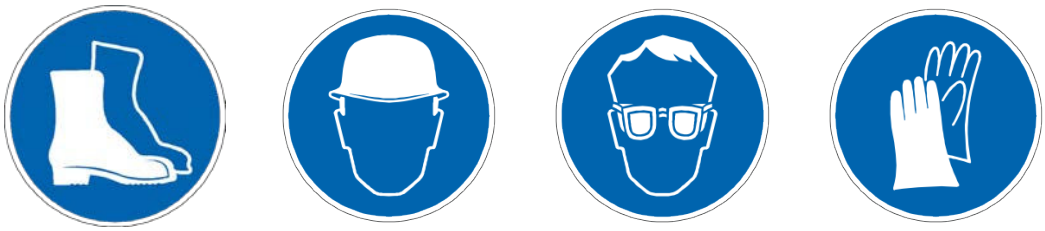
INSTALLATION GUIDE

FLUTED PANELS

ATTENTION

PROTECTION

The material may contain sharp edges. For this reason, we recommend that you wear the appropriate protective equipment: safety harness, safety boots, hard hat, safety glasses, and gloves.



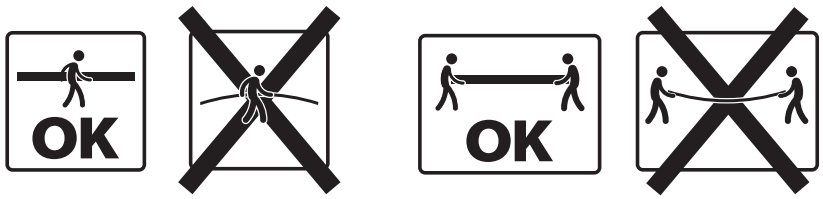
WARRANTY

FOR THE WARRANTY TO BE APPLICABLE, INSTALLATION MUST BE CARRIED OUT IN ACCORDANCE WITH THE STANDARDS SET OUT IN THE UPDATED BUILDING CODE, ALONG WITH THE MANUFACTURER'S RECOMMENDATIONS.

If a problem arises during profile installation, it is important to notify the distributor agent before the installation of 180 sq. ft. (2 boxes) to ensure that the warranty applies, and also to ensure that there are no corrections to be made to the installation surface.

HANDLING

Handle sheets with care. Always lift sheets vertically, not horizontally, to prevent them from bending or warping. Two or more people are recommended, depending on length.



PACKAGING HANDLING

To limit the risk of material breakage, it is important to follow certain rules when handling packaging :

1. Keep movement of materials to a minimum before installation.
2. Always take particular care when transporting panels from one point to avoid bending the panels.
3. Use a forklift with forks adjusted to maximum width to handle panel packs of up to 20 ft.
4. Beyond this length, use a forklift truck with boom and loading bar, or a crane.

HANDLING PACKAGES
OF UP TO
MAXIMUM OF 20 FT

HANDLING PACKAGES
OF 20 FT AND OVER

ORDER INTAKE & INSPECTION

It is the customer's responsibility to inspect the order upon receipt. In the event of an error or damage to a panel, it is important to notify the distributor as soon as possible so that the situation can be rectified.

STORAGE

To preserve the aesthetic and physical properties of MAC Metal Architectural Fluted Panels profiles, it is important to observe certain storage rules.

If panels cannot be installed immediately after delivery, store them indoors in a dry place, on a flat, well-ventilated surface. Keep movement to a minimum to minimize the risk of breakage.

Outdoor storage is the customer's responsibility. If outdoor storage is absolutely necessary, place the panels flat in a location that is not directly exposed to sunlight or extreme temperatures. These factors can cause the protective film to adhere more tightly to the panels, making it difficult to remove and leaving traces of adhesive on the surface of the product when removed. In addition, the accumulation of stagnant water on packaging can contribute to its deterioration, so it's vital to protect your order.

It is important to follow these recommendations:

1. If possible, choose a level, out-of-the-way location where the panels will not interfere with work on the site, and with limited exposure to the sun.
2. Cover the floor with plastic sheeting to prevent moisture from the ground from reaching the panels.
3. Place panels approx. 6 in (152 mm) from the floor to allow air circulation.
4. Raise part of the panels to allow rainwater to run off.
5. Protect the panels with a cloth. Do not use plastic, as this can as this can lead to condensation.

ZIP SYSTEM, INSULATED R-SHEATHING PANELS

Installation of MAC coatings on Zip System, Insulated R Sheathing or similar dual-composition panels comprising a softer-than-wood compound is not recommended.

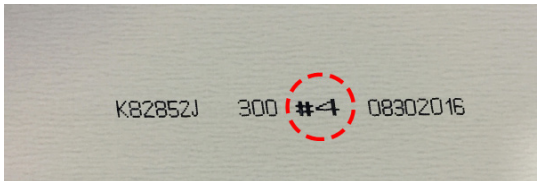
This type of panel does not provide a rigid installation base for MAC products and allows warping when exposed to sunlight depending on temperature, which then results in warping of the cladding panels.

INSTALLATION OF THE WOOD COLLECTION

The WOOD COLLECTION colors are available in a variety of hues and shades, and the number of panels varies according to panel width. Each panel is identified on the back and front by a sequence of bold numbers preceded by the pound sign #.

