Expanding Your Solutions

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"CT" – SHAFT WALL STUDS, 33 Mil

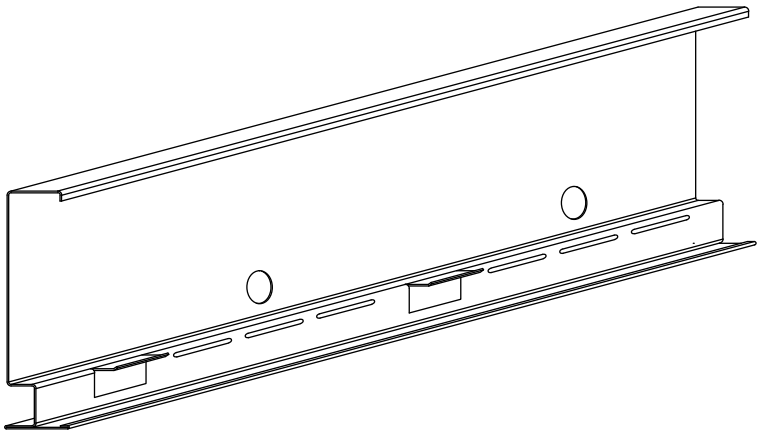
Geometric Properties

CEMCO's 33 Mil CT studs are fabricated in web depths of 2-1/2", 4", and 6" each with a short-flange width of 1-3/8" and long-flange width of 1-5/8". All CT studs manufactured by CEMCO are produced from hot-dipped galvanized steel in standard G40 coating. G60 is available upon special request.

Steel Thickness

Member Depth (A) (in)	Thickness (mil)	Design Thickness (in)[1]	Minimum Thickness (in)[1,2]
2-1/2, 4, 6	33	0.0346 (88mm)	0.0329 (84mm)

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 AISI S100.



Color Code (painted on ends):

33-mil: White

ASTM & Code Standards:

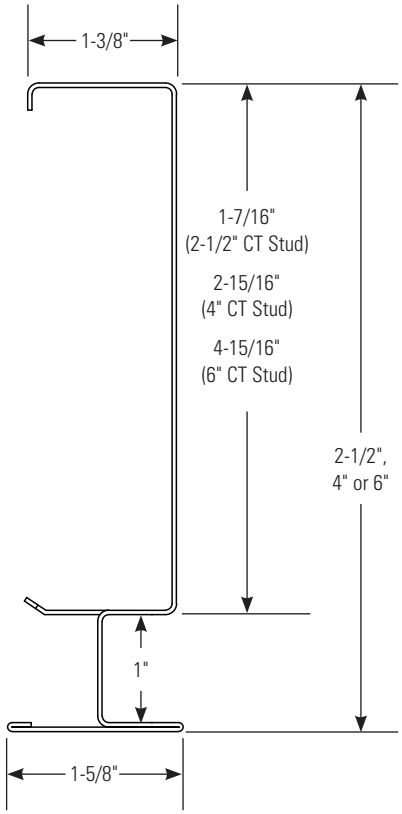
- ASTM A653/A653M, A924/A924M, A1003/A1003M, C645
- ICC-ESR 4934
- IBC/IRC: 2015, 2018, 2021, 2024
- CBC: 2016, 2019, 2022
- AISI: S100, S220
- UL-2079 5th edition

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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Limiting Heights

Stud Depth	Model Number	Gauge	Design Thickness (in)	Yield (ksi)	Deflection	5 psf	7.5 psf	10 psf	15 psf
1-Hour Shaft Wall System									
2-1/2"	20CT212	20	0.0346	40	L/120	16' 0"	13' 11"	12' 8"	10' 0"
					L/180	14' 1"	12' 4"	11' 2"	9' 8"
					L/240	12' 10"	11' 2"	10' 2"	8' 7"
					L/360	11' 2"	9' 8"	8' 7"	-
4"	20CT4	20	0.0346	40	L/120	20' 10"	18' 2"	16' 6"	10'10"
					L/180	18' 5"	16' 1"	14' 7"	10'10"
					L/240	16' 10"	14' 8"	13' 4"	10'10"
					L/360	14' 8"	12' 10"	11' 8"	10' 2"
6"	20CT6	20	0.0346	40	L/120	27' 8"	24' 2"	21' 8"	9' 8"
					L/180	24' 6"	21' 5"	19' 6"	9' 8"
					L/240	22' 4"	19' 6"	17' 8"	9' 8"
					L/360	19' 5"	17' 0"	15' 5"	9' 8"
2-Hour Shaft Wall System									
2-1/2"	20CT212	20	0.0346	40	L/120	16' 11"	14' 10"	13' 5"	10' 1"
					L/180	15' 1"	13' 2"	12' 0"	10' 1"
					L/240	13' 11"	12' 2"	11' 1"	9' 6"
					L/360	12' 4"	10' 8"	9' 7"	8' 1"
4"	20CT4	20	0.0346	40	L/120	21' 8"	19' 0"	17' 2"	10' 1"
					L/180	19' 5"	16' 11"	15' 5"	10' 1"
					L/240	17' 10"	15' 6"	14' 1"	10' 1"
					L/360	15' 8"	13' 8"	12' 5"	10' 1"
6"	20CT6	20	0.0346	40	L/120	27' 7"	24' 2"	21' 11"	10' 1"
					L/180	25' 4"	22' 1"	20' 1"	10' 1"
					L/240	23' 1"	20' 2"	18' 4"	10' 1"
					L/360	20' 2"	17' 7"	16' 0"	10' 1"
2-Hour Stairwell System									
4"	20CT4	20	0.0346	40	L/120	21' 10"	19' 1"	17' 4"	12' 0"
					L/180	19' 4"	16' 11"	15' 4"	12' 0"
					L/240	17' 8"	15' 6"	14' 1"	12' 0"
					L/360	15' 8"	13' 8"	12' 6"	10' 11"
6"	20CT6	20	0.0346	40	L/120	29' 4"	25' 7"	23' 2"	14' 8"
					L/180	25' 10"	22' 6"	20' 6"	14' 8"
					L/240	23' 8"	20' 8"	18' 10"	14' 8"
					L/360	20' 11"	18' 2"	16' 7"	14' 5"

Notes:
1. Allowable heights are based on the transverse load test complying with ICC-ES AC86 and AISI S916-15.
2. Studs spaced at 24" O.C. maximum.
3. Standard J-Track is used as both top and bottom track.
4. CT-Shaft Stud limiting heights were tested with 5/8" Type-X gypsum board oriented vertically.