

Product Category: Structural Metal Stud Framing: Specification Section 05 40 00
Available Coatings: G60 (standard); or G90 **Yield Strength:** 50 ksi
Product Name: 6DT10 **AISI Nomenclature:** 600T250-118
Product Description: 6 inch 10 gauge track member with 2-1/2 inch flanges

Material and Shape Property Notes:

Thickness: Design: 0.1242" • Minimum: 0.1180" • Designation: 118 mil • Equivalent Gauge:
10 Flange width: 2-1/2" • Web Depth: 6"

SECTION PROPERTIES

Gross Section Properties:

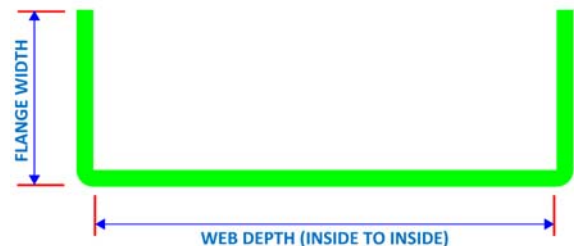
Cross Section Area (**A**): 1.3629 in²
Member Weight: 4.6337 pounds per foot
Moment of Inertia, strong axis (**I_x**): 8.362 in⁴
Radius of Gyration, strong axis (**R_x**): 2.477 in.
Moment of Inertia, weak axis (**I_y**): 0.800 in⁴
Radius of Gyration, weak axis (**R_y**): 0.7662 in.

Effective Section Properties:^[1]

Effective Section Modulus (**S_{x eff}**): 2.1956 in³
Allowable Bending Moment (**M_a**): 65.74 inch-kips
Gross Allowable Shear (**V_a**): 13.539 kips

Torsional Properties:

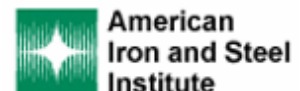
St. Venant Torsional Constant (**J x 1000**): 7.00 in⁴
Warping Constant (**C_w**): 5.4307 in⁶
Polar Radius of Gyration (**R_o**): 2.9546 in
Distance from shear center (**X_o**): -1.4166 in
Beta (**β**): 0.7741



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