



**ROOFING**

**SUPPLY**

INFORMATION &  
INSTALLATION MANUAL

**MRS-FF100**

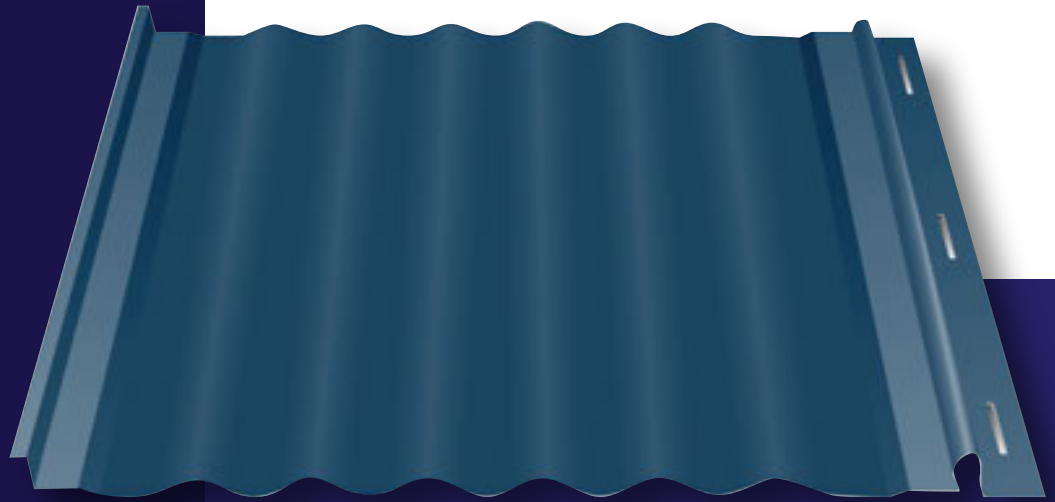
Don't just dream it, build it!

**METAL ROOFING SUPPLY**

4061 Highway 157 // Steprock, AR 72081

501.728.2122 // [metalroofingsupply.org](http://metalroofingsupply.org)

# INTRODUCING MRS-FF100



*MRS FF100 Panel Type A (Striations)*

Metal Roofing Supply's 16" wide MRS-FF100 panel comes in a one inch tall snap-lock seam. The MRS-FF100 offers a sleek, contemporary profile that is ideal for both residential and commercial applications. With its own formed nail strip, MRS-FF100 requires no clips; simply attach the panel to the roof deck with pancake head fasteners. MRS-FF100 will be available for jobsite forming, saving your time picking up the product.

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**NO CLIPS NEEDED!**

## INTRODUCTION

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- All applications and detailed drawings in this guide are proven methods, but may not be applicable to all building designs. It is the responsibility of the designer, roofing contractor and installer to ensure that the following details are adapted to meet the building requirements.
- It is the responsibility of the buyer or installer/contractor to determine the lengths and quantity of materials needed. Field measurements are required prior to ordering material. Quantity of the metal delivered to the job site is based on customer's orders. ***Metal Roofing Supply is not responsible for customer error.***
- Tin snips, a nibbler-type electric tool, or a band saw can be used for all cutting. *Circular saws will VOID paint warranty due to excessive heat and metal filings on surfaces.*
- A moisture barrier is recommended. ***When working with pressure-treated wood, a separation barrier must be used to prevent contact.***
- Avoid wet mortar, concrete and stucco as these cementitious materials are alkaline.
- Sealants for flashing shall be non-drying, non-toxic and non-curing. Butyl tapes and sealants are recommended. Sealant joints should be hidden from the sun and weather exposure to extend life. Sealants should be field applied on clean, dry surfaces without skips or voids in the bead.
- ***Metal Roofing Supply will not be held responsible for any and all claims resulting from a lack of water-tightness as a result of improper installation.***

**IT IS VERY IMPORTANT FOR THE ROOFING CONTRACTOR TO READ AND UNDERSTAND ALL THE POINTS IN THIS MANUAL**

## GENERAL INFORMATION

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**Pre-painted steel roofs can offer years of trouble-free coverage, but there are a few things you must be knowledgeable of.**

- Metal roofs are slippery and dangerous to walk on when wet; proper safety precautions should be taken when getting on a wet roof.
- Most dirt can be washed away with rain, but other greasy substances such as exhaust debris will require washing. If needed, a mild detergent may be used. **You are required to wash the roof twice per year.** Before cleaning commences, be sure to look over the area that is to be washed and ensure there will be no harm to the roof.
- Any leaves, needles, or tree limbs falling onto the roof should be removed. These can scratch the roof as well as retain moisture, reducing the effectiveness of the metal's coatings.
- **Using any touch-up paint products will VOID the paint warranty. Touch-up paints will not weather the same as the factory applied painted steel.**
- Use snow guards to allow snow to melt slowly. Snow accumulation is common on metal roofs. Snow creates a strong bond with metal roof surfaces. When the roof is warmed up either by heat escaping or from the sun, the bond weakens, forcing all snow to be released at once. This can cause damage as well as being quite dangerous.

