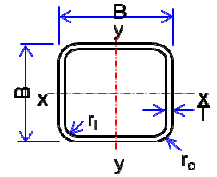
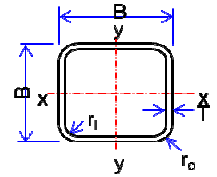


Hot finished Square Hollow Sections to EN 10210-2													
Designation		Normal Corner		Mass per metre	Area of Section	Second Moment of Area	Radius of Gyration	Elastic Modulus	Plastic Modulus	Torsional		Section Surface Area	Nominal Length
Size	Thickness	External	Internal							Inertia	Modulus		
B	T	$r_o$	$r_i$	M	A	I	r	Z	S	J	C	$A_s$	Tonne
mm x mm	mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
20	2	3	2	1.1	1.4	0.739	0.727	0.739	0.93	1.22	1.07	0.0748	912
20	2.5	3.75	2.5	1.32	1.68	0.835	0.705	0.835	1.08	1.41	1.2	0.0736	757
25	2	3	2	1.41	1.8	1.56	0.932	1.25	1.53	2.52	1.81	0.0948	709
25	2.5	3.75	2.5	1.71	2.18	1.81	0.909	1.44	1.82	2.97	2.08	0.0936	584
25	3	4.5	3	2	2.54	2	0.886	1.6	2.06	3.35	2.3	0.0923	501
30	2	3	2	1.72	2.2	2.84	1.14	1.89	2.29	4.53	2.75	0.115	580
30	2.5	3.75	2.5	2.11	2.68	3.33	1.11	2.22	2.74	5.4	3.22	0.114	475
30	3	4.5	3	2.47	3.14	3.74	1.09	2.5	3.14	6.16	3.6	0.112	405
40	2.5	3.75	2.5	2.89	3.68	8.54	1.52	4.27	5.14	13.6	6.22	0.154	346
40	3	4.5	3	3.41	4.34	9.78	1.5	4.89	5.97	15.7	7.1	0.152	293
40	3.2	4.8	3.2	3.61	4.6	10.2	1.49	5.11	6.28	16.5	7.42	0.152	277
40	3.6	5.4	3.6	4.01	5.1	11.1	1.47	5.54	6.88	18.1	8.01	0.151	250
40	4	6	4	4.39	5.59	11.8	1.45	5.91	7.44	19.5	8.54	0.15	228
40	5	7.5	5	5.28	6.73	13.4	1.41	6.68	8.66	22.5	9.6	0.147	189
50	2.5	3.75	2.5	3.68	4.68	17.5	1.93	6.99	8.29	27.5	10.2	0.194	272
50	3	4.5	3	4.35	5.54	20.2	1.91	8.08	9.7	32.1	11.8	0.192	230
50	3.2	4.8	3.2	4.62	5.88	21.2	1.9	8.49	10.2	33.8	12.4	0.192	217
50	3.6	5.4	3.6	5.14	6.54	23.2	1.88	9.27	11.3	37.2	13.5	0.191	195
50	4	6	4	5.64	7.19	25	1.86	9.99	12.3	40.4	14.5	0.19	177
50	5	7.5	5	6.85	8.73	28.9	1.82	11.6	14.5	47.6	16.7	0.187	146
50	6	9	6	7.99	10.2	32	1.77	12.8	16.5	53.6	18.4	0.185	125
50	6.3	9.45	6.3	8.31	10.6	32.8	1.76	13.1	17	55.2	18.8	0.184	120
60	2.5	3.75	2.5	4.46	5.68	31.1	2.34	10.4	12.2	48.5	15.2	0.234	224
60	3	4.5	3	5.29	6.74	36.2	2.32	12.1	14.3	56.9	17.7	0.232	189
60	3.2	4.8	3.2	5.62	7.16	38.2	2.31	12.7	15.2	60.2	18.6	0.232	178
60	3.6	5.4	3.6	6.27	7.98	41.9	2.29	14	16.8	66.5	20.4	0.231	160
60	4	6	4	6.9	8.79	45.4	2.27	15.1	18.3	72.5	22	0.23	145
60	5	7.5	5	8.42	10.7	53.3	2.23	17.8	21.9	86.4	25.7	0.227	119
60	6	9	6	9.87	12.6	59.9	2.18	20	25.1	98.6	28.8	0.225	101
60	6.3	9.45	6.3	10.3	13.1	61.6	2.17	20.5	26	102	29.6	0.224	97.2
60	8	12	8	12.5	16	69.7	2.09	23.2	30.4	118	33.4	0.219	79.9
70	3	4.5	3	6.24	7.94	59	2.73	16.9	19.9	92.2	24.8	0.272	160
70	3.2	4.8	3.2	6.63	8.44	62.3	2.72	17.8	21	97.6	26.1	0.272	151
70	3.6	5.4	3.6	7.4	9.42	68.6	2.7	19.6	23.3	108	28.7	0.271	135
