

FL # FL24096-R2
Application Type Revision
Code Version 2020
Application Status Approved

*Approved by DBPR. Approvals by DBPR shall be reviewed and ratified by the POC and/or the Commission if necessary.

Comments

Archived

Product Manufacturer Mid Florida Metal Roofing Supply/Supplies, Inc.
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Tavares, FL 32778
(352) 742-7070
amyprince@mfMrs.com

Authorized Signature Amy Prince
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Technical Representative
Address/Phone/Email

Quality Assurance Representative
Address/Phone/Email

Category Roofing
Subcategory Metal Roofing

Compliance Method Certification Mark or Listing

Certification Agency Keystone Certifications, Inc.
Validated By Keystone Certifications, Inc.

Referenced Standard and Year (of Standard)	<u>Standard</u>	<u>Year</u>
	UL 1897	2012
	UL 580	2006

Equivalence of Product Standards
Certified By

Product Approval Method Method 1 Option A

Date Submitted 09/03/2020
Date Validated 09/09/2020
Date Pending FBC Approval
Date Approved 09/16/2020

Summary of Products

FL #	Model, Number or Name	Description
24096.1	29 Ga. Multi-Rib	29 Ga, 60ksi Steel Over Asphalt Shingles, Over 15/32" Plywood
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: No Design Pressure: +N/A/-71.0 Other:		Certification Agency Certificate FL24096_R2_C_CAC_11027-001-Rev4CertificationReport.pdf Quality Assurance Contract Expiration Date 09/01/2025 Installation Instructions FL24096_R2_II_MFMRS_MR-Installation-082317.pdf Verified By: Keystone Certifications, Inc. Created by Independent Third Party: Evaluation Reports Created by Independent Third Party:
24096.2	29 Ga. Multi-Rib	29 Ga, 60ksi Steel Over 1x4 SYP Purlins, Over Asphalt Shingles, Over 15/32" Plywood
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: No Design Pressure: +N/A/-93.5 Other:		Certification Agency Certificate FL24096_R2_C_CAC_11027-001-Rev4CertificationReport.pdf Quality Assurance Contract Expiration Date 09/01/2025 Installation Instructions FL24096_R2_II_MFMRS_MR1x4-Installation-082317.pdf Verified By: Keystone Certifications, Inc. Created by Independent Third Party: Evaluation Reports Created by Independent Third Party:
24096.3	29 Ga. Multi-Rib	29 Ga, 80ksi Steel Over 1x4 SYP Purlins, Over 15/32" Plywood
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: No Design Pressure: +N/A/-93.5 Other:		Certification Agency Certificate FL24096_R2_C_CAC_11027-001-Rev4CertificationReport.pdf Quality Assurance Contract Expiration Date 09/01/2025 Installation Instructions FL24096_R2_II_MFMRS_MR1x4-Installation-082317.pdf Verified By: Keystone Certifications, Inc. Created by Independent Third Party: Evaluation Reports Created by Independent Third Party:
24096.4	29 Ga. Multi-Rib	29 Ga, 80ksi Steel Over 1x4 SYP Purlins, Over 15/32" Plywood
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: No Design Pressure: +N/A/-116.0 Other:		Certification Agency Certificate FL24096_R2_C_CAC_11027-001-Rev4CertificationReport.pdf Quality Assurance Contract Expiration Date 09/01/2025 Installation Instructions FL24096_R2_II_MFMRS_MR1x4-Installation-082317.pdf Verified By: Keystone Certifications, Inc. Created by Independent Third Party: Evaluation Reports Created by Independent Third Party:
24096.5	29 Ga. Multi-Rib	29 Ga, 80ksi Steel Over 15/32" Plywood
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: No Design Pressure: +N/A/-71.0 Other:		Certification Agency Certificate FL24096_R2_C_CAC_11027-001-Rev4CertificationReport.pdf Quality Assurance Contract Expiration Date 09/01/2025 Installation Instructions FL24096_R2_II_MFMRS_MR-Installation-082317.pdf Verified By: Keystone Certifications, Inc. Created by Independent Third Party: Evaluation Reports Created by Independent Third Party:
24096.6	29 Ga. Multi-Rib	29 Ga, 80ksi Steel Over 15/32" Plywood
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: No Design Pressure: +N/A/-108.5 Other:		Certification Agency Certificate FL24096_R2_C_CAC_11027-001-Rev4CertificationReport.pdf Quality Assurance Contract Expiration Date 09/01/2025 Installation Instructions FL24096_R2_II_MFMRS_MR-Installation-082317.pdf Verified By: Keystone Certifications, Inc. Created by Independent Third Party: Evaluation Reports Created by Independent Third Party:



Metal Roof Certification & Listing Program

Certification Report



11027-001-KCI

145 Limekiln Road, Suite 100B
New Cumberland, PA 17070
www.keystonecerts.com

Issue Dated: 9/27/2017
Revision Date: 9/1/2020
Expiration Date: 9/1/2025

Construction Specifications Institute (CSI) Category:

Division: 07 00 00 – Thermal & Moisture Protection

Section: 07 41 13 – Metal Roof Panels

This Certification Report was used in the qualification of Florida Product Approval [FL24096-R2](#)

1. Program Licensee:



Mid Florida Metal Roofing Supply, Inc.

28328 County Road 561

Tavares, FL 32778

352-742-7070

<http://www.midfloridametalroofingsupply.com>

2. Certified Roof Covering:

MFMRs Multi-Rib non-structural through-fastened metal roof panels installed over 15/32" B-C 4 plywood sheathing roof deck for use in new construction and re-roofing applications.

