

RHS DXB mm	Thickness t mm	Sec. Area A cm <sup>2</sup>	Unit wt. W kg/m	Moment of Inertia		Radius of Gyration		Elastic Modulus		Torsional Constants		Outer Surface
				Lxx cm <sup>4</sup>	Lyy cm <sup>4</sup>	Rxx cm	Ryy cm	Zxx cm <sup>3</sup>	Zyy cm <sup>3</sup>	J cm <sup>4</sup>	B cm <sup>3</sup>	Area per m m <sup>2</sup>
200x100	4.0	22.95	18.01	1199.71	410.78	7.23	4.23	119.97	82.16	991.47	141.46	0.579
	5.0	28.36	22.26	1459.25	496.94	7.17	4.19	145.93	99.39	1216.96	171.53	0.574
	6.0	33.63	26.40	1703.31	576.91	7.12	4.14	170.33	115.38	1434.03	199.68	0.589
	7.0	38.78	30.44	1932.19	650.93	7.06	4.10	193.22	130.19	1642.92	226.04	0.564
220x140	8.0	43.79	34.38	2146.21	719.19	7.00	4.05	214.62	143.84	1843.86	250.68	0.559
	4.0	27.75	21.78	1892.55	947.64	8.26	5.84	172.05	135.38	2000.01	223.99	0.699
	5.0	34.36	26.97	2313.36	1155.23	8.21	5.80	210.31	165.03	2467.63	273.47	0.694
	6.0	40.83	32.05	2713.97	1351.65	8.15	5.75	246.72	193.09	2922.95	320.55	0.689
240x120	7.0	47.18	37.03	3094.76	1537.22	8.10	5.71	281.34	219.60	3366.29	365.35	0.684
	4.0	27.75	21.78	2110.72	725.35	8.72	5.11	175.89	120.89	1736.39	208.03	0.699
	5.0	34.36	26.97	2579.67	882.47	8.67	5.07	214.97	147.08	2138.48	253.55	0.694
	6.0	40.83	32.05	3025.91	1030.45	8.61	5.02	252.16	171.74	2528.39	296.70	0.689
260x180	7.0	47.18	37.03	3449.84	1169.52	8.55	4.98	287.49	194.92	2906.43	337.58	0.684
	8.0	53.39	41.91	3851.84	1299.95	8.49	4.93	320.99	216.66	3272.90	376.29	0.679
	9.0	59.47	46.69	4232.30	1422.00	8.44	4.89	352.69	237.00	3628.08	412.93	0.674
	10.0	65.42	51.38	4591.59	1535.91	8.38	4.85	382.63	255.99	3972.25	447.57	0.668
300x160	4.0	34.15	26.81	3357.53	1917.45	9.92	7.49	258.27	213.05	3822.78	346.87	0.859
	5.0	42.36	33.25	4121.36	2349.53	9.86	7.45	317.03	261.06	4730.34	425.47	0.854
	6.0	50.43	39.59	4855.67	2763.43	9.81	7.40	373.53	307.05	5619.50	501.05	0.849
	7.0	58.38	45.83	5561.50	3159.50	9.76	7.36	427.81	351.06	6490.62	573.71	0.844
300x200	4.0	34.95	27.43	4196.67	1147.46	10.96	6.44	279.78	192.99	3435.43	331.89	0.879
	5.0	43.36	34.03	5153.13	1770.87	10.90	6.39	343.54	236.12	4244.57	406.58	0.874
	6.0	51.63	40.53	6073.51	2079.57	10.85	6.35	404.90	277.26	5034.64	478.20	0.869
	7.0	59.78	46.93	6958.28	2373.87	10.79	6.30	463.89	316.52	5806.00	546.85	0.864
300x200	8.0	67.79	53.22	7807.95	2654.12	10.73	6.26	520.53	353.88	6559.05	612.64	0.859
	9.0	75.67	59.40	8623.00	2920.63	10.67	6.21	574.87	389.42	7294.15	675.66	0.854
	10.0	83.42	65.49	9403.90	3173.71	10.62	6.17	626.93	423.16	8011.67	736.01	0.848
	4.0	38.95	30.57	5072.88	2736.56	11.41	8.38	338.19	273.66	5555.71	448.64	0.979
