



FOJOHN HARDWARE SDN BHD

福存五金有限公司

**Your One Stop Centre for Building &
Hardware Materials**



PRODUCT GUIDE

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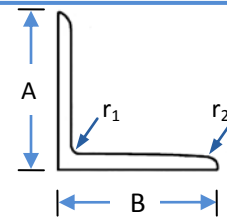
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Mild Steel Angle

Mild Steel Equal Angle

(6M Length)

JIS 3101 SS400



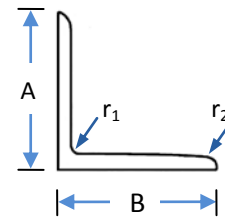
Size		Thickness	Weight	Corner Radius		Section Area
A X B	A X B	t		Root	Toe	
mm	in	mm	kg/m	r ₁	r ₂	cm ²
25 x 25	1 x 1	2.8	1.05	3.5	2.4	1.32
		3.0	1.12	3.5	2.4	1.41
		4.0	1.45	3.5	2.4	1.84
		5.0	1.71	3.5	2.4	2.25
30 x 30	1 1/4 x 1 1/4	2.8	1.27	5.0	2.4	1.62
		3.0	1.36	5.0	2.4	1.74
		4.0	1.76	5.0	2.4	2.27
		5.0	2.16	5.0	2.4	2.78
38 x 38	1 3/4 x 1 3/4	2.8	1.62	6.0	2.4	2.09
		3.0	1.72	6.0	2.4	2.24
		3.8	2.17	6.0	2.4	2.78
		4.0	2.36	6.0	2.4	2.93
		4.8	2.70	6.0	2.4	3.41
		5.0	2.85	6.0	2.4	3.55
		5.8	3.22	6.0	2.4	4.06
		6.0	3.58	6.0	2.4	4.20
50 x 50	1 1/2 x 1 1/2	4.0	3.06	7.0	2.4	3.92
		4.8	3.61	7.0	2.4	4.64
		5.0	3.77	7.0	2.4	4.83
		5.8	4.29	7.0	2.4	5.53
		6.0	4.43	7.0	2.4	5.72
		9.0	6.50	7.0	2.4	8.19
63 x 63	2 1/2 x 2 1/2	5.0	4.75	8.0	2.4	6.16
		6.0	5.71	8.0	2.4	7.31
		8.0	7.42	8.0	2.4	9.55
65 x 65	2 1/2 x 2 1/2	5.0	5.00	9.0	2.4	6.40
		5.8	5.72	9.0	2.4	7.34
		6.0	5.91	9.0	2.4	7.59
		8.0	7.66	9.0	2.4	9.91
		9.0	8.55	9.0	2.4	11.00
75 x 75	3 x 3	6.0	6.85	10.0	4.8	8.76
		7.5	8.42	10.0	4.8	10.78
		8.0	9.03	10.0	4.8	11.50
		9.0	9.96	10.0	4.8	12.80
		10.0	10.99	10.0	4.8	14.10
		12.0	13.00	10.0	4.8	16.70
80 x 80	3 x 3	6.0	7.34	10.0	4.8	9.36
		8.0	9.66	10.0	4.8	12.30
		10.0	11.80	10.0	4.8	15.10
90 x 90	3 x 3	6.0	8.30	11.0	4.8	10.60
		7.0	9.61	11.0	4.8	12.30
		8.0	10.90	11.0	4.8	13.90
		9.0	12.20	11.0	4.8	15.60
		10.0	13.40	11.0	4.8	17.20
		12.0	15.90	11.0	4.8	20.30
		13.0	17.00	11.0	4.8	21.90

(continued on next page...)

Mild Steel Equal Angle

(6M Length)

JIS 3101 SS400

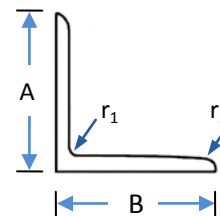


Size		Thickness	Weight	Corner Radius		Section Area
A X B	A X B	t		Root	Toe	
mm	in	mm		r ₁	r ₂	
100 x 100	4 x 4	6.0	9.20	12.0	4.8	11.90
		7.0	10.70	12.0	4.8	13.70
		8.0	12.20	12.0	4.8	15.60
		9.0	13.60	12.0	4.8	17.20
		10.0	15.00	12.0	4.8	19.20
		12.0	17.80	12.0	4.8	22.80
		15.0	21.90	12.0	4.8	28.00
120 x 120	5 x 5	8.0	14.70	13.0	4.8	18.80
		9.0	16.38	13.0	4.8	20.80
		10.0	18.20	13.0	4.8	23.30
		12.0	21.60	13.0	4.8	27.60
		15.0	26.60	13.0	4.8	34.00
125 x 125	5 x 5	8.0	14.90	14.0	4.8	19.70
		9.0	16.80	14.0	4.8	21.70
		10.0	19.09	14.0	4.8	24.30
		12.0	22.67	14.0	4.8	28.90
130 x 130	5 x 5	8.0	15.90	14.0	4.8	20.50
		9.0	17.90	14.0	4.8	22.90
		10.0	19.70	14.0	4.8	25.30
		12.0	23.50	14.0	4.8	30.10
		15.0	28.80	14.0	4.8	37.10
		16.0	30.70	14.0	4.8	39.40
150 x 150	6 x 6	8.0	18.00	16.0	4.8	23.80
		9.0	20.80	16.0	4.8	26.26
		10.0	23.00	16.0	4.8	29.50
		12.0	27.30	16.0	4.8	35.00
		15.0	33.80	16.0	4.8	43.20
		16.0	35.70	16.0	4.8	45.90
		18.0	40.10	16.0	4.8	51.20
		19.0	41.90	16.0	4.8	53.80
175 x 175	7 x 7	12.0	31.80	16.0	4.8	41.00
		15.0	39.40	16.0	4.8	50.70
200 x 200	8 x 8	12.0	36.55	18.0	4.8	47.20
		13.0	39.49	18.0	4.8	50.90
		15.0	45.30	18.0	4.8	58.30
		16.0	48.50	18.0	4.8	62.00
		18.0	54.20	18.0	4.8	69.40
		20.0	59.90	18.0	4.8	76.60
		24.0	71.10	18.0	4.8	90.80
		25.0	73.60	18.0	4.8	94.30
		26.0	76.80	18.0	4.8	97.80
250 x 250	10 x 10	25.0	93.70	20.0	4.8	120.00
		28.0	104.00	20.0	4.8	133.00
		32.0	118.00	20.0	4.8	151.00
		35.0	128.00	20.0	4.8	164.00

Mild Steel Unequal Angle

(6M Length)

BS 4360 G43A

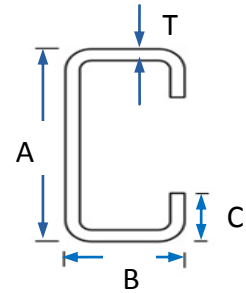


Nominal Size		Thickness	Weight	Corner Radius		Section Area
				Root	Toe	
A X B	A X B	t		r ₁	r ₂	
mm	in	mm	kg/m	mm	mm	cm ²
75 x 50	3 x 2	6.0	5.67	8.5	4.0	7.23
100 x 75	4 x 3	6.0	8.04	10	5.0	10.14
		7.0	9.32	10	5.0	11.87
		8.0	10.60	10	5.0	13.50
		9.0	11.80	10	7.0	14.94
		10.0	13.00	10	7.0	16.50
		12.0	15.40	10	5.0	19.20
125 x 75	5 x 3	7.0	10.70	10	5.0	13.62
		9.0	13.60	10	7.0	17.20
		10.0	14.90	10	7.0	19.00
		12.0	17.80	10	7.0	22.56
125 x 90	5 x 3 1/2	7.0	11.45	10	5.0	14.67
		10.0	16.10	10	7.0	20.50
		13.0	20.60	10	7.0	26.26
150 x 75	6 x 3	7.0	12.10	12	5.0	15.46
		9.0	15.30	12	8.5	19.44
		10.0	17.00	11	5.0	21.60
		12.0	20.10	12	8.5	25.56
		15.0	24.80	12	8.5	31.50
150 x 90	6 x 3 1/2	9.0	16.40	12	6.0	20.94
		12.0	21.50	12	8.5	27.36
		15.0	26.50	12	8.5	33.75
150 x 100	6 x 4	9.0	17.10	12	6.0	21.84
		12.0	22.40	12	8.5	28.56
		15.0	27.70	12	8.5	35.25
175 x 90	7 x 3 1/2	9.0	18.20	12	6.0	23.19
		12.0	23.80	12	8.5	30.26
		15.0	29.40	12	8.5	37.50
200 x 100	8 x 4	10.0	23.00	15	5.0	29.20
		12.0	27.30	15	5.0	34.80
		15.0	33.70	15	5.0	43.00
200 x 150	8 x 6	12.0	32.00	15	5.0	40.80
		15.0	29.60	15	5.0	50.50
		18.0	47.10	15	5.0	60.00

Channel

Mild Steel Lipped Channel / Purlin

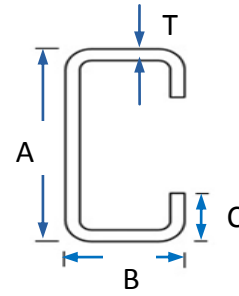
*Cut to length available



Size		Thickness t	Weight	Section Area
A X B X C	A X B X C			
mm	in	mm	kg/m	cm ²
100 x 50 x 20	4 x 2 x 3/4	2.3	4.06	5.172
		3.0	5.50	6.608
125 x 50 x 20	5 x 2 x 3/4	2.3	4.51	5.747
		3.0	6.13	7.358
		4.0	7.50	9.548
150 x 65 x 20	6 x 2 1/2 x 3/4	2.3	5.50	7.012
		3.0	7.51	9.008
		4.0	9.22	11.750
		4.5	10.25	13.070
175 x 75 x 20	7 x 3 x 3/4	2.3	6.31	8.047
		3.0	8.13	10.360
		4.0	10.50	13.550
		4.5	11.80	15.090
200 x 75 x 25	8 x 3 x 1	2.3	6.77	8.852
		3.0	9.27	11.410
		4.0	11.40	14.950
		4.5	12.70	16.670
225 x 75 x 25	9 x 3 x 1	3.0	9.30	12.160
		4.0	12.10	15.950
		3.5	13.60	17.790
250 x 75 x 25	10 x 3 x 1	3.0	9.89	12.910
		4.0	12.90	16.950
		4.5	14.50	18.920

Galvanised Lipped Channel / Purlin

*Cut to length available



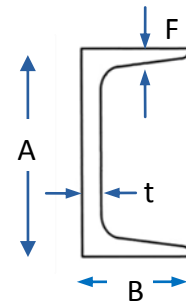
Size		Thickness t	Weight	Section Area
A X B X C	A X B X C			
mm	in	mm	kg/m	cm ²
75 x 45 x 15	3 x 1 3/4 X 5/8	1.0	1.531	1.95
		1.2	1.837	2.34
		1.6	2.449	3.12
100 x 50 x 17	4 x 2 x 3/4	1.2	2.145	2.88
		1.6	2.861	3.84
		2.0	3.552	4.80
		2.5	4.350	6.00
125 x 50 x 17	5 x 2 x 3/4	1.6	3.175	4.24
		2.0	3.944	5.30
		2.5	4.841	6.62
150 x 65 x 20	6 x 2 1/2 x 3/4	1.6	3.866	5.12
		2.0	4.808	6.40
		2.5	5.920	8.00
175 x 75 x 20	7 x 3 x 3/4	1.6	4.130	5.84
		2.0	5.180	7.30
		2.5	6.440	9.12
200 x 75 x 20	8 x 3 x 3/4	1.6	4.745	6.40
		2.0	5.907	8.00
		2.5	7.294	10.00
250 x 75 x 20	10 x 3 x 3/4	3.0	5.526	7.04
		4.0	6.908	8.80
		4.5	8.635	11.00

Mild Steel Channels

(6m Length)

JIS 3101 SS400

BS4360 G43A

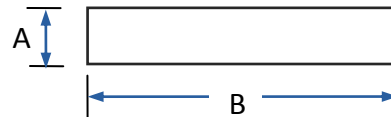


Nominal Size		Thickness		Weight
A X B	A X B	Web (t)	Flange (F)	
in	mm	mm	mm	kg/m
2" x 1"	50 x 25 x 3	3.0	4.0	3.0
3" x 1 1/2"	75 x 40 x 3.8	3.8	5.5	5.5
	75 x 40 x 5	5.0	7.0	6.9
4" x 2"	100 x 50 x 3.8	3.8	5.5	7.3
	100 x 50 x 5	5.0	7.5	9.4
	100 x 50 x 6	6.0	8.0	11.2
5" x 2 1/2"	125 x 65 x 5.2	5.2	7.6	12.0
	125 x 65 x 6	6.0	8.0	13.4
6" x 3"	150 x 75 x 5.5	5.5	8.0	14.7
	150 x 75 x 6.5	6.5	10.0	18.6
	150 x 75 x 9	9.0	12.5	24.0
7" x 3"	180 x 70 x 6.5	6.5	9.2	20.2
	180 x 75 x 7	7.0	10.5	21.4
7" x 3 1/2"	180 x 90 x 7.5	7.5	12.5	27.1
8" x 3"	200 x 73 x 6	6.0	10.0	22.0
	200 x 75 x 7	7.0	10.5	23.3
	200 x 80 x 7.5	7.5	11.0	24.6
8" x 3 1/2"	200 x 90 x 8	8.0	13.5	30.3
9" x 3"	230 x 80 x 8	8.0	12.0	28.4
9" x 3 1/2"	230 x 90 x 8.5	8.5	13.5	33.1
10" x 3"	250 x 78 x 7	7.0	11.9	28.0
	250 x 80 x 8	8.0	12.5	30.2
10" x 3 1/2"	250 x 90 x 9	9.0	13.0	34.6
	250 x 90 x 11	11.0	14.5	40.2
11" x 4"	280 x 100 x 9	9.0	13.0	38.8
	280 x 100 x 11.5	11.5	16.0	48.2
12" x 3 1/2"	300 x 90 x 9	9.0	12.0	38.1
	300 x 90 x 10	10.0	15.5	43.8
15" x 4"	380 x 100 x 10.5	10.5	16.0	54.5
	380 x 100 x 13	13.0	16.5	62.0

Mild Steel Flat Bar

(6m Length)

JIS 3101 SS400

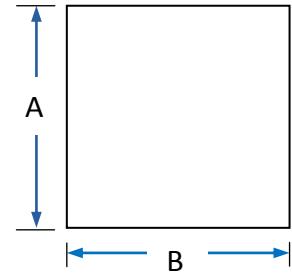


Nominal Size		Weight	Section Area
A X B	A X B		
mm	in		
3 X 12	1/8 X 1/2	0.283	0.36
3 X 16	1/8 X 5/8	0.377	0.48
3 X 19	1/8 X 3/4	0.447	0.57
3 X 25	1/8 X 1	0.589	0.75
3 X 32	1/8 X 1 1/4	0.754	0.96
3 X 38	1/8 X 1 1/2	0.895	1.14
3 X 50	1/8 X 2	1.180	1.50
4 X 12	3/16 X 1/2	0.377	0.48
4 X 15	3/16 X 5/8	0.471	0.60
4 X 18	3/16 X 3/4	0.565	0.72
4.5 X 25	3/16 X 1	0.880	1.13
4.5 X 32	3/16 X 1 1/4	1.130	1.44
4.5 X 38	3/16 X 1 1/2	1.334	1.71
4.5 X 50	3/16 X 2	1.770	2.25
6 X 15	1/4 X 5/8	0.710	0.90
6 X 18	1/4 X 3/4	0.850	1.08
6 X 25	1/4 X 1	1.180	1.50
6 X 32	1/4 X 1 1/4	1.510	1.92
6 X 38	1/4 X 1 1/2	1.790	2.28
6 X 50	1/4 X 2	2.360	3.00
6 X 65	1/4 X 2 1/2	3.060	3.90
6 X 75	1/4 X 3	3.350	4.50
6 X 100	1/4 X 4	4.710	6.00
6 X 125	1/4 X 5	5.890	7.50
6 X 150	1/4 X 6	7.060	9.00
6 X 200	1/4 X 8	9.420	12.00
9 X 25	3/8 X 1	1.770	2.25
9 X 32	3/8 X 1 1/4	2.260	2.88
9 X 38	3/8 X 1 1/2	2.680	3.42
9 X 50	3/8 X 2	3.530	4.50
9 X 65	3/8 X 2 1/2	4.590	5.85
9 X 75	3/8 X 3	5.300	6.75
9 X 100	3/8 X 4	7.060	10.00
9 X 125	3/8 X 5	8.83	11.25
9 X 150	3/8 X 6	10.60	13.50
9 X 200	3/8 X 8	14.10	18.00
9 X 250	3/8 X 10	17.70	22.50

Nominal Size		Weight	Section Area
A X B	A X B		
mm	in		
12 X 25	1/2 X 1	2.36	3.00
12 X 32	1/2 X 1 1/4	3.58	3.84
12 X 38	1/2 X 1 1/2	4.14	4.56
12 X 50	1/2 X 2	4.71	6.00
12 X 65	1/2 X 2 1/2	6.12	7.80
12 X 75	1/2 X 3	7.06	9.00
12 X 100	1/2 X 4	9.42	12.00
12 X 125	1/2 X 5	11.80	15.00
12 X 150	1/2 X 6	14.10	18.00
12 X 200	1/2 X 8	18.80	24.00
12 X 250	1/2 X 10	23.60	30.00
12 X 300	1/2 X 12	28.30	36.00
16 X 32	5/8 X 1 1/4	4.02	5.12
16 X 38	5/8 X 1 1/2	4.77	6.08
16 X 50	5/8 X 2	6.28	8.00
16 X 65	5/8 X 2 1/2	8.16	10.40
16 X 75	5/8 X 3	9.42	12.00
16 X 100	5/8 X 4	12.60	16.00
16 X 125	5/8 X 5	15.70	20.00
16 X 150	5/8 X 6	18.80	24.00
16 X 200	5/8 X 8	25.10	32.00
16 X 250	5/8 X 10	31.40	50.00
16 X 300	5/8 X 12	37.70	48.00
19 X 38	3/4 X 1 1/2	5.67	7.22
19 X 50	3/4 X 2	7.46	9.50
19 X 65	3/4 X 2 1/2	9.69	12.35
19 X 75	3/4 X 3	11.20	14.25
19 X 100	3/4 X 4	14.9	19.00
19 X 125	3/4 X 5	18.6	23.75
19 X 150	3/4 X 6	22.4	28.50
19 X 200	3/4 X 8	29.8	38.00
19 X 250	3/4 X 10	37.3	47.50
19 X 300	3/4 X 12	44.7	57.00
25 X 50	1 X 2	9.81	12.50
25 X 65	1 X 2 1/2	12.8	16.25
25 X 75	1 X 3	14.7	18.75
25 X 100	1 X 4	19.6	25.00
25 X 125	1 X 5	24.5	31.25
25 X 150	1 X 6	29.4	37.50
25 X 200	1 X 8	39.2	50.00
25 X 250	1 X 10	49.1	62.50
25 X 300	1 X 12	58.9	75.00

Mild Steel Square Bar

(6m Length)



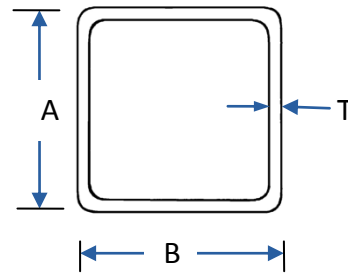
Section Size		Weight	Section Area
A X B	A X B		
mm	in	kg/m	cm ²
9 X 9	3/8" X 3/8"	0.63	0.81
12 X 12	1/2" X 1/2"	1.13	1.44
16 X 16	5/8" X 5/8"	2.01	2.56
19 X 19	3/4" X 3/4"	2.83	3.61
25 X 25	1" X 1"	4.91	6.25
32 X 32	1 1/4" X 1 1/4"	8.04	10.24
38 X 38	1 1/2" X 1 1/2"	11.30	14.44
50 X 50	2" X 2"	19.60	25.00
65 X 65	2 1/2" X 2 1/2"	33.20	42.25
75 X 75	3" X 3"	44.20	56.25
90 X 90	3 1/2" X 3 1/2"	63.60	81.00
100 X 100	4" X 4"	78.50	100.00
110 X 110	4 1/4" X 4 1/4"	95.00	121.00
120 X 120	4 3/4" X 4 3/4"	113.00	144.00
130 X 130	5 1/8" X 5 1/8"	133.00	169.00
140 X 140	5 1/2" X 5 1/2"	154.00	196.00
150 X 150	6" X 6"	177.00	255.00

Hollow Section

Square Hollow Section

(6m Length)

(ASTM A-500)



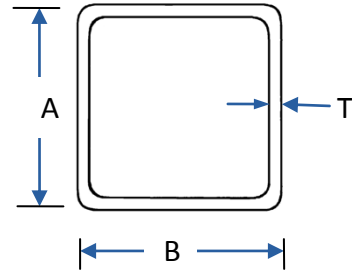
Nominal Size		Wall Thickness T	Calculated Weight	Section Area
A X B	A X B			
mm	in	mm	kg/m	cm ²
12 x 12	1/2 x 1/2	1.0	0.339	0.4314
		1.2	0.397	0.5060
		1.6	0.505	0.6436
16 x 16	5/8 x 5/8	1.0	0.464	0.5914
		1.2	0.548	0.6980
		1.6	0.706	0.8996
19 x 19	3/4 x 3/4	1.0	0.559	0.7114
		1.2	0.661	0.8420
		1.6	0.857	1.0920
25 x 25	1 x 1	1.0	0.747	0.9514
		1.2	0.887	1.1300
		1.6	1.160	1.4760
		2.3	1.600	2.0430
		3.0	2.010	2.5630
		3.2	2.120	2.7020
32 x 32	1 1/4 x 1 1/4	1.2	1.150	1.466
		1.6	1.510	1.924
		2.3	2.110	2.687
		3.0	2.670	3.403
		3.2	2.830	3.598
38 x 38	1 1/2 x 1 1/2	1.2	1.380	1.754
		1.6	1.810	2.308
		2.3	2.540	3.239
		3.0	3.240	4.123
		3.2	3.430	4.366
50 x 50	2 x 2	1.6	2.410	3.076
		2.3	3.410	4.343
		3.0	4.250	5.408
		3.2	4.500	5.727
		4.0	5.450	6.948
		4.5	6.020	7.669
		6.0	7.560	9.633

