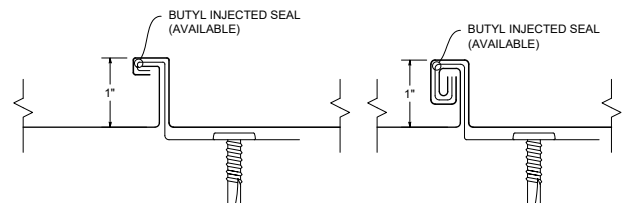
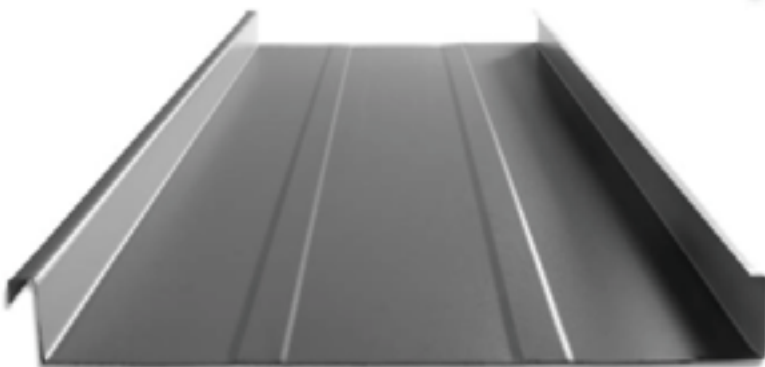
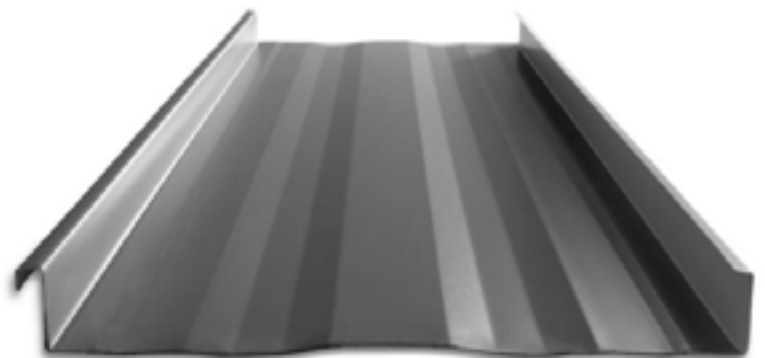
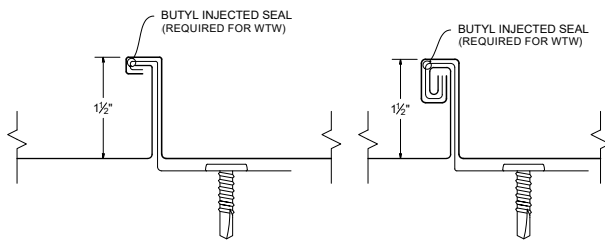




## MS-100™ & MS-150™

# Installation Guide - WeatherTight Warranty Details

(\*Note: MS-100™ does not qualify for WeatherTight Warranties)



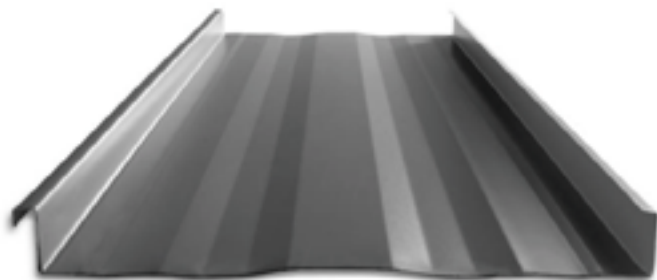


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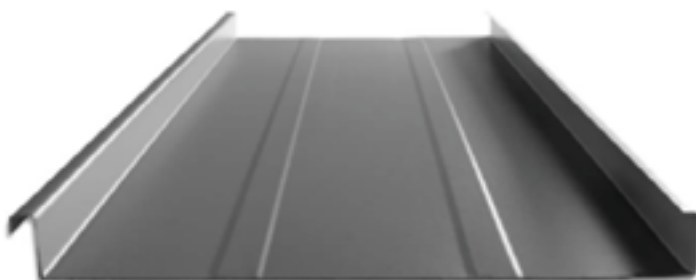
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13", 17" & 21" coverage options  
(other widths inquire)

### PANEL PROFILES



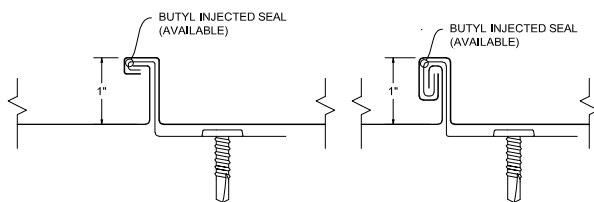
**STRIATIONS**



**ACCENT RIBS**

2 Accent ribs for 13" panels (Salem & Riverside)  
3 Accent ribs for 17" & 21" panels  
2 Accent ribs for all panels (Sacramento)

**90° SEAM DETAIL**




**180° SEAM DETAIL**

### KEY FEATURES

- 13", 17" & 21" coverage options (*other widths inquire*)
- 24 & 22 Tru-Gauge™ and .032" Aluminum
- 16 & 20 oz. Copper (*Please inquire*)
- Zinc Coil (*inquire for thicknesses*)
- Floating clip system: allows for expansion/contraction of panels in longer lengths
- 1" vertical rib
- Factory injected Butyl sealant
- Clip Relief is not standard, available upon request
- Concealed fasteners: fasteners cannot leak
- 1:12 minimum pitch recommended (*For lower pitches, please inquire*)
- Standard panel lengths 3' to 60' - notched  
Standard panel lengths 1' to 60' - not notched (*For longer panels, please inquire*)
- Onsite roll forming available
- Panel options: Striations, Accent Ribs, and Flat Pan
- Manufactured in Salem, OR and Riverside, CA

### TESTING

-  Code compliance UL Evaluation Report  
UL ER #25913-01
- UL Construction No. 575 & 602
- UL 580 Class 90 - Wind Uplift
- UL 790 Class A (ASTM E108) - Fire rated
- UL 2218 Class 4 - Impact (hail) rated
- ASTM A653/A924 - G90 Galvanized
- ASTM A792 - Zincalume/Galvalume AZ-50/55
- ASTM B209 - Aluminum Substrate



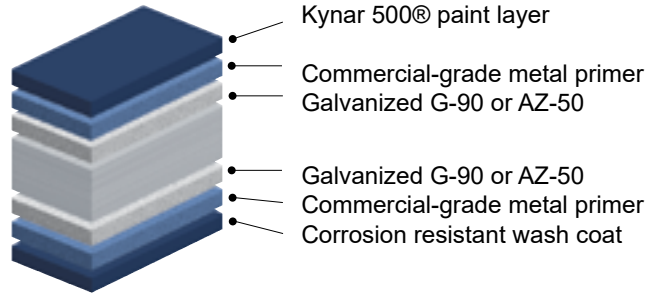
The MS-100™ is a mechanically seamed roof that is perfect for high wind areas and snow country. The butyl injected seam prevents water from entering the system, giving you a worry free roof for a lifetime.

## MATERIAL SPECIFICATIONS

- 26 gauge Kynar 500® Painted Steel  
.019" (Thickness prior to painting)  
G-90 Galvanized or AZ-50
- 24 gauge Kynar 500® Painted Steel  
.0236" (Thickness prior to painting)  
G-90 Galvanized or AZ-50
- 26, 24 & 22 gauge bare Zincolume® Plus AZ-55  
(No finish warranty – 25 yr. perforation warranty)
- ▲ 22 gauge Kynar 500® Painted Steel  
.029" (Thickness prior to painting)  
G-90 Galvanized or AZ-50
- ♦ .032" Kynar 500® Painted Aluminum
- 16 and 20 ounce Copper  
(Please inquire)
- Kynar 500® and substrate testing data available  
(See website)
- "Oil canning" is an inherent characteristic of roof and wall products, and not a defect, which is not a cause for panel rejection

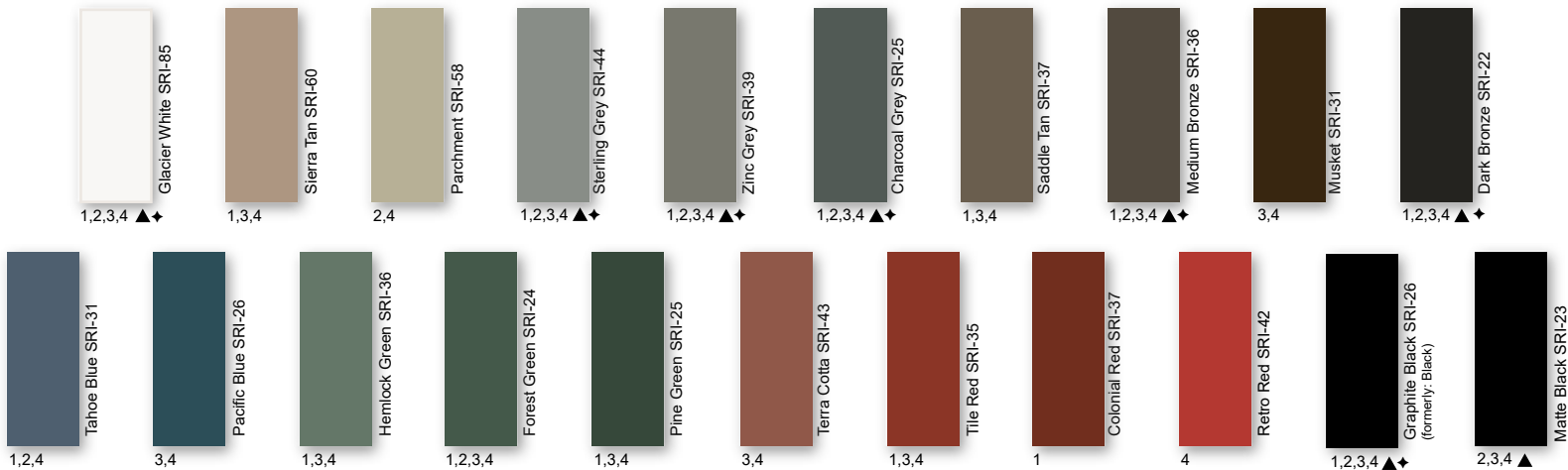
## KEY FEATURES

- 21 Standard Colors, 5 Metallic Colors and 4 Specialized Materials
- Kynar 500® Paint System - the ultimate in exterior durability and color retention
- "Cool" color pigments are specially designed to reflect infrared light, reducing heat gain to dwelling, and conform with ENERGY STAR® criteria
- Superior quality, two-coat, 70% resin finish, applied at a 1 mil. thickness
- 40-year residential paint warranty
- 20 and 30 year commercial paint warranty: Contact TMP for warranty specifications

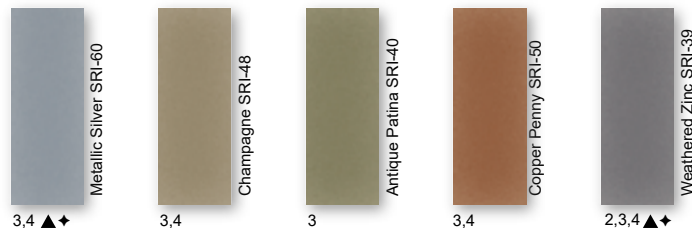


### 40-Year Residential / 20 and 30 Year Commercial Manufacturer's Limited Warranty

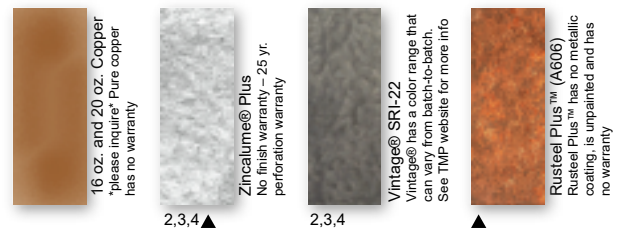
## STANDARD COOL KYNAR 500® COLORS



## PREMIUM METALLIC COOL KYNAR® COLORS



## SPECIALIZED MATERIAL



These printed chips provide a close representation of the colors.

Metal samples are available upon request. Coatings are low gloss 10-15% sheen. SRI = Solar Reflective Index. SRI values listed above are in accordance with ASTM E1980 and are based on actual testing. \*\*\*Oil canning is not a cause for material rejection\*\*\*





Standard MS100 Panels				
Width	Gauge	Color	LBS SQFT	LBS LF
13.75"	26	1	0.98	1.14
13.75"	24	2	1.15	1.34
17-5/8"	24	3	1.11	1.65
21"	24	4	1.09	1.93
13" and 21"	22	▲	1.37	2.42
Inquire	0.032	♦	0.52	0.81



The MS-150™ is a mechanically seamed roof that is perfect for high wind areas and snow country. The butyl injected seam prevents water from entering the system, giving you a worry free roof for a lifetime.

### KEY FEATURES

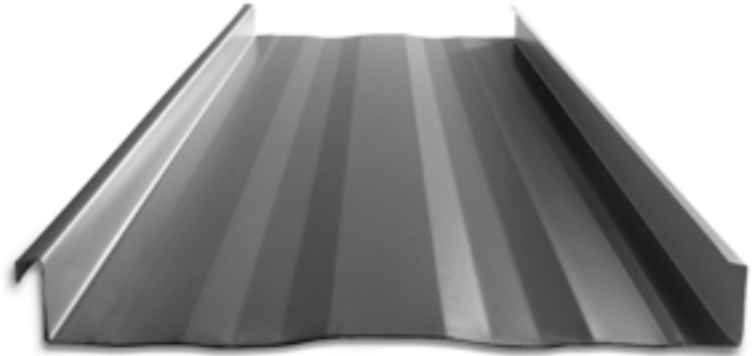
- 12", 16" & 20" coverage options
- 26, 24 & 22 gauge Tru-Gauge™ and .032" Aluminum
- 16 & 20 oz. Copper (*Please inquire*)
- True Zinc available on special request (*Please inquire*)
- Floating clip system: allows for expansion / contraction of panels in longer lengths
- 1-1/2" vertical rib
- Factory injected Butyl sealant
- Concealed fasteners: fasteners cannot leak
- Manufactured in Riverside CA, Sacramento CA & Salem, OR
-  ICC-ESR #5046 with CBC-CRC Supplement
-  - Code compliance UL Evaluation Report UL ER 25913-01
- UL 580 Class 90 Wind Uplift, UL 790 Class A Fire rated and UL 2218 Class 4 Impact (hail) rated
- UL Construction No. 554
- ASTM E283 - Air infiltration (walls)
- ASTM E331 - Water infiltration (walls)
- ASTM E1592 - Structural uniform static air pressure
- ASTM E1646 - Water infiltration (roof)
- ASTM E1680 - Air infiltration (roof)
- ASTM E2140 - Water test for full immersion hydrostatic roof systems
- Weather tightness warranty available: 5 to 30 Year Prorated or NDL (*Contact TMP representative for details*)
- 1:12 minimum pitch recommended (*For lower pitches, please inquire*)
- Standard panel lengths 3' to 60' - notched  
Standard panel lengths 1' to 60' - not notched (*For longer panels, please inquire*)
- On-site roll forming available
- Panel options: Striations, Accent Ribs, and Flat Pan
- Retro-fit systems available

### PANEL PROFILES

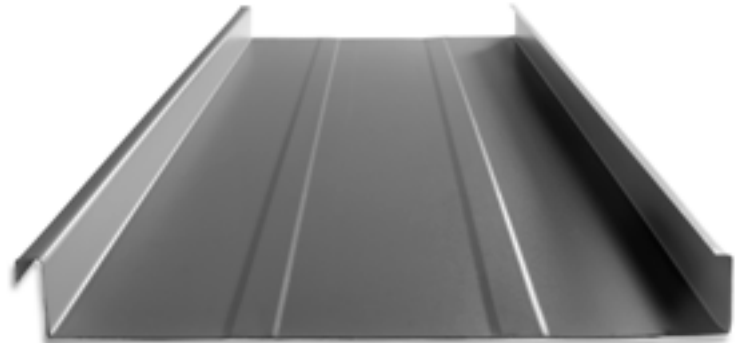


ICC-ESR #5046

12" to 20" coverage options

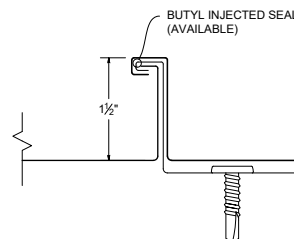


**STRIATIONS**

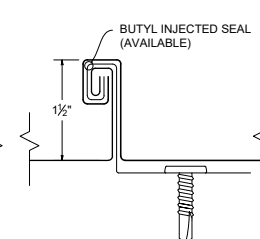


**ACCENT RIBS** 2 Accent ribs for 12-3/4" panel  
3 Accent ribs for 16-5/8" & 20" panel

### 90° SEAM DETAIL



### 180° SEAM DETAIL



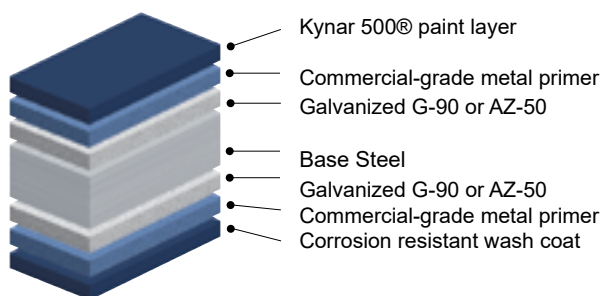
180 degree seams are not considered an architectural detail. The detail improves the weather tightness and wind uplift capabilities of the panel system, but will show stress and waviness in the seam. The detail is recommended for slopes less than 2:12, roof areas not easily viewed from the ground, and for high wind areas. For additional information, contact a TMP representative and DI Seamers for support and information about the proper use of seaming tools.

## MATERIAL SPECIFICATIONS

- 26 gauge Kynar 500® Painted Steel  
.019" (Thickness prior to painting)  
G-90 Galvanized or AZ-50
- 24 gauge Kynar 500® Painted Steel  
.0236" (Thickness prior to painting)  
G-90 Galvanized or AZ-50
- 26, 24 & 22 gauge bare Zincolume® Plus AZ-55  
(No finish warranty – 25 yr. perforation warranty)
- ▲ 22 gauge Kynar 500® Painted Steel  
.029" (Thickness prior to painting)  
G-90 Galvanized or AZ-50
- ♦ .032" Kynar 500® Painted Aluminum
- 16 and 20 ounce Copper  
(Please inquire)
- Kynar 500® and substrate testing data available  
(See website)
- "Oil Canning" is an inherent characteristic of roof and wall products, and not a defect, which is not a cause for panel rejection

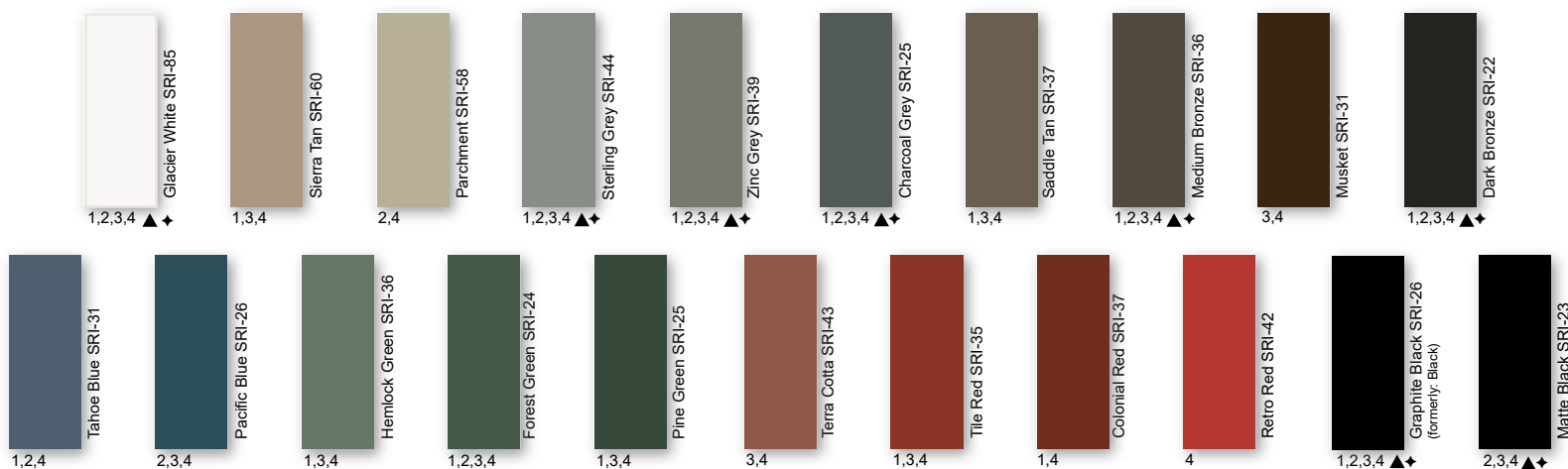
## KEY FEATURES

- 21 Standard Colors, 5 Metallic Colors and 4 Specialized Materials
- Kynar 500® Paint System - the ultimate in exterior durability and color retention
- "Cool" color pigments are specially designed to reflect infrared light, reducing heat gain to dwelling, and conform with ENERGY STAR® criteria
- Superior quality, two coat, 70% resin finish, applied at a 1 mil. thickness
- 40 year residential paint warranty
- 20 and 30 year commercial paint warranty: Contact TMP for warranty specifications

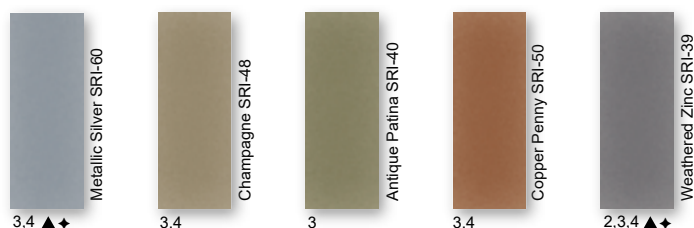


### 40-Year Residential / 20 and 30 Year Commercial Manufacturer's Limited Warranty

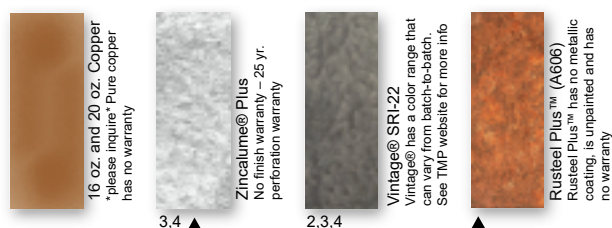
## STANDARD COOL KYNAR 500® COLORS



## PREMIUM METALLIC COOL KYNAR® COLORS



## SPECIALIZED MATERIAL



These printed chips provide a close representation of the colors.

Metal samples are available upon request. Coatings are low gloss 10-15% sheen.  
SRI = Solar Reflective Index. SRI values listed above are in accordance with ASTM E 1980 and are based on actual testing. \*\*\*Oil canning is not a cause for material rejection\*\*\*

Standard Panels				
Width	Gauge	Color	LBS SQFT	LBS LF
12-3/4"	26	1	1.05	1.14
12-3/4"	24	2	1.24	1.34
16-5/8"	24	3	1.18	1.65
20"	24	4	1.14	1.93
12"	22	▲	1.58	1.61
20"	22	▲	1.43	2.42
16-5/8"	0.032	♦	0.55	0.81



# Taylor Delivery Fleet



## Delivery Fleet

Taylor Metal Products prides itself with quick lead times delivered with our fleet of semi trucks. Our fleet of trucks are owned and operated by TMP. All of our drivers are Taylor Metal Products employees, so when your truck rolls in to deliver, you are dealing with Taylor Metal Products.

Expect consistent and exceptional service with short lead times. The inhouse fleet allows for efficient and cost-effective delivery.



Mounted on the rear of our semitrailer, the truck-mounted "piggy-back" forklift will accompany you right to your place of use, opening up unprecedented possibilities in terms of transportation. It can travel sideways, carrying panels up to 40' long, allowing delivery in locations that would typically be considered impossible to reach.

Save time and effort while avoiding potential loading and transport issues; have experienced TMP personnel deliver and unload your order.



## Delivery

We will make every attempt to deliver material to the desired location. We may be unable to gain access on tight corners or steep terrain. If the site is deemed inaccessible by our driver, the customer may choose an alternate delivery site within a reasonable proximity. If we are unable to make the alternate delivery, additional charges may be assessed.

The customer is responsible for:

- Determining adequate access for delivery ahead of time.
- Meeting the delivery at the agreed upon time.
- Providing adequate resources (1-4 people as needed) for off loading materials.
- A charge of \$100 per hour may be added for deliveries that go beyond their allotted time
- Check the shipment at the time of delivery.
- Verify material quantities against the shipping/packing list.
- Note any damage or discrepancies upon the paper work at the time of delivery and notify Taylor Metal Products within 48 hours of delivery.

Delivery times are usually scheduled one day in advance. Taylor Metal Products will make every effort to make the delivery at the scheduled time. Please be aware that there may be conditions beyond our control such as traffic, mechanical failures, road closures, etc. which may affect our schedule.

## Will Call/Loading

Flatbed trailers and trucks are best suited to transport metal roofing materials. These can be loaded from the side with a forklift and tied down in a safe and secure manner.

We are not able to load materials onto vehicles and/or trailers which are not suitable or may be hazardous to load. Please be aware that if we find a vehicle to be inappropriate, we reserve the right to refuse to load your order.

Unacceptable examples include: boat trailers, vans, buses, motor homes, campers and box trailers. Pickup racks which do not have sufficient supports for the weight or are not long enough to support bundles are also unacceptable.

Taylor Metal Products is not responsible to tie down loads nor do we provide any tie down materials. Please bring tie downs to secure your load (string or twine are **not** acceptable for this purpose).

**Consider having your order delivered on one of our trucks with a piggy back forklift.**



### Notes to Designer/Installer

**Taylor Metal Products** is providing the following details as an aid in design. The details in this guide are not inclusive to all design situations. The designer/installer is responsible for modifications and should take into consideration all aspects of the project including climate conditions, such as, snow and wind, as well as, building code requirements, building design, building usage and maintenance requirements.

Installation should be performed only by qualified installers familiar with metal roofing systems and industry standards. For details not shown in this guide, refer to the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) architectural sheet metal manual for proper design. For manufacturer's weather tightness warranties – all details must be preapproved by Taylor Metal Products technical representative.

The Standard gauge for all products in this guide is 24 gauge and the standard finish is Kynar 500®. We recommend specifying all flashings be the same gauge, color, and finish as the panels to ensure long-term durability and color match.

#### **Substrates**

Details in the manual are all shown over solid substrate. **MS-100™/MS-150™** can be used over spaced purlins. For solid substrate, **Taylor Metal Products** recommends 15/32" plywood or 22 ga. metal decking. Contact a TMP representative with questions about panel attachment to varying substrates.

