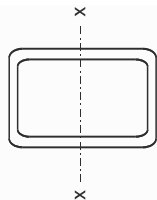


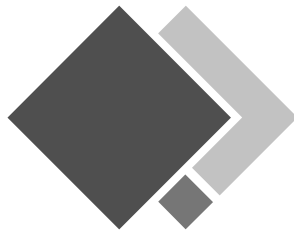
TABLE 5.2-1(2)(A)

RECTANGULAR HOLLOW SECTIONS
GRADE C350
DESIGN SECTION MOMENT AND WEB CAPACITIES
about x-axis



Designation		Mass per m	Design Section Moment Capacities				Design Web Capacities									
			ϕM_{sx}	FLR	Torsion ϕM_z	Shear ϕV_v	$\phi R_{by}/b_b$	$\phi R_{bp}/b_b$	$5r_{ext}$	b_{bw}	L_e/r	$\phi R_{by}/b_b$	$\phi R_{bp}/b_b$	$\frac{End\ Bearing}{2.5r_{ext}}$	b_{bw}	L_e/r
d	b	t	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
150x 50 x 6.0 RHS	16.7	28.7	1.43	12.1	291	0.996	2.24	75.0	60.0	70.0	0.917	2.07	37.5	60.0	76.0	
	14.2	24.8	1.47	10.7	246	0.817	1.47	62.5	62.5	87.5	0.764	1.32	31.3	62.5	95.0	
	11.6	20.6	1.50	9.1	200	0.644	0.815	50.0	65.0	114.0	0.611	0.717	25.0	65.0	124	
	8.96	16.2	1.53	7.23	152	0.611	0.346	30.0	69.0	161.0	0.598	0.300	15.0	69.0	175	
	7.53	13.7	1.55	6.20	127	0.507	0.204	25.0	70.0	196.0	0.499	0.176	12.5	70.0	213	
2.0 RHS	6.07	10.8	1.57	5.09	92.4	0.404	0.106	20.0	71.0	249.0	0.399	0.090	10.0	71.0	270	
127x 51 x 6.0 RHS	14.7	21.7	1.74	10.4	245	1.020	2.650	75.0	48.5	56.6	0.917	2.500	37.5	48.5	61.4	
	12.5	18.9	1.78	9.19	208	0.829	1.830	62.5	51.0	71.4	0.764	1.690	31.3	51.0	77.5	
	9.07	14.0	1.84	7.03	149	0.564	0.755	43.8	54.8	110.0	0.535	0.666	21.9	54.8	119	
	7.92	12.4	1.86	6.22	129	0.614	0.471	30.0	57.5	134.0	0.598	0.411	15.0	57.5	146	
	6.66	10.5	1.88	5.33	108	0.509	0.280	25.0	58.5	164.0	0.499	0.242	12.5	58.5	178	
125x 75 x 6.0 RHS	16.7	26.5	3.81	16.3	247	1.020	2.68	75.0	47.5	55.4	0.917	2.540	37.5	47.5	60.2	
	14.2	22.9	3.87	14.2	209	0.830	1.87	62.5	50.0	70.0	0.764	1.720	31.3	50.0	76.0	
	11.6	19.0	3.93	11.9	170	0.652	1.10	50.0	52.5	91.9	0.611	0.987	25.0	52.5	99.8	
	8.96	14.9	4.00	9.35	130	0.614	0.485	30.0	56.5	132.0	0.598	0.423	15.0	56.5	143	
	7.53	11.9	4.03	7.96	109	0.509	0.289	25.0	57.5	161.0	0.499	0.250	12.5	57.5	175	
2.0 RHS	6.07	8.29	4.06	6.51	88.0	0.405	0.151	20.0	58.5	205.0	0.399	0.130	10.0	58.5	222	
102x 76 x 6.0 RHS	14.7	19.5	4.66	13.2	199	1.050	3.06	75.0	36.0	42.0	0.917	2.96	37.5	36.0	45.6	
	12.5	16.9	4.74	11.6	169	0.850	2.27	62.5	38.5	53.9	0.764	2.16	31.3	38.5	58.5	
	9.07	12.6	4.86	8.70	122	0.573	1.07	43.8	42.3	84.5	0.535	0.966	21.9	42.3	91.7	
	7.92	11.1	4.91	7.65	106	0.619	0.688	30.0	45.0	105.0	0.598	0.609	15.0	45.0	114	
100x 50 x 6.0 RHS	12.0	14.3	2.06	7.73	190	1.050	3.09	75.0	35.0	40.8	0.917	3.00	37.5	35.0	44.3	
	10.3	12.5	2.11	6.90	162	0.852	2.31	62.5	37.5	52.5	0.764	2.20	31.3	37.5	57.0	
	8.49	10.5	2.16	5.90	132	0.664	1.50	50.0	40.0	70.0	0.611	1.38	25.0	40.0	76.0	
	7.53	9.43	2.19	5.33	117	0.574	1.10	43.8	41.3	82.5	0.535	0.996	21.9	41.3	89.6	
	6.60	8.40	2.22	4.73	102	0.620	0.711	30.0	44.0	103.0	0.598	0.630	15.0	44.0	111	
2.5 RHS	5.56	7.14	2.24	4.06	85.5	0.513	0.434	25.0	45.0	126.0	0.499	0.380	12.5	45.0	137	
2.0 RHS	4.50	5.83	2.27	3.35	69.1	0.407	0.231	20.0	46.0	161.0	0.399	0.200	10.0	46.0	175	
1.6 RHS	3.64	4.33	2.29	2.75	55.8	0.324	0.121	16.0	46.8	205.0	0.319	0.104	8.00	46.8	222	
76x 38 x 4.0 RHS	6.23	5.71	1.60	3.13	97.9	0.687	1.910	50.0	28.0	49.0	0.611	1.83	25.0	28.0	53.2	
	4.90	4.66	1.65	2.58	75.6	0.628	1.050	30.0	32.0	74.7	0.598	0.963	15.0	32.0	81.1	
	4.15	3.99	1.68	2.24	63.9	0.518	0.684	25.0	33.0	92.4	0.499	0.612	12.5	33.0	100	
	2.0 RHS	3.37	3.28	1.70	1.86	51.8	0.380	20.0	34.0	119.0	0.399	0.334	10.0	34.0	129	

Note: Bold listings in table note whether design web bearing yielding or buckling capacity is critical for either Interior or End Bearing.



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design capacity tables for structural steel



Volume 2: Hollow Sections

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**LIMIT STATES
EDITION TO
AS 4100-1998
 $S^* \leq \phi R_u$**

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**NOTE: SEE SECTION 2.1 FOR THE SPECIFIC MATERIAL
STANDARD (AS 1163) REFERRED TO BY THE SECTION TYPE AND
STEEL GRADE IN THESE TABLES**