CANADIAN Panel Tech

MEGA FRAMING

LIGHTWEIGHT STEEL FRAMING- NON STRUCTURAL

PRODUCT TECHNICAL GUIDE

LIGHTWEIGHT STEEL FRAMING

Growing environmental concerns have led to a re-evaluation of construction materials. Cold-formed steel offers numerous benefits for the environment, contractors, designers, and developers. It's recyclable, strong, and allows for longer clear spans. Additionally, it's lightweight, stable, and maintains price stability and cost efficient. Cold-formed steel is versatile and can be used for various applications in construction.

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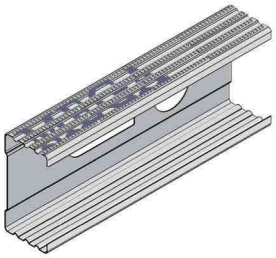
Product Identification

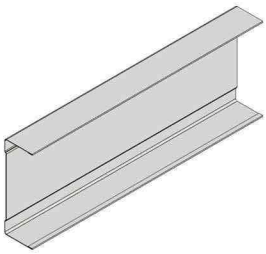
Note:

For sections available in both 33 and 50 ksi, the specifier must clearly indicate which yield point is required when ordering.

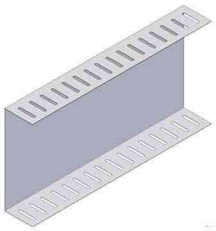
For example: 600S162-54 (50 ksi).



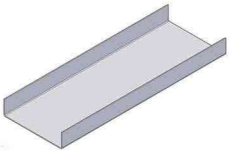
MEGA "S" - C-STUD/JOIST S-SECTIONS



MEGA "T" - TRACK T-SECTIONS

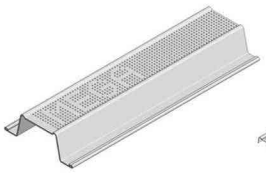


MEGA MULTI SLOTTED TRACK (MMT)

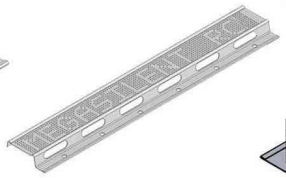


"U" - CHANNEL U-SECTIONS

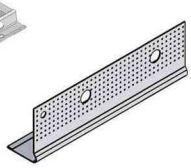
FLAT STRAP



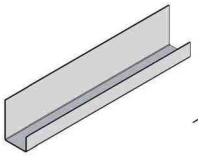
"F" - FURRING CHANNEL F-SECTIONS



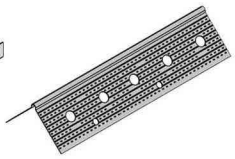
MEGASILENT RC



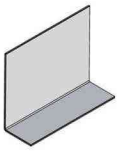
MEGA METAL FINISH BEAD 90°



MEGA J-TRIM



MEGA METAL CORNER BEAD 90° OR 130°



MEGA ANGLE 90° & 130°

Nomenclature Example

■ All SSMA products have a four-part identification code that identifies the web depth, flange width, style, and mil thickness.

Member Web Depth

(Example: 6" = **600** × $\frac{1}{100}$ inch)

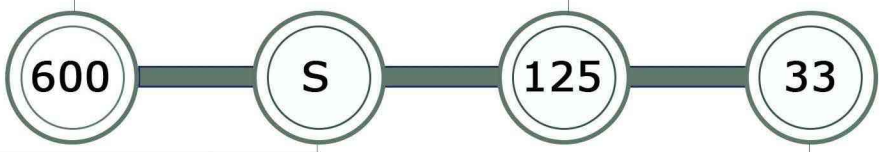
All member depths are given in $\frac{1}{100}$ inch.

For all "T" sections, member depth is the inside to inside dimension.

Flange Width

(Example: 1 ⅜" = 1.25" ≈ **125** × $\frac{1}{1000}$ inch)

All flange widths are given in $\frac{1}{100}$ inch.



Style

(Example: Stud or Joist section = **S**

Nomenclature uses the following four characters to designate the profile:

S = Stud or Joist Sections

T = Track Sections

U= Channel Sections

F = Furring Channel Sections

Mil Thickness

(Example: 0.033" = 33 mils; 1 mil = $\frac{1}{1000}$ inch)

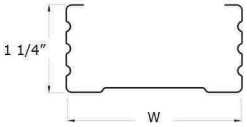
Mil thickness is the minimum base steel thickness measured in $\frac{1}{1000}$ inch. Minimum base steel thickness represents 95 percent of the design thickness.

MegaFraming Non-Structural Studs

Non-structural metal framing MAGA stud is an essential component used in metal wall or ceiling framing systems. Non-structural metal framing is primarily used for partition walls or other non-load bearing interior decoration and framing applications.

Benefits of MEGA Stud:

- Dimples: The dimples are used to add strength the to profile properties. (20g stud and track are produced without dimples).
- Three ribs for better drywall installation and Improved screw grip.
- Cost-Effectiveness.
- Flexibility in Design.
- Ease of Installation.



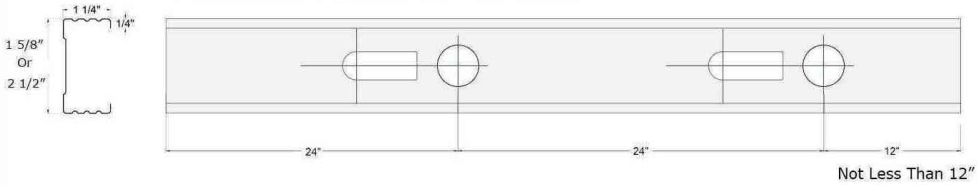
Code Compliance

- ASTM C754 : Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- ASTM C1007: Standard Specification for Installation of Load-Bearing Steel Studs for Interior and Exterior Non-Load-Bearing Framing.
- ASTM C653 : Standard Specification for Nonstructural Metal Framing.

Non-Structural Mega Studs

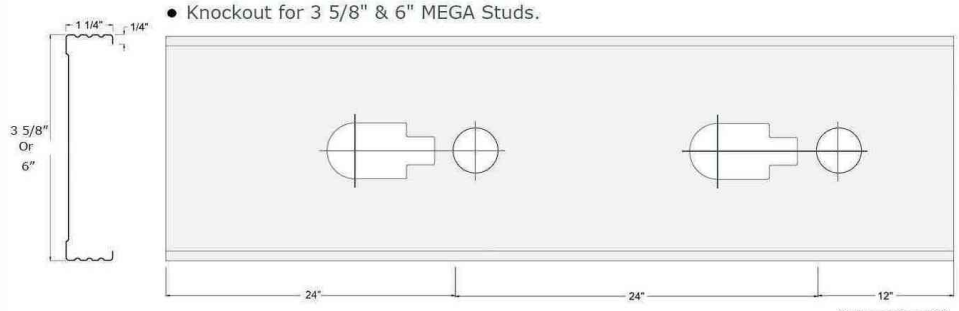
Product Designation	Web (W)		Flange (F)		Design Thickness			Weight	Mass	Yield Strength (Fy)		Coating
	in.	mm	in.	mm	in.	mm	Mils	lb/ft	kg/m	ksi	MPa	
162S125-18-MEGA	1-5/8"	41.28	1-1/4"	31.75	0.019	0.478	18	0.27	0.407	33	228	G40, G60, G90
250S125-18-MEGA	2-1/2"	63.50						0.33	0.490			
362S125-18-MEGA	3-5/8"	92.08						0.40	0.597			
400S125-18-MEGA	4"	101.60						0.43	0.633			
600S125-18-MEGA	6"	152.40						0.55	0.820			

- Knockout for 1 5/8" & 2 1/2" MEGA Studs.



Not Less Than 12"

- Knockout for 3 5/8" & 6" MEGA Studs.



