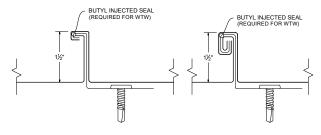
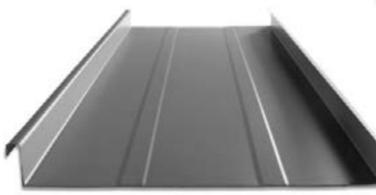


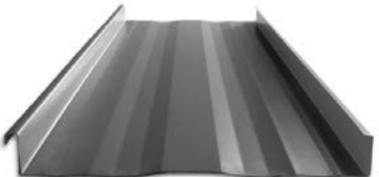
MS-100[™] & MS-150[™]

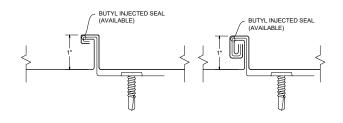
Installation Guide - WeatherTight Warranty Details (*Note: MS-100TM does not qualify for WeatherTight Warranties)













MS-100[™]/MS-150[™] WTW

Flashing and Details Guide

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MS-100™ MECHANICALLY SEAMED

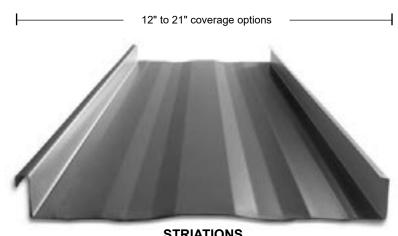


The MS-100[™] is a mechanically seamed rood that is perfect for high wind areas and snow country. The butyl injected seam prevents water from entering the system, giving you a worry free roof for a lifetime.

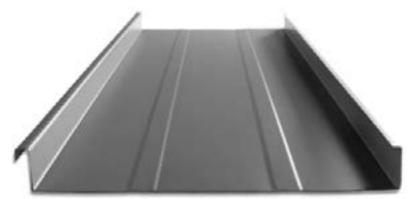
KEY FEATURES

- 12" to 21" coverage options
- 26, 24 & 22 gauge Tru-Gauge™ and .032" Aluminum
- 16 & 20 oz. Copper (Please inquire)
- · Floating clip system: allows for expansion/contraction of panels in longer lengths
- 1" vertical rib
- · Factory injected Butyl sealant
- · Concealed fasteners: fasteners cannot leak
- Code compliance UL Evaluation Report UL ER 25913-01
- UL 580 Class 90 Wind Uplift rated, UL 790 Class A Fire rated and UL 2218 Class 4 Impact (hail) rated
- UL Construction No. 575 & 602
- 1:12 minimum pitch recommended (For lower panels, please inquire)
- · Standard panel lengths 2' to 60' (For longer panels, please inquire)
- Onsite roll forming available
- Panel options: Striations, Accent Ribs, and Flat Pan
- · Retro-fit systems available





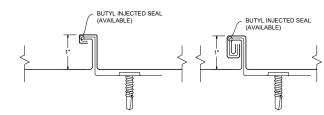
STRIATIONS



ACCENT RIBS 3 Accent ribs for 12" to 14-5/8" panel 4 Accent ribs for 16" & 21" 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.

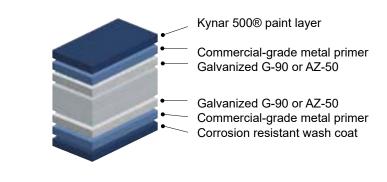
MATERIAL SPECIFICATIONS

- 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 Zincalume® 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

STANDARD COOL KYNAR 500® COLORS

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









MS-150TM WTW MECHANICALLY SEAMED



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.

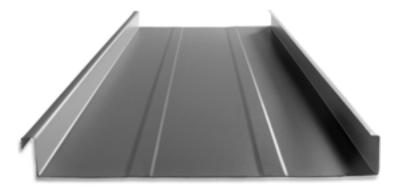
KEY FEATURES

- 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
- ES ICC-ESR #5046 with CBC-CRC Supplement
- Oute 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





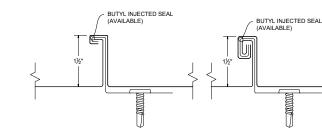
STRIATIONS



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



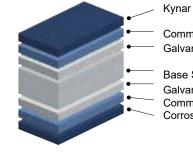
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MATERIAL SPECIFICATIONS

- 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 Zincalume® 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

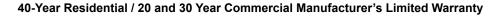
- 21 Standard Colors, 5 Metallic Colors and 4 Specialized Materials
- Kynar 500® Paint System the ultimate in exterior durability and color retention
- · "Cool" color pigments are specially designed to reflect infrared light, reducing heat gain to dwelling, and conform with ENERGY STAR® criteria
- · 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



Kynar 500® paint layer

Commercial-grade metal primer Galvanized G-90 or AZ-50

Base Steel Galvanized G-90 or AZ-50 Commercial-grade metal primer Corrosion resistant wash coat





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 consistant 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 & Will Call/Loading

<u>Delivery</u>

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.



MS-100™/MS-150™ WTW

Flashing and Details Guide



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

Minimum underlayment requirements are 30 lb. ASTM rated felt, a synthetic underlayment with Class A and ASTM UV protection technology or a high temperature self-adhering rubberized membrane. When choosing the underlayment, consider the roof slope, roof design, roof panel, and the climate.

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.



MS-100™/MS-150™ WTW

Flashing and Details Guide

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.

MS-100[™]/ MS-150[™] WTW

Flashing and Details Guide



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.

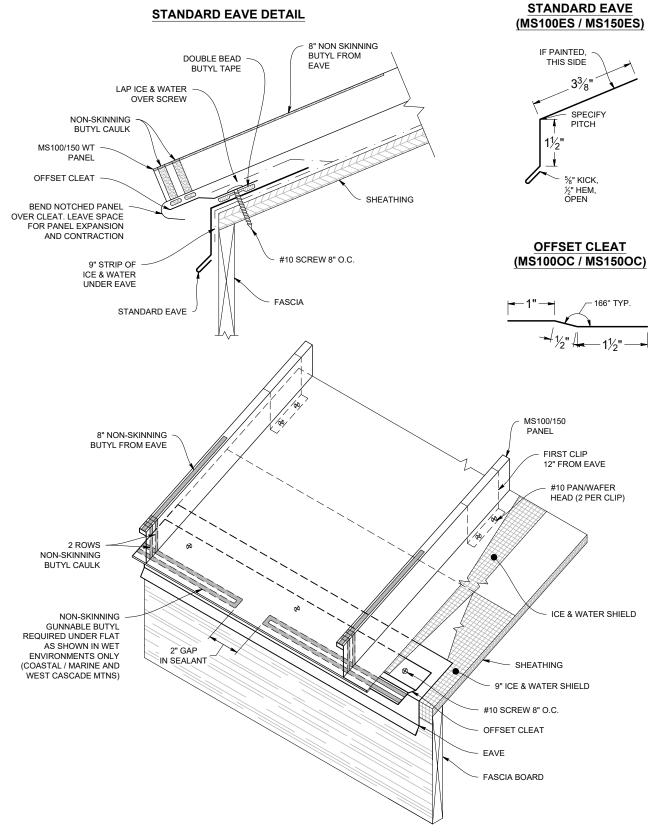
Metal roofs that are wet or dusty can be extremely slippery. Wear soft soled shoes and a safety harness to minimize risk of falling.

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.

