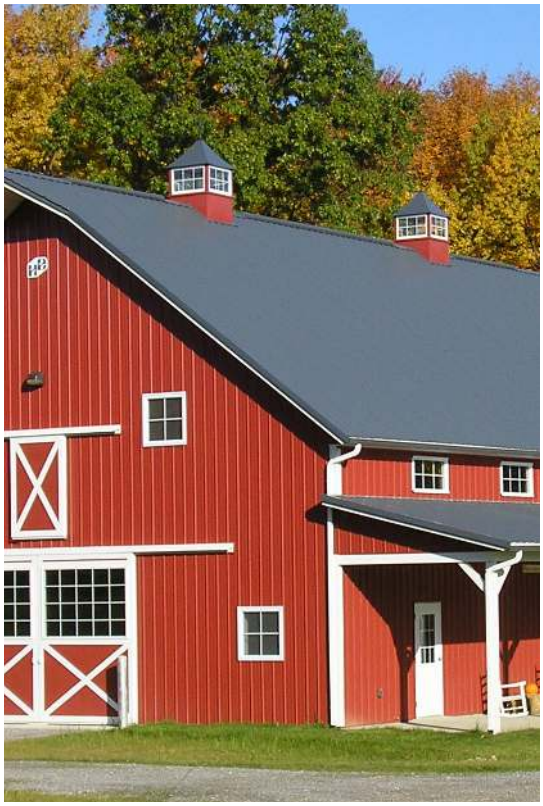
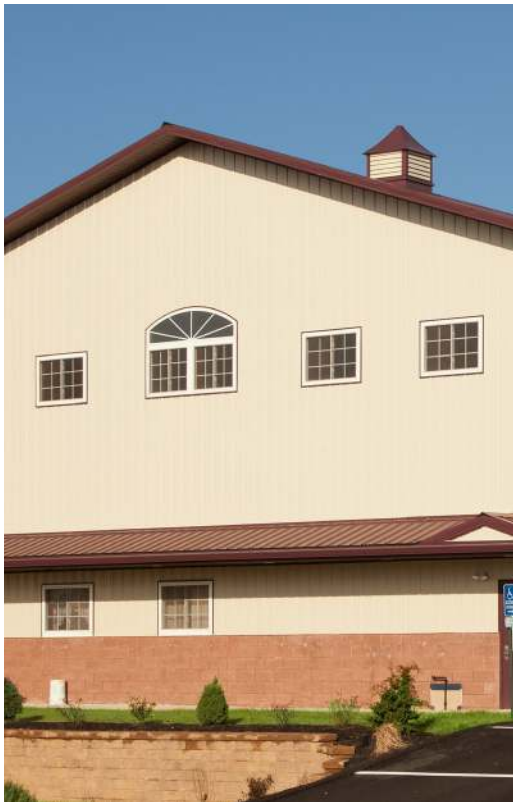
FABRAL
METAL WALL AND ROOF SYSTEMS

STANDARD DETAILS FOR METAL ROOFING AND SIDING

AGRICULTURAL
LIGHT COMMERCIAL
RESIDENTIAL







THE BLUE BOOK

Due to Product improvements, changes and other factors, Fabral reserves the right to change or delete information herein without prior notice or obligation to make changes in products previously purchased.

The details and written instructions described in this manual are suggested installation methods to ensure a quality application of our products, and should be considered as a guideline only. FABRAL recognizes that installation techniques can vary based upon builder and geographical preferences, and that there are other acceptable ways to install our products.

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INTRODUCTION

The Right Tools.

This Standard Details Manual, AKA the Blue Book, is the right tool to have at your fingertips. By knowing you have access to all of the right information from proper storage and installation instructions to trim and flashing details, you can be confident installing your Fabral materials. In addition, the Blue Book references the complete system components and accessories allowing you plan ahead.

Use the Blue Book, and call us when further support is needed.



AGRICULTURAL

Fabral is the solution for your agricultural applications. We know that your barns and buildings must stand up to all weather conditions and last through the years.



LIGHT COMMERCIAL

For your light commercial needs, Fabral offers metal roofing and siding to match the various building types.



RESIDENTIAL

Homeowners feel proud and confident with Fabral metal roofing for the durability and sophisticated appearance.

FABRALCORE™

You challenge us. And we like it.

Your vision for a building and what you want to achieve makes us think harder. It'd be easy to say - "That won't work." Instead we go with - "Let's see what we can do." As the leading provider of metal for building envelope solutions, we push the envelope.

We like it when you bring us a problem because we know we'll find the solution. We have the products, the manufacturing and the know-how. We offer everything you need for the total building envelope solution. At our core, we relish a challenge.









SYSTEM SUPPORT

- CUSTOMER CARE
- EDUCATION
- PROJECT CONSULTING
- TECHNICAL SUPPORT

To learn more, contact us at Fabral.com.

INSTALLATION INSTRUCTIONS

Building Design and Construction

In order to ensure the anticipated performance and longevity, protect metal panels from potentially corrosive situations and materials. When treated lumber will be in direct contact with metal panels or flashings please note the following: Galvanized steel is compatible with the CCA (Chromated Copper Arsenate) pressure-treated lumber that was predominantly used before 2004, but not with the older Penta treated lumber or the new ACQ (Alkaline Copper Quartenary), CA (Copper Azole), or CBA (Copper Boron Azole). Stainless steel or other special treated fasteners should be used into these non-compatible pressure treated lumbers. Aluminum must be separated from contact with all treated wood since the soluble copper in the preservative is corrosive to aluminum. Likewise, dissimilar metals also require a protective barrier between them to prevent galvanic corrosion. Request FABRAL Technical Bulletins #803, 106, and 107 for more information on treated lumber and dissimilar metals.

PLASTIC, BUILDERS' FELT, BITUMINOUS PAINT, CAULKING, OR GASKET MATERIAL MAY BE USED TO SEPARATE PANELS FROM TREATED WOOD AND DISSIMILAR METALS. When using aluminum panels in direct contact with steel, use a separator as described above and fasten with Stainless Steel screws.

Fertilizer, lime, acids, feeds, manure, soils, and many other compounds also cause corrosion in metal panels. Contact between metal panels and any potentially corrosive materials should be prevented.

Porous insulation materials may absorb and retain moisture, and should not be used in direct contact with metal panels. Use a vapor barrier such as polyethylene plastic or 30-lb felt to prevent moisture from contacting both the insulation and the metal panel.

FABRAL's translucent panels are intended for siding applications only. In all situations, foot traffic should be avoided on translucent panels. Translucent panels used in roofing applications will break down in a short time and cause staining and premature corrosion of the metal panels below. If used on roofs, apply butyl caulking to separate the fiberglass panels from the metal. Translucent panels should be cleaned and sealed regularly, as recommended by the translucent panel manufacturer.

Purlins, Girts and Roof Deck

The substructure to which the metal panels are fastened must be properly spaced and sufficiently thick to provide a roof or wall system able to meet required design loads.

A 2" nominal lumber thickness or 1" nominal thickness are both acceptable purlins. If snow guards are to be installed in the future, a 2 x 8 purlin can be installed in the area for snow guard installation. Call engineering for locations of 2 x 8 purlins. When using purlins, FABRAL recommends a maximum spacing of 24" on-center (note that 5V requires solid decking). Pullout values decrease if the fasteners protrude completely through the purlins. Kiln-dried softwood is recommended for purlins or decking (pine, fir, hemlock, and spruce). Hardwoods are difficult to fasten into without splitting and contain tannic acids that are corrosive to metal panels. Green (non-kiln-dried) lumber may warp, twist, and shrink as the wood seasons fully, causing waviness in the panels as well as loosening and leaking of the fasteners.

Solid decking is highly recommended for all residential applications. When using solid decking or sheathing, always use 30-lb felt or underlayment and plan on using closer fastener spacing and larger diameter #14 screws. (Refer to the tables on page 31).

On re-roofing projects where the condition of the old decking is in question, or where existing shingles will be left in place, new 2x4 or 1x4 purlins should be fastened through the decking and into the rafters. This will provide a solid framework for attaching the metal panels. For more detailed information on re-roofing applications, consult FABRAL Technical Bulletin #721, Re-Roofing With Metal. Load tables are available for all FABRAL panels; contact FABRAL for additional information.

Roofing

Panel sidelaps should face away from wind driven rain. To accomplish this, begin by installing the first sheet square with the eave and gable at the down wind end of the roof, farthest away from the source of prevailing winds or away from the primary viewing location.

In applications requiring a panel endlap, please refer to the detailed instructions in this booklet. For best results, lap panels as shown and install in the indicated sequence. **ALL ENDLAPS REQUIRE SEALANT. WHEN WEATHER-TIGHTNESS IS CRITICAL, USE SEALANT TAPE IN ALL SIDELAPS.**

To provide a drip edge, allow an overhang of 1 to 2 inches at the eave. At the gable edge, use a gable or sidewall flashing. This will keep weather out, prevent lifting in high winds, and provide a neat, finished appearance. The trim and roofing sheet should be fastened every 12 to 24 inches along the gable edge. Do not step on panel ribs or on trim pieces to prevent kinking.

Roof Pitch

The metal roofing panels shown in this manual require a minimum slope of 2½" per foot to ensure proper drainage. Refer to the rain-carrying table in this booklet for the maximum allowable panel length per slope that will provide adequate drainage. For longer slopes and lower roof pitches, contact FABRAL for other suitable profiles.

Bending and Bowing

Aluminum and Steel roofing and siding sheets are rollformed from hardened, tempered metal for maximum strength. If a sheet must be bent, a gentle 90-degree bend is the maximum recommended. Metal should not be re-bent once it has been formed, nor should it be folded back on itself. When a metal roofing sheet must be installed on a curved roof, screws should be installed at every overlapping rib at the sheet ends to resist the natural tendency of the metal to spring back. The standard fastening pattern is permitted over the rest of the sheet. When installing the metal panels shown in this booklet over a curved arch, the minimum radius of the arch is 18' for aluminum panels and 24' for steel panels. Use sealant tape or butyl caulking at all sidelaps and endlaps. Additional care and fasteners must be provided when securing the top and bottom purlins on an arched rafter building to prevent the curved panels from pulling the purlins loose from the rafters. Ring-shank pole barn nails, heavy wood screws, lag screws, or bolts are often used for attaching these purlins.

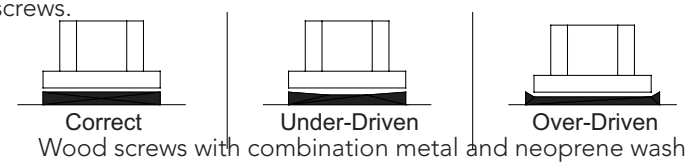
Siding

Siding should be installed using the standard fastening and overlap patterns to ensure optimum performance. For strong, neat corners use hemmed corner flashings. **DO NOT RUN SIDING SHEETS ALL THE WAY TO THE GROUND. INSTEAD, PROVIDE A PROTECTIVE BASE OF CONCRETE, MASONRY, TREATED WOOD, OR SIMILAR MATERIAL AND TERMINATE THE SIDING SHEETS 6" ABOVE GRADE.**

If siding sheets are installed horizontally, use sealant tape or butyl caulking at the vertical laps to ensure weather-tight joints. Install panels from the bottom up so that water is directed away from, and not into, the lap joints.

Fastening

FABRAL can supply either screws or nails for fastening into dimension lumber. Always use screws with solid sheathing. Screws for use with steel panels are galvanized and then coated with an organic polymer for optimum corrosion resistance. For best results with aluminum panels, use #300 series stainless steel screws.



Wood screws with combination metal and neoprene washers should be installed in the flat area of the panel adjacent to the ribs, and tightened such that the washer is compressed as illustrated above. This will ensure a lasting, leak-proof seal. **REMOVE ANY METAL FILINGS CREATED BY THE DRILLING ACTION OF THE SCREWS OR PRE-DRILLING OF THE HOLES TO AVOID RUST STAINING ON THE PANEL SURFACE.** Refer to the fastening schedules in this booklet for the correct fastener locations.

Panels adhered with CondenStop

FULL LENGTH PANELS FROM EAVE TO RIDGE ARE RECOMMENDED, EAVE OVERHANGS, VALLEYS AND ANY OTHER EDGES EXPOSED TO THE WEATHER SHOULD BE PAINTED TO SEAL MICROFIBERS FROM ABSORBING MOISTURE FROM THE OUTSIDE. WET STACK STORAGE STILL APPLIES TO PANELS WITH CONDENSTOP APPLIED. PLEASE STORE PROPERLY BY COVERING AND TILTING ONE END. IT'S ALWAYS BEST IF THEY CAN BE STORED INSIDE IF NOT BEING IMMEDIATELY INSTALLED.

Flashing and Trim

Always begin flashing installation from the bottom and work up, so that upper flashings are lapped on top of lower flashings. This will prevent moisture from leaking under the flashings and into the structure. Endlap flashings a minimum of 6" and seal the lap joints with sealant. Extend flashings 4-6" beyond the building, cut along the bend lines, apply sealant, and fold the side flaps in and the top flaps down to cap off the ends. Secure with pop-rivets or stitch screws.

Some roof conditions, such as valleys, may require a longer endlap and/or a larger flashing to properly drain moisture from the roof. Factors that influence flashing size, shape, and endlap requirements include roof pitch, roof geometry, slope length, and climatic factors (such as heavy snowfall or rainfall).

Whenever possible, begin trim installation at the downwind end of the roof, farthest away from the source of prevailing winds, to allow flashing laps to face away from wind-driven rain. Refer to the details in this book for the proper location of fasteners and sealants.

The flashings and trims shown in this book are standard parts. Custom trims are available to meet your specific design needs. If you need a special trim, please furnish a drawing of the desired shape, including dimensions and angles, to your Fabral dealer to obtain pricing and availability.

Refer to the SMACNA Architectural Sheet Metal Manual for additional information about detailing and installing flashings.

Safety

Always work safely when installing metal products and use extreme caution on the roof at all times. Wear gloves and safety glasses to reduce the risk of injury, and use hearing protection when operating power tools. Always be sure that ladders are safely positioned and properly secured. Safety harnesses or other special equipment may be required; be sure to Consult OSHA guidelines for compliance with all safety requirements.

Do Not walk on panels until all the fasteners are installed. Metal roofing panels are slippery when wet, dusty, frosty, or oily -- Do Not attempt to walk on a metal roof under these conditions. Wear soft-soled shoes to improve traction and to minimize damage to the paint finish. Always be aware of your position on the roof relative to any roof openings, roof edges, co-workers, and penetrations. Installing metal panels or flashings on a windy day can be dangerous and should be avoided if possible.

Cutting Aluminum Panels

To make a cut parallel to the ribs, score the panel deeply with a sharp utility knife and bend back-and-forth along the score, breaking the metal off cleanly. For cuts across the ribs, use straight-cut snips, electric or pneumatic shears, a portable profile shear, or an electric nibbler. Some installers prefer using a circular saw with a metal cutting blade (a fine-tooth hardwood blade, or a standard combination blade reversed in the saw works also). Light oil or soap on the blade will make cutting easier.

Cutting and Drilling Steel Panels

Steel panels may be cut with metal snips, electric or pneumatic shears, a portable profile shear, or an electric nibbler. Some installers prefer using a circular saw to cut metal panels. Do Not use self-consuming abrasive blades because of the following: 1. Abrasive blades burn the paint and galvanizing at the cut edge, leaving edges that are jagged and unsightly and rust more quickly 2. Abrasive blades produce hot metal filings that embed in the paint and cause rust marks on the face of the panel. If saw cutting cannot be avoided, select a carbide-tipped blade specially designed for cutting light-gage ferrous metal panels. These blades are now available at many home centers and lumber yards. 1. All saw cut panels must be turned face down and cut in a location down-wind and well away from the building and other panels to avoid embedment of metal filings on other panels 2. All saw cut panels must be thoroughly wiped to ensure the removal of all metal filings. Pre-drilling wall panels gives uniform alignment of screw rows. **BE SURE TO REMOVE ANY FILINGS ONCE PANELS ARE INSTALLED TO AVOID RUST MARKS FROM THE FILINGS.**

Building Maintenance

A metal roof should be inspected annually and cleaned as necessary to maintain its beauty and performance. Any debris or residue, including leaves, twigs, and dust should be cleaned off promptly to prevent moisture entrapment against the metal, which may lead to finish deterioration or premature corrosion. Flashings may need to be re-sealed periodically in order to maintain optimum weathertightness.

Proper Storage

Store metal panels indoors when possible; if outdoors, cover and elevate. Elevate one side higher for water drainage. Never cover in plastic; us a tarp that can breath. Allow for air circulation. If a bundle gets wet, break bands and separate sheets; allow sheets to dry completely and only restack if completely dry. Product should be stored for a maximum of 2-4 weeks before being installed.

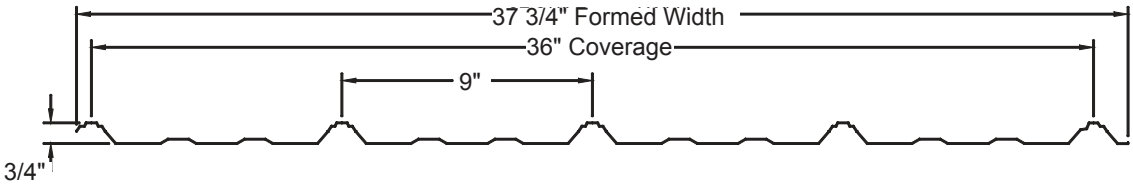
Spray Foam Insulation

When insulating metal with spray foam insulation, the first application layer should be getting the insulation behind all framing members. When completing the insulation, ensure the spray foam is installed in 2" thick layers (maximum) until desired thickness is achieved.

STEEL PANELS

Grandrib 3®





SCREW PATTERNS

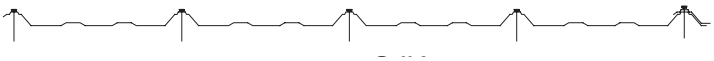


Intermediate Roof Purlins and All Siding

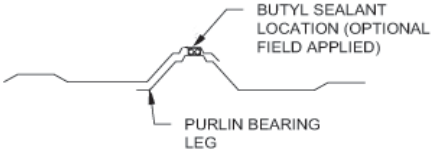


Eaves and Endlaps - Roof Purlins

NAIL PATTERNS



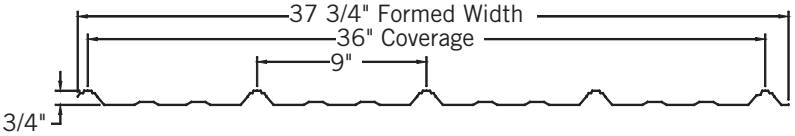
All Supports



80 screws per square or 1 pound of nails per square
See page 11 for a load table

TrustiRib™





NAIL PATTERNS

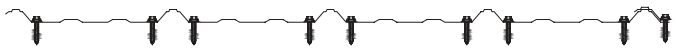


All Supports

SCREW PATTERNS



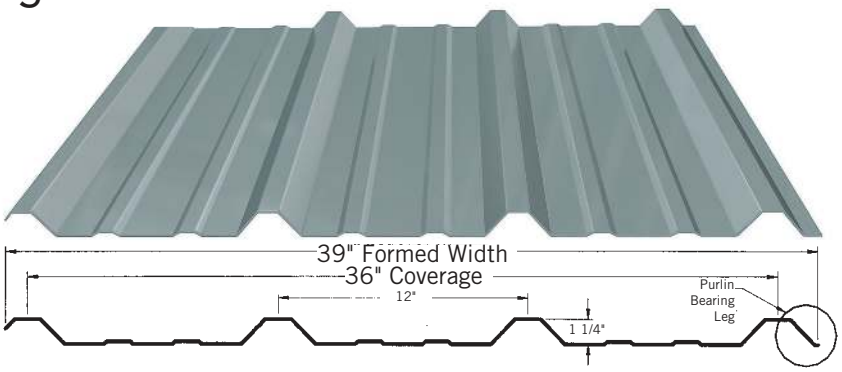
Intermediate Roof Purlins and All Siding



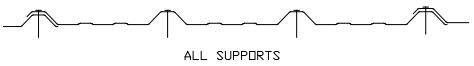
Eaves and Endlaps - Roof Purlins

Not all profiles are available in all areas. Please contact Fabral for availability

Mighti-Rib®



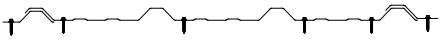
NAIL PATTERN



SCREW PATTERN



ROOFING - EAVES, RIDGES AND ENDLAPS

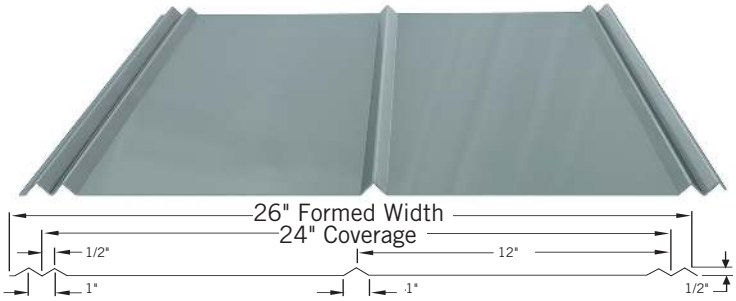


ROOFING - INTERMEDIATE SUPPORTS
SIDING - ALL SUPPORTS

Please see Mighti-Rib specific trims on page 20

5V Crimp

USE ON SOLID DECKING



NAIL PATTERN



ROOFING - EAVES, RIDGES, AND ENDLAPS

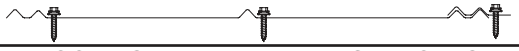


ROOFING - INTERMEDIATE SUPPORTS

SCREW PATTERN

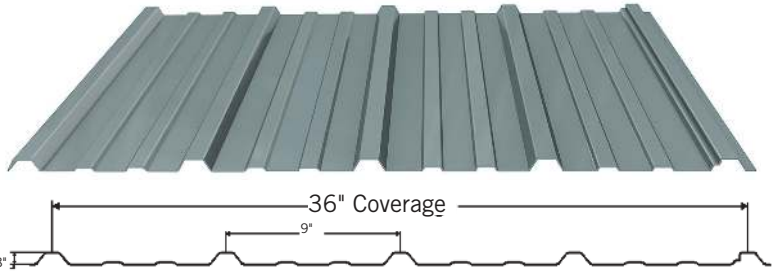


ROOFING - EAVES, RIDGES, AND ENDLAPS



ROOFING - INTERMEDIATE SUPPORTS
SIDING - ALL SUPPORTS

ProClad



Sidelap Detail



SCREW PATTERNS

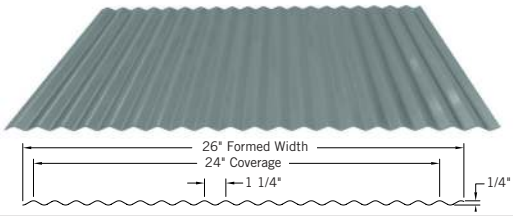


Intermediate Roof Purlins and All Siding

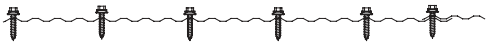


Eaves and Endlaps - Roof Purlins

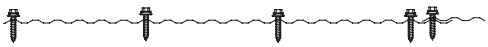
1 1/4" Corrugated



SCREW PATTERN



ROOFING - EAVES, RIDGES, AND ENDLAPS

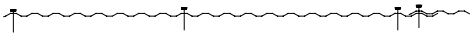


ROOFING - INTERMEDIATE SUPPORTS
SIDING - ALL SUPPORTS

NAIL PATTERN

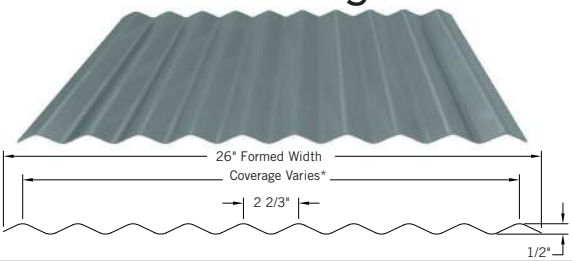


ROOFING - EAVES, RIDGES, AND ENDLAPS



ROOFING - INTERMEDIATE SUPPORTS
SIDING - ALL SUPPORTS

2 1/2" Corrugated



SCREW PATTERN

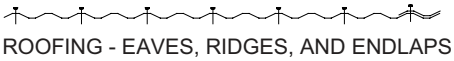


ROOFING - EAVES, RIDGES, AND ENDLAPS



ROOFING - INTERMEDIATE SUPPORTS
SIDING - ALL SUPPORTS

NAIL PATTERN



ROOFING - EAVES, RIDGES, AND ENDLAPS



ROOFING - INTERMEDIATE SUPPORTS



SIDING - ALL SUPPORTS

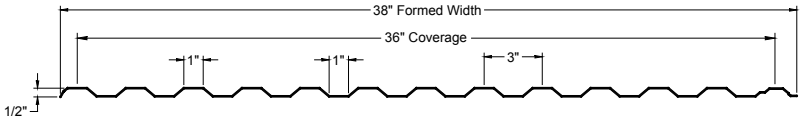
Note: Roofing panels require side caps cover two corrugations.

* Wall application- 24" coverage with 1 rib overlap Roof application- 21 1/3" coverage with 2 rib overlap

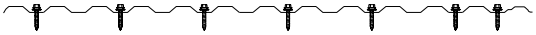
Not all profiles are available in all areas. Please contact Fabral for availability

Prime Rib®



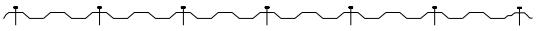


SCREW PATTERN



ALL SUPPORTS

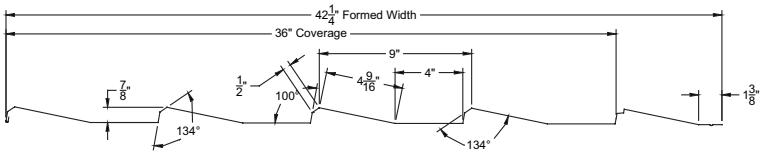
NAIL PATTERN



ALL SUPPORTS

Grandbeam®





STANDARD FASTENER LOCATIONS



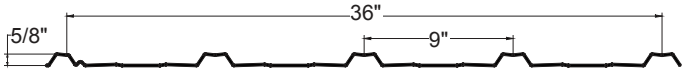
FASTENER LOCATION AT GABLE ENDS



Note: Grandbeam has panel specific flashings available

StrongClad®





SCREW PATTERN



Intermediate Roof Purlins and All Siding



Eaves and Endlaps- Roof Purlins

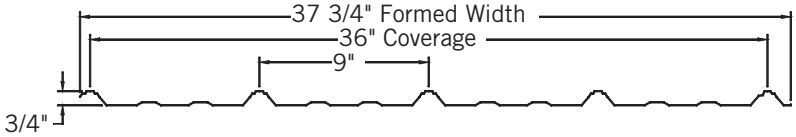
Not all profiles are available in all areas. Please contact Fabral for availability

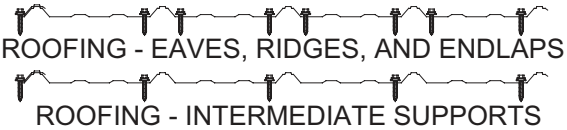
ALUMINUM PANELS

Grandrib 3®

Recommended as a Liner Panel only

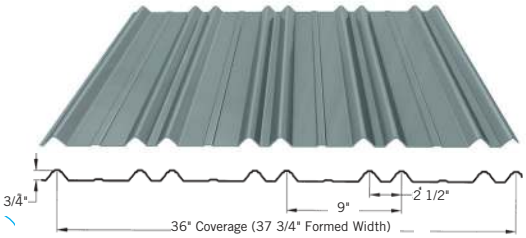


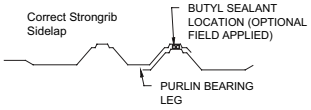


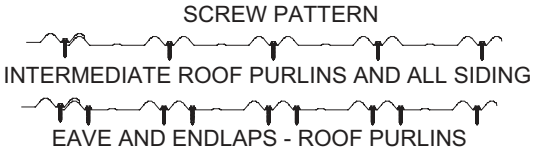


Strongrib®

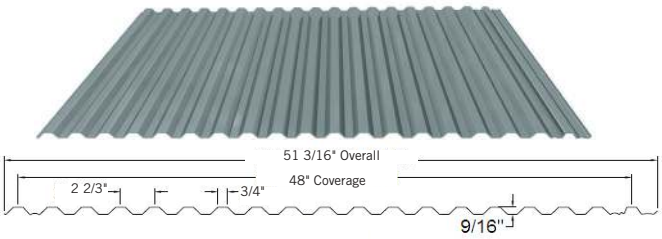
.018 Aluminum, Plain and Painted White







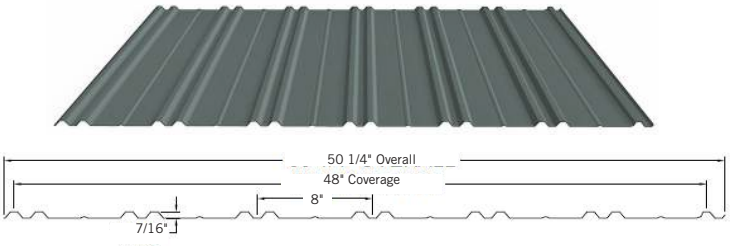
Fabrib®

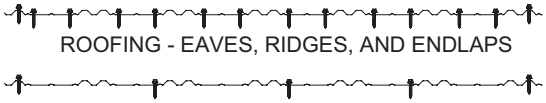




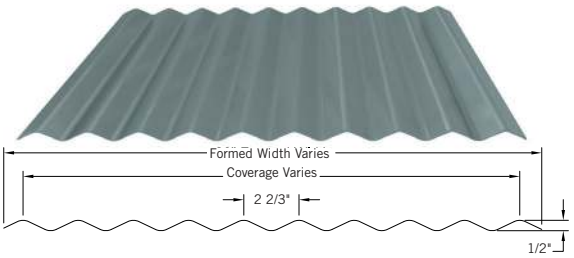
AluTwin

Other widths available





2 1/2" Corrugated





Not all profiles are available in all areas. Please contact Fabral for availability

Lengths greater than 16' on aluminum panels are not recommended due to expansion and contraction.

ESTIMATING & ROOF TYPES

Estimating Metal Roofing, Siding & Flashings

Panel lengths are to be determined by the truss top chord or actual field measurements. Remember to add for overhangs at the eaves; subtract for a gap at the ridge. Siding should be kept up away from the ground with a skirt board.

Number of Panels

The coverage of the panel being used will determine the number of panels at a length (i.e., 3' coverage panel on a 30 ft. long building would require 10 panels on each side of the ridge or 20 panels at the particular length).

Horizontal Measurement to a Roof

Divide the building width in half, then multiply by the slope factor (i.e., 40' wide building with 4/12 slope. 40 divided by 2 equals 20' times 1.054 equals 21'-1" in slope dimension). Allow for 1/2" to 1" gap at peak and 1" to 2" eave overhang.

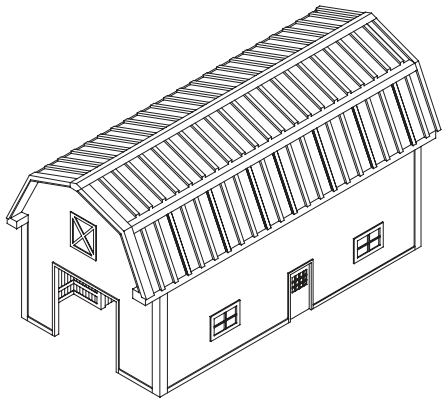
Roof Pitch	Slope Factor
3/12	1.031
4/12	1.054
5/12	1.083
6/12	1.120
8/12	1.202
10/12	1.302
12/12	1.414

Flashing Conditions

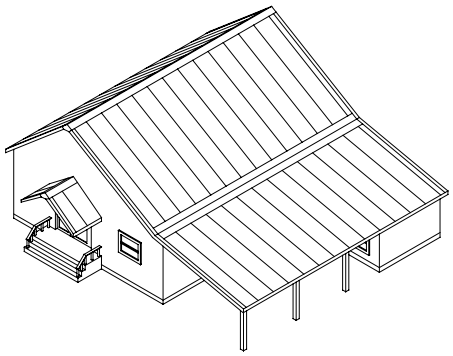
Roof - Eave, Ridge, Gable, Sidewall, Endwall, Valley, Hip, Transition, Gambrel, Soffits
Siding - Base Perimeter, Corners, Inside Corners, Man Doors, Windows, Sliding Doors, Overhead Doors

Please contact Fabral's Engineering Department for all your estimating & specification needs.

