

MACSTEEL

Africa's leading steel supplier



STRUCTURAL STEEL CATALOGUE



TRADING

MACSTEEL Africa's leading steel supplier

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Macsteel Service Centres SA is the leading steel service centre and distributor of steel products in Africa.

Eight dynamic Business Units within Macsteel Service Centres SA operate from a geographic network of more than 60 branches and service centres which supply the most comprehensive range of steel, stainless steel, aluminium products and processes available to industry.

To ensure the most beneficial and efficient focus on the varied needs of our valued clients, we categorise our Business Units into two broad sectors namely: Trading and Manufacturing.

Trading businesses in the Group are:

- Macsteel Trading
- Macsteel VRN
- Macsteel Exports

The Value Adding and Converting businesses are:

- Macsteel Coil Processing
- Macsteel Fluid Control
- Macsteel Roofing
- Macsteel Special Steels
- Macsteel Tube & Pipe
- Macsteel VRN
- Macsteel Trading

At Macsteel, our customers are at the centre of our focus. Exceptional levels of personalised service result in us partnering our customers through the entire steel supply chain, thereby ensuring repeat business and customer satisfaction. We employ over 4000 Macsteelers and they are central to the fulfilment of the Macsteel Group's service promise. Their experience, knowledge and passion for our Group reinforces the strength of our brand and the success of our business partnerships.

We invite and nurture dynamic partnerships with our suppliers, ensuring a healthy respect for product quality and reliable service combined with competitive prices.

We are proud subscribers to the support South Africa principle.

Macsteelers are empowered, passionate and pro-active people and together with our superb infrastructure, are well placed to meet the steel and stainless steel requirements of industry.

Kindly contact us, we sincerely look forward to being of service to You.

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○ Structural Round Tubing (Hot Rolled)

M

Mass Per Metre (kg/m)

Dimensions	1.6mm	2mm	2.5mm	3mm	3.5mm	4mm	4.5mm	5mm	6mm	8mm	10mm
15.8	0.560	0.681									
19.0	0.687	0.838									
21.3	0.777	0.952	1.159								
25.4	0.939	1.154	1.412								
26.9	0.998	1.228	1.504	1.768							
31.7	1.188	1.465	1.800	2.123							
34.0	1.278	1.578	1.942	2.294	2.633	2.959					
38.1	1.440	1.781	2.195	2.597	2.987	3.364					
42.8	1.626	2.012	2.485	2.945	3.392	3.827					
48.4	1.847	2.289	2.830	3.359	3.876	4.380	4.872				
50.8	1.941	2.407	2.978	3.536	4.083	4.617	5.138				
57.1	2.190	2.718	3.366	4.003	4.626	5.238	5.837				
60.3	2.316	2.876	3.564	4.239	4.903	5.554	6.193				
63.5	2.442	3.033	3.761	4.476	5.179	5.869	6.548				
76.2	2.944	3.660	4.544	5.416	6.275	7.122	7.957	8.779	10.387		
88.9		4.286	5.327	6.355	7.371	8.375	9.366	10.346	12.267		
101.6		4.913	6.110	7.295	8.468	9.628	10.776	11.912	14.146		
114.3		5.539	6.893	8.234	9.564	10.881	12.185	13.478	16.025		
127.0		6.165	7.676	9.174	10.660	12.133	13.595	15.044	17.904		
139.7				10.114	11.756	13.386	15.004	16.610	19.783		
152.4				11.053	12.852	14.639	16.413	18.176	21.663		
165.1				11.993	13.949	15.892	17.823	19.742	23.542		
177.8				12.932	15.045	17.145	19.232	21.308	25.421		
193.7				14.109	16.417	18.713	20.997	23.268	27.774		
219.1				15.988	18.610	21.219	23.816	26.400	31.532	41.648	51.567
273.1							29.808	33.059	39.523	52.302	64.884
323.9							35.446	39.323	47.039	62.325	77.412
355.6							38.964	43.232	51.730	68.579	85.230

Kindly note that other sizes can be supplied on application:

All tubing is normally supplied in 6m lengths, but other lengths are available on application. Please contact our Structural Steel Division for more information.

Round Tubing from 60mm and bigger; Square tubing from 50mm and bigger; Rectangular tubing from 60mm x 40mm and bigger; 3mm and thicker are available complying with a S355MPa yield strength material.

Kindly note that Value Added Services are available on request:

- Cut to Size
- Laser Cutting

□ Square Tubing (Hot Rolled)

M

Dimensions	1.6mm	2mm	2.5mm	3mm	3.5mm	4mm	4.5mm	5mm	6mm	8mm	10mm
12.7 x 12.7	0.575										
15.8 x 15.8	0.731	0.894									
19.0 x 19.0	0.889	1.092									
25.0 x 25.0	1.200	1.480	1.819	2.146							
32.0 x 32.0	1.529	1.892	2.334	2.764							
38.0 x 38.0	1.847	2.289	2.830	3.359	3.876	4.380					
40.0 x 40.0	1.943	2.408	2.980	3.539	4.085	4.620					
50.0 x 50.0	2.442	3.033	3.761	4.476	5.179	5.869	6.548				
60.0 x 60.0	2.944	3.660	4.544	5.416	6.275	7.122	7.957	8.779	10.387		
63.0 x 63.0	3.094	3.847	4.778	5.697	6.603	7.497	8.379				
75.0 x 75.0	3.685	4.587	5.703	6.807	7.898	8.977	10.043	11.098	13.169		
100.0 x 100.0		6.165	7.676	9.174	10.660	12.133	13.595	15.044	17.904		
120.0 x 120.0				11.053	12.852	14.639	16.413	18.176	21.663		
150.0 x 150.0				13.835	16.098	18.348	20.586	22.812	27.226	35.907	44.391
175.0 x 175.0					18.610	21.219	23.816		31.532	41.648	51.567
200.0 x 200.0							27.215		35.822	46.505	56.965
220.0 x 220.0									39.523	52.302	64.884
250.0 x 250.0									45.242	59.065	72.665
285.0 x 285.0									51.730	68.579	85.230

Rectangular Tubing (Hot Rolled)

M

Mass Per Metre (kg/m)

Dimensions	1.6mm	2mm	2.5mm	3mm	3.5mm	4mm	4.5mm	5mm	6mm	8mm	10mm
25.0 x 12.0	0.894	1.097									
31.0 x 19.0	1.200	1.480									
38.0 x 19.0	1.365	1.687									
38.0 x 25.0	1.515	1.874	2.312	2.737							
50.0 x 25.0	1.847	2.289	2.830	3.359	3.876	4.391	4.872				
50.0 x 38.0	2.190	2.718	3.366	4.003							
60.0 x 40.0	2.442	3.033	3.761	4.476	5.179	5.869	6.548				
63.0 x 38.0	2.466	3.063	3.798	4.520	5.231	5.929	6.614				
75.0 x 25.0	2.442	3.033	3.761	4.476	5.179	5.869					
76.0 x 38.0	2.817	3.502	4.347	5.179	5.999	6.807	7.602				
76.0 x 50.0	3.094	3.847	4.778	5.697	6.603	7.497	8.379				
100.0 x 50.0		4.587	5.703	6.807	7.898	8.977	10.043	11.098	13.169		
120.0 x 60.0		5.539	6.893	8.234	9.564	10.881	12.185	13.478	16.025		
120.0 x 80.0		6.165	7.676	9.174	10.660	12.133	13.595	15.044	17.904		
127.0 x 76.0		6.264	7.799	9.322	10.833	12.331	13.817	15.290	18.200		
150.0 x 50.0			7.676	9.174	10.660	12.133	13.595	15.044	17.904		
150.0 x 100.0				11.542	13.422	15.290	17.146	18.989	22.639		
160.0 x 80.0				11.053	12.852	14.639	16.413	18.176	21.663		
200.0 x 100.0				13.872	16.141	18.397	20.642	22.874	27.300	36.006	44.514
200.0 x 150.0							23.816	26.400	31.532	41.648	51.567
250.0 x 100.0							23.816	26.400	31.532	41.648	51.567
250.0 x 150.0									35.822	46.505	56.965
300.0 x 140.0									39.523	52.302	64.884
320.0 x 200.0									47.039	62.325	77.412

Kindly note that other sizes can be supplied on application:

All tubing is normally supplied in 6m lengths, but other lengths are available on application. Please contact our Structural Steel Division for more information.

Round Tubing from 60mm and bigger; Square tubing from 50mm and bigger; Rectangular tubing from 60mm x 40mm and bigger; 3mm and thicker are available complying with a S355MPa yield strength material.

Cold Formed Sections

M

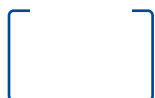
LIPPED ANGLE	2mm	2.5mm	3mm
75 x 50 x 20	2.400	2.940	3.460
100 x 75 x 20	3.190	3.930	4.640

LIPPED CHANNEL	2mm	2.5mm	3mm
75 x 50 x 20	3.120	3.830	4.500
100 x 50 x 20	3.520	4.320	5.090
100 x 64 x 20	3.960	4.870	5.750
100 x 75 x 20	4.300	5.300	6.260
125 x 50 x 20	3.910	4.810	5.680
125 x 64 x 20	4.350	5.360	6.330
125 x 75 x 20	4.690	5.790	6.850
150 x 50 x 20	4.300	5.300	6.260
150 x 64 x 20	4.740	5.850	6.920
150 x 75 x 20	5.090	6.280	7.440
175 x 50 x 20	4.690	5.790	6.850
175 x 64 x 20	5.130	6.340	7.510
175 x 75 x 20	5.480	6.770	8.030
200 x 50 x 20	5.090	6.280	7.440
200 x 75 x 20	5.870	7.260	8.620
250 x 75 x 20	6.660	8.240	9.800

All cold formed sections are normally supplied in 6.0m or 9.145m lengths, but other lengths are available on application. Please contact our Structural Steel Division for more information.



LIPPED ANGLE



LIPPED CHANNEL

Bigger sizes can be rolled on request.

