

Product Category: Structural Metal Stud Framing: Specification Section 05 40 00
Available Coatings: G60 (standard); or G90 **Yield Strength:** 33 ksi
Product Name: 4TW18 **AISI Nomenclature:** 400T200-43
Product Description: 4 inch 18 gauge track member with 2 inch flanges

Material and Shape Property Notes:

Thickness: Design: 0.0451" • Minimum: 0.0428" • Designation: 43 mil • Equivalent Gauge: 18
Flange width: 2" • Web Depth: 4"

SECTION PROPERTIES

Gross Section Properties:

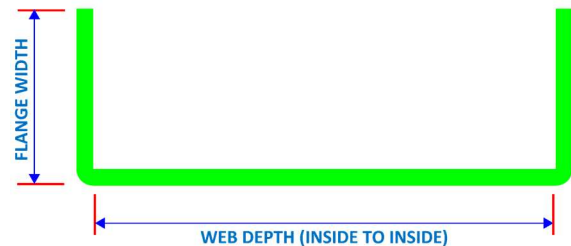
Cross Section Area (**A**): 0.3604 in²
Member Weight: 1.2253 pounds per foot
Moment of Inertia, strong axis (**I_x**): 1.0022 in⁴
Radius of Gyration, strong axis (**R_x**): 1.6676 in.
Moment of Inertia, weak axis (**I_y**): 0.1462 in⁴
Radius of Gyration, weak axis (**R_y**): 0.6369 in.

Effective Section Properties:^[1]

Effective Section Modulus (**S_{x eff}**): 0.4315 in³
Allowable Bending Moment (**M_a**): 6.1533 inch-kips
Gross Allowable Shear (**V_a**): 1.7391 kips

Torsional Properties:

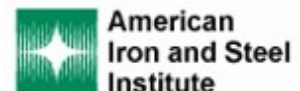
St. Venant Torsional Constant (**J x 1000**): 0.2443 in⁴
Warping Constant (**C_w**): 0.4269 in⁶
Polar Radius of Gyration (**R_o**): 2.1700 in
Distance from shear center (**X_o**): -1.2338 in
Beta (**β**): 0.6767



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