08 Vr= 38.88 ✓	5.18 -12.64 + Mu= 5.71 5.71 0.00 + Ma= 0.00 3.73 Ve= 2.29 Vr= 23.83 ✓ 10.39 -12.64 + Mu= 6.48 10.93 -12.64 + Ma= 6.22 11.29 Ve= 5.08 Vr= 38.88 ✓

SHEAR DESIGN CHECK FOR COLUMNS

Column	+X Mp Mc Mr	-X Mp Mc Mr	+Y Mp Mc Mr	-Y Mp Mc Mr
C311 Lnx= 2.50 Lny= 2.50	9.57 15.44 + Mu= 8.04 10.41 14.71 + Ma= 7.16 10.98 Ve= 6.08 Vr= 38.88 ✓	9.57 -15.44 + Mu= 8.04 10.41 -14.71 + Ma= 7.16 10.98 Ve= 6.08 Vr= 38.88 ✓	9.68 16.65 + Mu= 8.67 10.52 12.64 + Ma= 6.15 11.11 Ve= 5.93 Vr= 38.88 ✓	9.68 -16.65 + Mu= 8.67 10.52 -12.64 + Ma= 6.15 11.11 Ve= 5.93 Vr= 38.88 ✓
C312 Lnx= 2.50 Lny= 2.50	4.33 7.08 + Mu= 3.76 4.90 7.08 + Ma= 3.37 5.39 Ve= 2.85 Vr= 23.83 ✓	4.33 -6.35 + Mu= 3.37 4.90 -6.35 + Ma= 3.03 5.39 Ve= 2.56 Vr= 23.83 ✓	6.41 4.29 + Mu= 2.26 7.12 4.29 + Ma= 2.09 7.48 Ve= 1.74 Vr= 22.69 ✓	6.41 -8.35 + Mu= 4.40 7.12 -8.35 + Ma= 4.07 7.48 Ve= 3.39 Vr= 22.69 ✓
C313 Lnx= 2.50 Lny= 2.50	4.60 14.70 + Mu= 5.17 5.17 14.70 + Ma= 5.17 5.68 Ve= 4.14 Vr= 23.83 ✓	4.60 -12.64 + Mu= 5.17 5.17 -12.64 + Ma= 5.17 5.68 Ve= 4.14 Vr= 23.83 ✓	7.12 6.35 + Mu= 3.29 7.67 4.29 + Ma= 2.09 8.07 Ve= 2.15 Vr= 22.69 ✓	7.12 -8.35 + Mu= 4.33 7.67 -8.35 + Ma= 4.07 8.07 Ve= 3.36 Vr= 22.69 ✓
C314 Lnx= 2.50 Lny= 2.50	4.82 12.64 + Mu= 5.52 5.52 12.64 + Ma= 5.52 6.20 Ve= 4.42 Vr= 23.83 ✓	4.82 -12.64 + Mu= 5.52 5.52 -12.64 + Ma= 5.52 6.20 Ve= 4.42 Vr= 23.83 ✓	7.31 6.35 + Mu= 3.28 7.81 4.29 + Ma= 2.09 8.20 Ve= 2.15 Vr= 22.69 ✓	7.31 -8.35 + Mu= 4.31 7.81 -8.35 + Ma= 4.08 8.20 Ve= 3.36 Vr= 22.69 ✓
C315 Lnx= 2.50 Lny= 2.50	7.15 7.92 + Mu= 4.11 7.73 7.92 + Ma= 3.85 8.15 Ve= 3.19 Vr= 22.69 ✓	7.15 -6.36 + Mu= 3.30 7.73 -6.36 + Ma= 3.09 8.15 Ve= 2.56 Vr= 22.69 ✓	4.77 12.64 + Mu= 5.49 5.49 12.64 + Ma= 5.49 6.09 Ve= 4.39 Vr= 23.83 ✓	4.77 -12.64 + Mu= 5.49 5.49 -12.64 + Ma= 5.49 6.09 Ve= 4.39 Vr= 23.83 ✓
C316 Lnx= 2.50 Lny= 2.50	7.22 7.09 + Mu= 3.67 7.76 7.92 + Ma= 3.86 8.18 Ve= 3.01 Vr= 22.69 ✓	7.22 -6.36 + Mu= 3.29 7.76 -6.36 + Ma= 3.10 8.18 Ve= 2.56 Vr= 22.69 ✓	4.75 12.64 + Mu= 5.43 5.43 12.64 + Ma= 5.43 5.99 Ve= 4.34 Vr= 23.83 ✓	4.75 -12.64 + Mu= 5.43 5.43 -12.64 + Ma= 5.43 5.99 Ve= 4.34 Vr= 23.83 ✓
