

Hot Finished Square Hollow Sections

BS EN 10210

Designation		Weight	Cross Sectional Area	Second Moment of Area	Radius of Gyration	Elastic Modulus	Plastic Modulus	Torsional inertia content	Torsional modulus content	Superficial Area per metre length	Superficial Area per metre length	Nominal Length per tonne	Ratio for Local Buckling
Size	Thickness												
$B \times B$	T	M	A	I	i	W_{el}	W_{pl}	L_t	C_t	A_s	A_s	L	Flange
mm	mm	Kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m ² /m	m	B/T
19 × 19	1.6	0.853	1.09	0.54	0.71	0.57	0.70	0.88	0.82	0.07	0.07	1172.87	7.88
	2.0	1.093	1.15	0.64	0.75	0.64	0.79	1.03	0.93	0.08	0.08	1107.60	8.50
20 × 20	1.6	0.903	1.15	0.64	0.75	0.64	0.79	1.03	0.93	0.08	0.08	1107.60	8.50
	2.0	1.097	1.40	0.74	0.73	0.74	0.93	1.22	1.07	0.07	0.08	911.82	6.00
25 × 25	1.6	1.154	1.47	1.33	0.95	1.06	1.28	2.11	1.55	0.10	0.10	866.51	11.63
	2.0	1.411	1.80	1.56	0.93	1.25	1.53	2.52	1.81	0.09	0.10	708.86	8.50
	2.3	1.595	2.03	1.71	0.92	1.37	1.71	2.80	1.98	0.09	0.09	627.02	6.87
	2.5	1.714	2.18	1.81	0.91	1.44	1.82	2.97	2.08	0.09	0.09	583.56	6.00
	3.0	1.997	2.54	2.00	0.89	1.60	2.06	3.35	2.30	0.09	0.09	500.85	4.33
30 × 30	1.6	1.405	1.79	2.38	1.15	1.59	1.89	3.76	2.33	0.12	0.12	711.62	14.75
	2.0	1.725	2.20	2.84	1.14	1.89	2.29	4.53	2.75	0.11	0.12	579.81	11.00
	2.3	1.956	2.49	3.14	1.12	2.09	2.56	5.07	3.04	0.11	0.11	511.26	9.04
	2.5	2.106	2.68	3.33	1.11	2.22	2.74	5.40	3.22	0.11	0.11	474.81	8.00
	3.0	2.468	3.14	3.74	1.09	2.50	3.14	6.16	3.60	0.11	0.11	405.25	6.00
32 × 32	1.6	1.506	1.92	2.93	1.24	1.83	2.17	4.61	2.68	0.12	0.12	664.13	16.00
	1.8	1.680	2.14	3.22	1.23	2.01	2.41	5.10	2.94	0.12	0.12	595.38	13.78
	2.0	1.850	2.36	3.50	1.22	2.19	2.63	5.56	3.19	0.12	0.12	540.45	12.00
	2.3	2.100	2.68	3.88	1.20	2.43	2.95	6.23	3.53	0.12	0.12	476.11	9.91
	2.5	2.263	2.88	4.12	1.20	2.58	3.16	6.65	3.74	0.12	0.12	441.87	8.80
	3.0	2.656	3.38	4.66	1.17	2.91	3.63	7.62	4.21	0.12	0.12	376.51	6.67
	3.2	2.808	3.58	4.85	1.16	3.03	3.81	7.98	4.37	0.12	0.12	356.18	6.00
35 × 35	1.6	1.656	2.11	3.89	1.36	2.23	2.63	6.10	3.26	0.14	0.14	603.70	17.88
	2.0	2.039	2.60	4.67	1.34	2.67	3.19	7.39	3.90	0.13	0.14	490.51	13.50
	2.3	2.317	2.95	5.20	1.33	2.97	3.59	8.30	4.33	0.13	0.13	431.59	11.22
	2.5	2.499	3.18	5.53	1.32	3.16	3.85	8.87	4.59	0.13	0.13	400.22	10.00
	3.0	2.939	3.74	6.29	1.30	3.59	4.44	10.22	5.20	0.13	0.13	340.30	7.67
38 × 38	1.6	1.807	2.30	5.05	1.48	2.66	3.13	7.88	3.90	0.15	0.15	553.35	19.75
