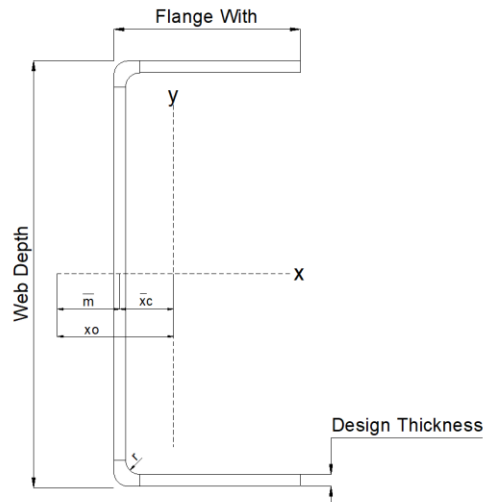


Product Type: Structural Track

Product Definition: 400T125-54 (50ksi)

CSI Code: 05 41 00



Profile Properties:

Web Depth	4.000 in	Yield Strength F_y :	50 ksi
Flange Width	1.250 in	Unit Weight	1.25 lb/ft
Design Thickness	0.0566 in	Coating	G60
Thickness	54mils (16Ga)		

Gross Section Properties:

Cross Sectional Area	A_{gross}	0.3672 in ²
Member weight per foot of length		1.25 lb/ft
Moment of Inertia. x-axis	I_x	0.9043 in ⁴
Radius of Gyration. x-axis	r_x	1.5693 in
Moment of Inertia. y-axis	I_y	0.0493 in ⁴
Radius of Gyration. y-axis	r_y	0.3665 in

Torsional Properties:

St. Venant Torsion Constant	$J \times 1000$	0.3921 in ⁴
Warping Constant	C_w	0.1536 in ⁶
Distance Between Shear Axis and Neutral Axis	x_0	-0.6207 in
Polar Radius of Gyration	r_0	1.7269 in
Torsional Flexural Constant	β	0.8708
Limit of Unbraced Length	L_u	16.66 in



Effective Section Properties:

Effective Area	Aeff	0.2269 in ²
Effective Moment of Inertia for Deflection	Ixe	0.8013 in ⁴
Effective Section Modulus	Sxe	0.3587 in ³
Allowable Bending Moment	Ma	10.7392 in.k
Allowable Shear Force (Solid Section)	Vag	3372 lbs

Codes & Standards:

- Calculations are based on AISI S240-20 and AISI S100-16 (2020) w/S2-20.
- Complies with IBC 2024. ASTM C955. ASTM C754. ASTM A653. ASTM A1003. ASTM E72
- LEED / Sustainability Credits: Environmental Product Declaration S-P Code: S-P-00869