

RECTANGULAR HOLLOW SECTION

Product Range

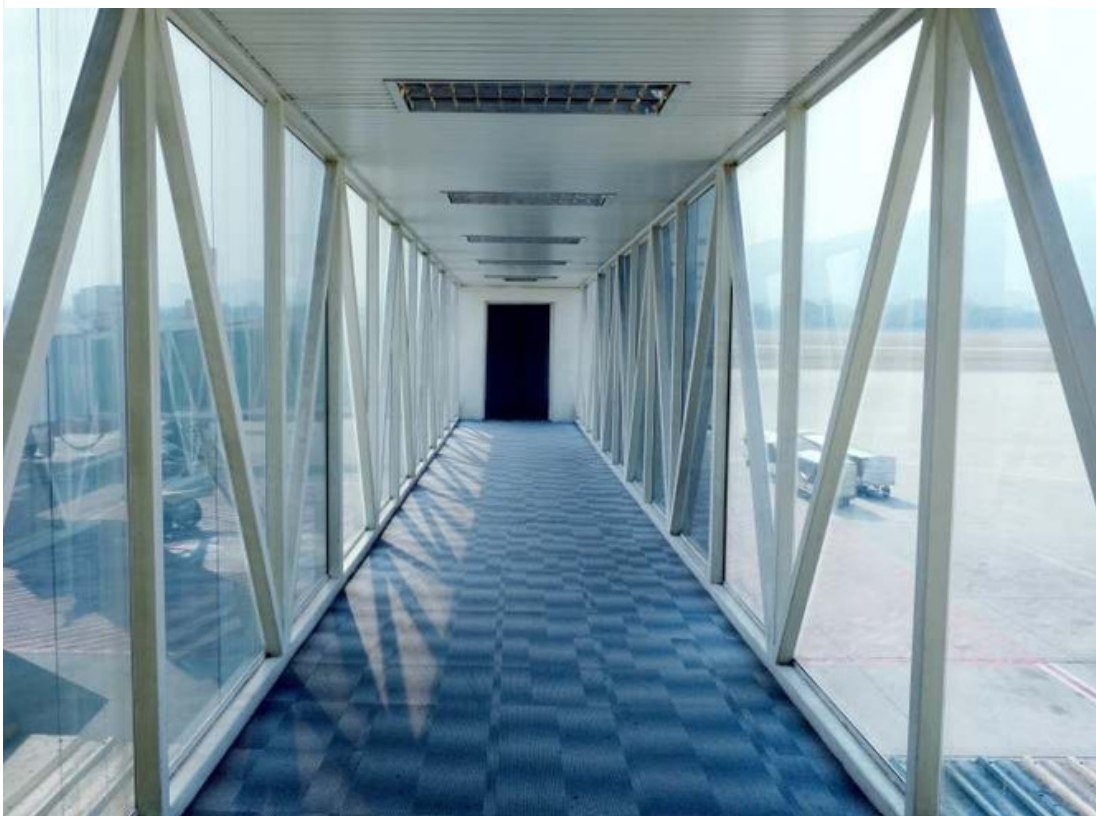
26mm X 13mm to 400mm X 200mm

Thickness

1mm to 12mm

RECTANGULAR HOLLOW SECTION (RHS) IS : 4923 : 2017/EN 10219-1 : 2006*/ASTM A-500

Dimension	Weight	Area	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants	
mm	kg/m	cm ²	I _{xx} cm ⁴	I _{yy} cm ⁴	R _{xx} cm	R _{yy} cm	Z _{xx} cm ³	Z _{yy} cm ³	S _{xx} cm ³	S _{yy} cm ³	J cm ⁴	C cm ³
26X13X1.6	0.85	1.08	0.83	0.27	0.88	0.50	0.64	0.42	0.84	0.51	0.63	0.66
26X13X2.0	1.02	1.30	0.94	0.30	0.85	0.48	0.73	0.47	0.98	0.59	0.64	0.67
30X20X1.6	1.12	1.43	1.66	0.88	1.08	0.78	1.11	0.88	1.39	1.05	1.85	1.38
30X20X2.0	1.37	1.74	1.94	1.02	1.06	0.77	1.30	1.02	1.65	1.24	2.08	1.55
30X20X2.2	1.48	1.88	2.05	1.08	1.04	0.76	1.37	1.08	1.76	1.32	2.15	1.60
40X10X1.6	1.12	1.43	2.25	0.22	1.25	0.39	1.13	0.44	1.57	0.54	0.65	0.76
40X10X2.0	1.37	1.74	2.60	0.25	1.22	0.38	1.30	0.50	1.85	0.63	0.65	0.78
40X20X1.6	1.37	1.75	3.43	1.15	1.40	0.81	1.72	1.15	2.18	1.34	2.83	1.92
40X20X2.0	1.68	2.14	4.05	1.34	1.38	0.79	2.03	1.34	2.61	1.60	3.25	2.19
40X20X2.2	1.82	2.32	4.32	1.43	1.36	0.79	2.16	1.43	2.81	1.71	3.40	2.29
40X20X2.6	2.10	2.68	4.81	1.57	1.34	0.77	2.41	1.57	3.18	1.93	3.58	2.43
40X25X1.6	1.50	1.91	4.02	1.93	1.45	1.01	2.01	1.55	2.49	1.80	4.25	2.51
40X25X2.0	1.84	2.34	4.77	2.28	1.43	0.99	2.39	1.83	2.99	2.16	4.99	2.91
40X25X2.2	1.99	2.54	5.11	2.43	1.42	0.98	2.56	1.95	3.23	2.32	5.28	3.07
40X25X2.6	2.31	2.94	5.72	2.71	1.39	0.96	2.86	2.17	3.67	2.63	5.73	3.32
50X25X1.6	1.75	2.23	7.02	2.37	1.77	1.03	2.81	1.90	3.53	2.17	5.83	3.21
50X25X2.0	2.15	2.74	8.38	2.81	1.75	1.01	3.36	2.25	4.26	2.62	6.90	3.76
50X25X2.2	2.34	2.98	9.01	3.01	1.74	1.01	3.61	2.41	4.61	2.82	7.35	3.99