300x200	5.0	48.36	37.98	6241.05	3360.92	11.36	8.34	416.07	336.00	6882.72	551.40	0.974
	6.0	57.63	45.24	7370.23	3962.19	11.31	8.29	491.35	396.22	8186.02	650.85	0.969
	7.0	66.78	52.42	8460.03	4540.76	11.26	8.25	564.06	454.08	9465.89	746.83	0.964
	8.0	75.79	59.50	9513.66	5097.04	11.20	8.20	634.24	509.70	10722.83	839.51	0.959
300x200	9.0	84.67	66.47	10528.93	5631.42	11.15	8.16	701.93	563.14	11975.29	929.01	0.954
	10.0	93.42	73.34	11507.24	6144.30	11.10	8.11	767.15	614.43	13169.70	1015.43	0.948

RHS DXB mm	Thickness t mm	Sec. Area A cm <sup>2</sup>	Unit wt. W kg/m	Moment of Inertia		Radius of Gyration		Elastic Modulus		Torsional Constants		Outer Surface
				Lxx cm <sup>4</sup>	Lyy cm <sup>4</sup>	Rxx cm	Ryy cm	Zxx cm <sup>3</sup>	Zyy cm <sup>3</sup>	J cm <sup>4</sup>	B cm <sup>3</sup>	Area per m <sup>2</sup>
50x25	2.0	2.74	2.15	8.38	2.81	1.75	1.01	3.35	2.25	6.79	3.79	0.142
	2.6	3.46	2.71	10.16	3.36	1.71	0.99	4.06	2069	8.27	4.53	0.137
	3.2	.13	3.24	11.63	3.80	1.68	0.96	4.65	3.04	9.52	5.12	0.134
	4.0	4.95	3.88	13.13	4.23	1.63	0.92	5.25	3.36	10.86	5.69	0.129
60x40	2.6	4.76	3.73	22.76	12.09	2.19	1.59	7.59	8.05	25.59	9.83	0.187
	2.9	5.25	4.12	24.74	13.11	2.17	1.58	8.25	6.56	28.02	10.66	0.185
	3.6	6.35	4.98	28.90	15.23	2.13	1.55	9.63	7.62	33.30	12.41	0.181
	4.5	7.67	6.02	33.31	17.44	2.08	1.51	11.10	8.72	39.34	14.29	0.177
66x33	2.6	4.70	3.69	25.15	8.43	2.31	1.34	7.62	5.11	20.75	8.71	0.185
	2.9	5.19	4.07	27.33	9.12	2.29	1.33	8.28	5.53	22.65	9.43	0.183
	3.6	6.28	4.93	31.87	10.52	2.25	1.29	9.66	6.37	26.71	10.90	0.179
	4.5	7.58	5.95	36.64	11.93	2.20	1.25	11.10	7.23	31.21	12.43	0.175
80x40	2.6	5.80	4.55	46.58	15.74	2.84	1.65	11.65	7.87	38.50	13.46	0.227
	2.9	6.41	5.03	50.87	17.11	2.82	1.63	12.72	8.56	42.23	14.66	0.225
	3.2	7.01	5.50	54.94	18.41	2.80	1.62	13.74	9.21	45.83	15.78	0.224
	4.0	8.55	6.71	64.79	21.49	2.75	1.59	16.20	10.74	54.77	18.49	0.219
96x48	4.8	10.01	7.85	73.22	24.03	2.71	1.55	18.30	12.05	62.81	20.79	0.215
	3.2	8.54	6.71	98.61	33.28	3.40	1.97	20.54	13.87	82.13	23.82	0.272
	4.0	10.47	8.22	117.54	39.32	3.35	1.94	24.49	16.38	99.11	28.24	0.267
	4.8	12.31	9.66	134.35	44.55	3.30	1.90	27.99	18.56	114.80	32.14	0.263
122x81	3.6	12.32	9.67	232.61	78.83	4.34	2.53	38.13	25.84	193.91	44.50	0.347
	4.5	15.14	11.88	278.94	93.78	4.29	2.49	45.73	30.75	235.39	53.13	0.343
	5.4	17.85	14.01	320.83	107.03	4.24	2.45	52.60	35.09	274.29	60.89	0.338
120x60	3.2	10.85	8.51	199.88	67.95	4.29	2.50	33.31	22.65	165.83	38.95	0.344
	3.6	12.11	9.5	220.75	74.77	4.27	2.48	36.79	24.92	184.10	42.91	0.341
