

800SJ250-97

Product Description: 8" Super Joist 12GA (2-1/2" Flange, 97mil)

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

Specification Section: 05.40.00 (Cold-Formed Metal Framing)

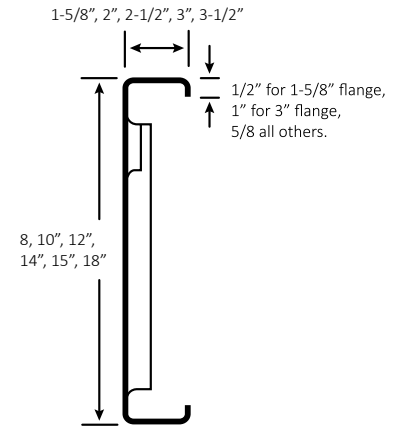


| GEOMETRIC PROPERTIES | | | |
|----------------------|-----------|----------------------|------------|
| Web Depth | 8 in. | Yield Strength, Fy | 50 ksi |
| Flange Width | 2.50 in. | Design Thickness | 0.1017 in. |
| Lip Length | 0.625 in. | Min. Steel Thickness | 0.966 in. |

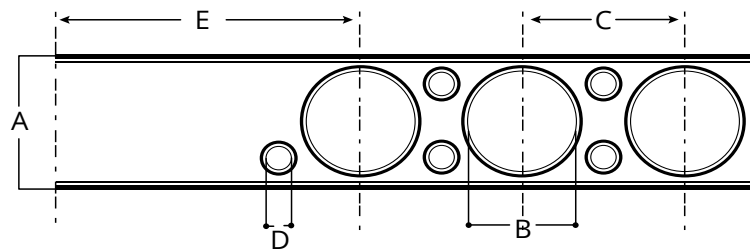
| GROSS PROPERTIES | | |
|-----------------------------------|-------------------------------------|---------|
| Area (in ²) | Total cross-sectional steel area | 1.3723 |
| Weight (lb/ft) | Linear weight per foot | 4.6658 |
| I _x (in ⁴) | Moment of inertia about the x-axis | 12.7931 |
| S _x (in ³) | Section modulus about the x-axis | 3.1983 |
| R _x (in) | Radius of gyration about the x-axis | 3.0532 |
| I _y (in ⁴) | Moment of inertia about the y-axis | 1.0108 |
| R _y (in) | Radius of gyration about the y-axis | 0.8582 |

| EFFECTIVE PROPERTIES | | |
|------------------------------------|--|---------|
| Max (in-k) | Maximum allowable bending moment | 70.8590 |
| I _{xe} (in ⁴) | Effective moment of inertia (x-axis) | 11.7390 |
| S _{xe} (in ³) | Effective section modulus (x-axis) | 2.8344 |
| V _a (k) | Maximum allowable shear force about the y-axis | 2570.8 |

| TORSIONAL PROPERTIES | | |
|-----------------------------------|--|--------|
| J x 1000 (in ⁴) | St. Venant torsional constant | 4.731 |
| C _w (in ⁶) | Warping constant | 12.183 |
| X _o (in) | Distance from shear center to centroid | 1.596 |
| R _o (in) | Polar radius of gyration | 3.551 |
| Beta | Torsional Flexural Constant | 0.798 |



| TYPICAL JOIST MEMBER SIZING | | | | |
|-----------------------------|--------------------------|------------------------------|--------------------------|--|
| A | B | C | D | E |
| Section Web Depth (in) | Large Hole Diameter (in) | Large Hole Spacing (in o.c.) | Small Hole Diameter (in) | Minimum Distance from End to Center of First Large Hole (in) |
| 8 | 4.25 | 9 | 1 | 22 |



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 or www.ebmetal.us