- Fluted panel SPC 1.1 | 2 different shade plank per color (#10 and #11)
- Fluted panel SPC 1.2 | 3 different shade plank per color (#7, #8 and #9)
- Fluted panel SPC 1.3 | 3 different shade plank per color (#7, #8 and #9)

* It's important to pay particular attention to this, and to install the boards randomly or according to a pre-established design to optimize the natural wood effect. Never repeat the same installation sequence to avoid creating a tapestry effect.



1. TOOLS

To get the job done right, you'll need a bending machine or bending pliers, a screwdriver and sheet-metal chisel, sealant, metal blade (see recommendations), electric scissors and a MAC bending bar. You'll also need a level and a tape measure.

ROTATING SAW

Cold-cutting rotary saws must be used with a specialized metal blade and in accordance with the manufacturer's recommendations. Please refer to the cutting guide available on our website for details of use.

1.1 ACCESSORIES

Here is a list of accessories for installing and finishing roof profiles:

- MAC wood or metal screws, depending on project type
- High-temperature sealing membrane
- Self-adhesive elastomeric membrane
- Steel roll
- Moldings
- Sealant

1.2 MAC SCREW TYPES

The use of MAC screws is highly recommended. In addition to being perfectly adapted to our profiles, they are duly tested and comply with ASTM B-117 2000h.

Should any other screw be used, it must comply with ASTM B-117 2000h to support the product's 40-year warranty.

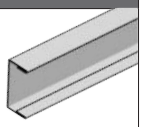
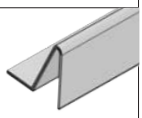
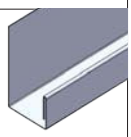
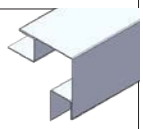
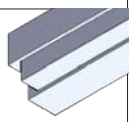
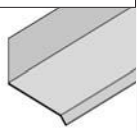
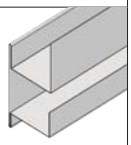
Screw in with moderate contact so as not to interfere with material expansion. Screws must not exert upward or downward pressure to avoid rounding the material.

MAC Self-Drilling Metal Screw A063.250

MAC Wood Screws A058.250

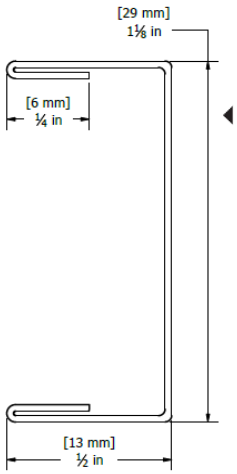
No 2. TRIMS

TRIMS AND FLASHINGS | FLUTED PANELS

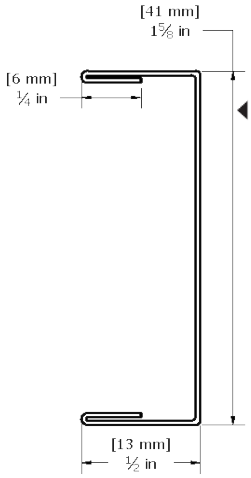
PRODUCT NUMBER	DESCRIPTION	
BATTEN TRIM FILLER M06I or M06J	The batten filler is integrated into a J-Trim, outside or inside corner, to reinforce the support of the last panel when ending in the flat part of the profile. It ensures optimum panel retention while providing a neat finish and greater stability for the entire cladding assembly.	
END OF WALL BRACKET M24IJ	This bracket is attached to the second-to-last panel to support and reinforce the installation of the last panel. It ensures solid anchorage and a secure finish when the installation is completed on a flat surface, while contributing to the panel's stability.	
J-TRIM M02A or M02B | Double J-Trim M03A or M03B | J-Trim Variable	Essential finishing mouldings are used to frame openings, ends, and tops of a wall. They provide a clean finish and protect exposed panel ends, while facilitating the expansion and contraction of materials. No 1 - Double J-Trim Moulding coloured on both sides is used when both sides of the moulding are visible. No 2 - Extended J-Trim with variable pallet, as needed . Designed to cover the required surface area as needed. Colored on both sides.	
OUTSIDE CORNER WITH INTEGRATED J-TRIM M21A or M21B	The Exterior Corner with integrated J-Trim is designed to receive and conceal panel ends in integrated J-trims on both sides. It allows quick installation and ensures a clean, uniform finish.	
INSIDE CORNER WITH INTEGRATED J-TRIM M22A or M22B	All-in-one moulding combines a rigid 90° inside corner with two integrated J-Trim returns. It's designed to facilitate installation in re-entrant corners, allowing panels to be neatly inserted on either side.	
DRIP FLASHING M51I or M51J | 45 degree M53I or M53J | 90 degree M56I or M56J | variable	Installed at the base of walls or above openings, drip moulding directs water away from the cladding to prevent infiltration and moisture damage. Designed with an integrated slope, it ensures efficient drainage while providing a clean finish. Please note that only double or extended variable drip flashings are colored on both sides.	
VERTICAL TRANSITION TRIM M12I or M12J HORIZONTAL TRANSITION TRIM M13I or M13J	Horizontal and vertical transition mouldings create a clear separation between two types of cladding (such as brick and steel) or between two areas of the same profile, particularly when installing over long lengths. It facilitates transitions by ensuring precise alignment and allowing controlled expansion of materials. It can also be used as a subsidence moulding, particularly for vertical installation, allowing materials to expand.	