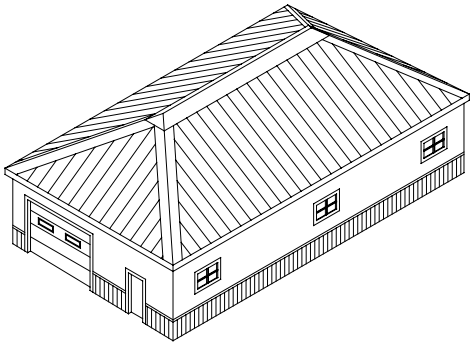
800.477.2741
717.735.1257 Fax



Gambrel Roof



Transition Roof



Hip Roof

LOAD TABLES & TESTING

GRANDRIB 3®

Load-Span Tables For 29 Gauge Grandrib 3®

Allowable Wind Uplift Loads (psf)

		Spacing of Fastener Rows					
Substrate	Fastener	9"	12"	15"	18"	21"	24"
3/4" Plywood	#14 Woodtite	275.6	206.7	165.4	137.8	118.1	103.4
5/8" Plywood	#14 Woodtite	160	120	96	80	68.6	60
1/2" Plywood	#14 Woodtite	135.9	101.9	81.5	67.9	58.2	51.0
23/32" OSB	#14 Woodtite	115.9	86.9	69.5	57.9	49.7	43.5
19/32" OSB	#14 Woodtite	100.7	75.5	60.4	50.3	43.1	37.8
7/16" OSB	#14 Woodtite	61.5	46.1	36.9	30.7	26.3	23.1
Solid 2x SPF	#14 Woodtite	293	220.0	176.0	146.7	125.7	110.0
Solid 1x Pine	#14 Woodtite	207.1	155.3	124.2	103.5	88.7	77.7
Solid 2x SPF	#10 WoodTite HLX	303.56	227.67	182.13	151.78	130.10	113.83
Solid 1x Pine	#10 WoodTite HLX	184.89	138.67	110.93	92.44	79.24	69.33
	Screws per Square	190	150	120	100	90	80

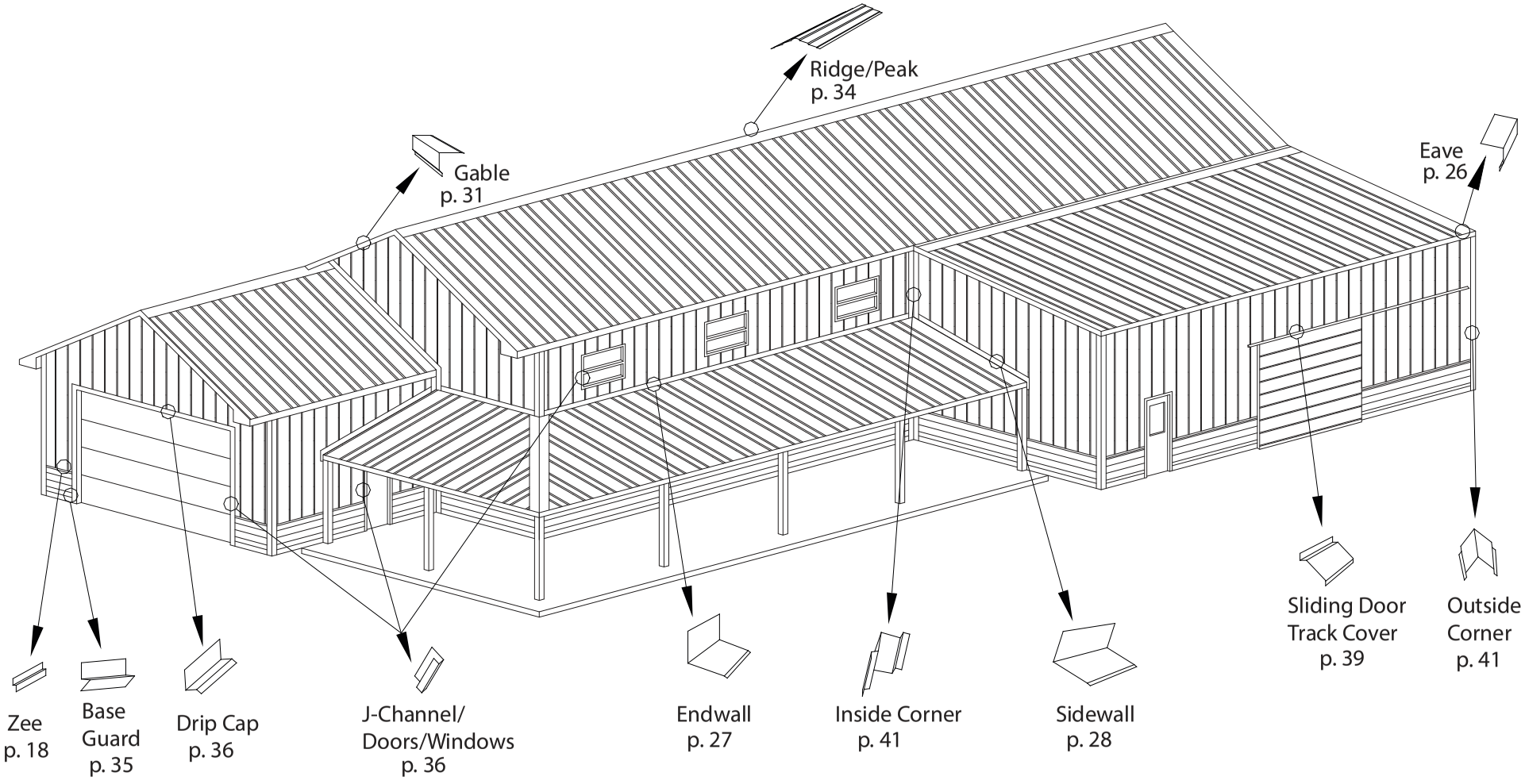
The Above Loads and fastener quantities are based on the standard fasening schedule shown on page 6 of this book, with the fastener having an embedment depth of 1” into the solid wood or penetrating the plywood or OSB. Contact FABRAL for additional design information on our products.

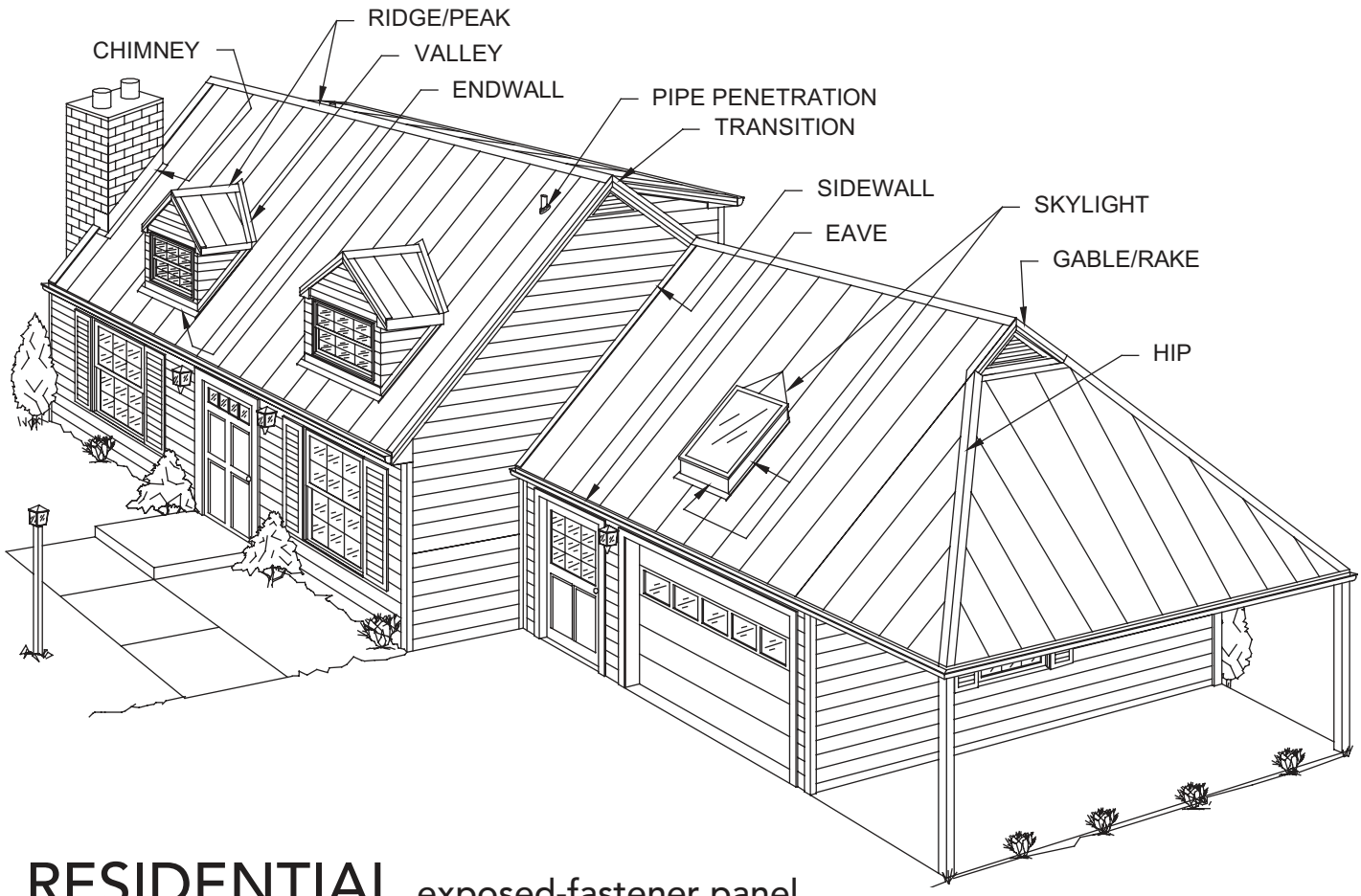
UL RATINGS

UL790 Class A Fire Rating applies to all Steel panels 29 ga and thicker and all Aluminum panels .032" and thicker.

UL2218 Class 4 Hail Impact Rating applies to all Steel panels 29 ga and thicker and all Aluminum panels .032" and thicker.

POST FRAME
BUILDING DETAILS





RESIDENTIAL exposed-fastener panel

BUILDING DETAILS

1. Determine the thickness and type of substrate to be used to support the metal roofing. *Solid decking is highly recommended for all residential applications (i.e., plywood, OSB).*

2. Refer to the Load-Span tables to select the proper fastener and spacing to meet loads on your structure. *Nails are NOT recommended for residential applications.*

3. Consult local building codes and restrictions to determine acceptable methods of construction for residential applications in your area.

4. Solid decking with 30# felt or synthetic underlayment for residential applications is recommended. Ice & water shield or similar self-adhesive membrane is recommended at all valleys, dormers, chimneys, transitions, skylights and other critical areas.

5. When re-roofing with metal panels over an existing shingle roof, metal panels may be installed directly over shingles with underlayment, or 2x4 purlins or 1x4 furring strips.

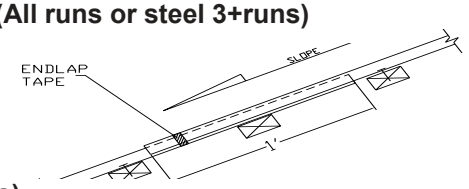
6. Zip board sheathing, which has a "built in" vapor barrier, is an acceptable substrate and vapor barrier.

7. Request Fabral's technical bulletins #720 and #721 for more details on residential roofing.

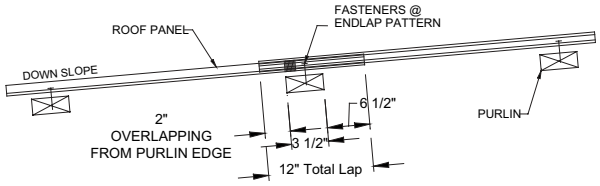
POST FRAME FLASHING DETAILS
ENDLAP & RAIN CARRYING TABLES

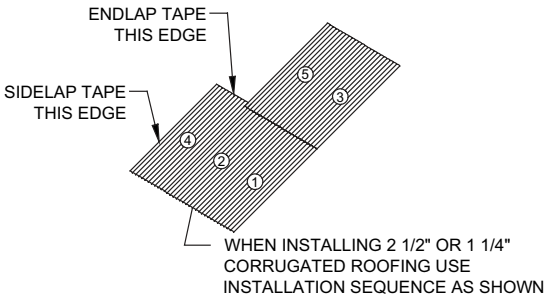
1. Apply 3/32" x 1/2" butyl endlap sealant on bottom panel just below centerline of purlin (see endlap diagram for location) on panel #1.
2. Apply sidelap sealant on panel #1 and connect to endlap sealant.
3. Place panel #2 so it overlaps panel #1, 12" as shown. Install screws per endlap fastening pattern.
4. Apply sidelap sealant on panel #2 to connect sidelap sealant of panel #1.
5. Place panel #3 over sidelap of #1 and #2.
6. Apply endlap sealant on panel #3.
7. Apply sidelap sealant on panel #3 and connect with endlap sealant.
8. Place panel #4 over endlap of panel #3. Install screws per endlap pattern.
9. Repeat sequence for entire roof.

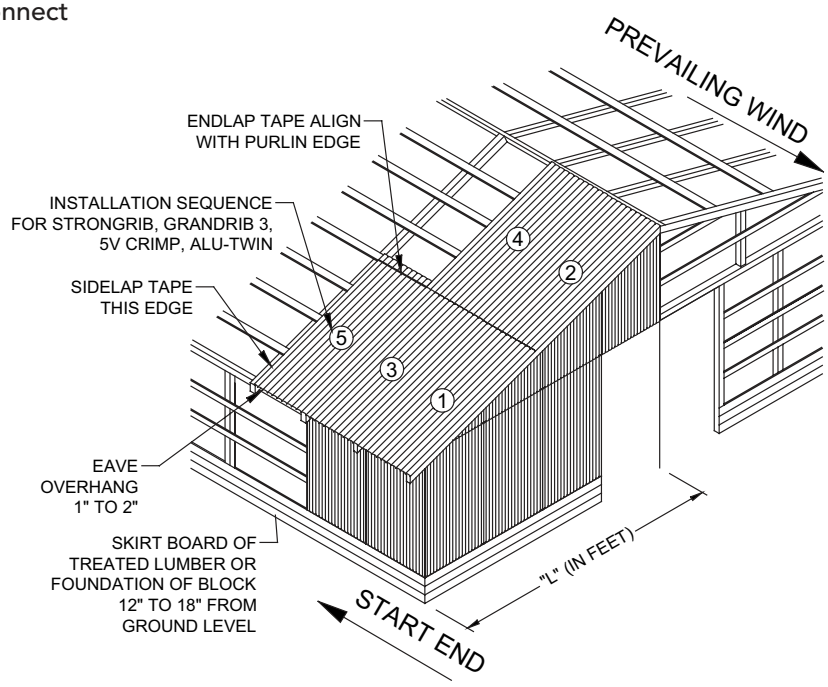
ALUMINUM (All runs or steel 3+runs)



STEEL (2 runs)







ALLOWABLE PANEL LENGTHS (ft.) ALONG THE SLOPE FOR 4" RAINFALL PER HOUR

Panel Name	Minimum Slope	Roof Slope					
		2 1/2:12	3:12	3 1/2:12	4:12	5:12	6:12
Grandrib 3	2 1/2:12	58	61	64	67	73	78
Prime Rib	2 1/2:12	39	41	43	45	49	53
5V	2 1/2:12	43	45	47	49	54	58
2 1/2" Corrugated	2 1/2:12	28	29	31	32	35	38
1 1/4" Corrugated	2 1/2:12	16	16	17	18	20	21
Alutwin	2 1/2:12	37	39	41	43	46	50
Fabrib	2 1/2:12	32	34	36	38	41	44

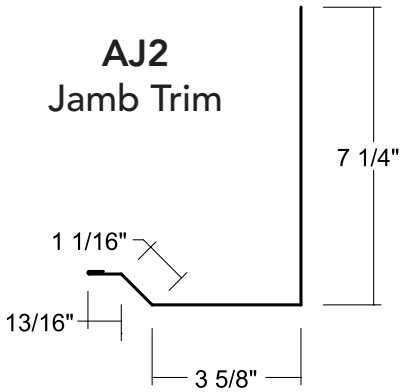
Notes For Rain-Carrying Tables

1. All values based on a 1-hour duration storm of 4"/hr. intensity.
2. Values represent the point at which the panel ribs will flood.
3. Size and frequency of penetrations can greatly reduce the amount of water removed from a roof.
4. All panel endlaps must be caulked.
5. When weather-tightness is crtical, use sealant tape in all sidelaps.

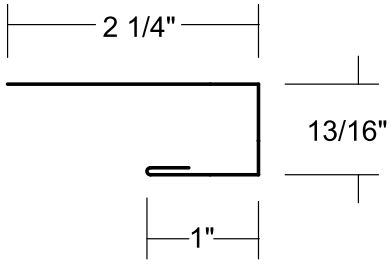
STANDARD POST FRAME

FLASHINGS & TRIMS

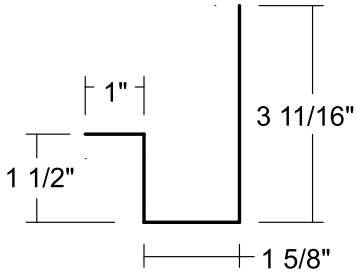
All flashing is 10' 6" in length & available in steel & aluminum, unless otherwise noted.
Please contact Fabral for specifics on the trim available in your area.



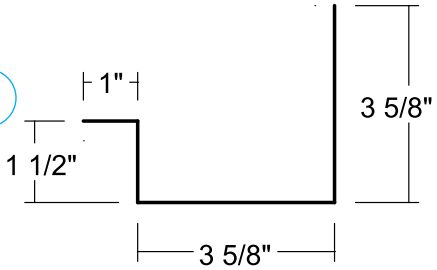
AJ2
Jamb Trim



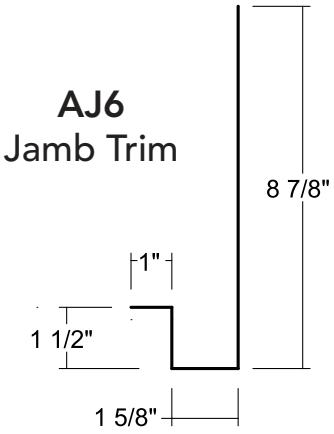
AJ3
J Channel



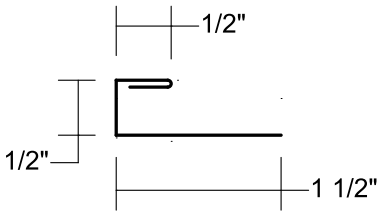
AJ4
Jamb Trim



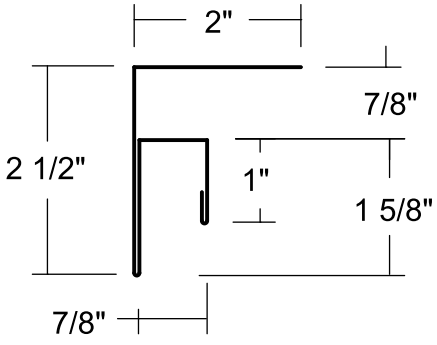
AJ5
Jamb Trim



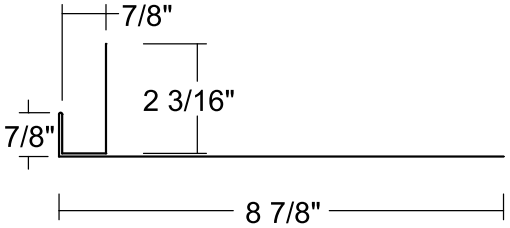
AJ6
Jamb Trim



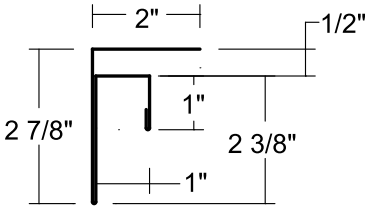
RJ8
J Channel



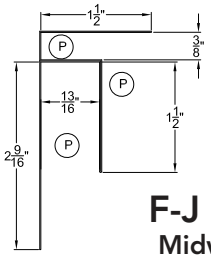
#45 Liner Channel
F-J Trim



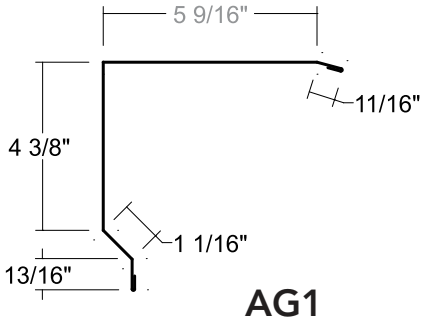
PJFB
One Piece Door Trim



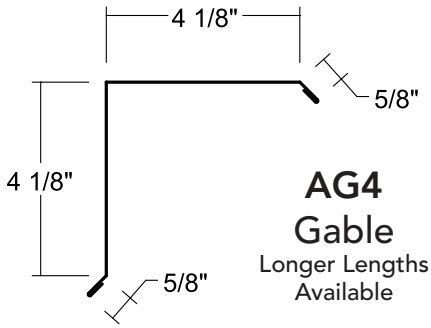
RJ9
F-J Trim



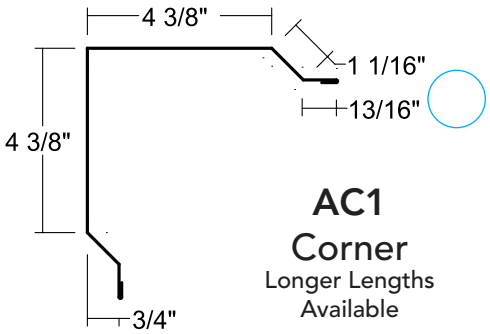
F-J 10 Trim
Midwest Only



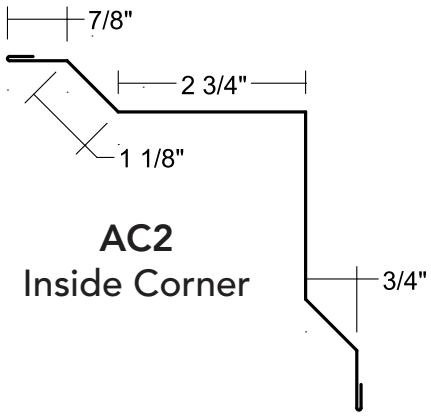
AG1
Gable/Rake



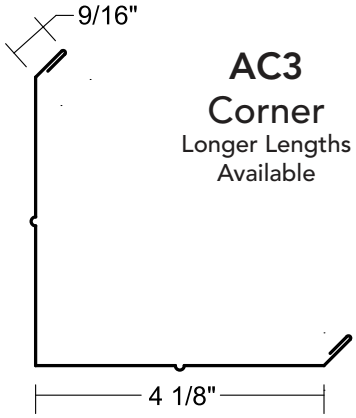
AG4
Gable
Longer Lengths Available



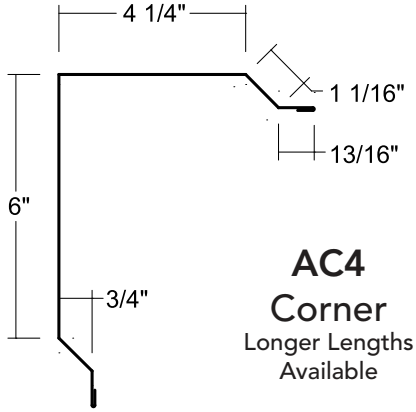
AC1
Corner
Longer Lengths Available



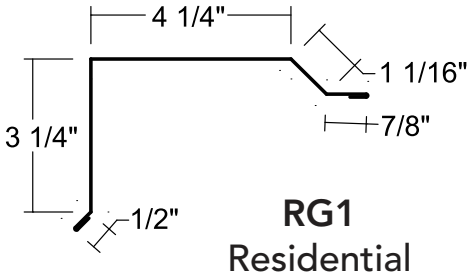
AC2
Inside Corner



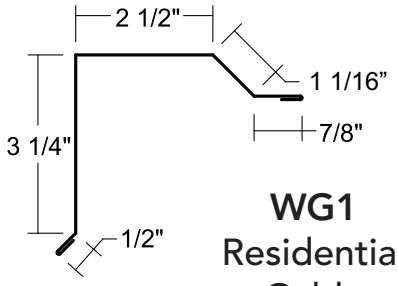
AC3
Corner
Longer Lengths Available



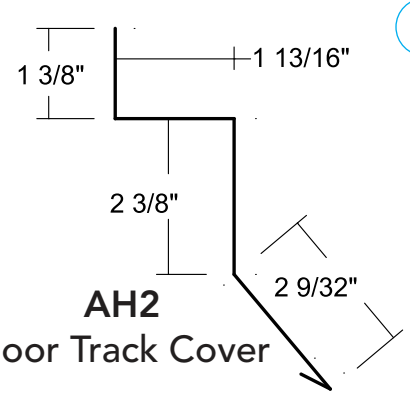
AC4
Corner
Longer Lengths Available



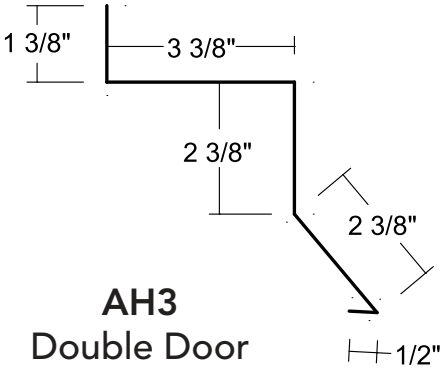
RG1
Residential Gable
Longer Lengths Available



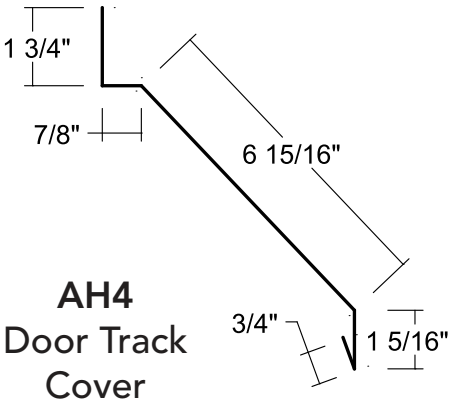
WG1
Residential Gable
Longer Lengths Available



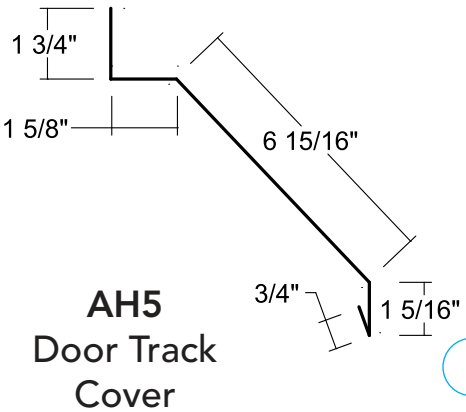
AH2
Door Track Cover



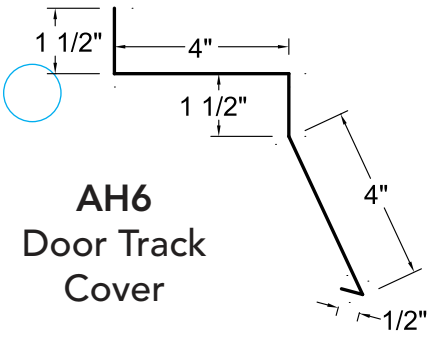
AH3
Double Door Track Cover



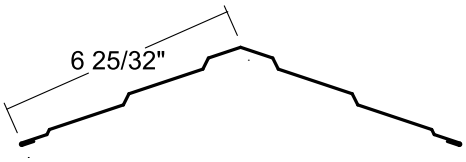
AH4
Door Track Cover



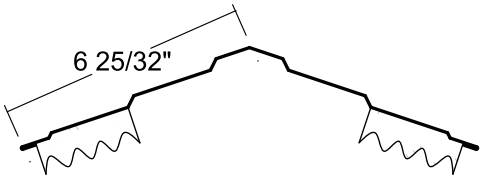
AH5
Door Track Cover



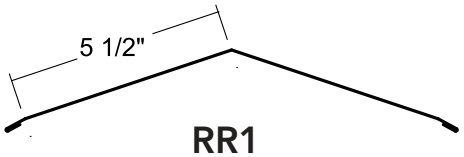
AH6
Door Track
Cover



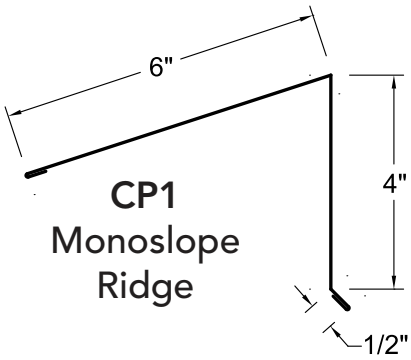
AR3
Ridge Cap



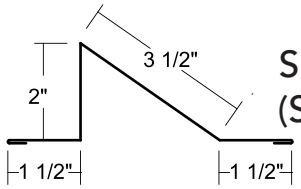
AR3 w/ Versavent RX-10
Ridge Cap



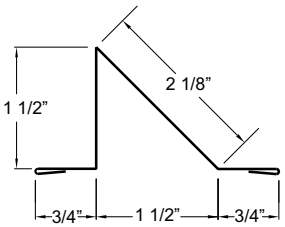
RR1
Universal
Ridge/Hip
Flash



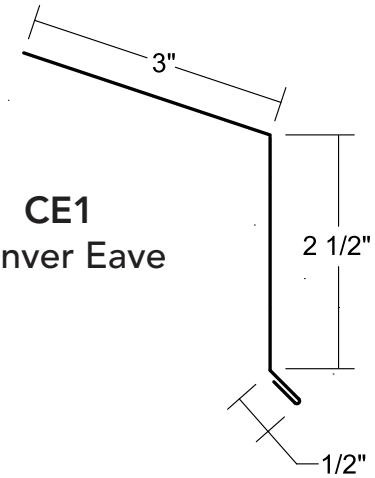
CP1
Monoslope
Ridge



SB
Snow Break
(Solid Deck)

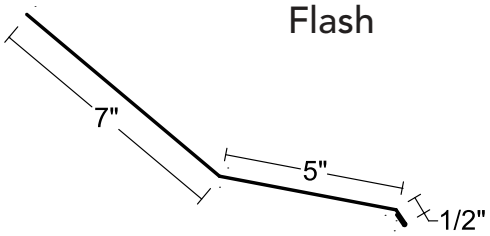


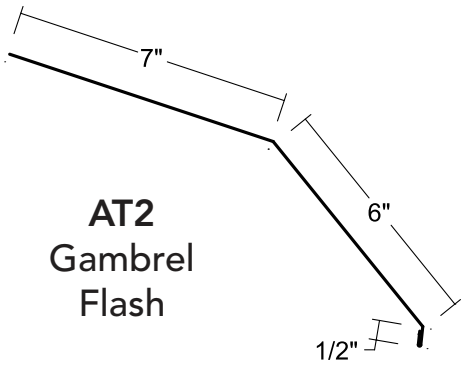
SB1
Snow Break
(2x4 Purlins)



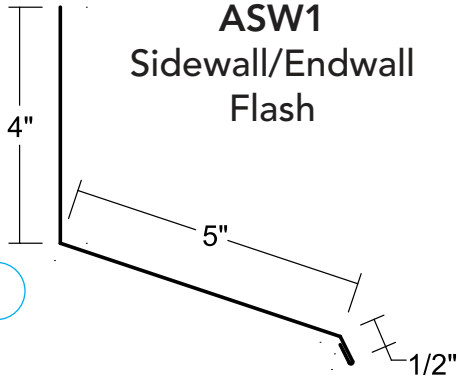
CE1
Denver Eave

AT1
Transition
Flash

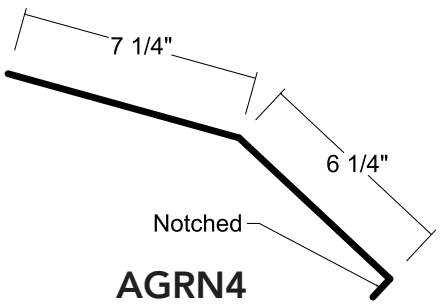




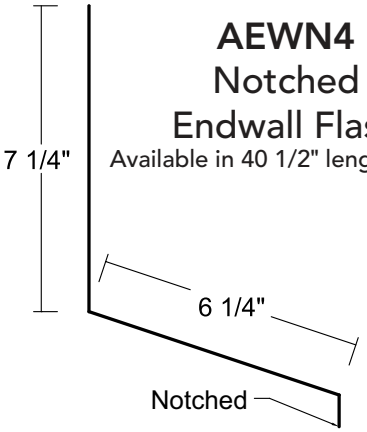
AT2
Gambrel
Flash



ASW1
Sidewall/Endwall
Flash



AGRN4
Notched
Gambrel Flash
Available in 40 1/2" length only

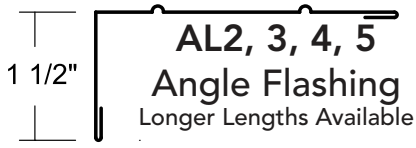


AEWN4
Notched
Endwall Flash
Available in 40 1/2" length only

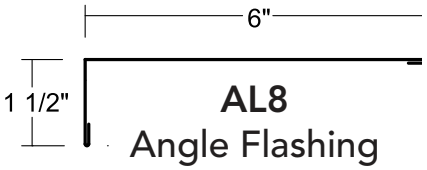
POST FRAME FLASHINGS & TRIMS

*Other sizes are available upon request

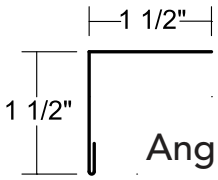
AL2= 3 1/2"
AL3= 5 1/2"
AL4= 7 1/4"
AL5= 9 1/4"



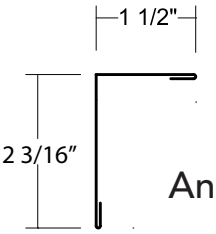
AL2, 3, 4, 5
Angle Flashing
Longer Lengths Available



