

Square Hollow Section

Sizes	SQUARE HOLLOW SECTION (SHS) IS 4923-2017/ EN10219-1:2006/ ASTM A-500										
	Area	Weight	Moment of Inertia	Radius of Gyration	Elastic Modulus	Plastic Modulus	Torsion			Superficial Area / mtr length	Nominal Length / Ton
	A	M	I	R	Z	S	J	C	As		
	cm ²	kg/m	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	
150 X 150 X 4	22.9	18.0	808.4	5.94	108	125	1265	162	0.586	55.5	
150 X 150 X 4.5	25.7	20.1	897.2	5.91	120	139	1411	180	0.585	49.6	
150 X 150 X 5	28.4	22.3	983.3	5.89	131	153	1554	197	0.583	44.9	
150 X 150 X 6	33.6	26.4	1148.0	5.84	153	180	1833	230	0.579	37.9	
150 X 150 X 8	43.8	34.4	1447.9	5.75	193	230	2357	230	0.573	29.1	
150 X 150 X 10	53.4	41.9	1710.6	5.66	228	276	2838	343	0.566	23.8	
150 X 150 X 12	62.5	49.1	1938.5	5.57	258	317	3274	390	0.559	20.4	
175 X 175 X 4	26.9	21.2	1303.8	6.96	149	172	2028	224	0.686	47.3	
175 X 175 X 4.5	30.2	23.7	1449.9	6.93	166	192	2265	249	0.685	42.2	
175 X 175 X 5	33.4	26.2	1592.3	6.91	182	211	2498	273	0.683	38.2	
175 X 175 X 6	39.6	31.1	1866.5	6.86	213	249	2954	320	0.679	32.1	
175 X 175 X 8	51.8	40.7	2373.6	6.77	271	321	3822	408	0.673	24.6	
175 X 175 X 10	63.4	49.8	2828.2	6.68	323	387	4630	486	0.666	20.1	
175 X 175 X 12	74.5	58.5	3233.2	6.59	370	447	5378	556	0.659	17.1	
180 X 180 X 4	27.7	21.8	1422.5	7.16	158	182	2210	237	0.706	45.9	
180 X 180 X 4.5	31.1	24.4	1582.3	7.14	176	203	2469	264	0.705	41.0	
180 X 180 X 5	34.4	27.0	1738.3	7.11	193	224	2724	290	0.703	37.1	
180 X 180 X 6	40.8	32.1	2039.0	7.07	227	264	3223	340	0.699	31.2	
180 X 180 X 8	53.4	41.9	2596.6	6.97	289	341	4173	433	0.693	23.9	
180 X 180 X 10	65.4	51.4	3098.3	6.88	344	411	5060	518	0.686	19.5	
200 X 200 X 4	30.9	24.3	1969.0	7.98	197	226	3049	295	0.786	41.2	
200 X 200 X 4.5	34.7	27.2	2192.7	7.95	219	253	3408	329	0.785	36.7	
200 X 200 X 5	38.4	30.1	2411.7	7.93	241	279	3763	362	0.783	33.2	
200 X 200 X 6	45.6	35.8	2835.5	7.88	284	330	4459	426	0.779	27.9	
200 X 200 X 8	59.8	46.9	3628.2	7.79	363	426	5792	545	0.773	21.3	
200 X 200 X 10	73.4	57.6	4350.3	7.70	435	517	7048	654	0.766	17.3	
200 X 200 X 12	86.5	67.9	5005.3	7.61	501	601	8226	753	0.759	14.7	
200 X 200 X 13	92.9	72.9	5308.6	7.56	531	641	8786	799	0.755	13.7	
220 X 220 X 4	34.1	26.8	2640.1	8.79	240	275	4076	360	0.866	37.3	
220 X 220 X 4.5	38.3	30.0	2942.9	8.77	268	308	4560	401	0.865	33.3	
220 X 220 X 5	42.4	33.2	3239.8	8.75	295	340	5038	442	0.863	30.1	
220 X 220 X 6	50.4	39.6	3816.4	8.70	347	402	5976	521	0.859	25.3	
220 X 220 X 8	66.2	52.0	4902.2	8.61	446	522	7784	669	0.853	19.2	
220 X 220 X 10	81.4	63.9	5901.2	8.51	536	634	9498	806	0.846	15.6	
220 X 220 X 12	96.1	75.5	6817.1	8.42	620	740	11118	932	0.839	13.3	
220 X 220 X 13	103.3	81.1	7245.0	8.38	659	790	11892	991	0.835	12.3	
225 X 225 X 4	34.9	27.4	2828.8	9.00	261	288	4365	377	0.886	36.5	
225 X 225 X 4.5	39.2	30.7	3153.9	8.97	280	322	4883	421	0.885	32.5	
