

250S125-33 (Standard Punch)

Product Description: 2-1/2" Stud STR 20GA (1-1/4" Flange, 33mil)

Coating: G60 (standard), G90 (special order)

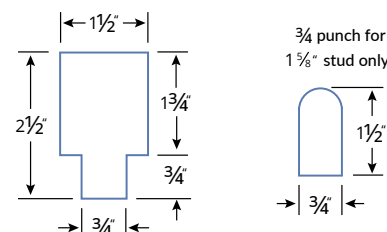
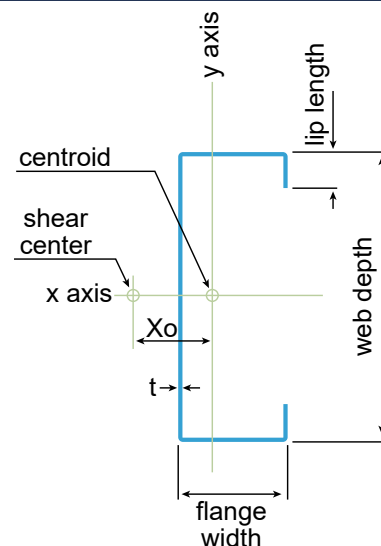
Specification Section: 09.22.16 (Non-Structural Metal Framing)

GEOMETRIC PROPERTIES			
Web Depth	2.5 in.	Yield Strength, F_y	33 ksi
Flange Width	1.25 in.	Design Thickness	0.0346 in.
Lip Length	0.188 in.	Min. Steel Thickness	0.0329 in.

GROSS PROPERTIES		
Area (in ²)	Total cross-sectional steel area	0.176
Weight (lb/ft)	Linear weight per foot	0.60
I_x (in ⁴)	Moment of inertia about the x-axis	0.178
S_x (in ³)	Section modulus about the x-axis	0.142
R_x (in)	Radius of gyration about the x-axis	1.007
I_y (in ⁴)	Moment of inertia about the y-axis	0.033
R_y (in)	Radius of gyration about the y-axis	0.431

EFFECTIVE PROPERTIES		
I_x (in ³)	Effective moment of inertia (x-axis)	0.175
S_x (in ³)	Effective section modulus (x-axis)	0.124
M_a (in-k)	Allowable bending moment-effective section modulus	2.45
M_{ad} (in-k)	Allowable bending moment-distortional buckling	2.11
V_a (lb)	Allowable shear force in web	975
$V_{a_{net}}$ (lb)	Allowable strong axis shear at punchout	399

TORSIONAL PROPERTIES		
$J \times 1000$ (in ⁴)	St. Venant torsional constant	0.070
C_w (in ⁶)	Warping constant	0.040
X_o (in)	Distance from shear center to centroid	-0.886
m (in)	Distance from shear center to mid-plane of web	0.532
R_o (in)	Polar radius of gyration	1.409
Beta	Torsional Flexural Constant	0.604



Non-structural punchout first punchout is centered 12" from beginning of member; subsequent punchouts are 24" on center (o.c.).
Center of last punchout is no less than 12" from end of member.

CODES AND STANDARDS:

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

- International Building Code (IBC): 2006–2024
- AISI S100-16 (2020) w/S2-20
- Sheet Steel: ASTM A1003/A1003M; ASTM A653/A653M
- Galvanized Coating: ASTM A653/A653M or equivalent
- Fire-Resistance (when applicable):
- UL Designs: U419, V438, V489, V498, W433, W440
- Fire Testing: ASTM E119; ANSI/UL 263
- Nonstructural Members:
- ASTM C645; AISI S220
- Installed per ASTM C754

Additional Standards:

- AISI S201; AISI S202

3rd Party Certification

For LEED Letter requests please submit through: www.buysuperstud.com

NEW HAMPSHIRE FACILITY
12 TALLWOOD DRIVE
BOW, NH 03304
P: 603-216-1573

MISSISSIPPI FACILITY
53 W L RUNNELS IND DR
HATTIESBURG, MS 39401
P: 601-584-7550

NEW JERSEY FACILITY
2960 WOODBRIDGE AVE
EDISON, NJ 08837
P: 732-662-6200