

Product Name: 2-1/2" SmartStud20
Description: 250SS125-19

Physical Properties

Web Depth (in)	2.500	Yield Stress Fy (KSI)	50
Flange Width (in)	1.250	Mils	19
Return Lip (in)	0.250	Design Thickness (in)	0.0200
Standard Coating	G40	Minimum Thickness (in)	0.0190
Weight (lb/ft)	0.369	Gauge EQ	20

Section Properties

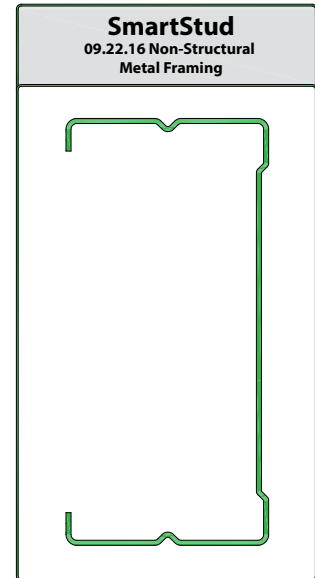
Cross Sectional Area (A)	0.108 in ²
Moment of Inertia (Ix)	0.112 in ⁴
Radius of Gyration (Rx)	1.017 in
Gross Moment of Inertia (Iy)	0.021 in ⁴
Gross Radius of Gyration (Ry)	0.439 in

Effective Section Properties

Moment of Inertia for Deflection (Ixe)	0.107 in ⁴
Section Modulus (Sxe)	0.080 in ³
Allowable Bending Moment (Ma)	2.086 in-k

Torsional Properties

St. Venant Torsion Constant (Jx1000)	0.0141 in ⁴
Warping Constant (Cw)	0.0284 in ⁶
Distance from Shear Center to Neutral Axis (Xo)	-0.952 in
Radii of Gyration (Ro)	1.465 in
Torsional Flexural Constant (Beta)	0.577
Unbraced Length (Lu)	23.9 in



Limiting Wall Heights - Composite

Spacing <small>2-1/2" SmartStud20</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'-2"	14'-4"	12'-8"	16'-1"	12'-6"	10'-2"	13'-8"	10'-11"	8'-11"
16"	15'-7"	12'-4"	10'-7"	13'-8"	10'-11"	9'-5"	12'-2"	9'-7"	8'-6"
24"	14'-3"	10'-8"	9'-1"	12'-0"	8'-11"	6'-11"	10'-0"	7'-11"	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