



CHAMPION METAL

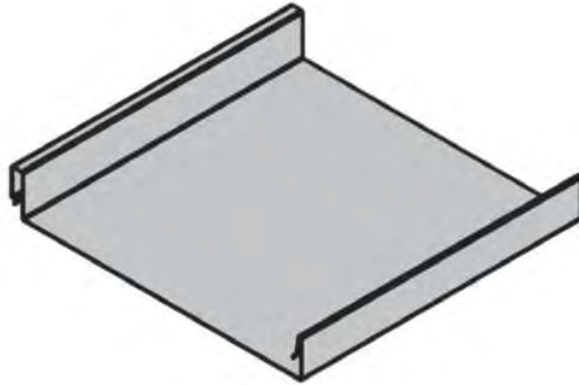
a Taylor Metal Company



Versa-Span™ Flashings and Details Guide

Versa-SpanTM

STRUCTURAL SNAP-LOCK



Features & Benefits

- 14-5/8" and 18" Standard Panel Width
- 1-3/4" Snap Lock Seam
- Custom Lengths 2'0" to 300'0"
- Concealed Clip System - No Seaming Required
- Minimum Slope 2 : 12
- UL 580 Class 90 Wind Uplift
- UL Certified for Cons No. 254, 255, 261, 303, 343, 414, 508A
- Structural Panel Suitable For Open Purlin System up to 4'
- Tested For:
ASTM 1592 - Structural Performance
ASTM 1646 - Water Infiltration
ASTM 1680 - Air Infiltration

Available Options

- Flat Pan / Ribs / Striations *
- 12" - 24" Panel Widths
- Weather tightness Warranty
(Contact Champion Metal Representative for cost and requirements)
- Factory Injected Butyl Sealant
- On-site roll forming available
(Contact Champion Representative)

*Striations reduce the appearance of oil canning

Material Specifications

- 24 gauge Kynar 500® Painted Steel
.0236" Steel (*thickness prior to painting*)
Per ASTM A-653-94
G-90 Galvanizing
- 24 gauge Zinalume
.0236" Steel
AZ55 - Clear Acrylic Coating
Per ASTM A-792

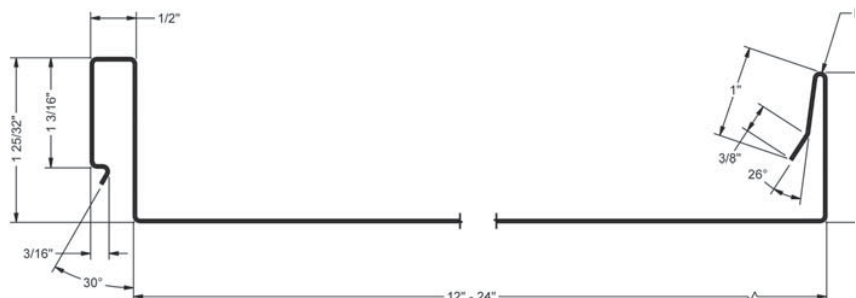
Available Options

- 22 gauge Kynar 500 Painted Steel
.029" Steel (*thickness prior to painting*)
Per ASTM A-653-94
G-90 Galvanizing
- AZ50 Zinalume
Per ASTM 792
- 16 and 20 ounce Copper
Per ASTM B-370

Finishes

- Panel is available in a wide variety of "Cool" baked on Kynar colors. See color chart or inquire for availability.
- Kynar® 500 Paint System - the ultimate in exterior durability and color retention
- Top of the line, two-coat, 70% resin finish, applied to a 1 mil. thickness
- 20 year commercial paint warranty
- 30 year residential paint warranty
 - fading
 - chalking
 - chipping
 - cracking
 - peeling

PANEL PROFILE



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Notes to Designer/Installer

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

Installation should be performed only by qualified installers familiar with metal roofing systems and industry standards. For details not shown in this guide, refer to the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) architectural sheet metal manual for proper design.

The Standard gauge for all products in this guide is 24 gauge and the standard finish is Kynar 500®/Hylar 5000®. We recommend specifying all flashings be the same gauge, color, and finish as the panels to insure long-term durability and color match.

Substrates

Details in the manual are all shown over solid substrate. Versa-Span™ can be used over spaced purlins. For solid substrate, Champion Metal recommends 5/8" plywood or metal decking.

Underlayment

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

Drag Load Requirements

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

Ventilation and Insulation

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

Oil Canning

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

Thermal Movement

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

Snow Design

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

All roof penetrations should be located as close to the ridge or top of roof. Snow country requires special designs for valleys to accommodate accumulation of snow and ice from uphill panels. Roof design should be considered in snow areas. Roof design should help resist the melting and freezing of snow and ice. A fit for purpose roof design has the greatest impact on maintaining a damage free roof system in snow areas. Please contact a Champion Metal representative for assistance in detail designs and appropriate panel selection for specific climate and building conditions.

Handling, Storage, and Safety

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

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

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

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

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

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

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

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

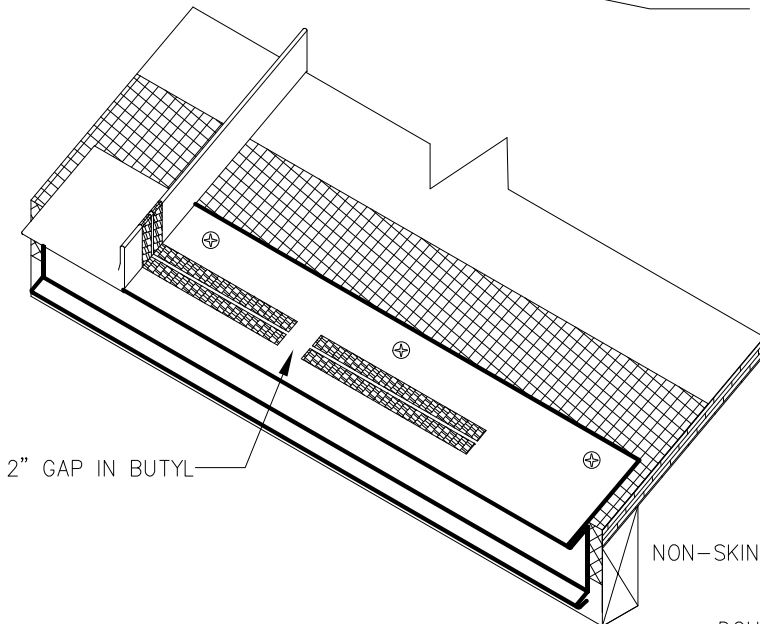
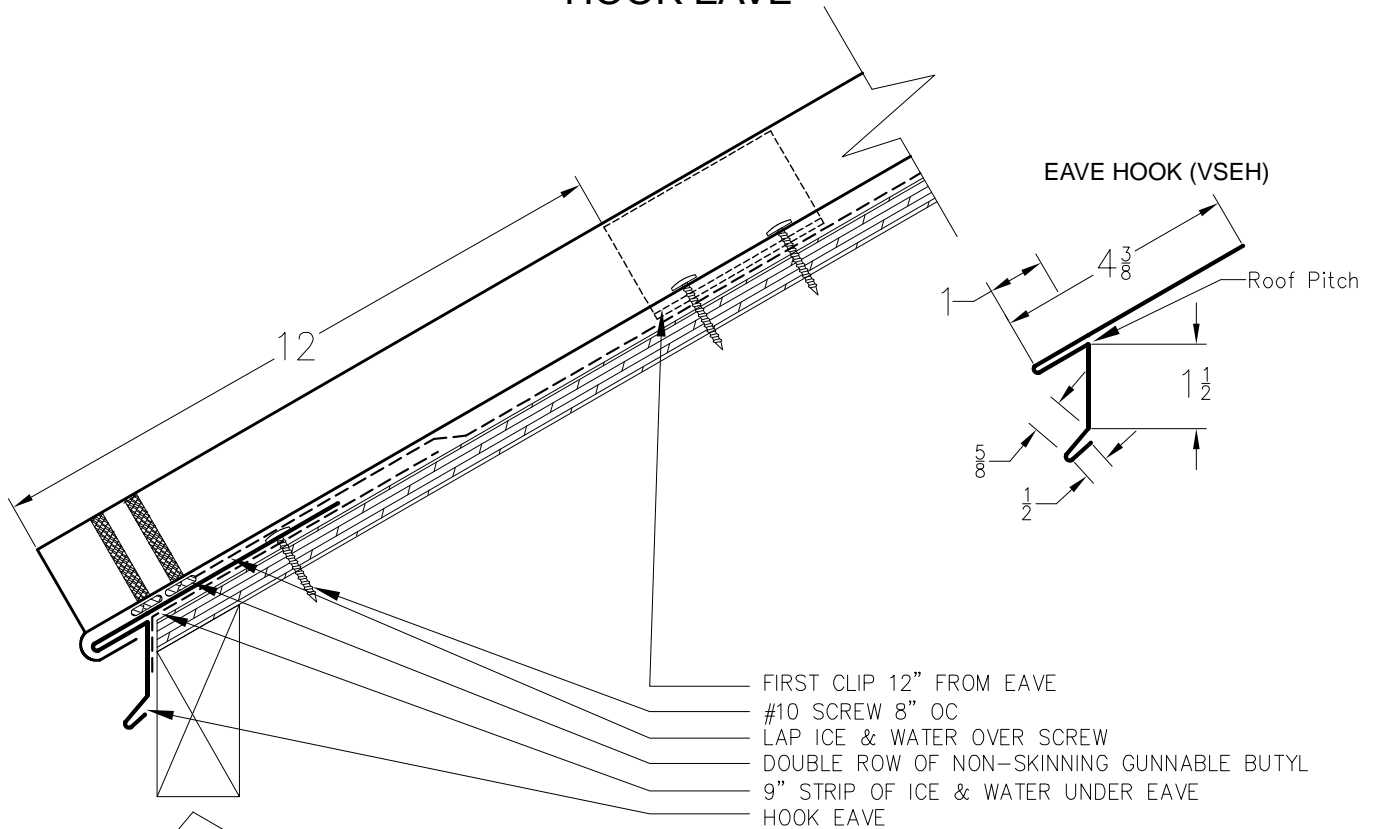
Do not walk on major ribs of panels.

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

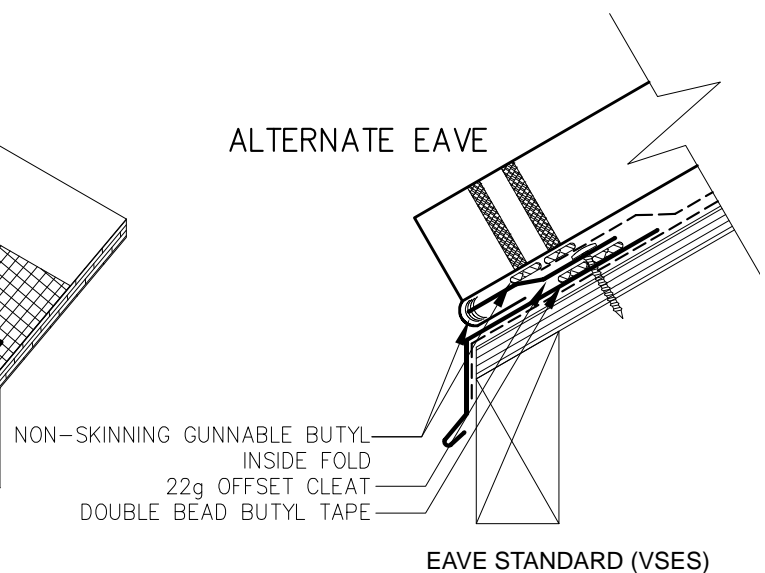
Avoid installing metal panels in windy conditions.

