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# **GENERAL NOTES**

The details shown on the following pages are suggestions or guidelines for installing the Maxima roof panel system. The installation details shown here are proven methods of construction, but they are not intended to cover all building requirements, designs or codes. The details may require changes or revisions due to individual project conditions.

Installation procedures shall be in accordance with the manufacturer's printed instructions, details or approved shop drawings. Installers should thoroughly familiarized themselves with all instructions prior to beginning the installation process.

The designer/installer is responsible to ensure the following:

That the details here meet the particular building requirements.

Awareness of and allowance for expansion/contraction of the roof panels.

That adequate water tightness is maintained.

That a proper uniform substructure is used to avoid panel distortion and that the substructure meets necessary code requirements.

That all supporting members have been examined and are straight, level and plumb.

McElroy Metal can provide all flashings and accessories shown in the installation drawings unless noted otherwise. Panels, flashing and trim shall be installed true and in proper alignment with any exposed fasteners equally spaced for the best appearance. Sealant shall be field applied on a clean, dry surface.

Some field cutting and fitting of panels and flashings is to be expected and to be considered a part of normal installation work. Workmanship shall be of the best industry standards and with installation performed by experienced metal craftsmen.

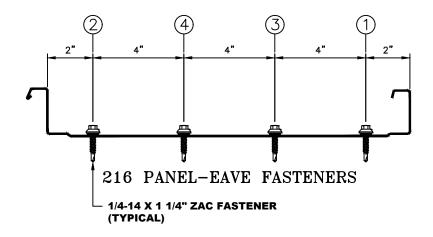
Oil canning of metal panels is in the product and is not a cause for rejection. Striated panels are recommended as the reduce the appearance of oil canning.

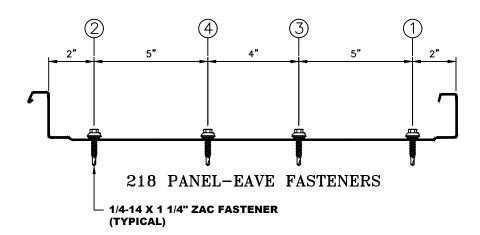
Contents of this manual are subject to change without notice. To confirm this book is the most current copy, please visit McElroy Metal's website at www.mcelroymetal.com.

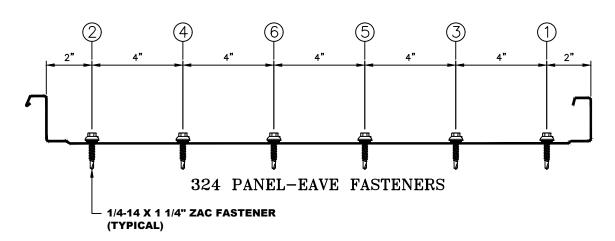


# **EAVE FASTENER PATTERN**

# MAXIMA EAVE FASTENER PATTERN





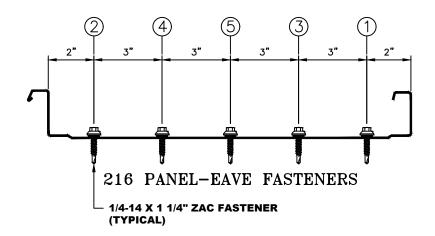


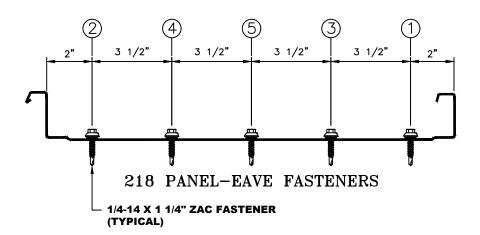


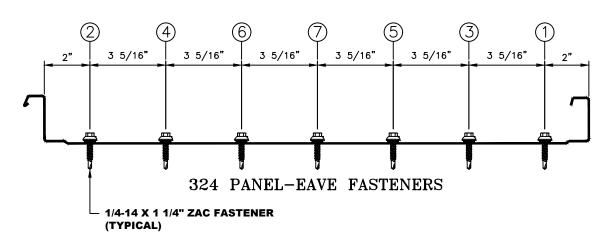
# **END LAP FASTENER PATTERN**

# MAXIMA END LAP FASTENER PATTERN

(USE THESE PATTERNS AT END LAPS WHEN CINCH STRAPS ARE OMITTED)

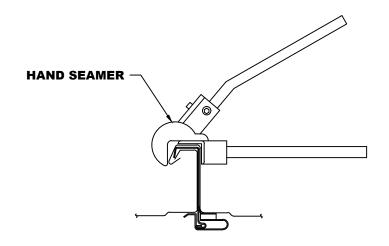




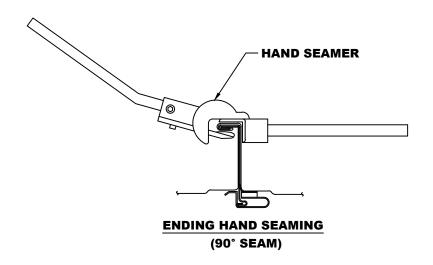




# **GENERAL INFORMATION**



#### **BEGINNING HAND SEAMING**



#### **HAND SEAMING OPERATION**

#### **CAUTION!!!**

It is critical that the panel seams are crimped and folded before using the electric seamer. Failure to follow these guidelines will result in damaged seams.

To begin seaming, set the hand seamer on the seam. Align the edge of the hand seamer about one to two inches passed the edge of the panel. Crimp the panel 3 to 4 times along the seam for a total of 12" at the eave and 5 or 6 time along the seam for a total of 18" at the ridge.



## **GENERAL INFORMATION**

#### **ATTENTION**

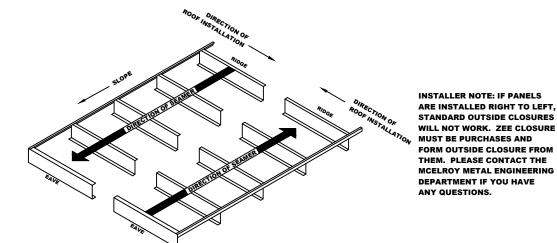
READ THE SEAMER INFORMATION THOROUGHLY BEFORE STARTING THE SEAMING OPERATION. FAILURE TO ADHERE TO THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY AND DAMAGE TO THE SEAMER AND/OR PANELS. THE ERECTOR WILL BE HELD LIABLE FOR ANY COSTS INCURRED FOR REPLACEMENT OR REPAIR.

#### PRE-SEAMING INFORMATION

- 1. Locate seamer box. Check to make sure you received a hand seamer, electric seamer and an information booklet. If not, please call our Technical Service Department.
- 2. Locate power source and check against power requirements in the information booklet.
- 3. Check seams for proper engagement.
- 4. Clean dirt, debris and excess sealant from seams and panel surfaces to aviod interfering with the seaming operation.
- 5. Panels do not have to be machine seamed as they are installed. However, Maxima ADV and Maxima 1.5" panels should be hand seamed 90° at each clip location as soon as possible.

#### **SEAMING OPERATION**

To determine the direction of the seaming process, stand at the eave and look upslope. If the roof is being installed from LEFT to RIGHT, the seamer will run from RIDGE to EAVE. If the roof is being installed from RIGHT to LEFT, the seamer will run from EAVE to RIDGE.



#### **INSPECTION OF SEAM**

A visual inspection of the seam should be made to determine if the seam is forming properly. Check seam against the cross section provided. IF THE SEAMER IS NOT PRODUCING A FINISHED SEAM SIMILAR TO THE CROSS SECTION PICTURED, STOP AT ONCE AND CALL THE MCELROY METAL TECHNICAL SERVICE DEPARTMENT.



#### **CROSS SECTION OF SEAM**

CAUTION: The use of any field seaming machine other than that provided by the manufacturer may damage the panels, void all warranties and will void all engineering data.



# PANEL CLIPS and THERMAL SPACER CHART

The following guidelines should be used when selecting the appropriate roof clips and thermal spacers for the Maxima roof system. The maximum insulation listed is based on UL-90 ratings for the Maxima Panels.

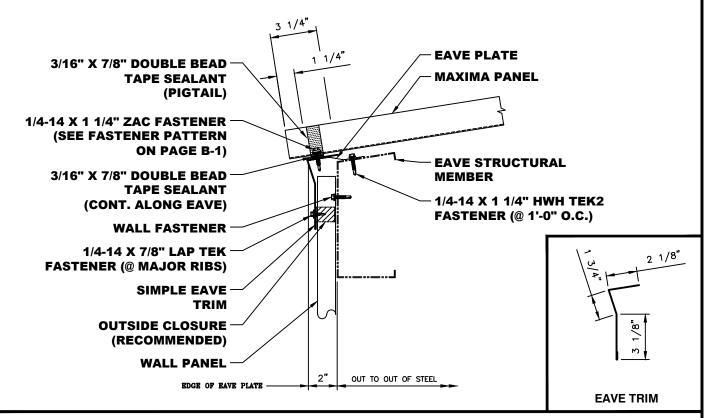
INSULATION / THERMAL SPACER SELECTION GUIDE			
INSULATION THICKNESS	LOW CLIP SYSTEM	HIGH CLIP SYSTEM	
NO INSULATION	3/8" THERMAL SPACER	NOT RECOMMENDED	
3" INSULATION	NO THERMAL SPACER	1" THERMAL SPACER	
4" INSULATION	NO THERMAL SPACER	5/8" THERMAL SPACER	
6" INSULATION	NOT RECOMMENDED	3/8" THERMAL SPACER	

#### THERMAL SPACER DISCLAIMER:

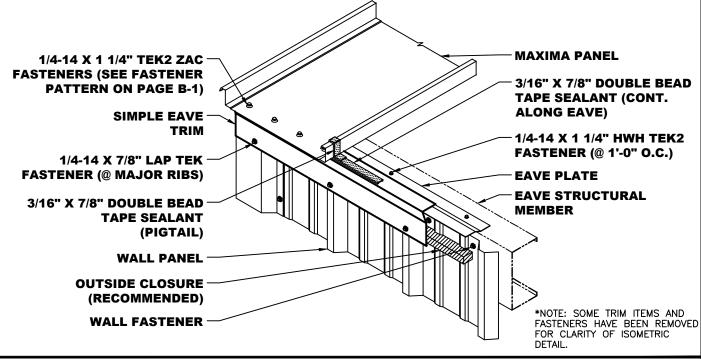
The above chart is only a guide. There are many blanket insulation manufactures and as such the densities of the insulation vary from manufacture to manufacture. This needs to be considered when selecting the appropriate clip system and thermal spacers. The different densities may affect the appearance of the metal roof system. In the end it is the installer's responsibility to make the correct selection. McElroy Metal does not require the use of thermal spacers with its metal roof systems however, the building owner or architect may. In certain climates the lack of a thermal spacer may cause a thermal break to occur which could lead to condensation. If a thermal spacer is not used on an un-insulated building a rumbling to a "thunder" type noise may be observed to be more pronounced. If a thermal spacer is not used, panel modularity may be more difficult to hold. Using too much or too dense insulation may result in purlin read through, may be more difficult to install, and/or may cause difficulty in holding panel modularity.



# MAXIMA EAVE DETAIL W/ SIMPLE EAVE TRIM

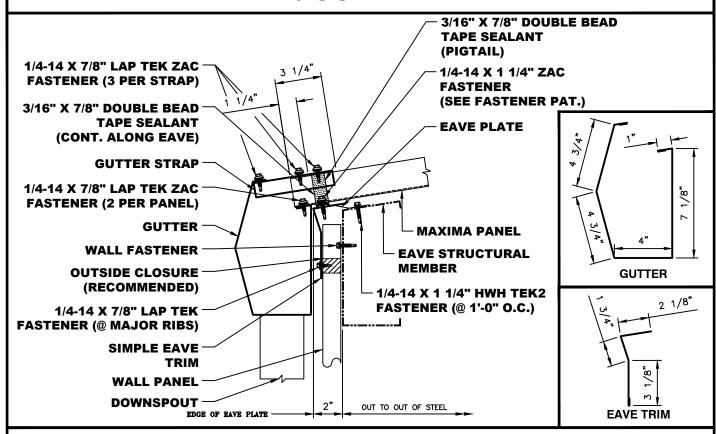


- NOTES: 1. Eave Plate to run from steel line to steel line.
  - 2. Simple Eave Trim to run from out of wall to out of wall.
  - 3. Attach Simple Eave Trim to Eave Plate with temporary fasteners. Attach to wall panel at major ribs with  $1/4-14 \times 7/8$ " Lap Tek fasteners.
  - 4. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant in trim laps and Pop Rivet trims as shown on page C-36.
  - 5. Apply continuous run of  $3/16" \times 7/8"$  Double Bead Tape on top of Simple Eave Trim.
  - 6. Apply 3/16" x 7/8" Double Bead Tape Pigtails at Eave.