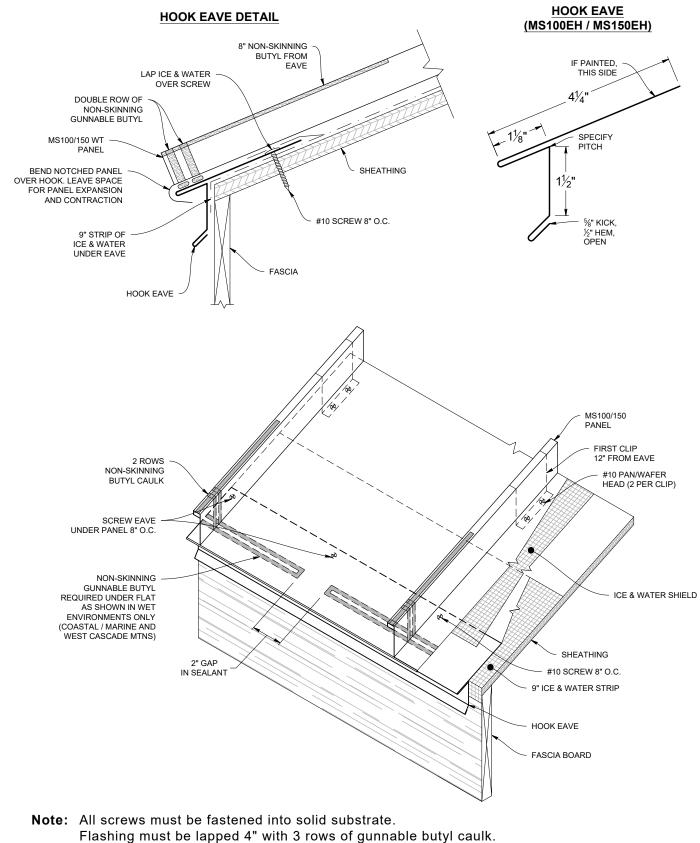
Standard Eave





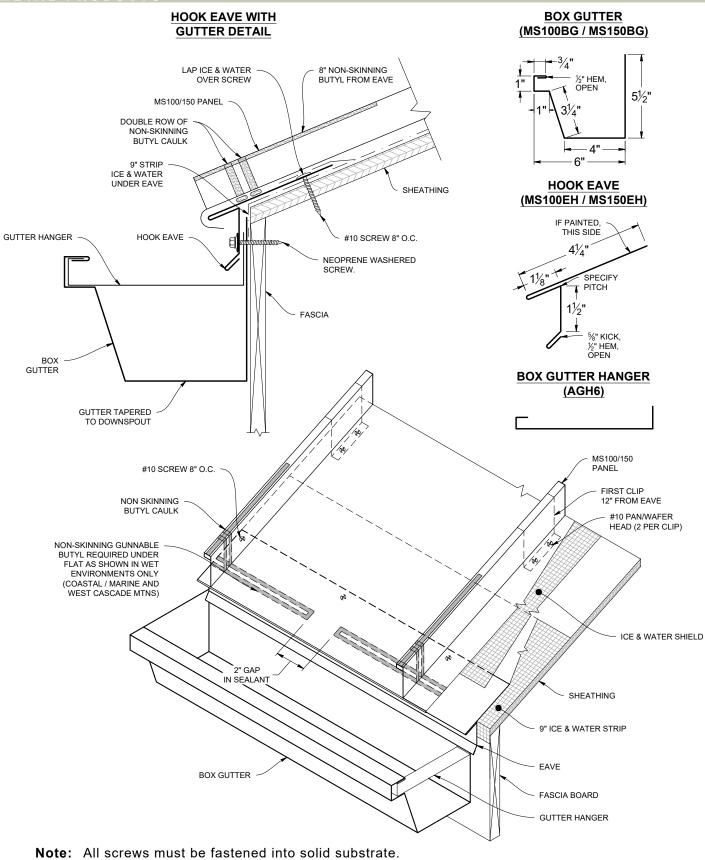


Hook Eave

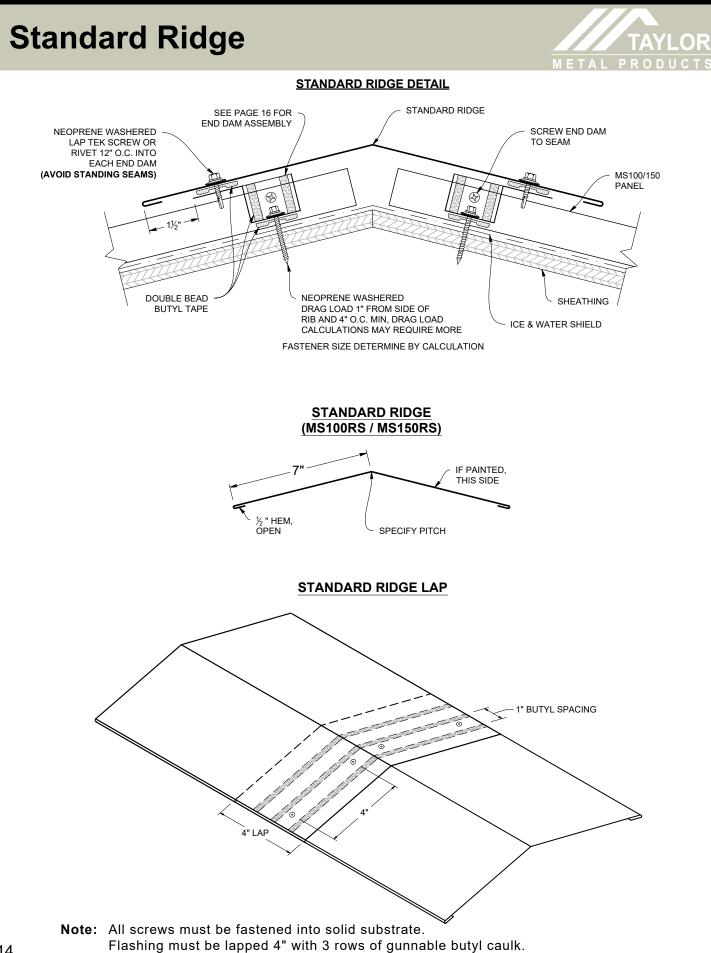




Gutter / Hook Eave

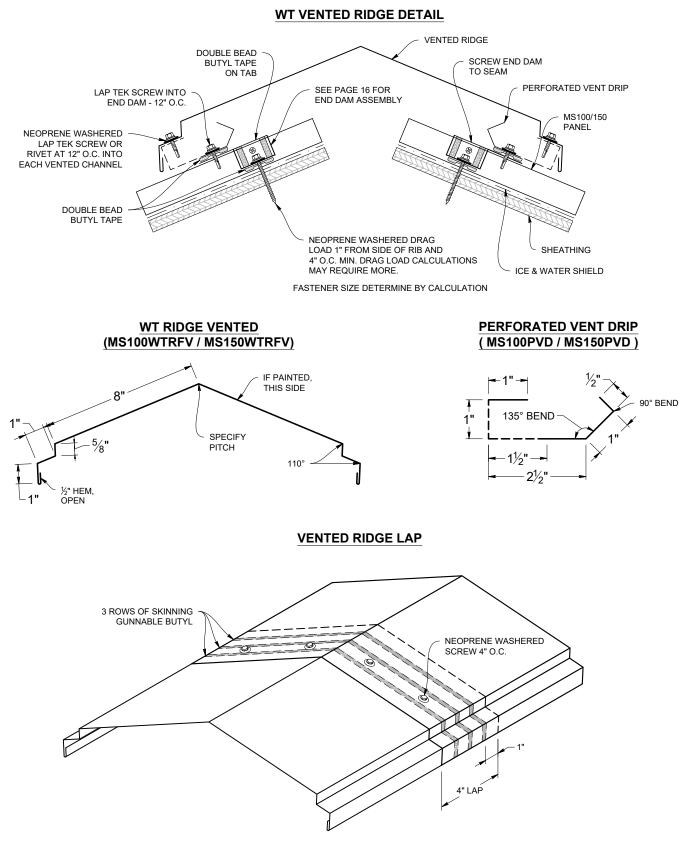


Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.