	4.5	14.87	11.67	264.52	88.88	4.22	2.44	44.09	29.63	184.10	42.91	0.341
145x62	4.8	20.28	15.92	555.16	228.50	5.23	3.36	76.57	55.73	534.27	94.45	0.429
	5.4	22.60	17.74	610.85	250.59	5.20	3.33	84.26	61.12	592.70	103.81	0.426
172z92	4.8	23.83	18.71	917.13	346.91	6.20	3.82	106.64	75.41	826.04	128.85	0.503
	5.4	26.59	20.88	1012.47	381.74	6.17	3.79	117.73	82.99	918.10	142.04	0.500

RHS DXB mm	Thickness t mm	Sec. Area A cm <sup>2</sup>	Unit wt. W kg/m	Moment of Inertia		Radius of Gyration		Elastic Modulus		Torsional Constants		Outer Surface
				Lxx cm <sup>4</sup>	Lyy cm <sup>4</sup>	Rxx cm	Ryy cm	Zxx cm <sup>3</sup>	Zyy cm <sup>3</sup>	J cm <sup>4</sup>	B cm <sup>3</sup>	Area per m <sup>2</sup>
25x25	1.6	1.43	1.12	1.28	1.28	0.94	0.94	1.02	1.02	1.96	1.46	0.092
	2.0	1.74	1.36	1.48	1.48	0.92	0.92	1.19	1.19	2.29	1.68	0.090
	2.6	2.16	1.69	1.72	1.72	0.89	0.89	1.38	1.38	2.68	1.92	0.087
	3.2	2.53	1.98	1.89	1.89	0.86	0.86	1.51	1.51	2.96	2.07	0.084
32x32	2.0	2.30	1.80	3.36	3.36	1.21	1.21	2.10	2.10	5.30	3.05	0.118
	2.6	2.88	2.26	4.02	4.02	1.18	1.18	2.51	2.51	6.45	3.63	0.115
	3.2	3.42	2.69	4.54	4.54	1.15	1.15	2.84	2.84	7.41	4.07	0.112
38x38	2.0	2.78	2.18	5.88	5.88	1.46	1.46	3.10	3.10	9.31	4.54	0.142
	2.6	3.51	2.75	7.14	7.14	1.43	1.43	2.76	2.76	11.51	5.49	0.139
	3.2	4.19	3.29	8.18	8.18	1.40	1.40	4.30	4.30	13.45	6.28	0.136
	4.0	5.03	3.95	9.26	9.26	1.36	1.36	4.87	4.87	15.67	7.12	0.131
40x40	2.6	3.72	2.92	8.45	8.45	1.51	1.51	4.22	4.22	13.63	6.20	0.147
	2.9	4.09	3.21	9.11	9.11	1.49	1.49	4.56	4.56	14.85	6.68	0.145
	3.2	4.45	3.49	9.72	9.72	1.48	1.48	4.86	4.86	16.00	7.12	0.144
	4.0	5.35	4.20	11.07	11.07	1.44	1.44	5.54	5.54	18.75	8.12	0.139
49.5x49.5	2.6	4.70	3.69	16.91	16.91	1.90	1.90	6.83	6.83	27.19	10.11	0.185
	2.9	5.19	4.07	18.37	18.37	1.88	1.88	7.42	7.42	29.81	10.98	0.183
	3.6	6.28	4.93	21.42	21.42	1.85	1.85	8.66	8.66	35.54	12.81	0.179
	4.5	7.58	5.95	24.64	24.64	1.80	1.80	9.96	9.96	42.15	14.79	0.175
60x60	2.6	5.80	4.55	31.33	31.33	2.33	2.33	10.44	10.44	50.08	15.52	0.227
	2.9	6.41	5.03	34.21	34.21	2.31	2.31	11.40	11.40	56.12	16.95	0.225
	3.2	7.01	5.50	36.94	36.94	2.30	2.30	12.31	12.31	60.02	18.31	0.224
	.0	8.55	6.71	43.55	43.55	2.26	2.26	14.52	14.52	72.41	21.62	0.219
	4.8	10.01	7.85	49.22	49.22	2.22	2.22	16.41	16.41	83.86	24.51	0.215
72x72	3.2	8.54	6.71	66.632	66.632	2.79	2.79	18.42	18.42	106.81	27.47	0.272
	4.0	10.47	8.22	79.03	79.03	2.75	2.75	21.95	21.95	129.85	32.78	0.267
	4.8	12.31	9.66	90.31	90.31	2.71	2.71	25.09	25.09	151.55	37.55	0.263

RHS DXB	Thickness t	Sec. Area A	Unit wt. W	Moment of Inertia		Radius of Gyration		Elastic Modulus		Torsional Constants		Outer Surface
