



# STEEL REFERENCE GUIDE

February 2024 Revision 5

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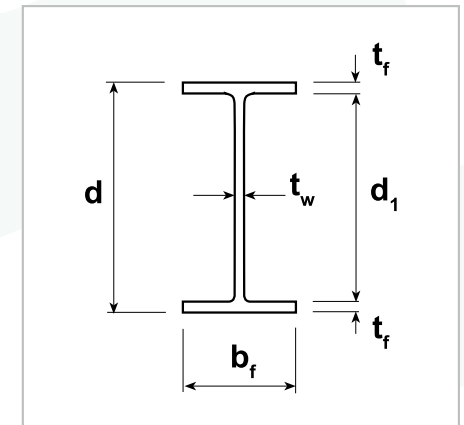
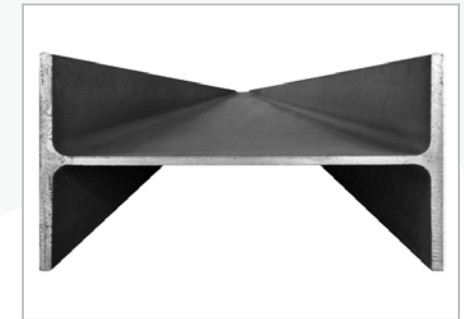
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# STRUCTURAL STEEL REFERENCE GUIDE: UNIVERSAL BEAMS

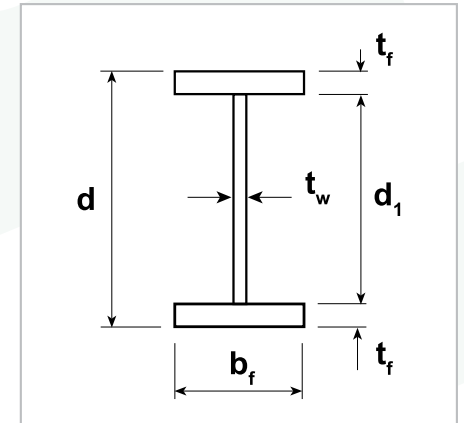
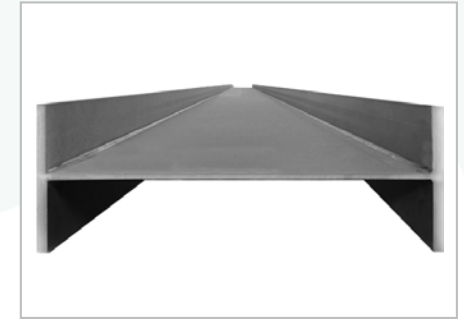
Designation	Weight	Surface Area	Depth of Section d	Width of Flange b <sub>f</sub>	Thickness of Flange t <sub>f</sub>	Web Thickness t <sub>w</sub>	Depth between Flanges d <sub>1</sub>
	kg/m	m <sup>2</sup> /m	mm	mm	mm	mm	mm
610	125.0	2.090	612	229	19.6	11.9	572
	113.0	2.080	607	228	17.3	11.2	572
	101.0	2.070	602	228	14.8	10.6	572
530	92.4	1.860	533	209	15.6	10.2	502
	82.0	1.850	528	209	13.2	9.6	502
460	82.1	1.650	460	191	16.0	9.9	428
	74.6	1.640	457	190	14.5	9.1	428
	67.1	1.630	454	190	12.7	8.5	428
410	59.7	1.490	406	178	12.8	7.8	381
	53.7	1.480	403	178	10.9	7.6	381
360	56.7	1.370	359	172	13.0	8.0	333
	50.7	1.360	356	171	11.5	7.3	333
	44.7	1.360	352	171	9.7	6.9	333
310	46.2	1.250	307	166	11.8	6.7	284
	40.4	1.240	304	165	10.2	6.1	284
	32.0	1.160	298	149	8.0	5.5	282
250	37.3	1.070	256	146	10.9	6.4	234
	31.4	1.060	252	146	8.6	6.1	234
	25.7	0.961	248	124	8.0	5.0	232
200	29.8	0.923	207	134	9.6	6.3	188
	25.4	0.915	203	133	7.8	5.8	188
	22.3	0.911	202	133	7.0	5.0	188
	18.2	0.764	198	99	7.0	4.5	184
180	22.2	0.691	179	90	10.0	6.0	159
	18.1	0.685	175	90	8.0	5.0	159
	16.1	0.680	173	90	7.0	4.5	159
150	18.0	0.584	155	75	9.5	6.0	136
	14.0	0.576	150	75	7.0	5.0	136



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- Non-standard lengths or cut to size on request.
- Typical Whyalla bundle size 4t to 5t.

# STRUCTURAL STEEL REFERENCE GUIDE: WELDED BEAMS

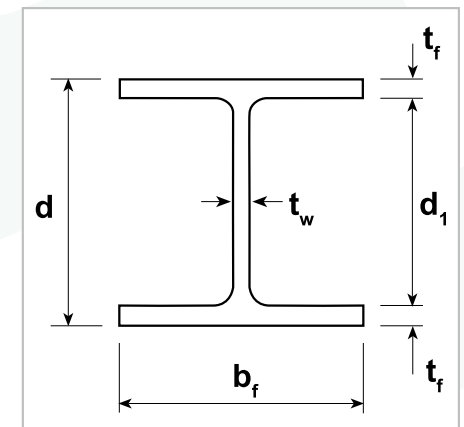
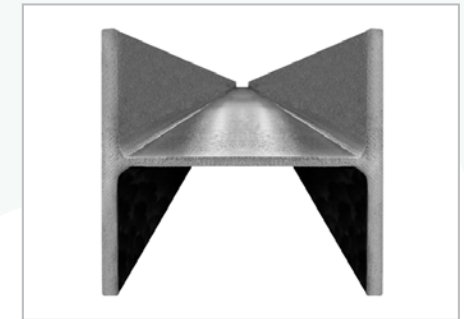
Designation	Weight	Surface Area	Depth of Section d	Width of Flange b <sub>f</sub>	Thickness of Flange t <sub>f</sub>	Web Thickness t <sub>w</sub>	Weld Size	Depth between Flanges d <sub>1</sub>
	kg/m	m <sup>2</sup> /m	mm	mm	mm	mm	mm	mm
1200WB	455	4.368	1200	500	40	16	8	1120
	423	4.352	1192	500	36	16	8	1120
	392	4.336	1184	500	32	16	8	1120
	342	3.936	1184	400	32	16	8	1120
	317	3.920	1176	400	28	16	8	1120
	278	3.708	1170	350	25	16	8	1120
	249	3.408	1170	275	25	16	8	1120
	1000WB	322	3.616	1024	400	32	16	8
296		3.600	1016	400	28	16	8	960
258		3.388	1010	350	25	16	8	960
215		3.168	1000	300	20	16	8	960
900WB	282	3.424	924	400	32	12	6	860
	257	3.408	916	400	28	12	6	860
	218	3.196	910	350	25	12	6	860
	175	2.976	900	300	20	12	6	860
800WB	192	2.812	816	300	28	10	6	760
	168	2.700	810	275	25	10	6	760
	146	2.680	800	275	20	10	6	760
	122	2.564	792	250	16	10	6	760
700WB	173	2.512	716	275	28	10	6	660
	150	2.400	710	250	25	10	6	660
	130	2.380	700	250	20	10	6	660
	115	2.364	692	250	16	10	6	660



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350, 350L0 and 400 available on request.
- Non-standard lengths or cut to size on request.
- Manufactured from stripped plate.

# STRUCTURAL STEEL REFERENCE GUIDE: UNIVERSAL COLUMNS

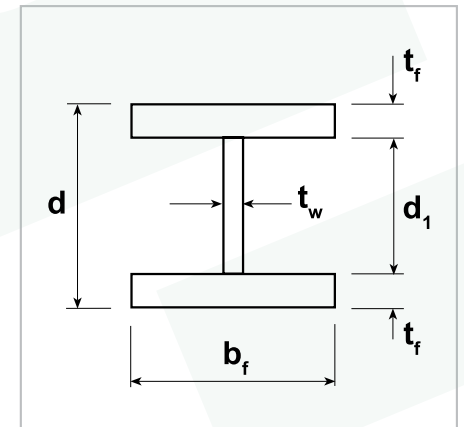
Designation	Weight	Surface Area	Depth of Section d	Width of Flange b <sub>f</sub>	Thickness of Flange t <sub>f</sub>	Web Thickness t <sub>w</sub>	Depth between Flanges d <sub>1</sub>
	kg/m	m <sup>2</sup> /m	mm	mm	mm	mm	mm
310	158.0	1.840	327	311	25.0	15.7	227
	137.0	1.820	321	309	21.7	13.8	227
	118.0	1.810	315	307	18.7	11.9	227
	96.8	1.790	308	305	15.4	9.9	227
250	89.5	1.500	260	256	17.3	10.5	225
	72.9	1.480	254	254	14.2	8.6	225
200	59.5	1.200	210	205	14.2	9.3	181
	52.2	1.190	206	204	12.5	8.0	181
	46.2	1.190	203	203	7.3	7.3	181
150	37.2	0.912	162	154	11.5	8.1	139
	30.0	0.900	158	153	9.4	6.6	139
	23.4	0.289	152	152	6.8	6.1	139
100	14.8	0.563	97	99	7.0	5.0	83



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- Grade 350 & 350L0 available on request.
- Non-standard lengths or cut to size on request.
- Typical Whyalla bundle size 4t to 5t.

# STRUCTURAL STEEL REFERENCE GUIDE: WELDED COLUMNS

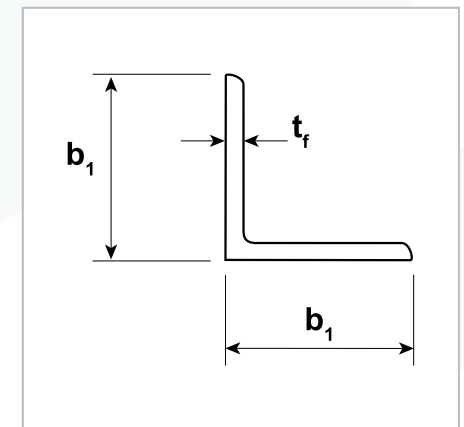
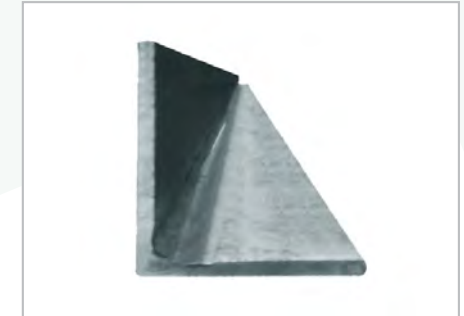
Designation	Weight	Surface Area	Depth of Section d	Width of Flange b <sub>f</sub>	Thickness of Flange t <sub>f</sub>	Web Thickness t <sub>w</sub>	Weld Size	Depth between Flanges d <sub>1</sub>
	kg/m	m <sup>2</sup> /m	mm	mm	mm	mm	mm	mm
500WC	440	2.880	480	500	40	40	8	400
	414	2.896	480	500	40	32	8	400
	383	2.880	472	500	36	32	8	400
	340	2.978	514	500	32	25	8	450
	290	2.972	506	500	28	20	8	450
	267	2.960	500	500	25	20	8	450
	228	2.940	490	500	20	20	8	450
400WC	361	2.380	430	400	40	40	8	350
	328	2.404	430	400	40	28	8	350
	303	2.388	422	400	36	28	8	350
	270	2.378	414	400	32	25	8	350
	212	2.360	400	400	25	20	8	350
	181	2.340	390	400	20	20	8	350
	144	2.332	382	400	16	16	8	350
350WC	280	2.054	355	350	40	28	8	275
	258	2.038	347	350	36	28	8	275
	230	2.028	339	350	32	25	8	275
	197	2.022	331	350	28	20	8	275



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- Grade 350, 350L0 and 400 available on request.
- Non-standard lengths or cut to size on request.
- Manufactured from stripped plate.

