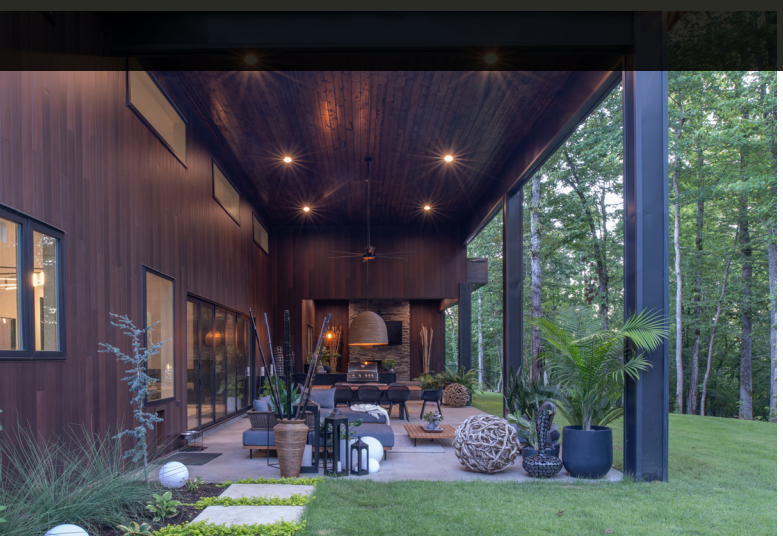
Installation Guide

HARRYWOOD PLUS



MAC
METAL ARCHITECTURAL

THE LOOK AND RICHNESS OF WOOD

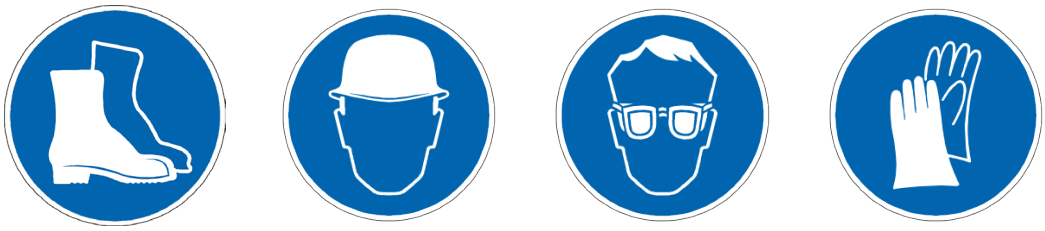
without the maintenance!

August 22, 2024

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.



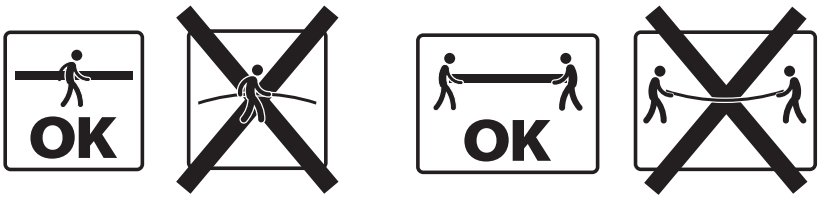
WARRANTY

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 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 fork-lift 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 Harrywood PLUS profile, 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

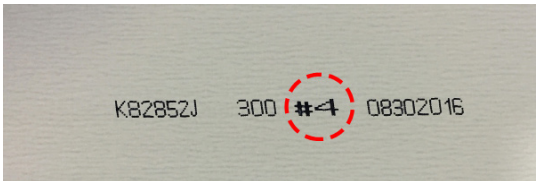
Installation of MAC coatings on Zip System, Insulated R Sheathing or similar dual-composition panels comprising a softer-than-wood compound is not recommended.

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.

WOOD COLLECTION INSTALLATION

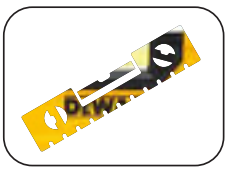
All the colors in the WOOD COLLECTION are available in 6 planks of varying hues and shades. Each board is identified on the back by a sequence of bold numbers from 1 to 6, preceded by the pound sign #.

