

Project Details

Design Code: AS 4100-1998
 Country: Australia
 User Name: Sam
 Project Name: Australian House AS4100
 Project ID: SYD12345
 Company: XYZ Pty Ltd
 Designer: Sam Carigliano
 Client: ABC Consulting Pty Ltd
 Unit System: metric



NOTE: The calculations for this design code are in **BETA** stage development. If you notice any irregularities or problems please contact support@skyciv.com.

Design Input Information

Design Factors	
ϕ	0.9

Design Materials			
ID	E (MPa)	Fy (MPa)	Fu (MPa)
1	199948	262	414

Section Dimensions								
ID	Name	d (m)	tw (m)	bt (m)	bb (m)	tt (m)	tb (m)	r (m)
1	150 UB 14	1.500e-1	5.000e-3	7.500e-2	7.500e-2	7.000e-3	7.000e-3	8.000e-3
2	200 UB 30	2.068e-1	6.300e-3	1.338e-1	1.338e-1	9.600e-3	9.600e-3	7.620e-3
3	180 UB 18	1.750e-1	5.000e-3	9.000e-2	9.000e-2	8.000e-3	8.000e-3	8.990e-3

Section Properties								
ID	Name	A (m ²)	J (m ⁴)	Iyp (m ⁴)	Izp (m ⁴)	Iw (m ⁶)	Syp (m ³)	Szp (m ³)
1	150 UB 14	1.7800e-3	2.8100e-8	4.9500e-7	6.6600e-6	2.5100e-9	2.0800e-5	1.0200e-4
2	200 UB 30	3.8000e-3	1.0200e-7	3.8400e-6	2.8900e-5	3.7300e-8	8.8100e-5	3.1300e-4
3	180 UB 18	2.3000e-3	4.5000e-8	9.7500e-7	1.2100e-5	6.8300e-9	3.3700e-5	1.5700e-4

Member Properties											
Member ID	Section ID	KzL (m)	KyL (m)	α_m	k_t	k_l	k_r	LST	LSC	LD	
1	1	2.07	2.07	1.00	1	1	1	300	200	250	
2	1	0.21	0.21	1.00	1	1	1	300	200	250	
3	2	6.40	6.40	1.00	1	1	1	300	200	250	
4	2	2.13	2.13	1.00	1	1	1	300	200	250	
5	1	2.10	2.10	1.00	1	1	1	300	200	250	

6	1	2.10	2.10	1.00	1	1	1	300	200	250
7	2	2.13	2.13	1.00	1	1	1	300	200	250
8	1	2.07	2.07	1.00	1	1	1	300	200	250
9	1	2.13	2.13	1.00	1	1	1	300	200	250
10	2	2.13	2.13	1.00	1	1	1	300	200	250
11	1	1.82	1.82	1.00	1	1	1	300	200	250
12	1	0.21	0.21	1.00	1	1	1	300	200	250
13	1	1.82	1.82	1.00	1	1	1	300	200	250
14	2	2.13	2.13	1.00	1	1	1	300	200	250
15	1	2.07	2.07	1.00	1	1	1	300	200	250
16	2	6.40	6.40	1.00	1	1	1	300	200	250
17	2	2.13	2.13	1.00	1	1	1	300	200	250
18	1	1.54	1.54	1.00	1	1	1	300	200	250
19	1	1.54	1.54	1.00	1	1	1	300	200	250
20	2	2.13	2.13	1.00	1	1	1	300	200	250
21	1	1.92	1.92	1.00	1	1	1	300	200	250
22	2	0.43	0.43	1.00	1	1	1	300	200	250
23	1	2.13	2.13	1.00	1	1	1	300	200	250
24	1	1.12	1.12	1.00	1	1	1	300	200	250
25	1	1.12	1.12	1.00	1	1	1	300	200	250
26	1	4.20	4.20	1.00	1	1	1	300	200	250
27	1	0.21	0.21	1.00	1	1	1	300	200	250
28	1	1.12	1.12	1.00	1	1	1	300	200	250
29	1	1.12	1.12	1.00	1	1	1	300	200	250
30	2	2.13	2.13	1.00	1	1	1	300	200	250
32	1	1.92	1.92	1.00	1	1	1	300	200	250
34	1	4.20	4.20	1.00	1	1	1	300	200	250
36	3	0.48	0.48	1.00	1	1	1	300	200	250
37	2	1.71	1.71	1.00	1	1	1	300	200	250
38	1	0.21	0.21	1.00	1	1	1	300	200	250
39	3	0.48	0.48	1.00	1	1	1	300	200	250
40	2	2.13	2.13	1.00	1	1	1	300	200	250
41	2	2.13	2.13	1.00	1	1	1	300	200	250
42	2	8.40	8.40	1.00	1	1	1	300	200	250
43	1	1.92	1.92	1.00	1	1	1	300	200	250
44	2	1.71	1.71	1.00	1	1	1	300	200	250
45	2	0.43	0.43	1.00	1	1	1	300	200	250
46	2	2.13	2.13	1.00	1	1	1	300	200	250
47	2	8.40	8.40	1.00	1	1	1	300	200	250
48	1	0.21	0.21	1.00	1	1	1	300	200	250
49	2	8.40	8.40	1.00	1	1	1	300	200	250
50	2	8.42	8.42	1.00	1	1	1	300	200	250
51	2	8.42	8.42	1.00	1	1	1	300	200	250
52	2	8.40	8.40	1.00	1	1	1	300	200	250
53	1	2.13	2.13	1.00	1	1	1	300	200	250
54	1	2.13	2.13	1.00	1	1	1	300	200	250
55	1	2.13	2.13	1.00	1	1	1	300	200	250

