



Expanding Your Solutions

#### Corporate Headquarters

13191 Crossroads Pkwy N., Ste 325  
City of Industry, CA 91746  
Phone: 800.775.2362  
Fax: 626.330.7598  
www.cemcosteel.com

#### Manufacturing Facilities

City of Industry, CA  
Denver, CO  
Ft. Worth, TX  
Pittsburg, CA

#### Structural Engineering/Design

1001-A Pittsburgh Antioch Hwy  
Pittsburg, CA 94565  
Phone: 800.775.2362  
Fax: 626.330.7598  
www.cemcoengineering.com

#### Technical Services

13191 Crossroads Pkwy N., Ste 325  
City of Industry, CA 91746  
Phone: 800.416.2278  
Fax: 626.249.5004

## 550S162-68 C-STUD 68 MIL (14 GA. STRUCTURAL)

### Geometric Properties

550S162-68 "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) |
|------------|-----------------------|------------------------|-------------|------------------------|----------------|------------------|----------|
| 550S162-68 | 0.0713                | 0.0677                 | 50          | CP60                   | 5-1/2          | 1-5/8            | 1/2      |

#### 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):** 68-mil: Orange

### 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: 2012, 2015, 2018
- CBC: 2013, 2016
- AISI: S100-07, S100-12, S100-16, S200-12, S240-15

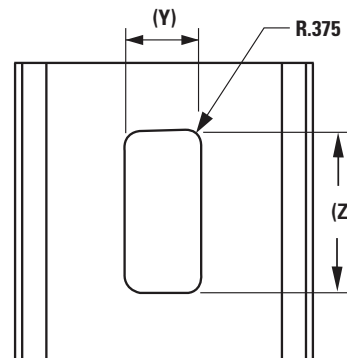
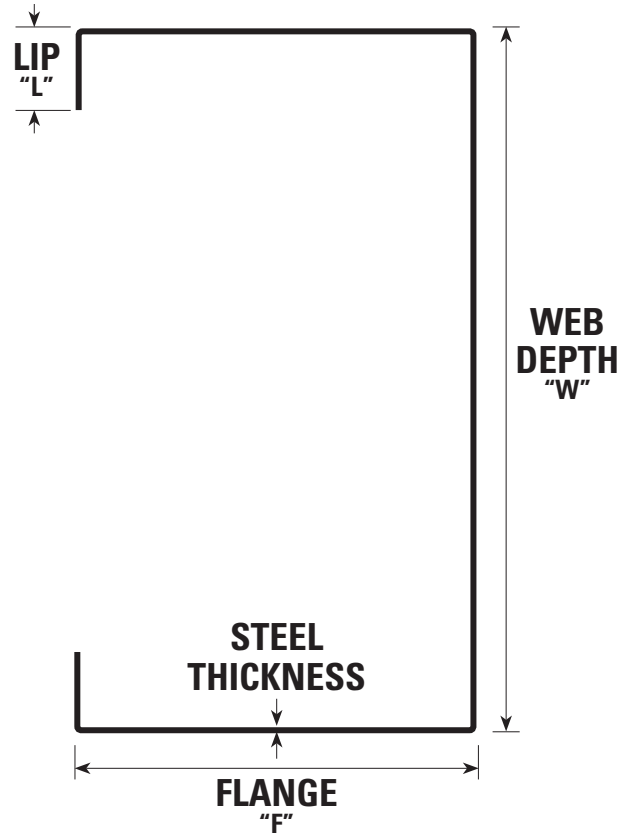
### LEED v4 for Building and Design Construction

- 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    |

### 550S162-68 Section Properties

| Design Thickness<br>(in.) | Fy<br>(ksi) | Gross <sup>3</sup>       |                          |            |                          |            | Effective Properties <sup>2</sup> |                          |              |             |               |               | Torsional Properties         |                          |            |           |            |       |      | Lu<br>(in) |
|---------------------------|-------------|--------------------------|--------------------------|------------|--------------------------|------------|-----------------------------------|--------------------------|--------------|-------------|---------------|---------------|------------------------------|--------------------------|------------|-----------|------------|-------|------|------------|
|                           |             | Ix<br>(in <sup>4</sup> ) | Sx<br>(in <sup>3</sup> ) | Rx<br>(in) | Iy<br>(in <sup>4</sup> ) | Ry<br>(in) | Ix<br>(in <sup>4</sup> )          | Sx<br>(in <sup>3</sup> ) | Ma<br>(in-k) | Vag<br>(lb) | Vanet<br>(lb) | Mad<br>(in-k) | Jx1000<br>(in <sup>4</sup> ) | Cw<br>(in <sup>6</sup> ) | Xo<br>(in) | m<br>(in) | Ro<br>(in) | β     |      |            |
| 0.0713                    | 50          | 2.861                    | 1.040                    | 2.086      | 0.212                    | 0.568      | 2.861                             | 1.031                    | 34.94        | 5350        | 2532          | 32.26         | 1.114                        | 1.342                    | -1.072     | 0.675     | 2.414      | 0.803 | 31.1 |            |

**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 December 04, 2018.

12-04-18 AT