# STRUCTURAL STEEL REFERENCE GUIDE: EQUAL ANGLES

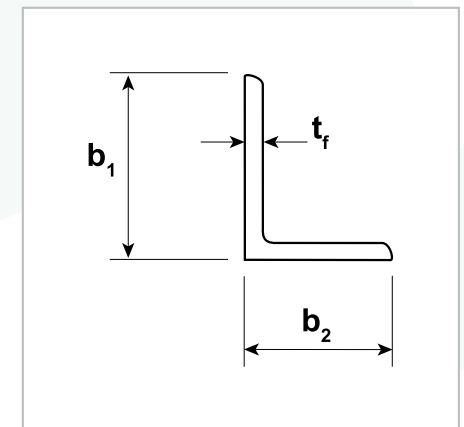
Designation	Weight	Surface Area	Side A $b_1$	Side B $b_1$	Thickness of Flange $t_f$
	kg/m		m <sup>2</sup> /m	mm	mm
200x200x26	76.8	0.788	200	200	26.0
200x200x20	60.1	0.788	200	200	20.0
200x200x18	54.4	0.788	200	200	18.0
200x200x16	48.7	0.788	200	200	16.0
200x200x13	40.0	0.788	200	200	13.0
150x150x19	42.1	0.586	150	150	19.0
150x150x16	35.4	0.586	150	150	16.0
150x150x12	27.3	0.590	150	150	12.0
150x150x10	21.9	0.590	150	150	10.0
125x125x16	29.1	0.491	125	125	16.0
125x125x12	22.5	0.491	125	125	12.0
125x125x10	18.0	0.491	125	125	10.0
125x125x8	14.9	0.491	125	125	8.0



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- Non-standard lengths or cut to size on request.

# STRUCTURAL STEEL REFERENCE GUIDE: UNEQUAL ANGLES

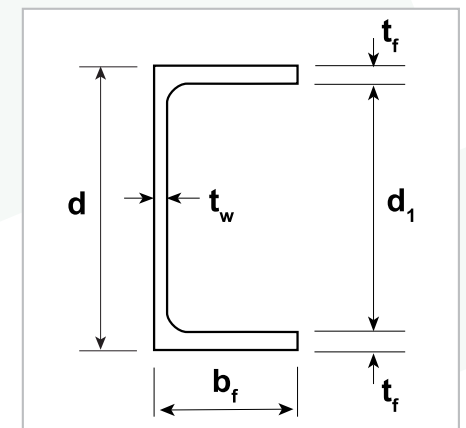
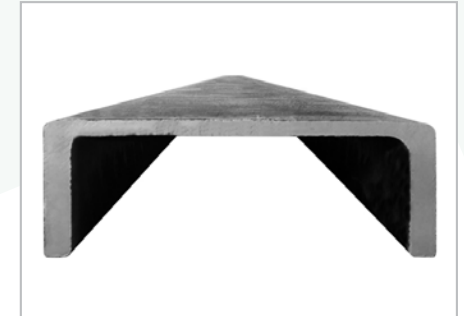
Designation	Weight	Surface Area	Side A $b_1$	Side B $b_2$	Thickness of Flange $t_f$
	kg/m	m <sup>2</sup> /m	mm	mm	mm
150x100x12	22.5	0.491	150	100	12.0
150x100x10	18.0	0.491	150	100	9.5
150x90x16	27.9	0.471	150	90	15.8
150x90x12	21.6	0.471	150	90	12.0
150x90x10	17.3	0.471	150	90	9.5
150x90x8	14.3	0.471	150	90	7.8
125x75x12	17.7	0.392	125	75	12.0
125x75x10	14.2	0.392	125	75	9.5
125x75x8	11.8	0.392	125	75	7.8
125x75x6	9.16	0.392	125	75	6.0



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- Non-standard lengths or cut to size on request.

# STRUCTURAL STEEL REFERENCE GUIDE: PARALLEL FLANGE CHANNELS

Designation	Weight	Surface Area	Depth of Section $d$	Width of Flange $b_f$	Thickness of Flange $t_f$	Web Thickness $t_w$	Depth between Flanges $d_1$
	kg/m	m <sup>2</sup> /m	mm	mm	mm	mm	mm
380PFC	55.2	1.130	380	100	17.5	10.0	345
300PFC	40.1	0.932	300	90	16.0	8.0	268
250PFC	35.5	0.834	250	90	15.0	8.0	220
230PFC	25.1	0.737	230	75	12.0	6.5	206
200PFC	22.9	0.678	200	75	12.0	6.0	176
180PFC	20.9	0.638	180	75	11.0	6.0	158
150PFC	17.7	0.579	150	75	9.5	6.0	131

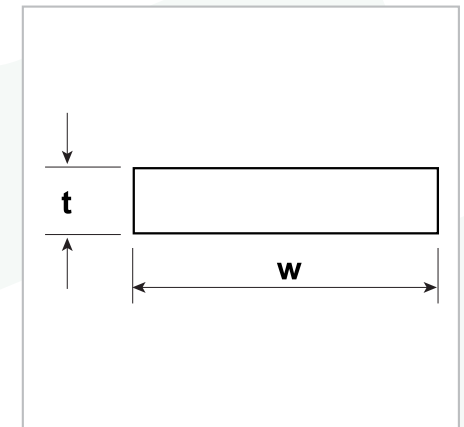


- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- Non-standard lengths or cut to size on request.



# MERCHANT BAR REFERENCE GUIDE: SQUARE EDGE FLATS

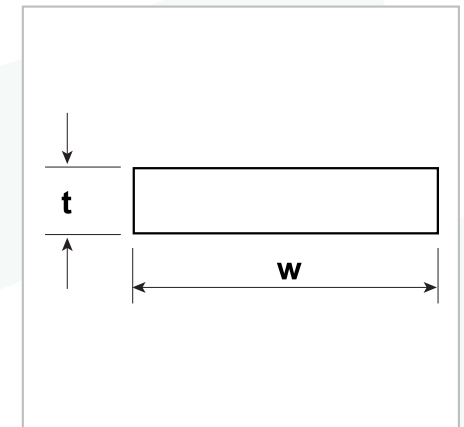
Designation	Weight	Surface Area	Width w	Thickness t	Metres per Tonne	Approx Lens
	kg/m	m <sup>2</sup> /m	mm	mm	m/t	per bundle
10x3*	0.241	0.026	10	3	4149.4	964 = 1t
13x3*	0.313	0.032	13	3	3194.9	798 = 1t
13x5*	0.468	0.036	13	5	2136.8	478 = 1t
13x6	0.628	0.038	13	6	1593.4	398 = 1t
16x3*	0.386	0.038	16	3	2590.7	647 = 1t
16x5*	0.643	0.042	16	5	1555.2	388 = 1t
16x8	1.030	0.048	16	8	970.9	160 = 0.989t
20x3	0.483	0.046	20	3	2070.4	346 = 1.002t
20x5	0.805	0.050	20	5	1242.2	208 = 1.004t
20x6	0.966	0.052	20	6	1035.2	173 = 1.002t
20x10	1.609	0.060	20	10	621.5	208 = 2.008t
25x3	0.604	0.058	25	3	1655.6	277 = 1.003t
25x5	1.006	0.060	25	5	994.0	332 = 2.004t
25x6	1.207	0.062	25	6	828.5	278 = 2.013t
25x8	1.609	0.066	25	8	621.5	208 = 2.008t
25x10	2.012	0.070	25	10	497.0	166 = 2.004t
25x12	2.414	0.074	25	12	414.3	138 = 1.999t
32x3	0.772	0.072	32	3	1295.3	219 = 1.015t
32x5	1.287	0.074	32	5	777.0	265 = 2.047t
32x6	1.545	0.076	32	6	647.2	215 = 1.993t
32x8	2.060	0.080	32	8	485.4	162 = 2.002t
32x10	2.575	0.084	32	10	388.3	129 = 1.993t
32x12	3.090	0.088	32	12	323.6	108 = 2.002t
40x3	0.966	0.088	40	3	1035.2	173 = 1.002t
40x5	1.609	0.090	40	5	621.5	208 = 2.008t
40x6	1.931	0.092	40	6	517.9	173 = 2.005t
40x8	2.575	0.096	40	8	388.3	129 = 1.993t
40x10	3.219	0.100	40	10	310.7	103 = 1.989t
40x12	3.862	0.104	40	12	258.9	87 = 2.016t



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- Supplied in 6m lengths.
- \*Denotes Rydal Flats supplied in 4m lengths.
- Non-standard lengths or cut to size on request.
- All lens/bundle are approx.

# MERCHANT BAR REFERENCE GUIDE: SQUARE EDGE FLATS

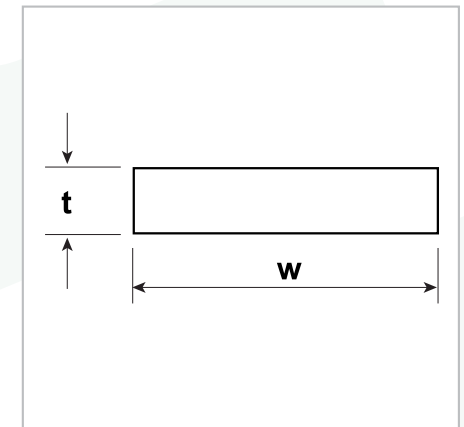
Designation	Weight	Surface Area	Width w	Thickness t	Metres per Tonne	Approx Lens
	kg/m	m <sup>2</sup> /m	mm	mm	m/t	per bundle
40x16	5.150	0.112	40	16	194.2	66 = 2.039t
40x20	6.437	0.120	40	20	155.4	52 = 2.008t
50x3	1.207	0.108	50	3	828.5	280 = 2.027t
50x5	2.012	0.110	50	5	497.0	166 = 2.004t
50x6	2.414	0.112	50	6	414.3	139 = 2.013t
50x8	3.219	0.116	50	8	310.7	104 = 2.008t
50x10	4.023	0.120	50	10	248.6	83 = 2.004t
50x12	4.828	0.124	50	12	207.1	69 = 1.999t
50x16	6.437	0.132	50	16	155.4	52 = 2.008t
50x20	8.046	0.140	50	20	124.3	42 = 2.028t
50x25	10.058	0.150	50	25	99.4	34 = 2.052t
65x3	1.569	0.136	65	3	637.3	213 = 2.005t
65x5	2.615	0.140	65	5	382.4	127 = 1.993t
65x6	3.138	0.142	65	6	318.7	107 = 2.015t
65x8	4.184	0.146	65	8	239.0	80 = 2.008t
65x10	5.230	0.150	65	10	191.2	65 = 2.040t
65x12	6.276	0.154	65	12	159.3	53 = 1.996t
65x16	8.368	0.162	65	16	119.5	41 = 2.059t
65x20	10.46	0.170	65	20	95.6	35 = 2.197t
75x5	3.017	0.160	75	5	331.5	110 = 1.991t
75x6	3.621	0.162	75	6	276.2	92 = 1.999t
75x8	4.828	0.166	75	8	207.1	71 = 2.057t
75x10	6.035	0.170	75	10	165.7	55 = 1.991t
75x12	7.242	0.174	75	12	138.1	46 = 1.999t
75x16	9.656	0.182	75	16	103.6	34 = 1.970t
75x20	12.069	0.190	75	20	82.9	28 = 2.028t
75x25	15.087	0.200	75	25	66.3	23 = 2.029t
90x6	4.345	0.192	90	6	230.1	78 = 2.033t
90x8	5.793	0.196	90	8	172.6	59 = 2.051t



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- 16x8 and above flats supplied in 6m lengths.
- \*Denotes Rydal Flats supplied in 4m lengths.
- Non-standard lengths or cut to size on request.
- All lens/bundle are approx.