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

HOOK EAVE

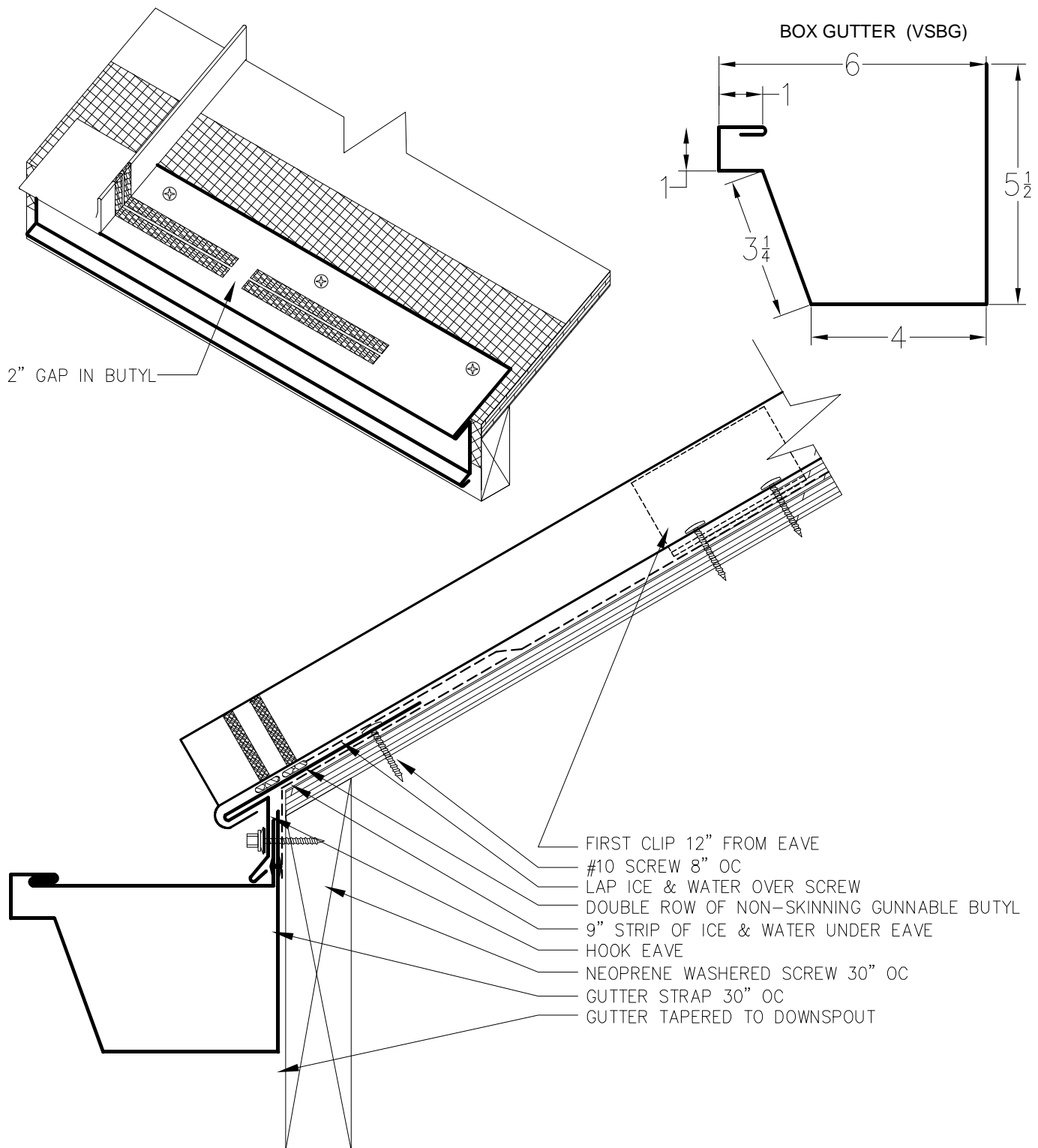


ALTERNATE EAVE



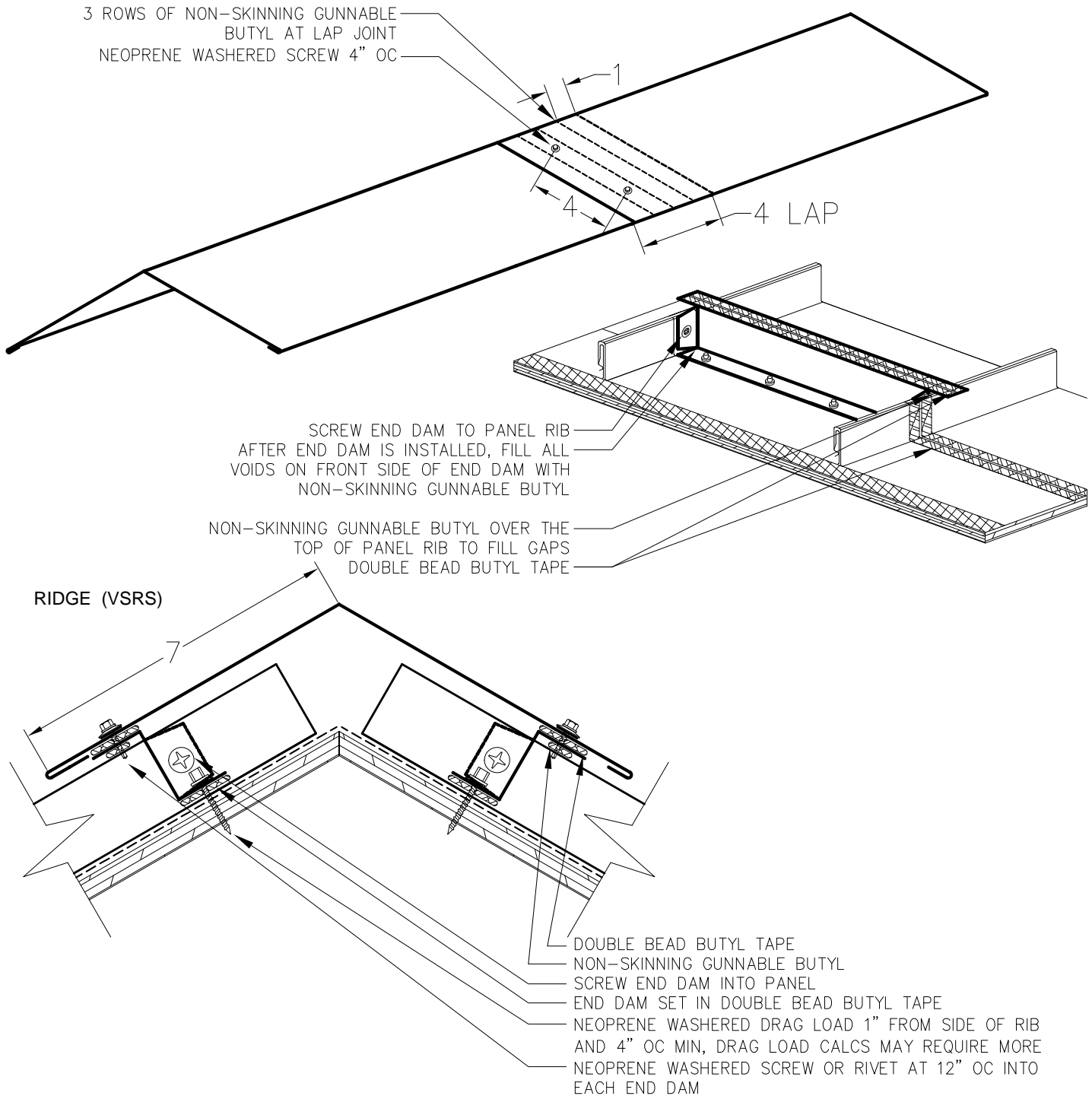
NOTE: All screws must be into solid substrate
Flashing must be lapped 4" with 2 rows of non-skinning gunnable butyl

HOOK EAVE WITH GUTTER



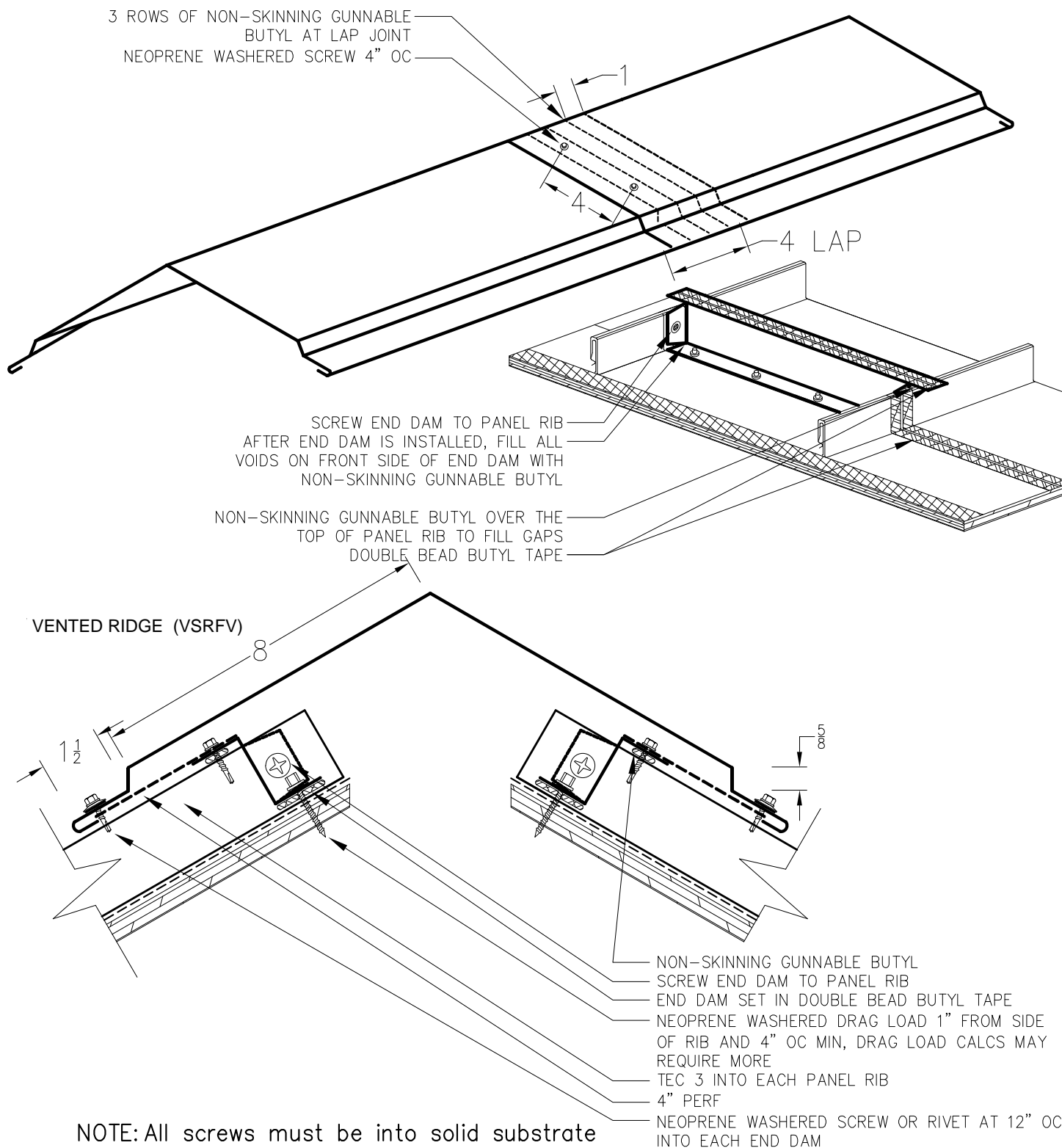
NOTE: All screws must be into solid substrate
Flashing must be lapped 4" with 2 rows of non skinning gunnable butyl

STANDARD RIDGE

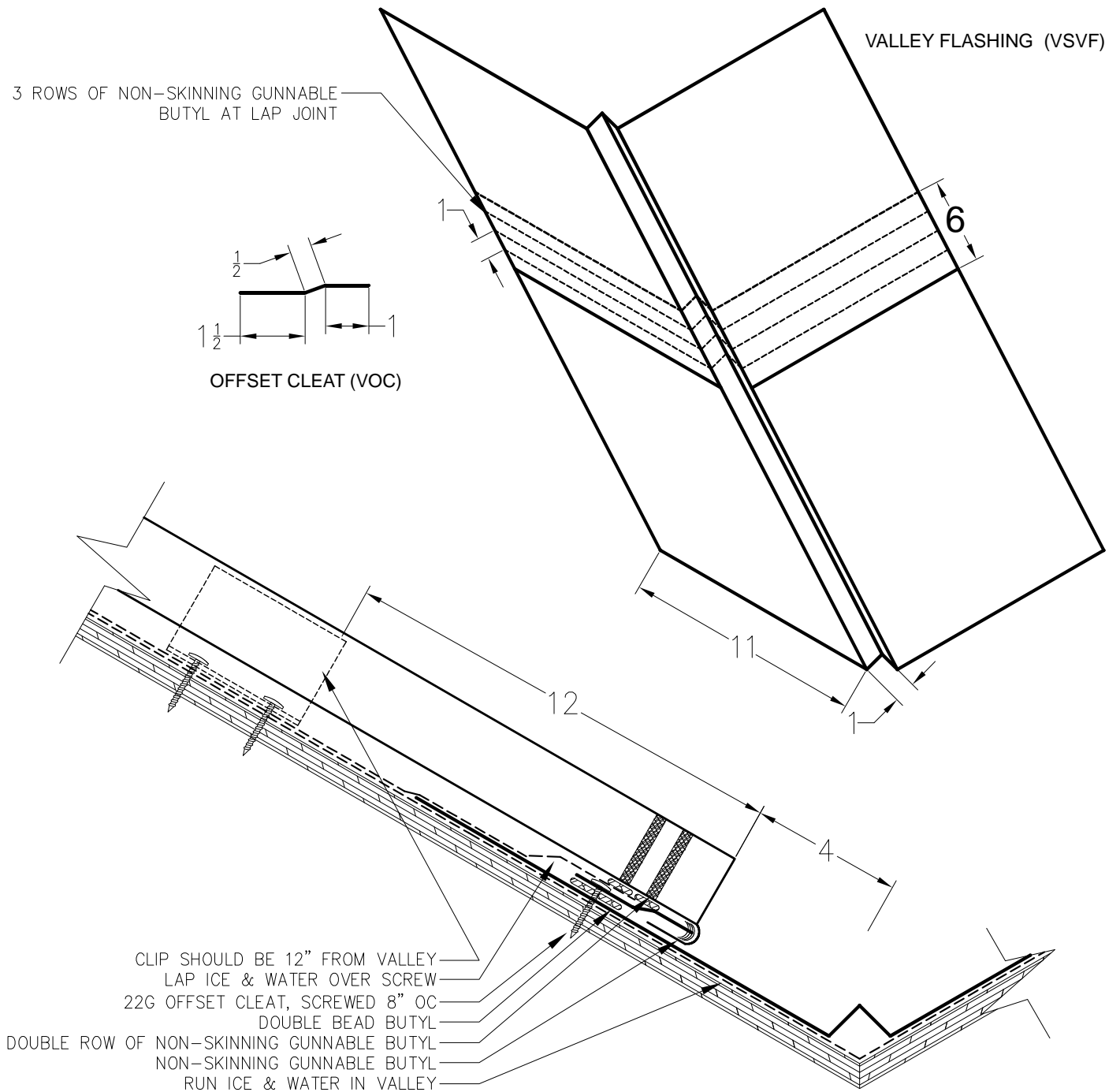


NOTE: All screws must be into solid substrate
Flashing must be lapped 4" with 3 rows of non-skinning gunnable butyl

