

Product Category: Structural Metal Stud Framing: Specification Section 05 40 00
Available Coatings: G60 (standard), G90. **Yield Strength:** 33 ksi
Product Name: 10SSJ20 **AISI Nomenclature:** 1000S162-33
Product Description: 10 inch deep 20 gauge stud member with 1-5/8" flanges

Material and Shape Property Notes:

Thickness: Design: 0.0346" • Minimum: 0.0329" •
Designation: 33 mil • Gauge: 20
Flange width: 1-5/8" • Web Depth: 10"

Nonstandard Member
Depth-to-thickness ratio exceeds AISI requirements for structural members.

SECTION PROPERTIES

Gross Section Properties:

Cross Section Area (**A**): 0.4827 in²
Member Weight: 1.6417 pounds per foot
Moment of Inertia, strong axis (**I_x**): 6.1986 in⁴
Radius of Gyration, strong axis (**R_x**): 3.5835 in.
Moment of Inertia, weak axis (**I_y**): 0.1317 in⁴
Radius of Gyration, weak axis (**R_y**): 0.5224 in.

Effective Section Properties:

Effective Moment of Inertia (**I_{x eff}**): 5.1808 in⁴
Effective Section Modulus (**S_{x eff}**): 0.8847 in³
Allowable Moment (**M_a**): 14.597 inch-kips

Torsional Properties:

St. Venant Torsional Constant (**J** x 1000): 0.1926 in⁴
Warping Constant (**C_w**): 2.5897 in⁶
Polar Radius of Gyration (**R_o**): 3.7145 in
Distance from shear center (**X_o**): -0.8266 in
Beta: 0.9505 Flat web to thickness ratio (**h/t**): exceeds 260.



CODES & STANDARDS

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

International Building Code (IBC) 2006 - 2021
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.

