SmartSpec Submittal

Sales Support: 803-684-5544
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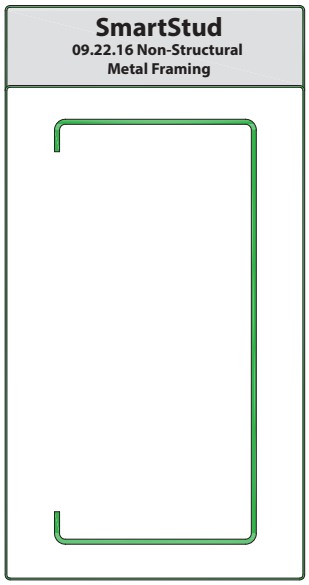
Product Name: **4" SmartStud 33mil**
Description: **400SS125-33**



Physical Properties

Web Depth (in)	4.000	Yield Stress Fy (KSI)	33
Flange Width (in)	1.250	Mils	33
Return Lip (in)	0.250	Design Thickness (in)	0.0346
Standard Coating	G40	Minimum Thickness (in)	0.0329
Weight (lb/ft)	0.770	Gauge	20

Section Properties

Cross Sectional Area (A)	0.228	in^2
Moment of Inertia (Ix)	0.531	in^4
Radius of Gyration (Rx)	1.527	in
Gross Moment of Inertia (Iy)	0.038	in^4
Gross Radius of Gyration (Ry)	0.407	in

Effective Section Properties

Moment of Inertia for Deflection (Ixe)	0.524	in^4
Section Modulus (Sxe)	0.203	in^3
Allowable Bending Moment (Ma)	4.01	in-k

Torsional Properties

St. Venant Torsion Constant (Jx1000)	0.0910	in^4
Warping Constant (Cw)	0.1180	in^6
Distance from Shear Center to Neutral Axis (Xo)	-0.738	in
Radii of Gyration (Ro)	1.744	in
Torsional Flexural Constant (Beta)	0.821	
Unbraced Length (Lu)	28.4	in

Limiting Wall Heights - Composite

Spacing 4" SmartStud33	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"	25'-3"	20'-1"	17'-6"	22'-1"	17'-6"	15'-4"	20'-1"	15'-11"	13'-11"
16"	22'-11"	18'-3"	15'-11"	20'-1"	15'-11"	13'-11"	18'-3"	14'-5"	12'-7"
24"	20'-1"	15'-11"	13'-11"	17'-3"	13'-11"	12'-0"	15'-0"	12'-7"	10'-9"

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