3. Scope of Certification:

This Certification Report provides technical data substantiating that the use of the certified roof covering and the evaluated roof systems are in compliance with the following:

- 2020 Florida Building Code - Building, 7th Edition, Section 1504.3.2.
- Florida Product Approval Rule 61G20-3.

Properties Evaluated:

- Wind Uplift Resistance

4. Evaluated Roof System Description:

4.1. **Roof Covering:** MFMRs Multi-Rib metal roof covering panels are cold roll-formed from 29 gauge steel sheet having the minimum yield strength specified in Table 1. The panels are aluminum-zinc alloy coated per ASTM A792 (AZ50), and shall be installed in accordance with the manufacturer's instructions and this Certification Report.

4.2. **Roof Deck:** MFMRs Multi-Rib metal roof panels are certified for use over solid or closely-spaced, minimum 15/32" B-C 4 plywood or lumber sheathing complying with 2020 Florida Building Code - Building, 7th Edition, Section 2303.1.5 with or without the use of 1x4 #2 SWP purlins at 24" O.C., with a minimum slope of 4% (1/2:12).

4.3. **Anchorage:** MFMRs Multi-Rib metal roof panels shall be through-fastened to the roof deck or purlins using #10-16 x 1-1/2" hex-head wood screws with EDPM-sealing washer, of the manufacturer & model specified in Table 1 or equivalent, applied in the patterns described in Appendix 1. The 1x4 purlins, when employed, shall be attached to the roof deck using 8x2-1/2" wood screws at max. 12" O.C.

4.4. **Underlayment:** MFMRs Multi-Rib metal roof panels in new construction applications shall be installed over underlayment meeting the applicable material type and attachment details specified in the 2020 Florida Building Code - Building, 7th Edition, Table 1507.1.1.1., the manufacturer's installation instructions and this Certification Report.



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5. Installation

MFMRs Multi-Rib metal roof panels in new construction applications shall be installed in accordance with the 2020 Florida Building Code Section 1507.4, the manufacturer’s published installation instructions and this Certification Report.

MFMRs Multi-Rib metal roof panels in re-roofing applications shall be installed in accordance with the 2020 Florida Building Code Sections 1507.4 & 1511, the manufacturer’s published installation instructions and this Certification Report.

The manufacturer’s installation instructions shall be made available at the time of installation. If there are differences between this report and the manufacturer’s installation instructions, this report shall take precedence.

6. Product Performance

The performance of the MFMRs Multi-Rib non-structural through-fastened metal roof panels described in this Certification Report has been demonstrated via testing in accordance with the following referenced standards:

- UL 580-94, *Tests for Uplift Resistance of Roof Assemblies.*
- UL 1897-98, *Uplift Tests for Roof Covering Systems.*

As tested & reported by the following independent accredited laboratory:

Laboratory	Report Ref.
Force Engineering & Testing	194-0255T-09A, B 194-0135T -07A thru D

Note: The UL 580-94 standard is equivalent to the UL 580-06 standard, and the UL 1897-98 standard is equivalent to the UL 1897-2012 standard.

7. Wind Resistance

The allowable design uplift pressures for MFMRs Multi-Rib anchored as described in Appendix 1, when tested in accordance with the referenced standards with an applied safety factor of 2.0 are found in Table 1.

Table 1

Description	Anchor Pattern	Anchor Man’f & Model	Max Design Uplift Pressure
29 Ga, 60ksi Steel Over Asphalt Shingles, Over 15/32” Plywood	A	Buildex HiLo Trugrip	71.0 psf
29 Ga, 60ksi Steel Over 1x4 SYP Purlins, Over Asphalt Shingles, Over 15/32” Plywood	A	Buildex HiLo Trugrip	93.5 psf
29 Ga, 80ksi Steel Over 1x4 SYP Purlins, Over 15/32” Plywood	A	Atlas HiLo Woodfast	93.5 psf
29 Ga, 80ksi Steel Over 1x4 SYP Purlins, Over 15/32” Plywood	B	Atlas HiLo Woodfast	116.0 psf
29 Ga, 80ksi Steel Over 15/32” Plywood	A	Atlas HiLo Woodgrip	71.0 psf
29 Ga, 80ksi Steel Over 15/32” Plywood	B	Atlas HiLo Woodgrip	108.5 psf



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8. Conditions of Use

MFMRs Multi-Rib non-structural through-fastened metal roof panels must be insulated against other materials or metals including concrete, lead, copper and treated lumber that contains corrosive materials.

9. Limitations of Use

MFMRs Multi-Rib non-structural through-fastened metal roof panels are not qualified for use in the High Velocity Hurricane Zone (HVHZ).

Fire classification, shear diaphragm design, roof deck design & attachment to supporting members are not within the scope of this Certification Report.

Roof support framing shall comply with 2020 Florida Building Code - Building, 7th Edition, Chapter 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.

