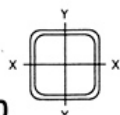




Square Hollow Sections

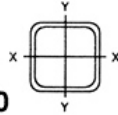


ASTM A-500

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
12 x 12	½ x ½	1.0	0.339	2.032	0.4314	0.0866	0.0866	0.144	0.144	0.448	0.448	0.177	0.177
		1.2	0.397	2.383	0.5060	0.0980	0.0980	0.163	0.163	0.440	0.440	0.204	0.204
		1.6	0.505	3.031	0.6436	0.116	0.116	0.193	0.193	0.424	0.424	0.249	0.249
16 x 16	⅝ x ⅝	1.0	0.464	2.786	0.5914	0.221	0.221	0.276	0.276	0.611	0.611	0.331	0.331
		1.2	0.548	3.288	0.6980	0.254	0.254	0.317	0.317	0.603	0.603	0.386	0.386
		1.6	0.706	4.237	0.8996	0.310	0.310	0.387	0.387	0.587	0.587	0.483	0.483
19 x 19	¾ x ¾	1.0	0.559	3.351	0.7114	0.383	0.383	0.403	0.403	0.733	0.733	0.479	0.479
		1.2	0.661	3.966	0.8420	0.443	0.443	0.466	0.466	0.725	0.725	0.560	0.560
		1.6	0.857	5.142	1.092	0.548	0.548	0.577	0.577	0.709	0.709	0.709	0.709
25 x 25	1 x 1	1.0	0.747	4.481	0.9514	0.910	0.910	0.728	0.728	0.978	0.978	0.854	0.854
		1.2	0.887	5.322	1.130	1.06	1.06	0.850	0.850	0.970	0.970	1.01	1.01
		1.6	1.16	6.950	1.476	1.34	1.34	1.07	1.07	0.953	0.953	1.29	1.29
		1.8	1.29	7.737	1.643	1.47	1.47	1.17	1.17	0.945	0.945	1.42	1.42
		2.3	1.60	9.622	2.043	1.75	1.75	1.40	1.40	0.925	0.925	1.73	1.73
		3.0	2.01	12.071	2.563	2.06	2.06	1.65	1.65	0.897	0.897	2.10	2.10
		3.2	2.12	12.729	2.702	2.14	2.14	1.71	1.71	0.889	0.889	2.19	2.19
30 x 30	—	1.2	1.08	6.453	1.370	1.89	1.89	1.26	1.26	1.17	1.17	1.48	1.48
		1.6	1.41	8.457	1.796	2.40	2.40	1.60	1.60	1.16	1.16	1.91	1.91
		1.8	1.57	9.432	2.003	2.64	2.64	1.76	1.76	1.15	1.15	2.11	2.11
		2.3	1.97	11.789	2.503	3.19	3.19	2.12	2.12	1.13	1.13	2.59	2.59
		3.0	2.48	14.897	3.163	3.83	3.83	2.55	2.55	1.10	1.10	3.18	3.18
		3.2	2.62	15.743	3.342	3.99	3.99	2.66	2.66	1.09	1.09	3.34	3.34
32 x 32	1¼ x 1¼	1.2	1.15	6.905	1.466	2.31	2.31	1.44	1.44	1.26	1.26	1.69	1.69
		1.6	1.51	9.060	1.924	2.95	2.95	1.84	1.84	1.24	1.24	2.19	2.19
		1.8	1.69	10.110	2.147	3.25	3.25	2.03	2.03	1.23	1.23	2.42	2.42
		2.0	1.86	11.142	2.366	3.53	3.53	2.21	2.21	1.22	1.22	2.65	2.65
		2.3	2.11	12.656	2.687	3.93	3.93	2.46	2.46	1.21	1.21	2.98	2.98
		3.0	2.67	16.027	3.403	4.75	4.75	2.97	2.97	1.18	1.18	3.68	3.68
		3.2	2.83	16.980	3.598	4.95	4.95	3.10	3.10	1.17	1.17	3.86	3.86
38 x 38	1½ x 1½	1.2	1.38	8.262	1.754	3.95	3.95	2.08	2.08	1.50	1.50	2.42	2.42
		1.6	1.81	10.869	2.308	5.08	5.08	2.67	2.67	1.48	1.48	3.14	3.14
		1.8	2.02	12.145	2.579	5.61	5.61	2.95	2.95	1.48	1.48	3.49	3.49
		2.0	2.23	13.403	2.846	6.12	6.12	3.22	3.22	1.47	1.47	3.83	3.83
		2.3	2.54	15.256	3.239	6.85	6.85	3.61	3.61	1.45	1.45	4.32	4.32
		3.0	3.24	19.418	4.123	8.38	8.38	4.41	4.41	1.43	1.43	5.38	5.38
		3.2	3.43	20.566	4.366	8.77	8.77	4.62	4.62	1.42	1.42	5.67	5.67
50 x 50	2 x 2	1.6	2.41	14.486	3.076	12.0	12.0	4.79	4.79	1.97	1.97	5.57	5.57
		1.8	2.70	16.215	3.443	13.3	13.3	5.32	5.32	1.96	1.96	6.21	6.21
		2.3	3.41	20.455	4.343	16.4	16.4	6.56	6.56	1.94	1.94	7.74	7.74
		3.0	4.25	25.500	5.408	19.5	19.5	7.79	7.79	1.90	1.90	9.39	9.39
		3.2	4.50	26.973	5.727	20.4	20.4	8.16	8.16	1.89	1.89	9.89	9.89
		4.0	5.45	32.725	6.948	23.7	23.7	9.49	9.49	1.85	1.85	11.7	11.7
		4.5	6.02	36.119	7.669	25.5	25.5	10.2	10.2	1.82	1.82	12.8	12.8
		5.0	6.56	39.358	8.356	27.0	27.0	10.8	10.8	1.80	1.80	13.7	13.7
		6.0	7.56	45.371	9.633	29.5	29.5	11.8	11.8	1.75	1.75	15.3	15.3



