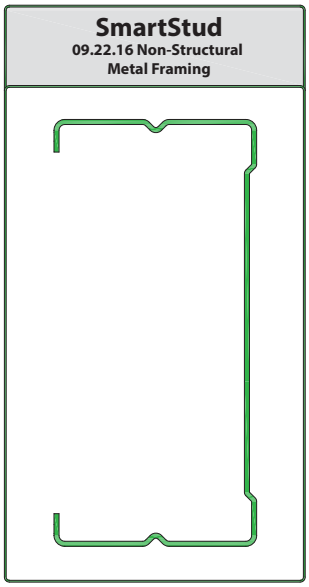
SmartSpec Submittal

Sales Support: 803-684-5544
Technical Support: 803-389-4425
Email Support: smartframe@cracometals.com

Product Name: **1-5/8" SmartStud 23mil**
Description: **162SS125-23**



Physical Properties

Web Depth (in)	1.625	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)	0.381	Gauge EQ	20

Section Properties

Cross Sectional Area (A)	0.112	in^2
Moment of Inertia (Ix)	0.052	in^4
Radius of Gyration (Rx)	0.681	in
Gross Moment of Inertia (Iy)	0.022	in^4
Gross Radius of Gyration (Ry)	0.488	in

Effective Section Properties

Moment of Inertia for Deflection (Ixe)	0.052	in^4
Section Modulus (Sxe)	0.064	in^3
Allowable Bending Moment (Ma)	1.599	in-k

Torsional Properties

St. Venant Torsion Constant (Jx1000)	0.0217	in^4
Warping Constant (Cw)	0.0140	in^6
Distance from Shear Center to Neutral Axis (Xo)	-1.077	in
Radii of Gyration (Ro)	1.356	in
Torsional Flexural Constant (Beta)	0.369	
Unbraced Length (Lu)	24.1	in

Limiting Wall Heights - Composite

Spacing 1-5/8"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"	14'-1"	11'-3"	9'-10"	12'-4"	9'-10"	8'-7"	11'-3"	8'-11"	N/A
16"	12'-10"	10'-2"	8'-11"	11'-3"	8'-11"	N/A	10'-2"	8'-1"	N/A
24"	11'-3"	8'-11"	N/A	9'-10"	N/A	N/A	8'-11"	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

