

Tracks (T)

MATERIAL	
Web (in)	12
Flange (in)	1¼
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)	2.79
Cross Sectional Area: A (in ²)	0.820
Moment of Inertia: Ix (in ⁴)	13.341
Section Modulus: Sx (in ³)	2.187
Radius of Gyration: Rx (in)	4.034
Moment of Inertia: Iy (in ⁴)	0.060
Radius of Gyration: Ry (in)	0.271

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	12.295	11.46
Section Modulus: Sxe (in ³)	1.493	1.287
Allowable Bending Moment: Ma (in-k)	24.63	32.18
Allowable Shear Force: Va (lb)	1354	1354
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.8756
Torsional Warping Constant: Cw (in ⁶)	1.820
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.333
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.056

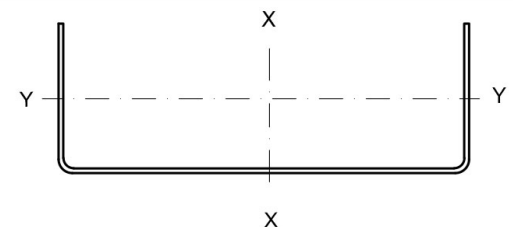


PRODUCT ID

1200T125-54 (12x1¼x16ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data