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Square Hollow Section

(6m Length)

(ASTM A-500)

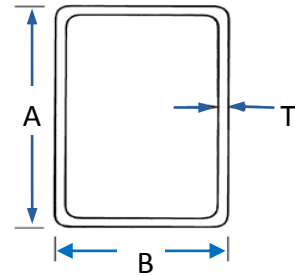


Nominal Size		Wall Thickness T	Calculated Weight	Section Area
A X B	A X B			
mm	in	mm	kg/m	cm ²
65 x 65	2 1/2 x 2 1/2	2.3	4.42	5.632
		3.0	5.66	7.208
		3.2	6.00	7.647
		4.0	7.34	9.348
		4.5	8.14	10.370
		6.0	10.40	13.230
75 x 75	3 x 3	2.3	5.14	6.552
		3.0	6.60	8.408
		3.2	7.01	8.927
		4.0	8.60	10.950
		4.5	9.55	12.170
		6.0	12.30	15.630
90 x 90	3 1/2 x 3 1/2	2.3	6.23	7.932
		3.0	8.01	10.210
		3.2	8.52	10.850
		4.0	10.50	13.350
		4.5	11.70	14.870
		6.0	15.10	19.230
100 x 100	4 x 4	2.3	6.95	8.852
		3.0	8.96	11.410
		3.2	9.52	12.130
		4.0	11.70	14.950
		4.5	13.10	16.670
		6.0	17.00	21.630
125 x 125	5 x 5	3.0	11.30	14.410
		3.2	12.00	15.330
		4.0	14.90	18.950
		4.5	16.60	21.170
		6.0	21.70	27.630
150 x 150	6 x 6	3.0	13.70	17.410
		3.2	14.50	18.530
		4.0	18.00	22.950
		4.5	20.20	25.670
		6.0	26.40	33.630

Rectangle Hollow Sections

(6m Length)

(ASTM A-500)



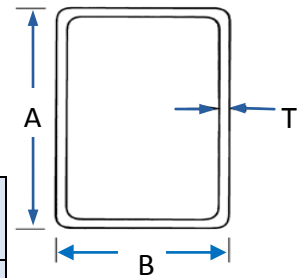
Nominal Size		Wall Thickness t	Calculated Weight	Sectional Area
A X B	A X B			
mm	in	mm	kg/m	cm ²
19 x 9	3/4 x 3/8	1.0	0.401	0.5114
		1.2	0.473	0.6020
		1.6	0.606	0.7716
25 x 12	1 x 1/2	1.0	0.543	0.6914
		1.2	0.642	0.8180
		1.6	0.832	1.0600
32 x 16	1 1/4 x 5/8	1.0	0.716	0.9114
		1.2	0.849	1.0820
		1.6	1.110	1.4120
38 x 19	1 1/2 x 3/4	1.0	0.857	1.091
		1.2	1.020	1.298
		1.6	1.330	1.700
38 x 25	1 1/2 x 1	1.0	0.951	1.211
		1.2	1.130	1.442
		1.6	1.490	1.892
50 x 25	2 x 1	1.0	1.140	1.145
		1.2	1.360	1.730
		1.6	1.790	2.276
		3.0	2.510	3.193
		3.2	3.380	4.302
65 x 38	2 1/2 x 1 1/2	1.6	2.490	3.1725
		2.3	3.520	4.4810
		3.2	4.650	5.9190
		4.0	5.640	7.1880
75 x 38	3 x 1 1/2	1.6	2.710	3.448
		1.9	3.180	4.057
		2.3	3.810	4.850
		3.0	4.860	6.188
		3.2	5.150	6.559
		4.0	6.270	7.988
		4.5	6.940	8.839
75 x 50	3 x 2	1.9	3.540	4.513
		2.3	4.24	5.402
		3.0	5.42	6.908
		3.2	5.75	7.327
		4.0	7.02	8.948
		4.5	7.79	9.919
		5.0	8.53	10.860
		6.0	9.92	12.630

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Rectangle Hollow Sections

(6m Length)

(ASTM A-500)



Nominal Size		Wall Thickness	Calculated Weight	Sectional Area
A X B	A X B	t		
mm	in	mm	kg/m	cm ²
100 x 50	4 x 2	1.9	4.29	5.463
		2.3	5.14	6.552
		3.0	6.60	8.408
		3.2	7.01	8.927
		4.0	8.60	10.950
		4.5	9.55	12.170
		5.0	10.50	13.360
		6.0	12.30	15.630
100 x 75	4 x 3	3.0	7.78	9.906
		3.2	8.26	10.530
		4.0	10.20	12.950
		4.5	11.30	14.420
		5.0	12.50	15.860
		6.0	14.60	18.630
125 x 50	5 x 2	2.3	5.96	7.596
		3.0	7.78	9.908
		3.2	8.26	10.530
		4.0	10.20	12.950
		4.5	11.30	14.420
		5.0	12.50	15.860
		6.0	14.60	18.630
125 x 75	5 x 3	3.0	8.96	11.410
		3.2	9.52	12.130
		4.0	11.70	14.950
		4.5	13.10	16.670
		5.0	14.40	18.360
		6.0	17.00	21.630
150 x 50	6 x 2	3.0	8.96	11.410
		3.2	9.52	12.130
		4.0	11.70	14.950
		4.5	13.10	16.670
		5.0	14.40	18.360
		6.0	17.00	21.630
150 x 75	6 x 3	3.0	10.10	12.910
		3.2	10.80	13.730
		4.0	13.30	16.950
		4.5	14.90	18.920
		5.0	16.40	20.860
		6.0	19.30	24.630
150 x 100	6 x 4	4.0	14.90	18.95
		4.5	16.60	21.17
		5.0	18.30	23.36
		6.0	21.70	27.63
200 x 100	8 x 4	4.0	18.00	22.950
		4.5	20.20	25.670
		5.0	22.30	28.360
		6.0	26.40	33.630

Plates

Hot Rolled Mild Steel Plates

BS 4360 G43A / JIS 3101 SS400 / JIS 3131 SPHC

Thickness		Width x Length				
		4' x 8'	5' x 10'	5' x 20'	6' x 20'	8' x 30'
		1219 x 2438	1524 x 3048	1524 x 6096	1829 x 6096	2438 x 9144
mm	in	kg/pc	kg/pc	kg/pc	kg/pc	kg/pc
1.2	1/16"	28	-	-	-	-
1.5		35	-	-	-	-
1.6		37	-	-	-	-
2.0	1/8"	47	-	-	-	-
2.3		54	-	-	-	-
2.5		58	-	-	-	-
2.8		65	-	-	-	-
3.0		70	109	-	-	-
4.0	3/16"	93	145	-	-	-
4.5		105	164	328	394	-
5.0		117	181	365	438	-
6.0	1/4"	140	219	438	525	1050
8.0	3/8"	187	292	583	700	1400
9.0		210	328	656	788	1575
10		233	362	729	875	1750
12	1/2"	280	438	875	1050	2100
15	5/8"	350	547	1094	1313	2625
16		373	584	1167	1400	2800
18	3/4"	420	656	1313	1575	3150
20		467	729	1458	1750	3500
22	7/8"	514	800	1604	1925	3850
24	1"	560	876	1750	2100	4200
25		583	912	1823	2188	4375
28	1 1/8"	653	1021	2042	2450	-
30	1 1/4"	700	1094	2188	2625	-
32		747	1167	2334	2800	-
38	1 1/2"	887	1386	2771	3325	-
50	2"	1167	1823	3646	4375	-

Mild Steel Chequered Plate

JIS 3101 SS400

Thickness		Width x Length	
		1219mm X 2438mm	1524mm X 3048mm
		4' X 8'	5' X 10'
mm	in	kg/pc	kg/pc
2.5	1/8"	63	99
3.0	1/8"	75	117
4.0	3/16"	98	154
4.5	3/16"	110	172
6.0	1/4"	145	227
9.0	3/8"	215	336
12.0	1/2"	285	445

Aluminium Sheets

Thickness		Size	kg/pc	Size	kg/pc
SWG	mm				
26G	0.4	4' X 8'	3.227	-	-
24G	0.5	4' X 8'	4.034	-	-
22G	0.6	4' X 8'	4.840	4' X 12'	7.260
20G	0.8	4' X 8'	6.454	4' X 12'	9.681
18G	1.0	4' X 8'	8.067	4' X 12'	12.101
16G	1.4	4' X 8'	11.294	4' X 12'	16.941
15G	1.8	4' X 8'	14.521	4' X 12'	21.782
14G	2.0	4' X 8'	16.134	4' X 12'	24.201
13G	2.5	4' X 8'	20.168	4' X 12'	30.252
11G	3.0	4' X 8'	24.201	4' X 12'	36.302

Aluminium Tread Plates

Thickness		Size	kg/pc
SWG	mm		
13G	2.5	4' X 12'	33.489
11G	3.0	4' X 12'	40.200

Aluminium Coil Sheets

Thickness		Size	kg/pc
SWG	mm		
30G	0.3	3' X 100'	22.7
30G	0.3	4' X 100'	30.3
26G	0.4	3' X 100'	30.3
26G	0.4	4' X 100'	40.3

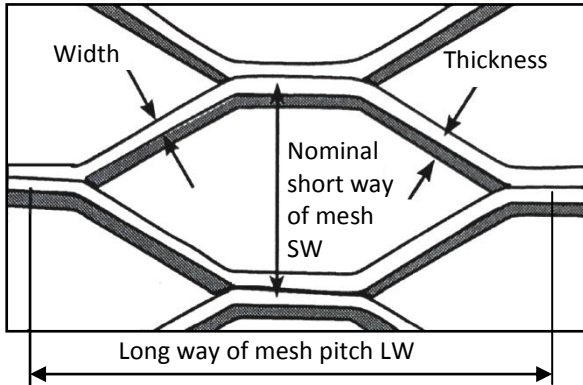
Expanded Metal

- GI Expanded Metal
- MS Expanded Metal

TYPES

There are 2 types of expanded metal:-

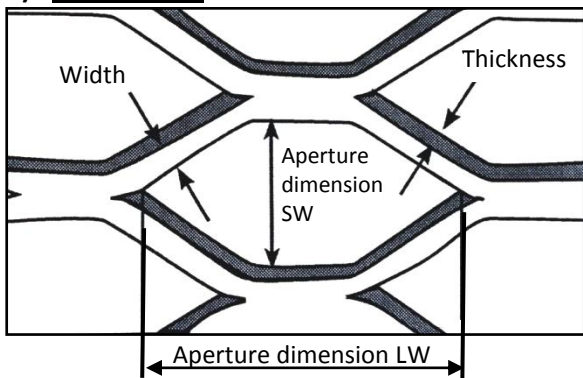
a) CONVENTIONAL



Produced by slitting steel plate or sheet and stretching the strands so formed at right angles to the plane of the steel plate or sheet so as to form a network of diamond shaped holes.

- Long Way of Mesh (LM): For conventional expanded metal, the length of the pitch of the major axis of the diamond.
- Short Way of Mesh (SM): For conventional expanded metal, the length of the pitch of the minor axis of the diamond.

b) FLATTENED

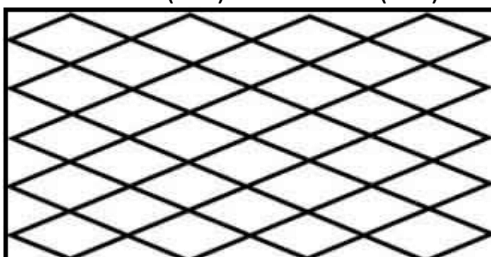


Produced by rolling of conventional expanded metal so that the strands are in the same plane as the sheet.

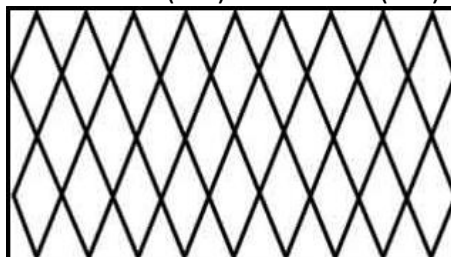
- Long Way of Mesh (LM): For flattened expanded metal, the length of the pitch of the major axis of the aperture.
- Short Way of Mesh (SM): For flattened expanded metal, the length of the pitch of the minor axis of the aperture.

SHEET SIZES

2440mm (LW) x 1220mm (SW)



1220mm (LW) x 2440mm (SW)



Expanded Metal

Model	Size of Mesh		Thickness (mm)	Strand Width (mm)	Nominal SHT Size		Weight kg/m
	SWM (mm)	LWM (mm)			LWM (mm)	SWM (mm)	
XM 71 (7502)	19	50	3.0	4.5	2440	1220	29.00
XM 72 (7503)	19	50	3.0	3.0	2440	1220	19.50
XM 72 (7503)	19	50	3.0	3.0	2440	1830	29.50
XM 75 (7506)	19	50	1.5	3.0	2440	1830	14.00
XM 76 (7507)	19	50	1.5	2.3	2440	1830	11.00
XM 76 (7507)	19	50	1.5	2.3	2440	2440	15.00
GWM 50075	25	76	5.0	7.5	1220	2440	69.00
XM 61 (1001)	25	76	3.0	4.5	2440	1220	22.50
XM 63 (1003)	25	76	3.0	3.0	2440	1220	14.50
XM 63 (1003)	25	76	3.0	3.0	2440	1830	22.50
XM 66 (1006)	25	76	1.5	3.0	2440	1830	10.50
XM 41 (1501)	38	114	4.5	9.5	1220	2440	46.50
XM 42 (1502)	38	114	4.5	7.5	2440	1220	43.00
XM 43 (1503)	38	114	4.5	6.0	2440	1220	34.50
XM 43 (1503)	38	114	4.5	6.0	2440	1830	51.00
XM 45 (1505)	38	114	3.0	4.5	2440	1220	16.50
XM 45 (1505)	38	114	3.0	4.5	2440	1830	22.50
XM 46 (1506)	38	114	3.0	3.0	2440	1220	11.00
XM 46 (1506)	38	114	3.0	3.0	2440	1830	16.50
XM 49 (1509)	38	114	1.5	3.0	2440	1830	8.00
XM 26 (3006)	76	200	6.0	6.0	2440	1220	22.50
XM 26 (3006)	76	200	6.0	6.0	2440	1830	34.00
XM 28 (3008)	76	200	4.5	6.0	2440	1220	16.50
XM 28 (3008)	76	200	4.5	6.0	2440	1830	25.50
XM 30 (3010)	76	200	4.5	4.5	2440	1220	12.50
XM 31 (3010)	76	200	4.5	4.5	2440	1830	18.50
XM 31 (3011)	76	200	3.0	6.0	2440	1830	10.50
XM 31 (3011)	76	200	3.0	6.0	2440	1220	16.50
XM 33 (3010)	76	200	3.0	3.0	2440	1830	5.00
1000 (3.8)	30	76	4.5	10.0	1220	1830	45.00
1000 (3.8)	30	76	4.5	10.0	1220	1830	45.00
1000	30	76	4.5	6.0	1220	2440	43.00
GWM 50105	30	76	5.0	10.5	1220	2440	80.00
GWM 30080	30	76	3.0	8.0	1220	2440	36.00
G 3092	34	76	3.0	4.5	2440	1220	12.50
GWM 50080	42	135	5.0	8.0	1220	2440	43.80
GWM 50110	45	135	5.0	11.0	1220	2440	56.00
G 1201	32	114	4.5	8.0	1220	2440	42.50
G 1232	33	102	3.0	3.0	2440	1220	12.50
G 2263	65	185	3.0	6.0	2440	1220	9.00
G 1032	25	40/81	3.0	3.0	1220	2440	14.50
G 1020	16	38	1.2	2.0	2440	1220	6.00
G 3035	22	52	3.0	3.5	1220	2440	22.00
GC 1515	9	29	1.5	1.5	2440	1220	12.10
GL 1563	16	76	1.5	6.3	1220	2440	30.95
1/2 X 18G	13	28	1.2	1.5	2440	1220	6.50

*SWM = Nominal Short Way of Expanded Metal

*LWM = Nominal Long Way of Expanded Metal

Galvanised Steel Sheets

Thickness		Size		Weight
SWG	mm	ft	mm	kg/pc
35G	0.18	3' X 8'	914 X 2438	3.2
32G	0.25	3' X 8'	914 X 2438	4.4
30G	0.30	3' X 8'	914 X 2438	5.3
28G	0.36	3' X 8'	914 X 2438	6.3
26G	0.46	3' X 8'	914 X 2438	8.1
24G	0.56	3' X 8'	914 X 2438	9.8

28G	0.30	4' X 8'	1219 X 2438	7.0
26G	0.40	4' X 8'	1219 X 2438	9.3
24G	0.50	4' X 8'	1219 X 2438	11.7
23G	0.60	4' X 8'	1219 X 2438	14.0
22G	0.70	4' X 8'	1219 X 2438	16.3
20G	0.80	4' X 8'	1219 X 2438	18.7
19G	1.00	4' X 8'	1219 X 2438	23.3
18G	1.20	4' X 8'	1219 X 2438	28.9
16G	1.40	4' X 8'	1219 X 2438	32.7
16G	1.50	4' X 8'	1219 X 2438	35.0
14G	1.80	4' X 8'	1219 X 2438	42.0
14G	2.00	4' X 8'	1219 X 2438	46.7
11G	3.00	4' X 8'	1219 X 2438	70.0

Electrical Galvanised Sheet

Thickness		Size		Weight
SWG	mm	ft	mm	kg/pc
20G	0.8	4' X 8'	1219 X 2438	18.7
18G	1.2	4' X 8'	1219 X 2438	28.0
16G	1.5	4' X 8'	1219 X 2438	35.0
14G	2.0	4' X 8'	1219 X 2438	46.7

Stainless Steel Sheets

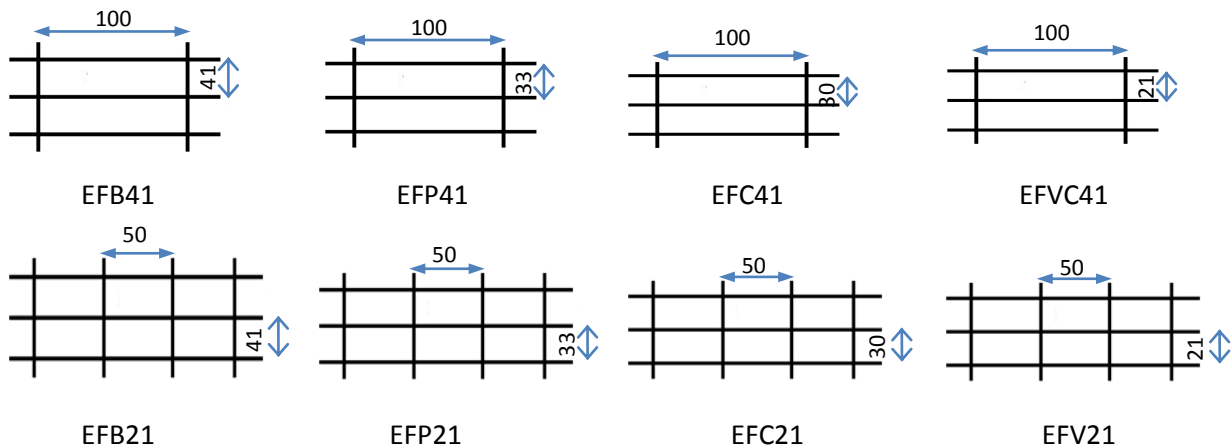
Thickness		Size and Weight	
		4' x 8'	5' x 10'
SWG	mm	kg/pc	kg/pc
26 G	0.4	9.48	-
24 G	0.5	11.86	-
23 G	0.6	14.23	-
22 G	0.7	16.60	-
20 G	0.8	18.97	-
19 G	0.9	21.34	-
19 G	1.0	23.72	37.06
18 G	1.2	28.50	44.47
16 G	1.5	35.57	55.59
14 G	2.0	47.43	74.12
11 G	3.0	71.15	111.18
8 G	4.0	94.86	148.24
	5.0	118.58	185.30
	6.0	142.30	222.36
	8.0	189.73	296.48
	9.0	213.44	333.54
	10.0	237.16	370.60
	12.0	284.59	444.72
	14.0	332.02	518.84
	16.0	379.46	592.96
	18.0	426.89	667.08
	20.0	474.32	741.20
	25.0	592.90	926.50

Grade: 304 1B or 2B
316 1B or 2B
316L 1B or 2B

Grating

- MS Gratings
- Hot Dipped Galvanised Grating

Standard Types of Steel Gratings



Bearing Bar:

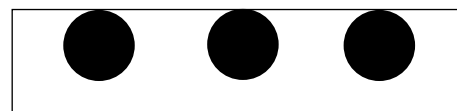
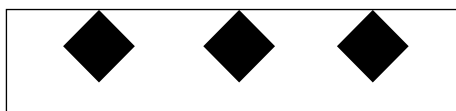


SQ. Twisted



Round

Cross Bar:



Standard Panel Sizes

Mesh Sizes

100/50	6000mm x 1000mm	or	6000mm x 915mm	or	20ft. x 3ft.
100/50	6000mm x 997mm	or	6000mm x 925mm	or	20ft. x 3ft.
100/50	6000mm x 990mm	or	6000mm x 928mm	or	20ft. x 3ft.
100/50	6000mm x 1000mm	or	6000mm x 915mm	or	20ft. x 3ft.