50X25X2.6	2.72	3.46	10.16	3.36	1.71	0.99	4.07	2.69	5.26	3.21	8.09	4.37
50X30X1.6	1.88	2.39	7.96	3.60	1.82	1.23	3.19	2.40	3.91	2.75	8.07	3.96
50X30X2.0	2.31	2.94	9.54	4.29	1.80	1.21	3.82	2.86	4.74	3.33	9.65	4.67
50X30X2.2	2.51	3.20	10.27	4.61	1.79	1.20	4.11	3.08	5.14	3.60	10.35	4.99
50X30X2.6	2.92	3.72	11.62	5.19	1.77	1.18	4.65	3.46	5.88	4.11	11.56	5.53
50X30X2.9	3.21	4.09	12.54	5.58	1.75	1.17	5.02	3.72	6.40	4.47	12.27	5.85
60X40X1.6	2.38	3.03	15.22	8.16	2.24	1.64	5.08	4.08	6.12	4.64	17.10	6.63
60X40X2.0	2.94	3.74	18.41	9.83	2.22	1.62	6.14	4.92	7.47	5.65	20.77	7.96
60X40X2.2	3.20	4.08	19.92	10.62	2.21	1.61	6.64	5.31	8.12	6.14	22.49	8.56
60X40X2.6	3.74	4.76	22.76	12.09	2.19	1.59	7.59	6.05	9.36	7.07	25.65	9.67
60X40X2.9	4.12	5.25	24.74	13.11	2.17	1.58	8.25	6.56	10.25	7.73	27.76	10.41
60X40X3.0	4.25	5.41	25.38	13.44	2.17	1.58	8.46	6.72	10.53	7.94	28.41	10.63
60X40X3.2	4.50	5.73	26.61	14.07	2.15	1.57	8.87	7.04	11.09	8.36	29.63	11.05
60X40X3.6	4.98	6.35	28.90	15.23	2.13	1.55	9.64	7.62	12.16	9.15	31.72	11.79
66X33X1.6	2.36	3.00	16.85	5.74	2.37	1.38	5.11	3.48	6.34	3.92	14.01	5.94
66X33X2.0	2.90	3.70	20.37	6.90	2.35	1.37	6.18	4.19	7.73	4.77	16.94	7.09
66X33X2.2	3.17	4.04	22.03	7.43	2.34	1.36	6.68	4.51	8.40	5.17	18.28	7.61
66X33X2.6	3.69	4.70	25.15	8.43	2.31	1.34	7.63	5.11	9.68	5.94	20.72	8.56
66X33X2.9	4.07	5.19	27.33	9.12	2.29	1.33	8.29	5.53	10.59	6.49	22.31	9.17
66X33X3.2	4.44	5.66	29.37	9.75	2.28	1.31	8.90	5.91	11.46	7.01	23.67	9.70
75X25X1.6	2.38	3.03	19.74	3.47	2.55	1.07	5.27	2.78	6.81	3.11	9.94	4.97
75X25X2.0	2.94	3.74	23.84	4.14	2.52	1.05	6.36	3.32	8.31	3.77	11.88	5.88
75X25X2.2	3.20	4.08	25.77	4.44	2.51	1.04	6.88	3.56	9.02	4.08	12.75	6.28
75X25X2.6	3.74	4.76	29.40	5.00	2.49	1.02	7.84	4.00	10.40	4.67	14.26	6.99



