

Product Category: Structural Metal Stud Framing: Specification Section 05 40 00

Available Coatings: G60 (standard); or G90

Yield Strength: 50 ksi

Product Name: 4DT12

AISI Nomenclature: 400T250-97

Product Description: 4 inch 12 gauge track member with 2-1/2 inch flanges

Material and Shape Property Notes:

Thickness: Design: 0.1017" • Minimum: 0.0966" • Designation: 97 mil • Equivalent Gauge: 12
Flange width: 2-1/2" • Web Depth: 4"

SECTION PROPERTIES

Gross Section Properties:

Cross Section Area (**A**): 0.91307 in²

Member Weight: 3.104 pounds per foot

Moment of Inertia, strong axis (**I_x**): 2.825 in⁴

Radius of Gyration, strong axis (**R_x**): 1.759 in.

Moment of Inertia, weak axis (**I_y**): 0.5883 in⁴

Radius of Gyration, weak axis (**R_y**): 0.8027 in.

Effective Section Properties:^[1]

Effective Section Modulus (**S_{x eff}**): 0.9696 in³

Allowable Bending Moment (**M_a**): 29.031 inch-kips

Gross Allowable Shear (**V_a**): 7.337 kips

Torsional Properties:

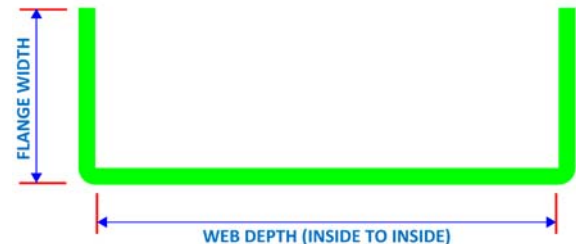
St. Venant Torsional Constant (**J** x 1000): 3.1479 in⁴

Warping Constant (**C_w**): 1.7942 in⁶

Polar Radius of Gyration (**R_o**): 2.5356 in

Distance from shear center (**X_o**): -1.6404 in

Beta (**β**): 0.5815



CODES & STANDARDS

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

International Building Code (IBC) 2006 - 2015

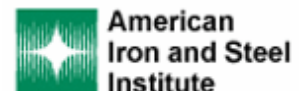
Sheet Steel: ASTM A1003 & ASTM A653

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.



[1] Where "NC" appears, the effective properties have not been calculated, due to limits in the American Iron and Steel Institute (AISI) North American Specification for the Design of Cold-Formed Steel Structural Members (AISI S100).

The Super Stud Building Products Family of Companies

