

Nominal Sizes		Wall Thickness (T)		Mass per unit Length		Pieces /bd ls	Nominal Sizes		Wall Thickness (T)		Mass per unit Length		Pieces /bd bdls		
Inch	NB (MM)	Inch	MM	Kg/Mtr	lb/Ft		Inch	NB (MM)	Inch	MM	Kg/Mtr	lb/Ft			
5/8 X 5/8	16 X 16	0.047	1.20	0.53	0.355	200	3 1/2 x 3 1/2	89 x 89	0.079	2.00	5.38	3.616	36		
		0.059	1.50	0.64	0.428	200			0.098	2.50	6.66	4.476	36		
		0.071	1.80	0.74	0.495	150			0.118	3.00	7.92	5.323	36		
		0.079	2.00	0.80	0.536	150			0.157	4.00	10.35	6.956	25		
3/4 x 3/4	19 x 19	0.047	1.20	0.64	0.431	200			0.197	5.00	12.68	8.522	20		
		0.059	1.50	0.78	0.523	200			0.236	6.00	14.91	10.020	16		
		0.071	1.80	0.91	0.609	150			0.315	8.00	18.62	12.513	12		
		0.079	2.00	0.99	0.663	150			0.354	9.00	20.43	13.730	12		
		0.098	2.50	1.17	0.785	100			0.079	2.00	5.40	3.629	36		
1 x 1	25 x 25	0.118	3.00	1.33	0.890	80			3 6/11 x 3 6/11	90 x 90	0.098	2.50	6.70	4.503	36
		0.047	1.20	0.87	0.583	150					0.118	3.00	8.01	5.383	36
		0.059	1.50	1.06	0.713	150					0.157	4.00	10.50	7.056	25
		0.071	1.80	1.25	0.837	100	0.197	5.00			12.80	8.602	20		
		0.079	2.00	1.36	0.914	100	0.236	6.00			15.10	10.148	16		
1 1/5 x 1 1/5	30 x 30	0.091	2.30	1.53	1.030	80	0.315	8.00			18.90	12.702	12		
		0.098	2.50	1.64	1.102	80	0.354	9.00			20.70	13.911	12		
		0.118	3.00	1.89	1.270	64	0.079	2.00			6.07	4.081	20		
		0.047	1.20	1.06	0.710	100	0.098	2.50			7.53	5.058	20		
		0.059	1.50	1.30	0.871	100	0.118	3.00			8.96	6.022	20		
		0.071	1.80	1.53	1.027	100	0.157	4.00			11.70	7.863	20		
		0.079	2.00	1.68	1.129	100	0.177	4.50			13.08	8.793	16		
		0.098	2.50	2.03	1.364	64	0.197	5.00	14.40	9.677	16				
		0.118	3.00	2.36	1.586	64	0.217	5.50	15.71	10.556	12				
		0.157	4.00	2.94	1.977	49	0.236	6.00	17.00	11.425	12				
1 1/8 x 1 1/8	38 x 38	0.059	1.50	1.67	1.124	100	0.315	8.00	21.40	14.382	9				
		0.071	1.80	1.98	1.331	80	0.354	9.00	23.53	15.813	9				
		0.079	2.00	2.18	1.464	80	0.394	10.00	25.60	17.204	9				
		0.098	2.50	2.66	1.788	64	0.472	12.00	28.31	19.026	9				
		0.118	3.00	3.12	2.093	49	0.098	2.50	9.10	6.116	20				
1 3/5 x 1 3/5	40 x 40	0.157	4.00	3.95	2.653	49	0.118	3.00	10.80	7.258	20				
		0.059	1.50	1.77	1.188	100	0.157	4.00	14.20	9.543	16				
		0.071	1.80	2.09	1.407	80	0.197	5.00	17.50	11.761	12				
		0.079	2.00	2.31	1.552	80	0.236	6.00	20.70	13.911	12				
		0.098	2.50	2.82	1.895	64	0.315	8.00	26.40	17.742	9				
		0.118	3.00	3.30	2.218	49	0.354	9.00	29.20	19.624	9				
		0.157	4.00	4.20	2.823	49	0.394	10.00	31.80	21.371	9				
		0.197	5.00	5.00	3.360	49	0.472	12.00	35.80	24.059	9				
		0.236	6.00	5.70	3.831	49	0.098	2.50	9.49	6.378	20				
		0.118	3.00	11.31	7.601	16	0.157	4.00	14.90	10.013	16				
2 x 2	50 x 50	0.079	2.00	2.93	1.969	49	0.197	5.00	18.30	12.298	12				
		0.098	2.50	3.60	2.419	49	0.236	6.00	21.70	14.583	12				