C317 Lnx= 2.50 Lny= 2.50	9.54 16.71 + Mu= 10.34 10.34 16.71 + Ma= 8.16 10.83 Ve= 7.40 Vr= 38.88 ✓	9.54 -14.71 + Mu= 7.65 10.34 -14.71 + Ma= 7.18 10.83 Ve= 5.93 Vr= 38.88 ✓	9.58 12.64 + Mu= 6.58 10.39 12.64 + Ma= 6.16 10.93 Ve= 5.09 Vr= 38.88 ✓	9.58 -12.64 + Mu= 6.58 10.39 -12.64 + Ma= 6.16 10.93 Ve= 5.09 Vr= 38.88 ✓
C318 Lnx= 2.50 Lny= 2.50	9.52 12.65 + Mu= 6.59 10.37 12.65 + Ma= 6.16 10.93 Ve= 5.10 Vr= 38.88 ✓	9.52 -12.65 + Mu= 6.59 10.37 -12.65 + Ma= 6.16 10.93 Ve= 5.10 Vr= 38.88 ✓	9.14 16.70 + Mu= 8.70 9.93 16.70 + Ma= 8.14 10.46 Ve= 6.73 Vr= 38.88 ✓	9.14 -14.70 + Mu= 7.66 9.93 -14.70 + Ma= 7.16 10.46 Ve= 5.93 Vr= 38.88 ✓
C319 Lnx= 2.50 Lny= 2.50	9.54 16.71 + Mu= 10.33 10.33 16.71 + Ma= 8.16 10.82 Ve= 7.40 Vr= 38.88 ✓	9.54 -14.71 + Mu= 7.65 10.33 -14.71 + Ma= 7.18 10.82 Ve= 5.93 Vr= 38.88 ✓	9.48 12.64 + Mu= 6.59 10.33 12.64 + Ma= 6.16 10.88 Ve= 5.10 Vr= 38.88 ✓	9.48 -12.64 + Mu= 6.59 10.33 -12.64 + Ma= 6.16 10.88 Ve= 5.10 Vr= 38.88 ✓
C320 Lnx= 2.50 Lny= 2.50	4.32 6.35 + Mu= 3.37 4.89 6.35 + Ma= 3.03 5.37 Ve= 2.56 Vr= 23.83 ✓	4.32 -7.08 + Mu= 3.76 4.89 -7.08 + Ma= 3.37 5.37 Ve= 2.85 Vr= 23.83 ✓	6.40 8.35 + Mu= 4.40 7.13 8.35 + Ma= 4.07 7.49 Ve= 3.39 Vr= 22.69 ✓	6.40 -6.35 + Mu= 3.34 7.13 -6.35 + Ma= 3.09 7.49 Ve= 2.57 Vr= 22.69 ✓
C321 Lnx= 2.50 Lny= 2.50	4.60 12.65 + Mu= 5.17 5.17 12.65 + Ma= 5.17 5.67 Ve= 4.13 Vr= 23.83 ✓	4.60 -14.70 + Mu= 5.17 5.17 -14.70 + Ma= 5.17 5.67 Ve= 4.13 Vr= 23.83 ✓	7.13 9.06 + Mu= 4.70 7.69 9.06 + Ma= 4.41 8.11 Ve= 3.65 Vr= 22.69 ✓	7.13 -6.35 + Mu= 3.29 7.69 -6.35 + Ma= 3.09 8.11 Ve= 2.55 Vr= 22.69 ✓
C322 Lnx= 2.50 Lny= 2.50	4.88 12.64 + Mu= 5.60 5.60 12.64 + Ma= 5.60 6.18 Ve= 4.48 Vr= 23.83 ✓	4.88 -12.64 + Mu= 5.60 5.60 -12.64 + Ma= 5.60 6.18 Ve= 4.48 Vr= 23.83 ✓	7.30 8.35 + Mu= 4.32 7.81 8.35 + Ma= 4.07 8.21 Ve= 3.36 Vr= 22.69 ✓	7.30 -6.35 + Mu= 3.28 7.81 -6.35 + Ma= 3.09 8.21 Ve= 2.55 Vr= 22.69 ✓