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Equal Angles Grade Mild Steel

Dimensions	2mm	2.5mm	3mm	4mm	5mm	6mm	8mm
25 x 25	0.777	0.954	1.114		1.773		
30 x 30	0.953	1.171	1.363		2.180		
40 x 40	1.285	1.582	1.874	2.417	2.974	3.516	
45 x 45			2.131	2.742	3.378	3.998	
50 x 50			2.367	3.056	3.770	4.469	5.819

Unequal Angle SANS 50025 / EN 10025 Grade S355JR

Dimensions	6mm	8mm	10mm	12mm	15mm
65 x 50	5.160	6.750			
75 x 50	5.650	7.390			
80 x 60	6.370	8.340			
90 x 65	7.070	9.290	11.400		
100 x 65		9.940	12.300		
100 x 75	8.044	10.572	13.370	15.439	
125 x 75		12.160	15.017	17.812	
150 x 75			16.979	20.167	24.829
150 x 90			18.176	21.599	26.615

Equal Angle SANS 50025 / EN 10025 Grade S355JR

Dimensions	4mm	5mm	6mm	8mm	10mm	12mm	15mm	16mm	18mm	20mm	24mm
60 x 60	3.696	4.568	5.423	7.088	8.689						
70 x 70			6.380	8.358	10.273						
80 x 80			7.338	9.630	11.859	14.026					
90 x 90			8.297	10.904	13.447	15.928					
100 x 100				12.179	15.036	17.831	21.905*				
120 x 120				14.712	18.197	21.620	26.636*				
150 x 150					22.981	27.345	33.774		40.062		
200 x 200								48.500	54.200	59.900	71.100

* Please confirm availability with your local Macsteel Trading branch as some items may not be readily available.

Please contact our Structural Steel Division for sizes not listed above.

Flat Bars - Mild Steel (Commercial Quality)

Dimensions	3mm	4.5mm	5mm	6mm	8mm	10mm	12mm	16mm	20mm	25mm	30mm	40mm
20	0.471		0.785	0.942	1.256	1.570						
25	0.589	0.883	0.981	1.178	1.570	1.963	2.355					
30	0.707	1.060	1.178	1.413	1.884	2.355	2.826					
40	0.942	1.413	1.570	1.884	2.512	3.140	3.768	5.024	6.280	7.850		
45			1.766*	2.120*			4.239*					
47.6			1.869									
50			1.963	2.355	3.140	3.925	4.710	6.280	7.850	9.813		
60				2.826	3.768	4.710	5.652	7.536	9.420*	11.775*		
65				3.062	4.082	5.103	6.123	8.164*	10.205*	12.756*		
70				3.297	4.396	5.495	6.594	8.792	10.990*	13.738*		
80				3.768	5.024	6.280	7.536	10.048	12.560	15.700	18.840*	25.120*
90				4.239	5.652	7.065	8.478	11.304*	14.130*	17.663*		

Flat Bars - SANS 50025 / EN 10025 Grade S355JR

Dimensions	6mm	8mm	10mm	12mm	16mm	20mm	25mm	30mm	40mm
100	4.710	6.280	7.850	9.420	12.560	15.700	19.625	23.550*	31.400*
110	5.181	6.908	8.635	10.362					
130		8.164	10.205	12.246	16.328	20.410	25.513	31.615	
150		9.420	11.775	14.130	18.840	23.550	29.438	35.325*	47.100*
180			14.130	16.956	22.608	28.260	35.325	42.390*	56.520*
200			15.700	18.840	25.120	31.400	39.250	47.100*	62.800*
250					31.400	38.250	49.060	58.880*	78.500*

Flat Bars - GR 55C (30 OAK)

Dimensions	10mm	12mm	16mm	20mm
100	7.850*	9.420*	12.600*	15.700*
130	10.210*	12.250*		

* Please confirm availability with your local Macsteel Trading branch as some items may not be readily available.

Please contact our Structural Steel Division for sizes not listed above.



Universal Beams SANS 50025 / EN 10025 S355JR

	KG/M	Web Dimensions	Flange Dimension	Height	Width
203 x 133	25.100	5.800	7.800	203.200	133.400
203 x 133	30.000	6.300	9.600	206.800	133.800
254 x 146	31.100	6.100	8.600	251.500	146.100
254 x 146	37.000	6.400	10.900	256.000	146.400
254 x 146	43.000	7.300	12.700	259.600	147.300
305 x 102	24.800	5.800	6.800	304.800	101.600
305 x 102	28.200	6.100	8.900	308.900	101.900
305 x 102	32.800	6.600	10.800	312.700	102.400
305 x 165	40.300	6.100	10.200	303.800	165.100
305 x 165	46.100	6.700	11.800	307.100	165.700
305 x 165	54.000	7.700	13.700	310.900	166.800
356 x 171	45.000	6.900	9.700	352.000	171.000
356 x 171	51.000	7.300	11.500	355.600	171.500
356 x 171	57.000	8.000	13.000	358.600	172.100
356 x 171	67.100	9.100	15.700	364.000	173.200
406 x 140	39.000	6.300	8.600	397.300	141.800
406 x 140	46.000	6.900	11.200	402.300	142.400
406 x 178	54.100	7.600	10.900	402.600	177.600
406 x 178	60.100	7.800	12.800	406.400	177.800
406 x 178	67.100	8.800	14.300	409.400	178.800
406 x 178	74.200	9.700	16.000	412.800	179.700
457 x 191	67.100	8.500	12.700	453.600	189.900
457 x 191	74.300	9.100	14.500	457.200	190.500
457 x 191	82.000	9.900	16.000	460.200	191.300
457 x 191	89.300	10.600	17.700	463.600	192.000
457 x 191	98.300	11.400	19.600	467.600	192.800
533 x 210	82.200	9.600	13.200	528.300	208.700
533 x 210	92.100	10.200	15.600	522.100	209.300
533 x 210	101.000	10.900	17.400	536.700	210.100
533 x 210	109.000	11.600	18.800	539.500	210.700
533 x 210	122.000	12.800	21.300	544.600	211.900



Taper Flange Channel SANS 50025 / EN 10025 S355JR

	KG/M	Web Dimensions	Flange Dimension	Height	Width
57 x 51*	6.840	6.100	6.100	57.200	50.800
76 x 38	6.700	5.100	6.800	76.200	38.100
100 x 50	10.727	6.000	8.500	100.000	50.000
120 x 55	13.546	7.000	9.000	120.000	55.000
127 x 64	14.926	6.400	9.200	127.000	63.500
140 x 60	16.223	7.000	10.000	140.000	60.000
152 x 76	17.911	6.400	9.000	152.400	76.200
160 x 65	19.122	7.500	10.500	160.000	65.000
178 x 54	14.546	5.800	8.400	177.800	54.000
180 x 70	22.265	8.000	11.000	180.000	70.000
200 x 75	25.400	8.500	11.500	200.000	75.000

* Please contact Macsteel to confirm availability



Parallel Flange Channel SANS 50025 / EN 10025 S355JR

	KG/M	Web Dimensions	Flange Dimension	Height	Width
100 x 50	10.100	5.000	8.400	100.000	50.000
180 x 70	21.100	7.000	10.900	180.000	70.000
200 x 75	24.300	7.500	11.400	200.000	75.000
230 x 90	32.200	7.500	14.000	230.000	90.000
260 x 90	34.800	8.000	14.000	260.000	90.000
300 x 100	45.400	9.000	16.500	300.000	100.000



Channel Supalite Tapered Flange CQ (Mild Steel) DIN.1026/1963

	KG/M	Web Dimensions	Flange Dimension	Height	Width
76 x 38	5.700	4.000	6.200	76.000	38.000
100 x 50	8.900	5.000	8.000	100.000	50.000

Please contact our Structural Steel Division for sizes not listed above.

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Universal Columns SANS 50025 / EN 10025 Grade S355JR

	KG/M	Web Dimensions	Flange Dimension	Height	Width
152 x 152	23.000	6.100	6.800	152.400	152.400
152 x 152	30.000	6.600	9.400	157.400	152.900
152 x 152	37.000	8.100	11.500	161.800	154.400
203 x 203	46.100	7.300	11.000	203.200	203.200
203 x 203	52.000	8.000	12.500	206.200	203.900
203 x 203	60.000	9.300	14.200	209.600	205.200
203 x 203	71.000	10.300	17.300	215.900	206.200
203 x 203	86.100	13.000	20.500	222.300	208.800
254 x 254	73.100	8.600	14.200	254.200	254.000
254 x 254	88.900	10.500	17.300	260.400	255.900
254 x 254	107.100	13.000	20.500	266.000	258.000
254 x 254	132.000	15.600	25.100	276.400	261.000
254 x 254	167.000	19.200	31.700	289.100	264.500
305 x 305	96.900	9.900	15.400	307.800	304.800
305 x 305	117.900	11.900	18.700	314.500	306.800
305 x 305	136.900	13.800	21.700	320.500	308.700
305 x 305	158.100	15.700	25.000	327.200	310.600
305 x 305*	198.100	19.100	31.400	339.900	314.500



Joist - Taper SANS EN10025 Grade S355JR

	KG/M	Web Dimensions	Flange Dimension	Height	Width
203 x 152*	52.300	8.900	16.500	203.200	152.400

* Available only on request - subject to volume required



Rails Drilled (standard holes)

Size	KG/M
15kg	14.905
22kg	22.542
30kg	30.150
40kg*	40.310



IPE Sections SANS 50025 / EN 10025 Grade S355JR

	KG/M	Web Dimensions	Flange Dimension	Height	Width
100 x 55	8.104	4.100	5.700	100.000	55.000
120 x 64	10.370	4.400	6.300	120.000	64.000
140 x 73	12.894	4.700	6.900	140.000	73.000
160 x 82	15.772	5.000	7.400	160.000	82.000
180 x 91	18.799	5.300	8.000	180.000	91.000
200 x 100	22.360	5.600	8.500	200.000	100.000



IPE Sections "AA" SANS 50025 / EN 10025 Grade S355JR

	KG/M	Web Dimensions	Flange Dimension	Height	Width
100 x 55	6.720	3.600	4.500	97.600	55.000
120 x 64	8.357	3.800	4.800	117.000	64.000
140 x 73	10.054	3.800	5.200	136.600	73.000
160 x 82	12.315	4.000	5.600	156.400	82.000
180 x 91	14.940	4.300	6.200	176.400	91.000
200 x 100	17.954	4.500	6.700	196.400	100.000

* Please confirm availability with your local Macsteel Trading branch as some items may not be readily available.

Please contact our Structural Steel Division for sizes not listed above.



Round Bar Mild Steel

Dimensions	6mm	8mm	10mm	12mm	16mm	20mm	22mm	24mm
	0.222	0.395	0.617	0.888	1.578	2.466	2.984	3.551

Dimensions	25mm	30mm	32mm	35mm	38mm	40mm
	3.853	5.549	6.313	7.553	8.903	9.865

Contact our Speciality Steel Division for Larger Sizes of Round Bar and Different Grades.