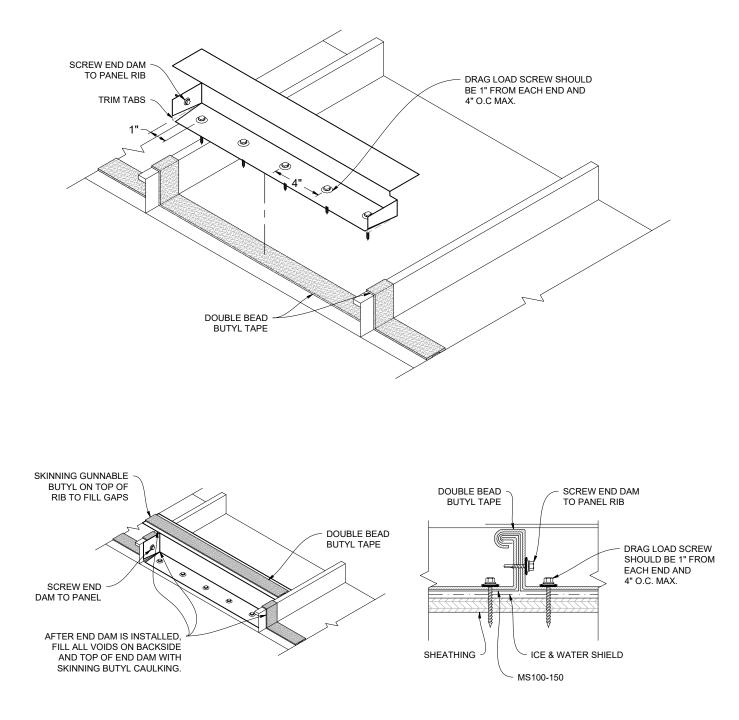


Vented Ridge



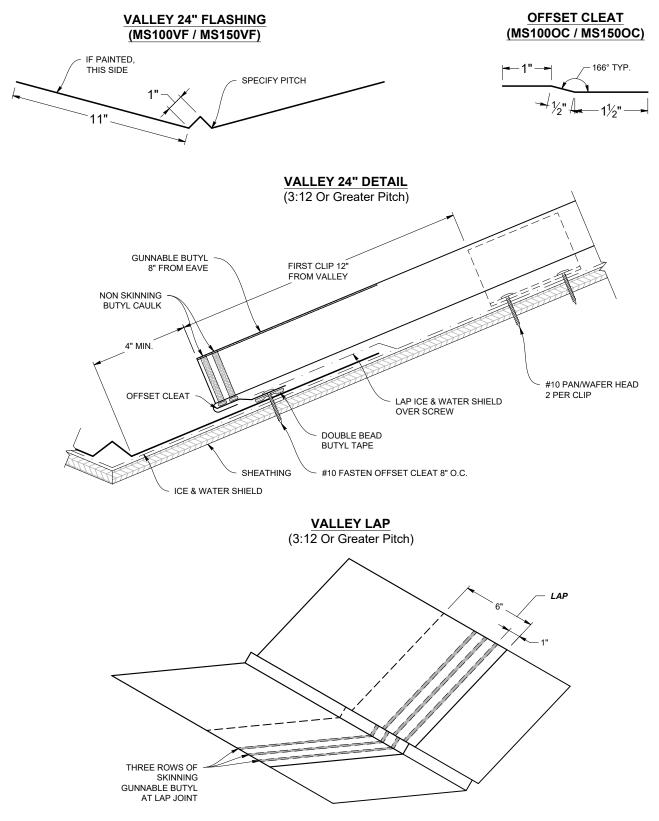
End Dam





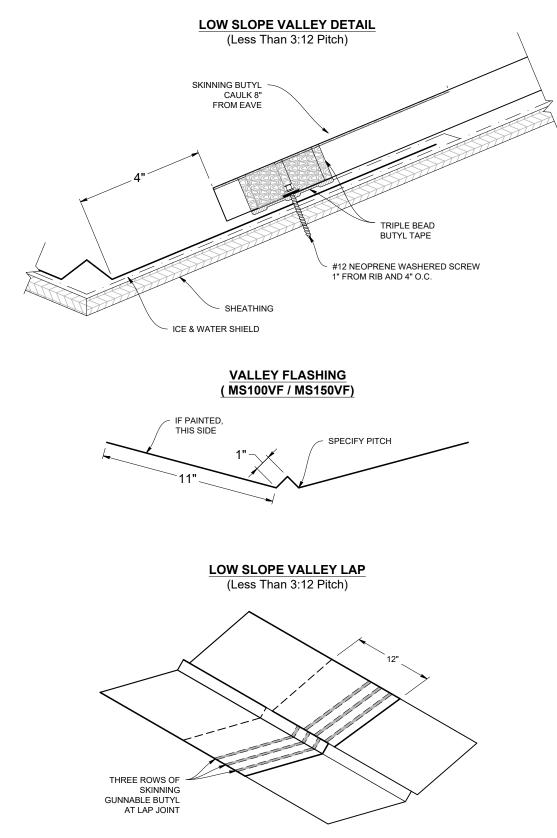
Valley Flashing Slope 3:12 or Greater





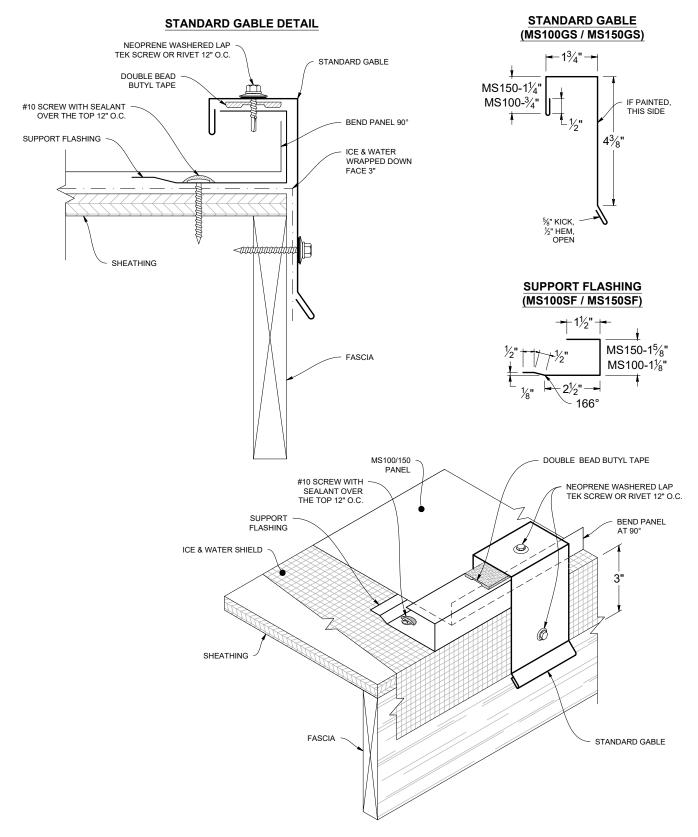
Valley Flashing - Low Slope Slope Less than 3:12





Standard Gable





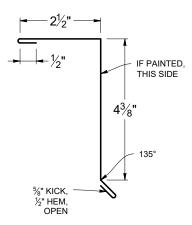
Note: All screws must be fastened into solid substrate. Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

Alternate Gable



SUPPORT FLASHING (MS100SF / MS150SF) -1½" MS150-1⁵/₈" MS100-1¹/₈" 21⁄2" 1⁄8" 166°

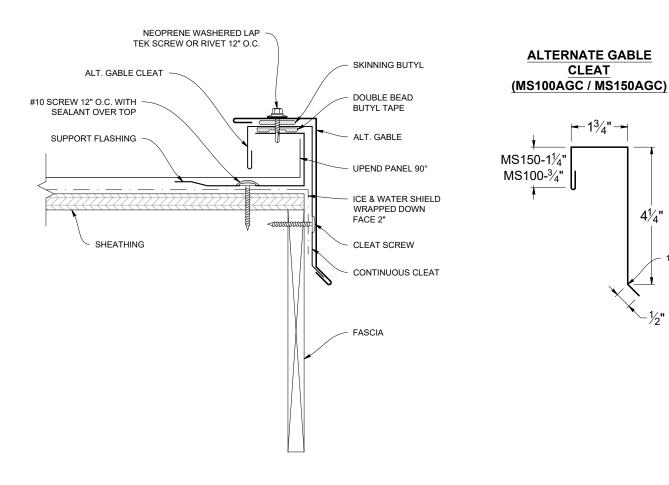
ALTERNATE GABLE (MS100AT / MS150AT)



135°

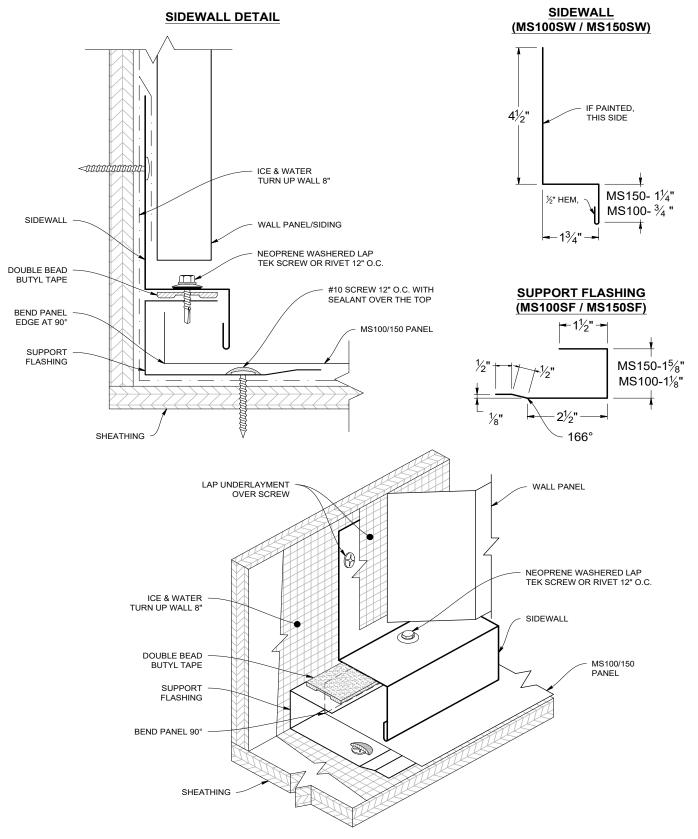
1/2"