VENTED RIDGE



STANDARD VALLEY

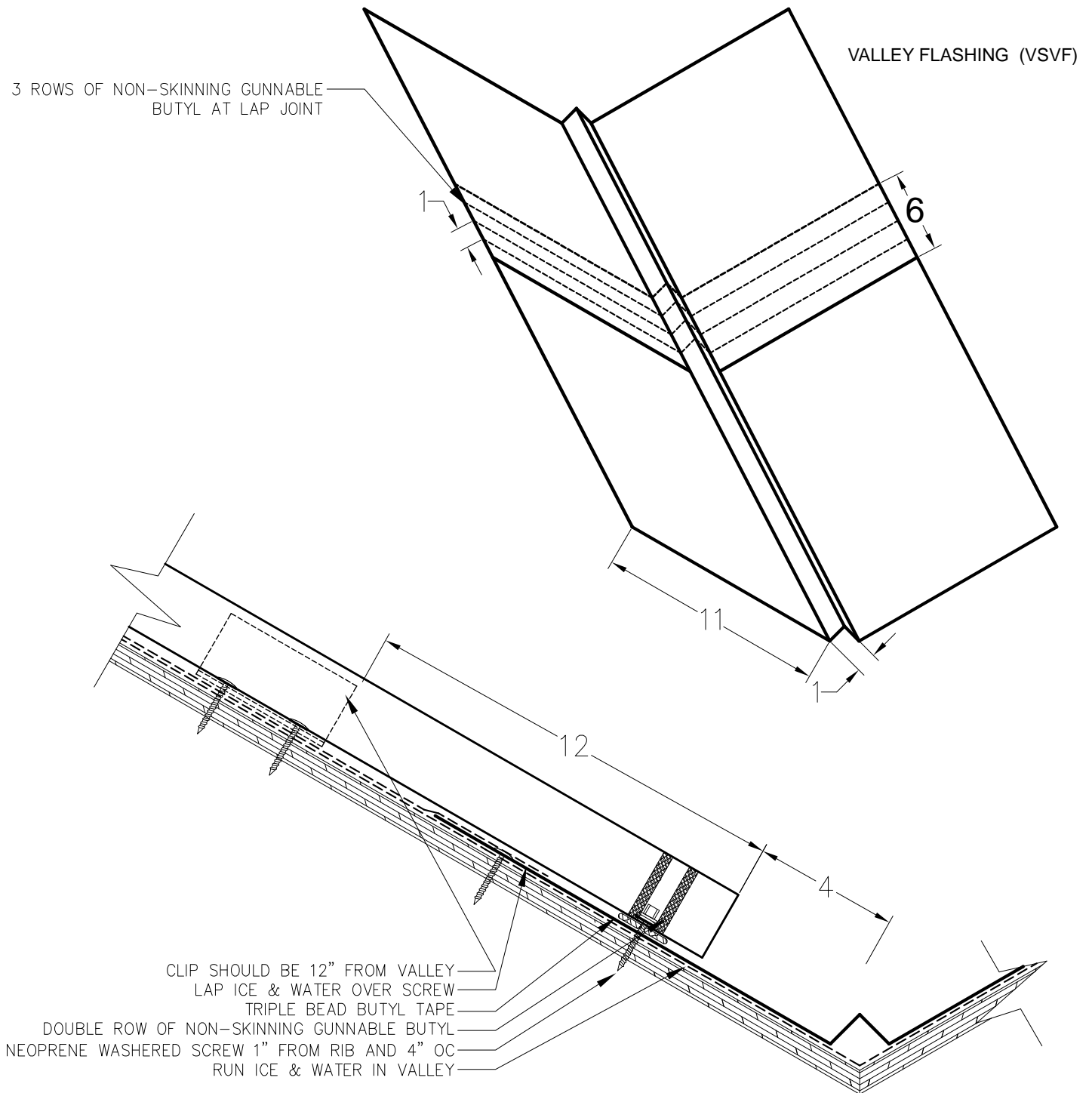


NOTE: All screws must be into solid substrate

Flashing must be lapped 6" with 3 rows of non-skinning gunnable butyl



ALTERNATE VALLEY

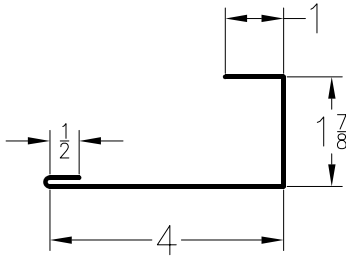


NOTE: All screws must be into solid substrate

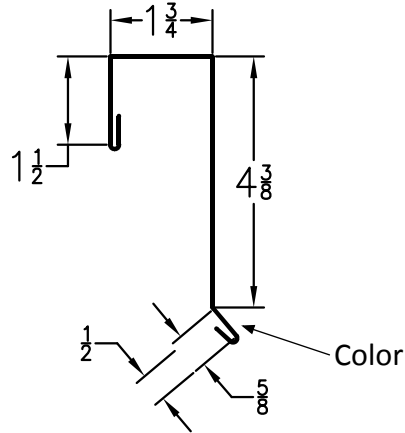
Flashing must be lapped 6" with 3 rows of non-skinning gunnable butyl

STANDARD GABLE

SUPPORT FLASHING (VSF)



SUPPORT FLASHING (VSGS1)

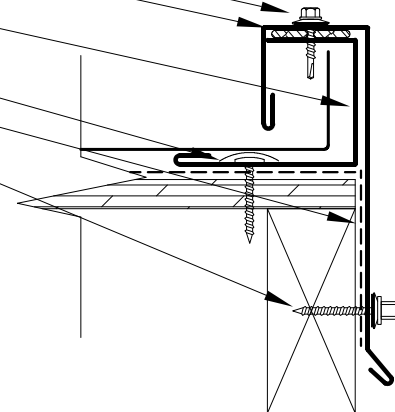


NEOPRENE WASHERED SCREW 12" OC OR RIVET
DOUBLE BEAD BUTYL TAPE

SUPPORT FLASHING WITH BACK HEM

SCREW 8" OC WITH SEALANT OVER THE TOP
ICF AND WATER WRAP DOWN FACE 3" MIN

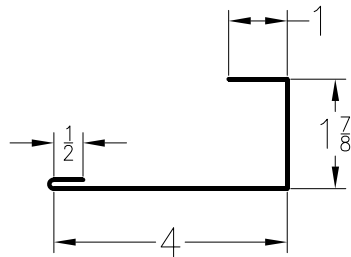
NEOPRENE WASHERED SCREW 12" OC



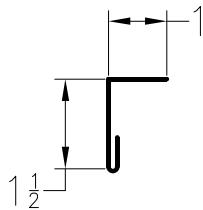
NOTE: All screws must be into solid substrate
Flashing must be lapped 4" with 2 rows of non-skinning gunnable butyl

ALTERNATE GABLE

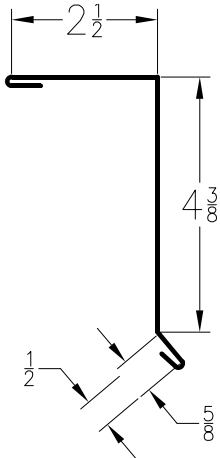
SUPPORT FLASHING (VSF)



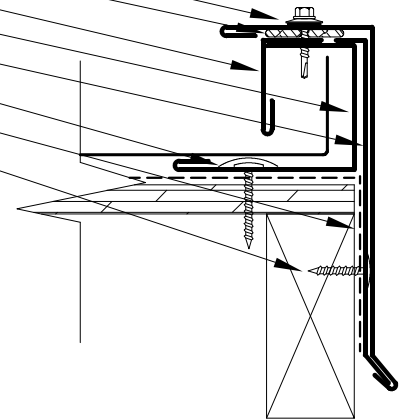
ALT CLOSURE (VSLF)



ALT GABLE (VSGS2)



NEOPRENE WASHERED SCREW 12" OC OR RIVET
DOUBLE BEAD BUTYL TAPE
CLOSURE TRIM
SUPPORT FLASHING WITH BACK HEM
CONTINUOUS CLEAT
SCREW 8" OC WITH SEALANT OVER THE TOP
ICE AND WATER WRAP DOWN FACE 3" MIN
CLEAT SCREW 8" OC

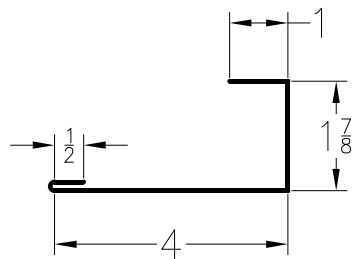


NOTE: All screws must be into solid substrate

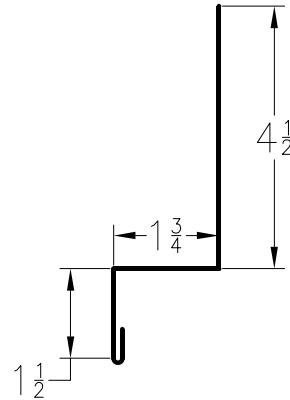
Flashing must be lapped 4" with 2 rows of non-skinning gunnable butyl

SIDE WALL

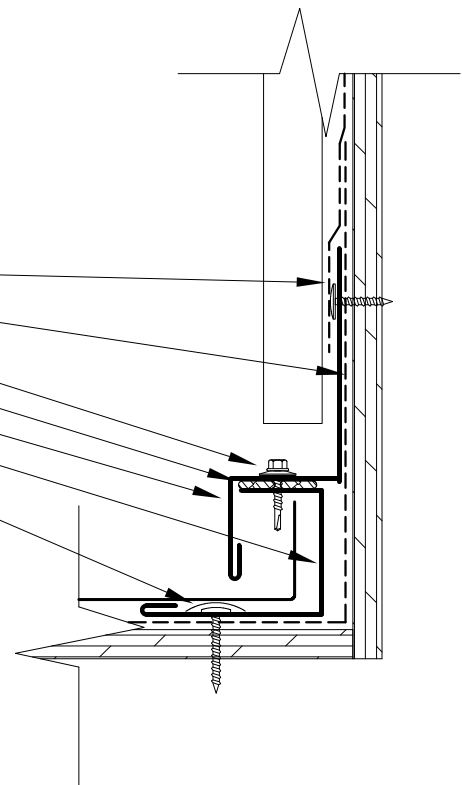
SUPPORT FLASHING (VSF)



SIDE WALL (VSSW)



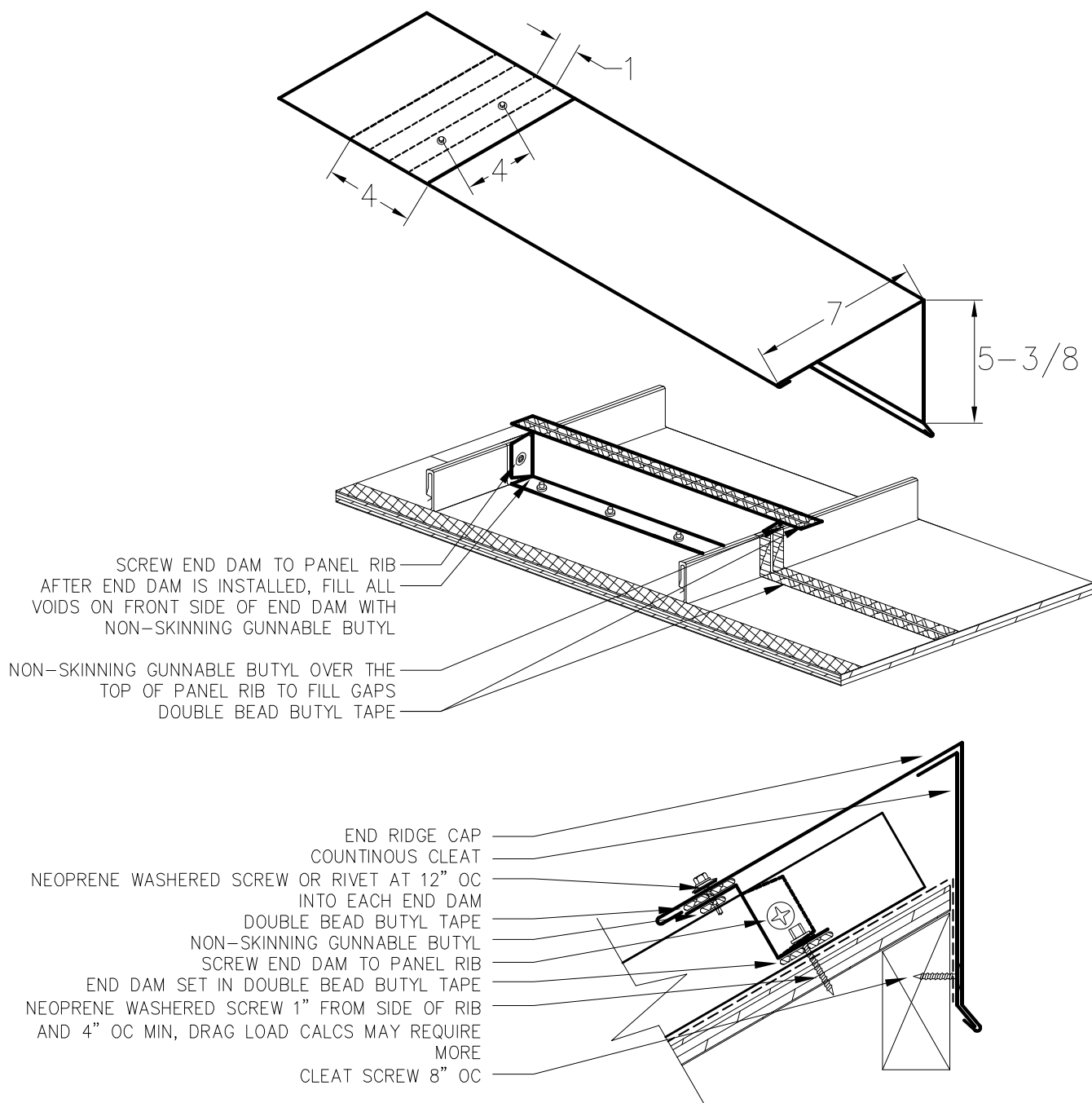
- LAP UNDERLAYMENT OVER SCREW
- ICE & WATER TURN UP WALL 8"
- NEOPRENE WASHERED SCREW 12" OC OR RIVET
- DOUBLE BEAD BUTYL TAPE
- CLOSURE TRIM
- SUPPORT FLASHING WITH BACK HEM
- SCREW 8" OC WITH SEALANT OVER THE TOP



NOTE: All screws must be into solid substrate
Flashing must be lapped 4" with 2 rows of non-skinning gunnable butyl

RIDGE END CAP

RIDGE END CAP (VSREC)