56	1	2.13	2.13	1.00	1	1	1	300	200	250
57	1	1.92	1.92	1.00	1	1	1	300	200	250
58	2	0.43	0.43	1.00	1	1	1	300	200	250
59	3	0.48	0.48	1.00	1	1	1	300	200	250
60	2	1.71	1.71	1.00	1	1	1	300	200	250
61	1	0.21	0.21	1.00	1	1	1	300	200	250
62	3	0.48	0.48	1.00	1	1	1	300	200	250
63	2	2.13	2.13	1.00	1	1	1	300	200	250
64	2	2.13	2.13	1.00	1	1	1	300	200	250
65	1	2.07	2.07	1.00	1	1	1	300	200	250
66	1	1.92	1.92	1.00	1	1	1	300	200	250
67	2	1.71	1.71	1.00	1	1	1	300	200	250
68	2	0.43	0.43	1.00	1	1	1	300	200	250
69	2	2.13	2.13	1.00	1	1	1	300	200	250
70	1	1.92	1.92	1.00	1	1	1	300	200	250
71	1	0.21	0.21	1.00	1	1	1	300	200	250
72	2	0.43	0.43	1.00	1	1	1	300	200	250
73	2	1.71	1.71	1.00	1	1	1	300	200	250
74	2	1.71	1.71	1.00	1	1	1	300	200	250
75	2	0.43	0.43	1.00	1	1	1	300	200	250
76	1	0.21	0.21	1.00	1	1	1	300	200	250
77	1	1.92	1.92	1.00	1	1	1	300	200	250
78	3	0.48	0.48	1.00	1	1	1	300	200	250
79	3	0.48	0.48	1.00	1	1	1	300	200	250
80	1	1.92	1.92	1.00	1	1	1	300	200	250
81	2	0.43	0.43	1.00	1	1	1	300	200	250
82	3	0.48	0.48	1.00	1	1	1	300	200	250
83	2	1.71	1.71	1.00	1	1	1	300	200	250
84	1	0.21	0.21	1.00	1	1	1	300	200	250
85	3	0.48	0.48	1.00	1	1	1	300	200	250
86	2	2.13	2.13	1.00	1	1	1	300	200	250
87	2	2.13	2.13	1.00	1	1	1	300	200	250
89	1	1.92	1.92	1.00	1	1	1	300	200	250
90	2	1.71	1.71	1.00	1	1	1	300	200	250
91	2	0.43	0.43	1.00	1	1	1	300	200	250
92	2	2.13	2.13	1.00	1	1	1	300	200	250
93	2	2.13	2.13	1.00	1	1	1	300	200	250
94	2	2.13	2.13	1.00	1	1	1	300	200	250
95	1	2.10	2.10	1.00	1	1	1	300	200	250
97	1	2.07	2.07	1.00	1	1	1	300	200	250
99	2	2.13	2.13	1.00	1	1	1	300	200	250
100	1	1.82	1.82	1.00	1	1	1	300	200	250
102	2	2.13	2.13	1.00	1	1	1	300	200	250
103	1	2.07	2.07	1.00	1	1	1	300	200	250
105	2	2.13	2.13	1.00	1	1	1	300	200	250
106	1	1.54	1.54	1.00	1	1	1	300	200	250
108	2	2.13	2.13	1.00	1	1	1	300	200	250