TRIMS AND FLASHINGS | FLUTED PANELS

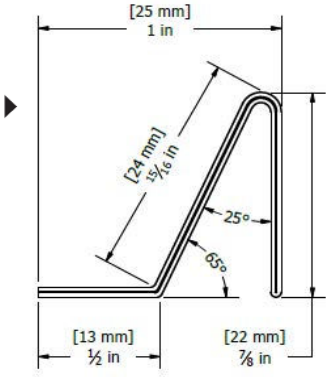
No. M06I (SPC 1.1)
Batten trim filler



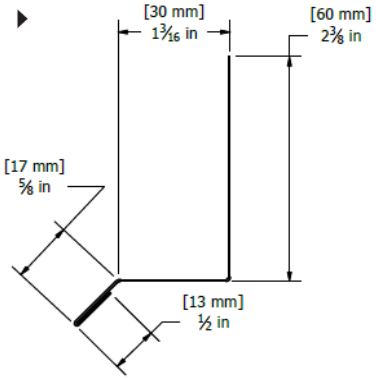
No. M06J (SPC 1.2 & SPC 1.3)
Batten trim filler



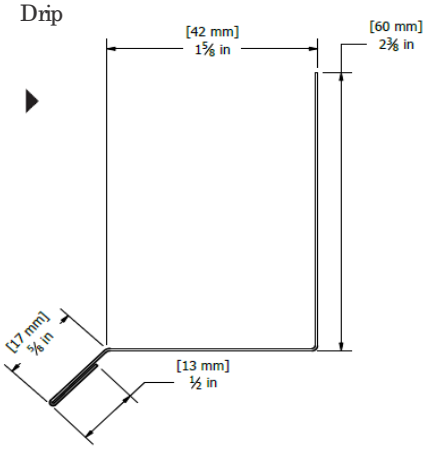
No. M24LJ (SPC 1.1, SPC 1.2 & SPC 1.3)
End of wall bracket



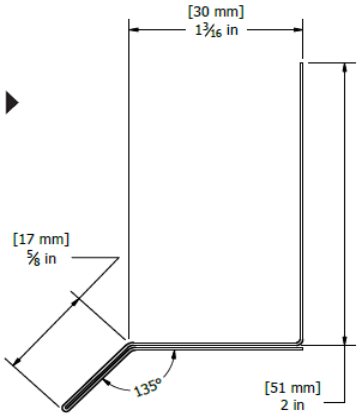
No. M50I (SPC 1.1)
Drip



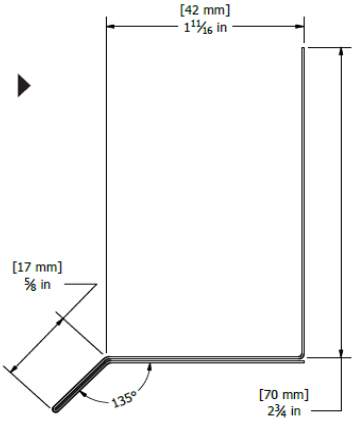
No. M50J (SPC 1.2 & SPC 1.3)
Drip



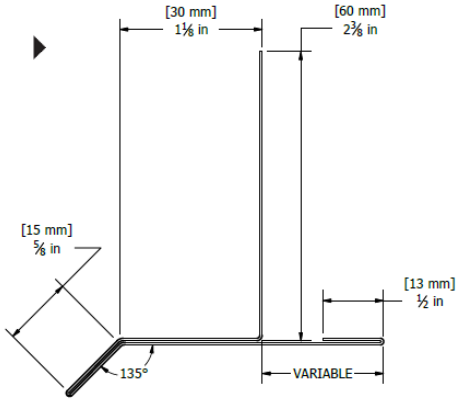
No. M53I (SPC 1.1)
Double drip



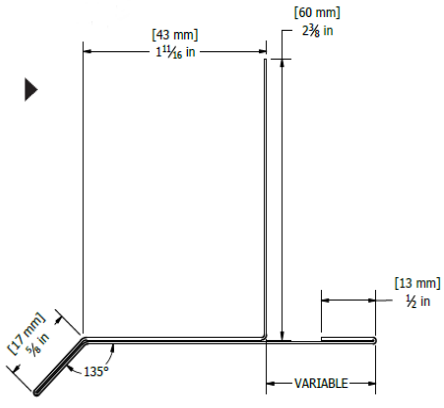
No. M53J (SPC 1.2 & SPC 1.3)
Double drip



