

**Product Name:** 3-5/8" SmartStud 18mil  
**Description:** 362SS125-18

### Physical Properties

Web Depth (in)	3.625	Yield Stress Fy (KSI)	33
Flange Width (in)	1.250	Mils	18
Return Lip (in)	0.250	Design Thickness (in)	0.0188
Standard Coating	G40	Minimum Thickness (in)	0.0179
Weight (lb/ft)	0.400	Gauge	25

### Section Properties

Cross Sectional Area (A)	0.118 in <sup>2</sup>
Moment of Inertia (Ix)	0.234 in <sup>4</sup>
Radius of Gyration (Rx)	1.409 in
Gross Moment of Inertia (Iy)	0.021 in <sup>4</sup>
Gross Radius of Gyration (Ry)	0.421 in

### Effective Section Properties

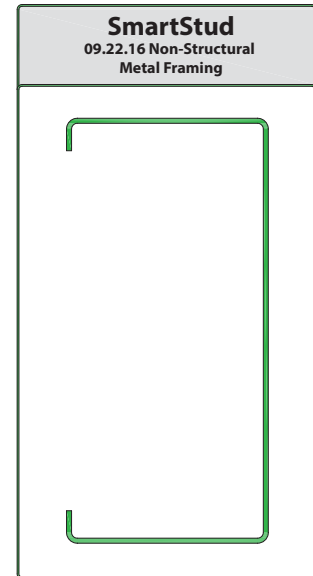
Moment of Inertia for Deflection (Ixe)	0.221 in <sup>4</sup>
Section Modulus (Sxe)	0.075 in <sup>3</sup>
Allowable Bending Moment (Ma)	1.520 in-k

### Torsional Properties

St. Venant Torsion Constant (Jx1000)	0.0140 in <sup>4</sup>
Warping Constant (Cw)	0.0540 in <sup>6</sup>
Distance from Shear Center to Neutral Axis (Xo)	-0.786 in
Radii of Gyration (Ro)	1.667 in
Torsional Flexural Constant (Beta)	0.778
Unbraced Length (Lu)	28.8 in

### Limiting Wall Heights - Composite

Spacing <small>3-5/8" SmartStud18mil</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"	18'-8"	16'-8"	14'-7"	15'-3"	14'-7"	12'-9"	13'-2"	13'-2"	11'-6"
16"	16'-2"	15'-2"	13'-3"	13'-2"	13'-2"	11'-6"	11'-5"	11'-5"	10'-4"
24"	13'-2"	13'-2"	11'-6"	10'-9"	10'-9"	9'-11"	9'-4"	9'-4"	8'-11"



### 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