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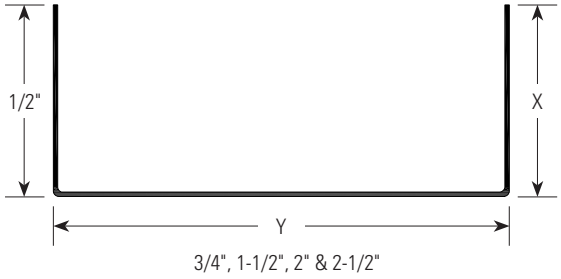
"U" - UNPUNCHED U-SHAPED CHANNEL • 1-1/2" x 54 Mil.

Geometric Properties

1-1/2" "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 CCRR-0224
- IBC: 2012, 2015, 2018, 2021
- CBC: 2013, 2016, 2019, 2022
- AISI: S100, S200, S240

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 50 ksi			
		Area (in^2)	Weight (lb/ft)	Ix (in^4)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Va (lbs)
150U050-54	0.0566	0.129	0.44	0.039	0.547	0.003	0.144	0.039	0.052	1.22	840

Notes: 1. For Deflection calculations, use effective Ixx.

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
150U050-54	L/240	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"
	L/360	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"

Notes:
1. Fy = 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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This technical information reflects the most current information available and supersedes any and all previous publications effective October 07, 2025.