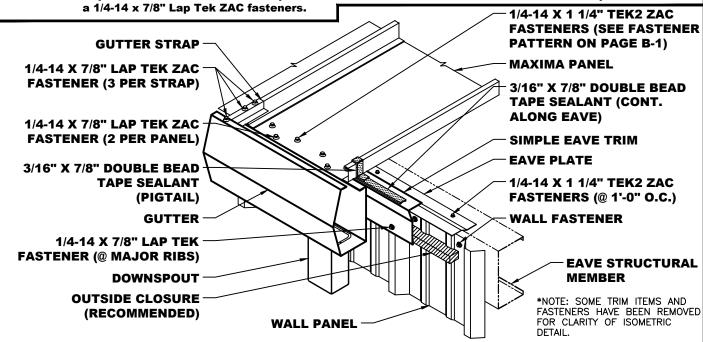




## **EAVE W/ GUTTER DETAIL**

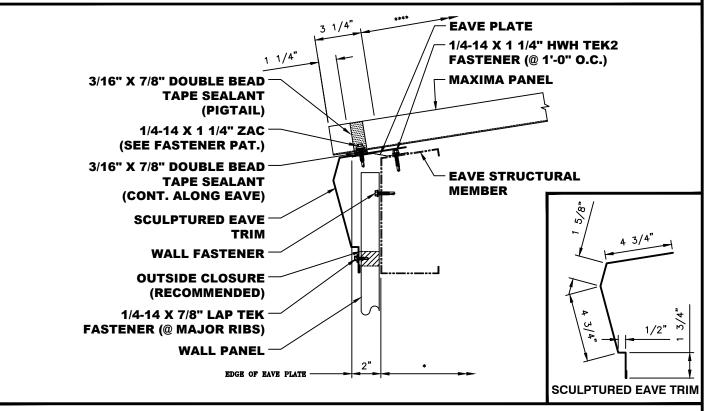


- NOTES: 1. Eave Plate to run from steel line to steel line.
  - 2. Simple Eave Trim and Gutter to run from out of wall to out of wall.
  - 3. Attach Simple Eave Trim to Eave Plate with temporary fasteners. Attach to wall panel at major ribs with a  $1/4-14 \times 7/8$ " Lap Tek.
  - 4. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and Pop Rivet trims as shown on page C-36.
  - 5. Apply continuous run of 3/16" x 7/8" Double Bead on top of Simple Eave Trim.
  - 6. Apply 3/16" x 7/8" Double Bead Pigtails at Eave.
  - 7. Attach Gutter to roof panel with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C. Attach Gutter Straps to panel ribs with 1/4-14 x 7/8" Lap Tek ZAC fastener. Then attach Gutter to Gutter Strap with

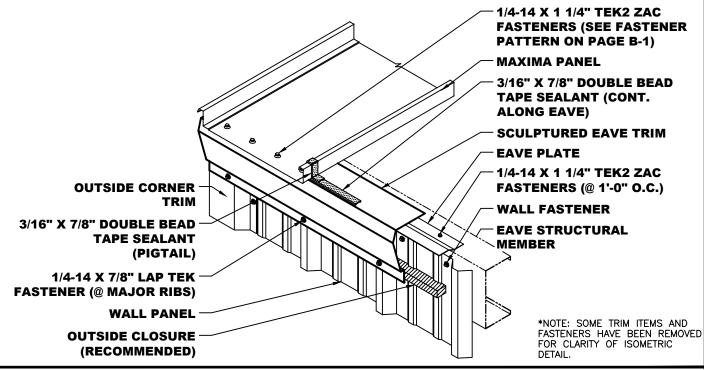




# MAXIMA EAVE DETAIL W/ SCULPTURED EAVE TRIM

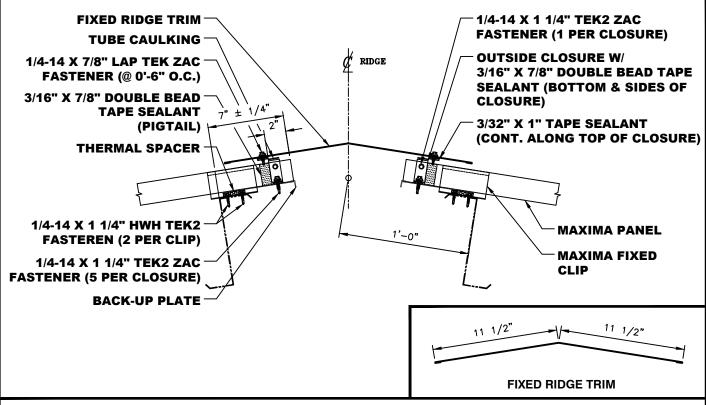


- NOTES: 1. Eave Plate to run from steel line to steel line.
  - 2. Scupltured Eave Trim to run from out of wall to out of wall.
  - 3. Attach Sculptured Eave Trim to Eave Plate with temporary fasteners. Attach to wall panel at major ribs with a  $1/4-14 \times 7/8$ " Lap Tek.
  - 4. Apply continuous run of 3/16" x 7/8" Double Bead on top of Sculptured Eave Trim.
  - 5. Apply 3/16" x 7/8" Double Bead Pigtails at Eave and Ridge of male panel leg as shown on page \_\_\_\_
  - 6. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and Pop Rivet trims as shown on page C-36.

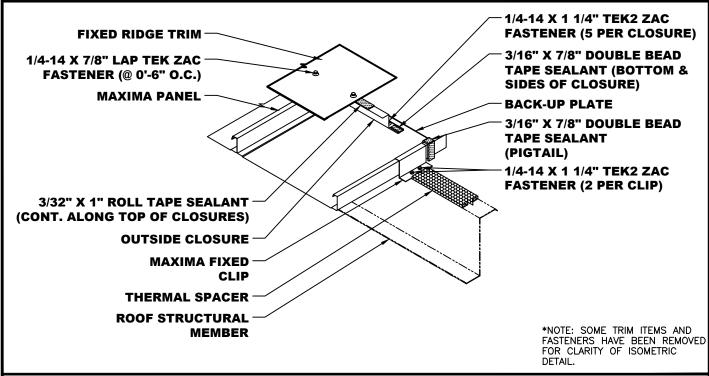




## **FIXED RIDGE DETAIL**

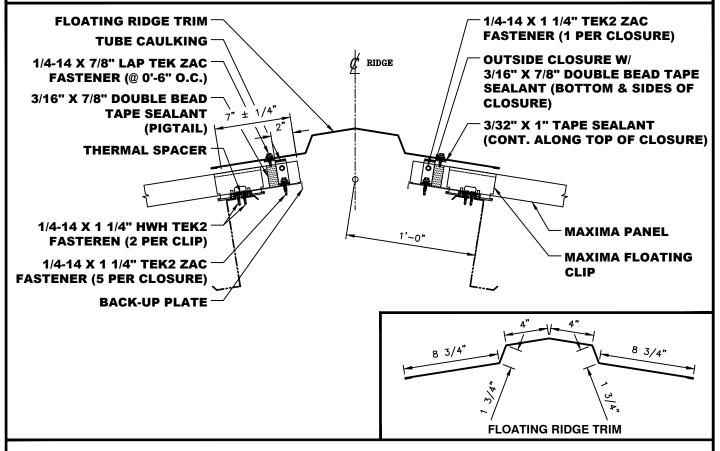


- NOTES: 1. Ridge Flashing to 2" outside of face of wall panels.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top flange of Outside Closures continuously along Ridge.
  - 3. Attach Ridge Flashing to Outside Closures with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 6" O.C.
  - 4. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and secure trim joint with  $1/4-14 \times 7/8$ " Lap Tek Zac Fasteners at 3" O.C.
  - 5. For Low Systems only, the first as well as the last Back-up Plate must be field modified to properly nest with the Rake Angle. Notch out the vertical leg of Back-up Plate to clear Rake Angle.



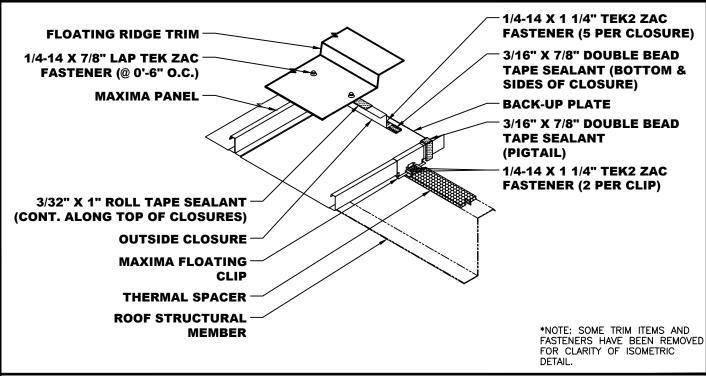


## FLOATING RIDGE DETAIL



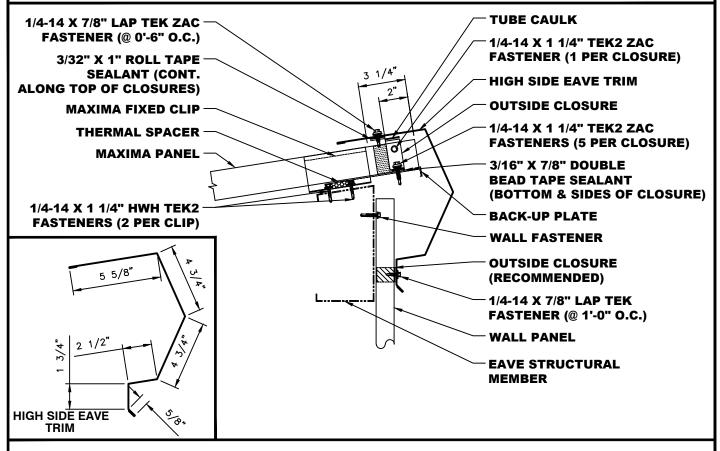
- NOTES: 1. Ridge Flashing to 2" outside of face of wall panels.

  2. Place 3/32" x 1" Roll Tape Sealant on top flange of Outside Closures continuously along Ridge.
  - 3. Attach Ridge Flashing to Outside Closures with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 6" O.C.
  - 4. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and secure trim joint with 1/4-14 x 7/8" Lap Tek Zac Fasteners at 3" O.C.

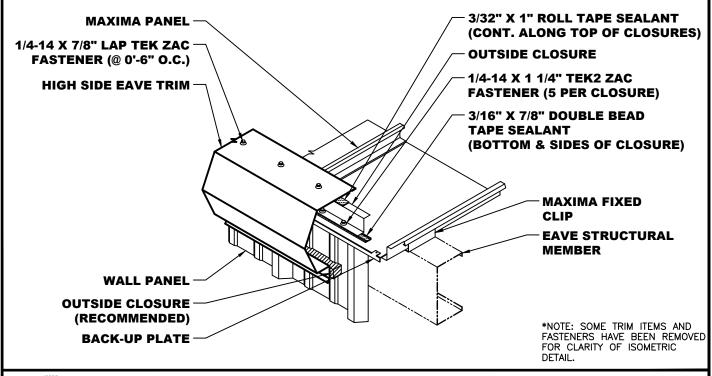




## **FIXED HIGH SIDE EAVE DETAIL**

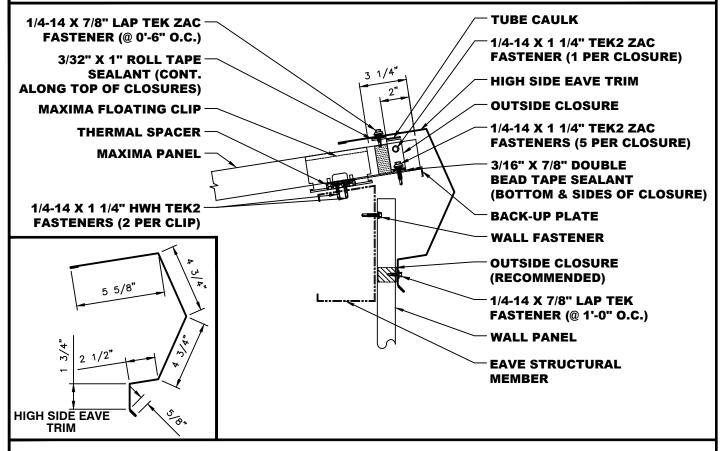


- NOTES: 1. High Side Eave Flashing to run from out of wall to out of wall.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top flange of Outside Closures continuously along Ridge.
  - 3. Attach High Side Eave Flashing to Outside Closures with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 6" O.C.
  - Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and secure trim
    joint with Pop Rivets as shown on page C-36.

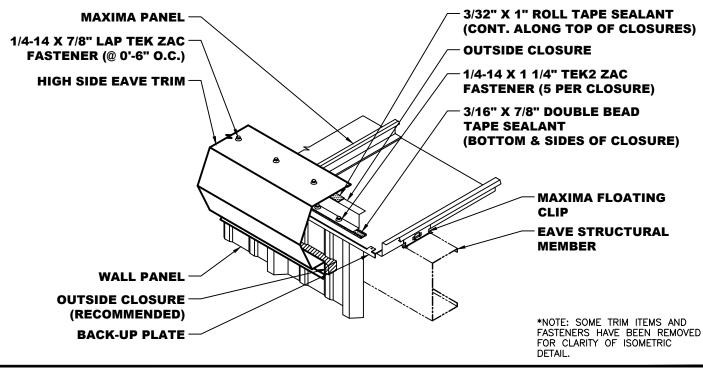




# MAXIMA FLOATING HIGH SIDE EAVE DETAIL

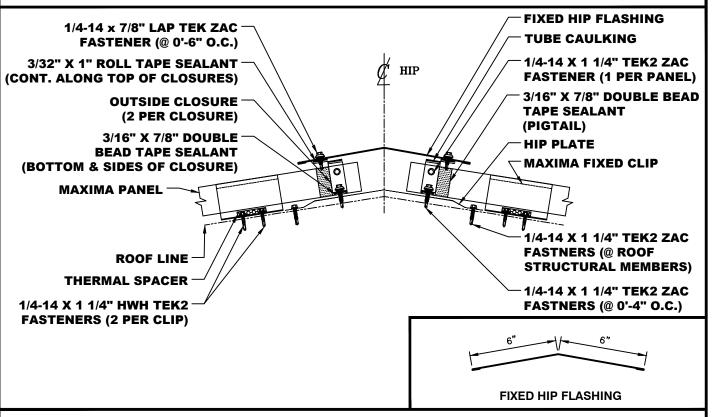


- NOTES: 1. High Side Eave Flashing to run from out of wall to out of wall.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top flange of Outside Closures continuously along Ridge.
  - 3. Attach High Side Eave Flashing to Outside Closures with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 6" O.C.
  - 4. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and secure trim joint with Pop Rivets as shown on page C-36.