Flat Bar Sizes

25mm x 5mm
32mm x 5mm
38mm x 5mm
50mm x 5mm

Steel Bars & Steel Shafts

High Tensile Deformed Bar

SIZE D		Cross-Sectional Area	Unit Weight	No. of Pcs 12m Length	Weight Per Bundle
mm	in	mm ²	kg/m	Per Bundle	MT
T10	3/8"	78.50	0.617	138	1.022
T12	1/2"	113.10	0.888	96	1.023
T16	5/8"	201.10	1.580	54	1.024
T20	3/4"	314.20	2.471	34	1.008
T25	1"	490.90	3.849	22	1.016
T32	1 1/4"	804.20	6.310	14	1.060
T40	1 1/2"	1256.60	9.864	9	1.065

Mild Steel Round Bar

Size D		Cross- Sectional Area	Unit Weight	No. Of Pcs 12m Length	Weight Per Bundle
mm	in	mm ²	kg/m	Per Bundle	MT
R10	3/8"	78.50	0.617	138	1.022
R12	1/2"	113.10	0.888	96	1.023
R16	5/8"	201.10	1.579	54	1.023
R20	3/4"	314.20	2.466	34	1.006
R25	1"	490.90	3.854	22	1.017
R32	1 1/4"	804.20	6.310	14	1.060

Hard Drawn Wire (Mild Steel Round Bar)

Size D		Cross- Sectional Area	Unit Weight	No. Of Pcs 12m Length	Weight Per Bundle
mm	in	mm ²	kg/m	Per Bundle	MT
R5.5	1/4"	23.76	0.186	320	0.739
R6.0	1/4"	28.28	0.222	320	0.852
R8.0	3/8"	50.30	0.395	150	0.711
R9.0	3/8"	63.60	0.499	150	0.899

Mild Steel Black Shaft

Thickness		kg/m
in	mm	
1 1/2"	38	8.90
1 3/4"	45	11.94
2"	50	15.42
2 1/4"	60	22.20
2 1/2"	65	26.45
2 3/4"	70	30.21
3"	75	34.68
3 1/4"	85	44.55
3 1/2"	90	49.95
3 3/4"	95	55.65
4"	100	61.66

Mild Steel Polish Shaft

INCHES

Thickness		kg/m
in	mm	
1/2"	12.70	0.994
5/8"	15.88	1.554
3/4"	19.05	2.237
7/8"	22.23	3.045
1"	25.40	3.978
1 1/4"	31.75	6.215
1 1/2"	38.10	8.950
1 3/4"	44.45	12.181
2"	50.80	15.910
2 1/4"	57.15	20.136
2 1/2"	63.20	24.859
2 3/4"	69.85	30.080
3"	76.20	35.790
3 1/4"	82.55	42.011
3 1/2"	88.00	48.723
3 3/4"	95.25	55.932
4"	101.60	63.639

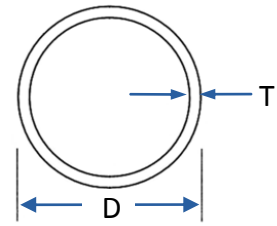
METRIC

Thickness		kg/m
mm	in	
20	3/4"	2.466
25	1"	3.853
30	1 1/4"	5.550
35	1 3/8"	7.550
40	1 1/2"	8.950
45	1 3/4"	11.940
50	2"	15.420
55	2 1/8"	18.650
60	2 3/8"	22.200
65	2 1/2"	26.450
70	2 3/4"	30.210
75	3"	34.680
80	3 1/8"	39.460
85	3 3/8"	44.550
90	3 1/2"	49.950
95	3 3/4"	55.650
100	4"	61.660

Pipes & Fittings

Mild Steel Black Pipes & Fittings

SPIM B100



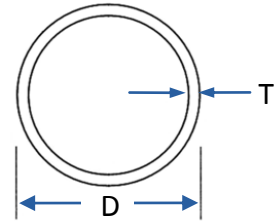
Nominal Size		Class or Grade	Outside Diameter (D) mm	Wall Thickness t	Weight
in	mm			mm	kg/m
1/2"	15	AA	21.40	1.6	0.739
3/4"	20	AA	26.90	1.6	0.982
1"	25	AA	33.80	1.8	1.364
1 1/4"	32	AA	42.30	1.8	1.739
1 1/2"	40	AA	48.40	1.8	1.994
2"	50	AA	60.20	1.8	2.503
2 1/2"	65	AA	76.00	1.9	3.368
3"	80	AA	88.70	2.1	4.330
4"	100	AA	113.20	2.2	5.917
5"	125	AA	140.60	4.0	12.364
6"	150	AA	166.10	4.0	15.069

JIS G3452: 1997

8"	200	B	216.00	5.8	30.10
10"	250	B	267.00	6.6	42.40
12"	300	B	318.00	6.9	53.00
14"	350	B	355.00	7.9	67.70
16"	400	B	406.00	7.9	77.60
18"	450	B	455.00	7.9	89.20

Mild Steel Black Pipes & Fittings

BS1387 – 1985



Nominal Size		Class or Grade	Outside Diameter (D) mm	Wall Thickness t	Weight Plain Ends
in	mm			mm	kg/m
Light					
1/2"	15	A	21.40	2.0	0.947
3/4"	20	A	26.90	2.3	1.380
1"	25	A	33.80	2.6	1.980
1 1/4"	32	A	42.30	2.6	2.540
1 1/2"	40	A	48.40	2.9	3.230
2"	50	A	60.20	2.9	4.080
2 1/2"	55	A	76.00	3.2	5.710
3"	80	A	88.70	3.2	6.720
4"	100	A	113.90	3.6	9.750
Medium					
1/2"	15	B	21.70	2.6	1.21
3/4"	20	B	27.20	2.6	1.56
1"	25	B	34.20	3.2	2.41
1 1/4"	32	B	42.90	3.2	3.10
1 1/2"	40	B	48.80	3.2	3.57
2"	50	B	60.80	3.6	5.03
2 1/2"	65	B	76.60	3.6	6.43
3"	80	B	89.50	4.0	8.37
4"	100	B	114.90	4.5	12.20
5"	125	B	140.60	5.0	16.60
6"	150	B	166.10	5.0	19.70
Heavy					
1/2"	15	C	21.70	3.2	1.44
3/4"	20	C	27.20	3.2	1.87
1"	25	C	34.20	4.0	2.94
1 1/4"	32	C	42.90	4.0	3.80
1 1/2"	40	C	48.80	4.0	4.38
2"	50	C	60.80	4.5	6.19
2 1/2"	65	C	76.60	4.5	7.93
3"	80	C	89.50	5.0	10.30
4"	100	C	114.90	5.4	14.50
5"	125	C	140.60	5.4	17.90
6"	150	C	166.10	5.4	21.30

STEEL BUTT – WELDING PIPE FITTINGS



90° Elbow (Short)



Tee (Straight)



Reducer (Concentric)



Reducer (Eccentric)



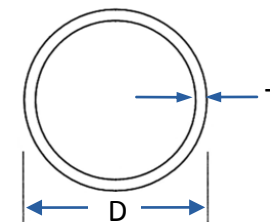
Tee (Eccentric)



Cap

API Pipes & Fittings

American Petroleum Institute
API 5L ASTM A106/A53 Grade A/B

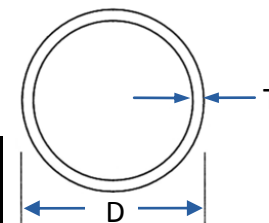


Nominal Size	Outer Diameter		Wall Thickness		Weight	Hydrostatic Test Pressure										
						API 5L				API 5LX						
	D		SCH. No.	T	kg/m	A		B		X42	X46	X52	X56	X60	X65	X70
	in	mm		MM		STD	ALT	STD	ALT							
1/8"	0.41	10.3	40 (STD)	1.73	0.36	700	-	700	-	-	-	-	-	-	-	-
			80(XS)	2.41	0.46	850	-	850	-	-	-	-	-	-	-	-
1/4"	0.54	13.7	40 (STD)	2.24	0.63	700	-	700	-	-	-	-	-	-	-	-
			80 (XS)	3.02	0.80	850	-	850	-	-	-	-	-	-	-	-
3/8"	0.68	17.1	40 (STD)	2.31	0.85	700	-	700	-	-	-	-	-	-	-	-
			80 (XS)	3.20	1.10	850	-	850	-	-	-	-	-	-	-	-
1/2"	0.84	21.3	40 (STD)	2.77	1.27	700	-	700	-	-	-	-	-	-	-	-
			80 (XS)	3.73	1.62	850	-	850	-	-	-	-	-	-	-	-
			(XXS)	7.47	2.55	1000	-	1000	-	-	-	-	-	-	-	-
3/4"	1.05	26.7	40 (STD)	2.87	1.68	700	-	700	-	-	-	-	-	-	-	-
			80 (XS)	3.91	2.19	850	-	850	-	-	-	-	-	-	-	-
			(XXS)	7.82	3.63	1000	-	1000	-	-	-	-	-	-	-	-
1"	1.32	33.4	40 (STD)	3.38	2.50	700	-	700	-	-	-	-	-	-	-	-
			80 (XS)	4.55	3.23	850	-	850	-	-	-	-	-	-	-	-
			160	6.35	4.23	-	-	-	-	-	-	-	-	-	-	-
			(XXS)	9.09	5.45	1000	-	1000	-	-	-	-	-	-	-	-
1 1/4"	1.66	42.2	40 (STD)	3.56	3.38	1200	-	1300	-	-	-	-	-	-	-	-
			80 (XS)	4.85	4.47	1800	-	1900	-	-	-	-	-	-	-	-
			160	6.35	5.60	-	-	-	-	-	-	-	-	-	-	-
			(XXS)	9.70	7.76	2200	-	2300	-	-	-	-	-	-	-	-
1 1/2"	1.9	48.3	40 (STD)	3.68	4.05	1200	-	1300	-	-	-	-	-	-	-	-
			80 (XS)	5.08	5.41	1800	-	1900	-	-	-	-	-	-	-	-
			160	7.14	7.24	-	-	-	-	-	-	-	-	-	-	-
			(XXS)	10.16	9.55	2200	-	2300	-	-	-	-	-	-	-	-

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API Pipes & Fittings

American Petroleum Institute
API 5L ASTM A106/A53 Grade A/B

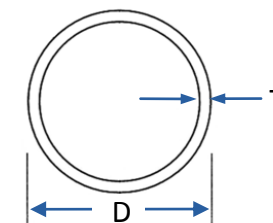


Nominal Size	Outer Diameter		Wall Thickness		Weight	Hydrostatic Test Pressure										
						API 5L				API 5LX						
	D		SCH. No.	T	kg/m	A		B		X42	X46	X52	X56	X60	X65	X70
	in	mm		MM		STD	ALT	STD	ALT							
2"	2 3/8	60/3	40 (STD)	2.11	3.02	1260	-	1470	-	1760	1930	2180	2350	2520	2730	2940
				2.77	3.93	-	-	-	-	2310	2530	2860	3000	3000	3000	3000
				3.18	4.47	-	-	-	-	2650	2910	3000	3000	3000	3000	3000
				3.58	5.00	-	-	-	-	2990	3000	3000	3000	3000	3000	3000
				3.91	5.44	2330	-	2500	-	3000	3000	3000	3000	3000	3000	3000
			80 (XS)	4.37	6.03	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000
				4.78	6.54	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000
				5.54	7.48	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000
				6.35	8.45	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000
				7.14	9.35	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000
			160 (XXS)	8.74	11.11	-	-	-	-	-	-	-	-	-	-	-
				11.07	13.45	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000
2 1/2"	2 7/8	73	40 (STD)	2.11	3.68	1040	-	1040	-	1460	1590	1800	1940	2080	2250	2430
				2.77	4.80	-	-	-	-	1910	2090	2370	2550	2730	2960	3000
				3.18	5.47	-	-	-	-	2190	2400	2710	2920	3000	3000	3000
				3.58	6.14	-	-	-	-	2470	2740	3000	3000	3000	3000	3000
				3.96	6.75	1950	-	2280	-	2730	3000	3000	3000	3000	3000	3000
				4.37	7.40	2150	-	2500	-	3000	3000	3000	3000	3000	3000	3000
				4.78	8.04	2350	-	2500	-	3000	3000	3000	3000	3000	3000	3000
				5.49	11.29	2220	-	2500	-	3000	3000	3000	3000	3000	3000	3000
				5.49	9.13	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000
			40 (STD)	6.35	10.44	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000
				5.49	11.29	2220	-	2500	-	3000	3000	3000	3000	3000	3000	3000
				6.35	12.93	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000
				7.14	14.39	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000
			80 (XS)	7.62	15.27	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000
			160	11.13	21.33	-	-	-	-	-	-	-	-	-	-	-
			(XXS)	15.24	27.67	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000

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API Pipes & Fittings

American Petroleum Institute
API 5L ASTM A106/A53 Grade A/B

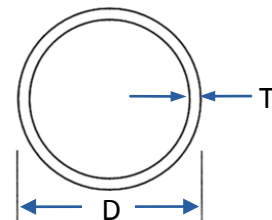


Nominal Size	Outer Diameter		Wall Thickness		Weight	Hydrostatic Test Pressure											
						API 5L				API 5LX							
	D		SCH. No.	T	kg/m	A		B		X42	X46	X52	X56	X60	X65	X70	
	in	mm		MM		STD	ALT	STD	ALT								
3"	3 1/2	88.9	40 (STD)	2.11	4.51	850	-	1000	-	1200	1310	1480	1590	1710	1850	1990	
				2.77	5.88	-	-	-	-	1570	1720	1940	2090	2240	2430	2620	
				3.18	6.72	1290	-	1500	-	1800	1970	2230	2400	2570	2790	3000	
				3.58	7.54	-	-	-	-	2030	2220	2510	2710	2900	3000	3000	
				3.96	8.30	1600	-	1870	-	2250	2460	2780	3000	3000	3000	3000	
				4.37	9.10	1770	-	2060	-	2480	2710	3000	3000	3000	3000	3000	
				4.78	9.91	1930	-	2260	-	2710	2970	3000	3000	3000	3000	3000	
				5.49	11.29	2220	-	2500	-	3000	3000	3000	3000	3000	3000	3000	
				6.35	12.93	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000	
				7.14	14.39	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000	
			80 (XS)	7.62	15.27	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000	
			160	11.13	21.33	-	-	-	-	-	-	-	-	-	-		
			(XXS)	15.24	27.67	2500	-	2500	-	3000	3000	3000	3000	3000	3000	3000	
3 1/2"	4	102	40 (STD)	2.11	5.17	750	-	870	-	1050	1150	1290	1390	1490	1620	1740	
				2.77	6.75	980	-	1140	-	1370	1500	1700	1830	1960	2130	2290	
				3.18	7.70	1120	-	1310	-	1580	1720	1950	2100	2250	2440	2630	
				3.58	8.65	1270	-	1480	-	1780	1950	2200	2370	2540	2750	2960	
				3.96	9.53	1400	-	1640	-	1970	2150	2430	2620	2810	3000	3000	
				4.37	10.47	1550	-	1810	-	2170	2370	2680	2890	3000	3000	3000	
				4.78	11.39	1690	-	1970	-	2370	2590	2930	3000	3000	3000	3000	
				5.74	13.57	2030	-	2370	-	2850	3000	3000	3000	3000	3000	3000	
				6.35	14.91	2250	-	2620	-	3000	3000	3000	3000	3000	3000	3000	
				7.14	16.62	2530	-	2800	-	3000	3000	3000	3000	3000	3000	3000	
			80 (XS)	8.08	18.62	2800	-	2800	-	3000	3000	3000	3000	3000	3000	3000	

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API Pipes & Fittings

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API 5L ASTM A106/A53 Grade A/B

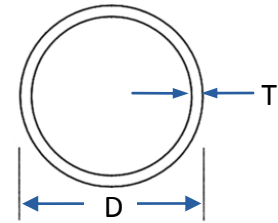


Nominal Size	Outer Diameter		Wall Thickness		Weight kg/m	Hydrostatic Test Pressure							
						API 5L				API 5LX			
	D		SCH. No.	T		A		B		X42	X46	X52	X56
	in	mm		mm		Std.	Alt.	Std.	Alt.				
4"	4 1/2"	114.3	40 (STD)	2.11	5.84	660	-	770	-	930	1020	1150	1240
				2.77	7.80	870	-	1020	-	-	-	-	-
				3.18	8.70	1000	-	1170	-	1400	1530	1730	1870
				3.58	9.77	1130	-	1320	-	1580	1730	1960	2110
				3.96	10.78	1250	-	1450	-	1750	1910	2160	2330
				4.37	11.84	1380	-	1610	-	1930	2110	2390	2570
				4.78	12.90	1500	-	1750	-	2110	2310	2610	2810
				5.16	13.88	1620	-	1890	-	2270	2490	2810	3000
			60	5.56	14.91	1750	-	2040	-	2450	2690	3000	3000
				6.02	16.07	1000	-	2210	-	2650	2910	3000	3000
				6.35	16.91	2000	-	2330	-	2800	3000	3000	3000
				7.14	18.86	2250	-	2620	-	3000	3000	3000	3000
			80 (XS)	7.92	20.79	2500	-	2800	-	3000	3000	3000	3000
				8.56	22.31	2700	-	2800	-	3000	3000	3000	3000
				11.13	28.30	2800	-	2800	-	3000	3000	3000	3000
				13.49	33.53	2800	-	2800	-	3000	3000	3000	3000
			(XXS)	17.12	41.02	2800	-	2500	-	3000	3000	3000	3000
5"	5 9/16	141.3	40 (STD)	2.11	7.24	540	-	630	-	-	-	-	-
				3.18	10.81	810	-	940	-	-	-	-	-
				3.96	13.42	1010	-	1180	-	-	-	-	-
				4.78	16.07	1220	-	1420	-	-	-	-	-
				5.56	18.62	1420	-	1650	-	-	-	-	-
				6.55	21.76	1670	-	1950	-	-	-	-	-
				7.14	23.61	2020	-	2360	-	-	-	-	-
				8.74	26.55	2230	-	2600	-	-	-	-	-
			80 (XS)	9.52	30.94	2430	-	2800	-	-	-	-	-
				12.70	40.26	2800	-	2800	-	-	-	-	-
				15.88	49.08	2800	-	2800	-	-	-	-	-
			(XXS)	19.05	57.41	2800	-	2800	-	-	-	-	-

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API Pipes & Fittings

American Petroleum Institute
API 5L ASTM A106/A53 Grade A/B

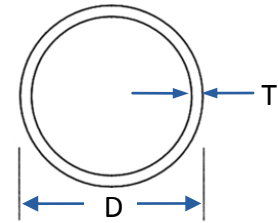


Nominal Size	Outer Diameter		Wall Thickness		Weight	Hydrostatic Test Pressure							
						API 5L				API 5LX			
	D		SCH. No.	T	kg/m	A		B		X42	X46	X52	X56
	in	mm		MM		Std.	Alt.	Std.	Alt.				
6"	6 5/8	168.3	30 40 (STD)	2.11	8.64	450	560	530	660	790	860	980	1050
				2.77	11.31	590	740	690	860	1040	1140	1280	1380
				3.18	12.93	680	850	790	990	1190	1300	1470	1580
				3.58	14.54	770	960	890	1120	1340	1470	1660	1790
				3.96	16.06	859	1060	990	1240	1480	1620	1840	1980
				4.37	17.65	930	1170	1090	1360	1640	1790	2030	2180
				4.78	19.24	1020	1280	1190	1490	1790	1960	2210	2380
				5.56	22.31	1190	1490	1390	1740	2080	2280	2580	2780
				6.35	22.31	1190	1490	1390	1740	2080	2280	2580	2780
				7.11	28.26	1520	1900	1780	2220	2660	2920	3000	3000
			80 (XS) 120 160 (XXS)	7.92	31.34	1700	2120	1980	2470	2970	3000	3000	3000
				8.74	34.38	1870	2340	2180	2730	3000	3000	3000	3000
				9.52	37.28	2040	2550	2380	2800	3000	3000	3000	3000
				10.97	42.56	2350	2800	2740	2800	3000	3000	3000	3000
				12.70	48.72	2720	2800	2800	2800	3000	3000	3000	3000
				14.27	54.20	2880	2800	2800	2800	3000	3000	3000	3000
				15.58	59.65	2800	2800	2800	2800	3000	3000	3000	3000
				18.26	67.55	2800	2800	2800	2800	3000	3000	3000	3000
				21.95	79.18	2800	2800	2800	2800	-	-	-	-
8"	8 5/8	219.1	20 30 40 (STD)	3.18	16.91	520	650	610	760	910	1000	1130	1220
				3.96	21.02	650	810	760	950	1140	1250	1410	1520
				4.78	25.23	780	980	920	1140	1370	1500	1700	1830
				5.16	27.20	-	-	-	-	1480	1620	1840	2000
				5.56	29.28	910	1140	1070	1330	1600	1750	1980	2130
				6.35	33.31	1040	1300	1350	1690	2020	2220	2510	2700
				7.04	36.79	1160	1450	1350	1690	2020	2220	2510	2700
				7.92	41.26	1300	1630	1520	1900	2280	2500	2820	3000
				8.18	42.53	1340	1680	1570	1960	2350	2580	2910	3000
				8.74	45.31	1440	1790	1680	2090	2510	2750	3000	3000
			60 80 (XS) 100 120 140 (XXS) 160	9.52	49.21	1570	1960	1830	2280	2740	3000	3000	3000
				10.31	53.09	-	-	-	-	-	-	-	-
				11.13	57.05	1830	2290	2130	2670	3000	3000	3000	3000
				12.70	64.63	2090	2610	2430	2800	3000	3000	3000	3000
				14.27	72.09	2350	2800	2740	2800	3000	3000	3000	3000
				15.09	75.89	-	-	-	-	-	-	-	-
				15.83	79.54	2610	2800	2800	2800	3000	3000	3000	3000
				18.26	90.43	2800	2800	2800	2800	3000	3000	3000	3000
				20.62	100.93	-	-	-	-	-	-	-	-
				22.22	107.87	2800	2800	2800	2800	-	-	-	-
				23.01	111.25	-	-	-	-	-	-	-	-