10. Licensed Manufacturing Facilities

This Certification Report is applicable only to MFMRs Multi-Rib non-structural through-fastened metal roof panels manufactured at the following locations. Each licensed facility is subject to periodic inspection by Keystone Certifications to verify conformance with Keystone Roof Covering Certification & Listing Program requirements:

Mid Florida Metal Roofing Supply, Inc.
28328 County Road 561
Tavares, Florida 32778

11. Identification

MFMRs Multi-Rib non-structural through-fastened metal roof panels represented by this report shall be identified with Keystone Roof Covering Certification & Listing Program certification labeling illustrated below, to be applied to individual panels, packaging, invoicing or bills of lading:



Digitally signed by Jon Hill
Date: 2020.09.08 16:56:30 -04'00'

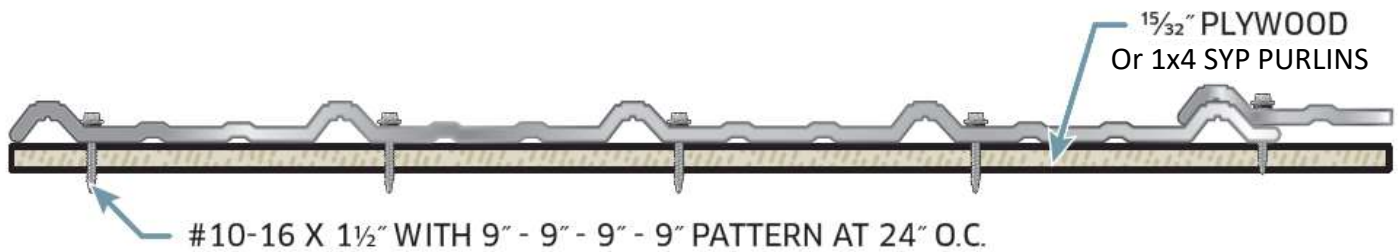
Jon Hill
President

Appendix 1

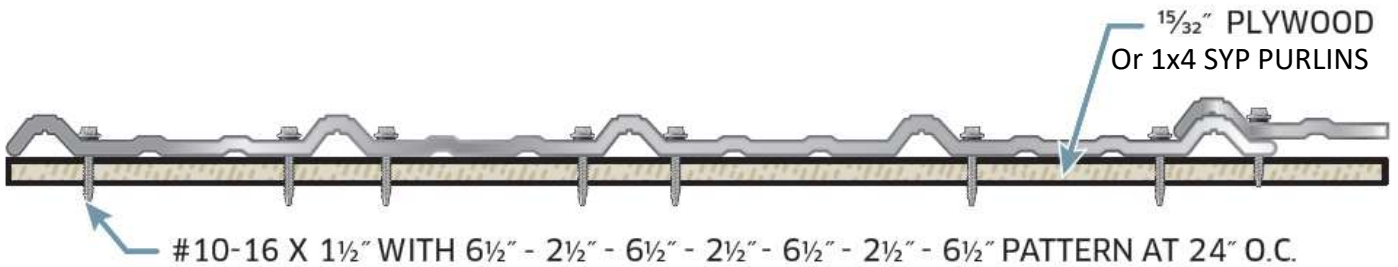
Notes: In all cases (new construction and re-roofing), the anchors shall fully penetrate the purlins or the plywood roof deck (as applicable). Slopes less than 3:12 require the use of lap sealant.

Anchor Pattern A

Standard Pattern

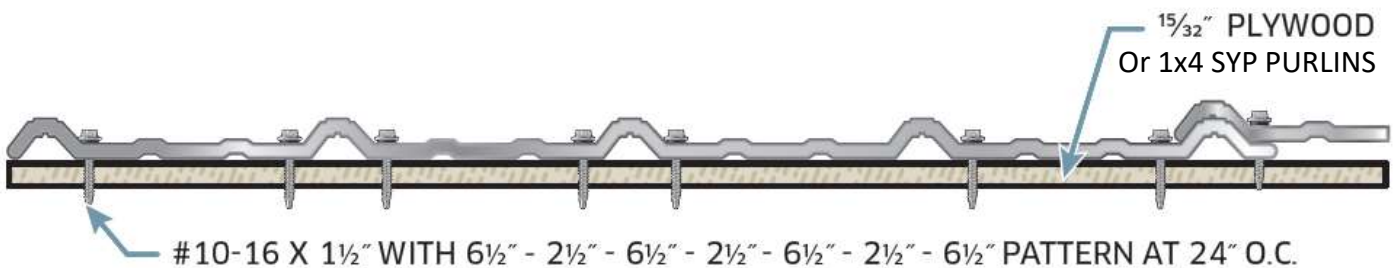


Panel End Pattern



Anchor Pattern B

Standard And Panel End Pattern





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Issue Dated: 9/27/2017
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Certificate Revisions

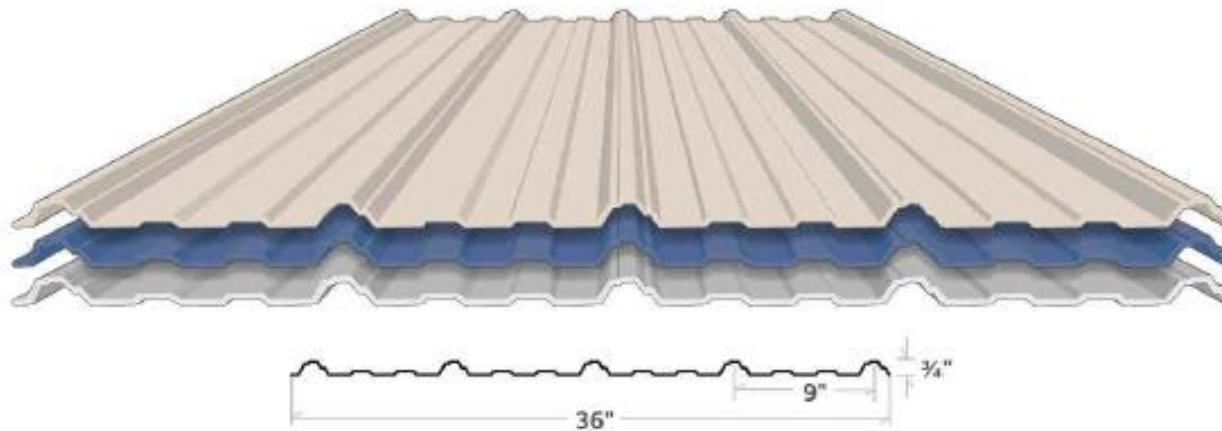
Rev #	Date	Description
0	09/27/2017	Initial issuance.
1	01/23/2018	Added Hyperlink for FL24096
2	02/26/2018	Removed specification for underlayment use in re-roofing, changed minimum slope to ½:12 with applied lap seals, removed minimum roof covering thickness dimension (relying on Gauge).
3	9/3/2019	Updated ANSI Logo to proper requirements. Updated FL# to correct revision number.
4	9/1/2020	Updated to FBC 7 th Edition.