RECTANGULAR HOLLOW SECTION (RHS) IS : 4923 : 2017/EN 10219-1 : 2006*/ASTM A-500

Dimension	Weight	Area	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants	
mm	kg/m	cm ²	I _{xx} cm ⁴	I _{yy} cm ⁴	R _{xx} cm	R _{yy} cm	Z _{xx} cm ³	Z _{yy} cm ³	S _{xx} cm ³	S _{yy} cm ³	J cm ⁴	C cm ³
75X25X3.0	4.25	5.41	32.72	5.49	2.46	1.01	8.73	4.40	11.69	5.21	15.44	7.55
75X50X1.6	3.01	3.83	30.51	16.39	2.82	2.07	8.14	6.56	9.75	7.40	34.07	10.70
75X50X2.0	3.72	4.74	37.16	19.91	2.80	2.05	9.91	7.97	11.96	9.06	41.75	12.96
75X50X2.2	4.07	5.18	40.35	21.59	2.79	2.04	10.76	8.64	13.03	9.87	45.43	14.02
75X50X2.6	4.76	6.06	46.44	24.78	2.77	2.02	12.39	9.92	15.10	11.43	52.42	16.02
75X50X2.9	5.26	6.70	50.77	27.04	2.75	2.01	13.54	10.82	16.60	12.55	57.31	17.40
75X50X3.2	5.75	7.33	54.90	29.18	2.74	2.00	14.64	11.68	18.04	13.63	61.88	18.69
75X50X3.6	6.40	8.15	60.10	31.86	2.72	1.98	16.03	12.75	19.90	15.01	67.44	20.23
75X50X4.0	7.03	8.95	64.96	34.34	2.69	1.96	17.33	13.74	21.66	16.33	72.33	21.59
80X40X1.6	2.88	3.67	30.71	10.52	2.89	1.69	7.68	5.26	9.47	5.87	25.48	8.99
80X40X2.0	3.56	4.54	37.36	12.72	2.87	1.67	9.34	6.36	11.61	7.17	31.08	10.84
80X40X2.2	3.89	4.96	40.53	13.76	2.86	1.67	10.14	6.88	12.64	7.80	33.72	11.71
80X40X2.6	4.55	5.80	46.58	15.74	2.83	1.65	11.65	7.87	14.64	9.01	38.68	13.31
80X40X2.9	5.03	6.41	50.87	17.11	2.82	1.63	12.72	8.56	16.07	9.88	42.09	14.40
80X40X3.0	5.19	6.61	52.25	17.56	2.81	1.63	13.07	8.78	16.54	10.16	43.16	14.74
80X40X3.2	5.50	7.01	54.94	18.41	2.80	1.62	13.74	9.21	17.46	10.72	45.21	15.39
80X40X3.6	6.12	7.79	60.05	20.02	2.78	1.60	15.02	10.01	19.23	11.77	48.88	16.56
80X40X4.0	6.71	8.55	64.79	21.49	2.75	1.59	16.20	10.75	20.91	12.77	51.97	17.55
96X48X1.6	3.49	4.44	54.03	18.57	3.49	2.05	11.26	7.74	13.82	8.58	44.69	13.26
96X48X2.0	4.32	5.50	66.04	22.59	3.47	2.03	13.76	9.42	17.00	10.52	54.83	16.09
96X48X2.2	4.73	6.02	71.82	24.51	3.45	2.02	14.97	10.22	18.54	11.47	59.70	17.44
96X48X2.6	5.53	7.04	82.96	28.19	3.43	2.00	17.29	11.75	21.55	13.30	69.03	19.99
96X48X2.9	6.12	7.80	90.94	30.79	3.41	1.99	18.95	12.83	23.73	14.63	75.62	21.77
96X48X3.2	6.70	8.54	98.61	33.28	3.40	1.97	20.55	13.87	25.85	15.91	81.83	23.43
96X48X3.6	7.47	9.52	108.35	36.40	3.37	1.96	22.58	15.17	28.58	17.56	89.50	25.47
96X48X4.0	8.22	10.47	117.54	39.32	3.35	1.94	24.49	16.39	31.21	19.14	96.41	27.30
96X48X4.5	9.13	11.63	128.30	42.68	3.32	1.92	26.73	17.79	34.34	21.01	103.91	29.30
100X50X1.6	3.63	4.63	61.29	21.08	3.64	2.13	12.26	8.44	15.04	9.33	50.65	14.45
100X50X2.0	4.51	5.74	74.98	25.67	3.61	2.11	15.00	10.27	18.50	11.46	62.21	17.57
100X50X2.2	4.93	6.28	81.59	27.87	3.60	2.11	16.32	11.15	20.19	12.50	67.79	19.05
100X50X2.6	5.78	7.36	94.33	32.09	3.58	2.09	18.87	12.84	23.48	14.51	78.48	21.86
100X50X2.9	6.40	8.15	103.48	35.09	3.56	2.07	20.70	14.04	25.88	15.96	86.08	23.84
100X50X3.0	6.60	8.41	106.46	36.06	3.56	2.07	21.30	14.43	26.66	16.44	88.53	24.47
100X50X3.2	7.01	8.93	112.29	37.95	3.55	2.06	22.46	15.18	28.20	17.37	93.28	25.70
100X50X3.6	7.81	9.95	123.51	41.56	3.52	2.04	24.71	16.63	31.21	19.19	102.23	27.99
100X50X4.0	8.60	10.95	134.14	44.95	3.50	2.03	26.83	17.98	34.10	20.93	110.37	30.06
100X50X4.5	9.55	12.17	146.61	48.87	3.47	2.00	29.33	19.55	37.56	23.00	119.34	32.35
100X50X5.0	10.49	13.36	158.19	52.45	3.44	1.98	31.64	20.98	40.84	24.95	126.87	34.28
120X60X1.6	4.39	5.59	107.43	37.05	4.38	2.57	17.91	12.35	21.89	13.60	88.45	21.18
120X60X2.0	5.45	6.94	131.92	45.33	4.36	2.56	21.99	15.11	27.00	16.75	109.10	25.89
120X60X2.2	5.97	7.60	143.82	49.33	4.35	2.55	23.97	16.45	29.51	18.29	119.15	28.15
120X60X2.6	7.00	8.92	166.92	57.05	4.33	2.53	27.82	19.02	34.41	21.30	138.66	32.50