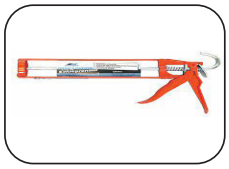
* It's important to pay particular attention to this and to install the planks randomly to optimize the wood effect. Never repeat the same installation sequence to avoid creating a tapestry effect.

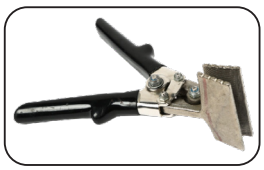
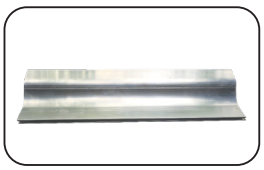


1. TOOLS

To get the job done right, you'll need a bending machine or bending pliers, a screwdriver and sheet-metal chisel, sealant, MAC Cutter specialized for the Harrywood PLUS profile, 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.

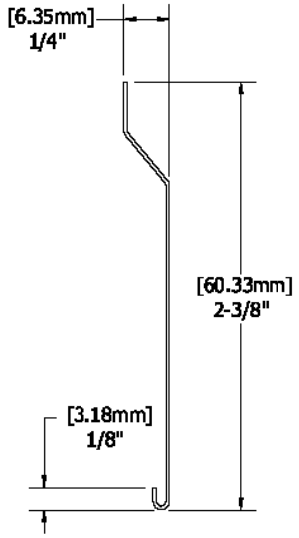
Screw in with moderate contact so as not to interfere with material expansion. Screws must not exert upward or downward pressure to avoid rounding the material.

