

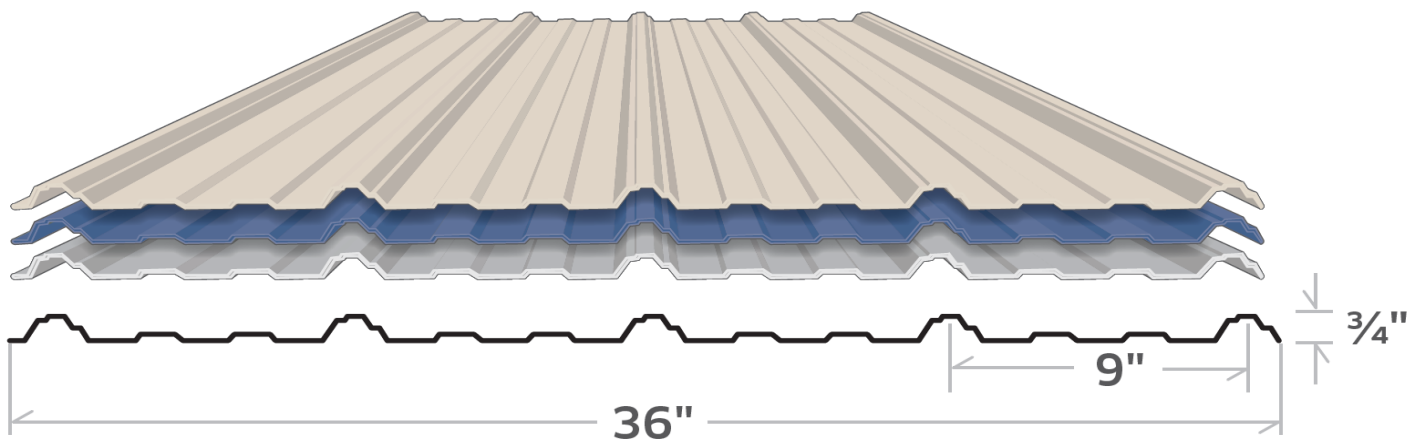
Multi Rib Installation Manual

MID
FLORIDA
Metal Roofing
SUPPLY, INC.

Multi-Rib Panel Product Information

- ◇ The Multi Rib panel features 5 ribs at 3/4" tall at 9" on center with smaller rib striations in between and provides 36" of coverage.
- ◇ Applications Over Plywood, Over Shingle, Over 1x4 Over Shingle, Over 1x4 Over Plywood—Approval #: FL24096
- ◇ Application Over 2x4 with Open Framing—Approval #: FL23490
- ◇ Application for Walls—Approval #: FL31397
- ◇ Available in 26 gauge and 29 gauge
- ◇ Minimum Roof Slope: 1/4:12 pitch with Lap Sealant OR 2:12 without Sealant
- ◇ Finish Warranty: Valspar WeatherX XL Siliconized Polyester coating 40 year Limited
- ◇ Galvalume Warranty: 25 year

*NOTE: If your application varies from the application shown here, please advise your sales representative for job-specific accommodations.



Available in 13 different colors. Painted panels are Weather XL Silicone Polyester; ideal for agricultural, industrial and pre-engineered metal building components and systems. All colors are Energy Star rated.

Also available in Galvalume.

IMPORTANT NOTICE

- ◇ This manual serves as a guide to proper installation of the Multi-Rib panel.
- ◇ It is important to check the local building codes, HOA regulations, etc. before installing a metal roof.
- ◇ If you have any questions regarding the proper installation of the Multi-Rib panel, please contact your Mid Florida Metal Roofing Supply representative.

SAFETY

- ◇ Tools recommended: screw gun, snips, nibbler, tape measure, drill bits, gloves, chalk/string line, safety harnesses, etc.
- ◇ Use extreme caution at all times when installing metal roofing.
- ◇ Never walk on a wet or unfastened metal roof panel.
- ◇ Failure to adhere to proper roofing safety guidelines can cause serious injury or death. Refer to OSHA guidelines for safety requirements.

STORAGE

- ◇ If metal panels are not to be installed immediately, keep stored in a dry location. Keep metal panels off of the ground by placing the panels on wood.
- ◇ Any moisture trapped between panels can cause damage to the paint, which can affect the life expectancy of your roof.

Flashing Details



- 2 Standard Ridge/Hip Cap
- 31 Rake or Gable Trim
- 11 Universal Sidewall
- 15 Universal End Wall
- 45 Eave Trim
- 67 Transition Flashing
- 25 Valley

Refer to flashing profiles for dimensions. Please note,
modified or custom flashing is available upon request!

Installation Tips

- ◇ The order in which this installation manual is read, is the order in which proper installation should occur. If you have any questions, please contact your Mid Florida Metal Roofing Supply representative.
- ◇ Underlayment installation should start at the eave of the roof and continue along the eave. The general overlap for underlayment is 4". **Please refer to Florida Building codes for specific installation instructions. Mid Florida Metal Roofing Supply recommends, and stocks, High Temp Peel and Stick or Midstate Synthetic Underlayment.**
- ◇ Field cutting material can be done with hand snips, nibblers, and/or shears. Any cutting should be completed on the ground and not above other panels or roof. This will help prevent the accumulation of metal debris that can cause damage to the paint. **Please make sure to brush/clean off the entire roof surface once installation is completed to prevent any issues from leftover shavings.**