109	2	8.40	8.40	1.00	1	1	1	300	200	250
113	2	8.42	8.42	1.00	1	1	1	300	200	250
114	2	8.40	8.40	1.00	1	1	1	300	200	250
115	1	2.13	2.13	1.00	1	1	1	300	200	250
117	1	2.13	2.13	1.00	1	1	1	300	200	250
119	2	2.13	2.13	1.00	1	1	1	300	200	250
120	2	2.13	2.13	1.00	1	1	1	300	200	250
121	1	2.07	2.07	1.00	1	1	1	300	200	250
123	1	2.10	2.10	1.00	1	1	1	300	200	250
125	1	2.07	2.07	1.00	1	1	1	300	200	250
127	2	2.13	2.13	1.00	1	1	1	300	200	250
128	1	1.82	1.82	1.00	1	1	1	300	200	250
130	2	2.13	2.13	1.00	1	1	1	300	200	250
131	1	2.07	2.07	1.00	1	1	1	300	200	250
133	2	2.13	2.13	1.00	1	1	1	300	200	250
134	1	1.54	1.54	1.00	1	1	1	300	200	250
136	2	2.13	2.13	1.00	1	1	1	300	200	250
137	2	8.40	8.40	1.00	1	1	1	300	200	250
141	2	8.42	8.42	1.00	1	1	1	300	200	250
142	2	8.40	8.40	1.00	1	1	1	300	200	250
143	1	2.13	2.13	1.00	1	1	1	300	200	250
145	1	2.13	2.13	1.00	1	1	1	300	200	250
147	2	2.13	2.13	1.00	1	1	1	300	200	250
148	2	2.13	2.13	1.00	1	1	1	300	200	250
149	1	2.07	2.07	1.00	1	1	1	300	200	250
150	1	2.07	2.07	1.00	1	1	1	300	200	250
151	1	2.10	2.10	1.00	1	1	1	300	200	250
153	1	2.07	2.07	1.00	1	1	1	300	200	250
154	1	2.07	2.07	1.00	1	1	1	300	200	250
155	2	2.13	2.13	1.00	1	1	1	300	200	250
156	1	1.82	1.82	1.00	1	1	1	300	200	250
158	2	2.13	2.13	1.00	1	1	1	300	200	250
159	1	2.07	2.07	1.00	1	1	1	300	200	250
160	1	2.07	2.07	1.00	1	1	1	300	200	250
161	2	2.13	2.13	1.00	1	1	1	300	200	250
162	1	1.54	1.54	1.00	1	1	1	300	200	250
164	2	2.13	2.13	1.00	1	1	1	300	200	250
165	2	8.40	8.40	1.00	1	1	1	300	200	250
169	2	8.42	8.42	1.00	1	1	1	300	200	250
170	2	8.40	8.40	1.00	1	1	1	300	200	250
171	1	2.13	2.13	1.00	1	1	1	300	200	250
173	1	2.13	2.13	1.00	1	1	1	300	200	250
175	2	2.13	2.13	1.00	1	1	1	300	200	250
176	2	2.13	2.13	1.00	1	1	1	300	200	250

Member Design Capacity

Member ID	ϕN_t (kN)	ϕN_s (kN)	ϕM_{sz} (kN-m)	ϕM_{sy} (kN-m)	ϕV_{vy} (kN)	ϕV_{vz} (kN)	ϕN_c (kN)	ϕM_b (kN-m)
1	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
2	419.72	419.72	24.05	4.67	106.11	148.55	419.72	24.50
3	896.04	896.04	73.81	20.30	184.33	363.46	149.36	21.06
4	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
5	419.72	419.72	24.05	4.67	106.11	148.55	158.07	11.14
6	419.72	419.72	24.05	4.67	106.11	148.55	158.07	11.14
7	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
8	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
9	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
10	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
11	419.72	419.72	24.05	4.67	106.11	148.55	195.97	12.45
12	419.72	419.72	24.05	4.67	106.11	148.55	419.72	24.50
13	419.72	419.72	24.05	4.67	106.11	148.55	195.97	12.45
14	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
15	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
16	896.04	896.04	73.81	20.30	184.33	363.46	149.36	21.06
17	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
18	419.72	419.72	24.05	4.67	106.11	148.55	242.66	14.05
19	419.72	419.72	24.05	4.67	106.11	148.55	242.66	14.05
20	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
21	419.72	419.72	24.05	4.67	106.11	148.55	181.33	11.95
22	896.04	896.04	73.81	20.30	184.33	363.46	895.32	74.95
23	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
24	419.72	419.72	24.05	4.67	106.11	148.55	316.93	17.05
25	419.72	419.72	24.05	4.67	106.11	148.55	316.93	17.05
26	419.72	419.72	24.05	4.67	106.11	148.55	46.11	6.03
27	419.72	419.72	24.05	4.67	106.11	148.55	419.72	24.50
28	419.72	419.72	24.05	4.67	106.11	148.55	316.93	17.05
29	419.72	419.72	24.05	4.67	106.11	148.55	316.93	17.05
30	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
32	419.72	419.72	24.05	4.67	106.11	148.55	181.33	11.95
34	419.72	419.72	24.05	4.67	106.11	148.55	46.11	6.03
36	542.34	542.34	36.27	7.23	123.79	203.73	523.63	35.38
37	896.04	896.04	73.81	20.30	184.33	363.46	748.93	57.35
38	419.72	419.72	24.05	4.67	106.11	148.55	419.72	24.50
39	542.34	542.34	36.27	7.23	123.79	203.73	523.63	35.38
40	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
41	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
42	896.04	896.04	73.81	20.30	184.33	363.46	89.91	16.22
43	419.72	419.72	24.05	4.67	106.11	148.55	181.33	11.95
44	896.04	896.04	73.81	20.30	184.33	363.46	748.93	57.35
45	896.04	896.04	73.81	20.30	184.33	363.46	895.32	74.95
46	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
47	896.04	896.04	73.81	20.30	184.33	363.46	89.91	16.22

