



www.studsunlimited.com

**Product Category:** 092216 - Non-Structural Framing  
**Product Name:** 400PWT200-19

#### 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 cold work of forming as applicable per AISI A7.2.
- Tabulated gross properties are based on full-section of the studs, away from punchouts.
- For deflection calculations, use the effective
- Allowable moment includes cold-work of forming.

#### Project Information

Name:  
Address:

#### Contractor Information

Name:  
Contact:  
Phone:  
Fax:

#### Architect Information

Name:  
Contact:  
Phone:  
Fax:

#### Distributor/Rep Information

Name:  
Contact:  
Phone:  
Email /Web:

## Properties

### 400PWT200-19

Finish: G40  
 Web Depth: 4" in  
 Flange Width: 2" in  
 Design Thickness: 0.02 in  
 Yield stress,  $F_y$ : 55 ksi  
 Weight: 0.540 lb/ft

### Properties

### 400PWT200-19

### Section Properties

#### Gross Section Properties

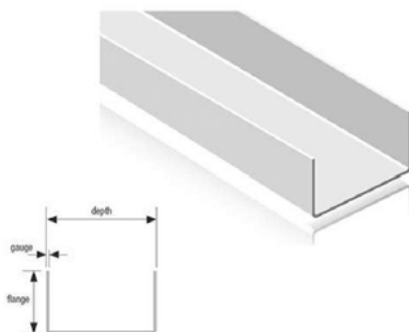
Cross sectional area (A): 0.16 in<sup>2</sup>  
 Moment of inertia ( $I_x$ ): 0.439 in<sup>4</sup>  
 Section Modulus ( $S_x$ ): 0.214 in<sup>3</sup>  
 Radius of gyration ( $R_x$ ): 1.657 in<sup>4</sup>  
 Gross moment of inertia ( $I_y$ ): 0.066 in<sup>4</sup>  
 Gross Radius of gyration ( $R_y$ ): 0.642 in<sup>2</sup>

#### Effective Section Properties

Moment of inertia for deflection ( $I_{xe}$ ): - in<sup>4</sup>  
 Section modulus ( $S_{xe}$ ): - in<sup>3</sup>  
 Allowable bending moment ( $M_a$ ): - in-lbs  
 ( $V_{ag}$ ): - lb  
 $Y_{cg}$ : -  
 $F_{ya}$ : 55 ksi

#### Torsional Properties

St. Venant torsion constant ( $J \times 1000$ ): 0.021 in<sup>4</sup>  
 Warping constant ( $C_w$ ): 0.193 in<sup>6</sup>  
 Distance from shear center to neutral axis ( $X_o$ ): -1.237 in  
 Dist from shear center to mid plain (m): 0.742  
 Radii of gyration ( $R_o$ ): 2.165 in  
 Torsional flexural constant (Beta): 0.674





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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.

Prime Wall is owned by and licensed by MRI Steel Framing

### **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](mailto:bjpowell@studsunlimited.com). Studs Unlimited is located in Oklahoma City, Oklahoma. **(1 point)**