

Tracks (T)

MATERIAL	
Web (in)	10
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)	5.056
Cross Sectional Area: A (in ²)	1.487
Moment of Inertia: Ix (in ⁴)	19.982
Section Modulus: Sx (in ³)	3.997
Radius of Gyration: Rx (in)	3.666
Moment of Inertia: Iy (in ⁴)	0.746
Radius of Gyration: Ry (in)	0.708

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	18.861	17.500
Section Modulus: Sxe (in ³)	3.461	3.279
Allowable Bending Moment: Ma (in-k)	68.39	98.17
Allowable Shear Force: Va (lb)	8846	9862
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	5.187
Torsional Warping Constant: Cw (in ⁶)	13.160
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.157
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.909

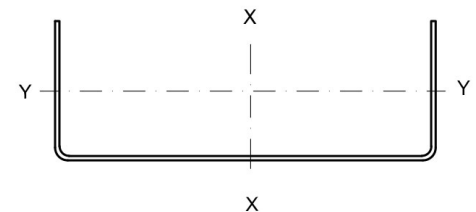


PRODUCT ID

1000T250-97 (10x2½x12ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data