



Steel Framing and Metal Lath

Corporate Headquarters  
263 N. Covina Lane  
City of Industry, CA 91744  
Phone: 800.775.2362 | Fax: 626.330.7598  
www.cemcosteel.com

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

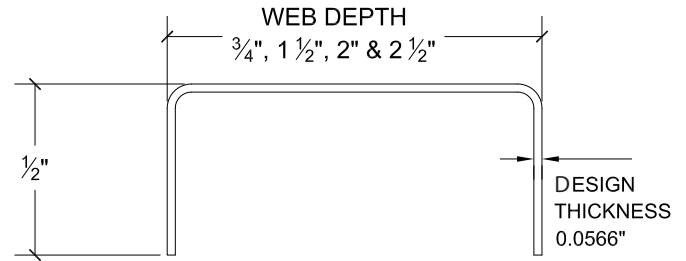
Structural Engineering/Design  
1001-A Pittsburg Antioch Hwy  
Pittsburg, CA 94565  
Phone: 925.473.9340 | Fax: 925.473.9124

Technical Services  
263 N. Covina Lane  
City of Industry, CA 91744  
Phone: 800.416.2278 | Fax: 626.249.5005

# "U" - Un-Punched U-Shaped Channel, 54 Mil (16 ga. structural)

## Geometric Properties

"U" channels are fabricated in 3/4", 1-1/2", 2", and 2-1/2" widths with 1/2" legs.  
All CEMCO U-Shaped channels are produced from hot-dipped galvanized steel in standard G60 coating weight. G90 is available upon special request.



## Steel Thickness

Mil thickness	Design Thickness (in.) <sup>1</sup>	Minimum Thickness (in.) <sup>1,2</sup>
54	0.0566 (1.44 mm)	0.0538 (1.37 mm)

- 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 Section A4.3 of the AISI S100-2007.

## Color Code (painted on ends)

54 mil: Green

## ASTM & Code Standards

- ASTM A653/A653M, A924/A924M, & A1003/A1003M
- AISI S100-2007
- 2009/2012 IBC & IRC
- 2007 CBC

## CEMCO cold-formed steel framing products contain 30% to 35% recycled steel.

These products are produced from steel consisting of the following contents:

- Total Recycled Content: 32.9%
- Post-Consumer Content: 25.6%
- Pre-Consumer Content: 6.8%

## LEED Points and Recycled Content

By using CEMCO metal lath products, your project can contribute to earning LEED points for:

- LEED MR 2.1 and 2.2: Construction Waste Management: Up to 2 points.
- LEED MR 4.1 and 4.2: Recycled Content: Up to 2 points.
- LEED MR 5.1 & 5.2: Regional Materials



## Technical Services

Contact Technical Services at 800.416.2278 for specific information or email to [techservices@cemcosteel.com](mailto:techservices@cemcosteel.com)

## SECTION PROPERTIES - U CHANNELS

Section	Design Thickness (in)	Gross Properties						Effective Properties 33 ksi			
		Area (in <sup>2</sup> )	Weight (lb/ft)	I <sub>x</sub> (in <sup>4</sup> )	R <sub>x</sub> (in <sup>3</sup> )	I <sub>y</sub> (in <sup>4</sup> )	R <sub>y</sub> (in <sup>3</sup> )	I <sub>x</sub> (in)	S <sub>x</sub> (in <sup>3</sup> )	M <sub>a</sub> (in <sup>3</sup> )	V <sub>a</sub> (in-k)
75U050-54	0.0566	0.087	0.30	0.007	0.288	0.002	0.155	0.007	0.019	0.45	315
150U050-54	0.0566	0.129	0.44	0.039	0.547	0.003	0.144	0.039	0.052	1.22	840
200U050-54	0.0566	0.157	0.54	0.079	0.709	0.003	0.136	0.079	0.079	1.87	1190
250U050-54	0.0566	0.186	0.63	0.139	0.866	0.003	0.128	0.0139	0.111	2.64	1540

