

Product Category: 09 22 16 - Non-Structural Framing
Product Name: 250T200-18

Project Information

Name:
Address:

Contractor Information

Name:
Contact:
Phone:
Fax:

Architect Information

Name:
Contact:
Phone:
Fax:

Distributor/Rep Information

Name:
Contact:
Phone:
Web/Email:

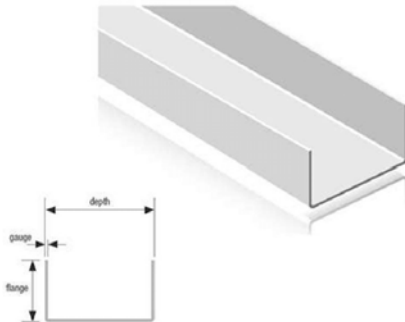
Important Properties Notes:

- 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 (V_a) are taken at locations away from stud punchouts.
- Allowable moments (M_a) are based on members being braced against rotation at 48" intervals, and on continuous lateral support of the compression flange.

Properties

250T200-18 Properties

Finish:	G90
Web Depth	2-1/2" in
Flange Width	2" in
Design Thickness	0.0188 in
Yield stress, F_y	33 ksi
Weight	0.416 lb/ft



250T200-18 Section Properties

Gross Section Properties

Cross sectional area (A)	0.122 in ²
Moment of inertia (I_x)	0.152 in ⁴
Radius of gyration (S_x)	0.116 in
Radius of gyration (R_x)	1.114 in ⁴
Gross moment of inertia (I_y)	0.053 in
Gross Radius of gyration (R_y)	0.661 in ²

Effective Section Properties

Moment of inertia for deflection (I_{xe})	- in ⁴
Section modulus (S_{xe})	- in ³
Allowable bending moment (M_a)	- In-lbs
(V_{ag})	- lb
Y_{cg}	-
F_{ya}	33 ksi

Torsional Properties

St. Venant torsion constant ($J \times 1000$)	0.014 in ⁴
Warping constant (C_w)	0.064 in ⁶
Distance from shear center to neutral axis (X_o)	2.407 in
m	-3.016
Radii of gyration (R_o)	2.733 in
Torsional flexural constant (β)	0.225
Unbraced Length (L_u)	40.2

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.