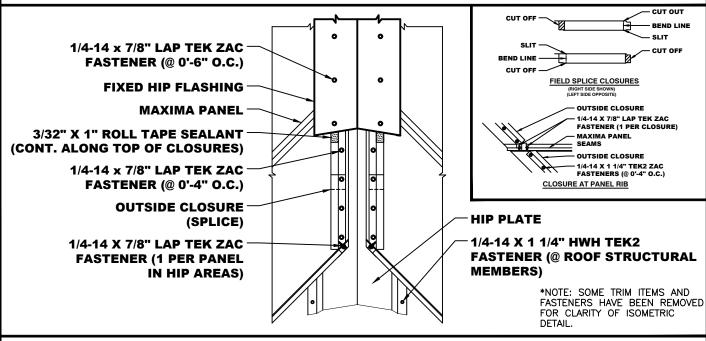




## **FIXED HIP DETAIL**

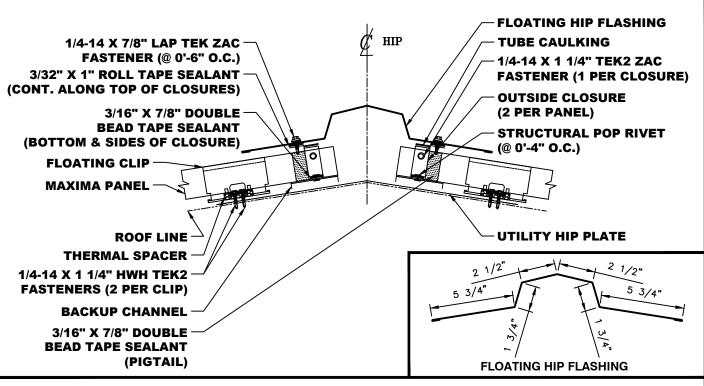


- NOTES: 1. Cut panels to required bevel for Hip condition.
  - 2. Two Outside Closures required per panel. Cut off, cut out, slit and bend to required bevel.
  - 3. Install closures over 3/16" x 7/8" Double Bead Tape Sealant and fasten with 1/4-14 x 1 1/4" Tek2 ZAC fasteners at 4" O.C.
  - 4. Apply 3/32" x 1" Butyl Tape on top flange of Outside Closure continously along length of Hip.
  - 5. Fill void ares with Tube Caulking.
  - 6. Install Hip Flashing from eave to ridge. Trim joint laps are to be 2" (min.) Apply 3/32" x 1" Roll Tape Sealant or 3/16" Ø bead of Tube Butyl at lap joints. Fasten with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 3" O.C.
  - 7. Attach Hip Flashing to top flange of Outside Closures with  $1/4-14 \times 7/8$ " Lap Tek ZAC fasteners at 6" O.C.

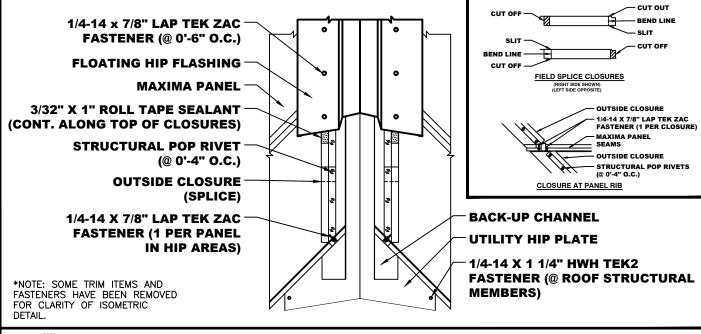




## FLOATING HIP DETAIL

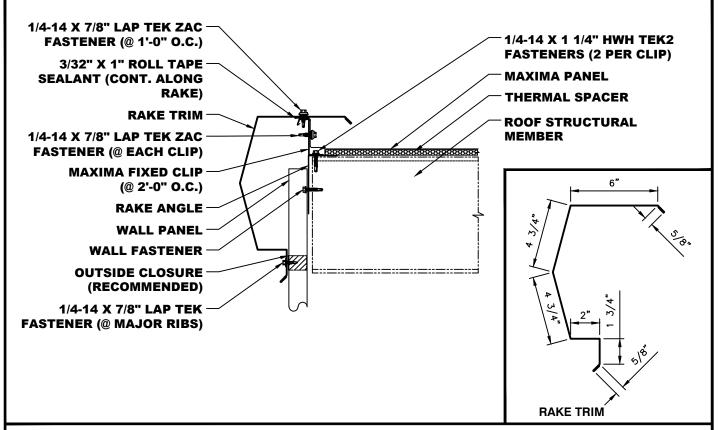


- NOTES: 1. Cut panels to required bevel for Hip condition.
  - 2. Two Outside Closures required per panel. Cut off, cut out, slit and bend to required bevel.
  - 3. Install closures over 3/16" x 7/8" Double Bead Tape Sealant and fasten with Structural Pop Rivets at 4" O.C.
  - 4. Apply 3/32" x 1" Butyl Tape on top flange of Outside Closure continously along length of Hip.
  - 5. Fill void ares with Tube Caulking.
  - 6. Install Hip Flashing from eave to ridge. Trim joint laps are to be 2" (min.) Apply 3/32" x 1" Roll Tape Sealant or 3/16" Ø bead of Tube Butyl at lap joints. Fasten with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 3" O.C.
  - 7. Attach Hip Flashing to top flange of Outside Closures with  $1/4-14 \times 7/8$ " Lap Tek ZAC fasteners at 6" O.C.

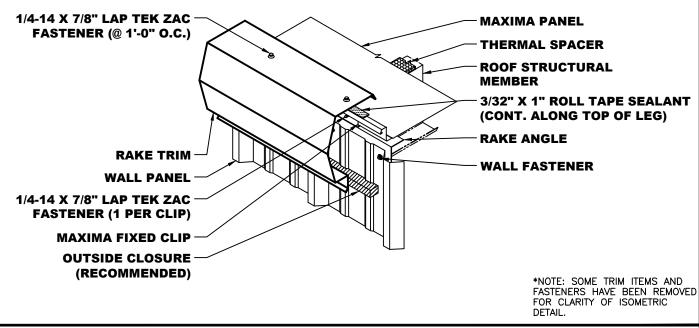




# **FIXED RAKE START DETAIL**



- NOTES: 1. Rake Trim to start even with face of sidewall panels.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top of panel leg continuously along Rake.
  - 3. Attach Rake Trim to roof panel with  $1/4-14 \times 7/8$ " Lap Tek fasteners at 1'-0" O.C.
  - 4. Attach Rake Trim to wall panels with  $1/4-14 \times 7/8$ " Lap Tek fasteners at major ribs.
  - 5. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and secure trim joint with Pop Rivets as shown on page C-36.





#### **MAXIMA FLOATING RAKE START DETAIL** 1/4-14 X 1 1/4" HWH TEK2 1/4-14 X 7/8" LAP TEK ZAC FASTENER (2 PER CLIP) **FASTENER (@ 1'-0" O.C.) MAXIMA PANEL** 3/32" X 1" ROLL TAPE **SEALANT (CONT. ALONG** THERMAL SPACER RAKE) **ROOF STRUCTURAL RAKE TRIM MEMBER** 1/4-14 X 7/8" LAP TEK ZAC **FASTENER (@ EACH CLIP) MAXIMA FLOATING CLIP** (@ 2'-0" O.C.) **RAKE ANGLE WALL PANEL WALL FASTENER RAKE SLIDE TRIM**

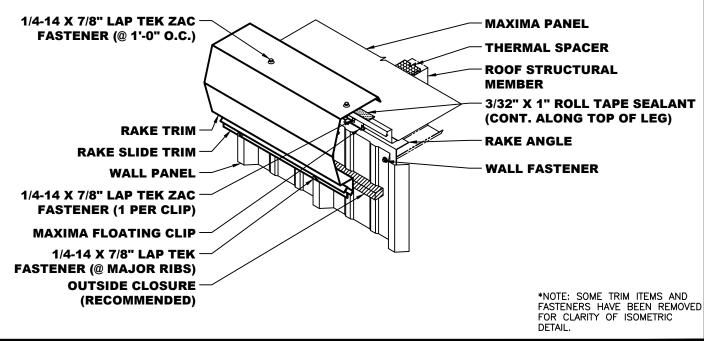
NOTES: 1. Rake Trim to start even with face of sidewall panels.

1/4-14 X 7/8" LAP TEK -FASTENER (@ MAJOR RIBS)

> OUTSIDE CLOSURE (RECOMMENDED)

- 2. Place 3/32" x 1" Roll Tape Sealant on top of panel leg continuously along Rake.
- 3. Attach Rake Trim to roof panel with 1/4-14 x 7/8" Lap Tek fasteners at 1-0" O.C.
- 4. Attach Rake Slide Trim to wall panels with 1/4-14 x 7/8" Lap Tek fasteners at major ribs.
- 5. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and secure trim joint with Pop Rivets as shown on page C-36.

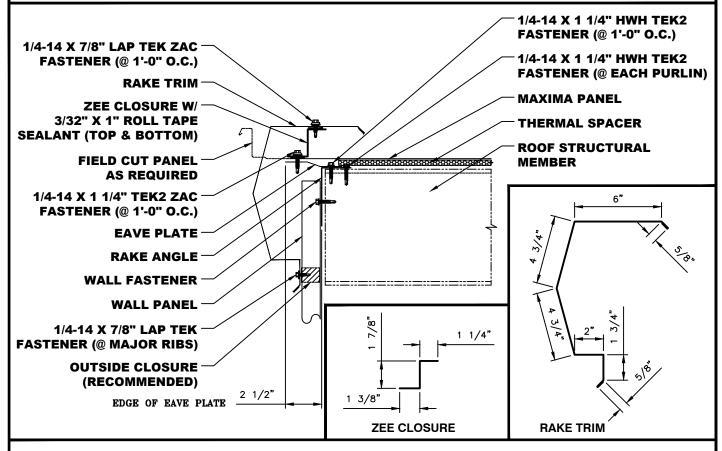
**RAKE SLIDE TRIM** 



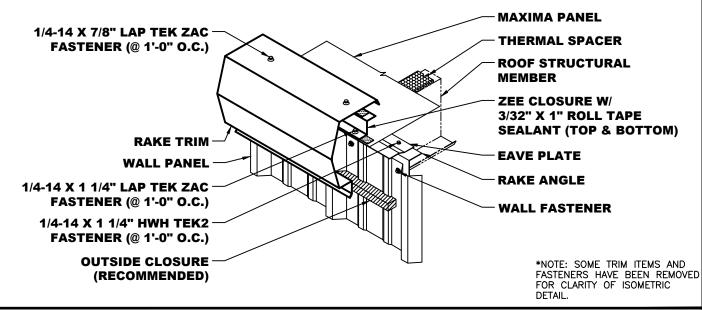


**RAKE TRIM** 

# MAXIMA FIXED RAKE START DETAIL (OFF MODULE)

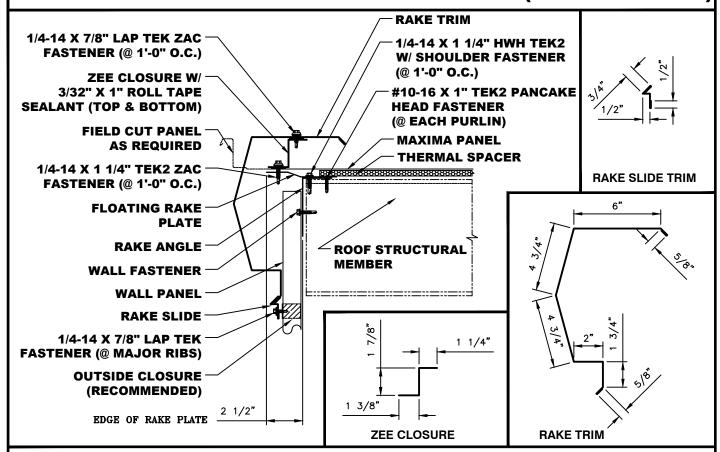


- NOTES: 1. Rake Trim to start even with face of sidewall panels.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top and bottom of Zee Closure the length of the rake.
  - 3. Attach Zee Closure with 1/4-14 x 1 1/4" Lap Tek ZAC fasteners at 1'-0" O.C. Install from Ridge to Eave to avoid "Back Water Laps". Place 3/32" x 3/8" Butyl Tape or 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 4. Attach Rake Trim to Zee Closure with 1/4-14 x 7/8" Lap Tek fasteners at 1'-0" O.C.
  - 4. Attach Rake Trim to wall panels with 1/4-14 x 7/8" Lap Tek fasteners at major ribs.
  - 5. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and secure trim joint with Pop Rivets as shown on page C-36.