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mm	mm	cm <sup>2</sup>	kg/m									
				Lxx cm4	Lyy cm4	Rxx cm	Ryy cm	Zxx cm3	Zyy cm3	J cm4	B cm3	Area per m m2
80x90	3.2	9.57	7.51	92.71	92.71	3.11	3.11	23.18	23.18	148.55	34.60	0.304
	4.0	11.75	9.22	111.04	111.04	3.07	3.07	27.78	27.78	181.22	41.49	0.299
	4.8	13.85	10.87	127.58	127.58	3.04	3.04	31.89	31.89	212.26	47.77	0.295
91.5x91.5	3.6	12.32	9.67	156.49	156.49	3.56	3.56	34.21	34.21	251.17	51.14	0.347
	4.5	15.14	11.88	187.57	187.57	3.52	3.52	41.00	41.00	306.78	61.40	0.343
	5.4	17.85	14.01	215.68	215.68	3.48	3.48	47.14	47.14	359.76	70.77	0.336
113.5x113.5	4.8	20.28	15.92	393.30	393.30	4.40	4.40	69.30	69.30	637.45	103.89	0.429
	5.4	22.60	17.74	432.58	432.58	4.38	4.38	76.23	76.23	708.69	114.41	0.426
132x132	4.8	23.83	16.71	634.39	634.39	5.16	5.16	96.12	96.12	1018.30	144.11	0.503
	5.4	26.59	20.88	700.11	700.11	5.13	5.13	106.08	106.08	1134.25	159.18	0.500
150x150	4.0	22.95	18.01	807.82	807.82	5.93	5.93	107.71	107.71	1273.46	161.38	0.579
	5.0	28.36	22.26	982.12	982.12	5.89	5.89	130.95	130.95	1569.09	196.38	0.574
	6.0	33.63	26.40	1145.91	1145.91	5.84	5.84	152.79	152.79	1856.18	229.44	0.569
	7.0	38.78	30.44	1299.41	1299.41	5.79	5.79	173.26	173.26	2134.99	260.65	0.584
	8.0	43.79	34.36	1443.00	1443.00	5.74	5.74	192.40	192.40	2405.78	290.12	0.559
180x180	4.0	27.75	21.78	1421.74	1421.74	7.16	7.16	157.97	157.97	2224.31	236.76	0.699
	5.0	34.36	26.97	1736.87	1736.87	7.11	7.11	192.99	192.99	2747.93	289.40	0.694
	6.0	40.83	32.05	2036.62	2036.62	7.06	7.06	226.28	226.28	3259.23	339.65	0.689
	7.0	47.18	37.03	2321.04	2321.04	7.01	7.01	257.89	257.89	3758.53	387.89	0.684
	8.0	53.39	41.91	2590.73	2590.73	8.97	8.97	287.86	287.86	4246.16	433.32	0.679
220x220	4.0	34.15	26.61	2639.14	2639.14	8.79	8.79	239.92	239.92	4099.49	359.65	0.859
	5.0	42.36	33.25	3238.02	3238.02	8.74	8.74	294.37	294.37	5076.22	441.43	0.854
	6.0	50.43	39.59	3813.36	3813.36	8.70	8.70	346.67	346.67	6034.53	520.18	0.849
	7.0	58.38	45.83	4365.55	4365.55	8.65	8.65	396.67	396.67	6974.82	596.00	0.844
	8.0	66.19	51.96	4894.99	4894.99	9.60	9.60	445.00	445.00	7897.48	668.99	0.839
250x250	4.0	38.95	30.57	3907.30	3907.30	10.02	10.02	312.58	312.58	6045.40	468.61	0.979
	5.0	48.36	37.96	4805.01	4805.01	9.97	9.97	384.40	384.40	7494.88	576.44	0.974
	6.0	57.63	45.24	5672.00	5672.00	9.92	9.92	453.76	453.76	8920.44	680.77	0.969
	7.0	66.78	52.42	6508.73	6508.73	9.87	9.87	520.70	520.70	10322.70	781.69	0.964
	8.0	75.79	59.50	7315.65	7315.65	9.82	9.82	585.25	585.25	11702.07	879.31	0.959