#### **Underlayment**

For roofs with pitches below 3:12, High Temp Ice and Water shield underlayment must be installed across the entire surface (projects with manufacturer's weathertightness warranties require the TMP private label product). For pitches steeper than (or equal to) 3:12, High Temp Ice and Water is necessary at all perimeter locations, eave, ridge, valley, hips, sidewall, endwall, prow and penetrations. The remaining of the roof's field areas can then be covered with approved synthetic felt. If local codes or specifications require a Class A fire rated assembly, Polystick XFR or Titanium FR (both products are distributed by TMP) must be installed over the entire roof with combustible decks.

Follow manufactures instructions carefully for all underlayment installation.

#### **Drag Load Requirements**

All panels must be pinned at one end to resist the drag load caused by snow loads, live loads, and the weight of the panel. Drag load is a function of roof slope, actual load and length of panels. Contact **Taylor Metal Products** for specific drag load requirements.

## **Ventilation/Insulation**

It is the responsibility of the designer to determine the material types needed to control condensation and to insulate and ventilate the roof system. Applications over rigid insulation may require blocking for solid attachment and framing the perimeter for installation of perimeter flashings.

## **Oil Canning**

Flat metal surfaces will display waviness commonly referred to as “oil canning.” Oil canning is caused by a variety of conditions. Steel mill tolerances, variations in or uneven substrates and roofing underlayments. Oil canning is a characteristic of metal roofing, not a defect and is not a cause for rejection. **Taylor Metal Products** offers **MS100™/MS150™** with striations or accent ribs to help minimize oil canning.

## **Thermal Movement**

The Panels and the flashings must be allowed to expand and contract, especially with longer length panels. The panel may need to have a slight gap where the panel hooks the offset cleat to allow for thermal movement of the panels.

## **Snow Design**

The following details do not address all conditions for snow environments. Consult with the designers, engineers, and others for acceptable details to accommodate your project and climate conditions. When possible gutters, valleys, pitch changes or other penetrations should be minimized in snow areas.

All roof penetrations should be located as close to the ridge or “pin point” top of roof. Snow country requires special designs for valleys to accommodate accumulation of snow and ice from uphill panels. Roof design should be considered in snow areas. Roof design should help resist the melting and freezing of snow and ice.

A fit for purpose roof design has the greatest impact on maintaining a damage free roof system in snow areas. Please contact a **Taylor Metal Products** representative for assistance in detail designs and appropriate panel selection for specific climate and building conditions.

### **Handling / Storage & Safety**

Handle materials with care when off-loading or moving materials to avoid damage to panels or flashings. Long panels may require two or more pick-up points, properly spaced to avoid damaging panels. Plan ahead; contact **Taylor Metal Products** for recommendations on handling/hoisting long panels.

Store the panels, flashings and accessories in a dry, well ventilated area, off the ground. If covering, allow ventilation around panels. Elevate one end of bundle to allow drainage of wet materials.

Wear clean, soft-soled shoes when walking on roofing panels to avoid damage to the painted finish.

Take care that sand, gravel, dirt, etc. sticking to your shoes is not carried onto the roof, scratching or otherwise damaging the finish on the roofing material. Walking on asphalt impregnated felt paper, especially on a hot day, can cause the asphalt to stick to your shoes and be tracked on to the roofing material.

Take care when painting to avoid getting over spray on the roofing material. Remember that wind can carry paint particles some distance. Over spray can cause the finish of the roofing material to look dull and may void your warranty.

Secure materials, especially when leaving the site, on the ground or roof to prevent winds from moving the materials. Wind-blown materials may cause damage to the material, property or persons.

Always use proper safety equipment and attire to minimize risk of cuts or other injuries.

Do not walk on panels that have not been completely installed.

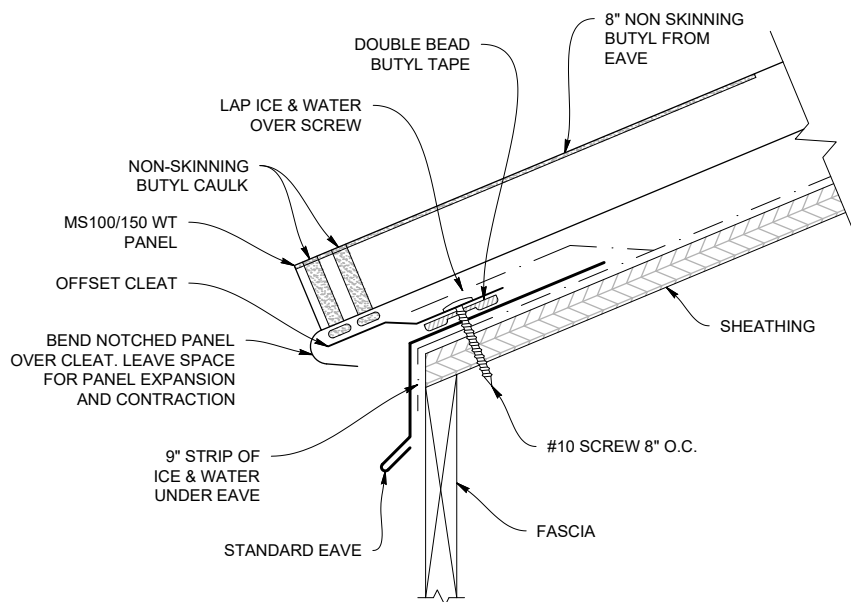
Do not walk on major ribs of panels.

Metal roofs that are wet or dusty can be extremely slippery. Wear soft soled shoes and a safety harness to minimize risk of falling.

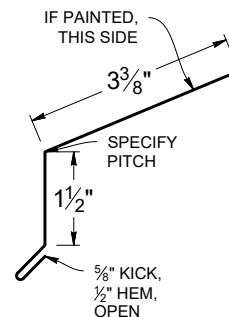
Avoid installing metal panels in windy conditions.

Safety considerations are the responsibility of the installer and his crew. Be sure to **use common sense** and generally accepted safety practices when installing roofing materials.

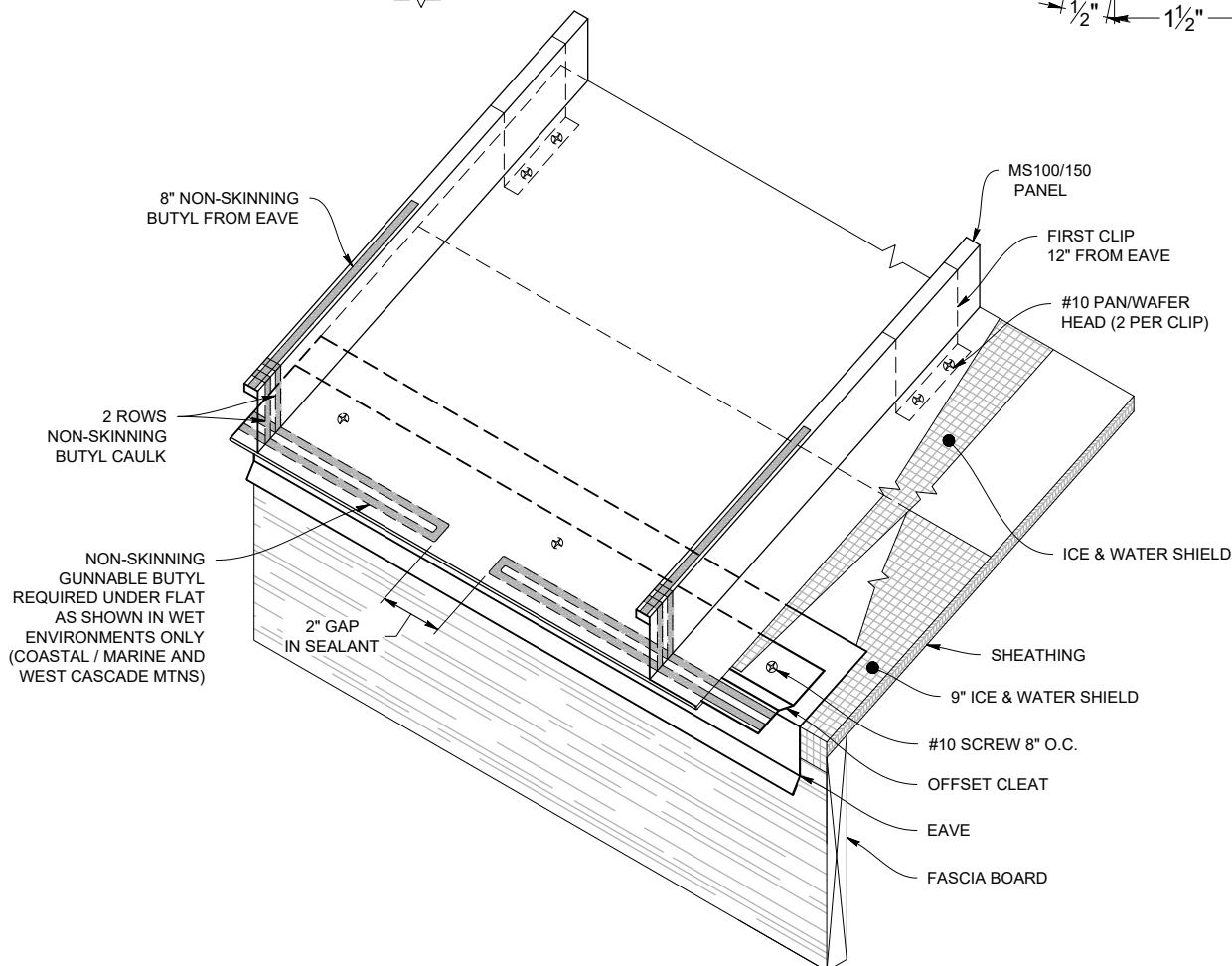
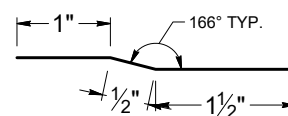
## STANDARD EAVE DETAIL



## STANDARD EAVE (MS100ES / MS150ES)



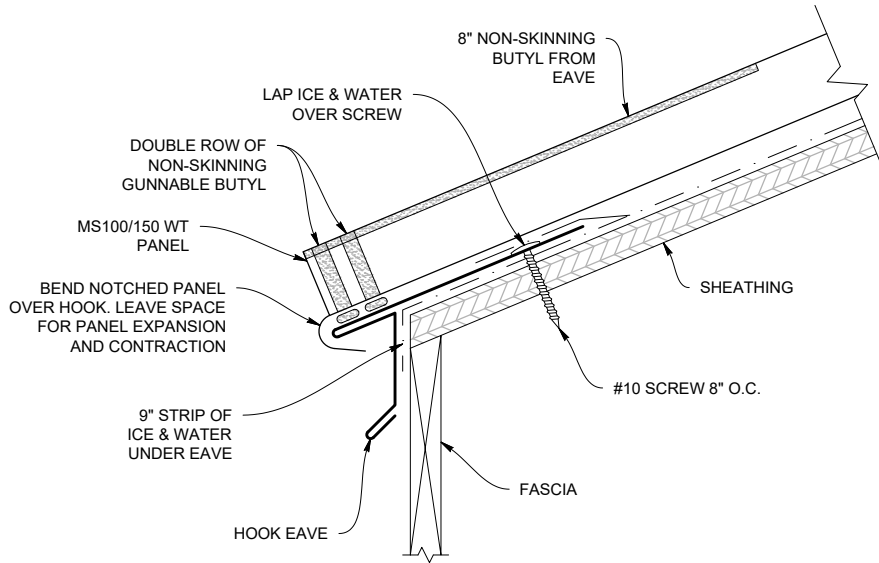
## OFFSET CLEAT (MS100OC / MS150OC)



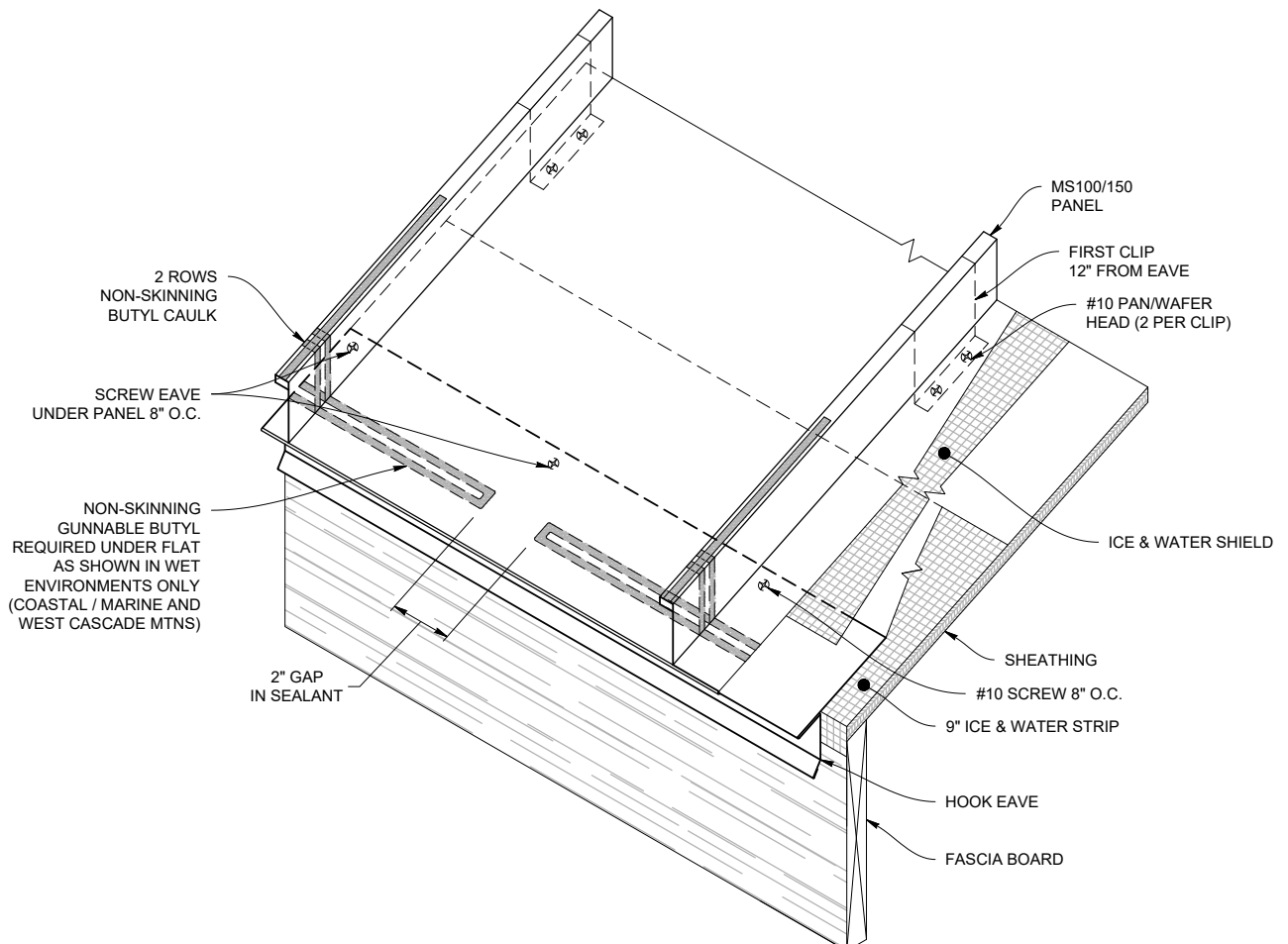
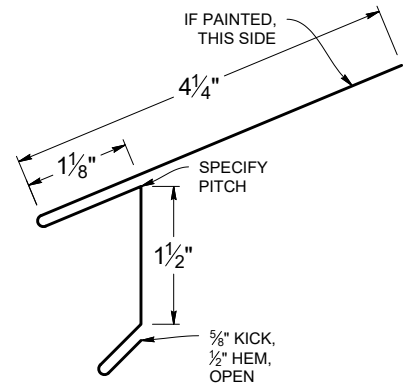
**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

# Hook Eave

## HOOK EAVE DETAIL

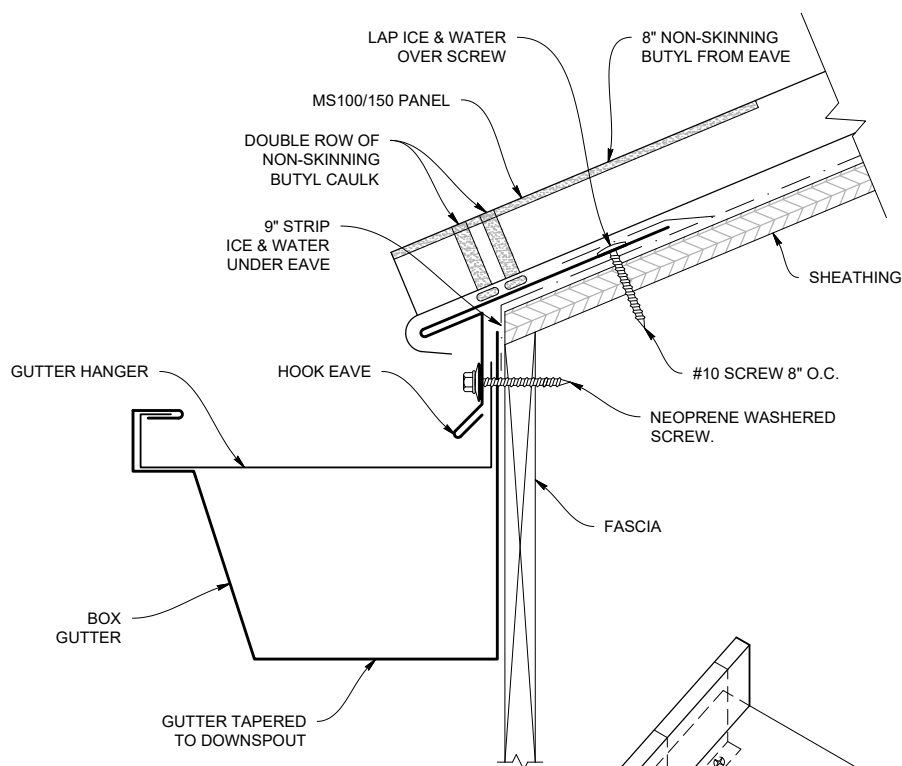


## HOOK EAVE (MS100EH / MS150EH)

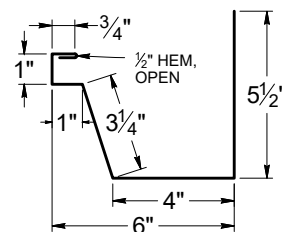


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

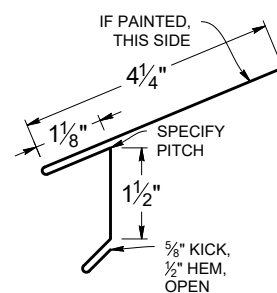
## HOOK EAVE WITH GUTTER DETAIL



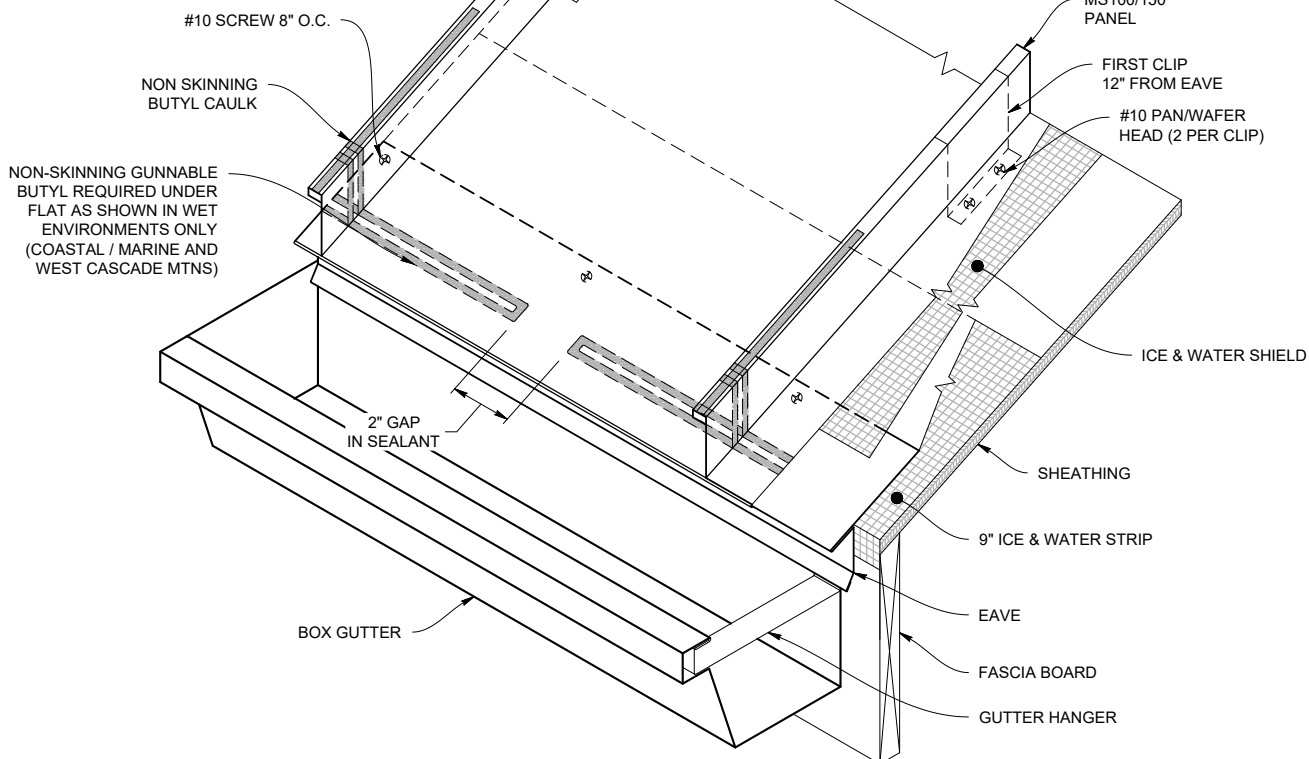
## BOX GUTTER (MS10065BG / MS15065BG)



## HOOK EAVE (MS100EH / MS150EH)



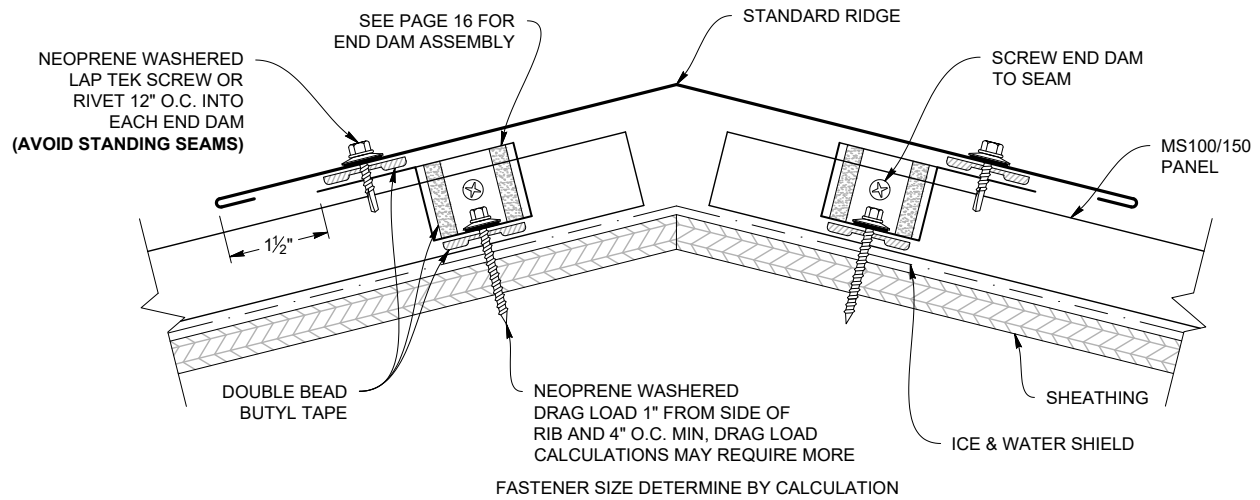
## BOX GUTTER HANGER (AGH6)



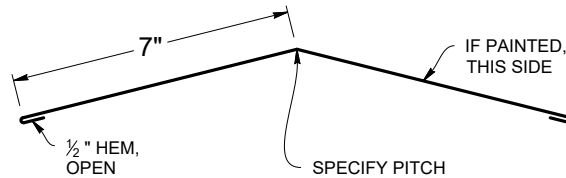
**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