## SAFETY

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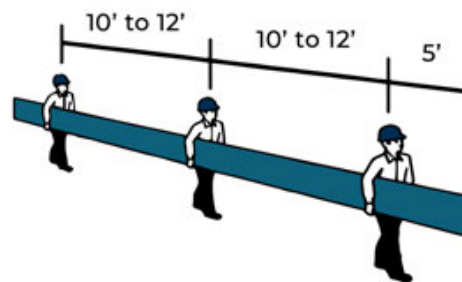
- Follow all OSHA regulations when on a roof.
- Use gloves when handling metal panels and trim, as edges are very sharp.
- Be sure to wear the correct gear and equipment. Safety glasses, gloves, and hard hats are a must for installers. Safety harnesses specifically designed for roofing must be installed and used.
- Soft soled shoes are recommended to prevent slippage.
- Ladders and scaffolding must always be properly secured.
- Never walk on an unsecured roof panel.
- Never install a roof in wet or windy conditions. Wet panels should be wiped dry to prevent slippage. In windy conditions, workers should never install panels as intense winds during installation can lead to serious injuries.

## OIL CANNING

*(The amount of waviness found in the flat area of metal panels)*

### OIL CANNING IS AN INHERENT CHARACTERISTIC OF COLD FORMED METAL PRODUCTS AND IS NOT A CAUSE FOR REJECTION

- Roof deck should be flat, with no nails or protrusions. Seams of plywood or OSB deck should be flush.
- Panels should use proper fasteners and should not be overdriven to cause distortions or to inhibit movement.
- Panels will snap together without much force.
- Carry panels on their side when transporting.



← **DO THIS!**

**DON'T  
DO THIS** →



**METAL ROOFING SUPPLY IS NOT RESPONSIBLE FOR AESTHETICS OF PRODUCT AFTER INSTALLATION.**

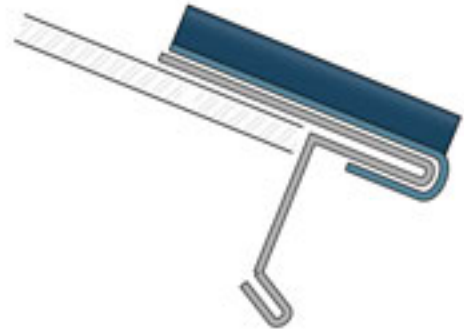
# INSTALLATION INSTRUCTIONS

MRS-FF100 Snap Lock panels are easily installed by overlapping the lap rib over the purlin rib. Panels should snap in place with no more than a push from your hand or a slight tap from a rubber mallet.

For aesthetics, the installer should check the roof deck for squareness before installing the panels.

Install T-drip before installing panels.

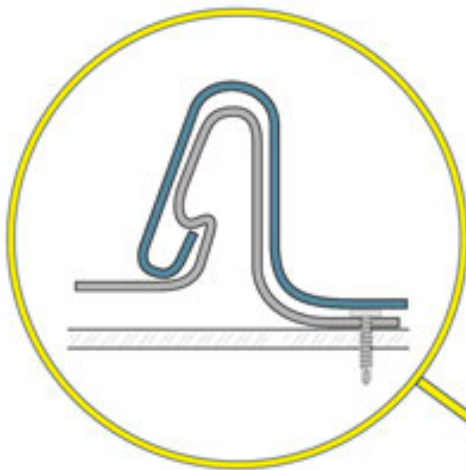
Measure from the ridge base to the bottom of the T-Drip, adding an inch for the top to tuck under the ridge base. Add an additional inch for the bottom hem over the T-Drip.