ALTERNATE GABLE DETAIL





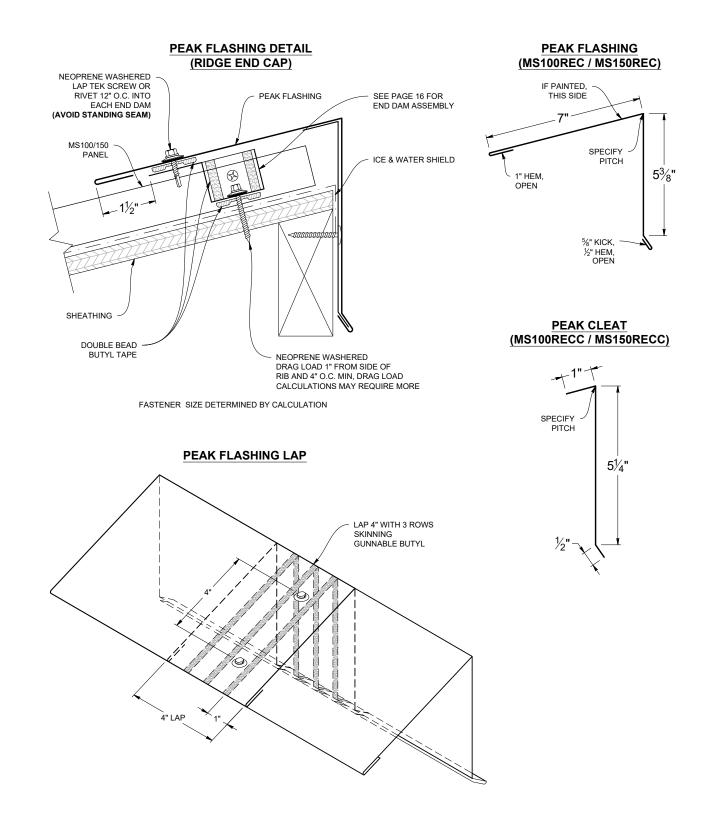
Sidewall

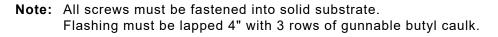


Note: All screws must be fastened into solid substrate. Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

Peak Flashing (Ridge End Cap)

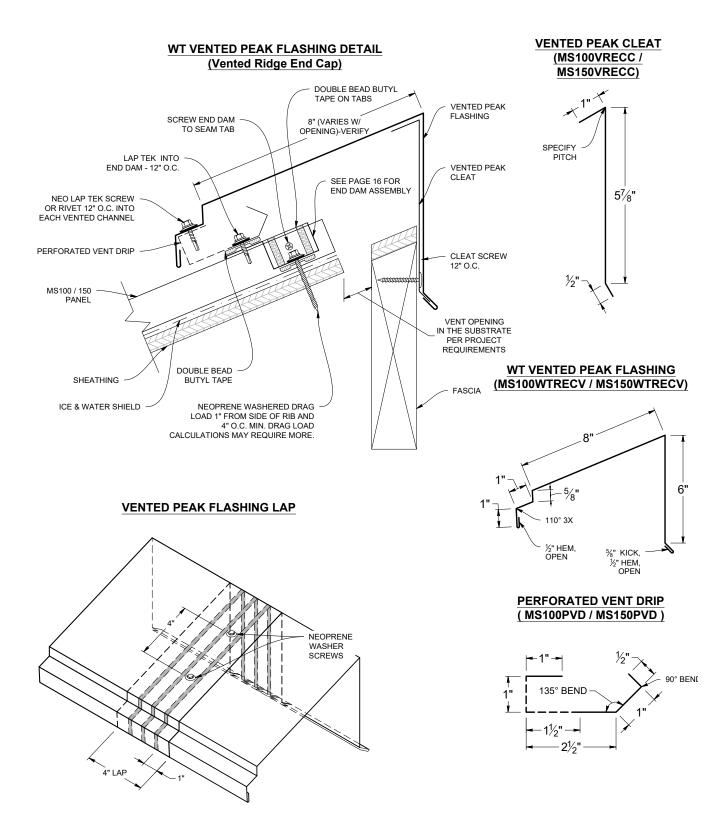






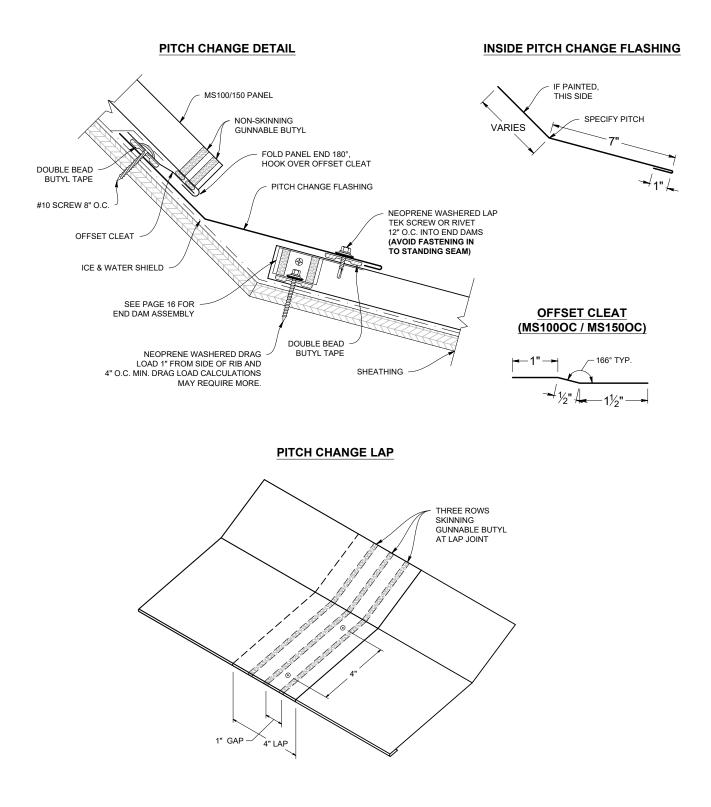


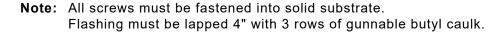
Vented Peak Flashing (Vented Ridge End Cap)



Pitch Change



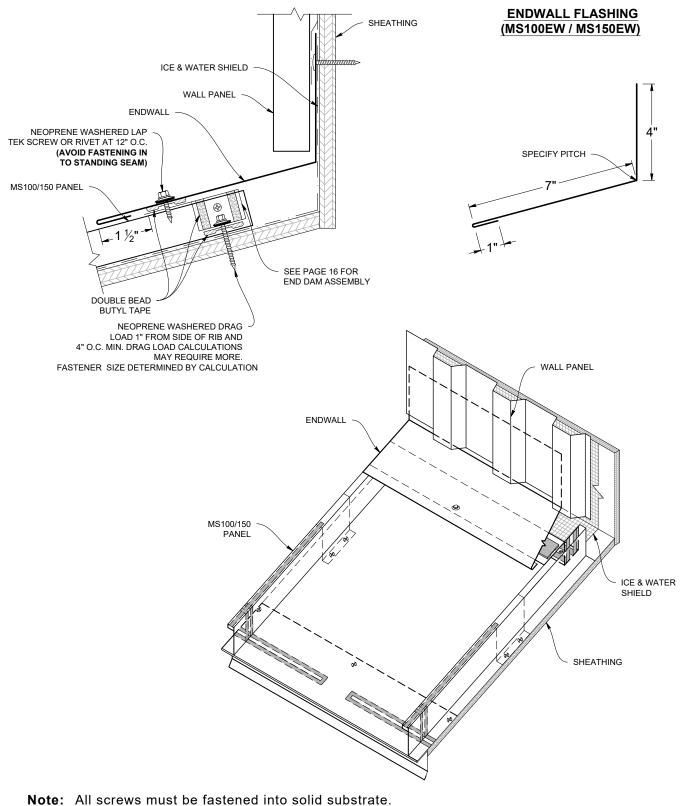




Endwall



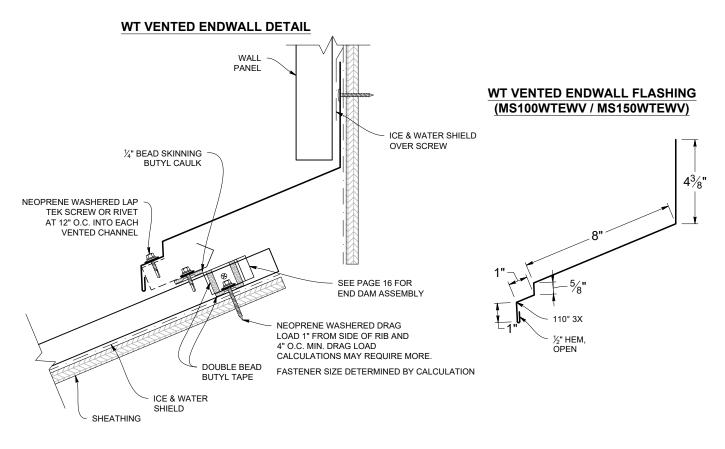
ENDWALL DETAIL

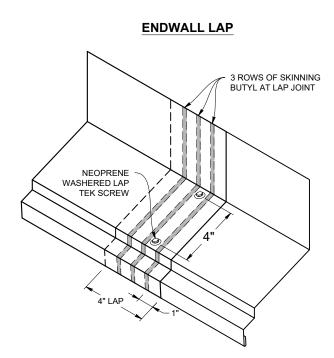


Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

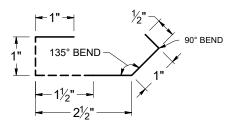
Vented Endwall





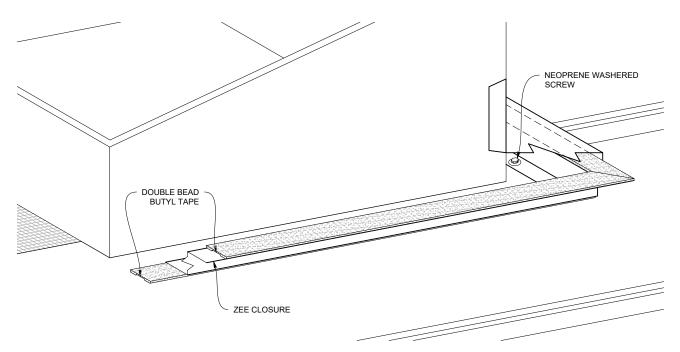


PERFORATED VENT DRIP (MS100PVD / MS150PVD)

