



Expanding Your Solutions

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## 400S162-33 C-STUDS 33 MIL. (20 GA. STRUCTURAL)

### Geometric Properties

400S162-33 "S" structural load-bearing studs are produced from hot-dipped galvanized steel in standard CP60 coating. CP90 is available upon special request, and may require up-charges and extended lead times.

### Physical Properties

| Model No.  | Design Thickness (in) | Minimum Thickness (in) | Yield (ksi) | Coating <sup>3,4</sup> | Web Depth (in) | Flange Size (in) | Lip (in) |
|------------|-----------------------|------------------------|-------------|------------------------|----------------|------------------|----------|
| 400S162-33 | 0.0346                | 0.0329                 | 33          | CP60                   | 4              | 1-5/8            | 1/2      |

**Notes:**

- Uncoated steel thickness. Thickness is for carbon sheet steel.
- Minimum thickness represents 95% of the design thickness and is the minimum acceptable thickness.
- Per ASTM C955 & A1003, Table 1.
- CP90 available upon request. Will require extended lead time and upcharge.

**Color Code (painted on ends):** 33-mil: White

### ASTM & Code Standards:

- ASTM A653/A653M, A924/A924M, A1003/1003, C955 & C1007
- ICC-ES & SFIA Code Compliance Certification Program
- ICC ESR-3016
- ATI CCRR-0224
- IBC: 2015, 2018, 2021
- CBC: 2019, 2022
- AISI: S100, S200, S240

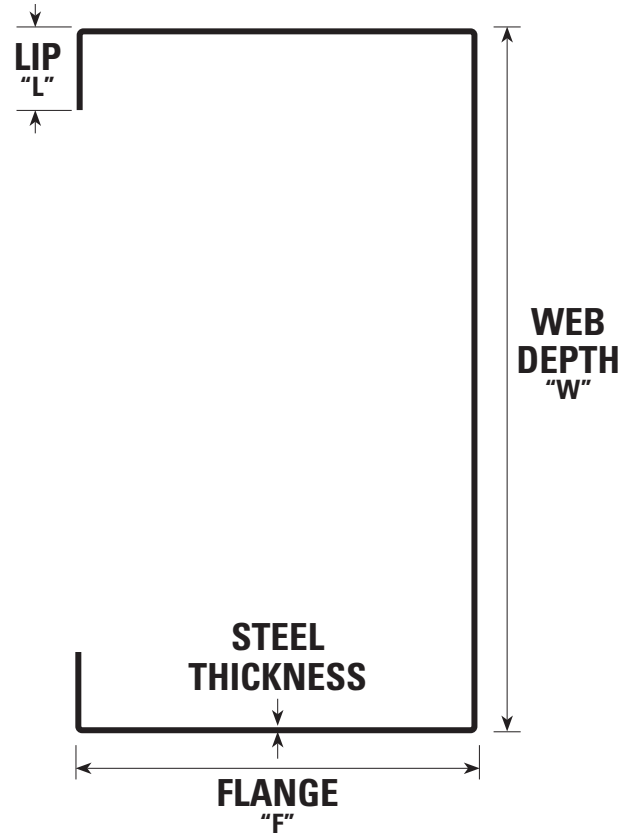
### LEED v4 for Building and Design Construction

- MR Prerequisite: Construction and Demolition Waste Management Planning.
- MR Credit: Construction and Demolition Waste Management.
- MR Credit: Building Product Disclosure and Optimization – Sourcing of Raw Materials, Option 2.
- MR Credit: Building Product Disclosure and Optimization – Environmental Product Declarations, Options 1 & 2.
- MR Credit: Building Product Disclosure and Optimization – Material Ingredients, Option 1.
- MR Credit: Building Life-Cycle Impact Reduction, Option 4.

### CEMCO cold-formed steel framing products contain 30% to 37% recycled steel.

- Total Recycled Content: 36.9%
- Post-Consumer: 19.8%
- Pre-Consumer: 14.4%

**CSI Division:** 05.40.00 – Cold-Formed Metal Framing



### Hole Detail

| Standard Hole Centers are 24" | (Z) (in) | (Y) (in) |
|-------------------------------|----------|----------|
| 2-1/2" studs                  | 2.000    | 0.750    |
| 3-1/2" to 14" studs           | 3.250    | 1.500    |

### 400S162-33 Section Properties

| Design Thickness (in.) | Fy (ksi) | Gross <sup>3</sup>    |                       |         |                       |         | Effective Properties <sup>2</sup> |                       |           |          |            |            | Torsional Properties      |                       |         |        |         |       | Lu (in) |
|------------------------|----------|-----------------------|-----------------------|---------|-----------------------|---------|-----------------------------------|-----------------------|-----------|----------|------------|------------|---------------------------|-----------------------|---------|--------|---------|-------|---------|
|                        |          | Ix (in <sup>4</sup> ) | Sx (in <sup>3</sup> ) | Rx (in) | Iy (in <sup>4</sup> ) | Ry (in) | Ix (in <sup>4</sup> )             | Sx (in <sup>3</sup> ) | Ma (in-k) | Vag (lb) | Vanet (lb) | Mad (in-k) | Jx1000 (in <sup>4</sup> ) | Cw (in <sup>6</sup> ) | Xo (in) | m (in) | Ro (in) | β     |         |
| 0.0346                 | 33       | 0.692                 | 0.346                 | 1.586   | 0.103                 | 0.611   | 0.692                             | 0.299                 | 5.91      | 976      | 595        | 6.06       | 0.110                     | 0.363                 | -1.263  | 0.768  | 2.118   | 0.644 | 42.3    |

**Notes:** 1. Web depth for track sections equals nominal depth plus 2 times the design thickness plus bend radius. 2. The values are for members with punch-outs. 3. Gross properties are based on the full, unreduced cross-section, away from web punchouts. 4. Use the effective moment of inertia for deflection calculation. 5. Allowable moment is lesser of Ma and Mad. Distortional buckling is based on an assumed  $K\phi = 0$ . 6. These members are available un-punched only.

Check the updated list of Certified Production Facilities at Intertek's website at <http://www.intertek.com/building/sfia>



This technical information reflects the most current information available and supersedes any and all previous publications effective May 1, 2024.

05/01/2024 AT