



MaxPanel Installation Guide



TABLE OF CONTENTS

GENERAL INFORMATION

Location Map And Contact Information 2

Warranty Information 3

MAXPANEL INFORMATION

Measuring the Roof / Tools Required 5

Storage, Handling, and Safety 6

Pre-Installation 7

Fastener Installation 8

MaxPanel Profile / Fastener Placements 9

Accessories 10

Flashing Locations 11

FLASHING PROFILES

Eave and Rakes Flashings 12

Ridge Cap Flashings 13

End Wall, Side Wall, and Lower Gambrel Flashings 14

Upper Gambrel and Residential Valley Flashing 15

FLASHING INSTALLATION DETAILS

Eave and Rake 16

OSC Rake and Ridge Cap 17

Vented Ridge and Hip Cap 18

Side Wall 19

End Wall 20

Lower and Upper Gambrel 21

Valley 22

LOCATION MAP & CONTACT INFORMATION



1. MURFREESBORO, TN
900 Cot Joe Fulghum Dr
Murfreesboro, TN 37129
615-494-1693

4. CONCORD, NH
28 Locke Road
Concord, NH 03301
603-892-5362

7. FREEPORT, FL
3296 State Highway 20 E
Freeport, FL 32439
850-835-2532

10. ATHENS, AL
17713 US-72
Athens, AL 35611
256-232-8080

2. TEXARKANA, TX
8000 Hampton Road
Texarkana, TX 75503
903-793-2067

5. CALHOUN, GA
180 N. Industrial Blvd NE
Calhoun, GA 30701
706-383-8554

8. WACO, TX
10231 S IH 35
Waco, TX 76706
254-230-4141

11. CHEROKEE, IA
5134 Highway 3
Cherokee, IA 51012
712-321-3777

3. HERMISTON, OR
915 E. Elm Avenue
Hermiston, OR 97838
541-289-6380

6. ARCADIA, FL
6192 Florida 72
Arcadia, FL 34266
863-491-9400

9. DAYTON, OH
109 Quinter Farm Rd
Union, OH 45322
937-741-8010

12. KISSIMMEE, FL
800 E Donegan Ave
Kissimmee, FL 34744
407-935-9714

LIMITED LIFETIME SMP PAINT WARRANTY

Warranty coverage for WeatherXL™ painted panels on AZ50 alum-zinc coated steel or HDG steel (G90/G60) substrate including but not limited to:

MaxPanel, PBR Panel, PBU Panel, MaxLoc100, MaxSeam175, MaxSnap150, MaxMech150, MaxMech200, Board and Batten Panel, and MaxStrong

1. MetalMax warrants that the color-coated finish applied to its steel roofing and siding panels will not crack, check, peel or lose adhesion. *This does NOT include minute fracturing, which may occur in proper fabrication of the building parts. Failure due to substrate corrosion is excluded. This warranty does not apply to the reverse side finish of the product.*
2. MetalMax also warrants that the color-coated finish applied to its steel roofing and siding panels will not, within a period of thirty years after installation or a period of thirty years and one month after the date of shipment (whichever comes first), chalk or lose color according to the following:
 - a) Chalks in excess of ASTM D-4214 Method A number six (6) rating on horizontally installed (roofing) panels and number eight (8) rating on vertically installed (Side Wall) panels, when properly maintained as described herein (*Except for Brite Red that chalks in excess of a five (5) rating on horizontally installed (roofing) panels and a number six (6) rating on vertically installed (Side Wall) panels*), and
 - b) Changes color more than seven (7.0) Hunter delta-E units on horizontally installed (roofing) panels and five (5.0) Hunter delta-E units on vertically installed (Side Wall) panels as determined by ASTM method D-2244 (*Except for Brite Red with color changes in excess of a ten (10) Hunter delta-E units on horizontally installed (roofing) panels and a number eight (8) Hunter delta-E units on vertically installed (Side Wall) panels*). Color change shall be measured on an exposed painted surface that has been cleaned of surface soils and chalk, and the corresponding values measured on the original or unexposed painted surface. Color changes may not be uniform on surfaces that are not equally exposed to the sun and elements and MetalMax does not warrant that color changes will be uniform.
3. **DISCLAIMER OF WARRANTY:** THE EXPRESS WARRANTY STATED HEREIN IS THE EXCLUSIVE WARRANTY APPLICABLE TO METALMAX PRIME PAINTED MATERIAL ONLY, ROOFING AND SIDING PANELS. METALMAX MAKES NO WARRANTIES OR GUARANTEES, EITHER EXPRESSED OR IMPLIED, BEYOND THE FACE HEREOF INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. METALMAX SHALL HAVE NO OTHER LIABILITY WITH RESPECT THERETO. This warranty will apply to those panels refinished or replaced but only for the period of time left on the original warranty. No employee or representative of MetalMax is authorized to change this limited warranty in any way or grant any other warranty regarding the product.
4. **LIMITATION OF LIABILITY:** THE EXCLUSIVE REMEDY FOR ANY AND ALL CLAIMS ARISING FROM THIS LIMITED WARRANTY SHALL BE LIMITED TO METALMAX REFINISHING OR REPLACING DEFECTIVE PANELS OR REFUNDING THE PURCHASE PRICE OF SUCH PANELS AS METALMAX SHALL ELECT. METALMAX SHALL NOT BE LIABLE FOR ANY LOSSES, DAMAGES, OR EXPENSES, WHETHER DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. IF THE WEATHERXL™ SILICONIZED POLYESTER COATINGS FAIL TO COMPLY WITH OUR LIMITED WARRANTY, WE WILL PAY FOR THE LABOR AND THE MATERIALS REASONABLY NECESSARY TO REPAINT, REPAIR OR REPLACE, AT OUR OPTION, THE BUILDING PART SHOWING THE FAILURE. METALMAX'S TOTAL LIABILITY IS EXPRESSLY LIMITED TO THE PURCHASE PRICE OF THE METALMAX STEEL ROOFING AND SIDING PANELS.

LIMITED LIFETIME WARRANTY

5. Claims under this warranty must be made in writing to MetalMax at PO Box 331973, Murfreesboro, TN 37133 within 30 days after the discovery of the defect. The notice to MetalMax shall include adequate identification of the material involved, nature of the claimed defect, date of the installation, date of shipment and order number. Failure of the claimant to provide such information in the time provided shall be deemed as a waiver of the claimant's rights herein. MetalMax shall have an additional 30 days to inspect the MetalMax steel roofing and siding panels before any further action shall be taken.
6. MetalMax does not warrant or guarantee the interior or reversed side finish or prepainted materials used for interior application.
7. MetalMax does not warrant or guarantee claims arising from damage to panels due to exposure to salt and salt water, water spray, corrosive or harmful chemicals (whether solids, liquids or gases), airborne contaminants, hail or other agents of a similar nature. Warranty is not valid on a property located 1,500 or fewer feet from a salt water environment.
8. MetalMax does not warrant or guarantee claims arising from the following:
 - a) Damage or defects caused by acts of God, falling objects, external forces, explosion, fire, riots, civil commotion, acts of war, excessive radiation, or other similar or dissimilar occurrences beyond MetalMax's control.
 - b) Minor hairline cracking of the paint finish.
 - c) Defects or damages to the painted steel roofing and siding panels caused by handling, shipping, transit, processing, storage or installation; damage due to failure of the substrate.
 - d) Damage caused by moisture or other contamination prior to installation.
 - e) Steel shavings or minute iron particles from sawing sparks that come in contact with the painted surface.
 - f) Non-vertical panels that don't have an adequate degree of pitch so as not to allow any free standing or accumulation of standing water.
 - g) Stored or installed in a way that allows for contact with animals or animal waste.
 - h) Deterioration to the panels caused directly or indirectly by panel contact with fasteners. The selection of suitable fasteners rests solely with the buyer.
 - i) Weather uniformity under non-uniform conditions.
 - j) Unusual harmful fumes, chemically aggressive environment, foreign substances in the atmosphere, standing water or direct salt spray.
 - k) Damage due to chemically treated or wet lumber.
 - l) Where materials / items such as snow guards and solar panels are attached / adhered to the product.
9. The warranty applies to panels installed in the continental United States.
10. MetalMax extends this warranty solely to the owner, at time of installation, of the structure where the material is originally installed. In instances where the owner of any structure where the material is installed is a non-living entity, including but not limited to corporations or associations, the warranty contained in Item 1 above is limited to 40 years.
11. This warranty is not transferable and non-assignable after one year from purchase date.

