Product Name: 400SLT250-43



## Product Category: 05.40.00 - Cold-Formed Metal Framing

Available Finish:	G60, G90	<b>Gross Section Properties</b>	
*Other standard coatings refe Web Depth: Flange Width:	4 in 2-1/2 in	Cross sectional area (A) Moment of inertia (Ix) Section Modulus (Sx) Radius of gyration (Rx) Gross moment of inertia (Iy) Gross Radius of gyration (Ry)	0.40 0.26 0.00 0.81 1.19 1.71
Slot Width: Design Thickness:	1-1/2 in 0.0451 in		
Gauge: Yield stress, Fy: Weight:	43 mils or 18 50 ksi 1.380 lb/ft		

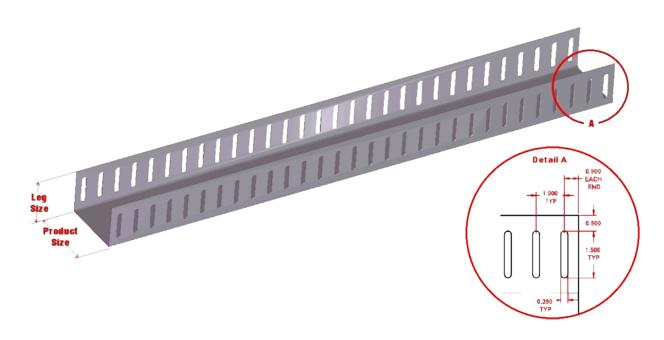
- Gross properties calculated at the gross section, away from slots.
- Web depth taken as nominal depth + (2 x thickness) + inside corner radius.
- Effective properties based on the 2007 NASPEC with 2010 Supplement and the following: net flange on tension side; effective flange on compression side, ignoring steel below the slot; effective web per NASPEC B2.3; Ωb = 2.0 per AISI S100-16/S240-20, A1.2; meets the requirements of the IBC 2021 Building Code.
- Effective properties are not available for 6" x 18-mil products. Web h/t > 260.

## **Effective Section Properties**

Moment of inertia for deflection (Ix)	
Section modulus (Sx)	in <sup>3</sup>
Allowable bending moment (Ma)	
Allowable bending moment from distortional buckling (Mad)	0 ln-k
Allowable strong axis shear away from punch-out (Vag)	
Allowable strong axis shear at punch out (Vanet)	

## **Torsional Properties**

St. Venant torsion constant (J x 1000)	NA in⁴
Warping constant (Cw)	NA in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	NA in
Distance from shear center to mid-plane of web (m)	NA in
Radii of gyration (Ro)	NA in
Torsional flexural constant (β)	NA



0.405 in<sup>2</sup>
0.268 in<sup>4</sup>
0.000 in<sup>3</sup>
0.813 in
1.193 in<sup>4</sup>
1.715 in

## **Additional Information**

MRI Steel Framing, LLC is an SFIA member. MRI acts in accordance with the product and quality standards required by the SFIA program. MRI meets or exceeds ASTM C955, A653, and A1003.

Current LEED credits available upon request