

400T125-54 (50ksi) Track

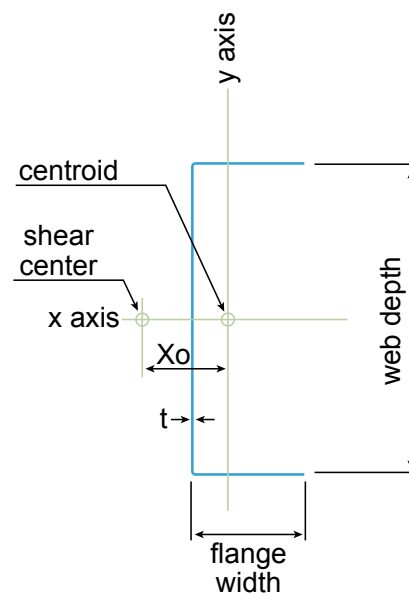
Product Description: 4" Track 16GA (1-1/4" Leg, 54mil)

Coating: G60 (standard), G90 (special order)

Specification Section: 05.40.00 (Cold-Formed Metal Framing)

GEOMETRIC PROPERTIES			
Web Depth	4 in.	Yield Strength, F_y	50 ksi
Leg Width	1.25 in.	Design Thickness	0.0566 in.
		Min. Steel Thickness	0.0538 in.

GROSS PROPERTIES		
Area (in ²)	Total cross-sectional steel area	0.367
Weight (lb/ft)	Linear weight per foot	1.25
I_x (in ⁴)	Moment of inertia about the x-axis	0.904
S_x (in ³)	Section modulus about the x-axis	0.431
R_x (in)	Radius of gyration about the x-axis	1.569
I_y (in ⁴)	Moment of inertia about the y-axis	0.049
R_y (in)	Radius of gyration about the y-axis	0.366
EFFECTIVE PROPERTIES		
I_x (in ³)	Effective moment of inertia (x-axis)	0.851
S_x (in ³)	Effective section modulus (x-axis)	0.359
M_a (in-k)	Allowable bending moment-effective section modulus	10.76
V_a (lb)	Allowable shear force in web	3372
TORSIONAL PROPERTIES		
$J \times 1000$ (in ⁴)	St. Venant torsional constant	0.3921
C_w (in ⁶)	Warping constant	0.154
X_o (in)	Distance from shear center to centroid	-0.621
m (in)	Distance from shear center to mid-plane of web	0.390
R_o (in)	Polar radius of gyration	1.727
Beta	Torsional Flexural Constant	0.871



CODES AND STANDARDS:

Super Stud products comply with the applicable provisions of the following:

- International Building Code (IBC): 2006–2024
- AISI S100-16 (2020) w/S2-20
- Sheet Steel: ASTM A1003/A1003M; ASTM A653/A653M
- Galvanized Coating: ASTM A653/A653M

Structural Members:

- ASTM C955; AISI S240
- Installed per ASTM C1007

Additional Standards:

- AISI S201; AISI S202

3rd Party Certification

For LEED Letter requests please submit through: www.buysuperstud.com