

ERW BLACK AND GALVANISED STEEL TUBES FOR WATER, GAS, AIR AND STEAM (IS : 1239-2004)

N.B. & Series	Outside Diameter		Wall Thickness		Nominal Mass of Black & Galvanised Steel Tubes				Socket		Strip		
	mm (nearest Inch)	min. mm	max. mm	mm	SWG	Plain End		Screwed & Socketed		No. of Pipes Per Bundle	min. Outer diameter mm	min. Length mm	Width Req'd. mm.
						Kg./Mtr.	Mtrs./ton	Kg./Mtr.	Mtrs./ton				
15 L	21.0	21.4	2.0	14	0.95	1056	0.96	1046	165	-	-	64	
(½) M	21.0	21.8	2.6	12	1.21	826	1.22	820	132	27.0	37.0	63	
H	21.0	21.8	3.2	10	1.44	694	1.45	690	110			62	
20 L	26.4	26.9	2.3	13	1.38	725	1.39	719	112			83	
(¾) M	26.5	27.3	2.6	12	1.56	641	1.57	637	98	32.5	39.0	82	
H	26.5	27.3	3.2	10	1.87	535	1.88	532	84			81	
25 L	33.2	33.8	2.6	12	1.98	505	2.00	500	80			102	
(1) M	33.3	34.2	3.2	10	2.41	415	2.43	412	65	39.5	46.0	101	
H	33.3	34.2	4.0	8	2.93	341	2.95	339	55			100	
32 L	41.9	42.5	2.6	12	2.54	394	2.57	389	60			128	
(1 ¼) M	42.0	42.9	3.2	10	3.10	322	3.13	319	51	49.0	51.0	127	
H	42.0	42.9	4.0	8	3.79	264	3.82	262	42			126	
40 L	47.8	48.4	2.9	11	3.23	310	3.27	306	48			147	
(1 ½) M	47.9	48.8	3.2	10	3.56	281	3.60	278	45	56.0	51.0	146	
H	47.9	48.8	4.0	8	4.37	229	4.41	227	36			145	
50 L	59.6	60.2	2.9	11	4.08	245	4.15	241	39			183	
(2) M	59.7	60.8	3.6	9	5.03	199	5.10	196	30	68.0	60.0	182	
H	59.7	60.8	4.5	7	6.19	161	6.26	160	27			181	
65 L	75.2	76.0	3.2	10	5.71	175	5.83	172	27			234	
(2 ½) M	75.3	76.6	3.6	9	6.42	156	6.54	153	24	84.0	69.0	233	
H	75.3	76.6	4.5	7	7.93	126	8.05	124	20			232	
80 L	87.9	88.7	3.2	10	6.72	149	6.89	145	23			273	
(3) M	88.0	89.5	4.0	8	8.36	120	8.53	117	19	98.0	75.0	272	
H	88.0	89.5	4.8	6	9.90	101	10.40	99	16			271	
100 L	113.0	113.9	3.6	9	9.75	102	10.00	100	16			354	
(4) M	113.1	115.0	4.5	7	12.20	82	12.50	80	13	124.0	87.0	352	
H	113.1	115.0	5.4	5	14.50	69	14.80	68	11			351	
125 M	138.5	140.8	4.8	6	15.90	63	16.40	61	10			437	
(5) H	138.5	140.8	5.4	5	17.90	56	18.40	54	9	151.0	96.0	435	
150 L	163.9	166.5	4.8	6	18.90	53	19.50	51	8			515	
(6) H	163.9	166.5	5.4	5	21.30	47	21.90	46	7	178	96.0	513	