MAC Anti-Corrosion
Self-Drilling K-Latch Screw
A058.250

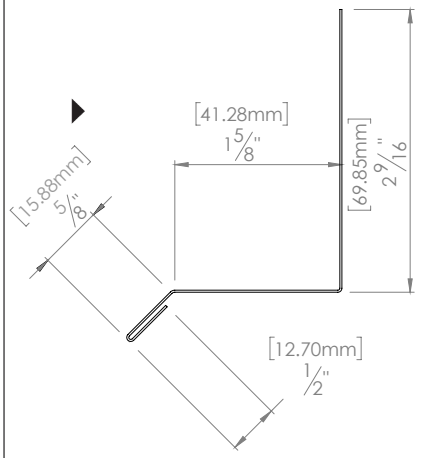
MAC Anti-Corrosion Wood
Screw A059.250

HARRYWOOD PLUS TRIM & FLASHING

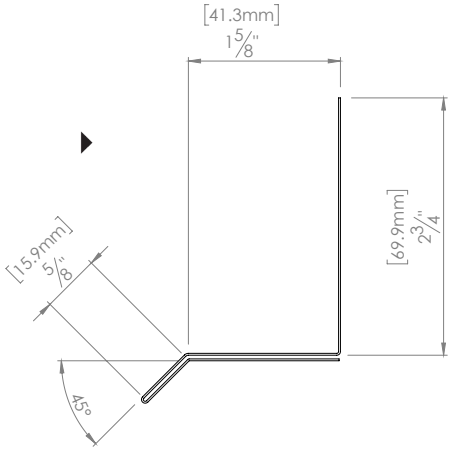
No. M10SHW
Starting Strip



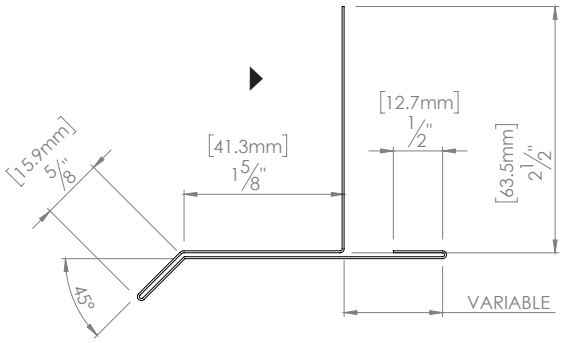
No. M50CD
Flashing Drip



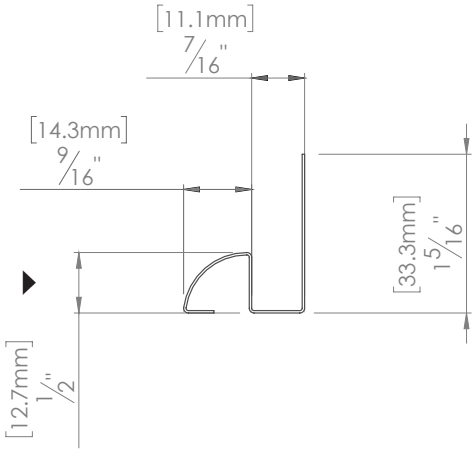
No. M53CD
Double Flashing Drip



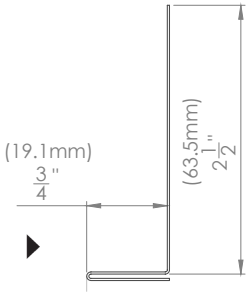
No. M56CD
Extended Drip Flashing with Variable



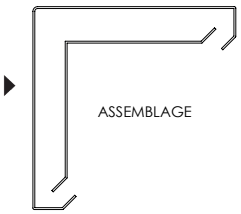
No. M22C
Inside Corner or QJ



No. M14CD
L-Trim



No. M20C
Outside Corner (2 pieces)



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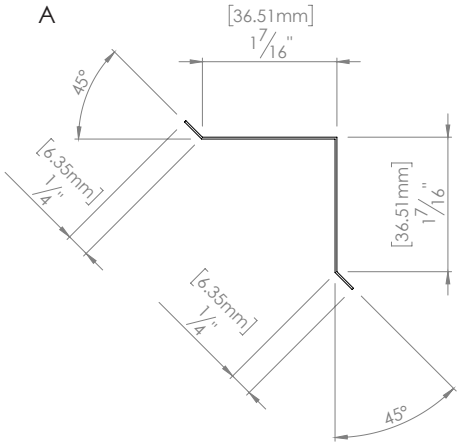

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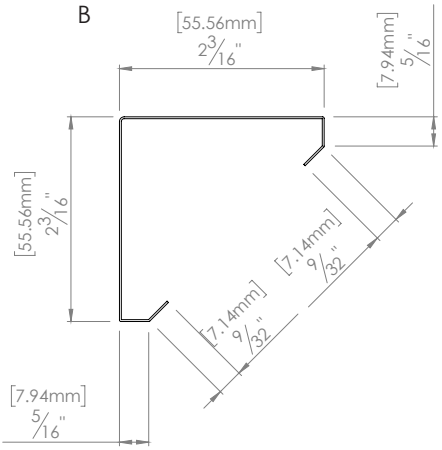
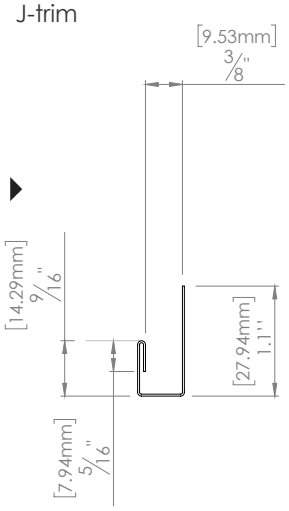
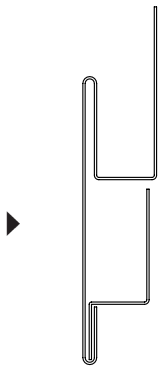


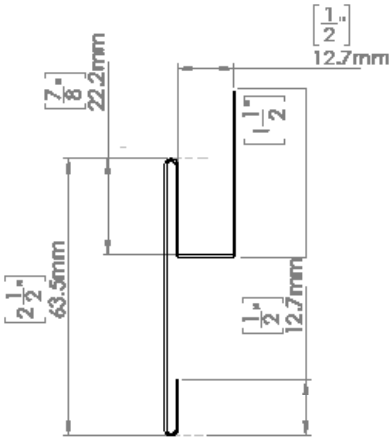
HARRYWOOD PLUS TRIM & FLASHING

No. M01C
J-trim



No. M12C
Vertical Transition Trim (2 pieces)





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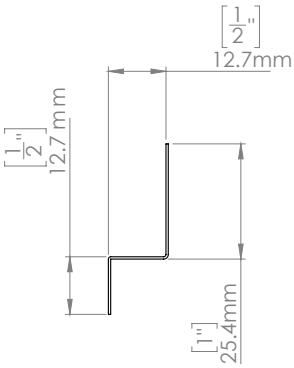
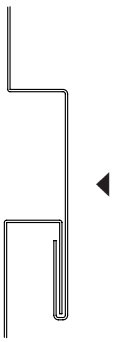