NOTE: All screws must be into solid substrate

Flashing must be lapped 4" with 3 rows of non-skinning gunnable butyl



VENTED RIDGE END CAP

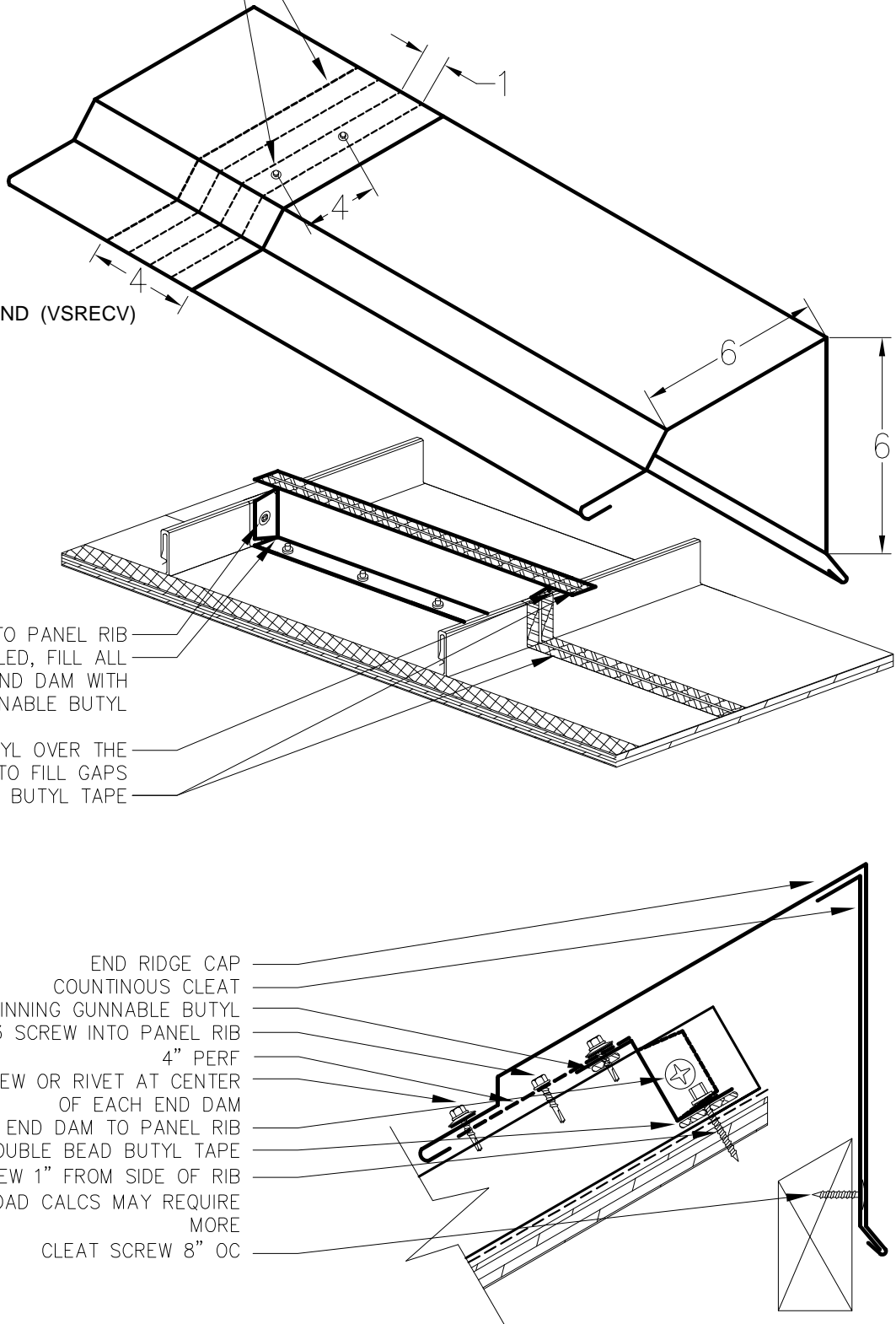
3 ROWS OF NON-SKINNING GUNNABLE
BUTYL AT LAP JOINT
NEOPRENE WASHERED SCREW 4" OC

VENTED RIDGE END (VSRECV)

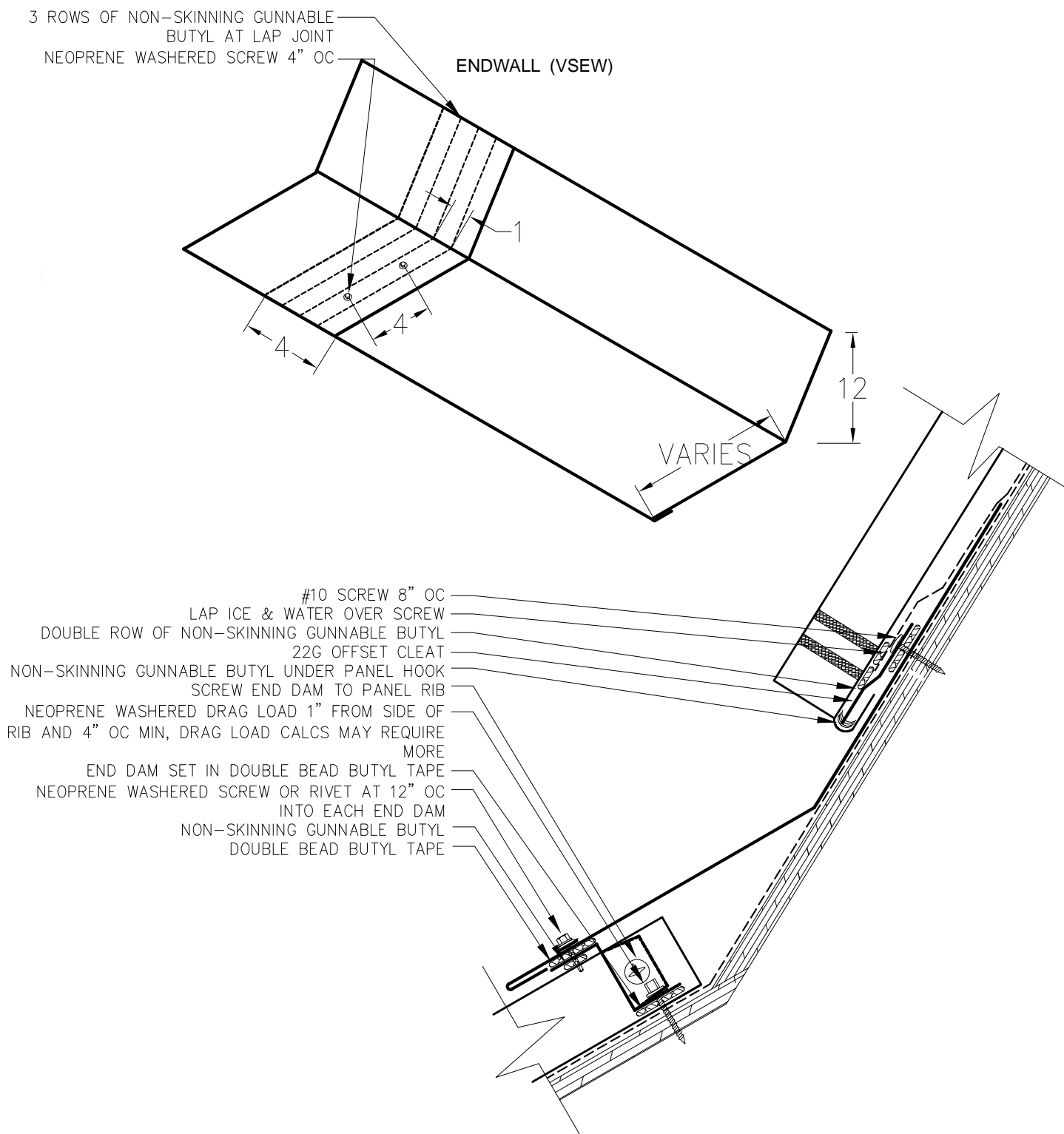
SCREW END DAM TO PANEL RIB
AFTER END DAM IS INSTALLED, FILL ALL
VOIDS ON FRONT SIDE OF END DAM WITH
NON-SKINNING GUNNABLE BUTYL

NON-SKINNING GUNNABLE BUTYL OVER THE
TOP OF PANEL RIB TO FILL GAPS
DOUBLE BEAD BUTYL TAPE

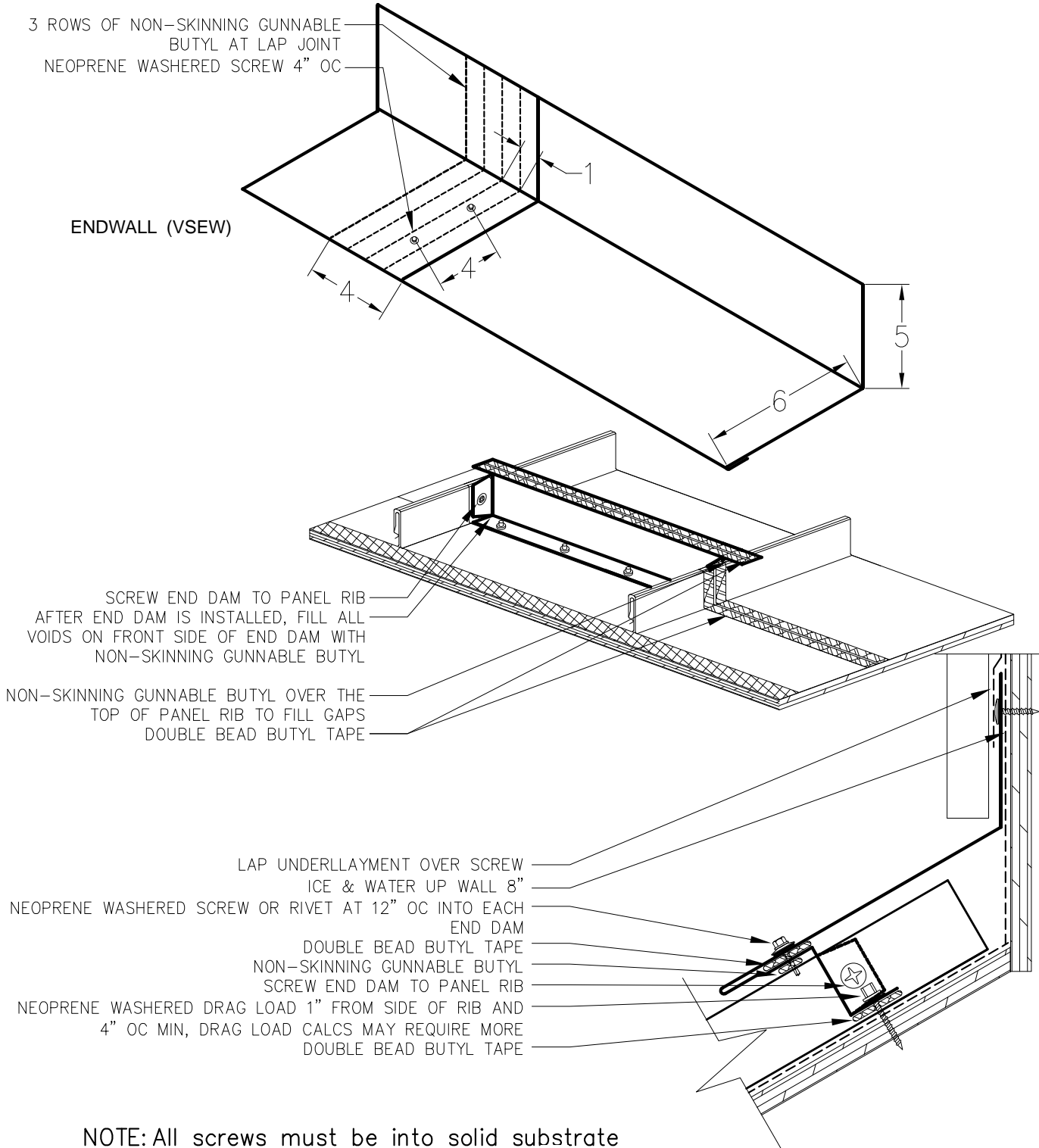
END RIDGE CAP
COUNTINOUS CLEAT
NON-SKINNING GUNNABLE BUTYL
TEC 3 SCREW INTO PANEL RIB
4" PERF
NEOPRENE WASHERED SCREW OR RIVET AT CENTER
OF EACH END DAM
SCREW END DAM TO PANEL RIB
END DAM SET IN DOUBLE BEAD BUTYL TAPE
NEOPRENE WASHERED SCREW 1" FROM SIDE OF RIB
AND 4" OC MIN, DRAG LOAD CALCS MAY REQUIRE
MORE
CLEAT SCREW 8" OC



ROOF PITCH TRANSITION



END WALL





VENTED END WALL

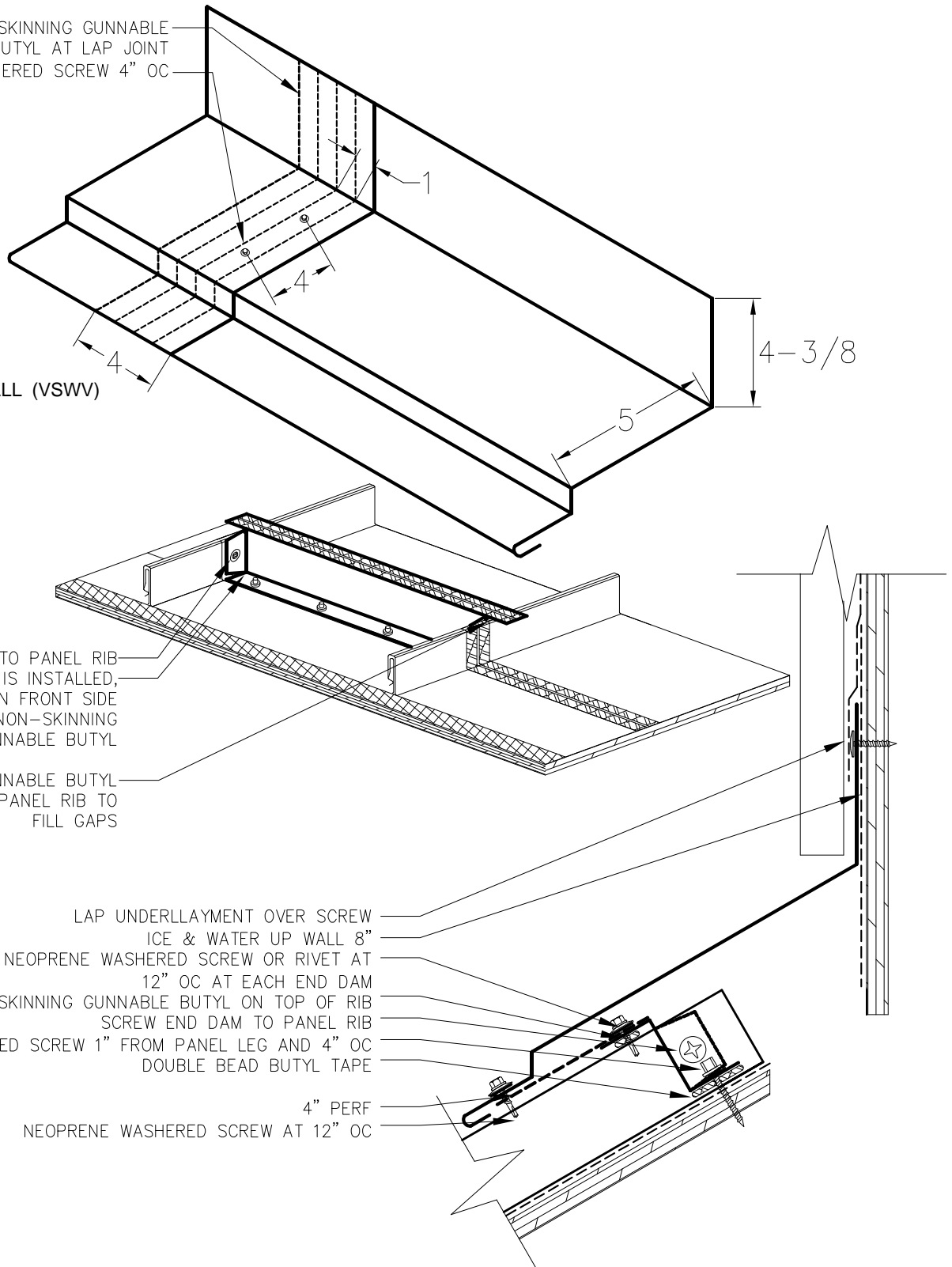
3 ROWS OF NON-SKINNING GUNNABLE BUTYL AT LAP JOINT
NEOPRENE WASHERED SCREW 4" OC

