



Steel Framing and Metal Lath

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"F" – Hat-Shaped Channel (1-1/2" Height)

Geometric Properties

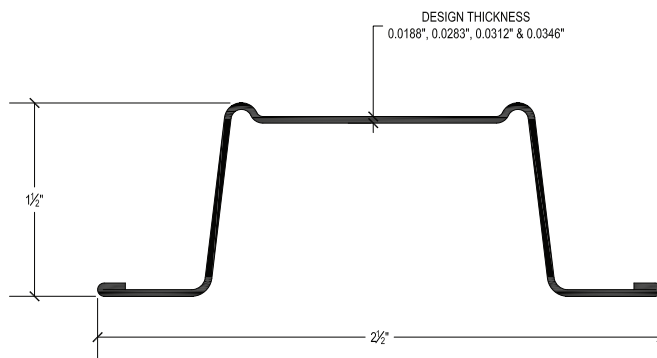
"F" hat-shaped channels are fabricated in 1-1/2" height with 1/2" flanges. All CEMCO furring channels are produced from hot-dipped galvanized steel in standard G40 coating weight. G60 and G90 are available upon special request.

Steel Thickness

Mil thickness	Design Thickness (in.) ¹	Minimum Thickness (in.) ^{1,2}
18	0.0188 (48 mm)	0.0179 (46 mm)
27	0.0283 (72 mm)	0.0269 (68 mm)
30	0.0312 (79 mm)	0.0295 (75 mm)
33	0.0346 (88 mm)	0.0329 (83 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)

- 18 mil: None
- 27 mil: Black
- 30 mil: Pink
- 33 mil: White

ASTM & Code Standards

- ICC-ESR 3016
- ASTM A653/A653M, A924/A924M, & A1003/A1003M, ASTM C645, ASTM C754 (Installation)
- AISI S100-2007
- 2006 IBC
- 2007 CBC

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

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%
- CEMCO can provide higher recycled content based on blending steel. Please refer to SSMA Tech dated May 2009 to calculate recycled content on blended steel.
- Link to SSMA Tech Note dated May 2009 on LEED® 2.2 Credits for Cold-Formed Steel Framing Manufacturers: <http://www.ssma.com/documents/TNO6%20SSMA%20LEED%202.2.pdf>



Technical Services

Contact Technical Services at 800.416.2278 for specific information or email to techservices@cemcosteel.com

PHYSICAL/STRUCTURAL PROPERTIES FOR HAT FURRING CHANNELS

Section	Fy (ksi)	Design Thickness (in)	Gross Properties						Effective Properties 33 ksi		
			Area	Weight	Ix	Rx	Iy	Ry	Ix	Sx	Ma
			(in ²)	(lb/ft)	(in ⁴)	(in)	(in ⁴)	(in)	(in ⁴)	(in ³)	(ft-lb)
087F125-18	33	0.0188	0.070	0.239	0.009	0.356	0.0354	0.710	0.0086	0.0160	26.41
087F125-27	33	0.0283	0.105	0.356	0.013	0.353	0.0528	0.710	0.0131	0.0272	44.78
087F125-30	33	0.0312	0.115	0.391	0.014	0.353	0.0580	0.710	0.0143	0.0307	50.47
087F125-33	33	0.0346	0.127	0.432	0.016	0.351	0.0641	0.710	0.0157	0.0337	55.43
150F125-18	33	0.0188	0.094	0.320	0.031	0.575	0.0467	0.705	0.0299	0.0344	56.59
150F125-27	33	0.0283	0.140	0.477	0.046	0.572	0.0697	0.705	0.0459	0.0569	93.74
150F125-30	33	0.0312	0.154	0.525	0.050	0.571	0.0767	0.705	0.0503	0.0639	105.25
150F125-33	33	0.0346	0.171	0.581	0.055	0.570	0.0848	0.705	0.0554	0.0704	115.92

NOTES

- Properties based on the 2001 NASPEC with the 2004 Supplement
- Design thickness used for determination of properties. Minimum delivered thickness must be no less than 95% of design thickness.
- For deflection calculations, use effective Ix. Effective Ix is based on Procedure 1 of the NASPEC
- Effective properties are given as the minimum value for positive or negative bending.

