

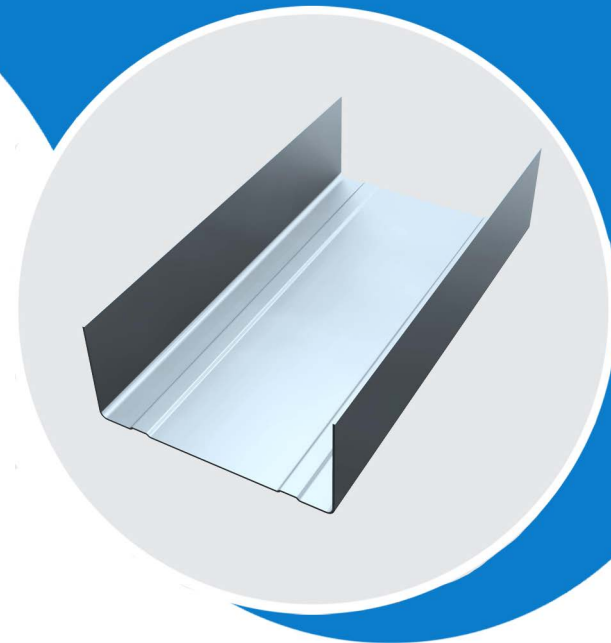
Tracks (T)

MATERIAL	
Web (in)	14
Flange (in)	2½
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)	3.62
Cross Sectional Area: A (in ²)	1.064
Moment of Inertia: Ix (in ⁴)	26.117
Section Modulus: Sx (in ³)	3.731
Radius of Gyration: Rx (in)	4.956
Moment of Inertia: Iy (in ⁴)	0.458
Radius of Gyration: Ry (in)	0.656

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	16.832	14.965
Section Modulus: Sxe (in ³)	1.880	1.593
Allowable Bending Moment: Ma (in-k)	37.14	47.70
Allowable Shear Force: Va (lb)	1837	21.59
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	1.136
Torsional Warping Constant: Cw (in ⁶)	16.860
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.969
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.092

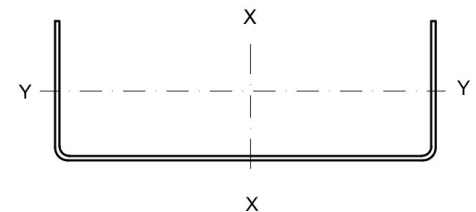


PRODUCT ID

1400T250-54 (14x2½x16ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data