SHEAR DESIGN CHECK FOR COLUMNS

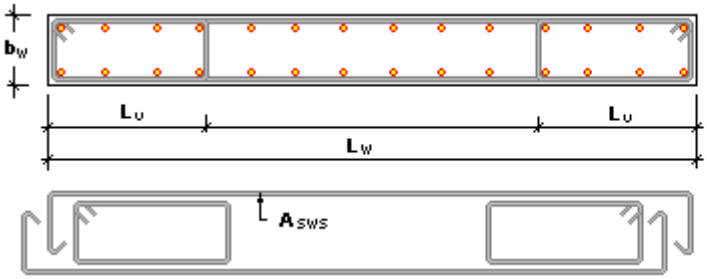
Column	+X Mp Mc Mr	-X Mp Mc Mr	+Y Mp Mc Mr	-Y Mp Mc Mr
C413 Lnx= 2.50 Lny= 2.50	3.95 14.70 + Mu= 7.90 4.60 14.70 + Ma= 4.60 5.17 Ve= 5.00 Vr= 23.83 ✓	3.95 -12.64 + Mu= 6.80 4.60 -12.64 + Ma= 4.60 5.17 Ve= 4.56 Vr= 23.83 ✓	5.99 4.29 + Mu= 2.33 7.12 6.35 + Ma= 3.06 7.67 Ve= 2.15 Vr= 22.69 ✓	5.99 -8.35 + Mu= 4.54 7.12 -8.35 + Ma= 4.02 7.67 Ve= 3.42 Vr= 22.69 ✓
C414 Lnx= 2.50 Lny= 2.50	4.06 12.64 + Mu= 6.87 4.82 12.64 + Ma= 4.82 5.52 Ve= 4.68 Vr= 23.83 ✓	4.06 -12.64 + Mu= 6.87 4.82 -12.64 + Ma= 4.82 5.52 Ve= 4.68 Vr= 23.83 ✓	6.14 4.29 + Mu= 2.33 7.31 6.35 + Ma= 3.07 7.81 Ve= 2.16 Vr= 22.69 ✓	6.14 -8.35 + Mu= 4.54 7.31 -8.35 + Ma= 4.04 7.81 Ve= 3.43 Vr= 22.69 ✓
C415 Lnx= 2.50 Lny= 2.50	6.00 7.09 + Mu= 3.86 7.15 7.92 + Ma= 3.81 7.73 Ve= 3.07 Vr= 22.69 ✓	6.00 -6.36 + Mu= 3.46 7.15 -6.36 + Ma= 3.06 7.73 Ve= 2.61 Vr= 22.69 ✓	3.95 12.64 + Mu= 6.92 4.77 12.64 + Ma= 4.77 5.49 Ve= 4.68 Vr= 23.83 ✓	3.95 -12.64 + Mu= 6.92 4.77 -12.64 + Ma= 4.77 5.49 Ve= 4.68 Vr= 23.83 ✓
C416 Lnx= 2.50 Lny= 2.50	6.03 7.09 + Mu= 3.86 7.22 7.09 + Ma= 3.41 7.76 Ve= 2.91 Vr= 22.69 ✓	6.03 -6.36 + Mu= 3.46 7.22 -6.36 + Ma= 3.06 7.76 Ve= 2.61 Vr= 22.69 ✓	4.01 12.64 + Mu= 6.85 4.75 12.64 + Ma= 4.75 5.43 Ve= 4.64 Vr= 23.83 ✓	4.01 -12.64 + Mu= 6.85 4.75 -12.64 + Ma= 4.75 5.43 Ve= 4.64 Vr= 23.83 ✓
C417 Lnx= 2.50 Lny= 2.50	8.49 14.71 + Mu= 7.79 9.54 16.71 + Ma= 9.54 10.34 Ve= 6.93 Vr= 38.88 ✓	8.49 -12.65 + Mu= 6.69 9.54 -14.71 + Ma= 7.06 10.34 Ve= 5.50 Vr= 38.88 ✓	8.49 12.64 + Mu= 6.70 9.58 12.64 + Ma= 6.06 10.39 Ve= 5.10 Vr= 38.88 ✓	8.49 -12.64 + Mu= 6.70 9.58 -12.64 + Ma= 6.06 10.39 Ve= 5.10 Vr= 38.88 ✓
C418 Lnx= 2.50 Lny= 2.50	8.44 12.65 + Mu= 6.71 9.52 12.65 + Ma= 6.06 10.37 Ve= 5.11 Vr= 38.88 ✓	8.44 -12.65 + Mu= 6.71 9.52 -12.65 + Ma= 6.06 10.37 Ve= 5.11 Vr= 38.88 ✓	8.19 16.70 + Mu= 8.81 9.14 16.70 + Ma= 8.00 9.93 Ve= 6.73 Vr= 38.88 ✓	8.19 -14.70 + Mu= 7.75 9.14 -14.70 + Ma= 7.04 9.93 Ve= 5.92 Vr= 38.88 ✓
