

HOLLOW STRUCTURALS

ASTM A-500

TOLERANCES FOR OUTSIDE DIMENSIONS and WALL THICKNESS

Largest outside dimension across flats, inches	2-1/2 to 3-1/2	Over 3-1/2 to 5-1/2 incl.	Over 5-1/2
Tolerance for outside dimensions including convexity or concavity	± .025"	± .030"	± 1%
Wall thickness tolerance*	± 10%	± 10%	± 10%

* Note: The allowable variation in wall thickness does not apply at corners.

MAXIMUM TWIST*

Longer outside dimensions, inches	2-1/2 to 4 incl.	Over 4 to 5-1/2 incl.	Over 5-1/2 to 8 incl.	Over 8
Maximum twist per 3 feet of length, inches	.075	.087	.100	.112

*Twist is measured by holding down the edge of one end of a square of rectangular hollow structural on a surface plate with the bottom side of the tube parallel to the surface plate and noting the height that either corner on the opposite end of the bottom side is above the surface plate.

LENGTHS AND PERMISSIBLE VARIATION

Tube lengths	2'0"/12'0"	12'0"/20'0"	20'0"/32'0"
Permissible variation in length	± 3/32"	± 1/8"	± 1/4"

SQUARENESS OF SIDES. . . . Adjacent sides of hollow structural may deviate from 90 degrees by plus or minus one degree.

VARIATIONS FROM EXACT STRAIGHTNESS
Permissible variations, inches (inches camber & sweep)

$$\frac{1}{8} \times \text{number of feet of total length}$$

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