

Product Category: 09 22 16 - Non-Structural Framing

Product Name: 250T200-30

Important Properties Notes:

- Calculated properties are based on AISI S100-12, North American Specification for Design of Cold-Formed Steel Structural Members.
- Effective properties are based on steel conforming to ASTM A653, Type B
- Effective section properties incorporate the strength increase from cold working, per specification section A7.2.
- Gross section properties are based on the full-unreduced cross section of the member, away from any punchouts.
- For deflection calculations, use the effective moment of inertia.
- Shear capacities (Va) are taken at locations away from stud punchouts.
- Allowable moments (Ma) are based on members being braced against rotation at 48" intervals, and on continuous lateral support of the compression flange.

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

250T200-30 Properties

| Finish: | G60 |
|------------------|-------------|
| Web Depth | 2-1/2" in |
| Flange Width | 2" in |
| Design Thickness | 0.0312 in |
| Yield stress, Fy | 33 ksi |
| Weight | 0.690 lb/ft |

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250T200-30 Section Properties

Gross Section Properties

| Cross sectional area (A) | 0.203 in ² |
|-------------------------------|-----------------------|
| Moment of inertia (lx) | 0.253 in ⁴ |
| Radius of gyration (Sx) | 0.191 in |
| Radius of gyration (Rx) | 1.116 in⁴ |
| Gross moment of inertia (ly) | 0.088 in |
| Gross Radius of gyration (Ry) | 0.659 In ² |

Effective Section Properties

St. Venant torsion constant (J x 1000)

Moment of inertia for deflection (lxe) - in⁴
Section modulus (Sxe) - in³
Allowable bending moment (Ma) - In-lbs
(Vag) - Ib
Ycg Fya 33 ksi

Torsional Properties

Warping constant (Cw)

| Distance from shear center to neutral axis (Xo) | 2.255 in |
|---|----------|
| m | -2.861 |
| Radii of gyration (Ro) | 2.601 in |
| Torsional flexural constant (Beta) | 0.248 |
| Unbraced Length (Lu) | 40.5 |
| | |

0.066 in⁴

0.106 in⁶



Additional Specification Information

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.