NOTES1. For Deflection calculations, use effective I<sub>xx</sub>



Corporate Headquarters  
263 N. Covina Lane  
City of Industry, CA 91744  
Phone: 800.775.2362 | Fax: 626.330.7598  
www.cencosteel.com

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

Structural Engineering/Design  
1001-A Pittsburg Antioch Hwy  
Pittsburg, CA 94565  
Phone: 925.473.9340 | Fax: 925.473.9124

Technical Services  
263 N. Covina Lane  
City of Industry, CA 91744  
Phone: 800.416.2278 | Fax: 626.249.5005

## ALLOWABLE U-CHANNEL CEILING SPANS - L/240

Section		4 psf					6 psf					13 psf				
		Channel Spacing (in) o.c.					Channel Spacing (in) o.c.					Channel Spacing (in) o.c.				
		24	36	48	60	72	24	36	48	60	72	24	36	48	60	72
75U050-54	Single	3' 11"	3' 5"	3' 1"	2' 10"	2' 8"	3' 5"	3' 0"	2' 8"	2' 6"	2' 4"	2' 7"	2' 4"	2' 1"	1' 11"	1' 9"
	Multiple	4' 10"	4' 2"	3' 10"	3' 7"	3' 4"	4' 2"	3' 8"	3' 4"	3' 1"	2' 10"	3' 3"	2' 9"	2' 4"	2' 1"	1' 11"
150U050-54	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 3"	3' 0"	2' 9"	2' 7"
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"
200U050-54	Single	5' 10"	5' 1"	4' 8"	4' 4"	4' 1"	5' 1"	4' 6"	4' 1"	3' 10"	3' 7"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"
	Multiple	7' 5"	6' 6"	5' 11"	5' 6"	5' 2"	6' 6"	5' 8"	5' 2"	4' 10"	4' 7"	5' 1"	4' 5"	4' 0"	3' 9"	3' 6"
250U050-54	Single	6' 1"	5' 4"	4' 10"	4' 6"	4' 3"	5' 4"	4' 8"	4' 3"	4' 0"	3' 9"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"
	Multiple	7' 9"	6' 9"	6' 2"	5' 9"	5' 5"	6' 9"	5' 11"	5' 5"	5' 0"	4' 9"	5' 3"	4' 7"	4' 3"	3' 11"	3' 9"

## ALLOWABLE U-CHANNEL CEILING SPANS - L/360

Section		4 psf					6 psf					13 psf				
		Channel Spacing (in) o.c.					Channel Spacing (in) o.c.					Channel Spacing (in) o.c.				
		24	36	48	60	72	24	36	48	60	72	24	36	48	60	72
75U050-54	Single	3' 5"	3' 0"	2' 8"	2' 6"	2' 4"	3' 0"	2' 7"	2' 4"	2' 2"	2' 1"	2' 4"	2' 0"	1' 10"	1' 8"	1' 7"
	Multiple	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	3' 8"	3' 2"	2' 11"	2' 8"	2' 7"	2' 10"	2' 6"	2' 3"	2' 1"	1' 11"
150U050-54	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 3"	3' 0"	2' 9"	2' 7"
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"
200U050-54	Single	5' 10"	5' 1"	4' 8"	4' 4"	4' 1"	5' 1"	4' 6"	4' 1"	3' 10"	3' 7"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"
	Multiple	7' 5"	6' 6"	5' 11"	5' 6"	5' 2"	6' 6"	5' 8"	5' 2"	4' 10"	4' 7"	5' 1"	4' 5"	4' 0"	3' 9"	3' 6"
250U050-54	Single	6' 1"	5' 4"	4' 10"	4' 6"	4' 3"	5' 4"	4' 8"	4' 3"	4' 0"	3' 9"	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"
	Multiple	7' 9"	6' 9"	6' 2"	5' 9"	5' 5"	6' 9"	5' 11"	5' 5"	5' 0"	4' 9"	5' 3"	4' 7"	4' 3"	3' 11"	3' 9"

Span Notes: 1.  $F_y = 33$  ksi for all sections 2. Multiple span indicates two or more equal spans with channel continuous over interior supports 3. Bearing Lengths = 0.75" 4. Allowable spans based on the compression flange laterally unbraced