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API Pipes & Fittings

American Petroleum Institute
API 5L ASTM A106/A53 Grade A/B

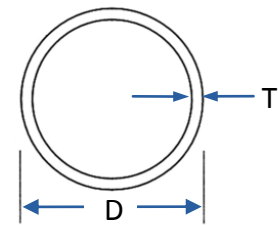


Nominal Size	Outer Diameter		Wall Thickness		Weight	Hydrostatic Test Pressure								
						API 5L				API 5LX				
	D		SCH. No.	T	kg/m	A		B		X42	X46	X52	X56	
	in	mm		mm		Std.	Alt.	Std.	Alt.					
10"	10 3/4	273	20	3.96	26.29	520	650	610	760	1040	1130	1280	1380	
				4.78	31.59	630	790	730	920	1250	1370	1550	1660	
				5.16	34.06	-	-	-	-	1350	1480	1670	1800	
				5.56	36.69	730	920	860	1070	1450	1590	1800	1940	
				6.35	41.77	840	1050	980	1220	1660	1820	2060	2210	
				7.09	46.47	930	1170	1090	1360	1850	2030	2290	2470	
			30	7.80	51.00	1030	1290	1200	1500	2040	2230	2520	2720	
				8.74	56.49	1150	1440	1340	1680	2280	2500	2830	3000	
				9.27	60.29	1220	1530	1430	1780	2420	2660	3000	3000	
			40 (STD)	11.13	71.85	1470	1830	1710	2140	2910	3000	3000	3000	
				12.70	81.54	1670	2090	1950	2440	3000	3000	3000	3000	
				14.27	91.08	1880	2350	2200	2740	3000	3000	3000	3000	
			80	15.09	95.97	-	-	-	-	-	-	-	-	-
				15.88	100.66	2090	2620	2440	2800	3000	3000	3000	3000	
				18.26	114.74	2410	2800	2800	2800	3000	3000	3000	3000	
			100	20.62	128.37	2720	2800	2800	2800	-	-	-	-	-
				21.44	133.00	-	-	-	-	-	-	-	-	-
				25.40	155.10	-	-	-	-	-	-	-	-	-
12"	12 3/4	323.8	20	4.37	34.42	490	610	570	710	960	1050	1190	1280	
				4.78	37.57	530	660	620	770	1050	1150	1300	1400	
				5.16	40.51	-	-	-	-	1140	1250	1410	1520	
				5.56	43.66	620	770	720	900	1230	1340	1520	1640	
				6.35	49.72	710	880	820	1030	1400	1530	1730	1870	
				7.14	55.74	790	990	930	1160	1570	1720	1950	2100	
			30	7.92	61.74	880	1100	1030	1280	1750	1910	2160	2330	
				8.38	65.20	930	1160	1090	1360	1850	2020	2290	2460	
				8.74	67.89	970	1210	1130	1420	1930	2110	2390	2570	
			(STD)	9.52	73.82	1060	1320	1240	1540	2100	2300	2600	2800	
				10.31	79.72	-	-	-	-	2270	2490	2810	3000	
				11.13	85.78	1240	1550	1440	1800	2450	2690	3000	3000	
			(XS)	12.70	97.44	1410	1760	1650	2060	2800	3000	3000	3000	
				14.27	108.96	1590	1980	1850	2310	3000	3000	3000	3000	
				15.88	120.55	1760	2210	2060	2570	3000	3000	3000	3000	
			80	17.48	132.01	1940	2430	2270	2800	3000	3000	3000	3000	
				19.05	143.17	2120	2650	2470	2800	3000	3000	3000	3000	
				20.62	154.21	2290	2800	2670	2800	3000	3000	3000	3000	
			100	21.44	159.85	-	-	-	-	-	-	-	-	-
				22.22	165.29	2470	2800	2800	2800	3000	3000	3000	3000	
				25.40	186.92	-	-	-	-	-	-	-	-	-

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API Pipes & Fittings

American Petroleum Institute
API 5L ASTM A106/A53 Grade A/B

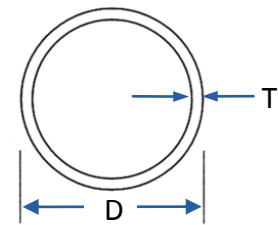


Nominal Size	Outer Diameter		Wall Thickness		Weight	Hydrostatic Test Pressure							
						API 5L				API 5LX			
	D		SCH. No.	T	kg/m	A		B		X42	X46	X52	X56
	in	mm				Std.	Alt.	Std.	Alt.				
14"	14	355.6	10	4.78	41.30	480	600	560	700	960	1050	1190	1280
				5.16	44.55	520	650	610	760	-	-	-	-
				5.33	46.07	-	-	-	-	1070	1170	1330	1430
				5.56	48.01	-	-	-	-	1120	1220	1380	1490
				6.35	54.68	640	800	750	940	1280	1400	1580	1700
			20	7.14	61.32	720	900	840	1050	1430	1570	1770	1910
				7.92	67.94	800	1000	940	1170	1590	1740	1970	2120
				8.74	74.73	880	1110	1030	1290	1750	1920	2170	2340
				9.52	81.28	960	1210	1120	1410	1910	2090	2370	2550
				10.31	87.79	-	-	-	-	2070	2270	2560	2760
			40	11.13	94.49	1130	1410	1310	1640	2230	2450	2770	2980
				11.91	100.96	-	-	-	-	2390	2620	2960	3000
				(XS)	12.70	107.38	1290	1610	1500	1880	2550	2790	3000
				14.27	120.14	1450	1810	1690	2110	2870	3000	3000	3000
				60	15.09	126.68	-	-	-	-	-	-	-
			80	15.88	132.98	1610	2010	1880	2340	3000	3000	3000	3000
				17.48	145.69	1770	2210	2060	2580	3000	3000	3000	3000
				19.05	158.08	1930	2410	2250	2800	3000	3000	3000	3000
				20.62	170.35	2090	2610	2440	2800	3000	3000	3000	3000
				22.22	182.69	2250	2800	2620	2800	3000	3000	3000	3000
			100	23.83	194.90	2410	2800	2800	2800	3000	3000	3000	3000
				25.40	206.80	-	-	-	-	-	-	-	-
16"	16	406.4	10	4.78	47.29	420	530	490	620	840	920	1040	1120
				5.16	51.02	460	570	530	670	910	990	1120	1210
				5.56	54.98	490	620	570	720	980	1070	1210	1300
				6.35	62.63	560	700	660	820	1120	1220	1380	1490
				7.14	70.26	630	790	740	920	1250	1370	1550	1670
			20	7.92	77.86	700	880	820	1020	1390	1520	1720	1860
				8.74	85.68	770	970	900	1130	1540	1680	1900	2050
				9.52	93.21	840	1050	980	1230	1670	1830	2070	2230
				10.31	100.72	-	-	-	-	1810	1980	2240	2420
				11.13	108.44	990	1230	1150	1440	1950	2140	2420	2610
			40 (XS)	11.91	115.87	-	-	-	-	2090	2290	2590	2790
				12.70	123.29	1120	1410	1310	1640	2230	2440	2760	2980
				14.27	138.02	1260	1580	1480	1840	2510	2750	3000	3000
				15.88	152.87	1410	1760	1540	2050	2790	3000	3000	3000
				60	16.66	160.12	-	-	-	-	-	-	-
			80	17.48	167.58	1550	1940	1810	2260	3000	3000	3000	3000
				19.05	181.94	1690	2110	1970	2460	3000	3000	3000	3000
				20.62	196.18	1830	2280	2130	2660	3000	3000	3000	3000
				21.44	203.48	-	-	-	-	-	-	-	-
				23.83	238.62	2250	2800	2620	2800	3000	3000	3000	3000
			100	25.40	238.62	2250	2800	2620	2800	3000	3000	3000	3000
				26.97	252.37	2390	2800	2790	2800	3000	3000	3000	3000
				28.58	266.20	2530	2800	2800	2800	3000	3000	3000	3000

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API Pipes & Fittings

American Petroleum Institute
API 5L ASTM A106/A53 Grade A/B

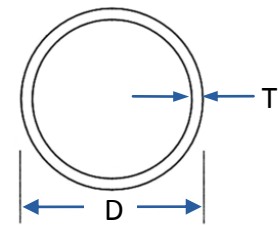


Nominal Size	Outer Diameter		Wall Thickness		Weight kg/m	Hydrostatic Test Pressure							
						API 5L				API 5LX			
	D		SCH. No.	T		A		B		X42	X46	X52	X56
	in	mm		mm		Std.	Alt.	Std.	Alt.				
18"	18	457.2	10	4.78	53.26	380	470	440	550	750	820	920	990
				5.56	61.95	440	550	510	640	870	950	1080	1160
				6.35	70.59	500	620	580	730	990	1090	1230	1320
				7.14	79.21	560	700	660	820	1110	1220	1380	1490
			20	7.92	87.79	620	780	730	910	1240	1240	1530	1650
				8.74	96.62	690	860	800	1000	1360	1490	1690	1820
				9.52	105.14	750	940	880	1090	1490	1630	1840	1980
				10.31	113.63	-	-	-	-	1610	1760	1990	2150
			30	11.13	122.36	880	1100	1020	1280	1740	1900	2150	2320
				11.91	130.79	-	-	-	-	1860	2040	2300	2480
				12.70	139.19	1000	1250	1170	1460	1980	2170	2460	2640
				14.27	155.91	1120	1400	1310	1640	2230	2440	2760	2970
			40	15.88	172.75	1250	1560	1460	1820	2480	2720	3000	3000
				17.48	189.48	1380	1720	1610	2010	2730	2990	3000	3000
				19.05	205.80	1500	1880	1750	2190	2980	3000	3000	3000
				20.62	222.02	1620	2030	1890	2370	3000	3000	3000	3000
			80	22.22	238.36	1750	2190	2040	2550	3000	3000	3000	3000
				23.83	254.59	1880	2340	2190	2740	3000	3000	3000	3000
				25.40	270.43	2000	2500	2330	2800	3000	3000	3000	3000
				26.97	286.15	2120	2660	2480	2800	3000	3000	3000	3000
				28.58	302.00	2250	2800	2620	2800	3000	3000	3000	3000
				30.15	317.47	2370	2800	2770	2800	-	-	-	-
				30.18	317.73	-	-	-	-	3000	3000	3000	3000
				31.75	333.07	2500	2800	2800	2800	3000	3000	3000	3000
20"	20	508	10	5.56	68.92	390	490	460	570	830	910	1020	1100
				6.35	78.54	450	560	520	660	940	1040	1170	1260
				7.14	88.15	510	630	590	740	1060	1160	1320	1420
				7.92	97.71	560	700	660	820	1180	1290	1460	1570
			20	8.74	107.56	620	770	720	900	1300	1420	1610	1730
				9.52	117.07	680	840	790	980	1420	1550	1760	1890
				10.31	126.55	-	-	-	-	1530	1680	1900	2050
				11.13	136.30	790	990	920	1150	1660	1810	2050	2210
			30	11.91	145.72	-	-	-	-	1770	1940	2190	2360
				12.70	151.10	900	1120	1050	1310	1890	2070	2340	2520
				14.27	173.78	1010	1260	1180	1480	2120	2330	2630	2750
				15.88	192.64	1120	1410	1310	1640	2360	2590	2750	2750
			60	17.48	211.36	1240	1550	1440	1810	2600	2750	2750	2750
				19.05	229.67	1350	1690	1580	1970	2750	2750	2750	2750
				20.62	247.85	1460	1830	1710	2130	2750	2750	2750	2750
				22.22	266.20	1580	1970	1840	2300	2750	2750	2750	2750
				23.83	284.43	1690	2110	1970	2460	2750	2750	2750	2750
				25.40	302.25	1800	2250	2100	2620	2750	2750	2750	2750
				26.97	319.94	1910	2390	2230	2750	2750	2750	2750	2750
				28.58	337.79	2020	2530	2360	2750	2750	2750	2750	2750
				30.15	355.25	2140	2670	2490	2750	-	-	-	-

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API Pipes & Fittings

American Petroleum Institute
API 5L ASTM A106/A53 Grade A/B

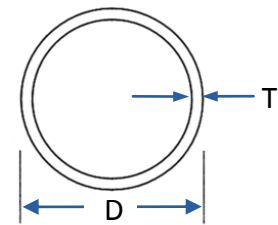


Nominal Size	Outer Diameter		Wall Thickness		Weight	Hydrostatic Test Pressure							
						API 5L				API 5LX			
	D		SCH. No.	T	kg/m	A		B		X42	X46	X52	X56
	in	mm		mm		Std.	Alt.	Std.	Alt.				
24"	24	609.6	30	14.27	209.54	840	1050	980	1230	1770	1910	2190	2300
				15.88	232.41	940	1170	1090	1370	1970	2160	2300	2300
			40	17.48	255.14	1030	1290	1200	1500	2170	2300	2300	2300
				19.05	277.39	1120	1410	1310	1640	2300	2300	2300	2300
				20.62	299.52	1220	1520	1420	1780	2300	2300	2300	2300
				22.22	321.88	1310	1640	1530	1910	2300	2300	2300	2300
				23.83	344.12	1410	1760	1640	2050	2300	2300	2300	2300
				25.40	365.88	1500	1880	1750	2190	2300	2300	2300	2300
				26.97	387.52	1590	1990	1860	2300	2300	2300	2300	2300
				28.58	409.37	1690	2110	1970	2300	2300	2300	2300	2300
				30.15	430.76	1780	2230	2080	2300	-	-	-	-
				30.18	-	-	-	-	-	2300	2300	2300	2300
				31.75	452.38	1880	2300	2190	2300	2300	2300	2300	2300
				33.32	473.53	1970	2300	2300	2300	2300	2300	2300	2300
				34.92	494.89	2060	2300	2300	2300	2300	2300	2300	2300
				36.50	515.78	2160	2300	2300	2300	-	-	-	-
				36.53	-	-	-	-	-	2300	2300	2300	2300
				38.10	536.89	2250	2300	2300	2300	2300	2300	2300	2300
				39.67	557.53	2300	2300	2300	2300	2300	2300	2300	2300
				26"	26	660.4	20	6.35	102.40	350	430	400	500
7.14	114.96	390	490					450	570	820	890	1010	1090
7.92	127.50	430	540					500	630	910	990	1120	1210
8.74	140.40	480	600					560	690	1000	1100	1240	1330
9.52	152.87	520	650					610	760	1090	1190	1350	1450
10.31	165.30	-	-					-	-	1180	1290	1460	1570
11.13	178.10	610	760					710	880	1270	1390	1580	1700
11.91	190.48	-	-					-	-	1360	1490	1690	1820
12.70	202.83	690	870					810	1010	1450	1590	1800	1940
14.27	227.42	780	970					910	1130	1630	1790	2000	2000
15.88	252.29	870	1080					1010	1260	1820	1990	2000	2000
17.48	277.03	950	1190					1110	1390	2000	2000	2000	2000
19.05	301.25	1040	1300					1210	1510	2000	2000	2000	2000
20.62	325.35	1120	1410					1310	1640	2000	2000	2000	2000
22.22	349.72	1210	1510					1410	1770	2000	2000	2000	2000
23.83	373.97	1300	1620					1520	1890	2000	2000	2000	2000
25.40	397.70	1380	1730	1620	2000	2000	2000	2000	2000				

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API Pipes & Fittings

American Petroleum Institute
API 5L ASTM A106/A53 Grade A/B

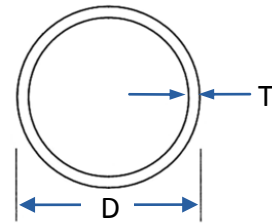


Nominal Size	Outer Diameter		Wall Thickness		Weight	Hydrostatic Test Pressure							
						API 5L				API 5LX			
	D		SCH. No.	T	kg/m	A		B		X42	X46	X52	X56
	in	mm		mm		Std.	Alt.	Std.	Alt.				
28"	28	711.2	10	6.35	110.36	320	400	370	470	680	740	840	900
				7.14	123.91	360	450	420	530	760	830	940	1010
				7.92	137.42	400	500	470	580	840	920	1040	1120
				8.74	151.35	-	-	-	-	930	1020	1150	1240
				9.52	164.80	480	600	560	700	1010	1110	1250	1350
				10.31	178.22	-	-	-	-	1100	1200	1360	1460
			20	11.13	192.04	560	700	660	820	1180	1300	1460	1580
				11.91	205.40	-	-	-	-	1270	1390	1570	1690
				12.70	218.73	640	800	750	940	1350	1480	1670	1800
				14.27	245.31	720	900	840	1050	1520	1660	1880	2020
				15.88	272.18	800	1000	940	1170	1690	1850	2090	2250
				17.48	298.91	880	1100	1030	1290	1860	2030	2300	2480
			30	19.05	325.11	960	1210	1120	1410	2020	2220	2510	2700
				20.62	351.19	1040	1300	1220	1520	2190	2400	2710	2920
				22.22	377.56	1120	1410	1310	1640	2360	2590	2920	3000
				23.83	403.80	1210	1510	1410	1760	2530	2770	3000	3000
				25.40	429.51	1290	1610	1500	1880	2700	2960	3000	3000
30"	30	762	10	6.35	118.31	300	370	350	440	630	690	780	840
				7.14	132.85	340	420	390	490	710	780	880	940
				7.92	147.36	370	470	440	550	790	860	970	1050
				8.74	162.28	-	-	-	-	870	950	1070	1160
				9.52	176.73	450	560	520	660	940	1040	1170	1260
				10.31	191.13	-	-	-	-	1020	1120	1270	1360
			20	11.13	205.98	530	660	610	770	1100	1210	1370	1470
				11.91	220.33	-	-	-	-	1180	1290	1460	1580
				12.70	234.64	600	750	700	880	1260	1380	1560	1680
				14.27	263.18	670	840	790	980	1420	1550	1750	1890
				15.88	292.06	750	940	880	1090	1580	1720	1950	2100
				17.48	320.81	830	1030	960	1200	1730	1900	2150	2310
			30	19.05	348.97	900	1120	1050	1310	1890	2070	2340	2520
				20.62	377.02	970	1220	1140	1420	2050	2240	2530	2730
				22.22	405.40	1050	1310	1220	1530	2200	2420	2730	2940
				23.83	433.65	1130	1410	1310	1640	2360	2590	2930	3000
				25.40	461.33	1200	1500	1400	1750	2520	2760	3000	3000
				26.97	488.88	1270	1590	1490	1860	2680	2930	3000	3000
			30	28.58	516.75	1350	1690	1580	1970	2840	3000	3000	3000
				30.18	544.50	1430	1780	1660	2080	2990	3000	3000	3000
				31.75	571.68	1500	1800	1750	2190	3000	3000	3000	3000

Galvanised Iron Pipes & Fittings

(6m Length)

SPIM100



Nominal Size		Class or Grade	Outside Diameter (D)	Wall Thickness t	Weight
in	mm		mm	mm	kg/m
1/2"	15	AA	21.40	1.6	0.739
3/4"	20	AA	26.90	1.6	0.982
1"	25	AA	33.80	1.8	1.364
1 1/4"	32	AA	42.30	1.8	1.739
1 1/2"	40	AA	48.40	1.8	1.994
2"	50	AA	60.20	1.8	2.503
2 1/2"	65	AA	76.00	1.9	3.368
3"	80	AA	88.70	2.1	4.330
4"	100	AA	113.20	2.2	5.917
5"	125	AA	140.60	4.0	12.364
6"	150	AA	166.10	4.0	15.069

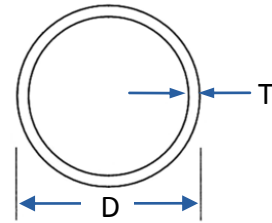
JIS G3452: 1997

8"	200	B	216.00	5.8	30.10
10"	250	B	267.00	6.6	42.40
12"	300	B	318.00	6.9	53.00
14"	350	B	355.00	7.9	67.70
16"	400	B	406.00	7.9	77.60
18"	450	B	455.00	7.9	89.20

Galvanised Iron Pipes & Fittings

(6m Length)

BS 1387 – 1985



Nominal Size		Class or Grade	Outside Diameter (D) mm	Wall Thickness t mm	Weight	Number of Threads per Inch
					Threads & Coupling kg/m	
in	mm					
LIGHT						
1/2"	15	A	21.40	2.0	0.956	14
3/4"	20	A	26.90	2.3	1.390	14
1"	25	A	33.80	2.6	2.000	11
1 1/4"	32	A	42.50	2.6	2.570	11
1 1/2"	40	A	48.40	2.9	3.270	11
2"	50	A	60.20	2.9	4.150	11
2 1/2"	65	A	76.00	3.2	5.830	11
3"	80	A	88.70	3.2	6.890	11
4"	100	A	113.90	3.6	10.000	11
MEDIUM						
1/2"	15	B	21.70	2.6	1.22	14
3/4"	20	B	27.20	2.6	1.57	14
1"	25	B	34.20	3.2	2.43	11
1 1/4"	32	B	42.90	3.2	3.13	11
1 1/2"	40	B	48.80	3.2	3.61	11
2"	50	B	60.80	3.6	5.10	11
2 1/2"	65	B	76.60	3.6	6.55	11
3"	80	B	89.50	4.0	8.54	11
4"	100	B	114.90	4.5	12.50	11
5"	125	B	140.60	5.0	17.10	11
6"	150	B	166.10	5.0	20.30	11
HEAVY						
1/2"	15	C	21.70	3.2	1.45	14
3/4"	20	C	27.20	3.2	1.88	14
1"	25	C	34.20	4.0	2.96	11
1 1/4"	32	C	42.90	4.0	3.83	11
1 1/2"	40	C	48.80	4.0	4.42	11
2"	50	C	60.80	4.5	6.26	11
2 1/2"	65	C	76.60	4.5	8.05	11
3"	80	C	89.50	5.0	10.50	11
4"	100	C	114.90	5.4	14.80	11
5"	125	C	140.60	5.4	18.40	11
6"	150	C	166.10	5.4	21.90	11

GI Fitting

Description	Size (inch)									
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"
Elbow	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Reducing Elbow	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tee	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Reducing Tee	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
Socket	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Reducing Socket	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nipple	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Reducing Nipple	-	✓	✓	✓	✓	✓	✓	✓	✓	-
Bushing	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
Union	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Plug	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cap	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Back Nut	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Short Bend	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Flange	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cross Tee	✓	✓	✓	✓	✓	✓	-	-	-	-
Elbow M/F	✓	✓	✓	✓	✓	✓	-	-	-	-
Socket M/F	✓	✓	✓	✓	✓	✓	-	-	-	-
Elbow 45D	✓	✓	✓	✓	✓	✓	-	-	-	-
Bend Female	✓	✓	✓	-	-	-	-	-	-	-



90 Elbow



90 Street Elbow



45 Elbow



Coupling



Half Coupling



Weld Nipple



Hex Nipple



Reducing Nipple



Hose Nipple



Barrel Nipple (TBE)



Tee



Cross



Nut



Round Cap



Hex Bushing



SQ Head Plug



Union



Union M/F



Union Buttweld Ends



Flange



Thread Flange

HDPE Pipes & Fittings

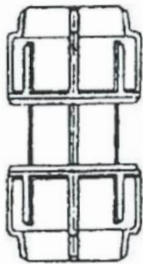
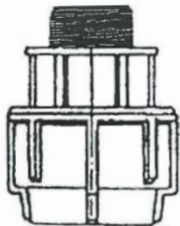
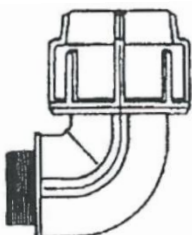
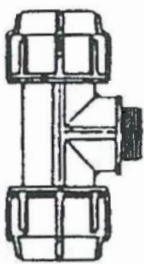
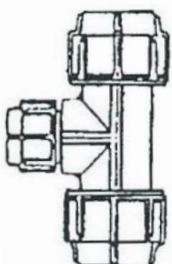
MS 1059: PART 2: 2002

