



STEEL CATALOGUE

www.esteelafrica.co.za



E-STEEL AFRICA

e-Steel Africa specializes in the stocking and exporting of mild steel, galvanised steel, wire products, stainless steel, aluminium, expanded metal, tubing, grating, nuts and bolts; and any other steel related products into sub Saharan Africa.

Our Wide stock range makes for a one stop solution for every need. Through our local and international network of suppliers we believe in offering the best quality materials at competitive prices.

ABOUT US

We procure material from local mills and manufacturers and we also supply imported material from Europe and Asia. The countries we are actively trading in are as follows:

- DRC
- Malawi
- Mozambique
- Tanzania
- Zambia
- Zimbabwe
- South Africa

Our head office is based in Pietermaritzburg. We have a warehouse in Johannesburg, and agents based in Germany, London, Belgium and China.

We supply a various range of clientele which includes merchants and stockists, manufacturers, fabricators and project work.

VISION

To become the preferred steel trading partner in Africa for our clients.

MISSION

We aim to offer our clients a superhero experience from the date of enquiry until the material is offloaded on the client's floor or project site in Africa.

HISTORY

The company was originally started in 2017 and in March 2019 changed it's trading name to E-Steel Africa (Pty) Ltd.

We have a combined steel experience of more than 20 years and have been fortunate to form long term business relationships with customers and suppliers along the way.

OUR SERVICES

- Procurement
- Distribution



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Mass per Metre

STRUCTURAL ROUND TUBING (HOT ROLLED)
TUBO REDONDO

Dimensions	1,6mm	2,0mm	2,5mm	3,0mm	3,5mm	4,0mm	4,5mm	5,0mm	6,0mm
15.9	0.563	0.681							
19.1	0.688	0.840							
21.3	0.778	0.953	1.158						
25.4	0.939	1.154	1.411						
27.0	1.002	1.233	1.502	1.768					
31.8	1.189	1.467	1.817						
34.1	1.282	1.562	1.942	2.293		2.969			
38,1	1.440	1.780	2.192	2.790		3.364			
42,8	1.642	2.012	2.484	2.944		3.827			
48.5	1.846	2.288	2.830	3.358		4.366	4.883		
50.8	1.940	2.406	3.089	3.533	4.083	4.616			
57.2	2.191	2,718	3.089	4.003		5.248			
60.3	2.317	2,875	3.700	4.224	4.876	5.551	6.154		
63.5	2.440	3.031	3.758	4.472	5.174	5.875	6.541		
76.2	2.942	3.658	4.534	5.416	5.261	7.105	7.939	9.771	10.387
88.9		4.286	5.327	6.355	7.371	8.375	9.336	10.344	12.265
101.6		4.908	6.104	7.288	8.460	9.619	10.760	11.911	14.135
114.3		5.534	6.893	8.221	9.555	10.880	12.170	13.465	16.011
127.0		6.165	7.669	9.166	10.660	12.120	13.590	15.044	17.880
139.7				10.110	11.760	13.390	15.000	16.610	19.780
152.4				11.050	12.850	14.640	16.410	18.180	21.660
165.1				11.990	13.950	15.890	17.810	19.740	23.540
193.7					16.440		21.030		27.820



SQUARE TUBING (HOT ROLLED)
TUBO QUADRADO

Dimensions	1,6mm	2,0mm	2,5mm	3,0mm	3,5mm	4,0mm	4,5mm	5,0mm	6,0mm
12,7 x 12,7	0.575								
15,9 x 15,9	0.734								
19,05 x 19,05	0.894	1.097							
25,4 x 25,4	1.212	1.496	1.817	2.614					
31,75 x 31,75	1.531	1.894	2.391	2.831					
38,1 x 38,1	1.850	2.293	2.892	3.326					
50,8 x 50,8	2.488	3.090	3.979	4.472	5.174	5.864	6.541		
60,33 x 60,33	2.937	3.652	4.534	5.403	6.261	7.105	7.939		
63,5 x 63,5	3.090	3.844	4.774	5.691	6.597	7.499	8.371		
76,2 x 76,2	3.710	4.583	5.690	6.801	7.891	8.969	10.034		
101,6 x 101,6		6.160	7.669	9.166	10.560	12.120	13.580	15.030	17.900
120,0 x 120,0							16.410	18.180	21.160
150,0 x 150,0							21.030		27.820
200,0 x 200,0							29.800		39.510
250,0 x 250,0							35.450		47.050

Please note that other sizes can be supplied on application.

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

ALL TUBING 3,0MM OR THICKER CAN BE SUPPLIED IN **Structatube™ 300**

Cold rolled and galvanised tubing also available on request.

We cannot accept responsibility for any mis-representations or inaccuracies of the above.





Mass per Metre

RECTANGULAR (HOT ROLLED)
TUBO RECTANGULAR

Dimensions	1,6mm	2,0mm	2,5mm	3,0mm	3,5mm	4,0mm	4,5mm	5,0mm	6,0mm
25,4 X 12,7	0.894	1.098							
31,8 X 19,05	1.212	1.469							
38,1 X 19,05	1.435	1.667							
38,1 X 25,4	1.531	1.894	2.390						
50,8 X 25,4	1.850	2.293	2.803	3.326					
50,8 X 38,1	2.190	2.718	3.366	4.003					
60,0 X 40,0		3.041	3.770	4.487					
76,2 X 25,4	2.440	3.031	3.758	4.472		5.174			
76,2 X 38,1	2.817	3.501	4.346	5.178	5.998	6.652	7.939		
76,2 X 50,8	3.090	3.844	4.774	5.691	6.597	7.499	8.371		
100 X 50		4.583	5.690	6.801	7.891	8.969	10.034	11.910	14.140
127,0 X 76,2		6.160	7.669	9.116	10.650	12.120	13.580	15.030	17.888
152,4 X 76,2				10.100	11.750		15.000	- 16.610	19.770
150,0 X 100,0				11.040	12.840	14.630	16.400	18.160	21.640
160,0 X 80,0				11.040	12.840	14.630	16.400	18.160	21.640
200,0 X 100,0					16.420		21.000		27.770
200,0 X 150,0					18,600		23.800		31.520
250,0 X 150,0							29.800		39.510

COLD FORMED SECTIONS
PERFIS LAMINADO A FRIO

LIPPED ANGLE	2,0mm	2,5mm	3,00mm
75 x 50 x 20	2.4000	2.940	3.4600
100 x 75 x 20	3.190	3.930	4.640

LIPPED CHANNEL	2,0mm	2,5mm	3,0mm
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



LIPPED ANGLE



LIPPED CHANNEL

Please note that other sizes can be supplied on application.

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

ALL TUBING 3,0MM OR THICKER CAN BE SUPPLIED IN **Structatube™ 300** Cold rolled tubing also available on request.

All cold formed sections are normally supplied in 6,0 or 9,145 metre lengths, but other lengths are available on application.

Please contact our Structural Steel Division for more Info.