Refer to www.keystonecerts.com to ascertain the ongoing status of this Compliance Certificate. Approval of building products and/or materials can only be granted by the building official having jurisdictional legal authority. Keystone Certifications, Inc. does not endorse or make warranties with respect to product performance or suitability of a product for a given use.

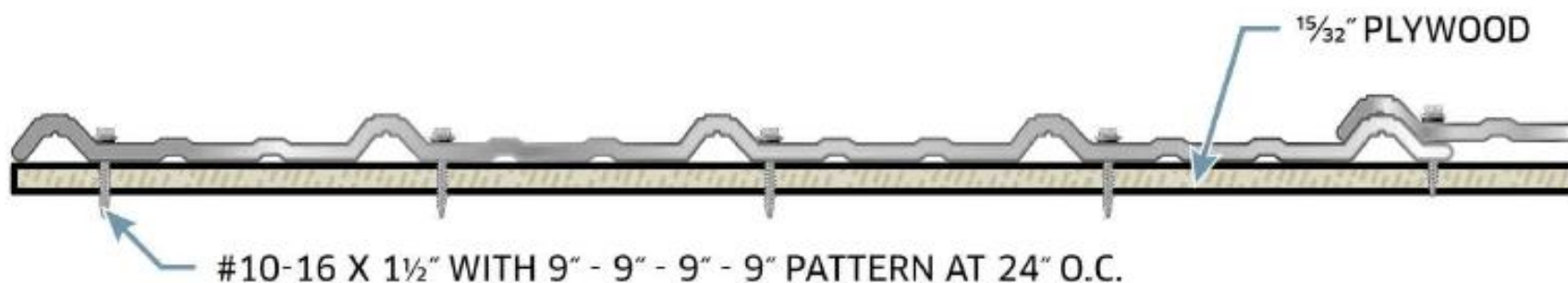
Multi-Rib

Over Plywood

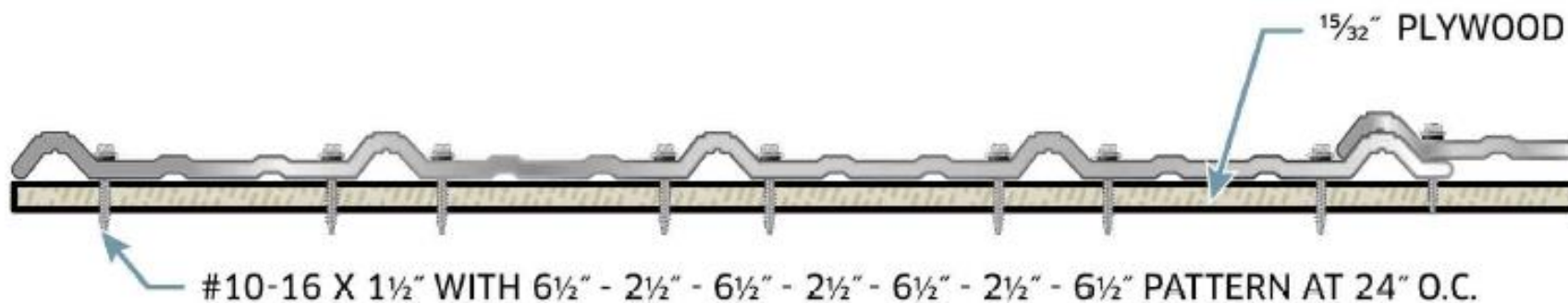
Installation Instructions



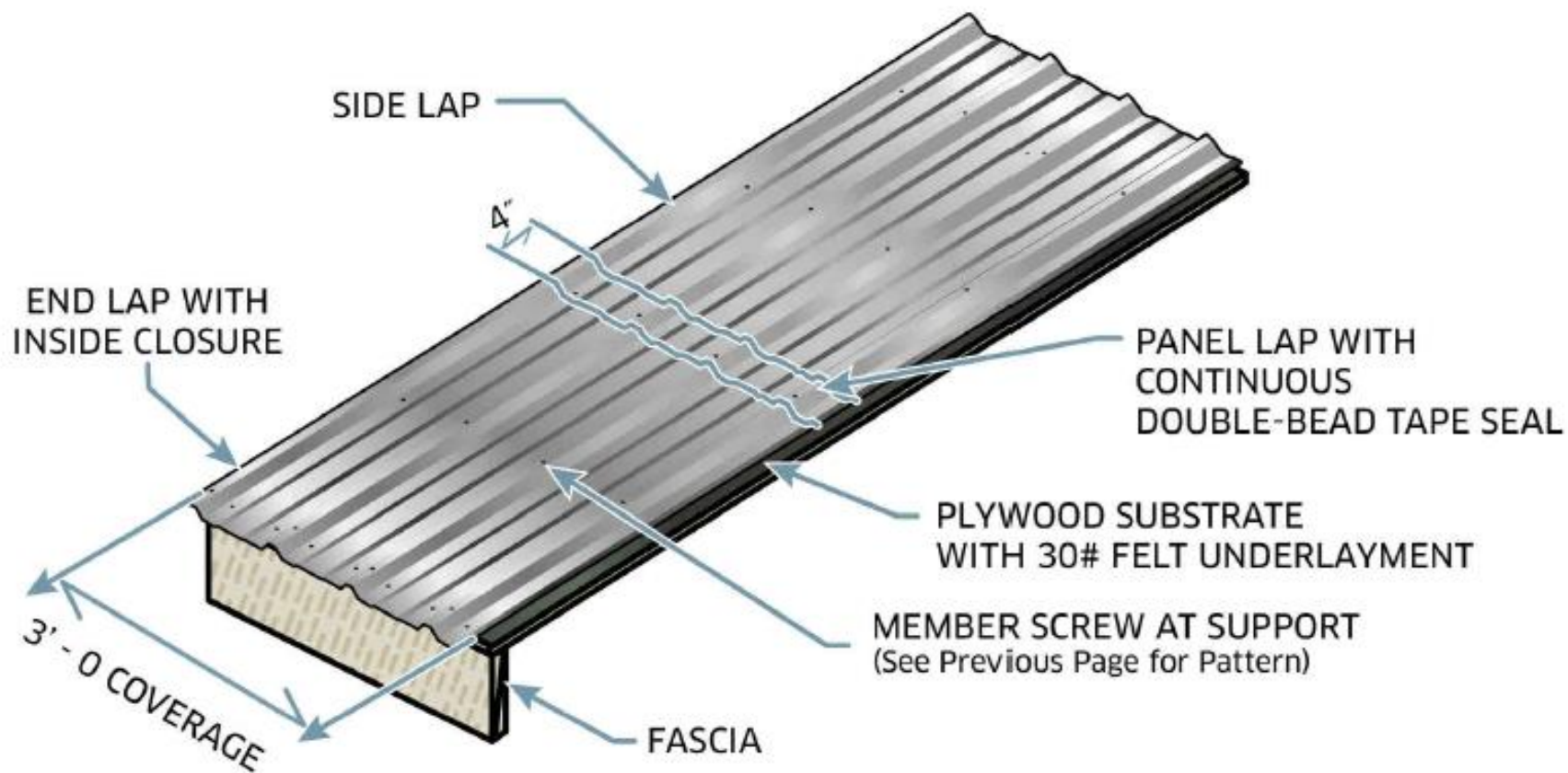
Multi-Rib Panel Fastener Standard Pattern