48	419.72	419.72	24.05	4.67	106.11	148.55	419.72	24.50
49	896.04	896.04	73.81	20.30	184.33	363.46	89.91	16.22
50	896.04	896.04	73.81	20.30	184.33	363.46	89.54	16.19
51	896.04	896.04	73.81	20.30	184.33	363.46	89.54	16.19
52	896.04	896.04	73.81	20.30	184.33	363.46	89.91	16.22
53	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
54	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
55	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
56	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
57	419.72	419.72	24.05	4.67	106.11	148.55	181.33	11.95
58	896.04	896.04	73.81	20.30	184.33	363.46	895.32	74.95
59	542.34	542.34	36.27	7.23	123.79	203.73	523.63	35.38
60	896.04	896.04	73.81	20.30	184.33	363.46	748.93	57.35
61	419.72	419.72	24.05	4.67	106.11	148.55	419.72	24.50
62	542.34	542.34	36.27	7.23	123.79	203.73	523.63	35.38
63	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
64	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
65	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
66	419.72	419.72	24.05	4.67	106.11	148.55	181.33	11.95
67	896.04	896.04	73.81	20.30	184.33	363.46	748.93	57.35
68	896.04	896.04	73.81	20.30	184.33	363.46	895.32	74.95
69	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
70	419.72	419.72	24.05	4.67	106.11	148.55	181.33	11.95
71	419.72	419.72	24.05	4.67	106.11	148.55	419.72	24.50
72	896.04	896.04	73.81	20.30	184.33	363.46	895.32	74.95
73	896.04	896.04	73.81	20.30	184.33	363.46	748.93	57.35
74	896.04	896.04	73.81	20.30	184.33	363.46	748.93	57.35
75	896.04	896.04	73.81	20.30	184.33	363.46	895.32	74.95
76	419.72	419.72	24.05	4.67	106.11	148.55	419.72	24.50
77	419.72	419.72	24.05	4.67	106.11	148.55	181.33	11.95
78	542.34	542.34	36.27	7.23	123.79	203.73	523.63	35.38
79	542.34	542.34	36.27	7.23	123.79	203.73	523.63	35.38
80	419.72	419.72	24.05	4.67	106.11	148.55	181.33	11.95
81	896.04	896.04	73.81	20.30	184.33	363.46	895.32	74.95
82	542.34	542.34	36.27	7.23	123.79	203.73	523.63	35.38
83	896.04	896.04	73.81	20.30	184.33	363.46	748.93	57.35
84	419.72	419.72	24.05	4.67	106.11	148.55	419.72	24.50
85	542.34	542.34	36.27	7.23	123.79	203.73	523.63	35.38
86	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
87	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
89	419.72	419.72	24.05	4.67	106.11	148.55	181.33	11.95
90	896.04	896.04	73.81	20.30	184.33	363.46	748.93	57.35
91	896.04	896.04	73.81	20.30	184.33	363.46	895.32	74.95
92	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
93	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
94	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
95	419.72	419.72	24.05	4.67	106.11	148.55	158.07	11.14

97	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
99	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
100	419.72	419.72	24.05	4.67	106.11	148.55	195.97	12.45
102	896.04	896.04	73.55	20.08	184.33	363.46	677.83	50.99
103	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
105	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
106	419.72	419.72	24.05	4.67	106.11	148.55	242.66	14.05
108	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
109	896.04	896.04	73.81	20.30	184.33	363.46	89.91	16.22
113	896.04	896.04	73.81	20.30	184.33	363.46	89.54	16.19
114	896.04	896.04	73.81	20.30	184.33	363.46	89.91	16.22
115	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
117	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
119	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
120	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
121	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
123	419.72	419.72	24.05	4.67	106.11	148.55	158.07	11.14
125	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
127	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
128	419.72	419.72	24.05	4.67	106.11	148.55	195.97	12.45
130	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
131	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
133	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
134	419.72	419.72	24.05	4.67	106.11	148.55	242.66	14.05
136	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
137	896.04	896.04	73.81	20.30	184.33	363.46	89.91	16.22
141	896.04	896.04	73.81	20.30	184.33	363.46	89.54	16.19
142	896.04	896.04	73.81	20.30	184.33	363.46	89.91	16.22
143	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
145	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
147	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
148	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
149	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
150	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
151	419.72	419.72	24.05	4.67	106.11	148.55	158.07	11.14
153	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
154	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
155	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
156	419.72	419.72	24.05	4.67	106.11	148.55	195.97	12.45
158	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
159	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
160	419.72	419.72	24.05	4.67	106.11	148.55	162.13	11.28
161	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
162	419.72	419.72	24.05	4.67	106.11	148.55	242.66	14.05
164	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
165	896.04	896.04	73.81	20.30	184.33	363.46	89.91	16.22