Square 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
65 x 65	2½ x 2½	2.3	4.42	26.528	5.632	36.4	36.4	11.2	11.2	2.54	2.54	13.1	13.1
		3.0	5.66	33.951	7.208	45.4	45.4	14.0	14.0	2.51	2.51	16.6	16.6
		3.2	6.00	36.016	7.647	47.8	47.8	14.7	14.7	2.50	2.50	17.5	17.5
		4.0	7.34	44.029	9.348	56.6	56.6	17.4	17.4	2.46	2.46	21.0	21.0
		4.5	8.14	48.836	10.37	61.6	61.6	18.9	18.9	2.44	2.44	23.1	23.1
		5.0	8.92	53.488	11.36	66.1	66.1	20.3	20.3	2.41	2.41	25.0	25.0
75 x 75	3 x 3	6.0	10.4	62.327	13.23	73.9	73.9	22.7	22.7	2.36	2.36	28.5	28.5
		2.3	5.14	30.861	6.552	57.1	57.1	15.2	15.2	2.95	2.95	17.7	17.7
		3.0	6.60	39.603	8.408	71.6	71.6	19.1	19.1	2.92	2.92	22.5	22.5
		3.2	7.01	42.045	8.927	75.5	75.5	20.1	20.1	2.91	2.91	23.8	23.8
		4.0	8.60	51.565	10.95	90.2	90.2	24.0	24.0	2.87	2.87	28.8	28.8
		4.5	9.55	57.314	12.17	98.6	98.6	26.3	26.3	2.85	2.85	31.7	31.7
90 x 90	3½ x 3½	5.0	10.5	62.908	13.36	106	106	28.4	28.4	2.82	2.82	34.5	34.5
		6.0	12.3	73.631	15.63	120	120	32.0	32.0	2.77	2.77	39.6	39.6
		2.3	6.23	37.361	7.932	101	101	22.4	22.4	3.56	3.56	25.9	25.9
		3.0	8.01	48.081	10.21	127	127	28.3	28.3	3.53	3.53	33.0	33.0
		3.2	8.52	51.088	10.85	135	135	29.9	29.9	3.52	3.52	35.0	35.0
		4.0	10.5	62.869	13.35	162	162	36.0	36.0	3.48	3.48	42.6	42.6
100 x 100	4 x 4	4.5	11.7	70.031	14.87	178	178	39.5	39.5	3.46	3.46	47.1	47.1
		5.0	12.8	77.038	16.36	193	193	42.9	42.9	3.43	3.43	51.4	51.4
		6.0	15.1	90.587	19.23	220	220	49.0	49.0	3.39	3.39	59.5	59.5
		2.3	6.95	41.694	8.852	140	140	27.9	27.9	3.97	3.97	32.3	32.3
		3.0	8.96	53.733	11.41	177	177	35.4	35.4	3.94	3.94	41.2	41.2
		3.2	9.52	57.117	12.13	187	187	37.5	37.5	3.93	3.93	43.7	43.7
125 x 125	5 x 5	4.0	11.7	70.405	14.95	226	226	45.3	45.3	3.89	3.89	53.3	53.3
		4.5	13.1	78.509	16.67	249	249	49.9	49.9	3.87	3.87	59.0	59.0
		5.0	14.4	86.458	18.36	271	271	54.2	54.2	3.84	3.84	64.6	64.6
		6.0	17.0	101.89	21.63	311	311	62.3	62.3	3.79	3.79	75.1	75.1
		3.0	11.3	67.863	14.41	354	354	56.7	56.7	4.96	4.96	65.6	65.6
		3.2	12.0	72.189	15.33	376	376	60.1	60.1	4.95	4.95	69.6	69.6
150 x 150	6 x 6	4.0	14.9	89.245	18.95	457	457	73.2	73.2	4.91	4.91	85.3	85.3
		4.5	16.6	99.704	21.17	506	506	80.9	80.9	4.89	4.89	94.8	94.8
		5.0	18.3	110.01	23.36	553	553	88.4	88.4	4.86	4.86	104	104
		6.0	21.7	130.15	27.63	641	641	103	103	4.82	4.82	122	122
		3.0	13.7	81.993	17.41	623	623	83.0	83.0	5.98	5.98	95.5	95.5
		3.2	14.5	87.261	18.53	661	661	88.1	88.1	5.97	5.97	101	101
175 x 175	7 x 7	4.0	18.0	108.08	22.95	808	808	108	108	5.93	5.93	125	125
		4.5	20.2	121.20	25.67	896	896	120	120	5.91	5.91	139	139
		5.0	22.3	133.56	28.36	982	982	131	131	5.89	5.89	153	153
		6.0	26.4	158.41	33.63	1146	1146	153	153	5.84	5.84	180	180
		4.0	21.2	126.92	26.95	1303	1303	149	149	6.95	6.95	172	172
		4.5	23.7	142.09	30.17	1449	1449	166	166	6.93	6.93	192	192
		5.0	26.2	157.11	33.36	1591	1591	182	182	6.91	6.91	211	211
		6.0	31.1	186.67	39.63	1864	1864	213	213	6.86	6.86	249	249