VENTED ENDWALL (VSWV)

SCREW END DAM TO PANEL RIB
AFTER END DAM IS INSTALLED,
FILL ALL VOIDS ON FRONT SIDE
OF END DAM WITH NON-SKINNING
GUNNABLE BUTYL

NON-SKINNING GUNNABLE BUTYL
OVER THE TOP OF PANEL RIB TO
FILL GAPS

LAP UNDERLAYMENT OVER SCREW
ICE & WATER UP WALL 8"
NEOPRENE WASHERED SCREW OR RIVET AT
12" OC AT EACH END DAM
NON-SKINNING GUNNABLE BUTYL ON TOP OF RIB
SCREW END DAM TO PANEL RIB
NEOPRENE WASHERED SCREW 1" FROM PANEL LEG AND 4" OC
DOUBLE BEAD BUTYL TAPE
4" PERF
NEOPRENE WASHERED SCREW AT 12" OC

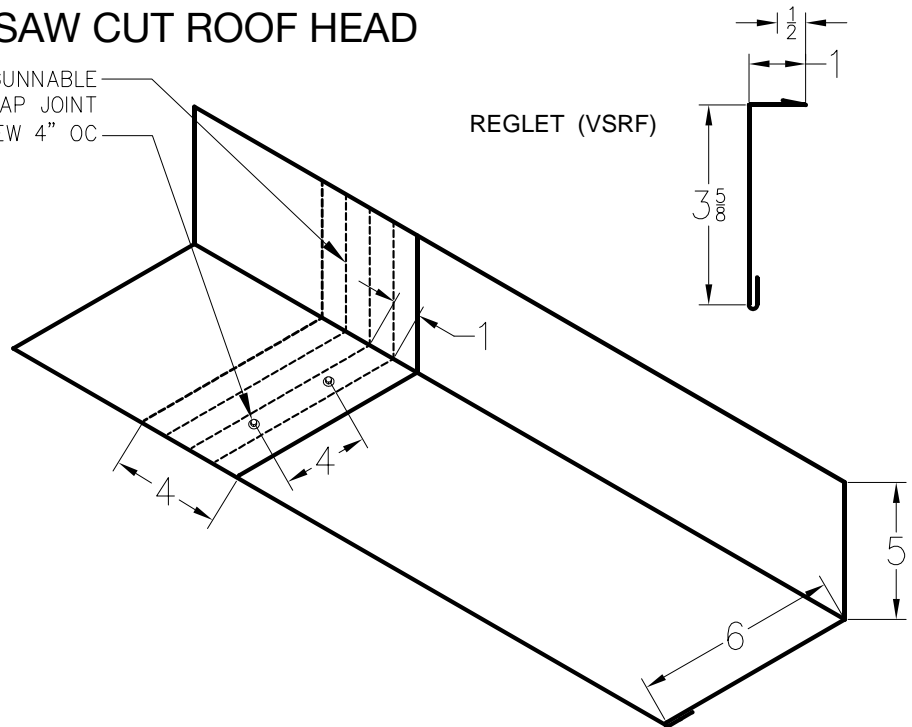


SAW CUT ROOF HEAD

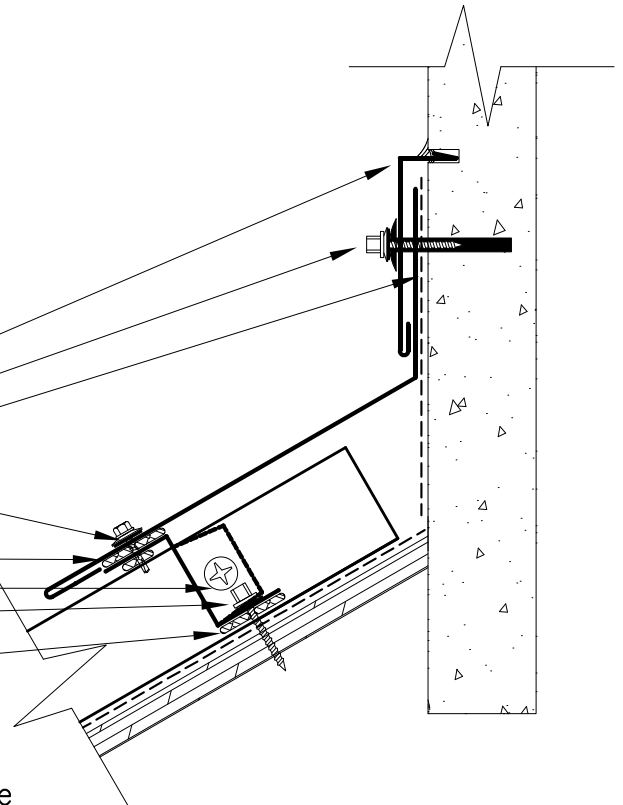
3 ROWS OF NON-SKINNING GUNNABLE
BUTYL AT LAP JOINT
NEOPRENE WASHERED SCREW 4" OC

REGLET (VSRF)

ENDWALL (VSRF)



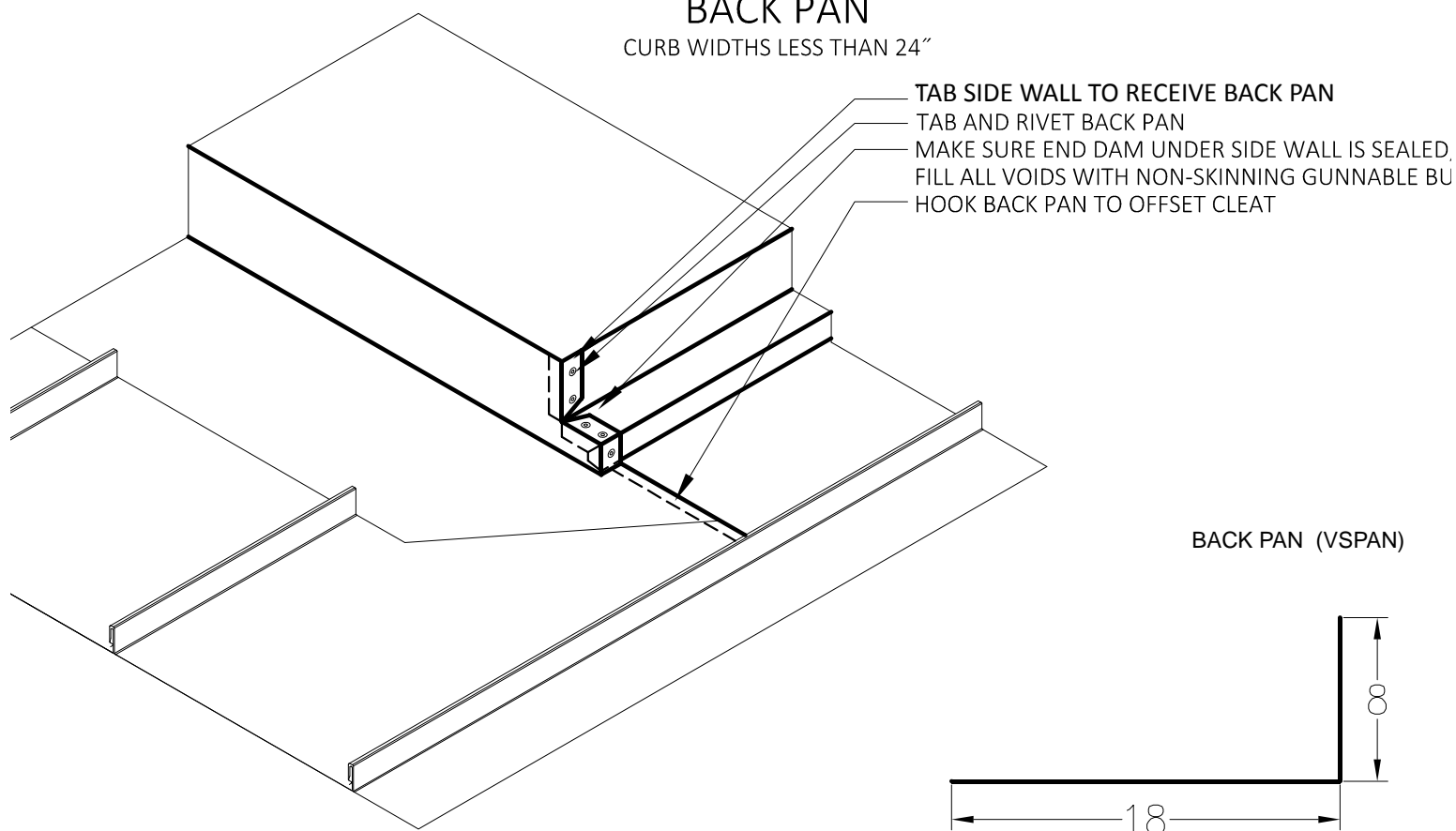
TUCK FLASHING INTO SAW CUT, SET IN SEALANT
FASTENER 24" OC
ICE & WATER UP WALL 8"
NEOPRENE WASHERED SCREW OR RIVET AT 12" OC
INTO EACH END DAM
DOUBLE BEAD BUTYL TAPE
SCREW END DAM TO PANEL RIB
NEOPRENE WASHERED SCREW 1" FROM PANEL LEG
AND 4" OC
DOUBLE BEAD BUTYL TAPE



NOTE: All screws must be into solid substrate
Flashing must be lapped 4" with 3 rows of non-skinning gunnable butyl

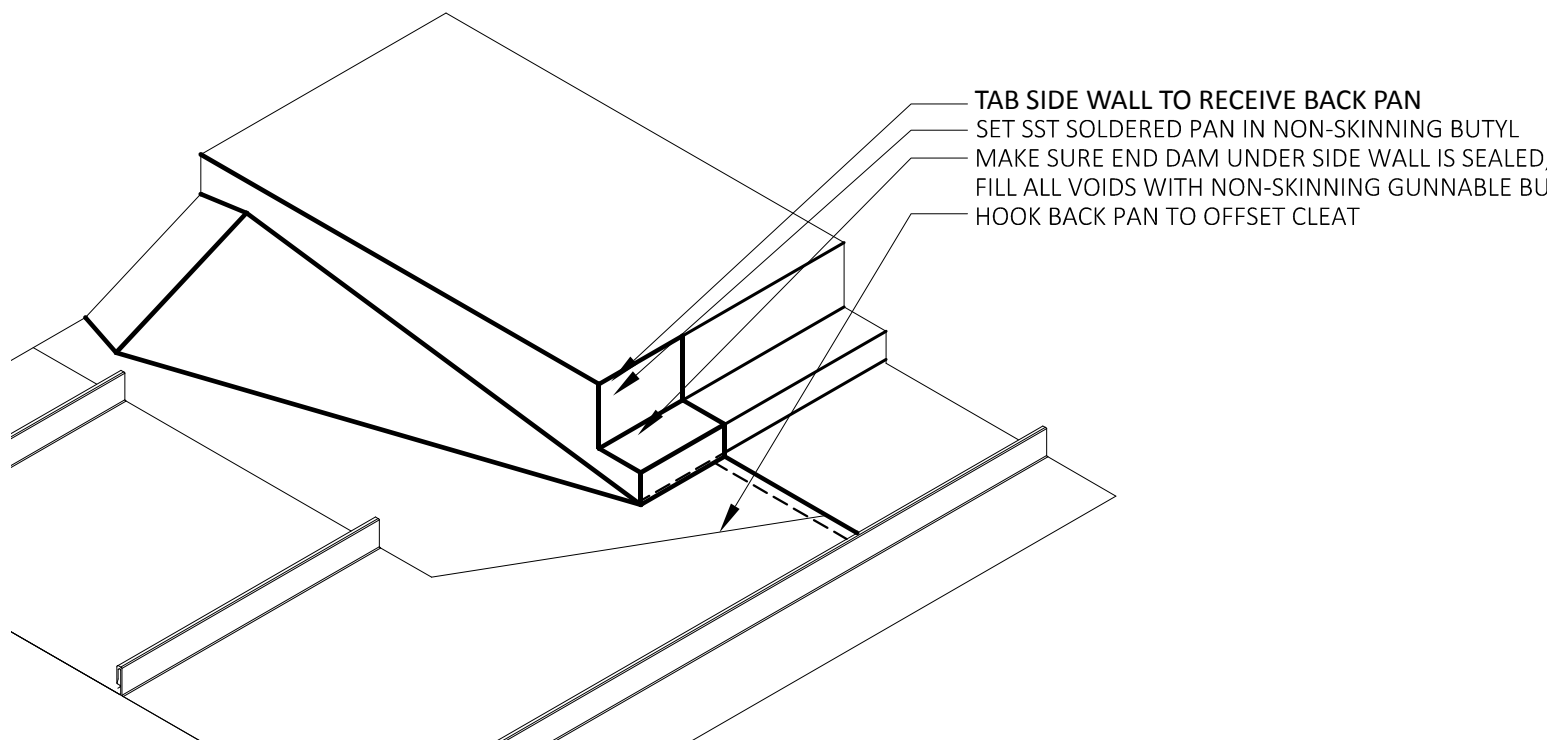
BACK PAN

CURB WIDTHS LESS THAN 24"