# Standard Ridge

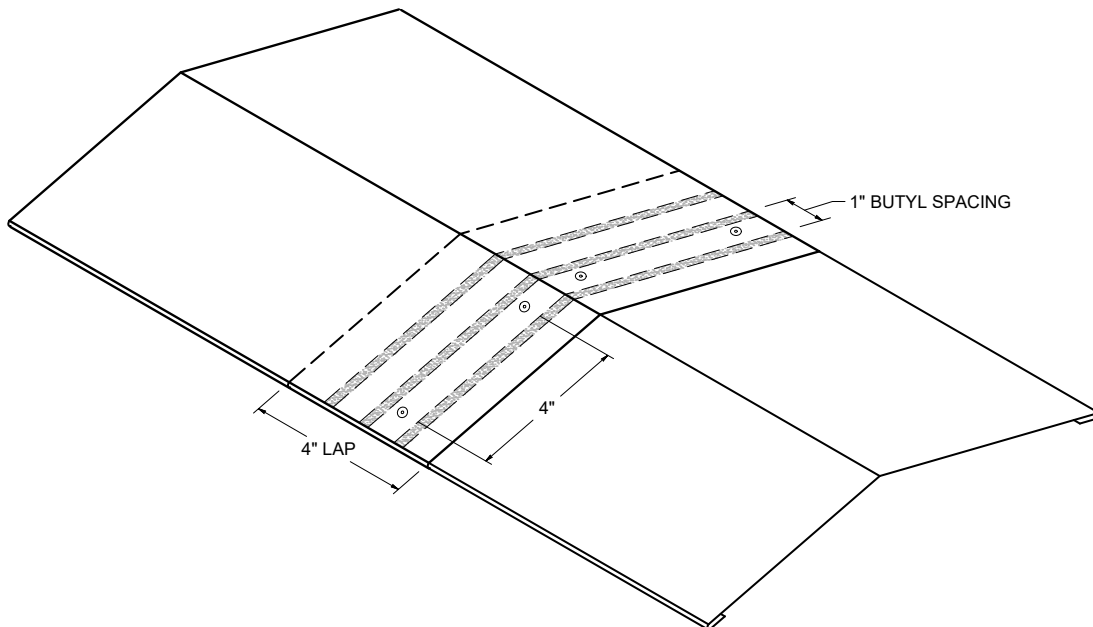
## STANDARD RIDGE DETAIL



## STANDARD RIDGE (MS100RS / MS150RS)

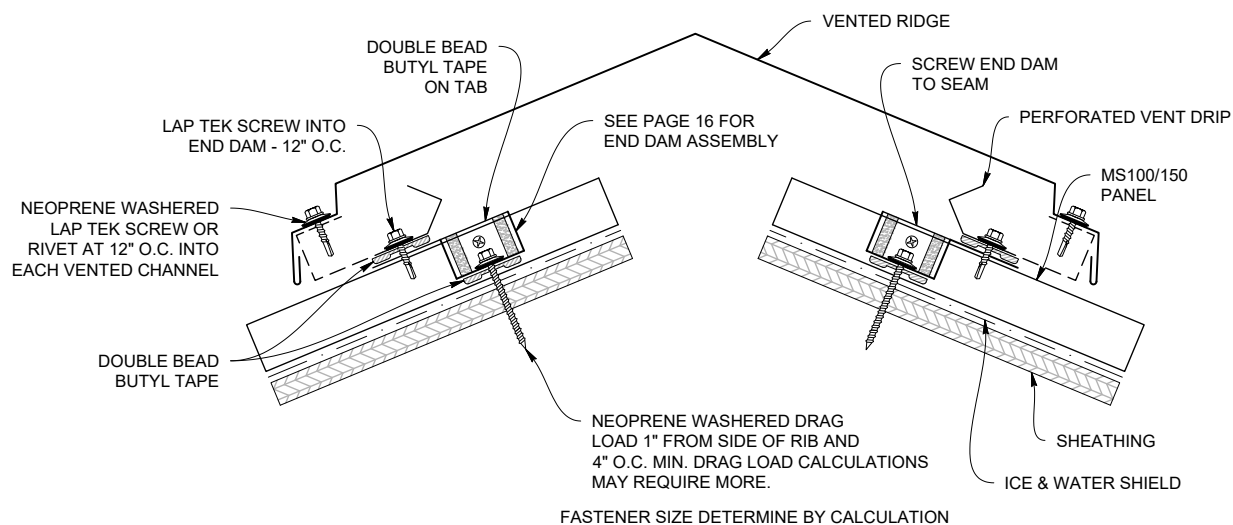


## STANDARD RIDGE LAP

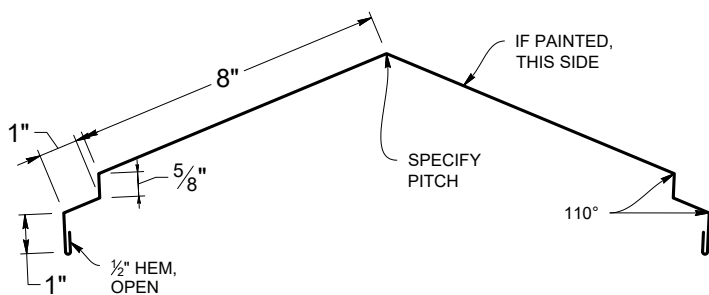


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

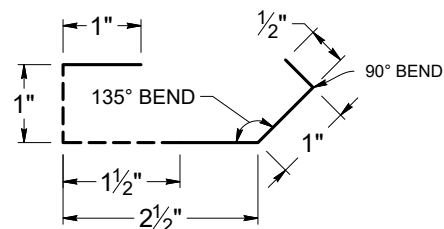
## WT VENTED RIDGE DETAIL



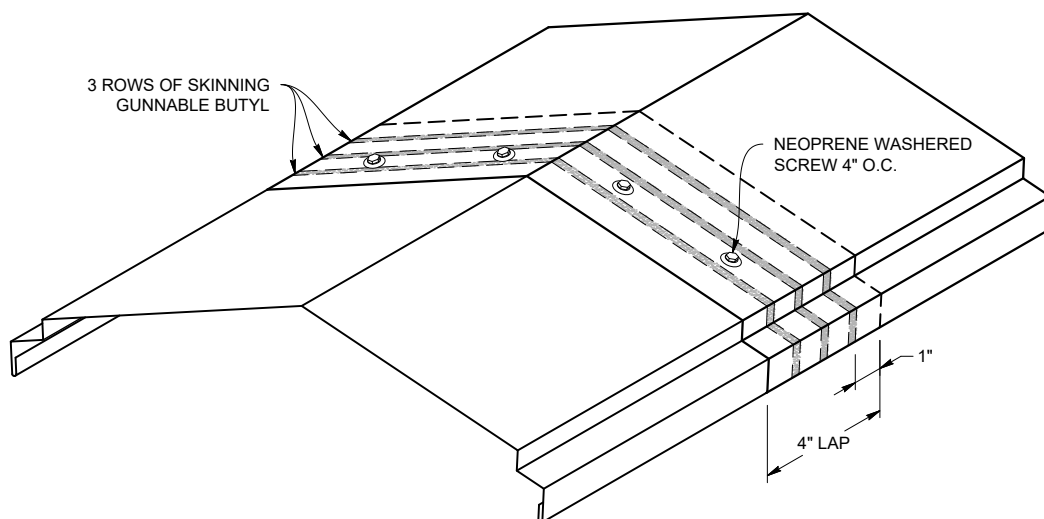
## WT RIDGE VENTED (MS100WTRFV / MS150WTRFV)



## PERFORATED VENT DRIP (MS100PVD / MS150PVD)

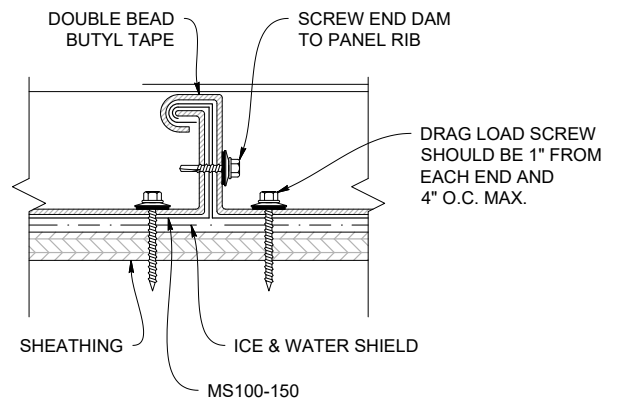
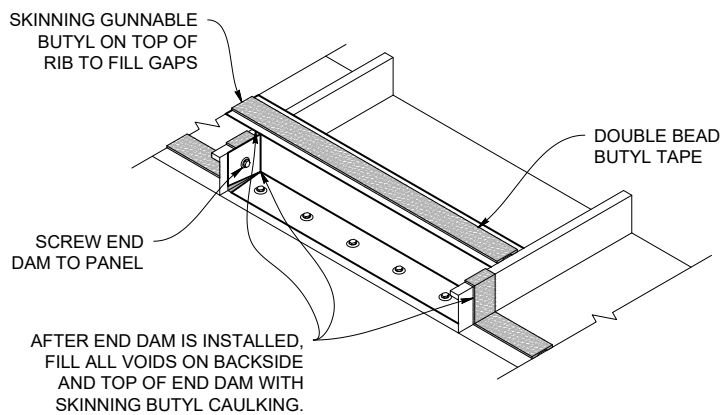
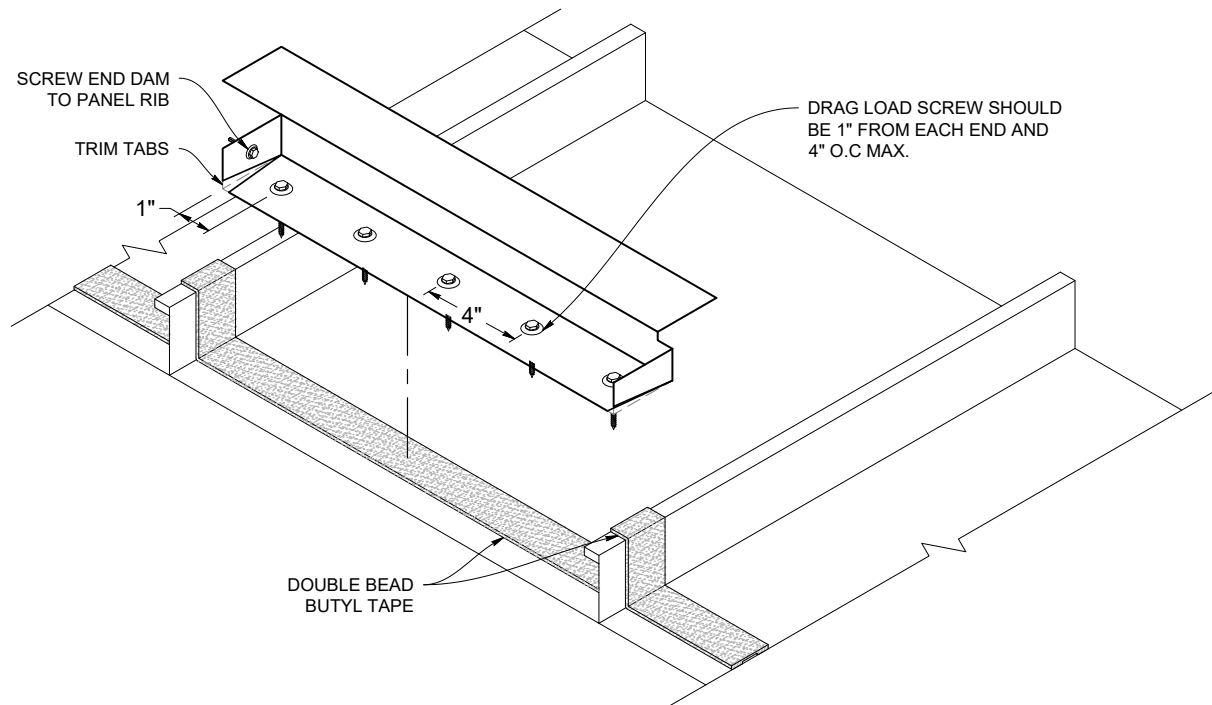


## VENTED RIDGE LAP



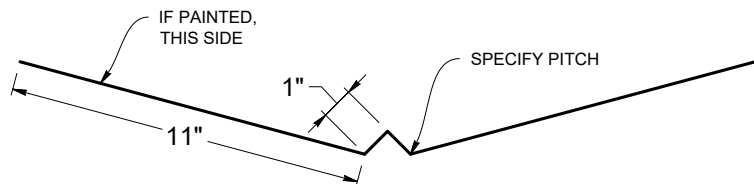
**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

# End Dam

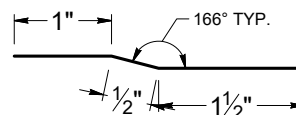


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

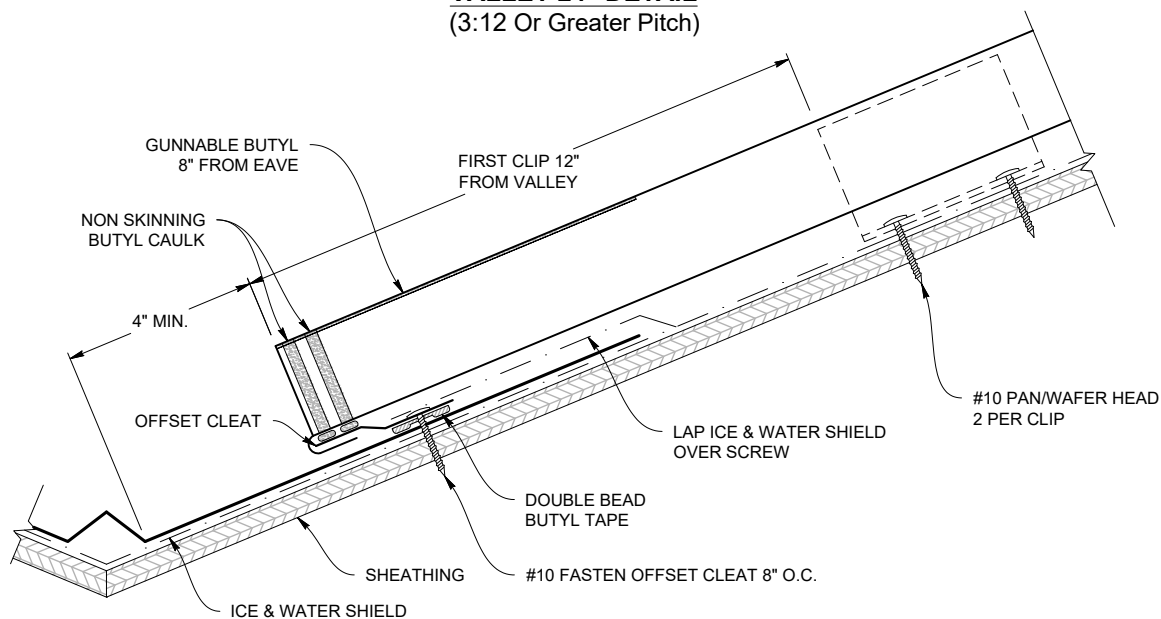
## VALLEY 24" FLASHING (MS100VF / MS150VF)



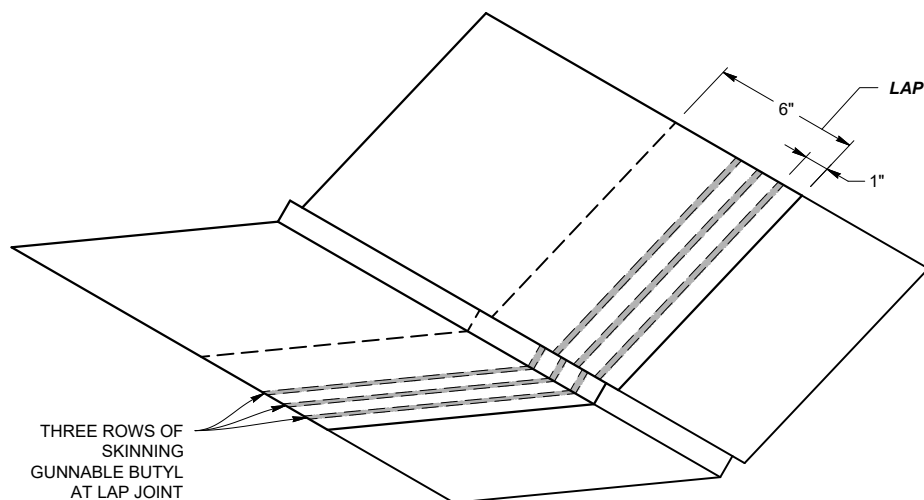
## OFFSET CLEAT (MS100OC / MS150OC)



## VALLEY 24" DETAIL (3:12 Or Greater Pitch)



## VALLEY LAP (3:12 Or Greater Pitch)



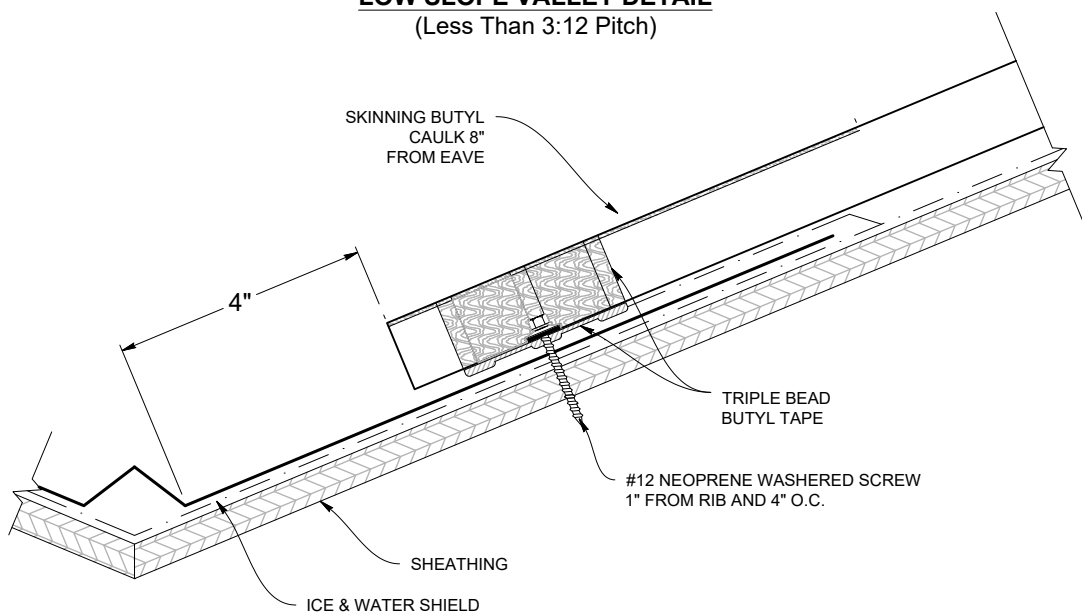
**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

# Valley Flashing - Low Slope

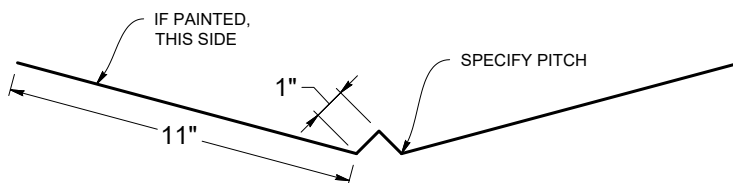
Slope Less than 3:12



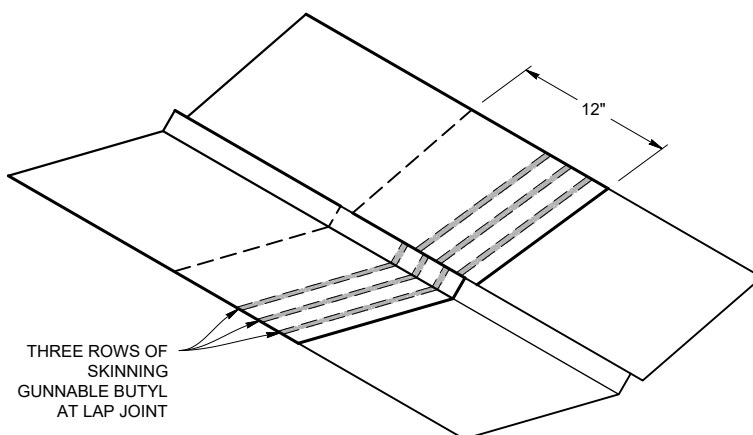
## LOW SLOPE VALLEY DETAIL (Less Than 3:12 Pitch)



## VALLEY FLASHING ( MS100VF / MS150VF)

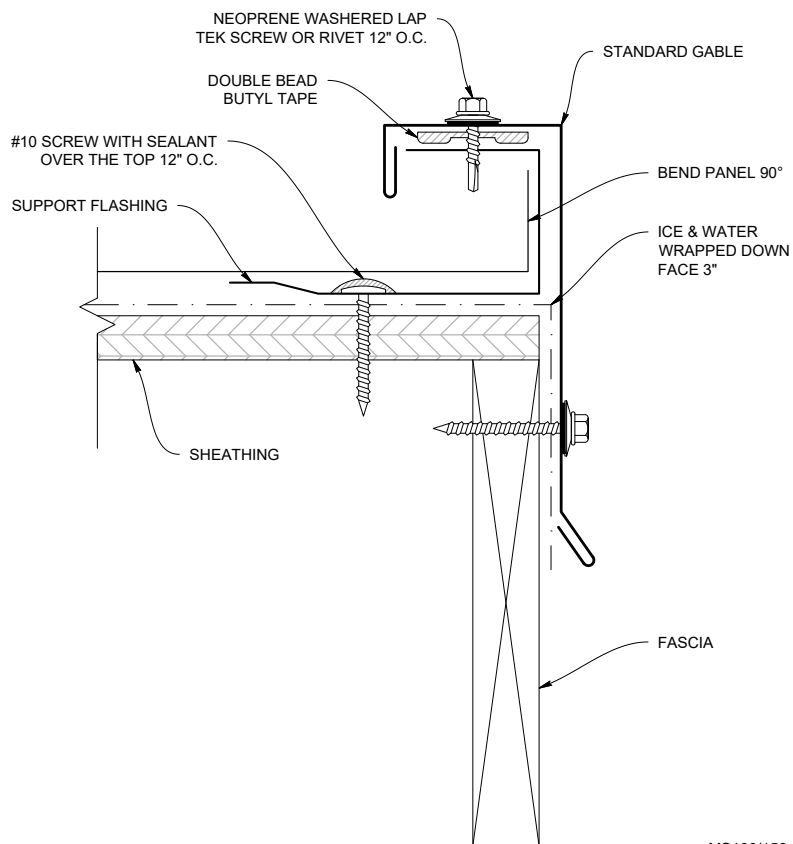


## LOW SLOPE VALLEY LAP (Less Than 3:12 Pitch)

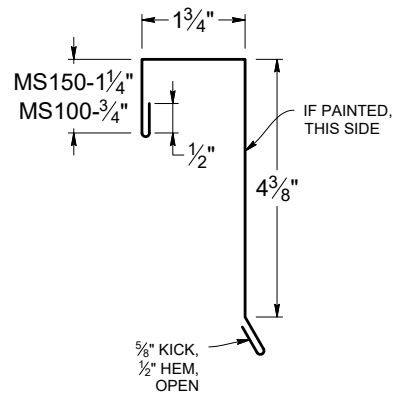


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

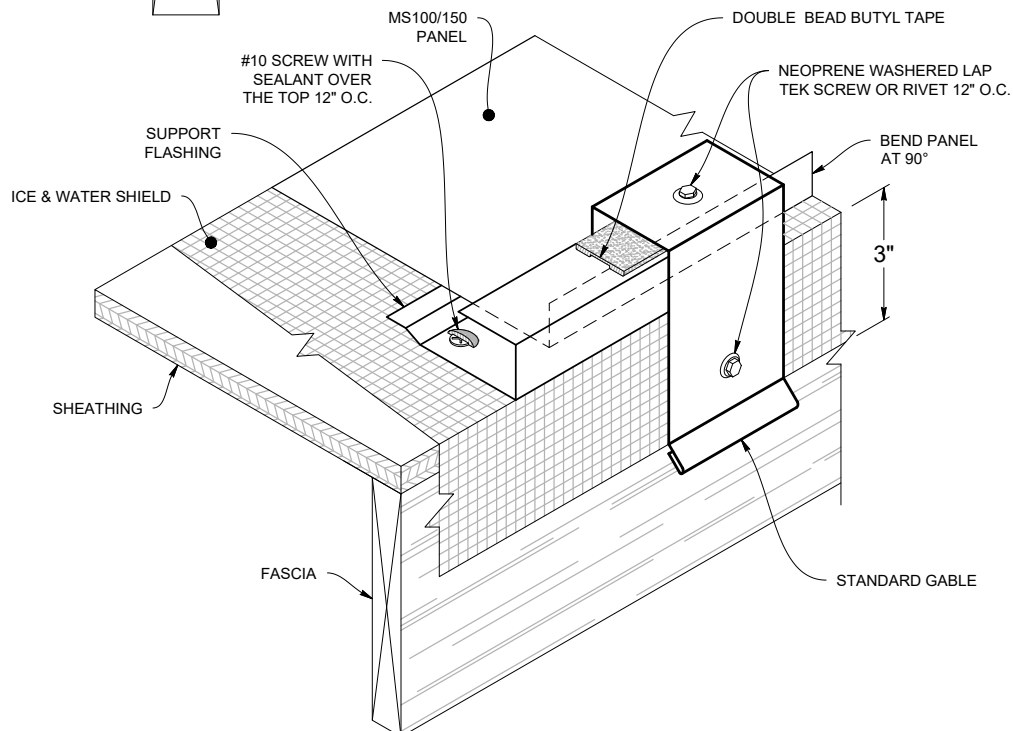
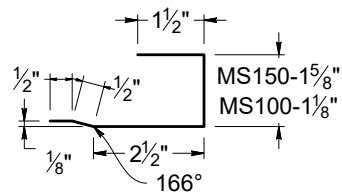
## STANDARD GABLE DETAIL



## STANDARD GABLE (MS100GB / MS150GB)



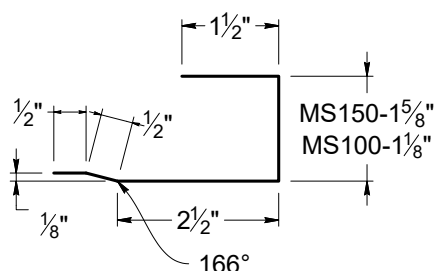
## SUPPORT FLASHING (MS100SF / MS150SF)



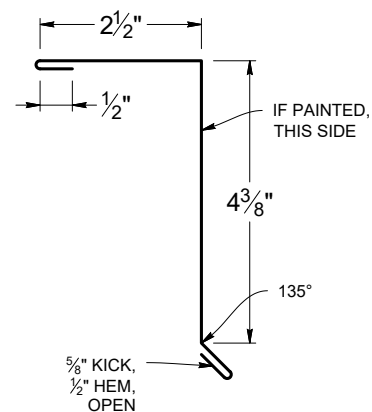
**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

# Alternate Gable

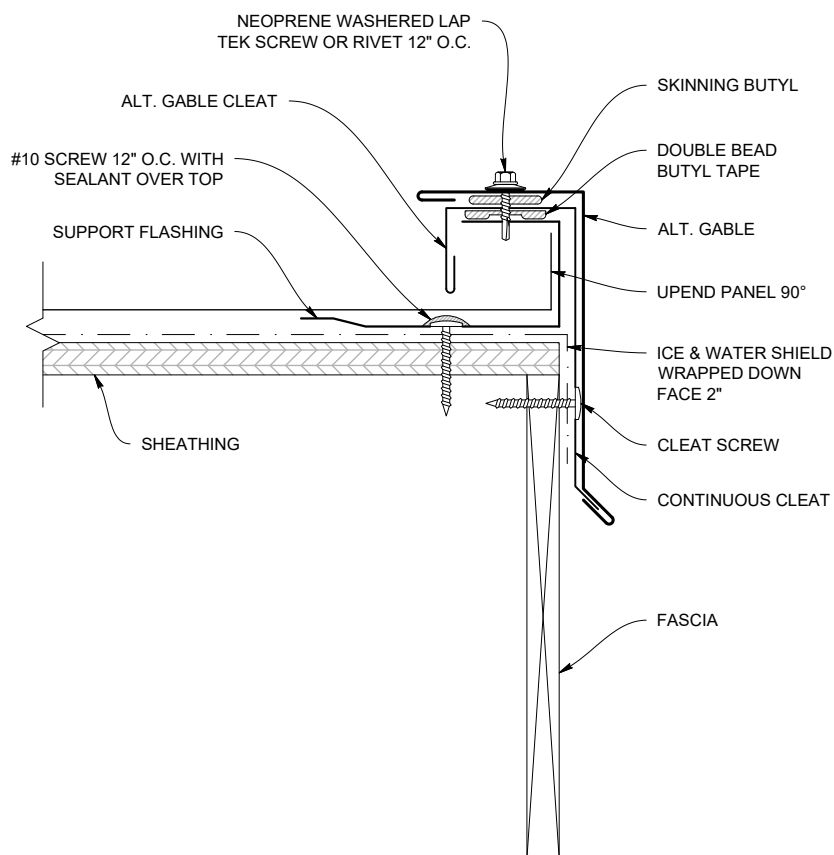
## SUPPORT FLASHING (MS100SF / MS150SF)