***For your convenience Mid Florida Metal Roofing Supply stocks (and recommends) the following:**

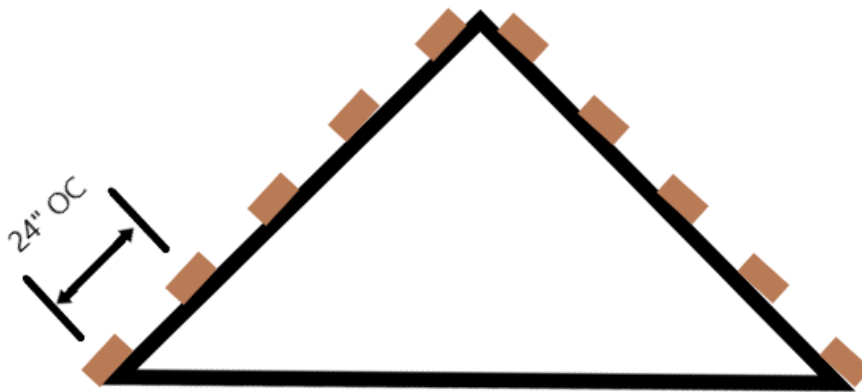
Hand Snips

Hand Seamers/Folding Tools

Nibblers

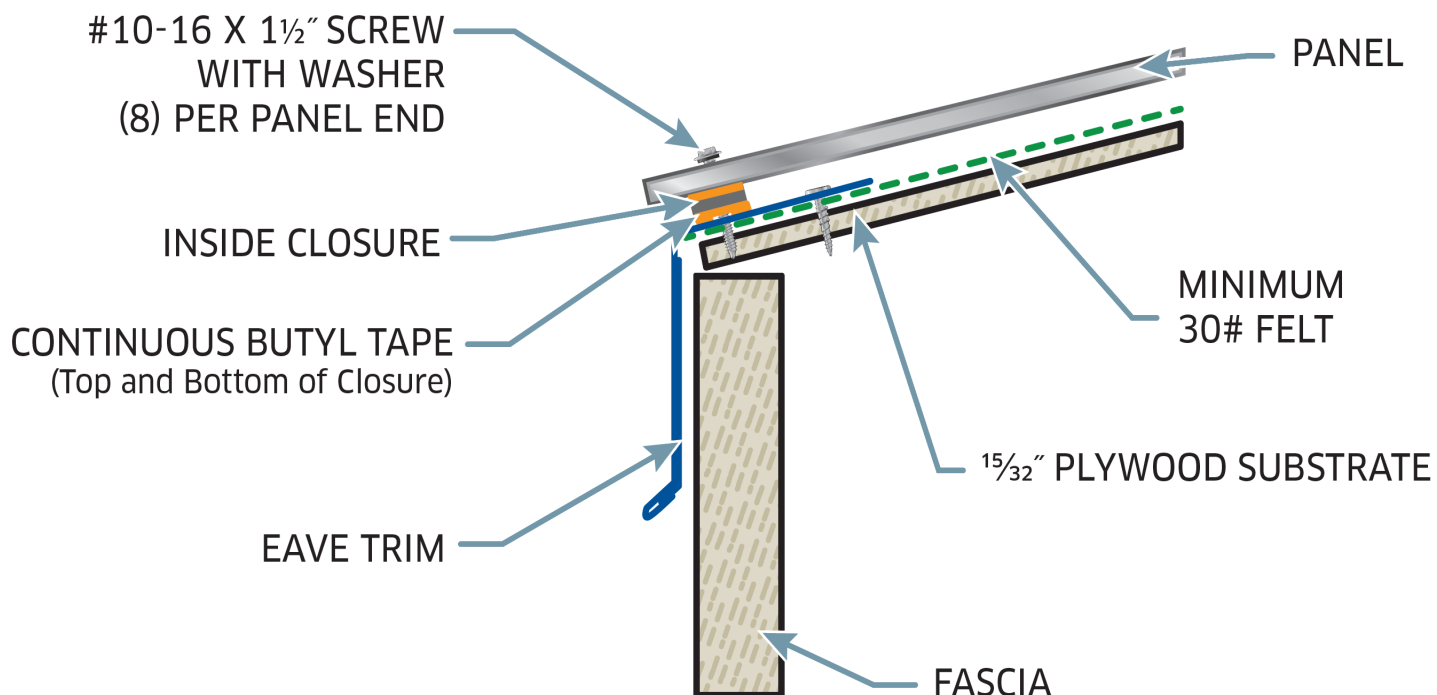
Purlin Application

- ◇ Wood purlins are recommended before installation of metal roofing to allow for a level surface as well as for an added layer of space for air flow.
- ◇ Purlins are installed after insulation and are to be spaced every 24" on center along the gable. Purlins are also recommended on either side of ridges, valleys, transitions, and hips as well as along the perimeter of the roof. Wood purlins will also need to be installed along endwall or sidewall areas and around any penetration such as skylights or pipes.
- ◇ Wood purlins in stock at Mid Florida Metal Roofing Supply are 1" x 4" x 10'. However, other sizes are available upon request.



PLEASE NOTE: NEVER use pressure treated wood purlins when installing metal roofing. It can be corrosive to the panels and cause screws to back out.

