

**Product Name:** 6" SmartStud 23mil

**Description:** 600SS125-23

### Physical Properties

Web Depth (in)	6.000	Yield Stress Fy (KSI)	50
Flange Width (in)	1.250	Mils	23
Return Lip (in)	0.250	Design Thickness (in)	0.0245
Standard Coating	G40	Minimum Thickness (in)	0.0233
Weight (lb/ft)	0.742	Gauge EQ	20

### Section Properties

Cross Sectional Area (A)	0.218 in <sup>2</sup>
Moment of Inertia (Ix)	1.064 in <sup>4</sup>
Radius of Gyration (Rx)	2.208 in
Gross Moment of Inertia (Iy)	0.032 in <sup>4</sup>
Gross Radius of Gyration (Ry)	0.385 in

### Effective Section Properties

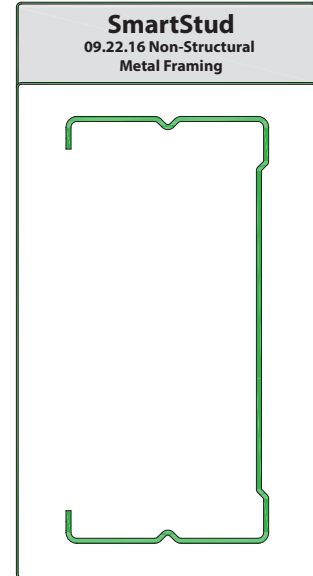
Moment of Inertia for Deflection (Ixe)	0.929 in <sup>4</sup>
Section Modulus (Sxe)	0.206 in <sup>3</sup>
Allowable Bending Moment (Ma)	5.158 in-k

### Torsional Properties

St. Venant Torsion Constant (Jx1000)	0.0431 in <sup>4</sup>
Warping Constant (Cw)	0.2428 in <sup>6</sup>
Distance from Shear Center to Neutral Axis (Xo)	-0.066 in
Radii of Gyration (Ro)	2.331 in
Torsional Flexural Constant (Beta)	0.921
Unbraced Length (Lu)	22.9 in

### Limiting Wall Heights - Composite

Spacing 6" SmartStud23mil	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"	33'-3"	26'-4"	23'-0"	28'-1"f	23'-0"	20'-1"	24'-4"f	20'-11"	18'-3"
16"	29'-9"	23'-11"	20'-11"	24'-4"f	20'-11"	18'-3"	21'-1"f	19'-0"	16'-7"
24"	24'-4"f	20'-11"	18'-3"	19'-10"f	18'-3"	16'-0"	17'-2"f	16'-7"	14'-5"



### 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