

**Product Name:** 1-5/8" SmartStud 30mil

**Description:** 162SS125-30

### Physical Properties

Web Depth (in)	1.625	Yield Stress Fy (KSI)	33
Flange Width (in)	1.250	Mils	30
Return Lip (in)	0.250	Design Thickness (in)	0.0312
Standard Coating	G40	Minimum Thickness (in)	0.0296
Weight (lb/ft)	0.450	Gauge	20

### Section Properties

Cross Sectional Area (A)	0.131 in <sup>2</sup>
Moment of Inertia (Ix)	0.061 in <sup>4</sup>
Radius of Gyration (Rx)	0.681 in
Gross Moment of Inertia (Iy)	0.026 in <sup>4</sup>
Gross Radius of Gyration (Ry)	0.441 in

### Effective Section Properties

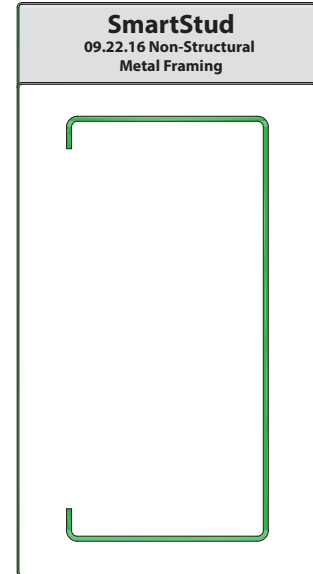
Moment of Inertia for Deflection (Ixe)	0.060 in <sup>4</sup>
Section Modulus (Sxe)	0.060 in <sup>3</sup>
Allowable Bending Moment (Ma)	1.190 in-k

### Torsional Properties

St. Venant Torsion Constant (Jx1000)	0.0430 in <sup>4</sup>
Warping Constant (Cw)	0.0140 in <sup>6</sup>
Distance from Shear Center to Neutral Axis (Xo)	-1.014 in
Radii of Gyration (Ro)	1.298 in
Torsional Flexural Constant (Beta)	0.390
Unbraced Length (Lu)	29.2 in

### Limiting Wall Heights - Composite

Spacing <small>1-5/8" SmartStud30</small>	5 psf			7.5 psf			10 psf		
	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
12"	14'-11"	11'-10"	10'-4"	13'-1"	10'-4"	8'-11"	11'-10"	9'-4"	7'-11"
16"	13'-7"	10'-9"	9'-4"	11'-10"	9'-4"	7'-11"	10'-9"	8'-3"	N/A
24"	11'-10"	9'-4"	7'-11"	10'-4"	7'-11"	N/A	9'-4"	N/A	N/A



### MANUFACTURING Codes & Standards

- NASPEC AISI S100-07 IBC 2009 2012 Compliant
- Coated in accordance to ASTM A1003 & A653
- Meets or exceeds ASTM C645 & C745 & AISI S220
- Multiple UL Design Listings including U419
- 3rd Party Code Evaluation Report ICC-ESR #3943
- US Patent No. D618,365S

### 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