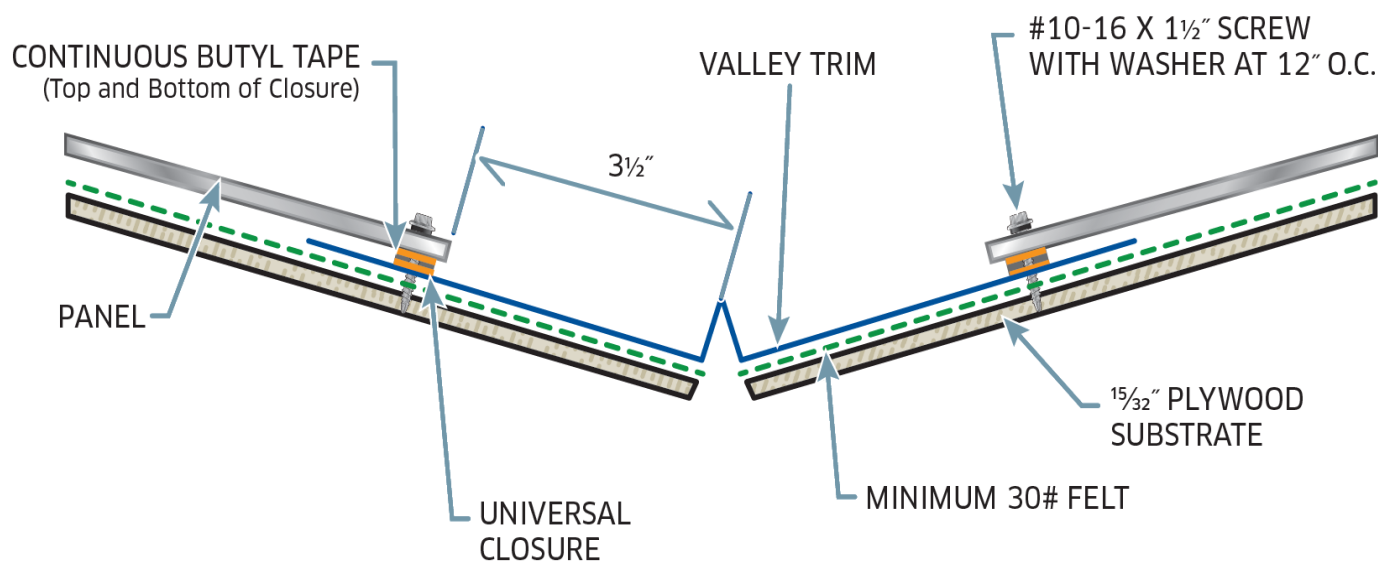
Multi Rib Eave Detail



TIPS:

- ◇ Attach the drip edge or eave trim to the decking (or purlin) with trim screws or Pancake screws at 24" on center.
- ◇ Once completed, and before installing panels, install inside closure strips to the top of the eave trim. *Note: it is recommended to apply butyl tape to both sides of the closure strips for a weather tight fit.
- ◇ It is recommended that panels be installed flush to the drip edge.
- ◇ If requested, post trim or fascia trim can also be applied to cover existing fascia board. Custom drip edge can also be ordered to extend over the fascia board.
 *Ask your sales representative for pricing and availability
- ◇ *If installing over 1x4 purlins: purlins should be placed flush to the eave.

Multi Rib Valley Detail

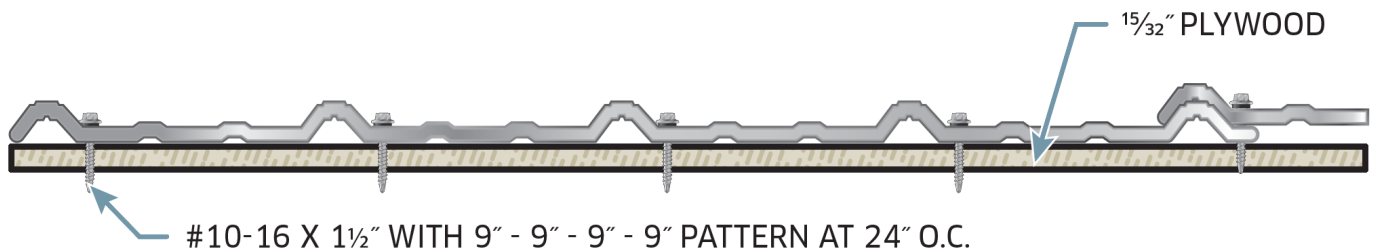


TIPS:

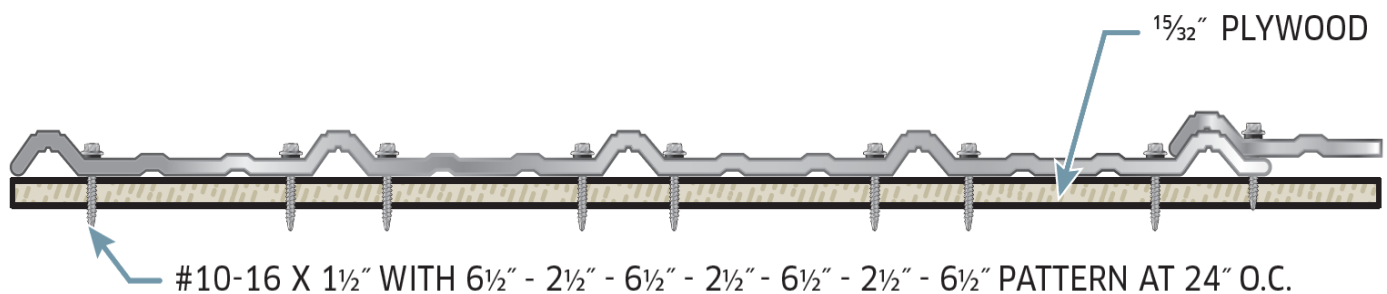
- ◇ When installing valley flashing, start at the bottom. Remember to allow for overhang — if you plan on a 3" overhang for your panels, overhang the valley by at least 3" as well. Attach with 1" trim screws every 24" on center.
- ◇ Apply Direct Seal on top of the valley flashing allowing at least 3-1/2" inches from the edge of the panel to the center of the valley flashing.
- ◇ You will fasten the roof panels at 12" on center along the valley flashing using 1-1/2" Woodscrews.
- ◇ **NOTE: The general overlap for flashing is 4"**
- ◇ *Purlins should be placed on either side of the valley at 1" and at 6".

Screw Pattern

Multi Rib Panel Standard Pattern



Multi Rib Panel End Pattern



*We recommend using Premium Woodscrew fasteners for your metal roof!