169	896.04	896.04	73.81	20.30	184.33	363.46	89.54	16.19
170	896.04	896.04	73.81	20.30	184.33	363.46	89.91	16.22
171	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
173	419.72	419.72	24.05	4.67	106.11	148.55	154.13	11.00
175	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09
176	896.04	896.04	73.81	20.30	184.33	363.46	677.83	51.09

Design Ratio

Member ID	$N^* / \phi N_s$	$M^*_z / \phi M_{sz}$	$M^*_y / \phi M_{sy}$	$V^*_y / \phi V_{vy}$	$V^*_z / \phi V_{vz}$	Combined Strength	$N^* / \phi N_c$	$M^*_z / \phi M_b$	Combined Buckling	KL / r	δ	Status
1	0.15	0.06	0.01	0.01	0.00	0.22	0.38	0.13	0.22	0.62	0.03	OK
2	0.07	0.08	0.03	0.11	0.00	0.17	0.07	0.08	0.08	0.06	0.00	OK
3	0.00	0.10	0.02	0.05	0.00	0.12	0.00	0.36	0.36	1.01	0.00	NG
4	0.00	0.09	0.00	0.05	0.00	0.09	0.00	0.14	0.14	0.34	0.00	OK
5	0.07	0.12	0.02	0.02	0.00	0.20	0.19	0.26	0.31	0.63	0.03	OK
6	0.07	0.11	0.02	0.02	0.00	0.19	0.19	0.23	0.28	0.63	0.03	OK
7	0.00	0.10	0.02	0.05	0.00	0.12	0.00	0.15	0.15	0.34	0.00	OK
8	0.32	0.04	0.01	0.01	0.00	0.37	0.83	0.09	0.51	0.62	0.01	OK
9	0.15	0.06	0.02	0.01	0.00	0.24	0.42	0.14	0.23	0.64	0.02	OK
10	0.00	0.07	0.00	0.03	0.00	0.07	0.00	0.09	0.09	0.34	0.00	OK
11	0.14	0.02	0.00	0.00	0.00	0.17	0.31	0.04	0.06	0.55	0.00	OK
12	0.04	0.08	0.02	0.10	0.00	0.13	0.04	0.08	0.08	0.06	0.00	OK
13	0.14	0.04	0.01	0.01	0.00	0.19	0.30	0.07	0.10	0.55	0.00	OK
14	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.22	0.00	OK
15	0.17	0.09	0.03	0.01	0.00	0.28	0.43	0.19	0.34	0.62	0.00	OK
16	0.00	0.10	0.00	0.05	0.00	0.10	0.00	0.34	0.34	1.01	0.00	NG
17	0.00	0.15	0.00	0.08	0.00	0.15	0.00	0.22	0.22	0.34	0.01	OK
18	0.07	0.11	0.01	0.02	0.00	0.19	0.12	0.19	0.22	0.46	0.00	OK
19	0.07	0.11	0.03	0.02	0.00	0.21	0.12	0.20	0.22	0.46	0.00	OK
20	0.00	0.10	0.02	0.05	0.00	0.12	0.00	0.14	0.14	0.22	0.00	OK
21	0.05	0.10	0.02	0.01	0.00	0.16	0.11	0.20	0.23	0.58	0.04	OK
22	0.00	0.10	0.01	0.08	0.00	0.11	0.00	0.09	0.10	0.04	0.00	OK
23	0.31	0.05	0.02	0.01	0.00	0.38	0.86	0.12	0.82	0.64	0.03	OK
24	0.00	0.14	0.00	0.04	0.00	0.14	0.00	0.19	0.19	0.22	0.02	OK
25	0.00	0.11	0.00	0.03	0.00	0.11	0.00	0.16	0.16	0.22	0.00	OK
26	0.00	0.10	0.00	0.02	0.00	0.10	0.00	0.40	0.40	1.26	0.14	NG
27	0.25	0.06	0.01	0.01	0.00	0.31	0.25	0.06	0.08	0.06	0.00	OK
28	0.00	0.13	0.00	0.04	0.00	0.13	0.00	0.18	0.18	0.22	0.01	OK
29	0.00	0.07	0.00	0.02	0.00	0.07	0.00	0.10	0.10	0.22	0.00	OK
30	0.00	0.09	0.00	0.05	0.00	0.09	0.00	0.13	0.13	0.34	0.00	OK
32	0.25	0.05	0.01	0.01	0.00	0.30	0.57	0.10	0.23	0.58	0.02	OK
34	0.00	0.11	0.00	0.02	0.00	0.11	0.00	0.46	0.46	1.26	0.14	NG
36	0.02	0.06	0.06	0.02	0.00	0.14	0.02	0.06	0.06	0.12	0.00	OK
37	0.00	0.14	0.01	0.09	0.00	0.15	0.00	0.19	0.19	0.27	0.00	OK
38	0.25	0.24	0.04	0.24	0.00	0.53	0.25	0.24	0.32	0.06	0.00	OK

