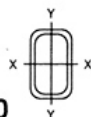




Rectangular Hollow Sections

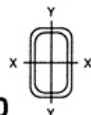


ASTM A-500

Nominal Size		Wall Thickness	Calculated Weight		Sectional Area	Moment of Inertia		Section Modulus		Radius of Gyration		Plastic Modulus	
						I _x	I _y	Z _x	Z _y	i _x	i _y	S _x	S _y
mm	in	mm	kg/m	kg/6m	cm ²	cm ⁴	cm ⁴	cm ³	cm ³	cm	cm	cm ³	cm ³
19 x 9	¾ x ⅜	1.0	0.401	2.409	0.5114	0.220	0.0653	0.232	0.145	0.657	0.357	0.307	0.177
		1.2	0.473	2.836	0.6020	0.252	0.0734	0.266	0.163	0.647	0.349	0.358	0.204
		1.6	0.606	3.634	0.7716	0.305	0.0859	0.321	0.191	0.629	0.334	0.450	0.252
25 x 12	1 x ½	1.0	0.543	3.257	0.6914	0.536	0.165	0.429	0.276	0.880	0.489	0.553	0.325
		1.2	0.642	3.853	0.8180	0.621	0.189	0.496	0.316	0.871	0.481	0.649	0.379
		1.6	0.832	4.991	1.060	0.770	0.229	0.616	0.382	0.853	0.465	0.829	0.478
32 x 16	1¼ x ⅝	1.0	0.716	4.293	0.9114	1.20	0.401	0.749	0.501	1.15	0.663	0.946	0.578
		1.2	0.849	5.096	1.082	1.40	0.464	0.875	0.580	1.14	0.655	1.12	0.679
		1.6	1.11	6.649	1.412	1.77	0.576	1.10	0.720	1.12	0.639	1.44	0.868
38 x 19	1½ x ¾	1.0	0.857	5.141	1.091	2.05	0.691	1.08	0.727	1.37	0.796	1.35	0.829
		1.2	1.02	6.114	1.298	2.40	0.804	1.26	0.847	1.36	0.787	1.60	0.977
		1.6	1.33	8.005	1.700	3.06	1.01	1.61	1.06	1.34	0.771	2.08	1.26
38 x 25	1½ x 1	1.0	0.951	5.706	1.211	2.46	1.28	1.29	1.03	1.42	1.03	1.57	1.18
		1.2	1.13	6.792	1.442	2.89	1.50	1.52	1.20	1.42	1.02	1.86	1.39
		1.6	1.49	8.910	1.892	3.70	1.91	1.95	1.53	1.40	1.01	2.42	1.80
50 x 25	2 x 1	1.0	1.14	6.836	1.451	4.79	1.63	1.92	1.30	1.82	1.06	2.38	1.46
		1.2	1.36	8.148	1.730	5.65	1.91	2.26	1.53	1.81	1.05	2.82	1.73