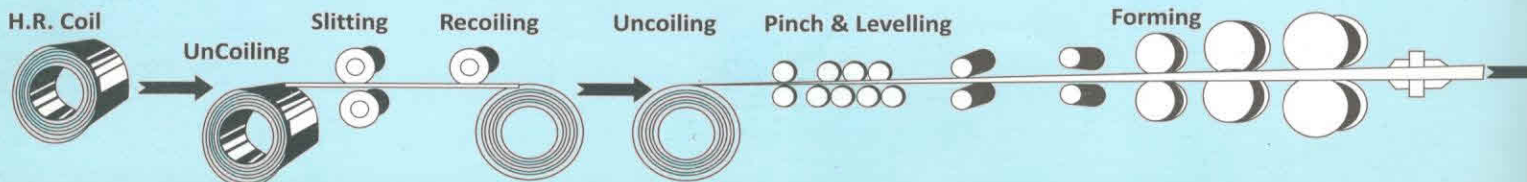
TOLERANCES

Series	Thickness	We. Single Tube	We. 10 Ton. Lot
Light	+ Not limited	+ 10%	+ 7.5%
	- 8%	- 8%	- 5%
Medium & Heavy	+ Not limited	± 10%	± 7.5%
	- 10%		

L = Light

M = Medium

H = Heavy



STEEL TUBES FOR STRUCTURAL PURPOSES (IS : 1161-1998)

N.B. and Series	Outside Diameter	Thickness	Nominal Weight Black Tubes Plain End		Calculated Nominal weight Galvanized Tubes Plain End	
			kg/m	m/tonne	kg/m	m/tonne
15 L	21.3	2.0	0.95	1056	1.00	1000
		2.6	1.21	836	1.26	794
		3.2	1.44	694	1.49	671
20 L	26.9	2.3	1.38	725	1.43	699
		2.6	1.56	641	1.61	621
		3.2	1.87	535	1.92	521
25 L	33.7	2.6	1.98	505	2.03	493
		3.2	2.41	415	2.46	407
		4.0	2.93	341	2.98	336
32 L	42.4	2.6	2.54	394	2.62	382
		3.2	3.10	323	3.18	314
		4.0	3.79	264	3.87	258
40 L	48.3	2.9	3.23	310	3.34	299
		3.2	3.56	281	3.67	272
		4.0	4.37	229	4.48	223
50 L	60.3	2.9	4.08	245	4.20	238
		3.6	5.03	199	5.15	194
		4.5	6.19	162	6.31	158
65 L	76.1	3.2	5.71	175	5.86	171
		3.6	6.42	156	6.57	152
		4.5	7.93	126	8.10	123
80 L	88.9	3.2	6.72	149	6.90	145
		4.0	8.36	120	8.54	117
		4.8	9.90	101	10.08	99
100 L	114.3	3.6	9.75	103	9.97	100
		4.5	12.20	82	12.42	81
		5.4	14.50	69	14.72	68
125	139.7	4.5	15.00	67	15.25	66
		4.8	15.90	63	16.15	62
		5.4	17.90	56	18.15	55
150	165.1	4.5	17.80	56	18.20	55
		4.8	18.90	53	19.30	52
		5.4	21.30	47	21.70	46
150	168.3	4.5	18.20	55	18.66	54
		4.8	19.40	52	19.88	50
		5.4	21.70	46	22.24	45
		6.3	25.20	40	25.74	39
175	193.7	4.8	22.40	45	22.94	44
		5.4	25.10	40	25.64	39
		5.9	27.30	37	27.87	36
200	219.1	4.8	25.40	39	25.95	39
		5.6	29.50	34	30.05	33
		5.9	31.00	32	31.55	32
250	273.0	5.9	38.90	26	39.68	25
300	323.9	6.3	49.30	20	50.28	20

STEEL TUBES FOR WATER, GAS & SEWAGE (IS : 3589-2001)

N.B. Size mm	Outside Diameter mm	Thickness mm	Weight (Plain End)	
			kg/mtr	mtr/ton
150	168.3	2.6	10.6	94
		3.2	12.0	83
		4.0	16.2	62
200	219.1	4.5	18.2	55
		2.6	13.9	72
		3.6	19.1	52
250	273.0	4.5	23.8	42
		6.3	33.1	30
		3.6	23.9	42
300	323.9	4.0	31.8	31
		4.0	26.5	38
		5.0	33.0	30
		6.3	41.1	24
		4.0	31.8	31
		4.5	35.4	28
		5.6	44.0	23
		7.1	55.5	18

TOLERANCES TOLERANCES: (IS : 1161-1998)