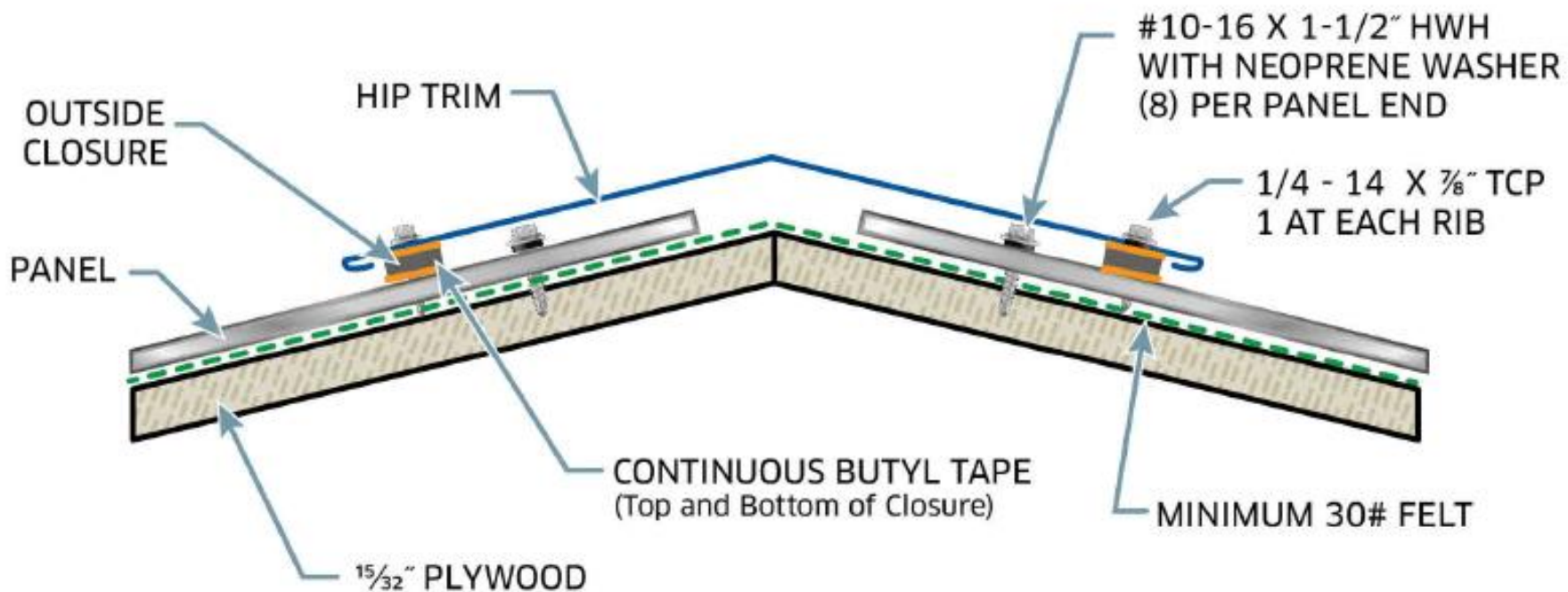
Multi-Rib Panel Fastener End Pattern



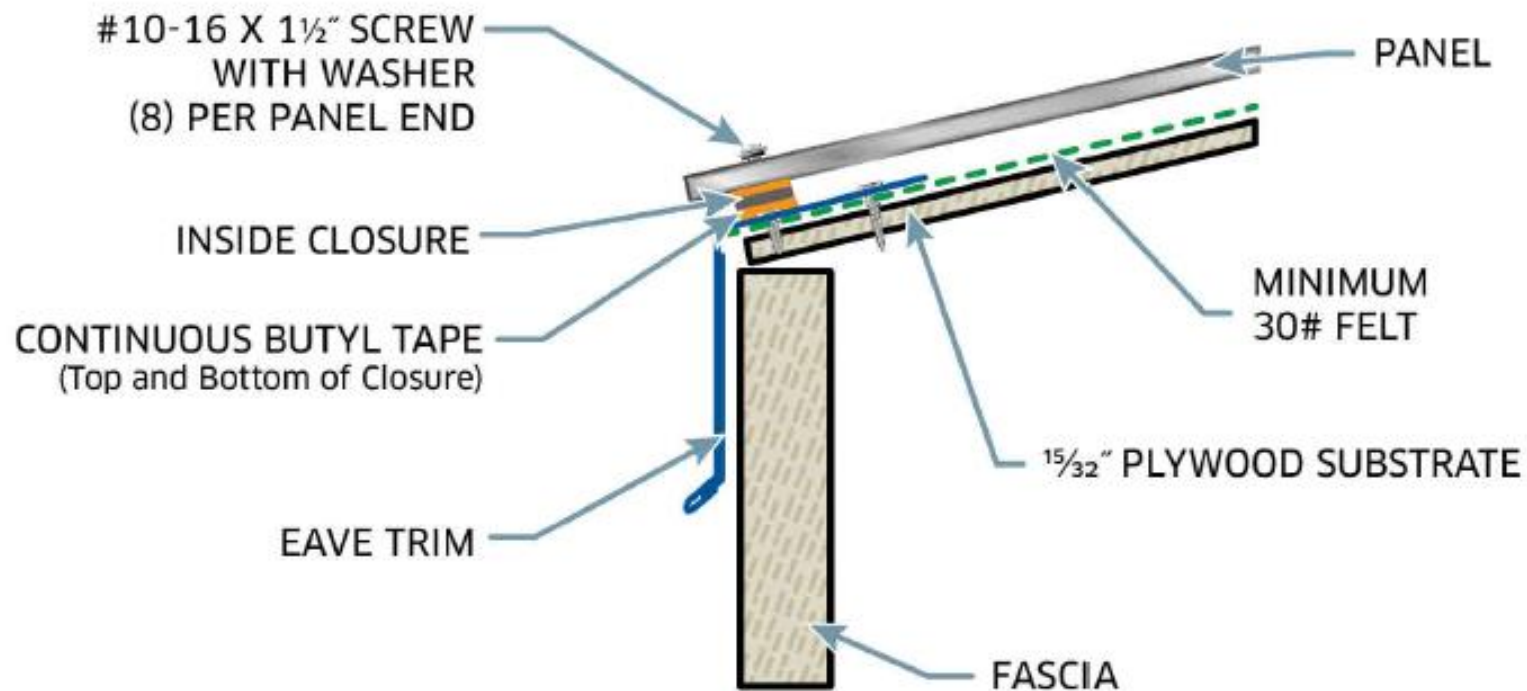
