

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.

Member Depth:

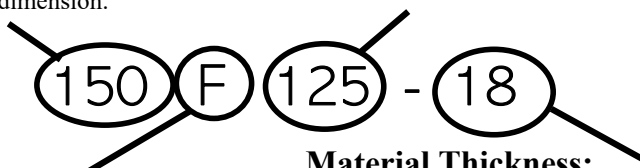
(Example: 1-1/2" = 150 x 1/100 inches)

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:

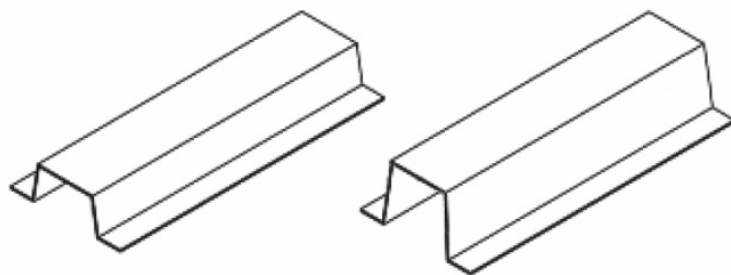
(Example: 0.018 in. = 18 mils; 1 mil = 1/100 in.)

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
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 AISI S100-16/S2-20.

General Notes

1. Calculated properties are based on AISI S100-16/S2-20 "North American Specification for Design of Cold-Formed Steel Structural Members."
2. Structural framing members have a protective coating conforming to ASTM C 955.
3. Drywall framing members have a protective coating conforming to ASTM spec A 653/A 653M, G-40 min, or equivalent corrosion resistance.
4. Reference ASTM specification A 1003/A 1003 M table 1 for the universe of allowable coatings for light gauge steel framing.
5. 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.
6. 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.

Furring Channel Properties

Furring Channel Section Properties

Section	Design Thickness ¹ (in)	Gross Properties					Effective Properties ³ (33ksi)		
		Area (in ²)	I _x (in ⁴)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x ² (in ⁴)	S _x (in ²)	Ma (ft-lb)
087F125-18	0.0188	0.070	0.009	0.356	0.035	0.710	0.0086	0.0160	26.41
087F125-30	0.0312	0.115	0.014	0.353	0.058	0.710	0.0143	0.0307	50.47
087F125-33	0.0346	0.127	0.016	0.351	0.064	0.710	0.0157	0.0337	55.43
087F125-43	0.0451	0.162	0.020	0.348	0.082	0.711	0.0196	0.0420	69.17
087F125-54	0.0566	0.200	0.023	0.334	0.075	0.609	0.0229	0.0560	80.79
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
150F125-33	0.0346	0.171	0.055	0.570	0.085	0.705	0.0554	0.0704	115.92
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)	F _y ksi	Spans	4 psf			6 psf			13 psf		
				Channel Spacing (in) o.c.			Channel Spacing (in) o.c.			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"
	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"
	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"

Furring Channel Allowable Ceiling Spans L/360

Section	Thickness (mil)	F _y (ksi)	Spans	4 psf			6 psf			13 psf		
				Channel Spacing (in) o.c.			Channel Spacing (in) o.c.			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"
	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"
	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"

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.