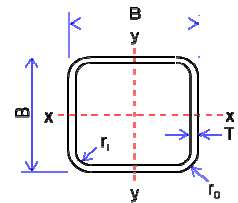
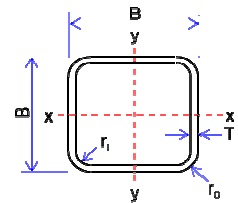


Cold formed Square Hollow Sections to EN 10210														
Designation	Normal Corner			Mass	Area	Second	Radius	Elastic	Plastic	Torsional			Section	Nominal
Size	Thickness	Radius		per	of	Moment	of	Modulus	Modulus	Constants			Surface	Length
B	T	r _o	r _i	M	A	I	r	Z	S	J	C	A _s		
mm x mm	mm	mm	mm	kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m
20	2	4	2	1.05	1.34	0.692	0.72	0.692	0.877	1.21	1.06	0.0731	953	
20	2.5	5	2.5	1.25	1.59	0.766	0.694	0.766	1	1.39	1.19	0.0714	802	
25	2	4	2	1.36	1.74	1.48	0.924	1.19	1.47	2.53	1.8	0.0931	733	
25	2.5	5	2.5	1.64	2.09	1.69	0.899	1.35	1.71	2.97	2.07	0.0914	610	
25	3	6	3	1.89	2.41	1.84	0.874	1.47	1.91	3.33	2.27	0.0897	529	
30	2	4	2	1.68	2.14	2.72	1.13	1.81	2.21	4.54	2.75	0.113	596	
30	2.5	5	2.5	2.03	2.59	3.16	1.1	2.1	2.61	5.4	3.2	0.111	492	
30	3	6	3	2.36	3.01	3.5	1.08	2.34	2.96	6.15	3.58	0.11	423	
40	2	4	2	2.31	2.94	6.94	1.54	3.47	4.13	11.3	5.23	0.153	434	
40	2.5	5	2.5	2.82	3.59	8.22	1.51	4.11	4.97	13.6	6.21	0.151	355	
40	3	6	3	3.3	4.21	9.32	1.49	4.66	5.72	15.8	7.07	0.15	303	
40	4	8	4	4.2	5.35	11.1	1.44	5.54	7.01	19.4	8.48	0.146	238	
50	2	4	2	2.93	3.74	14.1	1.95	5.66	6.66	22.6	8.51	0.193	341	
50	2.5	5	2.5	3.6	4.59	16.9	1.92	6.78	8.07	27.5	10.2	0.191	278	
50	3	6	3	4.25	5.41	19.5	1.9	7.79	9.39	32.1	11.8	0.19	236	
50	4	8	4	5.45	6.95	23.7	1.85	9.49	11.7	40.4	14.4	0.186	183	
50	5	10	5	6.56	8.36	27	1.8	10.8	13.7	47.5	16.6	0.183	152	
60	2	4	2	3.56	4.54	25.1	2.35	8.38	9.79	39.8	12.6	0.233	281	
60	2.5	5	2.5	4.39	5.59	30.3	2.33	10.1	11.9	48.7	15.2	0.231	228	
60	3	6	3	5.19	6.61	35.1	2.31	11.7	14	57.1	17.7	0.23	193	
60	4	8	4	6.71	8.55	43.6	2.26	14.5	17.6	72.6	22	0.226	149	
60	5	10	5	8.13	10.4	50.5	2.21	16.8	20.9	86.4	25.6	0.223	123	
60	6	12	6	9.45	12	56.1	2.16	18.7	23.7	98.4	28.6	0.219	106	
60	6.3	15.75	9.45	9.55	12.2	54.4	2.11	18.1	23.4	100	28.8	0.213	105	
70	2.5	5	2.5	5.17	6.59	49.4	2.74	14.1	16.5	78.5	21.2	0.271	193	
70	3	6	3	6.13	7.81	57.5	2.71	16.4	19.4	92.4	24.7	0.27	163	
70	3.6	7.2	3.6	7.24	9.23	66.5	2.69	19	22.7	108	28.7	0.268	138	
70	4	8	4	7.97	10.1	72.1	2.67	20.6	24.8	119	31.1	0.266	126	
70	5	10	5	9.7	12.4	84.6	2.62	24.2	29.6	142	36.7	0.263	103	
70	6	12	6	11.3	14.4	95.2	2.57	27.2	33.8	163	41.4	0.259	88.3	
70	6.3	15.75	9.45	11.5	14.7	93.8	2.53	26.8	33.8	168	42.1	0.253	86.7	
80	3	6	3	7.07	9.01	87.8	3.12	22	25.8	140	33	0.31	141	
80	3.6	7.2	3.6	8.37	10.7	102	3.09	25.5	30.2	165	38.4	0.308	119	
80	4	8	4	9.22	11.7	111	3.07	27.8	33.1	180	41.8	0.306	108	
80	5	10	5	11.3	14.4	131	3.03	32.9	39.7	218	49.7	0.303	88.7	
