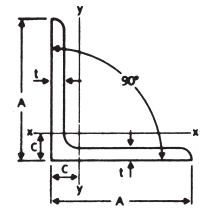


# STEEL, VALVE & PIPE FITTING

Angles  
Equal  
Metric Units

Section size AxB	Thickness t	Unit Weight M	Reduce of fillet r	Section Area A	Centre of Gravity Cx=Cy	Axis			
						lx=ly	ix=iy	iv	Zx=Zy
mm	mm	kg/m	mm	cm <sup>2</sup>	cm	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>
20 x 20	3.0	0.885	4.0	1.127	0.60	0.61	0.59	0.38	0.28
25 x 25	3.0	1.12	4.0	1.427	0.719	0.797	0.747	0.483	0.448
	5.0	1.76	4.0	2.246	0.79	1.18	0.72	0.48	0.69
30 x 30	3.0	1.36	4.0	1.727	0.844	1.42	0.908	0.585	0.661
	5.0	2.16	4.0	2.746	0.92	2.14	0.88	0.57	1.03
40 x 40	3.0	1.83	4.5	2.336	1.09	3.53	1.23	0.79	1.21
	4.0	2.42	6.0	3.079	1.12	4.48	1.21	0.78	1.56
	5.0	2.95	4.5	3.755	1.17	5.42	1.20	0.774	1.91
	6.0	6.52	6.0	4.48	1.20	6.33	1.19	0.77	2.26
45 x 45	4.0	2.74	6.5	3.492	1.24	6.50	1.36	0.88	2.00
	5.0	3.38	6.5	4.302	1.28	7.91	1.36	0.874	2.46
	6.0	3.96	6.5	5.044	1.32	9.00	1.34	0.86	2.83
50 x 50	3.0	2.33	7.0	2.96	1.31	6.86	1.52	0.99	1.86
	4.0	3.06	6.5	3.892	1.37	9.06	1.53	0.983	2.49
	5.0	3.77	6.5	4.802	1.41	11.1	1.52	0.976	3.08
	6.0	4.43	6.5	5.644	1.44	12.6	1.50	0.963	3.55
	8.0	5.78	6.5	7.364	1.52	16.1	1.48	0.96	4.62
60 x 60	5.0	4.55	6.5	5.802	1.66	19.6	1.84	1.18	4.52
	6.0	5.42	6.5	6.91	1.69	22.8	1.82	1.17	5.29
	7.0	6.21	6.5	7.914	1.73	25.9	1.81	1.16	6.06
65 x 65	5.0	5.00	8.5	6.637	1.77	25.3	1.99	1.28	5.35
	6.0	5.91	8.5	7.527	1.81	29.4	1.98	1.27	6.26
	8.0	7.66	8.5	9.761	1.88	36.8	1.94	1.25	7.96
	10.0	9.42	8.5	12.0	1.96	44.4	1.92	1.25	9.79
70 x 70	6.0	6.38	8.5	8.127	1.93	37.1	2.14	1.37	7.33
	7.0	7.38	8.5	9.40	1.97	42.4	2.12	1.37	8.43
	8.0	8.29	8.5	10.56	2.01	46.6	2.10	1.35	9.34
	10.0	10.20	8.5	13.0	2.09	56.4	2.08	1.35	11.5
75 x 75	6.0	6.85	8.5	8.727	2.06	46.1	2.30	1.48	8.47
	8.0	9.03	10.0	11.5	2.13	58.9	2.26	1.46	11.0
	9.0	9.96	8.5	12.69	2.17	64.4	2.25	1.45	12.1
	12.0	13.00	8.5	16.56	2.29	81.9	2.22	1.44	15.7
80 x 80	6.0	7.32	8.5	9.327	2.18	56.4	2.46	1.58	9.7
	7.0	8.49	10.0	10.8	2.21	64.2	2.44	1.57	11.1
	8.0	9.66	10.0	12.3	2.26	72.3	2.42	1.55	12.6
	9.0	10.7	10.0	13.59	2.30	79.2	2.41	1.55	13.9
	12.0	13.9	10.0	17.76	2.41	101.0	2.38	1.54	18.1
90 x 90	6.0	8.28	10.0	10.55	2.42	80.7	2.77	1.78	12.3
	7.0	9.59	10.0	12.22	2.46	93.0	2.76	1.77	14.2
	8.0	10.9	11.0	13.9	2.50	104.0	2.74	1.76	16.1
