



Expanding Your Solutions

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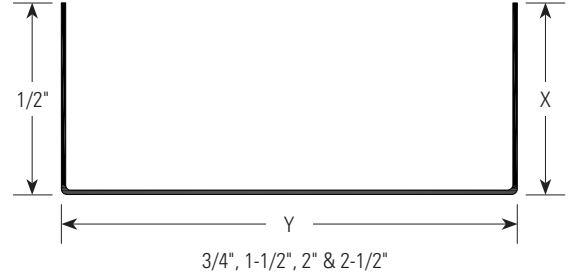
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"U" - UNPUNCHED U-SHAPED CHANNEL • 2" x 54 Mil.

Geometric Properties

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



Steel Thickness

Thickness (mil)	Design Thickness (in) ¹	Minimum Thickness (in) ^{1,2}
54	0.0566 (1.44 mm)	0.0538 (1.37 mm)

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 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, 924/A924M, A1003/1003, C955 & C1007
- ICC-ES & SFIA Code Compliance Certification Program
- ICC ESR-3016
- ATI CRR-0224
- IBC: 2012, 2015, 2018
- CBC: 2013, 2016
- AISI: S100-07, S100-12, S100-16, S200-12, S240-15

CSI Division: 05.40.00 – Cold-Formed Metal Framing

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%



U-Channel Section Properties

Section	Design Thickness (in)	Gross Properties						Effective Properties			
		Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	S _x (in ³)	M _a (in-k)	V _a (lbs)
200U050-54	0.0566	0.157	0.54	0.079	0.709	0.003	0.136	0.079	0.079	1.87	1190

Notes: 1. For Deflection calculations, use effective I_{xx}.

U-Shaped Channels Allowable Ceiling Spans

Section		Uniform Load															
		4 psf Channel Spacing o.c. (in)					6 psf Channel Spacing o.c. (in)					13 psf Channel Spacing o.c. (in)					
		24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	
200U050-54	L/240	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"
	L/360	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"	5'-1"	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"

- Notes:**
1. F_y = 50 ksi for all sections.
 2. Multiple span indicates two or more equal spans with channel continuous over interior supports.
 2. Bearing Lengths = 0.75".
 3. Allowable spans based on the compression flange laterally unbraced.

Technical Services

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www.cemcosteel.com



This technical information reflects the most current information available and supersedes any and all previous publications effective December 21, 2018.
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