No. M56I (SPC 1.1)
Extended drip flashing w/-variable

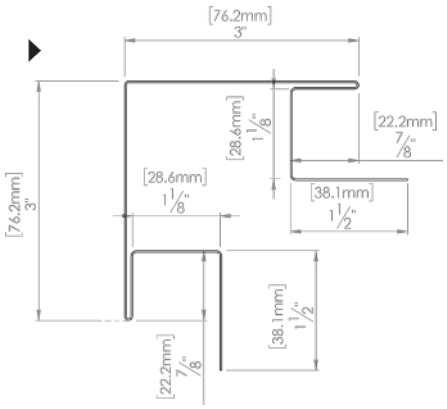


No. M56J (SPC 1.2 & SPC 1.3)
Extended drip flashing w/-variable

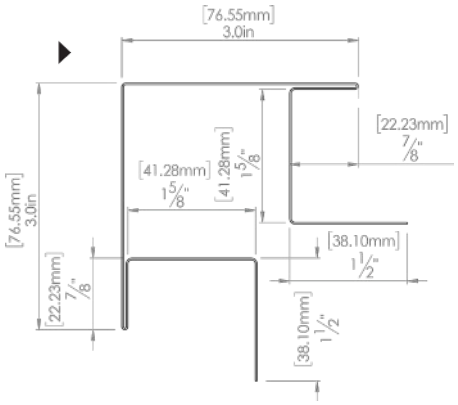


TRIMS AND FLASHINGS | FLUTED PANELS

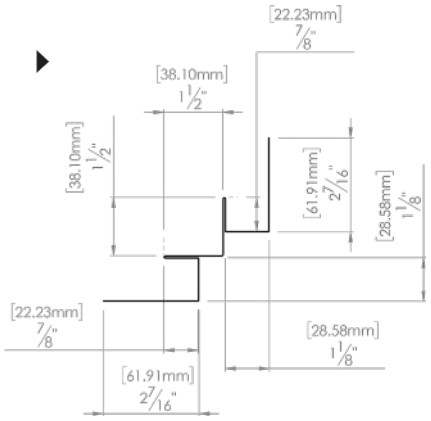
No. M21A (SPC 1.1)
Outside corner w/ integrated J-Trim



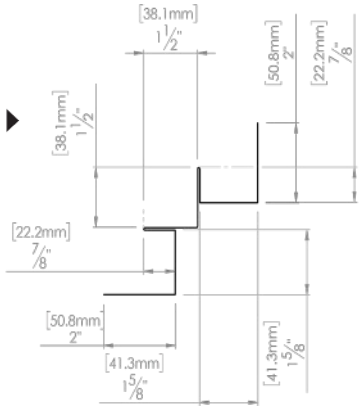
No. M21B (SPC 1.2 & SPC 1.3)
Outside corner w/ integrated J-Trim



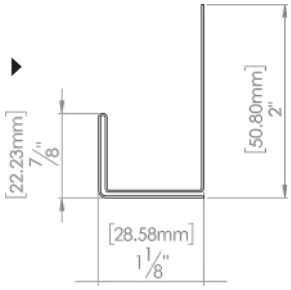
No. M22A (SPC 1.1)
Inside corner w/ integrated J-Trim



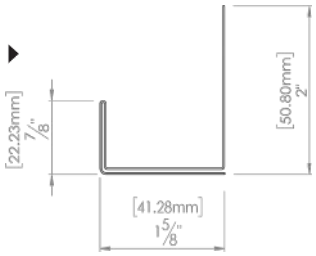
No. M22B (SPC 1.2 & SPC 1.3)
Outside corner w/ integrated J-Trim



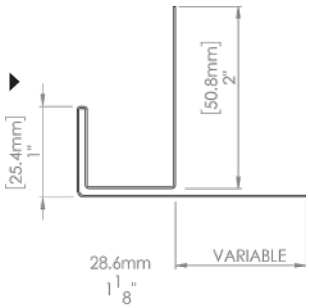
No. M02A (SPC 1.1)
Double J-Trim



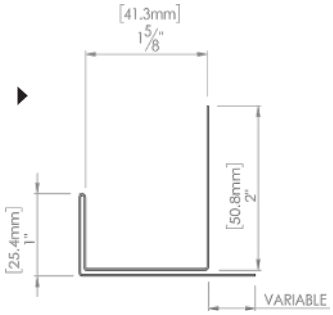
No. M02B (SPC 1.2 & SPC 1.3)
Double J-Trim



No. M03A (SPC 1.1)
Extended J-Trim w/ variable



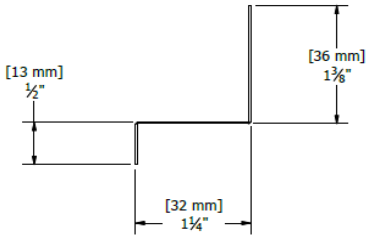
No. M03B (SPC 1.2 & SPC 1.3)
Extended J-Trim w/ variable

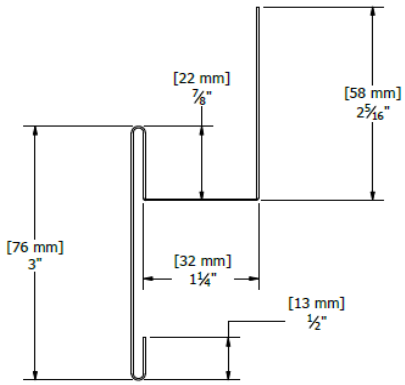


TRIMS AND FLASHINGS | FLUTED PANELS

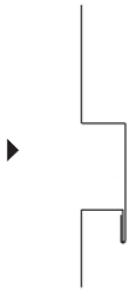
No. M12I (SPC 1.1)
Vertical transition trim