Not Less Than 12"

MegaFraming Non-Structural Track

Non-structural metal framing MEGA track is an essential component used in metal wall or ceiling framing systems. Non-structural metal framing is primarily used for partition walls or other non-load bearing interior decoration applications.

Benefits of MEGA Track:

- Folded track leg edge to increase profile strength.
- Lightweight Construction.
- Cost-Effectiveness.
- Flexibility in Design.
- Ease of Installation.
- Repair and Renovation.

Code Compliance

- ASTM C754 : Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- ASTM C1007: Standard Specification for Installation of Load-Bearing Steel Studs for Interior and Exterior Non-Load-Bearing Framing.
- ASTM C653 : Standard Specification for Nonstructural Metal Framing.

Non-Structural Mega Track

Product Designation	Web (W)		Flange (F)		Design Thickness			Weight	Mass	Yield Strength (Fy)		Coating
	in.	mm	in.	mm	in.	mm	Mils	lb/ft	kg/m	ksi	MPa	
162T125-18-MEGA	1-5/8"	41.28	1-1/4"	31.75	0.019	0.478	18	0.26	0.393	33	228	G40, G60, G90
250T125-18-MEGA	2-1/2"	63.50						0.32	0.477			
362T125-18-MEGA	3-5/8"	92.08						0.39	0.483			
400T125-18-MEGA	4"	101.60						0.42	0.620			
600T125-18-MEGA	6"	152.40						0.54	0.811			

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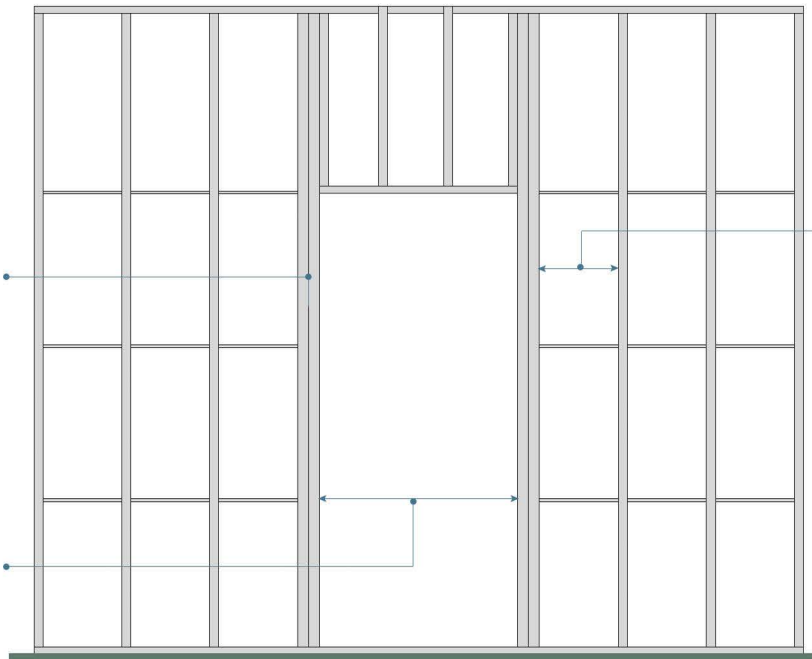
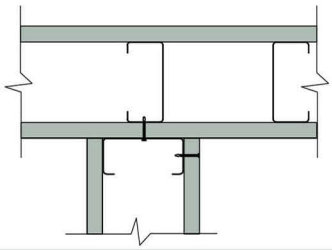
Non Load Bearing Wall Configuration

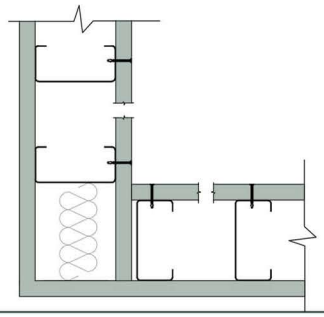


Non Load Bearing Wall Configuration



Intersection Installation

- Install the track on the floor and ceiling, leaving a 1/2" or 5/8"gap for the drywall to fit through.
- Place the intersecting stud centered with the adjoining stud.
- Secure the intersecting stud with drywall screws (as shown).

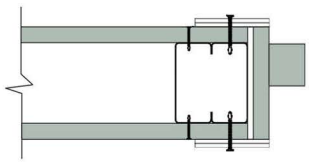


Inside Corner Installation

- Install the tracks on the floor and ceiling at a 90-degree. angle to each other, leaving a 1/2" or 5/8" gap for the drywall to run through.
- Form a right angle with the studs to create the inside corner.

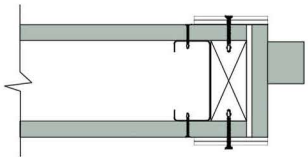
Outside Corner Installation

- Install tracks on the floor and ceiling perpendicular to each other.
- Three studs are required to complete an outside corner.
- Place one stud at the outside edge of the track intersection on either side of the inside intersection.



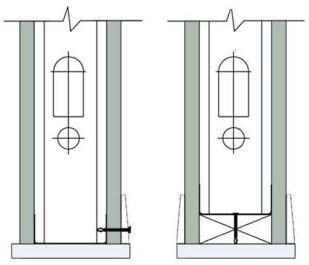
Door Frame (A) Installation

- Install double steel studs at the door frame.
- Ensure the studs are facing each other as shown above.
- Secure each stud using drywall scre



Door Frame (B) Installation

- Install the frame using one wood stud and one steel stud as shown.
- Butt the steel stud against the wood stud.
- Fasten both studs to the drywall.



Trim Installation

- Fasten the trim to the base of the wall using trimhead screws.
- Optionally, apply construction adhesive to the back of the trim before fastening.

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Limiting Height Informations

■ Limiting Height Tables for Composite Non-Structural Walls (Imperial)

Table 1: Maximum Stud Height, ft, Single Layer of 5/8 in. Type X Gypsum Board, Vertical Application, on Each Side of Minimum 0.0179 in. Base Steel Thickness Steel Studs

Member Designator	Stud Spacing (in)	5 psf			7.5 psf			10 psf		
		L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
162S125-18	12"	12' 9" f	10' 11"	9' 8"	10' 5" f	9' 6"	8' 6"	9' 0" f	8' 8"	
	16"	11' 0" f	9' 11"	8' 10"	9' 0" f	8' 8"		7' 10" f	7' 10"	
	24"	9' 0" f	8' 8"							
250S125-18	12"	16' 0" f	13' 11"	12' 7"	13' 1"f	12' 2"	10' 12"	11' 4" f	11' 1"	10' 0"
	16"	13' 10" f	12' 8"	11' 5"	11' 4"f	11' 1"	10' 0"	11' 4" f	9' 10"	8' 10"
	24"	11' 4" f	11' 1"	10' 0"	9' 3"f	9' 3" f	8' 4"	8' 0" f	8' 0" f	
362S125-18	12"	18' 3"	16' 5"	14' 4"	14' 11" f	14' 4"	12' 6"	12' 11" f	12' 11" f	11' 4"
	16"	15' 9" f	14' 11"	13' 0"	12' 11" f	12' 11" f	11' 4"	11' 2" f	11' 2" f	10' 2"
	24"	12' 11" f	12' 11" f	11' 4"	10' 6" f	10' 6" f	9' 9"	9' 1" f	9' 1" f	10' 2"
400S125-18	12"	18'10" f	17' 3"	15' 1"	15' 5" f	15' 1"	13' 2"	13' 4" f	13' 4" f	11' 12"
	16"	16' 4" f	15' 8"	13' 9"	13' 4" f	13' 4" f	11' 12"	11' 7"	11' 7" f	10' 10"
	24"	13' 4" f	13' 4"f	11' 12"	10' 11" f	10' 11" f	10' 5"	9' 5" f	9' 5" f	9' 5"
600S125-18	12"	22' 8" f	13' 4"	19' 7"	18' 6" f	18' 6" f	17' 2"	16' 0" f	16' 0" f	15' 7"
	16"	19' 7" f	19' 7" f	17' 10"	16' 0" f	16' 0" f	15" 7"	13' 11"f	16' 0" f	13' 11" f
	24"	16' 0" f	16' 0" f	15' 7"	13' 1" f	13' 0" f	13' 1" f			