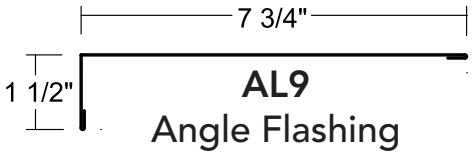
AL8
Angle Flashing



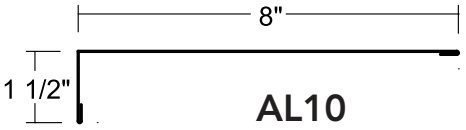
AL6
Angle Flashing



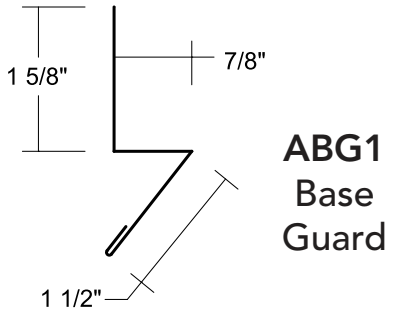
AL7
Angle Flashing



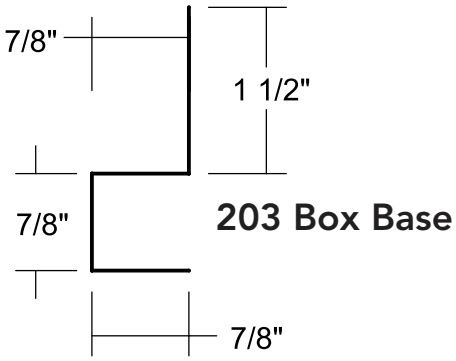
AL9
Angle Flashing



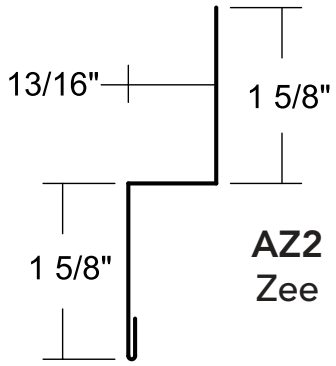
AL10
Angle Flashing



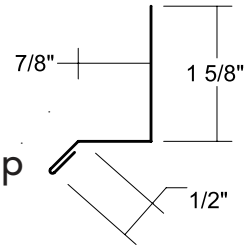
ABG1
Base
Guard



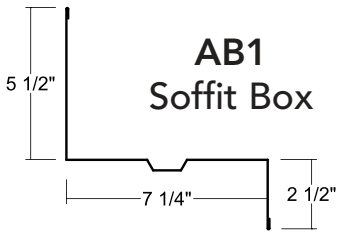
203 Box Base



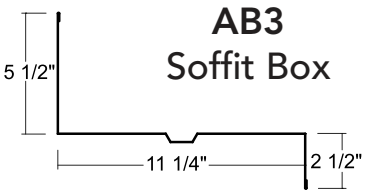
AZ2
Zee



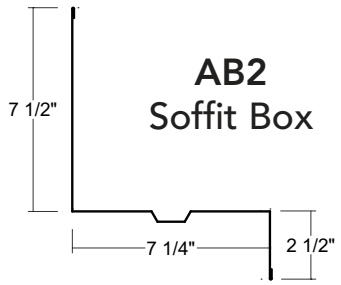
AD1
Drip Cap



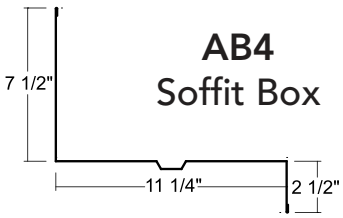
AB1
Soffit Box



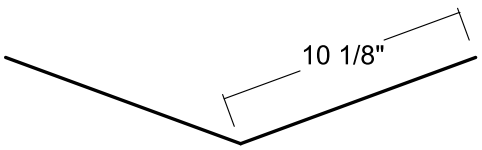
AB3
Soffit Box



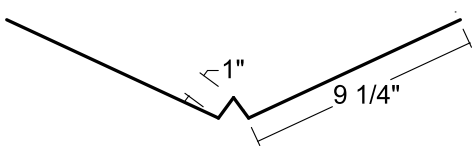
AB2
Soffit Box



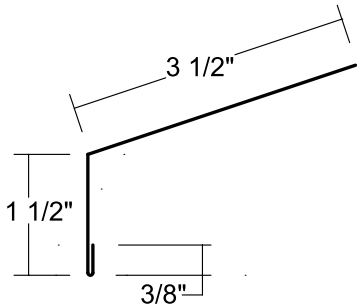
AB4
Soffit Box



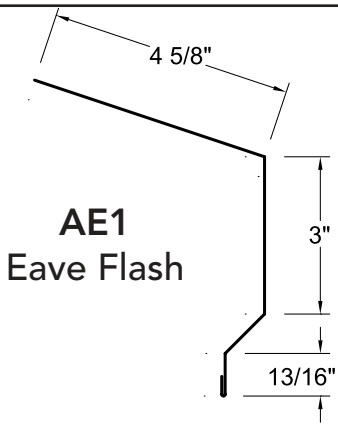
RV1
Valley Flash



RV2
W-Valley Flash



RE1
Residential Eave

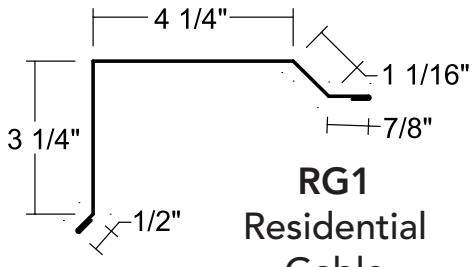


AE1
Eave Flash

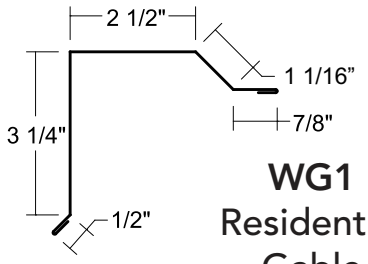
STANDARD RESIDENTIAL exposed-fastener panel

FLASHINGS & TRIMS

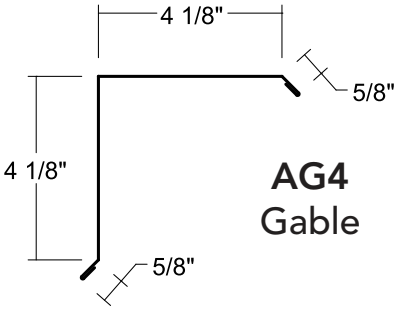
All flashing is 10' 6" in length & available in steel & aluminum, unless otherwise noted.
Please contact Fabral for specifics on the trim available in your area.



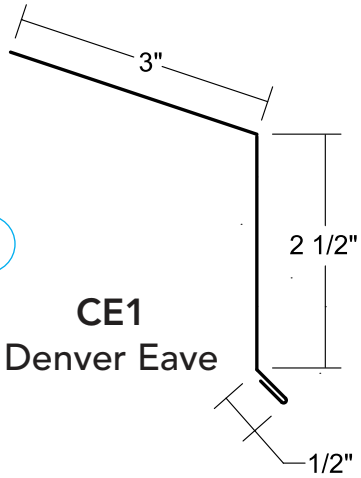
RG1
Residential Gable



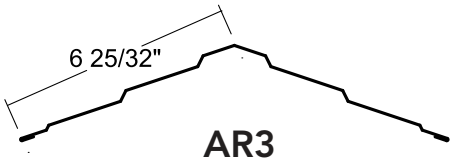
WG1
Residential Gable



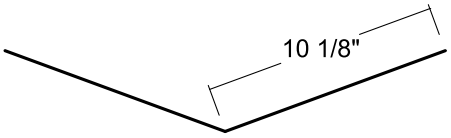
AG4
Gable



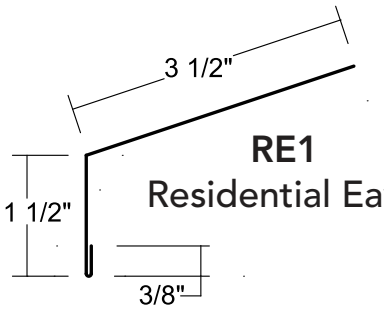
CE1
Denver Eave



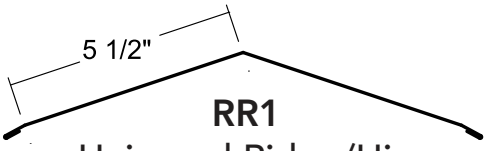
AR3
Ridge Cap



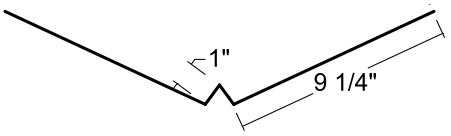
RV1
Valley Flash



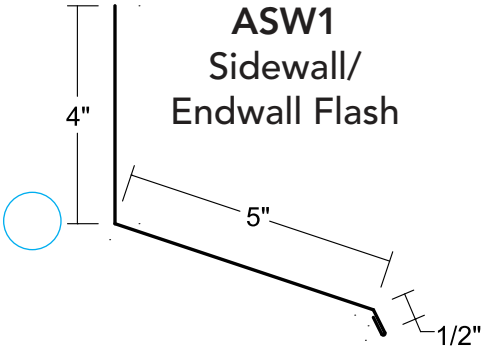
RE1
Residential Eave



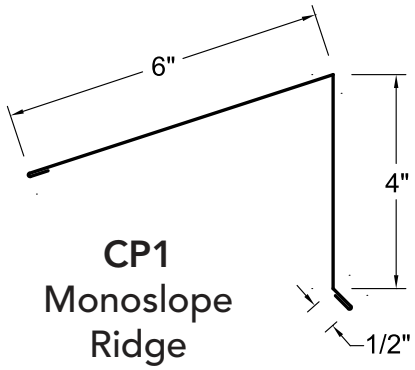
RR1
Universal Ridge/Hip Flash



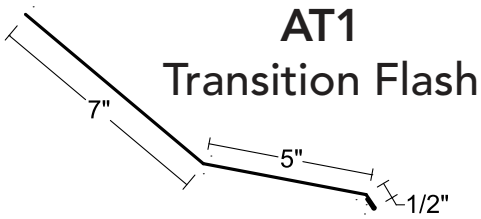
RV2
W-Valley Flash



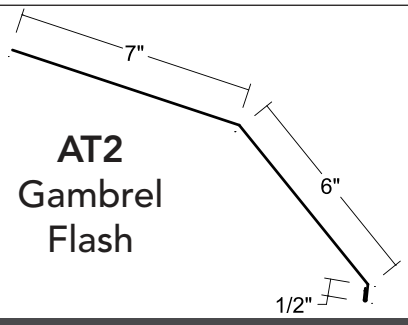
ASW1
Sidewall/ Endwall Flash



CP1
Monoslope Ridge



AT1
Transition Flash

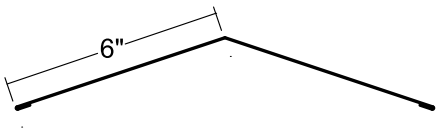


AT2
Gambrel Flash

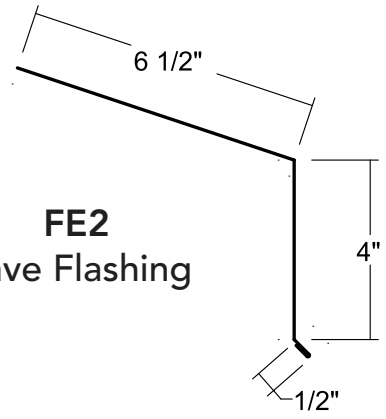
STANDARD MIGHTI-RIB®

FLASHINGS & TRIMS

All Mighti-Rib specific flashing is 10' 6" in length & available in steel, unless otherwise noted. Please contact Fabral for specifics on the trim available in your area.

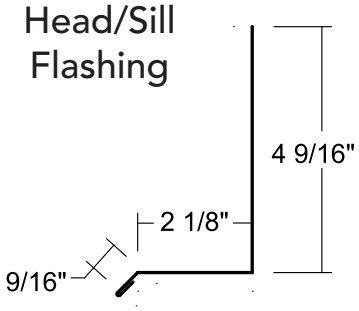


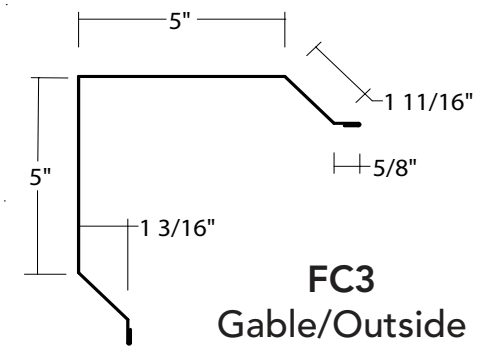
FR4
Ridge Cap



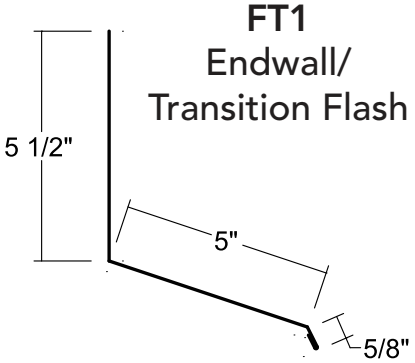
FE2
Eave Flashing

FH1
Head/Sill Flashing

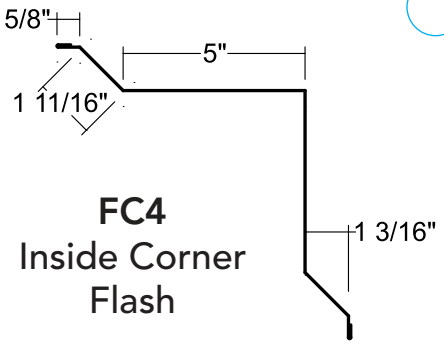




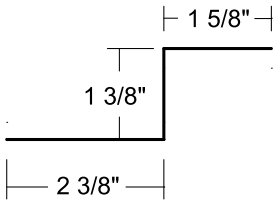
FC3
Gable/Outside Corner Flash



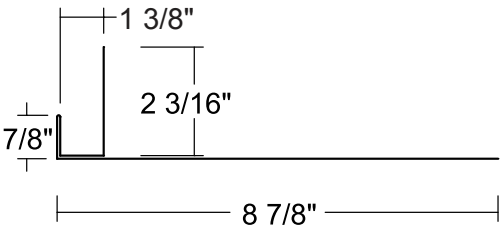
FT1
Endwall/ Transition Flash



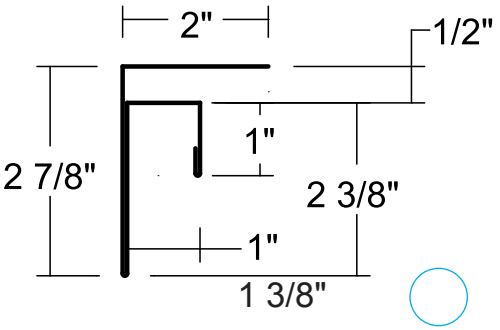
FC4
Inside Corner Flash



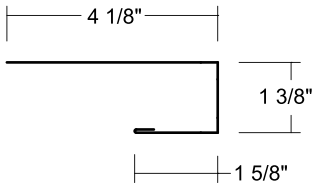
FZ4
Zee Flash



Modified PJFB Trim



Modified F-J Trim



FJ3
J Channel Flashing

GENERAL

NOTES

SYSTEM COMPONENTS

SNOW GUARDS

Exposed Fastener Panel	MINI	CLSM	CLSR	#640	#20	SM
Grandrib 3®	X		X	X		
Mighti-Rib®	X		X	X		
TrustiRib™	X		X	X		
5V Crimp	X	X	X	X		X
2 1/2" Corrugated					X	
ProClad	X		X	X		



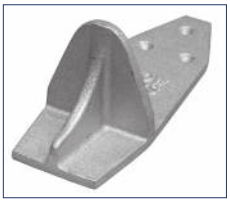
MINI Clear Snow Guard

- Available in premium polycarbonate plastic with UV stabilizers
- Provides maximum protection at a moderate price point
- Two-to-one base-to-blade ratio
- 4.5 sq.in. and gusseted blade snow pocket
- Typically installed by adhering to and mechanically fastened to the roofing panel



CL Snow Guard

- Available in premium polycarbonate plastic with UV stabilizers
- Unique vent rib systems allows for adhesive out gassing
- Three-to-one base-to-blade ratio adds significantly to strength



Snow Boss Snow Guards (#640)

- “Traditional Shape” solid cast aluminum
- Applied to the mid-panel on all standing, batten and flat seam roofs
- Typically installed by adhering to and mechanically fastened to the roofing panel
- Low profile protection, ideal for 1" x 2" purlins
- Non-Stock item, inquire for lead time

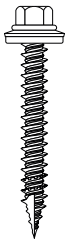


SM Snow Guard

- Available in cast aluminum
- Typically installed by adhering to and mechanically fastened to the roofing panel
- Very effective where there are no suitable seams
- Non-Stock item, inquire for lead time

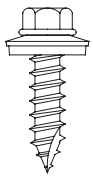
FASTENERS

For more information, review Fabral's installation manuals.



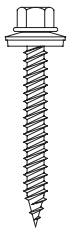
#10 WoodTite High Low

- Use with dimensional lumber
- Available in 1", 1 1/2", 2", 2 1/2" and 3"
- 1/4" hex head, EPDM/metal washer
- Oxyseal Long-Life Coating
- Plain or Painted
- 250/bag



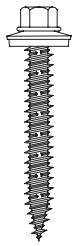
#14-10 WoodTite

- Use to fasten metal to plywood or OSB
- Use for trim attachment
- Available in 1", 1 1/2", and 2"
- 5/16" hex head, EPDM/metal washer
- Oxyseal Long-Life Coating
- Plain or Painted
- 250/bag



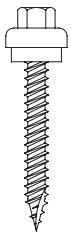
#10-16 302 Series Stainless Steel

- Use for high corrosive environments
- Use with ALUMINUM panels
- Available in 1", 1 1/2", and 2"
- 1/4" hex head, EPDM/metal washer
- Use with treated lumber
- Plain or Painted
- 250/bag



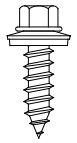
#10-14 410 Stainless Steel

- Use with 26 gauge or thinner to avoid pre-drilling
- NOT as corrosive resistant as the 300 Series
- Steel is harder than 300 Series
- Available in 1", 1 1/2", and 2"
- 1/4" hex head, EPDM/metal washer
- Use with steel panels installed on treated lumber
- Plain or Painted
- 250/bag



#10-14 Ultimate WoodTite

- Use with ALL panels
- Available in 1", 1 1/2", 2", 2 1/2" and 3"
- 1/4" case zinc hex head
- Hex head & washer all one piece
- Plain
- 250/bag



#12 x 3/4" Stitch Screw

- Used for attachment of trim to top of seam for screw flange panels
- Use with STEEL panels
- Used to stitch sidelaps for exposed fastener panels
- Used for miscellaneous metal to metal attachments
- 1/4" hex head, EPDM/metal washer
- Plain or Painted
- 250/bag

UNDERLAYMENT

30-Year Peel & Stick

PRODUCT SPECS:

- Watertight Self-Sealing Underlayment
- Asphalt-to-Asphalt Lap System
- Roll Size: 3' W x 72' L
- Minimum Thickness: 1.1mm
- Square Ft Per Roll: 200

50-Year Synthetic

PRODUCT SPECS:

- Installation requires mechanical fasteners
- Roll Size: 4' W x 250' L
- Minimum Thickness: .75mm
- Square Ft Per Roll: 1,000
- 36 rolls per pallet

CONDENSTOP®

Stop condensation with Fabral factory applied CondenStop. CondenStop saves time and money with reduced labor costs and installation time versus other condensation barriers. Easily and effectively prevent condensation and the problems caused by condensation by installing Fabral panels featuring CondenStop.

- Protects assets and investments from moisture
- Can be used in place of traditional vapor retarders
- Adds to interior corrosion protection
- Light gray color enhances the indoor look of an open framing structure roof
- Available for Grandrib 3 painted panel offerings

ACCESSORIES

VENTING & CLOSURES

Ridge Cap Vent Specifications:

- Venting factory applied to the ridge cap
- Save up to half of your installation time
- Non-profile specific material
- Clean, dust free installation
  Virtually NO WASTED material
- 1 1/2" x 3" material provides 17 sq. inches/lineal foot free area at the ridge

Available attached to ridge cap as RX-10 version and as X-10 version for field installation; not pre-applied to ridge cap

LP2 Closure Specifications:

- Available for Grandrib 3, Mighti-Rib, Horizon S, and Climaguard profiles
- LP2 Clousure Specifications
- Lower, custom-fit profile
- Moisture and pest barrier
- Non-obtrusive appearance
- Reduces utility costs
- One-person installation

Profile Fit Vent- Roll Specifications:

- Available for Grandrib 3 and 1 1/2" SSR profiles
- 10.66 sq. in. per lineal ft. of ridge (5.33 / side)

RV35 and RV100 Specifications:

- 10' long metal ridge vent
- Variety of colors available

TRANSLUCENT PANELS

Polycarbonate:

- Grandrib 3- Clear & White - 8', 10', 12'
  Mighti-Rib - Clear & White - 12'

PIPE BOOTS

EPDM Specifications:

- Colors: Gray and Black
- Up to 250^0 F

Silicon Specifications:

- Color: Orange
- Up to 450^0 F
- Ranging for pipe sizes from 1" to 13"
- Larger sizes available upon request

Pipe Sizes:

Base Diameter	Item No.	min	max
7 3/4"	3	1/4"	5"
10 3/4"	5	4 1/4"	7 1/2"
16 1/2"	8	7"	13"

*Retrofit boots also available, sizes may vary

FLAT SHEETS

Product Specifications:

- Used for field forming crickets around chimney, skylights, penetrations, and special flashing as necessary
- 29 gauge painted and plain galvanized
- Full width (40 13/16" x 10' 6")
- Grade 33 steel for better hemming, forming and flexibility for field forming

BACKER ROD

Product Specifications:

- Reduces the risk of oil canning
- Black foam with 5/8" diameter
- Available in individual boxes (two rolls at 775' each)
- Available in Midwest only

SEALANT & SEALER STRIP

Sealant Specifications:

- Waterproof sealant to fill gaps up to 1"
- UV-resistant
- Permanent flexibility - won't crack
- Standard color: gray (stocked)
- Up to 50 additional color options (non stocked)

Sealant Tape Specifications:

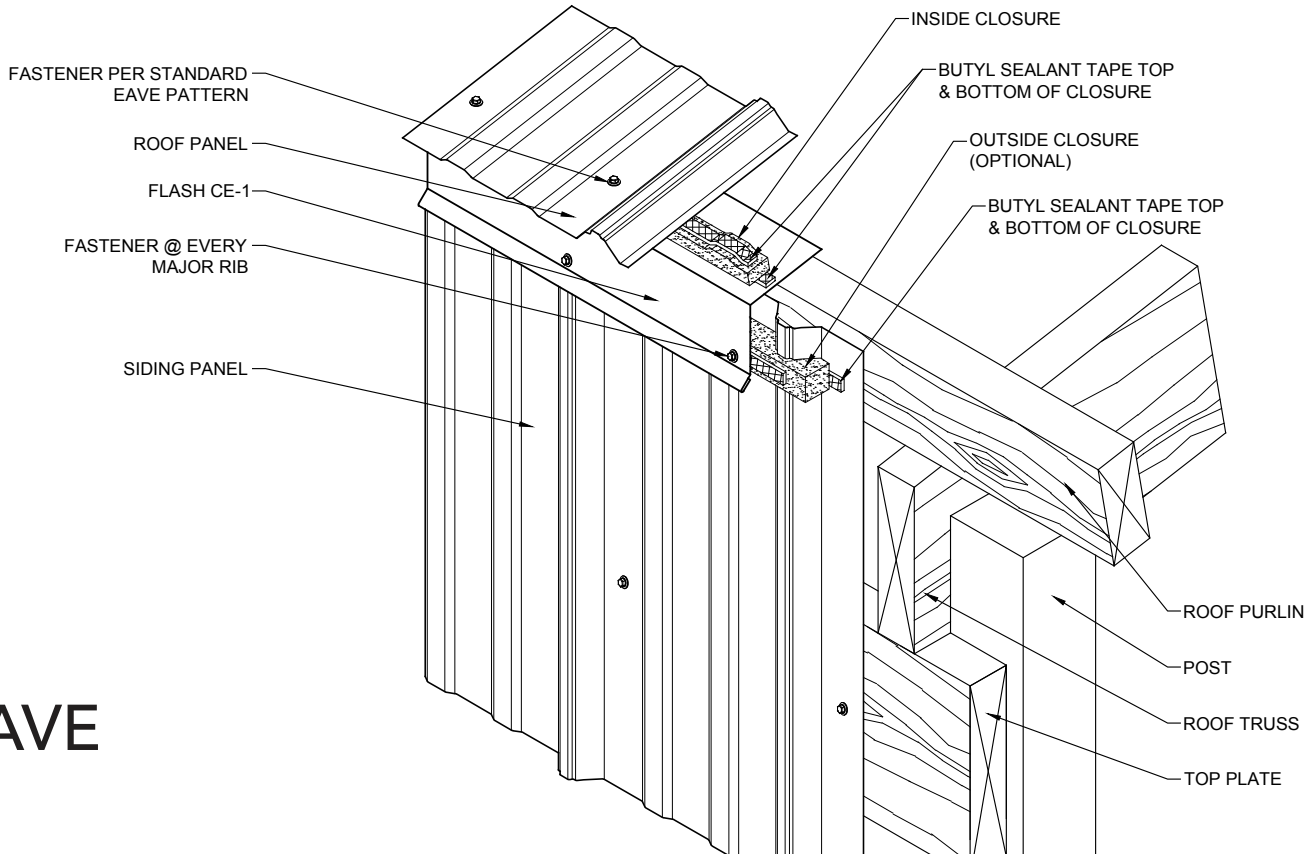
- 3/16" x 1/4" x 40' (side-lap)
- 3/32" x 1/2" x 50' (endlap)
- 1/8" x 2" x 30'

Asphalt Impregnated Sealer Strip Specifications:

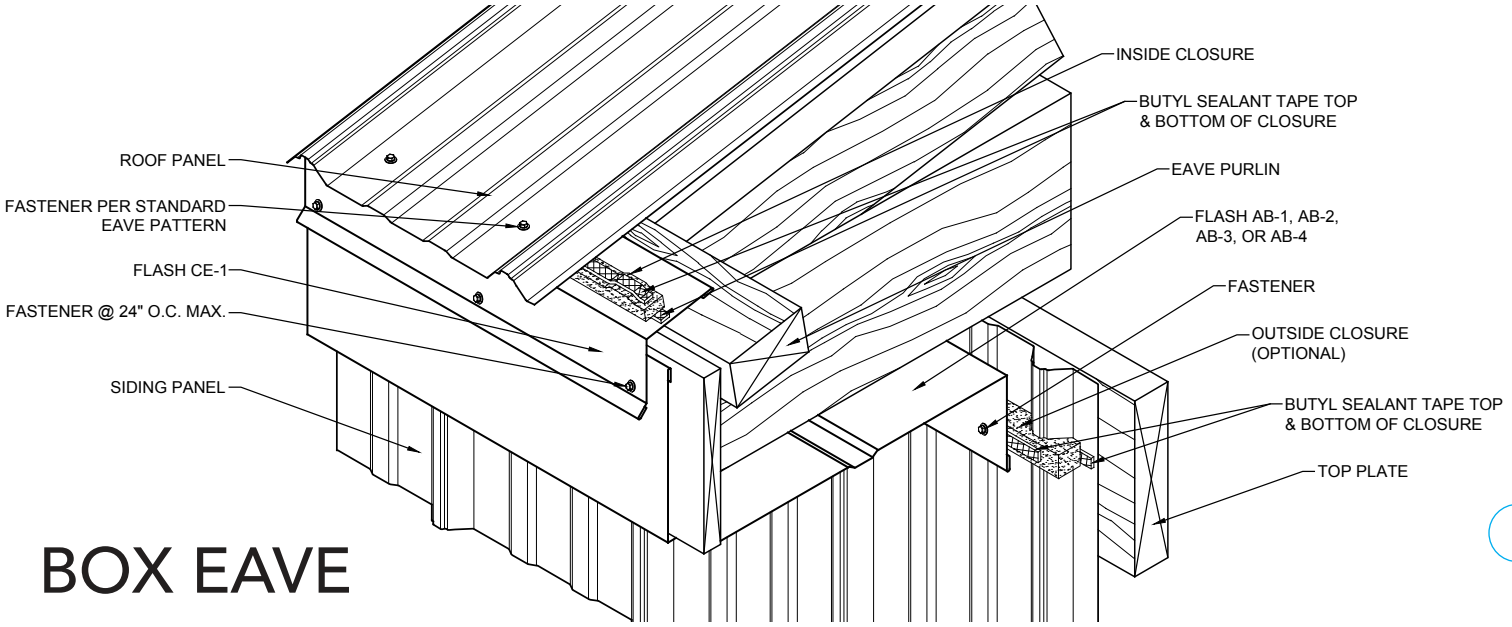
- Use at valleys and hips
- 1" x 1" x 19' 6.8" long