Assembly

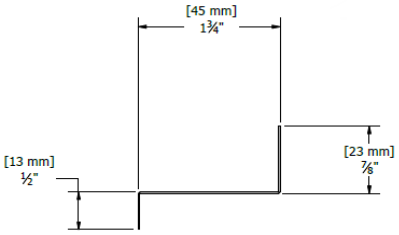


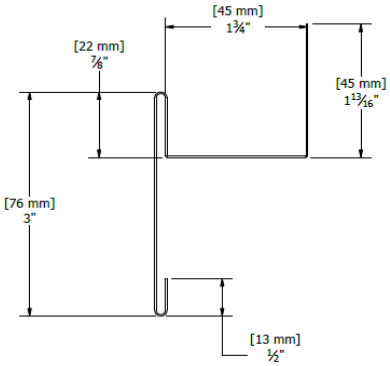


No. M12J (SPC 1.2, SPC 1.3)
Vertical transition trim

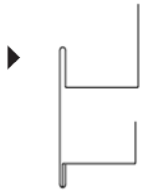


Assembly

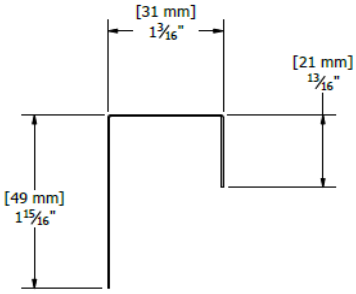


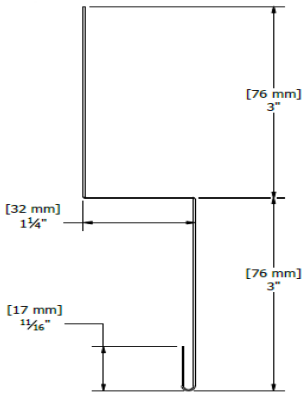


No. M13I (SPC 1.1)
Horizontal transition trim

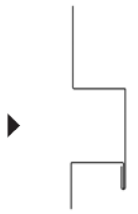


Assembly

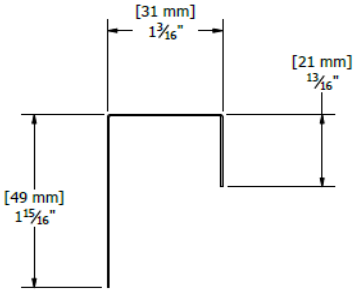


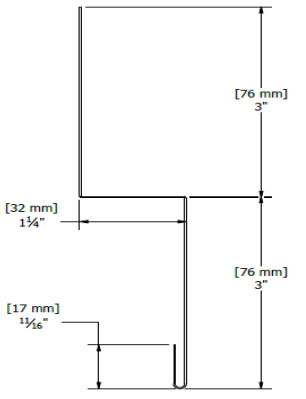


No. M13J (SPC 1.2, SPC 1.3)
Horizontal transition trim



Assembly





No 3. INSTALLATION

RECOMMENDATIONS

This installation guide provides general guidelines for the installation of MAC Metal Architectural's non-recessed screw Fluted Panels profiles. Siding installation should always be performed by a steel siding installation specialist. The information contained in this guide is for informational purposes only and may not be suitable for all building types and/or climatic conditions. The examples given are valid at the time of publication. At all times, please refer to and comply with local building codes and regulations.

MAC Metal Architectural reserves the right to modify the content of this guide at any time, without prior notice. To ensure you always have the most up-to-date information, please consult our website or contact your representative.

INSULATION & VENTILATION

When designing the building, make sure that all components are properly installed, including the ventilation system needed to prevent condensation. Condensation can occur in all types of buildings, and is therefore not unique to buildings made with metal profiles. Poor ventilation can lead to moisture problems and reduced insulation efficiency.

To ensure that the best practices are used for your project, refer to a building insulation and ventilation professional. They'll be able to guide and advise you properly.

WOOD OR STEEL FURRING

Depending on construction standards in your region, wood or steel furring may be required. This guide shows you how to install MAC cladding on wood furring. However, if your region's standards do not require it, it's up to you to decide whether or not to install it. In this case, installation can be carried out directly on the recommended rigid surface covered with a weather barrier.

PLASTIC FILM

Each sheet is covered with a plastic film designed to prevent damage to the surface during handling, transport or installation.

It is important to remove the plastic film BEFORE installing the mouldings and sheets, to prevent it from becoming trapped during assembly.

Make sure your walls are square before you start installing siding.