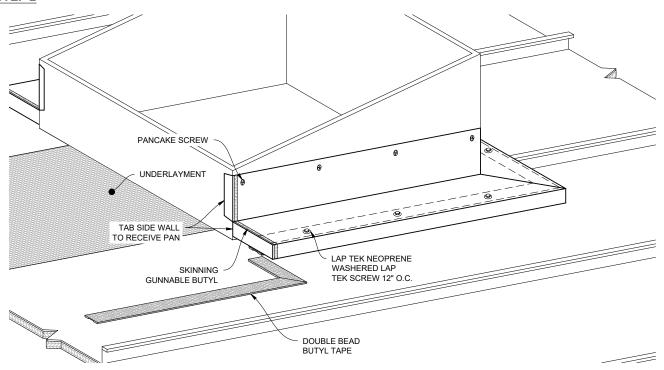




STEP 1



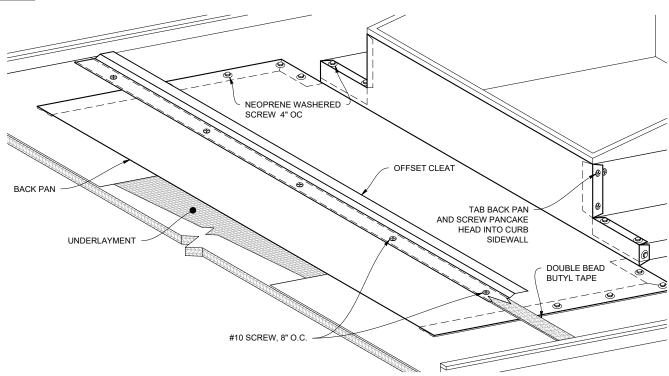
STEP 2



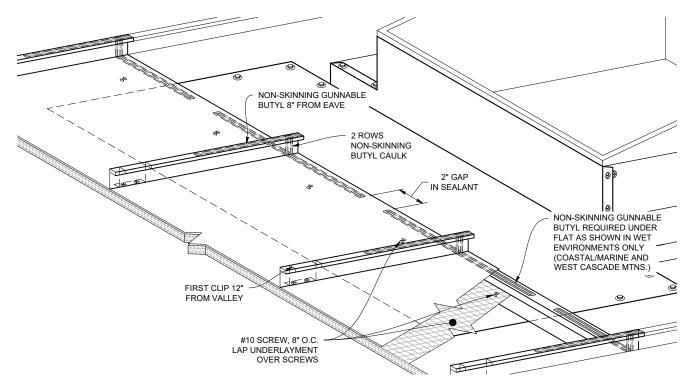
Note:All screws must be fastened into solid substrate.Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.Soldered or welded Stainless Steel crickets are allowed - except in corrosive environments27



STEP 3



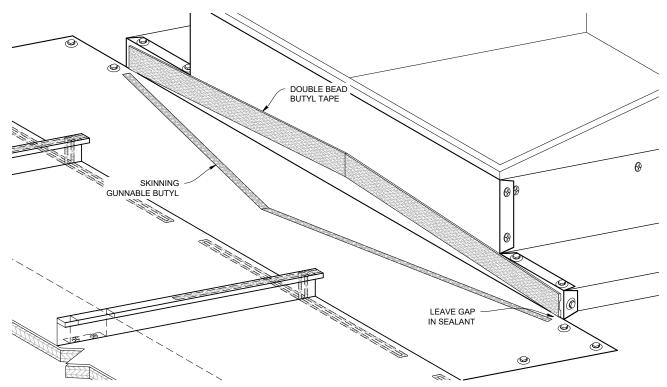
STEP 4



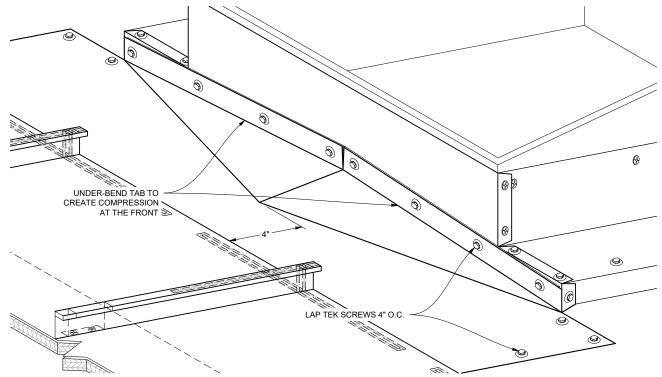
 Note: All screws must be fastened into solid substrate. Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.
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STEP 5



STEP 6

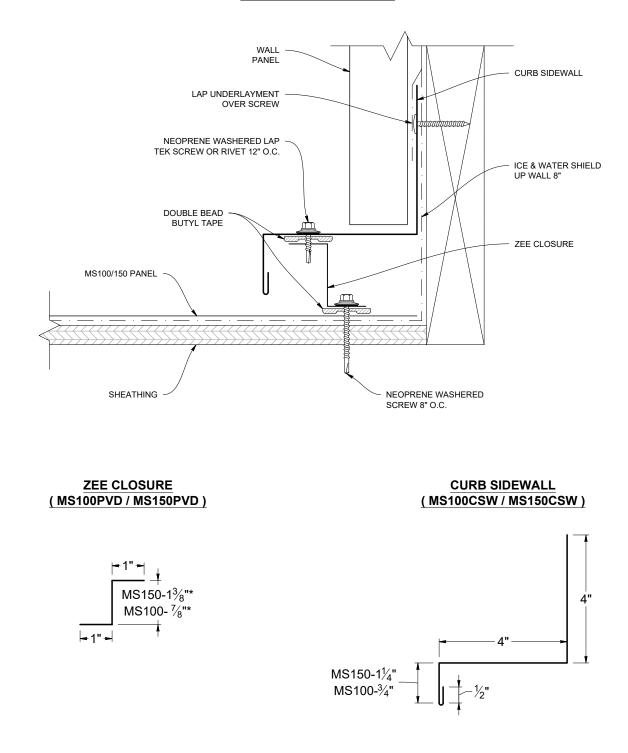


Note:All screws must be fastened into solid substrate.Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.Soldered or welded Stainless Steel crickets are allowed - except in corrosive environments29

Curb Sidewall



CURB SIDEWALL DETAIL

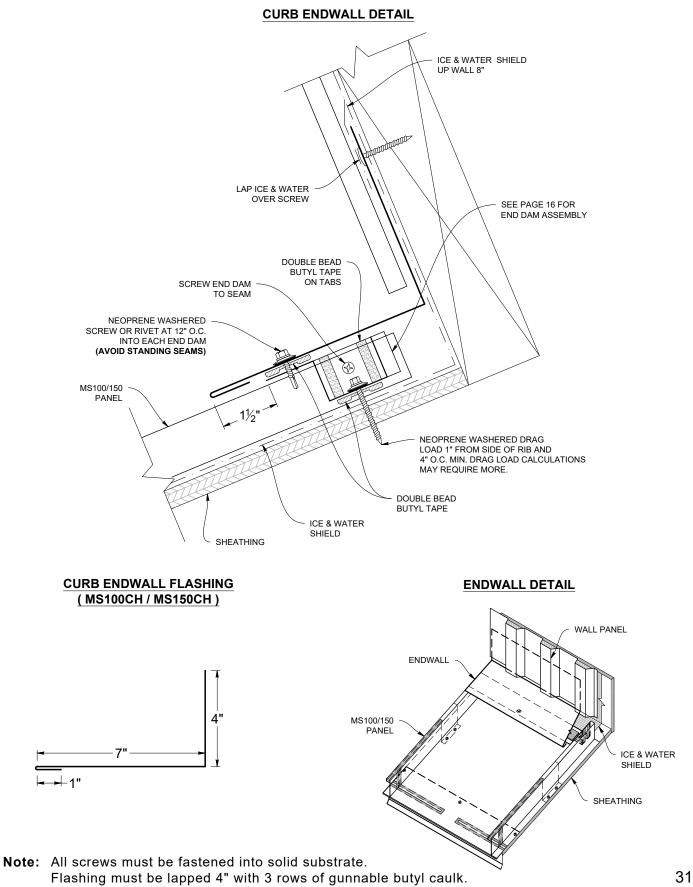


Note: All screws must be fastened into solid substrate. Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.