		0.118	3.00	4.25	2.856	36	0.315	8.00	27.70	18.616	9				
		0.157	4.00	5.45	3.663	36	0.354	9.00	30.60	20.565	9				
		0.197	5.00	6.56	4.409	25	0.394	10.00	33.40	22.446	9				
2 1/3 x 2 1/3	60 x 60	0.236	6.00	7.56	5.081	25	0.472	12.00	37.70	25.336	9				
		0.059	1.50	2.71	1.821	49	0.157	4.00	16.80	11.290	12				
		0.079	2.00	3.56	2.392	49	0.197	5.00	20.70	13.911	9				
		0.098	2.50	4.39	2.950	36	0.236	6.00	24.50	16.465	9				
		0.118	3.00	5.19	3.488	36	0.315	8.00	31.40	21.102	6				
		0.157	4.00	6.71	4.509	25	0.394	10.00	38.10	25.605	6				
		0.117	4.50	7.43	4.995	25	0.472	12.00	43.40	29.167	4				
		0.197	5.00	8.13	5.464	25	0.157	4.00	18.00	12.097	12				
		0.236	6.00	9.45	6.351	20	0.197	5.00	22.30	14.987	9				
		0.059	1.50	2.87	1.929	49	0.236	6.00	26.40	17.742	9				
2 1/2 x 2 1/2	63.5 x 63.5	0.079	2.00	3.78	2.540	49	0.315	8.00	33.90	22.782	6				
		0.118	3.00	5.52	3.710	36	0.354	9.00	37.66	25.309	6				
		0.157	4.00	7.15	4.805	25	0.394	10.00	41.30	27.755	6				
		0.197	5.00	8.68	5.833	25	0.472	12.00	47.10	31.653	4				
		0.236	6.00	10.11	6.794	20	0.157	4.00	19.30	12.970	12				
2 5/9 x 2 5/9	65 x 65	0.059	1.50	2.95	1.983	49	0.197	5.00	23.80	15.995	9				
		0.079	2.00	3.88	2.608	49	0.236	6.00	28.30	19.019	9				
		0.118	3.00	5.66	3.804	36	0.315	8.00	36.50	24.530	6				
		0.157	4.00	7.34	4.933	25	0.394	10.00	44.40	29.839	6				
		0.197	5.00	8.91	5.988	25	0.472	12.00	50.90	34.207	4				
2 3/4 x 2 3/4	70 x 70	0.236	6.00	10.39	6.983	20	0.157	4.00	21.80	14.651	12				
		0.059	1.50	3.18	2.137	36	0.197	5.00	27.00	18.145	9				
		0.079	2.00	4.19	2.816	36	0.236	6.00	32.10	21.573	9				
		0.098	2.50	5.17	3.474	36	0.315	8.00	41.50	27.890	6				
		0.118	3.00	6.13	4.120	36	0.394	10.00	50.70	34.073	6				
		0.157	4.00	7.97	5.356	25	0.472	12.00	58.50	39.315	4				
		0.177	4.50	8.85	5.948	25	0.157	4.00	24.30	16.331	6				
		0.197	5.00	9.70	6.519	25	0.197	5.00	30.10	20.228	6				
		0.236	6.00	11.33	7.614	25	0.236	6.00	35.80	24.059	4				
		0.059	1.50	3.42	2.298	36	0.315	8.00	46.50	31.250	4				
3 x 3	75 x 75	0.079	2.00	4.50	3.026	36	0.394	10.00	57.00	38.306	4				
		0.098	2.50	5.56	3.739	36	0.472	12.00	66.00	44.355	2				
		0.118	3.00	6.60	4.435	36	0.157	4.00	30.57	20.544	4				
		0.157	4.00	8.59	5.776	25	0.197	5.00	38.00	25.538	4				
		0.177	4.50	9.55	6.419	25	0.236	6.00	45.20	30.376	4				
3 1/7 x 3 1/7	80 x 80	0.197	5.00	10.50	7.056	20	0.315	8.00	59.10	39.718	4				
		0.236	6.00	12.30	8.266	20	0.394	10.00	72.70	48.858	2				
		0.079	2.00	4.82	3.237	36	0.472	12.00	84.80	56.989	2				
		0.098	2.50	5.96	4.003	36									
		0.118	3.00	7.07	4.751	36									
		0.157	4.00	9.22	6.196	25									
		0.177	4.50	10.26	6.894	25									
		0.197	5.00	11.30	7.594	20									
		0.236	6.00	13.20	8.871	16									
		0.315	8.00	16.40	11.022	12									
0.354	9.00	17.90	12.030	12											