	2.0	2.227	2.84	6.07	1.46	3.20	3.81	9.58	4.68	0.15	0.15	449.01	15.00
	2.3	2.534	3.23	6.78	1.45	3.57	4.29	10.78	5.21	0.15	0.15	394.68	12.52
	2.5	2.734	3.48	7.23	1.44	3.81	4.60	11.54	5.54	0.15	0.15	365.75	11.20
	3.0	3.221	4.10	8.26	1.42	4.35	5.33	13.34	6.30	0.14	0.14	310.44	8.67
	4.0	4.136	5.27	9.93	1.37	5.23	6.62	16.44	7.54	0.14	0.14	241.80	5.50
40 × 40	1.6	1.908	2.43	5.93	1.56	2.97	3.48	9.24	4.36	0.16	0.16	524.20	21.00
	1.9	2.243	2.86	6.86	1.55	3.43	4.06	10.76	5.03	0.16	0.16	445.90	17.05
	2.0	2.353	3.00	7.15	1.54	3.58	4.25	11.25	5.24	0.15	0.16	425.04	16.00
	2.3	2.678	3.41	8.00	1.53	4.00	4.79	12.67	5.84	0.15	0.15	373.39	13.39
	2.5	2.891	3.68	8.54	1.52	4.27	5.14	13.59	6.22	0.15	0.15	345.89	12.00
	3.0	3.410	4.34	9.78	1.50	4.89	5.97	15.74	7.10	0.15	0.15	293.29	9.33
	4.0	4.387	5.59	11.83	1.45	5.91	7.44	19.48	8.54	0.15	0.15	227.96	6.00
50 × 50	1.6	2.410	3.07	11.93	1.97	4.77	5.55	18.44	7.04	0.20	0.20	414.93	27.25
	1.9	2.839	3.62	13.86	1.96	5.55	6.50	21.55	8.16	0.20	0.20	352.21	22.32
	2.0	2.981	3.80	14.49	1.95	5.80	6.81	22.57	8.52	0.19	0.20	335.49	21.00
	2.3	3.400	4.33	16.30	1.94	6.52	7.71	25.54	9.56	0.19	0.19	294.09	17.74
	2.5	3.676	4.68	17.46	1.93	6.99	8.29	27.46	10.23	0.19	0.19	272.03	16.00
	3.0	4.352	5.54	20.20	1.91	8.08	9.70	32.06	11.79	0.19	0.19	229.80	12.67
	4.0	5.643	7.19	24.97	1.86	9.99	12.27	40.39	14.49	0.19	0.19	177.22	8.50
	4.5	6.259	7.97	27.03	1.84	10.81	13.44	44.12	15.64	0.19	0.19	159.78	7.11
	5.0	6.854	8.73	28.88	1.82	11.55	14.53	47.56	16.67	0.19	0.19	145.89	6.00
6.0	7.986	10.20	31.98	1.77	12.79	16.48	53.60	18.39	0.18	0.19	125.21	4.33	
60 × 60	1.6	2.912	3.71	21.00	2.38	7.00	8.10	32.31	10.35	0.24	0.24	343.35	33.50
	2.3	4.123	5.25	28.96	2.35	9.65	11.32	45.05	14.20	0.23	0.23	242.57	22.09
	2.5	4.461	5.68	31.11	2.34	10.37	12.20	48.53	15.23	0.23	0.23	224.16	20.00
	3.0	5.294	6.74	36.21	2.32	12.07	14.33	56.95	17.68	0.23	0.23	188.91	16.00
	4.0	6.899	8.79	45.39	2.27	15.13	18.31	72.51	22.03	0.23	0.23	144.95	11.00
	4.5	7.672	9.77	49.49	2.25	16.50	20.15	79.66	23.95	0.23	0.23	130.35	9.33
64 × 64	2.3	4.411	5.62	35.46	2.51	11.08	12.95	55.02	16.32	0.25	0.25	226.68	23.83
	3.0	5.670	7.22	44.46	2.48	13.89	16.44	69.70	20.37	0.25	0.25	176.35	17.33
	4.0	7.401	9.43	55.96	2.44	17.49	21.06	89.03	25.49	0.25	0.25	135.11	12.00
	4.5	8.237	10.50	61.13	2.41	19.10	23.21	97.98	27.78	0.24	0.24	121.41	10.22
	5.0	9.052	11.50	65.94	2.39	20.61	25.26	106.46	29.90	0.24	0.24	110.47	8.80