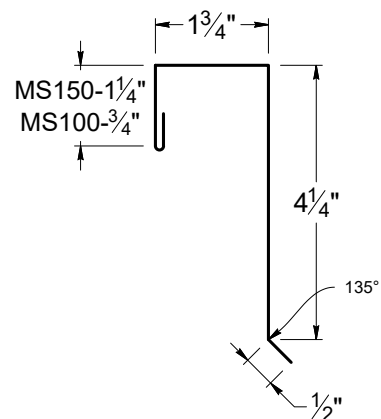
## ALTERNATE GABLE (MS100AT / MS150AT)



## ALTERNATE GABLE DETAIL

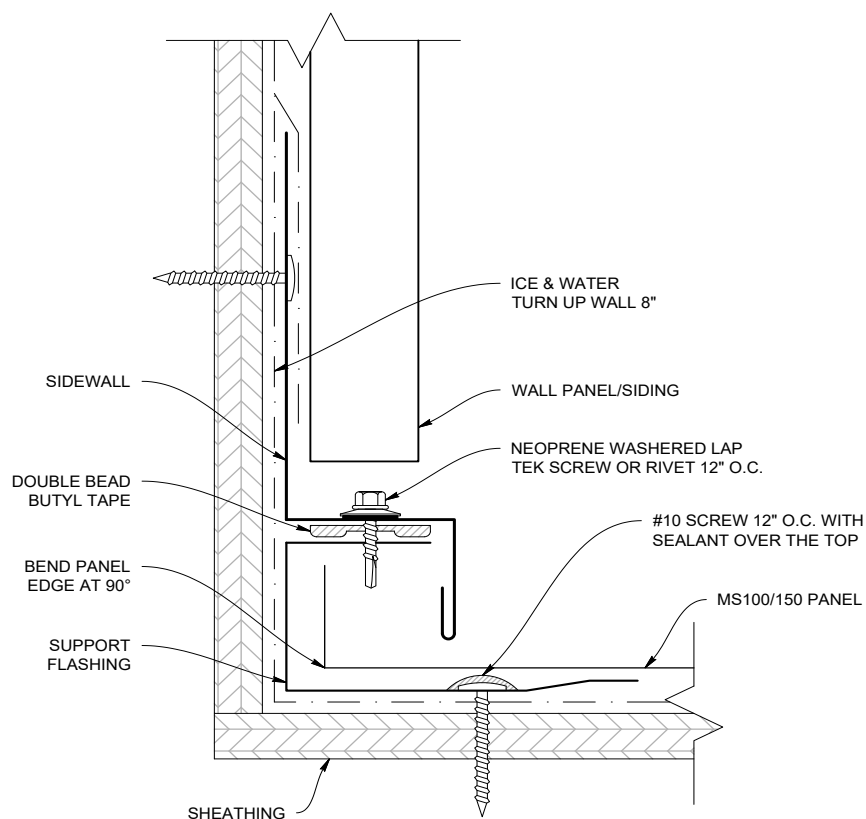


## ALTERNATE GABLE CLEAT (MS100AGC / MS150AGC)

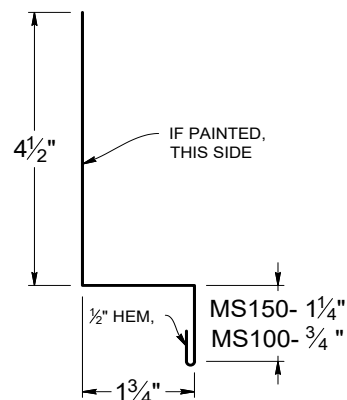


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

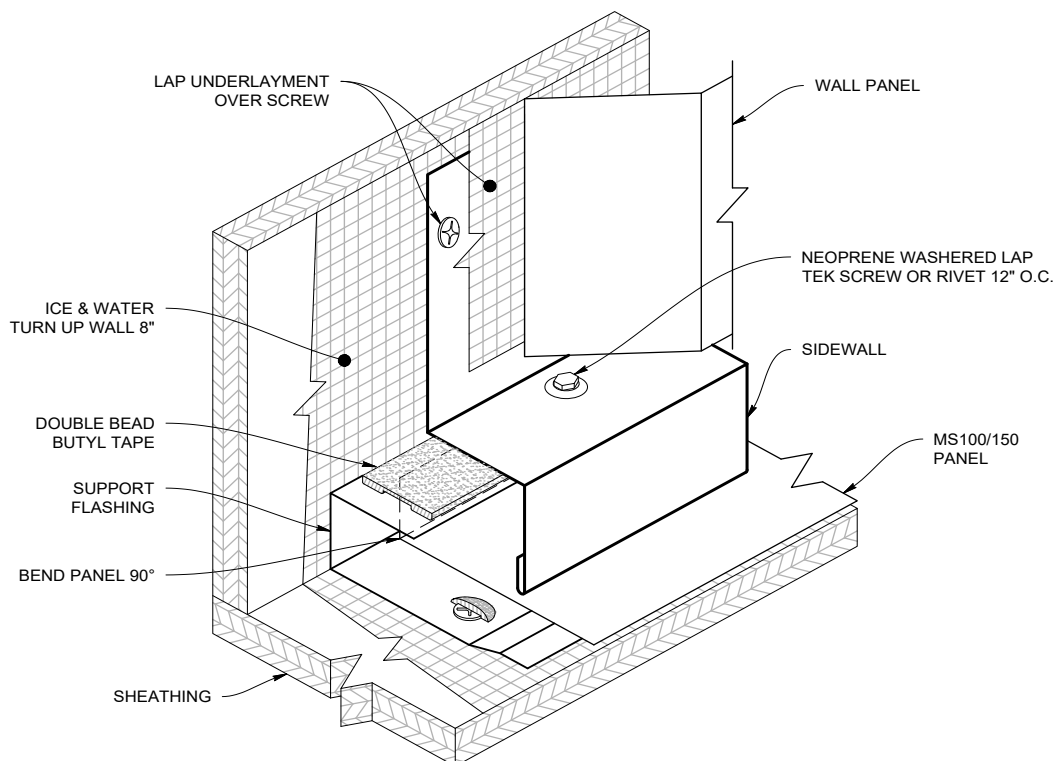
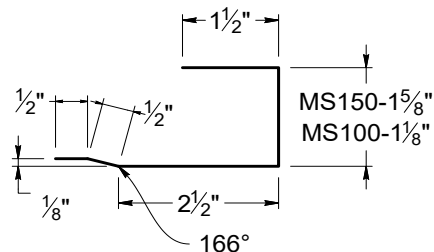
## SIDEWALL DETAIL



## SIDEWALL (MS100SW / MS150SW)



## SUPPORT FLASHING (MS100SF / MS150SF)

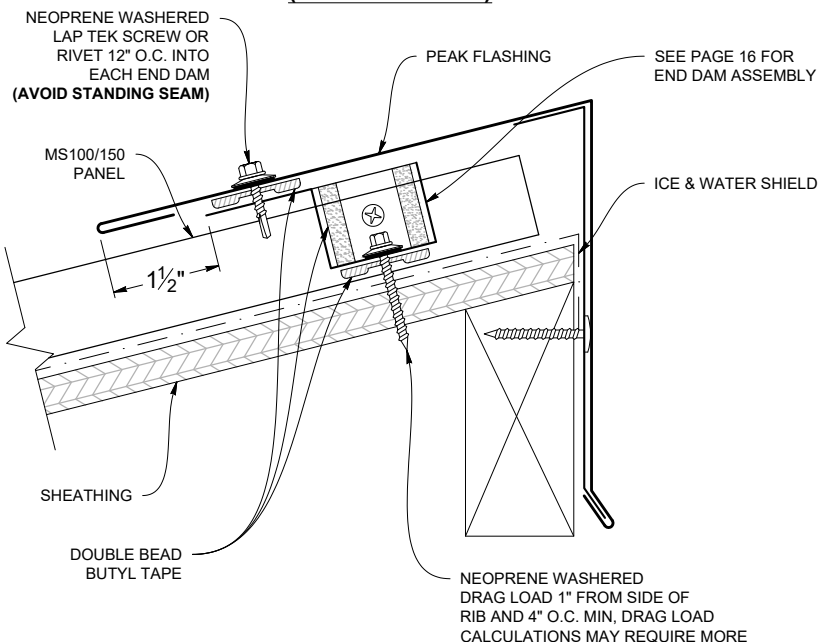


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

# Peak Flashing

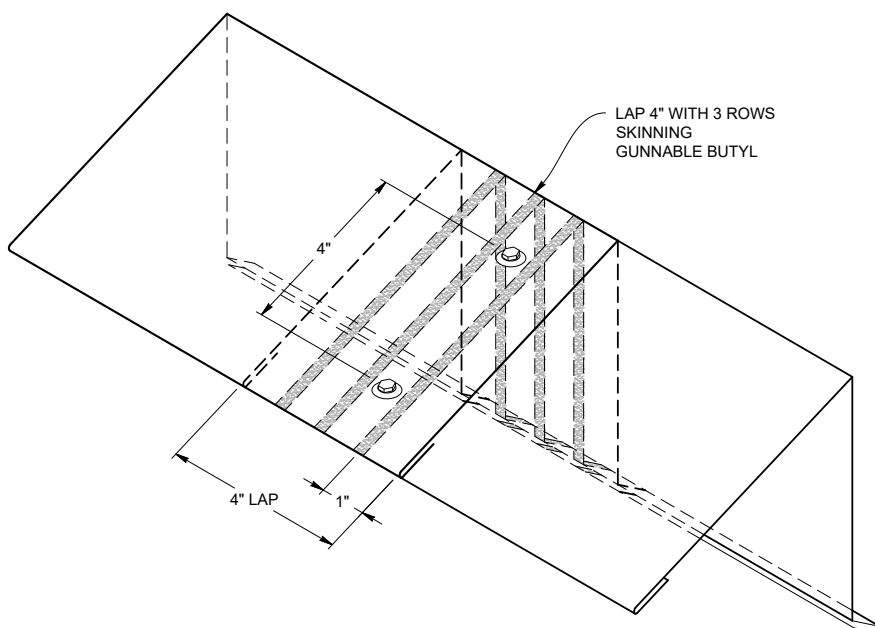
(Ridge End Cap)

## PEAK FLASHING DETAIL (RIDGE END CAP)

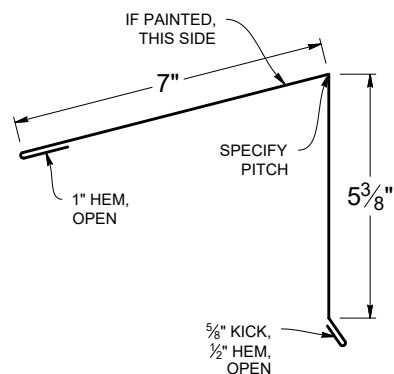


FASTENER SIZE DETERMINED BY CALCULATION

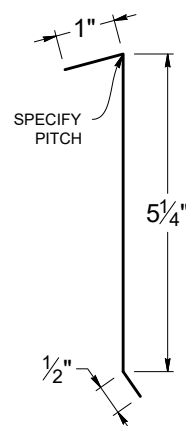
## PEAK FLASHING LAP



## PEAK FLASHING (MS100REC / MS150REC)



## PEAK CLEAT (MS100RECC / MS150RECC)

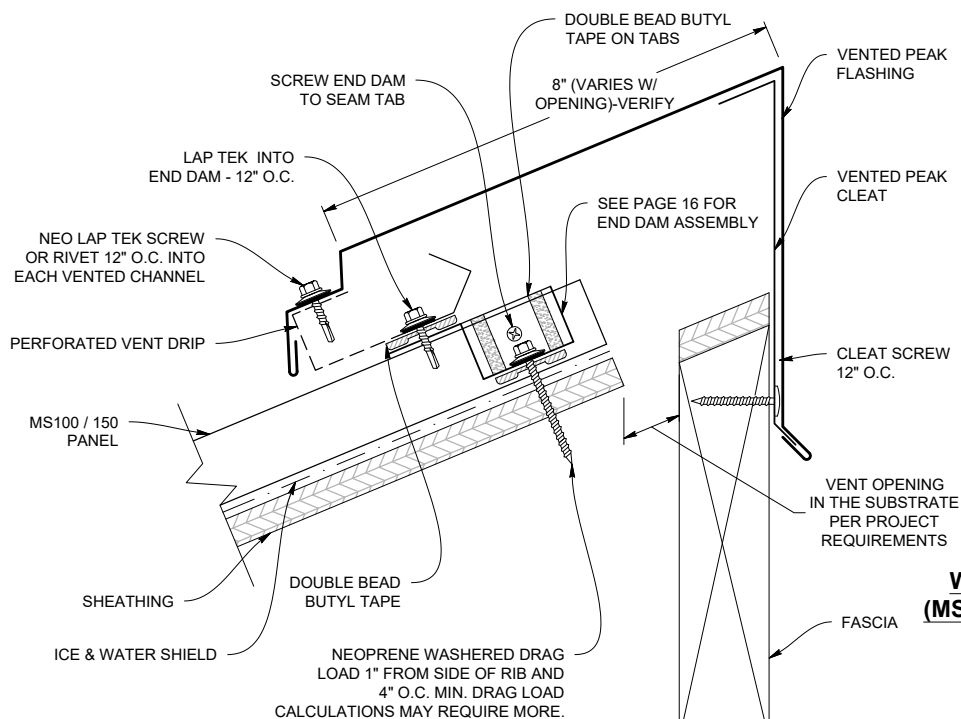


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

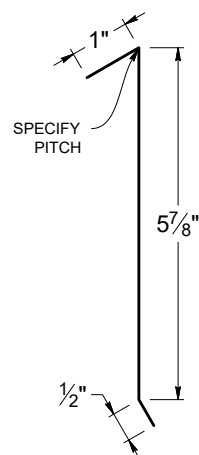
# Vented Peak Flashing

(Vented Ridge End Cap)

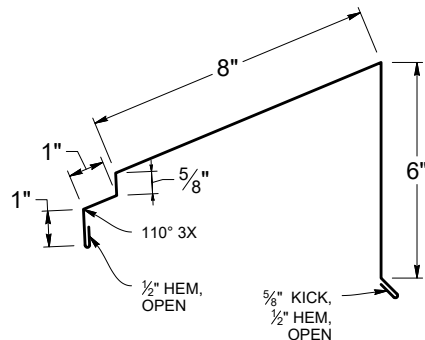
## WT VENTED PEAK FLASHING DETAIL (Vented Ridge End Cap)



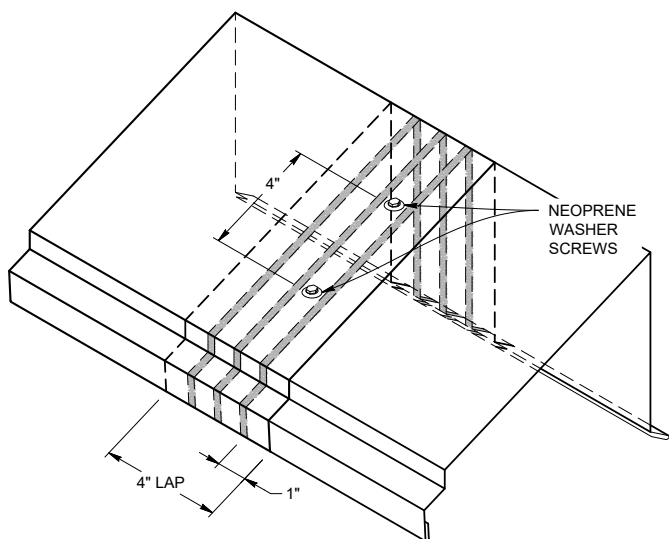
## VENTED PEAK CLEAT (MS100VRECC / MS150VRECC)



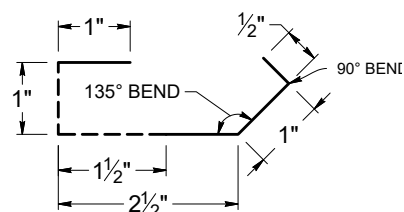
## WT VENTED PEAK FLASHING (MS100WTRECV / MS150WTRECV)



## VENTED PEAK FLASHING LAP



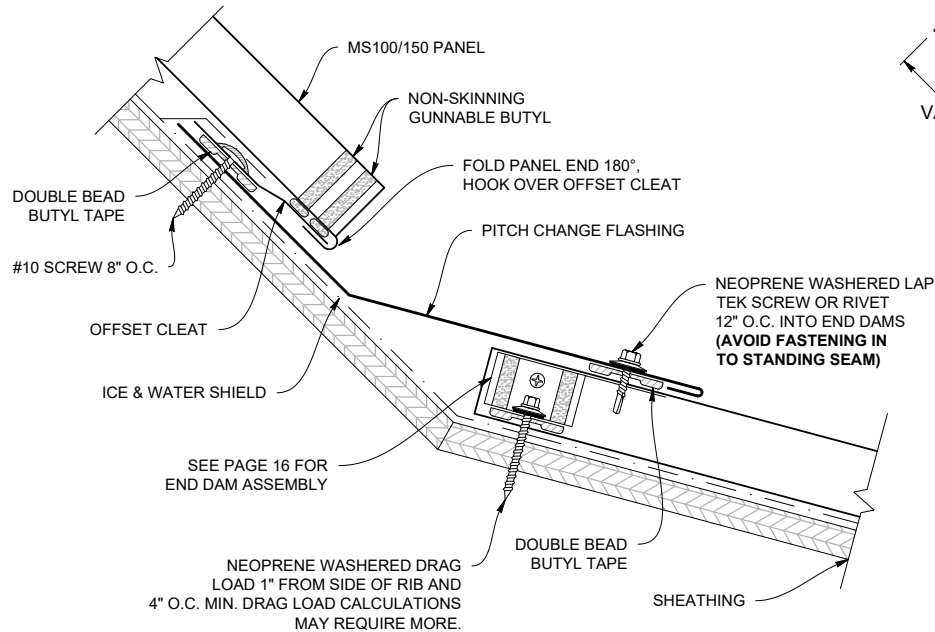
## PERFORATED VENT DRIP (MS100PVD / MS150PVD)



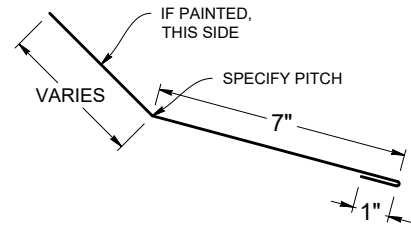
**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

# Pitch Change

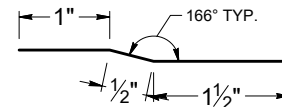
## PITCH CHANGE DETAIL



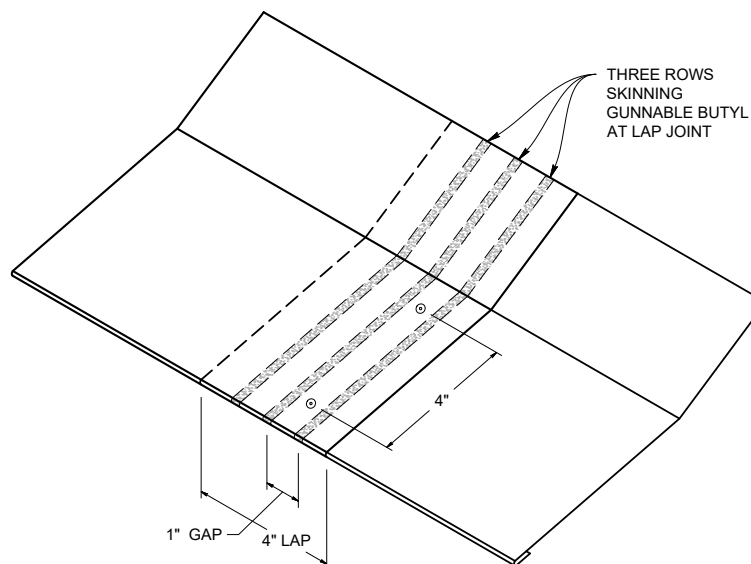
## INSIDE PITCH CHANGE FLASHING



## OFFSET CLEAT (MS100OC / MS150OC)

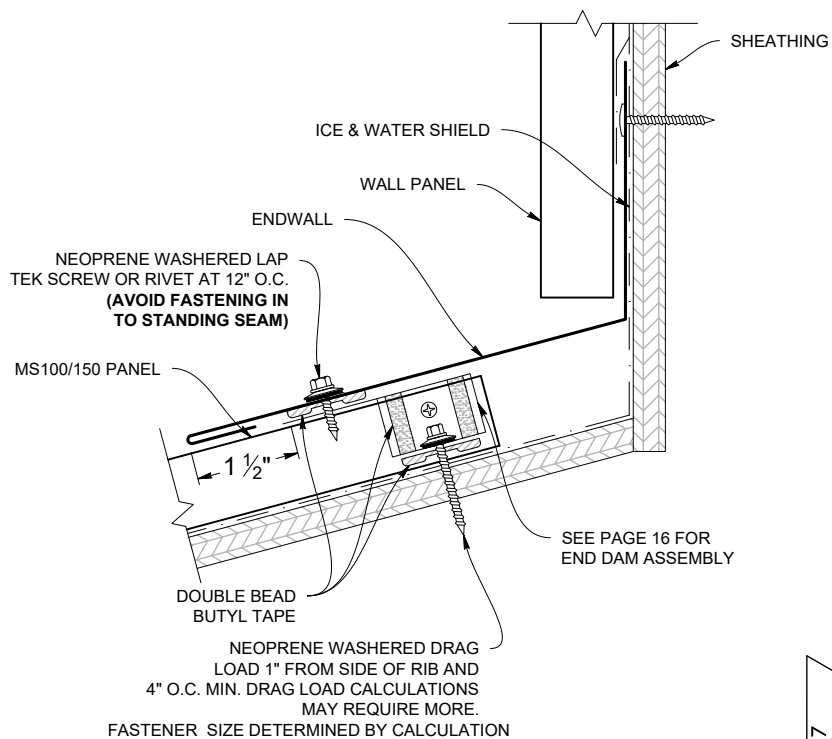


## PITCH CHANGE LAP

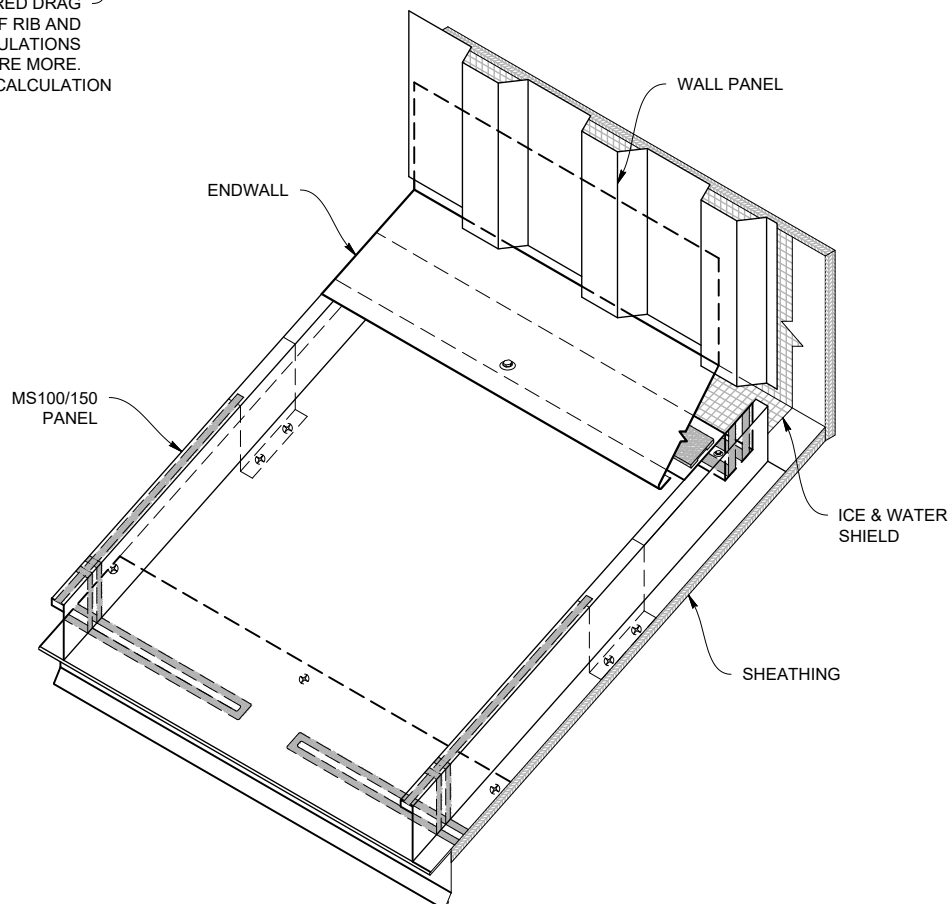
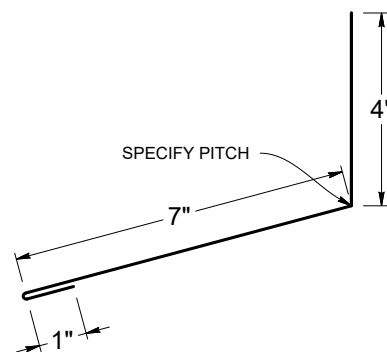