*Installation of panel over T-Drip*

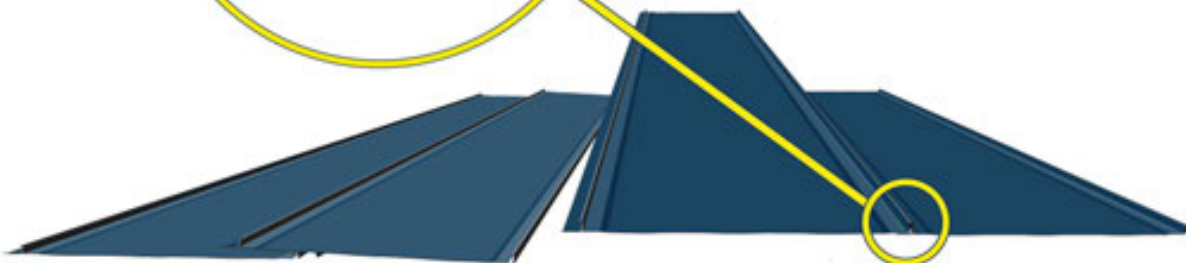
Prior to installing, determine the layout of your roof. For aesthetics, the ribs should line up at the hips and valleys should line up on opposing sides. For symmetry, decide if you want equal panels from rake edge to rake edge.

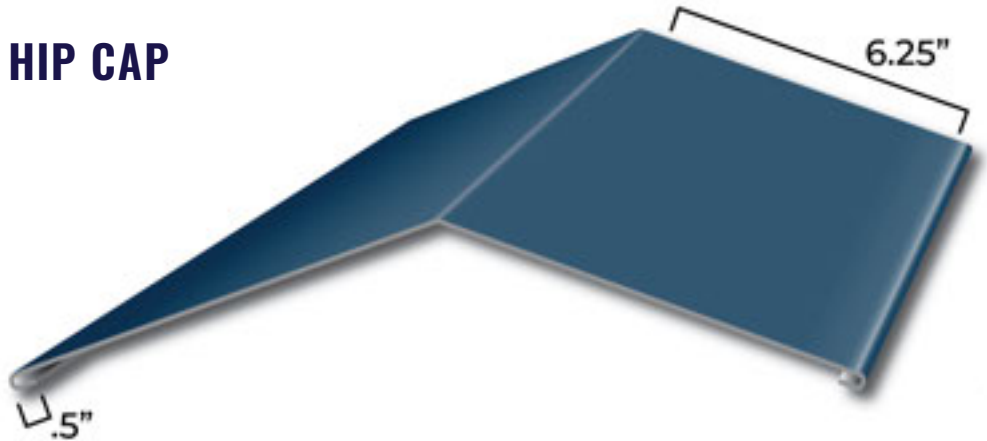
After notching 1" for ridge base and notching and hemming the bottom for eve, slide panel into position. Once panel is in position, fasten in place with a pancake head wood grip screw. Take care that fasteners are flush but not overdriven. Screw spacing should be **ten inches** on center of every other hole on MRS-FF100.



Position the next panel before snapping down. Snap from top to bottom with hand, or lightly tap with a rubber mallet.

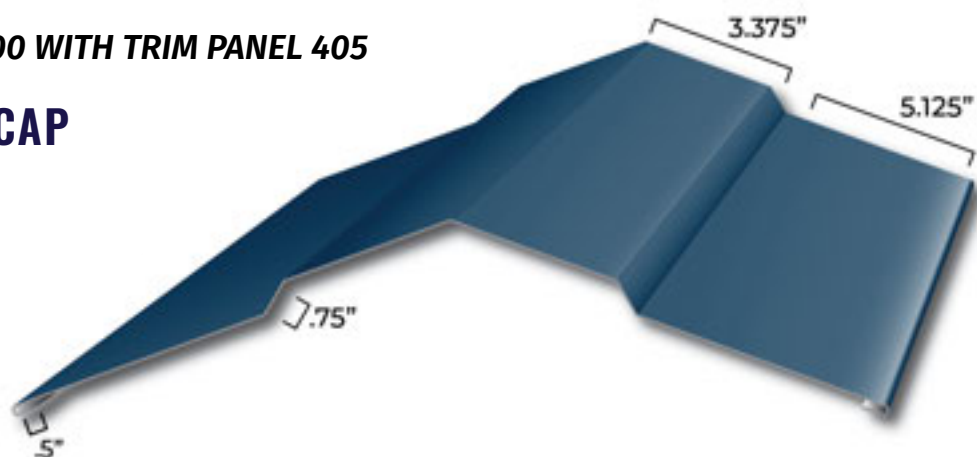
***Metal Roofing Supply does not have standard flashings for skylights, vents, pipes, chimneys or other protrusions. Metal Roofing Supply will custom bend any flashing for unique situations.***