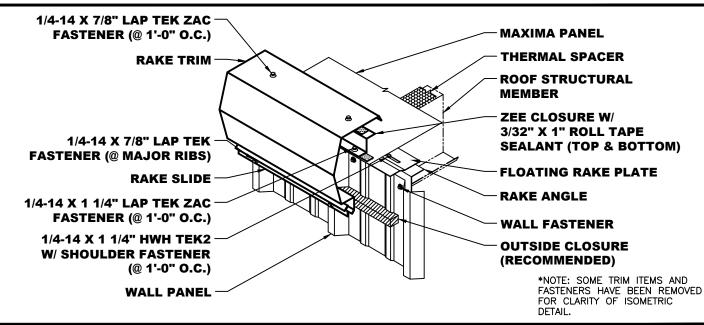




# MAXIMA FLOATING RAKE START DETAIL (OFF MODULE)

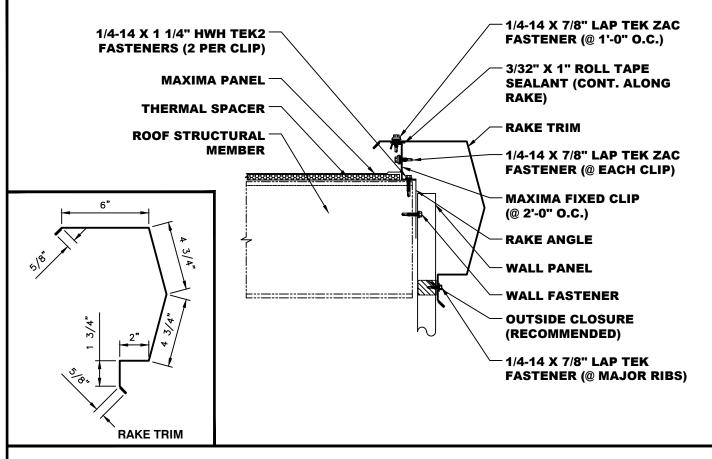


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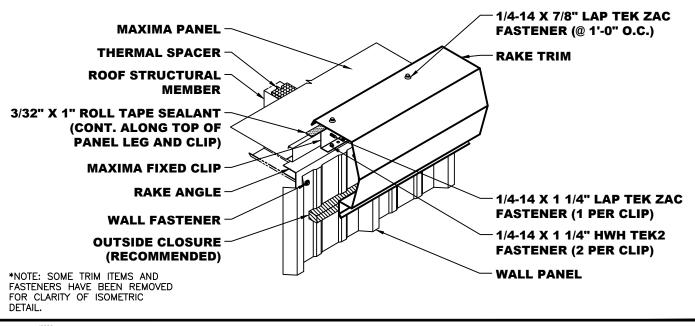




## **FIXED RAKE END DETAIL**

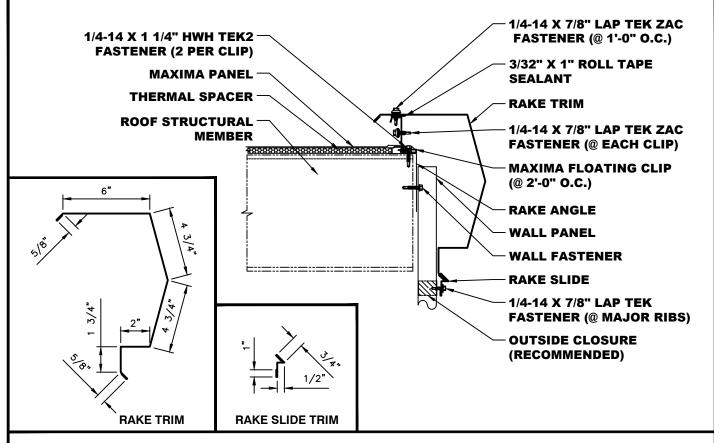


- NOTES: 1. Rake Trim to start even with face of sidewall panels.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top of panel leg continuously along Rake.
  - 3. Attach Rake Trim to roof panel with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C.
  - 4. Attach Rake Trim to wall panels with  $1/4-14 \times 7/8$ " Lap Tek fasteners at major ribs.
  - 5. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and secure trim joint with Pop Rivets as shown on page C-36.

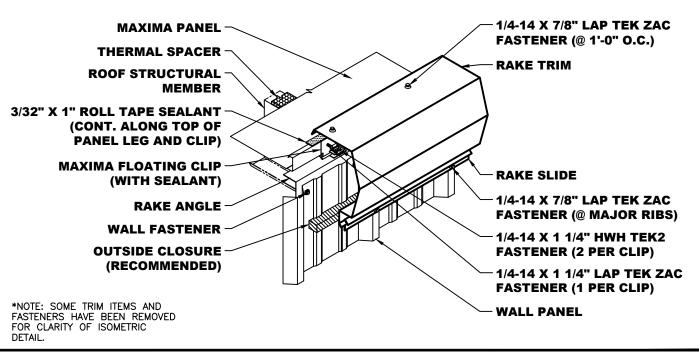




## FLOATING RAKE END DETAIL

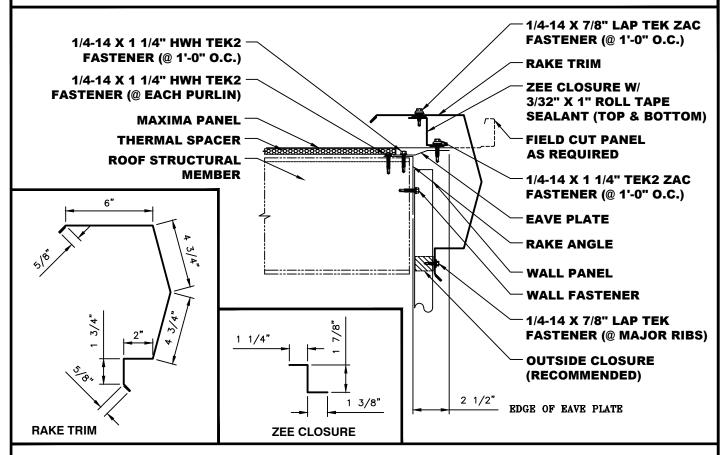


- NOTES: 1. Rake Trim to start even with face of sidewall panels.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top of panel leg continuously along Rake.
  - 3. Attach Rake Trim to roof panel with 1/4-14 x 7/8" Lap Tek fasteners at 1'-0" O.C.
  - 4. Attach Rake Slide Trim to wall panels with 1/4-14 x 7/8" Lap Tek ZAC fasteners at major ribs.
  - 5. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and secure trim joint with Pop Rivets as shown on page C-36.

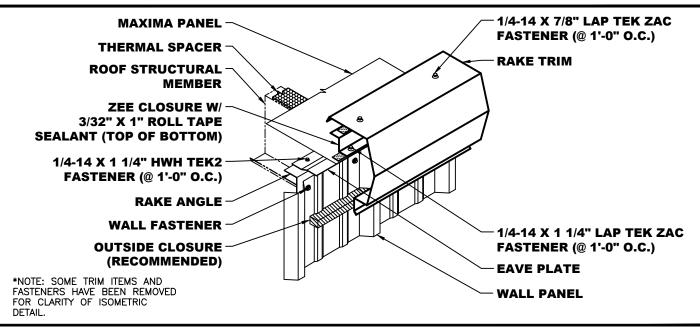




# **FIXED RAKE END DETAIL (OFF MODULE)**

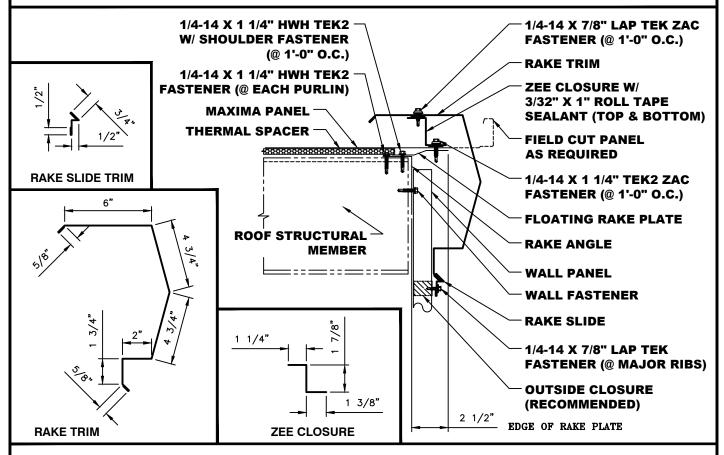


- NOTES: 1. Rake Trim to start even with face of sidewall panels.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top and bottom of Zee Closure the length of the rake.
  - Attach Zee Closure with 1/4-14 x 1 1/4" Lap Tek ZAC fasteners at 1'-0" O.C. Install from Ridge to Eave to avoid "Back Water Laps". Place 3/32" x 3/8" Butyl Tape or 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 4. Attach Rake Trim to Zee Closure with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C.
  - 4. Attach Rake Trim to wall panels with 1/4-14 x 7/8" Lap Tek fasteners at major ribs.
  - 5. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and secure trim joint with Pop Rivets as shown on page C-36.

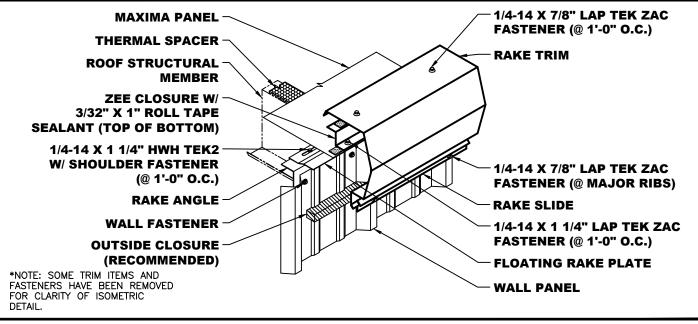




# MAXIMA FLOATING RAKE END DETAIL (OFF MODULE)

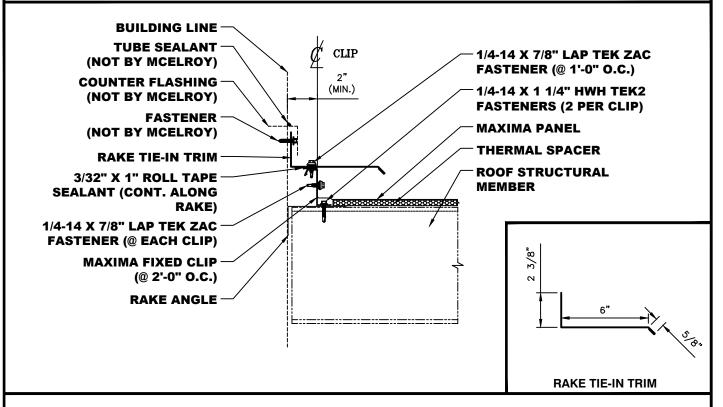


- NOTES: 1. Rake Trim to start even with face of sidewall panels.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top and bottom of Zee Closure the length of the rake.
  - 3. Attach Zee Closure with 1/4-14 x 1 1/4" Lap Tek ZAC fasteners at 1'-0" O.C. Install from Ridge to Eave to avoid "Back Water Laps". Place 3/32" x 3/8" Butyl Tape or 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 4. Attach Rake Trim to Zee Closure with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C.
  - 5. Attach Rake Trim to wall panels with 1/4-14 x 7/8" Lap Tek fasteners at major ribs.
  - 6. Trim pieces lap 2". Apply 3/32" x 3/8" Butyl Tape or Butyl Tube Sealant at trim laps and secure trim joint with Pop Rivets as shown on page C-36.

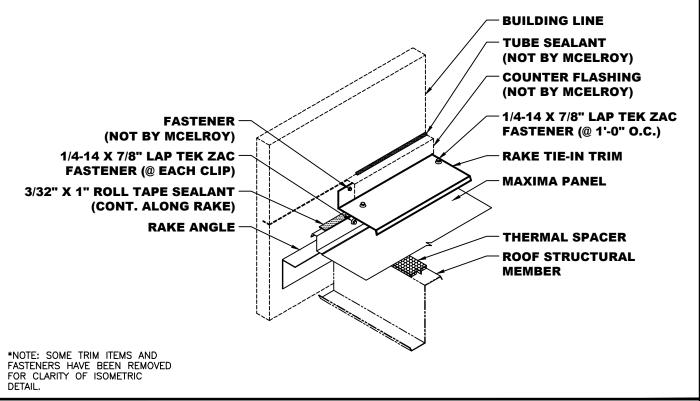




# **FIXED RAKE START TIE-IN DETAIL**

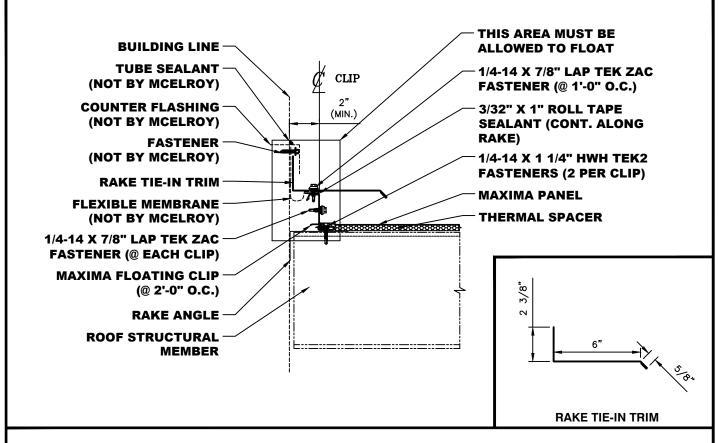


- NOTES: 1. Rake Tie-In Trim to start even with building line.
  - 2. Place 3/32" x 1" Roll Tape Sealant along top of female leg of panel the length of the rake.
  - 3. Attach Rake Tie-In Trim with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C. Place 3/32" x 3/8" Butyl Tape or 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 4. Trim pieces lap 2".

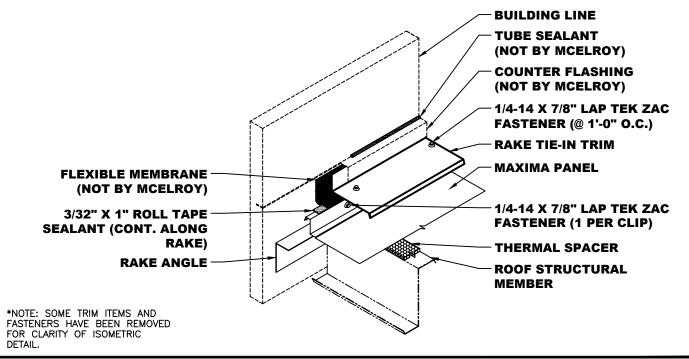




# MAXIMA FLOATING RAKE START TIE-IN DETAIL

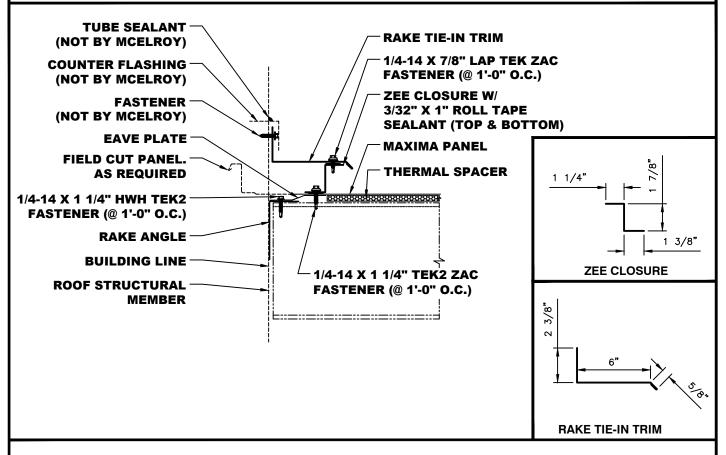


- NOTES: 1. Rake Tie-In Trim to start even with building line.
  - 2. Place 3/32" x 1" Roll Tape Sealant along top of female leg of panel the length of the rake.
  - 3. Attach Rake Tie-In Trim with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C. Place 3/32" x 3/8" Butyl Tape or 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 4. Trim pieces lap 2".