We also offer Pre-Galvanized as per Z275 (Galvanized coating 275gm/m², from size 40x40 to 100x100mm, Wall thickness from 1.6 mm to 4.0mm).

TOLERANCES FOR SHAPE AND MASS:

CHARACTERISTICS	SQUARE HOLLOW SECTIONS	
	Side Length (mm)	Tolerance
OUT SIDE DIMENSIONS (B & H)	H, B < 100	± 1% with a min. ± 0.5mm
	100 ≤ H,B ≤ 200	± 0.8%
	H,B > 200	± 0.6%
THICKNESS (T)	T ≤ 5.0mm ± 10% T > 5.0mm ± 0.5mm	
CONCAVITY/CONVEXITY	Max. 0.8 % with a minimum of 0.5mm	
SQUARENESS OF SIDE (α)	90° ± 1°	
EXTERNAL CORNER PROFILE	T ≤ 6.0mm : 1.6T to 2.4T, 6.0 < T ≤ 10.0mm : 2.0T to 3.0T, T > 10.0mm : 2.4T to 3.6T	
TWIST	2.0 mm + 0.5mm/m length	
STRAIGHTNESS	0.15% of total length and 3.0 mm over any 1m length	
MASS PER UNIT LENGTH	± 6% on individual delivered length	

CHEMICAL COMPOSITION:

GRADE	Chemical composition % max.						
	C	Si	Mn	P	S	N	Carbon Equivalent (CEV)
S235JRH	0.17	--	1.40	0.040	0.040	0.009	0.35
S275JOH	0.20	--	1.50	0.035	0.035	0.009	0.40
S275J2H	0.20	--	1.50	0.030	0.030	--	0.40
S355JOH	0.22	0.55	1.60	0.035	0.035	0.009	0.45
S355J2H	0.22	0.55	1.60	0.030	0.030	--	0.45

Carbon Equivalent : Max carbon equivalent shall be
 $CEV = C + (Mn / 6) + (Cr + Mo + V) / 5 + (Ni + Cu) / 15$

MECHANICAL PROPERTIES:

GRADE	Min. Yield Strength R _{eh} (Mpa)	Tensile Strength R _m (MPa)		Elongation % Min.	Min. Impact Energy (J)		
		Thk < 3 mm	Thk ≥ 3 mm		-20° C	0° C	20° C
S235JRH	235	360-510	360-510	24	--	--	27
S275JOH	275	430-580	410-560	20	--	27	--
S275J2H	275	430-580	410-560	20	27	--	--
S355JOH	355	510-680	470-630	20	--	27	--
S355J2H	355	510-680	470-630	20	27	--	--

WORKMANSHIP-Free from overlap, Lamination, tool/roll marks, pin holes, open seam & other harmful defect.

PACKING -Box Type

MILL TEST CERTIFICATE-We can issue a MTC, Certifying that the tubes supplied comply with this standard.