OUTSIDE DIAMETER	+0.75%
THICKNESS	+10%
WEIGHT (10MT LOAD)	+7.5%

TOLERANCES TOLERANCES: (IS : 1161-1998)

OUTSIDE DIAMETER

upto 48.3 mm	+0.4mm
Over 48.3mm	-0.8mm
	±1%

THICKNESS

For all Sizes	+Not limited
Welded Tubes	-10%

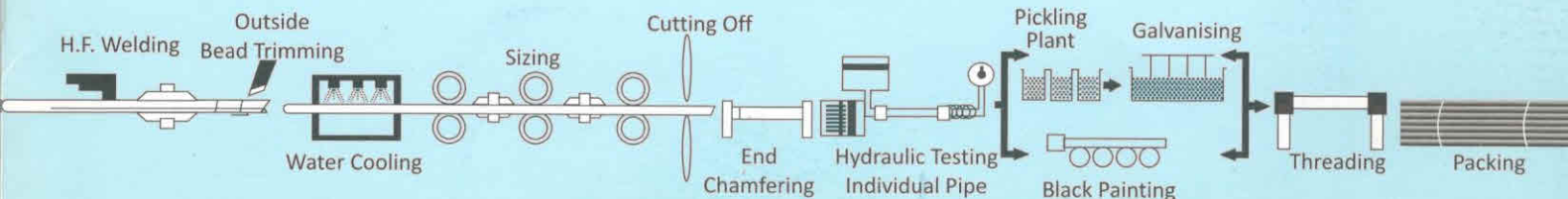
WEIGHT

Single Tube - Light	-80%
	+10%
Medium and Heavy	+10%
10 Ton Lot - Light	+5%
Medium & Heavy	+7.5%

Tensile Properties			% Elongation	
Grade	TS (Mpa)	Yield (Mpa)	upto 25.4	over 25.4
YS t 210	330	210	12	20
YS t 240	410	240	10	15
YS t 310	450	310	8	10

O.D. PIPES (SIZES IN MM)

12.7	15.9	19.1	22.2	25.4	31.8	38.1	50.8	57.0	63.5	70.6	81.0	101.6	127.0	152.4	168.3
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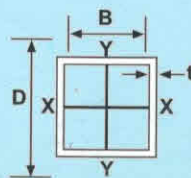


DIMENSION AND PROPERTIES OF SQUARE HOLLOW SECTIONS (SHS) (IS : 4923-1997)