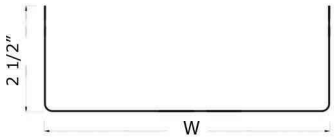
Table 2: Maximum Stud Height, ft, Single Layer of 5/8 in. Type X Gypsum Board, Vertical Application, on Each Side of Minimum 0.0329 in. Base Steel Thickness Steel Studs

Member Designator	Stud Spacing (mm)	5 psf			7.5 psf			10 psf		
		L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
250S125-33	12"	19' 5"	15' 5"	13' 6"	16' 12"	13' 6"	11' 9"	15' 5"	12' 3"	10' 8"
	16"	17' 8"	14' 0"	12' 3"	15' 5"	12' 3"	10' 8"	14' 0"	11' 1"	9' 9"
	24"	15" 5"	12' 3"	10' 8"	13' 6"f	12' 3"	9' 2"	3.67f	2.96	8' 1"
362S125-33	12"	23' 10"	18' 11"	16' 6"	20' 10"	16' 6"	14' 5"	18' 11"	15' 0"	13' 1"
	16"	21' 8"	17' 2"	14' 12"	18' 11"	14' 12"	13' 1"	17' 2"	13' 8"	11' 9"
	24"	18' 11"	14' 12"	13' 1"	16' 4"f	13' 1"	11' 2"	14' 2"f	11' 9"	9' 11"
400S125-33	12"	24' 11"	19' 9"	17' 3"	21' 9"	17' 3"	15' 1"	19' 9"	15' 8"	13' 9"
	16"	22' 7"	17' 11"	15' 8"	19' 9"	15' 8"	13' 9"	17' 11"	14' 3"	12' 5"
	24"	19" 9"	15' 8"	13' 9"	16' 11"f	13' 9"	11' 10"	14' 8" f	3.78	10' 7"
600S125-33	12"	34' 10"	27' 8"	24' 2"	30' 5"	24' 2"	21' 1"	27' 3" f	21' 11"	19' 2"
	16"	31' 8"	25' 2"	21' 11"	27' 3"f	21' 11"	19' 2"	23' 7" f	19' 11"	17' 5"
	24"	27' 3" f	21' 11"	19' 2"	22' 3" f	19' 2"	16' 8"	19' 3" f	17' 5"	

- *Gypsum board is 5/8" thick, Type X.*
- *The gypsum board must be applied full height to each stud flange and installed using minimum No. 6 Type S drywall screws spaced a maximum of 12" on- centre or studs at 24" spacing, and 16" on-centre for studs at 16" and 12" spacing.*
- *No fasteners are required for attaching the stud to the track.*
- *Stud end bearing must be a minimum of 1" .*
- *Minimum material yield strength equals 33 ksi.*
- *f' adjacent to the height value indicates that flexural strength controls the allowable wall height.*

MegaMulti Slotted Track

A MEGA Multi-slotted track, also known as a slotted track, is a versatile component commonly used at top of walls as require. MegaSlotted track offers a cost-effective and efficient solution for managing deflection in the upper section of laterally loaded walls.



Code Compliance

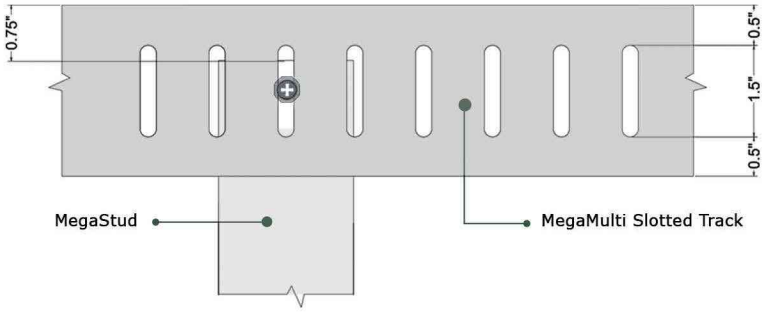
- ASTM C754 : Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- ASTM C1007: Standard Specification for Installation of Load-Bearing Steel Studs for Interior and Exterior Non-Load-Bearing Framing.
- ASTM C653 : Standard Specification for Nonstructural Metal Framing.

Mega Multi Slotted Track														
Product Designation	Web (W)		Leg (L)		Design Thickness			Weight	Mass	Yield Strength (Fy)		Coating	Stock Length	Pcs/ Bundle
	in.	mm	in.	mm	in.	mm	Mils	lb/ft	kg/m	ksi	MPa		ft	
362 MMT 250-33	3-5/8"	92.08	2-1/2"	63.50	0.035	0.88	33	0.96	1.43	33	228	G60, G90	10	12
400 MMT 250-33	4"	101.60						1.00	1.49					
600 MMT 250-33	6"	152.40						1.26	1.88					
800 MMT 250-33	8"	203.20						1.50	2.24					

Please consult with the project Engineer of Record (EOR) or refer to the project's stamped drawings to determine the appropriate gauge.

Installation Guide

- Use minimum #10 screws with 18 and 20-gaug MMT track.

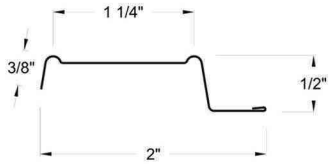


MegaSilent RC

MegaSilent is an effective and cost-efficient product used in enhancing the STC (Sound Transmission Class) rating of walls and floors assemblies.
MegaSilent distinctive design aids in amplifying the sound path within the assembly.
MegaSilent can be installed at floor and ceiling assemblies with nearly any stud or joist spacing.

Benefits of MegaSilent:

- Sound Isolation.
- Vibration Dampening.
- Improved Acoustic Performance.
- Space Efficiency.
- Easy Installation.



Code Compliance

- ASTM A1003: Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members.
- ASTM A924 : Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
- ASTM C754 : Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.

MegaSILENT RC														
Product Designation	Flange (A)		Leg (B)		Design Thickness			Weight	Mass	Yield Strength (Fy)		Coating	Stock Length	Pcs/ Bundle
	in.	mm	in.	mm	in.	mm	Mils	lb/ft	kg/m	ksi	MPa		ft	
05MS125-18	1-1/4"	31.8	1/2"	12.7	0.019	0.48	18	0.17	0.253	33	228	G40 G60 G90	10	20
05MS125-33					0.035	0.88	33	0.32	0.477					

Installation Guide

- **Wall Assembly**

MegaSilent RC is installed in wall assemblies as per ASTM C754 requirements, the Drywall Industry Standards. Please follow installation good practices.

- For one layer of drywall, use 1" framing screws.
- For Two layers of drywall, use 1 5/8" framing screws.
- Allow 1/8" gab for acoustic caulking around all edges except the top, where to leave 1/4" gab as per installation guide and the Architectural specifications of the project. To achieve the best acoustical results, please follow the Installation illustrations for spacing and orientations. It's extremely important to not use longer screws or fasten in the wrong locations, in order not to have a short circuit. Doing so defeats the purpose of using MegaSILENT RC.

- **Ceiling Assembly**

MegaSilent RC is installed in ceiling assemblies as per ASTM C754 requirements, the Drywall Industry Standards.
Please follow installation good practices.

- For one-layer drywall installation, please follow the illustrations below as per good industry practices.
- For more layers of drywalls, please reduce the spacing of the MegaSILENT RC as per the additional weight from the added drywall layers.
- Allow 1/8" gab for acoustical caulking around all edges.