# MERCHANT BAR REFERENCE GUIDE: SQUARE EDGE FLATS

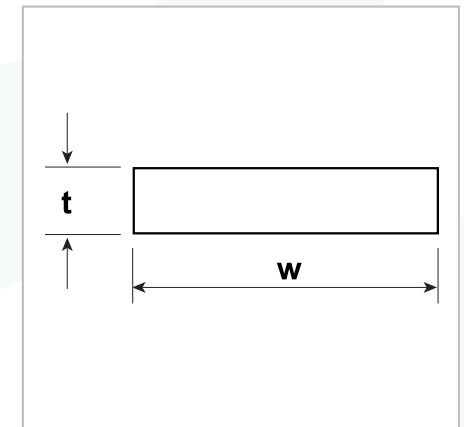
Designation	Weight	Surface Area	Width w	Thickness t	Metres per Tonne	Approx Lens
	kg/m	m <sup>2</sup> /m	mm	mm	m/t	per bundle
90x10	7.242	0.200	90	10	138.1	46 = 1.999t
90x12	8.690	0.204	90	12	115.1	38 = 1.981t
100x5	4.023	0.210	100	5	248.6	85 = 2.052t
100x6	4.828	0.212	100	6	207.1	71 = 2.057t
100x8	6.437	0.216	100	8	155.4	52 = 2.008t
100x10	8.046	0.220	100	10	124.3	43 = 2.076t
100x12	9.656	0.224	100	12	103.6	36 = 2.086t
100x16	12.874	0.232	100	16	77.7	26 = 2.008t
100x20	16.093	0.240	100	20	62.1	22 = 2.124t
100x25	20.116	0.250	100	25	49.7	17 = 2.052t
110x6	5.180	0.232	110	6	193.1	64 = 2.034t
110x8	7.081	0.236	110	8	141.2	48 = 2.039t
110x10	8.851	0.240	110	10	113.0	39 = 2.071t
110x12	10.621	0.244	110	12	94.2	34 = 2.167t
130x5	5.230	0.270	130	5	191.2	65 = 2.040t
130x6	6.276	0.272	130	6	159.3	55 = 2.071t
130x8	8.368	0.276	130	8	119.5	41 = 2.059t
130x10	10.460	0.280	130	10	95.6	33 = 2.071t
130x12	12.552	0.284	130	12	79.7	28 = 2.109t
130x16	16.736	0.292	130	16	59.8	20 = 2.008t
130x20	20.920	0.300	130	20	47.8	16 = 2.008t
130x25	26.150	0.310	130	25	38.2	13 = 2.040t
150x5	6.035	0.310	15	5	165.7	56 = 2.028t
150x6	7.242	0.312	15	6	138.1	46 = 1.999t
150x8	9.656	0.316	15	8	103.6	36 = 2.086t
150x10	12.069	0.320	15	10	82.9	29 = 2.100t
150x12	14.483	0.324	15	12	69.0	23 = 1.999t
150x16	19.311	0.332	15	16	51.8	16 = 2.202t
150x20	24.139	0.340	15	20	41.4	14 = 2.028t



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- 16x8 and above flats supplied in 6m lengths.
- \*Denotes Rydal Flats supplied in 4m lengths.
- Non-standard lengths or cut to size on request.
- All lens/bundle are approx.

# MERCHANT BAR REFERENCE GUIDE: SQUARE EDGE FLATS

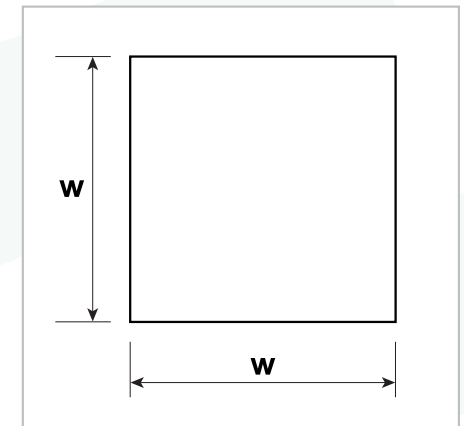
Designation	Weight	Surface Area	Width w	Thickness t	Metres per Tonne	Approx Lens
	kg/m	m <sup>2</sup> /m	mm	mm	m/t	per bundle
150x25	30.173	0.350	15	25	33.1	11 = 1.991t
150x50	60.346	0.400	15	50	16.6	5 = 1.810t
180x6	8.690	0.372	180	6	115.1	40 = 2.086t
180x10	14.483	0.380	180	10	69.0	24 = 2.086t
180x12	17.380	0.384	180	12	57.5	20 = 2.086t
180x16	23.173	0.392	180	16	43.2	11 = 1.529t
180x20	28.967	0.400	180	20	34.5	12 = 2.086t
180x25	36.208	0.450	180	25	27.6	9 = 1.955t
200x6	9.656	0.412	200	6	103.6	35 = 2.086t
200x8	12.874	0.416	200	8	77.7	26 = 2.008t
200x10	16.093	0.420	200	10	62.1	21 = 2.086t
200x12	19.311	0.424	200	12	51.8	13 = 2.008t
200x16	25.748	0.432	200	16	38.8	14 = 2.163t
200x20	32.185	0.440	200	20	31.1	11 = 2.124t
200x25	40.231	0.450	200	25	24.9	8 = 1.931t
250x6	12.069	0.512	250	6	82.9	28 = 2.028t
250x8	16.093	0.516	250	8	62.1	23 = 2.221t
250x10	20.116	0.520	250	10	49.7	18 = 2.172t
250x12	24.139	0.524	250	12	41.4	16 = 2.317t
250x16	32.185	0.528	250	16	31.1	11 = 2.124t
250x20	40.231	0.532	250	20	24.9	8 = 1.931t
250x25	50.289	0.536	250	25	19.9	7 = 2.112t
300x6	14.483	0.612	300	6	69.0	24 = 2.086t
300x8	19.311	0.616	300	8	51.8	19 = 2.202t
300x10	24.139	0.620	300	10	41.4	16 = 2.317t
300x12	28.967	0.624	300	12	34.5	12 = 2.086t
300x16	38.622	0.628	300	16	25.9	10 = 2.317t
300x20	48.278	0.632	300	20	20.7	8 = 2.317t
300x25	60.347	0.636	300	25	16.6	7 = 2.535t



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- 16x8 and above flats supplied in 6m lengths.
- \*Denotes Rydal Flats supplied in 4m lengths.
- Non-standard lengths or cut to size on request.
- All lens/bundle are approx.

# MERCHANT BAR REFERENCE GUIDE: SQUARE MILD STEEL

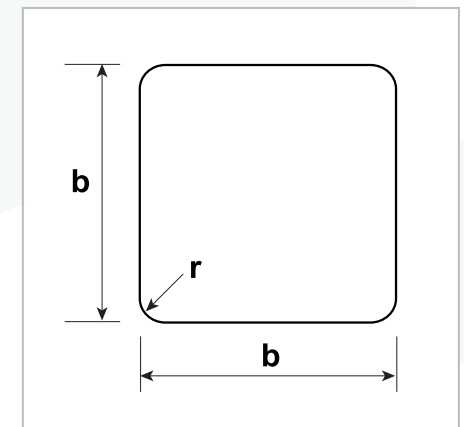
Designation	Weight	Surface Area	Width w	Metres per Tonne	Approx Lens
	kg/m	m <sup>2</sup> /m	mm	m/t	per bundle
10x10	0.805	0.004	10	1242.2	415 = 2.004t
12x12	1.159	0.048	12	862.8	291 = 2.023t
16x16	2.060	0.064	16	485.4	163 = 2.015t
20x20	3.219	0.080	20	310.7	104 = 2.008t
25x25	5.029	0.100	25	198.8	66 = 1.991t
40x40	12.874	0.160	40	77.7	26 = 1.965t



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- Supplied in 6m lengths.
- Non-standard lengths or cut to size on request.
- Corner radius on squares is approximately 1mm.

# MERCHANT BAR REFERENCE GUIDE: BILLETS

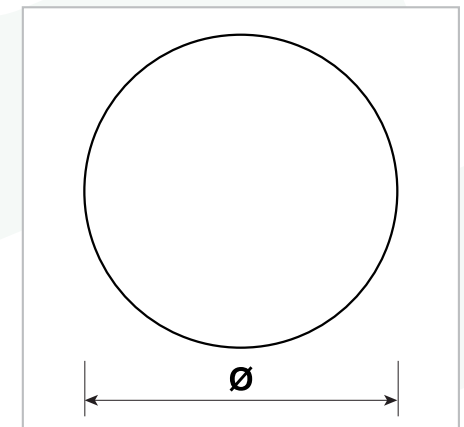
Designation	Weight	Surface Area	Size b	Metres per Tonne	Corner Radius r
	kg/m	m <sup>2</sup> /m	mm	m/t	mm
45x45	16.294	0.18	45	61.4	5.5
50x50	20.115	0.20	50	49.7	6.5
63x63	31.936	0.26	63	31.3	8.0
75x75	45.260	0.30	75	22.1	9.5



- Manufactured in accordance with the requirements of Australian Standard AS 1442/1022-1045.
- Larger square sections may need to be cut from a thick plate.

# MERCHANT BAR REFERENCE GUIDE: ROUND MILD STEEL

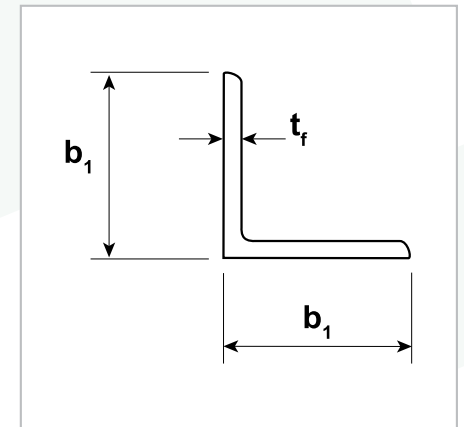
Diameter Ø	Weight	Surface Area	Metres per Tonne	Approx Lengths
mm	kg/m	m <sup>2</sup> /m	m/t	per bundle
6	0.233	0.020	4291.8	664 = 1.000t
8	0.394	0.025	2538.1	423 = 1.000t
10	0.632	0.031	1582.3	530 = 2.009t
12	0.910	0.039	1098.9	367 = 2.004t
14	1.239	0.044	807.1	271 = 2.014t
16	1.618	0.050	618.0	206 = 1.999t
18	2.047	0.057	488.5	168 = 2.064t
20	2.528	0.063	395.6	132 = 2.002t
22	3.059	0.069	326.9	110 = 2.019t
24	3.640	0.075	274.7	93 = 2.031t
27	4.607	0.085	217.1	73 = 2.018t
30	5.687	0.094	175.8	60 = 2.047t
33	6.882	0.104	145.3	50 = 2.064t
36	8.190	0.113	122.1	42 = 2.064t
39	9.611	0.123	104.0	36 = 2.076t
42	11.147	0.132	89.7	30 = 2.006t
45	12.796	0.141	78.1	26 = 1.996t
48	14.559	0.151	68.7	23 = 2.009t
50	15.798	0.157	63.3	22 = 2.085t
56	19.817	0.176	50.5	17 = 2.021t
60	22.749	0.188	44.0	15 = 2.047t
65	26.698	0.204	37.5	14 = 2.243t
75	35.545	0.236	28.1	10 = 2.133t



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- Typically supplied in 6m lengths.
- Longer lengths available on request.