Multi-Rib Panel Detail Over Plywood



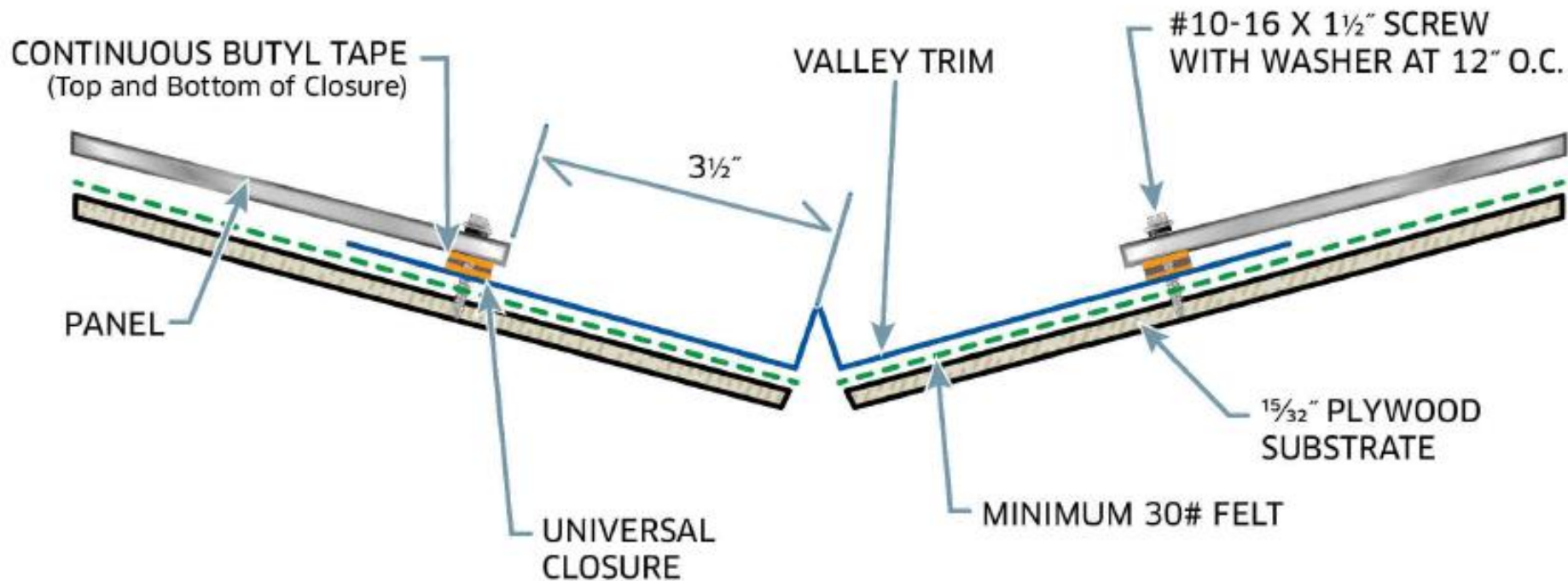
Multi-Rib Ridge and Hip Detail



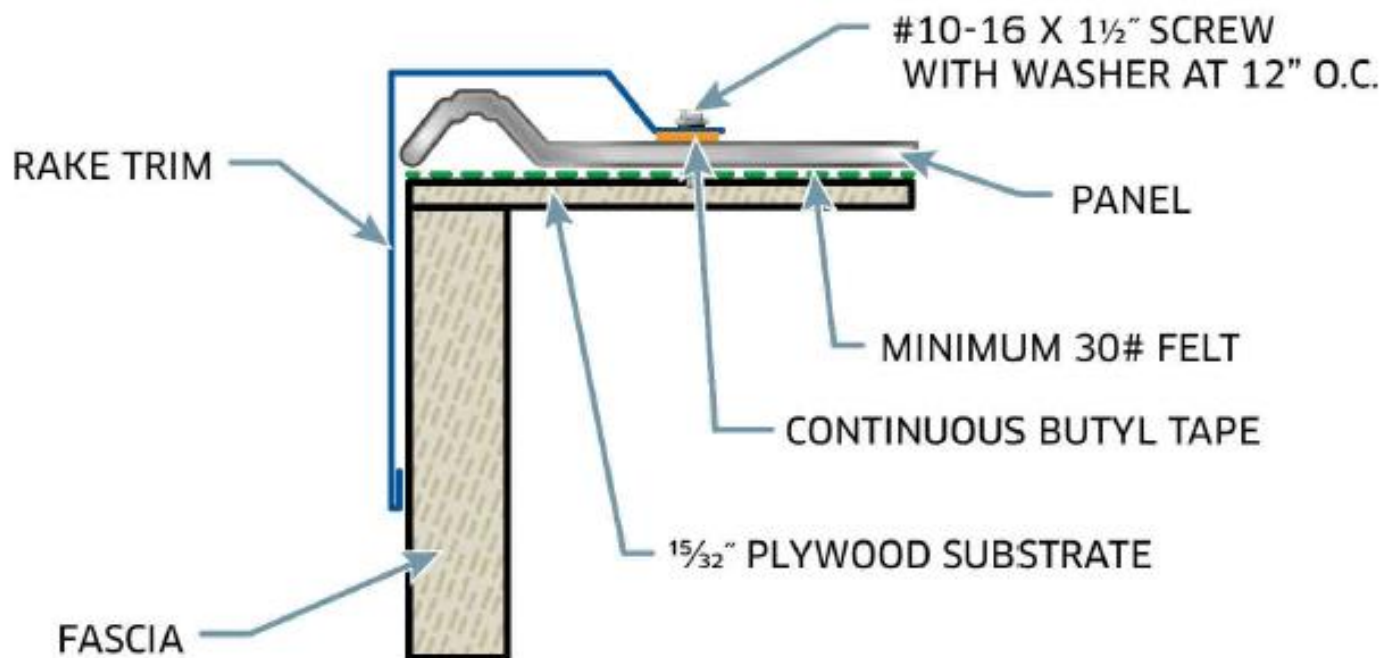
