

Tracks (T)

MATERIAL	
Web (in)	12
Flange (in)	2½
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.1017
Minimum Thickness (mil)	97
Gauge	12
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	5.748
Cross Sectional Area: A (in ²)	1.691
Moment of Inertia: Ix (in ⁴)	31.274
Section Modulus: Sx (in ³)	5.212
Radius of Gyration: Rx (in)	4.301
Moment of Inertia: Iy (in ⁴)	0.777
Radius of Gyration: Ry (in)	0.678

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	27.849	25.797
Section Modulus: Sxe (in ³)	4.335	3.825
Allowable Bending Moment: Ma (in-k)	85.66	114.53
Allowable Shear Force: Va (lb)	8145	8145
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	5.828
Torsional Warping Constant: Cw (in ⁶)	20.252
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.054
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.479

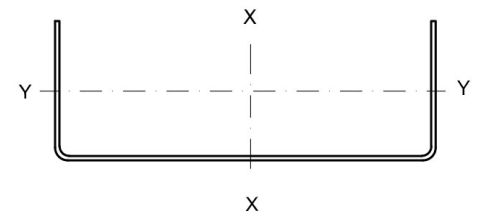


PRODUCT ID

1200T250-97 (12x2½x12ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data