	6.0	10.624	13.50	74.49	2.35	23.28	29.06	121.99	33.64	0.24	0.24	94.13	6.67
65 × 65	1.6	3.164	4.03	26.90	2.58	8.28	9.56	41.30	12.25	0.26	0.26	316.09	36.63
	2.0	3.923	5.00	32.90	2.57	10.12	11.77	50.80	14.94	0.25	0.26	254.93	28.50
	2.3	4.484	5.71	37.22	2.55	11.45	13.38	57.72	16.87	0.25	0.25	223.03	24.26
	2.5	4.854	6.18	40.01	2.54	12.31	14.43	62.23	18.11	0.25	0.25	206.03	22.00
	3.0	5.765	7.34	46.69	2.52	14.37	16.99	73.16	21.07	0.25	0.25	173.47	17.67
	4.0	7.527	9.59	58.83	2.48	18.10	21.77	93.52	26.40	0.25	0.25	132.86	12.25
	4.5	8.378	10.70	64.31	2.45	19.79	24.01	102.96	28.78	0.25	0.25	119.36	10.44
	5.0	9.209	11.70	69.40	2.43	21.35	26.14	111.91	30.99	0.25	0.25	108.58	9.00
	6.0	10.812	13.80	78.48	2.39	24.15	30.09	128.35	34.91	0.24	0.25	92.49	6.83

Hot Finished Square Hollow Sections

BS EN 10210

Designation		Weight <i>M</i>	Cross Sectional Area <i>A</i>	Second Moment of Area <i>I</i>	Radius of Gyration <i>i</i>	Elastic Modulus <i>W_{el}</i>	Plastic Modulus <i>W_{pl}</i>	Torsional inertia contant <i>L_t</i>	Torsional modulus contant <i>C_t</i>	Superficial Area per metre length <i>A_s</i>	Superficial Area per metre length <i>A_s</i>	Nominal Length per tonne <i>L</i>	Ratio for Local Buckling <i>B/T</i>
Size <i>B × B</i>	Thickness <i>T</i>												
mm	mm	Kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m ² /m	m	Flange <i>B/T</i>
70 × 70	2.5	5.246	6.68	50.47	2.75	14.42	16.85	78.29	21.23	0.27	0.27	190.62	24.00
	3.0	6.236	7.94	59.02	2.73	16.86	19.87	92.19	24.76	0.27	0.27	160.37	19.33
	4.0	8.155	10.40	74.69	2.68	21.34	25.54	118.24	31.16	0.27	0.27	122.63	13.50
	5.0	9.994	12.70	88.50	2.64	25.29	30.76	142.00	36.76	0.27	0.27	100.06	10.00
	6.0	11.754	15.00	100.56	2.59	28.73	35.53	163.49	41.60	0.26	0.27	85.07	7.67
	6.3	12.267	15.60	103.85	2.58	29.67	36.88	169.49	42.92	0.26	0.26	81.52	8.11
75 × 75	1.6	3.666	4.67	41.80	2.99	11.15	12.83	63.98	16.53	0.30	0.30	272.77	42.88
	2.3	5.206	6.63	58.14	2.96	15.50	18.02	89.78	22.89	0.29	0.29	192.09	28.61
	2.5	5.639	7.18	62.60	2.95	16.69	19.46	96.90	24.61	0.29	0.29	177.35	26.00
	3.0	6.707	8.54	73.35	2.93	19.56	22.97	114.26	28.75	0.29	0.29	149.11	21.00
	4.0	8.783	11.20	93.16	2.89	24.84	29.61	146.96	36.33	0.29	0.29	113.86	14.75
	4.5	9.791	12.50	102.26	2.86	27.27	32.74	162.32	39.78	0.29	0.29	102.13	12.67
	5.0	10.779	13.70	110.83	2.84	29.55	35.76	177.02	43.02	0.29	0.29	92.77	11.00
	6.0	12.696	16.20	126.43	2.80	33.72	41.42	204.47	48.89	0.28	0.29	78.76	8.50