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

## ENDWALL DETAIL



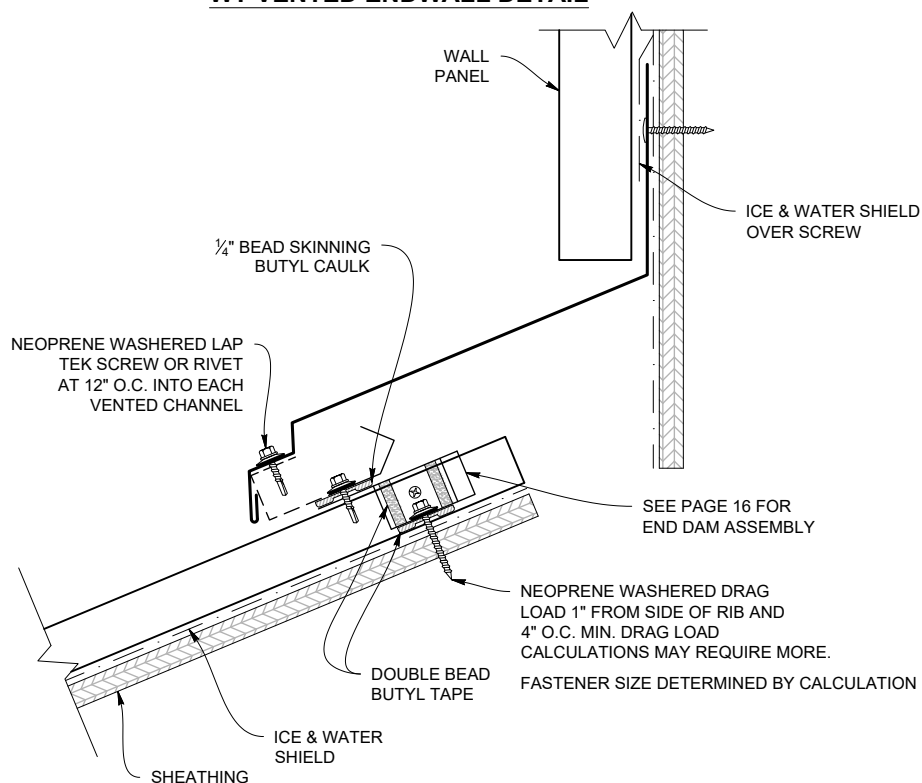
## ENDWALL FLASHING (MS100EW / MS150EW)



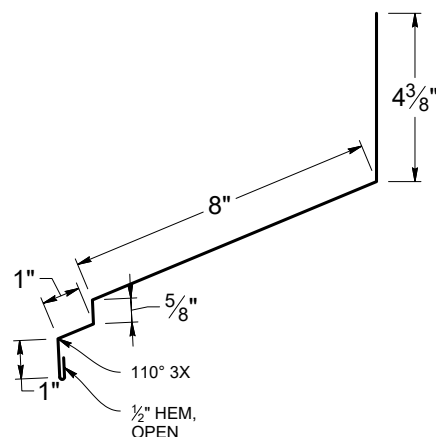
**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

# Vented Endwall

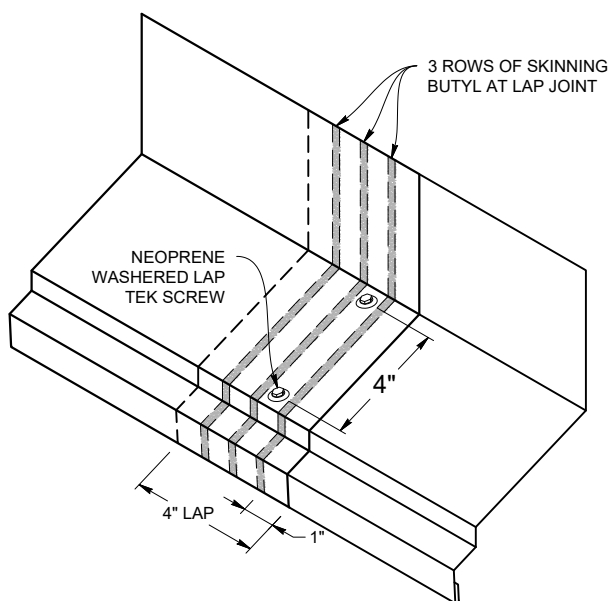
## WT VENTED ENDWALL DETAIL



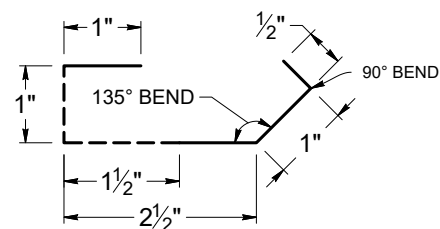
## WT VENTED ENDWALL FLASHING (MS100WTEWV / MS150WTEWV)



## ENDWALL LAP

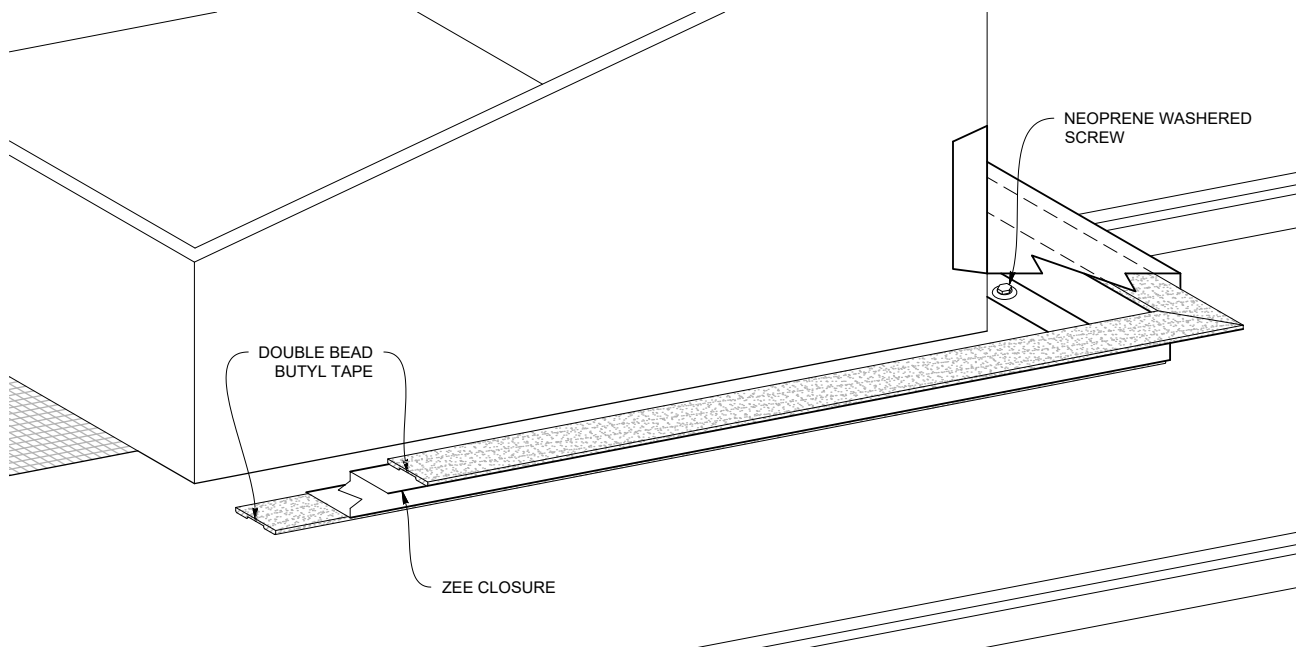


## PERFORATED VENT DRIP (MS100PVD / MS150PVD)

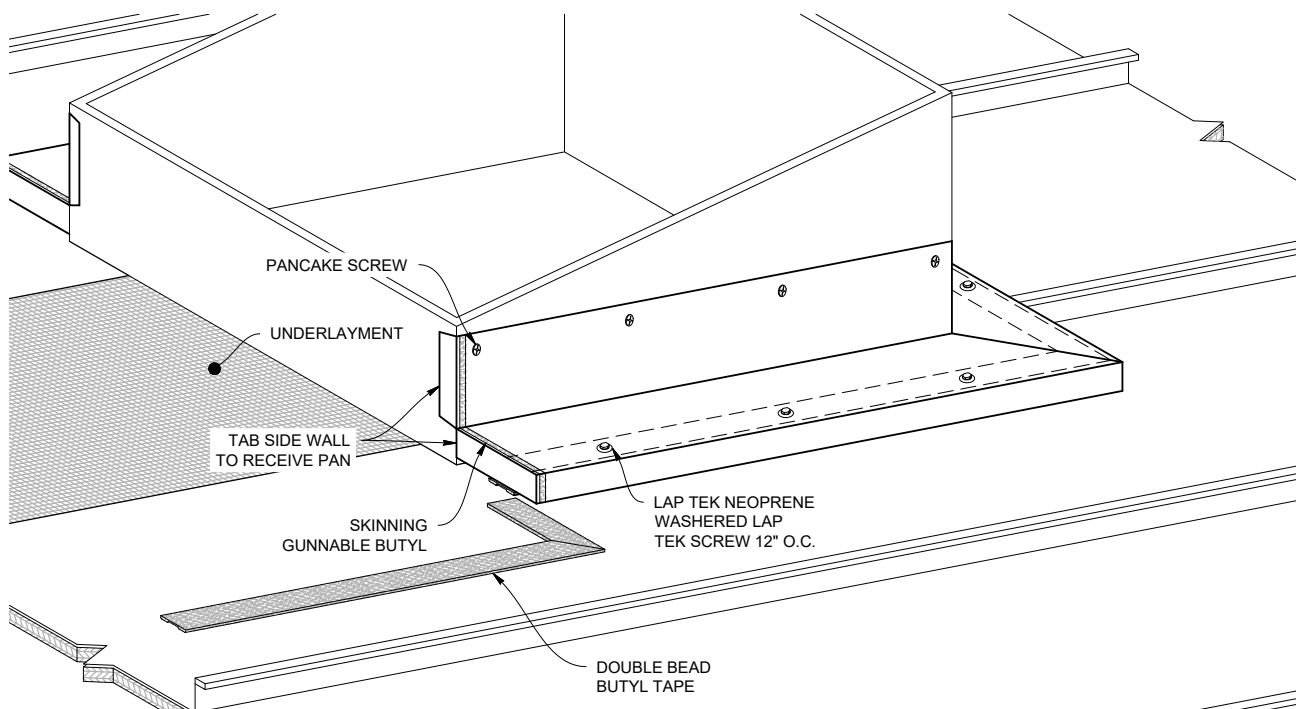


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

## STEP 1



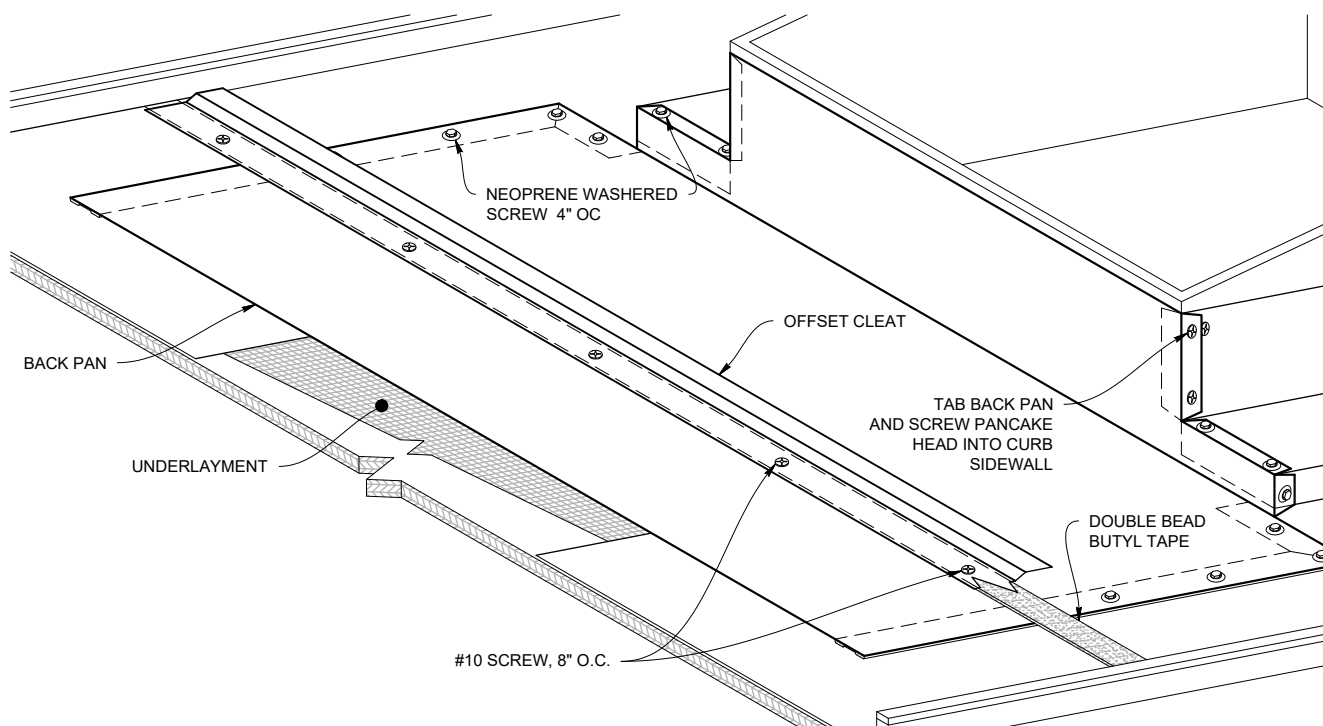
## STEP 2



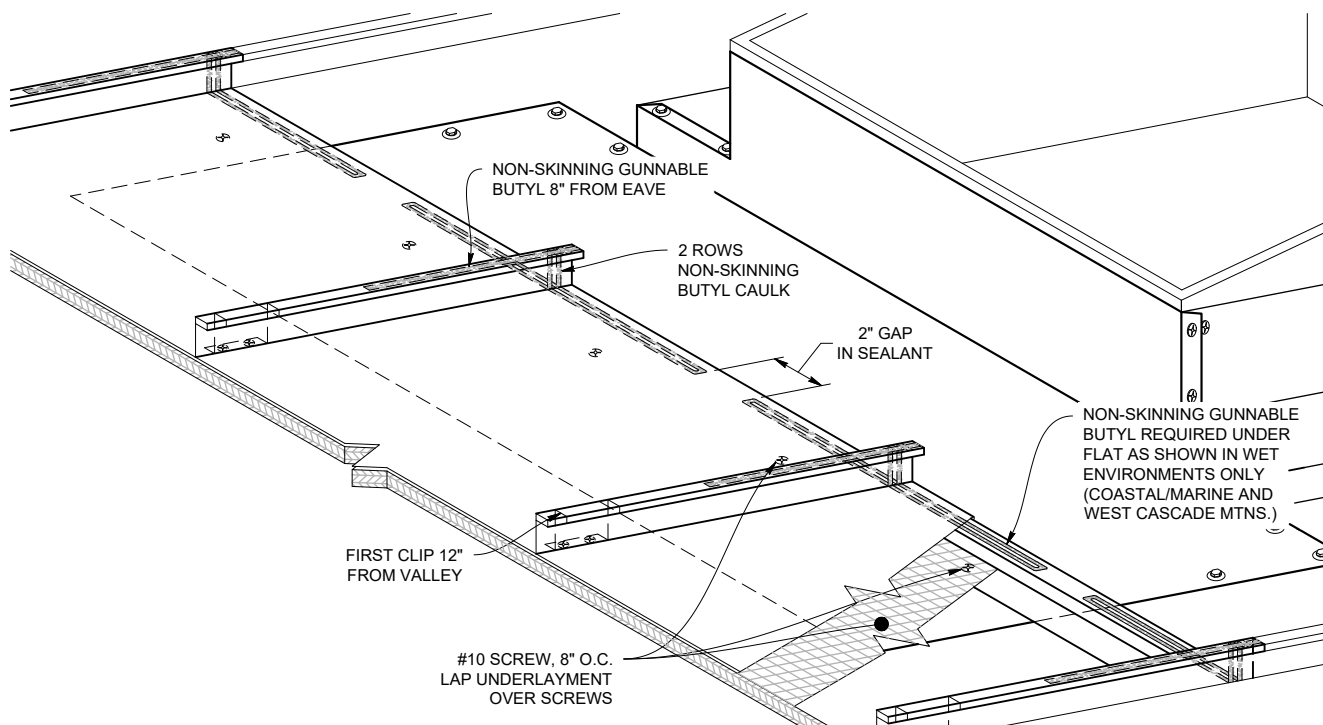
**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.  
Soldered or welded Stainless Steel crickets are allowed - except in corrosive environments

# Curb Back Pan/Cricket

## STEP 3

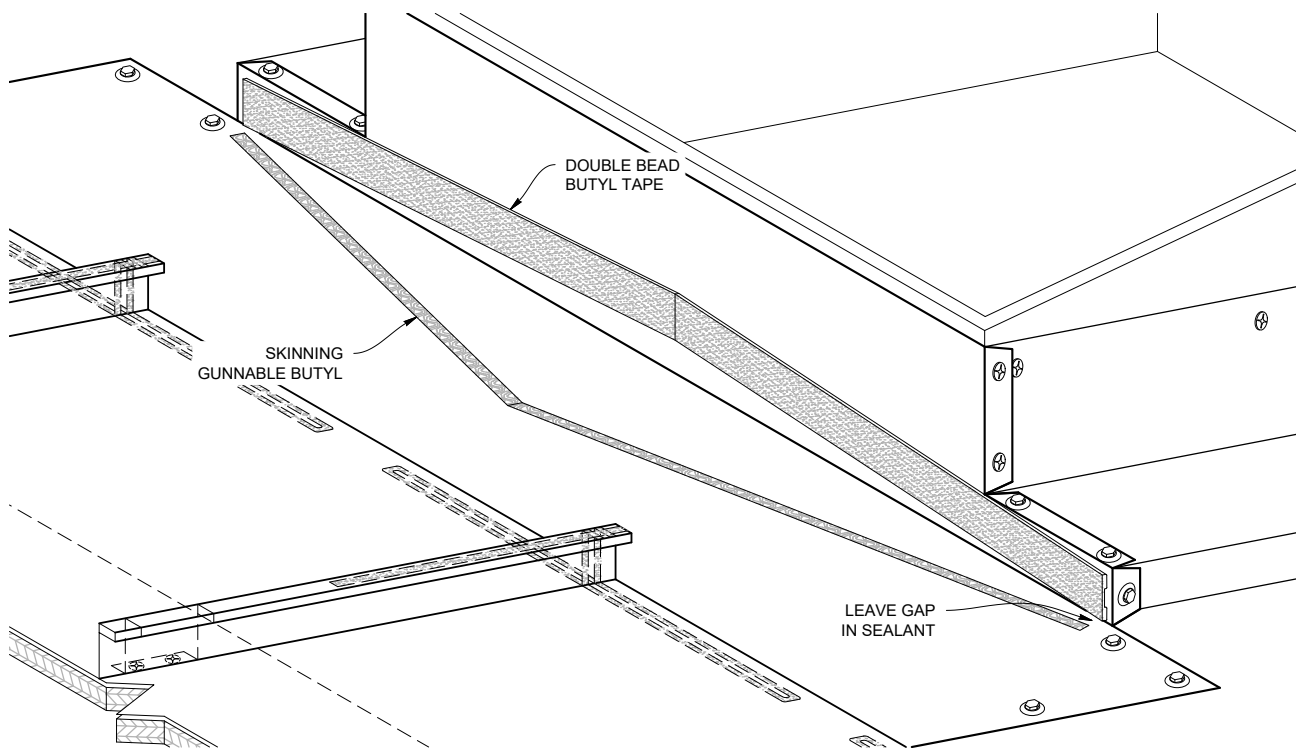


## STEP 4

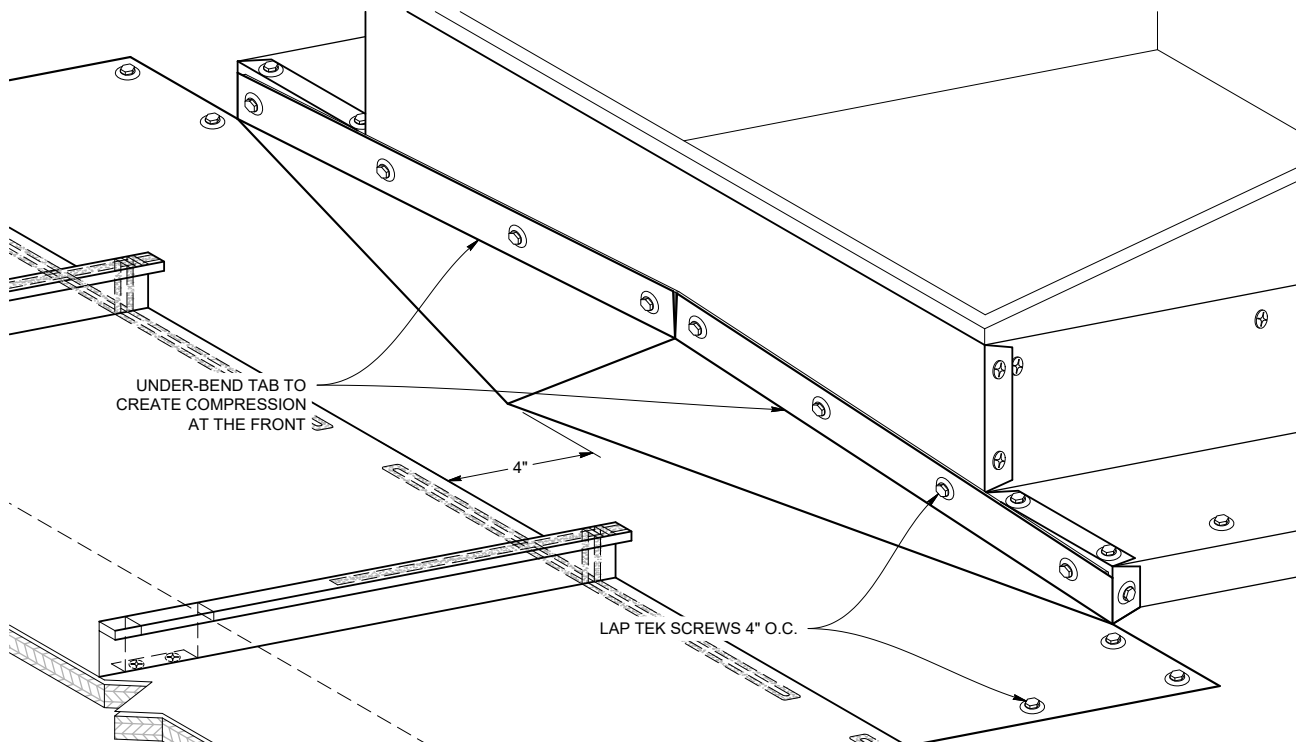


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.  
Soldered or welded Stainless Steel crickets are allowed - except in corrosive environments

## STEP 5

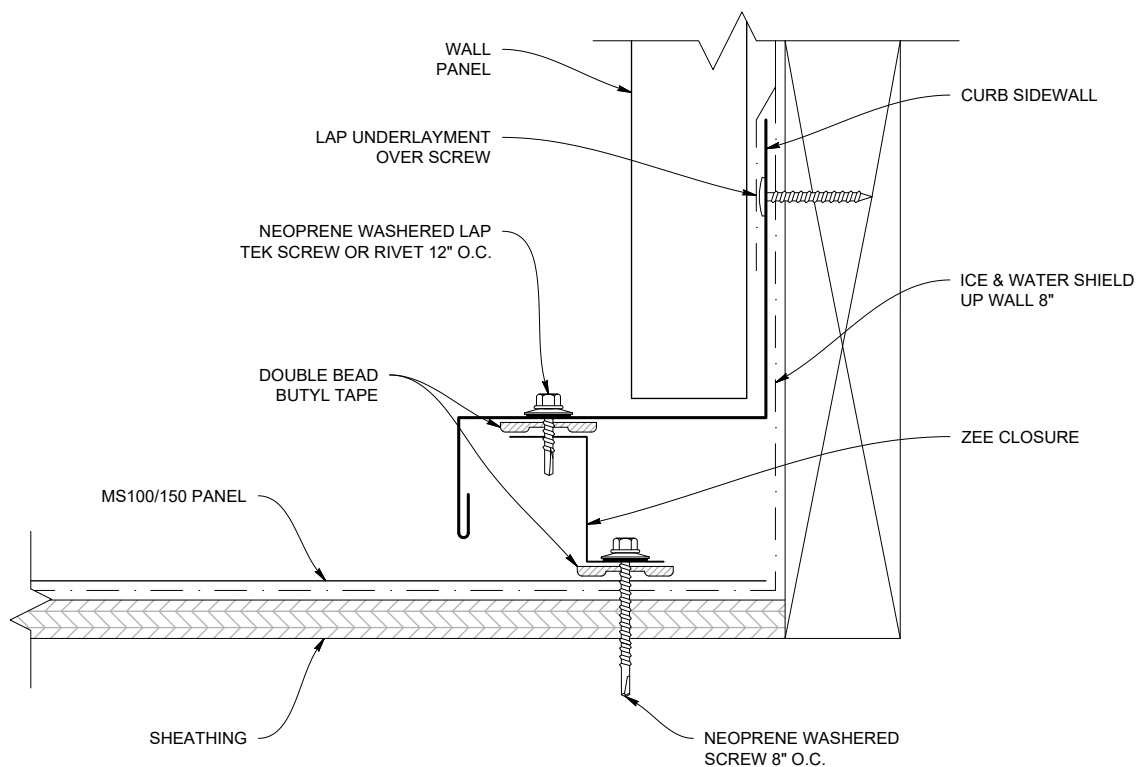


## STEP 6

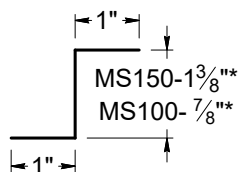


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.  
Soldered or welded Stainless Steel crickets are allowed - except in corrosive environments