Round Bar SANS 50025 / EN 10025 S355JR

Dimensions	45mm	50mm	55mm	60mm	65mm	70mm	80mm	90mm	103mm
	12.485	15.413	18.650	22.195	26.049	30.210	39.458	49.940	65.408



High Tensile Y-Bar (450MPa)

Deformed Round Bar	Y10	Y12	Y16	Y20	Y25	Y32	Y40
	0.617	0.888	1.580	2.470	3.850	6.310	9.860



Square Bar Mild Steel

Dimensions	8mm	10mm	12mm	16mm	20mm	25mm
	0.502	0.785	1.130	2.010	3.140	4.910

Dimensions	30mm	40mm
	7.070	12.600



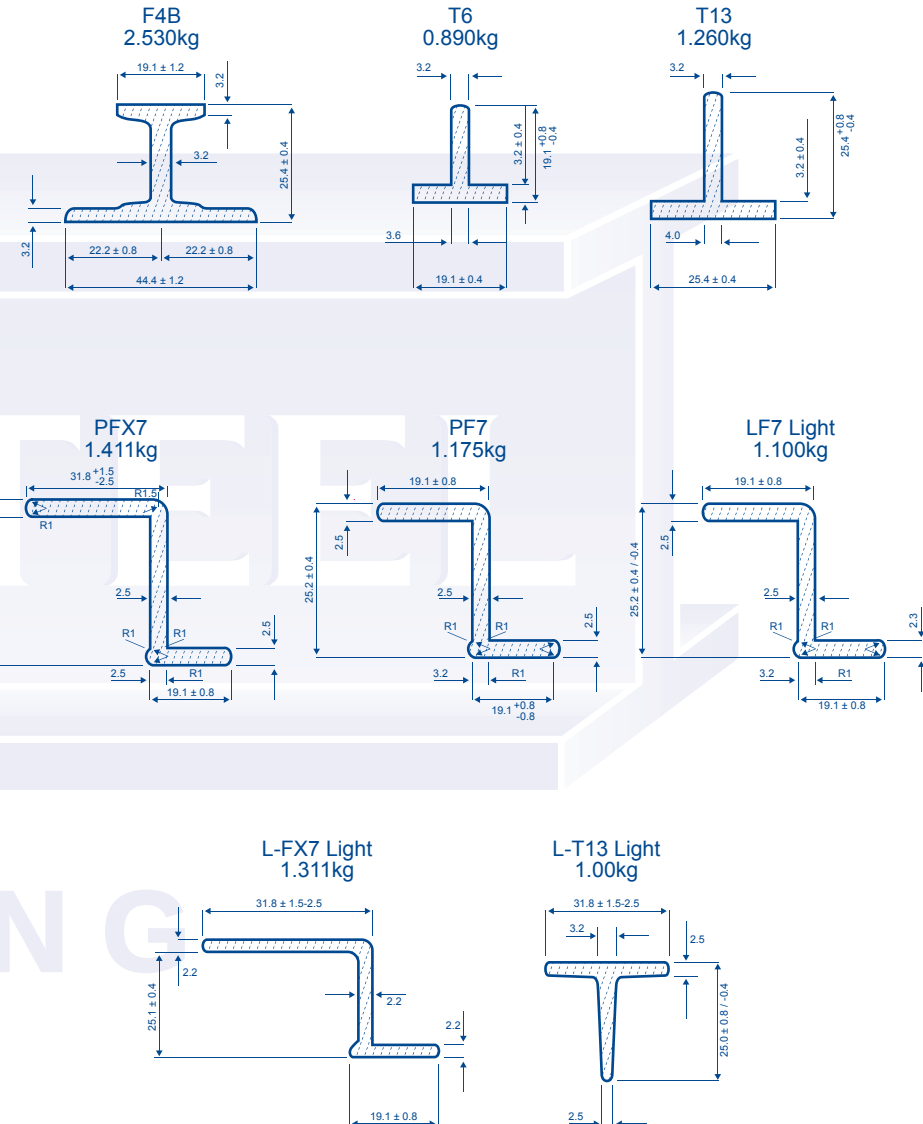
Square Bar SANS 50025 / EN 10025 S355JR

Dimensions	50mm	60mm	70mm
	19.600	28.300	38.500

Contact our Speciality Steel Division for Larger Sizes of Square Bar and Different Grades.

Please contact our Structural Steel Division for sizes not listed above.

Window Sections



Commercial Quality Plates EN 10025-2-S235JR+AR / CQ

Dimensions	4.5mm	5mm	6mm	8mm	10mm	12mm	14mm	16mm	18mm	20mm	22mm	25mm	28mm
2000 x 1000	70.650*	78.500*	94.200*	125.600*	157.000*	188.400*	219.800*	251.200*	282.600*	314.000*	345.400*	392.500*	
2500 x 1200	105.975	117.750	141.300	188.400	235.500	282.600	329.700*	376.800	423.900	471.000	518.100	588.750	659.400*
3000 x 1500	158.963	176.625	211.950	282.600	353.250	423.900	494.550	565.200	635.850*	706.500	777.150*	883.125	989.100*
4000 x 1800		282.600	339.120	452.160	565.200	678.240							
4000 x 2000		314.000	376.800	502.400	628.000	753.600	879.200	1004.800	1130.400	1256.000	1381.600	1570.000	1758.400*
8000 x 2000		628.000	753.600	1004.800	1256.000	1507.200		2009.600	2260.800*	2515.000	2763.200*	3140.000	
10000 x 2400		942.000	1130.400	1507.200	1884.000	2260.800	2637.600	3014.400	3391.200	3768.000	4144.800	4710.000	

Plates SANS 50025 / EN 10025 S275 JR+AR

Dimensions	5mm	6mm	8mm	10mm	12mm	14mm	16mm	18mm	20mm	22mm	25mm	28mm	30mm
2500 x 1200	117.750	141.300	188.400	235.500	282.600		376.800		471.000		588.750		706.500
3000 x 1500	176.625	211.625	282.600	353.250	423.900		565.200		706.500	771.150	883.125		1059.750
4000 x 1825	286.525	343.830	458.440	573.050	687.660								
4000 x 2000	314.000	376.800	502.400	628.000	753.600		1004.800		1256.000	1381.600*	1570.000	1758.400*	1884.000
8000 x 2000	628.000	753.600	1004.800	1256.000	1507.200	1758.400*	2009.600	2260.800*	2512.000	2763.200*	3140.000*		3768.000*
10000 x 2400	942.000	1130.400	1507.200	1884.000	2260.800	2637.600*	3014.400	3391.200*	3768.000	4144.800*	4710.000	5275.200*	5652.000
13000 x 2400		1469.520	1959.360	2449.200	2939.040	3428.880*	3918.720	4408.560*	4898.400	5388.240*	6123.000	6857.760*	7347.600
12000 x 3000		1695.000	2260.800	2826.000	3391.200		4521.600		5652.000		7065.000		

Dimensions	32mm	35mm	38mm	40mm	45mm	50mm	55mm	60mm	65mm	70mm	75mm	80mm	85mm
2500 x 1200	735.600	824.250*	894.900*	942.000	1059.750*	1177.500	1295.250*	1413.000	1530.750*	1648.500*	1766.250*	1884.000*	2001.750*
3000 x 1500	1130.400	1236.375	1342.350	1413.000	1589.625	1766.250	1942.875	2119.500	2296.125	2472.750	2649.375	2826.000	3002.625
4000 x 2000	2009.600*	2198.000*	2386.400*	2512.000	2826.000*	3140.000	3454.000*	3768.000*	4082.000	4396.000	4710.000	5024.000	5338.000
6000 x 2400				4521.600		5652.000							
10000 x 2400	6028.800			7536.000									
13000 x 2400	7837.440												

Dimensions	90mm	100mm	110mm	115mm	120mm	125mm	130mm	140mm	150mm
2500 x 1200	2119.500*	2355.500	2590.500	2708.250	2826.000	2943.750	3061.500	3297.000	3532.500*
3000 x 1500	3179.250	3532.500	3885.750	4062.375	4239.000	4415.625	4592.250	4945.500	5298.750
4000 x 2000	5652.000	6280.000	6908.000						

* Please confirm availability with your local Macsteel Trading branch as some items may not be readily available.

Note: 4.5mm to 12mm- Cut to length facilities available

Plates SANS 50025 / EN 10025 S355 JR+AR

Dimensions	5mm	6mm	8mm	10mm	12mm	14mm	16mm	18mm	20mm	22mm	25mm	28mm	30mm
2500 x 1200	117.750	141.300	188.400	235.500	282.600		376.800		471.000		588.750		706.500
3000 x 1500	176.625	211.950	282.600	353.250	423.900		565.200		706.500	777.150	883.125		1059.750
4000 x 1825	286.525	343.830	458.440	573.050	687.660								
4000 x 2000	314.000	376.800	502.400	628.000	753.600		1004.800		1256.000	1381.600*	1570.000	1758.400*	3768.000*
8000 x 2000	628.000	753.600	1004.800	1256.000	1507.200	1758.400*	2009.600	2260.800*	2512.000	2763.200*	3140.000*		
10000 x 2400	942.000	1130.400	1507.200	1884.000	2260.800	2637.600*	3014.400	3391.200*	3768.000	4144.800*	4710.000	5275.200*	5652.000
13000 x 2400	1224.600	1469.520	1959.360	2449.200	2939.040	3428.880*	3918.720	4408.560*	4898.400	5388.240*	6123.000	6857.760*	7347.600
12000 x 3000		1695.600	2260.800	2826.000	3391.200		4521.600	5086.800*	5652.000	6217.200*	7065.000		

Plates SANS 50025 / EN 10025 S355 JR+AR

Dimensions	32mm	35mm	38mm	40mm	45mm	50mm	55mm	60mm	65mm	70mm	75mm	80mm
2500 x 1200	753.600	824.250*	894.900*	942.000	1059.750*	1177.500	1295.250*	1413.000	1530.750*	1648.500*	1766.250*	1884.000*
3000 x 1500	1130.400	1236.375	1342.350	1413.000	1589.625	1766.250	1942.875	2119.500	2296.125	2472.750	2649.375	2826.000
4000 x 2000	2009.600*	2198.000*	2386.400*	2512.000	2826.000*	3140.000	3454.000*	3768.000*	4082.000	4396.000	4710.000	5024.000
6000 x 2400				4521.600		5652.000						
10000 x 2400	6028.800	6594.000		7536.000								
13000 x 2400	7837.440	8572.200										

Plates SANS 50025 / EN 10025 S355 JO+AR (As Rolled)

Dimensions	5mm	6mm	8mm	10mm	12mm	16mm	20mm	25mm	30mm	40mm	50mm
10000 x 2400	942.000	1130.400	1507.200	1884.000	2260.800	3014.400	3768.000	4710.000	5652.000	7536.000	9420.000*
6000 x 2400										4521.600	5652.000

Boiler Plates B.S 1501/151 GRADE 430A

Dimensions	5mm	6mm	8mm	10mm	12mm	16mm	20mm	25mm	30mm	32mm
10000 x 2400	942.000*	1130.400	1507.200	1884.000	2260.800	3014.400	3768.000	4710.000	5652.000	6028.800
12000 x 3000			2260.800*	2826.000*	3391.200*	4521.600*				

* Please confirm availability with your local Macsteel Trading branch as some items may not be readily available.

