

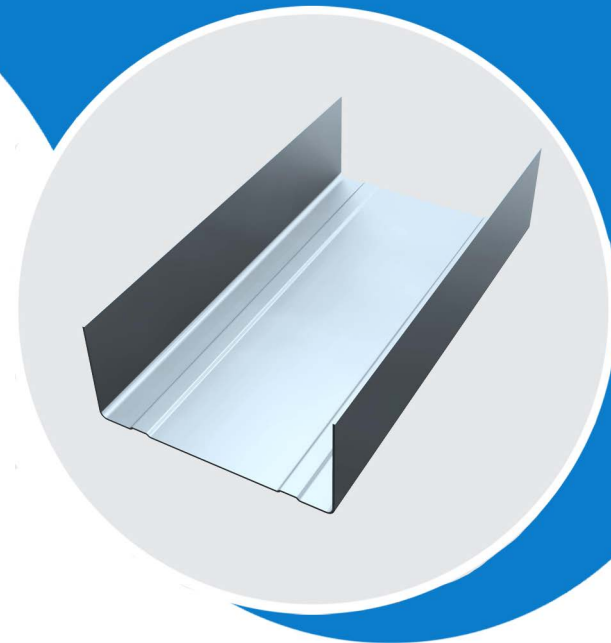
Tracks (T)

MATERIAL	
Web (in)	12
Flange (in)	1½
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.0566
Minimum Thickness (mil)	54
Gauge	16
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	2.89
Cross Sectional Area: A (in ²)	0.848
Moment of Inertia: Ix (in ⁴)	14.384
Section Modulus: Sx (in ³)	2.358
Radius of Gyration: Rx (in)	4.118
Moment of Inertia: Iy (in ⁴)	0.103
Radius of Gyration: Ry (in)	0.348

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	12.962	12.021
Section Modulus: Sxe (in ³) Allowable	1.531	1.314
Bending Moment: Ma (in-k)	25.26	32.85
Allowable Shear Force: Va (lb)	1354	1354
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.9059
Torsional Warping Constant: Cw (in ⁶)	3.033
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.454
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.157

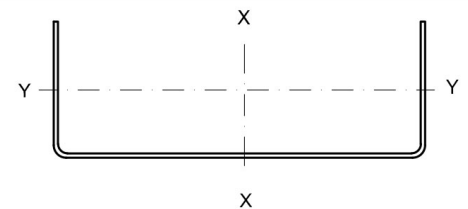


PRODUCT ID

1200T150-54 (12x1½x16ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data