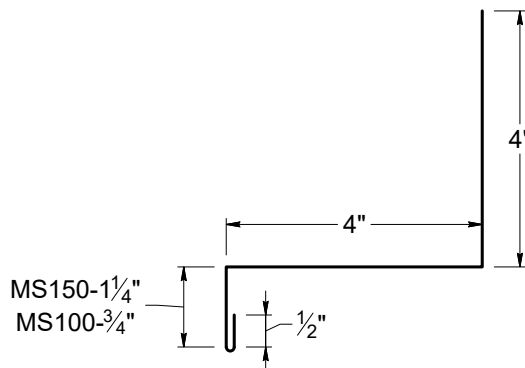
## CURB SIDEWALL DETAIL



### ZEE CLOSURE ( MS100PVD / MS150PVD )

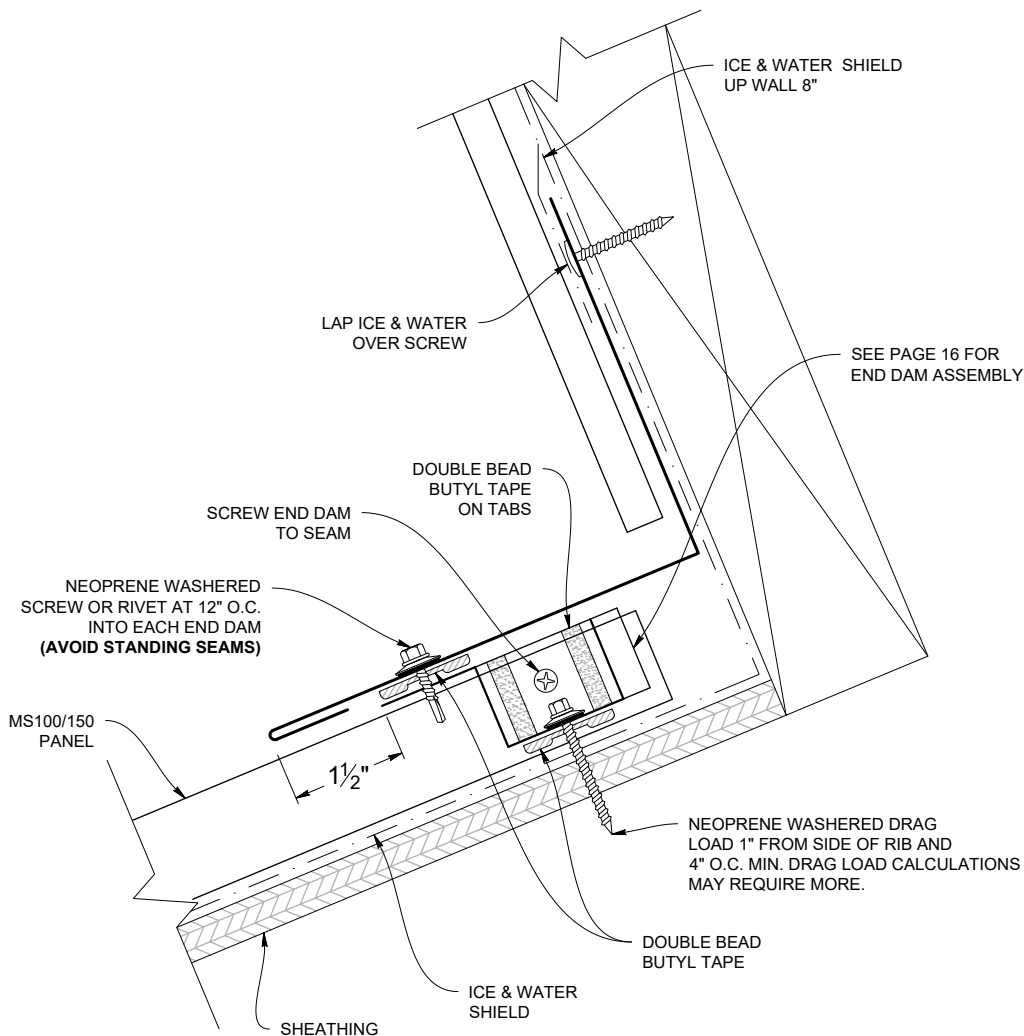


### CURB SIDEWALL ( MS100CSW / MS150CSW )

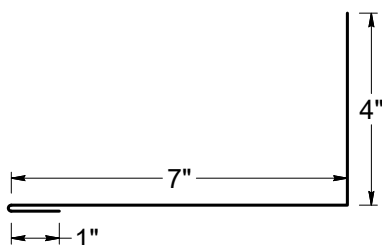


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

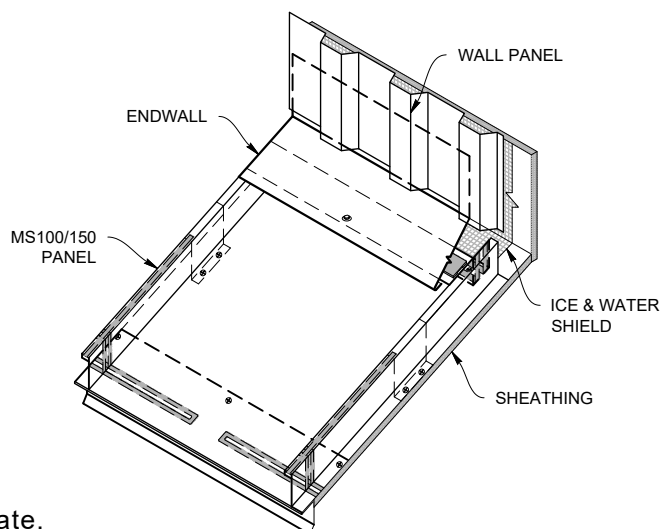
## CURB ENDWALL DETAIL



## CURB ENDWALL FLASHING ( MS100CH / MS150CH )

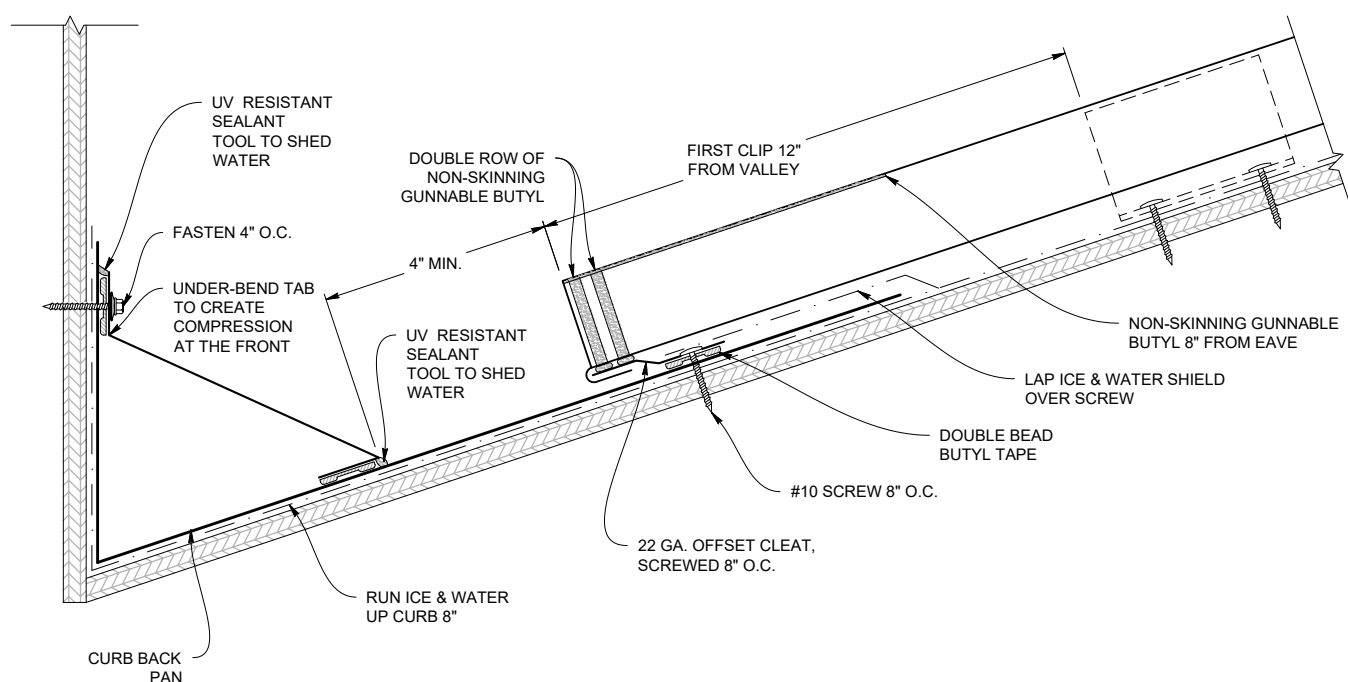


## ENDWALL DETAIL



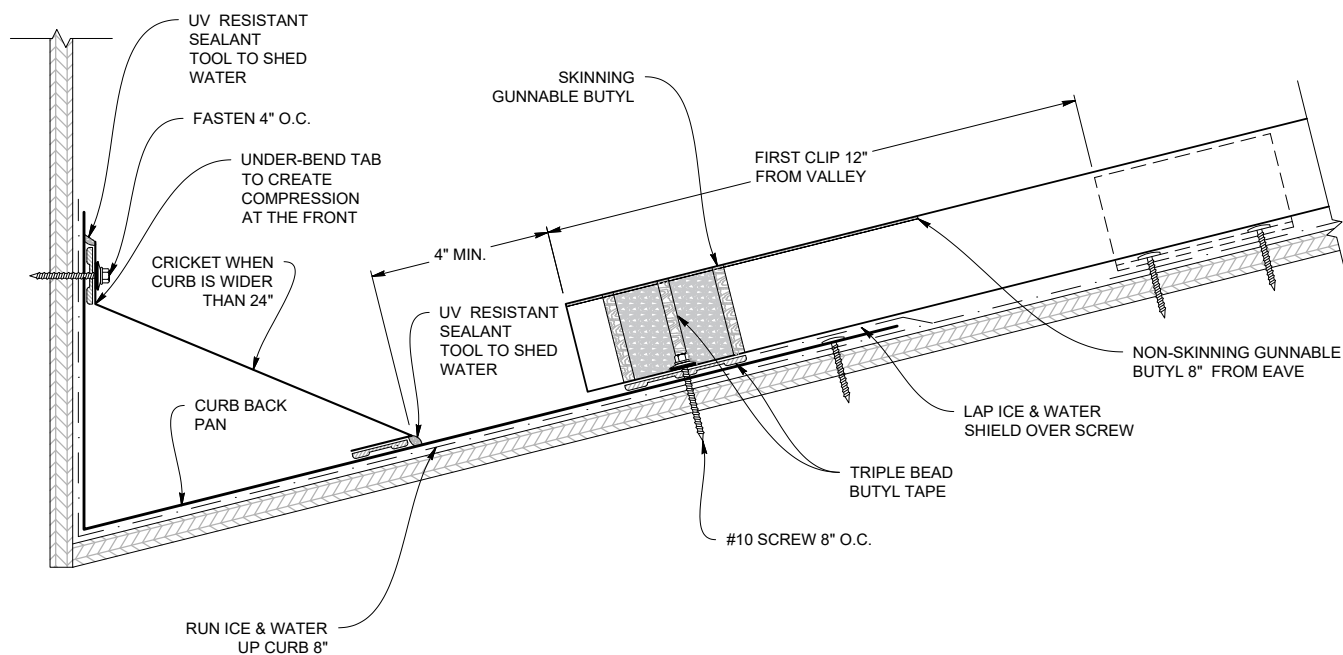
**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

**CURB BACK PAN / CRICKET DETAIL**  
**(3:12 Pitch or Greater)**



**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

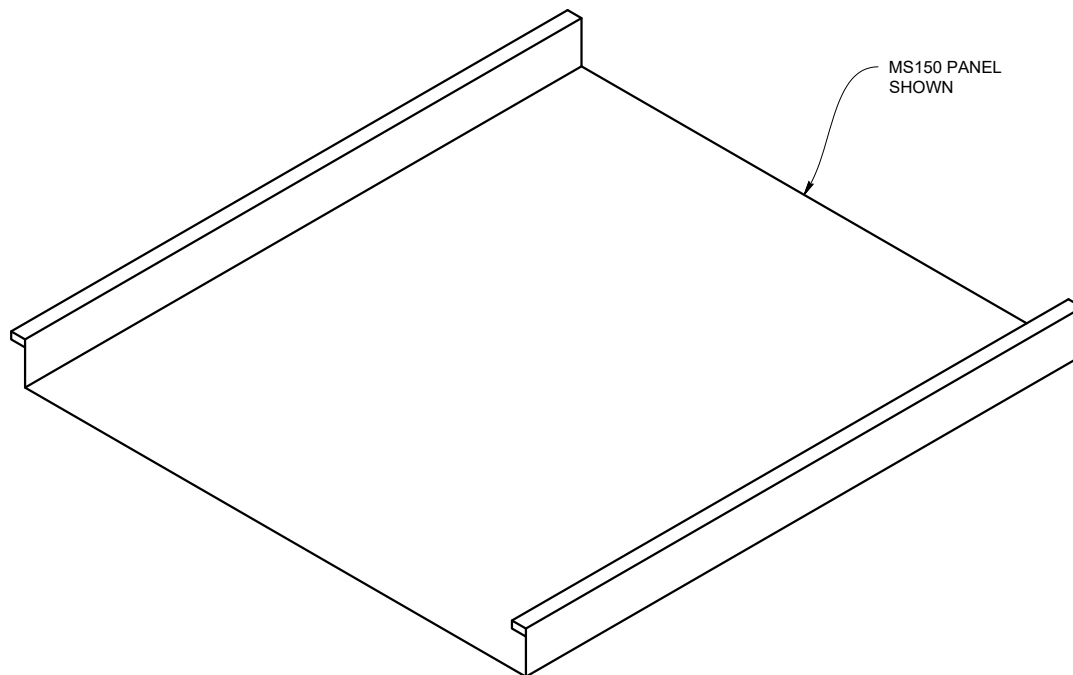
## CURB BACK PAN / CRICKET DETAIL ( Less Than 3:12 Pitch)



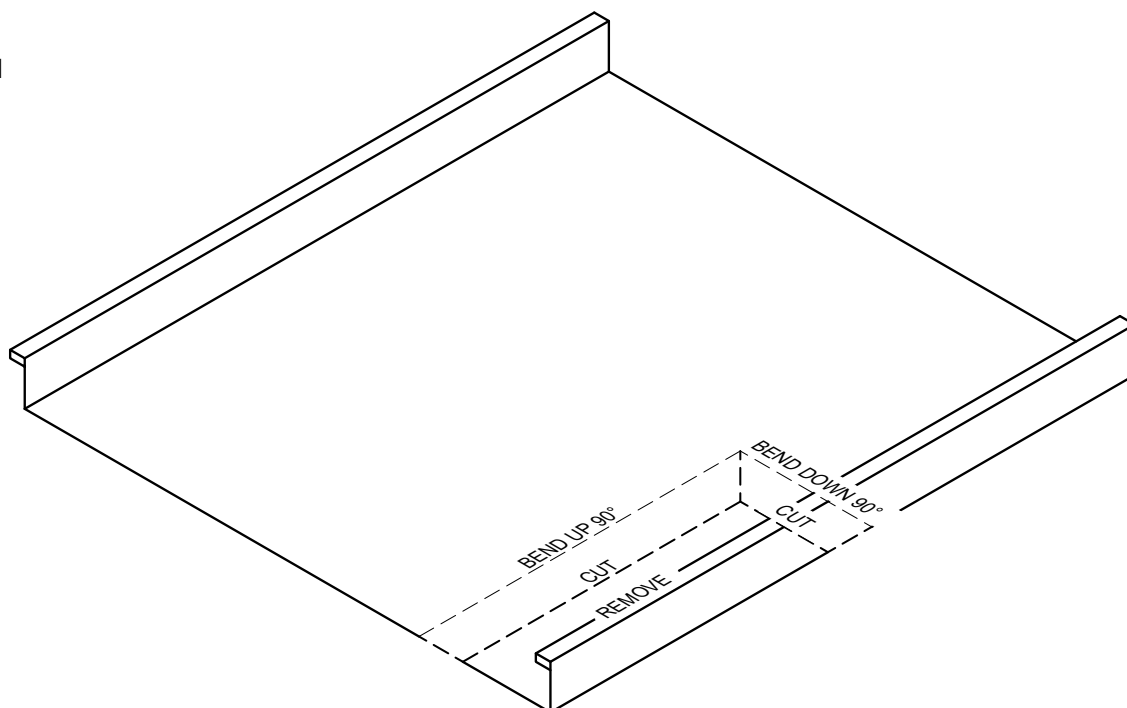
**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

# Eave to Gable Transition

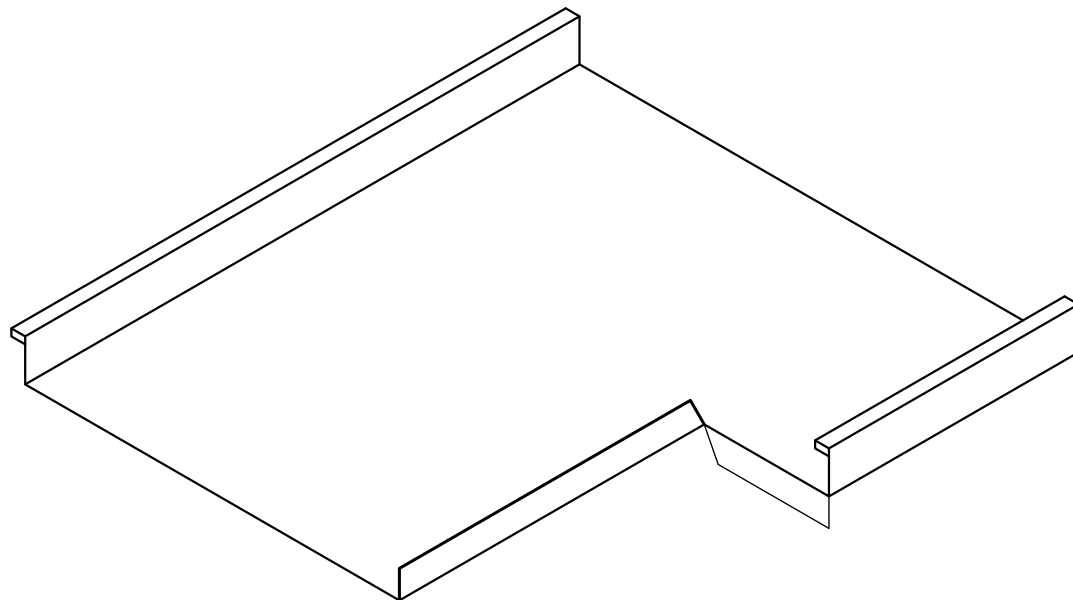
## EAVE TO GABLE TRANSITION



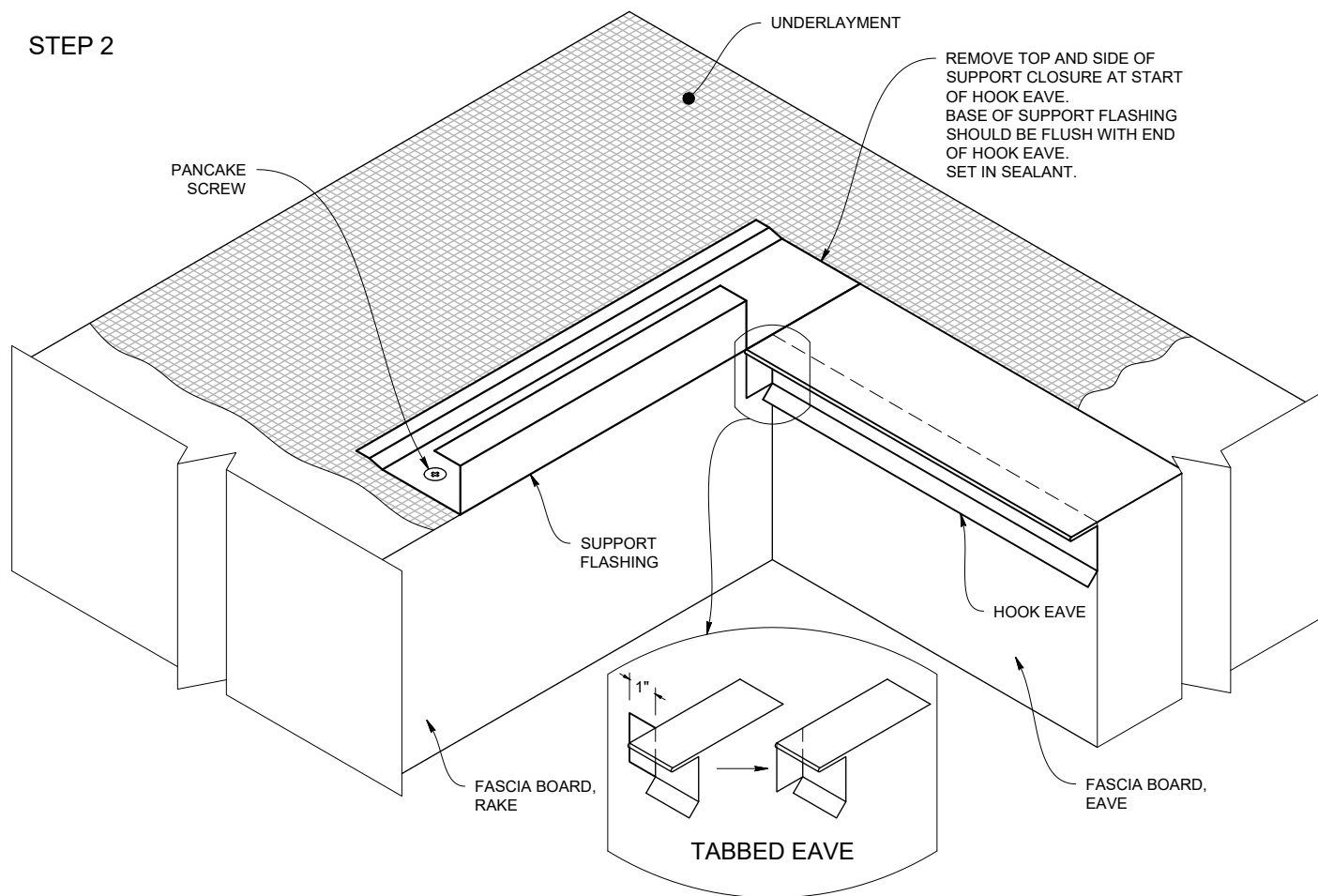
### STEP 1



**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.



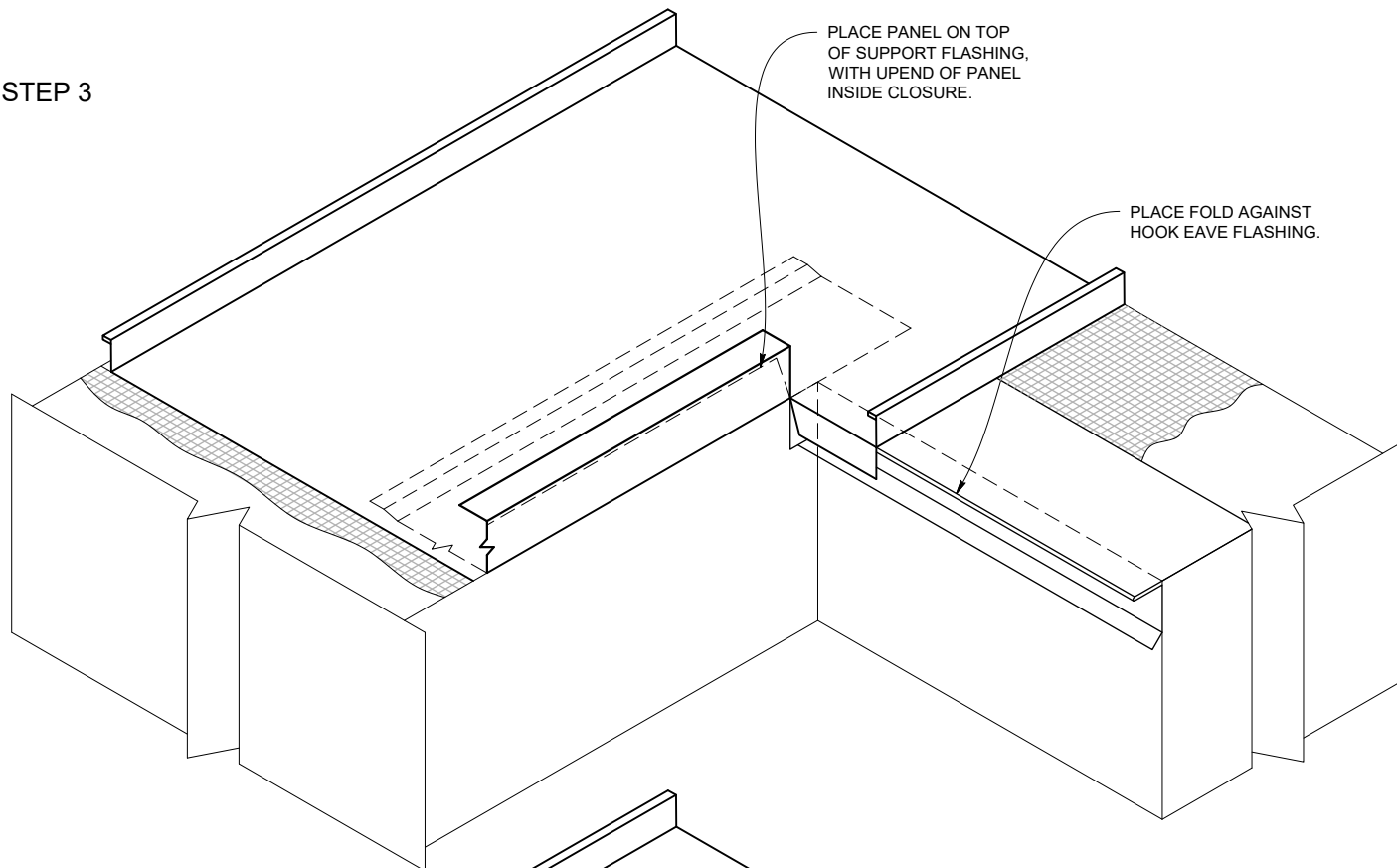
## STEP 2



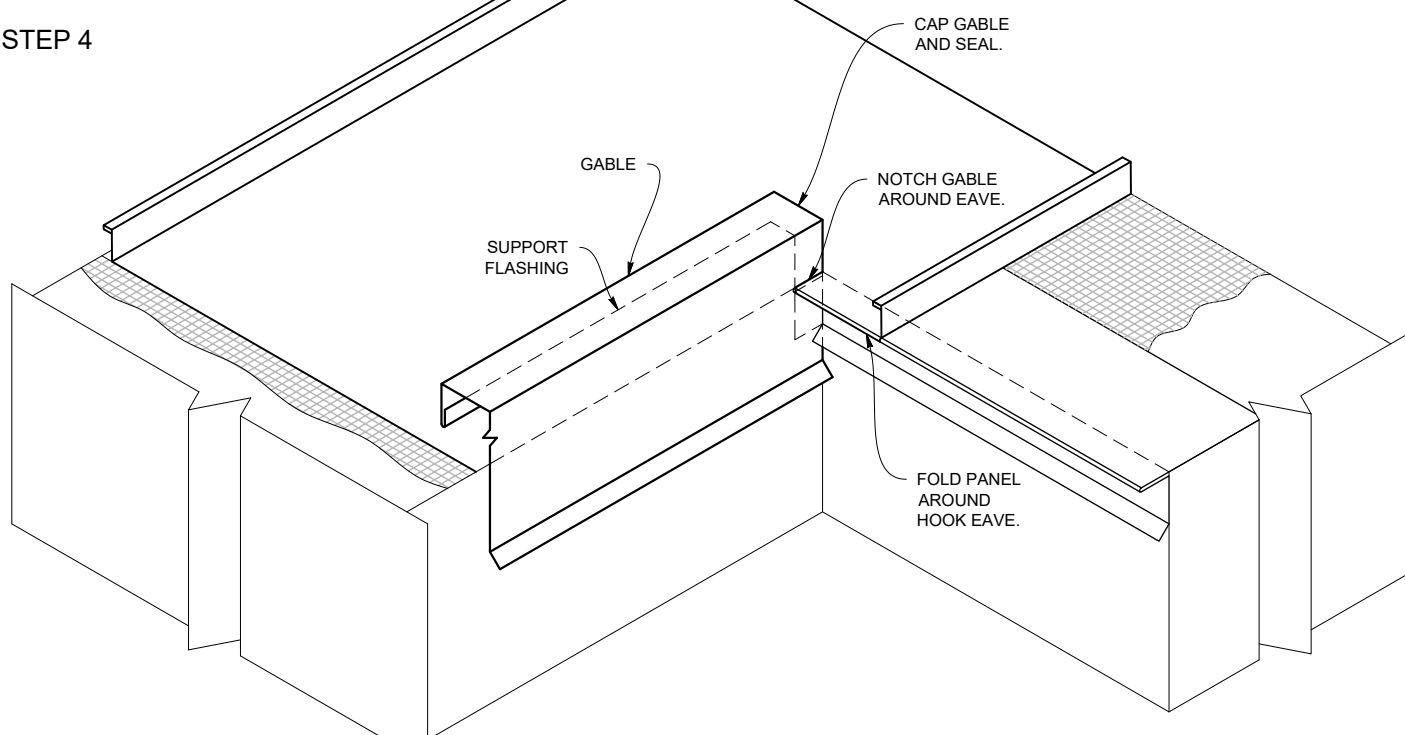
**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