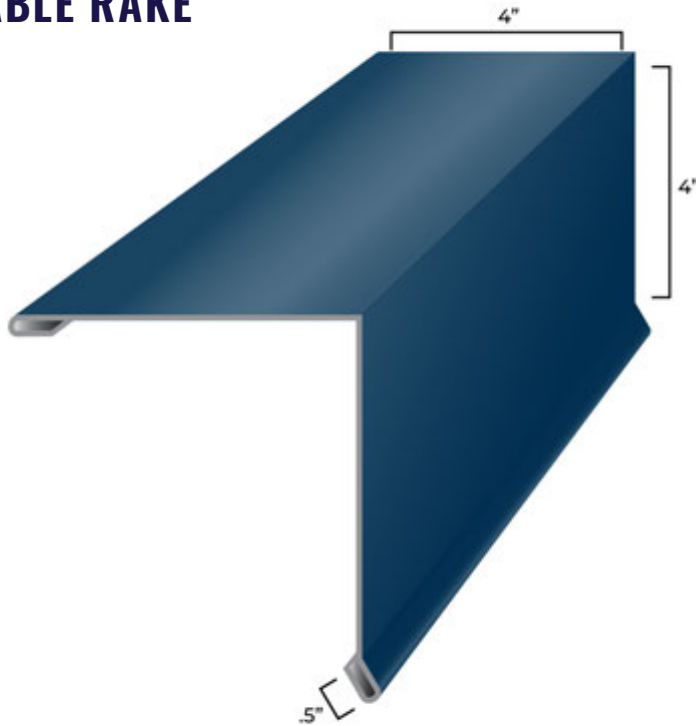


**MRS-FF100 WITH TRIM PANEL 400****HIP CAP**

Place cap on ridge of roof and center it. Mark both sides of cap on panel ridges. To ensure that the cap is straight, use a chalk line to mark the entire side of the roof. Cut Z-bar (MRS-440, see page 14) into sections to be placed between the ribs on the roof panels. Apply butyl tape or Geocel 2300 to the bottom side of the Z-bar with the color side facing down. Using the marks made on the ribs, align the Z-bar and secure to the panel with screws.

Once you have installed all of the Z-bar, hook one side of the cap onto the Z-bar and pull over, hooking onto the other side. Pre-drill the edge of the cap and Z-bar, and secure with rivets.

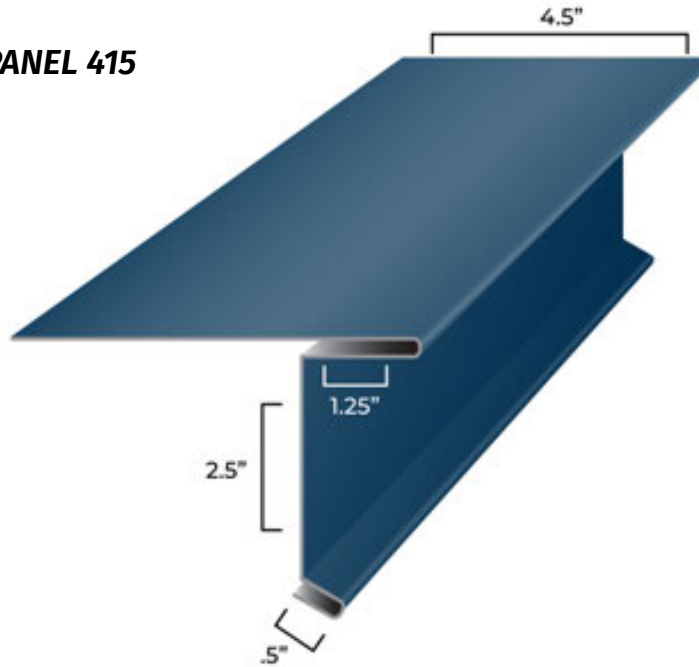
**MRS-FF100 WITH TRIM PANEL 405****RIDGE CAP**