		1.6	1.79	10.718	2.276	7.29	2.44	2.91	1.95	1.79	1.03	3.69	2.25
		2.3	2.51	15.039	3.193	9.86	3.23	3.94	2.59	1.76	1.01	5.11	3.09
		3.0	3.19	19.136	4.063	12.1	3.89	4.84	3.11	1.73	0.98	6.43	3.84
		3.2	3.38	20.265	4.302	12.7	4.05	5.07	3.24	1.72	0.97	6.79	4.04
65 x 38	2½ x 1½	1.6	2.49	14.938	3.172	18.3	7.94	5.63	4.18	2.40	1.58	6.91	4.75
		2.3	3.52	21.105	4.481	25.2	10.8	7.74	5.69	2.37	1.55	9.68	6.62
		3.0	4.39	26.321	5.588	29.8	12.8	9.18	6.75	2.31	1.51	12.3	8.36
		3.2	4.65	27.877	5.919	31.3	13.4	9.63	7.06	2.30	1.51	13.0	8.84
		4.0	5.64	33.855	7.188	36.5	15.5	11.2	8.17	2.25	1.47	15.8	10.6
75 x 38	3 x 1½	1.6	2.71	16.239	3.448	25.3	8.85	6.76	4.66	2.71	1.60	8.59	5.34
		1.9	3.18	19.107	4.057	29.4	10.2	7.85	5.39	2.69	1.59	10.1	6.26
		2.3	3.81	22.844	4.850	34.6	12.0	9.23	6.30	2.67	1.57	12.1	7.44
		3.0	4.86	29.147	6.188	42.8	14.7	11.4	7.72	2.63	1.54	15.3	9.41
		3.2	5.15	30.891	6.559	45.0	15.4	12.0	8.09	2.62	1.53	16.3	9.95
		4.0	6.27	37.623	7.988	52.8	17.9	14.1	9.40	2.57	1.50	19.8	12.0
		4.5	6.94	41.629	8.839	57.1	19.2	15.2	10.1	2.54	1.47	21.9	13.2
75 x 50	3 x 2	1.9	3.54	21.255	4.513	35.5	19.1	9.48	7.62	2.81	2.05	11.8	8.88
		2.3	4.24	25.444	5.402	41.9	22.4	11.2	8.96	2.79	2.04	14.1	10.6
		3.0	5.42	32.538	6.908	52.2	27.8	13.9	11.1	2.75	2.00	17.9	13.5
		3.2	5.75	34.509	7.327	54.9	29.2	14.6	11.7	2.74	2.00	19.0	14.3
		4.0	7.02	42.145	8.948	65.0	34.3	17.3	13.7	2.69	1.96	23.2	17.3
		4.5	7.79	46.716	9.919	70.6	37.2	18.8	14.9	2.67	1.94	25.7	19.1
		5.0	8.53	51.133	10.86	75.6	39.7	20.2	15.9	2.64	1.91	28.1	20.9
		6.0	9.92	59.501	12.63	84.4	44.1	22.5	17.6	2.58	1.87	32.6	24.1