Proper Screw Installation

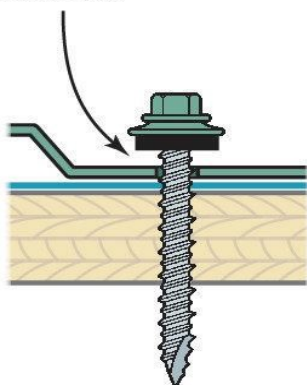
TIPS:

- ◇ Predrilling the metal panels on the ground can allow for easier screw installation. This also prevents any metal shavings from accruing on the roof which can cause issues later.
- ◇ Please see the diagram below for proper screw seating. Screws that are not properly seated can cause leaks and other issues with your roof.
- ◇ **Note:** We recommend using Premium Woodscrews for the best results!

Fastening Metal Roofing

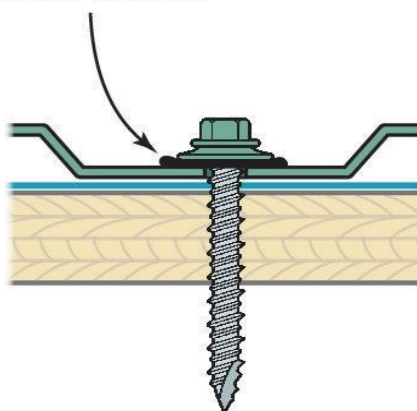
Underdriven

Rubber washer
not in contact
with roofing



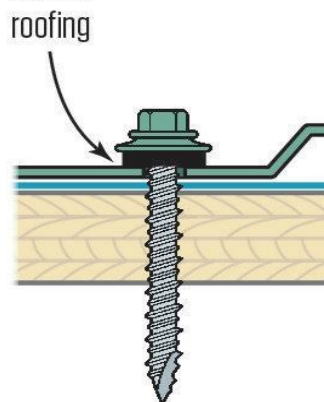
Overdriven

Compressed
rubber washer
creates a bad seal

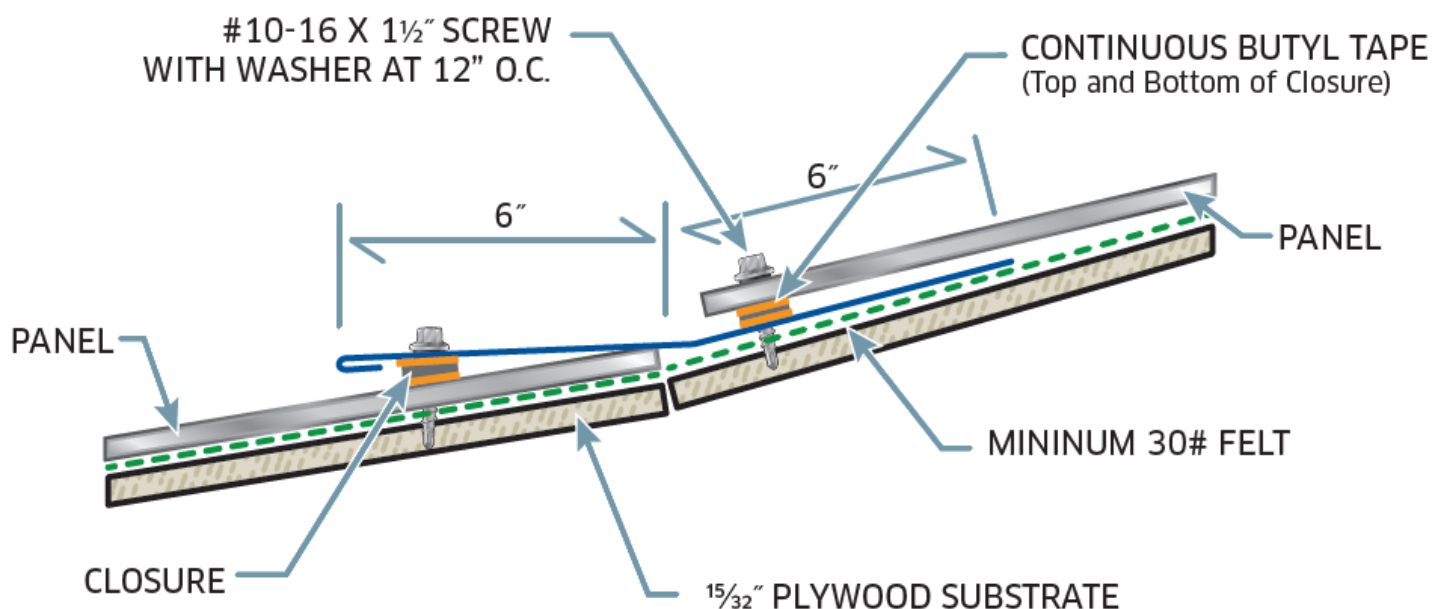


Correctly Driven