**MRS-FF100 WITH TRIM PANEL 410****GABLE RAKE**

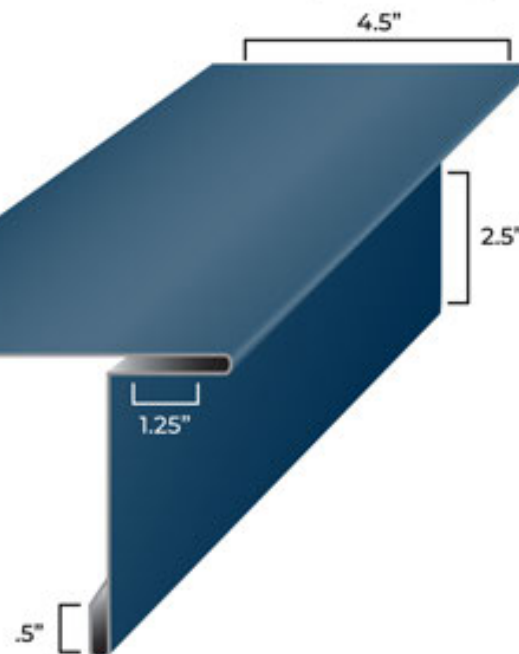
Place the gable rake on the edge of the roof and mark the lap edge on the panel. Apply butyl tape or Geocel 2300 to the bottom of Z-bar (MRS-440, see page 14), color side down. Align the Z-bar to the mark on the panel and secure with screws. Install a rake cleat (MRS-451, see page 14) to the face of the rake board color side down, securing cleat with pan head screws.

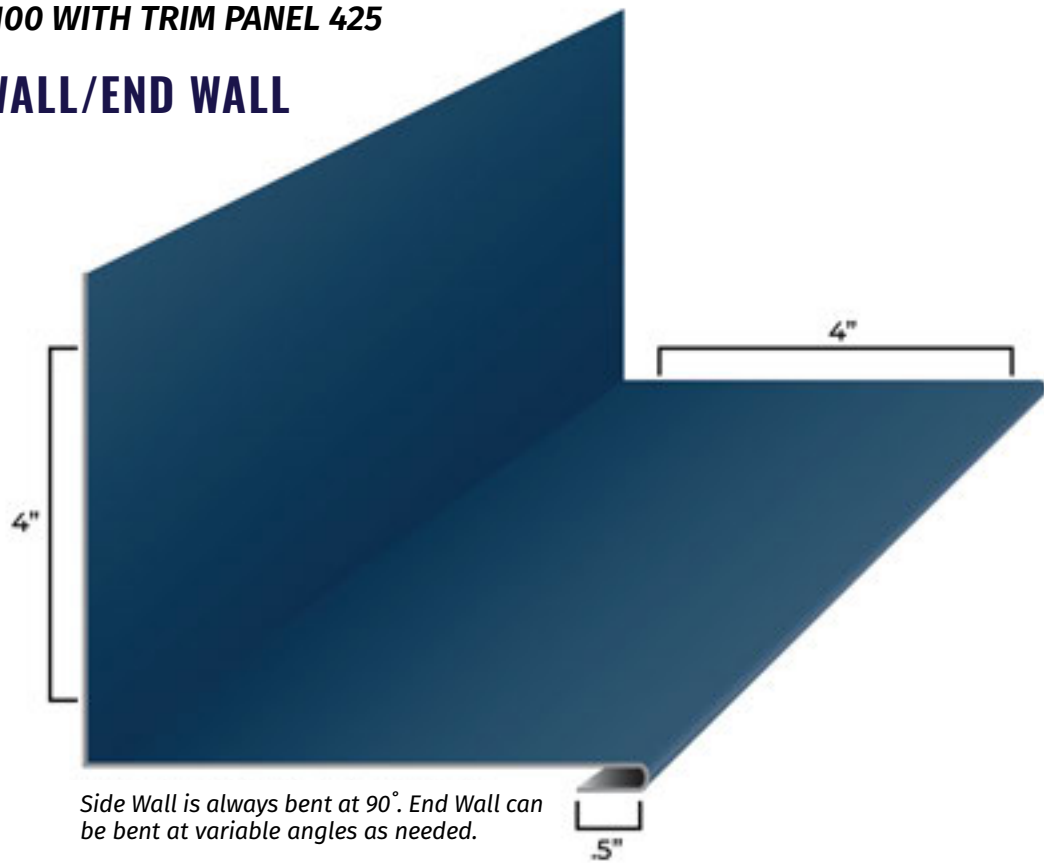
Once you have installed the Z-bar and rake cleat, hook the gable rake to the cleat and slip over the Z-bar. Pre-drill the edge of the gable rake and Z-bar and secure with rivets (most stores have displays for this).