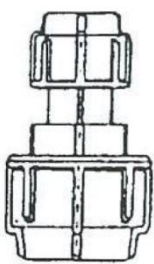
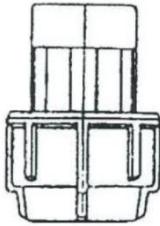
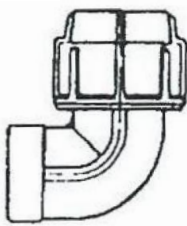
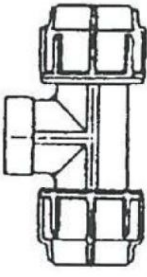
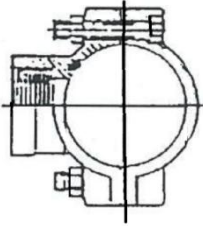
Nominal Outer Diameter		NOMINAL PRESSURE FOR DESIGN STRESS 6.3MPa AT 20°C									
		PN 6.3		PN 8		PN 10		PN 12.5		PN 16	
		STANDARD DIMENSION RATIO									
		SDR 21		SDR 17		SDR 13.6		SDR 11		SDR 9	
OD mm	NB inches	t	id	t	id	t	id	t	id	t	id
20	1/2	-	-	-	-	-	-	2.2	15.6	2.5	15
25	3/4	-	-	-	-	2.2	20.6	2.5	20	3.2	18.6
32	1	-	-	2.2	27.6	2.6	26.8	3.2	25.6	3.9	24.2
40	1.25	-	-	2.6	34.8	3.3	33.4	4.0	32.0	4.8	30.4
50	1.5	2.6	44.8	3.2	43.6	4.0	42.0	4.9	40.2	6.0	38.0
63	2.0	3.2	56.6	4.1	54.8	5.0	53.0	6.2	50.6	7.6	47.8
75	2.5	3.9	67.2	4.8	65.4	6.0	63.0	7.2	60.6	8.9	57.2
90	3.0	4.6	80.8	5.8	78.4	7.1	75.8	8.7	72.6	10.7	68.6
110	4.0	5.7	98.6	7.0	96.0	8.6	92.8	10.6	88.8	13.0	84.0
125	5.0	6.4	112.2	7.9	109.2	9.8	105.4	12.1	100.8	14.8	95.4
140	5.5	7.1	125.8	8.8	122.4	10.9	118.2	13.4	113.2	16.6	106.8
160	6.0	8.2	143.6	10.1	139.8	12.5	135.0	15.4	129.2	18.9	122.2
180	6.5	9.1	160.6	11.3	157.4	14.1	151.8	17.3	145.4	21.2	137.6
225	8.0	11.4	202.2	14.2	196.6	17.5	190.0	21.6	181.8	26.6	171.8
250	9.0	12.6	224.8	15.6	218.8	19.4	211.2	23.9	202.2	29.4	191.2
280	10.0	14.2	251.6	17.5	245.0	21.7	236.6	26.8	226.4	33.0	214.0
315	11.0	15.8	283.4	19.7	275.6	24.5	266.0	30.1	254.8	37.1	240.8
355	13.0	17.8	319.4	22.3	310.4	27.5	300.0	33.9	287.2	41.8	271.4
400	14.0	20.2	359.6	25.0	350.0	31.0	388.0	38.2	323.6	47.0	306.0
450	16.0	22.7	404.6	28.1	393.8	34.9	380.2	43.0	364.0	52.9	344.2
500	18.0	25.2	449.6	31.3	437.4	38.7	422.6	47.8	404.4	58.7	382.6

KEY	LENGTH AVAILABLE
OD = Outer Diameter	OD 20/25/32 - 100/200/300M coiled length
t = Wall Thickness	OD 50/63 - 100m coiled length
NB = Nominal Bore	OD 75/90 - 50m coiled & 6.1m straight length
id = Internal Diameter	OD 110 to 500 - 6.1m, 9m, 12.2m straight length
PN = Working Pressure	
1 bar = 14.5038 PSI	

HDPE Pipes Fittings

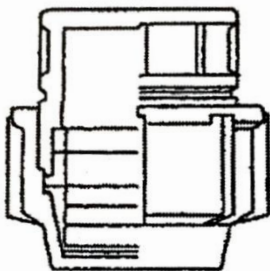
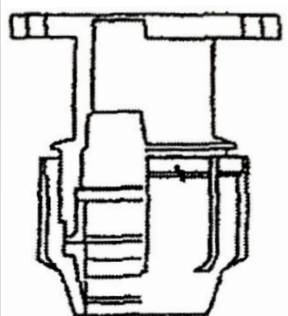
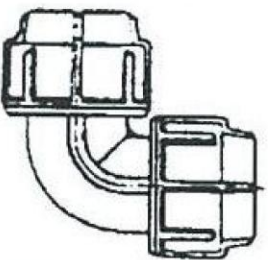
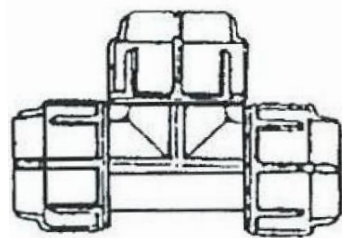
MS 1058: Part 2: 2002

				
STRAIGHT COUPLER	MALE THREADED ADAPTOR	MALE THREADED BEND	MALE THREADED TEE	REDUCING TEE
20mm x 20mm	20mm x 1/2"	20mm x 1/2"	20mm x 1/2"	25mm x 20mm
25mm x 25mm	20mm x 3/4"	20mm x 3/4"	20mm x 3/4"	32mm x 20mm
32mm x 32mm	25mm x 1/2"	25mm x 1/2"	25mm x 3/4"	32mm x 25mm
50mm x 50mm	25mm x 3/4"	25mm x 3/4"	25mm x 1"	50mm x 32mm
63mm x 63mm	20mm x 1"	25mm x 1"	32mm x 3/4"	63mm x 50mm
75mm x 75mm	32mm x 3/4"	32mm x 3/4"	32mm x 1"	90mm x 63mm
90mm x 90mm	32mm x 1"	32mm x 1"	50mm x 1 1/2"	
110mm x 110mm	50mm x 1 1/2"	50mm x 1 1/2"	63mm x 2"	
	63mm x 2"	63mm x 2"	90mm x 3"	
	75mm x 2 1/2"	90mm x 3"	110mm x 4"	
	90mm x 3"	110mm x 4"		
	110mm x 4"			

				
REDUCING COUPLER	FEMALE THREADED ADAPTOR	FEMALE THREADED BEND	FEMALE THREADED TEE	TAPPING SADDLE
25mm x 20mm	20mm x 1/2"	20mm x 1/2"	20mm x 1/2"	32mm x 3/4"
32mm x 20mm	20mm x 3/4"	20mm x 3/4"	20mm x 3/4"	32mm x 1"
32mm x 25mm	25mm x 1/2"	25mm x 1/2"	25mm x 1/2"	50mm x 3/4"
50mm x 32mm	25mm x 3/4"	25mm x 3/4"	25mm x 3/4"	50mm x 1"
63mm x 50mm	20mm x 1"	25mm x 1"	32mm x 3/4"	63mm x 3/4"
90mm x 63mm	32mm x 3/4"	32mm x 3/4"	32mm x 1"	63mm x 1"
110mm x 90mm	32mm x 1"	32mm x 1"	50mm x 1 1/2"	90mm x 3/4"
	50mm x 1 1/2"	50mm x 1 1/2"	63mm x 2"	90mm x 1"
	63mm x 2"	63mm x 2"	90mm x 3"	90mm x 2"
	75mm x 2 1/2"	90mm x 3"	110mm x 4"	110mm x 3/4"
	90mm x 3"	110mm x 4"		110mm x 1"
	110mm x 4"			110mm x 2"
				160mm x 3/4"
				160mm x 1"
				160mm x 2"
				225mm x 1"
				225mm x 2"

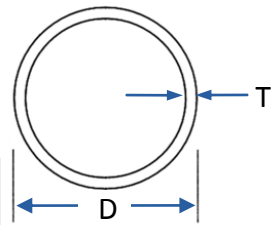
HDPE Pipes Fittings

MS 1058: Part 2: 2002

			
COUPLING	FLANGE ADAPTOR	EQUAL BEND	EQUAL TEE
20mm x 20mm	90 X 3"	20mm x 20mm	20mm x 20mm
25mm x 25mm	110 X 4"	25mm x 25mm	25mm x 25mm
32mm x 32mm		32mm x 32mm	32mm x 32mm
50mm x 50mm		50mm x 50mm	50mm x 50mm
63mm x 63mm		63mm x 63mm	63mm x 63mm
75mm x 75mm		90mm x 90mm	75mm x 75mm
90mm x 90mm		110mm x 110mm	90mm x 90mm
110mm x 110mm			110mm x 110mm

Stainless Steel Pipes

ASTM A312 WELDED AUSTENITIC STAINLESS STEEL PIPE



Nominal Size		Outside Diameter D		SCH 10			
				Nominal Wall Thickness T		Weight (kg/m)	
in	mm	in	mm	in	mm	304 / 304L	316 / 316L
1/2	15	0.840	21.34	0.083	2.11	1.011	1.017
3/4	20	1.050	26.67	0.083	2.11	1.291	1.299
1	25	1.315	33.40	0.109	2.77	2.113	2.127
1 1/4	32	1.660	42.16	0.109	2.77	2.718	2.735
1 1/2	40	1.900	48.26	0.109	2.77	3.139	3.159
2	50	2.375	60.33	0.109	2.77	3.972	3.997
2 1/2	65	2.875	73.03	0.120	3.05	5.317	5.351
3	80	3.500	88.90	0.120	3.05	6.522	6.564
3 1/2	90	4.000	101.60	0.120	3.05	7.487	7.535
4	100	4.500	114.30	0.120	3.05	8.452	8.507
5	125	5.563	141.30	0.134	3.40	11.679	11.745
6	150	6.625	168.28	0.134	3.40	13.964	14.054
8	200	8.625	219.08	0.148	3.76	20.167	20.297
10	250	10.750	273.05	0.165	4.19	28.062	28.242
12	300	12.750	323.85	0.18	4.57	36.346	36.58
14	350	14.000	355.60	0.188	4.78	41.772	42.04
16	400	16.000	406.40	0.188	4.78	47.821	48.128

Nominal Size		Outside Diameter D		SCH 40			
				Nominal Wall Thickness T		Weight kg/m	
in	mm	in	mm	in	mm	304 / 304L	316 / 316L
1/2	15	0.840	21.34	0.109	2.77	1.281	1.29
3/4	20	1.050	26.67	0.113	2.87	1.702	1.712
1	25	1.315	33.40	0.133	3.38	2.528	2.544
1 1/4	32	1.660	42.16	0.14	3.56	3.423	3.445
1 1/2	40	1.900	48.26	0.145	3.68	4.087	4.113
2	50	2.375	60.33	0.154	3.91	5.495	5.53
2 1/2	65	2.875	73.03	0.203	5.16	8.724	8.87
3	80	3.500	88.90	0.216	5.49	11.407	11.48
3 1/2	90	4.000	101.60	0.226	5.74	13.706	13.794
4	100	4.500	114.30	0.237	6.02	16.237	16.342
5	125	5.563	141.30	0.258	6.55	21.986	22.127
6	150	6.625	168.28	0.280	7.11	28.545	28.728
8	200	8.625	219.08	0.322	8.18	42.974	43.25
10	250	10.750	273.05	0.365	9.27	60.911	61.302
12	300	12.750	323.85	0.375	9.52	74.541	75.021
14	350	14.000	355.60	-	-	-	-
16	400	16.000	406.40	-	-	-	-

PVC Pipes & Fittings (6m Length)

Inch	Outer Diameter (O/D)	Thickness	Class
	mm	mm	
1-1/4"	42	1.8 - 2.0	O
1-1/2"	48	1.8 - 2.1	O
2"	60	1.8 - 2.1	O
2-1/2"	76	1.8 - 2.1	O
3"	89	1.8 - 2.1	O
4"	102	1.8 - 2.1	O
4"	102	2.9 - 3.3	O
4"	114	2.3 - 2.6	O
6"	165	3.1 - 3.4	O
8"	218	3.1 - 3.7	O

Inch	Outer Diameter (O/D)	Thickness	Class
	mm	mm	
2"	60	2.5 - 2.8	C
2-1/2"	76	3.0 - 3.3	C
3"	89	3.5 - 4.1	C
4"	114	4.5 - 5.2	C

Inch	Outer Diameter (O/D)	Thickness	Class
	mm	mm	
3"	89	2.9 - 3.3	B
4"	114	3.4 - 3.8	B
6"	165	4.5 - 5.0	B
8"	216	5.3 - 5.5	B

Inch	Outer Diameter (O/D)	Thickness	Class
	mm	mm	
1/2"	22	1.4 - 1.5	D
3/4"	26	1.5 - 1.6	D
1"	34	1.7 - 1.9	D
1-1/4"	42	2.2 - 2.4	D
1-1/2"	48	2.5 - 2.8	D
2"	60	3.1 - 3.4	D
2-1/2"	76	3.9 - 4.3	D
3"	89	4.6 - 5.1	D
4"	114	6.0 - 6.6	D
6"	165	8.8 - 9.7	D
8"	218	10.3 - 11.9	D

Inch	Outer Diameter (O/D)	Thickness	Class
	mm	mm	
1/2"	22	1.7 - 1.9	O
3/4"	26	1.9 - 2.1	O
1"	34	2.2 - 2.4	O
1-1/4"	42	2.7 - 3.0	O
1-1/2"	48	3.1 - 3.4	O
2"	60	3.9 - 4.3	O
3"	89	5.7 - 6.6	O
4"	114	7.3 - 8.4	O

Inch	Outer Diameter (O/D)	Thickness	Class
	mm	mm	
1/2"	22	2.8 - 3.1	AW
3/4"	26	2.9 - 3.2	AW
1"	34	3.4 - 3.8	AW
1-1/4"	42	3.6 - 4.0	AW
1-1/2"	48	3.7 - 4.1	AW
2"	60	4.5	AW
2-1/2"	76	4.5	AW
3"	89	5.5	AW
4"	114	7.0	AW
6"	165	8.5	AW

UPVC Pipes & Fittings

(6m Length)

Standard Size

Nominal Size		Outside Diameter	Thickness (mm)	
in	mm	mm	Standard	SIRIM
2"	50	55	1.8	2.1
3"	75	82.5	1.8	3
4"	100	110	1.9	3.2
6"	150	165	2.8	3.2 BS
8"	200	220	3	5.4 BS

BS3503

Nominal Size	Outside Diameter (D)		Wall Thickness											
			Class B			Class C			Class D			Class E		
			60m Head of Water			90m Head of Water			120m Head of Water			150m Head of Water		
			Average Value	Individual Value		Average Value	Individual Value		Average Value	Individual Value		Average Value	Individual Value	
	Min mm	Max mm	Max. mm	Min mm	Max mm	Max mm	Min mm	Max mm	Max mm	Min mm	Max mm	Max mm	Min mm	Max mm
3/8"	17.0	17.3	-	-	-	-	-	-	-	-	-	1.9	1.5	1.9
1/2"	21.2	21.5	-	-	-	-	-	-	-	-	-	2.1	1.7	2.1
3/4"	26.6	26.9	-	-	-	-	-	-	-	-	-	2.5	1.9	2.5
1"	33.4	33.7	-	-	-	-	-	-	-	-	-	2.7	2.2	2.7
1 1/4"	42.1	42.4	-	-	-	-	-	-	2.7	2.2	2.7	3.2	2.7	3.2
1 1/2"	48.1	48.4	-	-	-	-	-	-	3.0	2.5	3.0	3.7	3.1	3.7
2"	60.2	60.5	-	-	-	3.0	2.5	3.0	3.7	3.1	3.7	4.5	3.9	4.5
2 1/2"	75.0	75.3	-	-	-	3.5	3.0	3.5	4.5	3.9	4.5	5.5	4.8	5.5
3"	88.7	89.1	3.4	2.9	3.4	4.1	3.5	4.1	5.3	4.6	5.3	6.5	5.7	6.6
4"	114.1	114.5	4.0	3.4	4.0	5.2	4.5	5.2	6.8	6.0	6.9	8.3	7.3	8.4
5"	140.0	140.4	4.4	3.8	4.4	6.3	5.5	6.4	8.3	7.3	8.4	10.1	9.0	10.4
6"	168.0	168.5	5.2	4.5	5.2	7.5	6.6	7.6	9.9	8.8	10.2	12.1	10.8	12.5
7"	193.5	194.0	6.0	5.2	6.0	8.7	7.7	8.9	11.4	10.1	11.7	13.9	12.4	14.3
8"	218.8	219.4	6.1	5.3	6.1	8.8	7.8	9.0	11.6	10.3	11.9	14.1	12.6	14.5
9"	244.1	244.8	6.7	5.9	6.8	9.8	8.7	10.0	12.9	11.5	13.3	15.8	14.1	16.3
10"	272.6	273.4	7.5	6.6	7.6	10.9	9.7	11.2	14.3	12.8	14.8	17.5	15.7	18.1
12"	323.4	324.3	8.8	7.8	9.0	12.9	11.5	13.3	17.0	15.2	17.5	20.8	18.7	21.6
14"	355.0	356.0	9.6	8.5	9.8	14.1	12.6	14.5	18.6	16.7	19.2	22.8	20.5	23.6
16"	405.9	406.9	10.9	9.7	11.2	16.2	14.5	16.7	21.1	19.0	21.9	26.0	23.4	27.0
18"	456.7	457.7	12.3	11.0	12.7	18.2	16.3	18.8	23.8	21.4	24.6	-	-	-
20"	507.5	508.5	13.7	12.2	14.1	20.2	18.1	20.9	-	-	-	-	-	-
22"	558.3	559.3	15.0	13.4	15.5	22.1	19.9	22.9	-	-	-	-	-	-
24"	609.1	610.1	16.3	14.6	16.8	24.1	21.7	25.0	-	-	-	-	-	-

PVC / UPVC Fittings

Description	Size (mm)										
	15	20	25	32	40	50	65	80	100	165	200
Elbow 90 Degree	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Elbow 45 Degree	-	-	-	-	-	✓	✓	✓	✓	✓	✓
Equal Tee 'D'	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D/E Socket	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
P/T Socket	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-
Valve Socket	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
P/T Elbow	✓	✓	✓	✓	✓	✓	-	-	-	-	-
End Cap	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Plug	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-
Tank Connector	✓	✓	✓	✓	✓	✓	-	-	-	-	-
Flange Socket	-	-	-	-	✓	✓	✓	✓	✓	✓	✓
Flange Rubber Gasket	-	-	-	-	✓	✓	✓	✓	✓	✓	✓
P/T Tee	✓	✓	-	-	-	-	-	-	-	-	-
Long Bend	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
U Pipe Clip	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-
Elbow 90L (SWV)	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓
Elbow 45L (SWV)	-	-	-	-	✓	✓	✓	✓	✓	✓	✓
Equal Tee (SWV)	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓
D/E Socket (SWV)	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓
Y/Tee (SWV)	-	-	-	-	-	✓	✓	✓	✓	✓	✓
Cleaning Plug	-	-	-	-	-	✓	-	-	-	✓	✓

Description	Size (mm)									
	20 x 15	25 x 15	25 x 20	32 x 15	32 x 20	32 x 25	40 x 15	40 x 20	40 x 25	40 x 32
R. Socket	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R. Tee	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R. Bush	✓	✓	✓	✓	✓	✓	-	-	-	-
R. Elbow	✓	✓	✓	-	-	-	-	-	-	-

Description	Size (mm)										
	50 x 15	50 x 20	50 x 25	50 x 32	50 x 40	65 x 40	65 x 50	80 x 25	80 x 40	80 x 50	80 x 65
R. Socket	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓
R. Tee	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R. Bush	-	-	✓	✓	✓	-	-	-	-	-	✓
R. Socket [SWV]	-	-	-	-	-	✓	✓	-	✓	✓	-
R. Tee [SWV]	-	-	-	-	-	✓	✓	-	✓	✓	-

Description	Size (mm)							
	100 x 40	100 x 50	100 x 80	165 x 80	165 x 100	200 x 100	200 x 165	10" x 8"
R. Socket	✓	✓	✓	✓	✓	✓	✓	✓
R. Tee	✓	✓	✓	✓	✓	✓	✓	-
R. Bush	-	-	-	-	-	-	-	-
R. Socket [SWV]	-	✓	✓	✓	✓	✓	✓	✓
R. Tee [SWV]	✓	✓	✓	✓	✓	✓	✓	-

Description	Size (mm)				Description	Size (mm)			
	102	125	165	200		102 x 40	102 x 50	102 x 80	114 x 102
Elbow 90	✓	✓	-	-	Reducing Socket [SWV]	-	✓	✓	-
Elbow 45	✓	-	-	-	Reducing Tee [SWV]	✓	✓	-	-
Equal Tee	✓	-	-	-	Reducing Bush	-	-	-	-
D/E Socket	✓	-	✓	✓	Reducing Socket / Bush	-	-	-	✓
Tee	✓	-	-	-	Reducing Y/Tee	✓	✓	✓	✓

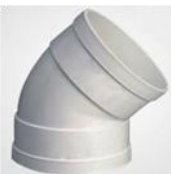
PVC Pipe Fittings

90 Elbow 'D'	
45 Elbow 'D'	
P/T Elbow	
Tee 'D'	
P/T Socket	
Valve Socket	
D/E Socket	
End Cap	
Flange	
Rubber Gasket For Flange	
P/T Flange	
Socket SWV	

Jam Nut	
Plug	
Cleaning Plug	
Pipe Clip	
Long Bend	
Cross Tee 'D' Welding	
R. Socket 'D'	
R. Tee 'D'	
R. Bush	
R. Elbow	
R. Socket SWV	
R. Tee SWV	

90 Elbow SWV	
45 Elbow SWV	
Tee SWV	
Y Tee SWV	
Tank Connector	

UPVC Pipe Fittings

Bend		Y Tee		Bose Connector Screw Type	
Bend W/Door		Y Tee W/Door		R. Socket	
45 Bend		'P' Trap		R. Tee	
45 Bend W/Door		'P' Trap Plain		Underground Straight Socket	
Tee		'S' Trap		R. Tee W/Door	
Tee W/Door		Offset		R. Bush	
Straight Socket		End Cap		Floor Gully Trap	
Pipe Sleeve		Dome Grating		Boss Connector Clip Type	
P/T Socket		Underground Bend		Underground Tee	
Vent Cowl		Underground 45 Bend			