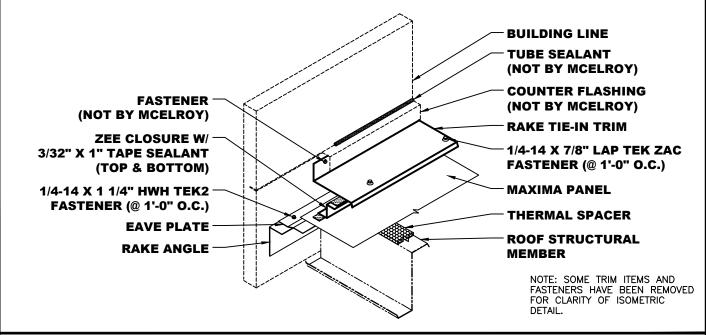




# MAXIMA FIXED RAKE START TIE-IN DETAIL (OFF MODULE)

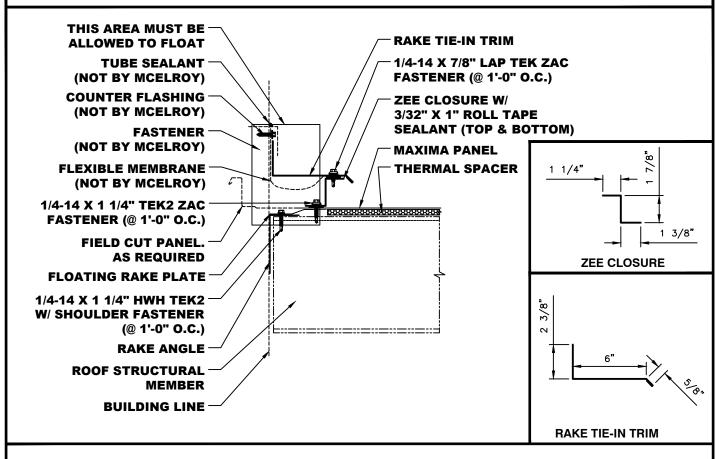


- NOTES: 1. Rake Tie-In Trim to start even with building line.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top and bottom of Zee Closure the length of the rake.
  - 3. Attach Zee Closure with 1/4-14 x 1 1/4" Lap Tek ZAC fasteners at 1'-0" O.C. Install from Ridge to Eave to avoid "Back Water Laps". Place 3/32" x 3/8" Butyl Tape or 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 4. Attach Rake Tie-In Trim to Zee Closure with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C.
  - 5. Trim pieces lap 2".

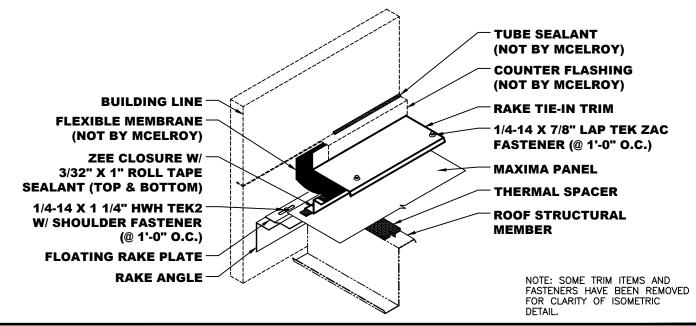




# MAXIMA FLOATING RAKE START TIE-IN DETAIL (OFF MODULE)

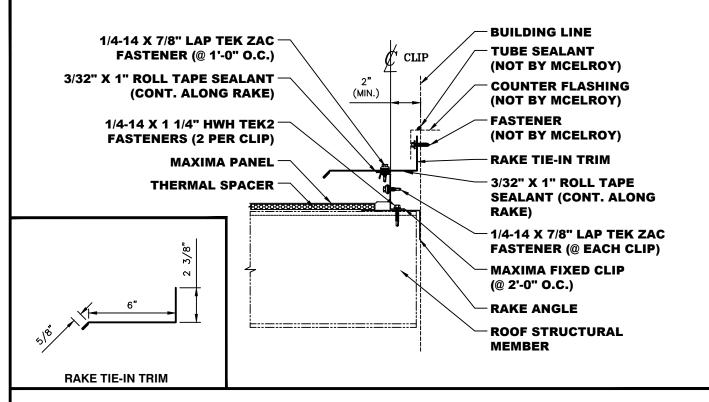


- NOTES: 1. Rake Tie-In Trim to start even with building line.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top and bottom of Zee Closure the length of the rake.
  - 3. Attach Zee Closure with 1/4-14 x 1 1/4" Lap Tek ZAC fasteners at 1'-0" O.C. Install from Ridge to Eave to avoid "Back Water Laps". Place 3/32" x 3/8" Butyl Tape or 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 4. Attach Rake Tie-In Trim to Zee Closure with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C.
  - 5. Trim pieces lap 2".

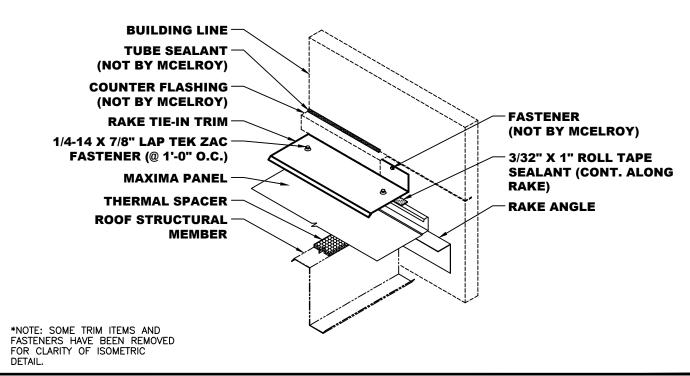




## **FIXED RAKE END TIE-IN DETAIL**

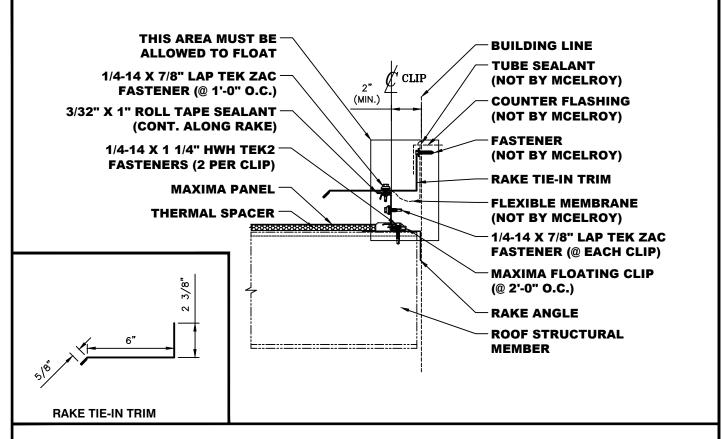


- NOTES: 1. Rake Tie-In Trim to start even with building line.
  - 2. Place 3/32" x 1" Roll Tape Sealant along top of female leg of panel the length of the rake.
  - 3. Attach Rake Tie-In Trim with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C. Place 3/32" x 3/8" Butyl Tape or 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 4. Trim pieces lap 2".

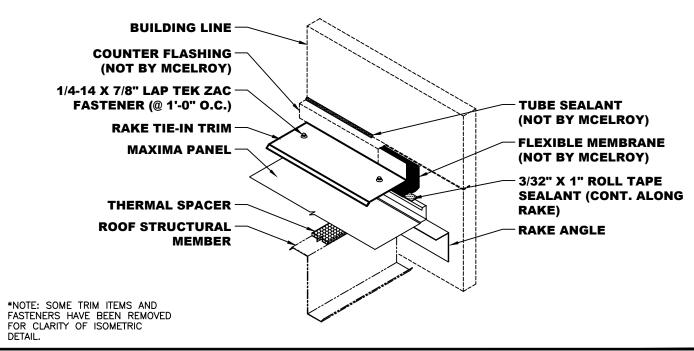




# MAXIMA FLOATING RAKE END TIE-IN DETAIL

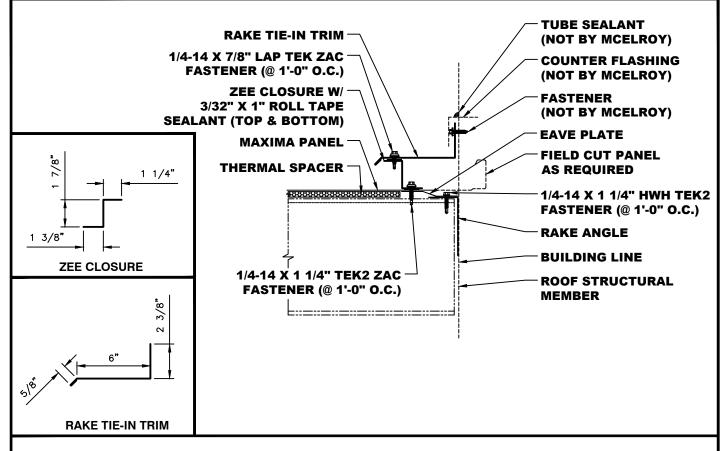


- NOTES: 1. Rake Tie-In Trim to start even with building line.
  - 2. Place 3/32" x 1" Roll Tape Sealant along top of female leg of panel the length of the rake.
  - 3. Attach Rake Tie-In Trim with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C. Place 3/32" x 3/8" Butyl Tape or 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 4. Trim pieces lap 2".

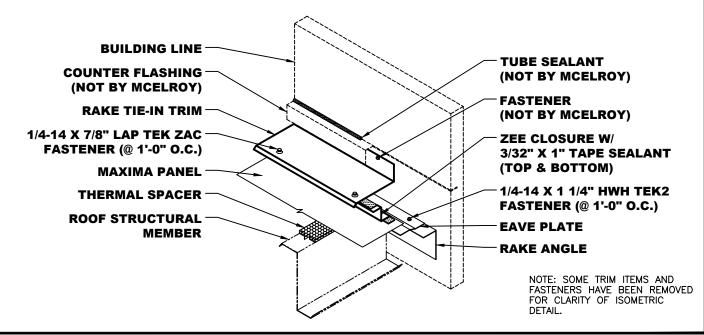




# MAXIMA FIXED RAKE END TIE-IN DETAIL (OFF MODULE)

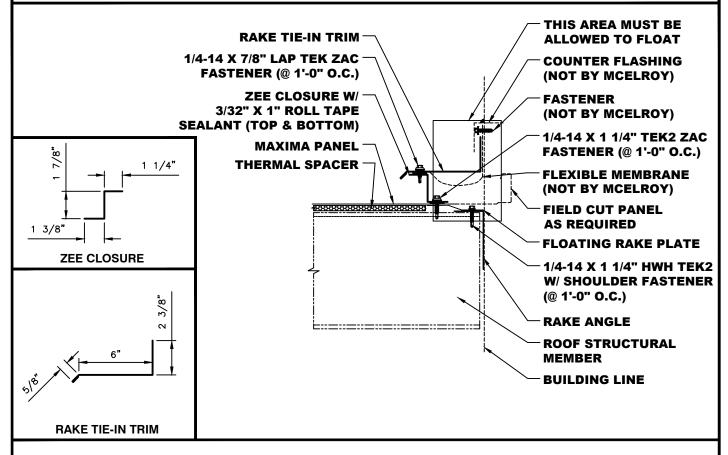


- NOTES: 1. Rake Tie-In Trim to start even with building line.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top and bottom of Zee Closure the length of the rake.
  - 3. Attach Zee Closure with 1/4-14 x 1 1/4" Lap Tek ZAC fasteners at 1'-0" O.C. Install from Ridge to Eave to avoid "Back Water Laps". Place 3/32" x 3/8" Butyl Tape or 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 4. Attach Rake Tie-In Trim to Zee Closure with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C.
  - 5. Trim pieces lap 2".

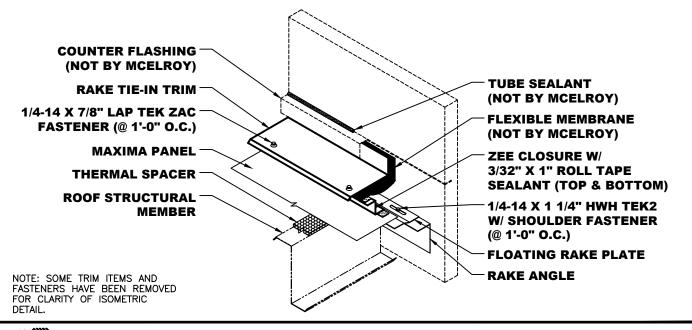




# MAXIMA FLOATING RAKE END TIE-IN DETAIL (OFF MODULE)

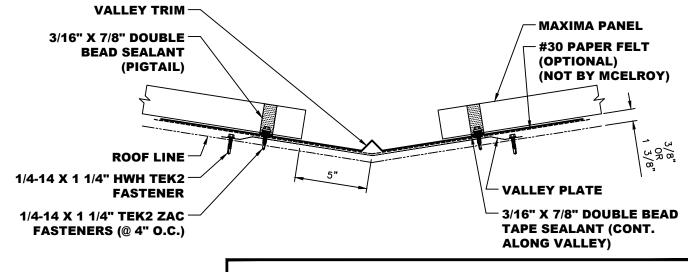


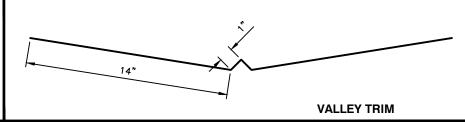
- NOTES: 1. Rake Tie-In Trim to start even with building line.
  - 2. Place 3/32" x 1" Roll Tape Sealant on top and bottom of Zee Closure the length of the rake.
  - 3. Attach Zee Closure with 1/4-14 x 1 1/4" Lap Tek ZAC fasteners at 1'-0" O.C. Install from Ridge to Eave to avoid "Back Water Laps". Place 3/32" x 3/8" Butyl Tape or 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 4. Attach Rake Tie-In Trim to Zee Closure with 1/4-14 x 7/8" Lap Tek ZAC fasteners at 1'-0" O.C.
  - 5. Trim pieces lap 2".