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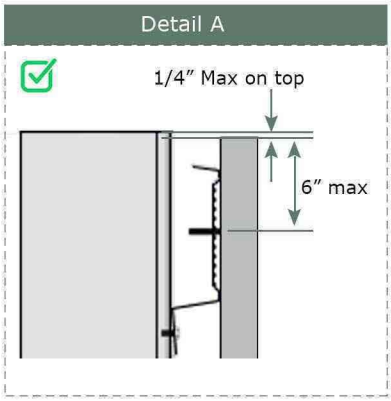
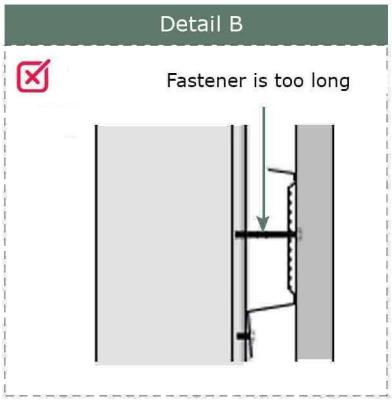
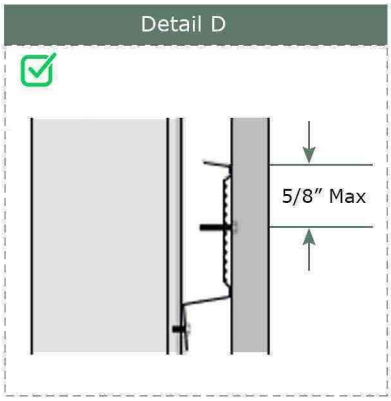
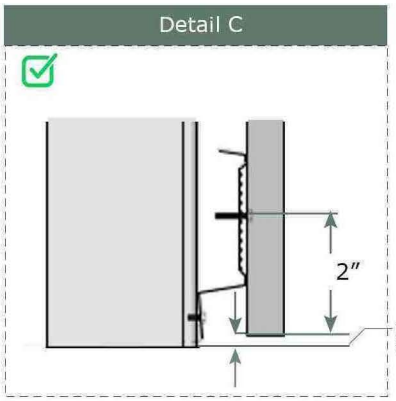
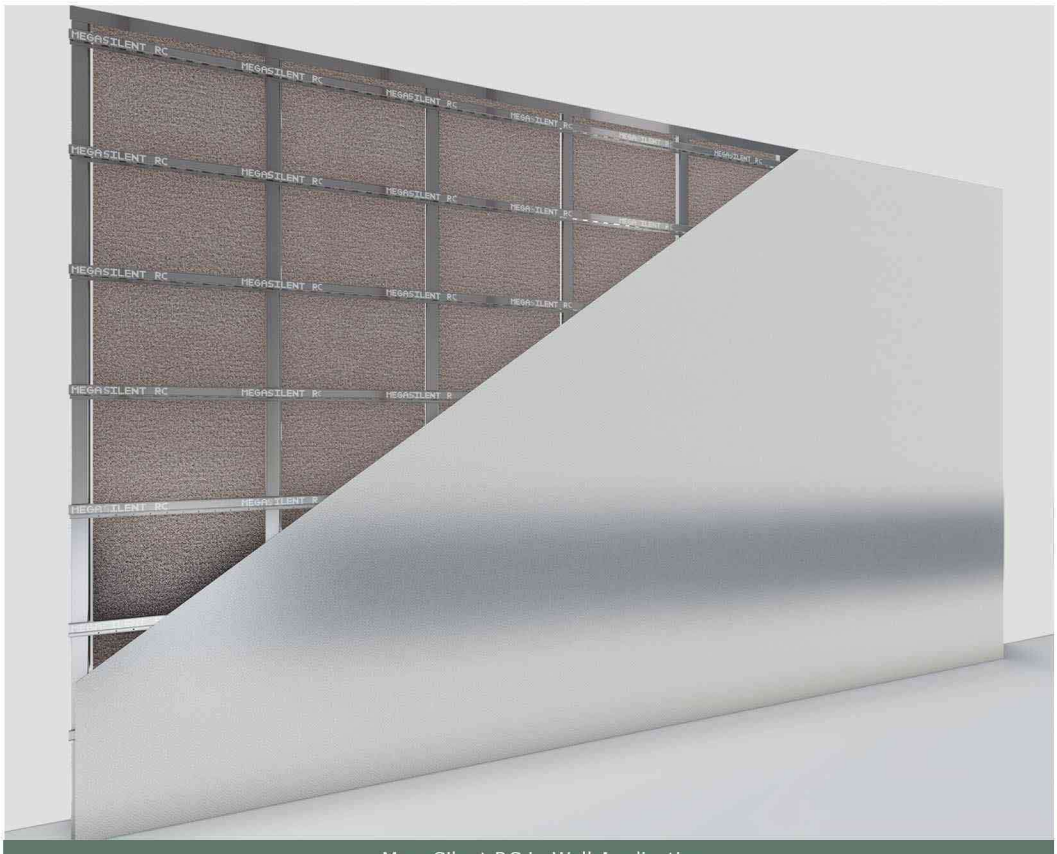
Installation Guide











MegaSilent RC in Wall Application

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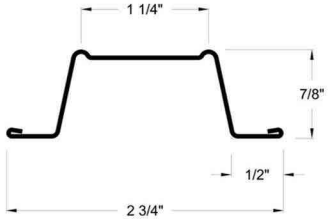
MegaFurring Channel

MegaFurring channels are commonly used in various framing purposes, primarily to provide support for finishes such as drywall or insulation in walls and ceilings applications. MegaFurring channels are typically installed vertically or horizontally along walls or ceilings; depending on the application. They are usually attached directly to the structural framing, such as studs or joists, using appropriate fasteners like wood or steel screws depending on the substructure framing.

Benefits of MegaFurring Channel:

- Leveling and Straightening.
- Insulation Support.
- Drop Ceiling Application.
- Sound Isolation.
- Wall Lining application.
- Masonry finish.



Code Compliance

- ASTM A1003: Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members.
- ASTM A924 : Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
- ASTM C754 : Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.

MegaFURRING Channel

Product Designation	Flange (A)		Leg (B)		Design Thickness			Weight	Mass	Yield Strength (Fy)		Coating	Stock Length	Pcs/ Bundle
	in.	mm	in.	mm	in.	mm	Mils	lb/ft	kg/m	ksi	MPa		ft	
0875MF125-18	1-1/4"	31.8	7/8"	22.23	0.0188	0.48	18	0.27	0.402	33	228	G40 G60 G90	10	20
0875MF125-33					0.0346	0.88	33	0.52	0.767					
0875MF125-43					0.0451	1.15	43	0.67	0.998					

MegaFURRING Section Properties

Section Designation	Base Design Thickness (in.)	F_y (ksi)	Gross					Effective		
			Area ($in.^2$)	I_x ($in.^4$)	r_x (in.)	I_y ($in.^4$)	r_y (in.)	^{I}xd ($in.^4$)	^{S}xe ($in.^3$)	^{M}rx (k-in.)
087F125-18	0.019	33	0.072	0.009	0.356	0.036	0.707	0.009	0.016	0.48
087F125-33	0.035	33	0.131	0.016	0.35	0.065	0.704	0.016	0.034	1.02
087F125-43	0.045	33	0.168	0.020	0.345	0.083	0.703	0.020	0.043	1.28

Hems and offsets in flanges are ignored. Effective properties are the minimum for positive and negative bending.

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Limiting Ceiling Span of MegaFuring

Table Notes

1- Single spans are the minimum span based on moment, shear, web crippling, or deflection.

2- Multiple spans are for two or more equal continuous spans with span length measured from support to support.

3- Web crippling check is based on a bearing length of 1" at end and interior supports.

4- Multiple spans are the minimum span based on moment, shear, web crippling, combined bending and shear, combined bending and web crippling, or deflection.

5- Web crippling and shear capacity have not been reduced for punchouts. If web punchouts occur near supports, members must be checked or reduced shear and web crippling in accordance with CSA S136-16.

