

Structural Track 400T200-97G90

Product Description 12 GA GALV 4.00" WEB X 2.00" FLANGE TRACK .097 MIN GAUGE G-90
Coating G90

Physical Properties

Design Thickness (in) 0.1017
Minimum Thickness (in) 0.0966
Web Width (in) 4
Flange Width (in) 2
Yield Strength (ksi) 50



Gross Section Properties

| | |
|-------------------------------|-------|
| Cross Sectional Area (A) | 0.811 |
| Weight of Member (lb/ft) | 2.76 |
| Section Modulus (Sx) | 1.085 |
| Moment of Inertia (Ix) | 2.364 |
| Radius of Gyration (Rx) | 1.707 |
| Gross Moment of Inertia (Iy) | 0.318 |
| Gross Radium of Gyration (Ry) | 0.626 |

Effective Section Properties

| | |
|--|-------|
| Moment of Inertia for deflection (Ixe) | 2.269 |
| Section Modulus (Sxe) | 0.911 |
| Allowable Bending moment (Ma) | 27.29 |
| Allowable shear force in web (U)(Vag) | 7337 |

Torsional Properties

| | |
|---|--------|
| St. Venant torsion constant (J x 1000) | 2.7973 |
| Warping constant (Cw) | 1.022 |
| Distance from shear center to neutral axis (Xo) | -1.192 |
| Radii of gyration (Ro) | 2.174 |
| Torsional flexural constant (Beta) | 0.699 |

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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 • Materials Ingredients (1 point) – Construction and Demolition Waste Management (1 point)