MEASURING THE ROOF

1. Measure from Eave Fascia Board to peak of Ridge to determine panel length.
2. Measure length of eave and divide by panel coverage width to determine number of panels needed.
3. For panels that intersect a Valley, measure the longest panel length and the ridge length. Divide the ridge length by the panel coverage width to determine the number of panels needed. Divide the longest panel length by the number of panels. This will give you the length you need to deduct from each panel.
4. For panels that intersect at a Hip location use the same method as a valley but use the eave dimension versus the ridge.
5. For calculating flashings measure each individual area and divide by 10'. The standard flashing length is 10'-6". Measuring all the area and adding them together can result in being short pieces of flashing or having to piece small pieces together.
6. For calculating panel fasteners calculated 1 screw per every square foot. For flashing fasteners 10 screws per piece of flashing.

TOOLS REQUIRED

Standard Tools required for field installation:

- Screw Guns
- Magnetic Bits
- Metal Nibbler or Shear
- Tin Snips
- Tape Measure
- Hammer
- Chalk Line
- Drill with bits
- Pop Rivet Gun
- Safety Goggles
- Ear Plugs
- Gloves
- Fall Protection

STORAGE

- If Metal Is not going to be used immediately, store the material inside in a well-ventilated area.
- If storing the material inside is not an option, the material must be stored off of the ground with one end 4" to 8" higher than the other to allow for run-off.
- When storing outside, cover the material with a tarp to protect from the elements.

HANDLING

- When handling metal panels, special care should be taken to prevent scratching of the material.
- Always use clean gloves or hands to hand material to reduce the risk of transferring dirt and oils to the material.
- Panels should always be carried by the panel edge so the panel is vertical to the ground.
- Panels should never be carried horizontal as this can result in bending or buckling of the panel.

SAFETY

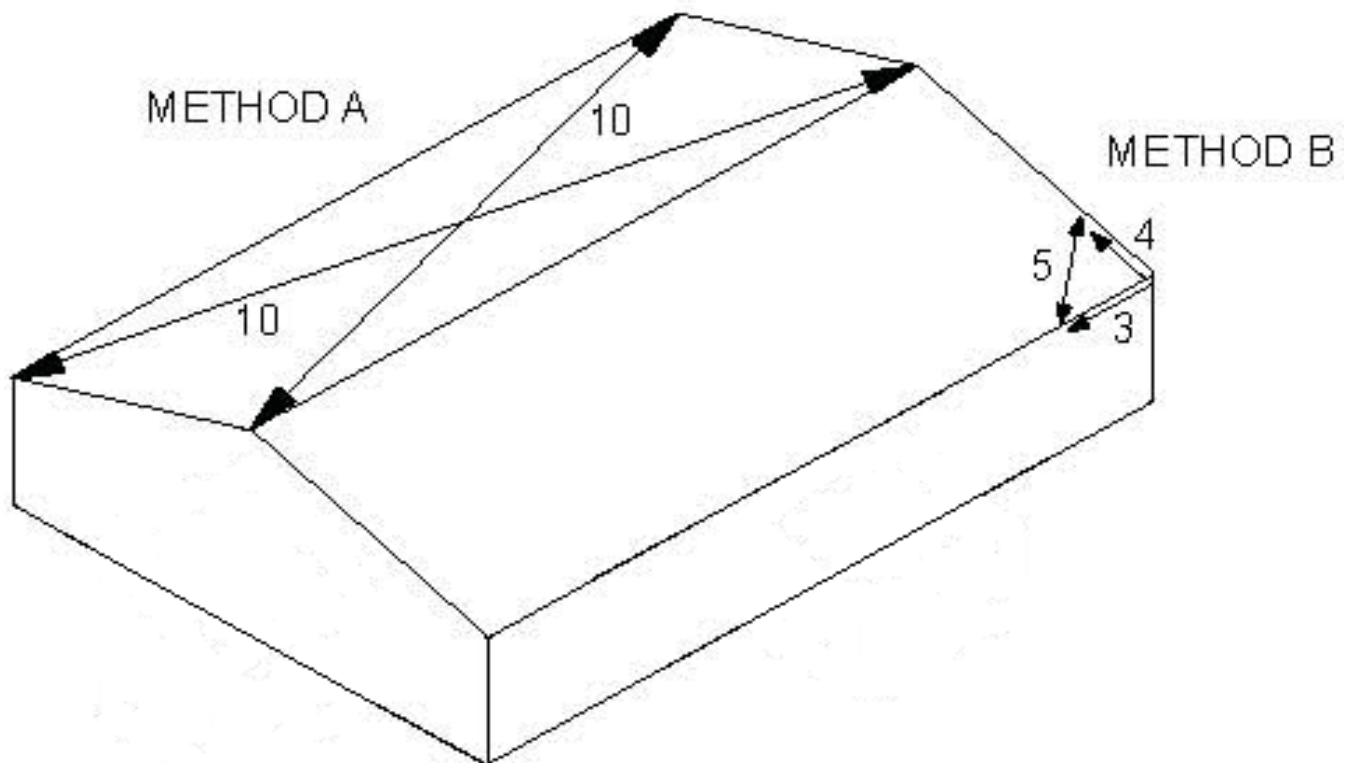
- Always wear gloves when working with metal panels to avoid cuts from sharp edges.
- When cutting or drilling metal panels, always wear safety glasses and sweep off any metal shavings to prevent eye injuries from flying metal fragments.
- Metal Panels can be slippery in dry weather conditions, so wear shoes with non-slip soles.
- Avoid working or walking on metal roofs during wet conditions as the panels will become extremely slippery.

PRE-INSTALLATION

Before beginning installation, the installer should check the roof deck for squareness. MetalMax recommends two different methods for verifying this:

METHOD A - Measure diagonally across one slope from similar points at the ridge and eave. If the roof area is square, then the measurements will be the same. Make adjustments as necessary to achieve a square area. Use a chalk line to mark the square line from Eave to Ridge.

METHOD B - Use the 3-4-5 triangle system. Measure along the eave to a multiple of 3, then measure along the gable end to a multiple of 4. The diagonal of these should be a multiple of 5. If the diagonal is not a multiple of 5 you will need to adjust your measuring points starting with the 4 leg until a square surface has been determined. Use a chalk line to mark the square line from Eave to Ridge.



INSTALLATION RECOMMENDATIONS

1. Select the proper screw gun for installing self drilling fasteners.
2. Set the magnet in the driving socket to the proper depth. Socket must bear securely on the hex washer face of the fastener.