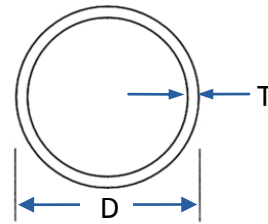
UPVC Conduit Pipe

Nominal Size		Thickness mm	Length ft
in	mm		
3/4"	19	1.5	10'
1"	25	1.7	10'

UPVC Connecting Pipe

Nominal Size		Thickness mm	Length ft
in	mm		
3/4"	22	1.5	10'

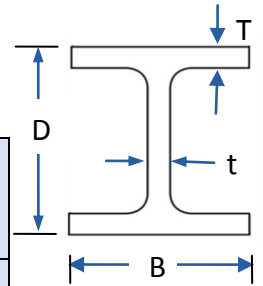
Galvanised Conduit Pipe Aurora Brand BS 31: 1940 (3.81M)



Nominal Size		Outside Diameter (D) mm	Wall Thickness T mm	Calculated Weight Without Coupler kg/m	Number of Threads per inch	Length of Threads mm
in	mm					
3/4"	19	18.90	1.6	0.70	16	14.29
1"	25	25.20	1.6	0.95	16	17.46
1 1/4"	32	31.60	1.6	1.20	16	19.05
1 1/2"	38	37.90	1.8	1.64	14	20.64
2"	50	50.60	2.0	2.44	14	23.81

Universal Beams & Columns

Metric Units

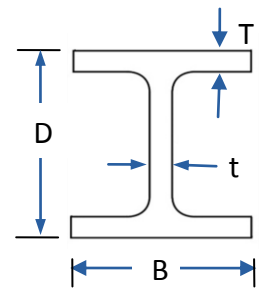


Section Size		Weight	Height	Width	Thickness		Section Area
			D	B	Web t	Flange T	
mm	in	kg/m	mm	mm	mm	mm	cm ²
100 X 50	4 X 2	9.30	100	50	5.0	7	11.85
100 X 100	4 X 4	17.20	100	100	6.0	8	21.90
125 X 60	5 X 2 1/2	13.20	125	60	6.0	8	16.84
125 X 125	5 X 5	23.80	125	125	6.5	9	30.31
150 X 75	6 X 3	14.00	150	75	5.0	7	17.85
150 X 100	6 X 4	21.10	148	100	6.0	9	26.84
150 X 150	6 X 6	31.50	150	150	7.0	10	40.14
175 X 90	7 X 3 1/2	18.10	175	90	5.0	8	23.04
175 X 125	7 X 5	23.30	169	125	5.5	8	29.65
175 X 175	7 X 7	40.20	175	175	7.5	11	51.21
200 X 100	8 X 4	17.80	198	99	4.5	7	23.18
		20.90	200	100	5.5	8	27.16
200 X 150	8 X 6	30.60	194	150	6.0	9	39.01
200 X 200	8 X 8	49.90	200	200	8.0	12	63.53
		56.20	200	204	12.0	12	71.53
		65.70	208	202	10.0	16	83.69
250 X 125	10 X 5	25.10	248	124	5.0	8	32.68
		29.00	250	125	6.0	9	37.66
250 X 175	10 X 7	43.60	244	175	7.0	11	56.24
250 X 250	10 X 10	63.80	244	252	11.0	11	82.06
		66.50	248	249	8.0	13	84.70
		71.80	250	250	9.0	14	92.18
		81.60	250	255	14.0	14	104.70
300 X 150	12 X 6	32.00	298	149	5.5	8	40.80
		36.70	300	150	6.5	9	46.78
300 X 200	12 X 8	55.80	294	200	8.0	12	72.38
		65.40	298	201	9.0	14	83.36
300 X 300	12 X 12	83.50	294	302	12.0	12	107.70
		87.00	298	299	9.0	14	110.80
		93.00	300	300	10.0	15	119.80
		105.00	300	305	15.0	15	134.80
		106.00	304	301	11.0	17	134.80
350 X 175	14 X 7	41.20	346	174	6.0	9	52.68
		49.40	350	175	7.0	11	63.14
350 X 250	14 X 10	69.20	336	249	8.0	12	88.15
		79.70	340	250	9.0	14	101.50
350 X 350	14 X 14	105.00	338	351	13.0	13	135.30
		113.00	344	348	10.0	16	146.00
		129.30	344	354	16.0	16	166.00
		135.00	350	350	12.0	19	173.90
		154.20	350	357	19.0	19	198.40
		159.00	356	352	14.0	22	202.00

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Universal Beams & Columns

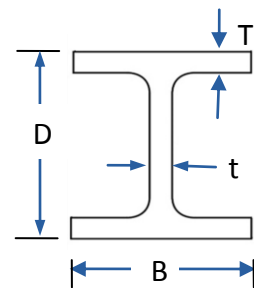
Metric Units



Section Size		Weight	Height D	Width B	Thickness		Section Area
					Web t	Flange T	
mm	in	kg/m	mm	mm	mm	mm	cm ²
400 X 200	16 X 8	56.10	396	199	7	11	72.16
		65.40	400	200	8	13	84.12
400 X 300	16 X 12	94.30	386	299	9	14	120.10
		105.00	390	300	10	16	136.00
400 X 400	16 X 16	140.00	388	402	15	15	178.50
		147.00	394	398	11	18	186.80
		168.00	394	405	18	18	214.40
		172.00	400	400	13	21	218.70
		197.00	400	408	21	21	250.70
		200.00	406	403	16	24	254.90
		232.00	414	405	18	28	295.50
		283.00	428	407	20	35	360.70
		415.00	458	417	30	50	528.60
		605.00	498	432	45	70	770.10
450 X 200	18 X 8	65.10	446	199	8	12	84.30
		74.90	450	200	9	14	96.76
450 X 300	18 X 12	106.00	434	299	10	15	135.00
		120.80	440	300	11	18	157.40
500 X 200	20 X 8	77.90	496	199	9	15	101.30
		88.20	500	200	10	16	114.20
		102.00	506	201	11	19	131.30
500 X 300	20 X 12	111.00	482	300	11	15	145.50
		125.00	488	300	11	18	163.50
600 X 200	24 X 8	92.40	596	199	10	14	120.50
		103.00	600	200	11	17	134.40
		118.00	606	201	12	20	152.50
		134.00	612	202	13	23	107.70
600 X 300	24 X 12	133.00	582	300	12	17	174.50
		147.00	588	300	12	20	192.50
		170.00	594	302	14	23	222.40
700 X 300	28 X 12	166.00	692	300	13	20	211.50
		185.00	700	300	13	24	235.50
		215.00	708	302	14	28	273.60
800 X 300	32 X 12	191.00	792	300	14	22	243.40
		210.00	800	300	14	26	267.40
		241.00	808	302	16	30	307.60
900 X 300	36 X 12	213.00	890	299	15	23	207.90
		243.00	900	300	16	28	309.80
		286.00	912	302	18	34	364.00

Universal Beams & Columns

Inch Units

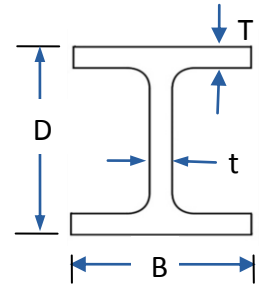


Nominal Size	Weight		Height D		Width B		Thickness		Section Area
							Web t	Flange T	
mm (in.)	lb/ft	kg/m	in	mm	in	mm	mm	mm	cm ²
W4 102 X 102 (4 X 4)	13	19.35	4.16	105.70	4.060	103.10	7.11	8.76	24.71
W5 127 X 76 (5 X 3)	9	13.00	5.00	127.00	3.000	76.20	4.20	7.60	16.80
W5 127 X 127 (5 X 5)	16	23.81	5.01	127.30	5.000	127.00	6.10	9.14	30.39
	19	28.28	5.15	130.80	5.030	127.80	6.86	10.29	35.87
W6 152 X 89 (6 X 3 1/2)	11	16.00	6.00	152.40	3.500	88.90	4.60	7.70	20.50
W6 152 X 102 (6 X 4)	9	13.39	5.90	149.90	3.940	100.10	4.32	5.46	17.29
	12	17.86	6.03	153.20	4.000	101.60	5.84	7.11	22.90
	16	23.81	6.28	159.50	4.030	102.40	6.60	10.29	30.58
W6 152 X 152 (6 X 6)	15	22.50	5.99	152.10	5.990	152.10	5.84	6.60	28.58
	15.5	23.00	6.00	152.40	6.000	152.40	6.10	6.80	29.80
	20	29.76	6.20	157.50	6.020	152.90	6.60	9.27	38.87
	25	37.20	6.38	162.10	6.080	154.40	8.13	11.56	47.35
W7 178 X 102 (7 X 4)	13	19.00	7.00	177.80	4.000	101.60	4.70	7.90	24.20
W8 203 X 102 (8 X 4)	10	14.88	7.89	200.40	3.940	100.10	4.32	5.21	19.10
	13	19.35	7.99	202.90	4.000	101.60	5.80	6.48	24.77
	15	22.50	8.11	206.00	4.015	102.00	6.22	8.00	28.65
	15.5	23.00	8.00	203.20	4.000	101.60	5.20	9.30	29.00
W8 203 X 133 (8 X 5 1/4)	17	25.30	8.00	203.20	5.250	133.40	5.84	7.80	32.30
	18	26.79	8.14	206.80	5.250	133.40	5.84	8.38	33.94
	20	30.00	8.14	206.80	5.268	133.80	6.30	9.60	38.00
	21	31.30	8.28	210.30	5.270	133.90	6.35	10.16	39.74
W8 203 X 165 (8 X 6 1/2)	24	35.72	7.93	201.40	6.495	165.00	6.22	10.16	45.68
	28	41.67	8.06	204.70	6.535	166.00	7.24	11.81	52.23
W8 203 X 203 (8 X 8)	31	46.00	8.00	203.20	8.000	203.10	7.24	11.05	58.90
	35	52.09	8.12	206.20	8.020	203.70	7.87	12.57	66.45
	40	60.00	8.25	209.60	8.070	205.00	9.14	14.22	75.48
	48	71.00	8.50	215.90	8.110	206.00	10.16	17.40	90.97
	58	86.00	8.75	222.20	8.220	208.80	12.95	20.57	110.30
	67	100.00	9.00	228.60	8.280	210.30	14.48	23.75	127.10
W10 254 X 102 (10 X 4)	12	17.86	9.87	250.70	3.960	100.60	4.83	5.33	22.84
	15	22.00	10.00	253.70	4.000	101.60	5.84	6.86	28.45
	17	25.00	10.11	256.80	4.010	101.90	6.10	8.38	32.19
	19	28.00	10.24	260.10	4.020	102.10	6.35	10.03	36.26
W10 254 X 146 (10 X 5 3/4)	21	31.25	9.90	251.50	5.750	146.10	6.10	8.60	40.00
	22	32.74	10.17	258.30	5.750	146.00	6.10	9.14	41.87
	25	37.20	10.08	256.00	5.762	146.40	6.40	10.90	47.50
	26	38.69	10.33	262.40	5.770	146.60	6.60	11.10	49.10
	29	43.00	10.22	259.60	5.799	147.30	7.30	12.70	55.10
	30	44.80	10.47	265.90	5.819	147.80	7.62	12.90	57.10

(continued on next page....)

Universal Beams & Columns

Inch Units

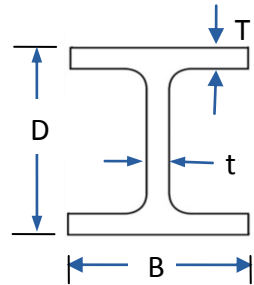


Nominal Size	Weight		Height D		Width B		Thickness		Section Area
							Web t	Flange T	
mm (in.)	lb/ft	kg/m	in	mm	in	mm	mm	mm	cm ²
W10 254 X 203 (10 X 8)	33	49.11	9.73	247.10	7.960	202.20	7.37	11.00	62.64
	39	58.04	9.92	252.00	7.985	202.80	8.00	13.40	74.19
	45	66.97	10.10	256.50	8.020	203.70	8.89	15.70	85.81
W10 254 X 254 (10 X 10)	89	132.00	10.88	276.40	10.275	261.00	15.60	25.30	168.90
	100	149.00	11.11	282.20	10.340	262.60	17.27	28.45	189.70
	112	167.00	11.36	288.50	10.415	264.50	19.18	31.75	212.30
W10 254 X 254 (10 X 10)	88	131.00	10.84	275.30	10.265	260.70	15.37	25.15	167.10
	77	115.00	10.60	269.20	10.190	258.80	13.46	22.10	145.80
	72	107.00	10.50	266.70	10.170	258.30	13.00	20.50	136.60
	68	101.20	10.40	264.20	10.130	257.30	11.94	19.56	129.00
	60	89.29	10.22	259.60	10.080	256.00	10.67	17.27	113.50
	54	80.36	10.09	256.30	10.030	254.80	9.40	15.60	101.90
	49	73.00	9.98	253.50	10.000	254.00	8.64	14.20	92.90
W12 305 X 127 (12 X 5)	22	33.00	12.31	321.70	4.030	102.40	6.60	10.80	41.81
	19	28.28	12.16	308.90	4.005	101.70	5.97	8.89	35.94
	16.5	25.00	12.00	304.80	4.000	101.60	5.80	6.80	31.40
	16	23.81	11.99	304.50	3.990	101.30	5.59	6.73	30.39
	14	20.83	11.91	302.50	3.970	100.80	5.08	5.71	26.84
W12 305 X 127 (12 X 5)	32	48.00	12.22	310.40	4.930	125.20	8.90	14.00	60.80
	28	42.00	12.07	306.60	4.893	124.30	8.00	12.10	53.20
	25	37.00	11.96	303.80	4.864	123.50	7.20	10.70	47.50
W12 305 X 165 (12 X 6 1/2)	36	54.00	12.24	310.90	6.565	166.80	7.70	13.70	68.40
	35	52.09	12.50	317.50	6.560	166.60	7.62	13.20	66.45
	31	46.00	12.09	307.10	6.525	165.70	6.70	11.80	58.90
	30	44.64	12.34	313.40	6.520	165.60	6.60	11.10	56.71
	27	40.00	11.96	303.80	6.500	165.10	6.10	10.20	51.50
	26	38.70	12.22	310.40	6.490	164.80	5.84	9.65	49.35
W12 305 X 203 (12 X 8)	50	74.41	12.19	309.60	8.080	205.20	9.40	16.20	94.84
	45	66.97	12.06	306.30	8.045	204.30	8.51	14.60	85.16
	40	59.53	11.94	303.30	8.005	203.30	7.49	13.00	76.13
W12 305 X 254 (12 X 10)	58	86.31	12.19	309.60	10.010	254.30	9.14	16.20	109.70
	53	78.87	12.06	306.30	9.995	253.90	8.76	14.60	100.60

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Universal Beams & Columns

Inch Units

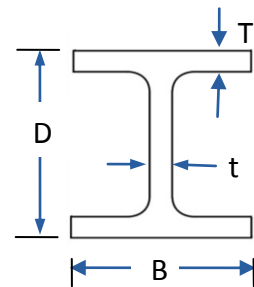


Nominal Size	Weight		Height		Width		Thickness		Section Area
							Web t	Flange T	
mm (in.)	lb/ft	kg/m	in	mm	in	mm	mm	mm	cm ²
W12 305 X 305 (12 X 12)	336	500.00	16.82	427.20	13.385	340.00	45.08	75.06	637.40
	305	453.90	16.32	414.50	13.235	336.20	41.27	68.71	578.10
	278	413.70	15.85	402.60	13.140	333.80	38.86	62.74	528.40
	252	375.00	15.41	391.40	13.005	330.30	35.43	57.15	477.40
	230	342.30	15.05	382.30	12.895	327.50	32.64	52.58	436.80
	210	312.50	14.71	373.60	12.790	324.90	29.97	48.26	398.70
	190	283.00	14.38	365.30	12.670	321.80	26.92	44.07	360.00
	170	253.00	14.03	356.40	12.570	319.30	24.38	39.62	322.60
	161	240.00	13.83	352.60	12.515	317.90	23.00	37.70	305.60
	152	226.20	13.74	348.20	12.480	317.00	22.10	35.56	288.40
	136	202.40	13.41	340.60	12.400	315.00	20.07	31.75	257.40
	133	198.00	13.38	339.90	12.365	314.10	19.20	31.40	252.30
	120	179.00	13.12	333.20	12.320	312.90	18.03	28.07	227.70
	106	158.00	12.89	327.40	12.220	310.40	15.49	25.15	201.30
	96	143.00	12.71	322.80	12.160	308.90	13.97	22.86	182.00
	92	137.00	12.62	320.40	12.155	308.70	13.80	21.70	174.60
	87	129.50	12.53	318.30	12.125	308.00	13.08	20.57	165.20
	79	118.00	12.38	314.50	12.080	306.80	11.94	18.67	149.70
	72	107.10	12.25	311.10	12.040	305.80	10.92	17.02	136.10
	65	97.00	12.12	307.30	12.000	304.80	9.91	15.30	123.20
W14 356 X 127 (14 X 5)	26	39.00	13.91	353.30	5.025	127.60	6.48	10.60	49.61
	22	33.00	13.74	349.00	5.000	127.00	5.84	8.51	41.87
W14 356 X 171 (14 X 6 3/4)	45	67.00	14.33	364.00	6.820	173.20	9.10	15.70	85.40
	38	57.00	14.10	358.10	6.770	172.00	7.87	13.00	72.26
	34	51.00	13.98	355.10	6.745	171.30	7.24	11.50	64.52
	30	45.00	13.84	351.50	6.730	170.90	6.86	9.78	57.10
W14 356 X 203 (14 X 8)	53	78.87	13.92	353.60	8.060	204.70	9.40	16.70	100.60
	48	71.43	13.79	350.30	8.030	204.00	8.64	15.10	90.97
	43	63.99	13.66	347.00	7.995	203.10	7.75	13.40	81.29
W14 356 X 254 (14 X 10)	82	122.00	14.31	363.50	10.130	257.30	12.95	21.72	155.50
	74	110.10	14.17	359.90	10.070	255.80	11.43	19.94	140.60
	68	101.20	14.04	356.60	10.035	254.90	10.54	18.36	129.00
	61	90.78	13.89	352.80	9.995	253.90	9.52	16.30	115.50
W14 356 X 368 (14 X 14 1/2)	136	202.00	14.75	374.70	14.740	374.40	16.80	27.00	257.90
	132	196.40	14.66	372.40	14.725	374.00	16.38	26.16	250.30
	120	179.00	14.48	367.80	14.670	372.60	14.99	23.88	227.70
	119	177.00	14.50	368.30	14.650	372.10	14.50	23.80	225.70
	109	162.20	14.32	363.70	14.605	371.00	13.33	21.84	206.50
	103	153.00	14.25	362.00	14.575	370.20	12.60	20.70	195.20
	99	147.30	14.16	359.70	14.565	370.10	12.32	19.81	187.70
	90	134.00	14.02	356.10	14.520	370.00	11.18	18.03	171.00
	87	129.00	14.00	355.60	14.500	368.80	10.70	17.50	164.90

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Universal Beams & Columns

Inch Units

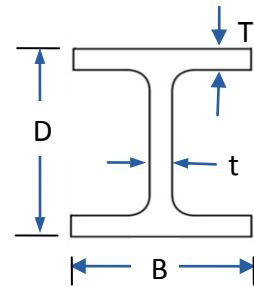


Nominal Size	Weight		Height D		Width B		Thickness		Section Area
							Web t	Flange T	
mm (in.)	lb/ft	kg/m	in	mm	in	mm	mm	mm	cm ²
W14 256 X 406 (14 X 16)	730	1086.00	22.42	569.50	17.890	454.40	77.98	124.70	1387.00
	665	989.60	21.64	549.70	17.650	448.30	71.88	114.80	1265.00
	605	900.30	20.92	531.40	17.415	442.30	65.91	105.60	1148.00
	550	818.50	20.24	514.10	17.200	436.90	60.45	97.03	1045.00
	500	744.10	19.60	497.80	17.010	432.10	55.63	88.90	948.40
	455	677.10	19.02	483.10	16.835	427.60	57.18	81.53	864.50
	426	634.00	18.67	474.20	16.695	424.10	47.62	77.09	806.40
	398	592.30	18.29	464.60	16.590	421.40	44.96	72.26	754.80
	370	551.00	17.92	455.20	16.475	418.50	42.04	67.56	703.20
	342	509.00	17.54	455.50	16.360	415.50	39.12	62.74	651.60
	314	467.00	17.19	436.60	16.235	412.40	35.90	58.00	595.50
	311	463.00	17.12	434.80	16.230	412.20	35.81	57.40	589.70
	283	421.10	16.74	425.20	16.110	409.20	32.77	52.58	537.40
	264	393.00	16.50	419.10	16.025	407.00	30.60	49.20	500.90
	257	382.50	16.38	416.10	15.995	406.30	29.84	48.01	487.70
	233	347.00	16.04	407.40	15.890	403.60	27.18	43.69	441.90
	228	340.00	16.00	406.40	15.865	403.00	26.50	42.90	432.70
	211	314.00	15.72	399.30	15.800	401.30	24.89	39.62	400.00
	193	287.20	15.48	393.20	15.710	399.00	22.61	36.58	366.40
	176	262.00	15.22	386.60	15.650	397.50	21.08	33.27	334.20
	159	237.00	14.98	380.50	15.565	395.40	18.92	30.23	301.30
	158	235.00	15.00	381.00	15.550	395.00	18.50	30.20	299.80
	145	216.00	14.78	375.40	15.550	393.70	17.27	27.69	275.50
W16 406 X 140 (16 X 51/2)	31	46.13	15.88	403.40	5.525	140.30	6.98	11.10	58.84
	26	39.00	15.69	398.50	5.500	139.70	6.35	8.76	49.55
W16 406 X 178 (16 X 7)	57	85.00	16.43	417.30	7.120	180.80	10.92	18.16	108.40
	50	74.41	16.26	413.00	7.070	179.60	9.65	16.00	94.84
	45	67.00	16.13	409.70	7.035	178.70	8.76	14.30	85.81
	40	60.00	16.01	406.70	6.995	177.70	7.75	12.80	76.13
	36	54.00	15.86	402.80	6.985	177.40	7.49	10.90	68.39
W16 406 X 260 (16 X 10 1/4)	100	148.80	16.97	431.00	10.425	264.80	14.86	25.02	189.70
	89	132.40	16.75	425.40	10.365	263.30	13.33	22.22	169.00
	77	114.60	16.52	419.60	10.295	261.50	11.56	19.30	145.80
	67	99.71	16.33	414.80	10.235	260.00	10.03	16.89	127.10
W18 457 X 152 (18 X 6)	55	82.00	18.31	465.10	6.142	153.50	10.70	18.90	104.50
	50	74.00	18.16	461.30	6.011	152.70	9.90	17.00	95.00
	46	68.46	18.06	458.70	6.060	153.90	9.14	15.30	87.10
	45	67.00	18.00	457.20	5.982	151.90	9.10	15.00	85.40
	40	60.00	17.90	454.70	6.015	152.80	8.00	13.30	76.31
	35	52.09	17.70	449.60	6.000	152.40	7.62	10.80	66.45