39	0.05	0.09	0.05	0.05	0.00	0.19	0.05	0.09	0.10	0.12	0.00	OK
40	0.00	0.12	0.00	0.07	0.00	0.12	0.00	0.17	0.17	0.34	0.00	OK
41	0.00	0.06	0.00	0.02	0.00	0.06	0.00	0.09	0.09	0.22	0.00	OK
42	0.00	0.18	0.00	0.05	0.00	0.18	0.00	0.83	0.83	0.88	0.07	OK
43	0.27	0.05	0.00	0.01	0.00	0.32	0.62	0.09	0.24	0.58	0.02	OK
44	0.00	0.12	0.01	0.10	0.00	0.13	0.00	0.16	0.16	0.27	0.00	OK
45	0.00	0.10	0.01	0.01	0.00	0.11	0.00	0.10	0.10	0.04	0.00	OK
46	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.22	0.00	OK
47	0.00	0.16	0.00	0.04	0.00	0.16	0.00	0.71	0.71	0.88	0.07	OK
48	0.07	0.08	0.03	0.11	0.00	0.17	0.07	0.08	0.08	0.06	0.00	OK
49	0.00	0.15	0.00	0.04	0.00	0.15	0.00	0.69	0.69	0.88	0.08	OK
50	0.00	0.13	0.01	0.04	0.00	0.13	0.00	0.61	0.61	1.32	0.07	NG
51	0.00	0.16	0.01	0.05	0.00	0.16	0.00	0.73	0.73	0.88	0.08	OK
52	0.00	0.16	0.00	0.05	0.00	0.16	0.00	0.74	0.74	0.88	0.08	OK
53	0.20	0.06	0.01	0.01	0.00	0.27	0.54	0.14	0.29	0.64	0.02	OK
54	0.17	0.07	0.02	0.01	0.00	0.26	0.47	0.15	0.29	0.64	0.03	OK
55	0.38	0.00	0.00	0.00	0.00	0.38	1.03	0.01	-Infinity	0.64	0.00	NG
56	0.35	0.02	0.01	0.00	0.00	0.37	0.96	0.03	0.91	0.64	0.01	OK
57	0.07	0.09	0.01	0.01	0.00	0.17	0.17	0.18	0.22	0.58	0.03	OK
58	0.00	0.12	0.01	0.09	0.00	0.13	0.00	0.12	0.12	0.04	0.00	OK
59	0.02	0.07	0.06	0.03	0.00	0.16	0.03	0.07	0.07	0.12	0.00	OK
60	0.00	0.15	0.01	0.11	0.00	0.16	0.00	0.19	0.19	0.27	0.00	OK
61	0.26	0.25	0.04	0.26	0.00	0.55	0.26	0.25	0.34	0.06	0.00	OK
62	0.05	0.09	0.06	0.05	0.00	0.20	0.05	0.09	0.10	0.12	0.00	OK
63	0.00	0.11	0.00	0.07	0.00	0.11	0.00	0.15	0.15	0.34	0.00	OK
64	0.00	0.06	0.00	0.02	0.00	0.06	0.00	0.09	0.09	0.34	0.00	OK
65	0.14	0.07	0.01	0.01	0.00	0.23	0.37	0.15	0.24	0.62	0.03	OK
66	0.28	0.05	0.00	0.01	0.00	0.33	0.64	0.10	0.28	0.58	0.02	OK
67	0.00	0.15	0.01	0.13	0.00	0.17	0.00	0.20	0.20	0.27	0.00	OK
68	0.00	0.10	0.01	0.01	0.00	0.12	0.00	0.10	0.10	0.04	0.00	OK
69	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.34	0.00	OK
70	0.08	0.09	0.01	0.01	0.00	0.18	0.18	0.19	0.23	0.58	0.03	OK
71	0.07	0.08	0.03	0.10	0.00	0.16	0.07	0.07	0.08	0.06	0.00	OK
72	0.00	0.11	0.01	0.08	0.00	0.12	0.00	0.11	0.11	0.04	0.00	OK
73	0.00	0.14	0.01	0.11	0.00	0.15	0.00	0.18	0.18	0.27	0.00	OK
74	0.00	0.13	0.01	0.09	0.00	0.14	0.00	0.17	0.17	0.27	0.00	OK
75	0.00	0.10	0.01	0.01	0.00	0.11	0.00	0.09	0.09	0.04	0.00	OK
76	0.26	0.22	0.03	0.22	0.00	0.50	0.26	0.21	0.29	0.06	0.00	OK
77	0.27	0.05	0.01	0.01	0.00	0.33	0.63	0.11	0.29	0.58	0.02	OK
78	0.05	0.07	0.05	0.04	0.00	0.17	0.05	0.07	0.08	0.12	0.00	OK
79	0.02	0.06	0.06	0.02	0.00	0.14	0.02	0.06	0.06	0.12	0.00	OK
80	0.08	0.09	0.01	0.01	0.00	0.18	0.18	0.18	0.22	0.58	0.03	OK
81	0.00	0.12	0.01	0.10	0.00	0.13	0.00	0.12	0.12	0.04	0.00	OK
82	0.02	0.07	0.06	0.03	0.00	0.16	0.03	0.07	0.07	0.12	0.00	OK
83	0.00	0.15	0.01	0.10	0.00	0.16	0.00	0.19	0.19	0.27	0.00	OK
84	0.26	0.25	0.04	0.25	0.00	0.54	0.26	0.24	0.33	0.06	0.00	OK
85	0.05	0.09	0.05	0.05	0.00	0.19	0.05	0.09	0.10	0.12	0.00	OK

