

HOLLOW STEEL SECTIONS FOR STRUCTURAL USE (SHS)



Dimensions and Depth Properties of Square Hollow Sections IS 4923 : 1997

Grade YST 210, YST 240, YST 310

Designation		Dept or Width	Thickness	Weight	Area of Section	Moment of Inertia	Radius of Gyration	Elastic Modulus	Plastic Modulus
mm		mm	mm	Kg/m	cm	cm	cm	cm	cm
1		2	3	4	5	6	7	8	9
25.0 X 25.0	2.6	25.0	2.6	1.69	2.16	1.72	0.89	1.38	1.76
	3.2	25.0	3.2	1.98	2.53	1.89	0.86	1.51	1.98
30.0 x 30.0	2.6	30.0	2.6	2.10	2.68	3.23	1.10	2.15	2.68
	3.2	30.0	3.2	2.49	3.17	3.62	1.07	2.41	3.08
32.0 X 32.0	4.0	30.0	4.0	2.94	3.75	3.97	1.03	2.64	3.50
	2.6	32.0	2.6	2.26	2.88	4.02	1.18	2.51	3.11
35.0 X 35.0	3.2	32.0	3.2	2.69	3.42	4.54	1.15	2.84	3.59
	4.0	32.0	4.0	3.19	4.07	5.02	1.11	3.14	4.11
38.0 X 38.0	2.6	35.0	2.6	2.51	3.20	5.43	1.30	3.10	3.81
	3.2	35.0	3.2	2.99	3.81	6.18	1.27	3.53	4.42
40.0 X 40.0	4.0	35.0	4.0	3.57	4.55	6.93	1.23	3.96	5.11
	2.6	38.0	2.6	2.75	3.51	7.14	1.43	3.76	4.57
45.0 X 45.0	2.9	38.0	2.9	3.03	3.86	7.68	1.41	4.04	4.97
	3.2	38.0	3.2	3.29	4.19	8.18	1.40	4.30	5.34
49.5 X 49.5	3.6	38.0	3.6	3.63	4.62	8.76	1.38	4.61	5.80
	4.0	38.0	4.0	3.95	5.03	9.26	1.36	4.87	6.22
60.0 X 60.0	2.6	40.0	2.6	2.92	3.72	8.45	1.51	4.22	5.12
	3.2	40.0	3.2	3.49	4.45	9.72	1.48	4.86	6.01
63.5. X 63.5	3.6	40.0	3.6	3.85	4.91	10.45	1.46	5.22	6.53
	4.0	40.0	4.0	4.20	5.35	11.07	1.44	5.54	7.01
72.0 X 72.0	2.6	45.0	2.6	3.32	4.24	12.47	1.71	5.52	6.64
	2.9	45.0	2.9	3.66	4.67	13.45	1.70	5.98	7.25
75.0 X 75.0	3.2	45.0	3.2	3.99	5.09	14.41	1.68	6.40	7.83
	3.6	45.0	3.6	4.42	5.63	15.57	1.66	6.92	8.55
80.0 X 80.0	4.5	45.0	4.5	5.31	6.77	17.74	1.62	7.88	9.99
	2.9	49.5	2.9	4.07	5.19	18.37	1.88	7.42	8.93
88.9 X 88.9	3.6	49.5	3.6	4.93	6.28	21.42	1.85	8.66	10.60
	4.5	49.5	4.5	5.95	7.58	24.64	1.80	9.96	12.47
91.5 X 91.5	2.9	60.0	2.9	5.03	6.41	34.21	2.31	11.40	13.56
	3.6	60.0	3.6	6.11	7.79	40.37	2.28	13.46	16.22
100.0 X 100.0	4.5	60.0	4.5	7.43	9.47	47.20	2.23	15.73	19.32
	3.2	63.5	3.2	5.85	7.45	44.35	2.44	13.97	16.65
113.5 X 113.5	3.6	63.5	3.6	6.51	8.29	48.55	2.42	15.29	18.36
	4.5	63.5	4.5	7.93	10.10	57.00	2.38	17.95	21.93
125.0 X 125.0	3.2	72.0	3.2	6.71	8.54	66.32	2.79	18.42	21.80
	4.0	72.0	4.0	8.22	10.47	79.03	2.75	21.95	26.32
132.0 X 132.0	4.8	72.0	4.8	9.66	12.31	90.31	2.71	25.09	30.49
	3.2	75.0	3.2	7.01	8.93	75.53	2.91	20.41	23.79
150.0 X 150.0	4.0	75.0	4.0	8.59	10.95	90.19	2.87	24.05	28.76
	4.9	75.0	4.9	10.30	13.12	104.82	2.83	27.95	33.92
180.0 X 180.0	3.2	80.0	3.2	7.51	9.57	92.72	3.11	23.18	27.29
	4.0	80.0	4.0	9.22	11.75	111.05	3.07	27.76	33.07
200.0 X 200.0	4.8	80.0	4.8	13.85	10.87	127.58	3.04	31.90	38.45
	3.6	88.9	3.6	9.38	11.65	142.83	3.46	32.13	37.85
225.0 X 225.0	4.5	88.9	4.5	11.52	14.67	170.97	3.41	38.46	45.85
	4.9	88.9	4.9	12.44	15.85	182.57	3.39	41.07	49.23
250.0 X 250.0	3.6	91.5	3.6	9.67	12.32	156.49	3.56	34.21	40.24
	4.5	91.5	4.5	11.88	15.14	187.57	3.52	41.00	48.79
275.0 X 275.0	5.4	91.5	5.4	14.01	17.85	215.68	3.48	47.14	56.77
	4.0	100.0	4.0	11.73	14.95	226.35	3.89	45.27	53.30
300.0 X 300.0	5.0	100.0	5.0	14.41	18.36	271.10	3.84	54.22	64.59
	6.0	100.0	6.0	16.98	21.63	311.47	3.79	62.29	75.10
325.0 X 325.0	4.5	113.5	4.5	14.99	19.10	372.88	4.42	65.71	77.33
	4.8	113.5	4.8	15.92	20.28	393.31	4.40	69.30	81.81
350.0 X 350.0	5.4	113.5	5.4	17.74	22.60	432.58	4.38	76.23	90.55
	6.0	113.5	6.0	19.53	24.87	469.81	4.35	82.79	98.96
375.0 X 375.0	4.5	125.0	4.5	16.62	21.17	505.83	4.89	80.93	94.84
	5.0	125.0	5.0	18.33	23.36	552.62	4.86	88.42	101.10
400.0 X 400.0	6.0	125.5	6.0	21.69	27.63	640.89	4.82	102.54	121.87
	4.8	132.0	4.8	18.71	23.83	634.39	5.16	96.12	112.69
425.0 X 425.0	5.4	132.0	5.4	20.88	26.59	700.11	5.13	106.08	125.02
	6.0	132.0	6.0	23.01	29.31	762.98	5.10	115.60	136.98
450.0 X 450.0	5.0	150.0	5.0	22.26	28.36	982.12	5.89	130.95	152.98
	6.0	150.0	6.0	26.40	33.63	1145.91	5.84	152.79	179.88
475.0 X 475.0	5.0	180.0	5.0	26.97	34.36	1736.89	7.11	192.99	224.02
	6.35	180.0	6.35	33.81	43.07	2137.84	7.05	237.54	278.14