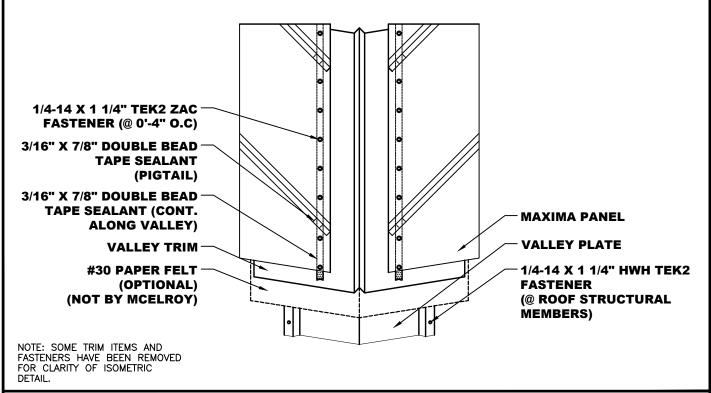


# **VALLEY DETAIL**



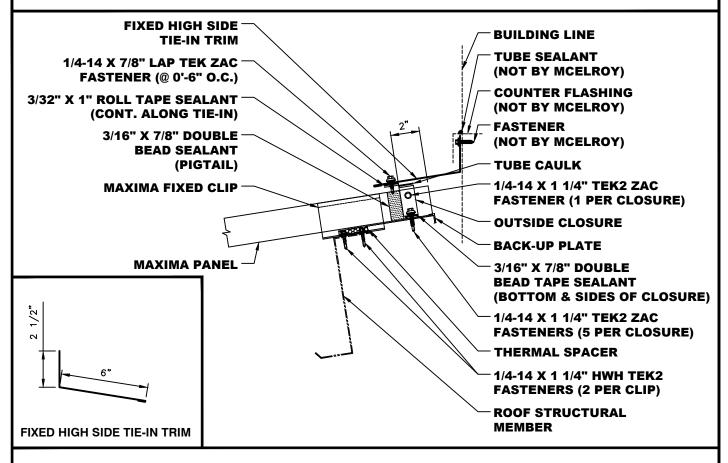


- NOTES: 1. Install Valley Trim from eave to ridge. Valley Trim pieces lap 6". Place 3/32" x 1" Butyl Tape or a 3/16" Ø bead of Butyl Tube Sealant in laps.
  - 2. Cut panels at required bevel for valley condition.
  - 3. Apply a continuous line of 3/16" x 7/8" Double Bead Tape Sealant up both sides of Valley Trim.
  - 4. Install roof panels and attach with 1/4-14 x 1 1/4" Tek2 ZAC fasteners at 4" O.C.

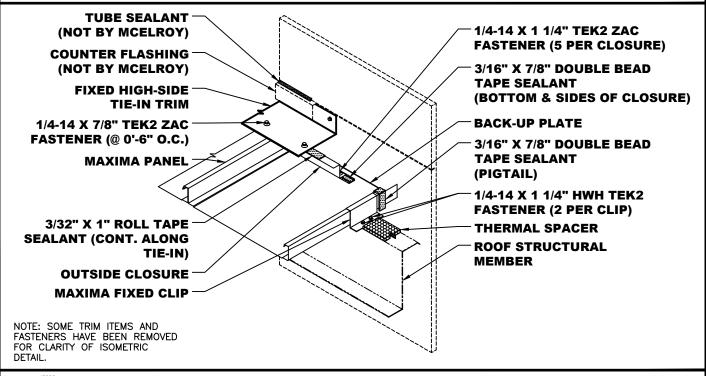




## **FIXED HIGH SIDE TIE-IN DETAIL**

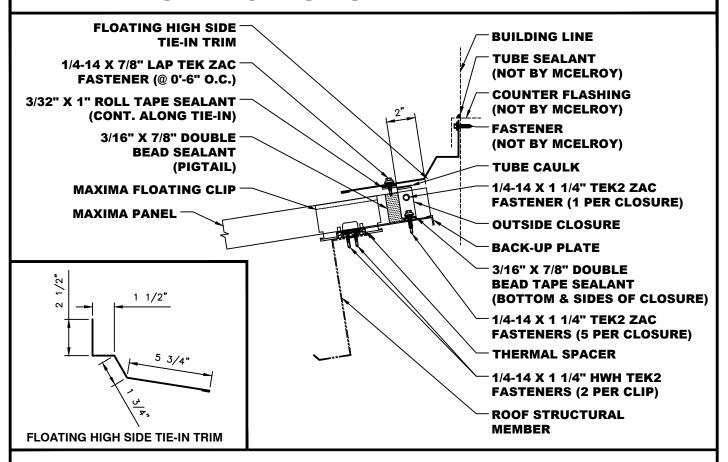


- NOTES: 1. Install High Side Tie-In Trim from out of panel to out of panel.
  - 2. Apply continuous line of 3/32" x 1" Roll Tape Sealant along top of Outside Closures.
  - 3. Install High Side Tie-In Trim to Ouside Closures with 1/4-14 x 7/8" Lap Tek Zac Fasteners at 6" O.C.
  - 4. Trim laps are 2". Apply 3/32" x 1" Butyl Tape or a 3/16" Ø bead of Tube Butyl in laps.

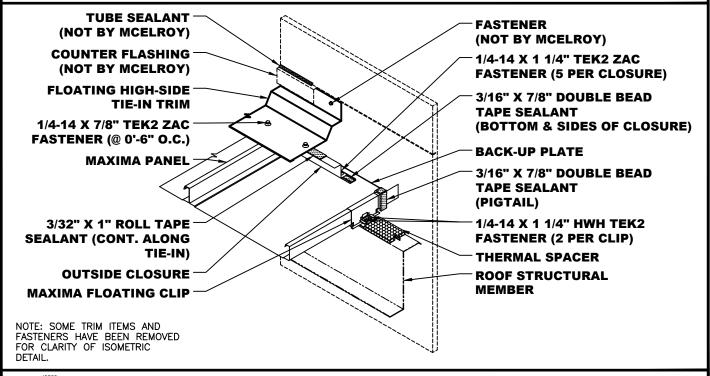




# MAXIMA FLOATING HIGH SIDE TIE-IN DETAIL



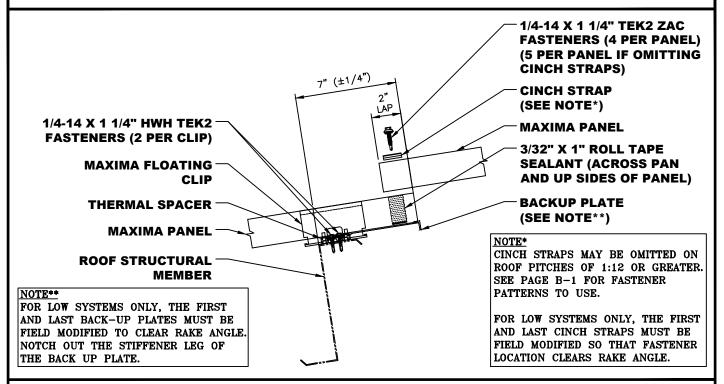
- NOTES: 1. Install High Side Tie-In Trim from out of panel to out of panel.
  - 2. Apply continuous line of 3/32" x 1" Roll Tape Sealant along top of Outside Closures.
  - 3. Install High Side Tie-In Trim to Ouside Closures with 1/4-14 x 7/8" Lap Tek Zac Fasteners at 6" O.C.
  - 4. Trim laps are 2". Apply 3/32" x 1" Butyl Tape or a 3/16" Ø bead of Tube Butyl in laps.



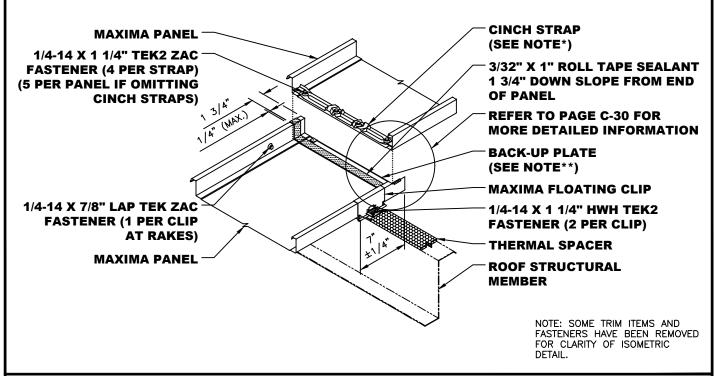


#### **MAXIMA**

### **END LAP DETAIL**

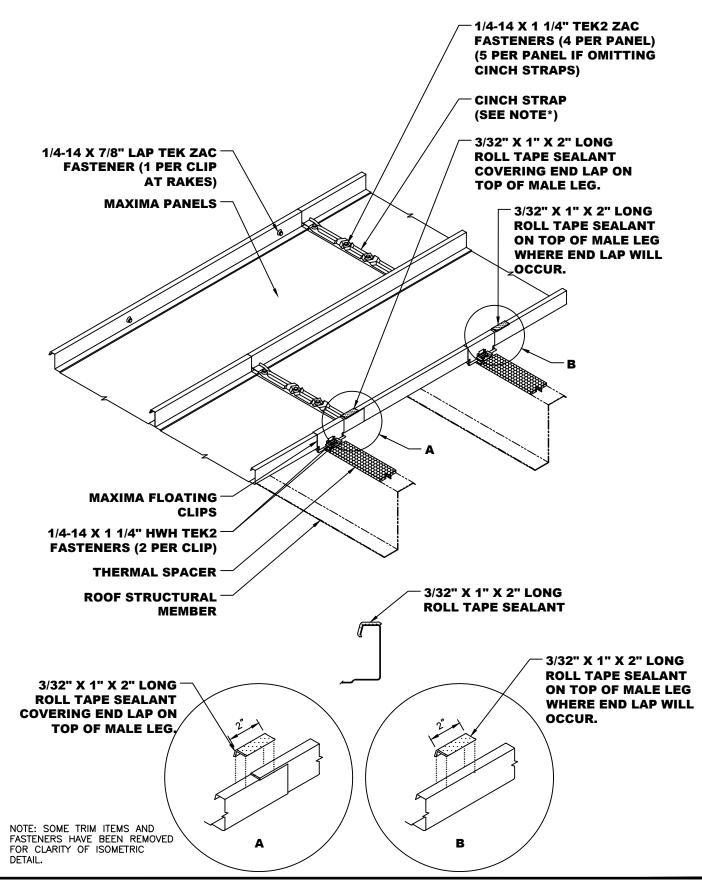


- NOTES: 1. Prior to attaching panel to the Eave Plate, measure the panel overhang at the purlin. The panel should extend 7" (+/- 1/4") up slope from the web of the purlin or centerline of joist.
  - 2. Slide the Back-up Plate on the end of the panel. Make sure the teeth are fully engaged with the panel.
  - 3. Apply a line of 3/32" x 1" Roll Tape Sealant 1 3/4" from the up slope end of the panel. The factory notches along the leading and trailing legs are 2" long and can be used as a guide to start the sealant placement.
  - 4. Position the up slope panel so the hook portion of the trailing leg is against the notch portion of the previously installed panel. The up slope panel should be aligned so the tape sealant on the down slope panel is covered by the up slope panel.

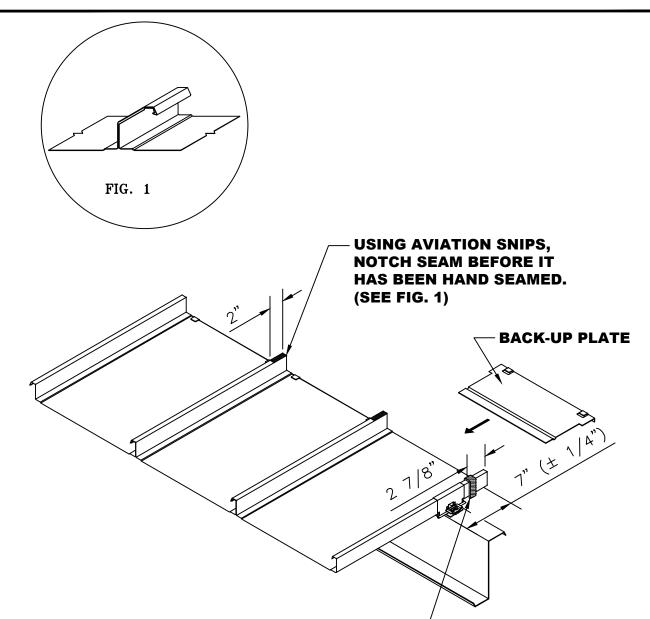




# **END LAP DETAIL (CONT.)**







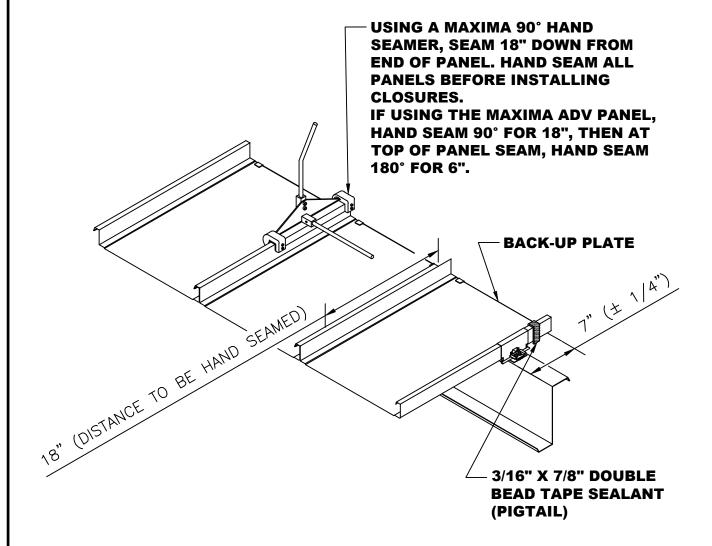
- 3/16" X 7/8" DOUBLE BEAD TAPE SEALANT (PIGTAIL)

## STEP 1

NOTE: SOME TRIM ITEMS AND FASTENERS HAVE BEEN REMOVED FOR CLARITY OF ISOMETRIC DETAIL.

