

Tracks (T)

MATERIAL	
Web (in)	12
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)	3.231
Cross Sectional Area: A (in ²)	0.950
Moment of Inertia: Ix (in ⁴)	17.817
Section Modulus: Sx (in ³)	2.969
Radius of Gyration: Rx (in)	4.330
Moment of Inertia: Iy (in ⁴)	0.444
Radius of Gyration: Ry (in)	0.684

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	11.959	10.685
Section Modulus: Sxe (in ³)	1.589	1.351
Allowable Bending Moment: Ma (in-k)	26.22	33.78
Allowable Shear Force: Va (lb)	1102	1102
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	1.015
Torsional Warping Constant: Cw (in ⁶)	11.770
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.056
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.509

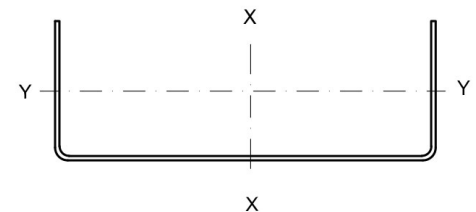


PRODUCT ID

1200T250-54 (12x2½x16ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data