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Mass per Metre **EQUAL ANGLE MILD STEEL**
CORNIERES EGAL
CANTONEIRA DE ABAS IGUAIS

Dimensions	2.5mm	3mm	4mm	5mm	6mm	8mm	10mm
25 X 25	0.953	1.114		1.773			
30 X 30	1.171	1.363		2.180			
40 X 40	1.582	1.874		2.974	3.516		
45 X 45		2.131		3.378	3.998		
50 X 50		2.367	3.056	3.770	4.469	5.819	
60 X 60			3.696	4.568	5.423	7.088	8.689

EQUAL ANGLE SANS 1431 Grade 350WA
CORNIERES EGAL
CANTONEIRA DE ABAS IGUAIS

Dimensions	6mm	8mm	10mm	12mm
70 X 7	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
120 X 120		14.712	18.197	21.620
150 X 150			22.981	27.345

UNEQUAL ANGLE SANS 1431 Grade 350WA
CORNIERES ENEGAL
CANTONEIRA DE ABAS DESIGUAIS

Dimensions	6mm	8mm	10mm	12mm
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		
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
150 X 90			18.176	21.599

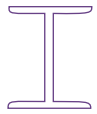
FLAT BAR SANS 1431 Grade 350WA
FER PLAT
BARRA RECTANGULAR

Dimensions	6mm	8mm	10mm	12mm	16mm	20mm	25mm
100	4.710	6.280	7.850	9.420	12.560	15.700	19.625
110			8.635				
130		8.164	10.205	12.246	16.328	20.410	25.513
150		9.420	11.775	14.130	18.840	23.550	29.438
180			14.130	16.956	22.608	28.260	35.325
200			15.700	18.840	25.120	31.400	39.250

FLAT BAR MILD STEEL
FER PLAT - QUALITE COMMERCIAL
BARRA RECTANGULAR - QUALIDADE COMERCIAL

Dimensions	5mm	6mm	8mm	10mm	12mm	16mm	20mm	25mm
20	0.785	0.942	1.256	1.570	1.880			
25	0.981	1.178	1.570	1.963	2.355			
30	1.178	1.413	1.884	2.355	2.826			
40	1.570	1.884	2.512	3.140	3.768	5.024	6.280	7.850
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	4.802	5.103	6.123	8.164	10.205	12.756
70		3.297	4.396	5.495	6.594	8.792	10.990	
80		3.768	5.024	6.280	7.536	10.048	12.560	15.700
90		4.239	5.652	7.065	8.478	11.304	14.130	17.663

Please contact our Structural Steel Division for Sizes not Listed Above.
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Mass per Metre
UNIVERSAL BEAMS SANS 1431 Grade 350WA
H.E.A. S275JR
FERRO I

	KG/M	Web Dimensions	Flange Dimensions	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 '1	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
533 x 210	82.200	9.600	13.200	528.300	208.700
533 x 210	92.100	10.200	15.600	533.100	209.300
533 x 210	101.000	10.900	17.400	536.700	210.100



TAPER FLANGE CHANNEL SANS 1431 Grade 350WA
UPN
FERRO U

	KG/M	Web Dimensions	Flange Dimensions	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



PARALLEL FLANGE CHANNEL SANS 1431 Grade 350WA
UPN - A AILES PARALLEL
FERRO I

	KG/M	Web Dimensions	Flange Dimensions	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

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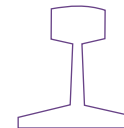
Mass per Metre
UNIVERSAL COLUMN SANS 1431 Grade 350WA
H.E.B.
FERRO I

	KG/M	Web Dimensions	Flange Dimensions	Height	Width
152 x 152	23.000	6.100	6.800	152.400	152.400
152 x 152	30.000	6.600	9.400	157.500	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
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



JOISTS - TAPER SANS 1431 Grade 350WA
FERRO I

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



RAILS DRILLED (standard holes)
RAIL CHEMIN DE FER
CARRIS

Size	Kg/m
15 kg	14.905
22 kg	22.542
30 kg	30.150
40 kg	40.310



IPE SECTIONS SANS 1431 Grade 350WA I.P.E.
PROFILES
FERRO I

	KG/M	Web Dimensions	Flange Dimensions	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 SANS "AA" 1431 Grade 350WA
I.P.E. AA PROFILES
FERRO I

	KG/M	Web Dimensions	Flange Dimensions	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 contact our Structural Steel Division for Sizes not Listed Above.

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Mass per Metre **ROUND BAR MILD STEEL**
FER ROND
VARAO LISO

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	40mm	45mm	50mm
	3.853	5.549	6.313	7.553	9.865	12.485	15.413

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

SQUARE BAR MILD STEEL
FER CARRE
BARRA QUADRADA

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

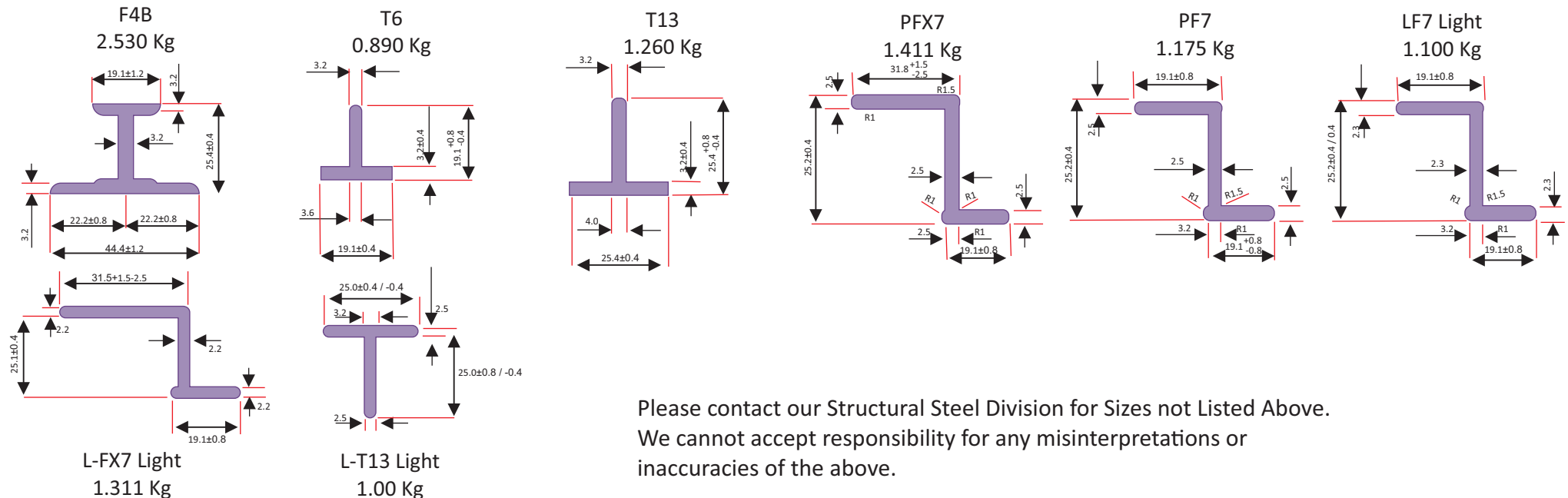
Dimensions	30mm	40mm	50mm
	7.070	12.600	19.600

