

**Expanding Your Solutions** 

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# Technical Services

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# 250S162-97 C-STUD 97 MIL (12 GA. STRUCTURAL)

# **Geometric Properties**

250S162-97 "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)	<b>Yield</b> (ksi)	Coating <sup>3,4</sup>	Web Depth (in)	Flange Size (in)	<b>Lip</b> (in)	
250S162-97	0.1017	0.0966	50	CP60	2-1/2	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): 97-mil: Red

# **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**

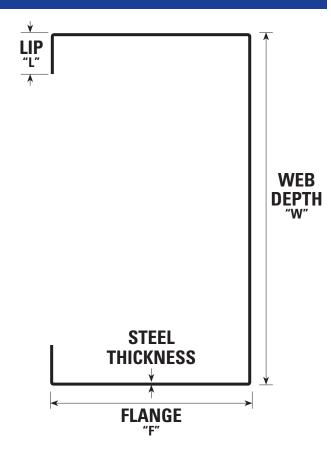
- MR Prerequisite: Construction and Demolition Waste Management Planning.
- MR Credit: Construction and Demolition Waste Management.
- MR Credit: Building Product Disclosure and Optimization Sourcing of Raw Materials, Option 2.
- MR Credit: Building Product Disclosure and Optimization Environmental Product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

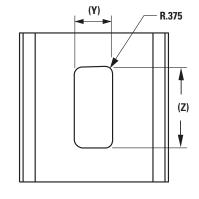
# CEMCO cold-formed steel framing products contain 30% to 37% recycled steel.

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

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





#### **Hole Detail**

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

# 250S162-97 Section Properties

Design Thickness (in.)	Eu	Gross <sup>3</sup>					Effective Properties <sup>2</sup>						Torsional Properties						Lu
	(ksi)	lx (in <sup>4</sup> )	<b>Sx</b> (in³)	Rx (in)	ly (in <sup>4</sup> )	Ry (in)	lx (in <sup>4</sup> )	<b>Sx</b> (in³)	Ma (in-k)	Vag (lb)	Vanet (lb)	Mad (in-k)	<b>Jx1000</b> (in <sup>4</sup> )	<b>Cw</b> (in <sup>6</sup> )	Xo (in)	<b>m</b> (in)	Ro (in)	ß	(in)
0.1017	50	0.596	0.477	0.989	0.209	0.586	0.596	0.477	16.93	3798	429	16.91	2.102	0.346	-1.386	0.815	1.801	0.408	33.5

**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 well

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