



Expanding Your Solutions

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## 800SSCJ175-54 PUNCHED SURE-SPAN™ C-JOIST 8" DEPTH

### Geometric Properties

800SSCJ175-54 Sure-Span™ floor joist is manufactured with a 1-3/4" flange, in 54 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 Thickness	Design Thickness (in.) <sup>1</sup>	Minimum Thickness (in.) <sup>1,2</sup>	Color Code (painted on ends)
54	0.0566" (1.44 mm)	0.0538" (1.37 mm)	Green

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 delivered to the job site, based on AISI S100.

### ASTM's & Code Standards

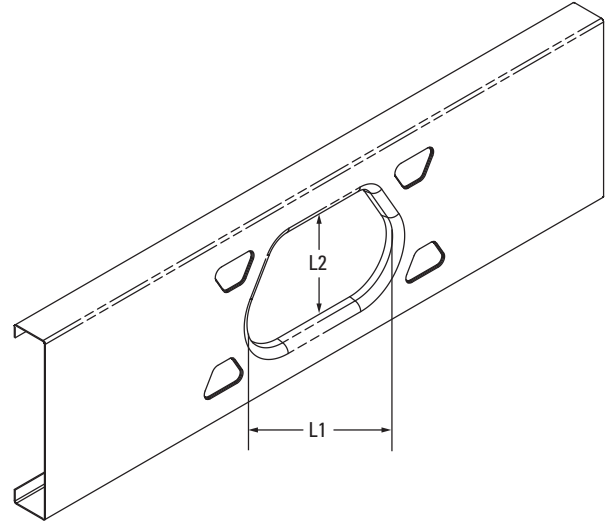
- ASTM A653/A653M, A924/A924M, & A1003/A1003M, C955, C1007
- UL Classified and UL Certified (UL FUS)
- UL G556, G557, G559, G560, G565, G574, G580, G588, G595, H503, H508, P546, P561, P562
- IBC: 2012, 2015, 2018, 2021
- CBC: 2013, 2016, 2019
- AISI: S100, S200, S240

### 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.

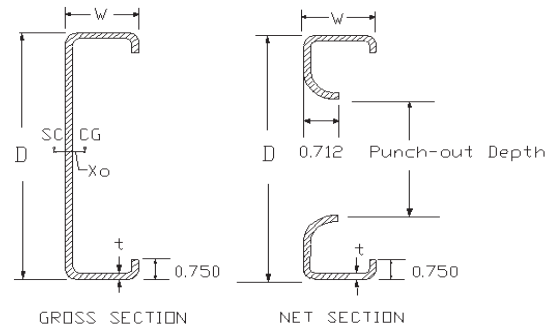
### CEMCO cold-formed steel framing products contain 30% to 37% recycled steel.

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



### Punch-Out Dimensions

Section	L1 (in.)	L2 (in.)	Spacing Between Punch-Outs (in.)
800SSCJ175-54	7-5/32	4-1/4	48



### 800SSCJ175-54 Structural Properties & Load Capacities

Dimensions			Gross Section Properties								Torsional Properties					Net Section Properties		Capacities	
w (in)	Gauge	t (in)	Weight (plf)	Area (in <sup>2</sup> )	I <sub>x</sub> (in <sup>4</sup> )	I <sub>y</sub> (in <sup>4</sup> )	S <sub>x</sub> (in <sup>3</sup> )	S <sub>y</sub> (in <sup>3</sup> )	R <sub>x</sub> (in)	R <sub>y</sub> (in)	X <sub>o</sub> (in)	J <sub>x1000</sub> (in <sup>4</sup> )	C <sub>w</sub> (in <sup>6</sup> )	R <sub>o</sub> (in)	β	A <sub>n</sub> (in <sup>2</sup> )	I <sub>xn</sub> (in <sup>4</sup> )	M <sub>all</sub> (k-in)	V <sub>all</sub> (k)
1.75	16	0.0566	2.421	0.712	6.282	0.282	1.571	0.215	2.970	0.630	-1.136	0.760	3.710	3.242	0.877	0.534	6.192	35.904	1.655

#### Notes:

1. The yield strength, F<sub>y</sub>, 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.
5. Allowable moment, M<sub>all</sub>, and shear, V<sub>all</sub>, capacities for joists are obtained by applying factors of safety to the least nominal capacities (between full and net section capacities).

### Technical Services

Technical Services: 800.416.2278  
Structural Engineering/Design: 925.473.9340  
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This technical information reflects the most current information available and supersedes any and all previous publications effective April 06, 2022.

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