INSTALL PANELS AND BACK-UP PLATES AS NORMAL. NOTCH PANELS SEAMS AT RIDGE TWO INCHES (2") DOWN FROM END OF PANEL, REMOVING ALL OF THE HORIZONTAL PORTION OF THE SEAM. SEE FIGURE 1.



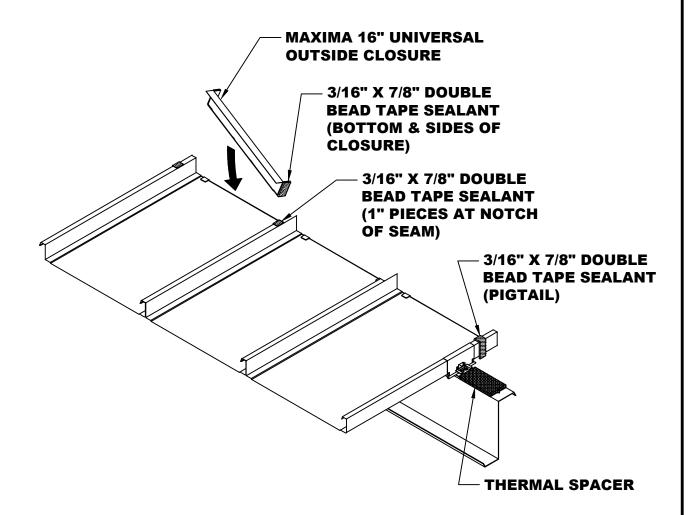


NOTE: SOME TRIM ITEMS AND FASTENERS HAVE BEEN REMOVED FOR CLARITY OF ISOMETRIC DETAIL.

### STEP 2

HAND SEAM PANELS EIGHTEEN INCHES (18") DOWN FROM THE ENDS OF THE PANELS.





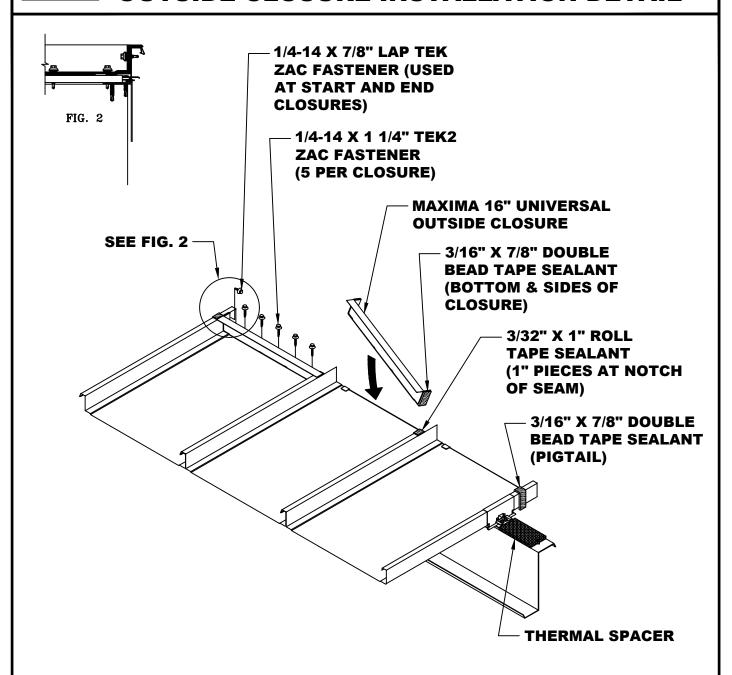
### STEP 3

APPLY 3/16" X 7/8" ROLL TAPE SEALANT TO THE TOP SIDE OF THE PANEL SEAM WHERE THE NOTCH YOU MADE ENDS.

APPLY 3/16" X 7/8" DOUBLE BEAD TAPE SEALANT TO THE BOTTOM AND SIDES OF THE OUTSIDE CLOSURE. (THIS SEALANT MOST BE CONTINUOUS FROM ONE SIDE TO THE OTHER)

INSTALL OUTSIDE CLOSURES SO THAT VERTICAL FACE OF CLOSURE IS LINED UP AT NOTCH IN SEAM.





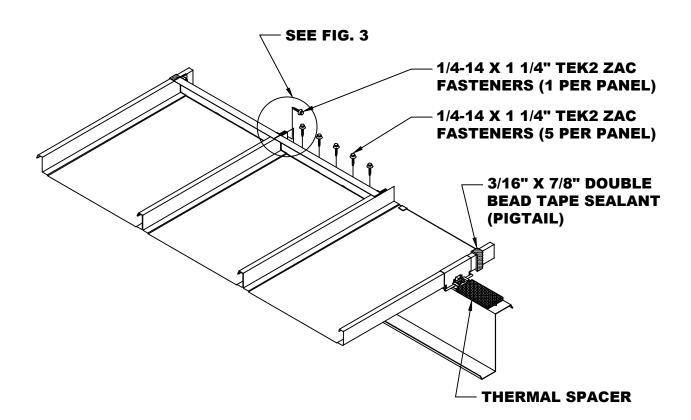
### STEP 4

FASTEN OUTSIDE CLOSURES TO PANELS WITH FIVE (5)  $1/4-14 \ X \ 1 \ 1/4"$  TEK2 ZAC FASTENERS.

AT THE STARTING AND ENDING PANELS ONLY, USE ONE (1) 1/4-14 X 7/8" LAP TEK ZAC FASTENER TO SECURE THE OUTSIDE VERTICAL LEG OF THE CLOSURE TO THE VERTICAL LEG OF THE PANEL. SEE FIG. 2.





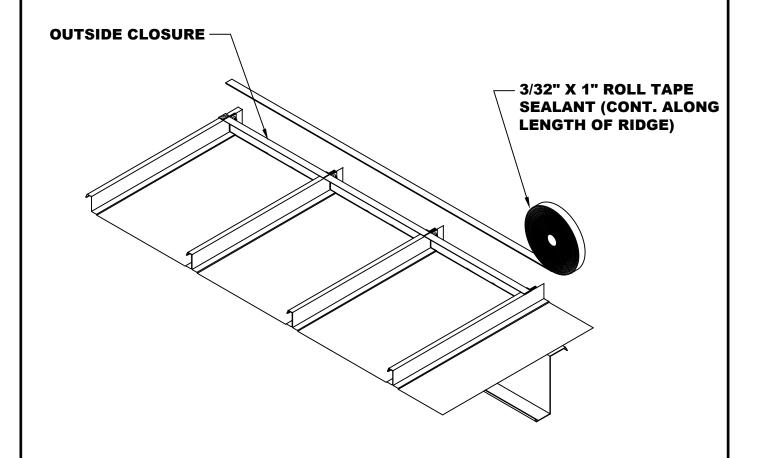


## STEP 5

FASTEN OUTSIDE CLOSURES TO PANELS AS DESCRIBED IN STEP 4.

SECURE THE VERTICAL LEG OF THE CLOSURES TO THE VERTICAL SEAM WITH ONE (1)  $1/4-14 \ X \ 1 \ 1/4"$  TEK2 ZAC FASTENER. SEE FIGURE 3.



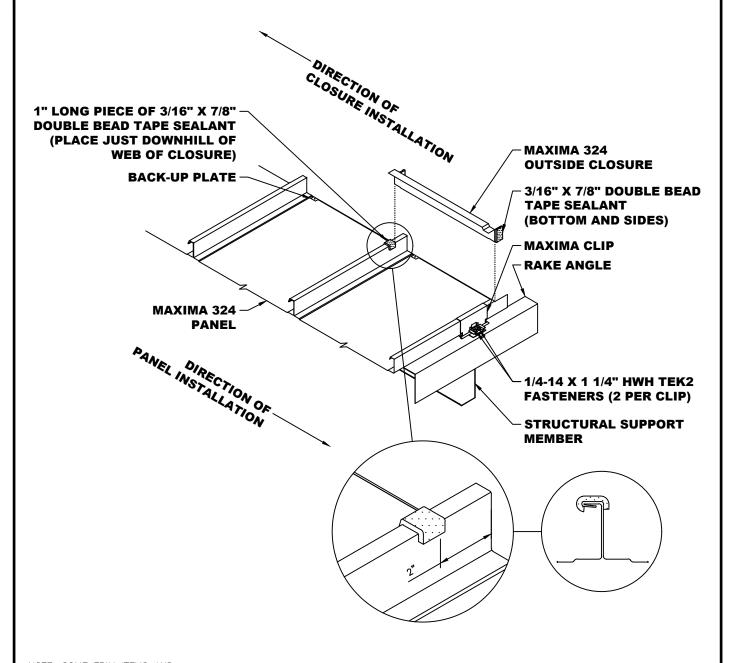


# STEP 6

NOTE: SOME TRIM ITEMS AND FASTENERS HAVE BEEN REMOVED FOR CLARITY OF ISOMETRIC DETAIL.

APPLY 3/32" X 1" ROLL TAPE SEALANT TO THE TOP OF THE OUTSIDE CLOSURES. THIS TAPE IS CONTINUOUS ALONG THE FULL LENGTH OF THE RIDGE, HIGH SIDE EAVE, HI-SIDE TIE-IN, HIP, TRANSITION, ETC.

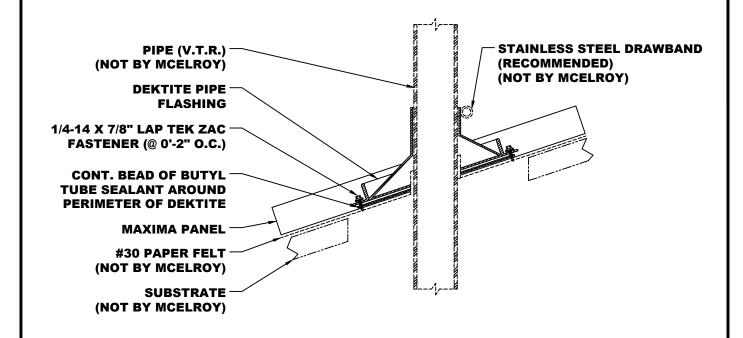




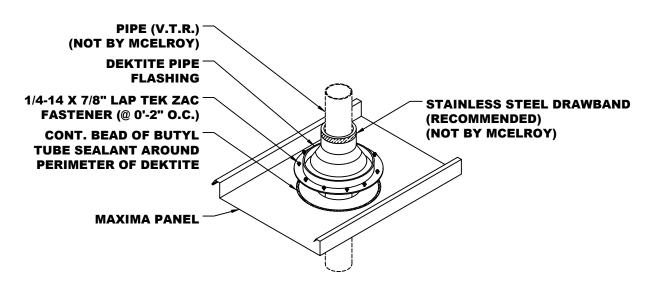
- NOTES: 1. Starting from the rigth hand side of roof, hand crip seams 18" down from the end of the panel.
  - 2. Place a 1" long piece of 3/16" x 7/8" Double Bead Tape Sealant across the top of the seam at the notch. If panels are not factory notched, place sealant tape 2" down from end of seam.
  - 3. Apply 3/16" x 7/8" Double Bead Tape Sealant to the sides and bottom of an Outside Closure.
  - 4. Starting at the right-hand side of the roof, install Outside Closures and fasten to the pan of the roof panels with five (6) 1/4-14 x 1 1/4" Tek2 ZAC Fasteners and one (1) 1/4-14 x 1 1/4" Tek2 ZAC Fastener through the tabs into the panel seams.



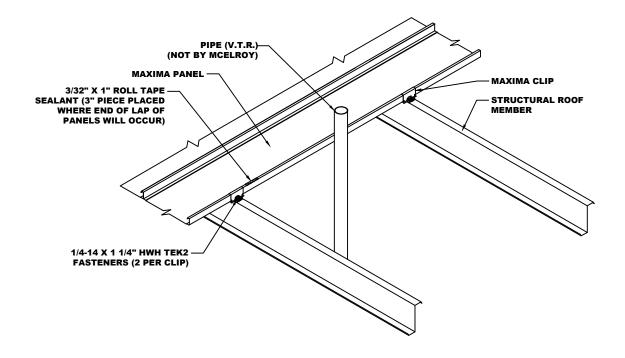
### **DEKTITE DETAIL**



- NOTES: 1. Cut hole in panel 1" larger than pipe diameter. If installing over a solid substrate, over-cut hole in substrate so fastener do not pin system from thermal movement.
  - 2. Cut hole in top of Dektite Boot so that it fits snuggly around pipe. Apply a 3/16" Ø bead of Tube Butyl sealant around the base flage of boot. Secure to panel with 1/4-14 x 7/8" Lap Tek ZAC fasteners 2" O.C.
  - 3. Dektite boot MUST fit in pan of panel. Do not fasten to standing seams.