70	4	6	4	8.15	10.4	74.7	2.68	21.3	25.5	118	31.2	0.27	123
70	5	7.5	5	9.99	12.7	88.5	2.64	25.3	30.8	142	36.8	0.267	100
70	6	9	6	11.8	15	101	2.59	28.7	35.5	163	41.6	0.265	85.1
70	6.3	9.45	6.3	12.3	15.6	104	2.58	29.7	36.9	169	42.9	0.264	81.5
70	8	12	8	15	19.2	120	2.5	34.2	43.8	200	49.2	0.259	66.5
80	3	4.5	3	7.18	9.14	89.8	3.13	22.5	26.3	140	33	0.312	139
80	3.2	4.8	3.2	7.63	9.72	95	3.13	23.7	27.9	148	34.9	0.312	131
80	3.6	5.4	3.6	8.53	10.9	105	3.11	26.2	31	164	38.5	0.311	117
80	4	6	4	9.41	12	114	3.09	28.6	34	180	41.9	0.31	106
80	5	7.5	5	11.6	14.7	137	3.05	34.2	41.1	217	49.8	0.307	86.5
80	6	9	6	13.6	17.4	156	3	39.1	47.8	252	56.8	0.305	73.3
80	6.3	9.45	6.3	14.2	18.1	162	2.99	40.5	49.7	262	58.7	0.304	70.2
80	8	12	8	17.5	22.4	189	2.91	47.3	59.5	312	68.3	0.299	57
90	3.6	5.4	3.6	9.66	12.3	152	3.52	33.8	39.7	237	49.7	0.351	104
90	4	6	4	10.7	13.6	166	3.5	37	43.6	260	54.2	0.35	93.7
90	5	7.5	5	13.1	16.7	200	3.45	44.4	53	316	64.8	0.347	76.1
90	6	9	6	15.5	19.8	230	3.41	51.1	61.8	367	74.3	0.345	64.4
90	6.3	9.45	6.3	16.2	20.7	238	3.4	53	64.3	382	77	0.344	61.6
90	8	12	8	20.1	25.6	281	3.32	62.6	77.6	459	90.5	0.339	49.9
100	3.6	5.4	3.6	10.8	13.7	212	3.92	42.3	49.5	328	62.3	0.391	92.7
100	4	6	4	11.9	15.2	232	3.91	46.4	54.4	361	68.2	0.39	83.9
100	5	7.5	5	14.7	18.7	279	3.86	55.9	66.4	439	81.8	0.387	68
100	6	9	6	17.4	22.2	323	3.82	64.6	77.6	513	94.3	0.385	57.5
100	6.3	9.45	6.3	18.2	23.2	336	3.8	67.1	80.9	534	97.8	0.384	54.9
100	8	12	8	22.6	28.8	400	3.73	79.9	98.2	646	116	0.379	44.3
100	10	15	10	27.4	34.9	462	3.64	92.4	116	761	133	0.374	36.5
120	4	6	4	14.4	18.4	410	4.72	68.4	79.7	635	101	0.47	69.3



Hot finished Square Hollow Sections to EN 10210-2													
Designation		Normal Corner		Mass per metre	Area of Section	Second Moment of Area	Radius of Gyration	Elastic Modulus	Plastic Modulus	Torsional		Section Surface Area	Nominal Length
Size	Thickness	External Radius	Internal Radius							Inertia	Modulus		
B	T	$r_o$	$r_i$	M	A	I	r	Z	S	J	C	$A_s$	Tonne
mm x mm	mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
120	5	7.5	5	17.8	22.7	498	4.68	83	97.6	777	122	0.467	56
120	6	9	6	21.2	27	579	4.63	96.6	115	911	141	0.465	47.2
120	6.3	9.45	6.3	22.2	28.2	603	4.62	100	120	950	147	0.464	45.1
120	8	12	8	27.6	35.2	726	4.55	121	146	1160	176	0.459	36.2
120	10	15	10	33.7	42.9	852	4.46	142	175	1382	206	0.454	29.7
120	12	18	12	39.5	50.3	958	4.36	160	201	1578	230	0.449	25.3
120	12.5	18.75	12.5	40.9	52.1	982	4.34	164	207	1623	236	0.448	24.5
140	5	7.5	5	21	26.7	807	5.5	115	135	1253	170	0.547	47.7
140	6	9	6	24.9	31.8	944	5.45	135	159	1475	198	0.545	40.1