Size mm	Thickness mm	Weight kg/m	Area of Section cm ²	Moment of Inertia cm ⁴	Radius of Gyration cm ²	Elastic Modulus cm ³	Plastic Modulus cm ³	Torsional Constants		Outer Surface Area per m ²
								cm ⁴	cm ³	
25.0 x 25.0	2.6	1.69	2.16	1.72	0.89	1.38	1.76	2.86	1.92	0.087
25.0 x 25.0	3.2	1.98	2.53	1.89	0.86	1.51	1.98	2.96	2.07	0.084
32.0 x 32.0	2.6	2.26	2.88	4.02	1.18	2.51	3.11	6.45	3.63	0.115
32.0 x 32.0	3.2	2.69	3.42	4.52	1.15	2.84	3.59	7.41	4.07	0.112
32.0 x 32.0	4.0	3.19	4.07	5.02	1.11	3.14	4.11			
38.0 x 38.0	2.6	2.75	3.51	7.14	1.43	3.76	4.57	11.51	5.49	0.139
38.0 x 38.0	2.9	3.03	3.86	7.68	1.41	4.04	4.97			
38.0 x 38.0	3.2	3.29	4.19	8.18	1.40	4.30	5.34	13.45	6.28	0.136
38.0 x 38.0	3.6	3.63	4.62	8.76	1.38	4.61	5.80			
38.0 x 38.0	4.0	3.95	5.03	9.26	1.36	4.87	6.22	15.67	7.12	0.131
40.0 x 40.0	2.6	2.92	3.72	8.45	1.51	4.22	5.12	13.63	6.20	0.147
40.0 x 40.0	3.2	3.49	4.45	9.72	1.48	4.86	6.01	16.00	7.12	0.144
40.0 x 40.0	3.6	3.85	4.91	10.45	1.46	5.22	6.53			
40.0 x 40.0	4.0	4.20	5.35	11.07	1.44	5.54	7.01	18.75	8.12	0.139
49.5 x 49.5	2.9	4.07	5.19	18.37	1.88	7.42	8.93	29.81	10.98	0.183
49.5 x 49.5	3.6	4.93	6.28	21.42	1.85	8.66	10.60	35.54	12.81	0.179
49.5 x 49.5	4.5	5.95	7.58	24.64	1.80	9.96	12.47	42.15	14.79	0.175
63.5 x 63.5	3.2	5.85	7.45	44.35	2.44	13.97	16.65			
63.5 x 63.5	3.6	6.51	8.29	48.55	2.42	15.29	18.36			
63.5 x 63.5	4.5	7.93	10.10	57.00	2.38	17.95	21.93			
72.0 x 72.0	3.2	6.71	8.54	66.32	2.79	18.42	21.80	106.81	27.47	0.272
72.0 x 72.0	4.0	8.22	10.47	79.03	2.75	21.95	26.32	129.85	32.78	0.267
72.0 x 72.0	4.8	9.66	12.31	90.31	2.71	25.09	30.49	151.55	37.55	0.263
91.5 x 91.5	3.6	9.67	12.32	256.49	3.56	34.21	40.24	251.17	41.14	0.347
91.5 x 91.5	4.5	11.88	15.14	187.57	3.52	41.00	48.79	306.78	61.14	0.343
91.5 x 91.5	5.4	14.01	17.85	215.68	3.48	47.14	56.77	359.76	70.77	0.338
100.0 x 100.0	4.0	11.73	14.95	226.35	3.89	45.27	53.30			
100.0 x 100.0	5.0	14.41	18.36	271.10	3.84	54.22	64.59			
100.0 x 100.0	6.0	16.98	21.63	311.47	3.79	62.29	75.10			
113.5 x 113.5	4.5	14.99	19.10	372.88	4.42	65.71	77.33			
113.5 x 113.5	4.8	15.92	20.28	393.31	4.40	69.30	81.81	637.45	103.89	0.429
113.5 x 113.5	5.4	17.74	22.60	432.58	4.38	76.23	90.55	708.69	114.41	0.426
113.5 x 113.5	6.0	19.53	24.87	469.81	4.35	82.79	98.96			
132.0 x 132.0	4.8	18.71	23.83	634.39	5.16	96.12	112.69	1018.30	144.11	0.503
132.0 x 132.0	5.4	20.88	26.59	700.11	5.13	106.08	125.02	1134.25	159.18	0.500
132.0 x 132.0	6.0	23.01	29.31		5.10	115.60	136.98			
150.0 x 150.0	5.0	22.26	28.36		5.89	130.95	152.98	1569.09	196.38	0.574
150.0 x 150.0	6.0	26.40	33.63		5.84	152.79	179.88	1856.18	229.44	0.569

TOLERANCES

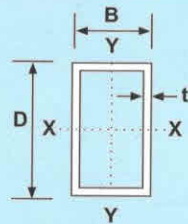
Thickness	± 10%
Weight	
- Single Length	+10%
	-8%
-10 Ton Lot.	+7.5%
O.D. of Side :	+1%
	(Minimum 0.5mm)



Tensile Properties		Yield (Mpa)	% Elongation	
Grade	TS (Mpa)		upto 25.4	over 25.4
YS t 210	330	210	12	20
YS t 240	410	240	10	15
YS t 310	450	310	8	10

DIMENSIONS AND PROPERTIES OF RECTANGULAR HOLLOW SECTIONS (RHS) (IS : 4923-1997)