80 × 80	2.3	5.567	7.09	71.05	3.17	17.76	20.60	109.50	26.24	0.31	0.31	179.63	30.78
	3.0	7.178	9.14	89.82	3.13	22.46	26.30	139.59	33.04	0.31	0.31	139.32	22.67
	4.0	9.411	12.00	114.46	3.09	28.61	33.98	179.98	41.90	0.31	0.31	106.26	16.00
	4.5	10.498	13.40	125.84	3.07	31.46	37.62	199.05	45.96	0.31	0.31	95.26	13.78
	5.0	11.564	14.70	136.61	3.05	34.15	41.13	217.37	49.79	0.31	0.31	86.47	12.00
	6.0	13.638	17.40	156.40	3.00	39.10	47.76	251.77	56.78	0.30	0.31	73.32	9.33
89 × 89	3.0	8.025	10.20	125.36	3.50	28.17	32.85	194.13	41.53	0.35	0.35	124.60	25.67
	4.0	10.541	13.40	160.52	3.46	36.07	42.59	251.22	52.92	0.35	0.35	94.87	18.25
	4.5	11.769	15.00	176.93	3.44	39.76	47.24	278.37	58.20	0.34	0.34	84.97	15.78
	5.0	12.977	16.50	192.57	3.41	43.27	51.74	304.58	63.22	0.34	0.34	77.06	13.80
	6.0	15.334	19.50	221.61	3.37	49.80	60.30	354.23	72.48	0.34	0.34	65.21	10.83
90 × 90	2.3	6.289	8.01	102.31	3.57	22.74	26.28	157.21	33.64	0.35	0.35	159.00	35.13
	3.0	8.120	10.30	129.81	3.54	28.85	33.63	200.94	42.53	0.35	0.35	123.16	26.00
	4.0	10.667	13.60	166.30	3.50	36.95	43.61	260.14	54.23	0.35	0.35	93.75	18.50
	4.5	11.911	15.20	183.34	3.48	40.74	48.38	288.30	59.65	0.35	0.35	83.96	16.00
	5.0	13.134	16.70	199.59	3.45	44.35	52.99	315.50	64.81	0.35	0.35	76.14	14.00
	6.0	15.522	19.80	229.81	3.41	51.07	61.79	367.08	74.34	0.34	0.35	64.42	11.00
	6.3	16.223	20.70	238.29	3.40	52.95	64.31	381.81	77.01	0.34	0.34	61.64	11.29
	8.0	20.059	25.60	281.49	3.32	62.55	77.65	458.95	90.50	0.34	0.34	49.85	8.25
100 × 100	2.3	7.011	8.93	141.61	3.98	28.32	32.65	217.07	41.96	0.39	0.39	142.63	39.48
	3.0	9.062	11.50	180.19	3.95	36.04	41.86	278.05	53.21	0.39	0.39	110.36	29.33
	4.0	11.923	15.20	231.81	3.91	46.36	54.44	361.10	68.15	0.39	0.39	83.87	21.00
	4.5	13.324	17.00	256.11	3.88	51.22	60.48	400.85	75.15	0.39	0.39	75.05	18.22
	5.0	14.704	18.70	279.43	3.86	55.89	66.36	439.41	81.83	0.39	0.39	68.01	16.00
	6.0	17.406	22.20	323.18	3.82	64.64	77.61	513.01	94.30	0.38	0.39	57.45	12.67
	6.3	18.201	23.20	335.57	3.80	67.11	80.86	534.18	97.82	0.38	0.38	54.94	12.87
	8.0	22.571	28.80	399.60	3.73	79.92	98.18	646.24	115.89	0.38	0.38	44.30	9.50
	9.0	25.034	31.90	432.52	3.68	86.50	107.52	705.92	125.12	0.38	0.38	39.95	8.11
120 × 120	2.3	8.456	10.80	248.01	4.80	41.34	47.45	378.80	61.35	0.47	0.47	118.26	48.17
	3.0	10.946	13.90	316.93	4.77	52.82	61.02	486.74	78.17	0.47	0.47	91.36	36.00
	4.0	14.435	18.40	410.27	4.72	68.38	79.71	635.07	100.81	0.47	0.47	69.28	26.00
