

Furring Channel

Furring Channel may be used for furring masonry walls and ceiling assemblies or in any other typical wall furring or cross-furring or framing application. Furring channel is available in 7/8" and 1-1/2" heights. Bearing surface is 1-1/4". Furring channel is available in 18, 27, 30 and 43 mil thicknesses (25-18ga.). Custom furring channel is available on request.

Designation

Industry standard nomenclature is used to identify MBA's products. The Steel Framing Industry Association has established standard designation codes for U-Channel. In each case, the identification starts with the measurement of the width of the member, followed by a letter (F = Furring Channel Sections) followed by the flange dimension. A hyphen is used to separate all of this from the thickness of the metal.

Member Depth:

(Example: 1-1/2" = 150 x 1/100 inches)

All member depths are taken in 1/100 inches. For all "T" sections member depth is the inside to inside dimension.

Flange Width:

(Example: 1-1/4" = 1.25" = 125 x 1/100 inches)

All flange widths are taken in 1/100 inches.



Style:

(Example: Furring Channel Section = F)

The alpha character utilized by the designation system is:

F = Furring Channel Sections

Material Thickness:

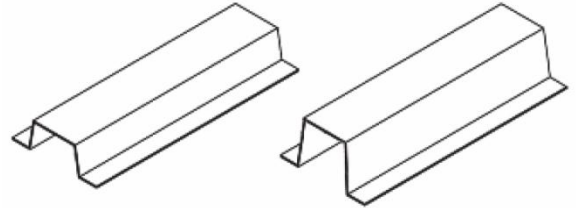
(Example: 0.018 in. = 18 mils; 1 mil = 1/100 in.)

Material thickness is the minimum base metal thickness in mils. Minimum base metal thickness represents 95% of the design thickness.

Steel Thickness

Mils	Gauge	Thickness (in)	
		Design	Minimum ¹
18	25	0.0188	0.0179
27	22	0.0283	0.0269
30	20	0.0312	0.0296
43	18	0.0451	0.0428

¹ Minimum Thickness represents 95% of the design thickness and is the minimum acceptable thickness delivered to the job site based on Section A3.4 of the 1996 AISI Specification.



General Notes

- Physical properties and load tables have been calculated in conformance with the 2001 NASPEC for the Design of Cold-Formed Steel Structural Members, including the 2004 Supplement, and the IBC 2006, unless noted otherwise.
- Structural framing members have a protective coating conforming to ASTM C 955.
- Drywall framing members have a protective coating conforming to ASTM spec A 653/A 653M, G-40 min, or equivalent corrosion resistance.
- Reference ASTM specification A 1003/A 1003 M table 1 for the universe of allowable coatings for light gauge steel framing.
- All delivered material must be kept dry, preferably by being stored inside a building under a roof. If it is necessary to store material outside, it must be stacked off the ground, properly supported on a level platform, and fully protected from the weather. Reference ASTM C 754 section 8 and ASTM C 1007 section 4.
- Drywall framing [nonstructural 25 gauge, 22 gauge and 20 gauge] is not permitted in load bearing (i.e. axial load greater than 200 lbs.) or exterior applications (i.e. transverse load greater than 10 PSF). Reference ASTM C 645 section 3.2.2.

LEED Green Building Credits

MR Credit 2: Construction Waste Management – MBA steel framing is 100% recyclable.

MR Credit 4: Recycled Content – MBA steel framing is formed from no less than 25.5% post-consumer and 6.8% pre-consumer recycled content.

MR Credit 5: Regional Materials – MBA has manufacturing facilities in multiple states.

