

Tracks (T)

MATERIAL	
Web (in)	10
Flange (in)	2½
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.0566
Minimum Thickness (mil)	54
Gauge	16
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	2.846
Cross Sectional Area: A (in ²)	0.837
Moment of Inertia: Ix (in ⁴)	11.416
Section Modulus: Sx (in ³)	2.283
Radius of Gyration: Rx (in)	3.693
Moment of Inertia: Iy (in ⁴)	0.42
Radius of Gyration: Ry (in)	0.714

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	8.397	7.348
Section Modulus: Sxe (in ³)	1.431	1.166
Allowable Bending Moment: Ma (in-k)	28.27	34.91
Allowable Shear Force: Va (lb)	1660	1660
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.894
Torsional Warping Constant: Cw (in ⁶)	7.674
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.161
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.937

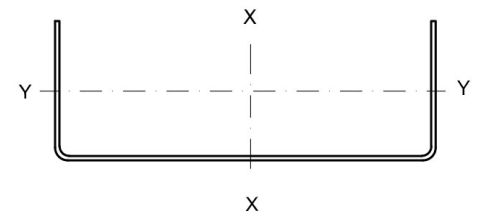


PRODUCT ID

1000T250-54 (10x2½x16ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data