POST FRAME

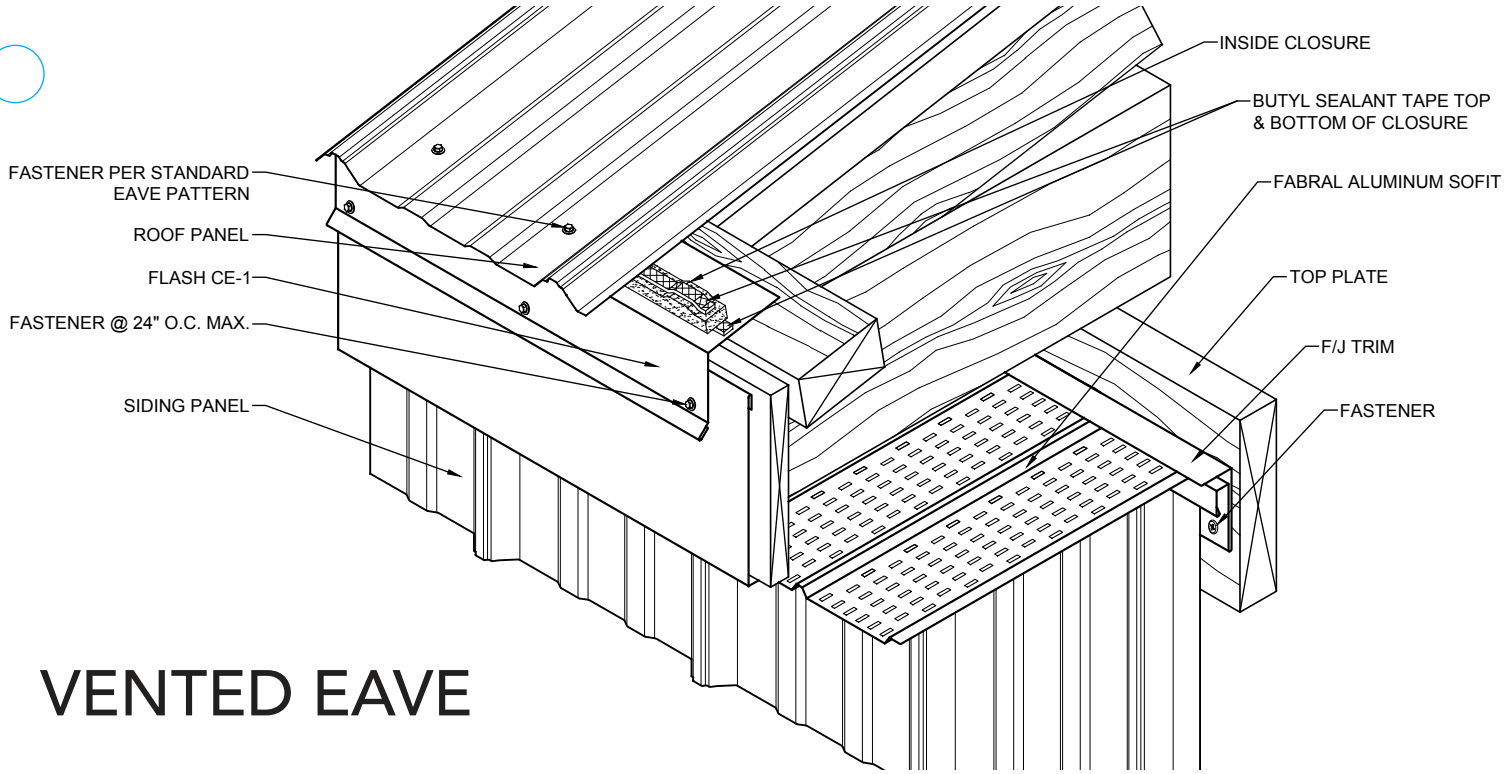
TRIM DETAILS



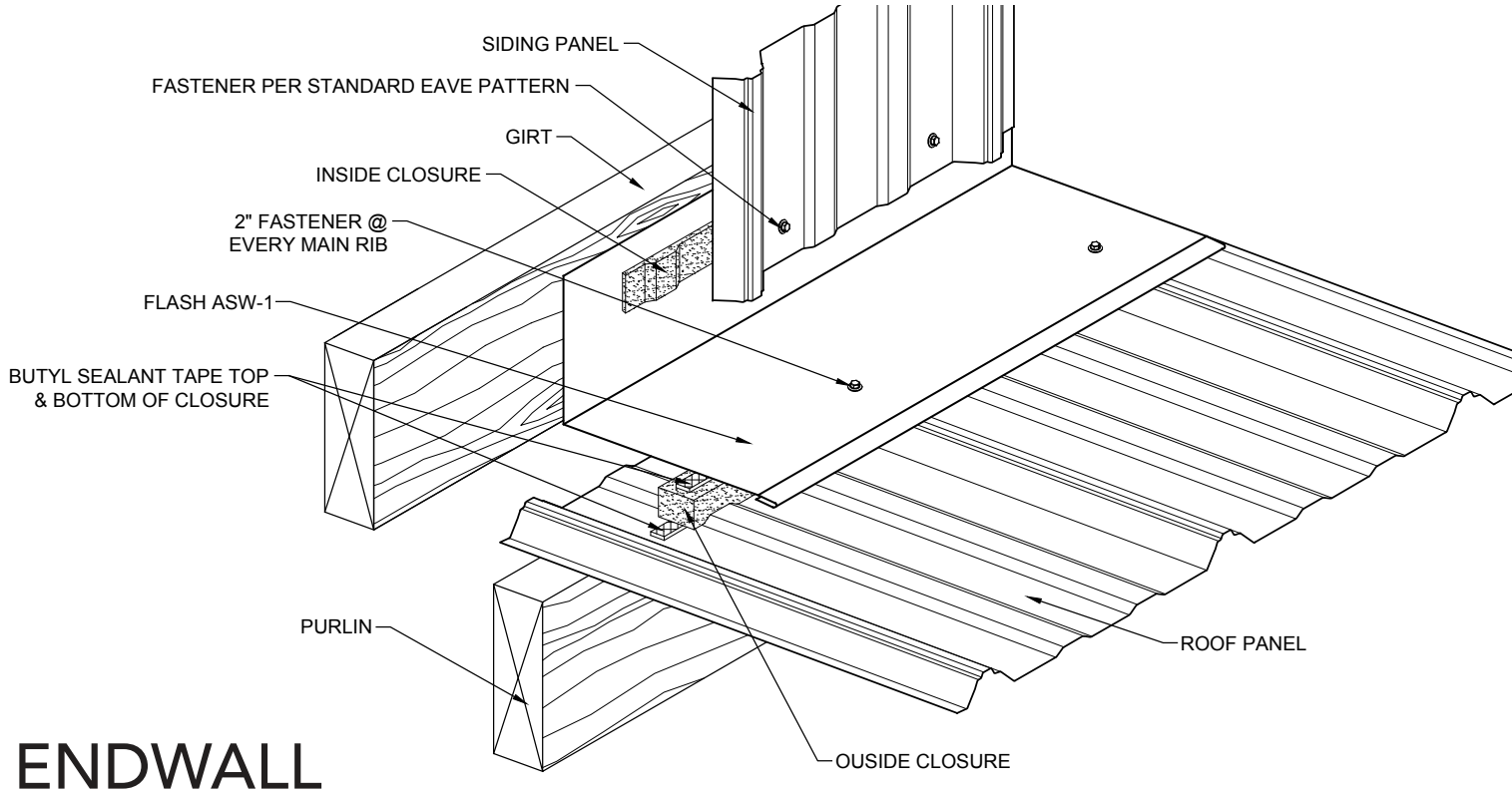
EAVE



BOX EAVE

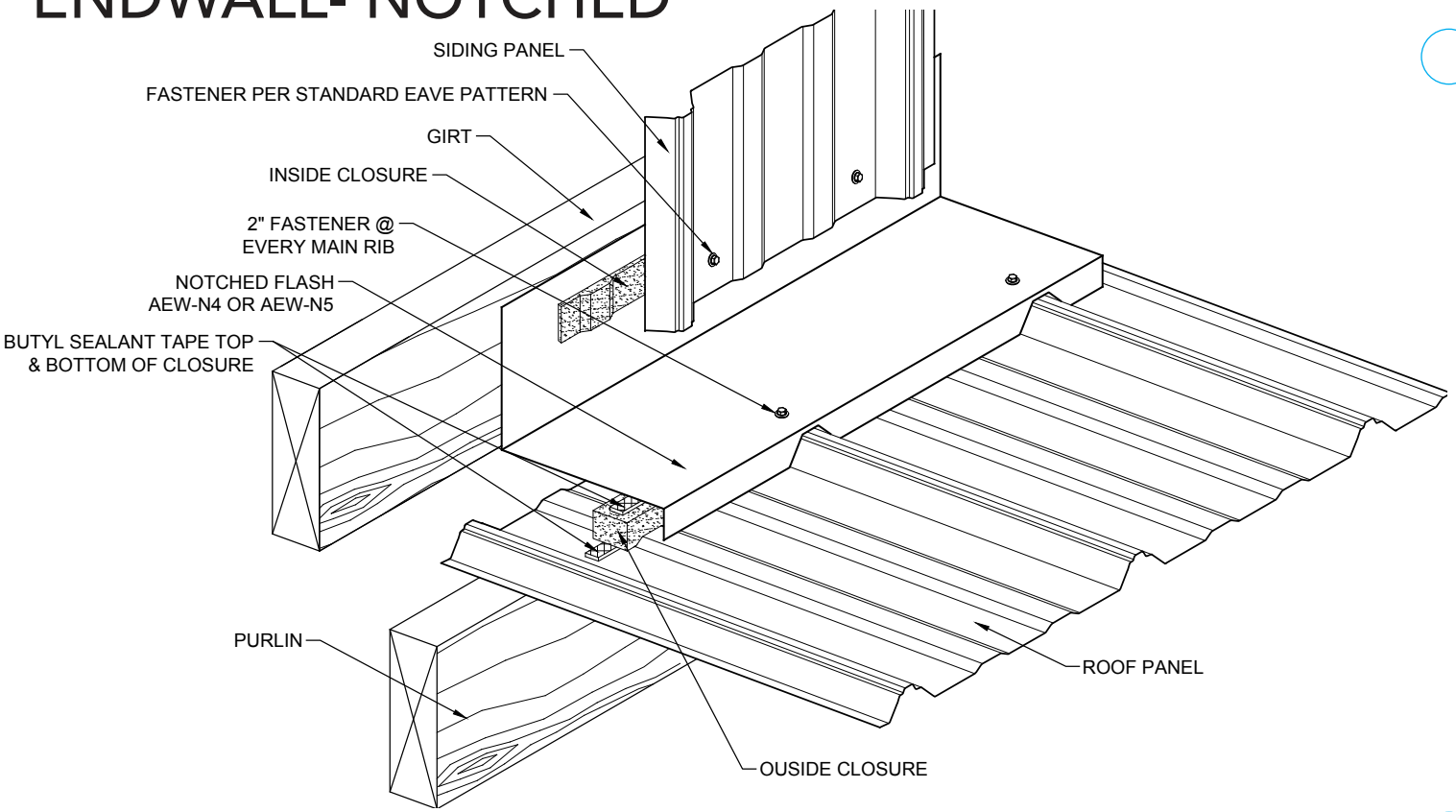


VENTED EAVE

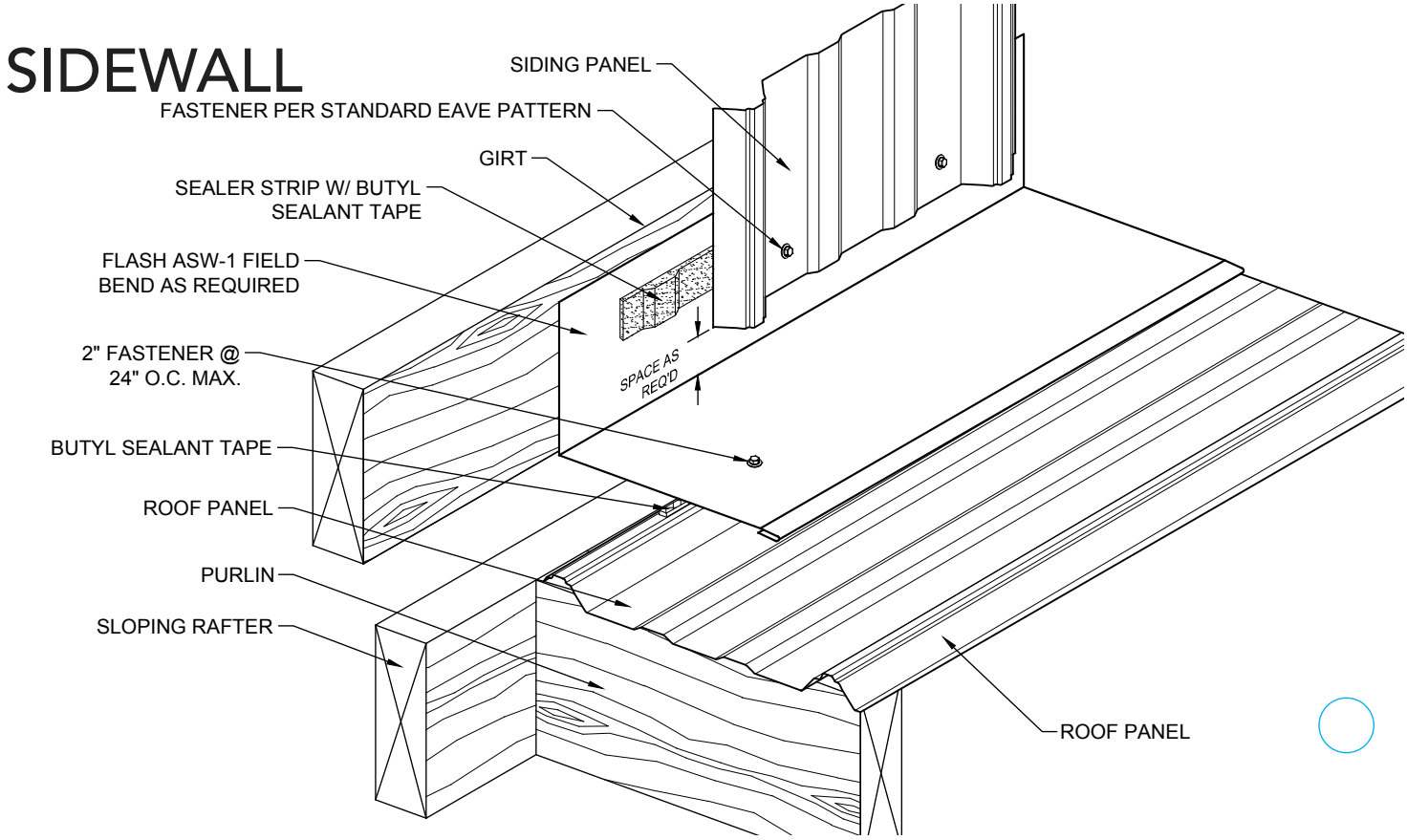


ENDWALL

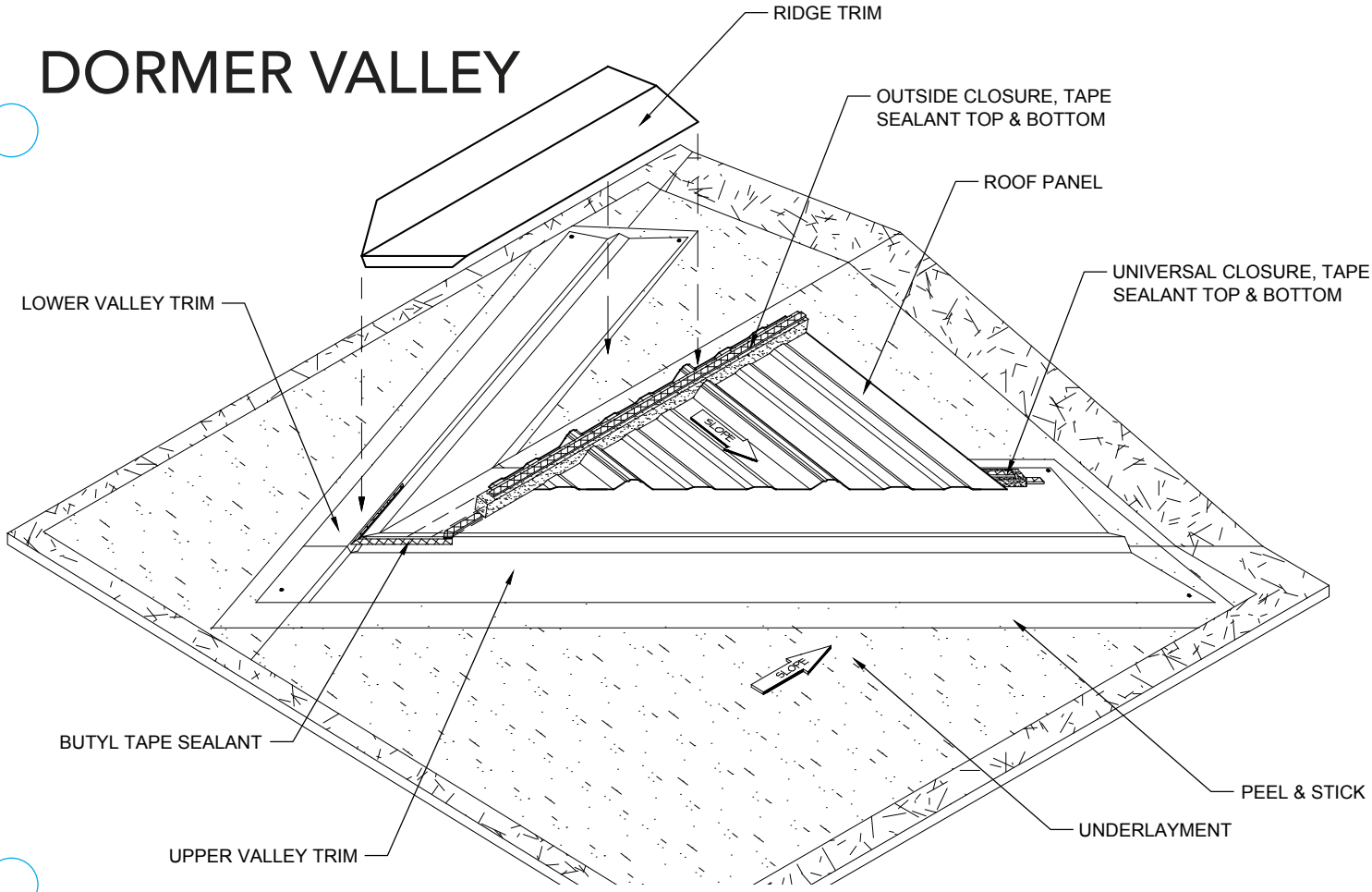
ENDWALL- NOTCHED



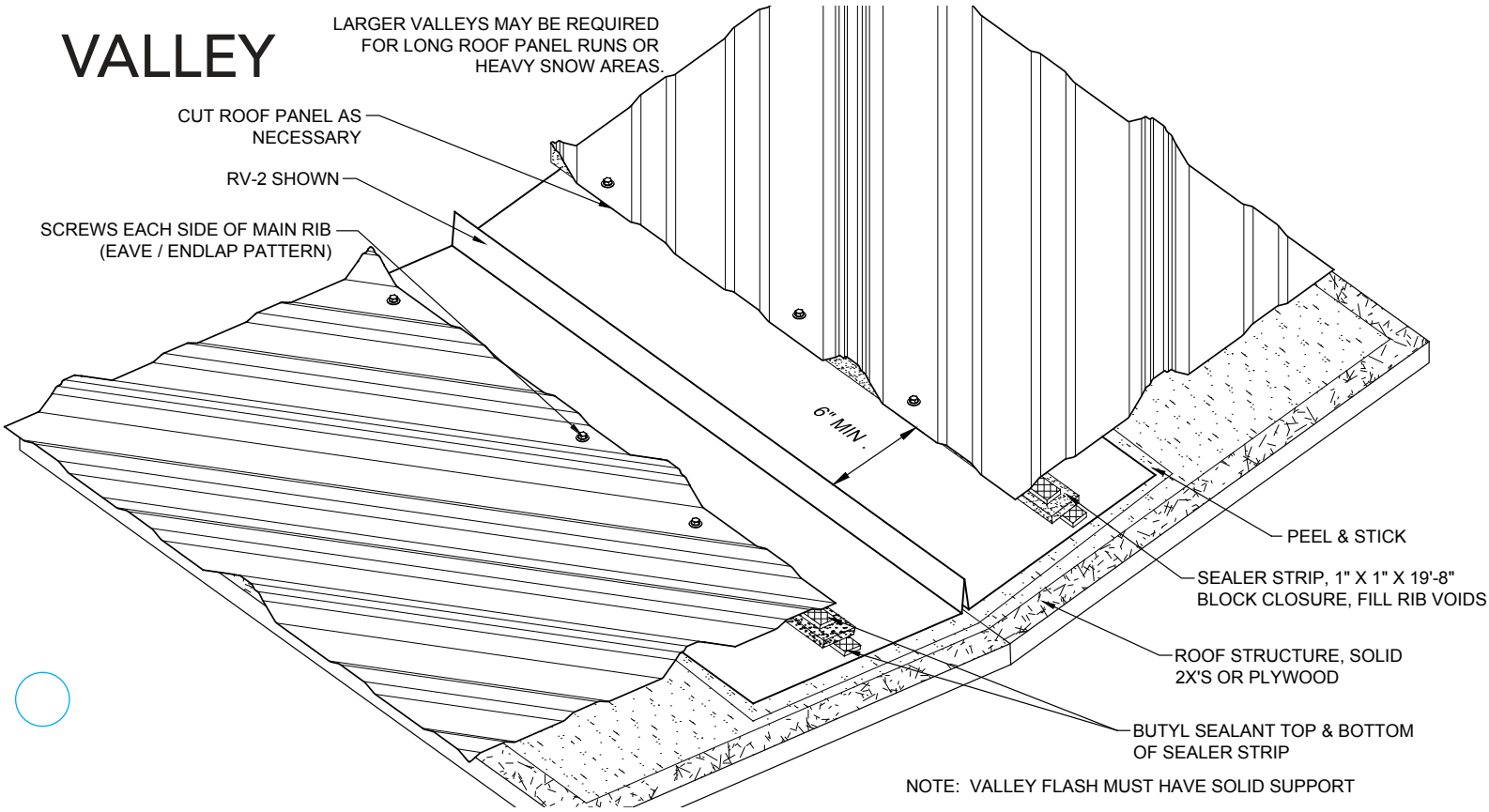
SIDEWALL



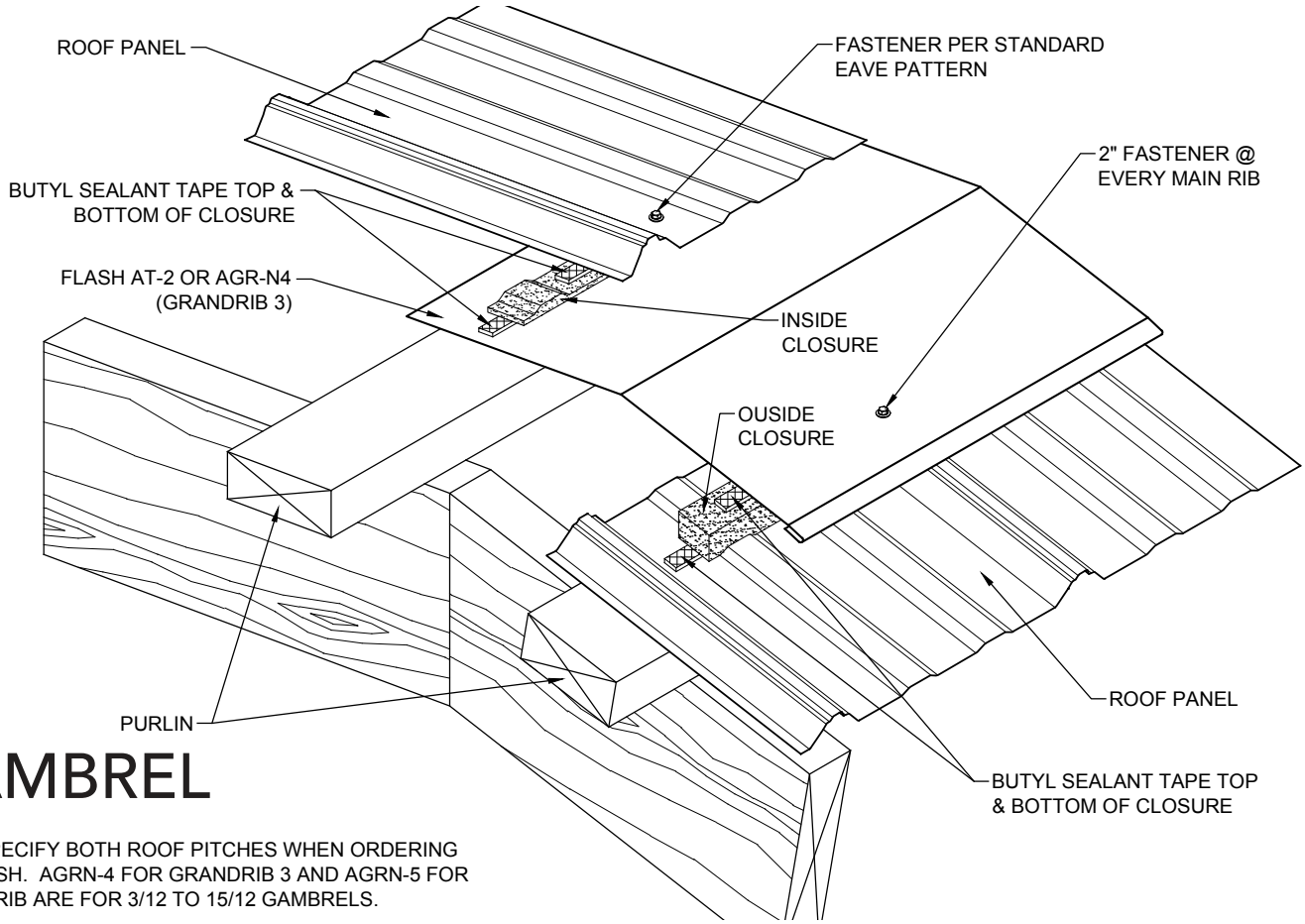
DORMER VALLEY



VALLEY

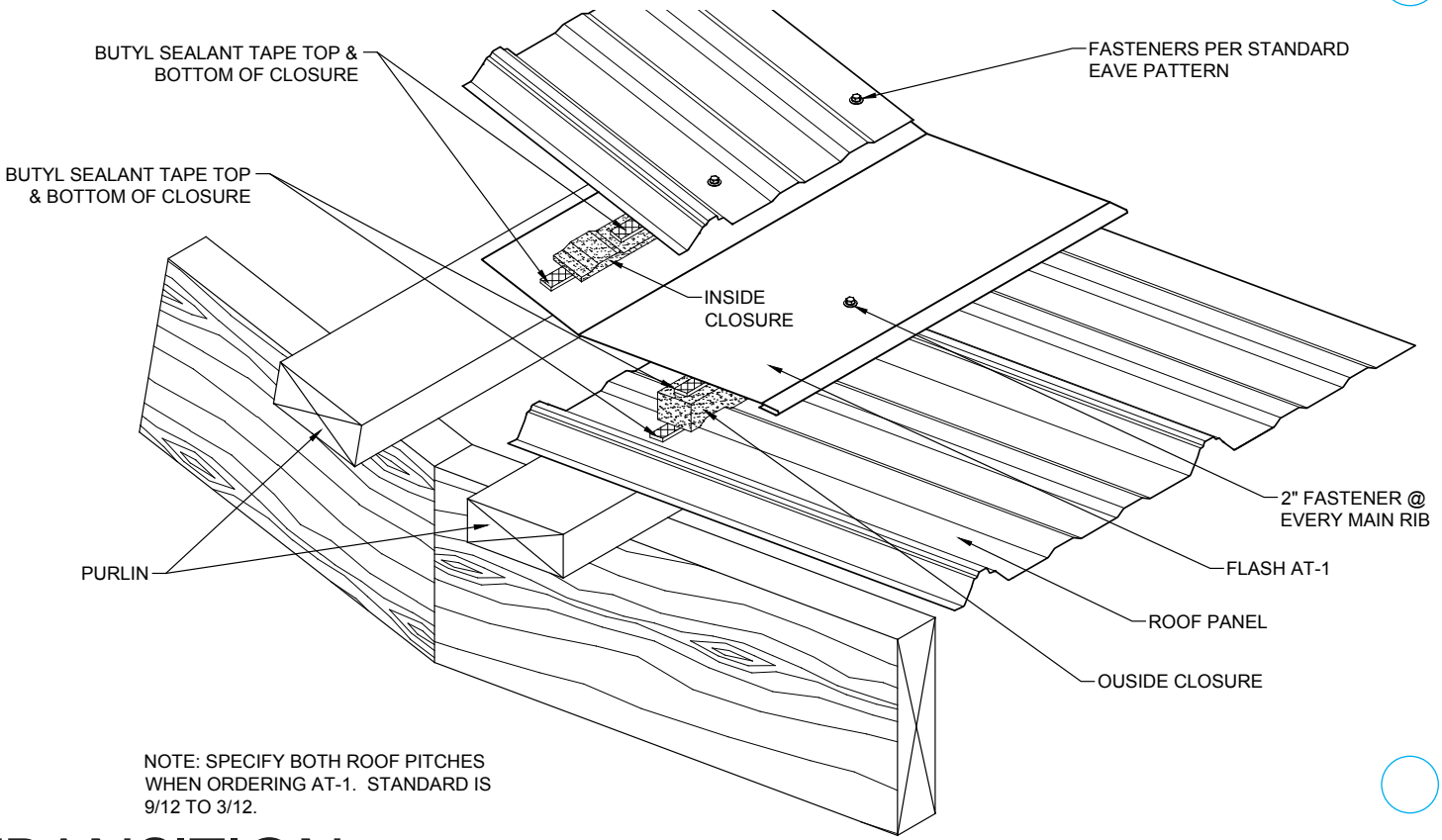


NOTE: VALLEY FLASH MUST HAVE SOLID SUPPORT



GAMBREL

NOTE: SPECIFY BOTH ROOF PITCHES WHEN ORDERING AT-2 FLASH. AGRN-4 FOR GRANDRIB 3 AND AGRN-5 FOR STRONGRIB ARE FOR 3/12 TO 15/12 GAMBRELS.

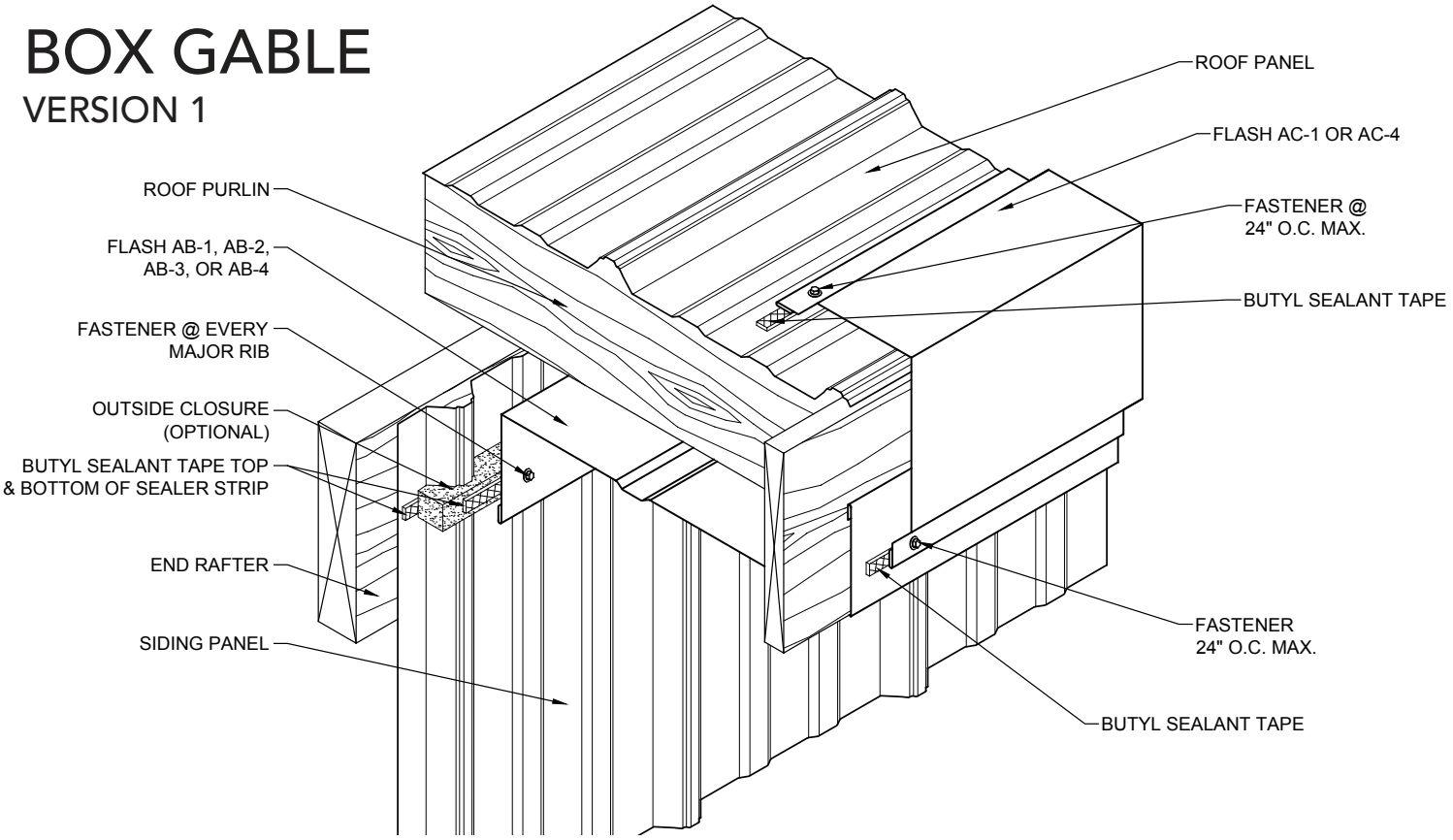


NOTE: SPECIFY BOTH ROOF PITCHES WHEN ORDERING AT-1. STANDARD IS 9/12 TO 3/12.