	9.0	12.2	11.0	15.5	2.54	116.0	2.74	1.76	18.0
	10.0	13.3	10.0	17.0	2.57	125.0	2.71	1.74	19.5
	12.0	15.9	11.0	20.3	2.70	148.0	2.70	1.75	23.3
	13.0	17.0	10.0	21.71	2.69	156.0	2.68	1.73	24.8
100 x 100	6.0	9.2	8.5	11.67	2.67	111.3	3.09	1.95	15.2
	7.0	10.7	10.0	13.62	2.71	129.0	3.08	1.98	17.7
	8.0	12.2	12.0	15.5	2.74	145.0	3.06	1.96	19.9
	10.0	15.0	10.0	19.0	2.82	175.0	3.04	1.95	24.4
	12.0	17.8	12.0	22.7	3.02	207.0	3.10	1.94	29.1
	13.0	19.1	10.0	24.31	2.94	220.0	3.00	1.94	31.1
	15.0	21.9	12.0	27.9	2.98	249.0	3.05	1.93	35.6
120 x 120	8.0	14.7	13.0	18.7	3.69	255.0	3.96	2.37	29.1
	10.0	18.2	13.0	23.2	3.67	313.0	3.94	2.36	36.0
	12.0	21.6	13.0	27.5	3.65	368.0	3.91	2.35	42.7
	15.0	26.6	13.0	33.9	3.62	45.0	3.86	2.33	52.4
130 x 130	8.0	15.9	13.0	20.42	3.49	331.75	4.03	2.59	34.88
	9.0	17.9	12.0	22.74	3.53	366.0	4.01	2.57	38.7
	10.0	19.7	13.0	25.26	3.57	406.04	4.01	2.57	43.08
	12.0	23.5	12.0	29.76	3.64	467.0	3.96	2.54	49.9
	15.0	28.8	12.0	36.75	3.76	568.0	3.93	2.53	61.5
	16.0	30.7	13.0	39.38	3.81	669.86	3.90	2.51	66.31
150 x 150	10.0	23.0	16.0	29.3	4.62	624.0	4.76	2.97	56.90
	12.0	27.3	14.0	34.77	4.14	740.0	4.61	2.96	68.1
	15.0	33.6	14.0	42.74	4.24	888.0	4.56	2.92	82.6
	18.0	40.1	14.0	51.0	4.54	1050.0	4.65	2.92	88.7
	19.0	41.9	14.0	53.38	4.40	1090.0	4.52	2.91	103.0
175 x 175	12.0	31.8	15.0	40.52	4.73	1170.0	5.37	3.44	91.6
	15.0	39.4	15.0	50.21	4.85	1440.0	5.35	3.42	114.0
200 x 200	15.0	45.3	17.0	57.75	5.47	2180.0	6.14	3.93	150.50
	16.0	48.5	18.0	61.8	6.16	2340.0	6.30	3.94	162.0
	18.0	54.2	18.0	69.1	6.13	2600.0	6.27	3.93	181.0
	20.0	59.9	17.0	76.3	5.67	2820.0	6.09	3.90	197.0
	24.0	71.1	18.0	90.6	6.06	3333.0	6.22	3.90	235.0
	25.0	73.6	17.0	93.75	5.87	3420.0	6.04	3.88	242.0
250 x 250	25.0	93.7	24.0	119.4	7.10	6950.0	7.63	4.89	388.0
	28.0	104.0	24.0	133.0	7.23	7690.0	7.61	4.89	433.0
	32.0	118.0	24.0	150.0	7.38	8600.0	7.57	4.87	488.0
	35.0	128.0	24.0	162.6	7.45	9110.0	7.48	4.83	519.0



## Allinton Engineering & Trading Pte Ltd

Head Office: Block 803, King George's Avenue #01-234 Singapore 200803. Tel: 6296 0679 (10 lines) 6292 7728 Fax: 6297 0024

Branch Office: 21 Tuas Basin Link Singapore 638782 Tel: 6265 1888 (10 lines) Fax: 6265 5623

Web-site: <http://www.allinton.com.sg> E-mail: [allinton@singnet.com.sg](mailto:allinton@singnet.com.sg)