No 4. 3 DIFFERENT PANEL MODELS

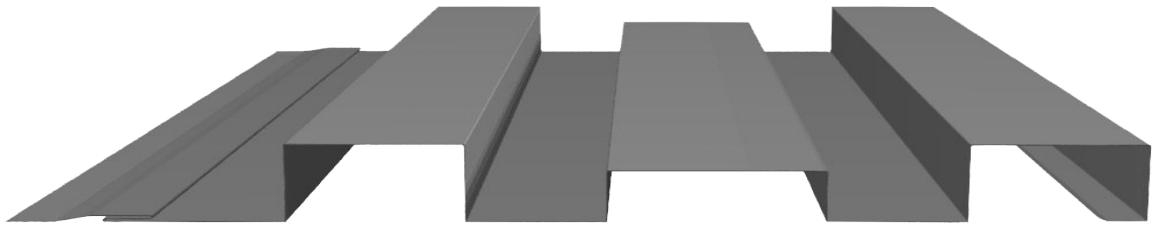
Model SPC1.1

The SPC1.1 fluted panel is available in 14.438“ (366.7 mm) x 1” (25.4 mm) wide sheets, with lengths ranging from 96“ (2,438.4 mm) to 156” (3,962.4 mm) with 6“ increments. Its distinctive design, with three 3 grooves, provides a uniform, aesthetically pleasing relief.

SPC1.1 - 14.438 in (366.7 mm) x 1 in (25.4 mm) x ranging from 96 in (2,438.4 mm) to 156 in (3,962.4 mm)

Model SPC1.2

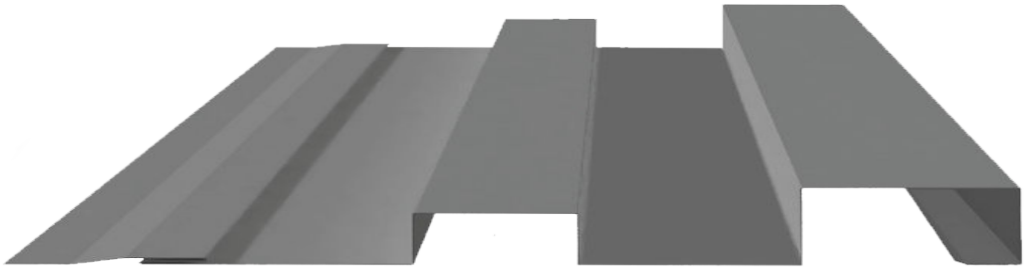
The SPC1.2 fluted panel is available in 12.5“ (317.5 mm) x 1.5” (38.1 mm) sheets, with lengths ranging from 96“ (2 438.4 mm) to 156” (3 962.4 mm) with 6 in increments. Its three grooves of varying widths and depths create a dynamic, flowing relief.



SPC1.2 - 2.5 in (317.5 mm) x 1.5 in (38.1 mm) x ranging from 96 in (2,438.4 mm) to 156 in (3,962.4 mm)

Modèle SPC1.3

The SPC1.3 fluted panel is available in 7.5“ (190.5 mm) x 1.5” (38.1 mm) sheets, with lengths ranging from 96“ (2,438.4 mm) to 156” (3,962.4 mm) with 6“ increments. Its three grooves of varying widths and depths create a dynamic, flowing relief.



SPC1.1 - 7.5 in (190.5 mm) x 1 in (25.4 mm) x ranging from 96 in (2,438.4 mm) to 156 in (3,962.4 mm)

No 4.1. FLUTED PANEL INSTALLATION OPTIONS

CREATING AN INSTALLATION TEMPLATE

Prior to installation, we recommend that you calculate the width of the wall where you'll be installing the panels, so that you can create an installation template, if you haven't already done so, based on the size of the panels, and determine which sections will require cut panels.

MAC Architectural Metal's fluted panels are offered in 3 different models, which can be installed individually or combined to create a unique design. If you opt for a mix of profiles, it's essential to determine the installation sequence before you begin.

FLUTED PANELS | SPC 1.1

FLUTED PANELS | SPC 1.2

FLUTED PANELS | SPC 1.3

FLUTED PANELS | MIXED

No 5. PREPARATION

NO 5.1 WALL PREPARATION | FORENCES INSTALLATION

It is strongly recommended that Fluted Panels be installed on double furring at 16'' centers (one vertical and one horizontal), and only if recommended by the construction standards in effect in your region.

No 5.2 TRIM INSTALLATION

A. INSTALLING FLASHING MOULDING AT THE BOTTOM OF THE WALL

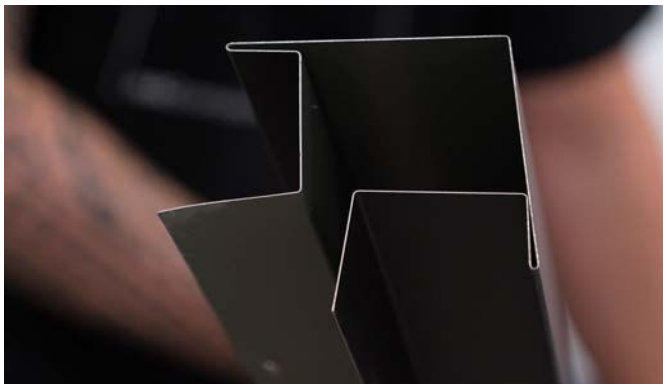
The drip flashing (M53I or M53J, depending on profile) must be installed behind the furring and weather barrier for optimal protection.