3. Use depth sensing nosepiece on screw gun to allow proper seating of fastener. Do not overdrive. (See illustration)

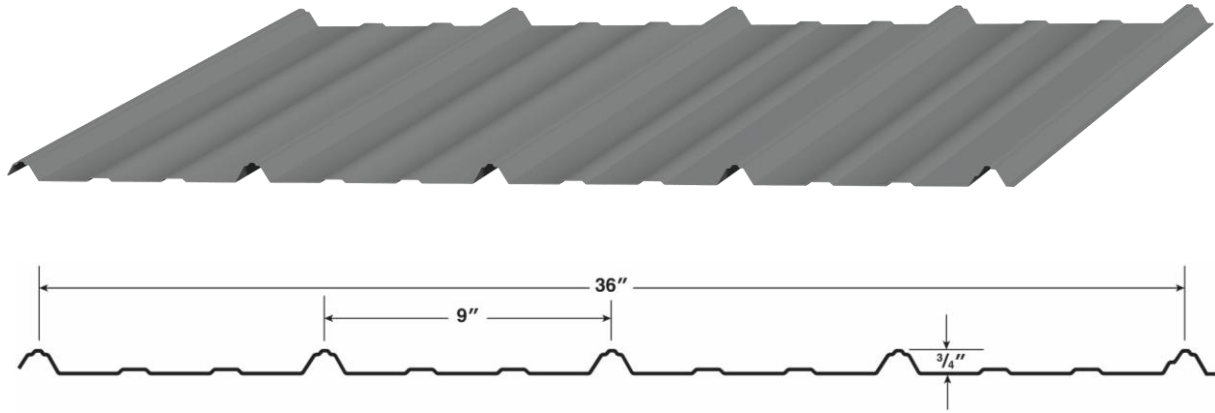
CORRECT	Sealing material slightly visible at edge of metal washer. Assembly is weather tight.	
UNDERDRIVEN	Sealing material no compressed, Assembly loose.	
OVERDRIVEN	Sealing material extruded beyond edge of washer. Washer deformed.	

4. Drive fastener perpendicular to surface.

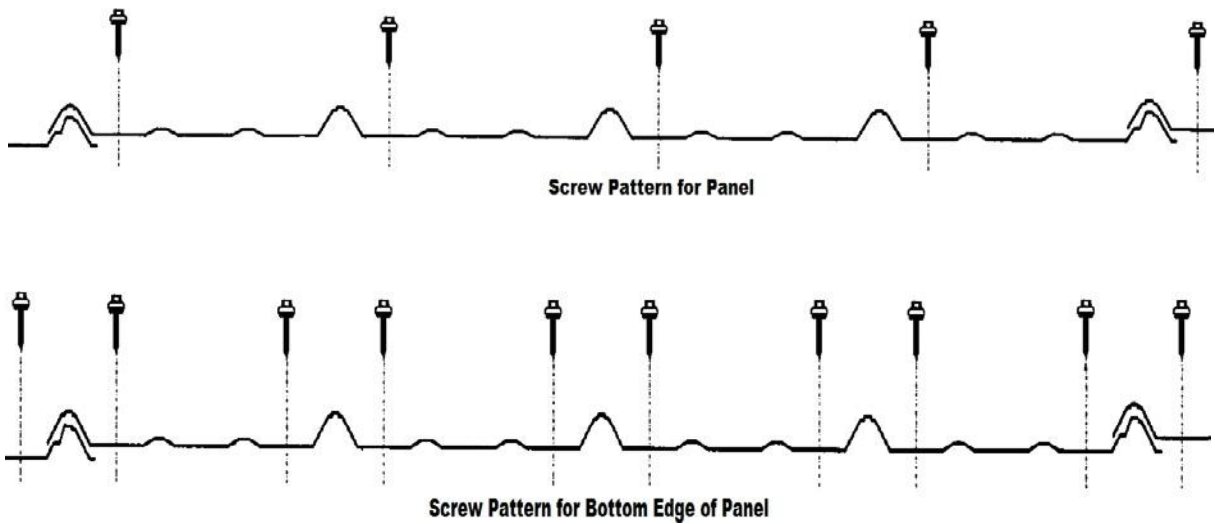
CORRECT	INCORRECT

5. Select extension cords with the correct wire size
6. Do not force the fasteners. Apply only enough end pressure to allow drill point to cut efficiently.

MAXPANEL PROFILE

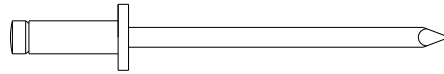


FASTENER PLACEMENTS

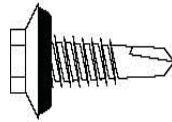


ACCESSORIES

1/8" STAINLESS STEEL POP RIVET



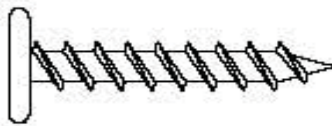
#1/4-14x7/8" STITCH SCREW



#10 WOODBINDER WOODGRIP SCREW - AVAILABLE IN 1", 1-1/2" and 2"



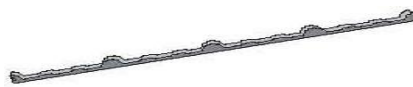
#10 PANCAKE HEAD SCREW - AVAILABLE IN 1" and 1-1/2"



OUTSIDE CLOSURE



INSIDE CLOSURE



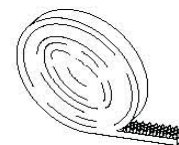
LOW-PROFILE VENTED CLOSURE



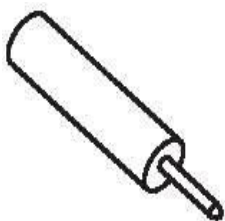
UNI-VENT VENTED CLOSURE (1"x2"x20'-0" ROLL)



