

## 1400T200-54<sup>1</sup> (50ksi) Track

Product Description: 14" Track 16GA (2" Leg, 54mil)

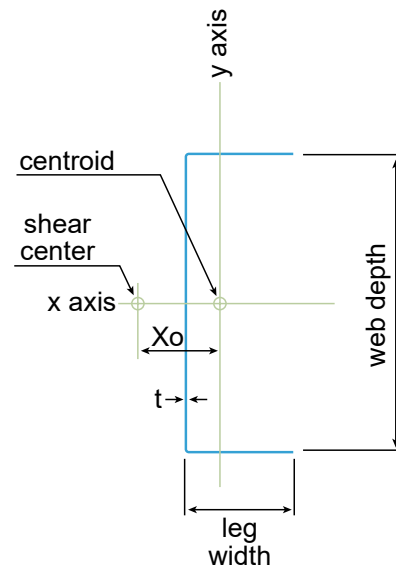
Coating: G60 (standard), G90 (special order)

Specification Section: 05.40.00 (Cold-Formed Metal Framing)

| GEOMETRIC PROPERTIES |        |                      |            |
|----------------------|--------|----------------------|------------|
| Web Depth            | 14 in. | Yield Strength, Fy   | 50 ksi     |
| Leg Width            | 2 in.  | Design Thickness     | 0.0566 in. |
|                      |        | Min. Steel Thickness | 0.0538 in. |

*\*1 Web-height to thickness ratio exceeds 200. Web stiffeners are required at all support points and concentrated loads.*

| GROSS PROPERTIES                  |                                                    |        |
|-----------------------------------|----------------------------------------------------|--------|
| Area (in <sup>2</sup> )           | Total cross-sectional steel area                   | 1.018  |
| Weight (lb/ft)                    | Linear weight per foot                             | 3.46   |
| I <sub>x</sub> (in <sup>4</sup> ) | Moment of inertia about the x-axis                 | 24.232 |
| S <sub>x</sub> (in <sup>3</sup> ) | Section modulus about the x-axis                   | 3.413  |
| R <sub>x</sub> (in)               | Radius of gyration about the x-axis                | 4.879  |
| I <sub>y</sub> (in <sup>4</sup> ) | Moment of inertia about the y-axis                 | 0.242  |
| R <sub>y</sub> (in)               | Radius of gyration about the y-axis                | 0.487  |
| EFFECTIVE PROPERTIES              |                                                    |        |
| I <sub>x</sub> (in <sup>3</sup> ) | Effective moment of inertia (x-axis)               | 18.385 |
| S <sub>x</sub> (in <sup>3</sup> ) | Effective section modulus (x-axis)                 | 1.590  |
| Ma (in-k)                         | Allowable bending moment-effective section modulus | 39.75  |
| Va <sub>g</sub> (lb)              | Allowable shear force in web                       | 1160   |
| TORSIONAL PROPERTIES              |                                                    |        |
| J x 1000 (in <sup>4</sup> )       | St. Venant torsional constant                      | 1.0872 |
| C <sub>w</sub> (in <sup>6</sup> ) | Warping constant                                   | 9.520  |
| X <sub>o</sub> (in)               | Distance from shear center to centroid             | -0.665 |
| m (in)                            | Distance from shear center to mid-plane of web     | 0.449  |
| R <sub>o</sub> (in)               | Polar radius of gyration                           | 4.948  |
| Beta                              | Torsional Flexural Constant                        | 0.982  |



### CODES AND STANDARDS:

Super Stud/EB Metal US 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](http://www.buysuperstud.com) or [www.ebmetal.us](http://www.ebmetal.us)