Please note: Other Steel Grades are available.

Wearplate 200 (W200) - SS10/200 [HARD WEARING PLATE (BENNOX)]

Dimensions	5mm	6mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm	35mm	40mm	45mm	50mm
2500 x 1200	117.750*	141.300	188.400	235.500	282.600	376.800	471.000	588.750	753.600	824.250*	942.000*	1059.750*	1177.500*
4000 x 2000	314.000*	376.800	502.400	628.000	753.600	1004.800	1256.000	1570.000	2009.600		2512.000*		3140.000*

Vastrap Floor Plate (Commercial Quality)

Dimensions	
2500 x 1200 x 30 - 4.6	78.000
2500 x 1200 x 4.5 - 6.1	113.340
4000 x 1200 x 4.5 - 6.1	181.344
8000 x 1200 x 4.5 - 6.1	362.688
2500 x 1200 x 6.0 - 7.6	148.650
4000 x 1200 x 6.0 - 7.6	237.840
8000 x 1200 x 6.0 - 7.6	457.680
2500 x 1200 x 8.0 - 9.6	196.200
4000 x 1200 x 8.0 - 9.6	313.920
8000 x 1200 x 8.0 - 9.6	627.840

Hot Rolled Sheets - Commercial Quality

Dimensions	1.6mm	2.0mm	2.5mm	2.8mm	3.0mm	3.5mm	4.0mm
1850 x 925	22.011	27.513	34.392	38.519*	41.270		55.027*
2450 x 925	29.149	36.437	45.546		54.655		
3050 x 925	36.288	45.360	56.700		68.040		
3650 x 925					81.425		
1850 x 1225	29.149	36.437	45.546		54.655		
2450 x 1225	38.603	48.254	60.318	67.556	72.381	84.445	96.508
3050 x 1225	48.057	60.071	75.089		90.107		
3650 x 1225	57.511	71.889	89.861		107.833		
3000 x 1500		72.351	90.439		108.527	126.614	144.702
3050 x 1500		73.557	91.946		110.335	128.724	147.114
2450 x 1500			73.858		88.630		
3000 x 1500			90.439		108.527		
3050 x 1500			91.946		110.335		
3650 x 1500			110.034		132.041		
2450 x 1800					106.356		
3000 x 1800					130.232		
3050 x 1800					132.402		
3650 x 1800					158.449		
4000 x 1800					173.642		231.523
6000 x 1800					260.464		

Hot Rolled Pickled & Oiled - CQ Sheets

Dimensions	2.0mm	2.5mm	2.8mm	3mm	3.5mm	4mm
2450 x 1225	48.254	60.318	67.556*	72.381	84.445	96.508

Hot Rolled - Supraform 290 (P&O)

Dimensions	2.0mm	2.5mm	2.8mm	3.0mm	4.0mm
2450 x 1225	48.254	60.318	67.556	72.381	96.508

Hot Rolled - EN 10111 DD 14 = KHR1 (P&O)

Previously BS 1449 KHR1 - Drawing & Forming Quality

Dimensions	1.6mm	1.8mm	2.0mm	2.2mm	2.3mm	2.5mm	2.8mm	3.0mm	3.2mm	3.5mm	4.0mm
2450 x 1225	38.603	43.429	48.254	53.080	55.492	60.318	67.556	72.381	77.207	84.445	96.508

* Please confirm availability with your local Macsteel Trading branch as some items may not be readily available.

Please Note: Cut to length facilities available

The abovementioned detail is provided for information/illustrative purposes and which should be verified. Macsteel will not be held liable for any inaccuracies in relation thereto.

Cold Rolled Sheets - Commercial Quality

Dimensions	0.5mm	0.6mm	0.8mm	1mm	1.2mm	1.6mm	2mm
1850 x 925	6.878	8.254	11.005	13.757	16.508	22.011	27.513
2450 x 925	9.109	10.931	14.575	18.218	21.862	29.149	36.437
1850 x 1225	9.109	10.931	14.575	18.218	21.862	29.149	36.437
2450 x 1225	12.064	14.476	19.302	24.127	28.952	38.603	48.254
3050 x 1225		18.021	24.029	30.036	36.043	48.507	

Cold Rolled Sheets - CR210 (OILED)

SUPRADRAW

Dimensions	0.5mm	0.6mm	0.7mm	0.8mm	1mm	1.2mm	1.4mm	1.6mm	2mm
2450 x 1225	12.064	14.476	16.889	19.302	24.127	28.952	33.778	38.603	48.254

Galvanised Flat Sheet - ISQ.230 - Z275 Spelter Sheets

Dimensions	0.5mm	0.58mm	0.8mm	1mm	1.2mm	1.6mm	1.9mm	2.4mm	2.8mm	3mm
1850 x 925	6.878	7.979	11.005	13.757	16.508	22.011	26.138			
2450 x 925	9.109	10.567	14.575	18.218	21.862	29.149	34.615			
1850 x 1225	9.109	10.567	14.575	18.218	21.862	29.149	34.615			
2450 x 1225	12.064	13.994	19.302	24.127	28.952	38.603	45.841	57.905	67.556*	72.381

Galvanised Flat Sheet - Lock Forming Z275 Spelter Sheets

Dimensions	0.58mm	0.8mm	1mm	1.2mm	1.4mm	1.6mm
2450 x 1225	13.994	19.302	24.127	28.952	33.778*	38.603

* Please confirm availability with your local Macsteel Trading branch as some items may not be readily available.

Please Note: Cut to length facilities available

QUALITY	CHEMICAL COMPOSITION % (LADLE ANALYSIS)													TENSILE STRENGTH (MIN)	YIELD STRESS (MIN)	ELONGATION % (MIN) ON GAUGE LENGTH		CHARPY V-NOTCH	
	C Max	Mn Max	P Max	S Max	Si Max	V	Al	Mo Max	Ni Max	Cr Max	Cu Max	B	Nb Max	Mpa	Mpa	200mm	5.56√ So	Temp °C	Ave (J)
Mild Steel Comm. Quality	0.25		0.04	0.04										not specified					
BS 4360* 43A	0.25	1.60	0.05	0.05	0.50									430/AR580	275/(t<16)	20	22		
43C	0.18	1.50	0.05	0.05	0.50									430/AR580	275/(t<16)	20	22	0	27
43D / 50B	0.16	1.50	0.04	0.04	0.10/0.50									430/AR580	275/(t<16)	20	22	-20	27
50C	0.23	1.60	0.05	0.05	0.50	0.003/0.10							0.003/0.10	490/AR640	355/(t<16)	18	20	20	27
SANS 1431* 300WA	0.20	1.50	0.05	0.05	0.50								0.003/0.10	490/AR640	355/(t<16)	18	20	0	27
300WC	0.22	1.60	0.04	0.04	0.50									450/AR620	300/(t<40)	20	22		
300WDD	0.22	1.60	0.04	0.04	0.50									450/AR620	300/(t<40)	20	22	0	27
350WA	0.22	1.60	0.04	0.04	0.50									450/AR620	300/(t<40)	20	22	-30	27
350WC	0.22	1.60	0.04	0.04	0.50									480/AR620	350/(t<40)	18	20		
350WD	0.22	1.60	0.04	0.04	0.50									480/AR650	350/(t<40)	18	20	0	27
SANS 50025 / EN10025 S275JR	0.22	1.60	0.04	0.04	0.50									480/AR650	350/(t<40)	18	20	-30	27
S275JO	0.22	1.50	0.045	0.045	-								0.009	510	275		22*	20	27
S275JN	0.18	1.50	0.045	0.04	-								0.009	510	275		22	0	27
S355JR	0.18	1.50	0.035	0.035	-									430	275		22	-20	27
S355JO	0.24	1.60	0.045	0.045	0.55								0.009	510/680	355		22	20	27
SANS 50025 / EN10025 S355JN	0.20	1.60	0.040	0.040	0.55								0.009	510/680	355		22	0	28
Corrosion Resistant	0.20	1.60	0.035	0.035	0.55									510/680	355		22	-20	27
WR 50 BI Corten A	0.12	0.20/0.50	0.07/0.15	0.05	0.25/0.75				0.65	0.30/1.25	0.25/0.55			480/(t<12.7)	275/(t<16)	18/(t<12.7)	22 (50mm)		
	0.19	0.20/1.25	0.04	0.05	0.30/0.65	0.02/0.10	0.015/0.06		0.40	0.40/0.70	0.25/0.40			480/(t<100)	275/(t<16)	18/(t<100)	21 (50mm)		
	0.19	0.80/1.35	0.04	0.05	0.30/0.65	0.04/0.10	0.015/0.06		0.40	0.40/0.70	0.25/0.40			550/(t<25)	275/(t<16)	16/(t<25)	21 (50mm)		
Wear Resistant 10/200	0.40/0.55	0.60/1.00	0.03	0.045	0.35/0.35									not specified					

* These specifications were replaced (see page 13 for comparison table)

Please note: Other Steel Grades are available.

List of corresponding former national designations

BS 4360: 1986	Din 17100	EN 10025: 1993	SANS 1431	SANS 50025 / EN 10025
Gr 40 A				
	RSt 37-2	S 235 JRG2	240WA	S 235 JR
GR 40 C	St 37-3 U	S 235 JO	240WC	S 235 JO
	St 37-3 N	S 235 J2G3 or G4		S 235 J2
Gr 43 A				
Gr 43 B	St 44-2	S 275 JR		S 275 JR
Gr 43 C	St 44-3 U	S 275 JO		S 275 JO
	St 44-3 N	S 275 J2G3 or G4		S 275 J2
None	None	None	300WA	None
Gr 50 A				
Gr 50 B		S 355 JR	350WA	S 355 JR
Gr 50 C	St 52-3 U	S 355 JO	350WC	S 355 JO
Gr 50 D	St 52-3 N	S 355 J2G3 or G4	350WD	S 355 J2
Gr 50 DD		S 355 K2G3 or G4	350WD	S 355 K2

Please note: Other Steel Grades are available.

TRADING

Suffixes to EN Specifications:

JR = Impact at room temperature (optional)	K2 = Impact test at -20°C (40J); (also correspond to 27J @ -30°C	G4 = Supply condition at the manufacturers discretion
JO = Impact test at 0°C (27J)	G2 = Rimmed steel is not permitted	AR = As Rolled
J2 = Impact test at -20°C (27J)	G3 = Normalised	N = Normalised

The abovementioned detail is provided for information/illustrative purposes and which should be verified. Macsteel will not be held liable for any inaccuracies in relation thereto.