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

DEFORMED ROUND BAR 450MPA
PER A BETON
VARAO NERVURADO

Dimensions	10mm	12mm	16mm	20mm	25mm	32mm
	0.617	0.888	1.580	2.470	3.850	6.310

WINDOW SECTIONS
PERFIS PARA JANELA



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Mass per Each

COMMERCIAL QUALITY PLATES
TOLES
CHAPA ACO MACIO

	4,5mm	5,0mm	6,0mm	8,0mm	10,0mm	12,0mm	16,0mm	20,0mm	25,0mm
2500 X 1200	106.000	118.000	141.000	188.000	236.000	283.000	377.000	471.000	589.000
3000 X 1500		177.000	212.000	283.000	353.000	424.000	565.000	707.000	883.000

HARDWEARING PLATES - SS10/200 / WEARPLATE 200

TOLES D'USURE
CHAPA SS10/200

		5,0mm	6,0mm	8,0mm	10,0mm	12,0mm	16,0mm	20,0mm	25,0mm
2500 X 1200	118.000	141.000	188.000	236.000	283.000	377.000	471.000	589.000	
4000 X 2000					628.000				

SANS 1431/300WA PLATES

TOLES
CHAPA 300WA

		5,0mm	6,0mm	8,0mm	10,0mm	12,0mm	16,0mm	20,0mm	25,0mm
2500 X 1200		118.000	141.000	188.000	236.000	283.000	377.000	471.000	589.000
3000 X 1500		177.000	212.000	283.000	353.000	424.000	565.000	707.000	883.000
4000 X 2000		314.000	377.000	502.000	628.000	754.000	1005.000	1256.000	1570.000
10000 X 2400		942.000	1130.000	1507.000	1884.000	2261.000	3014.000	3768.000	4710.000

		30mm	32mm	40mm	50mm
2500 X 1200		707.000	754.000	942.000	1178.000

VASTRAP FLOOR PLATES
TOLES
CHAPA DE OLIVIERA/LAGRIMA

		3,0/4,6	4,5/6,1	6,0/7,6	8,0/9,6
2500 X 1200		78.000	113.000	149.000	196.000

COLD ROLLED SHEETS - COMMERCIAL QUALITY
TOLES A FROID
CHAPA LAMINADA A FRIO

	0,5mm	0,6mm	0,8mm	1,9mm	1,2mm	1,6mm	2,0mm
1850 X 925	6.880	8.250	11.010	13.760	16.510	22.010	27.510
2450 X 925	9.110	10.930	14.570	18.220	21.860	29.150	36.440
2450 X 1225	12.060	14.480	19.300	24.130	28.950	38.600	48.250

HOT ROLLED SHEETS - COMMERCIAL QUALITY
TOLES A CHAUD
CHAPA LAMINADA A QUENTE

	1,6mm	2,0mm	2,5mm	2,8mm	3,0mm	4,0mm
1850 X 925	22.010	27.510	34.390		41.270	
2450 X 925	29.150	36.440	45.550		54.660	
2450 X 1225	38.600	48.250	60.320	67.560	72.380	96.510
3050 X 1225	48.060	60.070	75.090		90.110	
3000 X 1500		72.351	90.440		108.530	144.700
4000 X 1800					173.640	231.520

GALVANISED FLAT SHEET - Z275
TOLES GALVANISE
CHAPA GALVANIZADA

	0,5mm	0,6mm	0,8mm	1,0mm	1,2mm	1,6mm	1,9mm	3,0mm
1850 X 925	6.880	8.250	11.010	13.760	16.510	22.010	26.140	
2450 X 925	9.110	10.930	14.570	18.220	21.860	29.150	34.610	
2450 X 1225	12.060	14.480	19.300	24.130	28.950	38.600	45.840	72.380

PLEASE NOTE THAT DIFFERENT SIZES & QUALITIES OF PLATE AND SHEET ARE AVAILABLE FROM OUR STRUCTURAL STEEL DIVISION ON REQUEST.

We cannot accept responsibility for any misinterpretations or inaccuracies of the above.



TECHNICAL DATA - PLATES

QUALITY	CHEMICAL COMPOSITION % LADLE ANALYSIS)													TENSILE STRENGTH (MIN) (Mpa)	YIELD STRESS (MIN) (Mpa)	ELONGATION % (MIN) ON GAUGE LENGTH		CHARPY VNOTCH	
	C	Mn	P	S	Si	V	Al	Mo	Ni	Cr	Cu	B	Nb			200mm	5.65 ✓ So	TEMP°C	AVE(J)
	Max	Max	Max	Max	Max			Max	Max	Max	Max		Max						
MILD STEEL COMMERCIAL 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	0.16	1.50	0.04	0.04	0.10/0.50									430/AR580	275 (t<16)	20	22	-20	27
50B	0.23	1.60	0.05	0.05	0.50	0.003/0.10								490/AR640	355 (t<16)	18	20	20	27
50C	0.20	1.50	0.05	0.05	0.50									490/AR640	355 (t<16)	18	20	0	27
SABS 1431 300WA	0.22	1.60	0.04	0.04	0.50									450/AR620	300 (t<40)	20	22		
300WC	0.22	1.60	0.04	0.04	0.50									450/AR620	300 (t<40)	20	22	0	27
300WDD	0.22	1.60	0.04	0.04	0.50									450/AR620	300 (t<40)	20	22	-30	27
350WA	0.22	1.60	0.04	0.04	0.50									450/AR620	350 (t<40)	18	20		
350WC	0.22	1.60	0.04	0.04	0.50									480/AR650	350 (t<40)	18	20	0	27
350WD	0.22	1.60	0.04	0.04	0.50									480/AR650	350 (t<40)	18	20	-30	27
BSEN10025 S275JR	0.22	1.50	0.045	0.045	-									510	275		22	20	27
S275JO	0.18	1.50	0.045	0.04	-									510	275		22	0	27
S275J2G3	0.18	1.50	0.035	0.035	-									430	275		22	-20	27
S355JR	0.24	1.60	0.045	0.045	0.55									510/680	355		22	20	27
S355JO	0.20	1.60	0.040	0.040	0.55									510/680	355		22	0	28
BSEN10025 S355J2G3	0.20	1.60	0.035	0.035	0.55									510/680	355		22	-20	27
CORROSION RESISTANT WR 50BI 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)	348 (t<12.7)	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)	345 (t<100)	18 (t,100)	21 (50mm)		
	0.19	0.80/1.35	0.04	0.045	0.30/0.65	0.04/0.10	0.15/0.06		0.40	0.40/0.70	0.25/0.40			550/ (t<25)	415 (t<25)	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			
PRESSURE VESSEL WR 50BI CORTEN A	0.25	0.60/1.40	0.03	0.045	0.35			0.10	0.30	0.25	0.30			430/550	240 (16<t<40)		23		
BS 1501/161/430A	0.25	0.60/1.40	0.03	0.03	0.10/0.35			0.10	0.30	0.25	0.30			430/550	230 (40<t<63)		23		
ASTM A516	0.31	0.85/1.20	0.03	0.04	0.15/0.40									480/620	620	17			

PLEASE NOTE - OTHER STEEL GRADES ARE AVAILABLE

TECHNICAL DATA - PLATES (continued)

