

**Product Name:** 4" Stud  
**Description:** 400S250-97

### Physical Properties

Web Depth (in)	4.000	Gauge	12
Flange Width (in)	2.500	Mils	97
Return Lip (in)	0.625	Design Thickness (in)	0.1017
Standard Coating	CP60	Minimum Thickness (in)	0.0966
Available Coating *	CP90	Yield Stress Fy (ksi)	50
Weight (lb/ft)	3.290	Ultimate, Fu (ksi)	65

### Section Properties

Cross Sectional Area (A)	0.966 in <sup>2</sup>
Moment of Inertia (Ix)	2.542 in <sup>4</sup>
Radius of Gyration (Rx)	1.623 in
Gross Moment of Inertia (Iy)	0.801 in <sup>4</sup>
Gross Radius of Gyration (Ry)	0.911 in

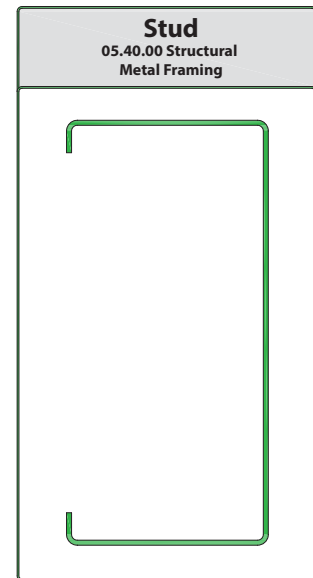
### Effective Section Properties

Moment of Inertia for Deflection (Ixe)	2.542 in <sup>4</sup>
Section Modulus (Sxe)	1.202 in <sup>3</sup>
Allowable Bending Moment (Ma)	40.44 in-k

### Torsional Properties

St. Venant Torsion Constant (Jx1000)	3.329 in <sup>4</sup>
Warping Constant (Cw)	2.978 in <sup>6</sup>
Distance from Shear Center to Neutral Axis (Xo)	-2.066 in
Radii of Gyration (Ro)	2.781 in
Torsional Flexural Constant (Beta)	0.448

\*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