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mm	kg/m	cm ²	I _{xx}	I _{yy}	R _{xx}	R _{yy}	Z _{xx}	Z _{yy}	S _{xx}	S _{yy}	J	C
			cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³
120X60X2.9	7.76	9.89	183.65	62.60	4.31	2.52	30.61	20.87	38.00	23.49	152.74	35.60
120X60X3.2	8.52	10.85	199.88	67.95	4.29	2.50	33.32	22.65	41.51	25.63	166.31	38.56
120X60X3.6	9.51	12.11	220.75	74.77	4.27	2.48	36.80	24.93	46.07	28.40	183.57	42.29
120X60X4.0	10.48	13.35	240.74	81.25	4.25	2.47	40.13	27.09	50.49	31.08	199.79	45.76
120X60X4.5	11.67	14.87	264.52	88.88	4.22	2.44	44.09	29.63	55.82	34.30	218.51	49.75
120X60X5.0	12.84	16.36	286.97	95.99	4.19	2.42	47.83	32.00	60.95	37.38	235.39	53.33
120X60X6.0	15.10	19.23	328.01	108.77	4.13	2.38	54.67	36.26	70.57	43.12	263.07	59.24
150X25X1.6	4.26	5.43	124.73	6.76	4.79	1.12	16.64	5.41	22.68	5.92	22.78	10.23
150X25X2.0	5.29	6.74	152.77	8.11	4.76	1.10	20.37	6.49	27.95	7.22	27.42	12.24
150X25X2.2	5.79	7.38	166.32	8.74	4.75	1.09	22.18	7.00	30.52	7.84	29.56	13.16
150X25X2.6	6.80	8.66	192.52	9.91	4.71	1.07	25.67	7.93	35.54	9.04	33.47	14.85
150X50X1.6	4.89	6.23	168.78	30.45	5.20	2.21	22.51	12.18	28.62	13.21	85.50	21.95
150X50X2.0	6.08	7.74	207.53	37.20	5.18	2.19	27.68	14.88	35.35	16.26	105.19	26.79
150X50X2.2	6.66	8.48	226.40	40.45	5.17	2.18	30.19	16.18	38.65	17.75	114.73	29.11
150X50X2.6	7.82	9.96	263.14	46.71	5.14	2.17	35.09	18.69	45.12	20.67	133.18	33.55
150X50X2.9	8.67	11.05	289.82	51.19	5.12	2.15	38.65	20.48	49.87	22.79	146.42	36.72
150X50X3.0	8.96	11.41	298.55	52.65	5.12	2.15	39.81	21.06	51.43	23.49	150.71	37.74
150X50X3.2	9.52	12.13	315.76	55.50	5.10	2.14	42.11	22.20	54.52	24.86	159.12	39.73
150X50X3.6	10.64	13.55	349.22	60.98	5.08	2.12	46.57	24.40	60.58	27.54	175.17	43.51
150X50X4.0	11.74	14.95	381.39	66.16	5.05	2.10	50.86	26.47	66.47	30.13	190.15	47.02
150X50X4.5	13.09	16.67	419.82	72.23	5.02	2.08	55.98	28.90	73.60	33.24	207.28	51.02
150X50X5.0	14.41	18.36	456.29	77.87	4.99	2.06	60.84	31.15	80.48	36.20	222.54	54.59
150X75X2.6	8.84	11.26	333.75	114.61	5.44	3.19	44.50	30.57	54.70	33.93	276.22	52.35
150X75X2.9	9.81	12.50	368.27	126.19	5.43	3.18	49.11	33.66	60.53	37.51	305.38	57.58
150X75X3.2	10.78	13.73	401.98	137.44	5.41	3.16	53.60	36.66	66.26	41.02	333.85	62.65
150X75X3.6	12.05	15.35	445.69	151.94	5.39	3.15	59.43	40.52	73.75	45.60	370.65	69.13
150X75X4.0	13.31	16.95	488.00	165.88	5.37	3.13	65.07	44.24	81.07	50.06	406.04	75.31
150X75X5.0	16.38	20.86	587.74	198.36	5.31	3.08	78.37	52.90	98.61	60.71	487.77	89.38
150X75X6.0	19.33	24.63	679.08	227.56	5.25	3.04	90.55	60.69	115.08	70.63	558.76	101.46
150X100X2.9	10.95	13.95	446.72	240.24	5.66	4.15	59.57	48.05	71.20	54.03	497.40	78.47
150X100X3.2	12.03	15.33	488.19	262.27	5.64	4.14	65.10	52.46	78.01	59.18	545.15	85.60
150X100X3.6	13.46	17.15	542.16	290.86	5.62	4.12	72.29	58.18	86.93	65.91	607.44	94.81
150X100X4.0	14.88	18.95	594.60	318.57	5.60	4.10	79.28	63.72	95.67	72.50	668.04	103.67
150X100X5.0	18.34	23.36	719.20	384.02	5.55	4.05	95.90	76.81	116.73	88.34	811.48	124.31
150X100X6.0	21.69	27.63	834.69	444.19	5.50	4.01	111.30	88.84	136.68	103.30	941.95	142.74
150X100X8.0	28.10	35.79	1039.29	549.48	5.39	3.92	138.58	109.90	173.31	130.63	1157.28	172.73
200X100X2.9	13.23	16.85	895.91	308.61	7.29	4.28	89.60	61.73	109.69	68.11	738.86	105.82
200X100X3.2	14.55	18.53	980.69	337.26	7.27	4.27	98.07	67.46	120.32	74.67	810.37	115.59
200X100X3.6	16.29	20.75	1091.47	374.54	7.25	4.25	109.15	74.91	134.30	83.26	903.95	128.26
200X100X4.0	18.02	22.95	1199.71	410.78	7.23	4.23	119.98	82.16	148.04	91.70	995.40	140.54
200X100X5.0	22.26	28.36	1459.25	496.94	7.17	4.19	145.93	99.39	181.37	112.09	1213.91	169.44
200X100X6.0	26.40	33.63	1703.31	576.91	7.12	4.14	170.34	115.39	213.27	131.50	1416.41	195.77