	THICKNESS RANGE (mm)	TYPICAL B.H.N.	HARDNESS H.R.C.	TYPICAL TENSILE STRENGTH (MPa)	TYPICAL YIELD STRENGTH (Mpa)	TYPICAL IMPACT STRENGTH + (J)	MAX OPERATING TEMP (°C)	TYPICAL ELONGATION (%)	WELDABILITY		COMMENTS
									SUGGESTED WELDING ELECTRODE SMAW	GMAW	
Mild Steel	2-50	130		400	250	-	-	23	E6013	ER705-6	For Comparison Only
VRN 200	3-50	200	135	580	450		250	-	E7018	ER70-56	Low cost liners, mechanical properties not guaranteed
VRN 360	30-100	387	40	1260	1100	41 @ 20°C	330	16	E7018	ER70-56	Good wear resistance and weldability
VRN 400	6-25 Good weldability	418	44	1300	1050	35 @ 0°C	330	14	E7018	ER70-56	Excellent wear resistance and fabrication properties.
VRN 500	4-50	520	53	1595	1332	65 @ 0°C	300	15	E7018 E8016	ER70-56	Extremely high wear resistance and impact resistance
VRN 600	9-25	600	59				700		Weld on backing plate only use E6013, E7018, ER705-6		CRC overlay plate for severe sliding wear applications + up to 600°C. Also available in buttons
VRN BOLTS	M12 M16 M20	440	47	1350	1120		300				Special bolts developed for attachment of liners
VRN 690	3-150	260	25	840	760	86 W@50°C	500	24	E9018 E11018	ER1005-6	Extra high strength structural steel with good weldability and formability
TM 600	3-10	240	25	800	650	80 @ -50°C	300	24	E9018 E11018	ER100-56	Hot rolled high strength sheet. Excellent formability and weldability
700MC	3-12	260	28	750/900	700	80 @ -50°C	500	16	E9018 E11018	ER100-56	High strength hot rolled sheet Excellent formability and weldability
3CR12	3-20	200	13	700	510	75 @ 20°C	600	21	E309 E316	E309L E316L	Corrosion resistant steel for wet sliding applications

PLEASE NOTE - OTHER STEEL GRADES ARE AVAILABLE



TECHNICAL DATA - SHEETS

QUALITY	CHEMICAL COMPOSITION % (LADLE ANALYSIS)									TENSILE STRENGTH (MIN) (Mpa)	YIELD STRESS (MIN) (Mpa)	ELONGATION % (MIN) ON GAUGE LENGTH OF		MANDREL DIAMETER FOR 1800 BEND TEST
	C Max	Mn Max	P Max	S Max	Si	Cu	Al Max	Ni	Cr			50 mm	200 mm	
COMMERICAL QUALITY	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 KCR 1	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	-	-	-	-	-					
CR 4	0.12	0.60	0.05	0.05	-	-	-	-	-	SUBJECT TO NEGOTIATION				
	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
HR 290	0.16	0.65	0.02	0.02	0.02		0.03			400	290/370	2<t<4=27 4<t<8=30	-	2<t<4=1t 4<t<8=1.5t
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														
PLEASE NOTE - OTHER STEEL GRADES ARE AVAILABLE														

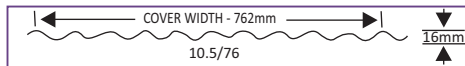
ROOF SHEETING • CHAPA DE TELHADO

CORRUGATED



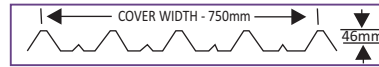
Guage	Grade	Finish	Mass kg/m	Kg/m ²
0.27mm	ISQ 550	Z120	1.642	2.691
0.32mm	ISQ 550	Z120	1.946	3.189
0.50mm	ISQ 550	Z275	3.040	4.984

CLASSIDEK



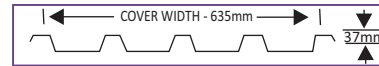
Guage	Grade	Finish	Mass kg/m	Kg/m ²
0.40mm	ISQ 300	Z160	2.974	3.903
0.50mm	ISQ 550	See Note 2	3.718	4.879
0.58mm	ISQ 300	See Note 2	4.313	5.660
0.80mm	ISQ 230	See Note 2	5.949	7.807
0.47mm	G550	See Note 1	3.333	4.374
0.53mm	G550	See Note 1	3.846	5.047

DELTA RIB



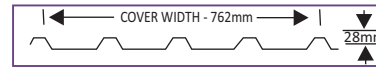
Guage	Grade	Finish	Mass kg/m	Kg/m ²
0.58mm	ISQ 300	See Note 2	5.391	7.188
0.80mm	ISQ 230	See Note 2	7.057	9.409

FLEKSPAN



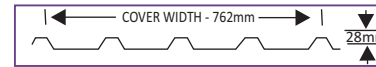
Guage	Grade	Finish	Mass kg/m	Kg/m ²
0.40mm	ISQ 300	Z160	2.974	4.335
0.50mm	ISQ 550	See Note 2	3.718	5.420
0.58mm	ISQ 300	See Note 2	4.313	6.287
0.40mm	ISQ 230	See Note 2	5.949	8.672
0.40mm	G550	See Note 1	3.333	4.859
0.40mm	G550	See Note 1	3.846	5.606

MS-1



Guage	Grade	Finish	Mass kg/m	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

TL-5



Guage	Grade	Finish	Mass kg/m	Kg/m ²
0.50mm	ISQ 550	See Note 2	3.778	4.958
0.58mm	ISQ550(3t)	See Note 2	4.382	5.750
0.80mm	ISQ 230	See Note 2	6.045	7.933
0.47mm	G550	See Note 1	3.333	4.374
0.53mm	G550	See Note 1	3.846	5.047

KINGKLIP 700



Guage	Grade	Finish	Mass kg/m	Kg/m ²
0.50mm	SQ550 (3t)	See Note 2	3.778	5.397
0.58mm	SQ550 (3t)	See Note 2	4.382	6.260
0.47mm	G550	See Note 1	3.333	4.761
0.53mm	G550	See Note 1	3.846	5.494

GENERAL

The mass and kg/m² values shown in the table are for Galvanised and Zincaleum' finishes

NOTE 1

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

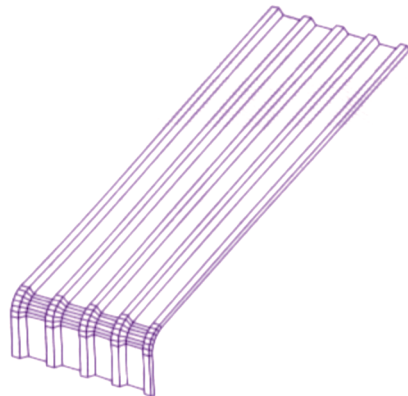
NOTE 2

Available with either Galvanised (Z275 & Z600) or a CHROMADEK coating

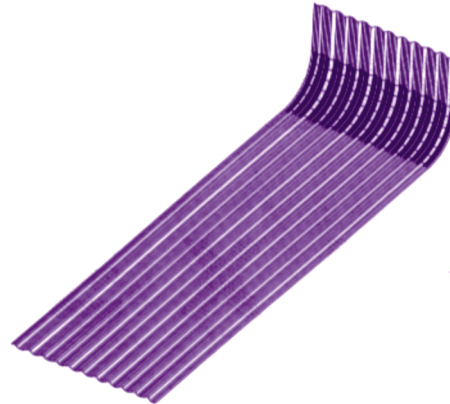
Aluminium and Stainless Steel are available as specials, subject to minimum quantities

