

Product Category: structural metal stud framing: specification section 05 40 00
Available Coatings: G60 (standard), G90. **Yield Strength:** 50 ksi
Product Name: 8TH12 **AISI Nomenclature:** 800T300-97
Product Description: 8 inch deep 12 gauge stud/joist member with 3" flanges

Material and Shape Property Notes:

Thickness: Design: 0.1017" • Minimum: 0.0966" • Designation: 97 mil • Equivalent Gauge: 12
Flange width: 3" • Web Depth: 8"

SECTION PROPERTIES

Gross Section Properties:

Cross Section Area (**A**): 1.4216 in²
Member Weight: 4.833 pounds per foot
Moment of Inertia, strong axis (**I_x**): 14.678 in⁴
Radius of Gyration, strong axis (**R_x**): 3.2133 in.
Moment of Inertia, weak axis (**I_y**): 1.189 in⁴
Radius of Gyration, weak axis (**R_y**): 0.9145 in.

Effective Section Properties:

Effective Moment of Inertia (**I_{x eff}**): 12.006 in⁴
Effective Section Modulus (**S_{x eff}**): 2.591 in³
Allowable Moment (**M_a**): 77.58 inch-kips

Torsional Properties:

St. Venant Torsional Constant (**J** x 1000): 4.901 in⁴
Warping Constant (**C_w**): 14.095 in⁶
Polar Radius of Gyration (**R_p**): 3.725 in
Distance from shear center (**X_o**): -1.6468 in
Beta: 0.8046 Flat web to thickness ratio (**h/t**): 74



CODES & STANDARDS

Super Stud products comply with the applicable provisions of the following:

International Building Code (IBC) 2006 - 2015
Sheet Steel: ASTM A1003 & ASTM A653
Galvanized Coating: ASTM A653
Members & Tolerances: ASTM C955
Meets ASTM C1007 when installed properly in structure

3rd Party Certification: Manufacturing verified & inspected
by Home Innovation Research Labs, Inc.