86	0.00	0.12	0.00	0.08	0.00	0.12	0.00	0.18	0.18	0.34	0.00	OK
87	0.00	0.05	0.00	0.01	0.00	0.05	0.00	0.07	0.07	0.34	0.00	OK
89	0.28	0.05	0.00	0.01	0.00	0.33	0.64	0.11	0.30	0.58	0.02	OK
90	0.00	0.16	0.01	0.13	0.00	0.17	0.00	0.20	0.20	0.27	0.00	OK
91	0.00	0.10	0.01	0.01	0.00	0.12	0.00	0.10	0.10	0.04	0.00	OK
92	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.34	0.00	OK
93	0.00	0.06	0.00	0.03	0.00	0.06	0.00	0.09	0.09	0.34	0.00	OK
94	0.00	0.14	0.00	0.07	0.00	0.14	0.00	0.21	0.21	0.22	0.00	OK
95	0.07	0.12	0.02	0.02	0.00	0.21	0.19	0.26	0.32	0.63	0.03	OK
97	0.30	0.02	0.00	0.00	0.00	0.32	0.78	0.04	0.19	0.62	0.00	OK
99	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.34	0.00	OK
100	0.14	0.02	0.00	0.00	0.00	0.17	0.31	0.04	0.06	0.55	0.00	OK
102	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.22	0.00	OK
103	0.15	0.08	0.01	0.01	0.00	0.25	0.40	0.17	0.28	0.62	0.00	OK
105	0.00	0.10	0.00	0.05	0.00	0.10	0.00	0.14	0.14	0.34	0.00	OK
106	0.07	0.11	0.01	0.02	0.00	0.20	0.12	0.19	0.22	0.46	0.00	OK
108	0.00	0.10	0.02	0.05	0.00	0.12	0.00	0.15	0.15	0.22	0.00	OK
109	0.00	0.19	0.00	0.06	0.00	0.19	0.00	0.87	0.87	0.88	0.07	OK
113	0.00	0.16	0.01	0.05	0.00	0.16	0.00	0.74	0.74	0.88	0.08	OK
114	0.00	0.16	0.00	0.05	0.00	0.16	0.00	0.72	0.72	0.88	0.08	OK
115	0.21	0.06	0.01	0.01	0.00	0.28	0.57	0.14	0.31	0.64	0.02	OK
117	0.39	0.00	0.00	0.00	0.00	0.40	1.07	0.01	-Infinity	0.64	0.00	NG
119	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.34	0.00	OK
120	0.00	0.10	0.00	0.05	0.00	0.10	0.00	0.14	0.14	0.34	0.00	OK
121	0.14	0.07	0.01	0.01	0.00	0.23	0.37	0.16	0.24	0.62	0.03	OK
123	0.07	0.12	0.02	0.02	0.00	0.21	0.19	0.26	0.32	0.63	0.03	OK
125	0.29	0.02	0.00	0.00	0.00	0.31	0.75	0.03	0.14	0.62	0.00	OK
127	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.34	0.00	OK
128	0.14	0.02	0.00	0.00	0.00	0.17	0.31	0.05	0.07	0.55	0.00	OK
130	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.22	0.00	OK
131	0.15	0.08	0.02	0.01	0.00	0.24	0.38	0.17	0.28	0.62	0.00	OK
133	0.00	0.09	0.00	0.05	0.00	0.09	0.00	0.14	0.14	0.34	0.00	OK
134	0.07	0.11	0.01	0.02	0.00	0.19	0.13	0.18	0.21	0.46	0.00	OK
136	0.00	0.10	0.02	0.05	0.00	0.12	0.00	0.14	0.14	0.22	0.00	OK
137	0.00	0.18	0.00	0.05	0.00	0.18	0.00	0.84	0.84	1.32	0.07	NG
141	0.00	0.16	0.01	0.05	0.00	0.16	0.00	0.73	0.73	0.88	0.08	OK
142	0.00	0.15	0.00	0.05	0.00	0.15	0.00	0.70	0.70	0.88	0.07	OK
143	0.21	0.06	0.01	0.01	0.00	0.28	0.58	0.12	0.29	0.64	0.02	OK
145	0.40	0.00	0.00	0.00	0.00	0.40	1.08	0.01	-Infinity	0.64	0.00	NG
147	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.34	0.00	OK
148	0.00	0.10	0.00	0.05	0.00	0.10	0.00	0.14	0.14	0.34	0.00	OK
149	0.14	0.07	0.01	0.01	0.00	0.22	0.36	0.15	0.24	0.62	0.03	OK
150	0.14	0.09	0.02	0.01	0.00	0.25	0.36	0.20	0.31	0.62	0.01	OK
151	0.07	0.11	0.02	0.02	0.00	0.20	0.18	0.24	0.30	0.63	0.03	OK
153	0.28	0.01	0.00	0.00	0.00	0.30	0.73	0.03	0.09	0.62	0.00	OK
154	0.28	0.01	0.00	0.00	0.00	0.29	0.72	0.02	0.08	0.62	0.00	OK
155	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.34	0.00	OK