B.HAT FURRING CHANNEL ALLOWABLE CEILING SPANS - L/240

Section	Fy (ksi)		Uniform Load								
			4 psf Channel Spacing (in) o.c.			6 psf Channel Spacing (in) o.c.			13 psf Channel Spacing (in) o.c.		
			12	16	24	12	16	24	12	16	24
087F125-18	33	Single	5' 2"	4' 9"	4' 1"	4' 6"	4' 1"	3' 7"	3' 6"	3' 2"	2' 9"
		Multiple	6' 5"	5' 10"	5' 1"	5' 7"	5' 1"	4' 2"	4' 0"	3' 6"	2' 10"
087F125-27	33	Multiple	6' 0"	5' 5"	4' 9"	5' 3"	4' 9"	5' 2"	4' 0"	3' 8"	3' 2"
		Single	7' 5"	6' 9"	5' 10"	6' 6"	5' 10"	4' 2"	5' 0"	4' 6"	3' 8"
087F125-30	33	Single	6' 2"	5' 7"	4' 11"	5' 5"	4' 11"	4' 3"	5' 0"	3' 9"	3' 4"
		Multiple	7' 7"	6' 11"	6' 1"	6' 8"	6' 1"	5' 3"	4' 2"	4' 8"	3' 11"
087F125-33	33	Single	6' 4"	5' 9"	5' 1"	5' 7"	5' 1"	4' 5"	5' 2"	3' 11"	3' 5"
		Multiple	7' 10"	7' 2"	6' 3"	6' 10"	6' 3"	5' 5"	4' 4"	4' 10"	4' 1"
150F125-18	33	Single	7' 11"	7' 2"	6' 3"	6' 11"	5' 1"	5' 6"	5' 4"	4' 10"	4' 2"
		Multiple	9' 9"	8' 10"	7' 6"	8' 6"	6' 3"	6' 0"	5' 8"	4' 9"	3' 8"
150F125-27	33	Single	9' 1"	8' 3"	7' 3"	7' 11"	7' 6"	6' 4"	6' 2"	5' 7"	4' 10"
		Multiple	11' 3"	10' 3"	8' 11"	9' 10"	7' 3"	7' 10"	7' 7"	6' 7"	5' 4"
150F125-30	33	Single	9' 5"	8' 6"	7' 5"	8' 2"	7' 5"	6' 6"	6' 4"	5' 9"	5' 0"
		Multiple	11' 7"	10' 6"	9' 2"	10' 2"	9' 2"	8' 0"	7' 10"	6' 12"	5' 8"
150F125-33	33	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"	5' 12"

C.HAT FURRING CHANNEL ALLOWABLE CEILING SPANS - L/360

Section	Fy (ksi)		Uniform Load								
			4 psf Channel Spacing (in) o.c.			6 psf Channel Spacing (in) o.c.			13 psf Channel Spacing (in) o.c.		
			12	16	24	12	16	24	12	16	24
087F125-18	33	Single	4' 6"	4' 1"	3' 7"	4' 10"	3' 7"	3' 2"	3' 1"	2' 9"	2' 5"
		Multiple	5' 7"	5' 1"	4' 5"	4' 11"	4' 5"	3' 11"	3' 9"	3' 5"	2' 10"
087F125-27	33	Single	5' 3"	4' 9"	4' 2"	4' 7"	4' 2"	3' 7"	3' 6"	3' 2"	2' 10"
		Multiple	6' 6"	5' 10"	5' 2"	5' 8"	5' 2"	4' 6"	4' 4"	4' 0"	3' 6"
087F125-30	33	Single	5' 5"	4' 11"	4' 3"	4' 8"	4' 3"	3' 9"	3' 8"	3' 4"	2' 11"
		Multiple	6' 8"	6' 1"	5' 3"	5' 10"	5' 3"	4' 7"	4' 6"	4' 1"	3' 7"
087F125-33	33	Single	5' 7"	5' 1"	4' 5"	4' 10"	4' 5"	3' 10"	3' 9"	3' 5"	3' 0"
		Multiple	6' 10"	6' 3"	5' 5"	6' 0"	5' 5"	4' 9"	4' 8"	4' 3"	3' 8"
150F125-18	33	Single	6' 11"	6' 3"	5' 6"	6' 0"	5' 6"	4' 9"	4' 8"	4' 3"	3' 8"
		Multiple	8' 6"	7' 9"	6' 9"	7' 5"	6' 9"	5' 11"	5' 8"	4' 9"	3' 8"
150F125-27	33	Single	7' 11"	7' 3"	6' 4"	6' 11"	6' 4"	5' 6"	5' 4"	4' 10"	4' 3"
		Multiple	9' 10"	8' 11"	7' 10"	8' 7"	7' 10"	6' 10"	6' 8"	6' 0"	5' 3"
150F125-30	33	Single	8' 2"	7' 5"	6' 6"	7' 2"	6' 6"	5' 8"	5' 6"	5' 0"	4' 5"
		Multiple	10' 2"	9' 2"	8' 0"	8' 10"	8' 0"	7' 0"	6' 10"	6' 3"	5' 5"
150F125-33	33	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:

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