# MERCHANT BAR REFERENCE GUIDE: EQUAL ANGLES

Designation	Weight	Surface Area	Side A $b_1$	Side B $b_1$	Thickness of Flange $t_f$
	kg/m	m <sup>2</sup> /m	mm	mm	mm
100x100x12	17.7	0.392	100	100	12.0
100x100x10	14.2	0.392	100	100	9.5
100x100x8	11.8	0.392	100	100	7.8
100x100x6	9.16	0.392	100	100	6.0
90x90x10	12.7	0.352	90	90	9.5
90x90x8	10.6	0.352	90	90	7.8
90x90x6	8.22	0.352	90	90	6.0
75x75x10	10.5	0.292	75	75	9.5
75x75x8	8.73	0.292	75	75	7.8
75x75x6	6.81	0.292	75	75	6.0
75x75x5	5.27	0.292	75	75	4.6
65x65x10	9.02	0.255	65	65	9.5
65x65x8	7.51	0.255	65	65	7.8
65x65x6	5.87	0.255	65	65	6.0
65x65x5	4.56	0.255	65	65	4.6
55x55x5	3.84	0.215	55	55	4.6
50x50x8	5.68	0.195	50	50	7.8
50x50x6	4.46	0.195	50	50	6.0
50x50x5	3.48	0.195	50	50	4.6
50x50x3	2.31	0.195	50	50	3.0
45x45x6	3.97	0.175	45	45	6.0
45x45x5	3.10	0.175	45	45	4.6
45x45x3	2.06	0.175	45	45	3.0
40x40x6	3.50	0.155	40	40	6.0
40x40x5	2.73	0.155	40	40	4.6
40x40x3	1.83	0.155	40	40	3.0
30x30x6	2.56	0.115	30	30	6.0
30x30x5	2.01	0.115	30	30	4.6
30x30x3	1.35	0.115	30	30	3.0
25x25x6	2.08	0.095	25	25	6.0
25x25x5	1.65	0.095	25	25	4.6
25x25x3	1.12	0.095	25	25	3.0

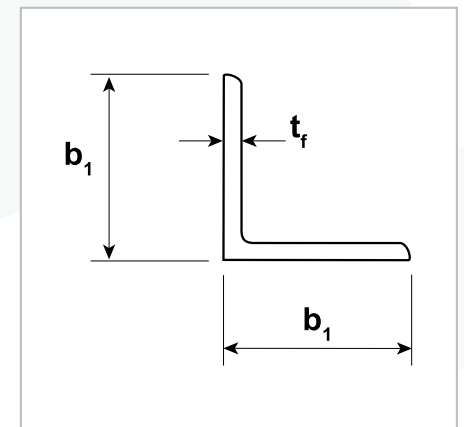


- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- Non-standard lengths or cut to size on request.



# MERCHANT BAR REFERENCE GUIDE: UNEQUAL ANGLES

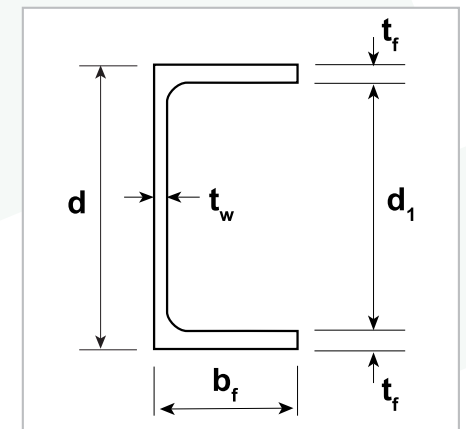
Designation	Weight	Surface Area	Side A $b_1$	Side B $b_2$	Thickness of Flange $t_f$
	kg/m	m <sup>2</sup> /m	mm	mm	mm
100x75x10	12.4	0.342	100	75	9.5
100x75x6	10.3	0.342	100	75	7.8
100x75x5	7.98	0.342	100	75	6.0
75x50x8	7.23	0.242	75	50	7.8
75x50x6	5.66	0.242	75	50	6.0
75x50x5	4.40	0.242	75	50	4.6
65x50x8	6.59	0.225	65	50	7.8
65x50x6	5.16	0.225	65	50	6.0
65x50x5	4.02	0.225	65	50	4.6



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- Non-standard lengths or cut to size on request.

# MERCHANT BAR REFERENCE GUIDE: PARALLEL FLANGE CHANNELS

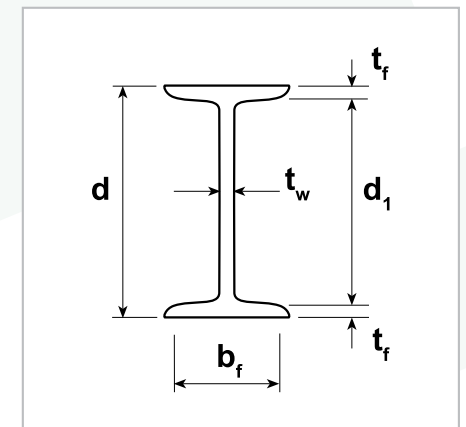
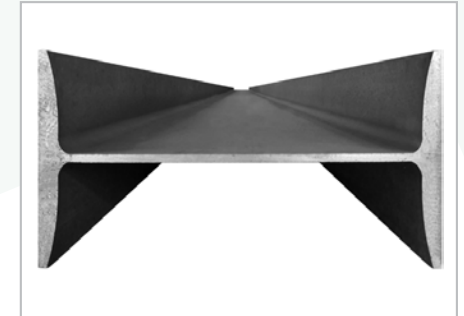
Designation	Weight	Surface Area	Depth of Section $d$	Width of Flange $b_f$	Thickness of Flange $t_f$	Web Thickness $t_w$	Depth between Flanges $d_1$
	kg/m	m <sup>2</sup> /m	mm	mm	mm	mm	mm
125PFC	11.9	0.494	125	65	7.5	4.7	110
100PFC	8.33	0.385	100	50	6.7	4.2	87
75PFC	5.92	0.296	75	40	6.1	3.8	63



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- Non-standard lengths or cut to size on request.

# MERCHANT BAR REFERENCE GUIDE: TAPERED FLANGE BEAMS

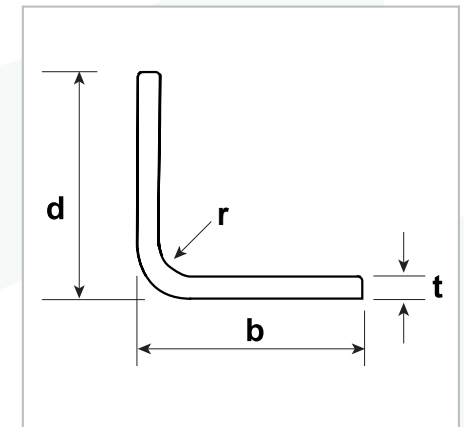
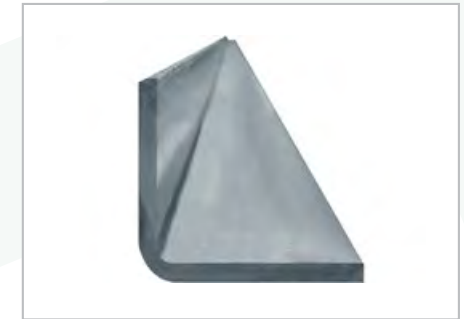
Designation	Weight	Surface Area	Depth of Section $d$	Width of Flange $b_f$	Thickness of Flange $t_f$	Web Thickness $t_w$	Depth between Flanges $d_1$
	kg/m	m <sup>2</sup> /m	mm	mm	mm	mm	mm
125TFB	13.1	0.470	125	65	8.5	5.0	108
100TFB	7.2	0.349	100	45	6.0	4.0	88



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3679.1 2016 in Grade 300.
- Grade 350 & 350L0 available on request.
- Non-standard lengths or cut to size on request.

# MERCHANT BAR REFERENCE GUIDE: DURAGAL® ANGLES

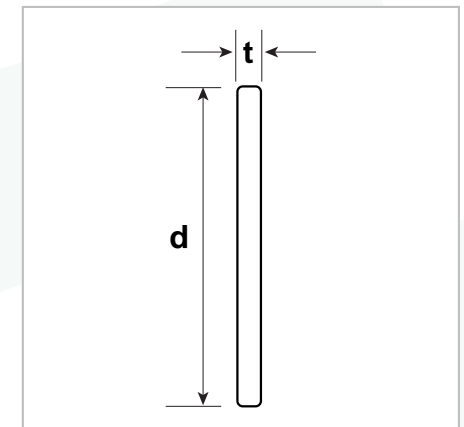
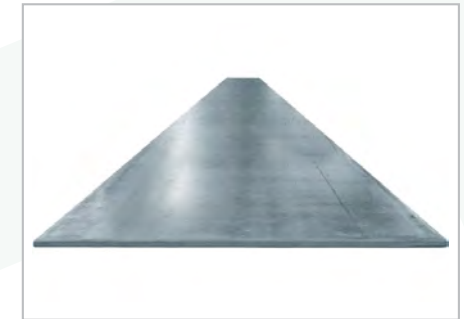
Designation	Weight	Surface Area	Depth d	Width b	Thickness t	Length	Quantity
	kg/m	m <sup>2</sup> /m	mm	mm	mm	m	per pack
25x25x2.5	0.894	0.095	25	25	2.5	6	80
30x30x2.5	1.093	0.117	30	30	2.5	6	80
40x40x2.5	1.490	0.157	40	40	2.5	6	60
40x40x4.0	2.310	0.155	40	40	4.0	6	39
45x45x2.5	1.689	0.175	45	45	2.5	6	54
50x50x2.5	1.888	0.197	50	50	2.5	6	33
50x50x2.5	1.888	0.197	50	50	2.5	9	33
50x50x4.0	2.943	0.195	50	50	4.0	6	27
50x50x4.0	2.943	0.195	50	50	4.0	9	27
50x50x5.0	3.594	0.195	50	50	5.0	6	24
50x50x5.0	3.594	0.195	50	50	5.0	9	24
50x50x5.0	3.594	0.195	50	50	5.0	12	24
50x50x6.0	4.210	0.195	50	50	6.0	9	21
65x65x4.0	3.892	0.255	65	65	4.0	9	22
65x65x5.0	4.779	0.255	65	65	5.0	9	22
75x75x4.0	4.525	0.295	75	75	4.0	9	22
75x75x5.0	5.569	0.293	75	75	4.0	9	22
75x75x6.0	6.664	0.292	75	75	6.0	9	18
100x100x6.0	9.078	0.392	100	100	6.0	12	16
125x75x6.0	9.078	0.392	125	75	6.0	12	16
150x100x6.0	11.492	0.500	150	100	6.0	12	16



- Radius 'r' is a minimum 3.5mm.
- A minimum of 100g/m<sup>2</sup> coating of zinc is applied by in-line galvanising to a mechanically (shot blasted) and chemically cleaned bright metal (AS 1627.4 Class 3.0) surface. A clear polymer barrier coating protects the galvanising prior to fabrication.
- DuraGal® is readily welded. Its thin evenly applied inline galvanised coating ensures minimal welding fumes. No need to preheat, change consumables or welding settings.
- Some items may require a 3 pack minimum order quantity.

# MERCHANT BAR REFERENCE GUIDE: DURAGAL® FLATS

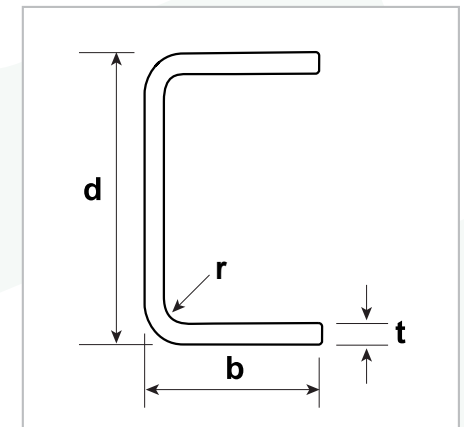
Designation	Weight	Surface Area	Depth d	Thickness t	Length	Quantity
	kg/m	m <sup>2</sup> /m	mm	mm	m	per pack
50x4.0	1.582	0.108	50	4.0	6	57
50x5.0	1.975	0.110	50	5.0	6	45
65x5.0	2.567	0.140	65	5.0	6	36
75x4.0	2.373	0.158	75	4.0	6	38
75x5.0	2.962	0.160	75	5.0	6	32
100x4.0	3.165	0.208	100	4.0	6	28
100x5.0	3.950	0.210	100	5.0	6	28
100x6.0	4.829	0.212	100	6.0	6	26
130x5.0	5.134	0.270	130	5.0	6	28
150x5.0	5.924	0.310	150	5.0	6	28
150x6.0	7.243	0.312	150	6.0	6	24
200x6.0	9.657	0.512	250	6.0	6	28
250x5.0	9.874	0.510	250	5.0	6	23



- A minimum of 100g/m<sup>2</sup> coating of zinc is applied by in-line galvanising to a mechanically (shot blasted) and chemically cleaned bright metal (AS 1627.4 Class 3.0) surface. A clear polymer barrier coating protects the galvanising prior to fabrication.
- DuraGal® is readily welded. Its thin evenly applied inline galvanised coating ensures minimal welding fumes. No need to preheat, change consumables or welding settings.
- Some items may require a 3 pack minimum order quantity.