Size D X B mm	Thickness mm	Weight kg/m	Area of Section cm ²	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants		Outer Surface Area m ²
				X-X cm ⁴	Y-Y cm ⁴	X-X cm	Y-Y cm	X-X cm ³	Y-Y cm ³	X-X cm ³	Y-Y cm ³	cm ⁴	cm ⁴	
50.0x25.0	2.9	2.98	3.80	10.93	3.60	1.70	0.97	4.37	2.88	5.72	3.48	-	-	-
50.0x25.0	3.2	3.24	4.13	11.63	3.80	1.68	0.96	4.65	3.04	6.14	3.73	9.52	5.12	0.134
60.0x40.0	2.9	4.12	5.25	24.74	13.11	2.17	1.58	8.25	6.56	10.25	7.73	28.02	10.66	0.185
66.0x33.0	2.9	4.07	5.19	27.33	9.12	2.29	1.33	8.28	5.53	10.59	6.49	22.65	9.43	0.183
66.0x33.0	3.6	4.93	6.28	31.87	10.52	2.25	1.29	9.66	6.37	12.56	7.66	26.65	10.90	0.179
66.0x33.0	4.5	5.95	7.58	36.64	11.93	2.20	1.25	11.10	7.23	14.77	8.94	31.21	12.43	0.175
70.0x30.0	2.9	4.12	5.25	29.82	7.72	2.38	1.21	8.52	5.14	11.07	6.04			
70.0x30.0	3.2	4.50	5.73	32.04	8.24	2.37	1.20	9.15	5.49	11.98	6.51			
70.0x30.0	4.0	5.45	6.95	37.23	9.42	2.31	1.16	10.64	6.28	14.20	7.66			
80.0x40.0	2.9	5.03	6.41	50.87	17.11	2.82	1.63	12.72	8.56	16.07	9.88	42.23	14.66	0.225
80.0x40.0	3.2	5.50	7.01	54.94	18.41	2.80	1.62	13.74	9.21	17.46	10.72	45.83	15.78	0.224
80.0x40.0	4.0	6.71	8.55	64.79	21.49	2.75	1.59	16.20	10.74	20.91	12.77	54.77	18.49	0.219
96.0x48.0	3.2	6.71	8.54	98.61	33.28	3.40	1.97	20.54	13.87	25.85	15.91	82.13	23.82	0.272
96.0x48.0	4.0	8.22	10.47	117.54	39.32	3.55	1.94	24.49	16.30	31.21	19.14	99.11	28.24	0.267
96.0x48.0	4.8	9.66	12.31	134.35	44.55	3.30	1.90	27.99	18.56	36.13	22.08	114.80	32.14	0.263
100.0x50.0	3.2	7.01	8.93	112.29	37.95	3.55	2.06	22.46	15.18	28.20	17.37			
100.0x50.0	4.0	8.59	10.95	134.14	44.95	3.50	2.03	26.83	17.98	34.10	20.93			
122x61.0	3.6	9.67	12.32	232.61	78.83	4.34	2.35	38.13	25.84	47.71	29.42	193.91	44.50	0.347
122.0x61.0	4.5	11.88	15.14	278.94	93.78	4.29	2.49	45.73	30.75	57.85	35.56	235.39	53.13	0.343
122.0x61.0	5.4	14.01	17.85	320.83	107.03	4.24	2.45	52.60	35.09	67.29	41.22	374.29	60.89	0.338
127.0x50.0	3.6	9.34	11.89	227.08	52.05	4.37	2.09	35.76	20.82	45.95	23.70			
127.0x50.0	4.6	11.69	14.89	276.33	62.46	4.31	2.05	43.52	24.98	56.66	29.04			
145.0x82.0	4.8	15.92	20.28	555.16	228.50	5.23	3.36	76.57	55.73	94.93	63.93	534.27	94.45	0.429
145.0x82.0	5.4	17.74	22.62	610.85	250.59	5.20	3.33	84.26	64.12	105.07	70.66	592.70	103.81	0.426
172.0x92.0	4.8	18.71	23.83	917.13	346.91	6.20	3.82	106.64	75.41	132.08	85.61	826.04	128.85	0.503
172.0x92.0	5.4	20.88	26.59	1012.47	381.74	6.17	3.79	117.73	82.99	146.55	94.86	918.10	142.04	0.500