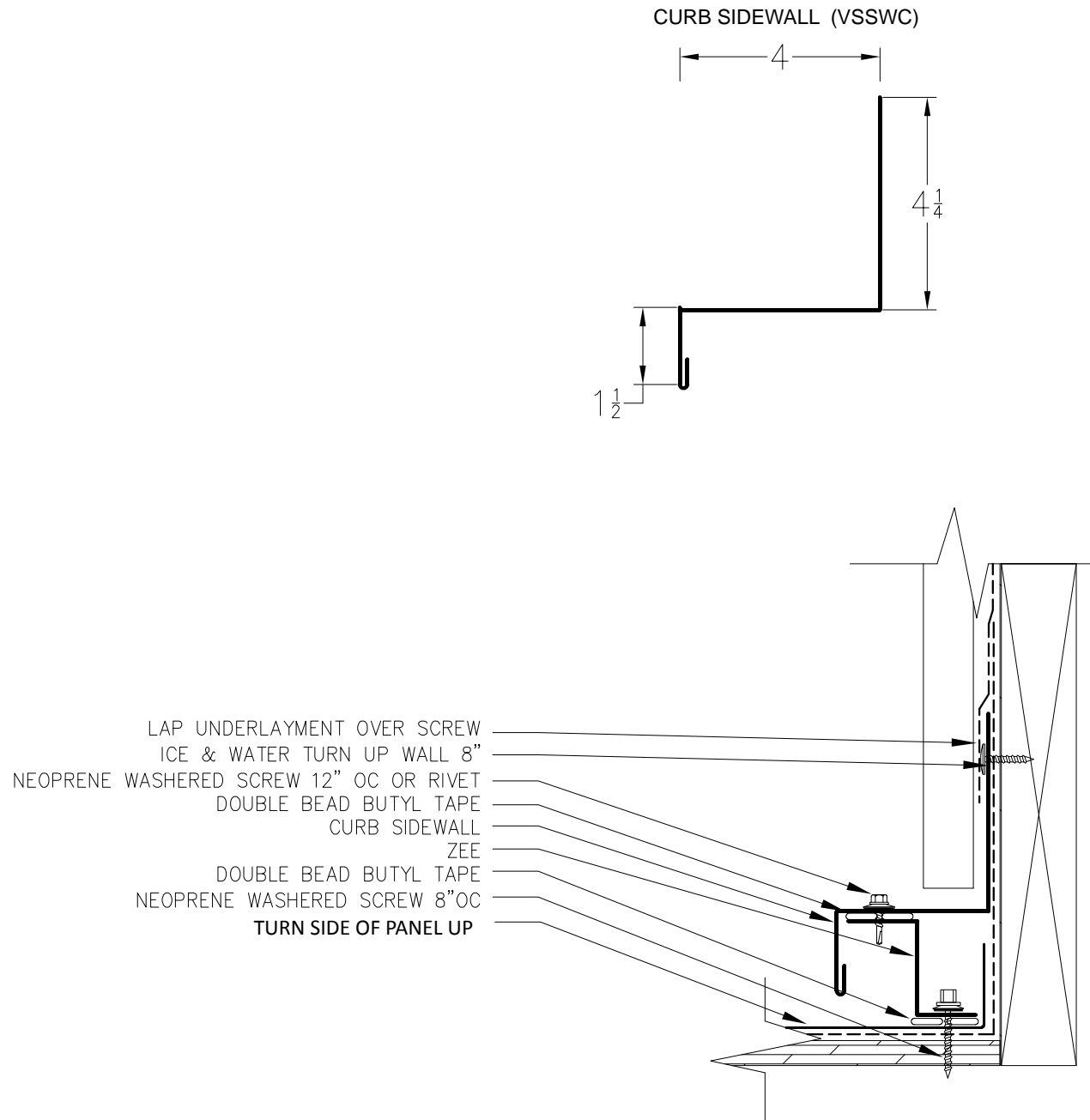


SOLDERED BACK PAN

CURB GREATER THAN 24"

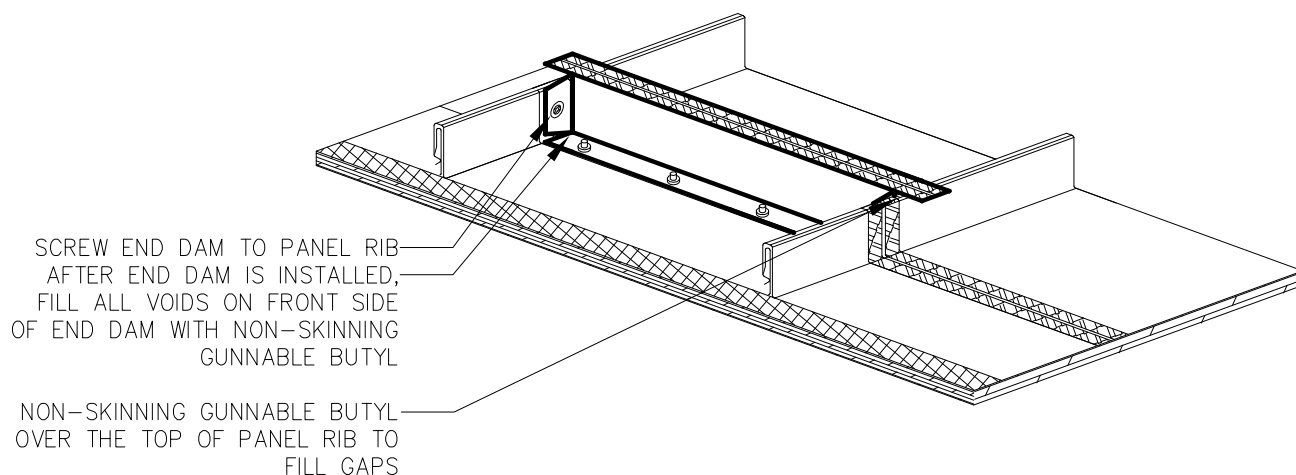


CURB SIDE WALL

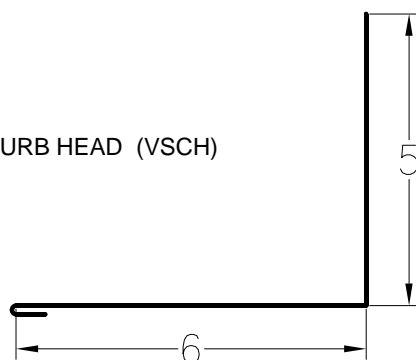


NOTE: All screws must be into solid substrate
Flashing must be lapped 4" with 2 rows of non-skinning gunnable butyl

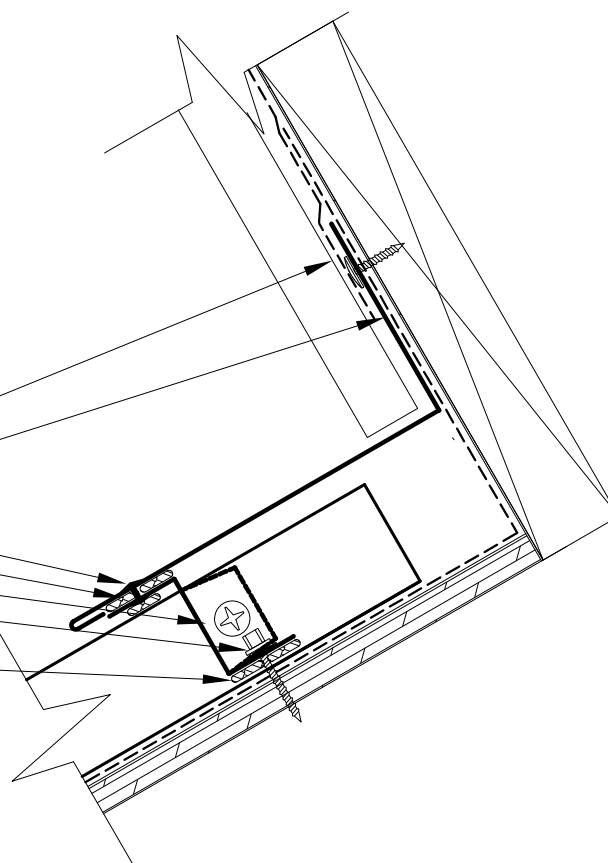
CURB HEAD



CURB HEAD (VSCH)



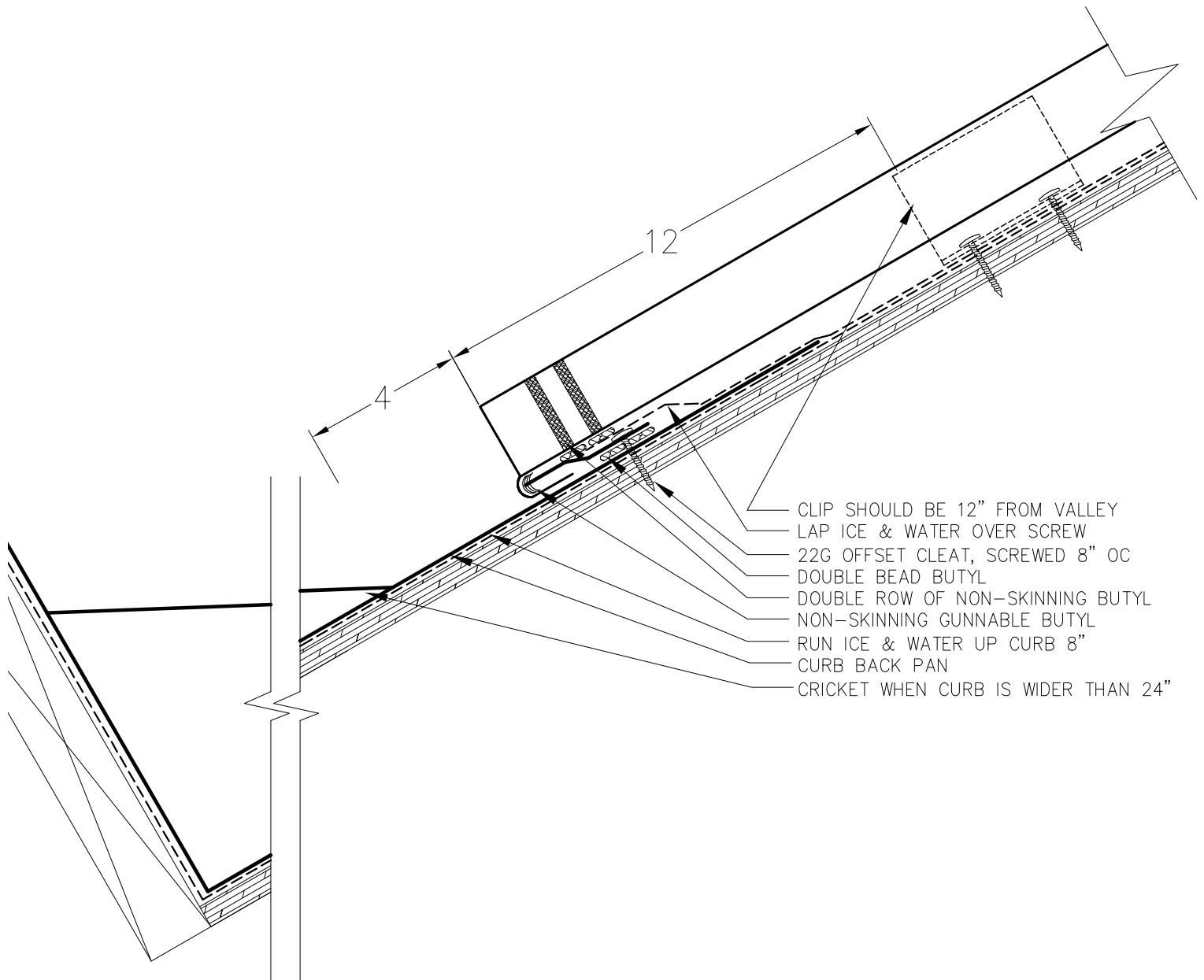
LAP UNDERLAYMENT OVER SCREW
ICE & WATER UP WALL 8"
NEOPRENE WASHERED SCREW OR RIVET AT CENTER OF
EACH END DAM
DOUBLE BEAD BUTYL TAPE
SCREW END DAM TO PANEL RIB
NEOPRENE WASHERED SCREW 1" FROM PANEL LEG AND
4" OC
DOUBLE BEAD BUTYL TAPE



NOTE: All screws must be into solid substrate
Flashing must be lapped 4" with 2 rows of non-skinning gunnable butyl



CURB PAN/CRICKET



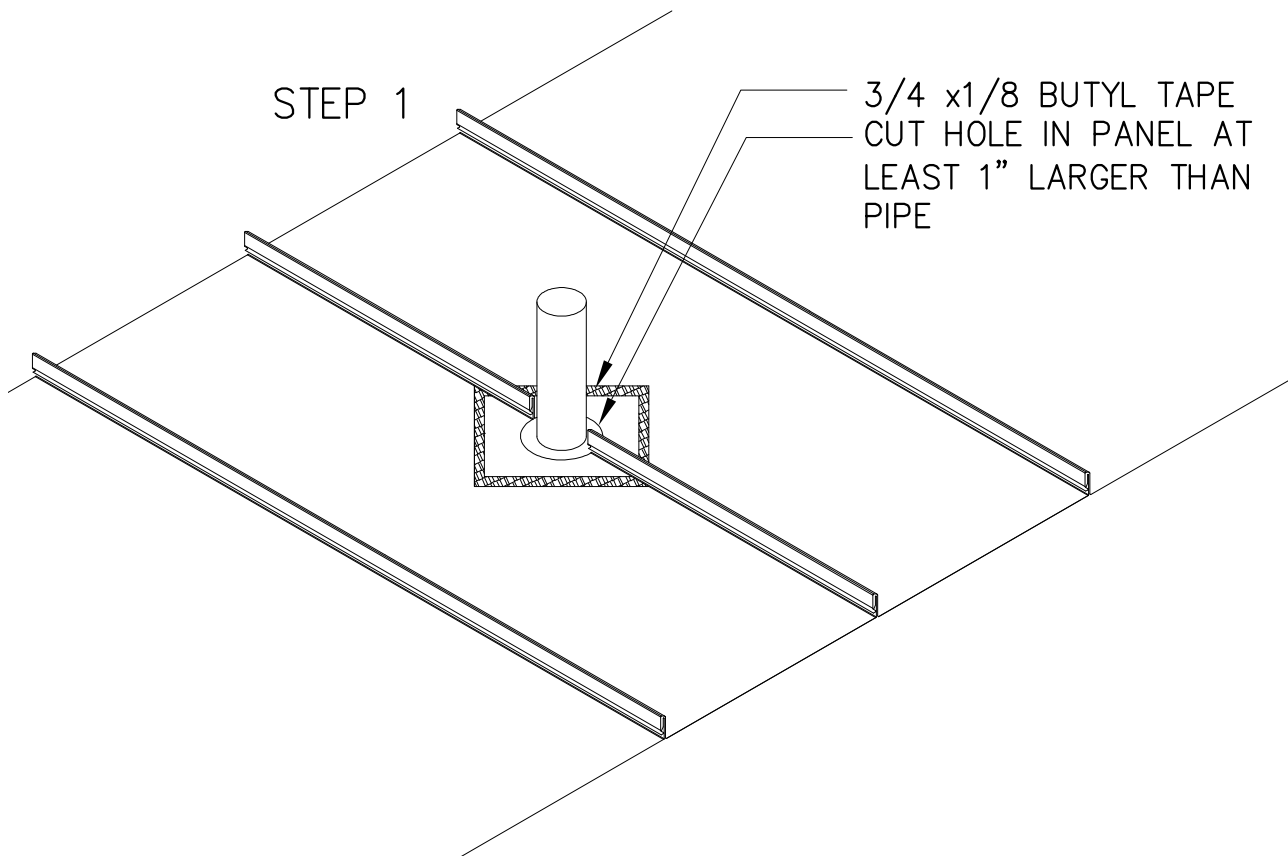
NOTE: All screws must be into solid substrate

