

## Sectional Tubes as per IS:4923

### Dimensions & Properties of Square Hollow Sections

Designation (mm) D x W x T	Depth or Width (mm)	Thickness (mm)	Weight (Kg/mtr.)	Area of Section (cm <sup>2</sup> )	Moment of Inertia (cm <sup>4</sup> )	Radius of Gyration (cm)	Elastic Modulus (cm <sup>2</sup> )	Plastic Modulus (cm <sup>2</sup> )
25.0 x 25.0 x 2.6	25.0	2.6	1.69	2.16	1.72	0.89	1.38	1.76
25.0 x 25.0 x 3.2	25.0	3.2	1.98	2.53	1.89	0.86	1.51	1.98
40.0 x 40.0 x 3.2	40.0	3.2	3.49	4.45	9.72	1.48	4.86	6.01
40.0 x 40.0 x 3.6	40.0	3.6	3.85	4.91	10.45	1.46	5.22	6.53
40.0 x 40.0 x 4.0	40.0	4.0	4.20	5.35	11.07	1.44	5.54	7.01
49.5 x 49.5 x 2.9	49.5	2.9	4.07	5.19	18.37	1.88	7.42	8.93
49.5 x 49.5 x 3.6	49.5	3.6	4.93	6.28	21.42	1.85	8.66	10.60
49.5 x 49.5 x 4.5	49.5	4.5	5.95	7.58	24.64	1.80	9.96	12.47

### Dimensions & Properties of Rectangular Hollow Sections

Designation (mm) D x W x T	Weight (Kg/mtr.)	Area of Section (cm <sup>2</sup> )	Moment Inertia (cm <sup>4</sup> )		Radius of Gyration (cm)		Elastic Modulus (cm <sup>2</sup> )		Plastic Modulus (cm <sup>2</sup> )	
			X - X	X - Y	X - X	Y - Y	X - X	Y - Y	X - X	Y - Y
50 x 25 x 2.9	2.98	3.80	10.93	3.60	1.70	0.97	4.37	2.88	5.72	3.48
50 x 25 x 3.2	3.24	4.13	11.63	3.80	1.68	0.96	4.65	3.04	6.14	3.73
60 x 40 x 2.9	4.12	5.25	24.74	13.11	2.17	1.58	8.25	6.56	10.25	7.73
80 x 40 x 2.9	5.03	6.41	50.87	17.11	2.82	1.63	12.72	8.56	16.07	9.88
80 x 40 x 3.2	5.50	7.01	54.94	18.41	2.80	1.62	13.74	9.21	17.46	10.72
80 x 40 x 4.0	6.71	8.55	64.79	21.49	2.75	1.59	16.20	10.74	20.91	12.77
100 x 50 x 3.2	7.01	8.93	112.29	37.95	3.55	2.06	22.46	15.18	28.20	17.37
100 x 50 x 4.0	8.59	10.95	134.14	44.95	3.50	2.03	26.83	17.98	34.10	20.93

### TECHNICAL SPECIFICATIONS Relevant Code : IS 4923 DIMENSIONAL TOLERANCES

Thickness	:	All size $\pm 10\%$
Length	:	Normal 6.25 meters with tolerance of $\pm 250\text{mm}$
Straightness	:	Unless otherwise arranged, the closed structurals shall have straightness of Minimum 1:200 on any length measured at the center of the length (mill straighten condition)
Weight	:	On individual length; + 10%, -8%. On lots of 10.0 tons $\pm 7.5\%$
Weldability	:	RHS/SHS are weldable with our any preheating with standard electrodes
Physical Properties	:	Minimum yield stress = 310 Mpa, Minimum tensile stress = 410 Mpa, % Elongation : 15min.