140	6.3	9.45	6.3	26.1	33.3	984	5.44	141	166	1540	206	0.544	38.3
140	8	12	8	32.6	41.6	1195	5.36	171	204	1892	249	0.539	30.7
140	10	15	10	40	50.9	1416	5.27	202	246	2272	294	0.534	25
140	12	18	12	47	59.9	1609	5.18	230	284	2616	333	0.529	21.3
140	12.5	18.75	12.5	48.7	62.1	1653	5.16	236	293	2696	342	0.528	20.5
150	5	7.5	5	22.6	28.7	1002	5.9	134	156	1550	197	0.587	44.3
150	6	9	6	26.8	34.2	1174	5.86	156	184	1828	230	0.585	37.3
150	6.3	9.45	6.3	28.1	35.8	1223	5.85	163	192	1909	240	0.584	35.6
150	8	12	8	35.1	44.8	1491	5.77	199	237	2351	291	0.579	28.5
150	10	15	10	43.1	54.9	1773	5.68	236	286	2832	344	0.574	23.2
150	12	18	12	50.8	64.7	2023	5.59	270	331	3272	391	0.569	19.7
150	12.5	18.75	12.5	52.7	67.1	2080	5.57	277	342	3375	402	0.568	19
150	16	24	16	65.2	83	2430	5.41	324	411	4026	467	0.559	15.3
160	5	7.5	5	24.1	30.7	1225	6.31	153	178	1892	226	0.627	41.5
160	6	9	6	28.7	36.6	1437	6.27	180	210	2233	264	0.625	34.8
160	6.3	9.45	6.3	30.1	38.3	1499	6.26	187	220	2333	275	0.624	33.3
160	8	12	8	37.6	48	1831	6.18	229	272	2880	335	0.619	26.6
160	10	15	10	46.3	58.9	2186	6.09	273	329	3478	398	0.614	21.6
160	12	18	12	54.6	69.5	2502	6	313	382	4028	454	0.609	18.3
160	12.5	18.75	12.5	56.6	72.1	2576	5.98	322	395	4158	467	0.608	17.7
160	16	24	16	70.2	89.4	3028	5.82	379	476	4988	546	0.599	14.2
180	5	7.5	5	27.3	34.7	1765	7.13	196	227	2718	290	0.707	36.7
180	6	9	6	32.5	41.4	2077	7.09	231	269	3215	340	0.705	30.8
180	6.3	9.45	6.3	34	43.3	2168	7.07	241	281	3361	355	0.704	29.4
180	8	12	8	42.7	54.4	2661	7	296	349	4162	434	0.699	23.4
180	10	15	10	52.5	66.9	3193	6.91	355	424	5048	518	0.694	19
180	12	18	12	62.1	79.1	3677	6.82	409	494	5873	595	0.689	16.1
180	12.5	18.75	12.5	64.4	82.1	3790	6.8	421	511	6070	613	0.688	15.5
180	16	24	16	80.2	102	4504	6.64	500	621	7343	724	0.679	12.5
200	5	7.5	5	30.4	38.7	2445	7.95	245	283	3756	362	0.787	32.9
200	6	9	6	36.2	46.2	2883	7.9	288	335	4449	426	0.785	27.6
200	6.3	9.45	6.3	38	48.4	3011	7.89	301	350	4653	444	0.784	26.3
200	8	12	8	47.7	60.8	3709	7.81	371	436	5778	545	0.779	21
200	10	15	10	58.8	74.9	4471	7.72	447	531	7031	655	0.774	17
200	12	18	12	69.6	88.7	5171	7.64	517	621	8208	754	0.769	14.4
200	12.5	18.75	12.5	72.3	92.1	5336	7.61	534	643	8491	778	0.768	13.8
200	16	24	16	90.3	115	6394	7.46	639	785	10340	927	0.759	11.1
220	6	9	6	40	51	3875	8.72	352	408	5963	521	0.865	25
220	6.3	9.45	6.3	41.9	53.4	4049	8.71	368	427	6240	544	0.864	23.8
220	8	12	8	52.7	67.2	5002	8.63	455	532	7765	669	0.859	19
220	10	15	10	65.1	82.9	6050	8.54	550	650	9473	807	0.854	15.4
220	12	18	12	77.2	98.3	7023	8.45	638	762	11091	933	0.849	13
220	12.5	18.75	12.5	80.1	102	7254	8.43	659	789	11481	963	0.848	12.5