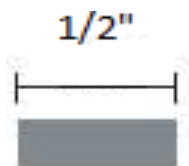
EMSEAL EXPANDABLE HIP/VALLEY CLOSURE



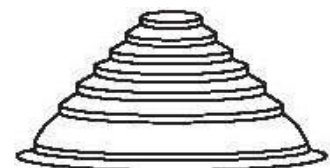
SOLAR SEAL 900 GUNNABLE SEALANT



BUTYL MASTIC 1/2"x3/32x4

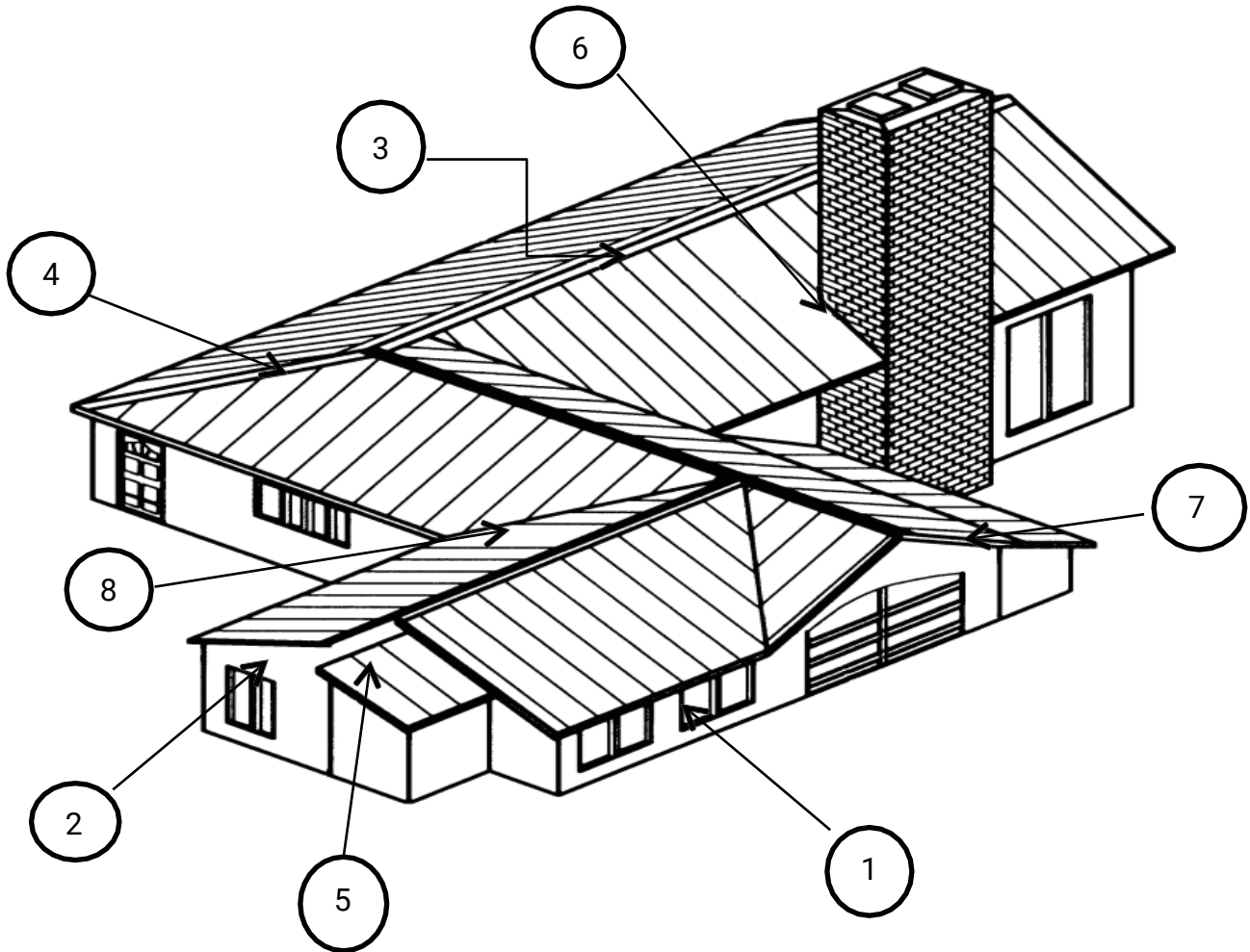


PIPE FLASHING



Available for pipe sizes from 1/4" up to 13".
Available in Grey EPDM, Hi-Temp Silicone, and Retro-Fit.

FLASHING LOCATIONS

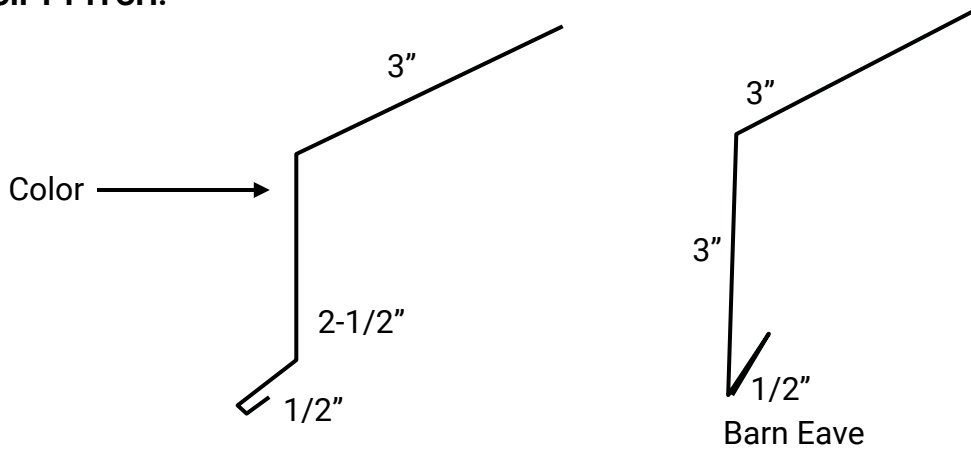


1. Eave Flashing
2. Rake Flashing
3. Ridge Cap Flashing
4. Hip Cap Flashing
5. End Wall Flashing
6. Side Wall Flashing
7. Lower Gambrel Flashing
8. Valley Flashing

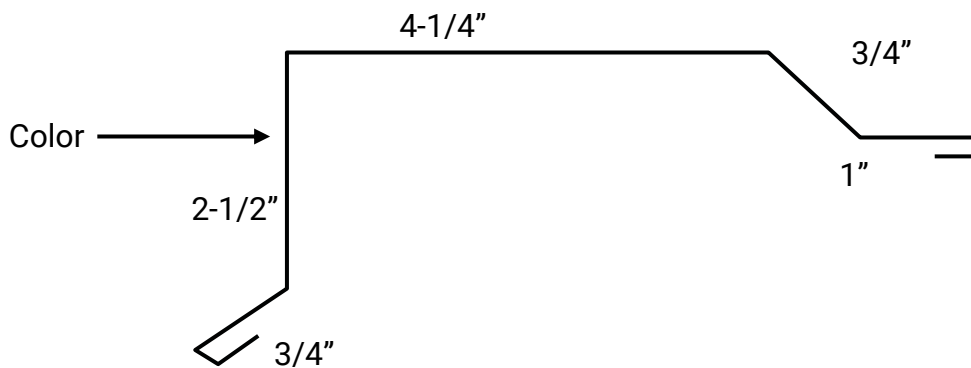
EAVE AND RAKES FLASHINGS

Residential Eave

SPECIFY PITCH:

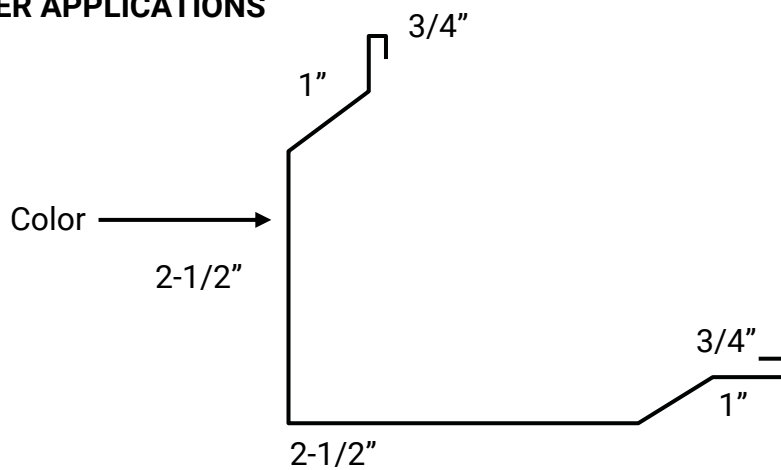


Residential Rake



Small Outside Corner

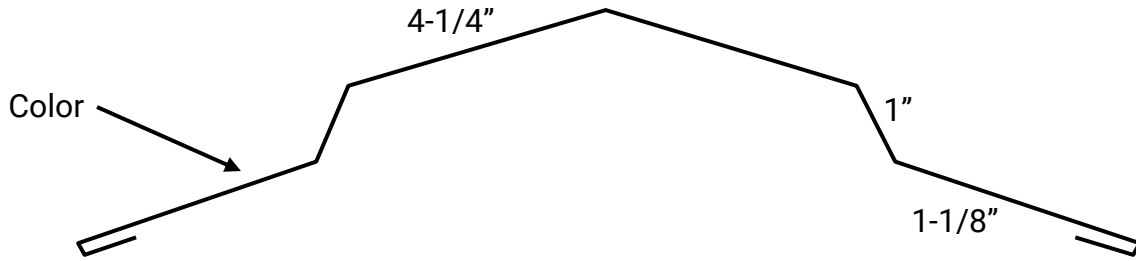
ROOF OVER APPLICATIONS



RIDGE CAP FLASHINGS

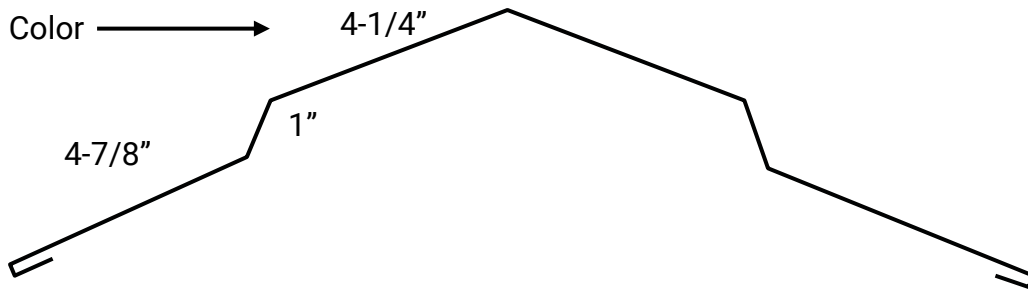
Ridge Cap

SPECIFY PITCH:



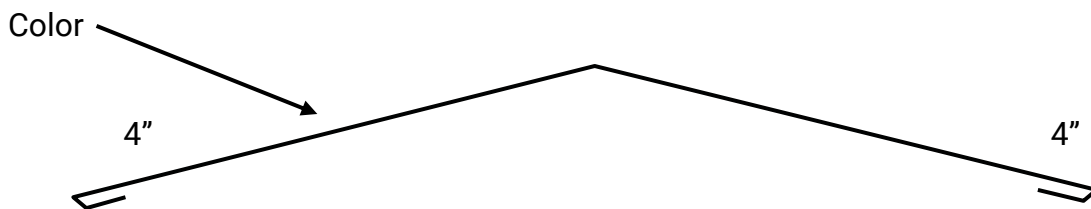
Wide Ridge Cap

SPECIFY PITCH:



Residential Hip Cap

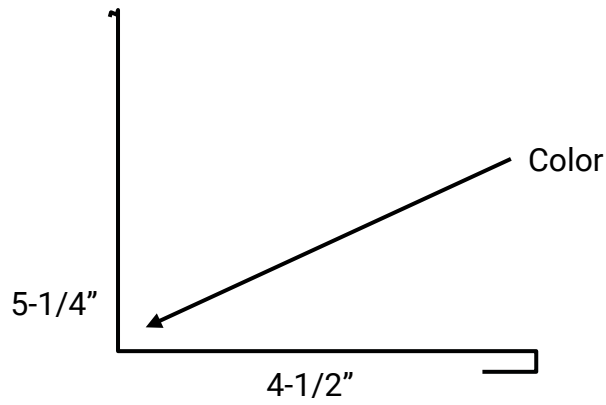
SPECIFY PITCH:



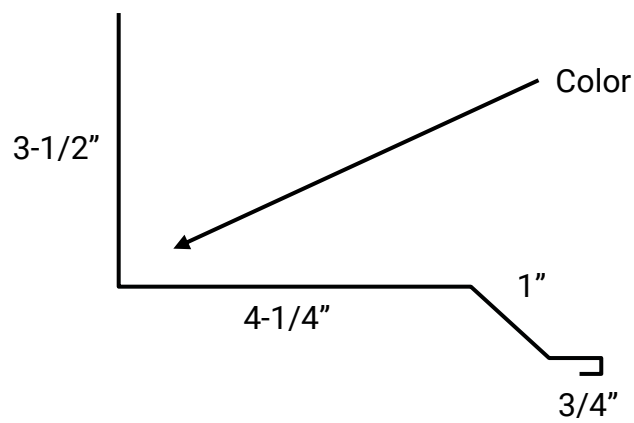
END WALL, SIDE WALL, AND LOWER GAMBREL FLASHINGS

End Wall

SPECIFY PITCH:

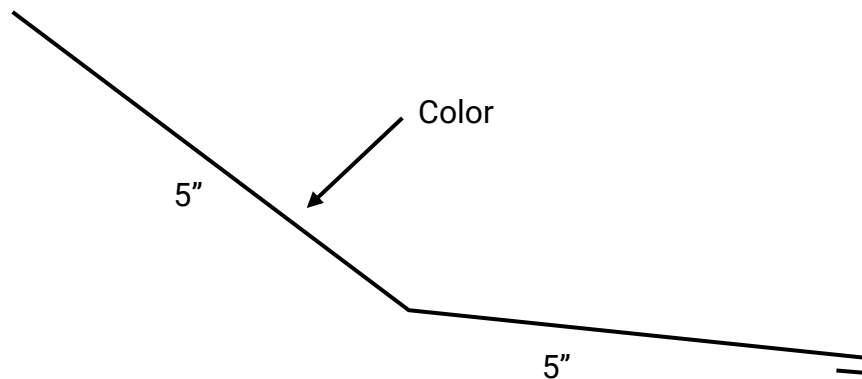


Side Wall



Lower Gambrel

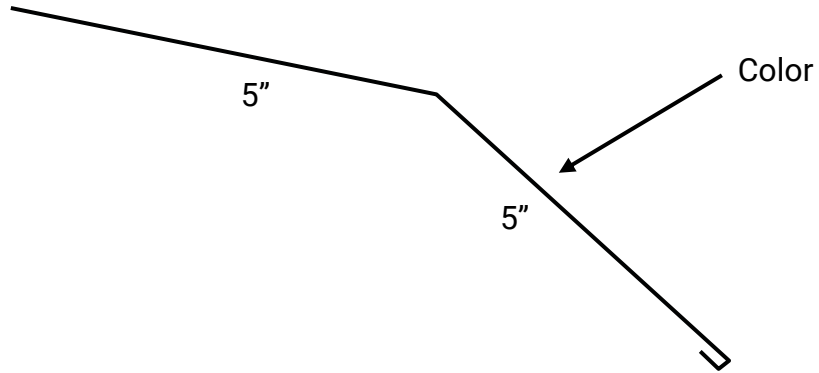
SPECIFY PITCH:



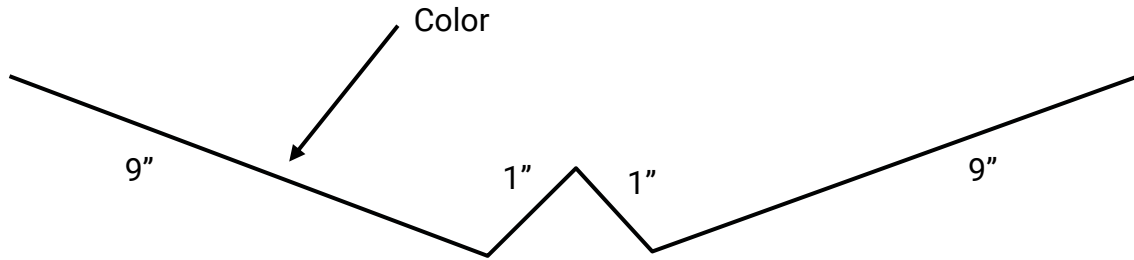
UPPER GAMBREL AND RESIDENTIAL VALLEY FLASHING

Upper Gambrel

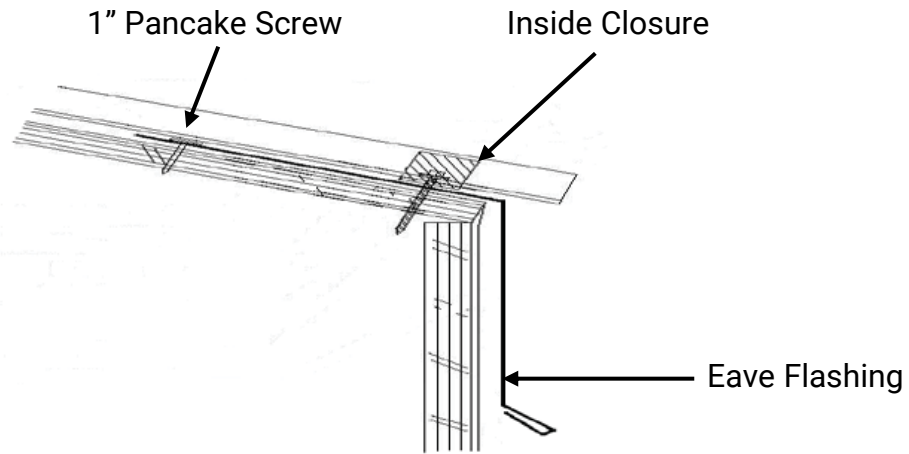
SPECIFY PITCH:



Residential Valley



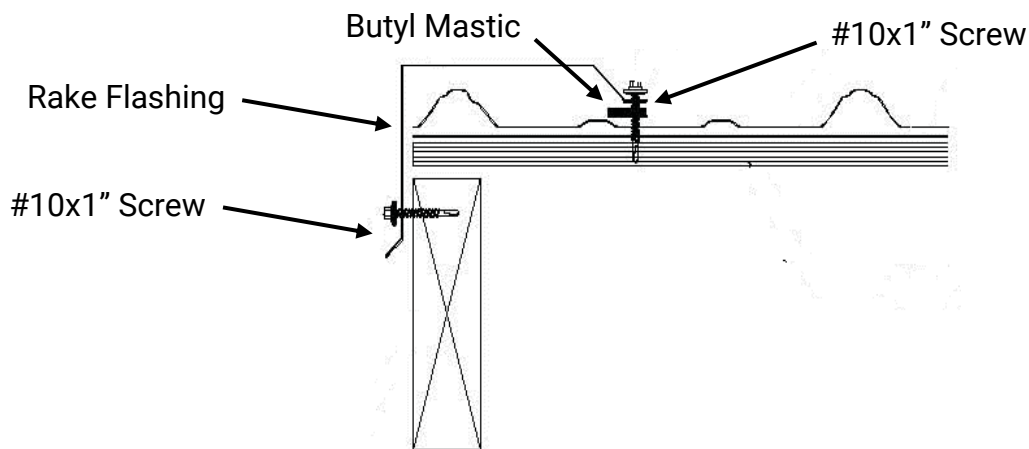
Eave Flashing



Installation Information

- 1** Attach Eave Trim to Roof Deck with #10 x 1" Pancake Screws 24" on center
- 2** Set Inside Closure into position approximately 1" from Eave Trim face.
- 3** Lay Roofing Panel into position. Minimum overhang of 1/4", Maximum overhang of 1-1/2"

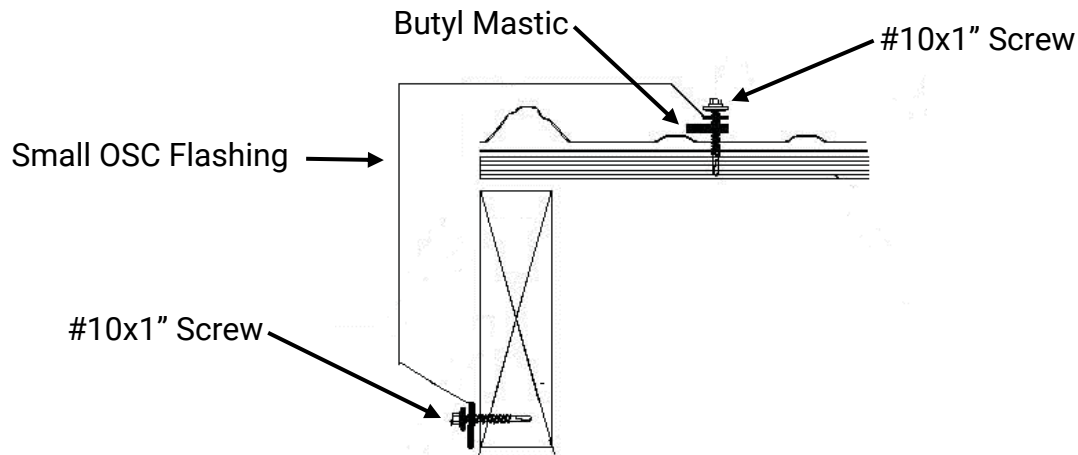
Residential Rake



Installation Information

- 1** Apply Butyl Mastic to leg of Rake Flashing that will sit on Roofing Panel. Start Installation from low end of roofing and work up towards ridge.
- 2** Attach Rake Flashing to Roof and Facia with #10x1" Woodgrip Fasteners every 24"

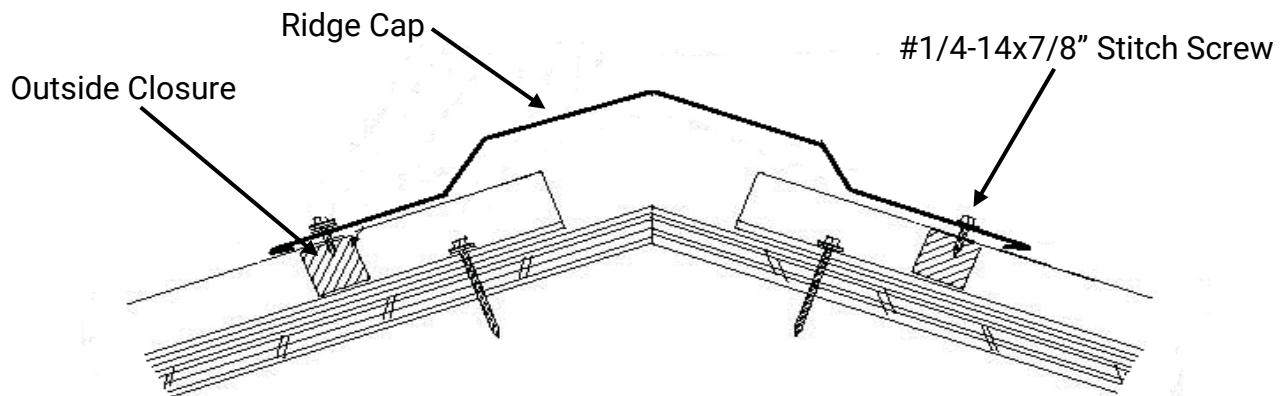
Small OSC as Rake Flashing



Installation Information

- 1 Apply Butyl Mastic to leg of Outside Corner Flashing that will sit on Roofing Panel. Start Installation from low end of roofing and work up towards ridge.
- 2 Attach Rake Flashing to Roof and Facia with #10 x 1" Woodgrip Fasteners every 24".

Ridge Cap

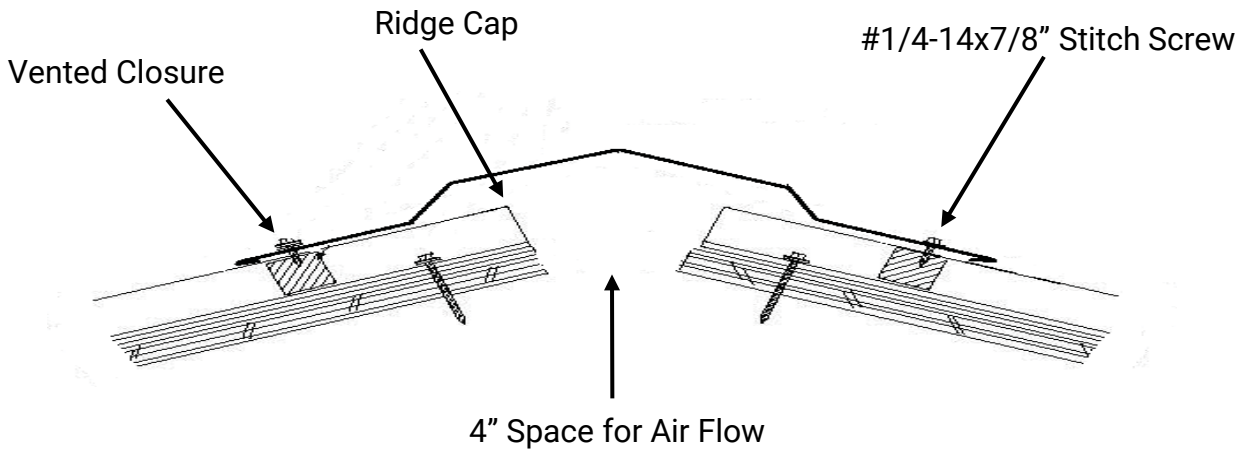


Installation Information

- 1 Measure and apply Outside Closures to Roofing Panel approximately 1" from outside edge of Ridge Cap.
- 2 Set Ridge Cap into position and attach to Roofing Panel with #1/4-14 x 7/8 Stitch Screws. Make sure that fastener goes through the closure into the high-rib of the panel.