Flashing must be lapped 4" with 2 rows of non-skinning gunnable butyl

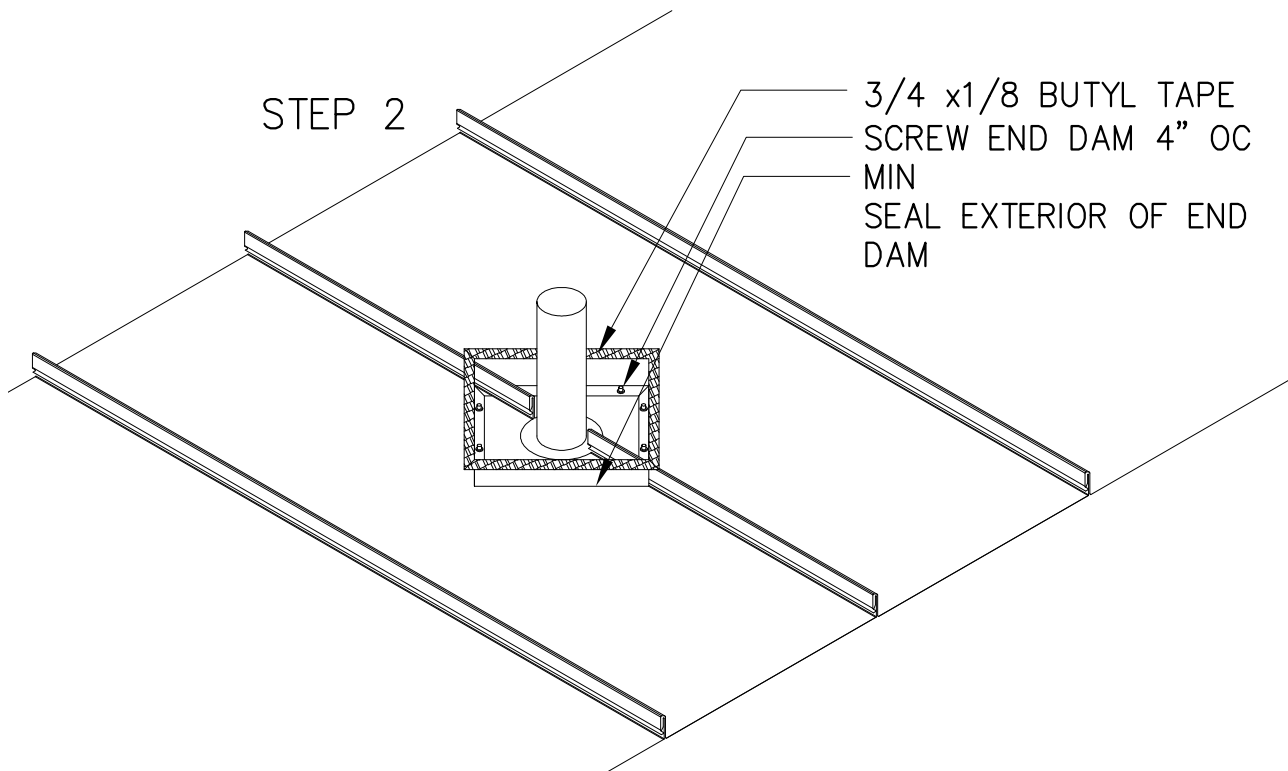


PIPE PENETRATION

STEP 1



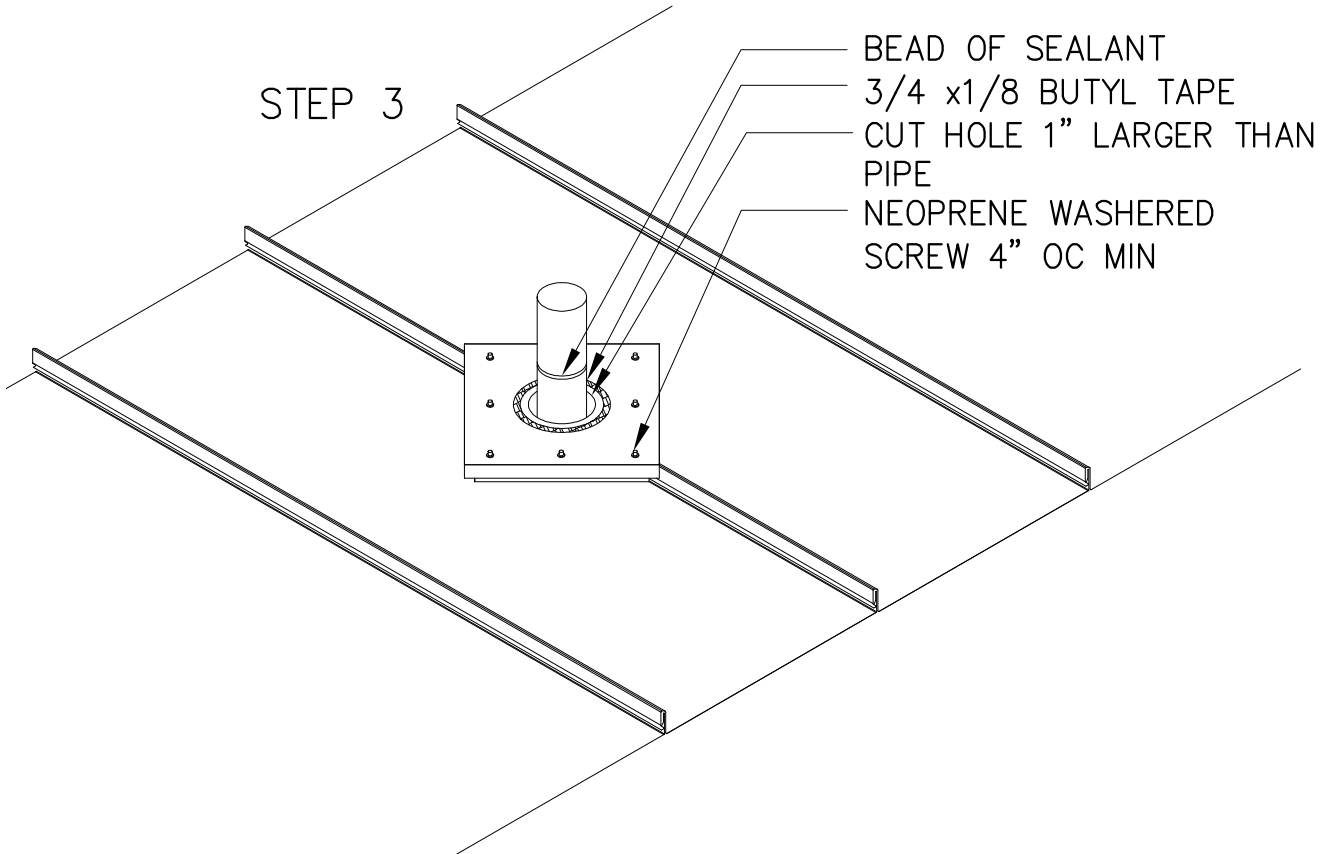
STEP 2



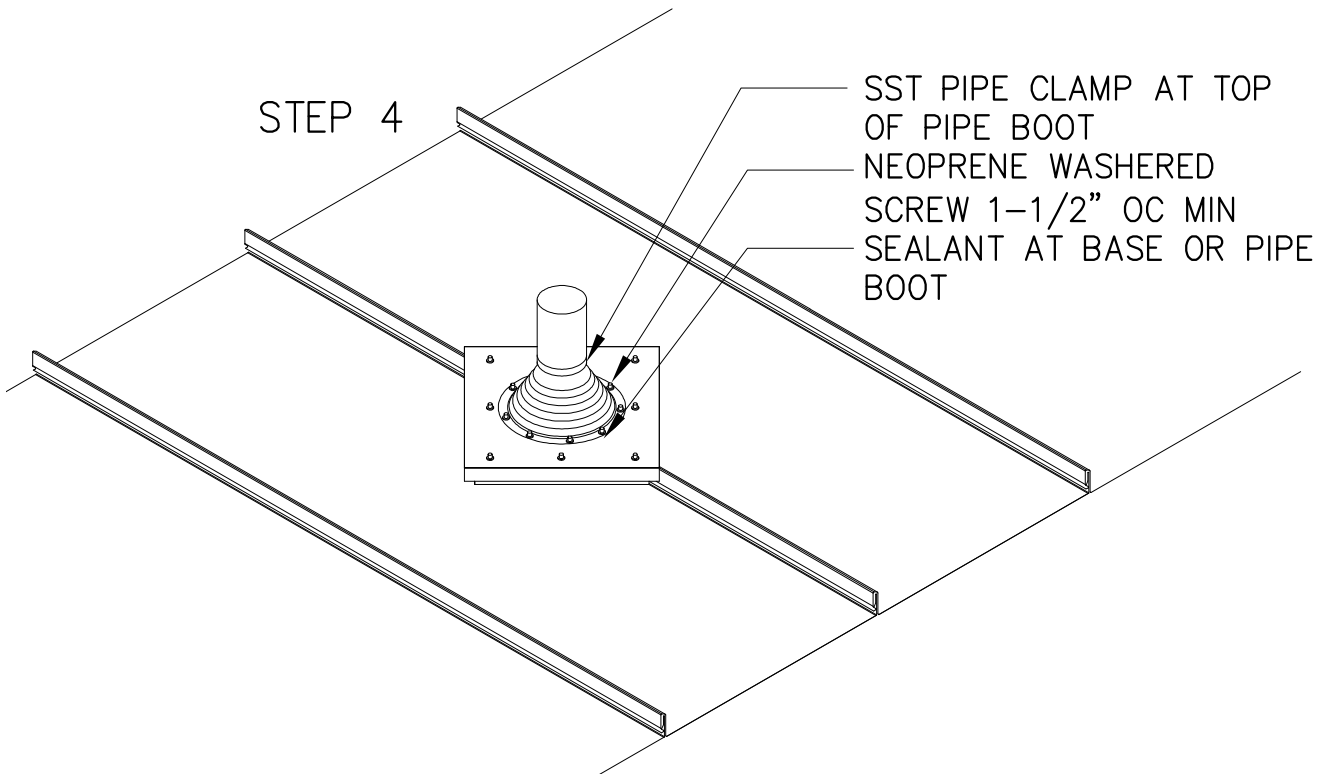


PIPE PENETRATION

STEP 3

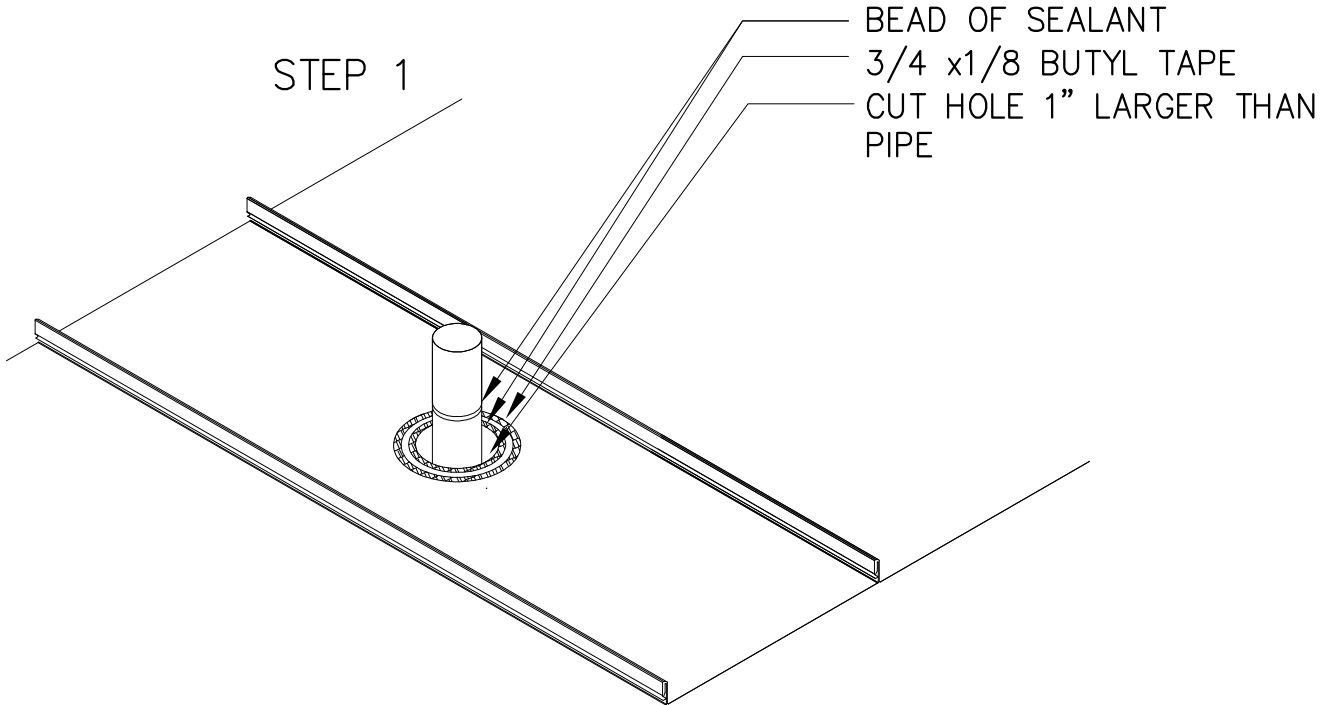


STEP 4

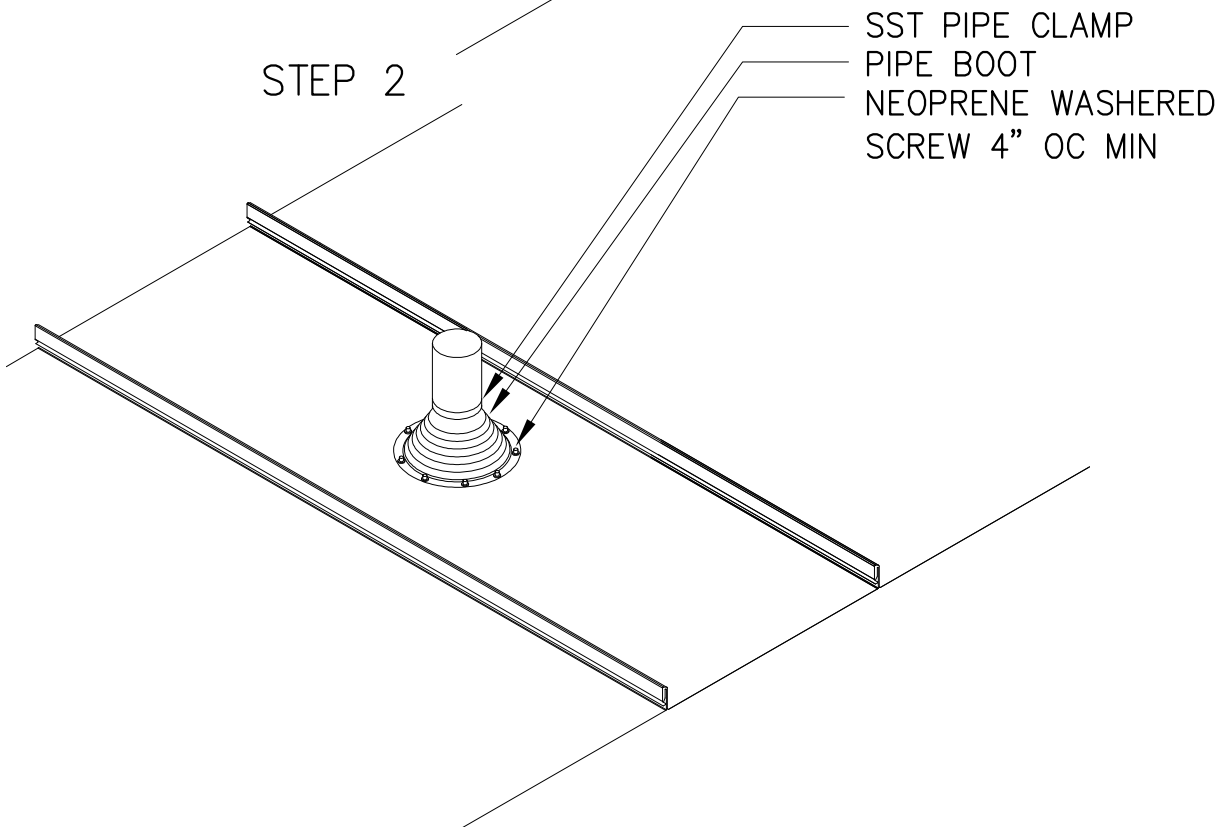


PIPE PENETRATION

STEP 1

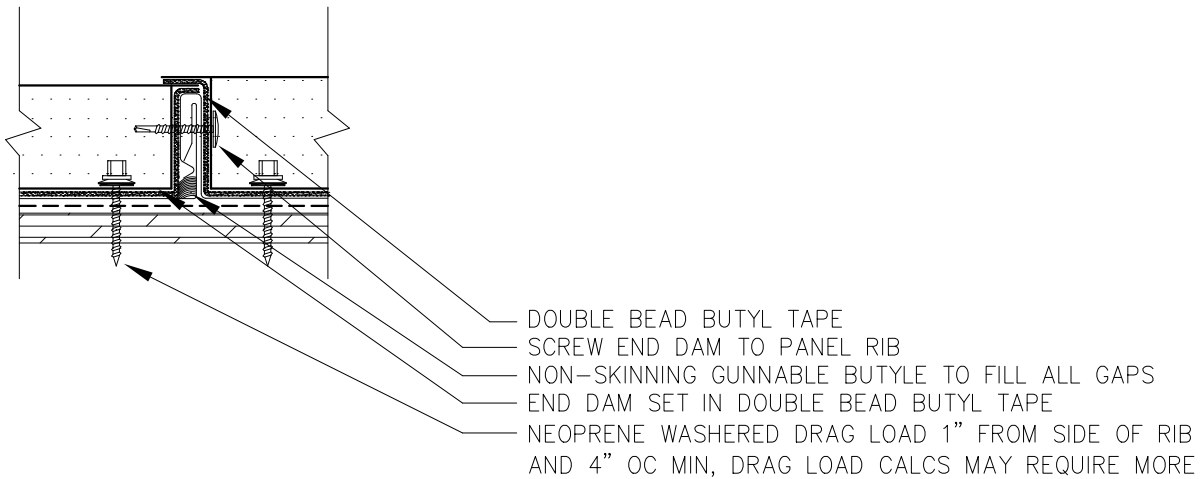
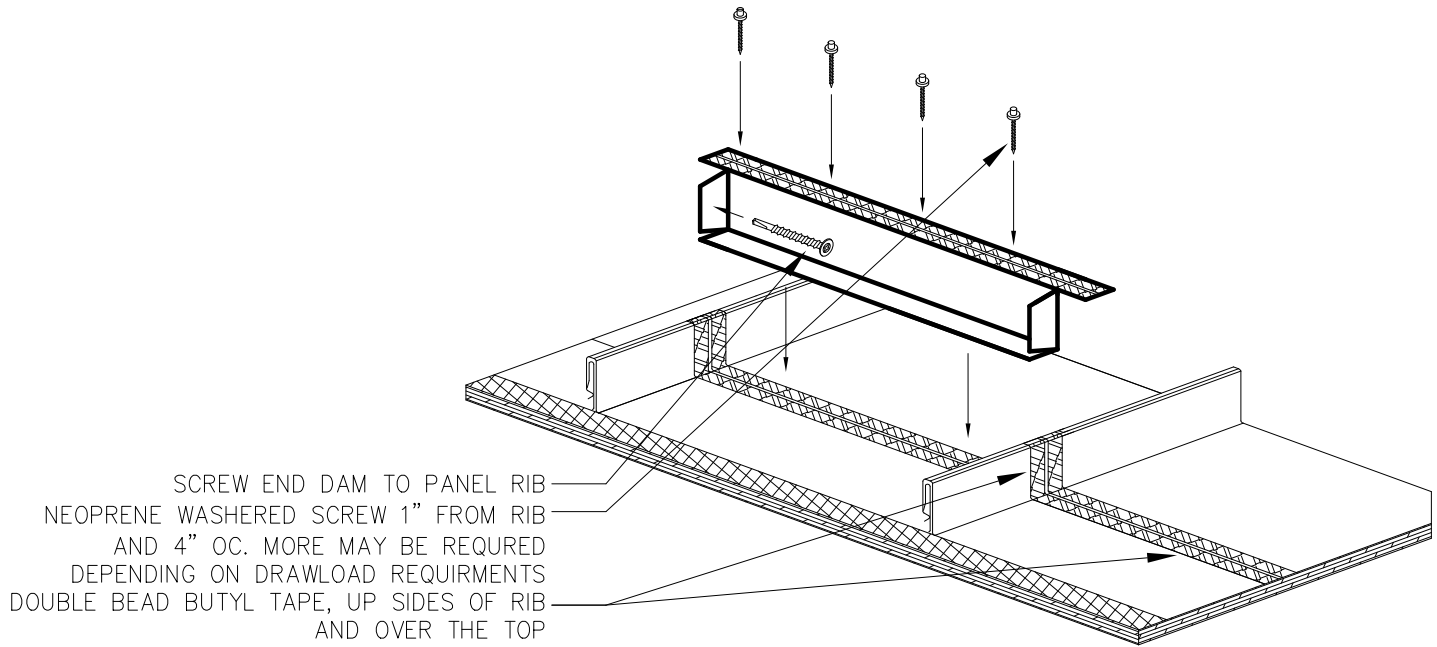


STEP 2



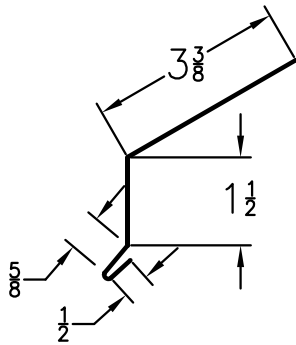


END DAM

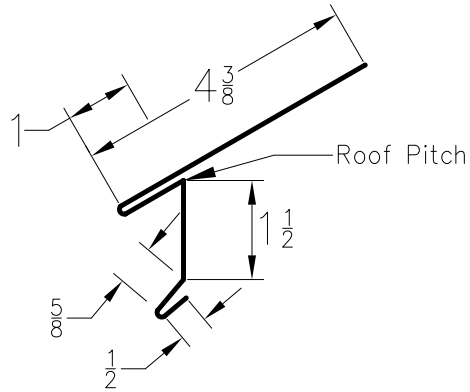




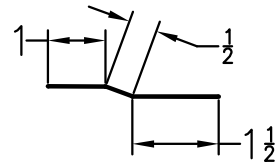
