

Tracks (T)

MATERIAL	
Web (in)	8
Flange (in)	2½
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.1017
Minimum Thickness (mil)	97
Gauge	12
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	4.365
Cross Sectional Area: A (in ²)	1.284
Moment of Inertia: Ix (in ⁴)	11.665
Section Modulus: Sx (in ³)	2.196
Radius of Gyration: Rx (in)	3.015
Moment of Inertia: Iy (in ⁴)	0.766
Radius of Gyration: Ry (in)	0.742

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	10.499	10.070
Section Modulus: Sxe (in ³)	2.482	2.33
Allowable Bending Moment: Ma (in-k)	49.04	69.87
Allowable Shear Force: Va (lb)	8846	10888
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	4.426
Torsional Warping Constant: Cw (in ⁶)	7.730
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.259
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.362

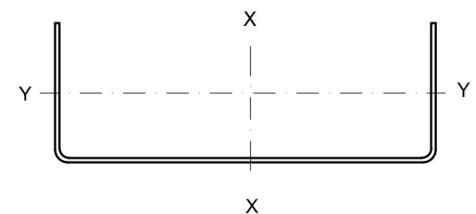


PRODUCT ID

800T250-97 (8x2½x12ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data