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mm	kg/m	cm ²	I _{xx} cm ⁴	I _{yy} cm ⁴	R _{xx} cm	R _{yy} cm	Z _{xx} cm ³	Z _{yy} cm ³	S _{xx} cm ³	S _{yy} cm ³	J cm ⁴	C cm ³
200X100X8.0	34.38	43.79	214621	71919	7.00	4.05	214.63	143.84	272.79	167.43	1765.96	240.49
240X120X4.0	21.78	27.75	2110.72	725.35	8.72	5.11	175.90	120.90	216.01	134.01	1745.55	207.11
240X120X5.0	26.97	34.36	2579.67	882.47	8.66	5.07	214.98	147.08	265.58	164.45	2141.72	251.48
240X120X6.0	32.05	40.83	3025.91	1030.45	8.61	5.02	252.16	171.75	313.41	193.69	2517.16	292.80
240X120X8.0	41.91	53.39	3851.84	1299.95	8.49	4.93	320.99	216.66	403.89	248.66	3196.64	366.11
250X100X4.0	21.16	26.95	2091.66	502.99	8.81	4.32	167.34	100.60	210.41	110.90	1335.40	177.41
250X100X5.0	26.19	33.36	2553.76	609.85	8.75	4.28	204.31	121.97	258.51	135.84	1631.59	214.59
250X100X6.0	31.11	39.63	2992.34	709.63	8.69	4.23	239.39	141.93	304.85	159.70	1908.64	248.83
250X100X8.0	40.66	51.79	3800.53	888.89	8.57	4.14	304.05	177.78	392.27	204.23	2397.53	308.31
250X150X4.0	24.30	30.95	2696.87	1234.24	9.33	6.31	215.75	164.57	259.61	183.27	2696.49	274.12
250X150X5.0	30.11	38.36	3304.18	1507.95	9.28	6.27	264.34	201.06	319.76	225.48	3322.96	334.43
250X150X6.0	35.82	45.63	3885.56	1768.35	9.23	6.23	310.85	235.78	378.05	266.28	3924.87	391.36
250X150X8.0	46.94	59.79	4972.24	2250.41	9.12	6.14	397.78	300.06	489.07	343.71	5043.97	494.90
250X150X10.0	57.63	73.42	5960.20	2682.88	9.01	6.04	476.82	357.72	592.79	415.67	6032.07	584.33
280X100X4.0	23.04	29.35	2785.31	558.32	9.74	4.36	198.96	111.67	252.63	122.42	1543.27	199.54
280X100X5.0	28.54	36.36	3406.60	677.60	9.68	4.32	243.33	135.52	310.80	150.09	1886.82	241.68
280X100X6.0	33.94	43.23	3998.76	789.27	9.62	4.27	285.63	157.86	367.00	176.62	2209.32	280.67
300X150X4.0	27.44	34.95	4196.67	1447.46	10.96	6.44	279.78	193.00	341.98	212.47	3455.16	330.97
300X150X5.0	34.04	43.36	5153.13	1770.87	10.90	6.39	343.55	236.12	421.90	261.73	4261.58	404.51
300X150X6.0	40.53	51.63	6073.51	2079.57	10.85	6.35	404.91	277.28	499.63	309.48	5039.24	474.31
300X150X8.0	53.22	67.79	7807.95	2654.12	10.73	6.26	520.53	353.89	648.55	400.51	6496.60	602.47
300X150X10.0	65.48	83.42	9403.90	3173.71	10.62	6.17	626.93	423.17	788.86	485.67	7804.31	715.07
300X200X4.0	30.58	38.95	5072.88	2736.56	11.41	8.38	338.20	273.66	401.18	304.84	5598.58	447.72
300X200X5.0	37.96	48.36	6241.05	3360.92	11.36	8.34	416.07	336.10	495.65	376.37	6919.17	549.43
300X200X6.0	45.24	57.63	7370.23	3962.19	11.31	8.29	491.35	396.22	587.83	446.07	8214.59	646.97
300X200X8.0	59.50	75.79	9513.66	5097.04	11.20	8.20	634.25	509.71	765.35	579.99	10688.71	829.36
300X200X10.0	73.33	93.42	11507.24	6144.30	11.10	8.11	767.15	614.43	933.86	706.73	12983.61	994.50
300X200X12.0	86.77	110.53	13354.97	7107.11	10.99	8.02	890.34	710.72	1093.47	826.41	15071.27	1141.95
350X250X5.0	45.81	58.36	10519.88	6305.84	13.43	10.39	601.14	504.47	709.04	564.76	12375.85	814.43
350X250X6.0	54.66	69.63	12457.31	7458.44	13.38	10.35	711.85	596.68	842.61	670.85	14733.26	962.58
350X250X8.0	72.06	91.79	16170.48	9659.06	13.27	10.26	924.03	772.73	1101.63	876.27	19295.99	1243.82
350X250X10.0	89.03	113.42	19672.08	11723.53	13.17	10.17	1124.12	937.89	1349.92	1072.79	23627.09	1504.66
350X250X12.0	105.61	134.53	22966.89	13655.73	13.07	10.08	1312.40	1092.46	1587.60	1260.54	27692.08	1744.69
400X200X5.0	45.81	58.36	12489.82	4311.75	14.63	8.60	624.50	431.18	762.43	473.87	10269.69	739.55
400X200X6.0	54.66	69.63	14789.35	5091.63	14.57	8.55	739.47	509.17	905.99	562.47	12205.15	872.78
400X200X8.0	72.06	91.79	19195.28	6572.45	14.46	8.46	959.77	657.25	1184.31	733.59	15926.47	1124.29
400X200X10.0	89.03	113.42	23348.08	7950.97	14.35	8.37	1167.41	795.10	1450.98	896.73	19422.50	1355.55
400X200X12.0	105.61	134.53	27252.93	9230.63	14.23	8.28	1362.65	923.07	1706.13	1052.01	22662.53	1566.20
300X200X14.0	99.78	127.11	15060.82	7988.55	10.89	7.93	1004.06	798.86	1244.30	939.14	16924.33	1271.23
400X200X14.0	121.76	155.11	30915.01	10414.85	14.12	8.19	1545.76	1041.49	1949.87	1199.54	25616.52	1755.81
400X300X6.0	64.08	81.63	19446.79	12557.11	15.43	12.40	972.34	837.15	1142.39	940.63	23929.98	1338.20
400X300X8.0	84.62	107.79	25342.70	16336.49	15.33	12.31	1267.14	1089.10	1497.91	1232.55	31464.16	1738.28

