

Structural Track 400T150-97G90

Product Description 12 GA GALV 4.00" WEB X 1.50" FLANGE TRACK .097 MIN GAUGE G90

Coating G90

Physical Properties

Design Thickness (in) 0.1017
Minimum Thickness (in) 0.0966
Web Width (in) 4
Flange Width (in) 1.5
Yield Strength (ksi) 50



Gross Section Properties

Cross Sectional Area (A)	0.71
Weight of Member (lb/ft)	2.41
Section Modulus (Sx)	0.874
Moment of Inertia (Ix)	1.904
Radius of Gyration (Rx)	1.638
Gross Moment of Inertia (Iy)	0.142
Gross Radium of Gyration (Ry)	0.447

Effective Section Properties

Moment of Inertia for deflection (Ixe)	1.904
Section Modulus (Sxe)	0.832
Allowable Bending moment (Ma)	24.92
Allowable shear force in web (U)(Vag)	7337

Torsional Properties

St. Venant torsion constant (J x 1000)	2.4466
Warping constant (Cw)	0.463
Distance from shear center to neutral axis (Xo)	-0.788
Radii of gyration (Ro)	1.872
Torsional flexural constant (Beta)	0.823

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.

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- MR Credit 2** • ConstructionWaste Management – Mill Steel Framing steel framing is 100% recyclable
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- 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)