Limiting Ceiling Spans of MegaFURRING (ft) - L/240

Specified dead loads			4 psf			6 psf			13 psf		
Section Designation	F_y (ksi)	Span Type	Spacing (in.) o.c.			Spacing (in.) o.c.			Spacing (in.) o.c.		
			12	16	24	12	16	24	12	16	24
087MF125-18	33	Single	5' 3"	4' 9"	4' 2"	4' 7"	4' 2"	3' 7"	3' 6"	3' 2"	2' 9"
	33	Multiple	6' 5"	5' 10"	5' 1"	5' 8"	5' 1"	4' 6"	4' 4"	3' 10"	3' 1"
087MF125-33	33	Single	6' 4"	5' 9"	5' 0"	5' 6"	5' 0"	4' 5"	4' 3"	3' 11"	3' 5"
	33	Multiple	7' 10"	7' 2"	6' 3"	6' 10"	6' 3"	5' 5"	5' 3"	4' 10"	4' 2"
087MF125-43	33	Single	6' 10"	6' 3"	5' 5"	6' 0"	5' 5"	4' 9"	4' 7"	4' 2"	3' 8"
	33	Multiple	8' 6"	7' 9"	6' 9"	7' 5"	6' 9"	5' 10"	5' 9"	5' 2"	4' 6"

Limiting Ceiling Spans of MegaFURRING (ft) - L/360

Specified dead loads			4 psf			6 psf			13 psf		
Section Designation	F_y (ksi)	Span Type	Spacing (in.) o.c.			Spacing (in.) o.c.			Spacing (in.) o.c.		
			12	16	24	12	16	24	12	16	24
087MF125-18	33	Single	4' 7"	4' 2"	3' 7"	4' 0"	3' 7"	3' 2"	3' 1"	2' 9"	2' 5"
	33	Multiple	5' 8"	5' 1"	4' 6"	4' 11"	4' 6"	3' 11"	3' 9"	3' 5"	3' 0"
087MF125-33	33	Single	5' 6"	5' 0"	4' 5"	4' 10"	4' 5"	3' 10"	3' 9"	3' 5"	2' 11"
	33	Multiple	6' 10"	6' 3"	5' 5"	6' 0"	5' 5"	4' 9"	4' 7"	4' 2"	3' 8"
087MF125-43	33	Single	6' 0"	5' 5"	4' 9"	5' 3"	4' 9"	4' 2"	4' 0"	3' 8"	3' 2"
	33	Multiple	7' 5"	6' 9"	5' 10"	6' 6"	5' 10"	5' 1"	5' 0"	4' 6"	3' 11"

Installation Guide

- **Installing MegaFraming Channels**
  Walls and ceiling assemblies are quite similar with minor differences and adjustments for overhead orientation.

- **Plan and Measure**
  Determine layout and measure ceiling area. Plan channel spacing based on finishing material and insulation needs.

- **Install the First Channel**
  Begin at one end of the assembly. Align the first channel perpendicular to joists. Use a level for straightness and attach with appropriate screws.

- **Spacing and Attaching Channels**
  Space remaining channels evenly across the ceiling. Ensure straightness with a level and attach securely with screws.

- **Adjustments**
  Modify channel placement for obstacles.
  Trim channels with metal-cutting tools if necessary.

- **Attach Vertical Channels (Optional)**
  Install vertical channels for additional support if needed, ensuring vertical alignment with a level.

- **Finish**
  Align and attach drywall panels to the channels.
  Secure with drywall screws.

- **Check Stability**
  Ensure all channels are secure and drywall is level.
  Adjust as needed before finishing with joint compound, tape, and paint.

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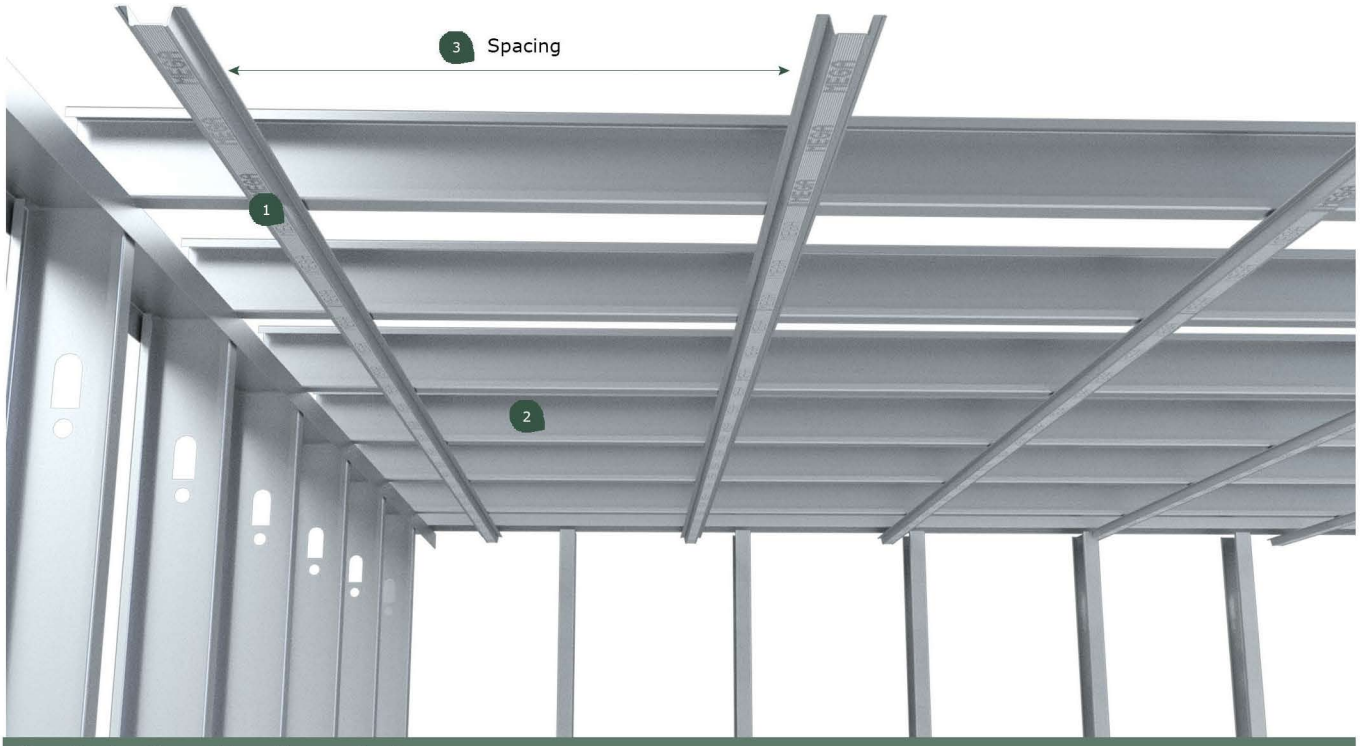
MegaFurring Channel

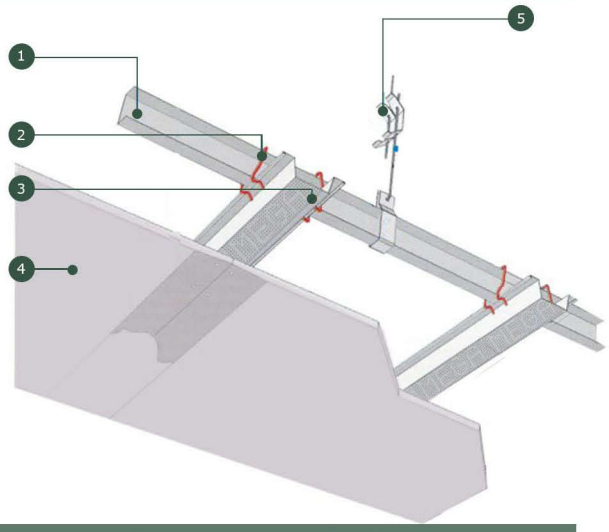


MegaFurring Channel in ceiling application

1. MegaFurring Channel
2. Ceiling Joist
3. Spacing: As Per Architectural Design Requirements

MegaFurring Channel in wall application

1. Mega Track
2. Mega Furring
3. Insulation
4. MegaStud



MegaFurring Channel in Suspended Ceiling System

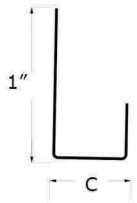
1. Mega U-Channel
2. Hanging Wire
3. MegaFurring Channel Gypsum Board
5. Adjusted Clip

Mega J-trim

Mega J-trim is available in three different sizes to suit the standard drywall thicknesses commonly used in wall framing. This versatile trim achieves a robust and clean finish along drywall edges surrounding window and door openings. Moreover, it serves to deliver a clean and tidy appearance on walls where the sheathing edge intersects with other non-drywall materials.