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

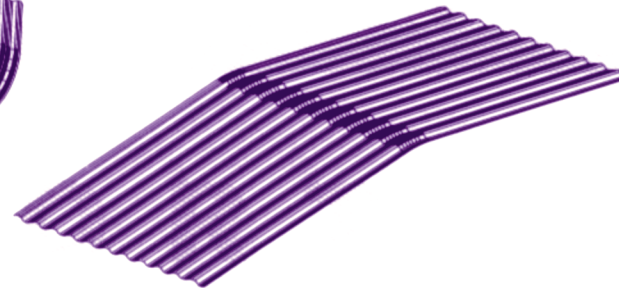
BULLNOSING & CRANKING



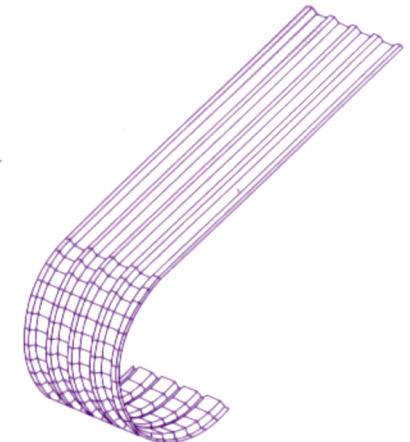
Standard Bullnose



Reverse Bullnose



Centre Crank



Double Bullnose

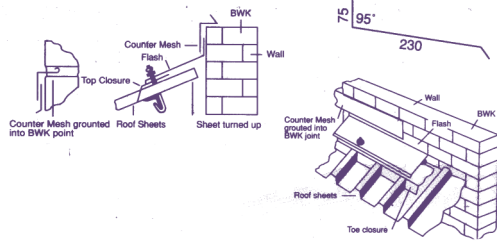
Please contact our Structural Steel Division for Sizes not Listed Above.
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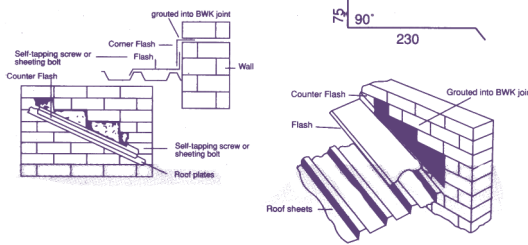
ROOF ACCESSORIES

