

Tracks (T)

MATERIAL	
Web (in)	12
Flange (in)	1½
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)	5.18
Cross Sectional Area: A (in ²)	1.523
Moment of Inertia: Ix (in ⁴)	25.999
Section Modulus: Sx (in ³)	4.208
Radius of Gyration: Rx (in)	4.131
Moment of Inertia: Iy (in ⁴)	0.176
Radius of Gyration: Ry (in)	0.340

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	25.990	25.717
Section Modulus: Sxe (in ³)	3.997	3.620
Allowable Bending Moment: Ma (in-k)	78.99	108.4
Allowable Shear Force: Va (lb)	7901	7901
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	5.2516
Torsional Warping Constant: Cw (in ⁶)	5.335
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.441
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.169

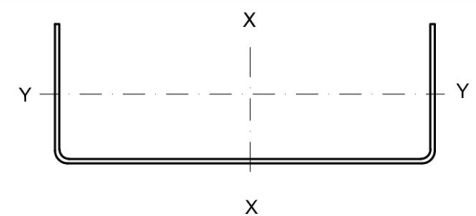


PRODUCT

1200T150-97 (12x1½x12ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data