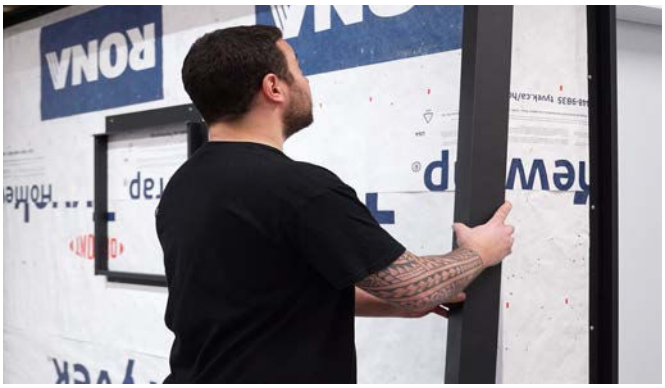
C. OUTSIDE AND INSIDE CORNERS

Measure the desired length from the top to the bottom of the wall.

Use this measurement to cut the moulding to the desired length.

Fasten corner mouldings in place.





D. END OF WALL

To finish off the wall, measure from left to right at the top of the wall. Cut the J-Trim to this measurement and fasten it in place with screws.

No 6. PANEL INSTALLATION

A. ALIGNMENT AND INSERTION

Start by inserting the male part into the female part, working from top to bottom.

B. FIXATION

Once the panel is in place, secure it with MAC screws every 16 to 24 inches.

C. CHECKING SQUARENESS

Check that the panels are level, approximately every 5 panels to ensure perfect alignment during installation.

D. J-TRIM POSITIONING

Place the top of the panel in the J-trim.

E. SECURE THE PANEL

Make sure the panels are securely clipped together.

No 7. CUTTING AND FINISHING THE PANELS

If you need to cut the panels across the width to finish the wall in a J-Trim, outside corner or inside corner, follow these steps depending on the situation :

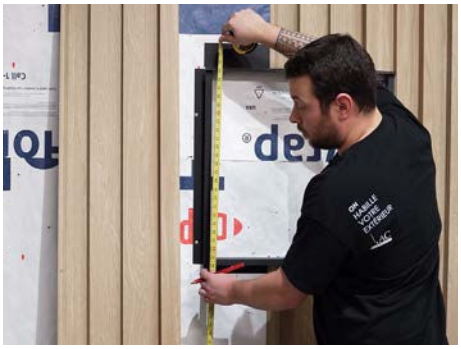
A. CUT ON TOP OF A BATTEN

If the cut falls into a panel batten:

1. Take your measurement and add ½" to ¾" to the intended width.

2. Bend this excess 90° towards the inside of the wall to ensure a better hold.

3. If the wall is highly exposed to wind, apply a sealant joint to prevent any panel detachment.



No 7. CUTTING AND FINISHING THE PANELS

A. CUT ON THE HOLLOW BETWEEN THE BATTENS

If the cut falls on a hollow section of the panel, adjust the panel to the desired width.

Then insert it into the J-Trim, the inside corner or the outside corner.

To secure the panel in place and achieve a neat finish, use the batten filler trim (M06I or M06J).

In areas exposed to strong winds, or for high installations, you may wish to add a few drops of sealant.

No 8. END OF THE WALL

A. STRENGTHENING AND FIXATION MOULDING

Whatever the scenario, when you reach the end of the wall. You'll need to install the end of wall bracket (M24IJ) on the second-to-last panel. This molding will support the last panel to ensure a solid, durable installation.

Then install the last panel, previously adjusted, and the batten filler trim, if required.

No 9. AROUND AN OPENING

A. MEASUREMENTS

Measure the opening (width and height) to ensure a perfect fit for mouldings and panels.

B. PREPARING MOULDINGS

1. Cut the Drip moulding for the top of the opening to ensure a proper seal.

   The length of the Drip moulding and J-Trim, installed horizontally, should match the width of the opening, making sure to add the length of both J-Trim folds.

2. Next, cut the J-Trims for the sides and bottom of the opening. Ensure that each cut is clean and precise for a neat, professional finish.

   The length of the vertically installed J-Trims should equal the height of the opening plus the length of the J-Trim fold.

   Finally, trim the folded ends of the horizontal J-Trims so that they match the length of the J-Trim fold.

C. TRIMS INSTALLATION

Secure the mouldings around the opening to create a rigid frame that will support the panels.

1. Drip | Top of the opening
   (above the window/door)

   Make a double fold in the Drip moulding to reinforce the structure.

   Trim the excess on each side to ensure a perfect fit.

2. J-Trim | Sides and bottom of the opening

   Position and install the horizontal J-Trim at the bottom of the opening to define the base of the window.

   Position and install the vertical J-Trims on either side of the horizontal J-Trim, making sure to insert them into the pre-cut notches to fully cover the wall.

   Place and install the drip flashing on top of the vertical J-Trims.

No 9. AROUND AN OPENING, part 2...

A. PANEL CUTTING AND INSTALLATION

Cut the panels to the precise dimensions of the opening.

If the panel cut falls at the top of a batten :

Take your measurement and add ½“ to ¾“ to the required width.

