

Tracks (T)

MATERIAL	
Web (in)	12
Flange (in)	2
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)	5.53
Cross Sectional Area: A (in ²)	1.625
Moment of Inertia: Ix (in ⁴)	29.816
Section Modulus: Sx (in ³)	4.826
Radius of Gyration: Rx (in)	4.284
Moment of Inertia: Iy (in ⁴)	0.410
Radius of Gyration: Ry (in)	0.502

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	29.808	28.971
Section Modulus: Sxe (in ³)	4.303	3.824
Allowable Bending Moment: Ma (in-k)	85.02	114.50
Allowable Shear Force: Va (lb)	7901	7901
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	5.6022
Torsional Warping Constant: Cw (in ⁶)	11.945
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.714
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.372

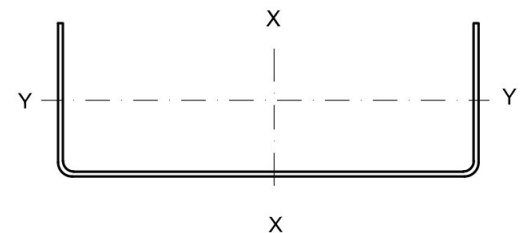


PRODUCT ID

1200T200-97 (12x2x12ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data