**MRS-FF100 WITH TRIM PANEL 415****T-DRIP**

Before installing FF100 panels, install eave cleat (MRS 450, see page 14) for T-Drip or T-Drip with no cleat over synthetic underlayment or moisture barrier for gutter. Use pancake head screws to secure. All T-Drips are at a 90° angle unless specified otherwise. This fits well at up to 4:12 pitch.

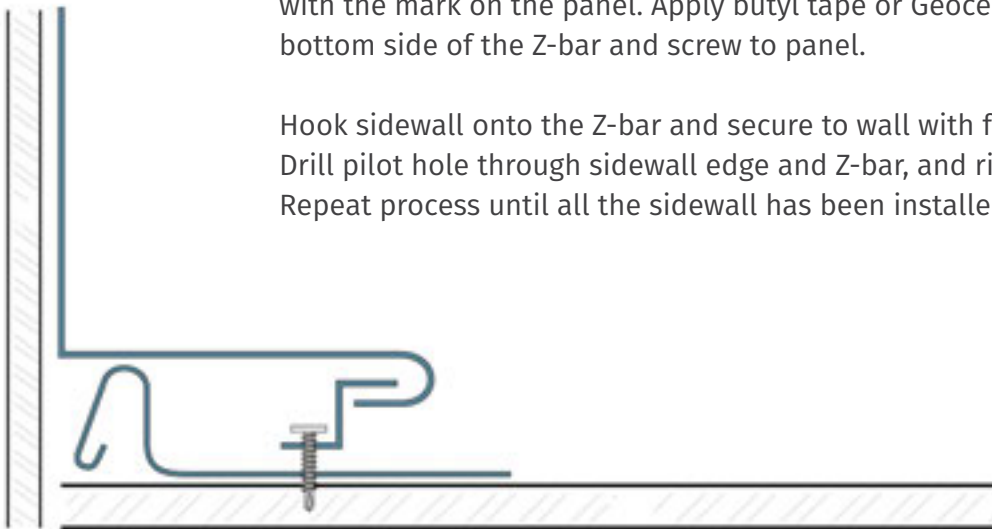
**MRS-FF100 WITH TRIM PANEL 420****T-DRIP FOR GUTTER**

**MRS-FF100 WITH TRIM PANEL 425****SIDE WALL/END WALL**

*Side Wall is always bent at 90°. End Wall can be bent at variable angles as needed.*

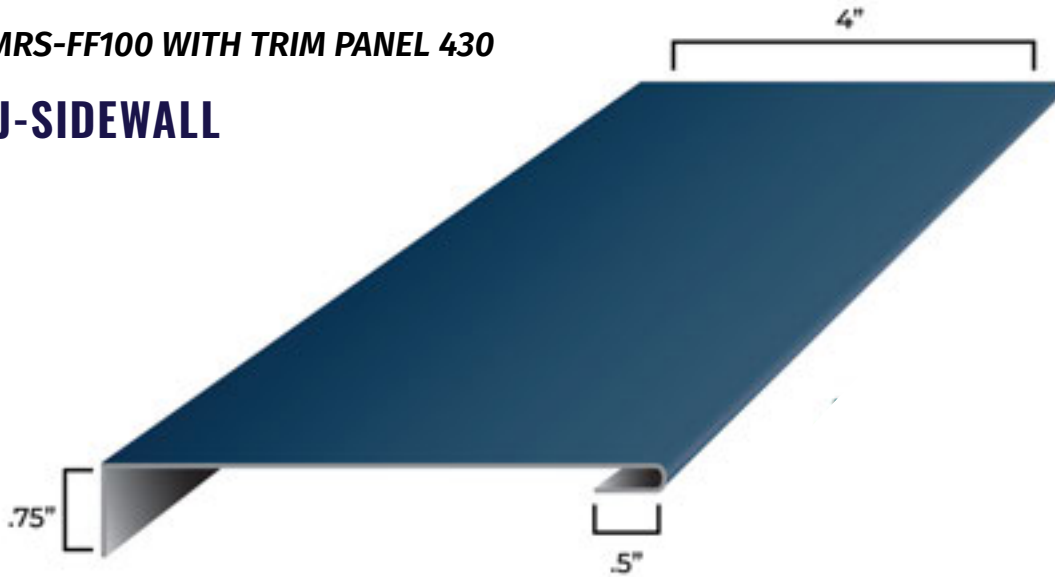
Place sidewall trim against the wall with flashing edge overlapping panel. Mark the outer lap edge on the panel. Remove sidewall and install Z-bar (MRS 440, see page 14), color side down, aligning it with the mark on the panel. Apply butyl tape or Geocel 2300 on the bottom side of the Z-bar and screw to panel.