C419 Lnx= 2.50 Lny= 2.50	8.49 16.71 + Mu= 8.84 9.54 16.71 + Ma= 9.54 10.33 Ve= 7.35 Vr= 38.88 ✓	8.49 -14.71 + Mu= 7.78 9.54 -14.71 + Ma= 7.06 10.33 Ve= 5.94 Vr= 38.88 ✓	8.40 12.64 + Mu= 6.70 9.48 12.64 + Ma= 6.05 10.33 Ve= 5.10 Vr= 38.88 ✓	8.40 -12.64 + Mu= 6.70 9.48 -12.64 + Ma= 6.05 10.33 Ve= 5.10 Vr= 38.88 ✓
C420 Lnx= 2.50 Lny= 2.50	3.74 6.35 + Mu= 3.41 4.32 6.35 + Ma= 2.98 4.89 Ve= 2.55 Vr= 23.83 ✓	3.74 -7.08 + Mu= 3.80 4.32 -7.08 + Ma= 3.32 4.89 Ve= 2.85 Vr= 23.83 ✓	5.57 8.35 + Mu= 4.47 6.40 8.35 + Ma= 3.95 7.13 Ve= 3.37 Vr= 22.69 ✓	5.57 -4.29 + Mu= 2.29 6.40 -6.35 + Ma= 3.00 7.13 Ve= 2.12 Vr= 22.69 ✓
C421 Lnx= 2.50 Lny= 2.50	3.95 12.64 + Mu= 6.80 4.60 12.65 + Ma= 4.60 5.17 Ve= 4.56 Vr= 23.83 ✓	3.95 -14.70 + Mu= 7.90 4.60 -14.70 + Ma= 4.60 5.17 Ve= 5.00 Vr= 23.83 ✓	5.99 8.35 + Mu= 4.54 7.13 9.06 + Ma= 4.36 7.69 Ve= 3.56 Vr= 22.69 ✓	5.99 -4.29 + Mu= 2.33 7.13 -6.35 + Ma= 3.05 7.69 Ve= 2.15 Vr= 22.69 ✓
C422 Lnx= 2.50 Lny= 2.50	4.08 12.64 + Mu= 6.89 4.88 12.64 + Ma= 4.88 5.60 Ve= 4.71 Vr= 23.83 ✓	4.08 -12.64 + Mu= 6.88 4.88 -12.64 + Ma= 4.88 5.60 Ve= 4.71 Vr= 23.83 ✓	6.13 8.35 + Mu= 4.54 7.30 8.35 + Ma= 4.03 7.81 Ve= 3.43 Vr= 22.69 ✓	6.13 -4.29 + Mu= 2.33 7.30 -6.35 + Ma= 3.07 7.81 Ve= 2.16 Vr= 22.69 ✓
C423 Lnx= 2.50 Lny= 2.50	4.10 12.64 + Mu= 6.89 4.90 12.64 + Ma= 4.90 5.62 Ve= 4.71 Vr= 23.83 ✓	4.10 -12.64 + Mu= 6.88 4.90 -12.64 + Ma= 4.90 5.62 Ve= 4.71 Vr= 23.83 ✓	6.16 8.35 + Mu= 4.54 7.32 8.35 + Ma= 4.04 7.82 Ve= 3.43 Vr= 22.69 ✓	6.16 -4.29 + Mu= 2.33 7.32 -6.35 + Ma= 3.07 7.82 Ve= 2.16 Vr= 22.69 ✓
C424 Lnx= 2.50 Lny= 2.50	5.98 6.36 + Mu= 3.46 7.14 6.36 + Ma= 3.05 7.72 Ve= 2.60 Vr= 22.69 ✓	5.98 -7.09 + Mu= 3.86 7.14 -7.92 + Ma= 3.81 7.72 Ve= 3.06 Vr= 22.69 ✓	3.95 12.64 + Mu= 6.79 4.58 12.64 + Ma= 4.58 5.14 Ve= 4.55 Vr= 23.83 ✓	3.95 -12.64 + Mu= 6.79 4.58 -12.64 + Ma= 4.58 5.14 Ve= 4.55 Vr= 23.83 ✓