Multi-Rib Eave Detail



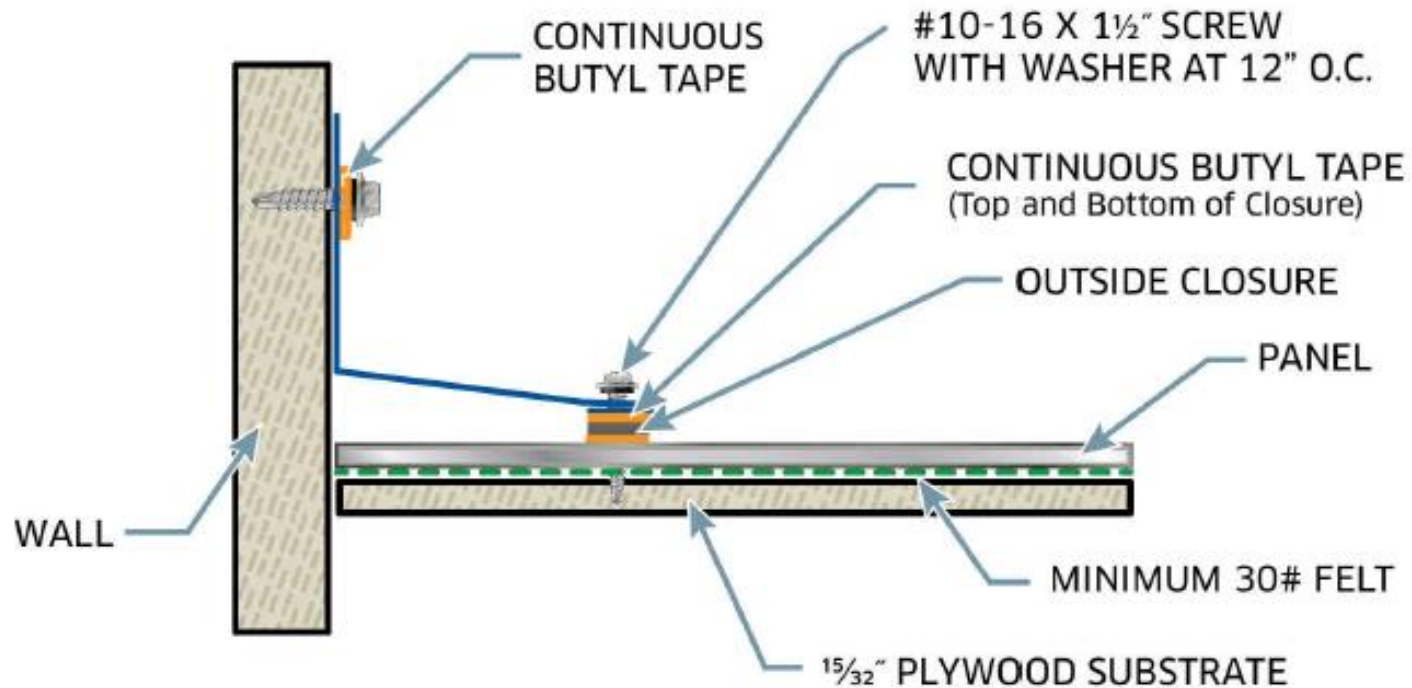
Multi-Rib Valley Detail



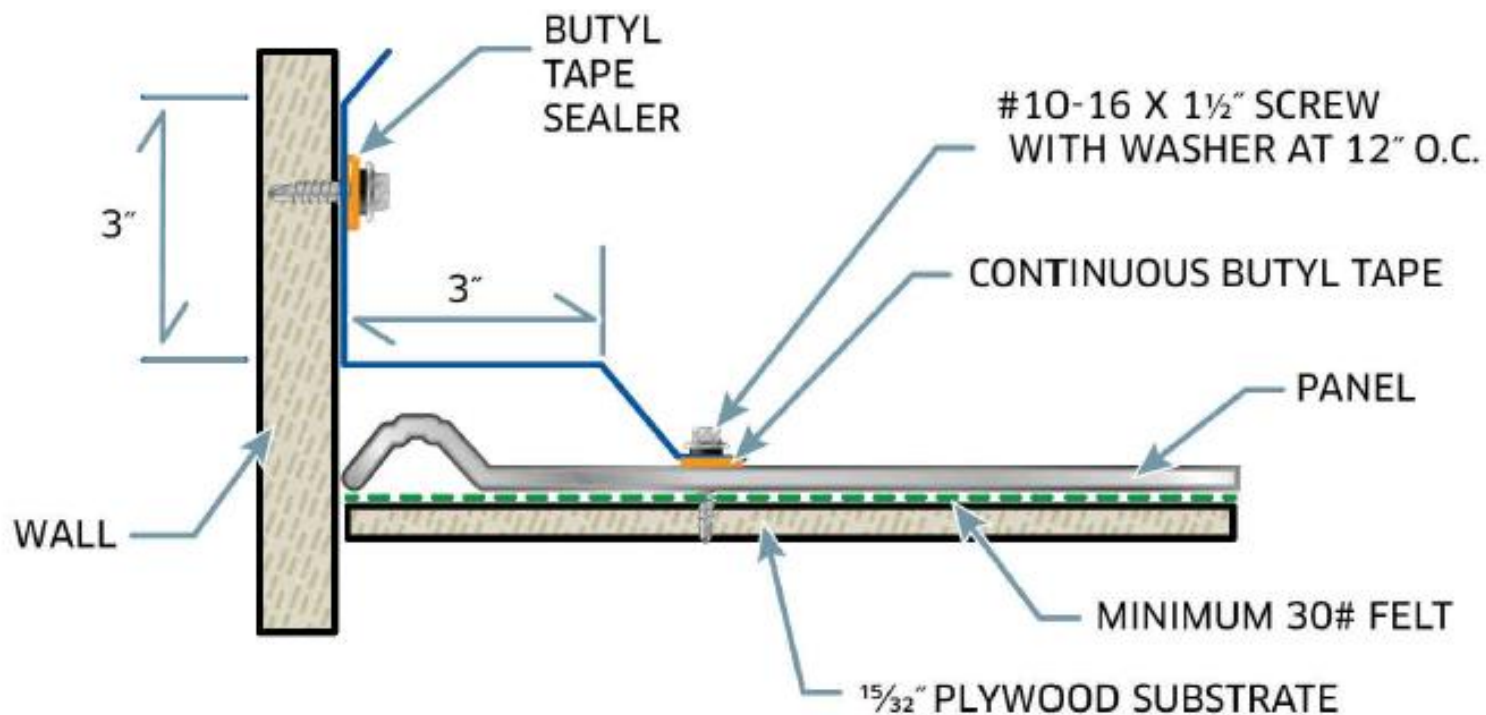
Multi-Rib Rake Detail



Multi-Rib End Wall Detail



Multi-Rib Side Wall Detail



Multi-Rib Transition Detail

