

Tracks (T)

MATERIAL	
Web (in)	8
Flange (in)	3½
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 50
Design Thickness (in)	0.1017
Minimum Thickness (mil)	97
Gauge	12
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	5.51
Cross Sectional Area: A (in ²)	1.487
Moment of Inertia: Ix (in ⁴)	14.838
Section Modulus: Sx (in ³)	3.709
Radius of Gyration: Rx (in)	3.159
Moment of Inertia: Iy (in ⁴)	1.798
Radius of Gyration: Ry (in)	1.100

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	12.016	11.146
Section Modulus: Sxe (in ³)	2.682	2.504
Allowable Bending Moment: Ma (in-k)	53.00	74.98
Allowable Shear Force: Va (lb)	8,846	10888
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	5.127
Torsional Warping Constant: Cw (in ⁶)	19,321
Shear Center to Centroid on Principal X-axis: Xo (in)	-2.083
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.940

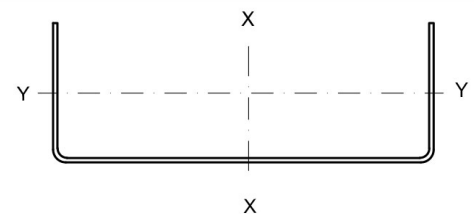


PRODUCT ID

800T350-97 (8x3½x12ga)

CODES & STANDARDS

- ASTM A 1003, A 653, & C 955
- AISI S100-16



See Hermes/Hephaistos Technical Manual
for complete design data