	THICKNESS RANGE (mm)	TYPICAL HARDNESS		TYPICAL TENSILE STRENGTH (Mpa)	TYPICAL YIELD STRENGTH (Mpa)	TYPICAL IMPACT STRENGTH (J)	MAX OPERATING TEMP (°C)	TYPICAL ELONGATION (%)	WELDABILITY SUGGESTED WELDING ELECTRODE		COMMENTS
		B.H.N	H.R.C						SMAW	GMAW	
Mild Steel	2-50	130	-	400	250	-	-	23	E6013	ER70S-6	For Comparison Only
VRN 200	3-50	200	13	500	450	-	250	-	E7018	ER70-S6	Low cost liners, mechanical properties not guaranteed
VRN 360	30-100	387	40	1260	1100	41 @ 20°C	330	16	E7018	ER70-S6	Good wear resistance and weldability
VRN 400	6-25 Good weldability	418	44	1300	1050	35 @ 0°C	330	14	E7018	ER70-S6	Excellent high wear resistance and fabrication properties
VRN 500	4-50	520	53	1595	1332	65 @ 0°C	300	15	E7018 E8016	EE70-S6	Extremely high wear resistance and impact resistance
VRN Integra	9-25	600	59	-	-	-	700	-			CRC overlay plate for severe sliding wear applications up to 600°C. Also available in buttons
VRN BOLTS	M12 M16 M20	440	47	1350	1220	-	300	-	-	-	Special bolts developed for attachment of liners
VRN 690	3-150	260	26	840	760	86 @ -50°C	500	24	E9018 E11018	ER100S-6	Extra high strength structural steel with good weldability and formability
700MC	3-12	260	28	750/900	700	80 @ -50°C	500	16	E9018 E11018	ER100S-6	High strength hot rolled sheet Excellent formability and weldability
3CR12	3-20	200	13	700	510	75 @ 20°C	600	21	E309 E316	E309 E316	Corrosion resistant steel for wet sliding applications

Please note: Other Steel Grades are available.

Suffixes to EN Specifications:		
JR = Impact at room temperature (optional)	K2 = Impact test at -20°C (40J); (also correspond to 27J @ -30°C	G4 = Supply condition at the manufacturers discretion
JO = Impact test at 0°C (27J)	G2 = Rimmed steel is not permitted	AR = As Rolled
J2 = Impact test at -20°C (27J)	G3 = Normalised	N = Normalised

	CHEMICAL COMPOSITION % (LADLE ANALYSIS)									TENSILE STRENGTH (MIN)	YIELD STRESS (MIN)	ELONGATION % (MIN) ON GAUGE LENGTH		MANDREL DIAMETER FOR 1800 BEND TEST
QUALITY	C Max	Mn Max	P Max	S Max	Si	Cu	Al Max	Ni	Cr	Mpa	Mpa	50mm	200mm	
Commercial Quantity	0.15				not specified									
BS 1449 / HR37/23	0.20	1.20	0.05	0.05	-	-	-	-	-	370	230	28	20	2t<3mm 3t<3mm
HR43/25	0.25	1.20	0.05	0.05	-	-	-	-	-	430	250	25	16	3t
HR50/35	0.20	1.50	0.05	0.05	-	-	-	-	-	500	350	20	12	3t
KHR 1	0.08	0.45	0.025	0.03	-	-	0.02/0.06	-	-	290	170	34	25	FLAT
HR2	0.08	1.54	0.03	0.035	-	-	-	-	-	290	170	34	25	FLAT
HR3	0.10	0.50	0.04	0.04	-	-	-	-	-	290	170	34	25	FLAT
HR4	0.12	0.60	0.05	0.05	-	-	-	-	-	280	170	25	18	1t<3mm 3t<3mm
Cold Rolled / KCR1	0.08	0.45	0.025	0.03	-	-	0.02/0.07	-	-	280	140	38	29	FLAT
CR 1	0.08	0.45	0.03	0.035	-	-	-	-	-	280	140	36	27	FLAT
CR 3	0.10	0.50	0.04	0.04	-	-	-	-	-	Subject to negotiation				
CR 4	0.12	0.60	0.05	0.05	-	-	-	-	-					
	TYPICAL CHEMICAL COMPOSITION %													
Supraform / HR 190	0.06	0.30	0.02	0.02	0.02	-	0.03	-	-	280	190/270	2<t<4=35 4<t<8=35	-	FLAT
HR 220	0.05	0.25	0.02	0.02	0.02	-	0.03	-	-	320	220/300	2<t<4=32 4<t<8=34	-	FLAT
HR 250	0.10	0.55	0.02	0.02	0.02	-	0.03	-	-	360	250/330	2<t<4=30 4<t<8=33	-	2<t<4=FLAT 4<t<8=1t
315MC	not available at present									390 - 460	315	2<t<4=27 4<t<8=30	-	2<t<4=1t 4<t<8=1.5t
355MC										430 - 510	355	25	-	-
420										490 - 570	420	23	-	-
550MC										600 - 760	550	19	-	-
700MC										750 - 900	700	16	-	-

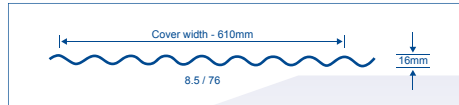
Every effort has been made to ensure the accuracy of this information, however, Macsteel cannot be held responsible for inaccuracies, changes in specifications or misinterpretations of data

not specified

Please note: Other Steel Grades are available.

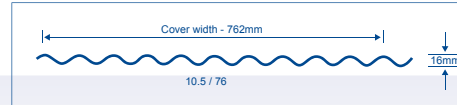
Roof Sheeting

Corrugated



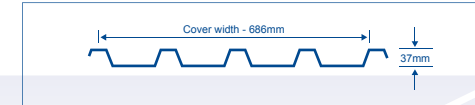
Gauge	Grade	Finish	Mass kg/m	Mass Kg/m ²
0.27mm	ISQ 550	Z120	1.642	2.691
0.32mm	ISQ 550	Z120	1.946	3.189
0.50mm	ISQ 550	Z275	3.040	4.984

Classidek



Gauge	Grade	Finish	Mass kg/m	Mass Kg/m ²
0.40mm	ISQ 300	Z160	2.974	3.903
0.50mm	ISQ 550	See Note 2	3.718	4.879
0.58mm	ISQ 300	See Note 2	4.313	5.660
0.80mm	ISQ 230	See Note 2	5.949	7.807
0.47mm	G550	See Note 1	3.333	4.374
0.53mm	G550	See Note 1	3.846	5.047

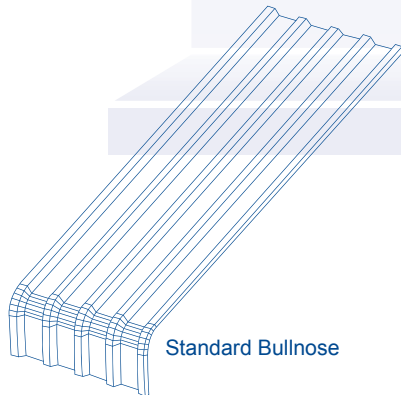
Flekspan



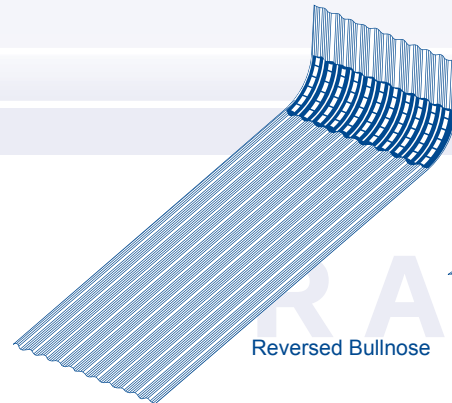
Gauge	Grade	Finish	Mass kg/m	Mass Kg/m ²
0.40mm	ISQ 300	Z160	2.974	4.335
0.50mm	ISQ 550	See Note 2	3.718	5.420
0.58mm	ISQ 300	See Note 2	4.313	6.287
0.80mm	ISQ 230	See Note 2	5.949	8.672
0.47mm	G550	See Note 1	3.333	4.859
0.53mm	G550	See Note 1	3.846	5.606

Indicated weights relate to Galvanised Materials. All other weights available on application.

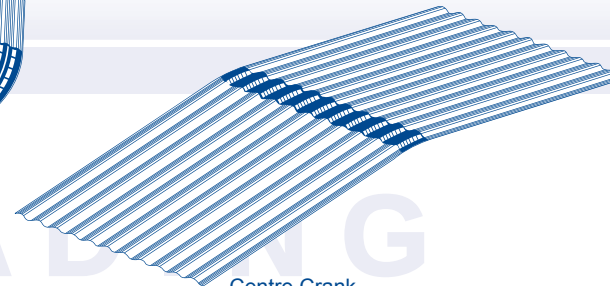
Bullnosing and Cranking



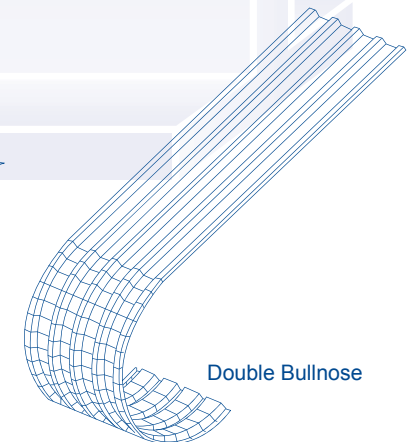
Standard Bullnose



Reversed Bullnose



Centre Crank



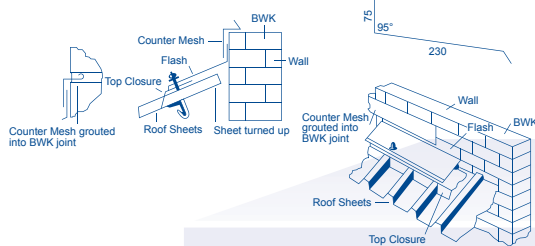
Double Bullnose

Please contact our Structural Steel Division for sizes not listed above.