RECTANGULAR HOLLOW SECTION (RHS) IS : 4923 : 2017/EN 10219-1 : 2006*/ASTM A-500
UPCOMING SIZES

Dimension	Weight	Area	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants	
mm	kg/m	cm ²	I _{xx} cm ⁴	I _{yy} cm ⁴	R _{xx} cm	R _{yy} cm	Z _{xx} cm ³	Z _{yy} cm ³	S _{xx} cm ³	S _{yy} cm ³	J cm ⁴	C cm ³
400X300X10.0	104.73	133.42	30954.74	19920.57	15.23	12.22	1547.74	1328.04	1840.98	1513.86	38709.68	2114.80
400X300X12.0	124.45	158.53	36288.45	23314.01	15.13	12.13	1814.43	1554.27	2171.73	1784.67	45625.84	2467.39
400X300X14.0	143.74	183.11	41349.30	26521.41	15.03	12.03	2067.47	1768.10	2490.27	2045.10	52172.04	2795.60
400X300X16.0	162.63	207.17	46142.73	29547.33	14.92	11.94	2307.14	1969.83	2796.72	2295.29	58308.01	3098.98
400X300X18.0	181.10	230.70	50674.11	32396.29	14.82	11.85	2533.71	2159.76	3091.21	2535.33	63994.05	3377.06
400X300X20.0	199.15	253.70	54948.80	35072.75	14.72	11.76	2747.44	2338.19	3373.85	2765.36	69191.33	3629.36
500X200X6.0	64.08	81.63	25690.13	6221.07	17.74	8.73	1027.61	622.11	1284.16	678.87	16353.70	1098.63
500X200X8.0	84.62	107.79	33466.50	8047.87	17.62	8.64	1338.66	804.79	1683.27	887.19	21366.48	1419.28
500X200X10.0	104.73	133.42	40860.16	9757.63	17.50	8.55	1634.41	975.77	2068.10	1086.73	26105.40	1716.72
500X200X12.0	124.45	158.53	47877.48	11354.15	17.38	8.46	1915.10	1135.42	2438.78	1277.61	30538.24	1990.64
500X200X14.0	143.74	183.11	54524.82	12841.14	17.26	8.37	2181.00	1284.12	2795.43	1459.94	34633.43	2240.67
500X200X16.0	162.63	207.17	60808.49	14222.30	17.13	8.29	2432.34	1422.23	3138.16	1633.85	38360.40	2466.45
500X200X18.0	181.10	230.70	66734.75	15501.28	17.01	8.20	2669.39	1550.13	3467.09	1799.45	41689.87	2667.57
500X200X20.0	199.15	253.70	72309.80	16681.66	16.88	8.11	2892.40	1668.17	3782.35	1956.86	44594.14	2843.63
500X300X8.0	97.18	123.79	43149.92	19747.90	18.67	12.63	1726.00	1316.53	2076.87	1466.15	43143.80	2192.97
500X300X10.0	120.43	153.42	52866.82	24127.24	18.56	12.54	2114.68	1608.49	2558.10	1803.86	53167.39	2675.40
500X300X12.0	143.29	182.53	62169.00	28293.53	18.46	12.45	2486.76	1886.24	3024.38	2130.27	62797.85	3130.85
500X300X14.0	165.72	211.11	71063.12	32251.70	18.35	12.36	2842.53	2150.12	3475.83	2445.50	71991.13	3558.92
500X300X16.0	187.75	239.17	79555.80	36006.64	18.24	12.27	3182.24	2400.45	3912.56	2749.69	80703.46	3959.20
500X300X18.0	209.36	266.70	87653.63	39563.17	18.13	12.18	3506.15	2637.55	4334.69	3042.93	88891.60	4331.25