TRANSITION

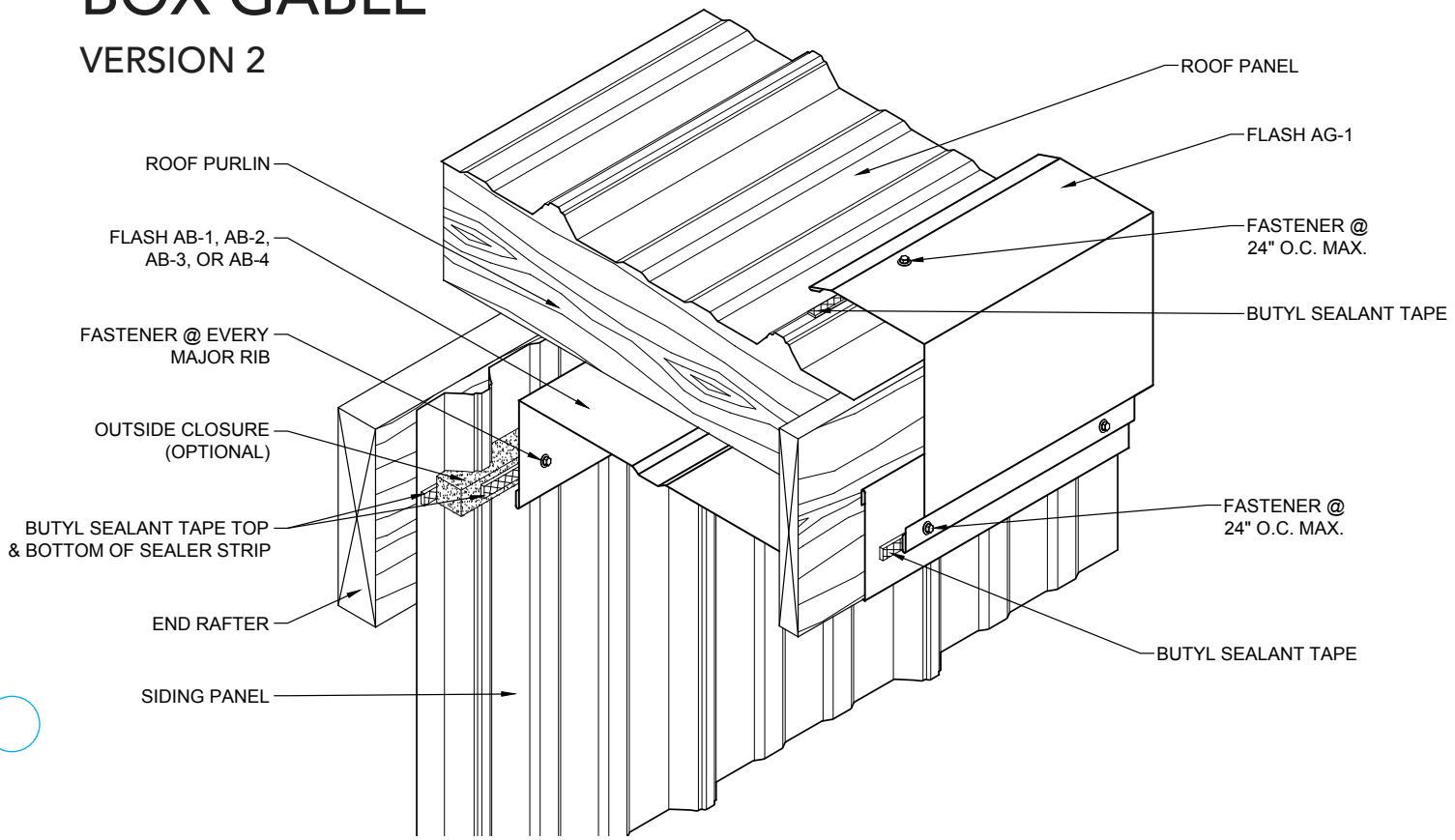
BOX GABLE

VERSION 1

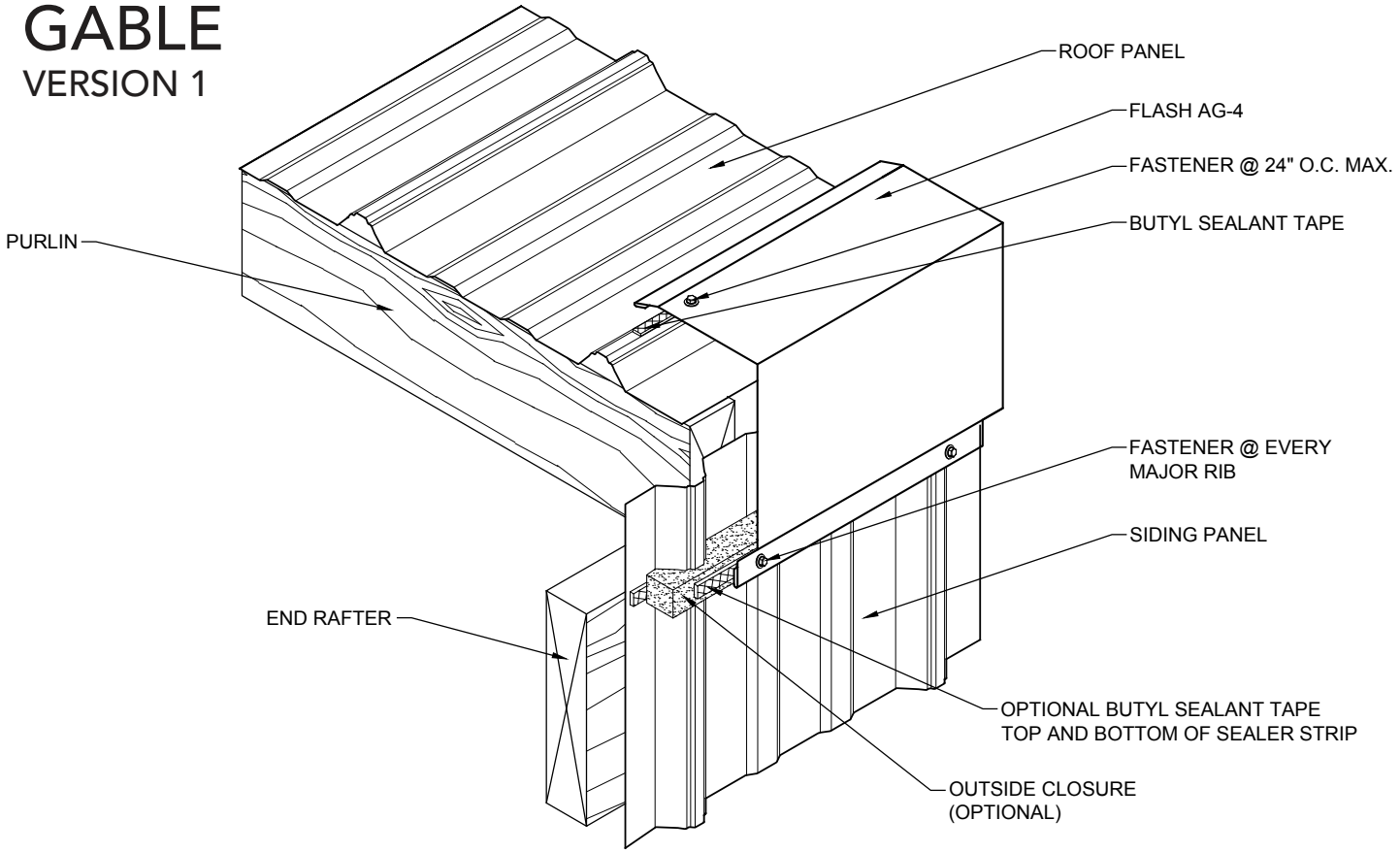


BOX GABLE

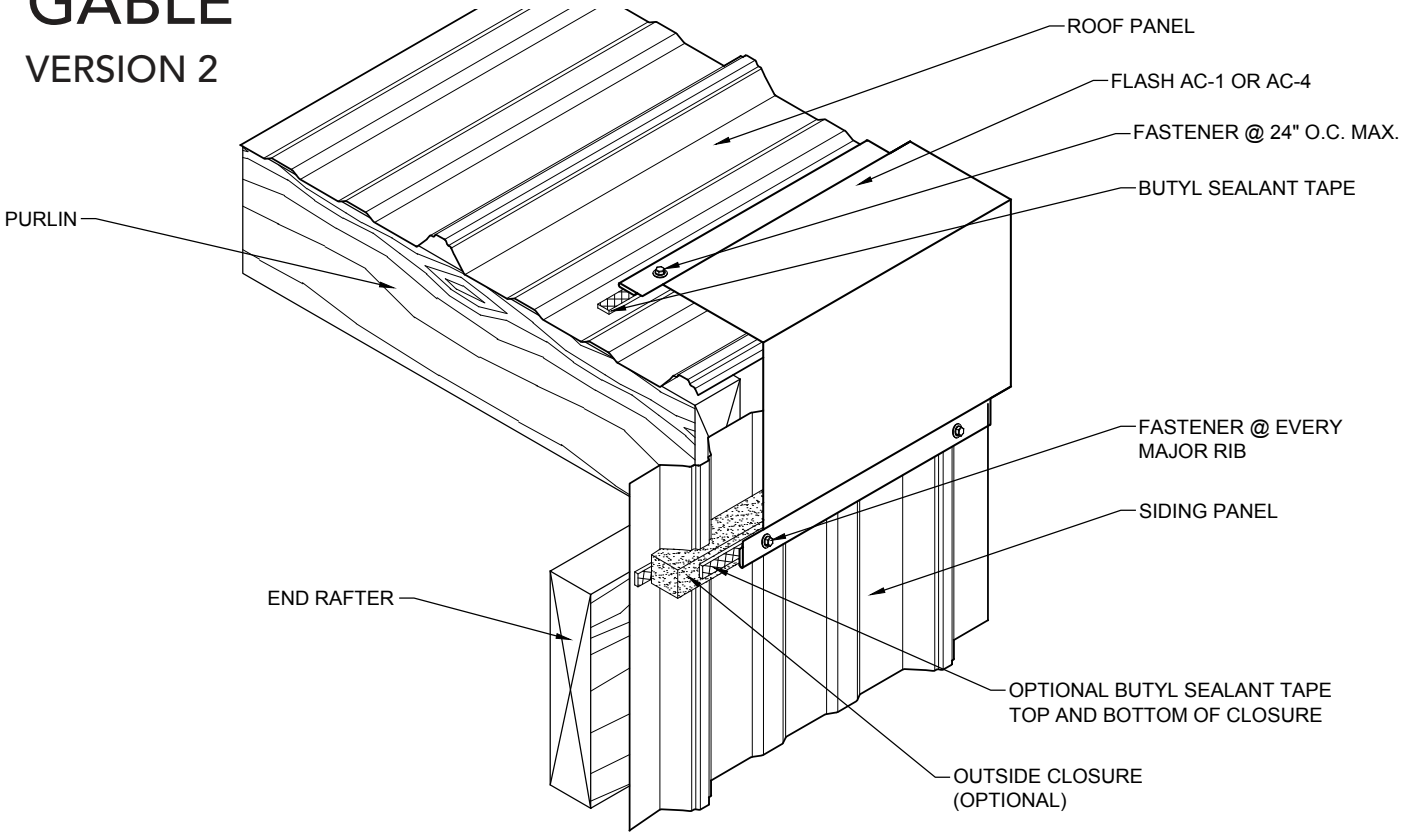
VERSION 2



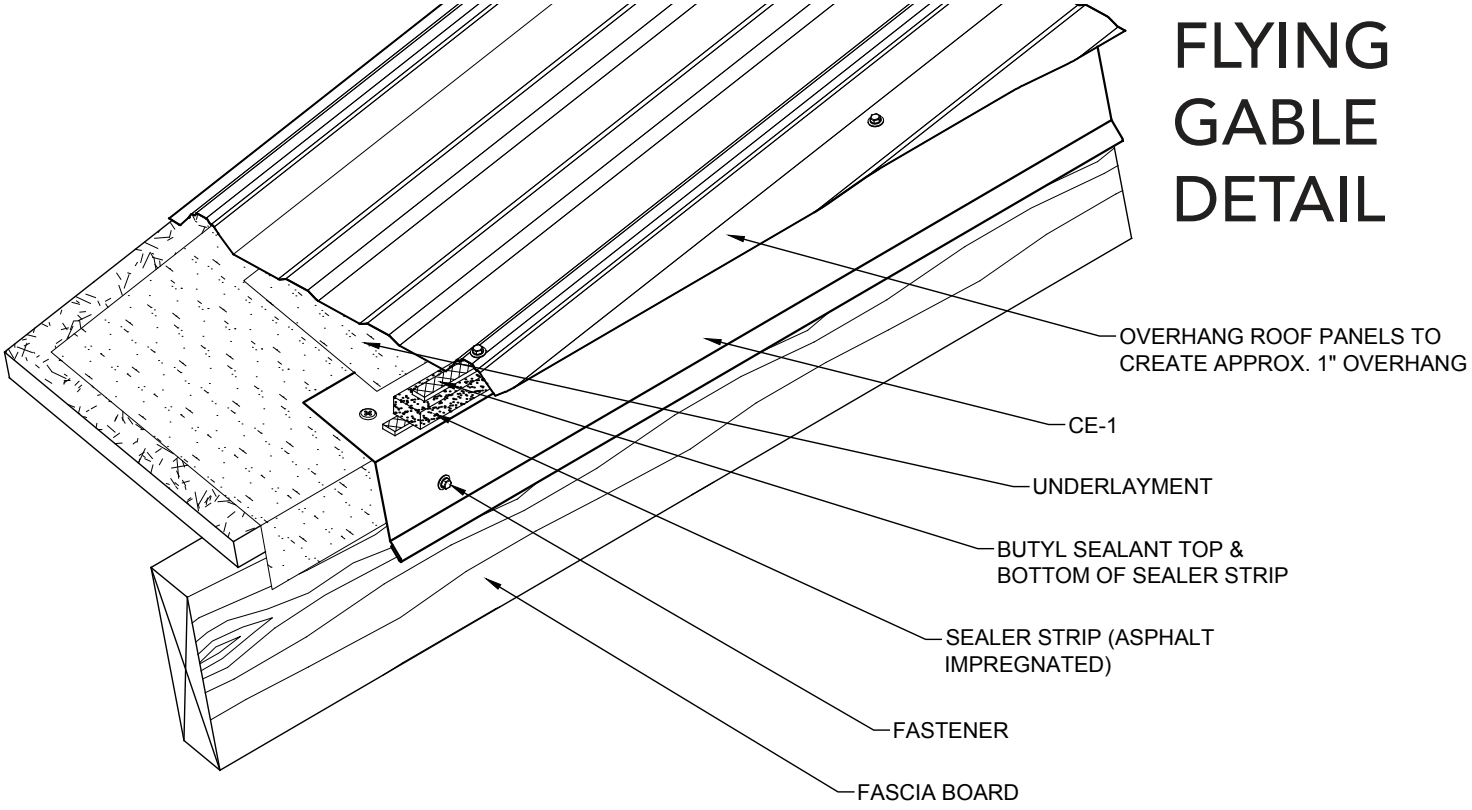
GABLE
VERSION 1

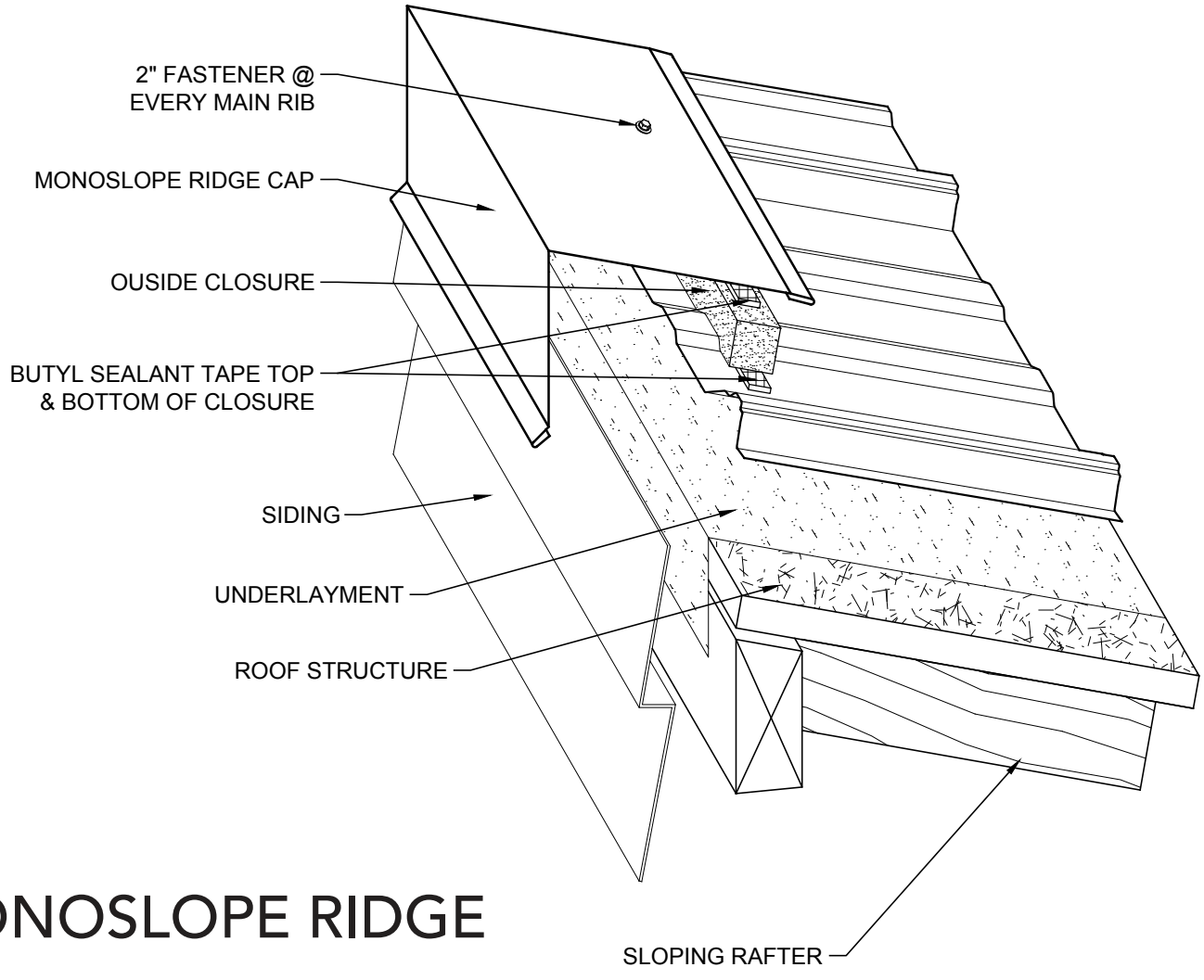


GABLE
VERSION 2



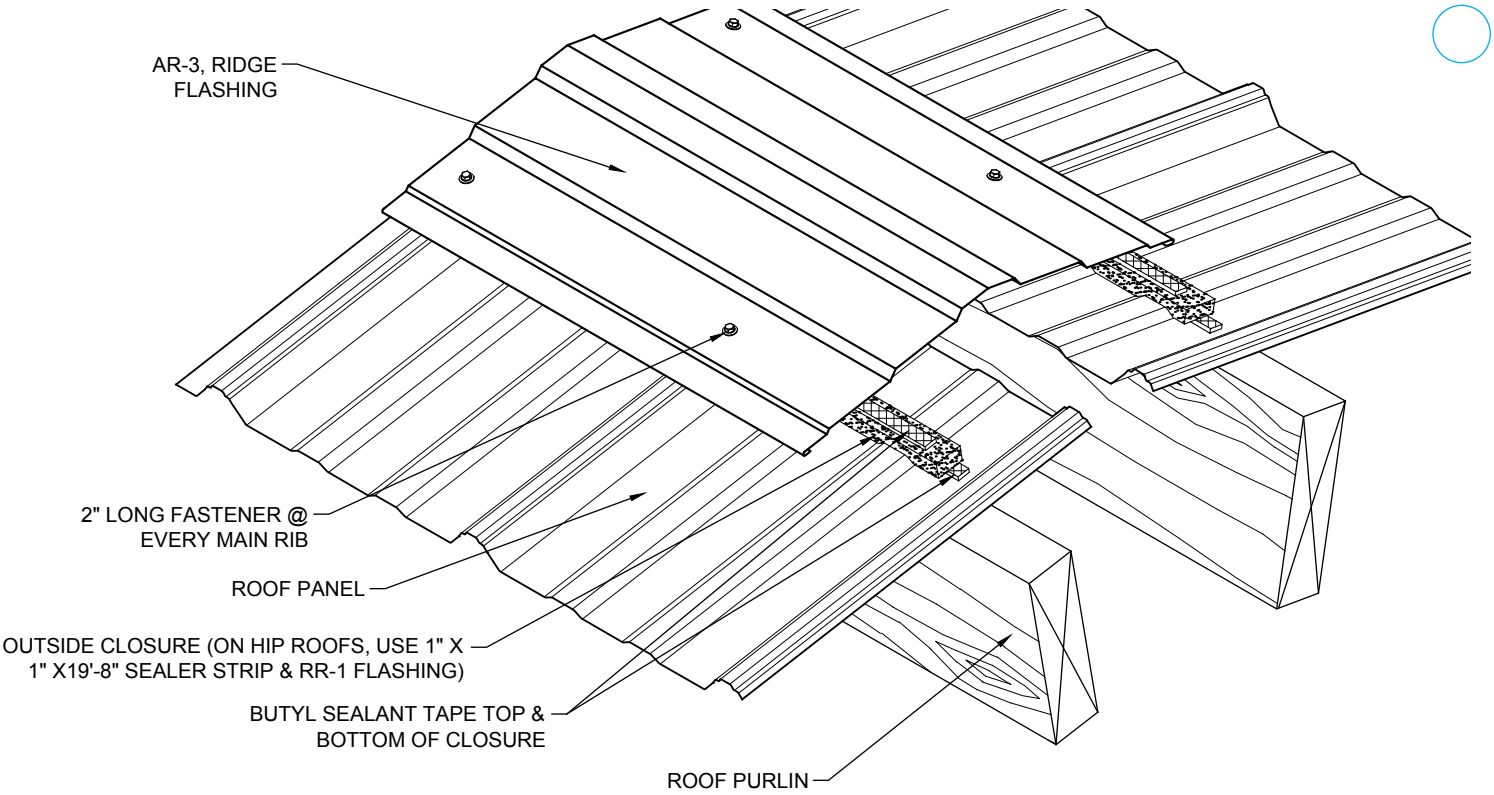
FLYING GABLE DETAIL



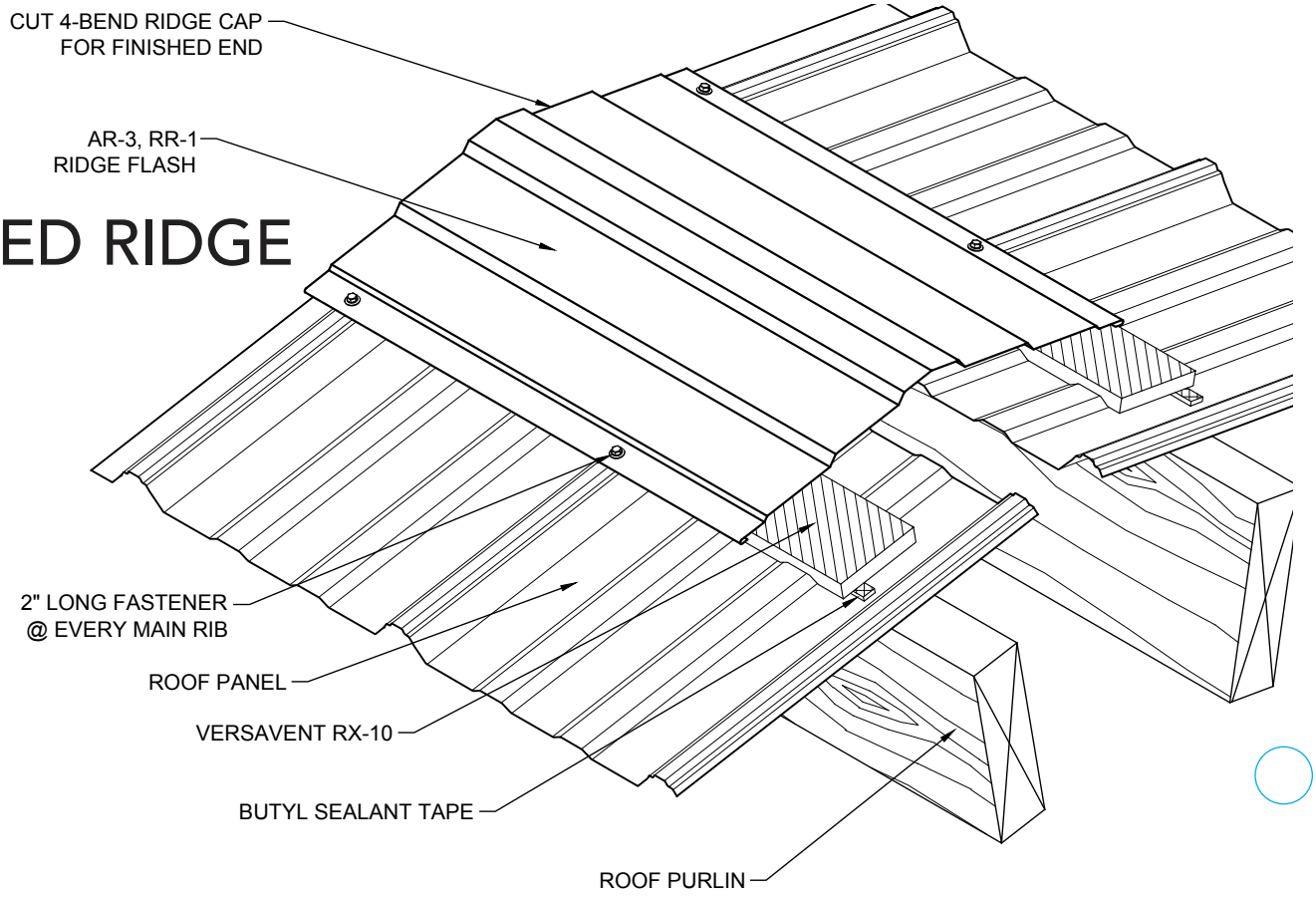


MONOSLOPE RIDGE

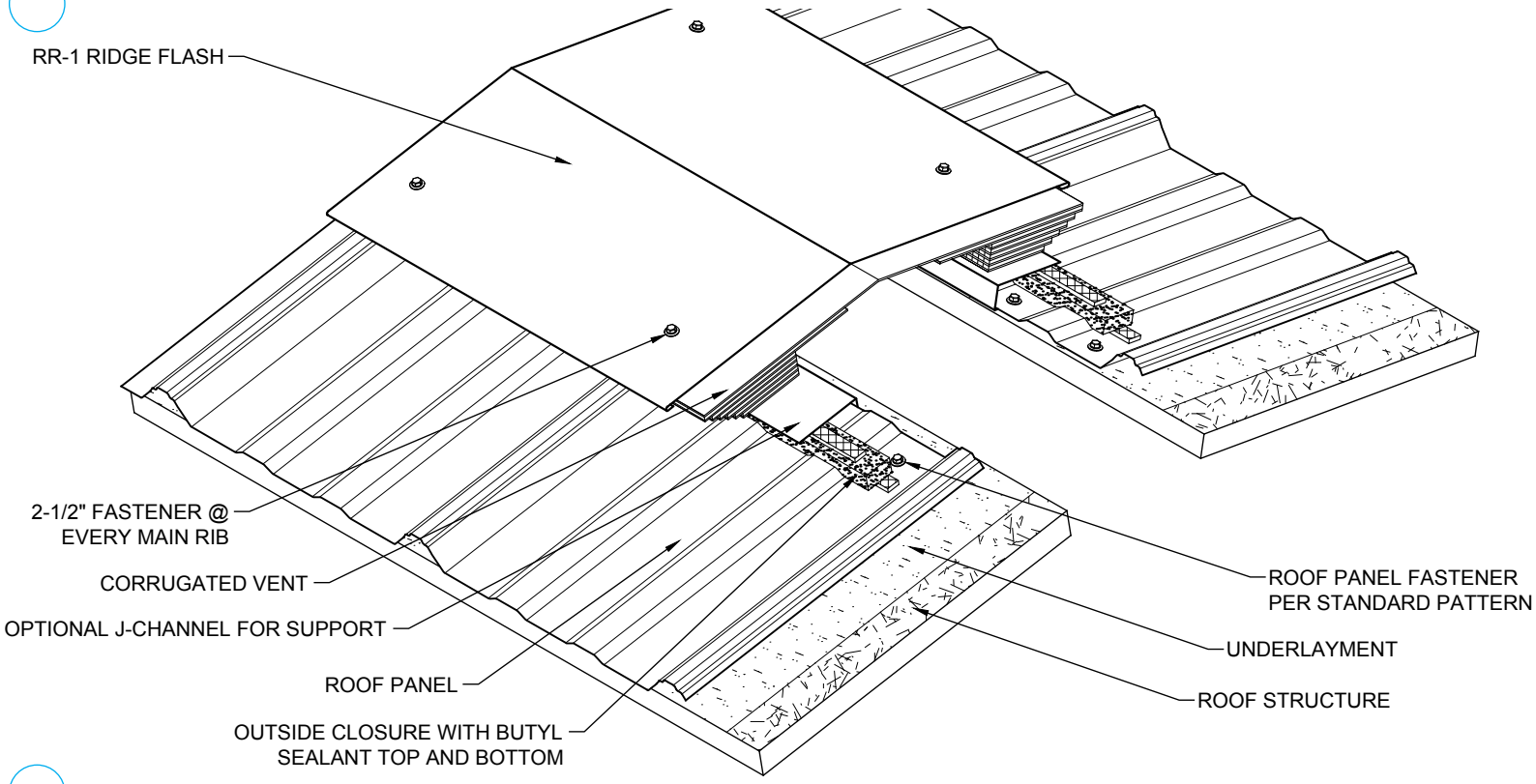
NON VENTED RIDGE/HIP



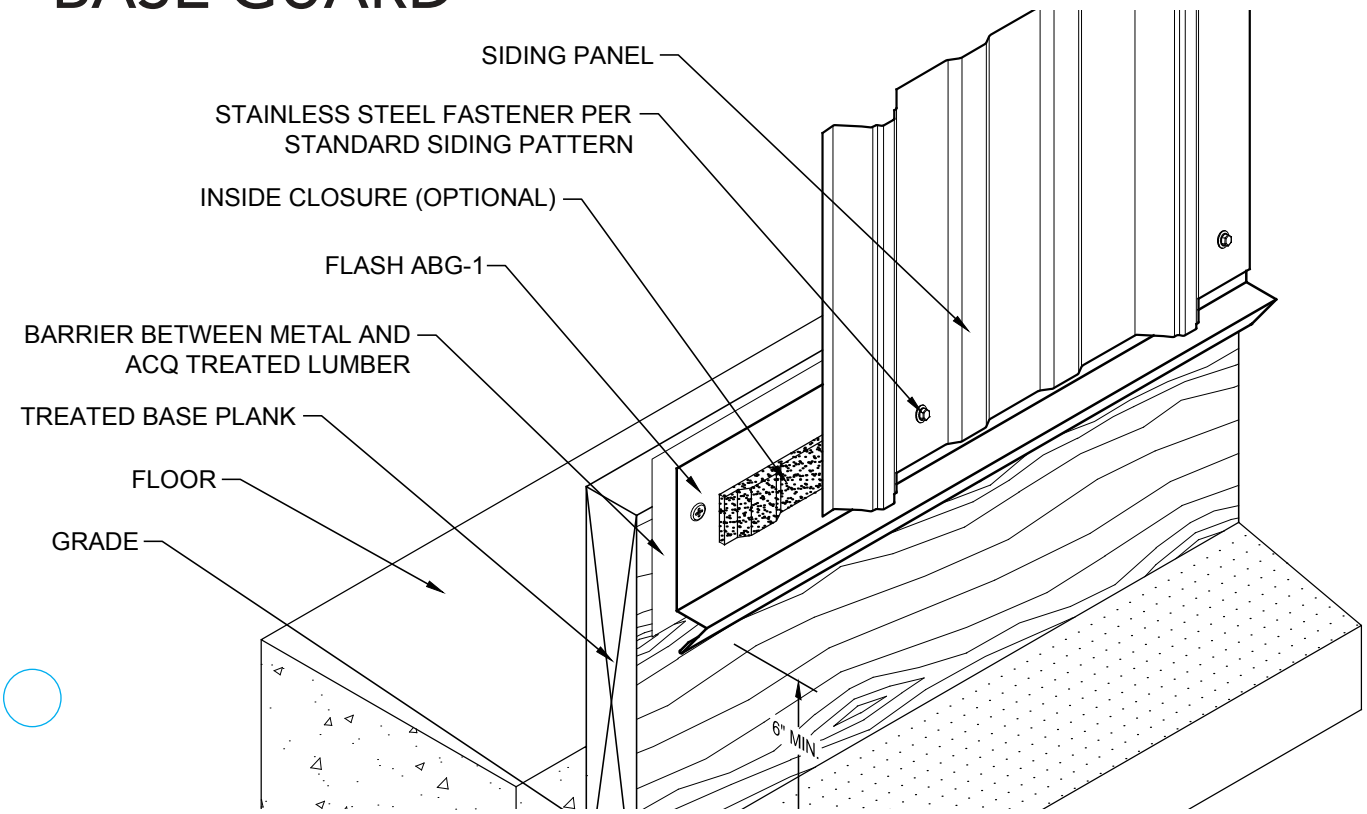
VENTED RIDGE



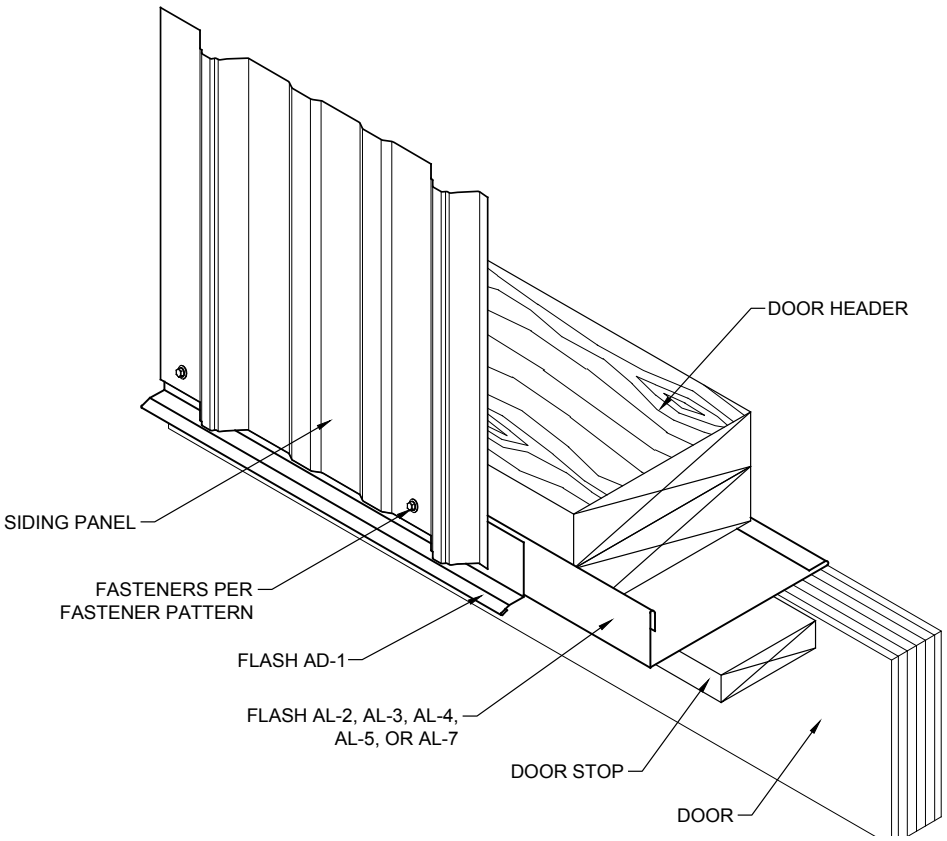
ALTERNATE VENTED RIDGE



BASE GUARD

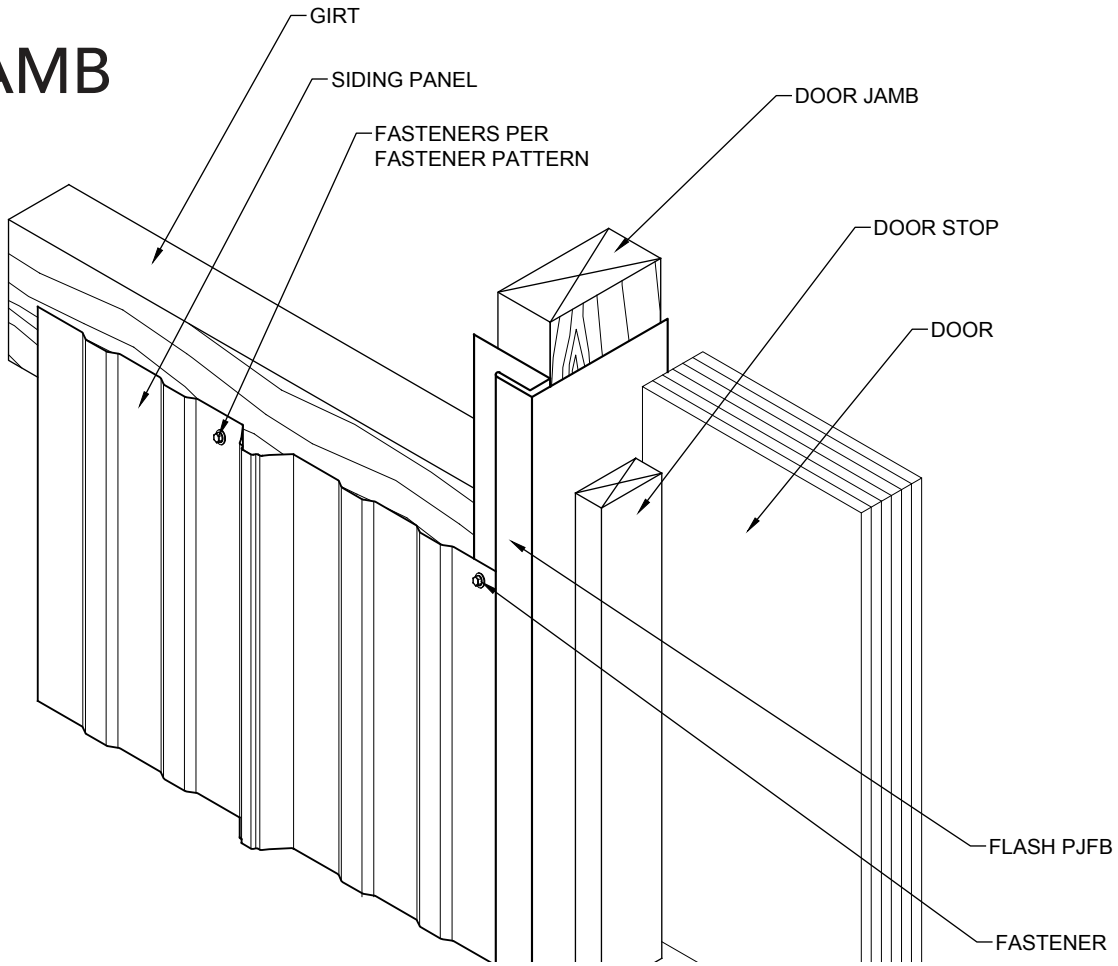


DOOR HEADER



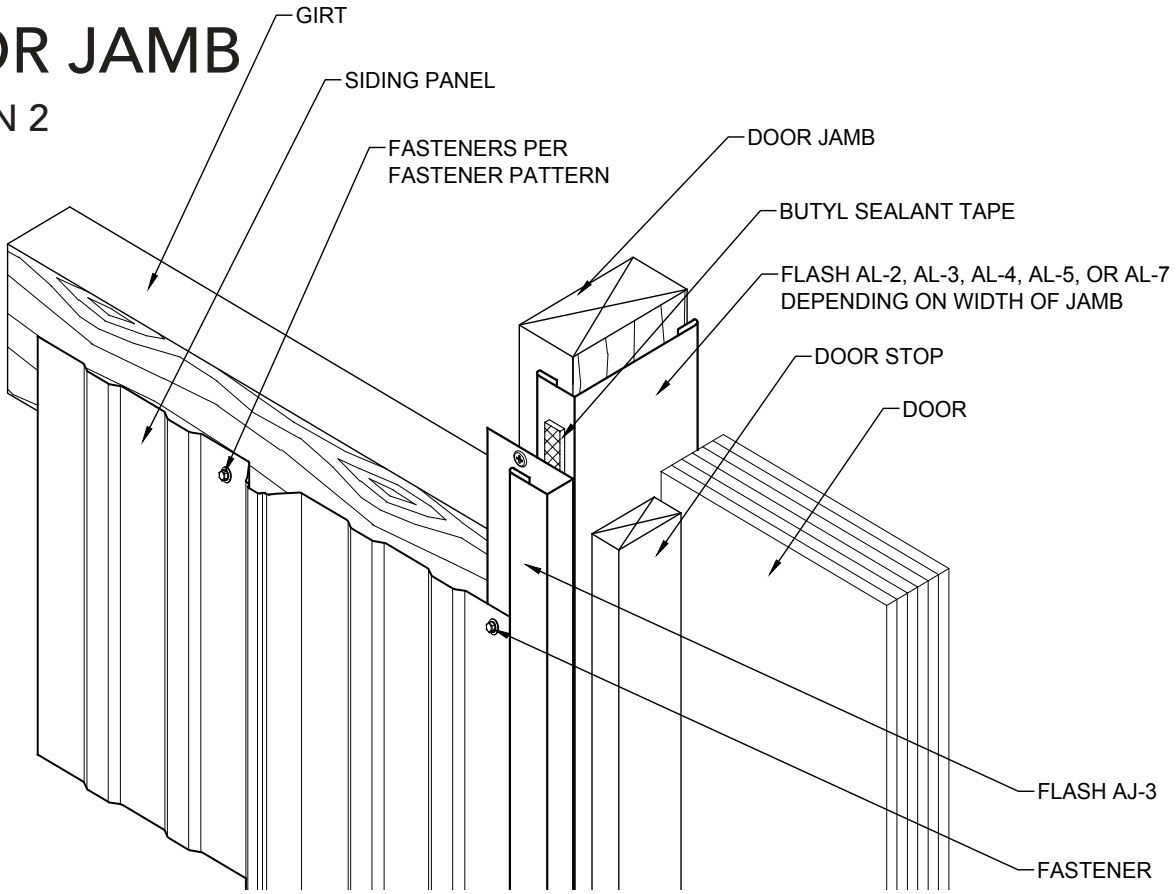
DOOR JAMB

VERSION 1



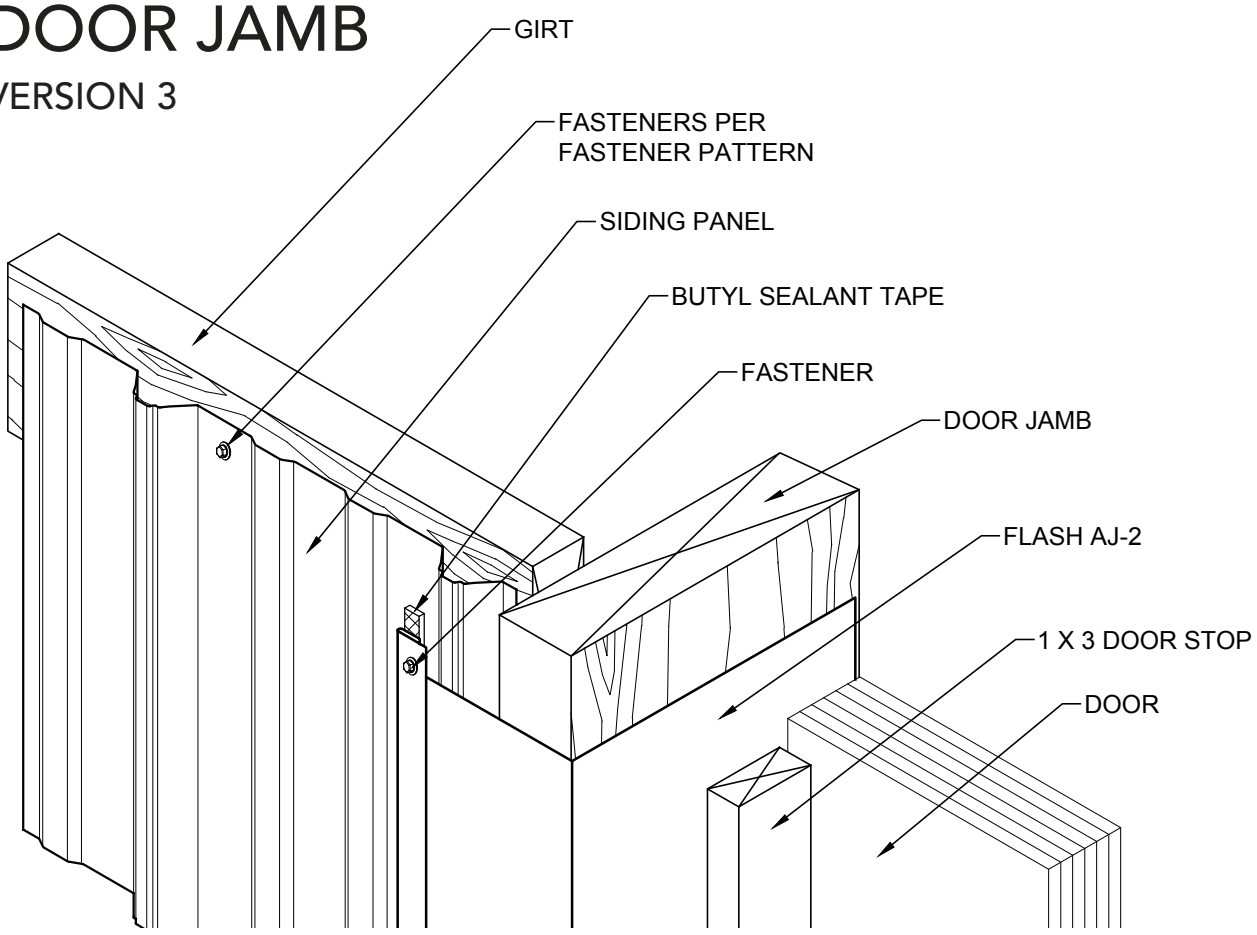
DOOR JAMB

VERSION 2



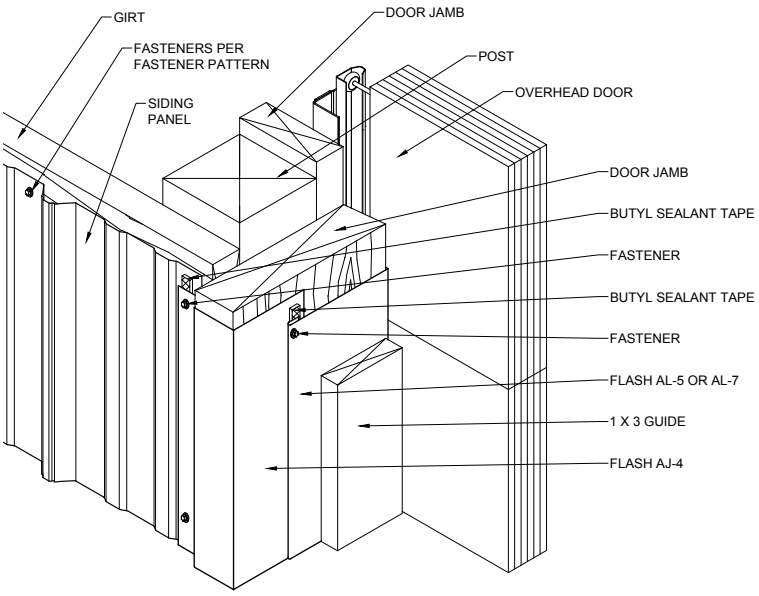
DOOR JAMB

VERSION 3

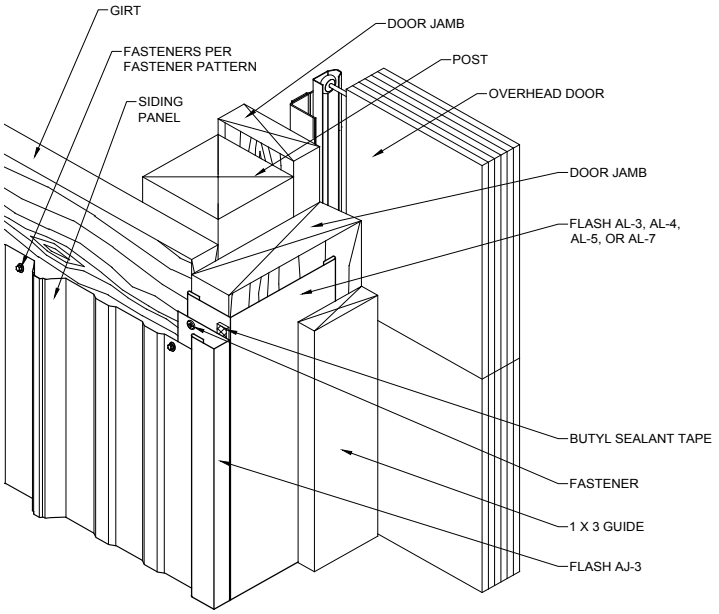