220	16	24	16	100	128	8749	8.27	795	969	14054	1156	0.839	9.97
250	5	7.5	5	38.3	48.7	4861	9.99	389	447	7430	577	0.987	26.1
250	6	9	6	45.7	58.2	5752	9.94	460	531	8825	681	0.985	21.9
250	6.3	9.45	6.3	47.9	61	6014	9.93	481	556	9238	712	0.984	20.9
250	8	12	8	60.3	76.8	7455	9.86	596	694	11525	880	0.979	16.6
250	10	15	10	74.5	94.9	9055	9.77	724	851	14106	1065	0.974	13.4
250	12	18	12	88.5	113	10556	9.68	844	1000	16567	1237	0.969	11.3
250	12.5	18.75	12.5	91.9	117	10915	9.66	873	1037	17164	1279	0.968	10.9
250	16	24	16	115	147	13267	9.5	1061	1280	21138	1546	0.959	8.67



Hot finished Square Hollow Sections to EN 10210-2													
Designation		Normal Corner		Mass per metre	Area of Section	Second Moment of Area	Radius of Gyration	Elastic Modulus	Plastic Modulus	Torsional		Section Surface Area	Nominal Length
Size	Thickness	External	Internal							Inertia	Modulus		
B	T	r <sub>o</sub>	r <sub>i</sub>	M	A	I	r	Z	S	J	C	A <sub>s</sub>	Tonne
mm x mm	mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
260	6	9	6	47.6	60.6	6491	10.4	499	576	9951	740	1.02	21
260	6.3	9.45	6.3	49.9	63.5	6788	10.3	522	603	10417	773	1.02	20.1
260	8	12	8	62.8	80	8423	10.3	648	753	13006	956	1.02	15.9
260	10	15	10	77.7	98.9	10242	10.2	788	924	15932	1159	1.01	12.9
260	12	18	12	92.2	117	11954	10.1	920	1087	18729	1348	1.01	10.8
260	12.5	18.75	12.5	95.8	122	12365	10.1	951	1127	19409	1394	1.01	10.4
260	16	24	16	120	153	15061	9.91	1159	1394	23942	1689	0.999	8.3
300	6	9	6	55.1	70.2	10080	12	672	772	15407	997	1.18	18.2
300	6.3	9.45	6.3	57.8	73.6	10547	12	703	809	16136	1043	1.18	17.3
300	8	12	8	72.8	92.8	13128	11.9	875	1013	20194	1294	1.18	13.7
300	10	15	10	90.2	115	16026	11.8	1068	1246	24807	1575	1.17	11.1
300	12	18	12	107	137	18777	11.7	1252	1470	29249	1840	1.17	9.32
300	12.5	18.75	12.5	112	142	19442	11.7	1296	1525	30333	1904	1.17	8.97
300	16	24	16	141	179	23850	11.5	1590	1895	37622	2325	1.16	7.12
350	8	12	8	85.4	109	21129	13.9	1207	1392	32384	1789	1.38	11.7
350	10	15	10	106	135	25884	13.9	1479	1715	39886	2185	1.37	9.44
350	12	18	12	126	161	30435	13.8	1739	2030	47154	2563	1.37	7.93
350	12.5	18.75	12.5	131	167	31541	13.7	1802	2107	48934	2654	1.37	7.62
350	16	24	16	166	211	38942	13.6	2225	2630	60990	3264	1.36	6.04
400	8	12	8	97.9	125	31857	16	1593	1830	48695	2363	1.58	10.2
400	10	15	10	122	155	39128	15.9	1956	2260	60092	2895	1.57	8.22
400	12	18	12	145	185	46130	15.8	2306	2679	71181	3405	1.57	6.9
400	12.5	18.75	12.5	151	192	47839	15.8	2392	2782	73906	3530	1.57	6.63
400	16	24	16	191	243	59344	15.6	2967	3484	92442	4362	1.56	5.24
400	20	30	20	235	300	71535	15.4	3577	4247	112489	5237	1.55	4.25