Furring Channel Properties

Furring Channel Section Properties

Section	Design Thickness ¹ (in)	Gross Properties					Effective Properties ³ (33ksi)		
		Area (in ²)	Ix (in ⁴)	Rx (in)	Iy (in ⁴)	Ry (in)	Ix ² (in ⁴)	Sx (in ²)	Ma (in-k)
087F125-18	0.0188	0.070	0.009	0.356	0.035	0.710	0.0086	0.0160	26.41
087F125-27	0.0283	0.105	0.013	0.353	0.053	0.710	0.0131	0.0272	44.78
087F125-30	0.0312	0.115	0.014	0.353	0.058	0.710	0.0143	0.0307	50.47
087F125-43	0.0451	0.162	0.020	0.348	0.082	0.711	0.0196	0.0420	69.17
150F125-18	0.0188	0.094	0.031	0.575	0.047	0.705	0.0299	0.0344	56.59
150F125-27	0.0283	0.140	0.046	0.572	0.070	0.705	0.0459	0.0569	93.74
150F125-30	0.0312	0.154	0.050	0.571	0.077	0.705	0.0503	0.0639	105.25
150F125-43	0.0451	0.219	0.070	0.565	0.109	0.705	0.0699	0.0888	146.25

¹ Minimum base metal thickness is 95% of design thickness.

² Moment of inertia given is for deflection calculations.

³ Effective properties are given as the minimum value for either positive or negative bending.

Furring Channel Allowable Ceiling Spans L/240

Section	Thickness (mil)	Fy (ksi)	Spans	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"
	27	33	Single	6' 0"	5' 5"	4' 9"	5' 3"	4' 9"	4' 2"	4' 0"	3' 8"	3' 2"
			Multiple	7' 5"	6' 9"	5' 10"	6' 6"	5' 10"	5' 2"	5' 0"	4' 6"	3' 8"
	30	33	Single	6' 2"	5' 7"	4' 11"	5' 5"	4' 11"	4' 3"	4' 2"	3' 9"	3' 4"
			Multiple	7' 7"	6' 11"	6' 1"	6' 8"	6' 1"	5' 3"	5' 2"	4' 8"	3' 11"
	43	33	Single	6' 10"	6' 3"	5' 5"	6' 0"	5' 5"	4' 9"	4' 7"	4' 2"	3' 8"
			Multiple	8' 6"	7' 8"	6' 9"	7' 5"	6' 9"	5' 10"	5' 9"	5' 2"	4' 6"
150F125	18	33	Single	7' 11"	7' 2"	6' 3"	6' 11"	6' 3"	5' 6"	5' 4"	4' 10"	4' 2"
			Multiple	9' 9"	8' 10"	7' 6"	8' 6"	7' 6"	6' 0"	5' 8"	4' 9"	3' 8"
	27	33	Single	9' 1"	8' 3"	7' 3"	7' 11"	7' 3"	6' 4"	6' 2"	5' 7"	4' 10"
			Multiple	11' 3"	10' 3"	8' 11"	9' 10"	8' 11"	7' 10"	7' 7"	6' 7"	5' 4"
	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"	7' 0"	5' 8"
	43	33	Single	10' 6"	9' 6"	8' 4"	9' 2"	8' 4"	7' 3"	7' 1"	6' 5"	5' 7"
			Multiple	13' 0"	11' 9"	10' 3"	11' 4"	10' 3"	9' 0"	8' 9"	8' 0"	6' 8"

Furring Channel Allowable Ceiling Spans L/360

Section	Thickness (mil)	Fy (ksi)	Spans	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' 0"	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"
	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"
	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"
	43	33	Single	6' 0"	5' 5"	4' 9"	5' 3"	4' 9"	4' 2"	4' 0"	3' 8"	3' 2"
			Multiple	7' 5"	6' 9"	5' 10"	6' 6"	5' 10"	5' 2"	5' 0"	4' 6"	4' 0"
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"
	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"
	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"
	43	33	Single	9' 2"	8' 4"	7' 3"	8' 0"	7' 3"	6' 4"	6' 2"	5' 7"	4' 11"
			Multiple	11' 4"	10' 3"	9' 0"	9' 11"	9' 0"	7' 10"	7' 8"	6' 11"	6' 1"

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.