# Eave to Gable Transition

## STEP 3

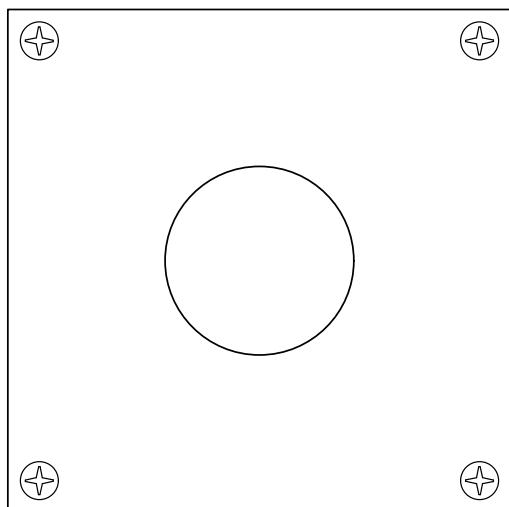
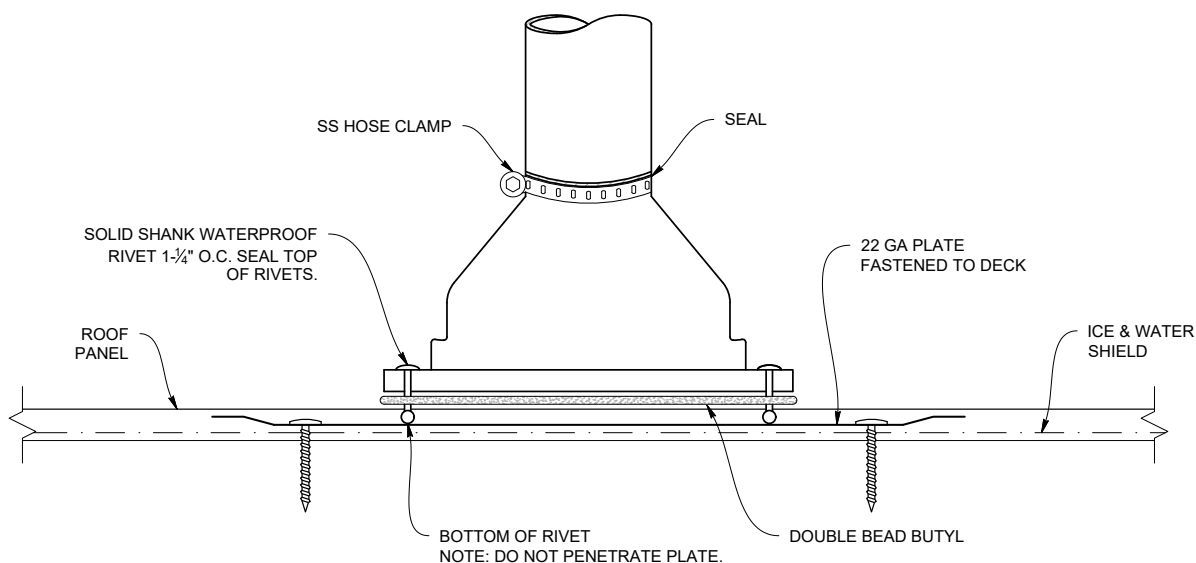


## STEP 4

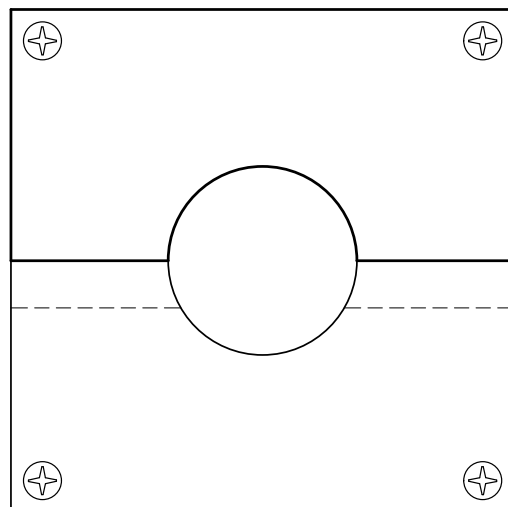


**Note:** All screws must be fastened into solid substrate.  
Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

FOR PIPES LOCATED GREATER THAN 20' FROM PIN POINT



SINGLE 22 GAUGE PLATE



TWO OVERLAPPING 22 GAUGE PLATES

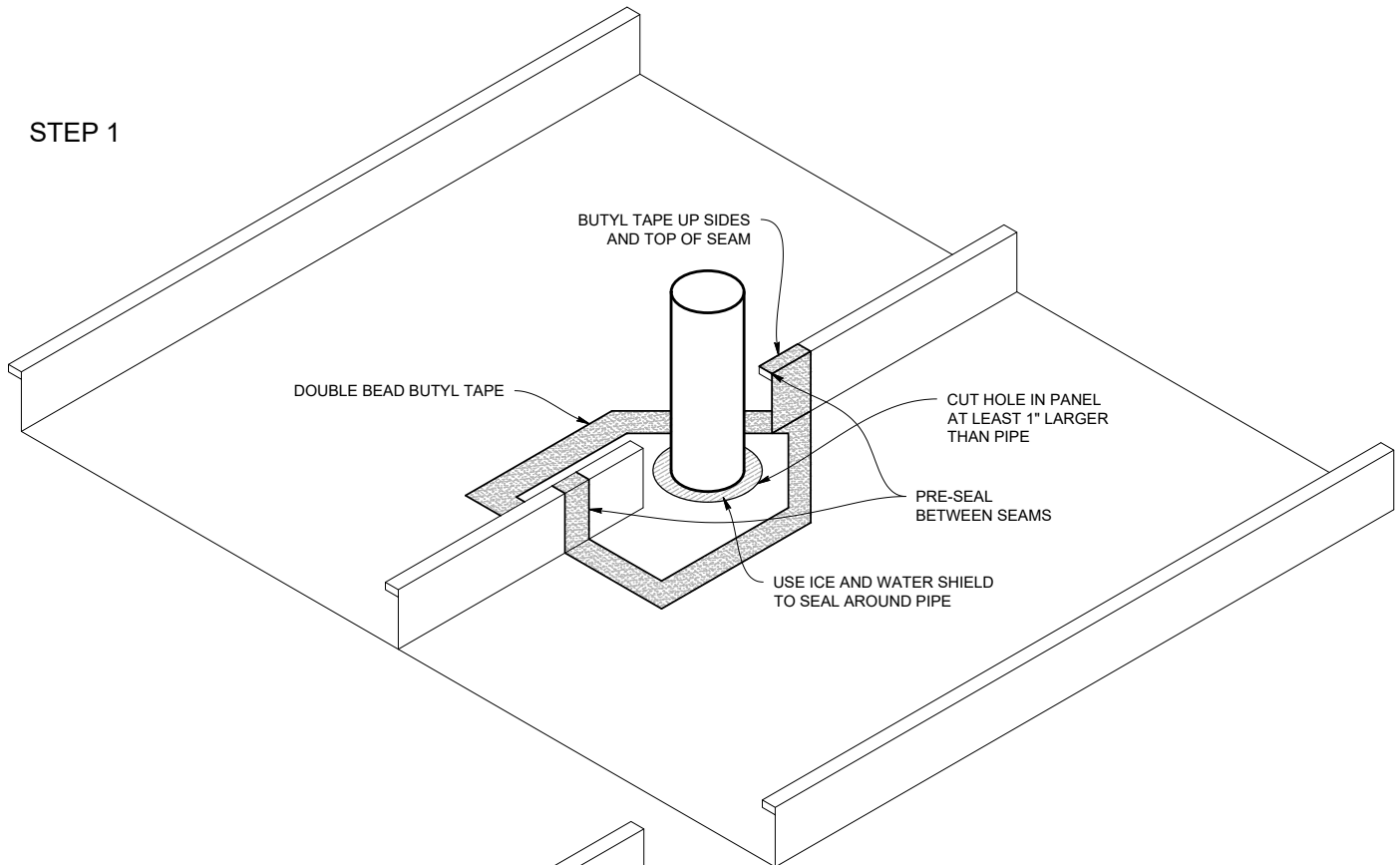
**Note:** If pipe penetration is over 20 ft. from PIN point, the Z closures shall be riveted to the panel the under layment covered by 22 ga. skid plate to protect the underlayment from rivets and thermal movement.

# Pipe Penetration - on Rib

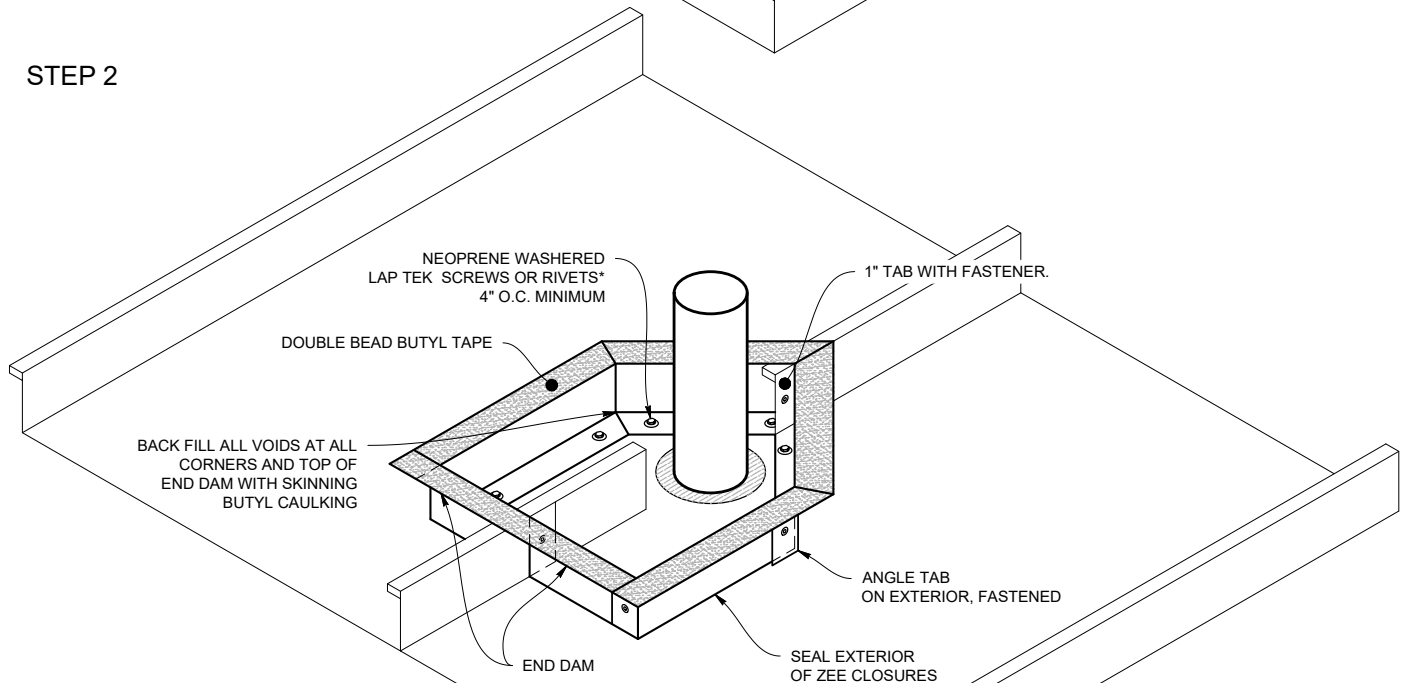
Home Plate Option



## STEP 1



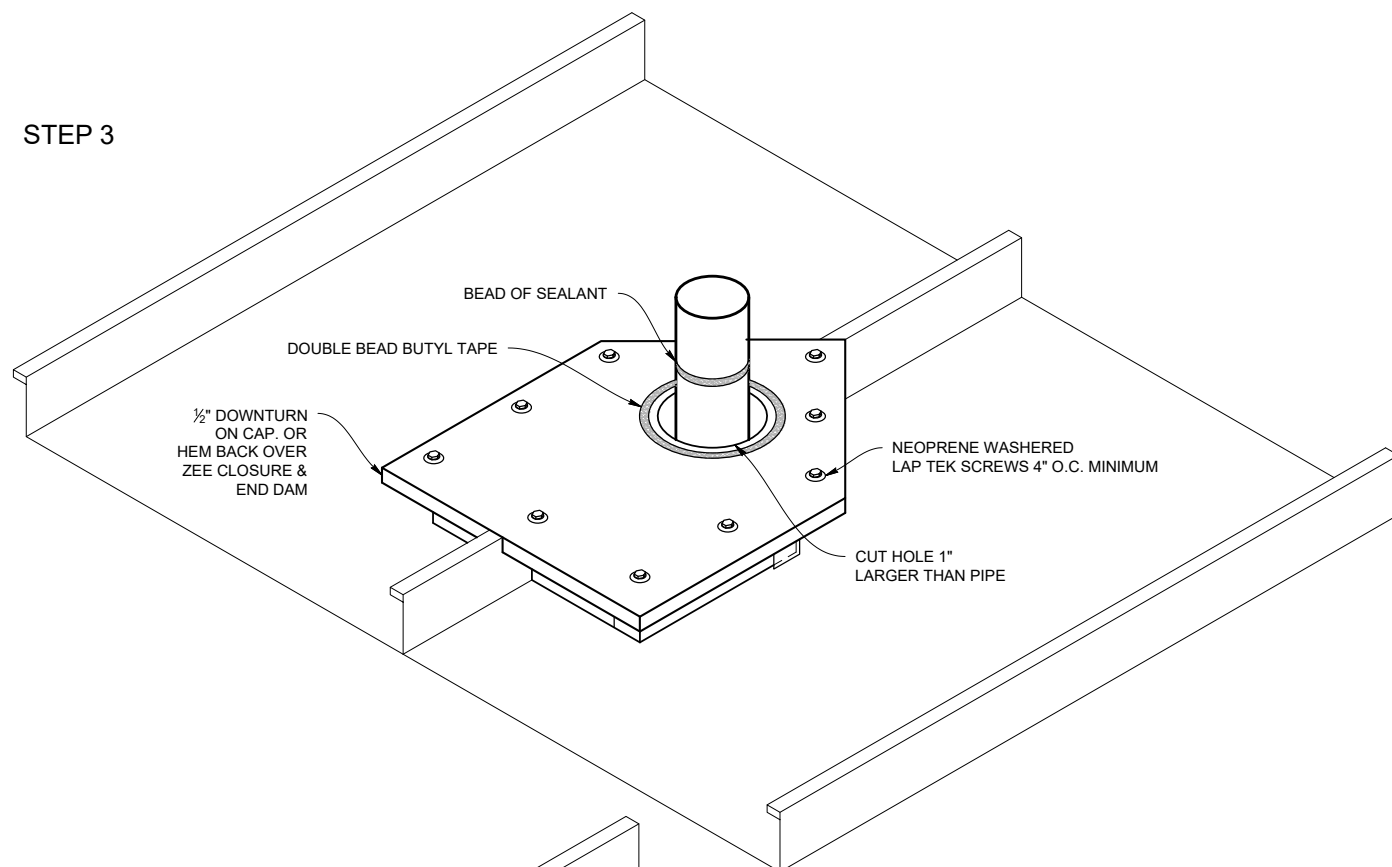
## STEP 2



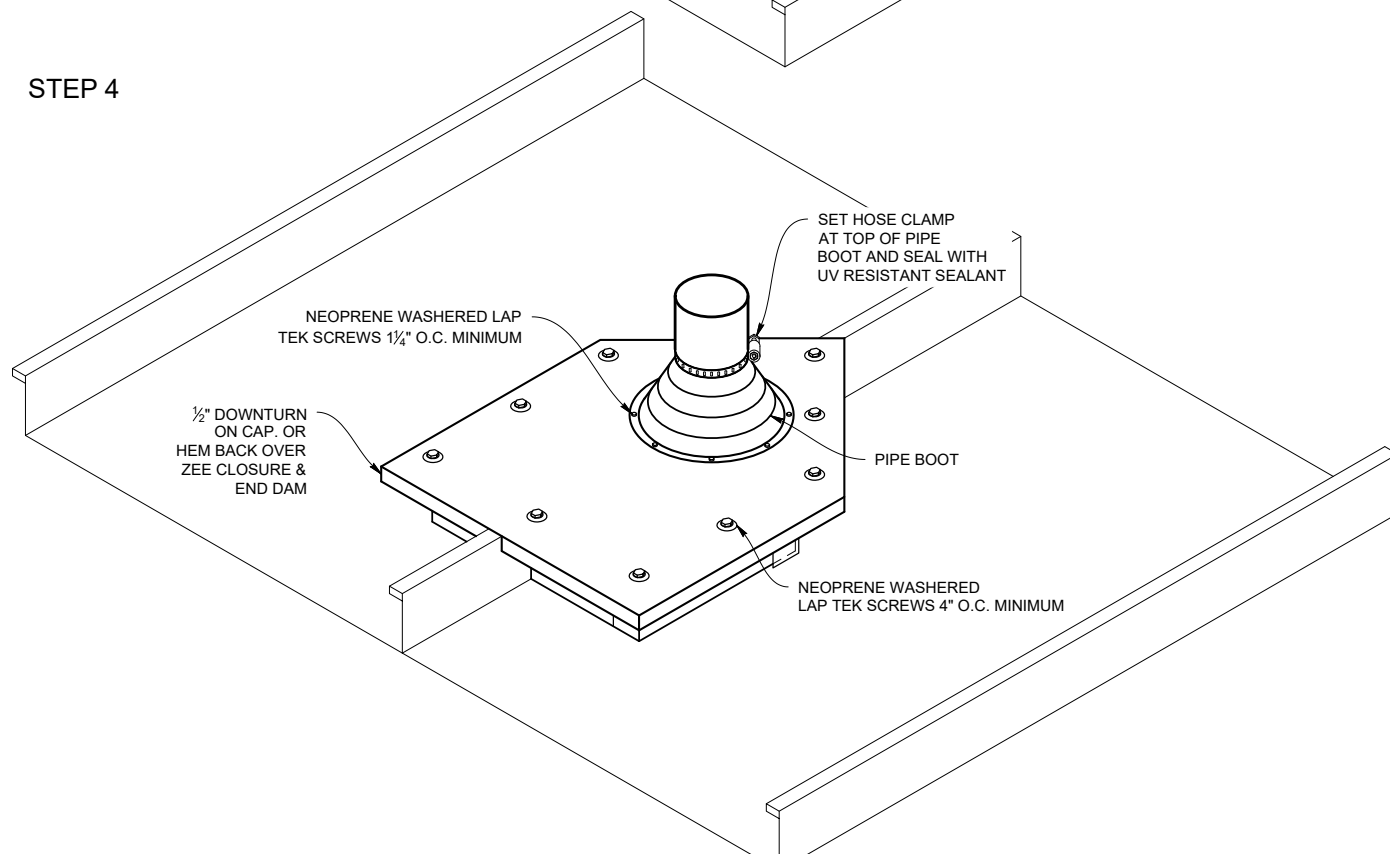
\*Use #63 closed end (solid shank) rivets and skid plate when penetration is greater than 20' from fixed pin point when installations are over a solid deck.

**Note:** All screws must be fastened into solid substrate. Flashing must be lapped 4" with 3 rows of gunnable sealant.

## STEP 3

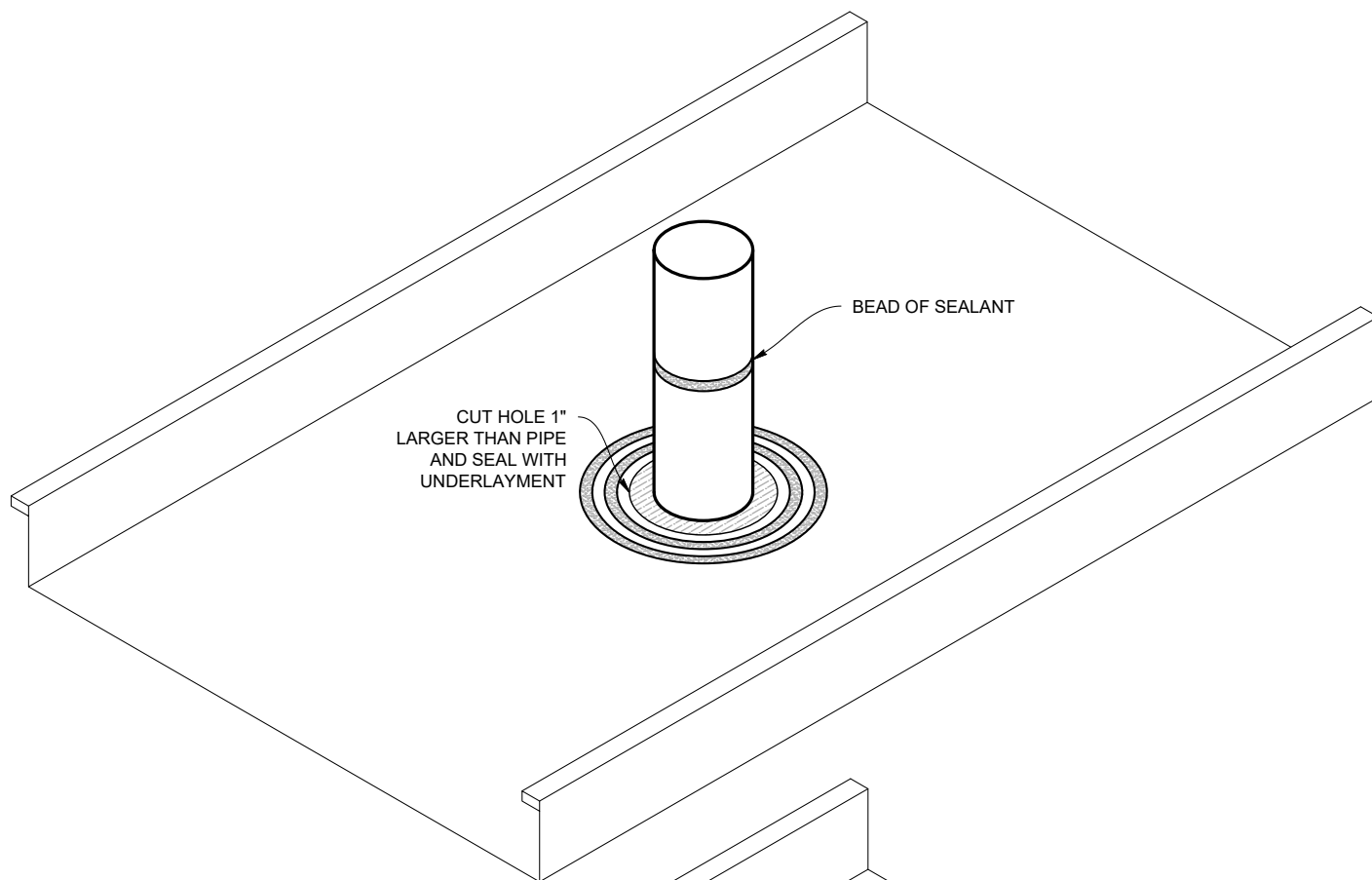


## STEP 4

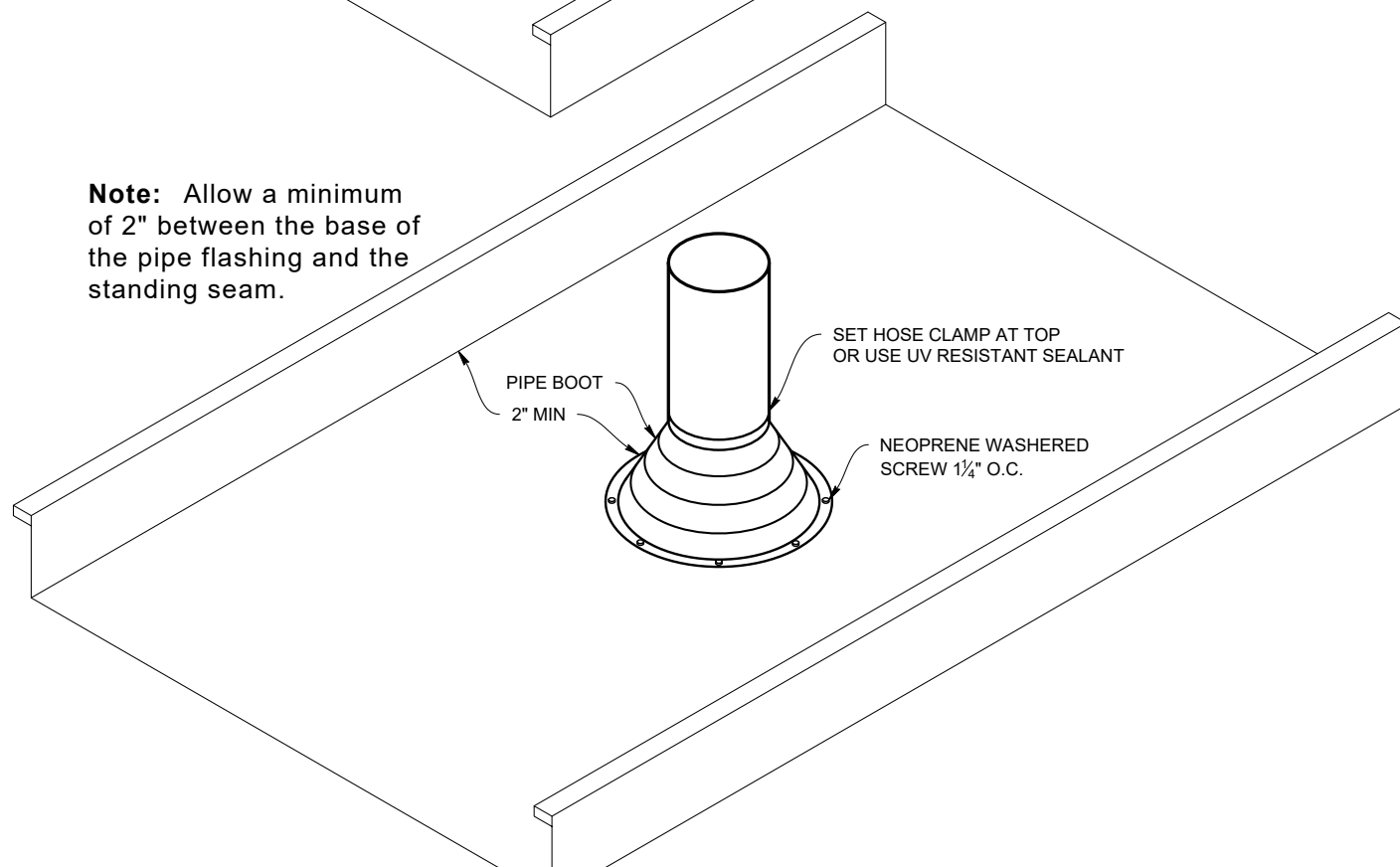


**Note:** All screws must be fastened into solid substrate. Flashing must be lapped 4" with 3 rows of gunnable sealant.

# Pipe Penetration - on Pan

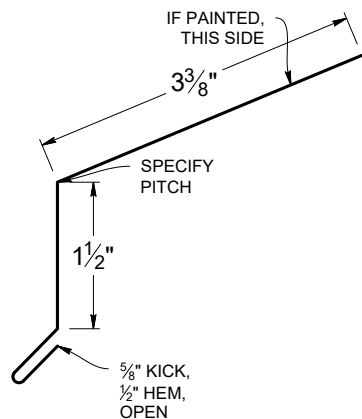


**Note:** Allow a minimum of 2" between the base of the pipe flashing and the standing seam.



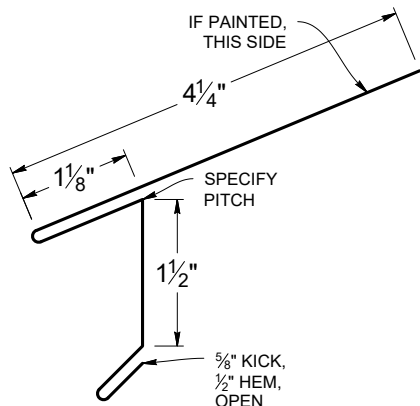
**Note:** If pipe penetration is over 20 ft. from PIN point, the pipe flashing shall be riveted to the panel the underlayment covered by 22 ga. skid plate to protect the underlayment from rivets and thermal movement.