# MERCHANT BAR REFERENCE GUIDE: DURAGAL® CHANNELS

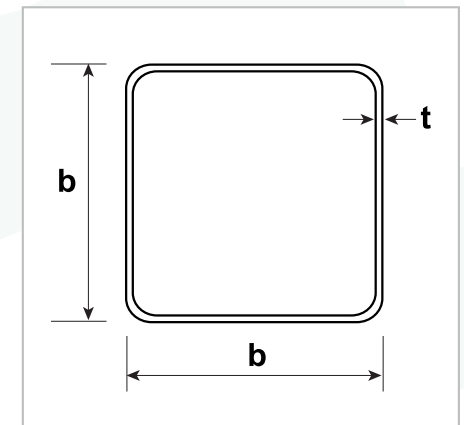
Designation	Weight	Surface Area	Depth d	Width b	Thickness t	Length	Quantity
	kg/m	m <sup>2</sup> /m	mm	mm	mm	m	per pack
75x40x4.0	4.430	0.299	75	40	4.0	9	18
100x50x4.0	5.584	0.382	100	50	4.0	9	18
125x65x4.0	7.595	0.481	125	65	4.0	9	18
150x75x5.0	11.177	0.580	150	75	5.0	12	12
180x75x5.0	12.362	0.640	180	75	5.0	12	12
200x75x5.0	13.152	0.669	200	75	5.0	12	12
200x75x6.0	15.742	0.688	200	75	6.0	12	12
230x75x6.0	17.198	0.729	230	75	6.0	12	12
250x90x6.0	19.605	0.758	250	90	6.0	12	8
300x90x6.0	22.019	0.847	300	90	6.0	12	6



- Radius 'r' is a minimum 3.5mm.
- A minimum of 100g/m<sup>2</sup> coating of zinc is applied by in-line galvanising to a mechanically (shot blasted) and chemically cleaned bright metal (AS 1627.4 Class 3.0) surface. A clear polymer barrier coating protects the galvanising prior to fabrication.
- DuraGal® is readily welded. Its thin evenly applied inline galvanised coating ensures minimal welding fumes. No need to preheat, change consumables or welding settings.
- Some items may require a 3 pack minimum order quantity.

# STRUCTURAL TUBE & PIPE REFERENCE GUIDE: SQUARE HOLLOW SECTION (SHS)

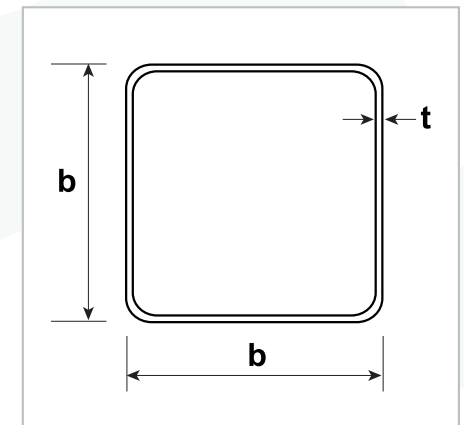
Size bxb	Nom. Thick t	Nom.Linear Mass	Surface Area	Quantity	Surface Finish	
					Painted	Galvanised
mm	mm	kg/m	m <sup>2</sup> /m	per pack		
<b>6500mm Lengths Standard</b>						
20x20	1.6	0.87	0.0745	100	*	*
	2.0	1.05	0.0800	100	*	*
25x25	1.6	1.12	0.0945	100	*	*
	2.0	1.36	0.0931	100	*	*
	2.5	1.64	0.0914	100	*	*
	3.0	1.89	0.0897	100	*	*
<b>8000mm Lengths Standard</b>						
30x30	1.6	1.38	0.115	100	*	*
	2.0	1.68	0.113	100	*	*
	2.5	2.03	0.111	100	*	*
	3.0	2.36	0.110	64	*	*
35x35	1.6	1.63	0.135	100	*	*
	2.0	1.99	0.133	100	*	*
	2.5	2.42	0.131	64	*	*
	3.0	2.83	0.130	64	*	*
40x40	1.6	1.88	0.155	81	*	*
	2.0	2.31	0.153	81	*	*
	2.5	2.82	0.151	64	*	*
	3.0	3.30	0.150	64	*	*
	4.0	4.09	0.143	49	*	*
50x50	1.6	2.38	0.195	64	*	*
	2.0	2.93	0.193	64	*	*
	2.5	3.60	0.191	49	*	*
	3.0	4.25	0.190	49	*	*
	4.0	5.35	0.183	36	*	*



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1163:2009 in Grade C350.
- Grade C450 and L0 available on request.
- Comes standard in black with option for painted or galvanised.

# STRUCTURAL TUBE & PIPE REFERENCE GUIDE: SQUARE HOLLOW SECTION (SHS)

Size Bxb	Nom. Thick t	Nom.Linear Mass	Surface Area	8m Lengths	12m Lengths	Surface Finish	
						mm	mm
50x50	5.0	6.39	0.179	30	-	*	*
	6.0	7.32	0.174	25	-	Oiled	
65x65	1.6	3.13	0.255	49	-		*
	2.0	3.88	0.253	42	-	*	*
	2.5	4.78	0.251	42	-	*	*
	3.0	5.66	0.250	36	-	*	*
	4.0	7.23	0.243	30	-	*	*
	5.0	8.75	0.239	25	-	*	*
	6.0	10.20	0.234	20	-	*	
75x75	2.0	4.50	0.293	36	-	*	*
	2.5	5.56	0.291	30	-	*	*
	3.0	6.60	0.290	30	25	*	*
	3.5	7.53	0.285	25	-	*	*
	4.0	8.49	0.283	25	15	*	*
	5.0	10.30	0.279	20	16	*	*
	6.0	12.00	0.274	16	12	*	*
89x89	2.0	5.38	0.348	20	-	*	*
	3.5	9.07	0.341	20	16	*	*
	5.0	12.50	0.334	16	12	*	*
	6.0	14.70	0.330	12	9	*	*
100x100	2.0	6.07	0.393	20	-	*	*
	3.0	8.96	0.390	20	16	*	*
	4.0	11.60	0.383	16	12	*	*
	5.0	14.20	0.379	12	9	*	*
	6.0	16.70	0.374	12	9	*	*
	9.0	23.50	0.361	9	6	*	

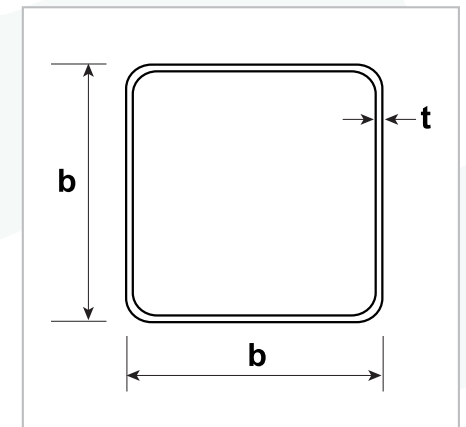


- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1163:2009 in Grade C350.
- Grade C450 and L0 available on request.
- Comes standard in black with option for painted or galvanised.



# STRUCTURAL TUBE & PIPE REFERENCE GUIDE: SQUARE HOLLOW SECTION (SHS)

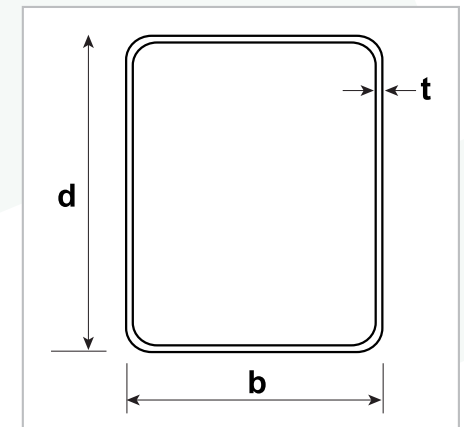
Size bxb	Nom. Thick t	Nom.Linear Mass	Surface Area	8m Lengths	12m Lengths	Surface Finish	
						mm	mm
125x125	4.0	14.80	0.483	12	9	*	*
	5.0	18.20	0.479	12	9	*	*
	6.0	21.40	0.474	9	6	*	
	9.0	30.60	0.461	8	4	*	
150x150	5.0	22.10	0.579	9	6	*	
	6.0	26.20	0.574	6	6	*	
	9.0	37.70	0.561	6	4	*	
200x200	5.0	29.90	0.779	6	4	*	
	6.0	35.60	0.774	6	4	*	
	9.0	51.80	0.761	4	2	*	
	12.5	69.40	0.768	-	1	*	
	16.0	85.50	0.759	-	1	*	
250x250	6.0	45.00	0.974	4	2	*	
	9.0	65.90	0.961	2	2	*	
	12.5	89.00	0.968	-	1	*	
	16.0	111.00	0.959	-	1	*	
300x300	10.0	88.40	1.170	-	1	*	
	12.5	109.00	1.170	-	1	*	
	16.0	136.00	1.160	-	1	*	
350x350	10.0	104.00	1.370	-	1	*	
	12.5	128.00	1.370	-	1	*	
	16.0	161.00	1.360	-	1	*	
400x400	10.0	120.00	1.570	-	1	*	
	12.5	148.00	1.570	-	1	*	
	16.0	186.00	1.560	-	1	*	



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1163:2009 in Grade C350.
- Grade C450 and L0 available on request.
- Comes standard in black with option for painted or galvanised.

# STRUCTURAL TUBE & PIPE REFERENCE GUIDE: RECTANGULAR HOLLOW SECTION (RHS)

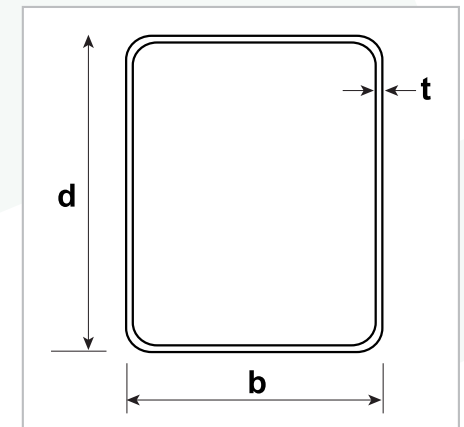
Size dxb	Nom. Thick t	Nom.Linear Mass	Surface Area	8m Lengths	12m Lengths	Surface Finish	
						mm	mm
50x25	1.6	1.75	0.145	96	-	*	*
	2.0	2.15	0.143	96	-	*	*
	2.5	2.62	0.141	72	-	*	*
	3.0	3.07	0.140	60	-	*	*
65x35	2.0	2.93	0.193	54	-	*	*
	2.5	3.60	0.191	54	-	*	*
	3.0	4.25	0.190	45	-	*	*
	4.0	5.35	0.183	35	-	*	*
75x25	1.6	2.38	0.195	65	-	*	*
	2.0	2.93	0.193	65	-	*	*
	2.5	3.60	0.191	48	-	*	*
75x50	1.6	3.01	0.245	54	54	*	*
	2.0	3.72	0.243	42	42	*	*
	2.5	4.58	0.241	42	24	*	*
	3.0	5.42	0.240	35	-	*	*
	4.0	6.92	0.233	28	-	*	*
	5.0	8.35	0.229	24	20	*	*
	6.0	9.67	0.224	20	-	*	*
100x50	1.6	3.64	0.295	32	32	*	*
	2.0	4.50	0.293	32	-	*	*
	2.5	5.56	0.291	32	24	*	*
	3.0	6.60	0.290	32	24	*	*
	3.5	7.53	0.285	24	18	*	*
	4.0	8.49	0.283	24	18	*	*
	5.0	10.30	0.279	18	15	*	*
	6.0	12.00	0.274	15	-	*	*



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1163:2009 in Grade C350.
- Grade C450 and L0 available on request.