Rectangular Hollow Sections



ASTM A-500

Nominal Size		Wall Thickness	Calculated Weight		Sectional Area	Moment of Inertia		Section Modulus		Radius of Gyration		Plastic Modulus	
						I _x	I _y	Z _x	Z _y	i _x	i _y	S _x	S _y
mm	in	mm	kg/m	kg/6m	cm ²	cm ⁴	cm ⁴	cm ³	cm ³	cm	cm	cm ³	cm ³
100 x 50	4 x 2	1.9	4.29	25.729	5.463	71.6	24.5	14.3	9.82	3.62	2.12	18.1	11.2
		2.3	5.14	30.861	6.552	84.8	29.0	17.0	11.6	3.60	2.10	21.7	13.3
		3.0	6.60	39.603	8.408	106	36.1	21.3	14.4	3.56	2.07	27.8	17.0
		3.2	7.01	42.045	8.927	112	38.0	22.5	15.2	3.55	2.06	29.5	18.0
		4.0	8.60	51.565	10.95	134	44.9	26.8	18.0	3.50	2.03	36.1	21.9
		4.5	9.55	57.314	12.17	147	48.9	29.3	19.5	3.47	2.00	40.1	24.3
		5.0	10.5	62.908	13.36	158	52.5	31.6	21.0	3.44	1.98	44.0	26.5
		6.0	12.3	73.631	15.63	179	58.7	35.7	23.5	3.38	1.94	51.4	30.7
100 x 75	4 x 3	3.0	7.78	46.668	9.908	142	91.1	28.4	24.3	3.78	3.03	35.1	28.7
		3.2	8.26	49.581	10.53	150	96.2	30.0	25.6	3.77	3.02	37.2	30.5
		4.0	10.2	60.985	12.95	180	115	36.0	30.8	3.73	2.99	45.7	37.4
		4.5	11.3	67.911	14.42	198	127	39.6	33.7	3.71	2.96	50.9	41.5
		5.0	12.5	74.683	15.86	215	137	42.9	36.5	3.68	2.94	55.9	45.6
		6.0	14.6	87.761	18.63	245	156	49.0	41.6	3.63	2.89	65.5	53.3
125 x 50	5 x 2	3.0	7.78	46.668	9.908	187	44.4	29.9	17.7	4.34	2.12	39.5	20.5
		3.2	8.26	49.581	10.53	198	46.7	31.6	18.7	4.33	2.11	42.0	21.8
		4.0	10.2	60.985	12.95	238	55.6	38.0	22.2	4.28	2.07	51.6	26.5
		4.5	11.3	67.911	14.42	261	60.6	41.7	24.2	4.25	2.05	57.4	29.4
		5.0	12.5	74.683	15.86	282	65.2	45.2	26.1	4.22	2.03	63.1	32.1
		6.0	14.6	87.761	18.63	322	73.3	51.5	29.3	4.16	1.98	74.0	37.3
125 x 75	5x3	3.0	8.96	53.733	11.41	243	111	38.9	29.5	4.61	3.12	48.7	34.1
		3.2	9.52	57.117	12.13	257	117	41.1	31.1	4.60	3.10	51.7	36.2
		4.0	11.7	70.405	14.95	311	141	49.7	37.5	4.56	3.07	63.7	44.5
		4.5	13.1	78.509	16.67	342	155	54.8	41.2	4.53	3.04	70.9	49.5
		5.0	14.4	86.458	18.36	373	168	59.6	44.7	4.50	3.02	78.1	54.3
		6.0	17.0	101.89	21.63	428	192	68.5	51.1	4.45	2.98	91.9	63.7
150 x 50	6 x 2	3.0	8.96	53.733	11.41	299	52.6	39.8	21.1	5.12	2.15	53.2	24.1
		3.2	9.52	57.117	12.13	316	55.5	42.1	22.2	5.10	2.14	56.5	25.5
		4.0	11.7	70.405	14.95	381	66.2	50.9	26.5	5.05	2.10	69.5	31.1
		4.5	13.1	78.509	16.67	420	72.2	56.0	28.9	5.02	2.08	77.5	34.5
		5.0	14.4	86.458	18.36	456	77.9	60.8	31.1	4.99	2.06	85.3	37.8
		6.0	17.0	101.89	21.63	523	87.9	69.8	35.2	4.92	2.02	100	43.9
150 x 75	6 x 3	3.0	10.1	60.798	12.91	380	130	50.6	34.7	5.42	3.17	64.2	39.5
		3.2	10.8	64.653	13.73	402	137	53.6	36.6	5.41	3.16	68.2	42.0
		4.0	13.3	79.825	16.95	488	166	65.1	44.2	5.37	3.13	84.1	51.6
		4.5	14.9	89.106	18.92	539	183	71.9	48.7	5.34	3.11	93.8	57.4
		5.0	16.4	98.233	20.86	588	198	78.4	52.9	5.31	3.08	103	63.1
		6.0	19.3	116.02	24.63	679	228	90.5	60.7	5.25	3.04	122	74.0
150 x 100	6 x 4	4.0	14.9	89.245	18.95	595	319	79.3	63.7	5.60	4.10	98.7	74.5
		4.5	16.6	99.704	21.17	658	352	87.7	70.4	5.58	4.08	110	83.1
		5.0	18.3	110.01	23.36	719	384	95.9	76.8	5.55	4.05	122	91.5
		6.0	21.7	130.15	27.63	835	444	111	88.8	5.50	4.01	144	108
200 x 100	8 x 4	4.0	18.0	108.08	22.95	1200	411	120	82.2	7.23	4.23	152	93.7
		4.5	20.2	120.90	25.67	1331	455	133	90.9	7.20	4.21	170	105
		5.0	22.3	133.56	28.36	1459	497	146	99.4	7.17	4.19	188	115
		6.0	26.4	158.41	33.63	1703	577	170	115	7.12	4.14	222	136