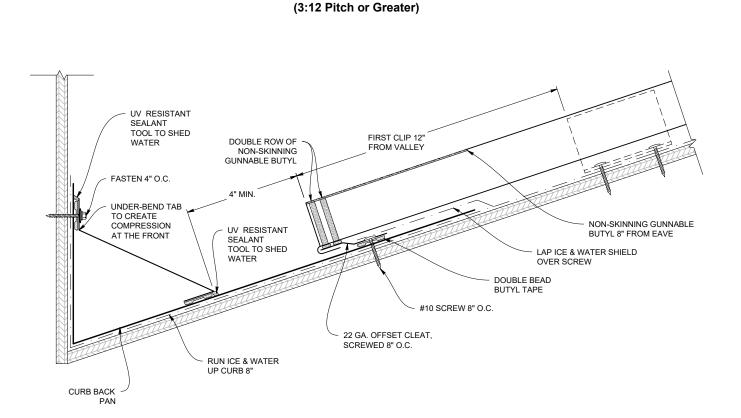
30

Curb Endwall





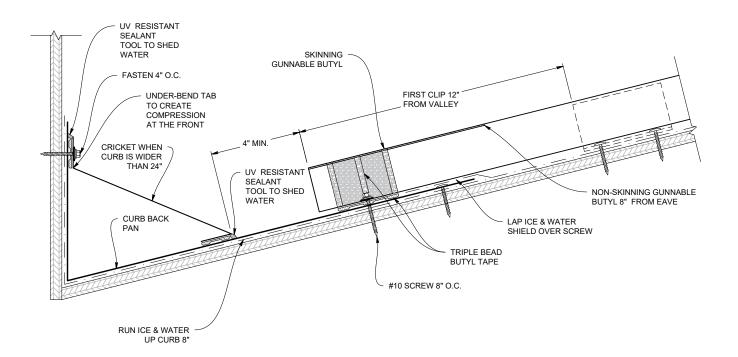




CURB BACK PAN / CRICKET DETAIL



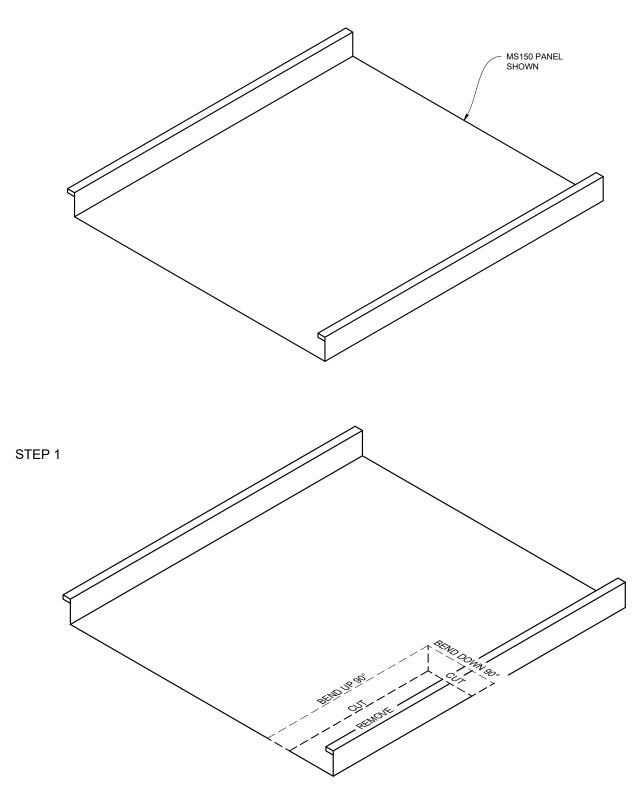
CURB BACK PAN / CRICKET DETAIL (Less Than 3:12 Pitch)



Eave to Gable Transition



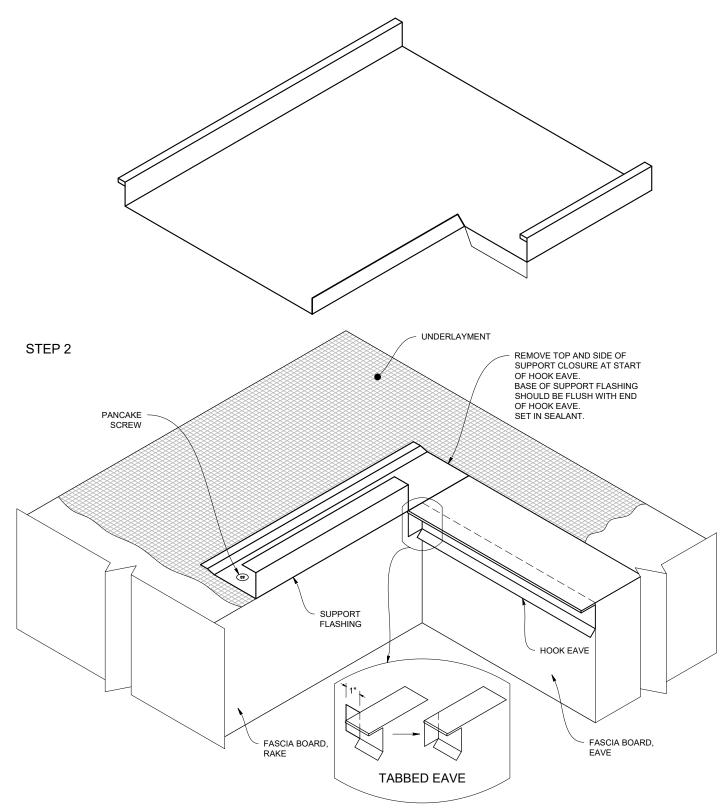
EAVE TO GABLE TRANSITION



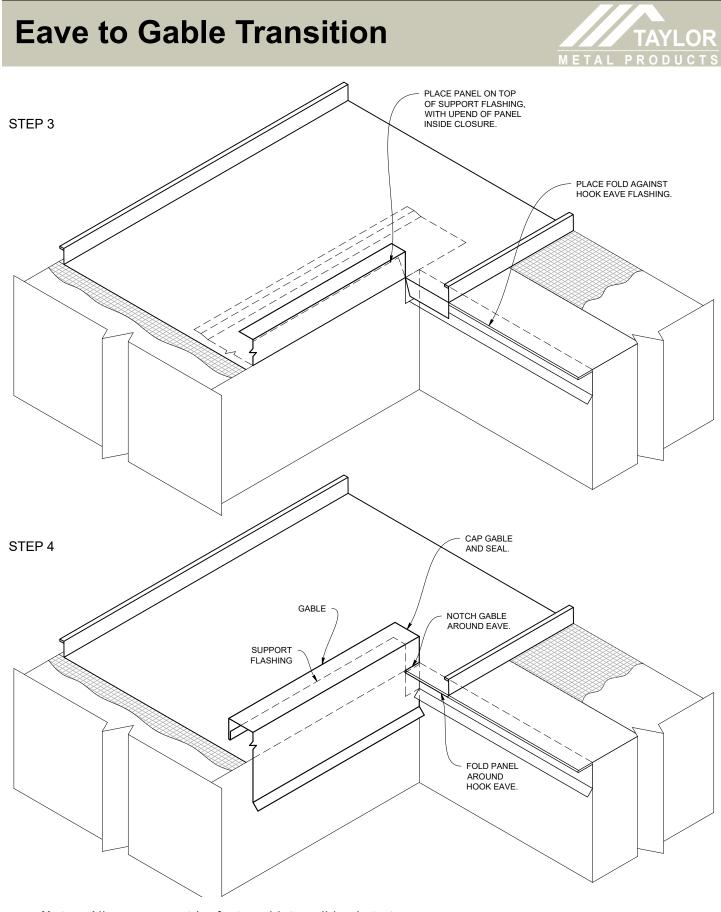
Note: All screws must be fastened into solid substrate. Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.



Eave to Gable Transition



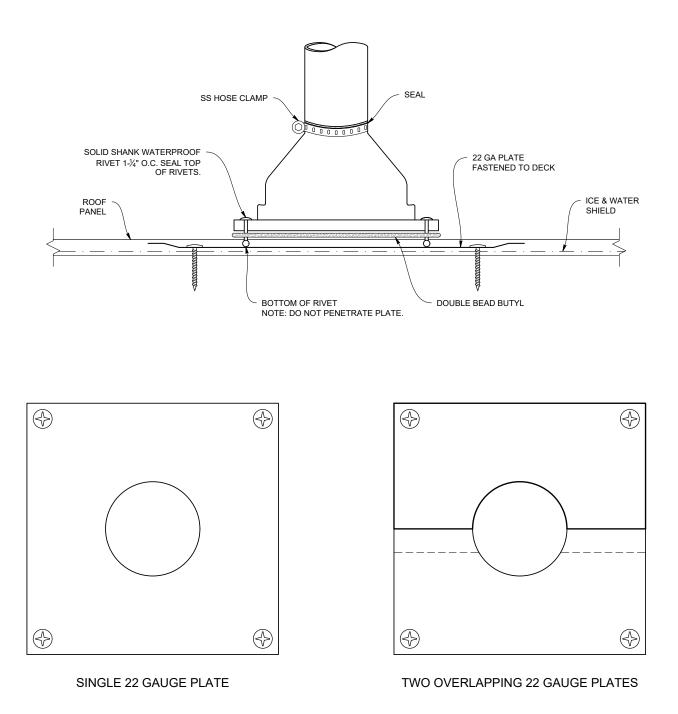
Note: All screws must be fastened into solid substrate. Flashing must be lapped 4" with 3 rows of gunnable butyl caulk.