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Universal Beams & Columns

Inch Units

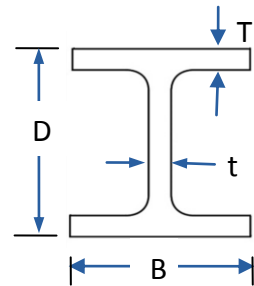


Nominal Size	Weight		Height		Width		Thickness		Section Area
							Web	Flange	
mm (in.)	lb/ft	kg/m	in	mm	in	mm	t	T	cm ²
W18 457 X 191 (18 X 7 1/2)	71	106.00	18.47	469.10	7.635	193.90	12.57	20.57	134.20
	66	98.00	18.40	467.40	7.592	192.80	11.40	19.60	125.30
	65	97.00	18.35	466.10	7.590	192.80	11.43	19.05	123.20
	60	89.29	18.24	463.30	7.555	191.90	10.54	17.65	113.50
	55	82.00	18.11	460.00	7.530	191.30	9.91	16.00	104.50
	50	74.41	17.99	456.90	7.495	190.40	9.02	14.40	94.84
	45	67.00	17.86	453.60	7.476	189.90	8.50	12.70	85.40
W18 457 X 279 (18 X 11)	119	177.10	18.97	481.80	11.265	286.10	16.64	26.92	226.50
	106	157.70	18.73	475.70	11.200	284.50	14.99	23.88	200.60
	97	144.40	18.59	472.20	11.145	283.10	13.59	22.10	183.90
	86	128.00	18.39	467.10	11.090	281.70	12.19	19.56	163.20
	76	113.10	18.21	462.50	11.035	280.30	10.80	17.27	143.90
W21 533 X 165 (21 X 6 1/2)	57	85.00	21.06	534.90	6.555	166.50	10.29	16.51	107.70
	50	74.41	20.83	529.10	6.530	165.90	9.65	13.50	94.84
	44	66.00	20.66	524.80	6.500	163.10	8.89	11.40	83.87
W21 533 X 210 (21 X 8 1/4)	93	138.40	21.62	549.10	8.420	213.90	14.73	23.62	176.10
	83	123.50	21.43	544.30	8.355	212.20	13.08	21.21	156.80
	82	122.00	21.44	544.60	8.342	211.90	12.80	21.30	155.80
	73	109.00	21.24	539.50	8.295	210.70	11.56	18.80	138.70
	68	101.20	21.13	536.70	8.270	210.10	10.92	17.40	129.00
	62	92.27	20.99	533.10	8.240	209.30	10.16	15.62	118.10
	55	82.00	20.80	528.30	8.216	208.70	9.60	13.20	104.40
W21 533 X 311 (21 X 12 1/4)	147	218.80	22.06	560.30	12.510	317.80	18.29	29.21	278.70
	132	196.40	21.83	554.50	12.440	316.00	16.51	26.29	250.30
	122	181.60	21.68	550.70	12.390	314.70	15.24	24.38	231.60
	111	165.20	21.51	546.40	12.340	313.40	13.97	22.22	211.00
	101	150.30	21.36	542.50	12.290	312.20	12.70	20.32	192.30
W24 610 X 178 (24 X 7)	62	92.27	23.74	603.00	7.040	178.80	10.92	14.99	117.40
	61	91.00	23.72	602.50	7.023	178.40	10.60	15.00	116.50
	55	82.00	23.57	598.70	7.005	177.90	10.03	12.83	104.50
W24 610 X 229 (24 X 9)	94	140.00	24.31	617.50	9.065	230.20	13.08	22.22	178.70
	84	125.00	24.10	612.10	9.020	229.10	11.94	19.56	159.40
	76	113.10	23.92	607.60	8.990	228.30	11.18	17.27	144.50
	68	101.20	23.73	602.70	8.965	227.70	10.54	14.86	129.70
W24 610 X 305 (24 X 12)	160	238.00	24.92	633.00	12.264	311.50	18.60	31.40	303.80
	120	179.00	24.31	617.50	12.088	307.00	14.10	23.60	277.90
	100	149.00	24.00	609.60	12.000	304.80	11.90	19.70	190.10
W24 610 X 324 (24 X 12 3/4)	162	241.10	25.00	635.00	12.955	329.10	17.91	30.99	307.70
	146	217.30	24.74	628.40	12.900	327.70	16.51	27.69	277.40
	131	194.90	24.48	621.80	12.855	326.50	15.37	24.38	248.40
	117	174.10	24.26	616.20	12.800	325.10	13.97	21.59	221.90
	104	154.80	24.06	611.10	12.750	323.80	12.70	19.05	197.40

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Universal Beams & Columns

Inch Units



Nominal Size	Weight		Height		Width		Thickness		Section Area
							Web t	Flange T	
mm (in.)	lb/ft	kg/m	in	mm	in	mm	mm	mm	cm ²
W27 686 X 254 (27 X 10)	114	170.00	27.29	693.20	10.070	255.80	14.48	23.62	216.10
	102	152.00	27.09	688.10	10.015	254.40	13.08	21.08	193.50
	94	140.00	26.92	683.80	9.990	253.70	12.45	18.92	178.70
	84	125.00	26.71	678.40	9.960	253.00	11.68	16.26	160.00
W27 686 X 356 (27 X 14)	178	264.90	27.81	706.40	14.085	357.80	18.41	30.23	337.40
	161	239.60	27.59	700.80	14.020	356.10	16.76	27.43	305.80
	146	217.30	27.38	695.50	13.965	354.70	15.37	24.76	276.80
W27 762 X 267 (30 X 10 1/2)	132	197.00	30.31	769.90	10.545	267.80	15.62	25.40	251.00
	124	185.00	31.17	766.30	10.515	267.10	14.86	23.62	235.50
	116	173.00	30.01	762.30	10.495	266.60	14.35	21.59	220.60
	108	161.00	29.83	757.70	10.475	266.10	13.84	19.30	204.50
	99	147.30	29.65	753.10	10.450	265.40	13.21	17.02	187.70
W30 762 X 381 (30 X 15)	211	314.00	30.94	785.90	15.105	383.70	19.68	33.40	400.00
	191	284.20	30.68	779.30	15.040	382.00	18.03	30.10	361.90
	173	257.50	30.44	773.20	14.985	380.60	16.64	27.05	327.70
W33 838 X 292 (33 X 11 1/2)	152	226.20	33.49	850.60	11.565	293.80	16.13	26.80	288.40
	141	210.00	33.30	845.60	11.535	293.00	15.37	24.38	268.40
	130	194.00	33.09	840.50	11.510	292.40	14.73	21.72	247.10
	118	176.00	32.86	834.60	11.480	291.60	13.97	18.80	223.90
W33 838 X 400 (33 X 15 3/4)	241	358.60	34.18	868.20	15.860	402.80	21.08	35.56	457.40
	221	328.90	33.93	861.80	15.805	401.40	19.68	32.38	419.40
	201	299.10	33.68	855.50	15.745	399.90	18.16	29.21	381.30
W36 917 X 305 (36 X 12)	210	313.00	36.69	931.90	12.180	309.40	21.08	34.54	398.70
	194	289.00	36.49	926.80	12.115	307.70	19.43	32.00	367.70
	182	271.00	36.33	922.80	12.075	306.70	18.41	29.97	345.80
	170	253.00	36.17	918.70	12.030	305.60	17.27	27.94	322.60
	160	238.10	36.01	914.70	12.000	304.80	16.51	25.91	303.20
	150	224.00	35.85	910.60	11.975	304.20	15.87	23.88	285.20
	135	201.00	35.55	903.00	11.950	303.50	15.24	20.07	256.10
W36 914 X 419 (36 X 16 1/2)	300	447.00	36.74	933.20	16.655	423.00	24.00	42.67	569.70
	280	417.00	36.52	927.60	16.595	421.50	22.48	39.88	531.60
	260	388.00	36.26	921.00	16.550	420.40	21.34	36.58	493.50
	245	365.00	36.08	916.40	16.510	419.40	20.32	34.29	465.20
	230	343.00	35.90	911.90	16.470	418.30	19.30	32.00	436.10

(Standard Specification)

Type of Fabric	Ref. No	MALAYSIAN Standard Ref. No.	Cross Section Area		Main Wire		Cross Wire		Mass Per Unit Area
			Main	Cross	Size	Spacing	Size	Spacing	
			mm ² /m	mm ² /m	mm	mm	mm	mm	kg/m ²
SQUARE MESH FABRIC	A10	A393	393	393	10	200	10	200	6.16
	A9	A318	318	318	9	200	9	200	4.99
	A8	A252	252	252	8	200	8	200	3.95
	A7	A193	193	193	7	200	7	200	3.02
	A6	A142	142	142	6	200	6	200	2.22
	A5	A98	98	98	5	200	5	200	1.54
	A4	A63	63	63	4	200	4	200	0.99
RECT STRUCTURE MESH FABRIC	B12	B1131	1131	252	12	100	8	200	10.86
	B10	B785	785	252	10	100	8	200	8.14
	B9	B636	636	252	9	100	8	200	6.97
	B8	B503	503	252	8	100	8	200	5.93
	B7	B385	385	193	7	100	7	200	4.53
	B6	B283	283	193	6	100	7	200	3.73
	B5	B196	196	193	5	100	7	200	3.05
LONG MESH FABRIC	C10	C785	785	71	10	100	6	400	6.72
	C9	C636	636	71	9	100	6	400	5.55
	C8	C503	503	49	8	100	5	400	4.34
	C7	C385	385	49	7	100	5	400	3.41
	C6	C283	283	49	6	100	5	400	2.61
	C5	C196	196	49	5	100	5	400	1.93
SMALL SQUARE MESH FABRIC	DA10	DA785	785	785	10	100	10	100	12.32
	DA9	DA636	636	636	9	100	9	100	9.98
	DA8	DA503	503	503	8	100	8	100	7.90
	DA7	DA385	385	385	7	100	7	100	6.04
	DA6	DA283	283	283	6	100	6	100	4.44
	DA5	DA196	196	196	5	100	5	100	3.08
	DA4	DA126	126	126	4	100	4	100	1.97

(Commercial Quality)

REF. No	Size (Thickness x Width x Length)	Weight kg/m ²
A5.5	5.5MM X 2M X 4.8M	1.52
A6.5	6.5MM X 2M X 4.8M	2.15
A7.5	7.5MM X 2M X 4.8M	2.90
A8.5	8.5MM X 2M X 4.8M	4.24
A9.5	9.5MM X 2M X 4.8M	4.74

BRC (Roll)

REF. No	Thickness	Size	
	mm	Width X Length	
610	2.00	7' X 45M	30KG
66C	2.70	7' X 45M	60KG
66	3.60	7' X 45M	85KG
65	4.00	7' X 45M	105KG
65BS	5.20	7' X 45M	

Galvanised Wire Mesh

REF. No	Thickness	Size
	mm	ft
28	4.0	4' X 8'
29	3.5	4' X 8'
210	3.0	4' X 8'
211	2.8	4' X 8'
212	2.4	4' X 8'
213	2.2	4' X 8'

28	4.0	6' 9" X 12"
29	3.5	6' 9" X 12"
210	3.0	6' 9" X 12"
213	2.2	6' 9" X 12"

Galvanized Welded Wire Mesh

Gauge	Wire Dia. mm	Mesh	Width x Length (W x L)
14	2.10	1" x 2"	3' & 4' x 100'
15	1.82	1" x 2"	3' & 4' x 100'
16	1.65	1" x 2"	3' & 4' x 100'
17	1.47	1" x 2"	3' & 4' x 100'
14	2.10	1" x 1"	3' x 100'
15	1.82	1" x 1"	3' x 100'
16	1.65	1" x 1"	3' x 100'
17	1.47	1" x 1"	3' x 100'
18	1.24	1" x 1"	3' x 100'
19	1.06	1" x 1"	3' x 100'
16	1.65	3/4" x 3/4"	3' x 100'
17	1.47	3/4" x 3/4"	3' x 100'
18	1.24	3/4" x 3/4"	3' x 100'
19	1.06	3/4" x 3/4"	3' x 100'
20	0.88	3/4" x 3/4"	3' x 100'
17	1.47	1/2" x 1"	3' x 100'
18	1.24	1/2" x 1"	3' x 100'
19	1.06	1/2" x 1"	3' x 100'
18	1.24	1/2" x 1/2"	3' x 100'
19	1.06	1/2" x 1/2"	3' x 100'
20	0.88	1/2" x 1/2"	3' x 100'
21	0.81	1/2" x 1/2"	3' x 100'
22	0.71	1/2" x 1/2"	3' x 100'

PVC & Galvanised Wire

PVC		Galvanised		
SWG	mm	SWG	mm	kg/roll
8G	3	4G	6.0	45
10G	4	6G	5.0	45
		8G	4.0	45
		10G	3.0	45
		11G	2.8	45
		12G	2.4	45
		13G	2.2	45
		14g	2.0	45/15
		16G	1.6	45/15
		18G	1.2	13
		19G	1.0	13
		20G	0.9	13
		24G	0.6	13

Hexagonal Netting

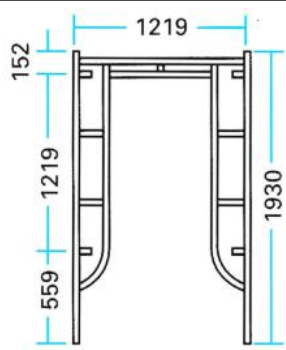
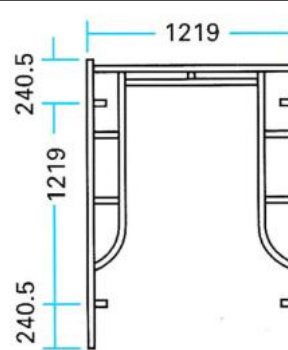
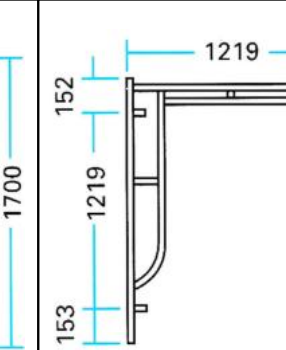
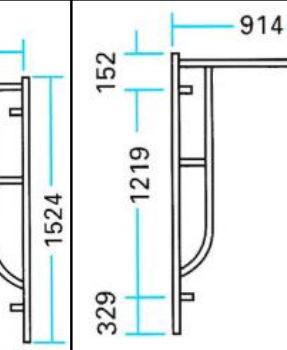
BWG	Mesh	Width x Length
24	1/2"	3" x 60"
25 24 22	1"	3", 4", 5", 6" x 60"
25 24 22	1 1/2"	3", 4", 5", 6" x 60"
25 24 22	2"	3", 4", 5", 6" x 60"

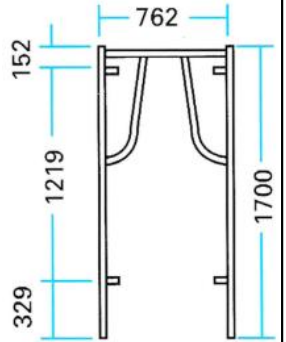
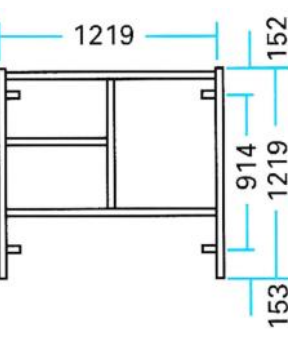
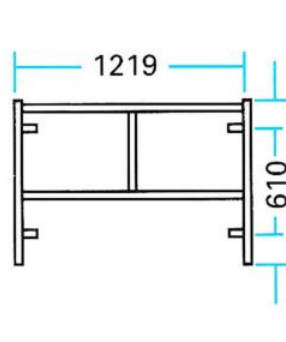
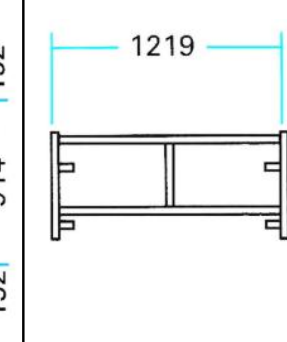
Chain Link Fencing

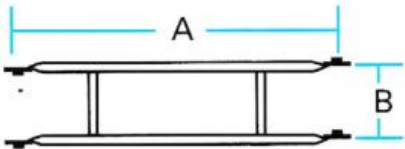
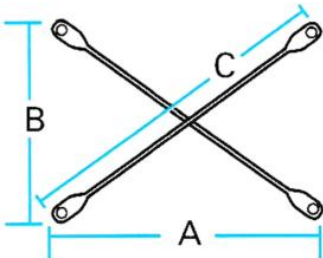
Wire Size		Size mm	Hole Size		Height Length
			inch	mm	
PVC	8G	4.0	2"	55	Cut to Size Available
	10G	3.0			
	8G	4.0	2 1/2"	70	
	10G	3.0			
GI	8G	4.0	2"	55	
	9G	3.5			
	10G	3.0			
	11G	2.8			
	12G	2.4			
	13G	2.2			
	8G	4.0	2 1/2"	70	
	9G	3.5			
	10G	3.0			
	11G	2.8			
	12G	2.4			
	13G	2.2			

Scaffolding Items

Frame Type Scaffolding

A 4064 Main Frame	A 4055B Main Frame	A 405 Main Frame	A 3055 Main Frame
			

A 2555 Main Frame	A 404L Ladder Frame	A 403L Ladder Frame	A 4017L Ladder Frame
			

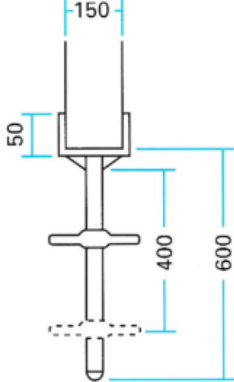
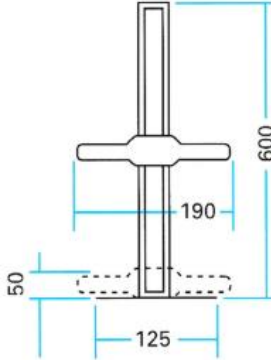
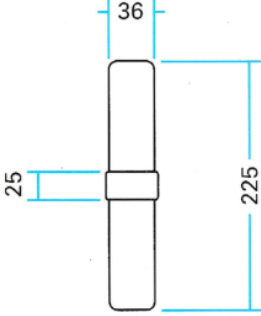
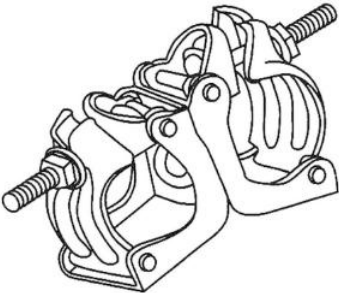
A 8040 Horizontal Frame	Cross Braces												
													
<table><tr><th>Code</th><th>A</th><th>B</th></tr><tr><td>A-8020</td><td>1829</td><td>450</td></tr><tr><td>A-8030</td><td>1829</td><td>745</td></tr><tr><td>A-8040</td><td>1829</td><td>1050</td></tr></table>	Code	A	B	A-8020	1829	450	A-8030	1829	745	A-8040	1829	1050	
Code	A	B											
A-8020	1829	450											
A-8030	1829	745											
A-8040	1829	1050											

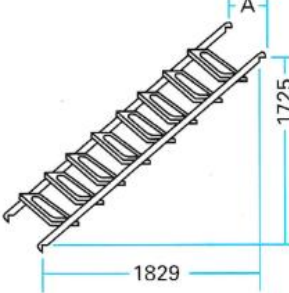
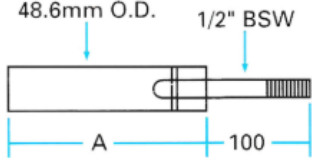
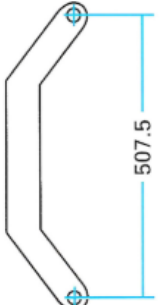
Item Code	A	B	C
A-14	1829	1219	2198
A-19	1829	914	2045
A-08	1829	610	1928
A-16S	1829	280	1850
A-11	1524	129	1952
A-18	1524	914	1777
A-9	1524	610	1642
A-16	1524	280	1549
A-13	1219	1219	1724
A-012	1219	914	1524
A-12	1219	610	1363
A-12S	1219	280	1251
Special lengths available on request			

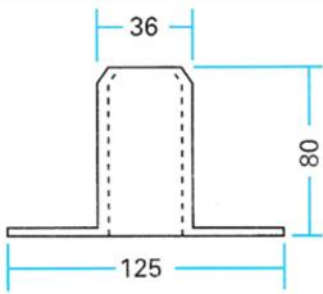
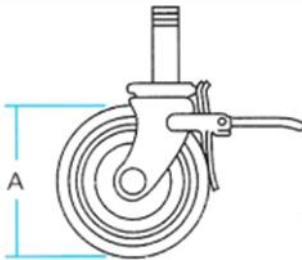
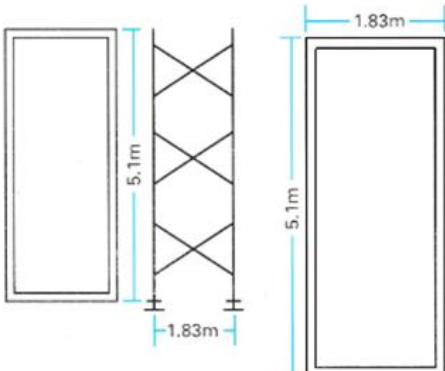
	SPAN BETWEEN FRAMES		
Used For	1829	1524	1219
All Size Main Frame	A-14	A-11	A-13
1219 Height Ladder Frame	A-19	A-18	A-012
914 Height Ladder Frame	A-08	A-9	A-12
490 Height Ladder Frame	A-16S	A-16	A-12S

*Special sizes are available on request. All above sizes are subject to modifications without prior notice.