Washer
snugged
against
roofing



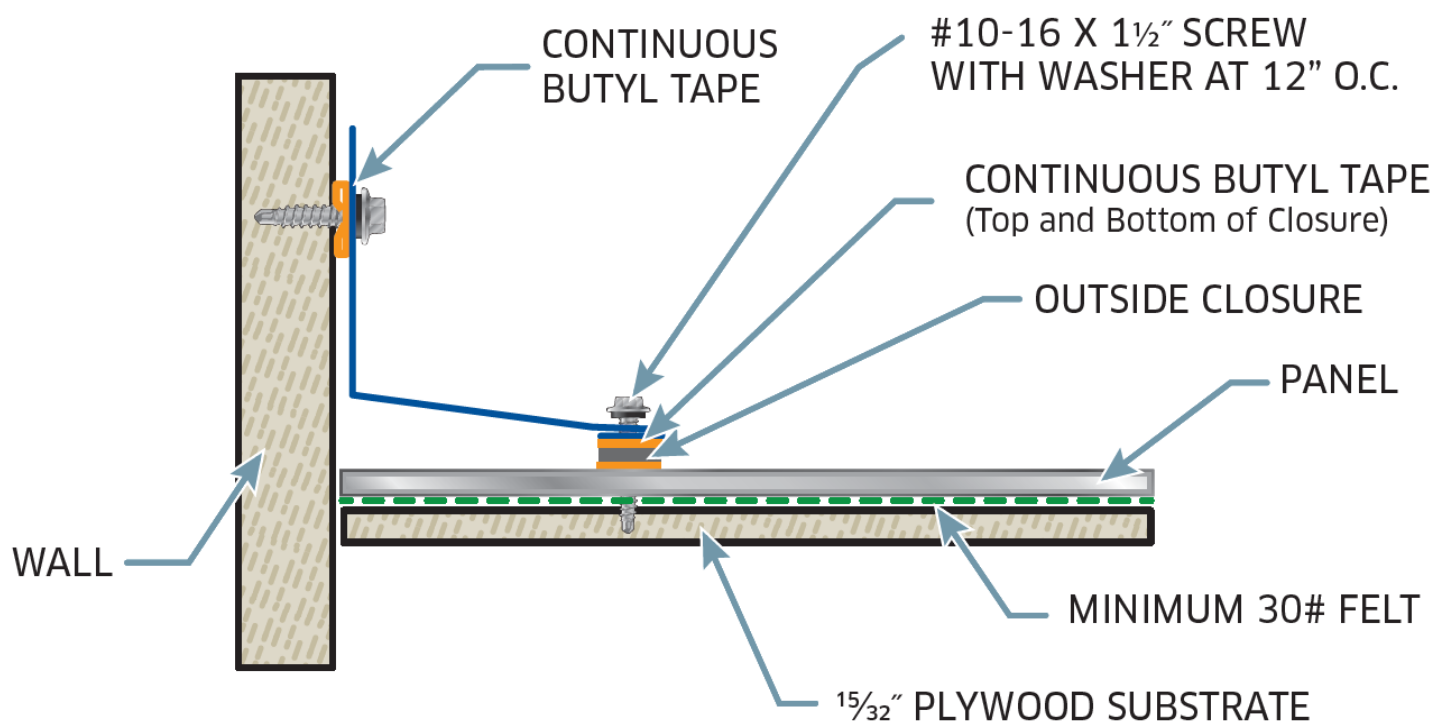
Multi Rib Transition Detail



TIPS:

- ◇ Once bottom roof panels are installed, install outside closures.
- ◇ Then attach transition flashing as shown. (Note that the hemmed end goes on top of the panel allowing the flat portion to sit underneath the top panels.)
- ◇ Install inside closures (**Remember:** Butyl tape is recommended to be applied to both the top and the bottom of the closures!)
- ◇ Install top panels screwing through the closure strips to hold in place.
- ◇ See Page 9 for panel end screw pattern.
- ◇ *Purlins should be placed on either side of transitions, approximately 1"-2" from center.

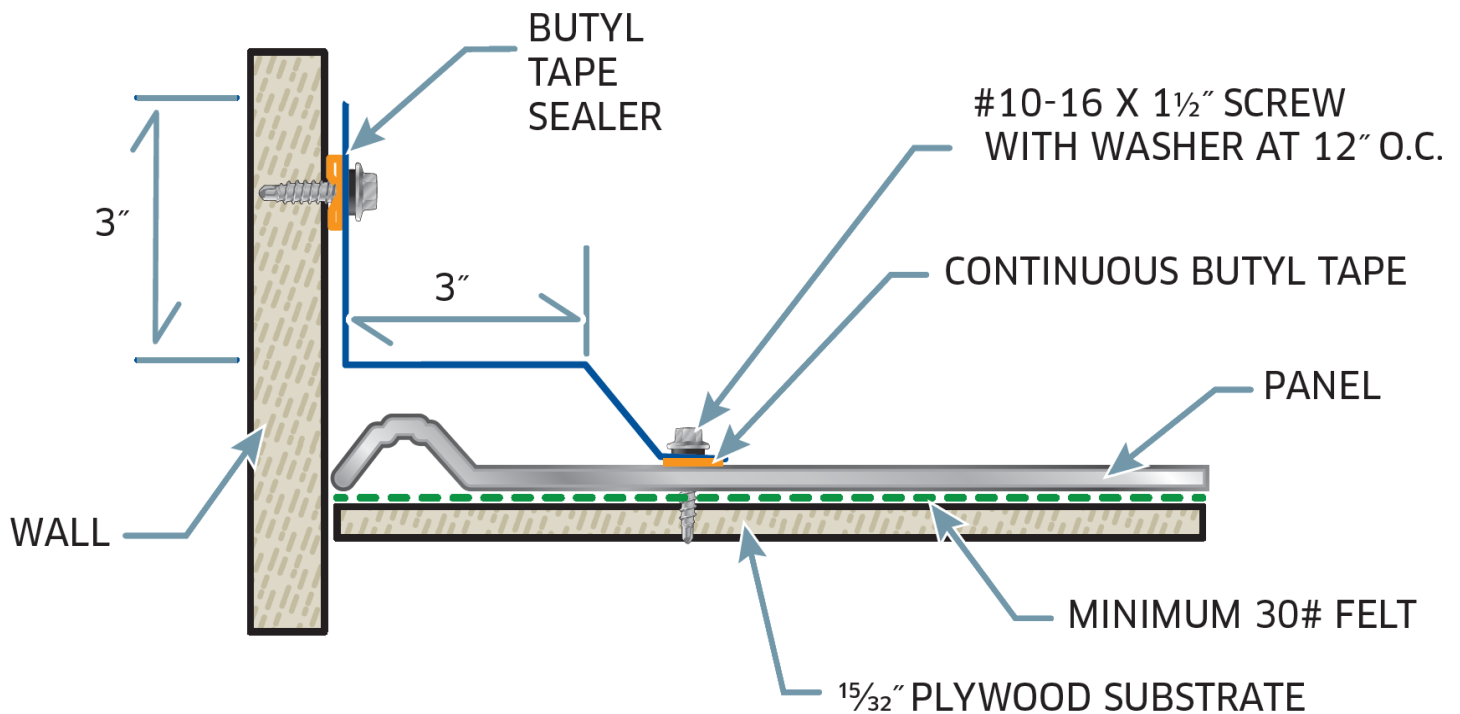
Multi Rib Endwall Detail



TIPS:

- ◇ Once panels are installed, install outside closures at the point where the endwall flashing will be fastened down.
- ◇ The top edge of the endwall can be secured in a few different ways. Generally it is tucked under the house siding. However, in cases where there is no siding, counterflashing can be added as another form of protection. Counterflashing also provides a more finished look. See Flashing Profiles #34
- ◇ In some cases, when counterflashing cannot be added, the endwall flashing can be modified to allow a caulk edge where permathane sealant can be used.
- ◇ *Purlins should be placed 2" from the wall.

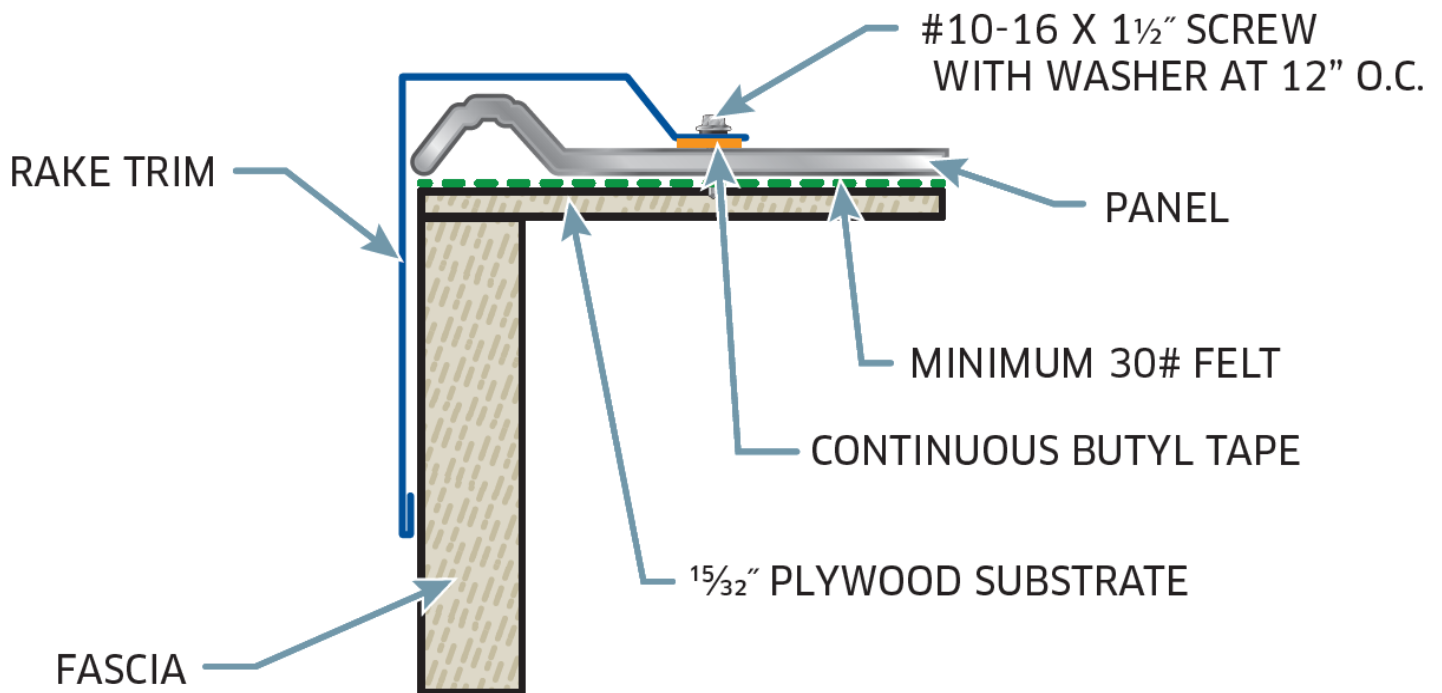
Multi Rib Sidewall Detail



TIPS:

- ◇ Install butyl tape along the bottom edge of the sidewall flashing.
- ◇ Once sidewall is in place, fasten at 12" on center with Premium Woodscrews.
- ◇ Be sure to apply your butyl tape sealant along the top edge of the sidewall where the fasteners will be installed. This creates your weathertight seal.
- ◇ As with endwall flashing, counterflashing can be added here. If preferred, a caulk edge can be modified as well.
- ◇ *Purlins should be installed 1" from the wall.