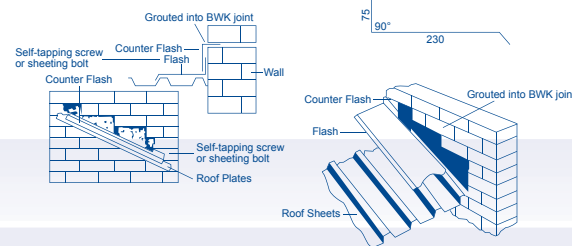
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Roof Accessories

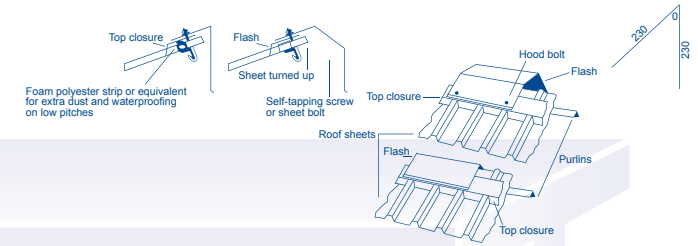
Headwall Flashing 305 Girth



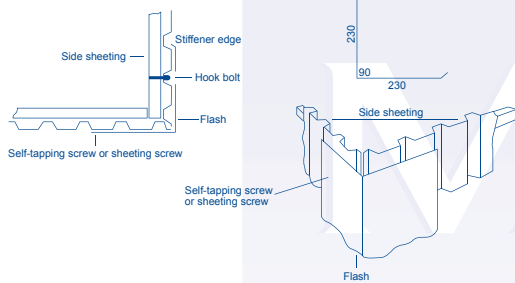
Headwall Flashing 305 Girth



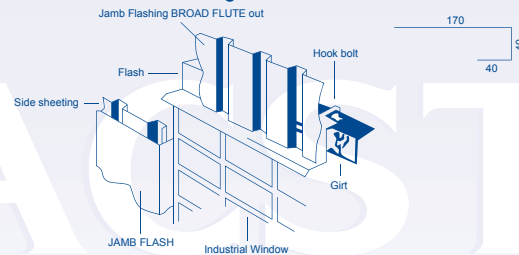
Apex and Hood Flashing 460 Girth



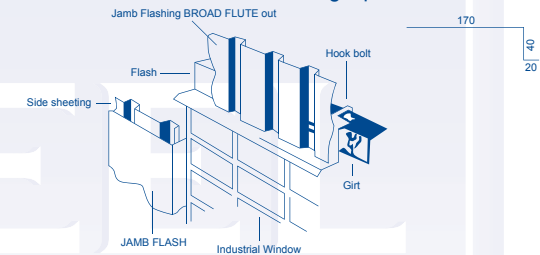
Corner Flashing 460 Girth



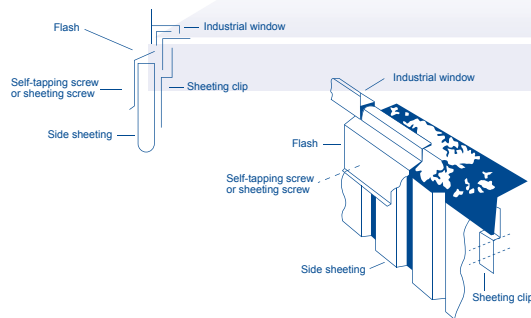
Jamb Flashing Closed 230 Girth



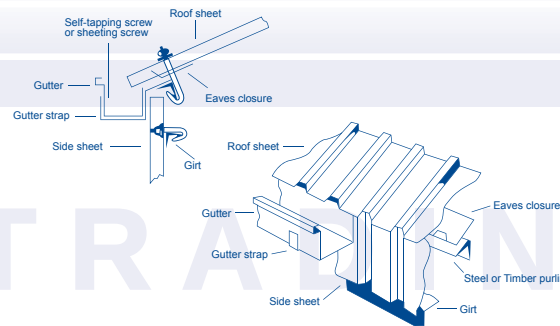
Jamb Flashing Open 230 Girth



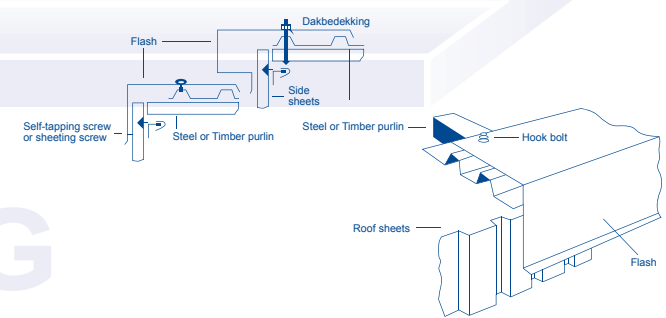
Corner Flashing 460 Girth



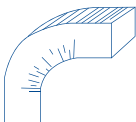
Eaves Closure and Typical Gutter



Barge Board



Curved Corner Flashing



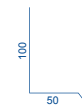
Broad Flute Closure



Narrow Flute Closure



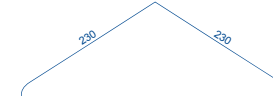
Drip Flashing



Counter Flashing



Standard Ridging 460 Girth



Roll Top Ridging



Gratings

Grating (Mild Steel)

	25 x 4.5	30 x 4.5	40 x 4.5
2400 x 1200	86.000	100.000	125.000



RS40 Grating



Non-Slip Grating

Stock Panels available in Retragrid RS40

Bearing Size mm	Panel Size Length mm	Width mm	Uncoated Mass kg
20 x 4.5	2400	1200	86
20 x 4.5	2400	1200	100
40 x 4.5	2400	1200	125

All sizes are available in Mild Steel - Uncoated, Bitumen Dipped or Galvanised

Stairtreads

Specifications

Stairtread Lengths mm	Stairtread Widths mm 85 and 25 165 to 285		Bearer Bar mm
	Side Plate Size		
Up to and including 750	80 x 4.5	60 x 3	86
751 to 1000	80 x 4.5	60 x 3	100
1001 to 1200	80 x 4.5	80 x 4.5	125

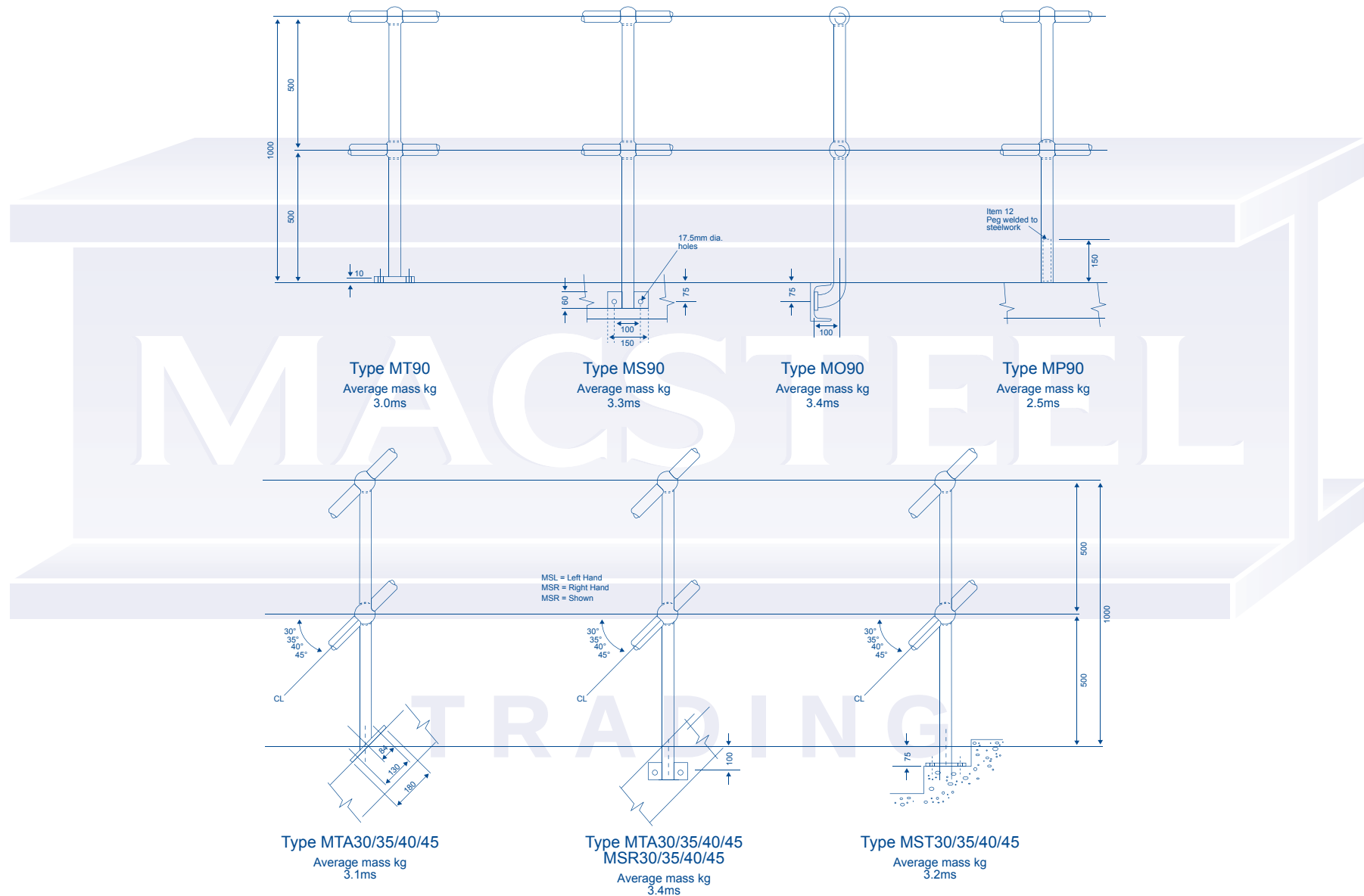
Stock Sizes

Size mm	Uncoated Mass Kg
600 x 205	4.4
600 x 245	5.1
750 x 205	5.4
750 x 245	6.1
900 x 245	8.1
1000 x 285	10.2

Available in Uncoated, Zincromate or Galvanized finish.

Any other finishes can be sourced on request.

Please contact our Structural Steel Division for sizes not listed above.

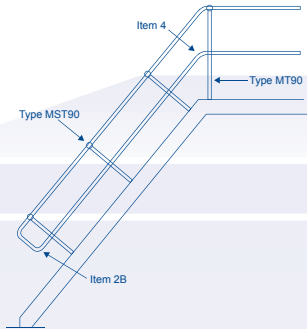


Available in Uncoated, Zincromate or Galvanized finish. Any other finishes can be sourced on request.

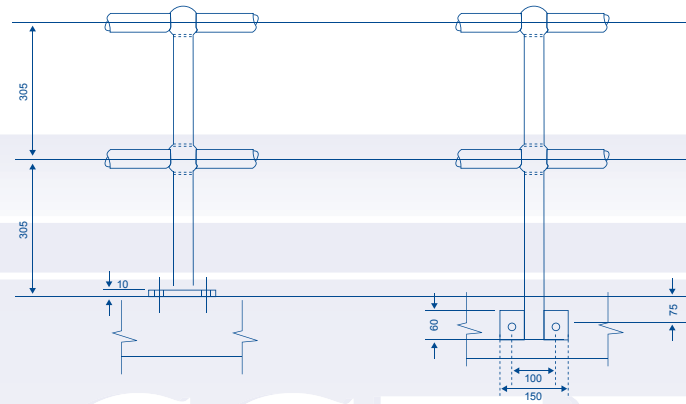
Please contact our Structural Steel Division for sizes not listed above.

