

## 400T125-43 Track

Product Description: 4" Track 18GA (1-1/4" Leg, 43mil)

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

Specification Section: 05.40.00 (Cold-Formed Metal Framing)

| GEOMETRIC PROPERTIES |          |                       |            |
|----------------------|----------|-----------------------|------------|
| Web Depth            | 4 in.    | Yield Strength, $F_y$ | 33 ksi     |
| Leg Width            | 1.25 in. | Design Thickness      | 0.0451 in. |
|                      |          | Min. Steel Thickness  | 0.0428 in. |

| GROSS PROPERTIES                   |                                                    |        |
|------------------------------------|----------------------------------------------------|--------|
| Area (in <sup>2</sup> )            | Total cross-sectional steel area                   | 0.293  |
| Weight (lb/ft)                     | Linear weight per foot                             | 1.00   |
| $I_x$ (in <sup>4</sup> )           | Moment of inertia about the x-axis                 | 0.716  |
| $S_x$ (in <sup>3</sup> )           | Section modulus about the x-axis                   | 0.344  |
| $R_x$ (in)                         | Radius of gyration about the x-axis                | 1.564  |
| $I_y$ (in <sup>4</sup> )           | Moment of inertia about the y-axis                 | 0.040  |
| $R_y$ (in)                         | Radius of gyration about the y-axis                | 0.369  |
| EFFECTIVE PROPERTIES               |                                                    |        |
| $I_x$ (in <sup>3</sup> )           | Effective moment of inertia (x-axis)               | 0.667  |
| $S_x$ (in <sup>3</sup> )           | Effective section modulus (x-axis)                 | 0.282  |
| $M_a$ (in-k)                       | Allowable bending moment-effective section modulus | 5.58   |
| $V_a$ (lb)                         | Allowable shear force in web                       | 1740   |
| TORSIONAL PROPERTIES               |                                                    |        |
| $J \times 1000$ (in <sup>4</sup> ) | St. Venant torsional constant                      | 0.1985 |
| $C_w$ (in <sup>6</sup> )           | Warping constant                                   | 0.122  |
| $X_o$ (in)                         | Distance from shear center to centroid             | -0.626 |
| $m$ (in)                           | Distance from shear center to mid-plane of web     | 0.394  |
| $R_o$ (in)                         | Polar radius of gyration                           | 1.724  |
| Beta                               | Torsional Flexural Constant                        | 0.868  |



### CODES AND STANDARDS:

Super Stud 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

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