

## 600S162-118 (Standard Punch)

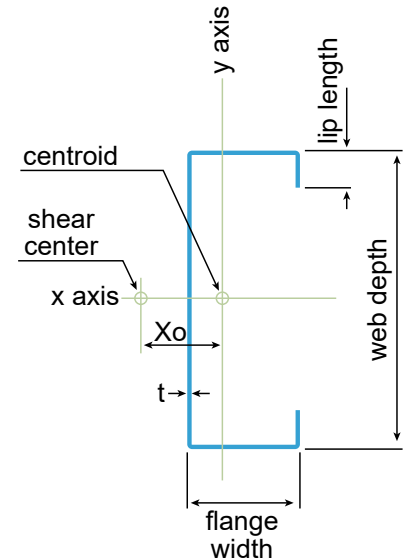
Product Description: 6" Stud 10GA (1-5/8" Flange, 118 mil)

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	1.625 in.	Design Thickness	0.1242 in.
Lip Length	0.500 in.	Min. Steel Thickness	0.1180 in.

GROSS PROPERTIES		
Area (in <sup>2</sup> )	Total cross-sectional steel area	1.158
Weight (lb/ft)	Linear weight per foot	3.94
I <sub>x</sub> (in <sup>4</sup> )	Moment of inertia about the x-axis	5.655
S <sub>x</sub> (in <sup>3</sup> )	Section modulus about the x-axis	1.885
R <sub>x</sub> (in)	Radius of gyration about the x-axis	2.209
I <sub>y</sub> (in <sup>4</sup> )	Moment of inertia about the y-axis	0.322
R <sub>y</sub> (in)	Radius of gyration about the y-axis	0.527
EFFECTIVE PROPERTIES		
I <sub>x</sub> (in <sup>3</sup> )	Effective moment of inertia (x-axis)	5.658
S <sub>x</sub> (in <sup>3</sup> )	Effective section modulus (x-axis)	1.874
M <sub>a</sub> (in-k)	Allowable bending moment-effective section modulus	68.57
M <sub>ad</sub> (in-k)	Allowable bending moment-distortional buckling	68.57
V <sub>g</sub> (lb)	Allowable shear force in web	12526
V <sub>a_net</sub> (lb)	Allowable strong axis shear at punchout	3622
TORSIONAL PROPERTIES		
J x 1000 (in <sup>4</sup> )	St. Venant torsional constant	5.956
C <sub>w</sub> (in <sup>6</sup> )	Warping constant	2.487
X <sub>o</sub> (in)	Distance from shear center to centroid	0.971
m (in)	Distance from shear center to mid-plane of web	0.623
R <sub>o</sub> (in)	Polar radius of gyration	2.470
Beta	Torsional Flexural Constant	0.846



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](http://www.buysuperstud.com) or [www.ebmetal.us](http://www.ebmetal.us)