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Stanchions (Zinc Chromate Coated)



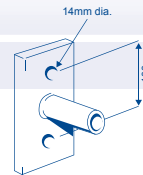
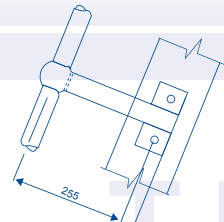
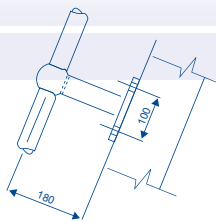
Type MST90 and MSS90
Stations fixed at 90° to stingers have been designed for use on staircases with angles greater than 45°



Type MST90
Average mass kg
2.2ms

Type MSS90
Average mass kg
2.6ms

For use on ladders between 70° and 90° inclines



Item 7
60 x 4.5 x 1 50mm wall end plate

Item 11
Hammer drive screw,
No 12 electro brassed
(For ms only)

Item 10
Rubber end plug

General:

The mass and kg/m² values shown in the table are for Galvanised and Zincalume® finishes.

Note 1:

Available with either ZINCALUME-2® (AZ150) or COLORBOND® coating.

Note 2:

Available in either Galvanised (Z265 & Z600) or a Chromadek® coating.

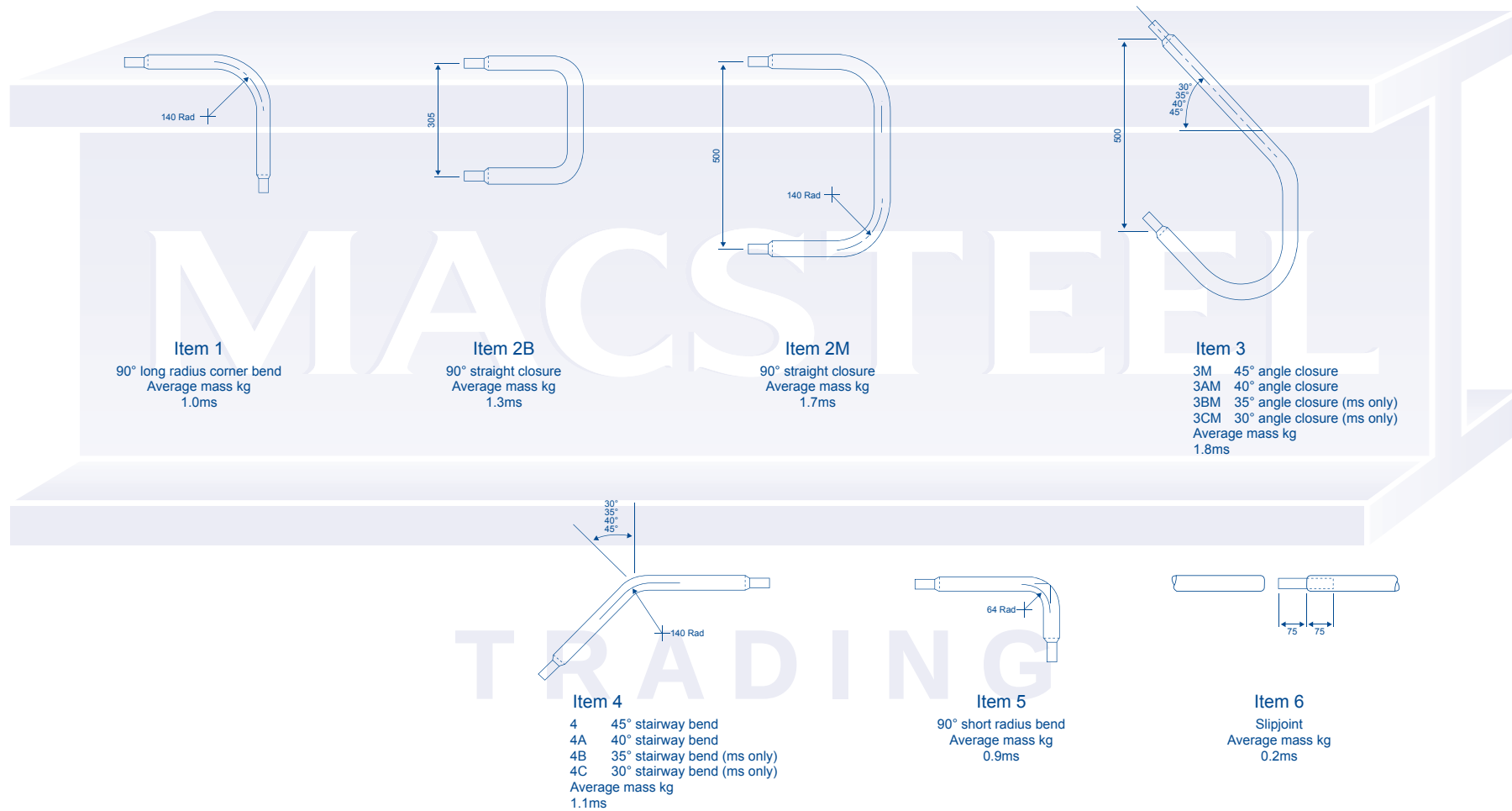
Aluminium and Stainless Steel are available as specials, subject to minimum quantities.

Available in Uncoated, Zincromate or Galvanized finish. Any other finishes can be sourced on request.

Please contact our Structural Steel Division for sizes not listed above.

The abovementioned detail is provided for information/illustrative purposes and which should be verified. Macsteel will not be held liable for any inaccuracies in relation thereto.

Handrail Bends and Closures (Zinc Chromate Coated)



Available in Uncoated, Zincromate or Galvanized finish. Any other finishes can be sourced on request.

Please contact our Structural Steel Division for sizes not listed above.

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Dimensions - Flattened

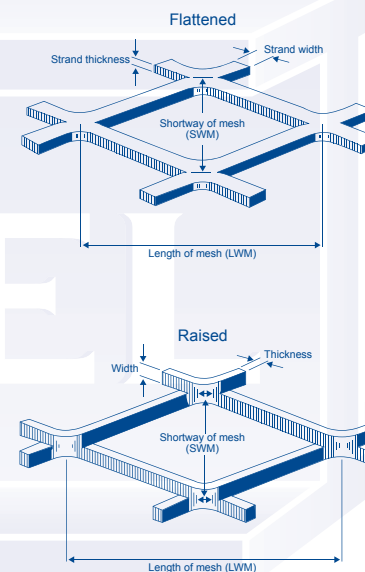
Type	SWM	LWM	STRAND WIDTH	STRAND THICKNESS	MASS PER SHEET
Flatex 338/VEM 6311F	50	80	4.5	2.5	10.4
Flatex 344/VEM 6320C	25	50	3	1.6	8.9
Flatex 346/VEM 6320H	25	50	4.5	3.0	25.0
Flatex 348/VEM 6320E	25	50	4.5	2.5	20.8
Flatex 349/VEM 6320D	25	50	3	2.0	11.1
Flatex 352/VEM 6318F	15	40	3	1.6	14.8
Flatex 358/VEM 6315F	10	30	3	1.6	22.2
Flatex 362/VEM 6380E	8	20	2	1.0	11.6

Standard Sheet Size: 1200 x 2400

Dimensions - Raised

Type	SWM	LWM	STRAND WIDTH	STRAND THICKNESS	MASS PER SHEET
MENTEX 38/VEM 484	40	140	6	4.5	31.3
MENTEX 43/VEM 305B	40	115	6	4.5	31.3
MENTEX 43A/VEM 305A	40	115	4.5	4.5	23.4
MENTEX 63/VEM 355G	30	80	3	3.0	13.9
MENTEX 70/VEM 325A	20	60	6	4.5	62.5
MENTEX 72/VEM 325G	20	60	3	3.0	20.8
MENTEX 80A/VEM 318H	15	40	3	0.5	23.2
MENTEX 82/VEM 318F	15	40	2.5	1.6	10
MENTEX 118/VEM 315F	10	30	2.5	1.6	18.5
MENTEX 130/VEM 280D	8	20	2	1.0	11.6
MENTEX 300/VEM 311E	45	80	3	3.0	16.7
MENTEX 304/VEM 320G	25	50	3	3.0	16.7

Standard Sheet Size: 1200 x 2400

Expanded Metal Dimensions
How to specify your mesh dimensions

Please note that all flattened meshes will be slightly thinner than specifications shown above (approximately 20%) caused by cold rolling the material flat.

Various other types are available.

Please contact our Structural Steel Division for sizes not listed above.

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Fencing



Field Fence

Height from 900mm - 2110mm
6 to 14 horizontal line wires, spaced vertically at 150mm or 300mm apart in lightly or fully galvanised finish
Standard rolls: 100m long



Razor Wire

Concertina Coil - 450mm, 730mm and 980mm diameter coils
Flat Wrap Coil - 500mm, 700mm and 900mm diameter coils
Unclipped - 200m roll



Barbed Wire

Iowa
Karoo I
Karoo II
Light or fully galvanised finish



Galvanised Wire

High Strain Wire - Lightly or fully galvanised finish in 50kg coils
Plain Galvanised Wire - 1.6mm to 4.0mm diameter wire in 5kg or 50kg coils
Galvanised Binding Wire - 0.71mm to 2.0mm diameter wire in 500g coils



Fencing Posts and Stays

Posts aluminium painted complete with cap and base in 76mm or 101mm diameter pipe 1.8m, 2.1m, 2.4m or 3.0m lengths
Stays aluminium painted complete with base in 38mm or 50mm diameter pipe, 1.8m, 2.1m, 2.4m or 3.0m lengths

Welded Mesh, Industrial Mesh Fencing and Gate Material



Fencing Y-Standards, I-Profile and Droppers

Y-Standards - 1.850m, 2.450m and 3.050m lengths
 I-Profile - 1.850m and 2.450m lengths
 Droppers - 1.250m, 1.400m, 1.850m and 2.450m lengths
 Security Y-Standards - 2.450m and 3.050m lengths with a 450mm overhang



Diamond Mesh and Netting Wire

Diamond Mesh - various heights, apertures and wire diameters in 30m rolls
 Netting Wire - various heights, apertures and wire diameters in 50m rolls



Brickforce

75mm x 20m rolls
 150mm x 20m rolls



Gates

Auction Gates - Heavy weight 1.2m height and various lengths
Boere Gates - Heavy weight 1.2m height and various lengths
Diamond Mesh Gates - Single or double leaf 1.2m or 1.8m heights and various lengths
Farm Gates - Medium or heavy weight 1.2m height and various lengths
Security Gates - Single or double leaf 1.8m or 2.4m heights and various lengths with a 450mm overhang

The value added services of Macsteel Trading are located at various branches. We adopt a customer-centric approach where the customer's needs are established and addressed through various value added services on offer. The customer benefits from just-in-time manufacturing, inventory and scrap reduction, and reductions in manpower and costly machinery.