500X300X20.0	230.55	293.70	95363.14	42926.09	18.02	12.09	3814.53	2861.74	4742.35	3325.36	96513.06	4674.62
600X200X6.0	73.50	93.63	40672.54	7350.51	20.84	8.86	1355.76	735.06	1722.32	795.27	20598.47	1324.49
600X200X8.0	97.18	123.79	53127.31	9523.28	20.72	8.77	1770.92	952.33	2262.23	1040.79	26928.52	1714.30
600X200X10.0	120.43	153.42	65043.47	11564.30	20.59	8.68	2168.12	1156.43	2785.23	1276.73	32934.16	2077.94
600X200X12.0	143.29	182.53	76428.61	13477.67	20.46	8.59	2547.63	1347.77	3291.44	1503.21	38582.25	2415.16
600X200X14.0	165.72	211.11	87290.27	15267.43	20.33	8.50	2909.68	1526.75	3780.99	1720.34	43840.48	2725.67
600X200X16.0	187.75	239.17	97635.94	16937.61	20.20	8.42	3254.54	1693.77	4254.00	1928.25	48677.53	3009.14
600X200X18.0	209.36	266.70	107473.08	18492.16	20.07	8.33	3582.44	1849.22	4710.57	2127.05	53063.38	3265.24
600X200X20.0	230.55	293.70	116809.10	19935.00	19.94	8.24	3893.64	1993.50	5150.84	2316.86	56969.59	3493.63
600X300X8.0	109.74	139.79	67146.73	23159.31	21.92	12.87	2238.23	1543.96	2735.83	1699.75	55282.51	2647.72
600X300X10.0	136.13	173.42	82450.14	28333.90	21.80	12.78	2748.34	1888.93	3375.23	2093.86	68185.35	3236.10
600X300X12.0	162.13	206.53	97176.13	33273.05	21.69	12.69	3239.21	2121.81	3997.04	2745.87	80627.77	3794.47
600X300X14.0	187.70	239.11	111332.56	37981.99	21.58	12.60	3711.09	2532.14	4601.39	2845.90	92563.22	4322.49
600X300X16.0	212.87	271.17	124927.25	42465.94	21.46	12.51	4164.25	2831.07	5188.40	3204.09	103945.54	4819.77
600X300X18.0	237.62	302.70	137967.96	46730.05	21.35	12.42	4598.94	3115.34	5758.17	3550.53	114729.07	5285.92
600X300X20.0	261.95	333.70	150462.43	50779.42	21.23	12.34	5015.42	3385.30	6310.84	3885.36	124868.90	5720.52
600X400X8.0	122.30	155.79	81166.14	34784.94	22.83	16.76	2705.54	2189.25	3209.43	2438.71	89433.21	3581.75
600X400X10.0	151.83	193.42	99858.61	53774.74	22.72	16.67	3328.57	2688.74	3965.23	3010.98	110706.68	4395.41
600X400X12.0	180.97	230.53	117923.65	63395.01	22.62	16.58	3930.79	3169.76	4702.64	3568.53	131433.38	5175.73
600X400X14.0	209.68	267.11	135374.85	72652.18	22.51	16.49	4512.50	3632.61	5421.79	4111.47	151556.54	5922.35
600X400X16.0	237.99	303.17	152218.85	81552.65	22.41	16.40	5073.96	4077.64	6122.80	4639.92	171019.37	6634.88
600X400X18.0	265.88	338.70	168462.86	90102.75	22.30	16.31	5615.43	4505.14	6805.77	5154.01	189765.23	7312.91
600X400X20.0	293.35	373.70	184115.76	98308.80	22.20	16.22	6137.20	4915.44	7470.84	5653.85	207737.81	7956.01