# STRUCTURAL TUBE & PIPE REFERENCE GUIDE: RECTANGULAR HOLLOW SECTION (RHS)

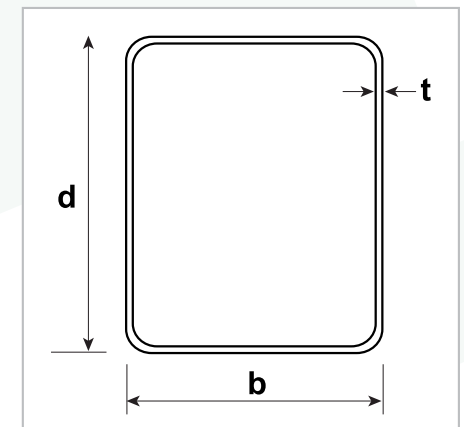
Size dxb	Nom. Thick t	Nom.Linear Mass	Surface Area	8m Lengths	12m Lengths	Surface Finish	
						mm	mm
102x76	3.5	9.07	0.341	12	-	*	
	5.0	12.50	0.335	12	-	*	
	6.0	14.70	0.330	12	-	*	
125x75	2.0	6.07	0.393	24	-		*
	2.5	7.53	0.391	20	20		*
	3.0	8.96	0.390	20	15	*	*
	4.0	11.60	0.383	15	15	*	*
	5.0	14.20	0.379	15	12	*	*
	6.0	16.70	0.374	12	6	*	*
150x50	2.0	6.07	0.393	21	21	*	*
	2.5	7.53	0.391	21	-	*	*
	3.0	8.96	0.390	21	15	*	*
	4.0	11.60	0.383	15	15	*	*
	5.0	14.20	0.379	15	9	*	*
	6.0	16.70	0.374	15	9	*	*
152x76	5.0	16.50	0.435	8	8	*	
	6.0	19.40	0.430	8	-	*	
150x100	4.0	14.80	0.483	12	9	*	*
	5.0	18.20	0.479	12	8	*	*
	6.0	21.40	0.474	9	6	*	
	9.0	30.60	0.461	6	4	*	
200x100	4.0	17.90	0.583	8	6	*	
	5.0	22.10	0.579	8	6	*	
	6.0	26.20	0.574	8	4	*	
	9.0	37.70	0.561	6	4	*	



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1163:2009 in Grade C350.
- Grade C450 and L0 available on request.

# STRUCTURAL TUBE & PIPE REFERENCE GUIDE: RECTANGULAR HOLLOW SECTION (RHS)

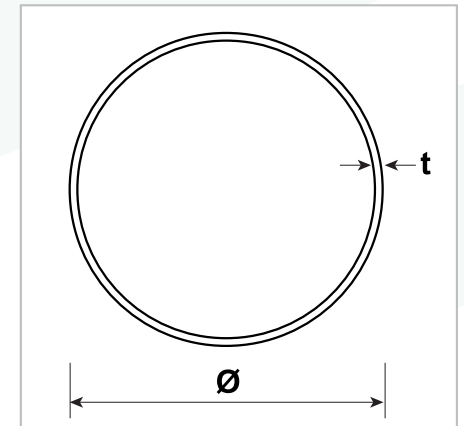
Size dxb	Nom. Thick t	Nom.Linear Mass	Surface Area	8m Lengths	12m Lengths	Surface Finish	
						Painted	Galvanised
mm	mm	kg/m	m <sup>2</sup> /m	per pack	per pack		
250x150	5.0	29.90	0.779	6	4	*	
	6.0	35.60	0.774	6	4	*	
	9.0	51.80	0.761	4	2	*	
	12.5	69.40	0.768	-	1	*	
	16.0	85.50	0.759	-	1	*	
300x200	6.0	45.00	0.985	2	1	*	
	8.0	51.10	0.979	2	1	*	
	9.0	65.90	0.976	-	2	*	
	10.0	72.70	0.974	1	1	*	
	12.5	89.00	0.968	-	1	*	
	16.0	111.0	0.959	-	1	*	
350x250	8.0	71.58	1.077	-	1	*	
	10.0	88.40	1.071	-	1	*	
	12.5	109.0	1.065	-	1	*	
	16.0	136.0	1.055	-	1	*	
400x200	8.0	71.60	1.180	-	2	*	
	10.0	88.40	1.170	-	1	*	
	12.5	109.0	1.170	-	1	*	
	16.0	136.0	1.160	-	1	*	
400x300	12.5	128.0	1.370	-	1	*	
	16.0	161.0	1.370	-	1	*	



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1163:2009 in Grade C350.
- Grade C450 and L0 available on request.

# STRUCTURAL TUBE & PIPE REFERENCE GUIDE: CIRCULAR HOLLOW SECTION (CHS)

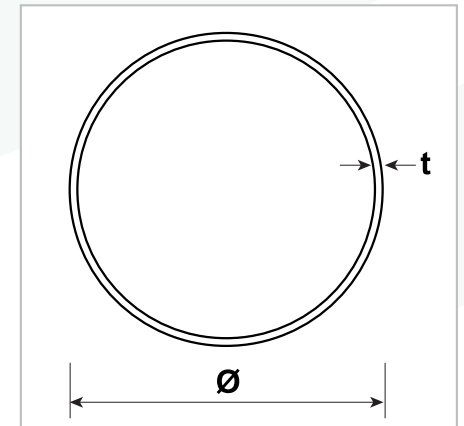
Size	Class	OD $\emptyset$	Nom. Thick t	Surface Area	Nom. Linear Mass Black	Nom. Linear Mass Galvanised	Quantity
mm		mm	mm	m <sup>2</sup> /m	kg/m	kg/m	per pack
20	M	26.9	2.6	0.085	1.56	1.60	127
25	XL	33.7	2.0	0.106	1.56	1.62	91
	L	33.7	2.6	0.106	1.99	2.05	91
	M	33.7	3.2	0.106	2.41	2.46	91
	H	33.7	4.0	0.106	2.94	2.99	91
32	XL	42.4	2.0	0.133	1.99	2.07	61
	L	42.4	2.6	0.133	2.55	2.63	61
	M	42.4	3.2	0.133	3.10	3.17	61
	H	42.4	4.0	0.133	3.80	3.86	61
40	XL	48.3	2.3	0.152	2.61	2.70	61
	L	48.3	2.9	0.152	3.25	3.30	61
	M	48.3	3.2	0.152	3.57	3.64	61
	H	48.3	4.0	0.152	4.38	4.45	61
	XH	48.3	5.4	0.152	5.71	-	61
50	XL	60.3	2.3	0.189	3.29	3.40	37
	L	60.3	2.9	0.189	4.11	4.21	37
	M	60.3	3.6	0.189	5.03	5.14	37
	H	60.3	4.5	0.189	6.19	6.33	37
	XH	60.3	5.4	0.189	7.31	-	37
65	XL	76.1	2.3	0.239	4.19	4.32	37
	L	76.1	3.2	0.239	5.75	5.89	37
	M	76.1	3.6	0.239	6.43	6.57	37
	H	76.1	4.5	0.239	7.93	8.08	37



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1074:1991.

# STRUCTURAL TUBE & PIPE REFERENCE GUIDE: CIRCULAR HOLLOW SECTION (CHS)

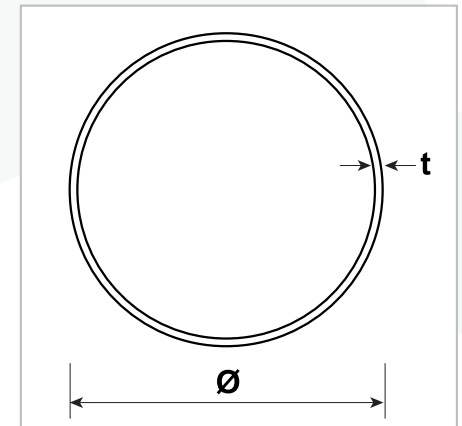
Size	Class	OD $\emptyset$	Nom. Thick t	Surface Area	Nom. Linear Mass Black	Nom. Linear Mass Galvanised	Quantity
mm		mm	mm	m <sup>2</sup> /m	kg/m	kg/m	per pack
80	XL	88.9	2.6	0.279	5.53	5.70	19
	L	88.9	3.2	0.279	6.76	6.93	19
	M	88.9	4.0	0.279	8.37	8.54	19
	H	88.9	5.0	0.279	10.30	10.6	19
	XH	88.9	5.9	0.279	12.10	-	19
90	XL	101.6	2.6	0.319	6.35	-	19
	L	101.6	3.2	0.319	7.77	7.95	19
	M	101.6	4.0	0.319	9.63	9.81	19
	H	101.6	5.0	0.319	11.90	-	19
100	XL	114.3	3.2	0.359	8.77	-	19
	L	114.3	3.6	0.359	9.83	10.0	19
	M	114.3	4.5	0.359	12.20	12.4	19
	H	114.3	5.4	0.359	14.50	14.7	19
125	XL	139.7	3.0	0.439	10.10	-	10
	L	139.7	3.5	0.439	11.80	12.0	10
	M	139.7	5.0	0.439	16.60	16.9	10
	H	139.7	5.4	0.439	17.90	-	10
150	XL	165.1	3.0	0.519	12.00	-	10
	L	165.1	3.5	0.519	13.90	14.3	10
	M	165.1	5.0	0.519	19.70	20.0	10
	H	165.1	5.4	0.519	21.30	-	10



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1074:1991.

# STRUCTURAL TUBE & PIPE REFERENCE GUIDE: FIREPIPE

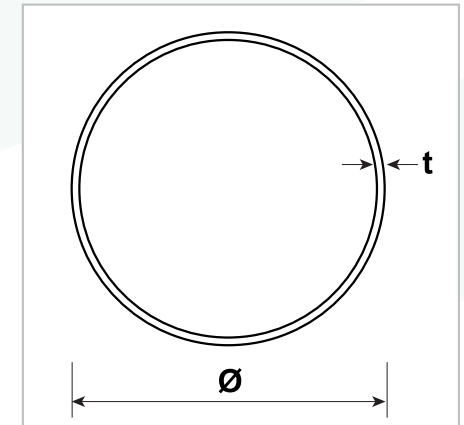
NB	Class	OD Ø	Nom. Thick t	Surface Area	Nom. Linear Mass	Quantity	PE	SOE	SBE
mm		mm	mm	m <sup>2</sup> /m	kg/m	per pack			
25	M	33.7	3.2	0.106	2.41	91	*	*	*
32	M	42.4	3.2	0.133	3.10	61	*	*	*
40	M	48.3	3.2	0.152	3.57	61	*	*	*
50	M	60.3	3.6	0.189	5.03	37	*	*	*
65	M	76.1	3.6	0.239	6.43	37	*		
80	M	88.9	4.0	0.279	8.37	19	*		
100	M	114.3	4.5	0.359	12.2	19	*		
150	M	165.1	5.0	0.519	19.7	10	*		



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1074:1991.