	4.5	16.150	20.60	454.72	4.70	75.79	88.75	706.66	111.53	0.47	0.47	61.92	22.67
	5.0	17.844	22.70	497.71	4.68	82.95	97.59	776.53	121.86	0.47	0.47	56.04	20.00
	6.0	21.174	27.00	579.43	4.63	96.57	114.67	911.16	141.40	0.46	0.47	47.23	16.00
	6.3	22.158	28.20	602.85	4.62	100.48	119.64	950.23	146.98	0.46	0.46	45.13	16.05
	8.0	27.595	35.20	726.31	4.55	121.05	146.46	1160.14	176.22	0.46	0.46	36.24	12.00
	9.0	30.686	39.10	791.78	4.50	131.96	161.19	1274.57	191.63	0.46	0.46	32.59	10.33
125 × 125	3.0	11.417	14.50	359.49	4.97	57.52	66.38	551.58	85.17	0.49	0.49	87.59	37.67
	4.0	15.063	19.20	465.93	4.93	74.55	86.78	720.32	109.97	0.49	0.49	66.39	27.25
	4.5	16.856	21.50	516.73	4.91	82.68	96.66	801.89	121.74	0.49	0.49	59.33	23.78
	5.0	18.629	23.70	565.95	4.88	90.55	106.34	881.60	133.11	0.49	0.49	53.68	21.00
	6.0	22.116	28.20	659.72	4.84	105.56	125.06	1035.47	154.67	0.48	0.49	45.22	16.83
	6.3	23.147	29.50	686.66	4.83	109.87	130.51	1080.19	160.84	0.48	0.48	43.20	16.84
	8.0	28.851	36.80	829.17	4.75	132.67	160.03	1321.15	193.30	0.48	0.48	34.66	12.63
9.0	32.099	40.90	905.17	4.70	144.83	176.29	1453.05	210.49	0.48	0.48	31.15	10.89	
140 × 140	4.0	16.947	21.60	662.62	5.54	94.66	109.78	1021.09	139.86	0.55	0.55	59.01	31.00
	5.0	20.984	26.70	807.46	5.50	115.35	134.82	1252.72	169.88	0.55	0.55	47.65	24.00
	6.0	24.942	31.80	944.35	5.45	134.91	158.92	1475.02	198.08	0.54	0.55	40.09	19.33
	6.3	26.114	33.30	983.89	5.44	140.56	165.97	1539.90	206.20	0.54	0.54	38.29	19.22
	8.0	32.619	41.60	1195.00	5.36	170.71	204.33	1891.84	249.31	0.54	0.54	30.66	14.50
	10.0	39.978	50.90	1416.06	5.27	202.29	246.09	2271.96	294.07	0.53	0.53	25.01	11.00
	12.0	47.017	59.90	1608.97	5.18	229.85	284.26	2615.76	332.82	0.53	0.53	21.27	9.17
	12.5	48.728	62.10	1652.96	5.16	236.14	293.26	2696.08	341.61	0.53	0.53	20.52	8.70

Hot Finished Square Hollow Sections

BS EN 10210

Designation		Weight	Cross Sectional Area	Second Moment of Area	Radius of Gyration	Elastic Modulus	Plastic Modulus	Torsional inertia content	Torsional modulus content	Superficial Area per metre length	Superficial Area per metre length	Nominal Length per tonne	Ratio for Local Buckling
Size	Thickness												
$B \times B$	T	M	A	I	i	W_{el}	W_{pl}	L_t	C_t	A_s	A_s	L	Flange
mm	mm	Kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m ² /m	m	B/T
150 × 150	3.0	13.772	17.50	629.98	5.99	84.00	96.52	962.95	124.62	0.59	0.59	72.61	46.00
	4.0	18.203	23.20	820.51	5.95	109.40	126.61	1262.11	161.78	0.59	0.59	54.94	33.50