156	0.14	0.03	0.00	0.00	0.00	0.17	0.30	0.05	0.07	0.55	0.00	OK
158	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.22	0.00	OK
159	0.15	0.08	0.01	0.01	0.00	0.24	0.38	0.17	0.27	0.62	0.00	OK
160	0.14	0.07	0.01	0.01	0.00	0.23	0.37	0.15	0.25	0.62	0.00	OK
161	0.00	0.09	0.00	0.05	0.00	0.09	0.00	0.14	0.14	0.34	0.00	OK
162	0.07	0.09	0.01	0.02	0.00	0.18	0.13	0.16	0.18	0.46	0.00	OK
164	0.00	0.10	0.02	0.05	0.00	0.12	0.00	0.15	0.15	0.22	0.00	OK
165	0.00	0.13	0.00	0.04	0.00	0.13	0.00	0.59	0.59	0.88	0.06	OK
169	0.00	0.13	0.01	0.04	0.00	0.14	0.00	0.61	0.61	0.88	0.07	OK
170	0.00	0.13	0.00	0.04	0.00	0.13	0.00	0.58	0.58	0.88	0.06	OK
171	0.21	0.05	0.01	0.01	0.00	0.27	0.58	0.11	0.27	0.64	0.01	OK
173	0.40	0.00	0.00	0.00	0.00	0.40	1.08	0.01	-Infinity	0.64	0.00	NG
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	OK
176	0.00	0.09	0.00	0.05	0.00	0.09	0.00	0.14	0.14	0.34	0.00	OK

Definitions

ϕ	Capacity factors in table 3.4
E	Modulus of elasticity
F _y	Specified minimum yield stress
F _u	Specified minimum tensile strength
A	Cross-sectional area
J	Torsional constant
I _{yp}	Moment of inertia about the Y axes
I _{zp}	Moment of inertia about the Z axes
I _w	Warping constant
S _{yp}	Plastic section modulus about the Y axis
S _{zp}	Plastic section modulus about the Z axis
KL	Effective length
α_m	Moment modification factor (Automatic calculation of value coming soon. The program takes default value 1.0)
k _t	Twist restraint factor given in Table 5.6.3(1)
k _l	Load height factor given in Table 5.6.3(2)
k _r	Lateral rotation restraint factor given in Table 5.6.3(3)
L _b	Length between braced points
LST	Limited slenderness for tension
LSC	Limited slenderness for compression
LD	Limited deflection
N _t	The nominal section capacity in tension determined in accordance with Clause 7.2
N _s	The nominal section capacity determined in accordance with Clause 6.2 (compression)
M _{Sz,Rd}	The nominal section moment capacity, as specified in Clause 5.2, for bending about the z-axis
M _{Sy}	the nominal section moment capacity, as specified in Clause 5.2, for bending about the y-axis
V _{vy}	the nominal shear capacity of the web determined from either Clause 5.11.2 or Clause 5.11.3 (along Y axis)
V _{vz}	the nominal shear capacity of the web determined from either Clause 5.11.2 or Clause 5.11.3 (along Z axis)
N _c	The nominal member capacity determined in accordance with Clause 6.3 (compression)
M _b	The nominal member moment capacity, as specified in Clause 5.3 or 5.6, for bending about the z-axis
N _{ed} / N _{Rd}	Design ratio in case of axial force
M* _z / ϕ M _{Sz}	Design ratio in case of bending about Z axis
M* _y / ϕ M _{Sy}	Design ratio in case of bending about Y axis
V* _y / ϕ V _{vy}	Design ratio in case of shear along Y axis
V* _z / ϕ V _{vz}	Design ratio in case of shear along Z axis
N* / ϕ N _c	Design ratio in case of buckling (compression)
M* _z / ϕ M _b	Design ratio in case of buckling (bending)
KL/r	Design ratio in case of section slenderness
δ	Design ratio in case of member deflection
OK	Capacity is provided
NG	Capacity is not provided