Benefits of Mega J-trim:

- Edge Protection.
- Clean Finish.
- Cost-Effectiveness.
- Corrosion resistance.



Code Compliance

- ASTM C754: Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- ASTM A1003 - Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members.
- ASTM C653: Standard Specification for Nonstructural Metal Framing.

Mega J-trim															
Product Designation	Flange (A)		Leg (B)		Flange (C)		Design Thickness			Weight	Mass	Yield Strength (Fy)		Coating	Stock Length	Pcs/ Bundle
	in.	mm	in.	mm	in.	mm	in.	mm	Mils	lb/ft	kg/m	ksi	MPa		ft	
JT-037-18	1"	25.4	3/8"	9.53	3/8"	9.53	0.017	0.432	18	0.110	0.164	33	228	G40	10	20
JT-050-18					1/2"	12.70				0.117	0.174					
JT-063-18					5/8"	15.88				0.124	0.185					

Installation Guide

- **Measure and Cut**
  Measure the Mega J-trim length, ensuring proper siding overlap.
  Cut using tin snips.

- **Preparation**
  Clean the installation area to ensure proper adhesion and a neat finish.

- **Positioning:**
  Start at one end, aligning the Mega J-trim straight with adjacent surfaces.

- **Attaching:**
  Secure the Mega J-trim with screws at regular intervals.

- **Finishing:**
  Inspect alignment and attachment. Make adjustments as needed.

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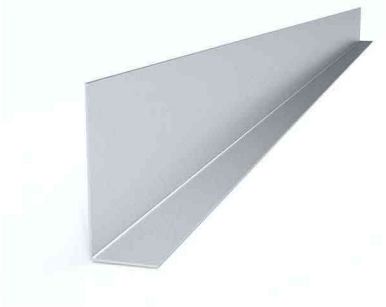
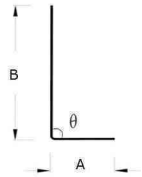
Mega Angle 90° & 130°



Metal Angles that are roll formed or made on press break with either 90° & 130°. These metal angles are commonly used in various framing, bracing and reinforcement applications. Typically, like making bulkheads and boxes in various interior drywall application.

Benefits of Framing Angles 90° & 130°:

- Versatile Profiles.
- Enhanced Stability.
- Available in G40, G60, G90.



Code Compliance

- ASTM C754 : Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- ASTM A1003: Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members.
- ASTM C653 : Standard Specification for Nonstructural Metal Framing.

Mega Angle 90° & 130°												
Product Designation	Angle	Web (W)		Flange (F)		Design Thickness			Weight	Mass	Yield Strength (Fy)		Coating
	Deg (°)	in.	mm	in.	mm	in.	mm	Mils	lb/ft	kg/m	ksi	MPa	
1.25-L-0.5-90-18	90°	1-1/4"	31.75	1/2"	12.70	0.0180	0.46	18	0.11	0.16	33	228	G40, G60, G90
1.25-L-0.5-90-33	90°	1-1/4"	31.75	1/2"	12.70	0.0330	0.84	33	0.20	0.29			
2-L-1-90-18	90°	2"	50.80	1"	25.40	0.018	0.84	18	0.18	0.27			
2-L-1-90-33	90°	2"	50.80	1"	25.40	0.033	0.84	33	0.34	0.50			
2-L-2-90-18	90°	2"	50.80	2"	50.80	0.018	0.84	18	0.24	0.36			
2-L-2-90-33	90°	2"	50.80	2"	50.80	0.033	0.84	33	0.45	0.67			
2-L-2-130-18	130°	2"	50.80	2"	50.80	0.018	0.84	18	0.24	0.36			
2-L-2-130-33	130°	2"	50.80	2"	50.80	0.033	0.84	33	0.45	0.67			
2-L-1.5-90-18	90°	2"	50.80	1-1/2"	38.10	0.018	0.84	18	0.21	0.32			
2-L-1.5-90-33	90°	2"	50.80	1-1/2"	38.10	0.033	0.84	33	0.39	0.58			

Installation Guide

Measure and Cut: Measure trim length and cut accordingly.

Attaching: Attach the trim securely using wafer head self-tapping screws.

Check Alignment: Use level to ensure straightness and alignment.

Drywall attaching: attached the drywall in accordance with the manufacturer's instructions and industry-standard best practices.

Mega Angle 130°

Mega Angle 90° - Bulkhead Edge

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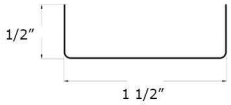
Mega U-channel / Bridging channel

U-channels are commonly used in the framing industry for various purposes and applications. They are used in walls, joist and truss applications in bridging, bracing and general framing. U-channels also used in combination with MegaFuring channel in dropped ceiling assemblies.

Benefits of U-Channel

- Standard Lengths.
- Load Distribution.
- Prevention of lateral Movement.
- Available in G40, G60 & G90.



Code Compliance

- ASTM C754 : Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- ASTM A1003: Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members.
- ASTM C653 : Standard Specification for Nonstructural Metal Framing.

Mega U-channel / Bridging channel

Product Designation	Web (A)		Leg (B)		Design Thickness			Weight	Mass	Yield Strength (Fy)		Coating	Stock Length	Pcs/ Bundle
	in.	mm	in.	mm	in.	mm	Mils	lb/ft	kg/m	ksi	MPa		ft	
150U50-43	1-1/2"	38.1	1/2"	12.7	0.045	1.15	43	0.36	0.532	33	228	G60	10	20
150U50-54					0.057	1.44	54	0.44	0.657	50				

Limiting Ceiling Spans of Mega U-channel (ft) - L/240

Specified Dead Loads			4 psf					6 psf					13 psf					15 psf				
Section Designation	Fy (ksi)	Span Type	Spacing (in.) o.c.					Spacing (in.) o.c.					Spacing (in.) o.c.					Spacing (in.) o.c.				
			24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	24	36	48	60	72
150U050-54	33	Single	5' 11"	5' 2"	4' 8"	4' 4"	4' 1"	5' 2"	4' 6"	4' 1"	3' 9"	3' 7"	4' 0"	3' 6"	3' 2"	2' 11"	2' 9"	3' 9"	3' 4"	3' 0"	2' 10"	2' 8"
	33	Multiple	7' 6"	6' 7"	6' 0"	5' 7"	5' 3"	6' 7"	5' 9"	5' 3"	4' 10"	4' 7"	5' 1"	4' 5"	4' 0"	3' 9"	3' 6"	4' 10"	4' 3"	3' 10"	3' 7"	3' 3"

Limiting Ceiling Spans of Mega U-channel (ft) - L/360

Specified Dead Loads			4 psf					6 psf					13 psf					15 psf				
Section Designation	Fy (ksi)	Span Type	Spacing (in.) o.c.					Spacing (in.) o.c.					Spacing (in.) o.c.					Spacing (in.) o.c.				
			24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	24	36	48	60	72
150U050-54	33	Single	5' 11"	5' 2"	4' 8"	4' 4"	4' 1"	5' 2"	4' 6"	4' 1"	3' 9"	3' 7"	4' 0"	3' 6"	3' 2"	2' 11"	2' 9"	3' 9"	3' 4"	3' 0"	2' 9"	2' 8"
	33	Multiple	7' 4"	6' 5"	5' 10"	5' 5"	5' 1"	6' 5"	5' 7"	5' 1"	4' 9"	4' 5"	4' 11"	4' 4"	3' 11"	3' 8"	3' 5"	4' 9"	4' 1"	3' 9"	3' 6"	3' 3"

Table Notes

1 -Multiple spans indicate two or more equal spans continuous over interior supports.