	4.5	20.389	26.00	912.23	5.93	121.63	141.28	1407.63	179.59	0.59	0.59	49.05	29.33
	5.0	22.554	28.70	1001.63	5.90	133.55	155.69	1550.47	196.89	0.59	0.59	44.34	26.00
	6.0	26.826	34.20	1173.56	5.86	156.47	183.75	1828.09	230.02	0.58	0.59	37.28	21.00
	6.3	28.092	35.80	1223.37	5.85	163.12	191.97	1909.29	239.59	0.58	0.58	35.60	20.81
	8.0	35.131	44.80	1490.60	5.77	198.75	236.87	2351.36	290.65	0.58	0.58	28.46	15.75
	9.0	39.164	49.90	1636.11	5.73	218.15	261.95	2597.12	318.27	0.58	0.58	25.53	13.67
	10.0	43.118	54.90	1773.21	5.68	236.43	286.05	2832.38	344.19	0.57	0.57	23.19	12.00
	12.0	50.785	64.70	2022.96	5.59	269.73	331.37	3271.57	391.14	0.57	0.57	19.69	10.00
	12.5	52.653	67.10	2080.44	5.57	277.39	342.11	3374.87	401.90	0.57	0.57	18.99	9.50
	160 × 160	4.0	19.459	24.80	1001.67	6.36	125.21	144.65	1538.35	185.30	0.63	0.63	51.39
5.0		24.124	30.70	1224.67	6.31	153.08	178.05	1891.98	225.90	0.63	0.63	41.45	28.00
6.0		28.710	36.60	1437.13	6.27	179.64	210.37	2233.38	264.36	0.62	0.63	34.83	22.67
6.3		30.071	38.30	1498.85	6.26	187.36	219.86	2333.42	275.49	0.62	0.62	33.26	22.40
8.0		37.643	48.00	1831.29	6.18	228.91	271.80	2879.72	335.17	0.62	0.62	26.57	17.00
10.0		46.258	58.90	2185.82	6.09	273.23	329.01	3477.87	398.30	0.61	0.61	21.62	13.00
12.0		54.553	69.50	2502.41	6.00	312.80	382.08	4028.28	454.23	0.61	0.61	18.33	10.83
12.5		56.578	72.10	2575.82	5.98	321.98	394.71	4158.47	467.15	0.61	0.61	17.67	10.30
16.0		70.189	89.40	3028.35	5.82	378.54	476.09	4987.52	546.30	0.60	0.60	14.25	7.50
178 × 178	4.0	21.720	27.70	1391.51	7.09	156.35	180.13	2131.97	231.68	0.70	0.70	46.04	40.50
	4.5	24.345	31.00	1550.05	7.07	174.16	201.27	2381.18	257.72	0.70	0.70	41.08	35.56
	5.0	26.950	34.30	1705.26	7.05	191.60	222.09	2626.58	283.15	0.70	0.70	37.11	31.60
	6.0	32.102	40.90	2005.83	7.00	225.37	262.84	3106.01	332.20	0.70	0.70	31.15	25.67
	9.0	47.077	60.00	2830.84	6.87	318.07	377.91	4453.90	465.62	0.69	0.69	21.24	16.78
180 × 180	4.0	21.971	28.00	1440.21	7.17	160.02	184.32	2206.05	237.15	0.71	0.71	45.51	41.00
	4.5	24.628	31.40	1604.48	7.15	178.28	205.95	2464.13	263.84	0.71	0.71	40.60	36.00
	5.0	27.264	34.70	1765.34	7.13	196.15	227.29	2718.32	289.91	0.71	0.71	36.68	32.00
	6.0	32.478	41.40	2076.98	7.09	230.78	269.03	3215.05	340.22	0.70	0.71	30.79	26.00
	6.3	34.027	43.30	2167.88	7.07	240.88	281.31	3361.05	354.85	0.70	0.70	29.39	25.57
	8.0	42.667	54.40	2660.76	7.00	295.64	348.88	4162.19	433.81	0.70	0.70	23.44	19.50
