

**Expanding Your Solutions** 

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## 362S300-54 C-STUDS 54 MIL. (16 GA. STRUCTURAL)

## **Geometric Properties**

362S300-54 "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<br>No. | Design<br>Thickness<br>(in) | Minimum<br>Thickness<br>(in) | Yield<br>(ksi) | Coating <sup>3,4</sup> | Web<br>Depth<br>(in) | Flange<br>Size<br>(in) | <b>Lip</b> (in) |  |
|--------------|-----------------------------|------------------------------|----------------|------------------------|----------------------|------------------------|-----------------|--|
| 362S300-54   | 0.0566                      | 0.0538                       | 50             | CP60                   | 3-5/8                | 3                      | 7/8             |  |

#### Notes:

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

## Color Code (painted on ends): 54-mil: Green

## **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

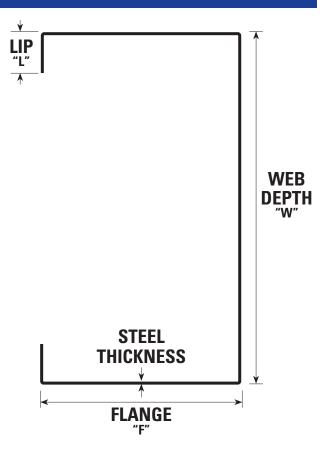
## LEED v4 for Building and Design Construction

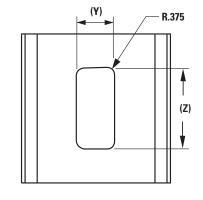
- MR Prerequisite: Construction and Demolition Waste Management Planning.
- MR Credit: Construction and Demolition Waste Management.
- MR Credit: Building Product Disclosure and Optimization Sourcing of Raw Materials, Option 2.
- MR Credit: Building Product Disclosure and Optimization Environmental Product 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<br>Hole Centers<br>are 24" | <b>(Z)</b><br>(in) | ( <b>Y)</b><br>(in) |  |  |
|-------------------------------------|--------------------|---------------------|--|--|
| 2-1/2"<br>studs                     | 2.000              | 0.750               |  |  |
| 3-1/2" to<br>14" studs              | 3.250              | 1.500               |  |  |

## 362S300-54 Section Properties

| Design<br>Thickness<br>(in.) | E.    | Gross <sup>3</sup>       |             |            |                          |                | Effective Properties <sup>2</sup> |             |              |             |               |               | Torsional Properties             |                          |                |                  |            |       | 1          |
|------------------------------|-------|--------------------------|-------------|------------|--------------------------|----------------|-----------------------------------|-------------|--------------|-------------|---------------|---------------|----------------------------------|--------------------------|----------------|------------------|------------|-------|------------|
|                              | (ksi) | lx<br>(in <sup>4</sup> ) | Sx<br>(in³) | Rx<br>(in) | ly<br>(in <sup>4</sup> ) | <b>Ry</b> (in) | lx<br>(in <sup>4</sup> )          | Sx<br>(in³) | Ma<br>(in-k) | Vag<br>(lb) | Vanet<br>(lb) | Mad<br>(in-k) | <b>Jx1000</b> (in <sup>4</sup> ) | Cw<br>(in <sup>6</sup> ) | <b>Xo</b> (in) | <b>m</b><br>(in) | Ro<br>(in) | ß     | Lu<br>(in) |
| 0.0566                       | 50    | 1.422                    | 0.785       | 1.515      | 0.822                    | 1.151          | 1.386                             | 0.628       | 18.81        | 3372        | 1016          | 19.02         | 0.662                            | 3.237                    | -2.860         | 1.640            | 3.435      | 0.307 | 66.6       |

**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.