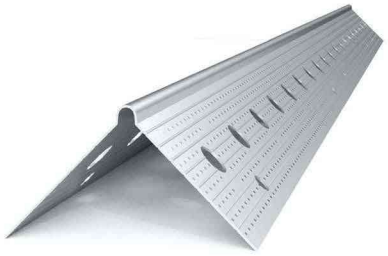
2 -Compression flanges assumed unbraced.

3 -Web crippling based on 3/4" bearing at end and interior supports.

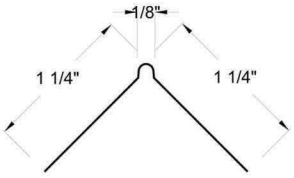
Mega U-channel / Bridging channel Section Properties

Section Designation	Base Design Thickness (in.)	Depth A (in.)	Flange B (in.)	F_y (ksi)	Gross							Effective		
					Weight (lb/ft)	Area ($in.^2$)	I_x ($in.^4$)	r_x (in.)	I_y ($in.^4$)	r_y (in.)	^{V}rg (kip)	^{I}xd ($in.^4$)	^{S}xe ($in.^3$)	^{M}rx (k-in.)
150U50-43	0.045	1.5	0.5	50	0.357	0.11	0.032	0.56	0.002	0.147	1.37	0.032	0.043	2.21
150U50-54	0.057	1.5	0.5	50	0.441	0.13	0.039	0.55	0.003	0.145	1.65	0.039	0.052	2.73

Mega Metal Corner Bead 90° or 130°



Mega Metal Corner Bead is used in drywall sheathing corners protection.



Benefits of Mega Metal Corner Bead:

- High Quailty Bead.
- Ease of Installation.
- Locally made from **Galvannealed steel**.

Code Compliance

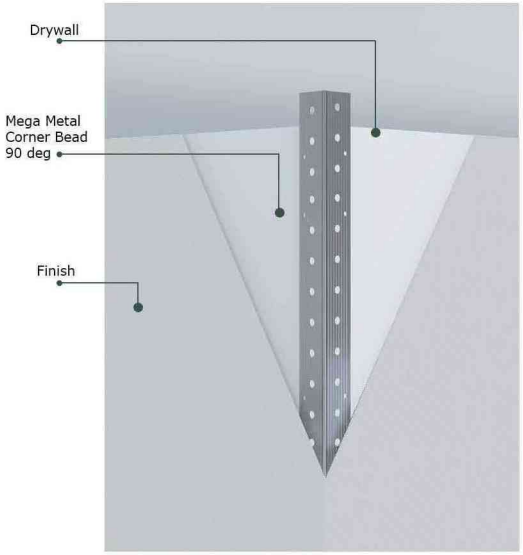
- ASTM C754 : Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- ASTM A1003: Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members.
- ASTM C653 : Standard Specification for Nonstructural Metal Framing.

Mega Metal Bead / 90° or 130°

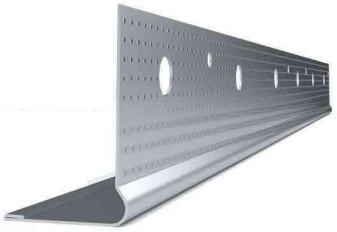
Product Designation	Angle	Leg (A)		Leg (B)		Design Thickness			Weight	Mass	Yield Strength (Fy)		Coating	Stock Length	Pcs/ Bundle
	Deg (°)	in.	mm	in.	mm	in.	mm	Mils	lb/ft	kg/m	ksi	MPa		ft	
MB90	90	1-1/4"	31.75	1-1/4"	31.75	0.016	0.41	18	0.155	0.224	33	228	G40	10	20
MB130	130														

Installation Guide

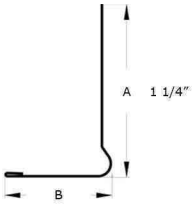
- **Prepare the Corner:** Ensure that the corner is clean, dry and free of debris or protrusions.
- **Cut the Corner Bead (if necessary):** Measure the length of the corner. If needed, use tin snips to cut the bead to the appropriate length.
- **Apply Joint Compound:** Using a trowel or drywall knife, apply a thin layer of compound to the corner. Ensure coverage of the entire surface.
- **Position the Corner Bead:** Place the bead over the corner and press firmly to align it properly with the wall.
- **Secure the Corner Bead:** Use drywall screws or nails to attach the bead to the wall at regular intervals, ensuring a secure attachment.
- **Feather the Joint Compound:** Apply additional compound over the bead, covering fasteners and feathering edges for a smooth transition.
- **Allow to Dry:** Follow manufacturer's instructions for drying time.
- **Sand and Finish:** Once dry, sand lightly to smooth imperfections. Apply additional coats of compound as needed, re-sand and paint as required.



Mega Metal Finish Bead 90°



A Mega Metal Finish Bead, often referred to as a finishing trim or finishing bead, is a type of metal trim used to protect drywall edges and corners, this tirm is suitable for standard right-angle corners.



Benefits of Finsh Bead:

- Edge Protection.
- Straight Lines.
- Structural Support.
- Uniformity.
- Available in 1/2" & 5/8".

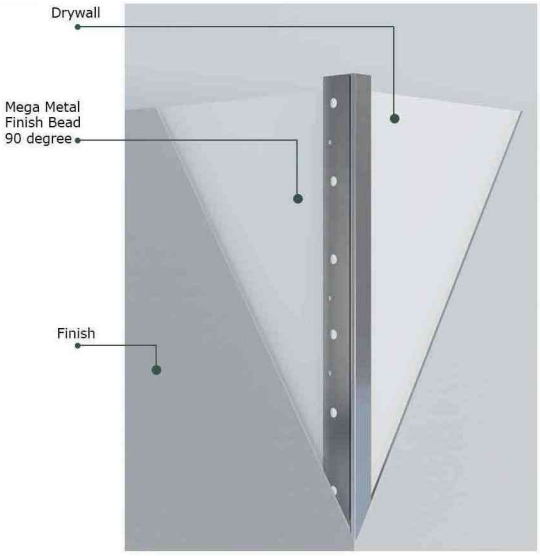
Code Compliance

- ASTM C754 : Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- ASTM A1003: Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members.
- ASTM C653 : Standard Specification for Nonstructural Metal Framing.

Mega Metal Finish Bead / 90°															
Product Designation	Angle	Leg (A)		Leg (B)		Design Thickness			Weight	Mass	Yield Strength (Fy)		Coating	Stock Length	Pcs/ Bundle
	Deg (°)	in.	mm	in.	mm	in.	mm	Mils	lb/ft	kg/m	ksi	MPa		ft	
MBL050	90	1-1/4"	31.75	1/2"	12.70	0.016	0.41	18	0.11	0.164	33	228	G40	10	20
MBL063	90			5/8"	15.88		0.41		0.12	0.174					

Installation Guide

- **Prepare the Corner:** Ensure that the corner where you'll install the finish bead is clean, dry, and free of debris or protrusions.
- **Apply Joint Compound:** Using a trowel or drywall knife, apply a thin layer of joint compound or drywall mud to the corner. Ensure full coverage.
- **Position the Mega Finish Bead:** Place the Mega finish bead over the corner with the applied joint compound. Press it firmly, ensuring proper alignment and flushness against the wall.
- **Secure the Finish Bead:** Use drywall screws to secure the finish bead to the wall at regular intervals. Fasten them into wall studs or framing members for security.
- **Feather the Joint Compound:** Apply additional joint compound over the finish bead, covering fasteners and feathering edges for a smooth transition.
- **Allow to Dry:** Let the joint compound dry completely.
- **Sand and Finish:** Once dry, lightly sand the surface to imperfections. Apply extra joint compound as needed, re-sand for a seamless finish, Prime and-paint to match the wall.



