## Technical Services

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## "F" - FURRING CHANNEL • 7/8" HEIGHT • 33 MIL.

## Geometric Properties

Hat-shaped Furring (F) Channels are fabricated in $7 / 8^{\prime \prime}$ height with $1 / 2^{\prime \prime}$ flanges. All CEMCO furring channels are produced from hot-dipped galvanized steel in standard G 40 coating weight. G 60 and G 90 are available upon special request.

## Steel Thickness

| Thickness <br> (mil) | Design Thickness <br> (in) | Minimum Thickness <br> (in). $)^{12}$ |
| :---: | :---: | :---: |
| 33 | $0.0346(0.88 \mathrm{~mm})$ | $0.0329(0.83 \mathrm{~mm})$ |

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.

## DESIGN THICKNESS

( 25 \& 20 GAUGE)
(18 \& 33 MIL)


## 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 | $\begin{gathered} \mathrm{Fy} \\ (\mathrm{ksi}) \end{gathered}$ | Design Thickness (in) | Gross Properties |  |  |  |  |  | Effective Properties |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Area <br> (in²) | Weight (lb/ft) | $\begin{gathered} \text { Ix } \\ \left(i^{4}\right) \end{gathered}$ | $\begin{aligned} & \mathbf{R x} \\ & \text { (in) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { ly } \\ & \left(\text { in }^{4}\right) \end{aligned}$ | $\begin{gathered} \begin{array}{c} \text { Ry } \\ \text { (in) } \\ \hline \end{array}{ }^{2} \\ \hline \end{gathered}$ | $\begin{gathered} \text { Ix } \\ \left(\text { in }^{4}\right) \end{gathered}$ | $\begin{gathered} \text { Sx } \\ \left(i^{3}\right) \\ \hline \end{gathered}$ | $\begin{gathered} \mathbf{M a} \\ (\mathrm{ft}-\mathrm{lb}) \end{gathered}$ |
| 087F125-33 | 33 | 0.0346 | 0.127 | 0.443 | 0.016 | 0.351 | 0.0763 | 0.774 | 0.0157 | 0.0337 | 55.43 |

## 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 | $\begin{gathered} \text { Fy } \\ \text { (ksi) } \end{gathered}$ |  |  | Uniform Load |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 4 pst Channel Spacing 0.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 |
| 087F125-33 | 33 | L/240 | Single | 6'-4" | 5'-9" | 5'-1' | 5'-7" | $5^{\prime}-1{ }^{\prime \prime}$ | 4'-5" | 4'-4" | $3^{\prime}-11^{\prime \prime}$ | $3^{\prime}-5{ }^{\prime \prime}$ |
|  |  |  | Multiple | 7'-10" | 7'-2' | $6^{\prime}-3{ }^{\prime \prime}$ | $6^{\prime}-10^{\prime \prime}$ | $6^{\prime}-3$ " | 5'-5" | $5^{\prime}-4{ }^{\prime \prime}$ | $4^{\prime}-10^{\prime \prime}$ | 4'-1' |
|  |  | L/360 | Single | 5'-7" | 5'-1" | 4'-5" | 4'-10" | 4'-5" | 3'-10" | 3'-9" | 3'-5" | 3'-0" |
|  |  |  | Multiple | 6'-10" | $6^{\prime}-3{ }^{\prime \prime}$ | $5^{\prime}-5^{\prime \prime}$ | $6^{\prime}-0{ }^{\prime \prime}$ | $5^{\prime}-5^{\prime \prime}$ | 4'-9" | 4'-8" | 4'-3" | $3^{\prime}-8$ " |

## 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.

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