

Product Name: 1-5/8" SmartStud20

Description: 162SS125-19

Physical Properties

Web Depth (in)	1.625	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)	0.310	Gauge EQ	20

Section Properties

Cross Sectional Area (A)	0.091 in ²
Moment of Inertia (Ix)	0.043 in ⁴
Radius of Gyration (Rx)	0.685 in
Gross Moment of Inertia (Iy)	0.018 in ⁴
Gross Radius of Gyration (Ry)	0.449 in

Effective Section Properties

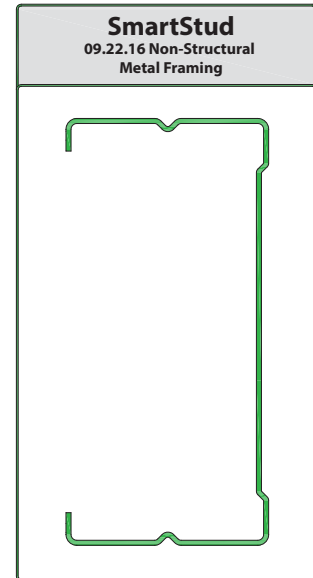
Moment of Inertia for Deflection (Ixe)	0.042 in ⁴
Section Modulus (Sxe)	0.051 in ³
Allowable Bending Moment (Ma)	1.269 in-k

Torsional Properties

St. Venant Torsion Constant (Jx1000)	0.0118 in ⁴
Warping Constant (Cw)	0.0117 in ⁶
Distance from Shear Center to Neutral Axis (Xo)	-1.082 in
Radii of Gyration (Ro)	1.631 in
Torsional Flexural Constant (Beta)	0.368
Unbraced Length (Lu)	24.2 in

Limiting Wall Heights - Composite

Spacing <small>1-5/8" 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"	13'-8"	11'-0"	9'-6"	12'-0"	9'-6"	7'-10"	11'-0"	8'-6"	N/A
16"	12'-6"	9'-10"	8'-6"	11'-0"	8'-6"	N/A	9'-11"	7'-5"	N/A
24"	11'-0"	8'-6"	N/A	9'-6"	N/A	N/A	8'-6"	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