OVERHEAD DOOR JAMBS

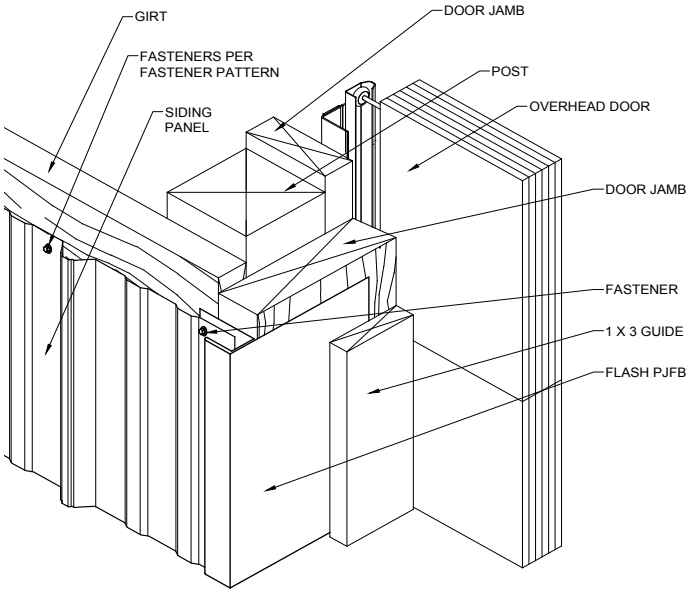
VERSION 1



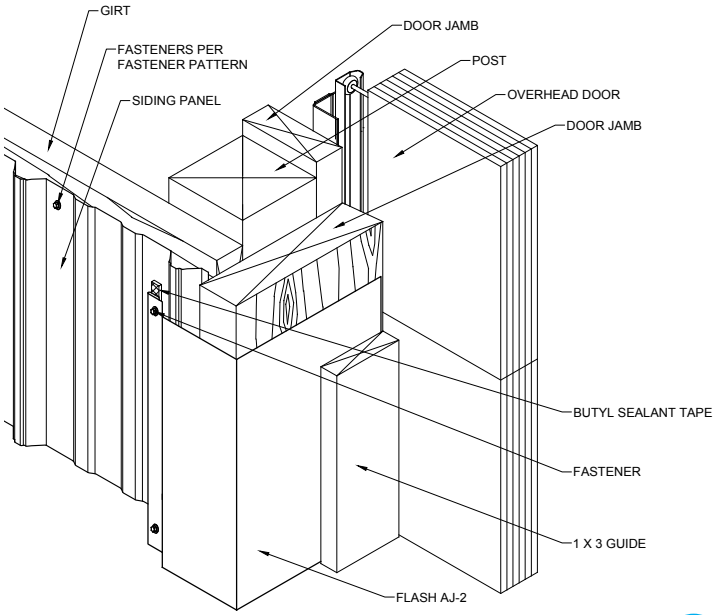
VERSION 3

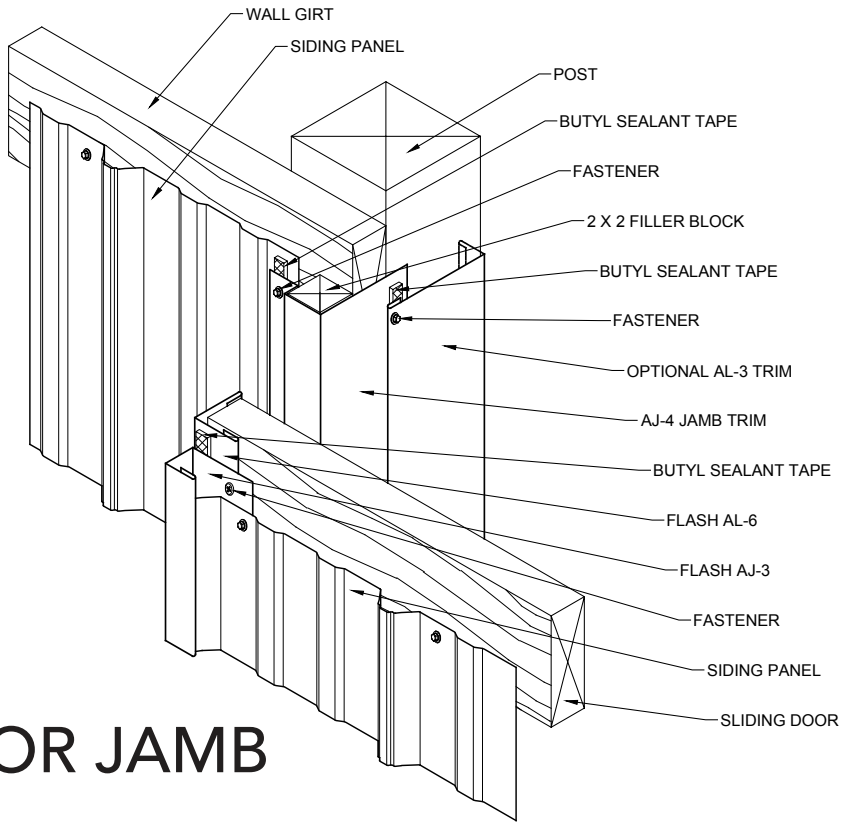


VERSION 2



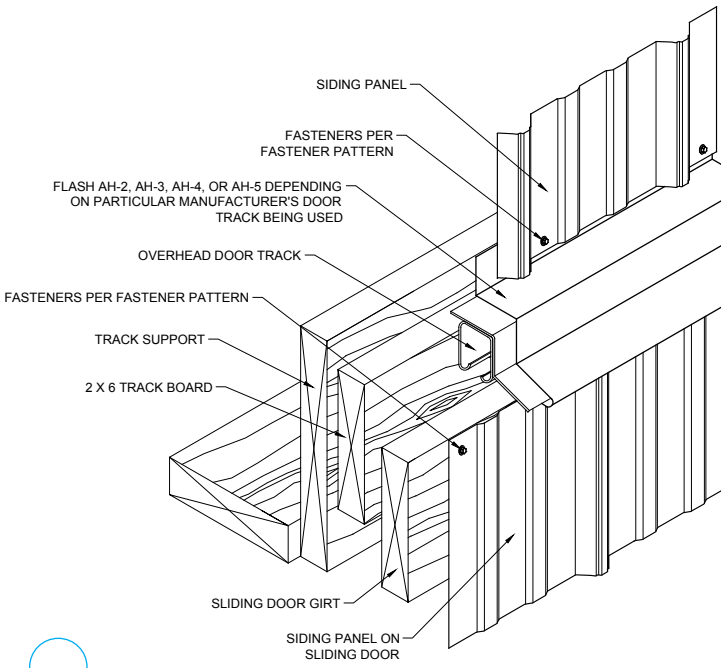
VERSION 4



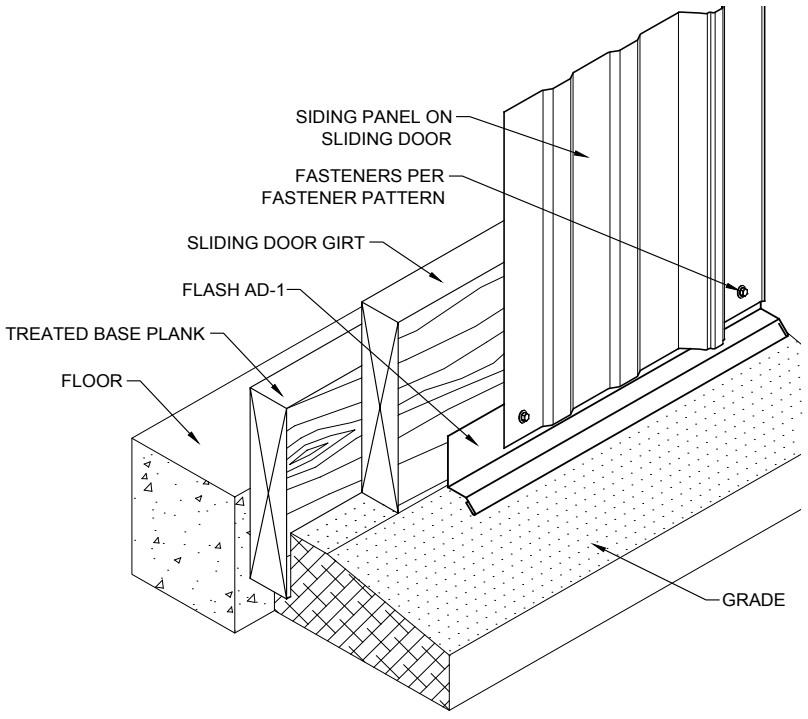


SLIDING DOOR JAMB

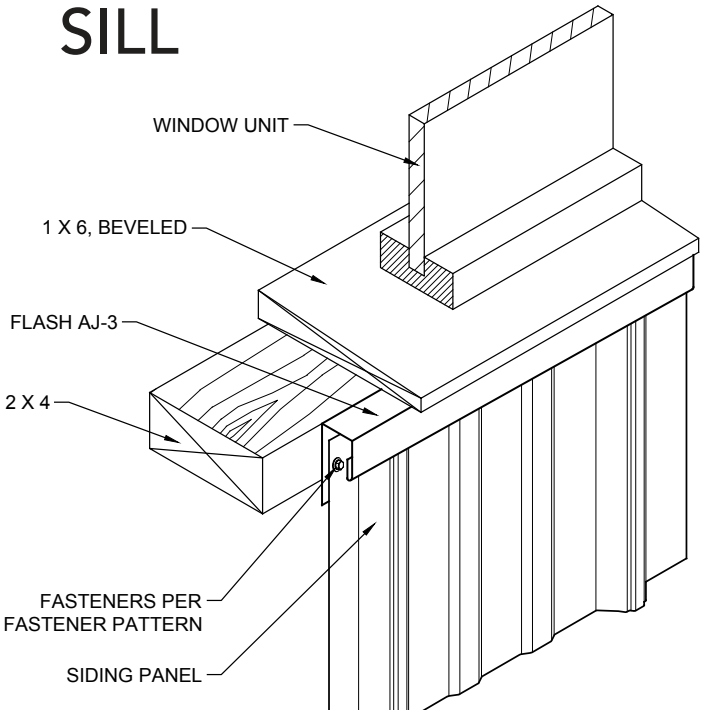
SLIDING DOOR HEADER



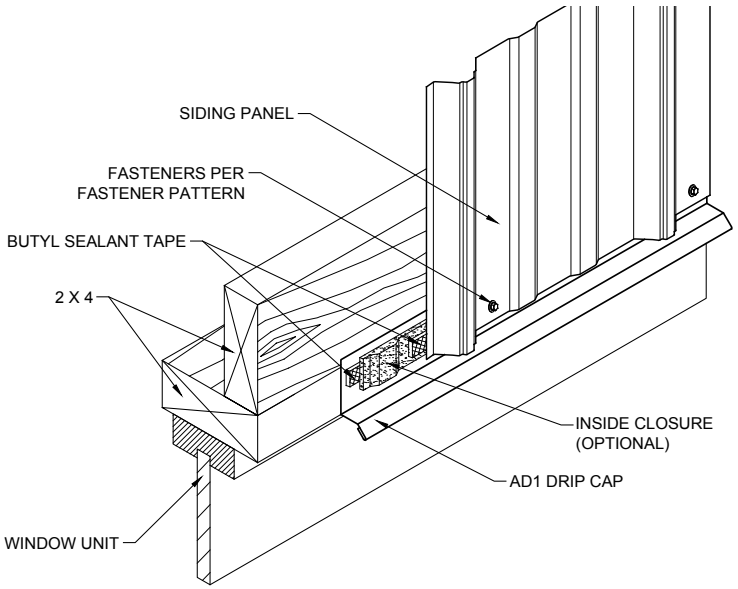
SLIDING DOOR BASE



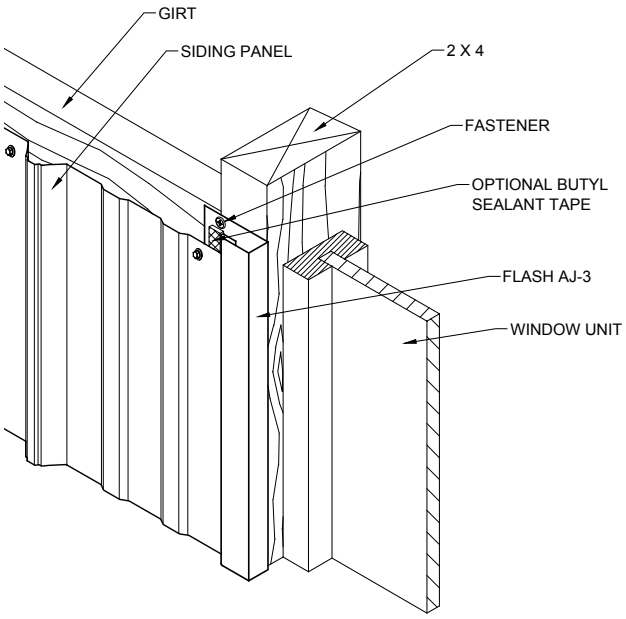
WINDOW SILL



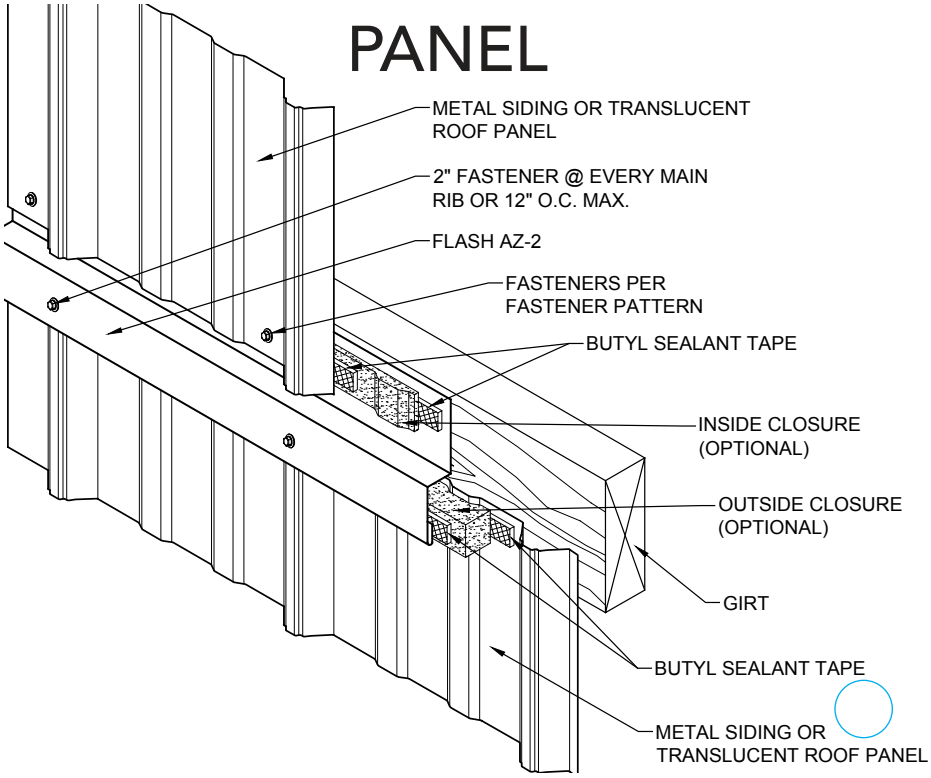
WINDOW HEADER

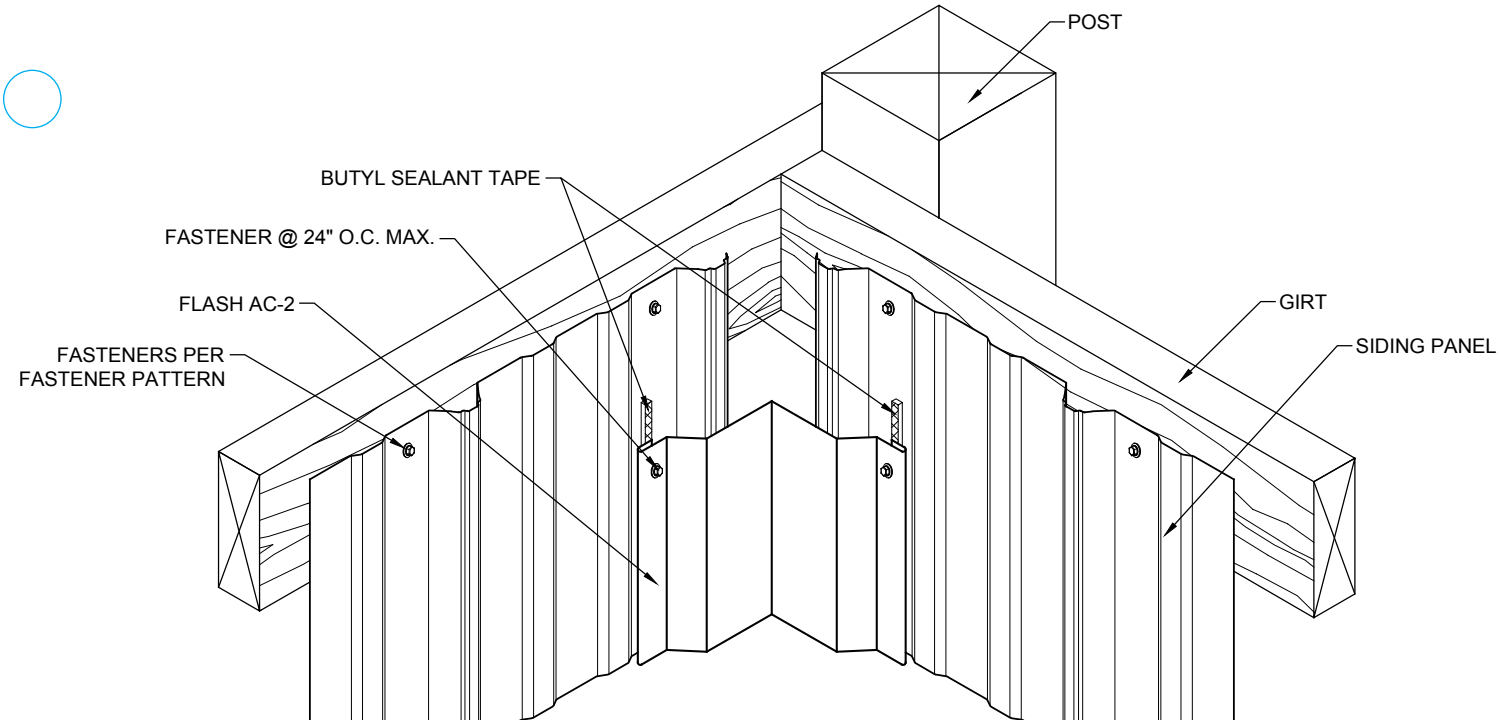


WINDOW JAMB



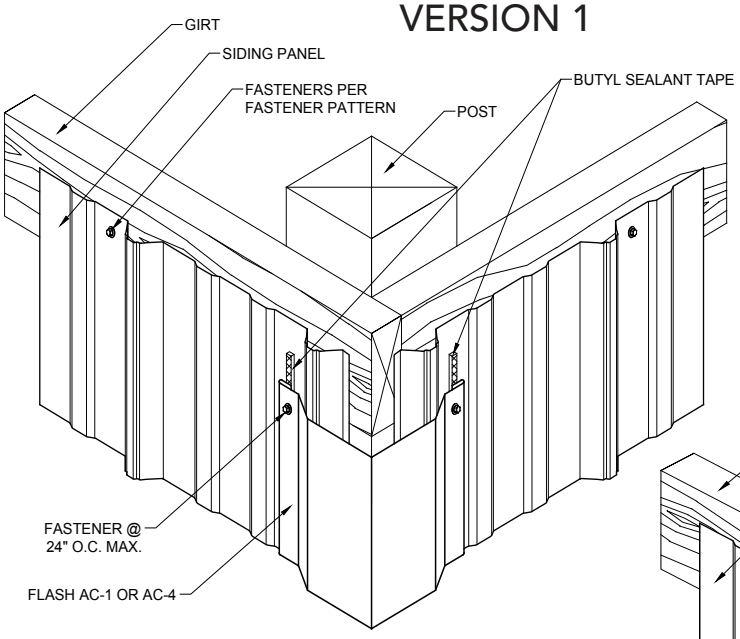
TRANSLUCENT PANEL



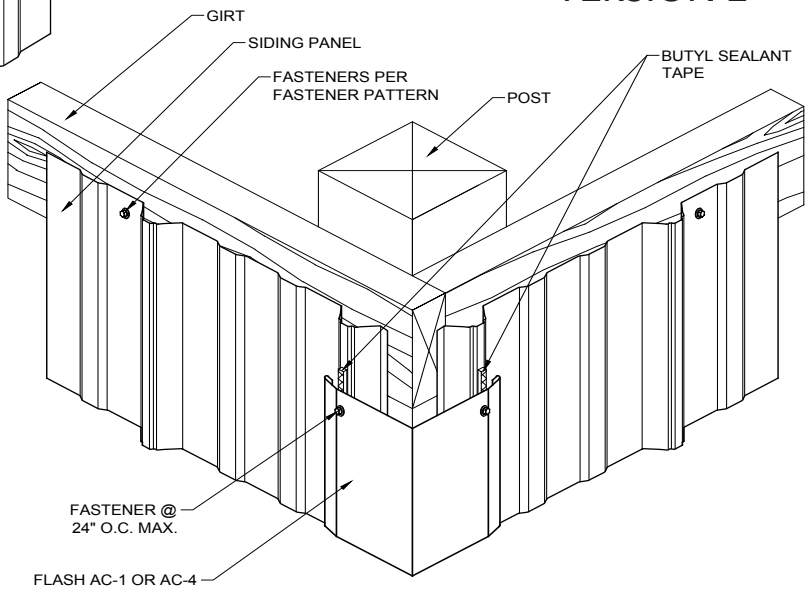


INSIDE CORNER

VERSION 1



VERSION 2



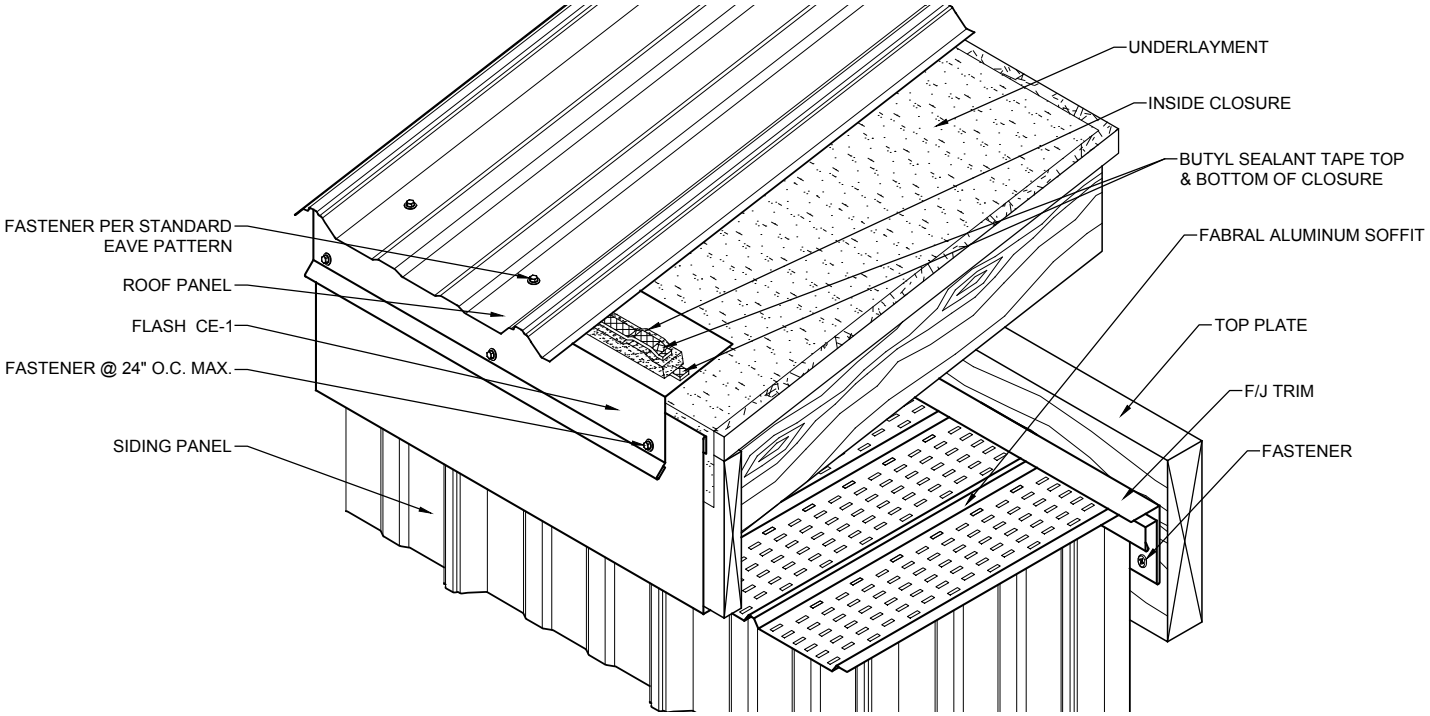
OUTSIDE CORNERS

RESIDENTIAL exposed-fastener panel

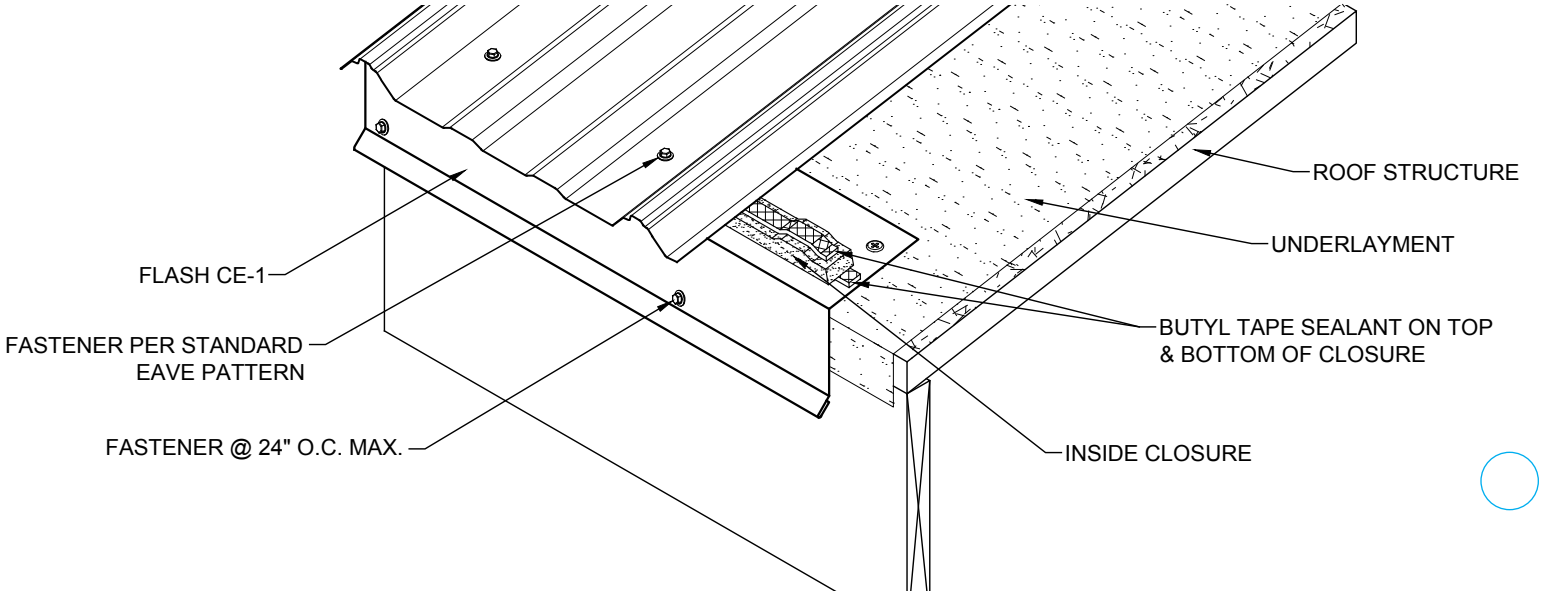
TRIM DETAILS

