



Expanding Your Solutions

**Corporate Headquarters**  
13191 Crossroads Pkwy N., Ste 325  
City of Industry, CA 91746  
Phone: 800.775.2362  
Fax: 626.330.7598

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

**Structural Engineering/Design**  
1001-A Pittsburgh Antioch Hwy  
Pittsburg, CA 94565  
Phone: 800.775.2362  
Fax: 626.330.7598

**Technical Services**  
13191 Crossroads Pkwy N., Ste 325  
City of Industry, CA 91746  
Phone: 800.416.2278  
Fax: 626.249.5004

## "F" – FURRING CHANNEL • 1-1/2" HEIGHT • 33 MIL.

### Geometric Properties

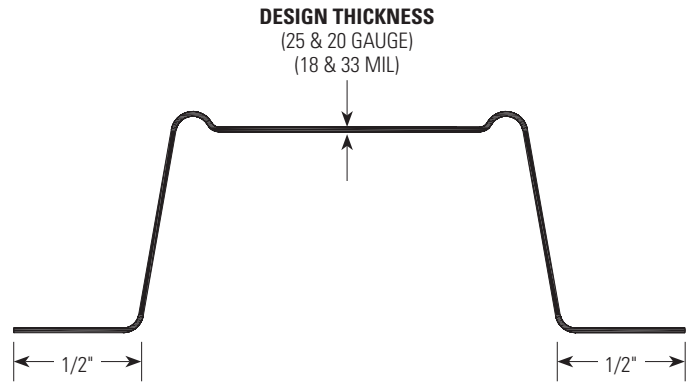
Hat-shaped Furring (F) Channels are fabricated in 1-1/2" height with 1/2" flanges. All CEMCO furring channels are produced from hot-dipped galvanized steel in standard G40 coating weight. G60 and G90 are available upon special request.

### Steel Thickness

Thickness (mil)	Design Thickness (in) <sup>1</sup>	Minimum Thickness (in) <sup>1,2</sup>
33	0.0346 (0.88mm)	0.0329 (0.83mm)

**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):

33-mil: White

### ASTM & Code Standards:

- ICC-ES ESR-3016
- ASTM A653/653M, A924/A924M, A1003/A1003M, C645, C754 (Installation)
- IBC: 2015, 2018, 2021
- CBC: 2016, 2019
- AISI: S100, S220

### 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%



### Physical/Structural Properties

Section	Fy (ksi)	Design Thickness (in)	Gross Properties						Effective Properties		
			Area (in <sup>2</sup> )	Weight (lb/ft)	Ix (in <sup>4</sup> )	Rx (in)	Iy (in <sup>4</sup> )	Ry (in)	Ix (in <sup>4</sup> )	Sx (in <sup>3</sup> )	Ma (ft-lb)
150F125-33	33	0.0346	0.171	0.581	0.055	0.570	0.0848	0.705	0.0554	0.0704	115.92

**Notes:**

1. Properties based on the 2007 NASPEC.
2. Design thickness used for determination of properties. Minimum delivered thickness must be no less than 95% of design thickness.
3. For deflection calculations, use effective Ixx. Effective Ixx is based on Procedure 1 of the NASPEC.
4. Effective properties are given as the minimum value for positive or negative bending.

### Furring Channels Allowable Ceiling G Spans

Section	Fy (ksi)			Uniform Load								
				4 psf Channel Spacing o.c. (in)			6 psf Channel Spacing o.c. (in)			13 psf Channel Spacing o.c. (in)		
				12	16	24	12	16	24	12	16	24
150F125-33	33	L/240	Single	9'-8"	8'-10"	7'-8"	8'-6"	7'-8"	6'-9"	6'-6"	5'-11"	5'-2"
			Multiple	12'-0"	10'-11"	9'-6"	10'-6"	9'-6"	8'-4"	8'-1"	7'-4"	6'-0"
		L/360	Single	8'-6"	7'-8"	6'-9"	7'-5"	6'-9"	5'-10"	5'-9"	5'-2"	4'-6"
			Multiple	10'-6"	9'-6"	8'-4"	9'-2"	8'-4"	7'-3"	7'-1"	6'-5"	5'-7"

**Notes:**

1. Single spans taken as the minimum span based on moment, shear, web crippling or deflection.
2. Multiple spans indicate two or more equal, continuous spans with span length measured support to support.
3. Multiple spans taken as the minimum span based on moment, shear, web crippling, deflection combined bending and shear or combined and web crippling.
4. Web crippling values based on 1" bearing at end and interior supports.

### Technical Services

Technical Services: 800.416.2278  
Structural Engineering/Design: 925.473.9340  
www.cemcosteel.com



This technical information reflects the most current information available and supersedes any and all previous publications effective March 17, 2023.

03-17-23 AT