80	6	12	6	13.2	16.8	149	2.98	37.3	45.8	252	56.6	0.299	75.7	
80	6.3	15.75	9.45	13.5	17.2	149	2.94	37.1	46.1	261	57.9	0.293	74	
80	8	20	12	16.4	20.8	168	2.84	42.1	53.9	307	66.6	0.286	61.1	
90	3	6	3	8.01	10.2	127	3.53	28.3	33	201	42.5	0.35	125	
90	3.6	7.2	3.6	9.5	12.1	149	3.5	33	38.9	238	49.6	0.348	105	
90	4	8	4	10.5	13.3	162	3.48	36	42.6	261	54.2	0.346	95.4	
90	5	10	5	12.8	16.4	193	3.43	42.9	51.4	316	64.7	0.343	77.9	
90	6	12	6	15.1	19.2	220	3.39	49	59.5	368	74.2	0.339	66.2	
90	6.3	15.75	9.45	15.5	19.7	221	3.35	49.1	60.3	382	76.2	0.333	64.6	
90	8	20	12	18.9	24	255	3.25	56.6	71.3	456	88.8	0.326	53	
100	3	6	3	8.96	11.4	177	3.94	35.4	41.2	279	53.2	0.39	112	
100	4	8	4	11.7	14.9	226	3.89	45.3	53.3	362	68.1	0.386	85.2	
100	5	10	5	14.4	18.4	271	3.84	54.2	64.6	441	81.7	0.383	69.4	
100	6	12	6	17	21.6	311	3.79	62.3	75.1	514	94.1	0.379	58.9	
100	6.3	15.75	9.45	17.5	22.2	314	3.76	62.8	76.4	536	97	0.373	57.3	
100	8	20	12	21.4	27.2	366	3.67	73.2	91.1	645	114	0.366	46.8	
100	10	25	15	25.6	32.6	411	3.55	82.2	105	750	130	0.357	39.1	
100	12	36	24	28.3	36.1	408	3.36	81.6	110	794	136	0.338	35.3	
100	12.5	37.5	25	29.1	37	410	3.33	82.1	111	804	137	0.336	34.4	
120	3	6	3	10.8	13.8	312	4.76	52.1	60.2	488	78.2	0.47	92.3	
120	4	8	4	14.2	18.1	402	4.71	67	78.3	637	101	0.466	70.2	
120	5	10	5	17.5	22.4	485	4.66	80.9	95.4	778	122	0.463	57	
120	6	12	6	20.7	26.4	562	4.61	93.7	112	913	141	0.459	48.2	
120	6.3	15.75	9.45	21.4	27.3	572	4.58	95.3	114	955	146	0.453	46.7	
120	8	20	12	26.4	33.6	677	4.49	113	138	1163	175	0.446	37.9	
120	10	25	15	31.8	40.6	777	4.38	129	162	1376	203	0.437	31.4	
120	12	36	24	35.8	45.7	806	4.2	134	174	1518	219	0.418	27.9	
120	12.5	37.5	25	36.9	47	817	4.17	136	178	1551	223	0.416	27.1	
140	4	8	4	16.8	21.3	652	5.52	93.1	108	1023	140	0.546	59.7	



Cold formed Square Hollow Sections to EN 10210														
Designation	Normal Corner			Mass per metre	Area of Section	Second Moment of Area	Radius of Gyration	Elastic Modulus	Plastic Modulus	Torsional Constants	Inertia Modulus	Section Surface Area	Nominal Length	
	Size	Thickness	Radius											External
B	T	r ₀	r ₁	kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	
mm x mm	mm	mm	mm											
140	5	10	5	20.7	26.4	791	5.48	113	132	1256	170	0.543	48.3	
140	6	12	6	24.5	31.2	920	5.43	131	155	1479	198	0.539	40.8	
140	6.3	15.75	9.45	25.4	32.3	941	5.39	134	160	1550	205	0.533	39.4	
140	8	20	12	31.4	40	1127	5.3	161	194	1901	248	0.526	31.8	
140	10	25	15	38.1	48.6	1312	5.2	187	230	2274	291	0.517	26.2	
140	12	36	24	43.4	55.3	1398	5.03	200	253	2567	322	0.498	23.1	
140	12.5	37.5	25	44.8	57	1425	5	204	259	2634	329	0.496	22.3	