All residential flashings are formed for a 4/12 pitch unless otherwise requested by the customer.

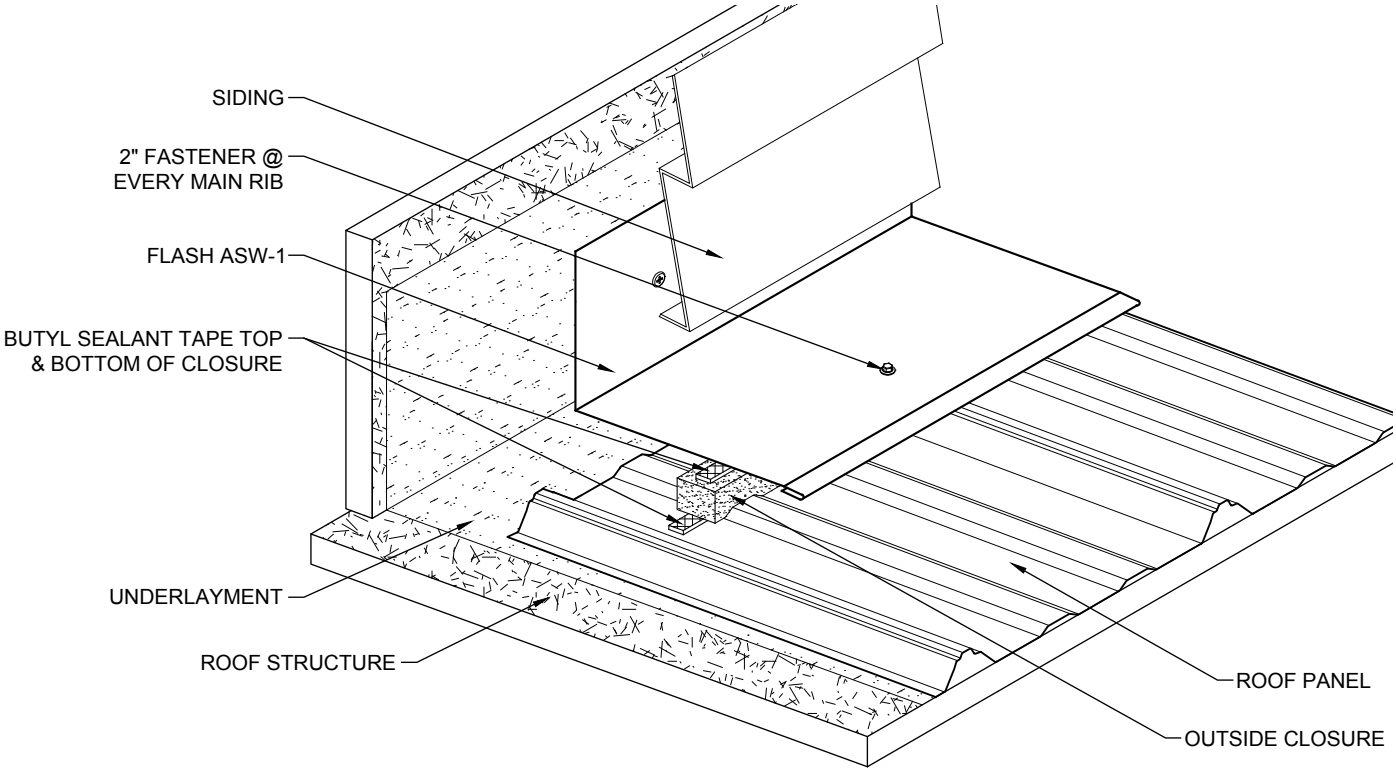
RESIDENTIAL VENTED EAVE



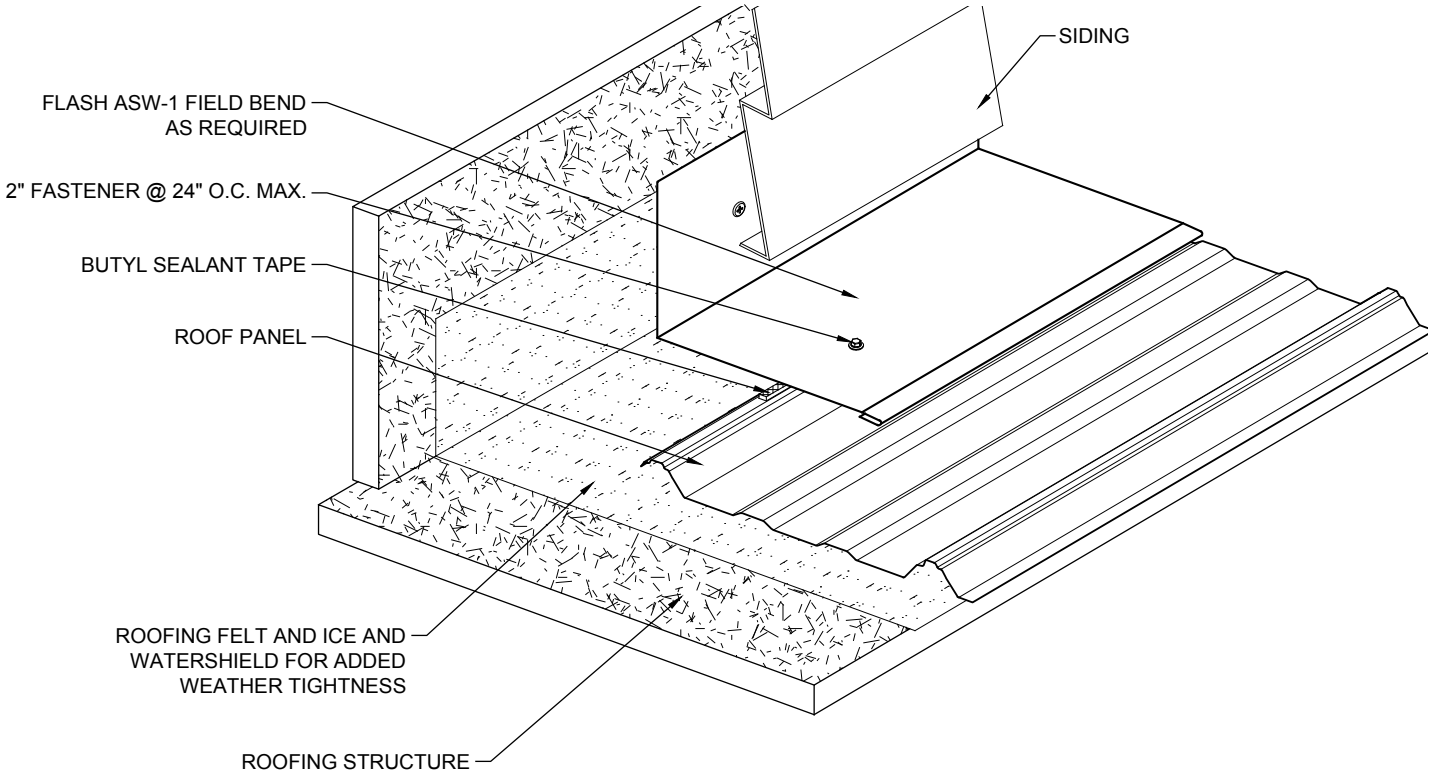
RESIDENTIAL EAVE



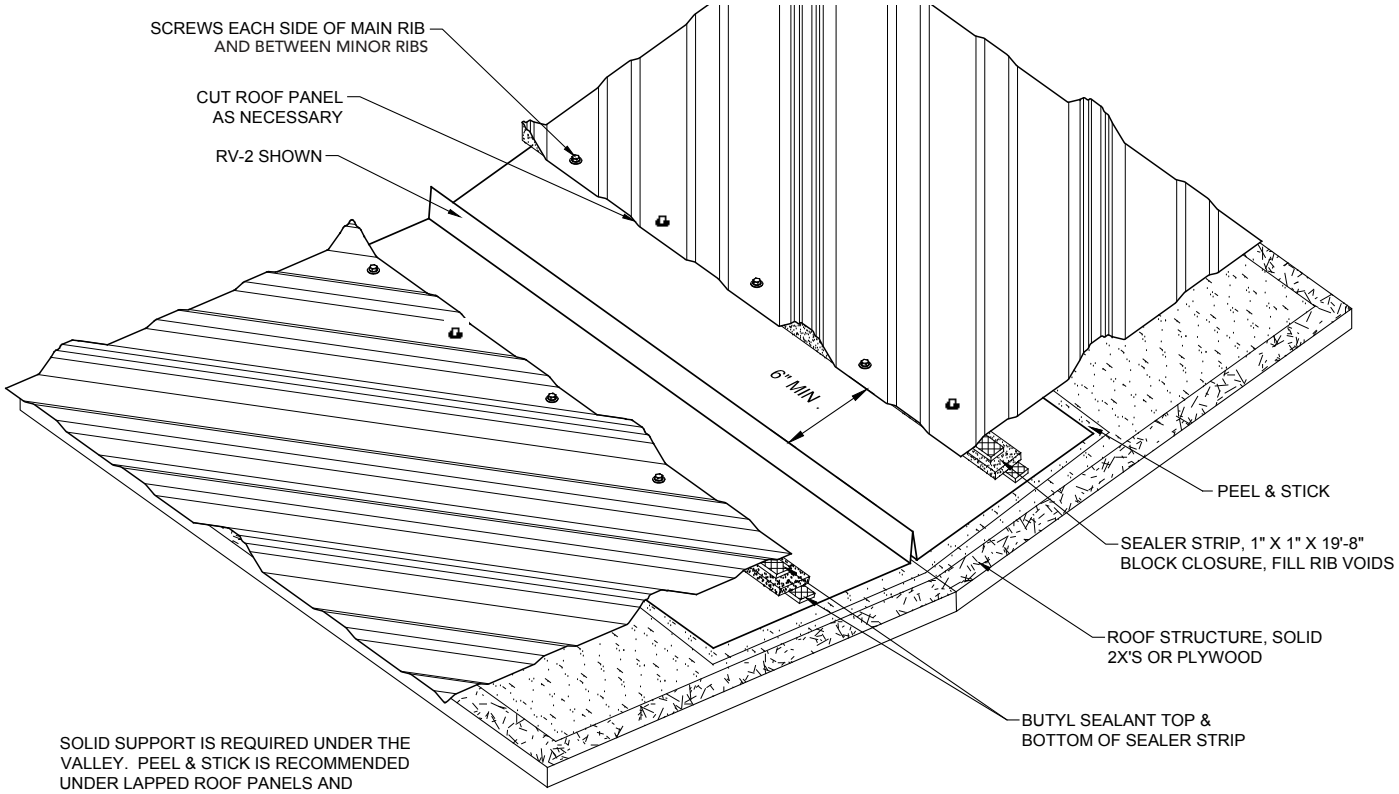
RESIDENTIAL ENDWALL



RESIDENTIAL SIDEWALL

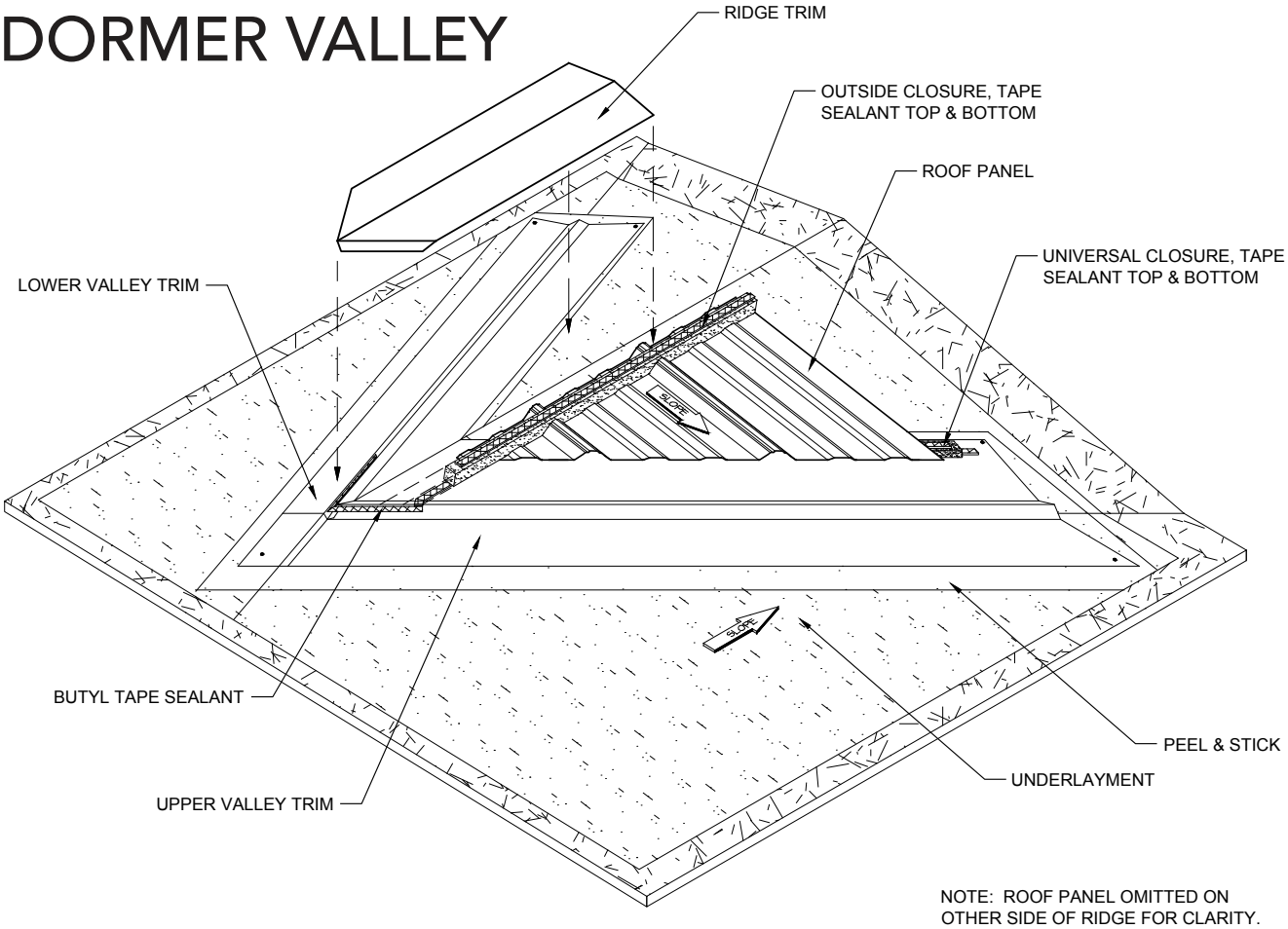


RESIDENTIAL VALLEY



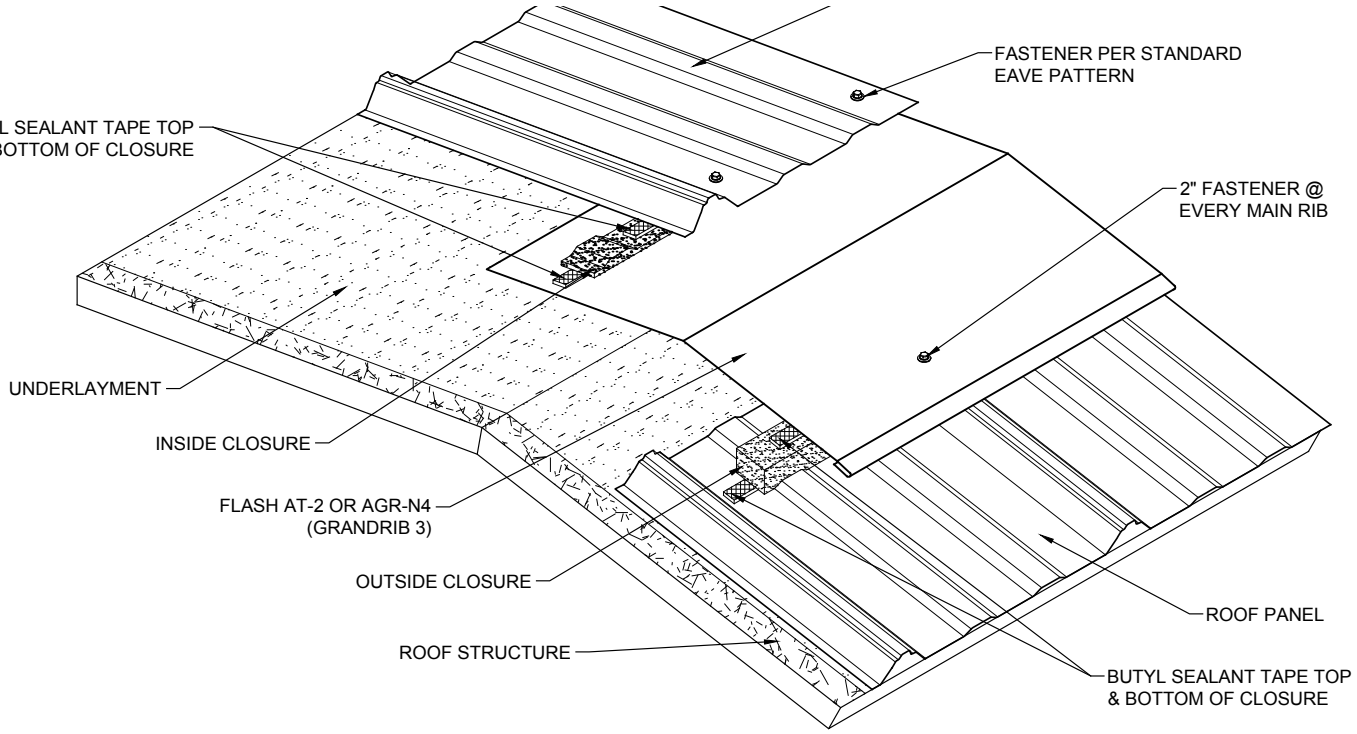
SOLID SUPPORT IS REQUIRED UNDER THE VALLEY. PEEL & STICK IS RECOMMENDED UNDER LAPPED ROOF PANELS AND VALLEY FLASHING. LINING MUST CONTINUE DOWN TO EAVE LINE.

DORMER VALLEY



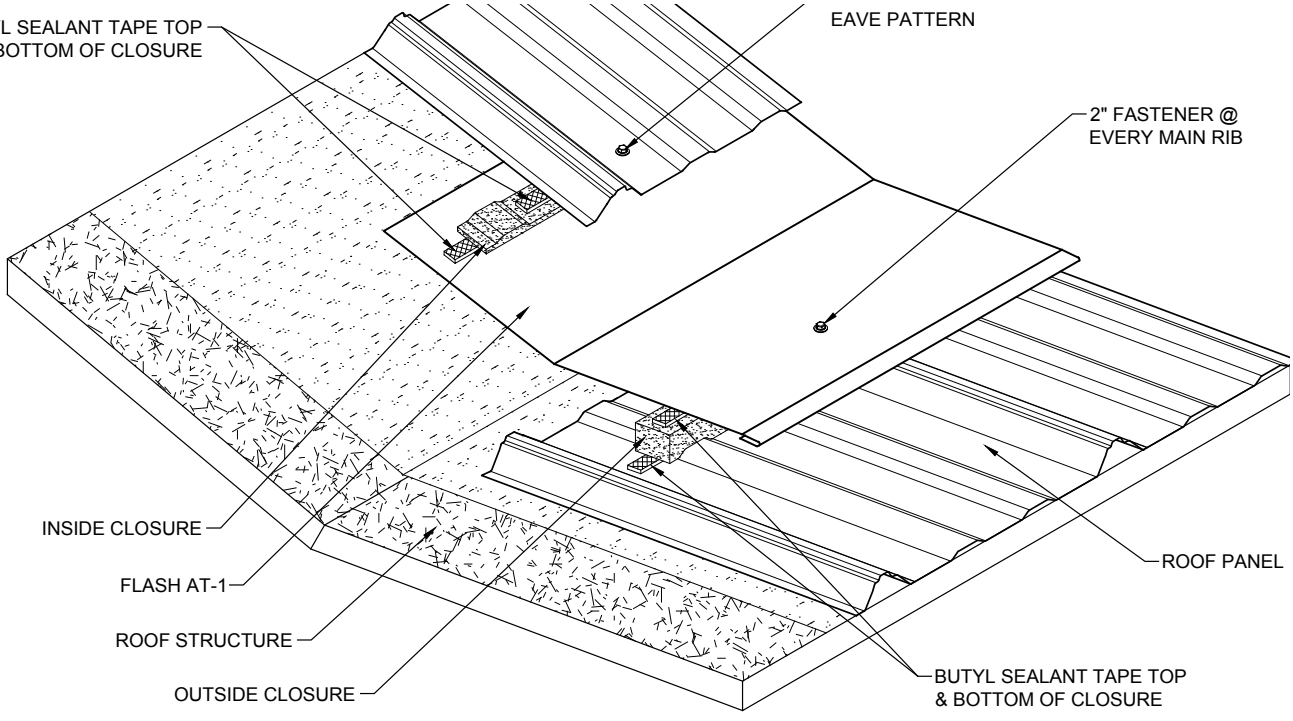
NOTE: ROOF PANEL OMITTED ON OTHER SIDE OF RIDGE FOR CLARITY.

RESIDENTIAL GAMBREL

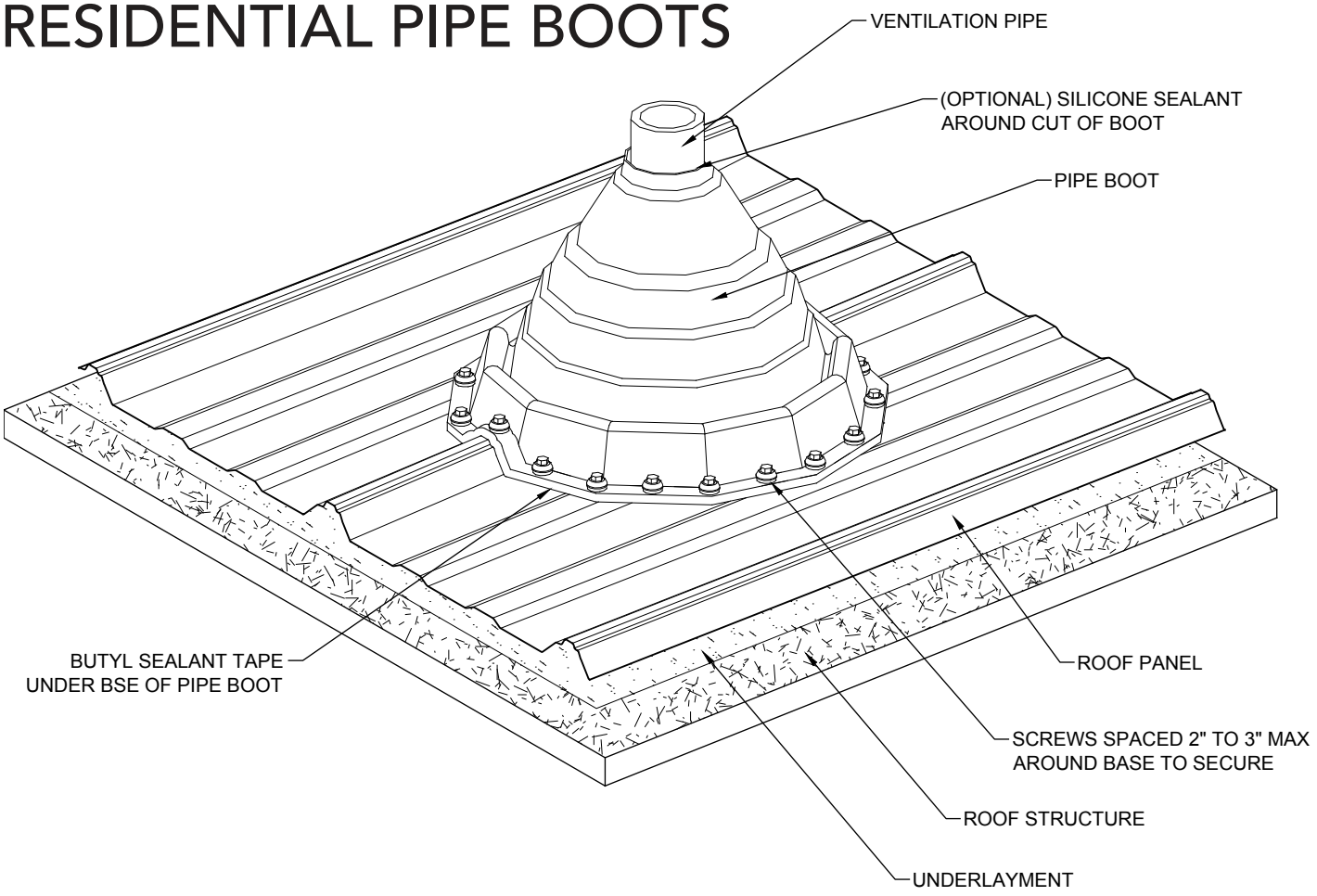


NOTE: SPECIFY BOTH ROOF PITCHES WHEN ORDERING AT-2 FLASH. AGRN-4 FOR GRANDRIB 3 AND AGRN-5 FOR STRONGRIB ARE FOR 3/12 TO 15/12 GAMBRELS.