Frame Type Scaffolding

A752HTS U-Head	A752TS Jack Base	A20 Joint Pin	A486S/R Free Size Clamp
			 d = 42.7mm – 48.6mm

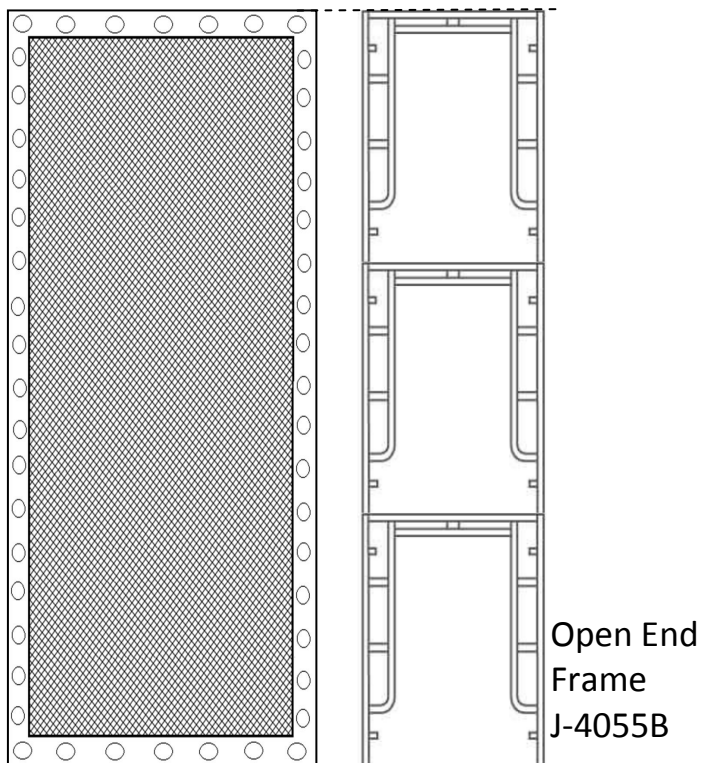
BKN6 Catwalk	K3055S Stair	WT500 Wall Tie	A506 Arm Lock
	 Code K 4055S A 650 K 3055S A 450	 Code WT 400 A 400 WT 500 A 500 WT 600 A 600	

A15 Base Plate	Caster Wheel	Safety Net
	 Code A 726 A 150 A 728 A 200	

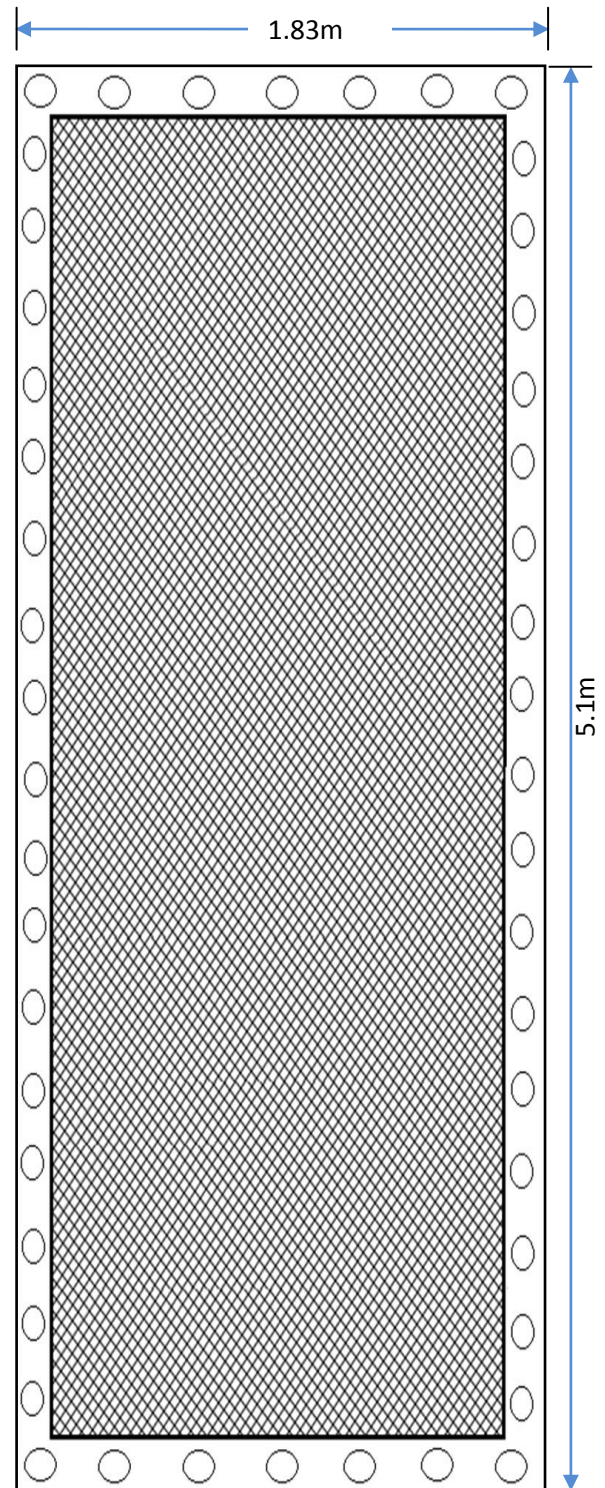
Scaffolding Safety Netting



The safety net is a prefabricated frame of 'Synthetic Fabric' netting which is fixed onto the outside of the scaffold as a protection against falling debris.



- Easy to install and dismantle
- Durable
- Reduces work site hazard
- Comes in the size of 5.1m x 1.83m



BS Pipes & Fittings

Double Coupler	Swivel Coupler	Sleeve Coupler	Putlog Coupler
			

Joint Pin	Beam Clamp	Scaffold Tubes (Hot Dipped Galvanised)
		

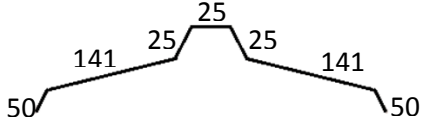
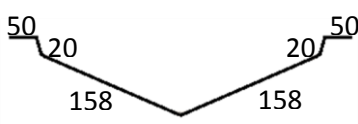
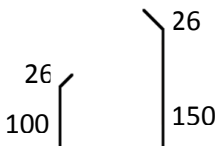
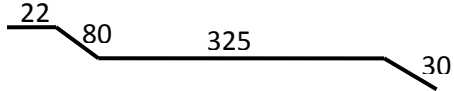
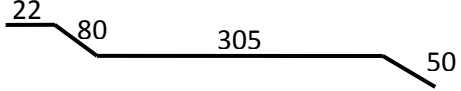
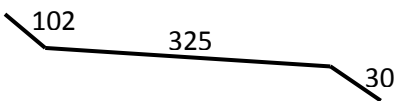
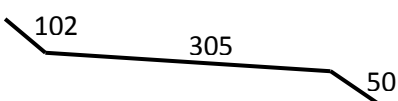
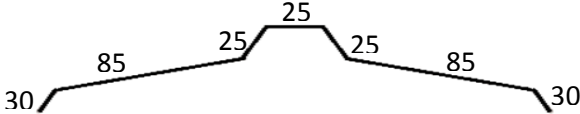
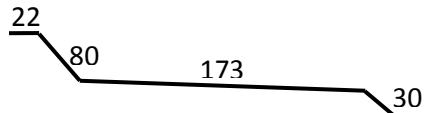
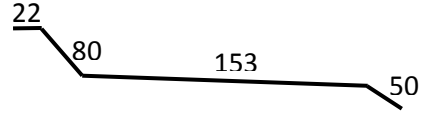
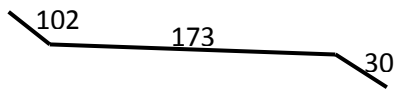
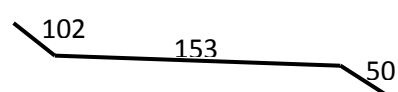
Plywood

Thickness		Size	Glue Type	Grade	Pcs/Bundle
mm	in				
2.7	1/8"	4' X 8'	MR	White PVC	250
3.6	1.25/8"	4' X 8'	MR	Laminated	170
2.7	1/8"	4' X 8'	MR	BB/CC	250
2.7	1/8"	4' X 8'	MR	UTY	250
2.7	1/8"	4' X 8'	WBP	UTY	250
3.6	1.25/8"	4' X 8'	MR	BB/CC	170
3.6	1.25/8"	4' X 8'	MR	UTY	170
3.6	1.25/8"	4' X 8'	WBP	BB/CC	170
3.6	1.25/8"	4' X 8'	WBP	UTY	170
5.2	1/4"	4' X 8'	MR	BB/CC	125
5.2	1/4"	4' X 8'	MR	UTY	125
5.2	1/4"	4' X 8'	WBP	BB/CC	125
5.2	1/4"	4' X 8'	WBP	UTY	125
9.0	3/8"	4' X 8'	MR	BB/CC	100
9.0	3/8"	4' X 8'	MR	UTY	100
9.0	3/8"	4' X 8'	MR	B2	100
9.0	3/8"	4' X 8'	WBP	UTY	100
9.0	3/8"	4' X 8'	WBP	B2	100
12.0	1/2"	4' X 8'	T1.5	BB/CC	70
12.0	1/2"	4' X 8'	T1.5	B2	70
12.0	1/2"	4' X 8'	MR	BB/CC	70
12.0	1/2"	4' X 8'	MR	UTY	70
12.0	1/2"	4' X 8'	WBP	BB/CC	70
12.0	1/2"	4' X 8'	WBP	UTY	70
12.0	1/2"	4' X 8'	WBP	B2	70
15.0	5/8"	4' X 8'	T1.5	BB/CC	60
15.0	5/8"	4' X 8'	T1.5	UTY	60
15.0	5/8"	4' X 8'	T1.5	B2	60
15.0	5/8"	4' X 8'	WBP	BB/CC	60
15.0	5/8"	4' X 8'	WBP	UTY	60
15.0	5/8"	4' X 8'	WBP	B2	60
18.0	3/4"	4' X 8'	MR	BB/CC	50
18.0	3/4"	4' X 8'	MR	UTY	50
18.0	3/4"	4' X 8'	WBP	BB/CC	50
18.0	3/4"	4' X 8'	WBP	UTY	50
18.0	3/4"	4' X 8'	WBP	B2	50

Roofing

Color Metal Roofing

Thickness Width: 760mm TCT: +/- 0.03mm			32G 0.26mm RM	30G 0.30mm RM	28G 0.36mm RM	0.41mm RM	26G 0.46mm RM	0.48mm RM
Superdek/ Zindek	PPGI		✓	✓	✓	✓	✓	✓
Tile	PPGI		-	-	✓	✓	✓	✓
Curve	PPGI		-	-	✓	✓	✓	✓
Flat Sheet	PPGI	HARD	✓	✓	✓	✓	✓	✓
	-914mm	SOFT	-	-	✓	✓	✓	✓
	PPGI - 1219mm		-	-	✓	✓	✓	✓
ACCESSORIES - Ridge Capping Valley Gutter - Rain Gutter Flashing/ Fascia								
PPGI	Size: 18" x 8' / pc		✓	✓	✓	✓	✓	✓
PPGI	Size: 12" x 8' / pc		✓	✓	✓	✓	✓	✓

Accessories Size: 18" x 8' (in mm)	
   Ridge Capping Valley Gutter Rain Gutter	
Concrete Flashing	 
Wood Flashing	 
Accessories Size: 12" x 8' (in mm)	
Ridge Capping	
Concrete Flashing	 
Wood Flashing	 

Colour Available:-

- YK Blue, Sapphire Blue, Marine Blue, Lazurite Blue, Wira Blue
- YK Green
- Safari Beige
- YK Red, Tomato Red, Autumn/Brick Red
- Sunrise
- Dark Grey
- Snow White

Galvanised Corrugated Sheet

Thickness		Size		Coverage	Weight	Packing
SWG	mm	Length	Width	Area	kg/pc	Crate/pc
35G	0.18	6'	27"	24"	2.362	600
35G	0.18	7'	27"	24"	2.756	500
35G	0.18	8'	27"	24"	3.149	500
35G	0.18	9'	27"	24"	3.542	500
35G	0.18	10'	27"	24"	3.936	400
35G	0.18	12'	27"	24"	4.723	300



Galvanised Capping

Thickness		Size		Weight
SWG	mm	Length	Width	kg/pc
35G	0.18	6'	12"	0.788
35G	0.18	8'	12"	1.051
30G	0.30	6'	12"	1.313
30G	0.30	8'	12"	1.751
28G	0.36	6'	12"	1.576
28G	0.36	8'	12"	2.102

Nails

Wire Nail

Size		Packing
inch	mm	kg/box
1"	25	20
1 1/2"	38	20
2"	50	20
2 1/2"	65	20
3"	75	20
4"	100	20
5"	125	20
6"	150	20



Roofing Nail

Size		Packing
inch	mm	kg/box
2"	50	20
2 1/2"	65	20



Concrete Nail

Size		Packing
inch	mm	kg/box
1"	25	20
1 1/2"	38	20
2"	50	20
2 1/2"	65	20
3"	75	20
4"	100	20



Spandek Screw

Size		Type
inch	mm	
3/4"	20	Mild Steel
2"	50	
2"	50	Wood
2 1/2"	65	



Notes: All the tables shown are for reference only.

Water Storage Tank

HDPE Water Tank

Opening Type:	C	= Center Manhole
	D	= Detachable Dome Cover
	S	= Side Manhole
	B	= Both Center and Side Manhole

*Note: Inlet & Outlet

A) Cylindrical Tank

Model		Capacity		Diameter		Height	
		Gallons	Litres	mm	inches	mm	inches
SMALL	R2.8CD	60	280	560	22	1300	52
	R5.67CD	130	600	760	30	1500	60
	R6.8CD	150	680	830	33	1400	56
	R7.5CD	165	750	820	33	1650	66
	R9.0CC	200	900	992	40	1445	58
	R13.6CC	300	1360	1200	48	1535	66
	R16CC	350	1600	1430	57	1300	52
	R18CC	400	1800	1305	52	1665	67
	R27CC(2)	600	2700	1460	58	1830	73
MEDIUM	R40CC(3)	900	4000	1750	70	2055	82
	R64CC	1400	6400	2000	80	2450	98
	R72CC(2)	1600	7200	2000	80	2900	116
LARGE	R90CB	2000	9000	2500	100	2585	103
	R135CB(2)	3000	13500	3000	120	2900	116
	R180CB	4000	18000	3000	120	3265	131
	R230CB	5000	23000	3000	120	3730	194
	R230CC	5000	23000	4000	160	2250	90
	R300CB	6700	30000	3000	120	4860	149
	R360CB	8000	36000	3600	144	4295	172
	R450CB(2)	10000	45000	3700	148	5430	217

[1 inch = 25mm]



B) Round Taper Tank

Model	Capacity		Top Diameter		Bottom Diameter		Height	
	Gallons	Litres	mm	inches	mm	inches	mm	inches
R2.3TD(4)	50	230	895	36	705	28	650	26
R3.6TD(2)	80	360	1110	44	800	32	795	32
R4.5TD(2)	100	450	1195	48	900	36	810	32
R6.8TD(2)	150	680	1340	54	1025	41	925	37
R9.0TD(2)	200	900	1430	57	1185	47	975	39
R11TD(3)	250	1100	1540	62	1210	48	1000	40
R16TD	350	1600	1650	66	1310	52	1300	52
R18TD(3)	400	1800	1650	66	1200	48	1545	62

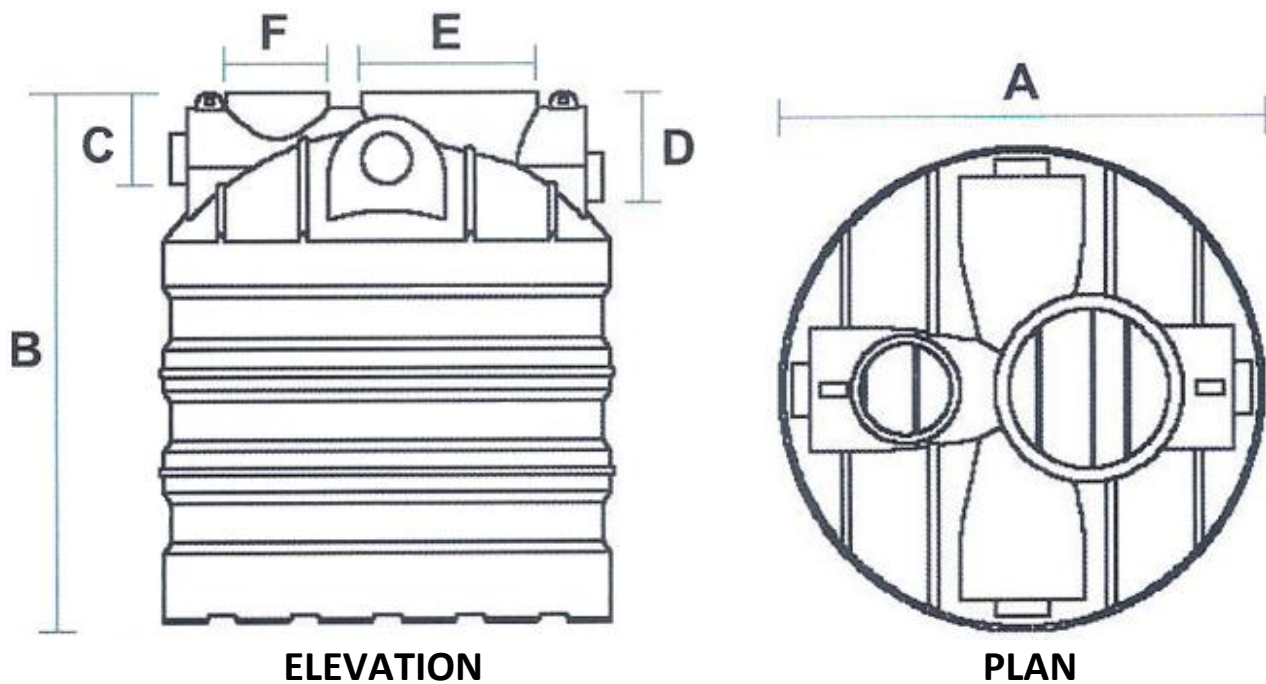


C) Rectangular & Square Tank

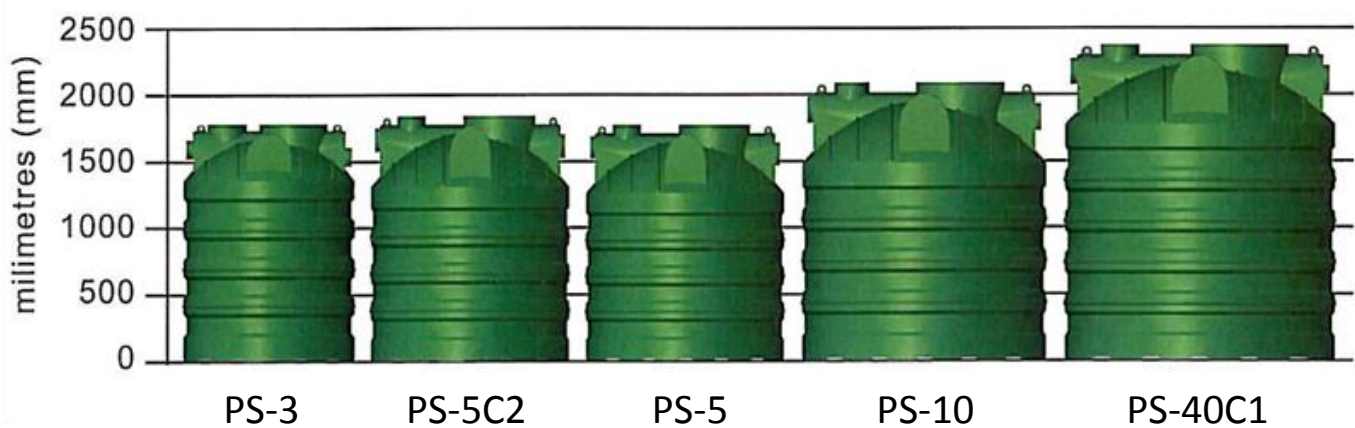
Model	Capacity		Top Diameter		Bottom Diameter		Height	
	Gallons	Litres	mm	inches	mm	inches	mm	inches
RT2.0CB	50	230	1100	44	600	24	330	13
RT2.3CC	50	230	900	36	700	28	450	18
RT4.5CB(2)	100	450	1300	52	800	32	525	21
SQ6.8CB	150	680	1100	44	1100	44	650	26
SQ9.0CB(2)	200	900	1220	49	1220	49	680	27



HDPE Septic Tank



MODEL		PS-3	PS-5C2	PS-5	PS-10	PS-40C1
POPULATION EQUIVALENT	For Black & Grey Water	3-5	5-9	5-11	9-16	16-30
	For Black Water Only	5-9	9-16	9-2c	16-25	25-60
EFFECTIVE VOLUME	litres	> 2200	> 2700	> 3400	> 5800	> 8800
INLET/OUTLET DIAMETER	mm	100	100	100	100	100/150
DETENTION TIME	hours	45	33	40	36	55
DIMENSIONS						
A	mm diameter	1450	1625	1850	2150	2400
B	mm	1760	1740	1730	2020	2435
C	mm	210	220	220	210	238
D	mm	260	270	270	270	313
E	mm	510dia.	530dia.	530dia.	530x630	530x675
F	mm	310dia.	310dia.	310dia.	310dia.	310dia.



Reinforced Concrete Piles

FJ Concrete Piles are high strength precast reinforced concrete segmental piles of square section designed to meet the foundation needs of building and engineering structures.

FJ Concrete Piles are designed and manufactured in accordance with **MS 1314 : Part 3: 2004 Standard Class S, J and M** and **MS 1314 : Part 6 : 2004 Standard** for small piles class RCS-1 and **Perakuan Pematuhan Standard (PPS) – CIDB**.

The nominal sizes and lengths that available are as in following tables:-

Size (mm)	CLASS	Pile Length (m)			
		3m	6m	9m	12m
150 x 150	RCS-1	✓	✓	-	-
175 x 175	RCS-1	✓	✓	-	-
200 x 200	S	✓	✓	-	-
	J	✓	✓	-	-
	M	✓	✓	-	-
250 X 250	S	✓	✓	✓	✓
	J	✓	✓	✓	✓
	M	✓	✓	✓	✓
300 X 300	S	✓	✓	✓	✓
	J	✓	✓	✓	✓
	M	✓	✓	✓	✓





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