

## Structural Track 400T200-33

**Product Description** 20 GA GALV 4.00" WEB x 2.00" FLANGE TRACK .033 MIN GAUGE  
**Coating** G60

**Physical Properties**  
 Design Thickness (in) 0.0346  
 Minimum Thickness (in) 0.0329  
 Web Width (in) 4  
 Flange Width (in) 2  
 Yield Strength (ksi) 33



### Gross Section Properties

Cross Sectional Area (A)	0.277
Weight of Member (lb/ft)	0.94
Section Modulus (Sx)	0.371
Moment of Inertia (Ix)	0.768
Radius of Gyration (Rx)	1.666
Gross Moment of Inertia (Iy)	0.113
Gross Radium of Gyration (Ry)	0.639

### Effective Section Properties

Moment of Inertia for deflection (Ixe)	0.581
Section Modulus (Sxe)	0.22
Allowable Bending moment (Ma)	4.34
Allowable shear force in web (U)(Vag)	940

### Torsional Properties

St. Venant torsion constant (J x 1000)	0.1104
Warping constant (Cw)	0.336
Distance from shear center to neutral axis (Xo)	-1.229
Radii of gyration (Ro)	2.167
Torsional flexural constant (Beta)	0.678

### 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)