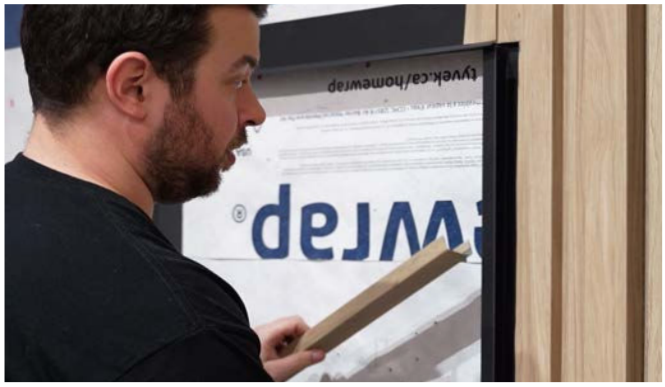
Fold this excess 90° inward toward the wall to ensure better hold.

If the wall is highly exposed to wind, apply a bead of sealant to prevent the panel from coming loose.

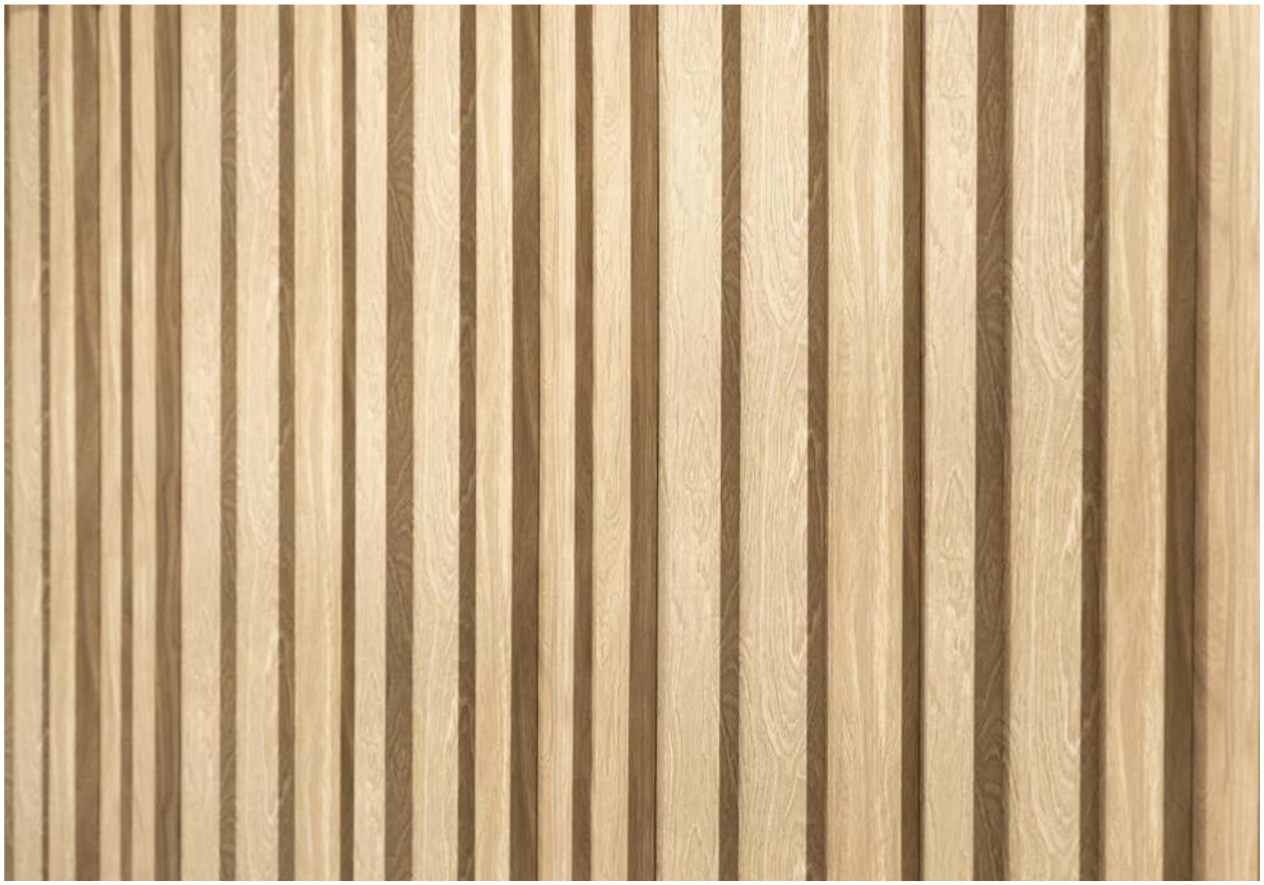
No 10. FOR IMPECCABLE FINISHING RESULTS

For a perfect finish, insert the batten filler (M06I or M06J) into the J-Trim.

This step recreates a fluted effect inside the moulding, giving a uniform, harmonious appearance.



RELIEF & DYNAMISM FOR FACADES IN MOVEMENT



For more information on the installation of the Fluted Panels profiles, visit the PRO section of our website, MACmetalarchitectural.com or our Youtube Chanel.

You will find a bank of technical information on the profile, such as a series of installation videos, molding guides as well as access to technical drawings.

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