TOLERANCES

Thickness	$\pm 10\%$
Weight	$\pm 10\%$
- Single Length	$+10\%$
	-8%
-10 Ton Lot.	$\pm 7.5\%$
O.D. of Side :	$\pm 1\%$
	(Minimum 0.5mm)

Tensile Properties		Yield (Mpa)	% Elongation	
Grade	TS (Mpa)		upto 25.4	over 25.4
YSI210	330	210	12	20
YS1240	410	240	10	15
YS1310	450	310	8	10

ROUNDS**Sqrs.**

Size mm	Rounds kg/m	Sqrs. kg/m
5	0.15	0.20
5.5	0.19	0.24
6	0.22	0.28
6.5	0.26	0.33
7	0.30	0.38
8	0.39	0.50
9	0.50	0.64
10	0.62	0.78
11	0.75	0.95
12	0.89	1.13
13	1.04	1.33
14	1.21	1.54
16	1.58	2.01
18	2.00	2.54
20	2.47	3.14
22	2.98	3.80
25	3.85	4.91
28	4.83	6.15
30	5.55	7.06
32	6.31	8.04

ROUNDS**Sqrs.**Size
mmRounds
kg/mSqrs.
kg/m

36	7.99	10.17
38	8.90	11.34
40	9.86	12.56
42	10.87	13.88
45	12.29	15.90
47	13.61	17.34
50	15.41	19.62
53	17.31	22.05
56	19.34	24.62
60	22.18	28.62
63	24.47	31.61
71	31.08	39.57
75	34.66	44.15
80	39.46	50.24
90	49.94	63.58
100	61.61	78.15
110	74.60	94.60
125	96.34	122.66
160	157.84	200.96

FLATS

Sqrs.

Size mm	Weight kg/M	Size mm	Weight kg/M
12 x 3	0.28	40 x 20	6.3
16 x 3	0.38	45 x 6	2.1
16 x 5	0.63	45 x 10	3.5
20 x 3	0.47	50 x 3	1.2
20 x 5	0.79	50 x 5	2.0
20 x 6	0.94	50 x 6	2.4
25 x 6	1.02	50 x 8	3.1
25 x 10	2.00	50 x 10	3.9
25 x 12	2.4	50 x 12	4.7
30 x 5	1.18	50 x 16	6.3
30 x 6	1.41	50 x 20	7.8
30 x 10	2.4	50 x 25	9.8
30 x 12	2.8	65 x 6	3.1
30 x 16	3.8	65 x 8	4.1
35 x 6	1.6	65 x 10	5.1
35 x 10	2.8	65 x 12	6.1
35 x 12	3.3	65 x 16	8.2
35 x 16	4.4	65 x 20	10.2
40 x 3	0.940	65 x 25	12.8
40 x 5	1.6	65 x 32	16.3
40 x 6	1.9	70 x 25	13.8
40 x 10	3.1	75 x 6	3.5
40 x 12	3.8	75 x 8	4.7
40 x 16	5.0	75 x 10	5.9

FLATS

[Contd.]

Size mm	Weight kg/M	Size mm	Weight kg/M
75 x 12	7.1	150 x 20*	23.6
75 x 16	9.4	150 x 25	29.5
75 x 20	11.8	180 x 20	28.3
75 x 25	14.7		
75 x 32	18.8		
80 x 25	20.1		
100 x 6	4.7		
100 x 10	7.8		
100 x 12	9.4		
100 x 16	12.6		
100 x 20	15.7		
100 x 25	19.6		
100 x 32	25.1		
125 x 6	5.9		
125 x 10	9.8		
125 x 12	11.8		
130 x 10	10.2		
150 x 10	11.8		
150 x 12	14.1		
150 x 16	18.8		
		ROUNDEDGE	
		200 x 10	15.7
		200 x 12	18.8
		200 x 16	25.1
		200 x 20	31.4
		200 x 25	39.2
		220 x 20	34.5
		250 x 10	19.6
		250 x 12	23.6
		250 x 16	31.4
		250 x 20	39.2
		250 x 25	49.1
		300 x 12	28.3
		300 x 16	37.7