RHS (Rectangular Hollow Section) Sizes

SIZE	0.8	1.0	1.2	1.4	1.6	2.0	2.2	2.6	2.9	3.2	3.6	4.0	4.5	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0
25X20																						
26X13																						
30X20																						
40X20																						
40X10																						
40X25																						
45X35																						
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80X40																						
96X48																						
100X50																						
120X60																						
120X80																						
122X61																						
130X50																						
145X82																						
150X30																						
150X50																						
150X75																						
150X100																						
160X80																						
172X92																						
180X60																						
180X120																						
200X100																						
200X150																						
220X140																						
240X120																						
250X150																						
300X150																						
300X200																						
300X100																						
350X250																						
400X200																						
400X350																						
500X200																						
500X300																						
600X200																						
600X400																						

TENSILE PROPERTIES OF STEEL TUBES
FOR STRUCTURAL PURPOSE
IS 1161:2014, TABLE 2, (Clauses 3.1 and 11.2)

S. No.	Grade	Tensile Strength	Yield Strength	Elongation on Gauge Length
		Min	Min	$5.65 \sqrt{S_0}$ Min
		MPa	MPa	Percent
1	YSt 210	330	210	20
2	YSt 240	410	240	17
3	YSt 310	450	310	14
4	YSt 355	490	355	10

TENSILE PROPERTIES OF STEEL TUBES
SECTIONS
IS 4923:2017, TABLE 4, (Clauses 19.2)

S. No.	Grade	Tensile Strength	Yield Strength	Elongation
		Min	Min	Min
		MPa	MPa	Percent
1	YSt 210	330	210	20
2	YSt 240	410	240	15
3	YSt 310	450	310	10
4	YSt 355	490	355	10

CHEMICAL & MECHANICAL PROPERTIES

IS 2062:2011 (Clauses 5, 8.1, 8.2, 10.3, 10.3.1, 11.3.1, 12.2)

Grade Designation	Ladle Analysis, Percent, Max					Carbon Equivalent	Tensile Strength R_m , Min MPa	Yield Stress	Percentage Elongation A, min at Gauge Length $L=5.65 \sqrt{S_0}$
	C	Mn	S	P	Si	(CE), Max			
E 250	0.22	1.50	0.045	0.045	0.40	0.41	410	250	23
E 300	0.20	1.50	0.045	0.045	0.45	0.44	440	300	22
E 350	0.20	1.55	0.045	0.045	0.45	0.47	490	350	22
E 410	0.20	1.60	0.045	0.045	0.45	0.50	540	410	20

CHEMICAL COMPOSITION & MECHANICAL PROPERTIES

IS 10748:2004 Table 1 & 3 (Clauses 7.1, 7.2, 8.3 & 9.2.4)

Grade	Ladle Analysis, Percent, Max				Carbon Equivalent	Tensile Strength Min, MPa	Yield Stress Min, MPa	Percentage Elongation, min at Gauge Length $5.65 \sqrt{S_0}$
	C	Mn	S	P	(CE), Max			
1	0.10	0.50	0.040	0.040	-	290	170	30
2	0.12	0.60	0.040	0.040	-	330	210	28
3	0.16	1.20	0.040	0.040	-	410	240	25
4	0.20	1.30	0.040	0.040	0.45	430	275	20
5	0.25	1.30	0.040	0.040	0.45	490	310	15



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