FLASHINGS

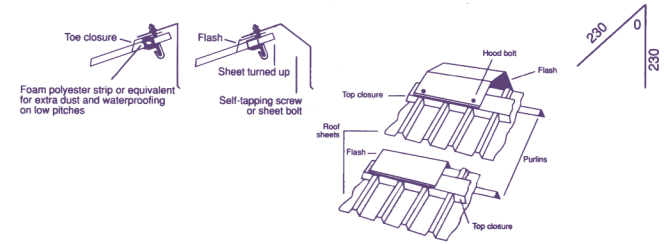
HEADWALL FLASHING 305 GIRTH



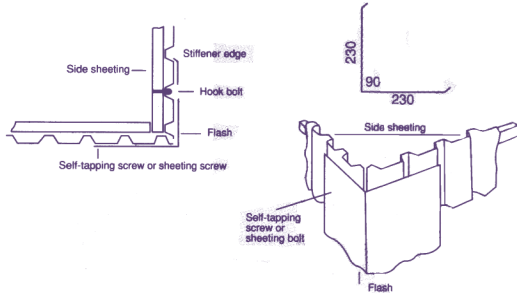
SIDEWALL FLASHING 305 GIRTH



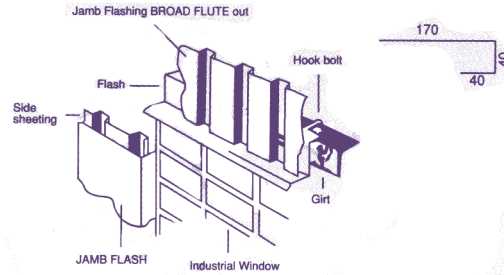
APEX AND HOOD FLASHING 460 GIRTH



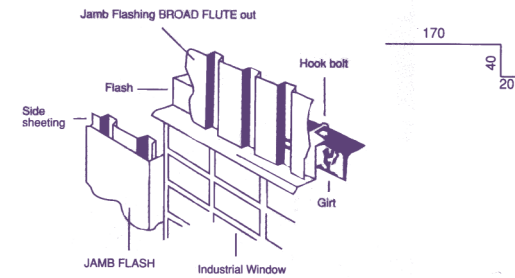
CORNER FLASHING 460 GIRTH



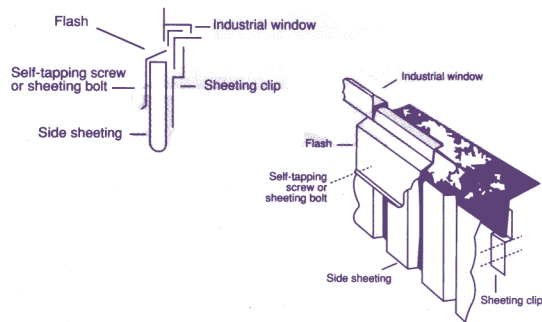
JAMB FLASHING CLOSED 230 GIRTH



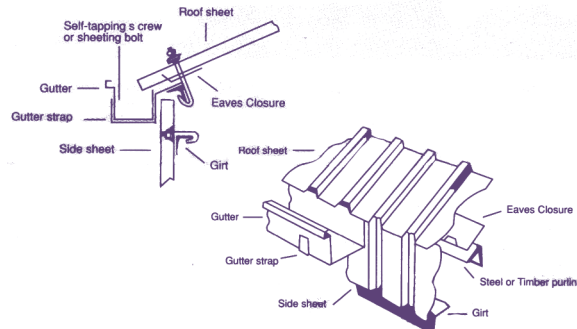
JAMB FLASHING OPEN 230 GIRTH



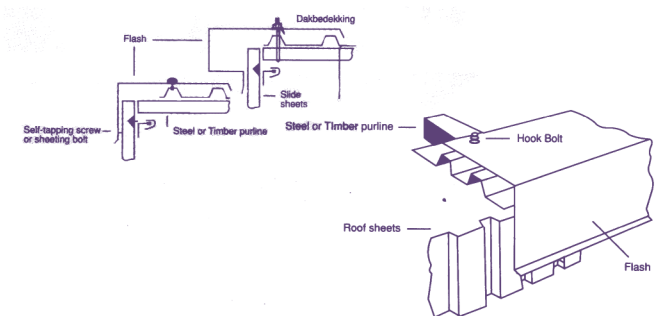
SILL FLASHING 150 GIRTH



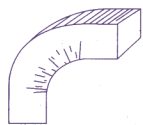
EAVES CLOSURE and TYPICAL GUTTER



BARGE BOARD



CURVED CORNER FLASHING



BROAD FLUTE CLOSURE



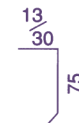
NARROW FLUTE CLOSURE



DRIP FLASHING



COUNTER FLASHING



STANDARD RIDGING 460 GIRTH



ROLL TOP RIDGING

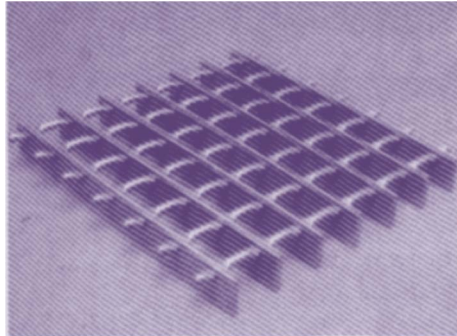


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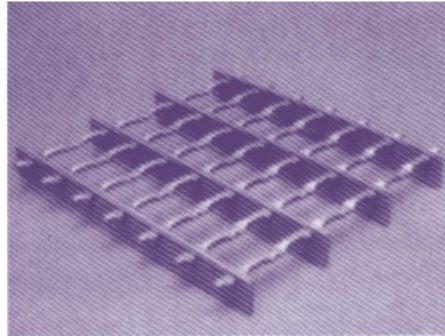
GRATINGS

Mass per Each GRATING (MILD STEEL)

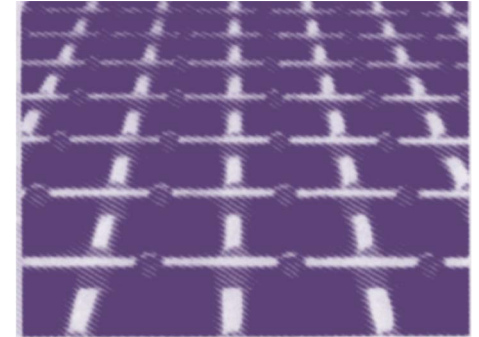
	25 x 4,5	30 x 4,5	40 x 4,5
2400 x 1200	86.000	100.000	125.000



RS40



RS80



POSITIVE NON SLIP

STOCK PANELS AVAILABLE IN RECTAGRID RS40

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

THE ABOVE SIZES ARE AVAILABLE IN MILD STEEL - UNCOATED, BITUMEN DIPPED OR GALVANISED

STAIRTREADS

SPECIFICATIONS

Stairtread Lengths mm	Stairtread Widths mm		Bearer Bar mm
	85 and 25	165 to 285	
	Side Plate Size		
Up to and Including 751 to 1000	80 x 4.5	60 x 3	25 x 4.5
1001 to 1200	80 x 4.5	80 x 4.5	30 x 4.5
			40 x 4.5

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

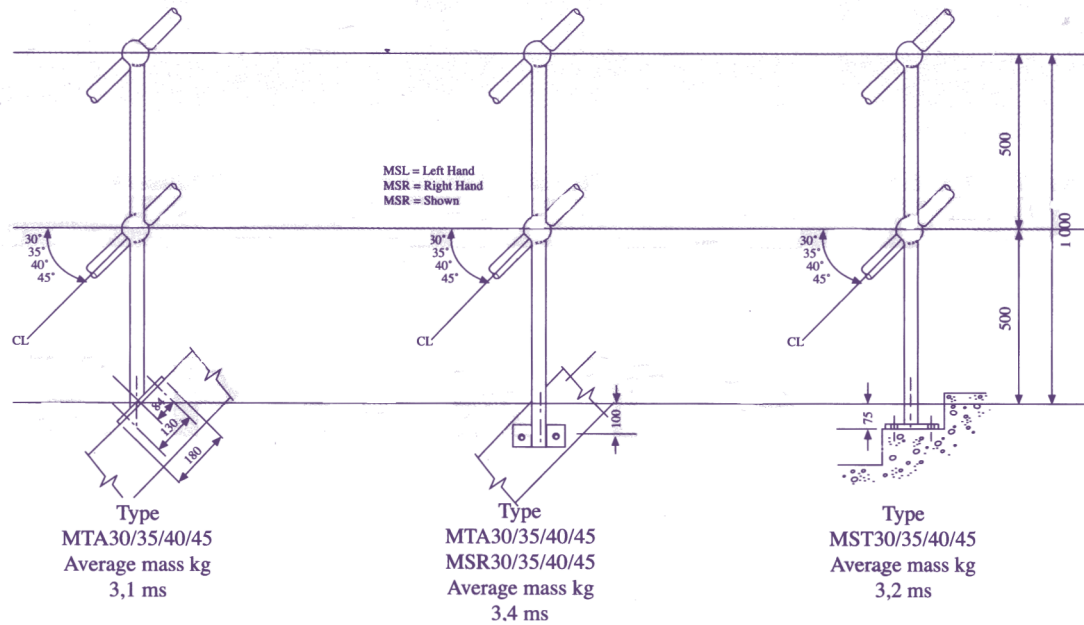
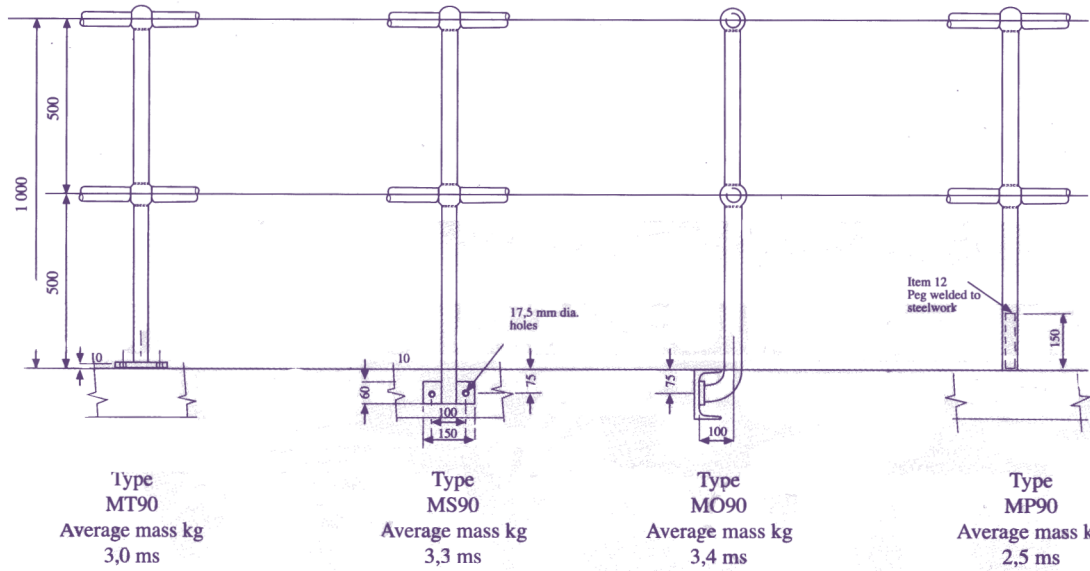
STOCK SIZES

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

Please contact our Structural Steel Division for Sizes not Listed Above.
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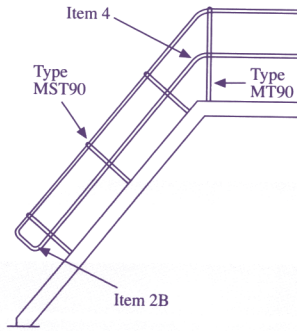
HANDRAIL STANCHIONS CORREMAOS



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.
We cannot accept responsibility for any misinterpretations or inaccuracies of the above.