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



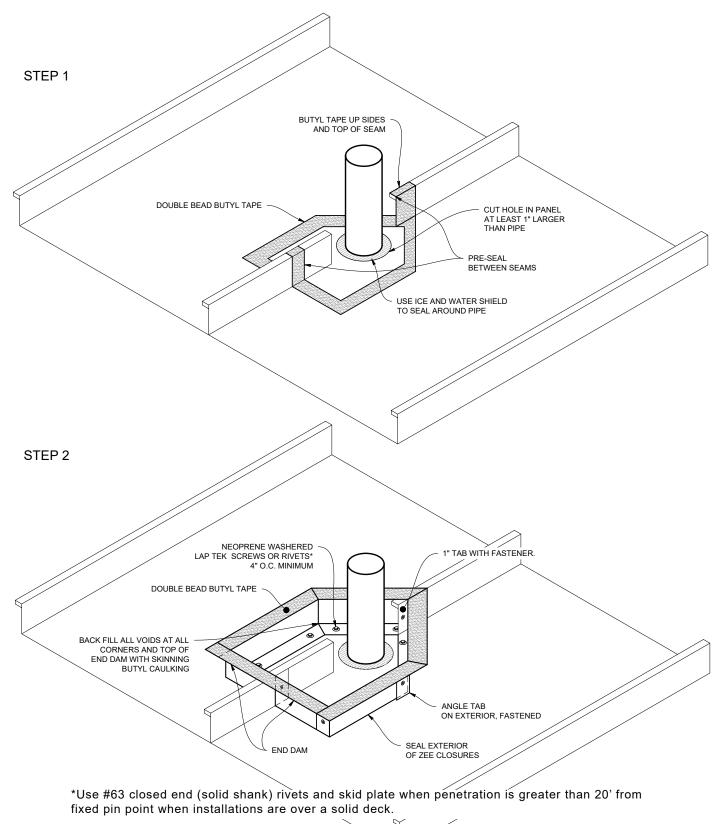
FOR PIPES LOCATED GREATER THAN 20' FROM PIN POINT



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

TAYLOR METAL PRODUCTS

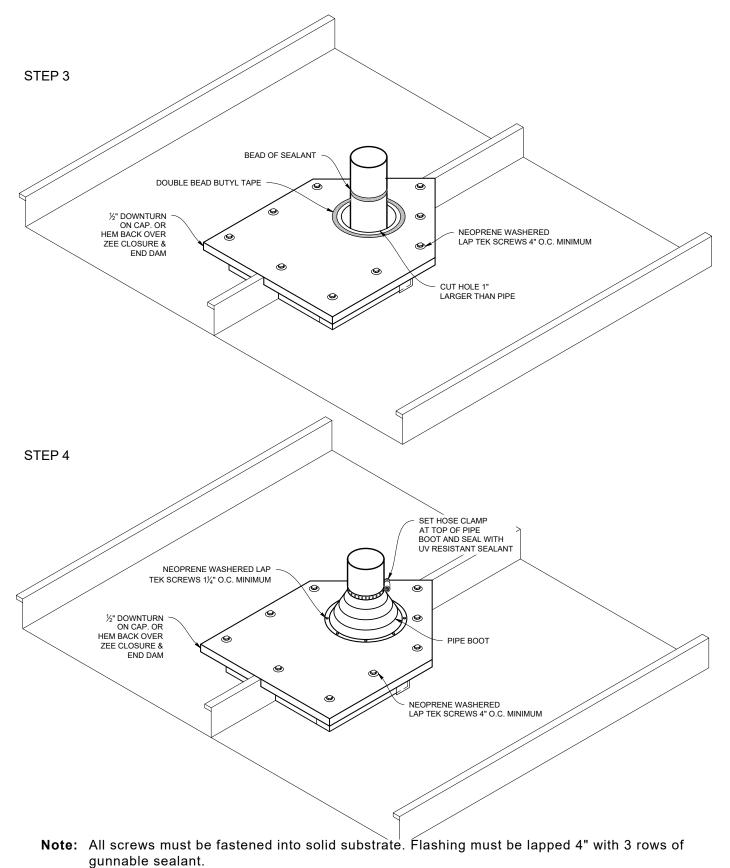


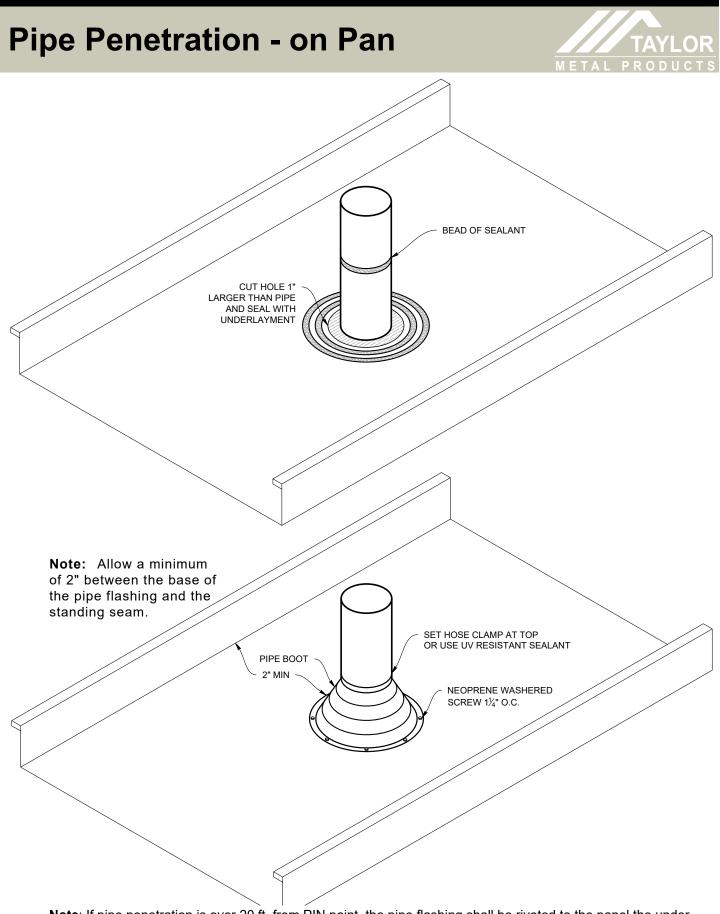
Note: All screws must be fastened into solid substrate. Flashing must be lapped 4" with 3 rows of gunnable sealant.



Pipe Penetration - on Rib

Home Plate Option

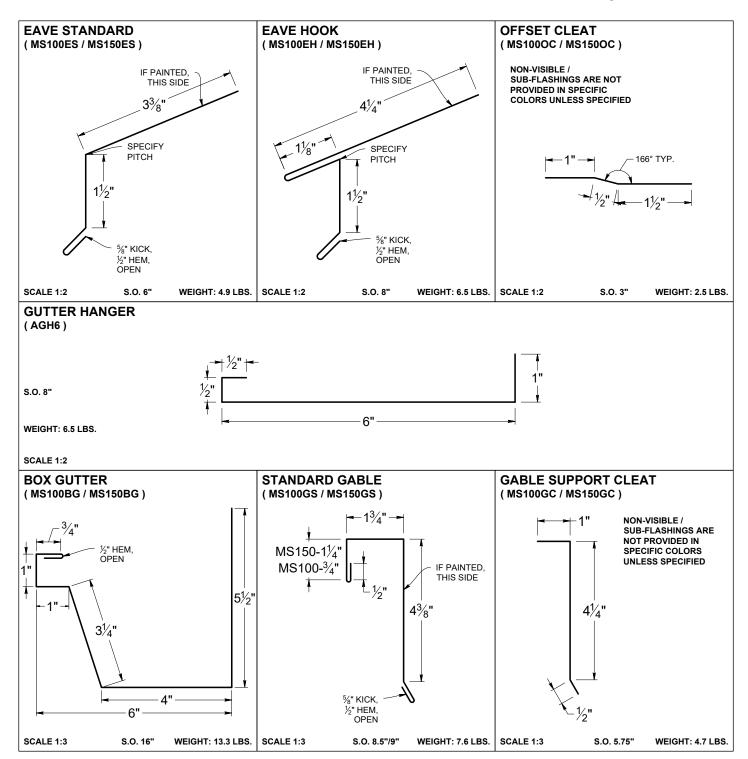




Note: If pipe penetration is over 20 ft. from PIN point, the pipe flashing shall be riveted to the panel the under layment covered by 22 ga. skid plate to protect the underlayment from rivets and thermal movement.