150	4	8	4	18	22.9	808	5.93	108	125	1265	162	0.586	55.5	
150	5	10	5	22.3	28.4	982	5.89	131	153	1554	197	0.583	44.9	
150	6	12	6	26.4	33.6	1146	5.84	153	180	1833	230	0.579	37.9	
150	6.3	15.75	9.45	27.4	34.8	1174	5.8	156	185	1922	239	0.573	36.6	
150	8	20	12	33.9	43.2	1412	5.71	188	226	2364	289	0.566	29.5	
150	10	25	15	41.3	52.6	1653	5.61	220	269	2839	341	0.557	24.2	
150	12	36	24	47.1	60.1	1780	5.44	237	298	3231	380	0.538	21.2	
150	12.5	37.5	25	48.7	62	1817	5.41	242	306	3321	389	0.536	20.5	
150	16	48	32	58.7	74.8	2009	5.18	268	351	3830	440	0.518	17	
160	4	8	4	19.3	24.5	987	6.34	123	143	1541	185	0.626	51.9	
160	5	10	5	23.8	30.4	1202	6.29	150	175	1896	226	0.623	42	
160	6	12	6	28.3	36	1405	6.25	176	206	2239	264	0.619	35.4	
160	6.3	15.75	9.45	29.3	37.4	1442	6.21	180	213	2349	275	0.613	34.1	
160	8	20	12	36.5	46.4	1741	6.12	218	260	2897	334	0.606	27.4	
160	10	25	15	44.4	56.6	2048	6.02	256	311	3490	395	0.597	22.5	
160	12	36	24	50.9	64.9	2224	5.86	278	346	3997	443	0.578	19.6	
160	12.5	37.5	25	52.6	67	2275	5.83	284	356	4114	455	0.576	19	
160	16	48	32	63.7	81.2	2546	5.6	318	413	4799	520	0.558	15.7	
180	4	8	4	21.8	27.7	1422	7.16	158	182	2210	237	0.706	45.9	
180	5	10	5	27	34.4	1737	7.11	193	224	2724	290	0.703	37.1	
180	6	12	6	32.1	40.8	2037	7.06	226	264	3223	340	0.699	31.2	
180	6.3	15.75	9.45	33.3	42.4	2096	7.03	233	273	3383	354	0.693	30	
180	8	20	12	41.5	52.8	2546	6.94	283	336	4189	432	0.686	24.1	
180	10	25	15	50.7	64.6	3017	6.84	335	404	5074	515	0.677	19.7	
180	12	36	24	58.5	74.5	3322	6.68	369	454	5865	584	0.658	17.1	
180	12.5	37.5	25	60.5	77	3406	6.65	378	467	6050	600	0.656	16.5	
180	16	48	32	73.8	94	3887	6.43	432	550	7178	698	0.638	13.6	
200	4	8	4	24.3	30.9	1968	7.97	197	226	3049	295	0.786	41.2	
200	5	10	5	30.1	38.4	2410	7.93	241	279	3763	362	0.783	33.2	
200	6	12	6	35.8	45.6	2833	7.88	283	330	4459	426	0.779	27.9	
200	6.3	15.75	9.45	37.2	47.4	2922	7.85	292	341	4682	444	0.773	26.8	
200	8	20	12	46.5	59.2	3566	7.76	357	421	5815	544	0.766	21.5	
200	10	25	15	57	72.6	4251	7.65	425	508	7072	651	0.757	17.6	
200	12	36	24	66	84.1	4730	7.5	473	576	8230	743	0.738	15.2	
200	12.5	37.5	25	68.3	87	4859	7.47	486	594	8502	765	0.736	14.6	
200	16	48	32	83.8	107	5625	7.26	562	706	10210	901	0.718	11.9	
220	5	10	5	33.2	42.4	3238	8.74	294	340	5038	442	0.863	30.1	
220	6	12	6	39.6	50.4	3813	8.7	347	402	5976	521	0.859	25.3	
220	6.3	15.75	9.45	41.2	52.5	3940	8.66	358	417	6277	543	0.853	24.3	
220	8	20	12	51.5	65.6	4828	8.58	439	516	7815	668	0.846	19.4	
220	10	25	15	63.2	80.6	5782	8.47	526	625	9533	804	0.837	15.8	