# STRUCTURAL TUBE & PIPE REFERENCE GUIDE: LARGE STRUCTURAL PIPE

NB	OD $\phi$	Nom. Thick t	Surface Area	Nom. Linear Mass Black	NB	OD $\phi$	Nom. Thick t	Surface Area	Nom. Linear Mass Black
mm	mm	mm	m <sup>2</sup> /m	kg/m	mm	mm	mm	m <sup>2</sup> /m	kg/m
65	76.1	4.00	0.239	7.13	450	457.0	6.40	1.435	71.12
65	76.1	5.00	0.239	8.77	450	457.0	9.50	1.435	104.84
80	88.9	5.50	0.279	11.31	450	457.0	12.7	1.435	139.30
100	114.3	4.80	0.359	12.96	500	508.0	6.40	1.595	79.20
100	114.3	6.00	0.359	16.02	500	508.0	9.50	1.595	116.79
125	114.3	4.80	0.444	16.16	500	508.0	12.7	1.595	155.12
125	114.3	6.60	0.444	21.99	600	610.0	6.40	1.915	95.26
150	168.3	4.80	0.528	19.35	600	610.0	9.50	1.915	140.68
150	168.3	6.40	0.528	25.55	600	610.0	12.7	1.915	187.06
150	168.3	7.10	0.528	28.22	600	610.0	16.0	1.915	232.94
150	168.3	11.0	0.528	42.67	650	660.0	12.7	2.072	202.74
200	219.1	4.80	0.688	25.37	700	711.0	9.53	2.233	164.34
200	219.1	6.40	0.688	33.57	700	711.0	12.7	2.233	218.71
200	219.1	8.20	0.688	42.60	700	711.0	15.9	2.233	272.56
200	219.1	12.7	0.688	64.64	750	762.0	9.50	2.393	176.84
250	273.1	4.80	0.858	31.76	750	762.0	12.7	2.393	234.68
250	273.1	6.40	0.858	42.09	750	762.0	15.9	2.393	292.54
250	273.1	9.27	0.858	60.50	750	762.0	19.05	2.393	348.99
250	273.1	12.7	0.858	81.55	800	813.0	9.50	2.553	188.82
300	323.9	6.40	1.017	50.11	800	813.0	12.7	2.553	250.64
300	323.9	9.50	1.017	73.66	800	813.0	16.0	2.553	314.39
300	323.9	12.7	1.017	97.50	900	914.0	9.50	2.870	211.91
350	355.6	6.40	1.117	55.10	900	914.0	12.7	2.870	282.29
350	355.6	9.50	1.117	81.10	900	914.0	15.9	2.870	352.16
350	355.6	12.7	1.117	107.40	1050	1067.0	9.53	3.350	248.52
400	406.4	6.40	1.276	63.13	1050	1067.0	12.7	3.350	330.19
400	406.4	9.50	1.276	92.98					
400	406.4	12.7	1.276	123.30					

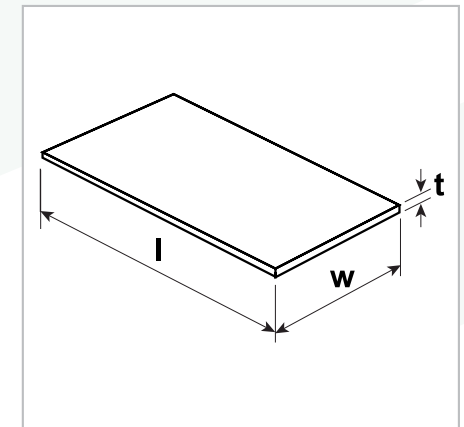


- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1163:2009 in Grade C350.
- Typically supplied in 9m & 12m lengths.



# PLATE PRODUCTS REFERENCE GUIDE: MILD STEEL PLATE - 250 GRADE

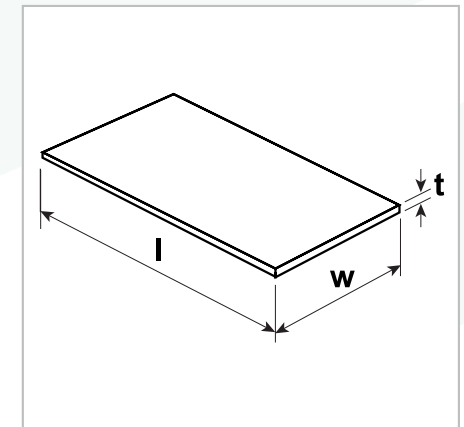
Designation	Weight	Thickness t	Width w	Length l	Designation	Weight	Thickness t	Width w	Length l
	kg/m <sup>2</sup>	mm	mm	mm		kg/m <sup>2</sup>	mm	mm	mm
2400x6000	47.10	6	2400	6000	3000x12000	157.00	20	3000	12000
2400x9000	47.10	6	2400	9000	3200x12000	157.00	20	3200	12000
3000x9000	47.10	6	3000	9000	2400x6000	196.25	25	2400	6000
3000x12000	47.10	6	3000	12000	3000x9000	196.25	25	3000	9000
3200x12000	47.10	6	3200	12000	3000x12000	196.25	25	3000	12000
2400x6000	62.80	8	2400	6000	3200x12000	196.25	25	3200	12000
2400x9000	62.80	8	2400	9000	2400x6000	219.80	28	2400	6000
3000x9000	62.80	8	3000	9000	2400x6000	251.20	32	2400	6000
3000x12000	62.80	8	3000	12000	3000x9000	251.20	32	3000	9000
3200x12000	62.80	8	3200	12000	2400x9000	282.60	36	2400	9000
2400x6000	78.50	10	2400	6000	2400x6000	314.00	40	2400	6000
2400x9000	78.50	10	2400	9000	2400x9000	353.25	45	2400	9000
3000x9000	78.50	10	3000	9000	2400x6000	392.50	50	2400	6000
3000x12000	78.50	10	3000	12000	2400x9000	392.50	50	2400	9000
3200x12000	78.50	10	3200	12000	2400x6000	431.75	55	2400	6000
2400x6000	94.20	12	2400	6000	2400x6000	471.00	60	2400	6000
2400x9000	94.20	12	2400	9000	2400x6000	549.50	70	2400	6000
3000x12000	94.20	12	3000	12000	2400x5200	628.00	80	2400	5200
3200x12000	94.20	12	3200	12000	1800x6000	706.50	90	1800	6000
2400x6000	125.60	16	2400	6000	2400x4000	785.00	100	2400	4000
2400x9000	125.60	16	2400	9000	2400x3700	863.50	110	2400	3700
3000x12000	125.60	16	3000	12000	2400x3400	942.00	120	2400	3400
3200x12000	125.60	16	3200	12000	2400x3100	1020.50	130	2400	3100
2400x6000	157.00	20	2400	6000	2400x2700	1177.50	150	2400	2700
3000x9000	157.00	20	3000	9000					



■ Manufactured in accordance with the requirements of Australian Standard AS/NZS 3678 in Grade 250.

# PLATE PRODUCTS REFERENCE GUIDE: MILD STEEL PLATE - 350 GRADE

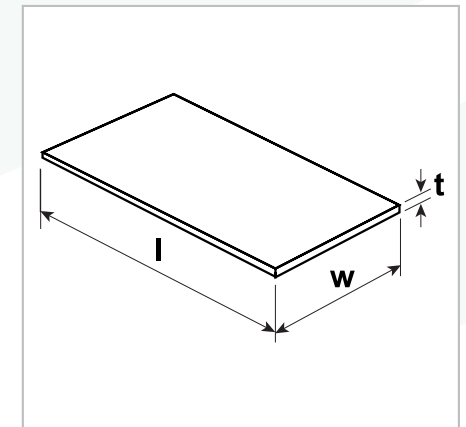
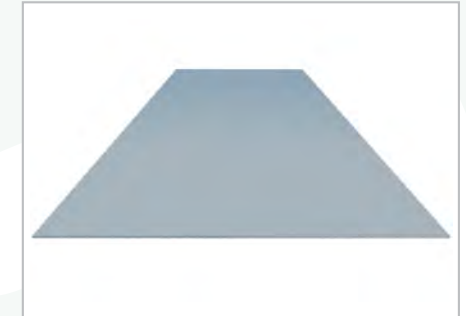
Designation	Weight	Thickness t	Width w	Length l	Designation	Weight	Thickness t	Width w	Length l
	kg/m <sup>2</sup>	mm	mm	mm		kg/m <sup>2</sup>	mm	mm	mm
2400x6000	39.25	5	2400	6000	3100x9600	157.00	20	3100	9600
2400x9000	39.25	5	2400	9000	3000x12000	157.00	20	3000	12000
3000x9000	39.25	5	3000	9000	2400x9600	196.25	25	2400	9600
2400x9600	47.10	6	2400	9600	3000x12000	196.25	25	3000	12000
3000x12000	47.10	6	3000	12000	2400x10000	219.80	28	2400	10000
2400x9600	62.80	8	2400	9600	2400x9600	251.20	32	2400	9600
3000x12000	62.80	8	3000	12000	2400x12000	251.20	32	2400	12000
2400x9600	78.50	10	2400	9600	2400x9600	282.60	36	2400	9600
3100x9600	78.50	10	3100	9600	2400x7600	314.00	40	2400	7600
3000x12000	78.50	10	3000	12000	2400x7600	392.50	50	2400	7600
2400x9600	94.20	12	2400	9600	2400x7600	471.00	60	2400	7600
3100x9600	94.20	12	3100	9600	2400x6000	549.50	70	2400	6000
3000x12000	94.20	12	3000	12000	2400x6000	628.00	80	2400	6000
2400x9600	125.60	16	2400	9600	2400x3150	706.50	90	2400	3150
3100x9600	125.60	16	3100	9600	2400x6300	706.50	90	2400	6300
3000x12000	125.60	16	3000	12000	2100x3150	785.00	100	2100	3150
2400x9600	157.00	20	2400	9600	2100x6500	785.00	100	2100	6500



■ Manufactured in accordance with the requirements of Australian Standard AS/NZS 3678 in Grade 250.

# PLATE PRODUCTS REFERENCE GUIDE: COIL PLATE (TRUSPEC)

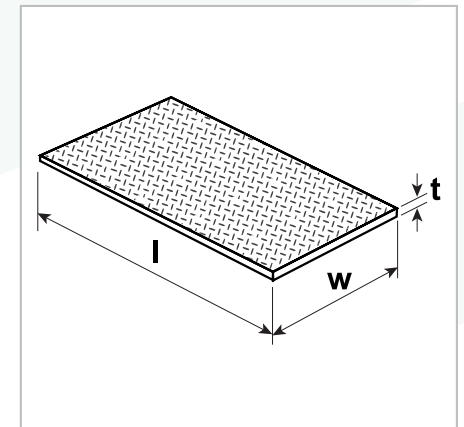
Designation	Weight	Thickness t	Width w	Length l	Designation	Weight	Thickness t	Width w	Length l
	kg/m <sup>2</sup>	mm	mm	mm		kg/m <sup>2</sup>	mm	mm	mm
1200x2400	23.55	3	1200	2400	1800x6000	39.25	5	1800	6000
1200x3000	23.55	3	1200	3000	1200x6000	47.10	6	1200	6000
1200x6000	23.55	3	1200	6000	1500x3000	47.10	6	1500	3000
1500x3000	23.55	3	1500	3000	1500x6000	47.10	6	1500	6000
1500x6000	23.55	3	1500	6000	1800x6000	47.10	6	1800	6000
1800x6000	23.55	3	1800	6000	1200x2400	62.80	8	1200	2400
1200x2400	31.40	4	1200	2400	1500x3000	62.80	8	1500	3000
1200x6000	31.40	4	1200	6000	1200x2400	78.50	10	1200	2400
1500x3000	31.40	4	1500	3000	1500x3000	78.50	10	1500	3000
1500x6000	31.40	4	1500	6000	1200x2400	94.20	12	1200	2400
1800x6000	31.40	4	1800	6000	1500x3000	94.20	12	1500	3000
1200x2400	39.25	5	1200	2400	1200x2400	125.60	16	1200	2400
1200x6000	39.25	5	1200	6000	1500x3000	157.00	20	1500	3000
1500x3000	39.25	5	1500	3000	1500x3000	196.25	25	1500	3000
1500x6000	39.25	5	1500	6000					



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1594 - HA250.