Hook sidewall onto the Z-bar and secure to wall with fasteners. Drill pilot hole through sidewall edge and Z-bar, and rivet together. Repeat process until all the sidewall has been installed.



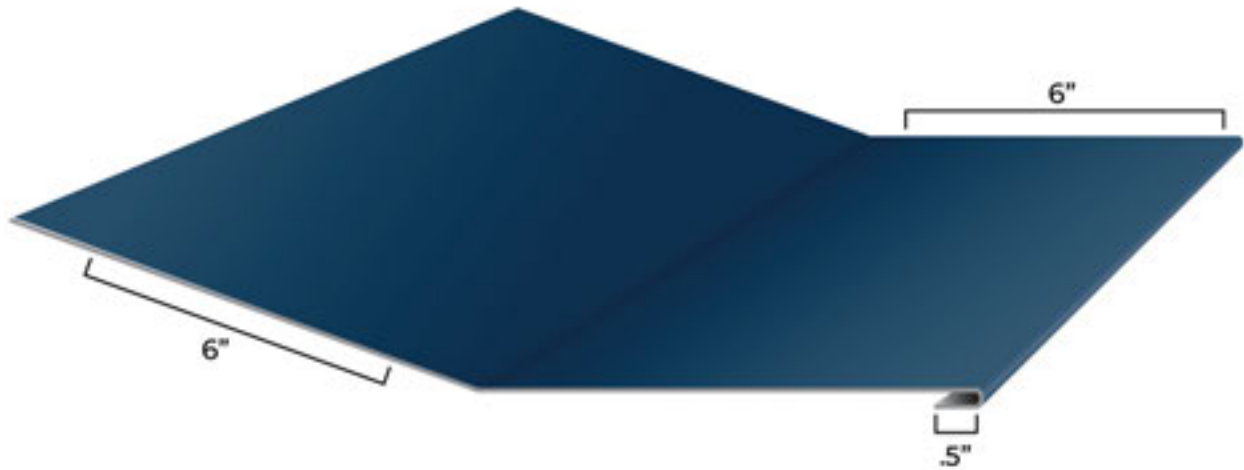
**MRS-FF100 WITH TRIM PANEL 430**

## **J-SIDEWALL**



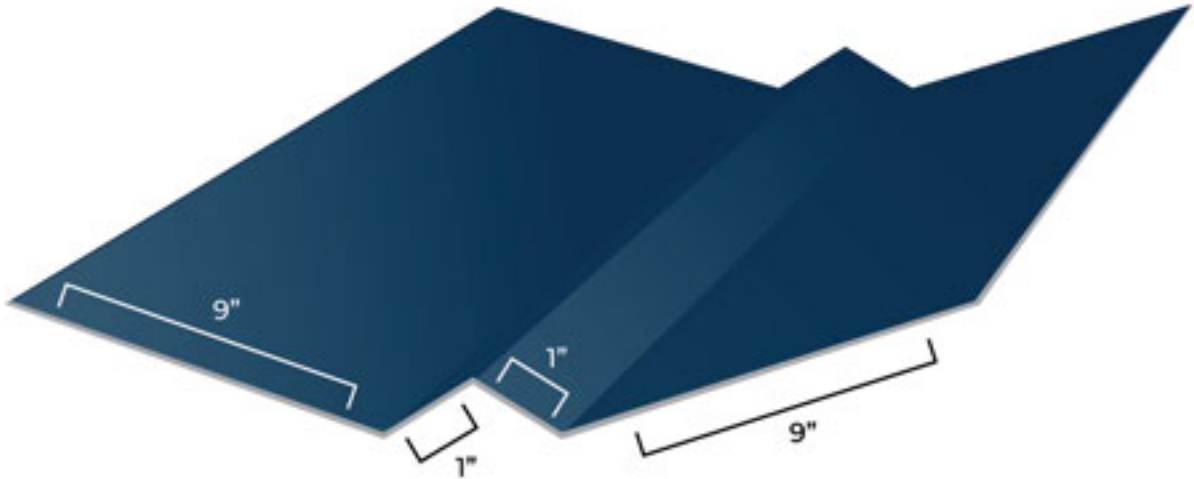
Place the .75" tab of the J-sidewall piece into the existing J-trim of the sidewall with flashing edge overlapping panel. Mark the outer lap edge on the panel. Remove sidewall and install Z-bar (MRS-440. see page 14), color side down, aligning it with the mark on the panel. Apply butyl tape or Geocel 2300 on the bottom side of the Z-bar and screw to panel.

