

**Product Category:** 05 41 00 - Structural Framing  
**Product Name:** 600T125-43

### Project Information

Name:  
Address:

### 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 non-structural rack sections are ignored.

### Contractor Information

Name:  
Contact:  
Phone:  
Fax:

### Architect Information

Name:  
Contact:  
Phone:  
Fax:

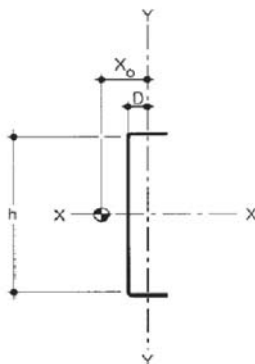
### Distributor/Rep Information

Name:  
Contact:  
Phone:  
Web/Email:

## Properties

### 600T125-43 Properties

|                  |               |
|------------------|---------------|
| Finish:          | G60           |
| Web Depth        | 6" in         |
| Flange Width     | 1-1/4" in     |
| Design Thickness | 0.0451 in     |
| Thickness        | 43mils or 18G |
| Yield stress, Fy | 33 ksi        |
| Weight           | 1.303 lb/ft   |



### 600T125-43 Section Properties

#### Gross Section Properties

|                               |                       |
|-------------------------------|-----------------------|
| Cross sectional area (A)      | 0.383 in <sup>2</sup> |
| Moment of inertia (Ix)        | 1.862 in <sup>4</sup> |
| Section Modulus (Sx)          | 0.604 in <sup>3</sup> |
| Radius of gyration (Rx)       | 2.205 in              |
| Gross moment of inertia (Iy)  | 0.044 in <sup>4</sup> |
| Gross Radius of gyration (Ry) | 0.337 in              |

#### Effective Section Properties

|   |                       |
|---|-----------------------|
| Moment of inertia for deflection (Ixe)                    | 1.772 in <sup>4</sup> |
| Section modulus (Sxe)                                     | 0.454 in <sup>3</sup> |
| Allowable bending moment (Ma)                             | 8.97 In-k             |
| Allowable bending moment from distortional buckling (Mad) | - In-k                |
| Allowable strong axis shear away from punch-out (Vag)     | 3.430 lb              |
| Allowable strong axis shear at punch out (Vanet)          | - lb                  |

#### Torsional Properties

|   |                       |
|---|-----------------------|
| St. Venant torsion constant (J x 1000)          | 0.260 in <sup>4</sup> |
| Warping constant (Cw)                           | 0.307 in <sup>6</sup> |
| Distance from shear center to neutral axis (Xo) | -1.064 in             |
| Distance from shear center to mid-plane (M)     | 0.887 in              |
| Radii of gyration (Ro)                          | 2.471 in              |
| Torsional flexural constant (Beta)              | 0.815                 |
| Unbraced Length (Lu)                            | 24.8 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](mailto:bjpowell@studsunlimited.com). Studs Unlimited is located in Oklahoma City, Oklahoma. **(1 point)**