220	12	36	24	73.5	93.7	6487	8.32	590	712	11149	922	0.818	13.6	
220	12.5	37.5	25	76.2	97	6674	8.29	607	735	11530	951	0.816	13.1	
220	16	48	32	93.9	120	7812	8.08	710	881	13971	1129	0.798	10.7	
250	5	10	5	38	48.4	4805	9.97	384	442	7443	577	0.983	26.3	
250	6	12	6	45.2	57.6	5672	9.92	454	524	8843	681	0.979	22.1	
250	6.3	15.75	9.45	47.1	60	5873	9.89	470	544	9290	711	0.973	21.2	
250	8	20	12	59.1	75.2	7229	9.8	578	676	11598	878	0.966	16.9	
250	10	25	15	72.7	92.6	8707	9.7	697	822	14197	1062	0.957	13.8	
250	12	36	24	84.8	108	9859	9.55	789	944	16691	1226	0.938	11.8	
250	12.5	37.5	25	88	112	10161	9.52	813	975	17283	1266	0.936	11.4	
250	16	48	32	109	139	12047	9.32	964	1180	21146	1520	0.918	9.18	
260	6	12	6	47.1	60	6405	10.3	493	569	9970	739	1.02	21.2	
260	6.3	15.75	9.45	49.1	62.6	6635	10.3	510	591	10475	772	1.01	20.4	
260	8	20	12	61.6	78.4	8178	10.2	629	734	13087	955	1.01	16.2	
260	10	25	15	75.8	96.6	9865	10.1	759	894	16035	1156	0.997	13.2	
260	12	36	24	88.6	113	11200	9.96	862	1028	18878	1337	0.978	11.3	



Cold formed Square Hollow Sections to EN 10210														
Designation	Normal Corner			Mass per metre	Area of Section	Second Moment of Area	Radius of Gyration	Elastic Modulus	Plastic Modulus	Torsional Constants	Section Surface Area	Nominal Length		
	Thickness	Radius											Inertia	Modulus
B	T	r _o	r _i	M	A	I	r	Z	S	J	C	A _s	per	Tonne
mm x mm	mm	mm	mm	kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	
260	12.5	37.5	25	91.9	117	11548	9.93	888	1063	19553	1381	0.976	10.9	
260	16	48	32	114	145	13739	9.73	1057	1289	23986	1663	0.958	8.77	
300	6	12	6	54.7	69.6	9964	12	664	764	15434	997	1.18	18.3	
300	6.3	15.75	9.45	57	72.6	10342	11.9	689	795	16218	1042	1.17	17.5	
300	8	20	12	71.6	91.2	12801	11.8	853	991	20312	1293	1.17	14	
300	10	25	15	88.4	113	15519	11.7	1035	1211	24966	1572	1.16	11.3	
300	12	36	24	104	132	17767	11.6	1184	1402	29514	1829	1.14	9.65	
300	12.5	37.5	25	108	137	18348	11.6	1223	1451	30601	1892	1.14	9.3	
300	16	48	32	134	171	22076	11.4	1472	1774	37837	2299	1.12	7.46	
350	8	20	12	84.2	107	20681	13.9	1182	1366	32557	1787	1.37	11.9	
350	10	25	15	104	133	25189	13.8	1439	1675	40127	2182	1.36	9.61	
350	12	36	24	123	156	29054	13.6	1660	1949	47598	2552	1.34	8.16	
350	12.5	37.5	25	127	162	30045	13.6	1717	2020	49393	2642	1.34	7.86	
350	16	48	32	159	203	36511	13.4	2086	2488	61481	3238	1.32	6.28	
400	10	25	15	120	153	38216	15.8	1911	2214	60431	2892	1.56	8.35	
400	12	36	24	141	180	44319	15.7	2216	2587	71843	3395	1.54	7.07	
400	12.5	37.5	25	147	187	45877	15.7	2294	2683	74598	3518	1.54	6.81	
400	16	48	32	184	235	56154	15.5	2808	3322	93279	4336	1.52	5.43	