	9.0	47.642	60.70	2933.37	6.95	325.93	387.00	4612.76	477.23	0.70	0.70	20.99	17.00
200 × 200	4.0	24.483	31.20	1991.05	7.99	199.11	228.79	3043.41	295.39	0.79	0.79	40.84	46.00
	4.5	27.454	35.00	2220.38	7.97	222.04	255.82	3401.98	329.01	0.79	0.79	36.43	40.44
	5.0	30.404	38.70	2445.48	7.95	244.55	282.52	3755.73	361.92	0.79	0.79	32.89	36.00
	6.0	36.246	46.20	2883.10	7.90	288.31	334.88	4448.82	425.68	0.78	0.79	27.59	29.33
	6.3	37.983	48.40	3011.15	7.89	301.12	350.33	4653.01	444.29	0.78	0.78	26.33	28.75
	8.0	47.691	60.80	3709.01	7.81	370.90	435.55	5777.65	545.23	0.78	0.78	20.97	22.00
	9.0	53.294	67.90	4097.84	7.77	409.78	483.87	6413.56	601.17	0.78	0.78	18.76	19.22
	10.0	58.818	74.90	4470.92	7.72	447.09	530.87	7030.57	654.63	0.77	0.77	17.00	17.00
	12.0	69.625	88.70	5170.91	7.64	517.09	620.91	8208.19	754.42	0.77	0.77	14.36	14.17
	12.5	72.278	92.10	5336.49	7.61	533.65	642.60	8490.89	777.93	0.77	0.77	13.84	13.50
	16.0	90.285	115.00	6393.54	7.46	639.35	785.47	10339.77	927.14	0.76	0.76	11.08	10.00
220 × 220	5.0	33.544	42.70	3281.08	8.76	298.28	343.75	5028.21	441.93	0.87	0.87	29.81	40.00
	6.0	40.014	51.00	3874.69	8.72	352.24	407.94	5963.50	520.74	0.86	0.87	24.99	32.67
	6.3	41.940	53.40	4048.82	8.71	368.07	426.90	6239.55	543.80	0.86	0.86	23.84	31.92
	8.0	52.715	67.20	5001.66	8.63	454.70	531.82	7764.50	669.45	0.86	0.86	18.97	24.50
	10.0	65.098	82.90	6050.24	8.54	550.02	649.79	9473.36	806.76	0.85	0.85	15.36	19.00
	12.0	77.161	98.30	7022.77	8.45	638.43	761.92	11090.78	933.23	0.85	0.85	12.96	15.83
	12.5	80.128	102.00	7254.29	8.43	659.48	789.05	11480.92	963.22	0.85	0.85	12.48	15.10
	16.0	100.333	128.00	8748.85	8.27	795.35	968.97	14053.84	1155.72	0.84	0.84	9.97	11.25
250 × 250	5.0	38.254	48.70	4860.97	9.99	388.88	446.85	7430.20	576.94	0.99	0.99	26.14	46.00
	6.0	45.666	58.20	5751.82	9.94	460.15	531.02	8825.21	681.32	0.98	0.99	21.90	37.67
	6.3	47.874	61.00	6013.92	9.93	481.11	555.93	9237.84	711.96	0.98	0.98	20.89	36.68
	8.0	60.251	76.80	7454.85	9.86	596.39	694.23	11525.12	879.75	0.98	0.98	16.60	28.25
	9.0	67.424	85.90	8267.70	9.81	661.42	773.30	12830.24	973.95	0.98	0.98	14.83	24.78
	10.0	74.518	94.90	9055.21	9.77	724.42	850.68	14105.60	1064.91	0.97	0.97	13.42	22.00
	12.0	88.465	113.00	10555.56	9.68	844.44	1000.45	16567.46	1237.38	0.97	0.97	11.30	18.33
	12.5	91.903	117.00	10915.33	9.66	873.23	1036.85	17164.48	1278.58	0.97	0.97	10.88	17.50
	16.0	115.405	147.00	13266.72	9.50	1061.34	1280.20	21138.38	1546.40	0.96	0.96	8.67	13.13