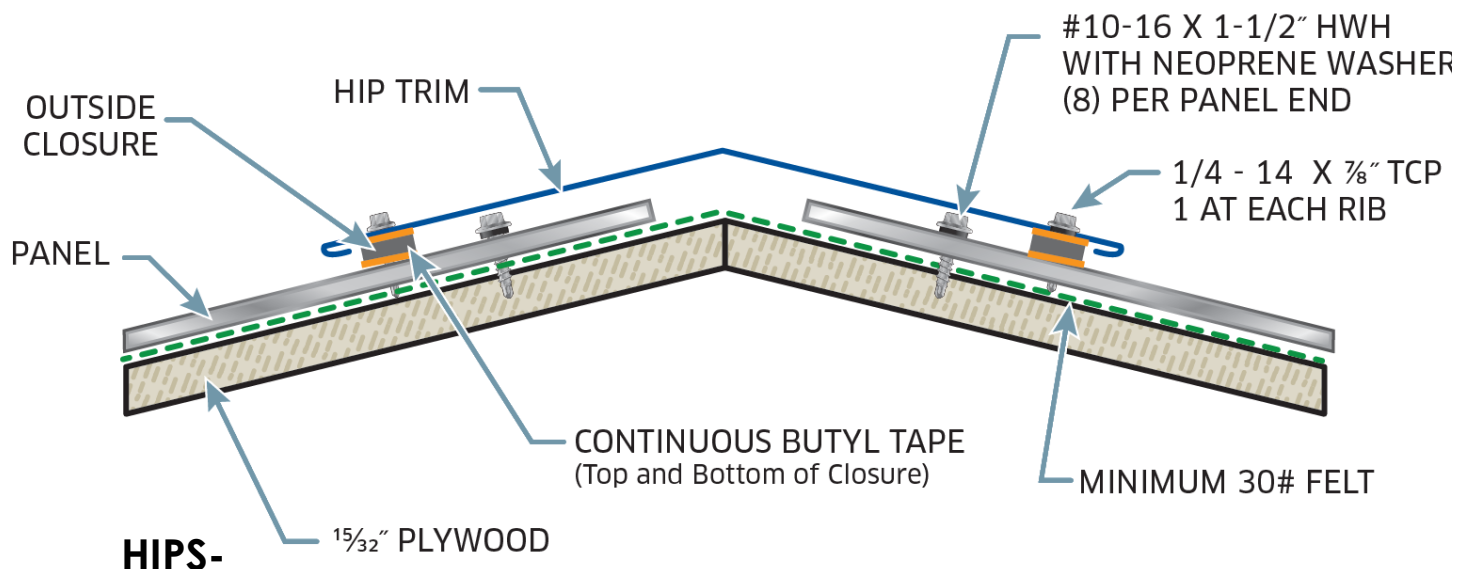
Multi Rib Rake/Gable Detail



TIPS:

- ◇ Install butyl tape along the inside of the flat 1/2" that will be fastened to the top of the panel.
- ◇ Start installation at the eave and allow 1" - 2" of overhang that can be cut and folded down for a finished look.
- ◇ Fasteners can be installed along fascia side of gable end for added security, but is not required.
- ◇ *Purlins should be placed 1"-2" from gable ends and run parallel to panels.

Multi Rib Hip and Ridge Detail



- ◇ Metal panels that meet at the hips should be cut close to hip point, but not touching.
- ◇ Apply Direct Seal along panels where the hip cap edges will be fastened.
- ◇ Start at the bottom of the hip when installing hip flashing, remember to allow overhang for bending which will match panel overhang.
- ◇ Attached hip flashing with Premium SDS 7/8" screws at each rib along the flashing.

RIDGES-

- ◇ There are two applications for the ridge cap flashing: vented and non-vented.
- ◇ For non-vented ridges, install outer closures (with butyl tape on both top and bottom) and fasten cap with Premium SDS 7/8" screws at each rib.
- ◇ For vented ridges, panels at the peak must leave at least a 2-4" gap between them for best ventilation. Razorback Ridgevent should be installed in place of outer closures.
- ◇ Remember to leave enough overhang of the ridge cap to cut and bend ends to create a finished look.
- ◇ *Purlins should be placed approximately 3" from center of ridge line on both sides for standard ridge caps.

NOTE: Please specify the pitch of your roof when ordering.

Boot Installation



STEP 1:

Choose appropriate pipe flashing with opening at least 20% smaller than pipe diameter.

If necessary, trim opening to 20% smaller than pipe diameter.



STEP 2:

Slide pipe flashing down over pipe (A non-petroleum based lubricant will ease installation)



STEP 3:

Press pipe flashing down, bending it to conform to roof profile or roof irregularities. A blunt tool will help press flashing into tight roof angles. Trace exterior of base flashing with a non permanent device , being careful not to score painted metal surface.



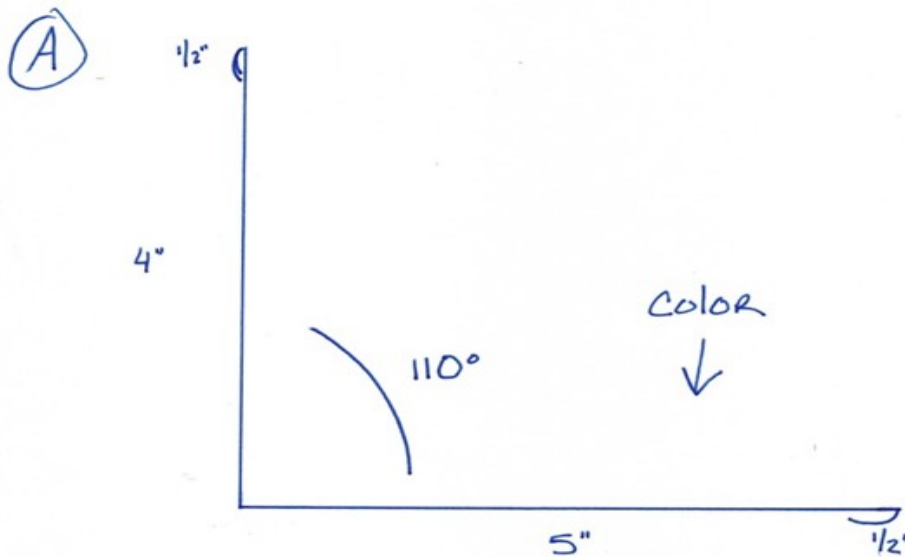
STEP 4:

Apply Geocel sealant between base and roof inside of trace line. Use fasteners to complete sealing. For UPC installation, fastener spacing may not exceed 1-1/2" O.C. (Premium fasteners are recommended.)