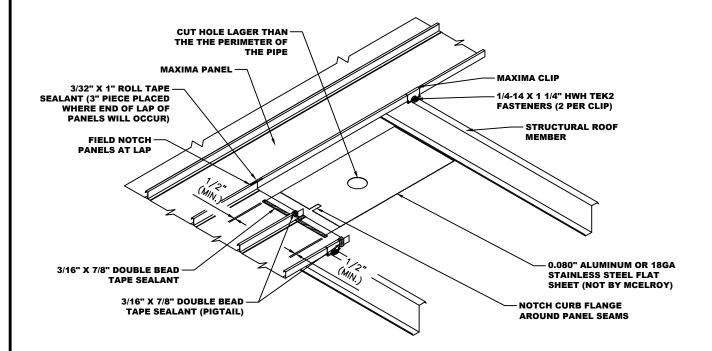






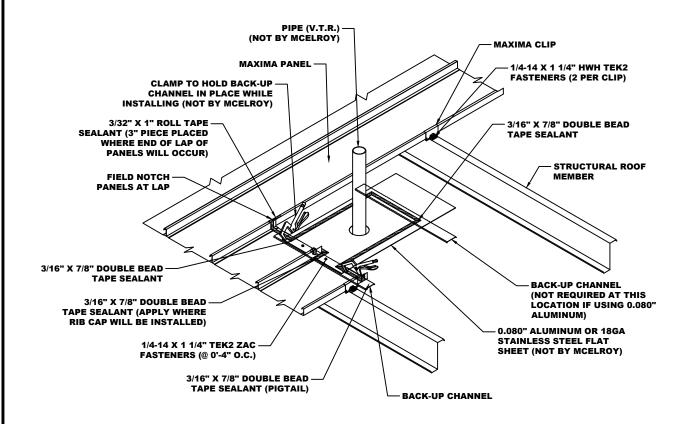
STEP #1





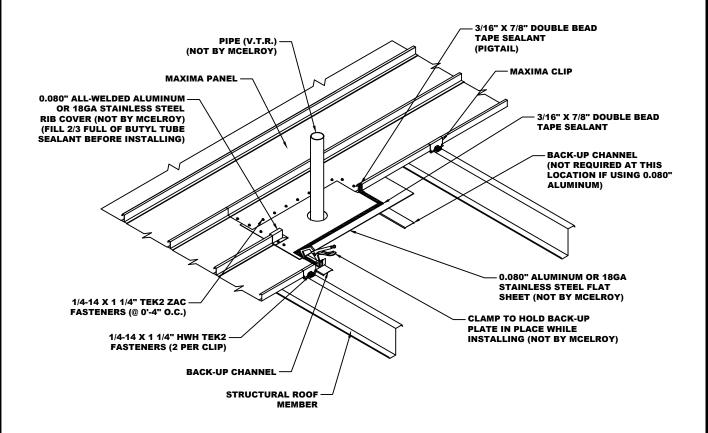
STEP #2





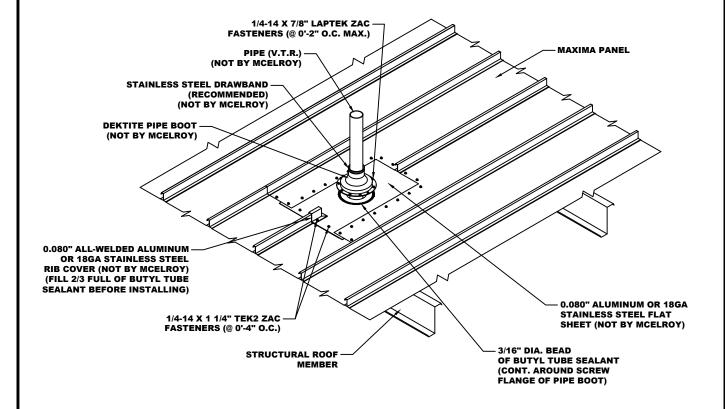
STEP #3





STEP #4



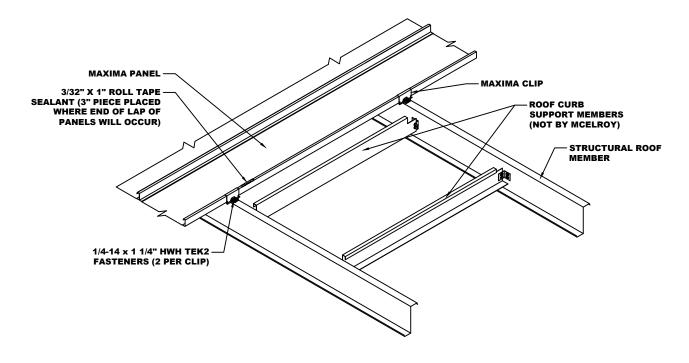


STEP #5

NOTE: SOME TRIM ITEMS AND FASTENERS HAVE BEEN REMOVED FOR CLARITY OF ISOMETRIC DETAIL.

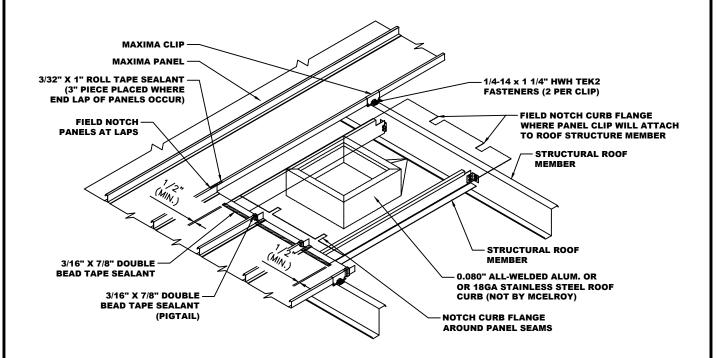
NOTE: GUTTERS AND PENETRATIONS SHOULD BE PROTECTED BY A SNOWGUARD SYSTEM TO PREVENT DAMAGE FROM SLIDING ICE AND SNOW.





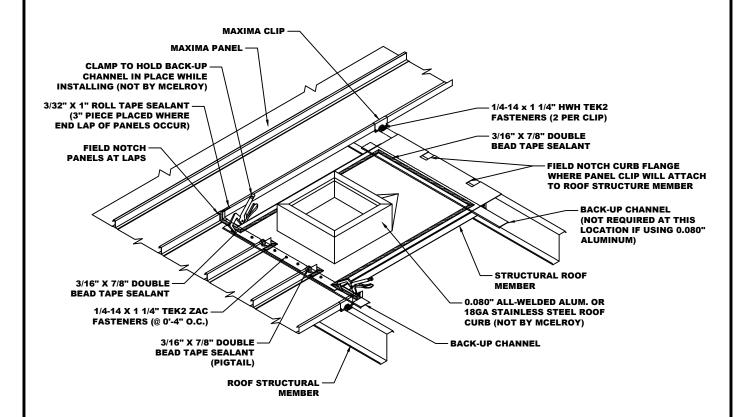
STEP #1





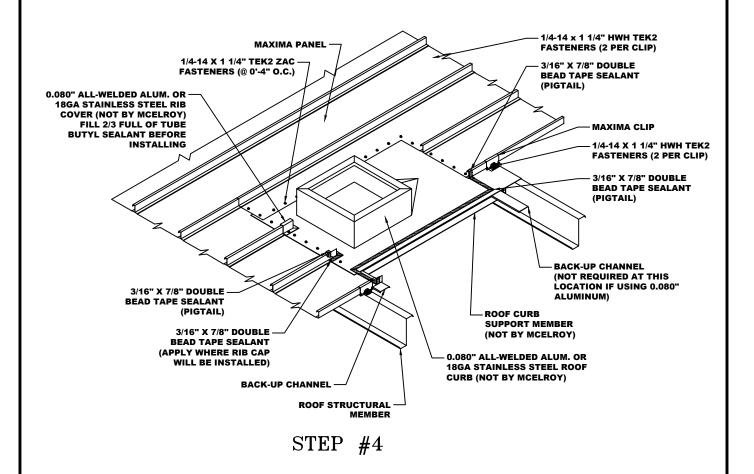
STEP #2



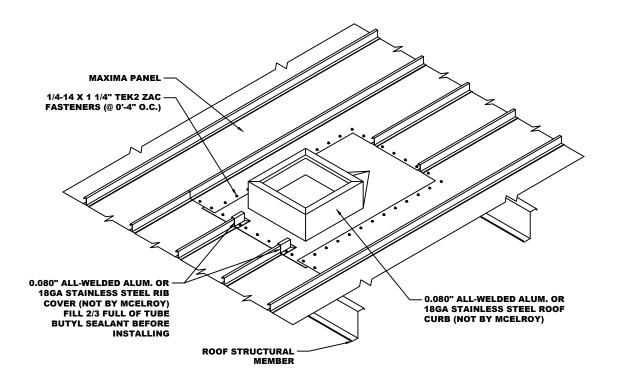


STEP #3







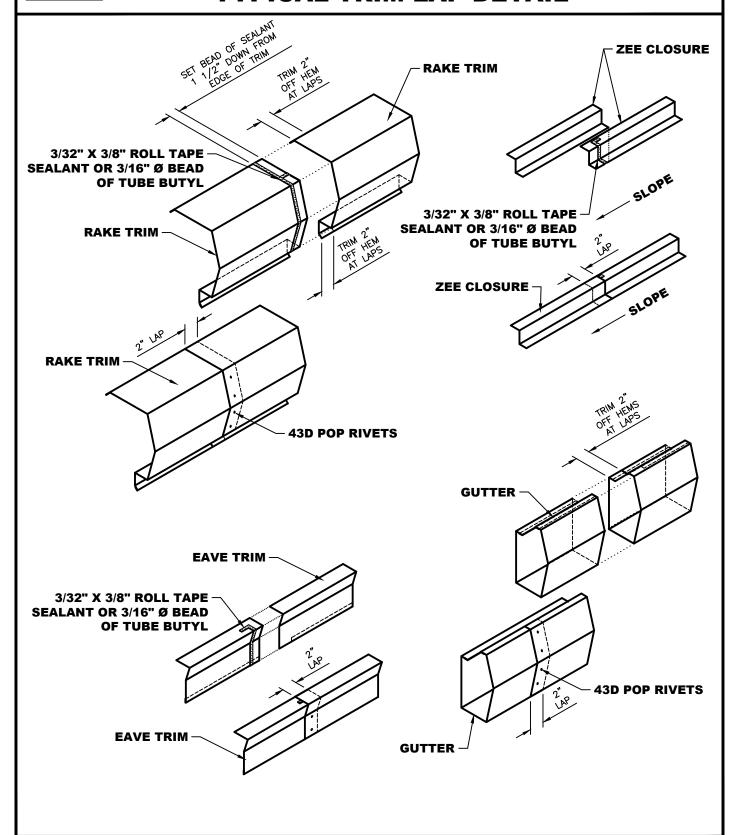


STEP #5

NOTE: GUTTERS AND PENETRATIONS SHOULD BE PROTECTED BY A SNOWGUARD SYSTEM TO PREVENT DAMAGE FROM SLIDING ICE AND SNOW.



### **TYPICAL TRIM LAP DETAIL**

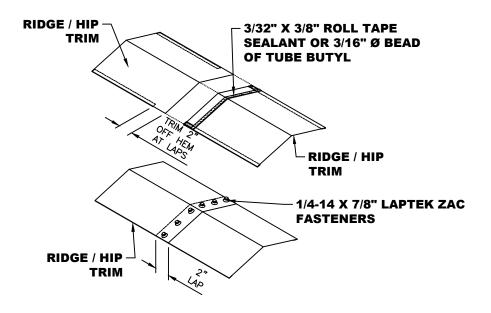


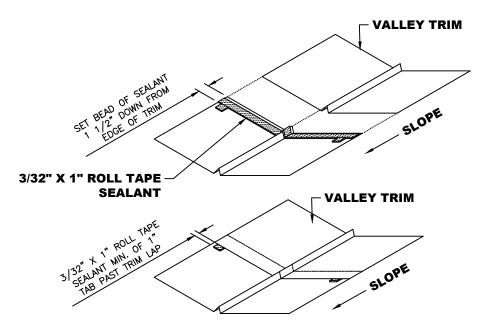
NOTE: 1. Apply 3/32" x 3/8" Roll Tape Sealant or a 3/16" Ø bead of Tube Butyl 1 1/2" back from the edge of the trim. Also, apply a piece of tape sealant or bead of Tube Butyl as a Pigtail to completely seal joint.

- 2. Notch the hems on the upper trim piece 2" so that the trim will fit flat in the lap joint.
- 3. Secure trim laps with Pop Rivets as shown above.



# **TYPICAL TRIM LAP DETAIL**





NOTE: 1. Apply 3/32" x 3/8" Roll Tape Sealant or a 3/16" Ø bead of Tube Butyl 1 1/2" back from the edge of the trim. Also, apply a piece of tape sealant or bead of Tube Butyl as a Pigtail to completely seal joint.

- 2. Notch the hems on the upper trim piece 2" so that the trim will fit flat in the lap joint.
- 3. Secure trim laps with 1/4-14 x 7/8" LapTek Zac Fasteners as shown above.





#### ☆ MANUFACTURING LOCATIONS ● SERVICE CENTERS ★ MANUFACTURING AND SERVICE CENTER



#### MANUFACTURING LOCATIONS

ADELANTO, CA ASHBURN, GA BOSSIER CITY, LA CLINTON, IL DIAMOND, MO HOUSTON, TX LEWISPORT, KY LOCKHART, TX MARSHALL, MI MAUSTON, WI

MERKEL, TX PEACHTREE CITY, GA SUNNYVALE, TX WINCHESTER, VA



17031	Koala	Road

Adelanto, CA 92301

3052 Yadkin Road Chesapeake, VA 23323

409 Lovejoy Road Ft. Walton Beach, FL 32548

10504 E. 59th Street Indianapolis, IN 46236

1020 Veterans Street Mauston, WI 53948

613 North Bierdeman Rd. **Pearl, MS** 39208

8200 Berry Ave. Suite 100 Sacramento, CA 95828

5215 Leo St. **Alexandria, LA** 71301

9476 Meadowbrook Rd. Clinton, IL 61727

3014 Lincoln Court Garland, TX 75041

32 Industrial Circle Lancaster, PA 17601

5123 Terminal Dr. McFarland, WI 53558

8511 Industrial Drive Pearland, TX 77584

1365 Dean Forest Rd. Savannah, GA 31405 1007 Wilso Dr, Baltimore, MD 21223

3215 Highway 59 Diamond, MO 64840

1440 Aldine Bender Road Houston, TX 77032

9435 US Hwy. 60 W. Lewisport, KY 42351

514 Cave Road Nashville, TN 37210

2755 Hwy 60 **Pendergrass, GA 30567** 

7355 Oakley Industrial Blvd. Union City, GA 30291

1500 Hamilton Rd. Bossier City, LA 71111

390 N. Valley Dell Dr. **Fenton, MO** 63026

221 Benelli Drive Hutto, TX 78634

2701 Cahill Street Lockhart, TX 78644

8304 Hwy. 70 E. North Little Rock, AR 72117

7450 Tower Street Richland Hills, TX 76118

1144 Silstar Rd. West Columbia, SC 29170

325 McGhee Rd. Winchester, VA 22603

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