

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

Available Coatings: G60 (standard); or G90

Yield Strength: 50 ksi

Product Name: 4TW12

AISI Nomenclature: 400T200-97

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

Material and Shape Property Notes:

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

SECTION PROPERTIES

Gross Section Properties:

Cross Section Area (**A**): 0.81136 in²

Member Weight: 2.759 pounds per foot

Moment of Inertia, strong axis (**I_x**): 2.3646 in⁴

Radius of Gyration, strong axis (**R_x**): 1.707 in.

Moment of Inertia, weak axis (**I_y**): 0.3181 in⁴

Radius of Gyration, weak axis (**R_y**): 0.6261 in.

Effective Section Properties:^[1]

Effective Section Modulus (**S_{x eff}**): 0.9153 in³

Allowable Bending Moment (**M_a**): 27.404 inch-kips

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

Torsional Properties:

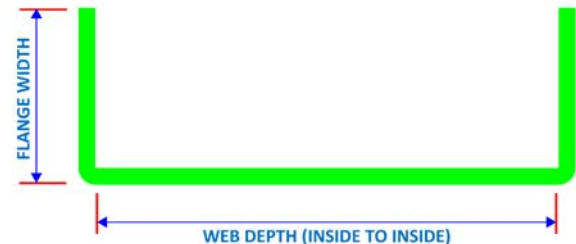
St. Venant Torsional Constant (**J x 1000**): 2.7973 in⁴

Warping Constant (**C_w**): 0.9677 in⁶

Polar Radius of Gyration (**R_o**): 2.1848 in

Distance from shear center (**X_o**): -1.2112 in

Beta (**β**): 0.6927



CODES & STANDARDS

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

International Building Code (IBC) 2006 - 2015

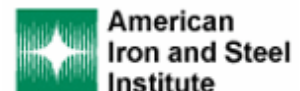
Sheet Steel: ASTM A1003 & ASTM A653

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