225 X 225 X 5	43.4	34.0	3472.9	8.95	309	356	5396	463	0.883	29.4	
225 X 225 X 6	51.6	40.5	4092.7	8.90	364	421	6403	546	0.879	24.7	
225 X 225 X 8	67.8	53.2	5261.6	8.81	468	547	8344	702	0.873	18.8	
225 X 225 X 10	83.4	65.5	6339.4	8.72	563	665	10188	846	0.866	15.3	
225 X 225 X 12	98.5	77.3	7329.7	8.62	652	777	11933	979	0.859	12.9	
225 X 225 X 13	105.9	83.1	7793.3	8.58	693	830	12769	1042	0.855	12.0	
250 X 250 X 4	38.9	30.6	3709.3	10.02	313	358	6014	469	0.986	32.7	
250 X 250 X 4.5	43.7	34.3	4361.5	9.99	349	400	6732	523	0.985	29.2	
250 X 250 X 5	48.4	38.0	4807.1	9.97	385	442	7443	577	0.983	26.3	
250 X 250 X 6	57.6	45.2	5675.5	9.92	454	524	8843	681	0.979	22.1	
250 X 250 X 8	75.8	59.5	7323.9	9.83	586	683	11552	879	0.973	16.8	
250 X 250 X 10	93.4	73.3	8857.9	9.74	709	833	14141	1064	0.966	13.6	
250 X 250 X 12	110.5	86.8	10281.6	9.64	823	975	16610	1236	0.959	11.5	
250 X 250 X 13	118.9	93.3	10953.5	9.60	876	1043	17798	1317	0.955	10.7	
250 X 250 X 14	127.1	99.8	11599.4	9.55	928	1109	18957	1395	0.952	10.0	
250 X 250 X 15	135.2	106.1	12219.9	9.51	978	1173	20084	1471	0.948	9.4	
280 X 280 X 5	54.4	42.7	6812.4	11.20	487	558	10513	730	1.103	23.4	
280 X 280 X 6	64.8	50.9	8057.5	11.15	576	663	12504	863	1.099	19.6	
280 X 280 X 8	85.4	67.0	10435.1	11.05	745	865	16373	1118	1.093	14.9	
280 X 280 X 10	105.4	82.8	12667.0	10.96	905	1058	20092	1358	1.086	12.1	
280 X 280 X 12	124.9	98.1	14757.7	10.87	1054	1243	23660	1583	1.079	10.2	

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	A	M	I	R	Z	S	J	C	As	
	cm²	kg/m	cm⁴	cm	cm³	cm³	cm⁴	cm³	m²/m	m
280 X 280 X 13	134.5	105.6	15751.7	10.82	1125	1331	25388	1690	1.075	9.5
280 X 280 X 14	143.9	113.0	16712.1	10.78	1194	1418	27077	1794	1.072	8.9
280 X 280 X 15	153.2	120.3	17639.7	10.73	1260	1502	28728	1894	1.068	8.3
300 X 300 X 5	58.4	45.8	8419.3	12.01	561	643	12968	842	1.183	21.8
300 X 300 X 6	69.6	54.7	9967.9	11.96	665	764	15434	997	1.179	18.3
300 X 300 X 8	91.8	72.1	12935.0	11.87	862	999	20236	1294	1.173	13.9
300 X 300 X 10	113.4	89.0	15733.2	11.78	1049	1224	24866	1574	1.166	11.2
300 X 300 X 12	134.5	105.6	18367.7	11.68	1225	1439	29323	1839	1.159	9.5
300 X 300 X 13	144.9	113.7	19625.1	11.64	1308	1543	31486	1965	1.155	8.8
300 X 300 X 14	155.1	121.8	20843.5	11.59	1390	1645	33606	2088	1.152	8.2
300 X 300 X 15	165.2	129.7	22023.4	11.55	1468	1744	35682	2207	1.148	7.7
300 X 300 X 16	175.2	137.5	23165.6	11.50	1544	1841	37714	2322	1.145	7.3
300 X 300 X 17	185.0	145.2	24270.6	11.45	1618	1935	39702	2433	1.142	6.9
300 X 300 X 18	194.7	152.8	25339.1	11.41	1689	2028	41647	2541	1.138	6.5
320 X 320 X 5	62.4	48.9	10261.0	12.83	641	734	15779	962	1.263	20.4
320 X 320 X 6	74.4	58.4	12158.7	12.78	760	873	18789	1140	1.259	17.1
320 X 320 X 8	98.2	77.1	15805.4	12.69	988	1142	24663	1482	1.253	13.0
320 X 320 X 10	121.4	95.3	19258.4	12.59	1204	1401	30341	1806	1.246	10.5