# PLATE PRODUCTS REFERENCE GUIDE: FLOOR PLATE

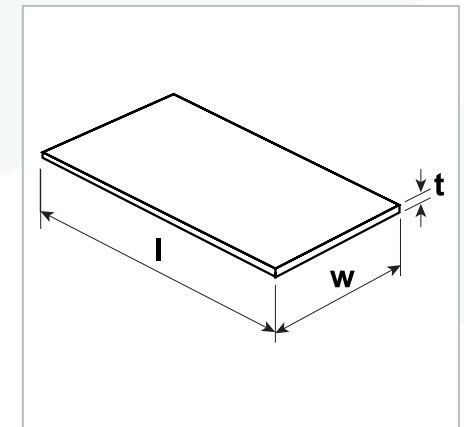
Designation	Weight	Thickness t	Width w	Length l	Designation	Weight	Thickness t	Width w	Length l
	kg/m <sup>2</sup>	mm	mm	mm		kg/m <sup>2</sup>	mm	mm	mm
1200x2400	18.49	2.1	1200	2400	1500x3000	41.25	5	1500	3000
1200x2400	25.55	3	1200	2400	1500x6000	41.25	5	1500	6000
1200x3000	25.55	3	1200	3000	1200x2400	49.10	6	1200	2400
1200x4200	25.55	3	1200	4200	1200x6000	49.10	6	1200	6000
1200x6000	25.55	3	1200	6000	1500x6000	49.10	6	1500	6000
1200x6900	25.55	3	1200	6900	1800x6000	64.80	8	1800	6000
1200x2400	41.25	5	1200	2400	1800x6000	80.50	10	1800	6000
1200x6000	41.25	5	1200	6000	1800x6000	96.20	12	1800	6000



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3678 in Grade 250.

# PLATE PRODUCTS REFERENCE GUIDE: BOILER PLATE

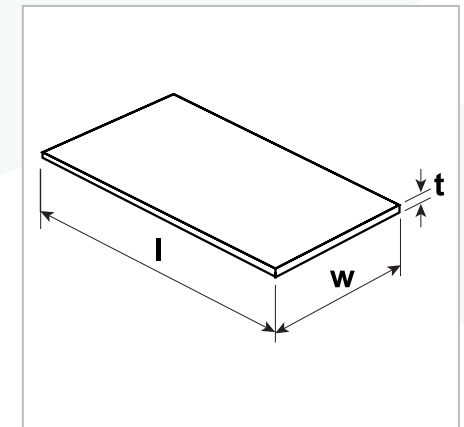
Designation	Weight	Thickness t	Width w	Length l	Designation	Weight	Thickness t	Width w	Length l
	kg/m <sup>2</sup>	mm	mm	mm		kg/m <sup>2</sup>	mm	mm	mm
3100x9600	62.80	8	3100	9600	2400x9600	314.00	40	2400	9600
3100x9600	78.50	10	3100	9600	2400x7600	392.50	50	2400	7600
3100x9600	94.20	12	3100	9600	2400x6000	471.00	60	2400	6000
3100x9600	125.60	16	3100	9600	2400x6000	549.50	70	2400	6000
3100x8600	157.00	20	3100	8600	2400x5200	628.00	80	2400	5200
3100x9600	196.25	25	3100	9600	2400x5200	785.00	100	2400	5200
2400x9600	251.20	32	2400	9600					



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 1548 -PT460NR.

# PLATE PRODUCTS REFERENCE GUIDE: QUENCH & TEMPERED PLATE (Q&T) - 80 GRADE

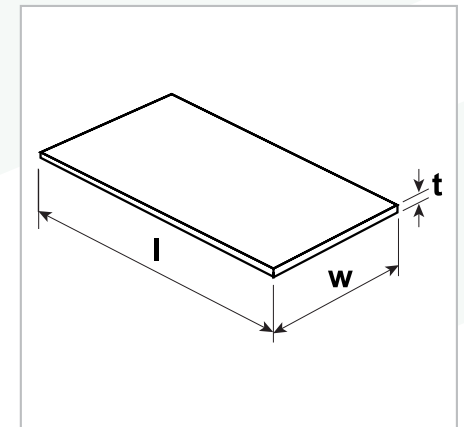
Designation	Weight	Thickness t	Width w	Length l	Designation	Weight	Thickness t	Width w	Length l
	kg/m <sup>2</sup>	mm	mm	mm		kg/m <sup>2</sup>	mm	mm	mm
2500x9600	31.40	4	2500	9600	2485x8000	196.25	25	2485	8000
2500x9600	39.25	5	2500	9600	3100x8000	196.25	25	3100	8000
1525x8000	47.10	6	1525	8000	2485x8000	251.20	32	2485	8000
2485x8000	47.10	6	2485	8000	2485x8000	314.00	40	2485	8000
2485x8000	62.80	8	2485	8000	2485x8000	392.50	50	2485	8000
2485x8000	78.50	10	2485	8000	2485x6000	471.00	60	2485	6000
3100x8000	78.50	10	3100	8000	2000x6000	549.50	70	2000	6000
2485x8000	94.20	12	2485	8000	2000x6000	588.75	75	2000	6000
3100x8000	94.20	12	3100	8000	2000x6000	628.00	80	2000	6000
2485x8000	12.50	16	2485	8000	2000x6000	706.50	90	2000	6000
3100x8000	12.50	16	3100	8000	2000x6000	785.00	100	2000	6000
2485x8000	157.00	20	2485	8000	2000x4300	942.00	120	2000	4300
3100x8000	157.00	20	3100	8000	2000x4300	1099.00	140	2000	4300



- Manufactured in accordance with the requirements of Australian Standard AS/NZS 3597 in Grade 700.

# PLATE PRODUCTS REFERENCE GUIDE: QUENCH & TEMPERED PLATE (Q&T) - 400 GRADE

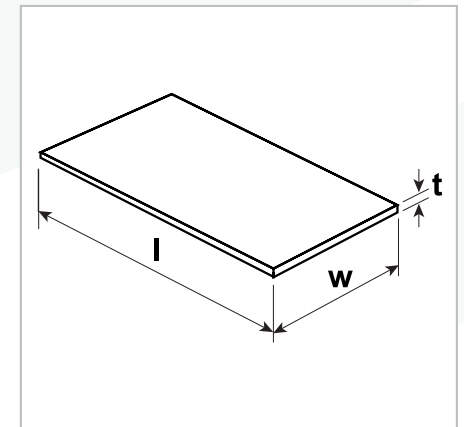
Designation	Weight	Thickness t	Width w	Length l	Designation	Weight	Thickness t	Width w	Length l
	kg/m <sup>2</sup>	mm	mm	mm		kg/m <sup>2</sup>	mm	mm	mm
1525x8000	47.10	6	1525	8000	2485x8000	196.25	25	2485	8000
2485x8000	47.10	6	2485	8000	3100x8000	196.25	25	3100	8000
2485x8000	62.80	8	2485	8000	2485x8000	251.20	32	2485	8000
2485x8000	78.50	10	2485	8000	2485x8000	314.00	40	2485	8000
3100x8000	78.50	10	3100	8000	2485x8000	392.50	50	2485	8000
2485x8000	94.20	12	2485	8000	2485x6000	471.00	60	2485	6000
3100x8000	94.20	12	3100	8000	2000x6000	549.50	70	2000	6000
2485x8000	125.60	16	2485	8000	2000x6000	588.75	75	2000	6000
3100x8000	125.60	16	3100	8000	2000x6000	628.00	80	2000	6000
2485x8000	157.00	20	2485	8000	2000x6000	706.50	90	2000	6000
3100x8000	157.00	20	3100	8000	2000x6000	785.00	100	2000	6000



- *Manufactured to manufacturers own internal specifications.*

# PLATE PRODUCTS REFERENCE GUIDE: QUENCH & TEMPERED PLATE (Q&T) - 450 GRADE

Designation	Weight	Thickness t	Width w	Length l	Designation	Weight	Thickness t	Width w	Length l
	kg/m <sup>2</sup>	mm	mm	mm		kg/m <sup>2</sup>	mm	mm	mm
2500x9300	25.12	3.2	2500	9300	2485x8000	157.00	20	2485	8000
2500x8000	31.40	4	2500	8000	3100x8000	157.00	20	3100	8000
2500x9600	31.40	4	2500	9600	2485x8000	196.25	25	2485	8000
2500x8000	39.25	5	2500	8000	3100x8000	196.25	25	3100	8000
2500x9600	39.25	5	2500	9600	2485x8500	251.20	32	2485	8500
2500x8000	47.10	6	2500	8000	3100x8000	251.20	32	3100	8800
2500x9600	47.10	6	2500	9600	2485x8000	314.00	40	2485	8000
2485x8000	62.80	8	2485	8000	2485x8000	392.50	50	2485	8000
2500x9600	62.80	8	2500	9600	2485x8000	471.00	60	2485	8000
2485x8000	78.50	10	2485	8000	2485x8000	549.50	70	2485	8000
3100x8000	78.50	10	3100	8000	2485x8000	588.75	75	2485	8000
2485x8000	94.20	12	2485	8000	2485x8000	628.00	80	2485	8000
3100x8000	94.20	12	3100	8000	2485x8000	706.50	90	2485	8000
2485x8000	125.60	16	2485	8000	2485x8000	785.00	100	2485	8000
3100x8000	125.60	16	3100	8000					

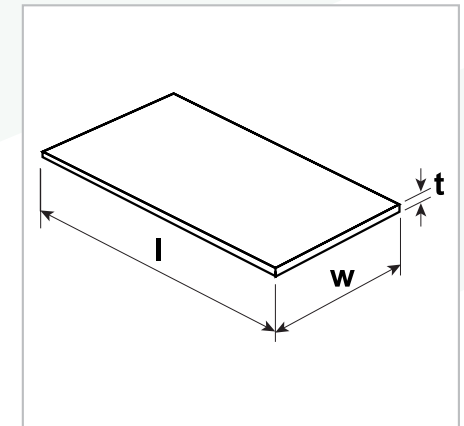


■ Manufactured to manufacturers own internal specifications.



# PLATE PRODUCTS REFERENCE GUIDE: QUENCH & TEMPERED PLATE (Q&T) - 500 GRADE

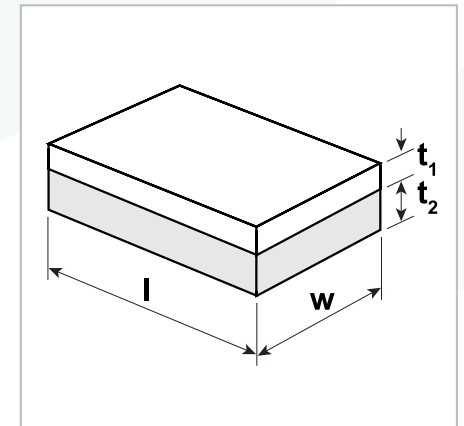
Designation	Weight	Thickness t	Width w	Length l	Designation	Weight	Thickness t	Width w	Length l
	kg/m <sup>2</sup>	mm	mm	mm		kg/m <sup>2</sup>	mm	mm	mm
2485x8000	62.80	8	2485	8000	2485x8000	314.00	40	2485	8000
2485x8000	78.50	10	2485	8000	2485x8000	392.50	50	2485	8000
2485x8000	94.20	12	2485	8000	2485x6000	471.00	60	2485	6000
2485x8000	125.60	16	2485	8000	1900x6000	549.50	70	1900	6000
2485x8000	157.00	20	2485	8000	1900x6000	588.75	75	1900	6000
2485x8000	196.25	25	2485	8000	1900x6000	628.00	80	1900	6000
2485x8000	251.20	32	2485	8000	1525x6000	785.00	100	1525	6000



- *Manufactured to manufacturers own internal specifications.*

# PLATE PRODUCTS REFERENCE GUIDE: CLAD PLATE

Designation	Clad Thickness $t^1$	Base Thickness $t^2$	Width $w$	Length $l$	Designation	Clad Thickness $t^1$	Base Thickness $t^2$	Width $w$	Length $l$
	mm	mm	mm	mm		mm	mm	mm	mm
1400x2900	4	6	1400	2900	1400x2900	9	10	1400	2900
1400x2900	6	6	1400	2900	1400x2900	12	12	1400	2900
1400x2900	7	8	1400	2900	1400x2900	17	12	1400	2900



- *Manufactured to manufacturers own internal specifications.*