260 × 260	6.0	47.550	60.60	6491.06	10.40	499.31	575.64	9950.77	739.65	1.02	1.02	21.03	39.33
	6.3	49.853	63.50	6787.99	10.30	522.15	602.72	10417.32	773.05	1.02	1.02	20.06	38.27
	8.0	62.763	80.00	8422.50	10.30	647.88	753.17	13005.96	956.25	1.02	1.02	15.93	29.50
	10.0	77.658	98.90	10242.46	10.20	787.88	923.65	15931.83	1158.95	1.01	1.01	12.88	23.00
	12.0	92.233	117.00	11953.69	10.10	919.51	1087.15	18729.23	1348.35	1.01	1.01	10.84	19.17
	12.5	95.828	122.00	12364.83	10.10	951.14	1126.95	19408.61	1393.68	1.01	1.01	10.44	18.30
	16.0	120.429	153.00	15060.91	9.91	1158.53	1393.55	23941.86	1689.39	1.00	1.00	8.30	13.75

Hot Finished Square Hollow Sections

BS EN 10210

Designation		Weight	Cross Sectional Area	Second Moment of Area	Radius of Gyration	Elastic Modulus	Plastic Modulus	Torsional inertia content	Torsional modulus content	Superficial Area per metre length	Superficial Area per metre length	Nominal Length per tonne	Ratio for Local Buckling
Size	Thickness												
$B \times B$	T	M	A	I	i	W_{el}	W_{pl}	L_t	C_t	A_s	A_s	L	Flange
mm	mm	kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m ² /m	m	B/T
300 × 300	6.0	55.086	70.20	10079.70	12.00	671.98	772.15	15407.26	996.95	1.18	1.18	18.15	46.00
	6.3	57.765	73.60	10546.68	12.00	703.11	808.79	16136.29	1042.61	1.18	1.18	17.31	44.62
	9.0	81.554	104.00	14595.70	11.90	973.05	1130.23	22522.15	1436.68	1.18	1.18	12.26	30.33
	12.0	107.305	137.00	18776.89	11.70	1251.79	1469.98	29249.38	1840.17	1.17	1.17	9.32	22.50
	12.5	111.528	142.00	19441.96	11.70	1296.13	1524.85	30333.13	1904.03	1.17	1.17	8.97	21.50
	16.0	140.525	179.00	23849.56	11.50	1589.97	1894.94	37621.71	2325.16	1.16	1.16	7.12	16.25
350 × 350	6.0	64.506	82.20	16166.76	14.00	923.82	1058.28	24644.96	1372.57	1.38	1.38	15.50	54.33
	6.3	67.656	86.20	16924.42	14.00	967.11	1108.90	25820.85	1436.26	1.38	1.38	14.78	52.56
	8.0	85.371	109.00	21128.76	13.90	1207.36	1391.60	32383.57	1788.69	1.38	1.38	11.71	40.75
	9.0	95.684	122.00	23531.83	13.90	1344.68	1554.65	36164.28	1989.37	1.38	1.38	10.45	35.89
	10.0	105.918	135.00	25883.56	13.90	1479.06	1715.32	39886.15	2185.24	1.37	1.37	9.44	32.00
	12.0	126.145	161.00	30434.90	13.80	1739.14	2029.52	47153.92	2562.85	1.37	1.37	7.93	26.67
	12.5	131.153	167.00	31541.38	13.70	1802.36	2106.59	48934.32	2654.36	1.37	1.37	7.62	25.50
	16.0	165.645	211.00	38942.07	13.60	2225.26	2629.67	60989.74	3263.62	1.36	1.36	6.04	19.38

ALPINEPIPE.COM