No. M13C
Horizontal transition trim (2 pieces)



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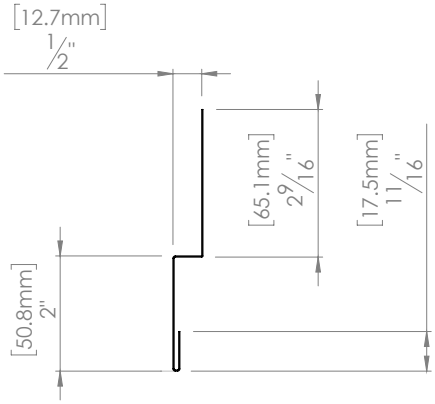

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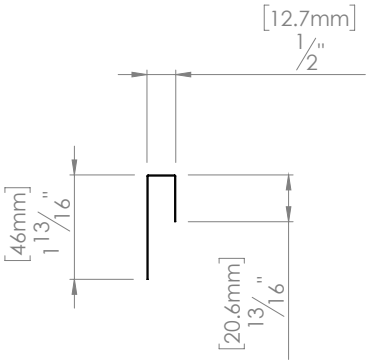


2. INSTALLATION

RECOMMENDATIONS

This installation guide provides general guidelines for the installation of MAC Metal Architectural's non-recessed screw Harrywood PLUS profile. 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.

HARRYWOOD PLUS PROFILE

Harrywood PLUS is available in 6.0625-inch (154 mm) x 3/8-inch (9.5 mm) x 144-inch (3,658 mm) sheets.
It features a large, flat, uncluttered surface which, when used in one of the colors from our WOOD Collection, offers a flawless contemporary finish.

HARRYWOOD PLUS - 6.0625-inch (154 mm) x 3/8-inch (9.5 mm) x 144-inch

3.1 PREPARATION

Before beginning the installation of the Harrywood PLUS profile, make sure that the surface you are covering meets all current industry standards. Always refer to your local building code.

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.

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.

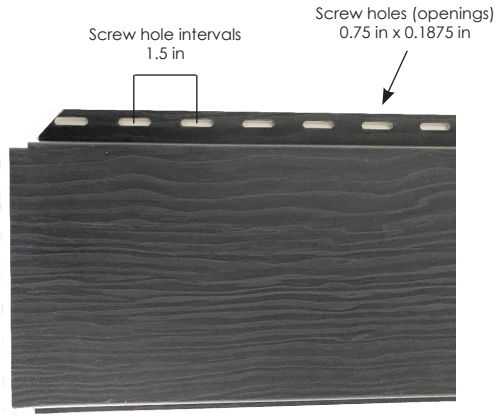
3.1 EXPANSION

At the cross joint of the panels, space should be provided for expansion or contraction of the material depending on the temperature at the time of installation. A space of 1/8 inch to 1/4 inch should be provided between two female panels. For a new wood building of more than one storey, a transition molding should be installed on each floor. For steel structures,a transition molding should be installed every 30 feet. For a very long wall, it is recommended to install a vertical transition molding every 30 feet.

PANEL FEATURES

A. 0.16 inch -wide screw rail along the entire length of the structure

B. 3/4 inch holes for screws, with 2.36 inches in between each hole (center to center)



4. INSTALLATION

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. Before you start installing the coverings, make sure your walls are perfectly square.

Harrywood PLUS profiles can be installed horizontally, vertically or diagonally.

4.1 STARTER STRIP

Using alaser-guided level, a chalk tracer, or a standard level, trace a reference line as a guide to ensure the starter strip is in place.

Now fasten the starter strip, #M10SHWP, 3 inches above the area where you will start your wall. Use either MAC anti-corrosion wood screws or MAC anti-corrosion self-drilling screws (1 1/8-inch or 2 1/2-inch) as needed. Secure it with the first screw. When you are level, screw it in place.

**Make sure the starter strip is level, as it will serve as a guide for the rest of the installation.

4.2 SCREWS

Tighten the screws with moderate pressure on the metal to allow it to expand. They should not exert upward or downward pressure to avoid distorting the siding and/or opening the joint.