Material Specifications

■ Structural and Non-Structural members are coated to meet the minimum code requirements. Products manufactured by Canadian Panel Tech meet the requirements of the following specifications:

Product Type	Material Specifications	Min Yield ksi	Min Tensile ksi	Minimum Metallic Coating Designation
Non-structural Products ASTM C645	ASTM A653, SS Grade 33	33	45	G40
	ASTM A1003, Grade 33 (NS33)	33	... [6]	G401, A401, AZ502, GF303, T1-254, T2-1004, 60G/60G5
Structural Products ASTM C955 (CP60 Coatings)	ASTM A653, SS Grade 33	33	45	G60
	ASTM A1003, Grade 33 Type H (ST33H)	33	45	G601, A601, AZ502, GF303
	ASTM A653, SS Grade 50 Class 1	50	65	G60
	ASTM A1003, Grade 50 Type H (ST50H)	50	65	G601, A601, AZ502, GF303
	ASTM A653 HSLA Grade 50	50	65	G60

- *[1]A653 Standard for steel sheet, zinc coated (galvanized) or zinc-iron alloy-coated (galvannealed) by the hot-dip process.*
- *[2]A792 Standard for steel sheet, 55% aluminum-zinc alloy-coated by the hot-dip process.*
- *[3]A875 Standard for steel sheet, zinc-5% aluminum alloy-coated by the hot-dip process.*
- *[4]A463 Standard for steel sheet, aluminum coated by the hot-dip process.*
- *[5]A879 Standard for steel sheet, zinc coated by the electrolytic process for application requiring designation of the coating mass on each surface.*
- *[A]No tensile requirements for nonstructural steel in accordance with ASTM A1003 standards.*
- *[6]MegaFraming non structural products has a high yield strength exceeds 50 ksi in some products.*

Coating Specification

■ The base steel thickness can be determined from measuring the coated thickness and deducting the following metallic coating thickness.

Coating Designation (Imperial)	Coating Designation (Metric)	Coating Thickness (in)	Coating Thickness (mm)
G40*	Z120	0.0007	0.017
G60	Z180	0.0010	0.025
G90	Z275	0.0015	0.039
AZ50	AZM150	0.0016	0.040
ZA55	AZM165	0.0017	0.044

- *Note: *G40 coating only for non-structural products (NS)*

■ Products comply with the minimum metallic.
Coating weight [mass] requirements as shown in table below.

Coating Weight [Mass] requirement (Metallic Coating)	
Member Type	**Coating Designation**
Structural	G60 [Z180][A] AZ50 [AZM150][B]
Non-Structural	G40[Z120][A] AZ250 [AZM150][B]

- *[A]Zinc-Coated steel sheet as described in ASTM Specification A653/A792M*
- *[B]55% aluminum-zinc alloy-coated steel sheet as described in ASTM specification A792/A792*

Design Yield Stress

MegaFRAMING products are galvanized steel that to be cold formed from steel meeting the requirements of AISI S220 OR AISI S240 as applicable in compliance with ASTM A653/A653M type. The design yield stress of the material shall be related to the thickness as listed in Table below. Non-structural members may have a design yield stress greater than 33 ksi (230 MPa) if the product satisfies the applicable requirement of ASTM C645.

Design Yield Stress		
Designation Thickness	Designation Thickness	
	(ksi)	(Mpa)
18	33	230
33	33	230
43	33	230

Lip Stiffener Length Design

Design Lip Length for Studs and Joists				
Section	Flange Width		Lip Length	
	in	mm	in	mm
S125	1.250	31.8	0.187	4.8
S162	1.625	41.3	0.500	12.7

■ The lip length on a stud or joist will be related to the flange width as listed in Table below.

Steel Thickness Design

■ Products are cold-formed to shape from sheet steel with a steel thickness listed in below Table.
Product thickness will be referenced to the corresponding designation thickness.

Steel Thickness Table				
Designation Thickness (mil)	Minimum Thickness [1] (in)	Design Thickness [1] (in)	Design Inside Corner Radii [2] (in)	Reference Only Gauge No.
18	0.018	0.019	0.084	25
27	0.027	0.029	0.080	22
30	0.030	0.031	0.078	20 – Drywall
33	0.033	0.035	0.076	20 – Structural
43	0.043	0.045	0.071	18

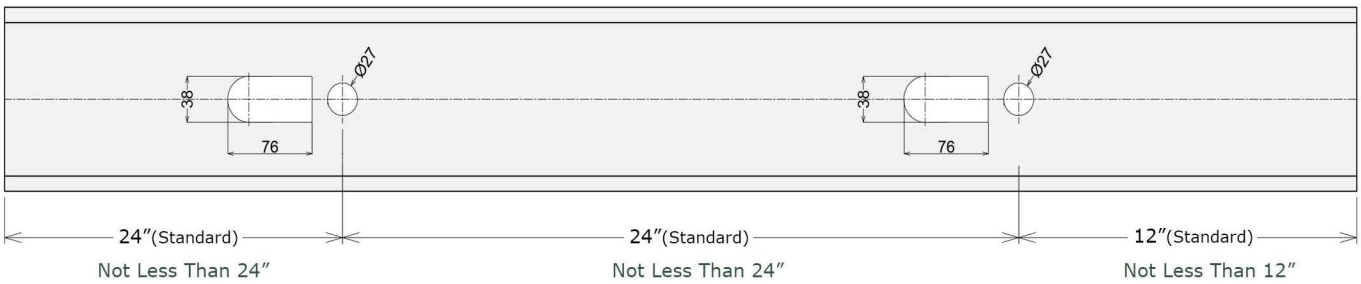
- *[1]Minimum thickness represents 95% of the design and is the minimum acceptable thickness delivered to the jobsite based on CSA S136 Section A2.4.*
- *[2]The tables in this catalog are calculated based on inside corner radii listed in this table. The inside corner radius is the maximum of 3/32 – t/2 or 1.5t, truncated after the fourth decimal place (t = design thickness). Centerline bend radius is calculated by adding half of the design thickness to listed corner radius.*

Web Depth (h) to Thickness (t) Ratios [2,3,4]

Mil Thickness	18 mil		33 mil		43 mil		54 mil		68 mil		97 mil		118 mil	
Design Thickness (in)	0.0188		0.0346		0.0451		0.0566		0.0713		0.1017		0.1242	
Inside Bend Radius (in)	0.0843		0.0764		0.0712		0.0849		0.1069		0.1525		0.1863	
Depth (in)	h (in)	h/t	h (in)	h/t	h (in)	h/t	h (in)	h/t	h (in)	h/t	h (in)	h/t	h (in)	h/t
1.625	1.419	75	1.403	41	1.392	31	1.342	24	1.269	18	1.117	11	1.004	8
2.5	2.294	122	2.278	66	2.267	50	2.217	39	2.144	30	1.992	20	1.879	15
3.625	3.419	182	3.403	98	3.392	75	3.342	59	3.269	46	3.117	31	3.004	24
4	3.794	202 [1]	3.778	109	3.767	84	3.717	66	3.644	51	3.492	34	3.379	27
6	5.794	-	5.778	167	5.767	128	5.717	101	5.644	79	5.492	54	5.379	43

[1]h/t exceeds 200
[2]h value used for h/t calculation is the flat width of the web. For S members, this is the out-to-out member size, minus twice the thickness, minus twice the inside bend radius.
[3]h/t values exceeding 260 are marked with a dash (-).
[4]h/t values in this table apply to S (studs and joists) members only and do not apply to tracks and channels.

Typical Service Hole Spacing



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