ANGLES

Size mm	Weight kg/M	Size mm	Weight kg/M
20 x 20 x 3	0.900	55 x 55 x 5	4.1
25 x 25 x 3	1.1	55 x 55 x 6	4.9
25 x 25 x 5	1.8	60 x 60 x 5	4.5
30 x 30 x 3	1.4	60 x 60 x 6	5.4
30 x 30 x 5	2.2	60 x 60 x 8	7.0
35 x 35 x 3	1.6	65 x 65 x 6	5.8
35 x 35 x 5	2.6	65 x 65 x 8	7.7
35 x 35 x 6	3.0	65 x 65 x 10	9.4
40 x 40 x 3	1.8	75 x 75 x 4	5.5
40 x 40 x 5	3.0	75 x 75 x 6	6.8
40 x 40 x 6	3.5	75 x 75 x 8	8.9
45 x 45 x 5	3.4	75 x 75 x 10	11.0
45 x 45 x 6	4.0	80 x 80 x 6	7.3
50 x 50 x 5	3.8	80 x 80 x 8	9.6
50 x 50 x 6	4.5	80 x 80 x 10	11.8

ANGLES

Size mm	Weight kg/M	Size mm	Weight kg/M
90 x 90 x 6	8.2	130 x 130 x 8	15.9
90 x 90 x 8	10.8	130 x 130 x 10	19.7
90 x 90 x 10	13.4	130 x 130 x 12	23.4
90 x 90 x 12	15.8	130 x 130 x 15	28.9
100 x 100 x 6	9.2	150 x 150 x 10	22.8
100 x 100 x 8	12.1	150 x 150 x 12	27.2
100 x 100 x 10	14.9	150 x 150 x 16	35.8
100 x 100 x 12	17.7	150 x 150 x 18	39.9
110 x 110 x 8	13.4	150 x 150 x 20	44.1
110 x 110 x 10	16.5	200 x 200 x 16	48.5
110 x 110 x 12	19.6	200 x 200 x 20	60.0

UNEQUAL ANGLES

Size mm	Weight kg/M	Size mm	Weight kg/M
45 x 30 x 5	2.8	100 x 75 x 8	10.5
45 x 30 x 6	3.3	100 x 75 x 10	13.0
65 x 45 x 6	6.4	125 x 75 x 8	12.1
75 x 50 x 6	5.6	125 x 75 x 10	14.9
75 x 50 x 8	7.4	150 x 115 x 10	20.2
75 x 50 x 10	9.0	150 x 115 x 12	23.8
90 x 60 x 6	6.8	150 x 115 x 16	31.3
90 x 60 x 10	11.0		

**For Weight of any Sizes in Angles
[Length Size - 6 + Size x 6 ÷ 127]**

**Example
50 - 6 + 50 x 6 ÷ 127 = 4.45 per Meter**

SHEETS

SHEETS

WEIGHT IN KGS.

Thickness		Weight per Sq.Mtr. in kg	Size			
M.M.	BG.	Kg/M ²	1800 x 600	1800 x 900	1800 x 1250	2500 x 900
M.M.	BG.	Kg/M ²	6x2	6x3	6x4	8x3
4	8	31.40	56.50-8	75.300-8	—	—
3.55	9	27.90	— 9	—	—	—
3.15	10	24.75	44.500-10	—	29.500-10	55.700-10
2.80	11	22.00	— 11	—	—	—
2.50	12	19.00	30.700-12	—	20.500-12	42.750-12
2.24	13	17.00	—	—	—	—
2.00	14	15.70	25.400-14	—	17.000-14	33.300-14
1.80	15	14.15	—	—	—	—
1.60	16	12.55	20.300-16	—	13.500-16	28.000-16
1.40	17	11.00	—	—	—	—
1.25	18	9.80	15.900-18	—	—	22.000-18
1.12	19	8.80	—	—	—	—
1.00	20	7.85	12.700-20	—	—	17.000-20
0.90	21	7.05	—	—	—	—
0.80	22	6.30	—	—	—	14.200-22
0.63	24	4.95	—	—	—	11.000-24
0.50	26	3.90	—	—	—	—
0.40	28	3.15	—	—	—	—