## EAVE STANDARD ( MS100ES / MS150ES )



SCALE 1:2 S.O. 6" WEIGHT: 4.9 LBS.

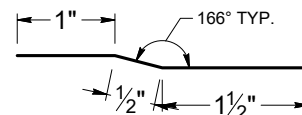
## EAVE HOOK ( MS100EH / MS150EH )



SCALE 1:2 S.O. 8" WEIGHT: 6.5 LBS.

## OFFSET CLEAT ( MS100OC / MS150OC )

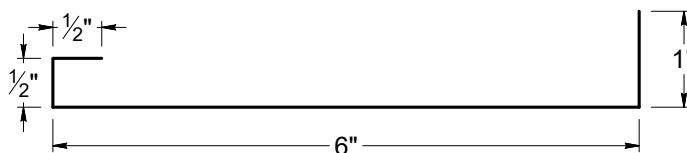
NON-VISIBLE /  
SUB-FLASHINGS ARE NOT  
PROVIDED IN SPECIFIC  
COLORS UNLESS SPECIFIED



SCALE 1:2 S.O. 3" WEIGHT: 2.5 LBS.

## GUTTER HANGER ( AGH6 )

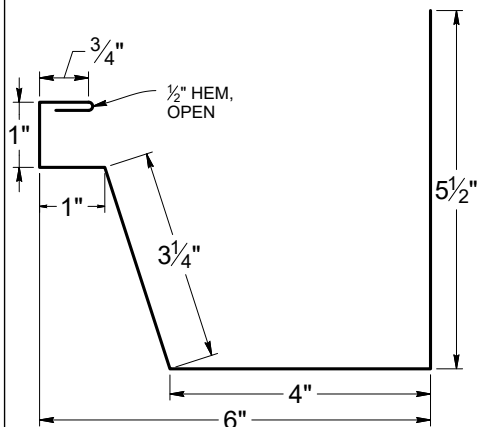
S.O. 8"



WEIGHT: 6.5 LBS.

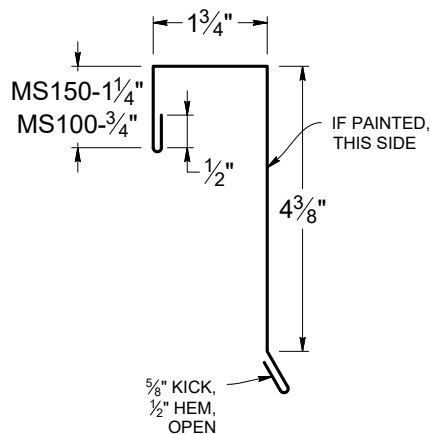
SCALE 1:2

## BOX GUTTER ( MS10065BG / MS15065BG )



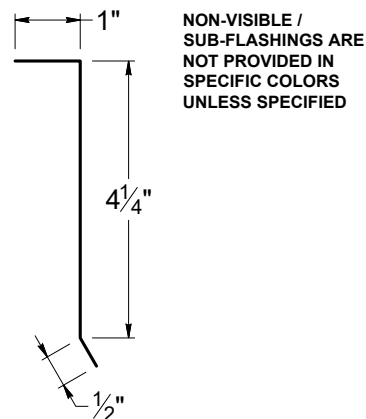
SCALE 1:3 S.O. 16" WEIGHT: 13.3 LBS.

## STANDARD GABLE ( MS100GB / MS150GB )



SCALE 1:3 S.O. 8.5"/9" WEIGHT: 7.6 LBS.

## GABLE SUPPORT CLEAT ( MS100GC / MS150GC )



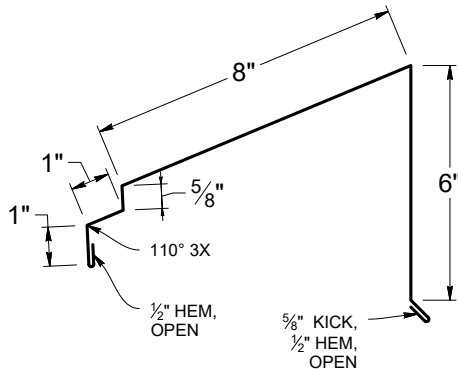
SCALE 1:3 S.O. 5.75" WEIGHT: 4.7 LBS.

# MS-100™/MS-150™ WTW

Flashing and Details Selection  
Flashing: 10' Standard

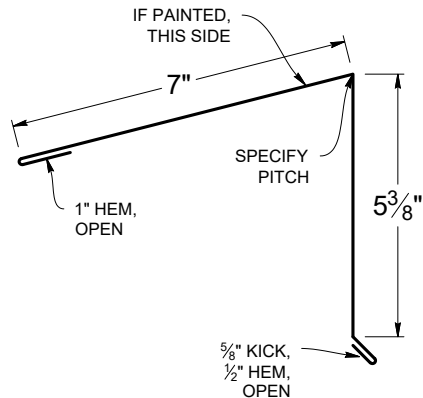


## WT VENTED PEAK FLASHING ( MS100WTRECV / MS150WTRECV )



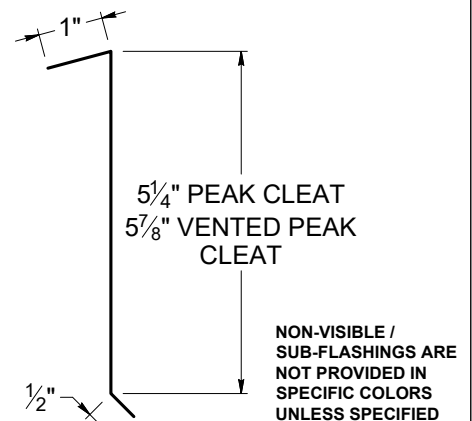
SCALE 1:4 S.O. 18.25" WEIGHT: 14.85 LBS.

## PEAK FLASHING ( MS100REC / MS150REC )



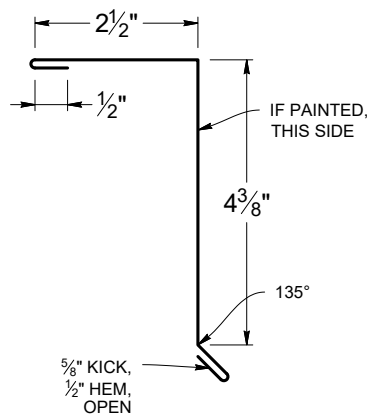
SCALE 1:4 S.O. 14.5" WEIGHT: 11.9 LBS.

## PEAK CLEAT / VENTED PEAK CLEAT ( MS100RECC / MS150RECC ) ( MS100VRECC / MS150VRECC )



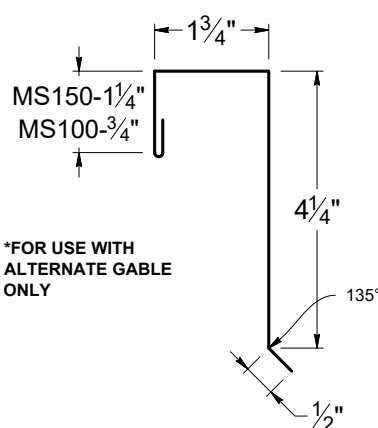
SCALE 1:3 S.O. 6.75" WEIGHT: 5.49 LBS.

## ALTERNATE GABLE ( MS100AT / MS150AT )



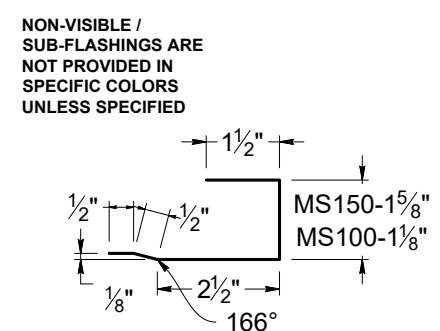
SCALE 1:3 S.O. 8.5" WEIGHT: 7 LBS.

## ALTERNATE GABLE CLEAT ( MS100AGC / MS150AGC )



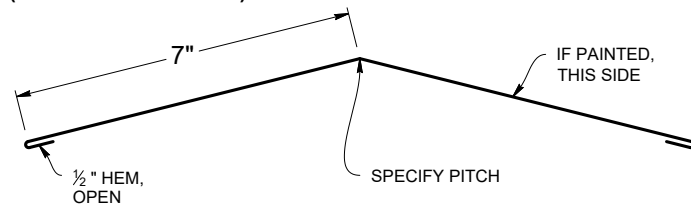
SCALE 1:3 S.O. 7.25"/7.75" WEIGHT: 4.7 LBS.

## SUPPORT FLASHING ( MS100SF / MS150SF )



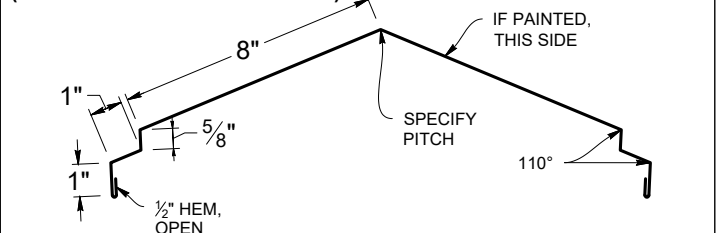
SCALE 1:3 S.O. 6.125"/6.625" WEIGHT: 6 LBS.

## STANDARD RIDGE ( MS100RS / MS150RS )



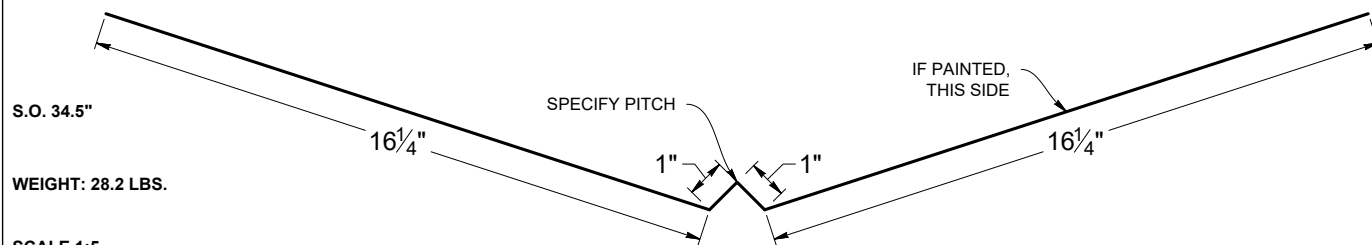
SCALE 1:4 S.O. 15" WEIGHT: 13.1 LBS.

## WT RIDGE FULL VENTED ( MS100WTRFV / MS150WTRFV )

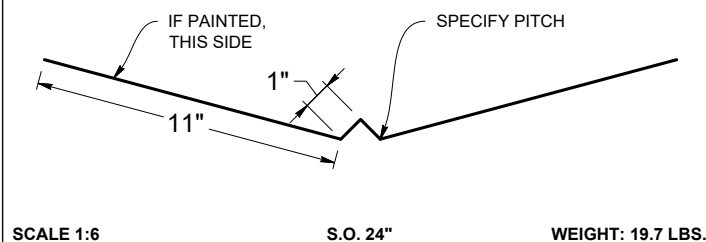


SCALE 1:6 S.O. 22.25" WEIGHT: 18.1 LBS.

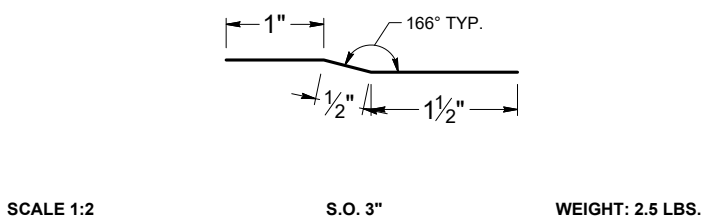
## VALLEY WIDE FLASHING ( MS100VFW / MS150VFW )



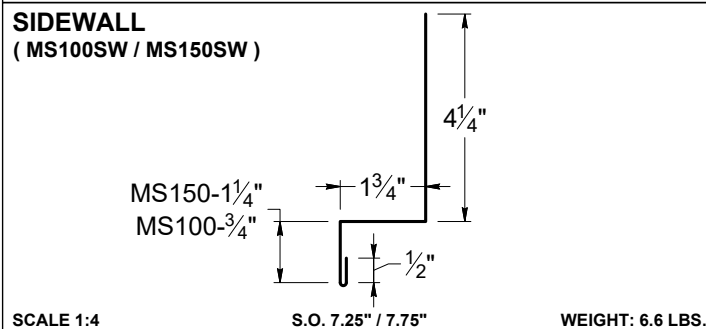
## VALLEY FLASHING ( MS100VF / MS150VF )



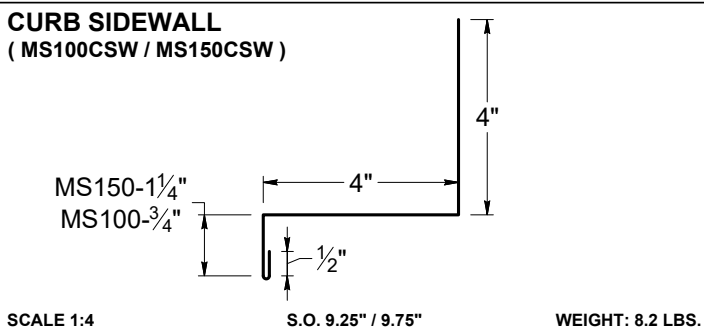
## OFFSET CLEAT ( MS100OC / MS150OC )



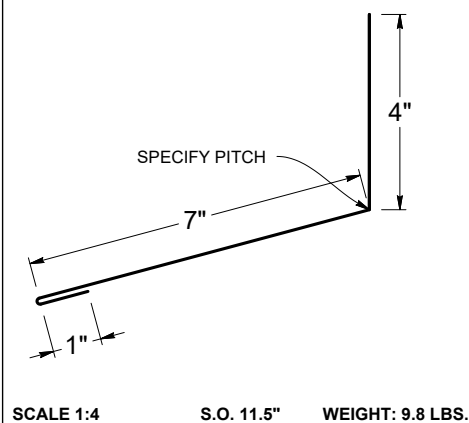
## SIDEWALL ( MS100SW / MS150SW )



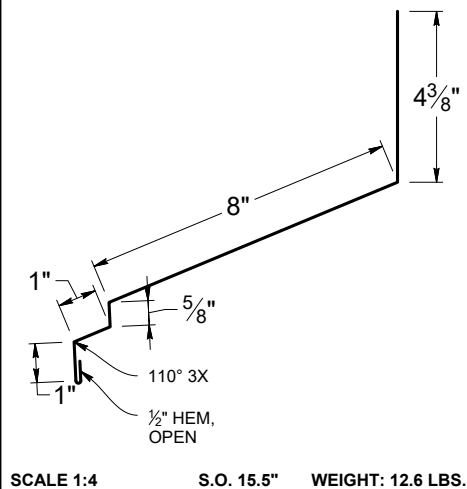
## CURB SIDEWALL ( MS100CSW / MS150CSW )



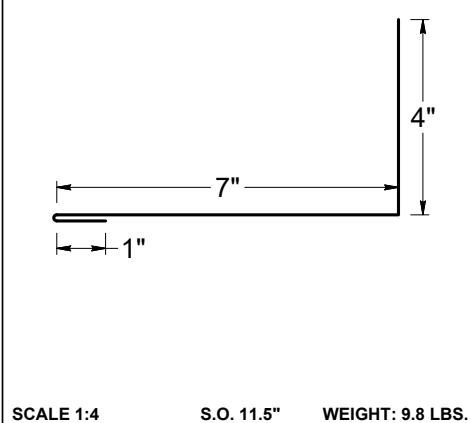
## ENDWALL ( MS100EW / MS150EW )



## WT VENTED ENDWALL ( MS100WTEWV / MS150WTEWV )



## CURB ENDWALL ( MS100CH / MS150CH )



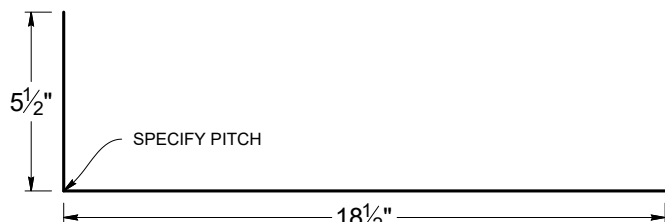
# MS-100™/MS-150™ WTW

Flashing and Details Selection  
Flashing: 10' Standard



## BACK PAN

( MS100PAN / MS150PAN )



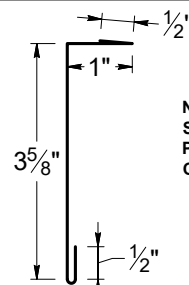
SCALE 1:6

S.O. 24"

WEIGHT: 21.3 LBS.

## REGLET

( MS100RF / MS150RF )



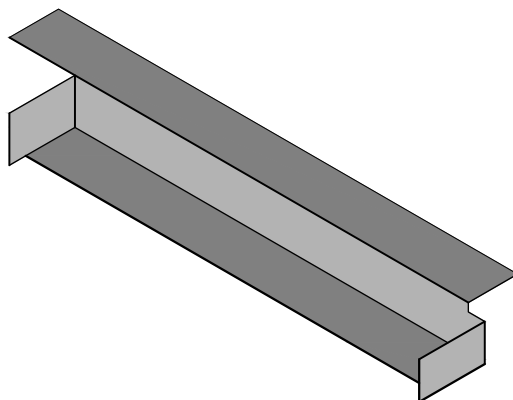
NON-VISIBLE /  
SUB-FLASHINGS ARE NOT  
PROVIDED IN SPECIFIC  
COLORS UNLESS SPECIFIED

SCALE 1:3

S.O. 5.625"

WEIGHT: 4.6 LBS.

## END DAM



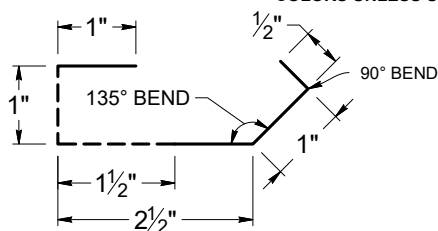
S.O. VARIES

WEIGHT: VARIES

## PERFORATED VENT DRIP

( MS100PVD / MS150PVD )

NON-VISIBLE / SUB-FLASHINGS  
ARE NOT PROVIDED IN SPECIFIC  
COLORS UNLESS SPECIFIED



SCALE 1:2

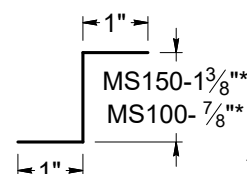
S.O. 6"

WEIGHT: 4.88 LBS.

## ZEE CLOSURE

( MS100ZF / MS150ZF )

NON-VISIBLE / SUB-FLASHINGS  
ARE NOT PROVIDED IN  
SPECIFIC COLORS UNLESS  
SPECIFIED



\*HEIGHT ALLOWS  
FOR DOUBLE BEAD  
BUTYL TAPE

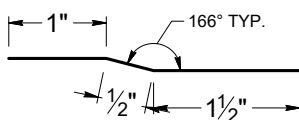
SCALE 1:3

S.O. 2.875"/3.375"

WEIGHT: 3 LBS.

## OFFSET CLEAT

( MS100OC / MS150OC )



SCALE 1:2

S.O. 3"

WEIGHT: 2.5 LBS.



# Custom Trim Order



Customer Name: \_\_\_\_\_ Job Name: \_\_\_\_\_

Gauge: \_\_\_\_\_ Color: \_\_\_\_\_ Status: ☐ Original ☐ New

Specify: ☐ Angles ☐ Color Side ☐ Dimensions ☐ Stretchout

SO \_\_\_\_\_

Dwg #: \_\_\_\_\_ Pitch: \_\_\_\_\_ # of Pieces: \_\_\_\_\_

Description: \_\_\_\_\_

Hems: ☐ Open ☐ Closed ☐ Slightly Open

SO \_\_\_\_\_

Dwg #: \_\_\_\_\_ Pitch: \_\_\_\_\_ # of Pieces: \_\_\_\_\_

Description: \_\_\_\_\_

Hems: ☐ Open ☐ Closed ☐ Slightly Open

SO \_\_\_\_\_

Dwg #: \_\_\_\_\_ Pitch: \_\_\_\_\_ # of Pieces: \_\_\_\_\_

Description: \_\_\_\_\_

Hems: ☐ Open ☐ Closed ☐ Slightly Open

SO \_\_\_\_\_

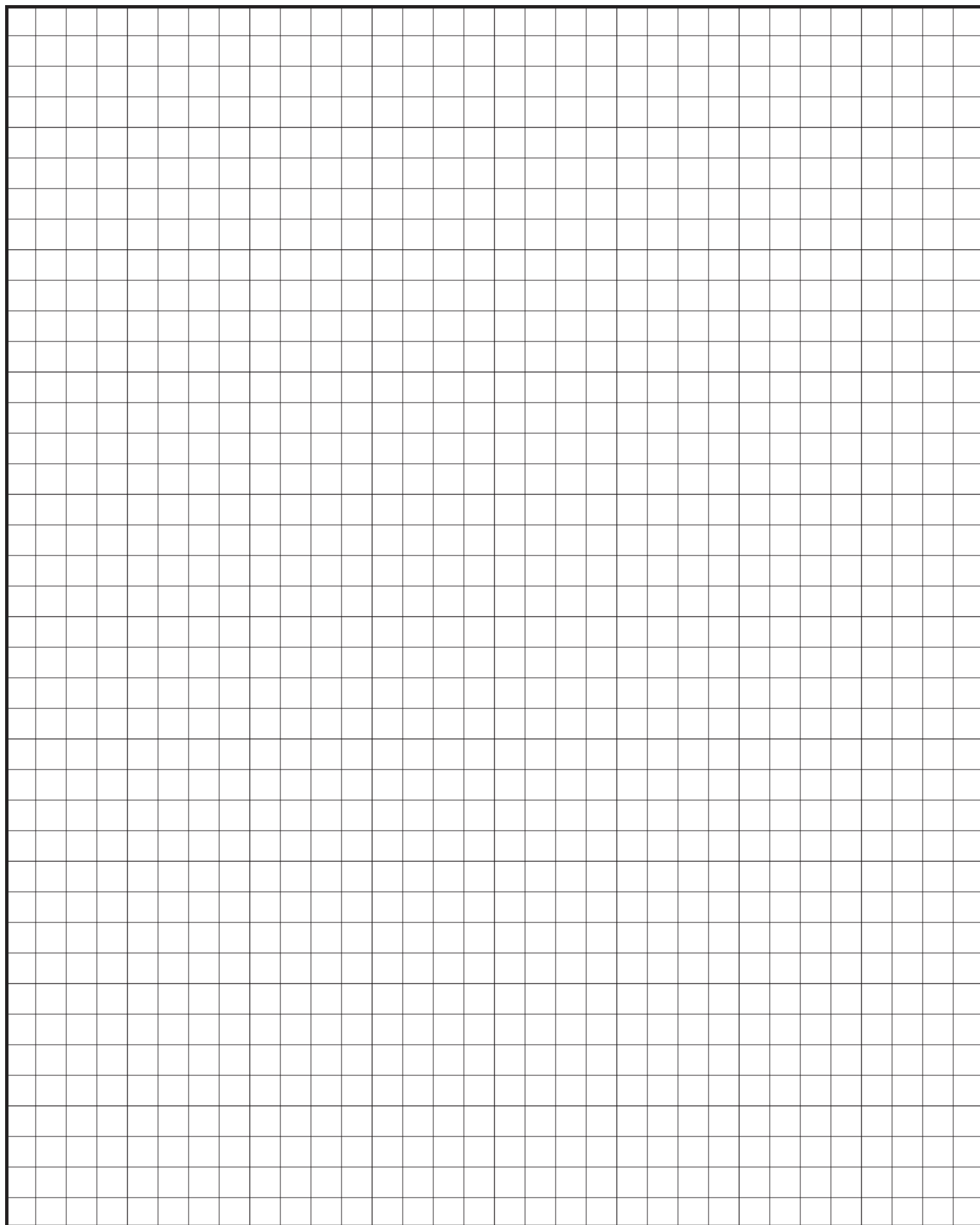
Dwg #: \_\_\_\_\_ Pitch: \_\_\_\_\_ # of Pieces: \_\_\_\_\_

Description: \_\_\_\_\_

Hems: ☐ Open ☐ Closed ☐ Slightly Open

**Please provide a drawing for each flashing with precise measurements and angles**

**Fax to: 503-581-6877**









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Fax: 509-535-8682

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