MRI STEEL FRAMING LLC

Corporate Headquarters: 15 Salt Creek Lane, Suite 412 Hinsdale, IL 60521 **P:** 630-616-1850 **F:** 630-568-5979
Production Facility: 201 Mississippi St, Dock #Q40, Gary, IN 46402 **P:** 630-616-1850 **F:** 219-886-3341

Product Category: 05.40.00 - Cold-Formed Metal Framing **Product Name:** 400SLT250-54

Available Finish: G60, G90
*Other standard coatings referenced in ASTM A1003

Web Depth: 4 in
Flange Width: 2-1/2 in
Slot Width: 1-1/2 in
Design Thickness: 0.0566 in
Gauge: 54 mils or 16G
Yield stress, Fy: 50 ksi
Weight: 1.731 lb/ft

Gross Section Properties

Cross sectional area (A)	0.509 in^2
Moment of inertia (Ix)	0.335 in^4
Section Modulus (Sx)	0.000 in^3
Radius of gyration (Rx)	0.811 in
Gross moment of inertia (Iy)	1.511 in^4
Gross Radius of gyration (Ry)	1.723 in

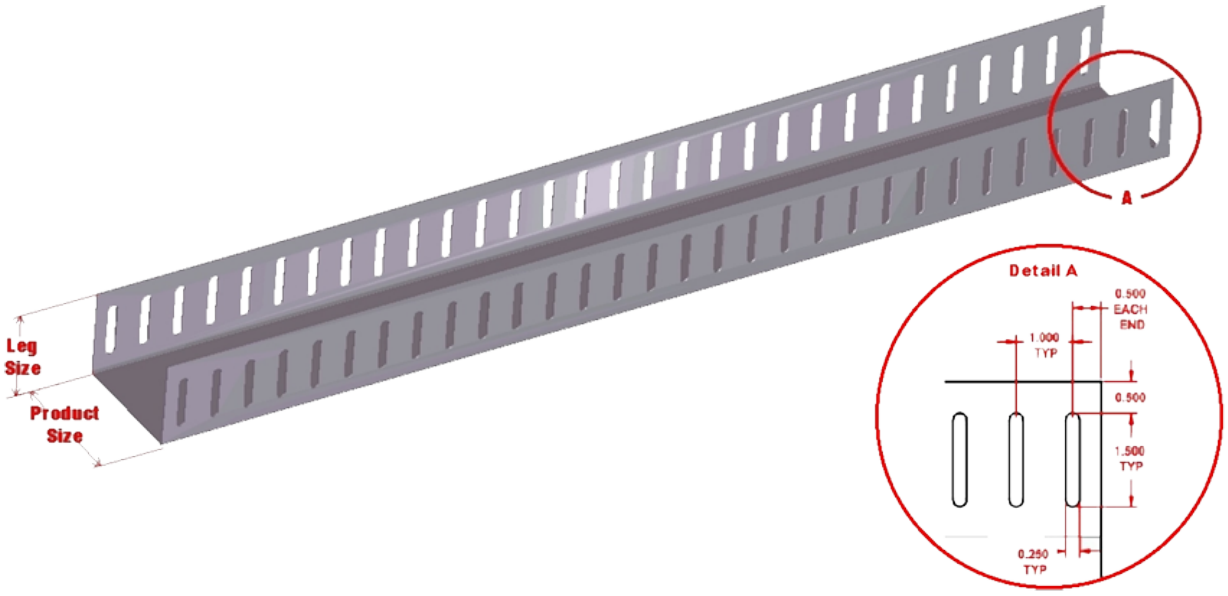
Effective Section Properties

Moment of inertia for deflection (Ix)	0.650 in^4
Section modulus (Sx)	0.284 in^3
Allowable bending moment (Ma)	7.11 In-k
Allowable bending moment from distortional buckling (Mad)	0 In-k
Allowable strong axis shear away from punch-out (Vag)	0 lb
Allowable strong axis shear at punch out (Vanet)	0 lb

Torsional Properties

St. Venant torsion constant (J x 1000)	NA in^4
Warping constant (Cw)	NA in^6
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

- 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.



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