VENTED RIDGE AND HIP CAP

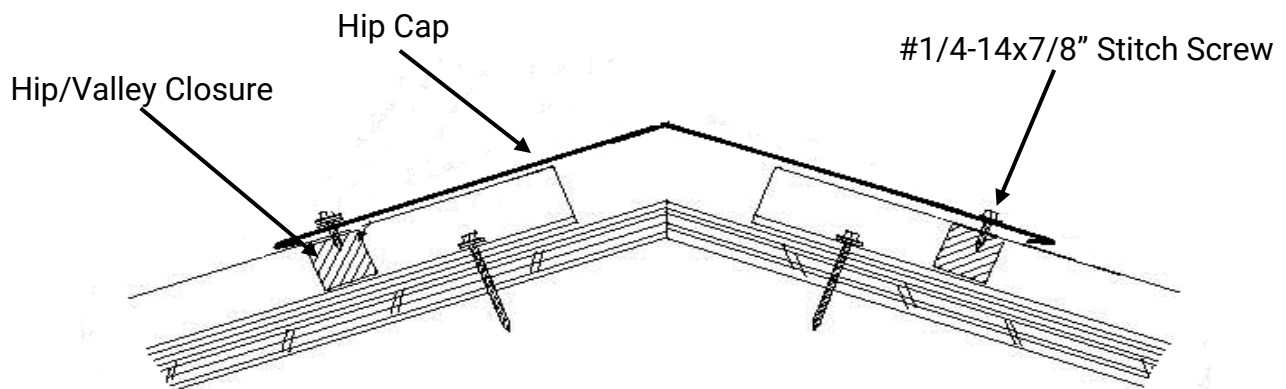
Vented Ridge Cap



Installation Information

- 1 Measure and apply Vented Outside Closures to Roofing Panel approximately 1" from outside edge of Ridge Cap.
- 2 Set Ridge Cap into position and attach to Roofing Panel with #1/4-14 x 7/8 Stitch Screws. Make sure that fastener goes through the closure into the high-rib of the panel.

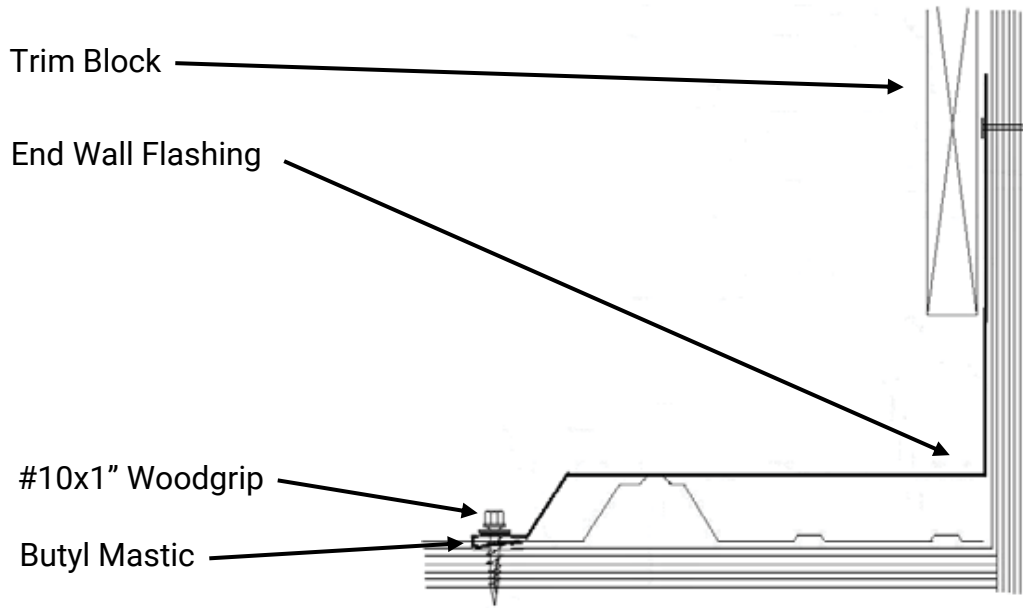
Hip Cap



Installation Information

- 1 Measure and apply Outside Closures to Roofing Panel approximately 1" from outside edge of Ridge Cap.
- 2 Set Ridge Cap into position and attach to Roofing Panel with #1/4-14 x 7/8 Stitch Screws. Make sure that fastener goes through the closure into the high-rib of the panel.

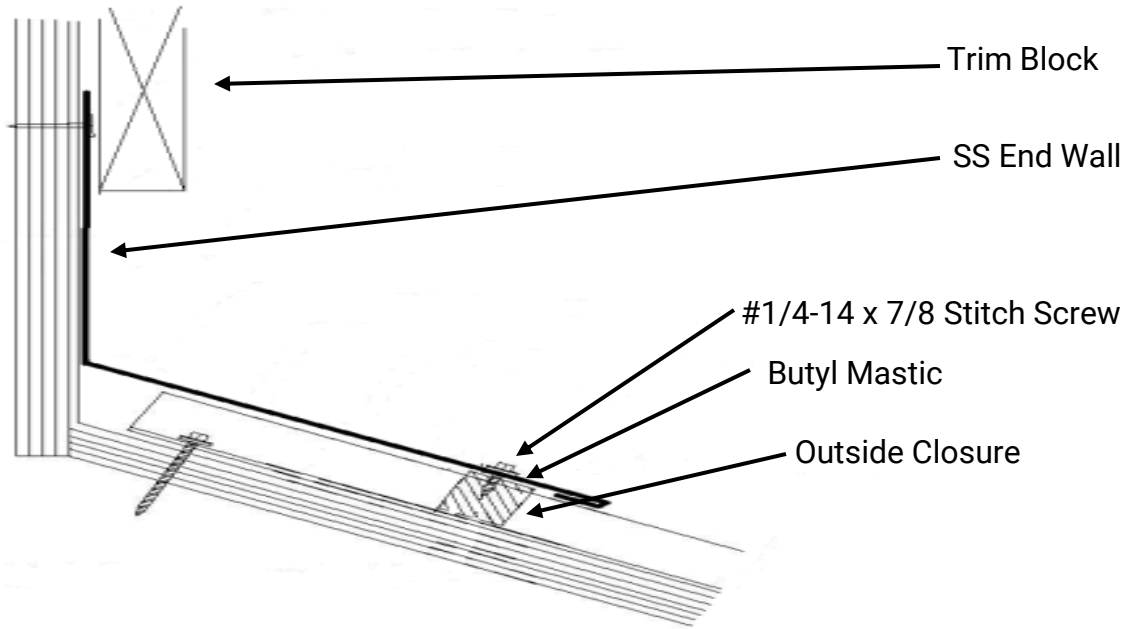
Side Wall



Installation Information

- 1** Apply Butyl tape to bottom side of Flashing and attach with 1" woodgrip screw.
- 2** Attach upper side to wall with a fastener.
- 3** For Wood Siding, use a trim block to seal edge of trim to building.
- 4** For brick, cut 1/8" groove in wall and install reglet trim. Run a bead of sealer at top edge of trim.
- 5** For siding, remove bottom J-Channel and attach upper side of trim to wall. Reinstall J-Channel and siding.

