

**Product Category:** 2-1/2" SmartStud 23mil

**Product Name:** 250SS125-23

**Physical Properties**

Web Depth (in)	2.500	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)	0.451	Gauge EQ	20

**Section Properties**

Cross Sectional Area (A)	0.132 in <sup>2</sup>
Moment of Inertia (Ix)	0.136 in <sup>4</sup>
Radius of Gyration (Rx)	1.013 in
Gross Moment of Inertia (Iy)	0.026 in <sup>4</sup>
Gross Radius of Gyration (Ry)	0.439 in

**Effective Section Properties**

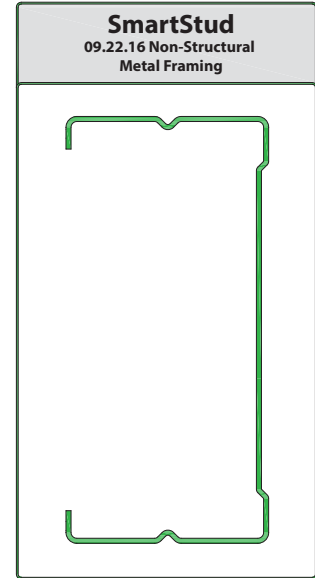
Moment of Inertia for Deflection (Ixe)	0.135 in <sup>4</sup>
Section Modulus (Sxe)	0.108 in <sup>3</sup>
Allowable Bending Moment (Ma)	2.708 in-k

**Torsional Properties**

St. Venant Torsion Constant (Jx1000)	0.0260 in <sup>4</sup>
Warping Constant (Cw)	0.0342 in <sup>6</sup>
Distance from Shear Center to Neutral Axis (Xo)	-0.095 in
Radii of Gyration (Ro)	1.461 in
Torsional Flexural Constant (Beta)	0.579
Unbraced Length (Lu)	23.9 in

**Limiting Wall Heights - Composite**

Spacing <small>2-1/2" SmartStud23mil</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"	20'-9"	16'-1"	14'-2"	18'-1"	14'-1"	10'-10"	15'-9"	11'-8"	9'-4"
16"	16'-10"	13'-2"	11'-6"	14'-10"	11'-9"	10'-1"	13'-3"	10'-4"	8'-7"
24"	16'-0"	11'-10"	9'-3"	13'-4"	9'-4"	7'-6"	10'-8"	8'-1"	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