

Structural Track 400T150-43G90

Product Description 18 GA GALV 4.00" WEB X 1.50" FLANGE TRACK .043 MIN GAUGE G90

Coating G90

Physical Properties

Design Thickness (in) 0.0451
Minimum Thickness (in) 0.0428
Web Width (in) 4
Flange Width (in) 1.5
Yield Strength (ksi) 33



Gross Section Properties

Cross Sectional Area (A)	0.315
Weight of Member (lb/ft)	1.07
Section Modulus (Sx)	0.39
Moment of Inertia (Ix)	0.811
Radius of Gyration (Rx)	1.604
Gross Moment of Inertia (Iy)	0.066
Gross Radius of Gyration (Ry)	0.458

Effective Section Properties

Moment of Inertia for deflection (Ixe)	0.719
Section Modulus (Sxe)	0.293
Allowable Bending moment (Ma)	5.8
Allowable shear force in web (U)(Vag)	1739

Torsional Properties

St. Venant torsion constant (J x 1000)	0.2138
Warping constant (Cw)	0.2
Distance from shear center to neutral axis (Xo)	-0.817
Radii of gyration (Ro)	1.857
Torsional flexural constant (Beta)	0.807

ASTM & Code Standards

- AISI S100-12 & ICC ES ESR-4062
- Framing meets ASTM A1003, A653 & C955

Notes

1. Calculated properties are based on AISI S100-16, North American Specification for Design of Cold-Formed Steel Structural Members.
2. The centerline bend radius is based on inside corner radii shown in thickness chart.
3. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A3.3.2.
4. Tabulated gross properties are based on full-unreduced cross section of the studs, away from punchouts.
5. For deflection calculations, use the effective moment of inertia.
6. Allowable moment includes cold-work of forming.
7. Web depth for track sections is equal to the nominal height plus 2 times the design thickness plus the bend radius. Hems on non-structural rack sections are ignored.

Mill Steel Framing LEED Green Credits

- MR Credit 2** • ConstructionWaste Management – Mill Steel Framing steel framing is 100% recyclable
- MR Credit 4** • Recycled Content – Mill Steel Framing products contain no less than 25.5% post-consumer and 6.8% pre-consumer recycled content
- MR Credit 5** • Regional Materials – Mill Steel Framing has manufacturing facilities in Indiana, Alabama & Texas
- V4 MR Credits** • Building Product Disclosure and Optimization EPD (1 point)
 • Materials Ingredients (1 point) – Construction and Demolition Waste Management (1 point)