Cut to Length

Light Mill:	Angles, Flats, Round Bars (Cut on Band Saws and Cropping Lines)
Medium Mill:	Channels up to 200x75, IPE and Heavy Angles (Cut on Band Saws)
Heavy Mill:	Universal Beams, Universal Columns, RSJs and all Channels (Cut on our Band Saws and Cold Saws)

Mitre Cutting (or Bevel Cuts)

Mitre or bevel cuts are limited to 45 degree angles. Drawings are required in order to determine cut angle, mitre or bevel, toe up or toe down and we need to establish drawn and opposite hand.

Drilling

We are equipped with CNC drilling lines which can drill up to 22m long sections; with minimum hole sizes of 10mm up to 50mm in diameter. Our integrated bandsaws allow us to either drill or cut first, depending on the size and length of the material as well as the positioning of the holes. The accuracy of our drilling is within a tolerance of ± 1 mm.

Cropping and Punching

We have cropping machines which can crop and punch any angles ranging from 45x45x3 up to 200x200x24 angles. Hole sizes vary from 10mm up to 32mm, and sizes in-between are available on request. The accuracy of our cropping and punching is within a tolerance of ± 1 mm.

Flat Bar Line

The flat bar line increases the existing range of our value added offering; with capabilities of marking, punching and cropping flat bars from 40x5mm up to 250x25mm. Up to 6m lengths can be accommodated with a capability to punch up to 46mm diameter holes.

Manufacturing

The following sections can be manufactured:

- Cellular Beams
- T Sections
- Castellated Beams
- Haunches



Angle Cropped and Punched



Section Drilling



Cut to Length and Drilling



Angles Cropped and Punched



Cut to Length Facilities

What is a Cellular Beam?

A cellular beam is a modern version of the traditional 'castellated' beam, but with a far wider range of applications. A universal beam of universal column is profiled using a patented double cut profiling process, then assembled into a section which is approximately 40-60% deeper than its parent section (see Figure 1). The exact finished depth, cell diameter and cell spacing are all flexible dimensions. A cellular beam has up to two and half times better section properties than its parent section.

Applications of Cellular Beams

Floor Beams

Cellular Beams are most commonly used as floor beams. Enabling one or all of the following to be achieved: Long Clear Spans; Service Integration and/or Shallow Overall Floor Depths.



Roof Beams

Straight Cellular Beams - The principle benefit of cellular beams is the ability to span over long distances at a much lighter weight compared to standard universal beam (UB) sections.



Curved Cellular Beams

Cellular Beams are the perfect solution for curved roof applications, combining a considerable weight saving and a low-cost curving process.



Technical Advisory Service

Macsteel Trading has an office-based design service for cellular beam design and specification. The service is provided to Engineers and Architects to assist in optimizing the design of a specific project and to enable the Engineers to gain familiarity and expertise in cellular beam design. Macsteel staff will attend project design meetings where necessary. In-house technical seminars are conducted regularly aimed at promoting the efficient design of cellular beams and proficiency with the associated design software, CELLBEAM. Technical advisory services are offered without charge or obligation. For free design service, brochures and training, please contact your nearest Macsteel Trading branch or email: design@macstrading.co.za

Tapered Cellular Column

By altering the direction of the profiling process, cellular beams provide the most economical method of producing tapered steel members.

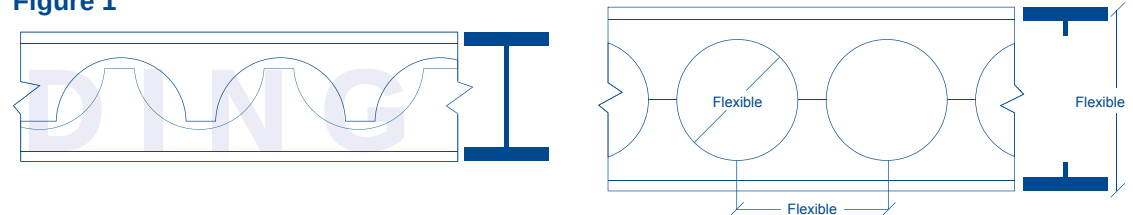


Cellular Column

As building height increases, cellular columns become increasingly economical compared to other solutions. High-bay columns in large sheds are a particularly suitable application, where the increased inertia of the cellular beam will minimise the deflections in the tall columns.



Figure 1



Palisade Fencing:

Slotted channels are used for the Crosses. Spacings are available in 160 and 180mm centres. 40 x 40 x 2.0, 2.5 or 3.0mm Hot Rolled angles are used for the Palisade Palings. 76 x 76 x 1.6mm Hot Rolled tubes are used for the Palisade Poles. Palisade Pole Caps are manufactured to fit.

Spike Types



Industrial



7-Spike Industrial



Domestic Spike



Devils Fork

Slotted Channel	Centre to Centre	Number of Palings
2000mm	180mm	11
2400mm	180mm	13
3000mm	180mm	16
2000mm	160mm	12
2400mm	160mm	15
3000mm	160mm	18

Advantages:

- Ease of assembly
- Suited for DIY market
- Stronger and more durable product
- Aesthetically pleasing
- Competitive pricing
- Different sizes for various applications



Industrial

Should you have any special palisade requests please contact your Macsteel Trading Branch.
Please contact our Structural Steel Division for sizes not listed above. The abovementioned detail is provided for information/illustrative purposes and which should be verified. Macsteel will not be held liable for any inaccuracies in relation thereto.



Car Park Structure



Distribution Centre - Gottlieb Group



Cold Storage - Port Elizabeth



Power Station - Luderitz

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Ongwediva Fresh Produce Market - Namibia



Polokwane International Airport - South Africa



Mauritius Commercial Bank - Mauritius

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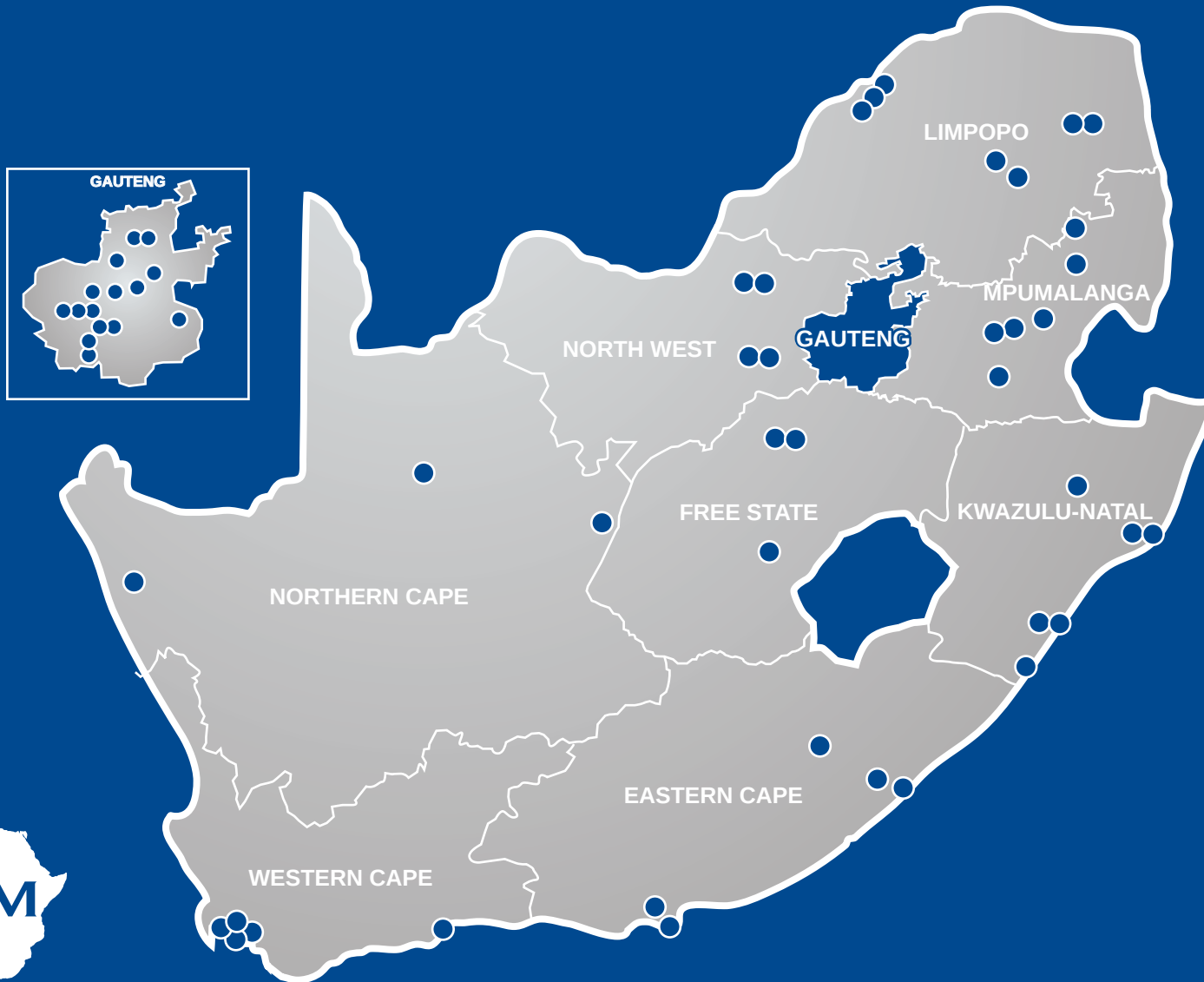
NOTES:

MACSTEEL

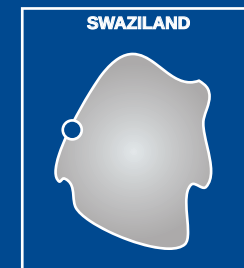
TRADING

MACSTEEL

Africa's leading steel supplier



African Branches



MACSTEEL

Africa's leading steel supplier



TRADING

Empowered, passionate people with superb infrastructure dedicated to the supply and beneficiation of steel and allied products to meet the needs of industry and our wider community.

MACSTEEL Africa's leading steel supplier