

Tracks (T)

MATERIAL	
Web (in)	12
Flange (in)	1¼
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)	5.01
Cross Sectional Area: A (in ²)	1.472
Moment of Inertia: Ix (in ⁴)	24.090
Section Modulus: Sx (in ³)	3.899
Radius of Gyration: Rx (in)	4.045
Moment of Inertia: Iy (in ⁴)	0.102
Radius of Gyration: Ry (in)	0.264

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	24.081	23.751
Section Modulus: Sxe (in ³)	3.691	3.443
Allowable Bending Moment: Ma (in-k)	72.93	103.1
Allowable Shear Force: Va (lb)	7901	7901
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	5.0763
Torsional Warping Constant: Cw (in ⁶)	3.171
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.322
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.066

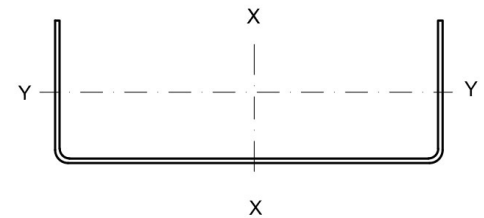


PRODUCTID

1200T125-97 (12x1¼x12ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data