320 X 320 X 12	144.1	113.1	22523.2	12.50	1408	1650	35822	2113	1.239	8.8
320 X 320 X 13	155.3	121.9	24086.8	12.45	1505	1770	38489	2261	1.235	8.2
320 X 320 X 14	166.3	130.6	25605.3	12.41	1600	1888	41106	2404	1.232	7.7
320 X 320 X 15	177.2	139.1	27079.6	12.36	1692	2004	43674	2543	1.228	7.2
320 X 320 X 16	188.0	147.6	28510.2	12.32	1782	2117	46192	2678	1.225	6.8
320 X 320 X 17	198.6	155.9	29897.8	12.27	1869	2227	48660	2809	1.222	6.4
320 X 320 X 18	209.1	164.1	31243.1	12.22	1953	2335	51078	2936	1.218	6.1
350 X 350 X 5	68.4	53.7	13498.6	14.05	771	882	20714	1157	1.383	18.6
320 X 320 X 6	74.4	58.4	12158.7	12.78	760	873	18789	1140	1.259	17.1
320 X 320 X 8	98.2	77.1	15805.4	12.69	988	1142	24663	1482	1.253	13.0
320 X 320 X 10	121.4	95.3	19258.4	12.59	1204	1401	30341	1806	1.246	10.5
320 X 320 X 12	144.1	113.1	22523.2	12.50	1408	1650	35822	2113	1.239	8.8
320 X 320 X 13	155.3	121.9	24086.8	12.45	1505	1770	38489	2261	1.235	8.2
320 X 320 X 14	166.3	130.6	25605.3	12.41	1600	1888	41106	2404	1.232	7.7
320 X 320 X 15	177.2	139.1	27079.6	12.36	1692	2004	43674	2543	1.228	7.2
320 X 320 X 16	188.0	147.6	28510.2	12.32	1782	2117	46192	2678	1.225	6.8
320 X 320 X 17	198.6	155.9	29897.8	12.27	1869	2227	48660	2809	1.222	6.4
320 X 320 X 18	209.1	164.1	31243.1	12.22	1953	2335	51078	2936	1.218	6.1
320 X 320 X 19	219.5	172.3	32546.7	12.18	2034	2440	53446	3060	1.215	5.8
320 X 320 X 20	229.7	180.3	33809.3	12.13	2113	2543	55763	3180	1.211	5.5
380 X 380 X 5	74.4	58.4	17354.3	15.28	913	1043	26583	1370	1.503	17.1
380 X 380 X 6	88.8	69.7	20605.5	15.23	1085	1241	31695	1627	1.499	14.3
380 X 380 X 8	117.4	92.2	26895.3	15.14	1416	1630	41712	2123	1.493	10.9
380 X 380 X 10	145.4	114.2	32906.9	15.04	1732	2006	51453	2599	1.486	8.8
380 X 380 X 12	172.9	135.8	38647.0	14.95	2034	2369	60918	3053	1.479	7.4
380 X 380 X 13	186.5	146.4	41417.3	14.90	2180	2546	65546	3272	1.475	6.8
380 X 380 X 14	199.9	156.9	44122.2	14.86	2322	2720	70105	3486	1.472	6.4
380 X 380 X 15	213.2	167.4	46762.5	14.81	2461	2891	74595	3696	1.468	6.0
380 X 380 X 16	226.4	177.7	49339.0	14.76	2597	3059	79015	3900	1.465	5.6
380 X 380 X 17	239.4	187.9	51852.4	14.72	2729	3224	83364	4100	1.462	5.3
380 X 380 X 18	252.3	198.1	54303.7	14.67	2858	3385	87644	4294	1.458	5.0
380 X 380 X 19	265.1	208.1	56693.6	14.62	2984	3544	91854	4484	1.455	4.8
380 X 380 X 20	277.7	218.0	59022.9	14.58	3106	3700	95993	4670	1.451	4.6
400 X 400 X 5	78.4	61.5	20294.8	16.09	1015	1157	31055	1522	1.583	16.3
400 X 400 X 6	93.6	73.5	24109.9	16.05	1205	1379	37039	1808	1.579	13.6
400 X 400 X 8	123.8	97.2	31503.5	15.95	1575	1812	48778	2363	1.573	10.3
400 X 400 X 10	153.4	120.4	38587.4	15.86	1929	2231	60213	2895	1.566	8.3
400 X 400 X 12	182.5	143.3	45368.7	15.77	2268	2637	71341	3404	1.559	7.0
400 X 400 X 14	211.1	165.7	51854.2	15.67	2593	3031	82162	3892	1.552	6.0
400 X 400 X 15	225.2	176.8	54988.3	15.63	2749	3222	87457	4128	1.548	5.7