HANDRAIL STANCHIONS CORREMAOS

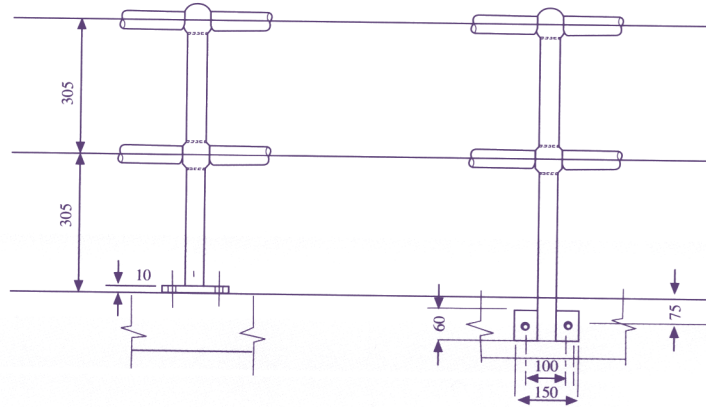
STANCHIONS (ZINC CHROMATE COATED)



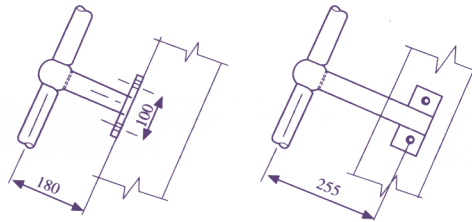
Type
MST 90 and MSS 90

Stanchions fixed at 90° to stringers have been designed for use on staircases with angles greater than 45°

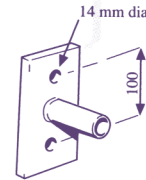
For use on ladders between 70° and 90° inclines



MST 90	Type	MSS 90
2,2 ms	Average mass kg	2,6 ms



MLT90	Type	MLS90
1,1 ms	Average mass kg	1,4 ms



Item 7
60 x 4,5 x 1 50 mm wall end plate



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



Item 10
Rubber end plug

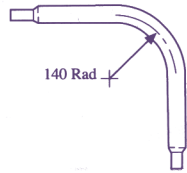
Available in Uncoated, Zincromate or Galvanized Finish. Any other finishes can be sourced on request. Please contact our Structural Steel Division for Sizes not Listed Above. We cannot accept responsibility for any misinterpretations or inaccuracies of the above.



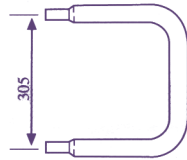
HANDRAILS CORREMAOS E ACCESORIOS

Mass per Each

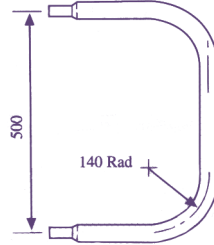
HANDRAIL BENDS AND CLOSURES (ZINC CHROMATE COATED)



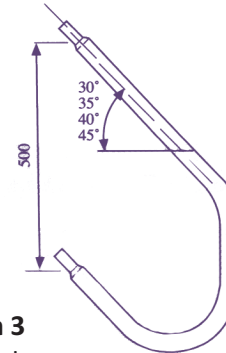
Item 1
90° long radius corner bend
Average mass kg
1,0ms



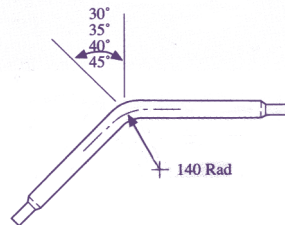
Item 2B
90° straight closure
Average mass kg
1,3ms



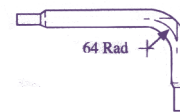
Item 2M
90° straight closure
Average mass kg
1,7ms



Item 3
3M 45° angle closure
3AM 40° angle closure
3BM 35° angle closure (ms only)
3CM 30° angle closure (ms only)
Average mass kg
1,8ms



Item 4
4 45° stairway bend
4A 40° stairway bend
4B 35° stairway bend (ms only)
4C 30° stairway bend (ms only)
Average mass kg
1,1ms



Item 5
90° short radius bend
Average mass kg
0,9ms



Item 6
Slipjoint
Average mass kg
0,2ms

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.
We cannot accept responsibility for any misinterpretations or inaccuracies of the above.

DIMENSIONS - RAISED

EXPANDED METAL CHAPA EXTENDIDA

TYPE	SWM	WM	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
MENTEX70/VEM 325A	20	60	6	4.5	62.5
MENTEX 72/VEM 325G	20	50	3	3.0	20.8
MENTEX 80A/VEM 318H	15	40	3	.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 139/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

DIMENSIONS - FLATTENED

TYPE	SWM	WM	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 6280E	8	20	2	1.0	11.6

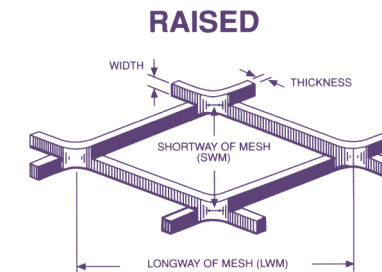
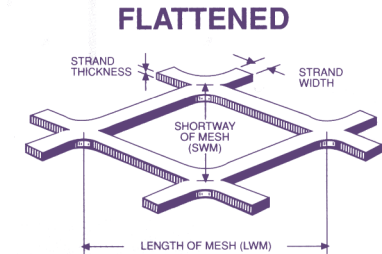
Standard Sheet Size 1200 x 2400

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 on request.

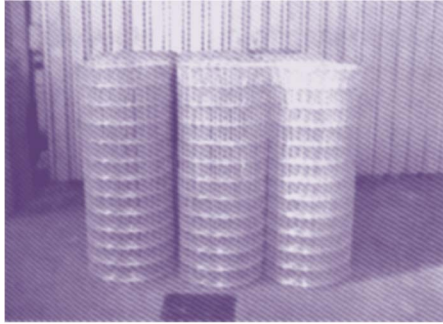
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EXPANDED METAL DIMENSIONS
How to specify your mesh dimensions