*Screws should be installed in the perforated space already provided every 16 inches to 24 inches (center to center) to allow for expansion if necessary. Use MAC anti-corrosion wood screws or MAC anti-corrosion self-drilling screws (1 1/8-inch or 2 1/2-inch), depending on the type of furring or surface to be screwed.

Screws should screwed in until they have moderate contact with the clip portion of the profile so that they do not interfere with the expansion of the metal. Screws should not exert upward or downward pressure to avoid rounding the profile or opening the panels in the joints. A methodical check of the work should be done every 3 or 4 panels installed at height to detect possible anomalies.

Remove the protective film from the cladding before installation to ensure a proper visual inspection of the installation quality and to make appropriate corrections as the installation progresses.

In cases where the furring is not aligned, we recommend leaving a gap between the wall or furring and the steel siding when the screw is fastened to it in order to avoid creating too much tension on the product, which could lead to warping.

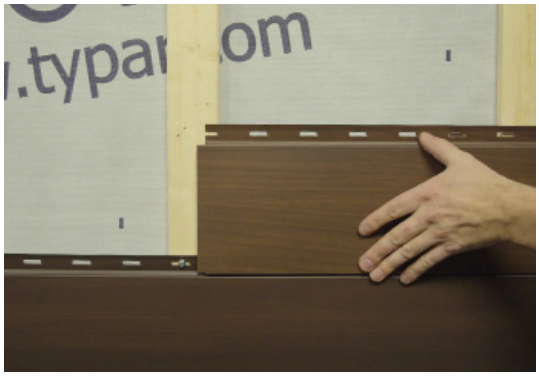
4.3 THE CUTS

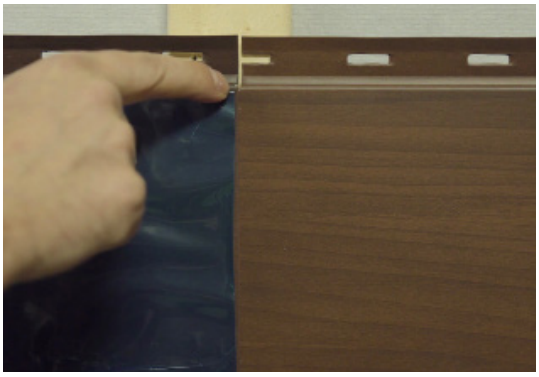
If you need to cut the panels, use the Harrywood PLUS cutter designed specifically for the Harrywood PLUS profile as recommended by MAC Architectural Metal.

* For more information on other recommended cutting methods, such as the use of a rotary saw, please refer to the cutting sheet available on our website where you will find information about the details to take into account when carrying out your projects.

4.4 THE JOINTS

Only factory cuts should be used to make the wall joints. The field joints should only be used in wall moldings.





5. INSIDE CORNER

5.1 THE QJ MOLDING

Proceed with the installation of the siding on one of the walls and attach the QJ Inside Corner molding, #M22C. Continue with the installation of the siding, taking care to leave a 1/8-inch gap for expansion.

On the other wall, make sure to slide the panels over the end of the QJ Inside Corner molding.

6. OUTSIDE CORNER

The Outside Corner molding, #M20C, is installed in two steps:

6.1 STEP 1. THE FASTENING MOLDING

After installing the panels on the two walls so that they form a corner, secure the fastening molding in place with screws.

6.2 STEP 2. THE FINISHING MOLDING

Apply random drops of sealant (1-inch wide x 1/4-inch higth), fillet of sealant, to the inside of the finishing molding inside the finishing molding before clamping it in place.

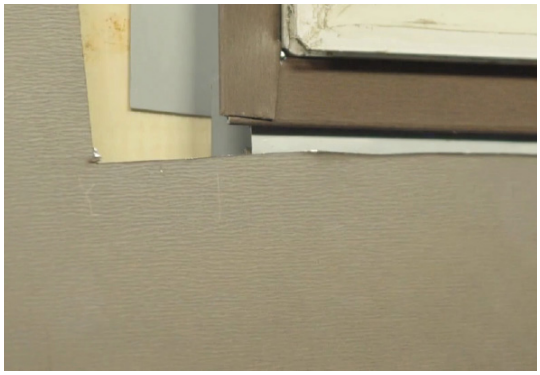
*If you do not have a support, you will have to fasten the corner with a screw. Trim and bend the bottom of the finishing molding to create a mounting surface.

