

Tolerance - ASTM A-500

Tolerances	Square and Rectangular Hollow Sections		
	ASTM A-500		
Outside Dimension (OD)	Largest Outside Dia. Across Flats in (mm)	Tolerance, plus & minus in (mm)	
	2 ½ (63.5) and under	0.020 (0.50)	
	Over 2 ½ to 3 ½ (63.5 to 88.9), incl	0.025 (0.64)	
	Over 3 ½ to 5 ½ (88.9 to 139.7), incl	0.030 (0.76)	
Thickness (t)	Over 5 ½ (139.7) 1%		
Thickness (t)	Plus and minus 10 % of nominal thickness, exclusive of weld area		
Tolerances of Length	Plus 2 in (50.8mm) and minus zero on ordered lengths. (Please specify if any lighter tolerances is required)		
Out of Roundness			
Concavity / Convexity	Shall not exceed the outside dimension tolerance		
Squareness of size	Adjacent side may deviate from 90 degrees by plus and minus 2 degrees max.		
External corner profile	3T (max.)		
Twist	Specified Dia of Longest Side, in (mm)	Max. Twist in 3ft, in	Max. Twist in 1m, mm
	1 ½ (38.1) and under	0.050	1.390
	Over 1 ½ to 2 ½ (38.1 to 63.5), incl	0.062	1.720
	Over 2 ½ to 4 (63.5 to 101.6), incl	0.075	2.090
	Over 4 to 6 (101.6 to 152.4), incl	0.087	2.420
Over 6 to 8 (152.4 to 203.2), incl	0.100	2.780	
Over 8 (203.2)	0.112	3.110	
Straightness	1/8 in x <u>Total Length in ft</u> 5		
Mass	-		