End Wall

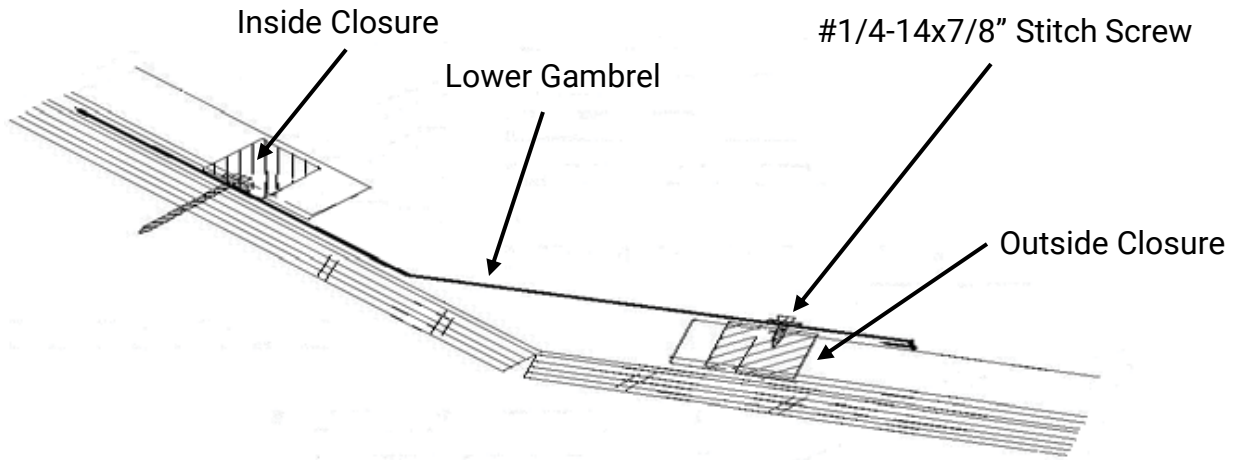


Installation Information

- 1** Apply Butyl tape to bottom side of Flashing and attach with Stitch Screw.
- 2** Attach upper side to wall with a fastener.
- 3** For Wood Siding, use a trim block to seal edge of trim to building.
- 4** For brick, cut 1/8" grove in wall and install reglet trim. Run a bead of sealer at top edge of trim.
- 5** For siding, remove bottom J-Channel and attach upper side of trim to wall. Reinstall J-Channel and siding.

LOWER AND UPPER GAMBREL

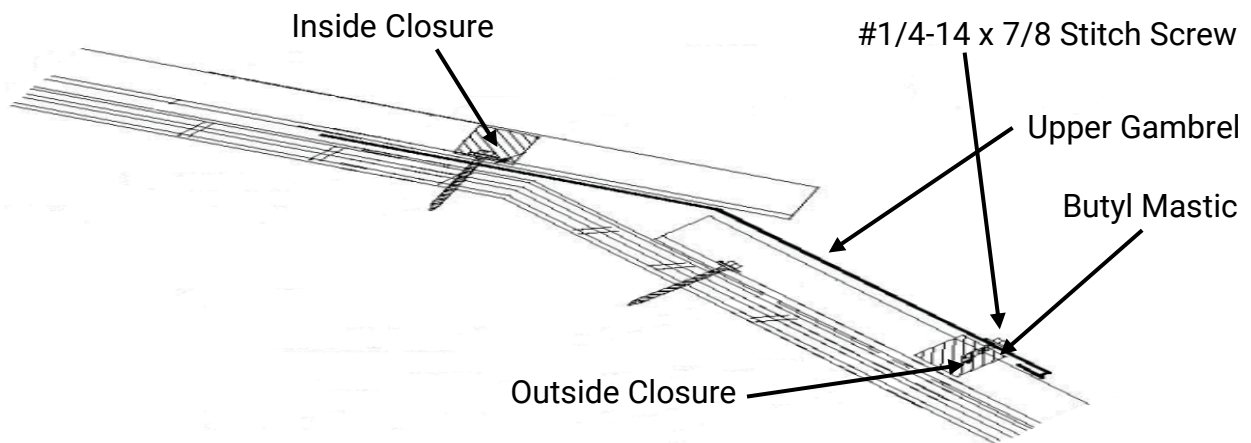
Lower Gambrel / Pitch Break



Installation Information

- 1 Install Lower Panel first.
- 2 Install Outside Closure and apply Butyl Mastic to top of Closure.
- 3 Lay Flashing into place and attach through Closure and Mastic with Stitch Screw.
- 4 Set Inside Closure into position and install Upper Panel.

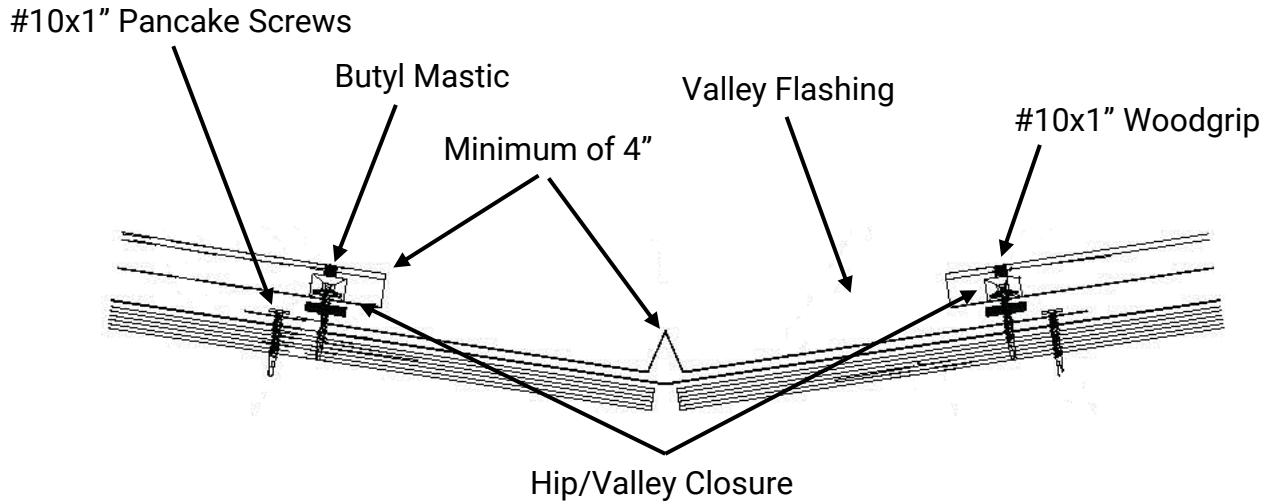
Upper Gambrel



Installation Information

- 1 Install Lower Panel first.
- 2 Install Outside Closure and apply Butyl Mastic to top of Closure.
- 3 Lay Flashing into place and attach through Closure and Mastic with Stitch Screw.
- 4 Set Inside Closure into position and install Upper Panel.

Valley



Installation Information

- 1** Attach Valley Flashing to roof deck with #10x1" Pancake Screws.
- 2** Apply Butyl Mastic and Hip/Valley Closure.
- 3** Install Panel at Minimum of 4" up from center of Valley. Attach Panels with #10x1" Woodgrip screws through closure and mastic.