7. WINDOW FRAMING

7.1 ADJUSTMENT

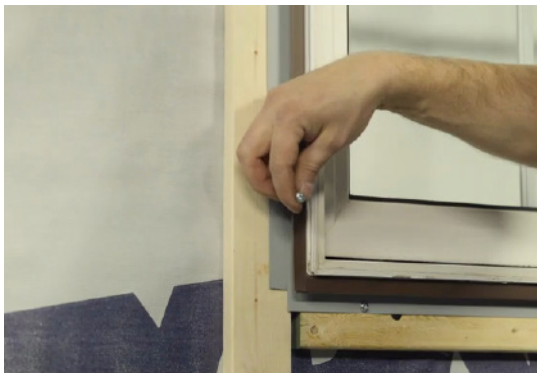
Measure and adjust the plank appropriately before attaching it.

If the panels do not sit flush with the height of the wall, cut it an extra 1/2 inch long so that you can fold it at a 45-degree angle. Then, set the extra piece backwards to add support, and fix the folded sheet onto the extra piece.



7.2 STEP 2. SOFFIT J-TRIM INSTALLATION

If the wall that you are covering has a window, start by installing a J-Trim molding, #M01C, around the three sides of the window. Then, install a drip flashing over the top of the window frame.



7.3 THE SIDES

Continue with the installation of the panels on each side of the window, taking care to install the different shades in a random order (identified by a sequence of numbers from 1 to 6 on the back of the panels).

7.4 THE TOP OF THE WINDOW

We recommend installing a drip flashing before installing the first panel at the top of the window.

In cases where the panel does not reach the full height, cut the panel an extra 1/2-inch long so that you can fold it at a 45-degree angle. Then, attach the cut remnant upside down to provide additional support. Finally, secure the folded sheet onto the cut remnant.

7.4 TOP OF THE WINDOW

8. END OF A WALL

8.1 THE ADJUSTMENTS

Measure and adjust the last panel with electric shears before fastening it in place in the J-Trim #M01C.

In the event that the panel does not reach its full height of the wall, attach the cut panel in the J-Trim #M01C, to provide more support for the cut panel.

8.2 J-TRIM FOR SOFFIT

Next, install the J-Trim Soffit Molding, #M01C, at the top of the wall.

9. PREPARATION

Before taking the first step, make sure that the surface to be covered with the Harrywood PLUS profile meets all industry standards in your area.

9.1 INSTALLATION

PARALLEL-TO-WALL INSTALLATION

Before starting the installation of the soffits, it is recommended, if needed, to install furring to allow the soffit panels to be screwed in place. Furrings installed parallel to the wall will allow this installation to be carried out.

In the case of a soffit installation parallel to the wall, furring must be installed at 16-inch center / cennter, starting with the installation of the first furring from the wall.

*Always ensure that the furring is level.

PERPENDICULAR TO-WALL INSTALLATION

In the case of soffits installed perpendicular to the wall, it is recommended, if needed, install furring every 16-inches (center to center) to provide adequate support for the panels and to avoid fixing problems due to lack of support.

9.2. INSTALLATION OF THE J-TRIM

Now apply the J-Trim, overlapping the last panel of the wall and taking care to affix it to the furring closest to the wall so that the soffit panels can be inserted into it.The panels will be inserted into this J-Trim and then fastened to the furring for both installation methods.

9.3 THE CUTS

For both types of installation, measure and cut the pieces using the MAC cutter designed specifically for the Harrywood PLUS profile, as recommended by MAC Metal Architectural. It is recommended to support the soffit panels at least every 16 inches (center to center) for installations perpendicular to the wall.

9.4 THE JOINTS

When installing the panels parallel to the wall, the ventilation holes of the soffit panels must be folded down at the ends to allow a good fit on the 3/8-inch thick junction block.