SHEAR DESIGN CHECK FOR COLUMNS

Column	+X Mp Mc Mr	-X Mp Mc Mr	+Y Mp Mc Mr	-Y Mp Mc Mr
C527 Lnx= 2.50 Lny= 2.50	0.00 12.65 + Mu= 12.65 8.39 12.65 + Ma= 5.94 9.47 Ve= 7.44 Vr= 38.88 ✓	0.00 -12.65 + Mu= 12.65 8.39 -12.65 + Ma= 5.95 9.47 Ve= 7.44 Vr= 38.88 ✓	0.00 12.64 + Mu= 12.64 8.19 14.70 + Ma= 6.94 9.15 Ve= 7.83 Vr= 38.88 ✓	0.00 -14.70 + Mu= 14.70 8.19 -16.70 + Ma= 7.89 9.15 Ve= 9.04 Vr= 38.88 ✓
C528 Lnx= 2.50 Lny= 2.50	0.00 7.08 + Mu= 7.08 3.74 7.08 + Ma= 3.28 4.33 Ve= 4.15 Vr= 23.83 ✓	0.00 -6.35 + Mu= 6.35 3.74 -6.35 + Ma= 2.94 4.33 Ve= 3.72 Vr= 23.83 ✓	0.00 8.35 + Mu= 8.35 5.57 8.35 + Ma= 3.88 6.41 Ve= 4.89 Vr= 22.69 ✓	0.00 -4.29 + Mu= 4.29 5.57 -4.29 + Ma= 1.99 6.41 Ve= 2.51 Vr= 22.69 ✓
C529 Lnx= 2.50 Lny= 2.50	0.00 14.71 + Mu= 14.71 3.95 14.71 + Ma= 6.80 4.60 Ve= 8.60 Vr= 23.83 ✓	0.00 -12.64 + Mu= 12.64 3.95 -12.64 + Ma= 5.85 4.60 Ve= 7.40 Vr= 23.83 ✓	0.00 8.35 + Mu= 8.35 5.99 8.35 + Ma= 3.82 7.12 Ve= 4.87 Vr= 22.69 ✓	0.00 -4.29 + Mu= 4.29 5.99 -4.29 + Ma= 1.96 7.12 Ve= 2.50 Vr= 22.69 ✓
C530 Lnx= 2.50 Lny= 2.50	0.00 12.64 + Mu= 12.64 4.06 12.64 + Ma= 5.78 4.82 Ve= 7.37 Vr= 23.83 ✓	0.00 -12.64 + Mu= 12.64 4.06 -12.64 + Ma= 5.77 4.82 Ve= 7.37 Vr= 23.83 ✓	0.00 8.35 + Mu= 8.35 6.14 8.35 + Ma= 3.81 7.31 Ve= 4.87 Vr= 22.69 ✓	0.00 -4.29 + Mu= 4.29 6.14 -4.29 + Ma= 1.96 7.31 Ve= 2.50 Vr= 22.69 ✓
C531 Lnx= 2.50 Lny= 2.50	0.00 7.09 + Mu= 7.09 6.00 7.09 + Ma= 3.23 7.15 Ve= 4.13 Vr= 22.69 ✓	0.00 -6.36 + Mu= 6.36 6.00 -6.36 + Ma= 2.90 7.15 Ve= 3.70 Vr= 22.69 ✓	0.00 12.64 + Mu= 12.64 3.95 12.64 + Ma= 5.84 4.59 Ve= 7.39 Vr= 23.83 ✓	0.00 -12.64 + Mu= 12.64 3.95 -12.64 + Ma= 5.84 4.59 Ve= 7.39 Vr= 23.83 ✓
C532 Lnx= 2.50 Lny= 2.50	0.00 14.71 + Mu= 14.71 8.49 14.71 + Ma= 6.92 9.54 Ve= 8.65 Vr= 38.88 ✓	0.00 -12.65 + Mu= 12.65 8.49 -12.65 + Ma= 5.95 9.54 Ve= 7.44 Vr= 38.88 ✓	0.00 12.64 + Mu= 12.64 8.49 12.64 + Ma= 5.94 9.58 Ve= 7.43 Vr= 38.88 ✓	0.00 -12.64 + Mu= 12.64 8.49 -12.64 + Ma= 5.94 9.58 Ve= 7.43 Vr= 38.88 ✓
C533 Lnx= 2.50 Lny= 2.50	0.00 12.65 + Mu= 12.65 8.44 12.65 + Ma= 5.94 9.52 Ve= 7.44 Vr= 38.88 ✓	0.00 -12.65 + Mu= 12.65 8.44 -12.65 + Ma= 5.94 9.52 Ve= 7.44 Vr= 38.88 ✓	0.00 12.64 + Mu= 12.64 8.19 14.70 + Ma= 6.95 9.14 Ve= 7.83 Vr= 38.88 ✓	0.00 -14.70 + Mu= 14.70 8.19 -16.70 + Ma= 7.89 9.14 Ve= 9.04 Vr= 38.88 ✓
C535 Lnx= 2.50 Lny= 2.50	16.36 18.46 + Mu= 9.55 17.53 18.46 + Ma= 8.97 18.53 Ve= 7.41 Vr= 88.60 ✓	16.36 -21.06 + Mu= 10.89 17.53 -21.06 + Ma= 10.24 18.53 Ve= 8.45 Vr= 88.60 ✓	130.55 21.39 + Mu= 11.10 140.72 23.39 + Ma= 11.31 150.34 Ve= 8.96 Vr=106.95 ✓	130.55 -21.39 + Mu= 11.10 140.72 -23.39 + Ma= 11.31 150.34 Ve= 8.96 Vr=106.95 ✓
C635 Lnx= 2.50 Lny= 3.00	0.00 14.15 + Mu= 14.15 16.36 18.46 + Ma= 8.91 17.53 Ve= 9.23 Vr= 88.60 ✓	0.00 -12.69 + Mu= 12.69 16.36 -21.06 + Ma= 10.17 17.53 Ve= 9.14 Vr= 88.60 ✓	0.00 0.00 + Mu= 0.00 130.55 21.39 + Ma= 10.29 140.72 Ve= 3.43 Vr=106.95 ✓	0.00 0.00 + Mu= 0.00 130.55 -21.39 + Ma= 10.29 140.72 Ve= 3.43 Vr=106.95 ✓