RESIDENTIAL TRANSITION

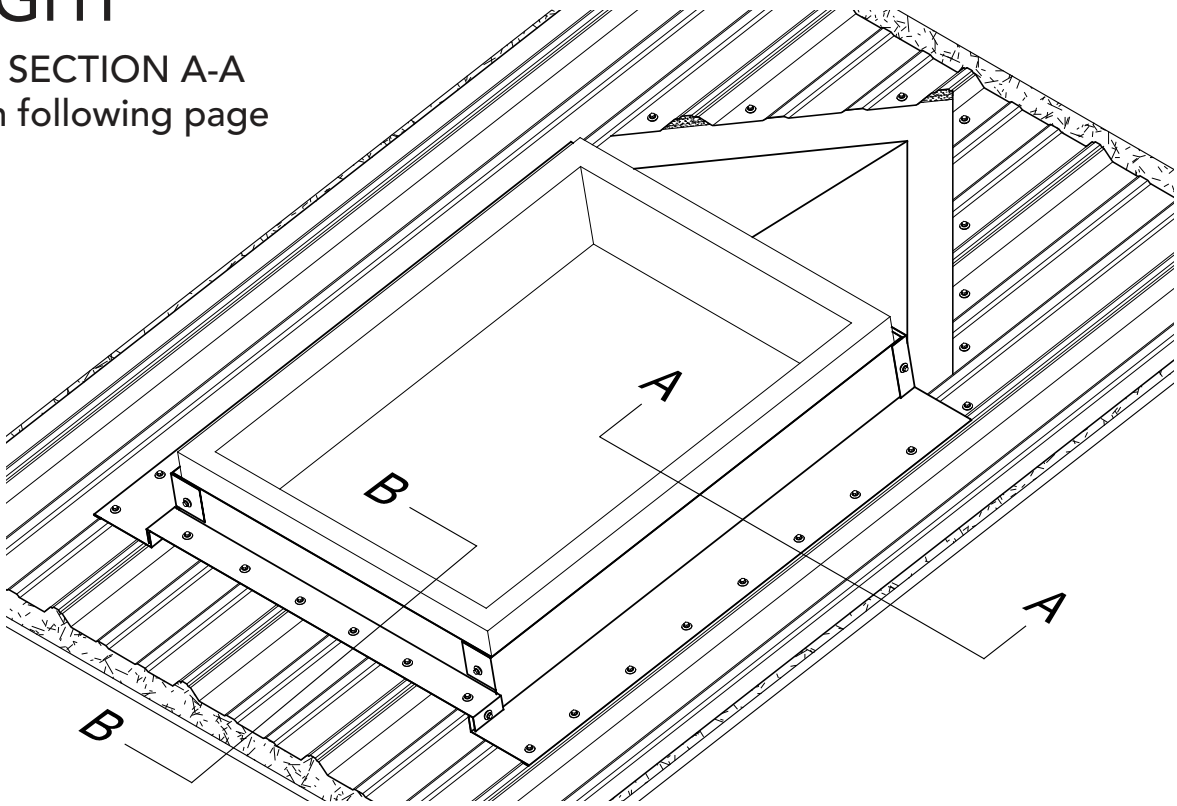


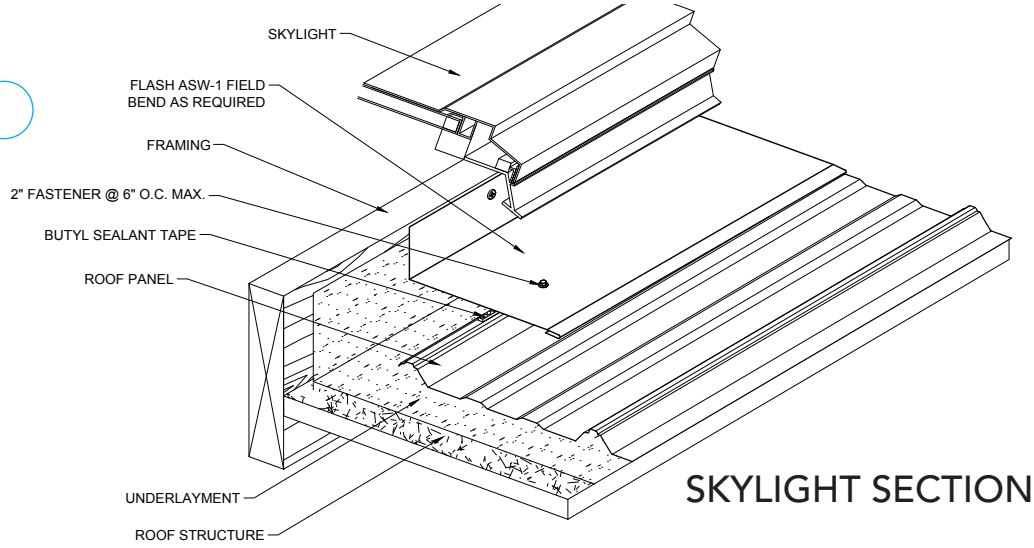
RESIDENTIAL PIPE BOOTS



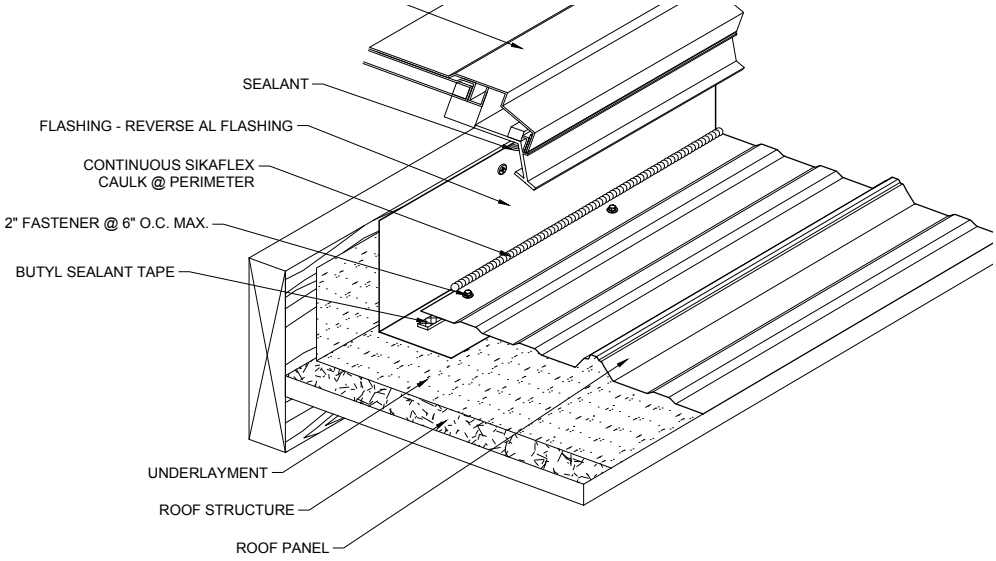
SKYLIGHT

SKYLIGHT SECTION A-A
and B-B on following page

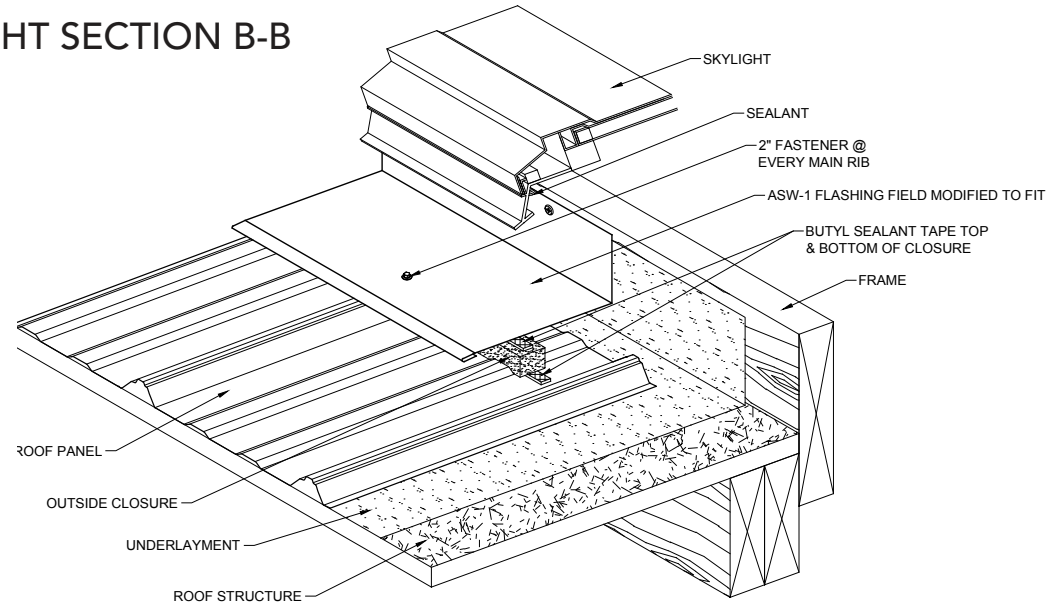




SKYLIGHT SECTION A-A

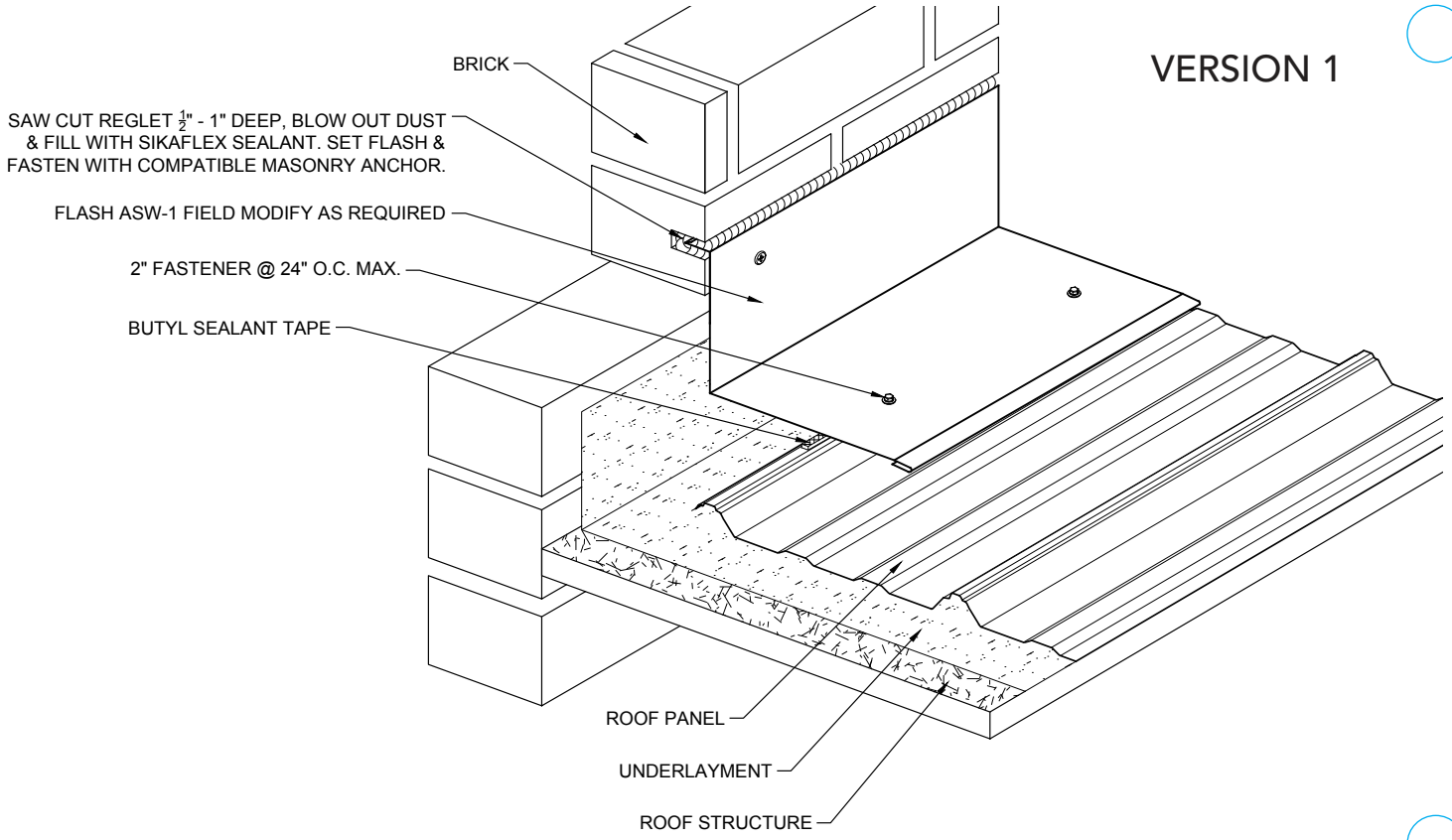


SKYLIGHT SECTION B-B

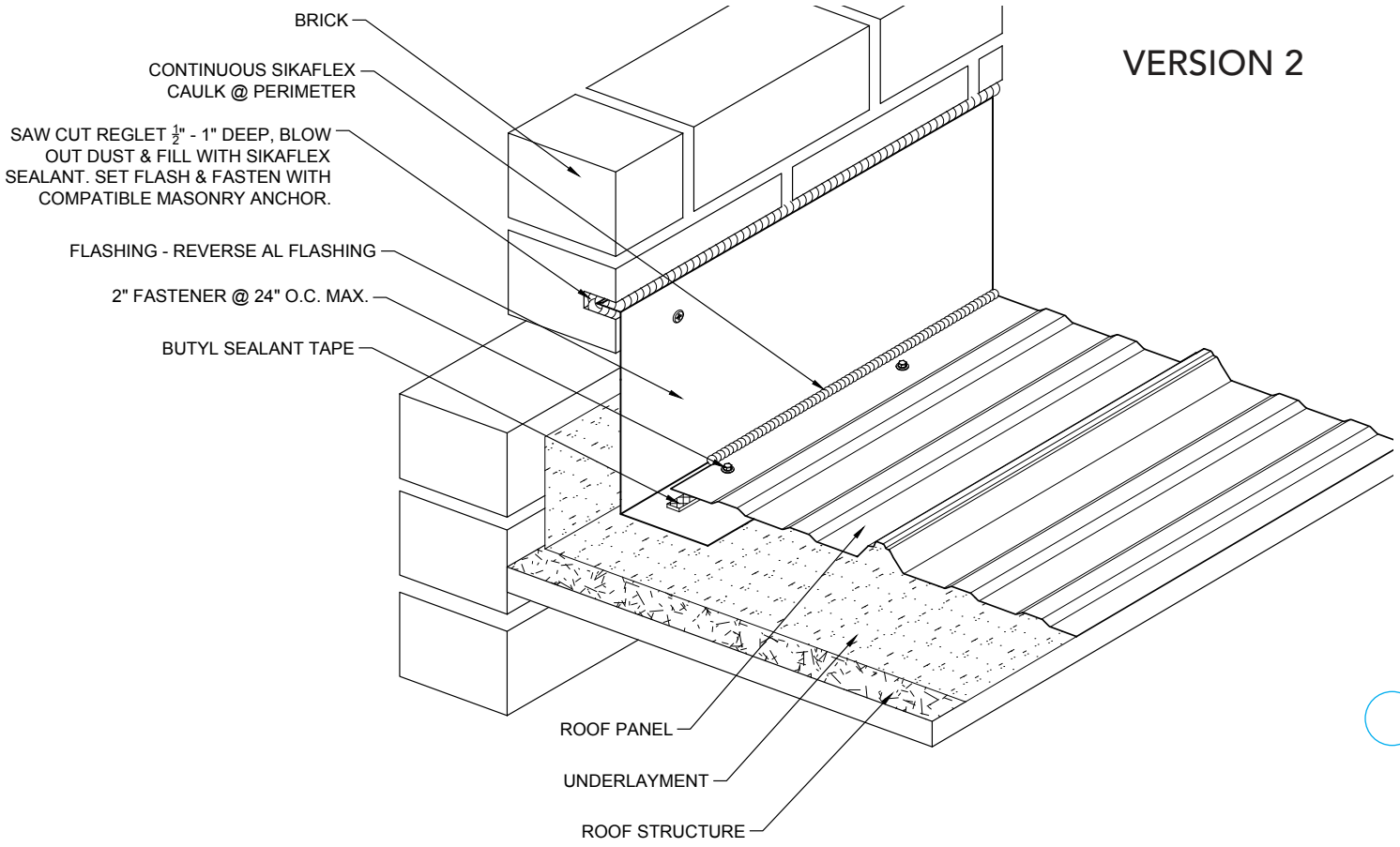


CHIMNEY DETAILS

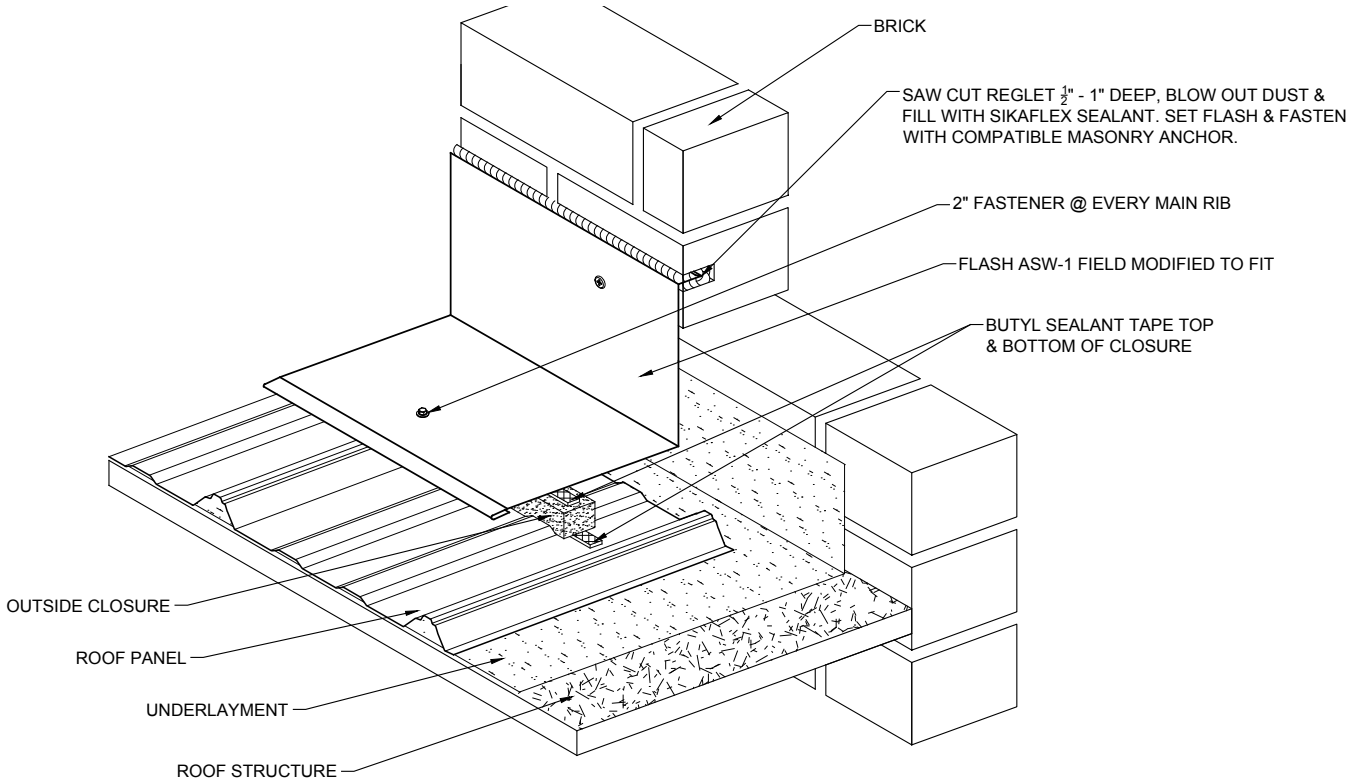
VERSION 1



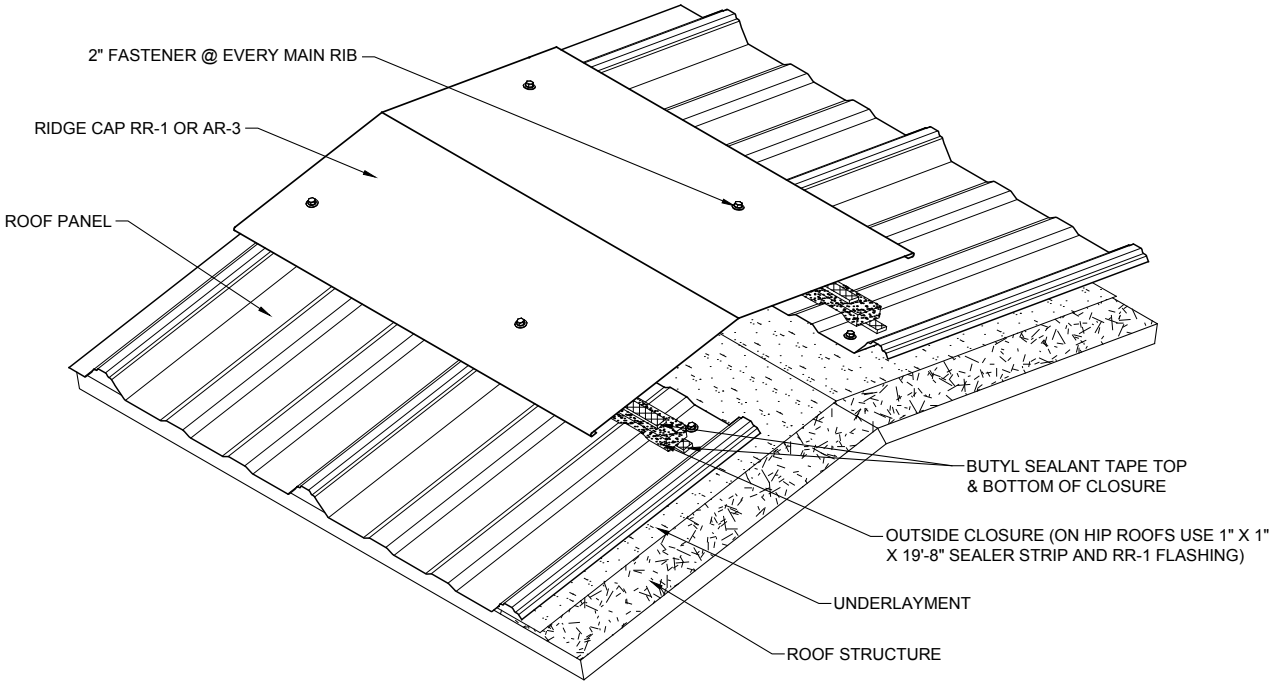
VERSION 2



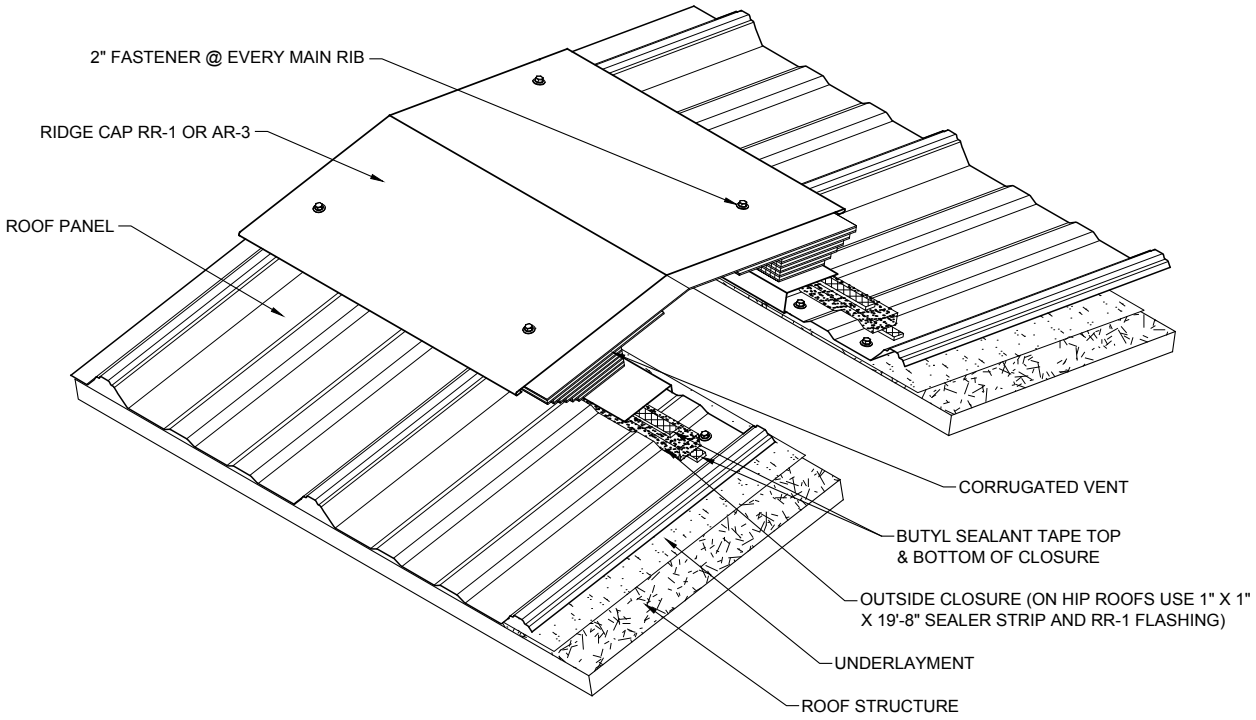
CHIMNEY ENDWALL



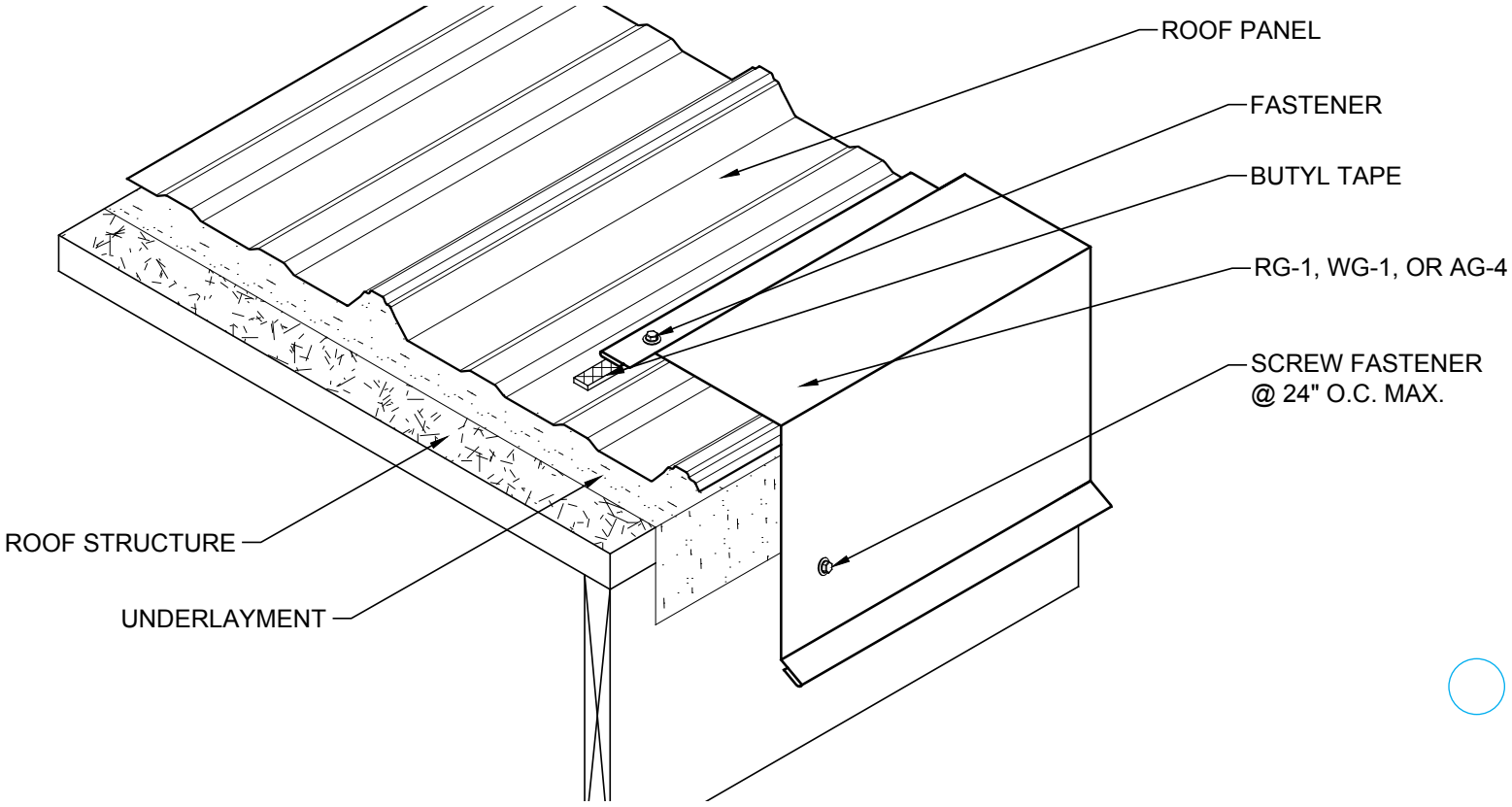
RESIDENTIAL RIDGE/HIP



RESIDENTIAL VENTED RIDGE



RESIDENTIAL GABLE



PAINT SYSTEMS & WARRANTIES

Enduracote® is a paint system that takes performance to the next level. Based on cutting edge resin technology, this system offers unbeatable durability and superior long-term performance against the elements.

The Enduracote® PLUS Warranty

- Lifetime film integrity for walls & roofs
- 30-year against fade & chalk for walls and roofs
- 15-year edge rust against acid rain
- 25-year non-perforation against acid rain for walls; 20-years for roof

For profiles: Grandrib 3 PLUS

The Enduracote® Warranty for Galvanized Panels

- Lifetime film integrity for walls & roofs
- 30-year against fade & chalk for walls and roofs
- 10-year edge rust against acid rain

For profiles: Grandrib 3, 5V Crimp, ProClad, StrongClad, Prime Rib, Grandbeam

TrustiRib™ Warranty

- 40-year film integrity
- 30-year fade and chalk prorated at a subsequent 5% every year beginning at year 10

The Enduracote® Warranty for Galvalume® Panels

- Lifetime film integrity for walls & roofs
- 30-year against fade & chalk for walls and roofs
- 20 year non-perforation warranty

For profiles: Grandrib 3, 1 1/2" SSR, Climaguard, Mighti-Rib, Horizon S, Horizon 16, Ultra-Loc, Ultra-Rib

OTHER WARRANTIES

Polyester Paint Warranty

- 25-year limited film integrity
- 10-year against fade & chalk

For profiles: Shelterguard®, 5-Rib

Galvalume® Perforation Warranty

- 20-year non-perforation warranty for Grandrib 3, Mighti-Rib, Climaguard, Horizon S and 1 1/2" SSR

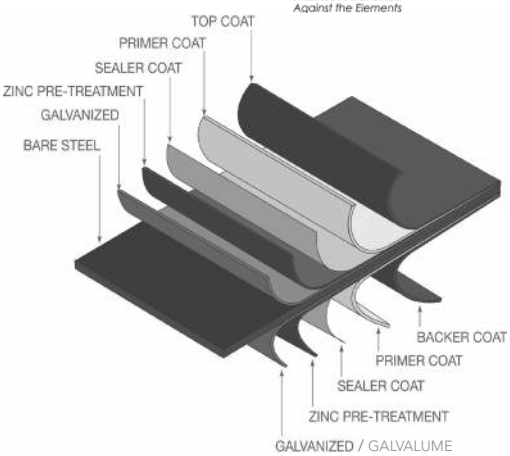
Galvalume is a registered trademark of BIEC International.

Aluminum Product Guarantee

- 30-year corrosion guarantee

Product Warranties are available upon request

ENDURACOTE® PREMIUM DEFENSE Against the Elements



The ENERGY STAR® Program

The ENERGY STAR Program promotes highly reflective roof systems that reflect solar energy. These roof systems allow buildings to stay cooler and, in turn, use less electricity for air conditioning; less electricity means a reduction in power generation and a reduction of pollutants discharged at power plants. Fabral has attained ENERGY STAR approval for many of its Enduracote® system colors. Ask for Technical Bulletin #724 titled "ENERGY STAR Approval," for program details and a list of approved Enduracote® colors.

All Fabral Enduracote Colors are ENERGY STAR Approved

Please contact your Fabral representative for more information about Fabral warranties and paint systems.

COMPLETE CONTACT INFORMATION

Contact by Phone - Nationwide Plant Locations

Cedar City, UT	(800) 432-2725
Grapevine, TX	(800) 477-9066
Gridley, IL	(800) 451-3974
Jackson, GA	(800) 884-4484
Lancaster, PA	(800) 477-2741
Marshfield, WI	(800) 528-0878
Spokane, WA*	(800) 456-9124 (800) 477-8028
St. Joseph, MN	(800) 873-3440
Tifton, GA	(800) 749-8144

Contact by Email

info@fabral.com

Fabral.com/contact

Live Tech Chat

Fabral.com

*Both numbers service Northern California, Oregon, Washington areas

GENERAL NOTES

GENERAL

NOTES

FABRAL
METAL WALL AND ROOF SYSTEMS

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