In order to create more discrete joints and a continuity effect with the panels, when installing parallel to the wall we recommend fastening a 3/8-inch think engineered wood block to the furring where the joints meet. The block will then act as a base upon which to join the two panels and will allow the ends of the panels to be screwed onto it.

For non-ventilated joints, do not shim.

9.5 THE FINISH

Once all the panels are installed, the finishing or crowning of the fascia can be done with a custom-bent steel strip. MAC Metal Architectural recommends that installers make the custom molding by double tapping at both ends of the molding. This action will stiffen the molding and help prevent it from warping. as when installing panels, not to overtighten the molding in place since this could cause indentation and deformation of the molding.

9.6 THE EXPANSION

At the transverse joint of the panels, remember to leave space for the expansion of the material depending on the temperature during installation. Leave a space of 1/8-inch between two female panels and 1/8-inch for moldings as well.

9.7 WINDSTORM RATED ASSEMBLY

The Harrywood Plus profile can be installed as per ZHLA 63 wall assembly design in the High Velocity Wind Zone in Florida. This product has been tested under TAS 201 / TAS 202 / TAS 203 / ASTM E1886 / ASTM E1996 with design pressure +/- 75 psf and large missile impact – Level D resistance. The wall assembly must comply with the one presented in ZHLA 63 listing to ensure product performance. Please follow other installation best practice shown in this installation guide for siding product installation basis.

METAL SIDING SUPPORT WALL COMPOSITION

When installing Harrywood Plus panels on a home or building to comply with tested Windstorm rated assembly ZHLA.63 architectural wall design, home or building exterior wall composition to be designed and built as follow :

With the home or building wood frame studs spaced at 16 in O.C., apply :

1. Plywood sheathing 5/8-inch (15.9 mm); 2-1/2-inch by 0.099 in. nails spaced at 8-inch (203 mm) along sheet edges and at 8 -inch (203 mm) in field of panel.

2. SOPRASEAL STICK 1100T flashing membrane 12 in. high at sill of the wall assembly, (or equivalent flashing membrane).

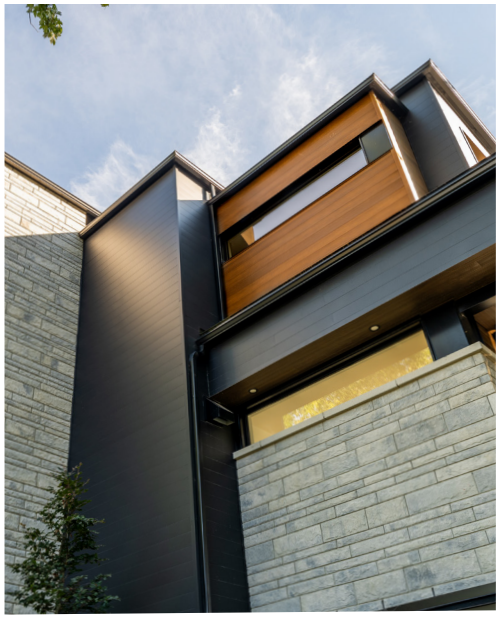
3. SOPRASEAL VP PRIMER applied on 5/8 -inch plywood and flashing membrane before the installation of SOPRASEAL VP self-adhesive membrane, composed of resins and fast evaporating solvents (or equivalent primer).

4. SOPRASEAL VP self-adhesive vapor permeable and air barrier membrane installed on 5/8-inch plywood. The self-adhesive under face is covered with a silicone release film. (or equivalent VP and air barrier membrane)

5. 1-inch by 3-inch (19 mm x 64 mm) vertical furring strips spaced 16-inch (406 mm) O.C. and secured with a 2-1/2-inch by 0.099-inch nail at each wood stud.

6. Harrywood Plus metal cladding architectural wall system; starting moulding, top moulding, and lateral moulding screwed with #8-1.00-inch at 16-inch (406 mm) O.C. and #8-1.00-inch at 16-inch (406 mm) on every panel intersection. *

   *Harrywood Plus metal cladding installation remains the same as shown in this guide.



For more information on the installation of the Harrywood PLUS+ profile, visit the PRO section of our website, MACmetalarchitectural.com, or our Youtube channel.

You'll find a bank of technical information abiout the profile, including a series of installation videos, molding booklets, and technical drawings.

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