Hook sidewall onto the Z-bar and secure to wall with fasteners. Drill pilot hole through sidewall edge and Z-bar, and rivet together. Repeat process until all the sidewall has been installed.

**MRS-FF100 WITH TRIM PANEL 435****TRANSITION**

To install transition trim, place the trim piece on the roof with the hemmed edge on top of the ribs of the panel. Mark the top of the ribs where the transition overlaps. Cut the Z-bar (MRS-440, see page 14) into sections to be placed between the ribs of the panel. Apply butyl tape or Geocel 2300 to bottom side of the Z-bar with the color side facing down, and secure with screws. Hook the sidewall onto the Z-bar, pre-drill holes and secure with rivets. Secure the upper side of the trim with pan head fasteners.

When installing a transition, a starter cleat (MRS-445, see page 14) should be installed. Install the starter cleat color side down. Apply butyl tape or Geocel 2300 and secure to transition with pan head screws. This cleat will provide a place to hook the upper panels for the roof.

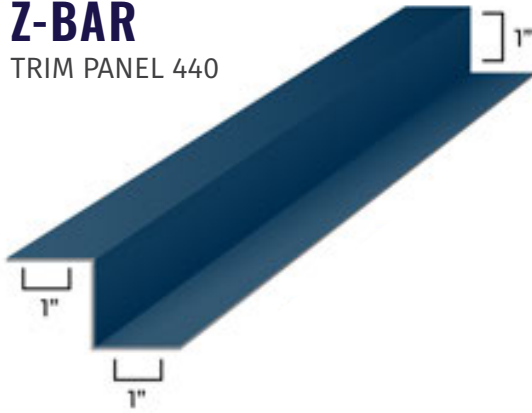
**MRS-FF100 WITH TRIM PANEL 445****VALLEY**

Valley flashing may be nailed to roof surface. Once the valley is installed, a starter cleat (MRS 445, see page 14) should be installed to attach the upper roofing panel. Starter cleat should be installed **four inches from the center** of the valley color side down. Apply butyl tape or Geocel 2300 to bottom side of the cleat and secure with pan head screws. This cleat will provide a place to hook the upper panels for the roof.

# ADDITIONAL TRIM PIECES

## Z-BAR

TRIM PANEL 440



Z-Bar is used to secure leading trim edge onto a panel, whether it be horizontal or vertical.

## STARTER CLEAT

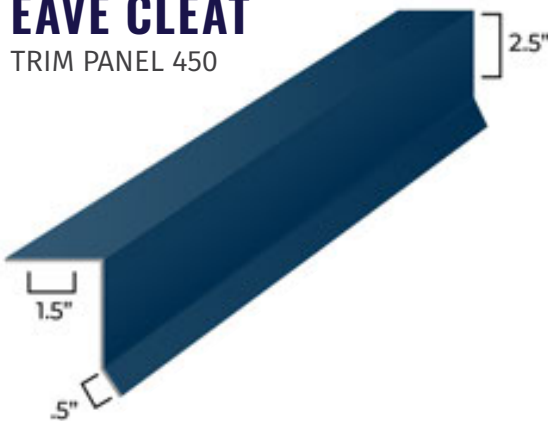
TRIM PANEL 445



Starter Cleat is used anywhere when starting a new run.

## EAVE CLEAT

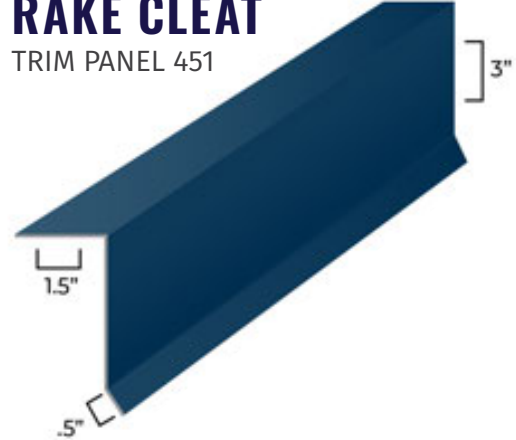
TRIM PANEL 450



Eave Cleat is used on T-Drip.

## RAKE CLEAT

TRIM PANEL 451



Rake Cleat is used on gable rake.

**All MRS-FF100 jobs using Z-bar are required to use Butyl Seal. Geocell 2300 can be used for other jobs.**