

**Expanding Your Solutions** 

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# Manufacturing Facilities

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# 1125SSCJ175-97 PUNCHED SURE-SPAN™ C-JOIST 11.25" DEPTH

#### **Geometric Properties**

1125SSCJ175-97 Sure-Span™ floor joist is manufactured with a 1.75" flange, in 97 mil thickness. All SSCJ joists are available with the large punch-outs at 48" on-center, with the first punch-out 18" from one end. All CEMCO SSCJ load bearing floor joists are produced from hot-dipped galvanized steel in standard CP60 coating. CP90 is available upon special request.

#### **Steel Thickness**

| Mil<br>Thickness | Design<br>Thickness<br>(in.) <sup>1</sup> | Minimum<br>Thickness<br>(in.) <sup>1, 2</sup> | Color Code<br>(painted on ends) |  |  |  |
|------------------|---|---|---------------------------------|--|--|--|
| 97               | 0.1017" (2.58 mm)                         | 0.0966" (2.45 mm)                             | Red                             |  |  |  |

- 1. Uncoated Steel Thickness. Thickness is for carbon sheet steel.
- Minimum Thickness represents 95% of the design thickness and is the minimum acceptable thickness delivered to the job site, based on AISI S100.

#### **ASTM's & Code Standards**

- ASTM A653/A653M, A924/A924M, & A1003/A1003M, C955, C1007
- UL Classified and UL Certified (UL FUS)
- UL G556, G557, G559, G560, G565, G574, G580, G588, G595, H503, H508, P546, P561, P562
- IBC: 2012, 2015, 2018, 2021
- CBC: 2013, 2016, 2019
- AISI: S100, S200, S240

### **LEED v4 for Building and Design Construction**

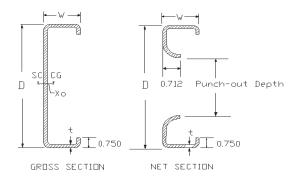
- MR Prerequisite: Construction and Demolition Waste Management Planning
- MR Credit: Construction and Demolition Waste Management.
- MR Credit: Building Product Disclosure and Optimization Sourcing of Raw Materials, Option 2.
- MR Credit: Building Product Disclosure and Optimization Environmental Product 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%

#### **Punch-Out Dimensions**

| Section        | <b>L1</b> (in.) | <b>L2</b> (in.) | Spacing Between<br>Punch-Outs (in.) |  |  |  |  |
|----------------|-----------------|-----------------|-------------------------------------|--|--|--|--|
| 1125SSCJ175-97 | 9-15/32         | 6-1/4           | 48                                  |  |  |  |  |



#### 1125SSCJ175-97 Structural Properties & Load Capacities

| Dimensions |       |           | Gross Section Properties |               |                          |                          |                 |                    |            | Torsional Properties |            |                                  |                              |            | Net Section<br>Properties |             | Capacities                |                |             |
|------------|-------|-----------|--------------------------|---------------|--------------------------|--------------------------|-----------------|--------------------|------------|----------------------|------------|----------------------------------|------------------------------|------------|---------------------------|-------------|---------------------------|----------------|-------------|
| w<br>(in)  | Gauge | t<br>(in) | Weight (plf)             | Area<br>(in²) | lx<br>(in <sup>4</sup> ) | ly<br>(in <sup>4</sup> ) | <b>Sx</b> (in³) | <b>Sy</b><br>(in³) | Rx<br>(in) | Ry<br>(in)           | Xo<br>(in) | <b>Jx1000</b> (in <sup>4</sup> ) | <b>Cw</b> (in <sup>6</sup> ) | Ro<br>(in) | ß                         | An<br>(in²) | lxn<br>(in <sup>4</sup> ) | Mall<br>(k-in) | Vall<br>(k) |
| 1.75       | 12    | 0.1017    | 5.358                    | 1.576         | 24.935                   | 0.494                    | 4.433           | 0.355              | 3.978      | 0.560                | -0.902     | 5.433                            | 12.459                       | 4.117      | 0.952                     | 0.937       | 23.010                    | 104.893        | 6.828       |

#### Notes

- 1. The yield strength, Fy, is 33 ksi for 18 gauge and 50 ksi for 16, 14, and 12 gauge material.
- 2. Tabulated weight values are based on full section geometry.
- 3. Punch-out Depth = 4.25" (web depth 7.25", 8" and 9.25"), 6.25" (web depth 10" and 11.25"), 8" (web depth 12"), 10" (web depth 14")
- 4. For Allowable Stress Design (ASD) method, use a factor of safety of 1.95 for both moment and shear capacities. This factor of safety is obtained from a joist test program as per AISI 2012, Chapter F.
- Allowable moment, Mall, and shear, Vall, capacities for joists are obtained by applying factors of safety to the least nominal capacities (between full and net section capacities).



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