

Product Category: 05 41 00 - Structural Framing

Product Name: 250T125-43

Important Properties Notes:

- Calculated properties are based on AISI S100-12 with S2-10 Supplement, North American Specification for Design of Cold-Formed Steel Structural Members.
- The centerline bend radius is based on inside corner radii shown in thickness chart.
- Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
- Tabulated gross properties are based on full-unreduced cross section of the studs, away from punchouts.
- · For deflection calculations, use the effective moment of inertia.
- · Allowable moment includes cold-work of forming.
- Web depth for track sections is equal to the nominal height plus 2 times the design thickness plus the bend radius. Hems on nonstructural rack sections are ignored.

Project Information

Name: Address:

Contractor Information

Name: Contact: Phone: Fax:

Architect Information

Name: Contact: Phone: Fax:

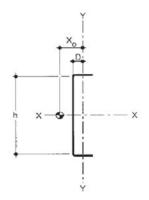
Distributor/Rep Information

Name: Contact: Phone: Web/Email:

Properties

250T125-43 Properties

Finish:	G90
Web Depth	2-1/2" in
Flange Width	1-1/4" in
Design Thickness	0.04510 in
Thickness	43mils or 18G
Yield stress, Fy	33 ksi
Weight	0.76528 lb/ft



250T125-43 Section Properties

Gross Section Properties

Cross sectional area (A)	0.22508 in ²
Moment of inertia (lx)	0.25047 in ⁴
Section Modulus (Sx)	0.18823 in ³
Radius of gyration (Rx)	1.0549 in
Gross moment of inertia (ly)	0.03509 in⁴
Gross Radius of gyration (Ry)	0.3948 in

Effective Section Properties

Moment of inertia for deflection (lxe)	0.21454	in ⁴
Section modulus (Sxe)	0.14768	in ³
Allowable bending moment (Ma)	2.91820	In-k
Allowable bending moment from distortional	-	In-k
buckling (Mad)		
Allowable strong axis shear away from	1.45274	lb
punch-out (Vag)		
Allowable strong axis shear at punch out	- 1	b

Torsional Properties

(Vanet)

St. Venant torsion constant (J x 1000)	0.15261 in ⁴
Warping constant (Cw)	0.04091 in ⁶
Distance from shear center to neutral axis	-0.76460 in
(Xo)	
Distance from shear center to mid-plane (M)	1.36140 in
Radii of gyration (Ro)	in
Torsional flexural constant (Beta)	
Unbraced Length (Lu)	in



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Additional Specification Information

Studs Unlimited is an SFIA member. Studs Unlimited acts in accordance with the product and quality standards required by the SFIA program.

Studs Unlimited meets or exceeds ASTM C955, A653, and A1003.

LEED Specification Information

Materials & Resources Credit 2: Construction Waste Management – Studs Unlimited Steel Framing Products are formed from steel and are 100% recyclable. (1 point)

Materials & Resources Credit 4: Recycled Content intends to increase demand for building products that incorporate recycled content materials, therefore reducing impacts resulting from extraction and processing of new virgin materials. As discussed and demonstrated below, North American steel building products contribute positively toward points under Credits 4.1 and 4.2. The following is required by LEED-NC Versions 2.2 and 2009:

Credit 4.1 (1 point) Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of pre-consumer content constitutes at least 10%(based on cost) of the total value of the materials in the project.

Credit 4.2 (1 point) Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of pre-consumer content constitutes at least 20% of the total value of the materials in the project.

Materials & Resources Credit 5: Regional Materials - Contact Studs Unlimited directly for information at bjpowell@studsunlimited.com. Studs Unlimited is located in Oklahoma City, Oklahoma. (1 point)