

Product Name: 2-1/2" SmartStud 18mil

Description: 250SS125-18

Physical Properties

Web Depth (in)	2.500	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)	0.330	Gauge	25

Section Properties

Cross Sectional Area (A)	0.097 in ²
Moment of Inertia (Ix)	0.099 in ⁴
Radius of Gyration (Rx)	1.014 in
Gross Moment of Inertia (Iy)	0.019 in ⁴
Gross Radius of Gyration (Ry)	0.439 in

Effective Section Properties

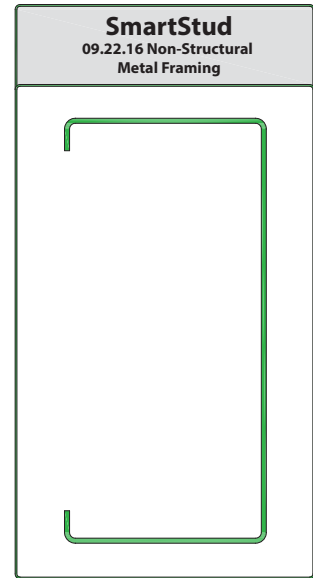
Moment of Inertia for Deflection (Ixe)	0.089 in ⁴
Section Modulus (Sxe)	0.059 in ³
Allowable Bending Moment (Ma)	1.170 in-k

Torsional Properties

St. Venant Torsion Constant (Jx1000)	0.0110 in ⁴
Warping Constant (Cw)	0.0230 in ⁶
Distance from Shear Center to Neutral Axis (Xo)	-0.904 in
Radii of Gyration (Ro)	1.427 in
Torsional Flexural Constant (Beta)	0.599
Unbraced Length (Lu)	29.0 in

Limiting Wall Heights - Composite

Spacing <small>2-1/2" 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"	16'-4"	14'-2"	12'-9"	13'-4"	12'-4"	11'-2"	11'-7"	11'-3"	10'-2"
16"	14'-2"	12'-10"	11'-7"	11'-7"	11'-3"	10'-2"	10'-0"	10'-0"	9'-0"
24"	11'-7"	11'-3"	10'-2"	9'-5"	9'-5"	8'-6"	8'-2"	8'-2"	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