

**Product Name:** 4" Stud  
**Description:** 400S250-33

### Physical Properties

Web Depth (in)	4.000	Gauge	20
Flange Width (in)	2.500	Mils	33
Return Lip (in)	0.625	Design Thickness (in)	0.0346
Standard Coating	CP60	Minimum Thickness (in)	0.0329
Available Coating *	CP90	Yield Stress Fy (ksi)	33
Weight (lb/ft)	1.170	Ultimate, Fu (ksi)	45

### Section Properties

Cross Sectional Area (A)	0.344 in <sup>2</sup>
Moment of Inertia (Ix)	0.948 in <sup>4</sup>
Radius of Gyration (Rx)	1.660 in
Gross Moment of Inertia (Iy)	0.310 in <sup>4</sup>
Gross Radius of Gyration (Ry)	0.949 in

### Effective Section Properties

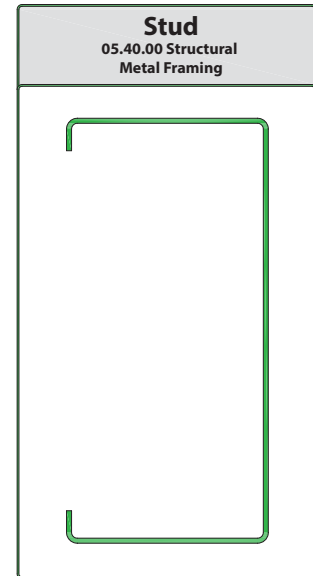
Moment of Inertia for Deflection (Ixe)	0.905 in <sup>4</sup>
Section Modulus (Sxe)	0.352 in <sup>3</sup>
Allowable Bending Moment (Ma)	6.950 in-k

### Torsional Properties

St. Venant Torsion Constant (Jx1000)	0.137 in <sup>4</sup>
Warping Constant (Cw)	1.165 in <sup>6</sup>
Distance from Shear Center to Neutral Axis (Xo)	-2.151 in
Radii of Gyration (Ro)	2.878 in
Torsional Flexural Constant (Beta)	0.441

**This section does not meet the requirements of AISI. Advised to increase the thickness**

\*By request



### MANUFACTURING Codes & Standards

NASPEC AISI S100-07 IBC 2009 2012 Compliant  
 Coated in accordance to ASTM A1003 & A653  
 Meets or exceeds ASTM C955 & AISI S200  
 Code Evaluation Report ICC-ESR #3957

### GREEN Benefits & LEED Data:

LEED Credit MR 2 - Construction Waste Mgmt - 1-2 Points  
 LEED Credit MR 4 - Recycled Credit - 1-2 Points  
 LEED Credit MR 5 - Regional Materials - 1-2 Points  
 CRACO products are 100% recyclable  
 Contact Technical Services for more information