

600S250-54 (50ksi) (Standard Punch)

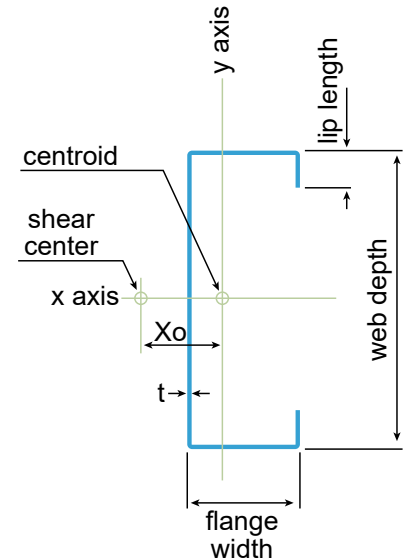
Product Description: 6" Stud 16GA (2-1/2" Flange, 54 mil)

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

Specification Section: 05.40.00 (Cold-Formed Metal Framing)

GEOMETRIC PROPERTIES			
Web Depth	6 in.	Yield Strength, Fy	50 ksi
Flange Width	2.5 in.	Design Thickness	0.0566 in.
Lip Length	0.625 in.	Min. Steel Thickness	0.0538 in.

GROSS PROPERTIES		
Area (in ²)	Total cross-sectional steel area	0.670
Weight (lb/ft)	Linear weight per foot	2.28
I _x (in ⁴)	Moment of inertia about the x-axis	3.820
S _x (in ³)	Section modulus about the x-axis	1.273
R _x (in)	Radius of gyration about the x-axis	2.389
I _y (in ⁴)	Moment of inertia about the y-axis	0.562
R _y (in)	Radius of gyration about the y-axis	0.917
EFFECTIVE PROPERTIES		
I _x (in ³)	Effective moment of inertia (x-axis)	3.774
S _x (in ³)	Effective section modulus (x-axis)	1.054
M _a (in-k)	Allowable bending moment-effective section modulus	31.56
M _{ad} (in-k)	Allowable bending moment-distortional buckling	27.70
V _g (lb)	Allowable shear force in web	2822
V _{net} (lb)	Allowable strong axis shear at punchout	1947
TORSIONAL PROPERTIES		
J x 1000 (in ⁴)	St. Venant torsional constant	0.715
C _w (in ⁶)	Warping constant	4.194
X _o (in)	Distance from shear center to centroid	-1.860
m (in)	Distance from shear center to mid-plane of web	1.129
R _o (in)	Polar radius of gyration	3.163
Beta	Torsional Flexural Constant	0.654



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/EB Metal US 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

Structural Members:

- ASTM C955; AISI S240
- Installed per ASTM C1007

Additional Standards:

- AISI S201; AISI S202

3rd Party Certification

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