Custom Trim

Customer:	TOM LANE
Work Order:	99999

CUSTOM DRAWING



Mid Florida Metal Roofing Supply can create custom trim designs to meet your specific needs.

If you would like to request custom trim, please provide the following:

1. A profile drawing of the trim.
2. All measurements, including hems.
3. Specify pitch or degree that the angle is needed.
4. Indicate the color side of the trim.

(SEE ABOVE)

Terms and Conditions

1. CANCELLATION AND RETURN POLICY

Once an order has been placed for a manufactured item, it cannot be cancelled. All panel orders and special order (non-stock) trim are considered the property of the customer and are non-refundable once they have been manufactured. All goods are sold "AS IS". Accessories are refundable as long as they are returned in a clean, re-saleable condition. Restocking charges may apply.

2. ORDER PROCESS

Customers must confirm all orders in writing via text, email, fax or in person.

3. PRICING

Pricing is subject to change without notice. All initial pricing given includes a cash discounted price. If paying with a credit card, please add 4% to your total amount.

4. SALES TAX

All orders are subject to sales tax unless a current sales tax exemption certificate is provided to MFMRs prior to sale.

5. PAYMENT TERMS

- A deposit in the amount of 50% of invoice total is due at the time of placing the order. The remainder is due at the time of pickup or before delivery, unless otherwise agreed to in writing.
- Credit terms may be established at the sole discretion of the financial department of MFMRs. MFMRs reserves the right to deny credit without explanation.
- All credit accounts are required to complete a "Job Information" form or submit a recorded notice to owner on all material being supplied

6. ORDER ACCURACY

Purchaser assumes all responsibility for accuracy of order. All cut lengths and quantities are to be provided by purchaser and not based on comments or suggestions of any employee or representative of MFMRs.

7. STANDING SEAM MATERIAL ORDERS

For material orders up to 500 LF there will be a minimum charge of \$65.00 per order for crating material (12ft in length). Larger jobs will be quoted on a job specific basis depending on quantity of material ordered. A signed Standing Seam disclaimer will be required on all standing seam orders!

8. MISCELLANEOUS

- a. There will be a charge of \$50.00 for any returned checks
- b. This contract shall be governed by and construed in accordance with laws of the state of Florida.
- c. Purchaser, by placing its order with seller, represents and warrants that purchaser is familiar with and in compliance with all laws and regulations applicable to its work, including all Florida Product Approval requirements and OSHA rules and regulations with specific reference to the safety standards for fall protection in the construction industry.
- d. Purchaser assumes all responsibility for applying county codes and guidelines applicable to work performed.

9. INFORMATION TO BE NOTED

Galvalume

Uniform visual appearance (color, spangle, shadow spots, and striping) of unfinished Galvalume(r), Acrylic Galvalume(r), Galvanized, Acrylic Galvanized, Aluminum, and Paint Grip panels cannot be guaranteed. If uniform appearance is desired, then prepainted Galvalume(r) or Galvanized should be ordered. Non-uniform surface appearance (color, spangle, shadow spots, and striping) may occur over time, it does not

represent a deficiency in the material, nor does it affect any warranties which may be in place, and it is not a reason for rejection.

OIL CANNING

Oil canning can be defined as the actual waviness in the flat areas of roofing and siding panels. Generally the period and amplitude of the wave depend on the width of the flat. Oil Canning is an inherent condition with light gauge cold formed metal products, and can result from residual stresses induced or redistributed during coil production, slitting, perforating, forming or fabrication of steel products. Improper deck handling, installation or attachment to misaligned steel supports can also cause oil canning.

In general, oil canning is an aesthetic condition with no effect on the structural integrity of the deck. Since many uncontrollable factors can lead to oil canning, the manufacturer assumes no responsibility for the cost of actions taken in response to an oil canning condition. Oil canning shall not be a cause for rejection of material.

10. THINGS YOU SHOULD KNOW

Cutting panels:

- All material should be cut with nibblers, tin snips or a profile shear if available. You always want to make a shearing / pinching cutting action versus an abrasive cutting action from a circular saw. Although it is not the recommended choice of Mid Florida Metal Roofing Supply to use a saw for cutting we understand that many will still do so. There are two concerns when using a saw. First, be sure that no burrs are left on the ends of the panel. The rough edges are not protected and will rust. Second, the filings or shavings coming off of the blade are hot and will adhere to the surface of the panels and these will also rust. Be sure all filings and shavings are removed from the surface as they will rust and pit the material.

Corrosive / dissimilar materials to avoid:

- Graphite pencils should be avoided when marking panels. Graphite will corrode the metal and within a short period of time rust will form. Lead and Copper boots are also corrosive to Galvalume.
- Direct contact with pressure treated lumber and metal roofing must be avoided to prevent potential corrosion.
- Damage will result if uninstalled panels or trim are allowed to remain wet in storage. Be sure to store material that will not be installed immediately in a dry location. Wet material should be air-dried and re-stacked if installation is not planned right away.
- Nibblers, and especially Carborundum blades on electric saws, do have a tendency to either leave hot metal particles that can burn paint surfaces or leave rust marks on panels and trim. The same is true of any filings left on the roof caused by the application of screws. Care should be taken to brush all such particles from roof surfaces after application. CAUTION! clean all metal shavings and particles off of roof to avoid unsightly rust stains.

11. PICK UP DISCLAIMER NOTICE

- Mid Florida Metal Roofing & Supply sincerely appreciates your business. Unfortunately, our facility does not have the capacity to store material in the volume that we are producing. Therefore, it is important orders are picked up promptly after the first notification. We will make every attempt possible to notify you via the contact information provided.
- If product is not picked up within 15 business days from 1st notification that it is ready, storage fees will be added and calculated at \$15 per day.
- **After 30 business days, material becomes the ownership of Mid Florida Metal Roofing.**