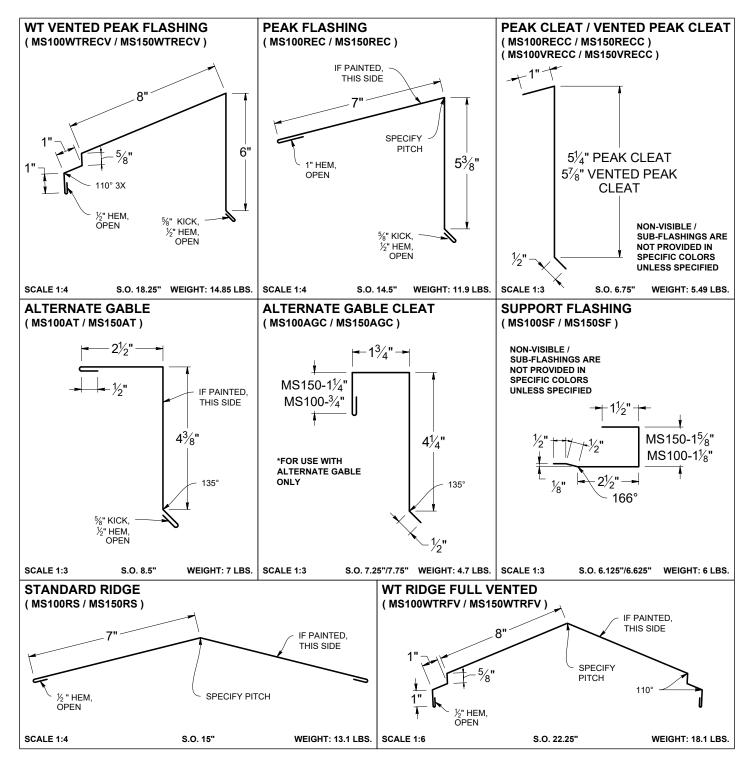
MS-100TM/MS-150TM WTW Flashing and Details Selection Flashing: 10' Standard



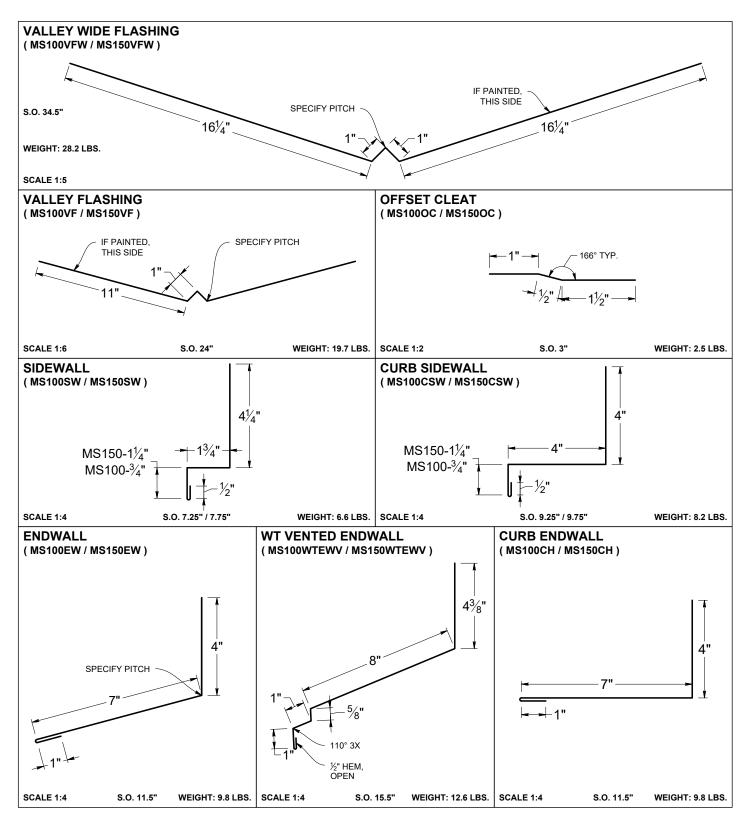
MS-100TM/MS-150TM WTW Flashing and Details Selection

Flashing: 10' Standard





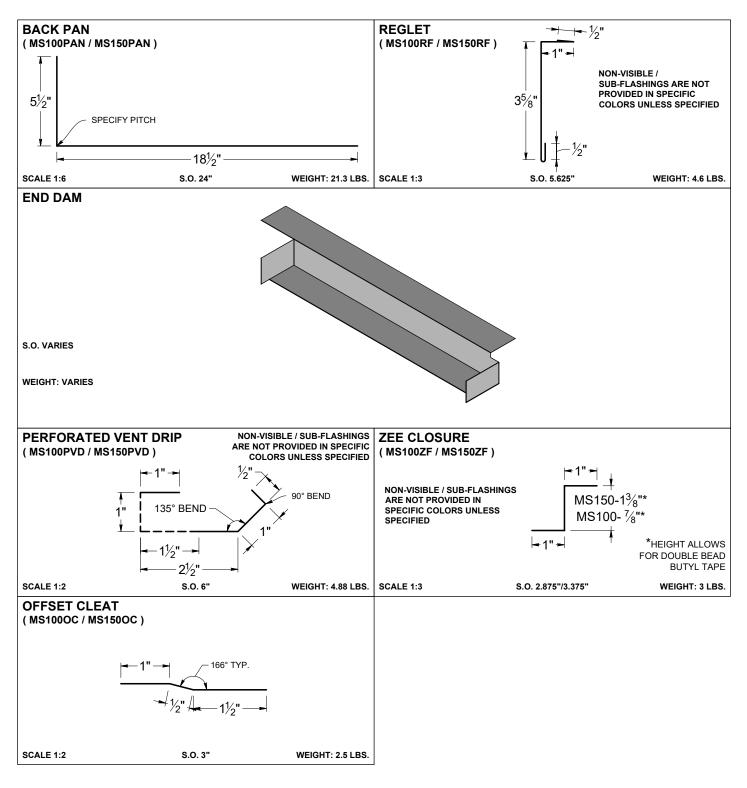




MS-100TM/MS-150TM W Flashing and Details Selection

Flashing: 10' Standard





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		YLOR DUCTS DWW O	rder	□ Add-	on Oro	der 🗆 Qu	ote						
	LPRU				_ Date:								
Sold To:	_	Job Name: Ship To:											
Order Contact: Phone #: Fax #:					Call	II Delivery Delivery Date:							
-	cultural	Resident			Comme	rical Route:							
Standard Panels are in Bold font. PBR Marion "R" Pane Max Corr 2-1/2" Corrugate Classic 7/8" Corrug GR-7 HR-34 T-3 Tuff-Rib		Notched? Y / N Clip Relief? Y / Notched AND Tabbed? Y / N (REQUIRE Screw Concealer? Y / N (Standard for Rit 12" Easy-Lock* □ 16" Easy-Lock*	Flat (Flat on Seala D together for Eas and Striations) ShadowLi 1/2" to 11"x12" Sm 11"x12" Lift Choice: /-Groove	nt? Y / N syLock & StreamLine) ine**(circle): <u>1</u> ", c 3" Reveal: noothWall** fetime Soffit	t**	5 5/8" Slim-Lock* 2" MS-200* 4" MS-200* 6" MS-200* 2" MS-200* 2" MS-150* 6" MS-150* 0" MS-150* 3" MS-100* 7" MS-100* ther Panel:	 Color: Pitch: Gauge: Dmatch: Pallet: 10' 20' 30 12" Versa-Span* 14" Versa-Span* 16" Versa-Span* 18" Versa-Span* 14 5/8" T-Panel* 						
Panel & Flashing Items	-	m-Lock, Easy-Lock, Lifetime Soffit, Smo ch StreamLine, T-3, Tuff Rib, GR7, PBR,					პ-200 flashings ar	e 10'					
Quantity	Length	Item Description	Part #	Quantity	Length	Item Desc	ription	Part #					
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Underlay		Screws?		ps?	Caulk	5	Closures?	<u> </u>					
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Cus	tom ⁻	Trim C			TAYLOR METAL PRODUCTS										
Custome	er Name: _					Jo	b Name: <u>-</u>								
Gauge:		(Color:				Status:	🗆 Or	riginal 🗆	New					
Specify:	□ Angle	s 🗆 Color	Side 🗆	Dimensions	s 🗆 Stre	tchout									
SO					SO										
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SO					SO										
		: # c					tch:								
		Closed		ntly Open	Hems:	Oper	ı ⊡Clo	sed		y Open					

Please provide a drawing for each flashing with precise measurements and angles Fax to: 503-581-6877

4566 Ridge Dr NE Salem OR 97301 • Photo

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SALEM BRANCH 4566 Ridge Dr. NE

Salem, OR 97301

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