

Product Category: structural metal stud framing: specification section 05 40 00
Available Coatings: G60 (standard), G90. **Yield Strength:** 50 ksi
Product Name: 6DT12 **AISI Nomenclature:** 600T250-97
Product Description: 6 inch deep 12 gauge track member with 2 1/2" flanges

Material and Shape Property Notes:

Thickness: Design: 0.1017" • Minimum: 0.0966" • Designation: 97 mil • Gauge: 12
Flange width: 2 1/2" • Web Depth: 6"

SECTION PROPERTIES

Gross Section Properties:

Cross Section Area (**A**): 1.117 in²
Member Weight: 3.796 pounds per foot
Moment of Inertia, strong axis (**I_x**): 6.769 in⁴
Radius of Gyration, strong axis (**R_x**): 2.462 in.
Moment of Inertia, weak axis (**I_y**): 0.6628 in⁴
Radius of Gyration, weak axis (**R_y**): 0.7705 in.

Effective Section Properties:

Effective Moment of Inertia (**I_{x eff}**): 5.758 in⁴
Effective Section Modulus (**S_{x eff}**): 1.6606 in³
Allowable Moment (**M_a**): 49.719 inch-kips

Torsional Properties:

St. Venant Torsional Constant (**J x 1000**): 0.3849 in⁴
Warping Constant (**C_w**): 4.4527 in⁶
Polar Radius of Gyration (**R_p**): 2.9474 in
Distance from shear center (**X_o**): -1.4251 in
Beta: 0.7662 Flat web to thickness ratio (**h/t**): 54



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.