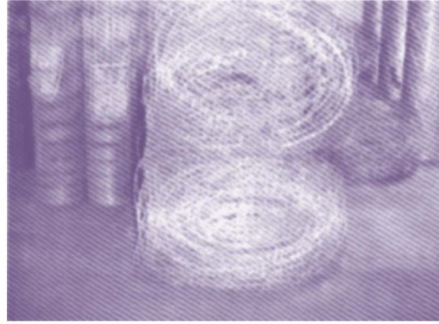
FENCING • PRODUCTOS DE VEDACAO

FENCING AND RELATED MATERIALS



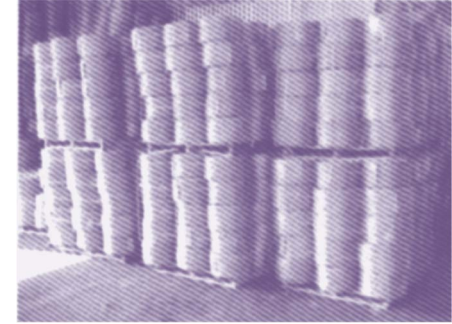
FIELD FENCE

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 ARAME LAMINADA A FRIO

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



BARBED WIRE • ARAME FERPADO

Iowa
Karoo I
Karoo II
Light or fully galvanised finish



GALVANISED WIRE • ARAME GALVANIZADO

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 500 gram coils



FENCING POSTS & STAYS

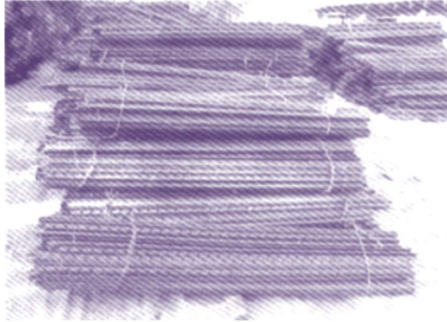
Posts aluminium painted complete with cap and base in 76mm or 101mm diameter pipe
1.8m, 2.1 m, 2.4m or 3.0m lengths
Stays aluminium painted complete with base in 38mm or 50mm diameter pipe.
1.8m, 2.1m, 2.4m or 3.0m lengths

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FENCING continued PRODUCTOS DE VEDACAO

WELDED MESH, INDUSTRIAL MESH FENCING & GATE MATERIAL



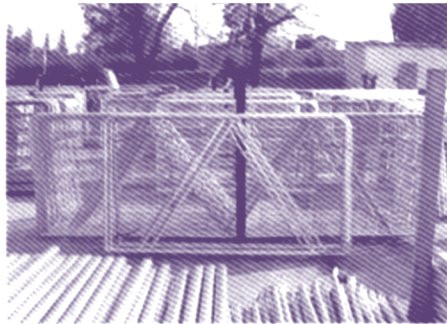
FENCING Y-STANDARDS, I-PROFILE AND DROPPERS

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



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 heights and various lengths

Security Gates - Single or double leaf 1,8m or 2,4m heights and various lengths with a 450mm overhang



DIAMOND MESH AND NETTING WIRE

Diamond Mesh - various heights, apertures and wire diameters in 30 metre rolls

Netting Wire - various heights, apertures and wire diameters in 50 metre rolls



BRICKFORCE

75mm x 20 metre rolls

150mm x 20 metre rolls

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VALUE ADDED SERVICES

- Materials can be cut to any lengths.
- All cutting is done according to customers specifications.
- Mitre cuts up to 45 are possible.
- All cut material is bundled, strapped and marked according to the customers specifications, prior to despatch.
- All small items are placed in drums or bags and are tagged for identification purposes.

Profiling

- Cellular Beams.
- Castellated Beams.
- T-Pieces
- Haunches.

Cellular Beams

The Geometry of cellular floor and roof beams are chosen to suit the requirements of each specific case.

Given the client's maximum depth and minimum service opening size the optimum cellular beam can be designed.

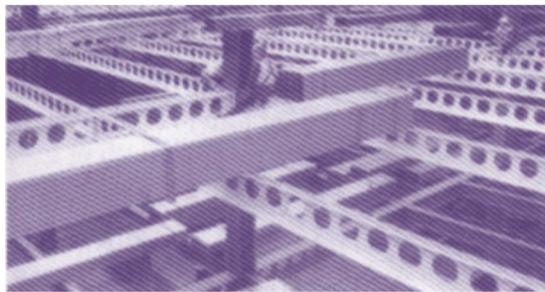
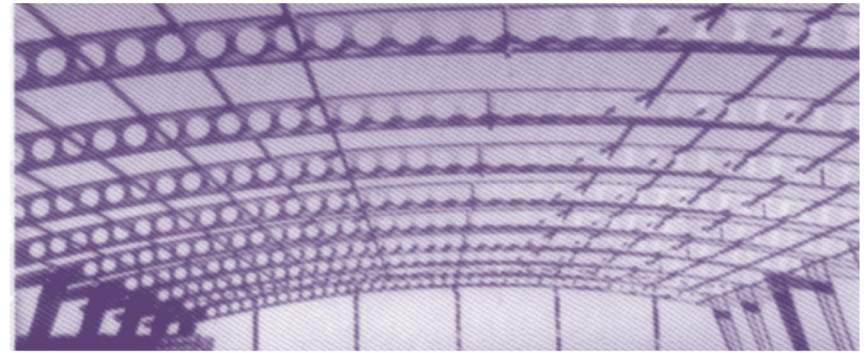
E-Steel have an office based design service to provide advice and full designs. To help optimize the design of a specific project and assist engineers to gain familiarity and expertise in cellular beam design, E-Steel staff will attend project design meetings. In-house technical seminars to promote the efficient design of cellular beams and proficiency with the associated software.

CELLBEAM can be arranged. Technical support will be offered without charge or obligation. For free design service, brochures, software and training contact your E-steel Trading branch.



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CELLULAR BEAMS



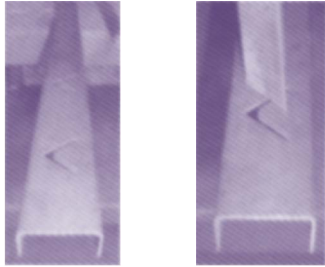
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PALISADE FENCING

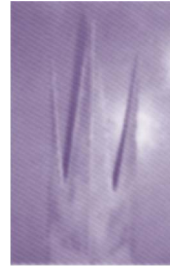
Palisade Fencing

Slotted Channels are used for the Crosses. Spacings are available in 160 and 180mm centres. 40x40x2.0, 2.5 or 3.0mm Hot Rolled angles are used for the Palisade Palings. 76x76x1.6mm Hot Rolled Tubes are used for the Palisade Poles. Palisade Pole Caps are manufactured to fit.

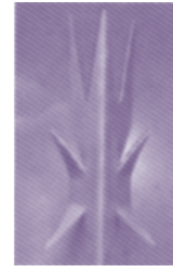
Slotted Channels



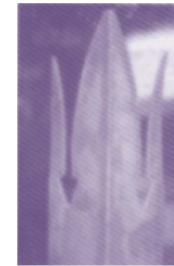
Spike Types



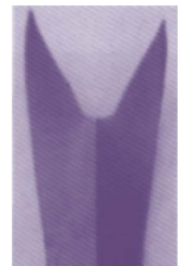
Industrial



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.

Should you have any special palisade requests please contact your E-steel Trading branch.

Domestic



Industrial



Please contact our Structural Steel Division for Sizes not Listed Above.

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The countries we are actively trading in are as follows:

- DRC
- Malawi
- Mozambique
- Tanzania
- Zambia
- Zimbabwe
- South Africa





CONTACT DETAILS:

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CELL: +27 84 301 7144
EMAIL ADDRESS: nicky@e-steel.co.za