SHEARWALL DESIGN CHECK

Vr = Ach (0.65 fctd + rsh fyd) Wall shear design
Vrh = 0.22 fcd Ach Max. concrete shear design
rshx = Asws.(∑ Letrx/s)/Ach rshy = Asws.(∑ Letry/s)/Ach
Vfr = μ N + fyd Asd = Working point friction shear force
N = Ng - Ne Min. Wall load
μ = 1 (rought surface ≥5mm)



Dikdörtgen perdelerde

$$\rho_{sh} = \frac{2 . A_{sws}}{A_{ch}} \cdot \left[\frac{L_w}{s} + \frac{2 . L_u}{s_u} \right]$$

Poligon perdelerde

$$\rho_{shx} = \frac{A_{sws}}{A_{ch}} \cdot \left[\sum \frac{L_{etrx}}{s} \right]$$

$$\rho_{shy} = \frac{A_{sws}}{A_{ch}} \cdot \left[\sum \frac{L_{etry}}{s} \right]$$

$$V_r = 0{,}65 . A_{ch} . f_{ctd} + \rho . A_{ch} . f_{yd} > V_d$$

Column	Dir.	Ln	N	Vd	Vr	Vrh	Vfr	EXPLANATION (t)
CB34	X	2.50	80.844	68.983	200.456	333.667	357.296	✓
	Y	2.50	114.189	72.511	172.934	333.667	390.641	✓
CZ34	X	2.50	64.651	59.369	200.456	333.667	357.972	✓
	Y	2.50	94.758	58.817	172.934	333.667	388.080	✓
C334	X	2.50	52.412	29.806	200.456	333.667	309.470	✓
	Y	2.50	74.158	32.504	172.934	333.667	331.215	✓
C434	X	2.50	38.903	17.687	200.456	333.667	249.599	✓
	Y	2.50	52.734	17.266	172.934	333.667	263.429	✓
C534	X	2.50	22.315	1.336	200.456	333.667	233.010	✓
	Y	2.50	30.728	7.867	172.934	333.667	241.423	✓
C634	X	2.50	4.717	1.109	200.456	333.667	215.413	✓
	Y	3.00	9.240	3.314	172.934	333.667	219.936	✓