9, 11, 13, 15, 17, 19 & 21
Applicable to B.P. Sheets

TMT BARS

Size mm	Area CM ²	Weight kg/M	Length M/TON
5	0.283	0.222	4510
8	0.503	0.395	2532
10	0.785	0.617	1621
12	1.131	0.888	1125
14	1.539	1.208	829
16	2.011	1.578	633
18	2.545	2.000	500
20	3.142	2.466	405
22	3.801	2.980	336
25	4.909	3.854	260
28	6.157	4.830	207
32	8.042	6.313	159
36	10.18	7.990	125

M. S. PLATES

Size mm	Weight kg/M	Size mm	Weight kg/M
5	39.2	25	196.2
6	47.1	28	219.8
7	55.0	32	251.2
8	62.8	36	282.6
9	70.6	40	314.0
10	78.5	45	353.2
12	94.2	50	392.5
14	109.9	56	439.6
16	125.6	63	494.5
18	141.3	71	557.4
20	157.0	80	628.0
22	172.7		

for Weight of any size of Plate
Length x Width x Thickness x 7.85 = 1 Plate
 mm mm

CHEQUERED PLATES

Size mm	Weight kg/M
5	45.30
6	53.20
7	61.10
8	68.09
10	84.06
12	100.30

WINDOW SECTION

T 1	1.025
T 2	1.102
T 3	1.163
T 5	1.652
T 6	0.884
T 7	0.950
T 8	1.020
F 4 B	2.217
F 7 B	1.532
F 8	1.859
C P 6	1.726
E Z 7	1.911
K 1	2.007

CHANNELS

Size mm	Weight kg/M
75 x 40	6.8
100 x 50	9.2
125 x 65	12.8
150 x 75	16.4
175 x 75	19.6
200 x 75	22.2
225 x 80	26.0
250 x 80	30.4
300 x 90	35.9
400 x 100	49.5

HEAVY WEIGHT ISMC**BEAMS****[ISMB]**

Size mm	Weight kg/M	Size mm	Weight kg/M	Size mm	Weight kg/M
125 x 66	13.7	100 x 50	8.0	175 x 85	19.2
160 x 76	17.7	100 x 70	11.5	180 x 82	21.9
175 x 77	21.7	100 x 75	11.5	200 x 100	25.4
200 x 76	24.3	116 x 100	23.0	200 x 140	28.8
225 x 83	30.7	120 x 58	11.1	200 x 200	49.4
250 x 82	34.2	140 x 66	14.5	225 x 110	31.2
300 x 92	41.5	140 x 73	14.7	250 x 125	37.2
		125 x 70	13.2	300 x 140	45.1
		150 x 50	7.1	350 x 140	52.9
		150 x 75	14.9	400 x 140	62.6
		150 x 80	15.0	450 x 150	73.1
		150 x 150	37.1	500 x 180	87.7
		160 x 74	17.7	600 x 210	122.6

SHEETS SIZE

2500 x 1000 8x3	2500 x 1100 8x3	2500 x 1200 8x3	2500 x 1250 8x4	4000 x 1000 13x3	5000 x 1000 16x3 157.000-8
—	—	—	—	—	—
61.900-10	68.000-10	74.000-10	77.000-10	99.000-10	—
—	—	—	—	—	—
47.500-12	52.200-12	57.000-12	59.500-12	76.000-12	—
—	—	—	—	—	—
39.000-14	43.200-14	47.000-14	49.000-14	62.800-14	—
—	—	—	—	—	—
31.400-16	34.500-16	37.600-16	39.200-16	—	—
—	—	—	—	—	—
24.500-18	27.000-18	29.400-18	30.600-19	—	—
—	—	—	—	—	—
19.500-20	21.000-20	23.600-20	24.500-20	—	—
—	—	—	—	—	—
15.750-22	17.300-22	18.900-22	19.800-22	—	—
12.400-24	13.300-24	15.000-24	15.000-24	—	—

Gages Sheets are rarely available CRCA Sheets G. P. Sheets