EAVE STANDARD (VSES)



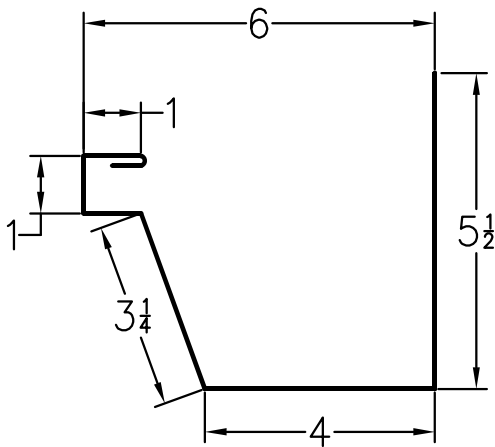
EAVE HOOK (VSEH)



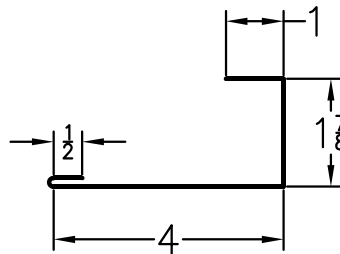
OFFSET CLEAT (VSOC)



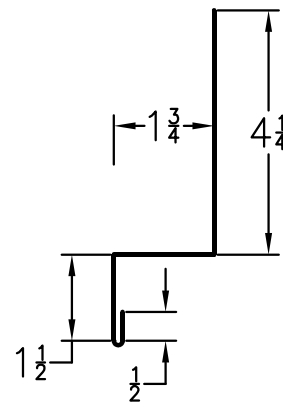
BOX GUTTER (VSBG)



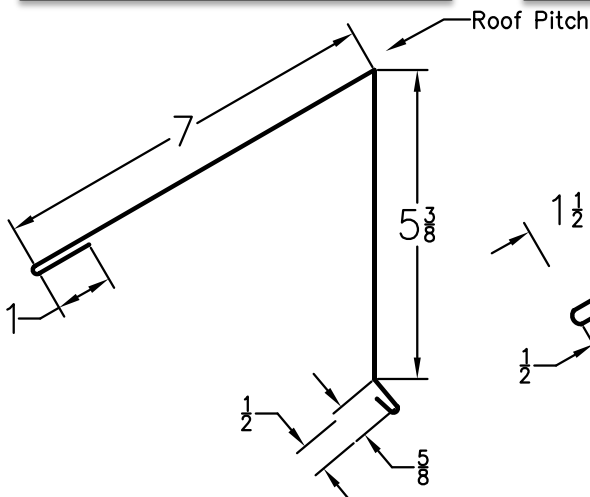
SUPPORT FLASHING (VSSF)



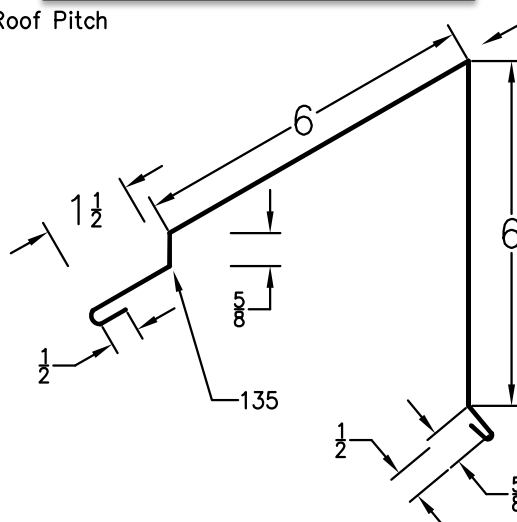
SIDE WALL (VSSW)



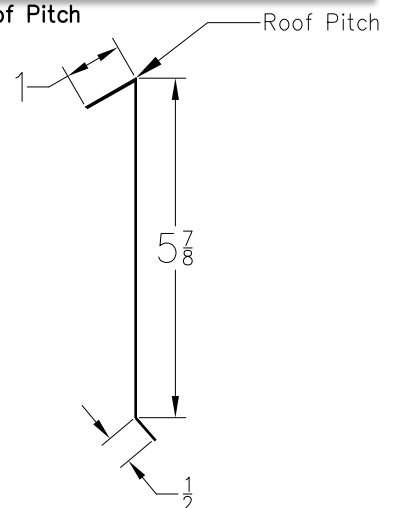
RIDGE END CAP (VSREC)



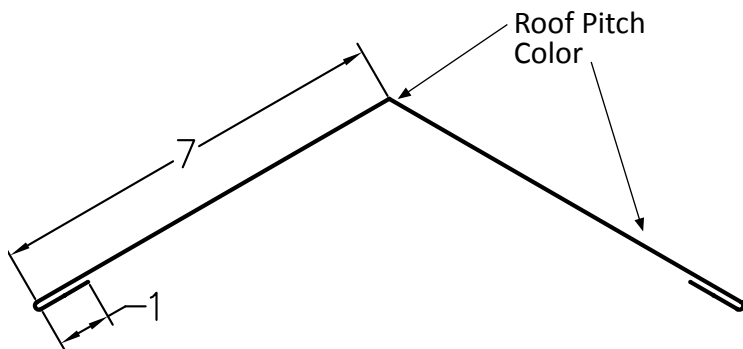
VENTED RIDGE END (VSRECV)



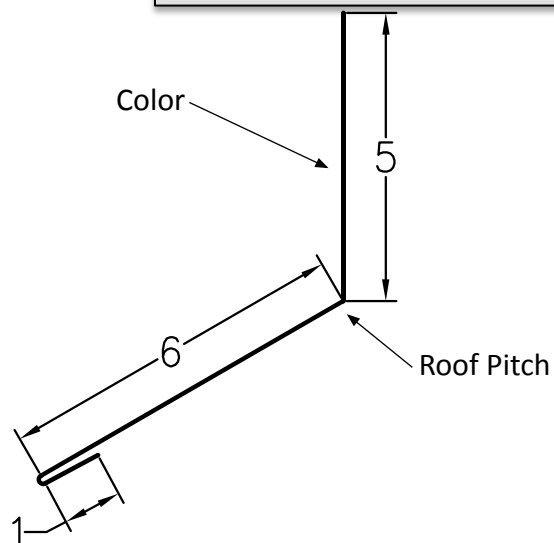
SUPPORT CLEAT (VSSC)



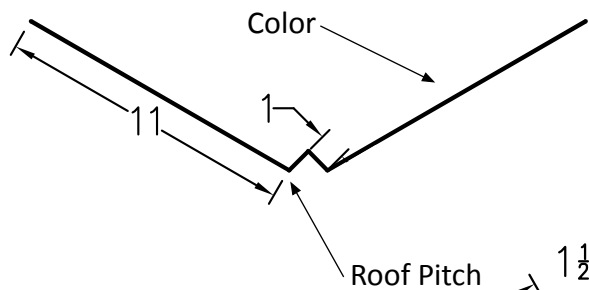
RIDGE (VSRS)



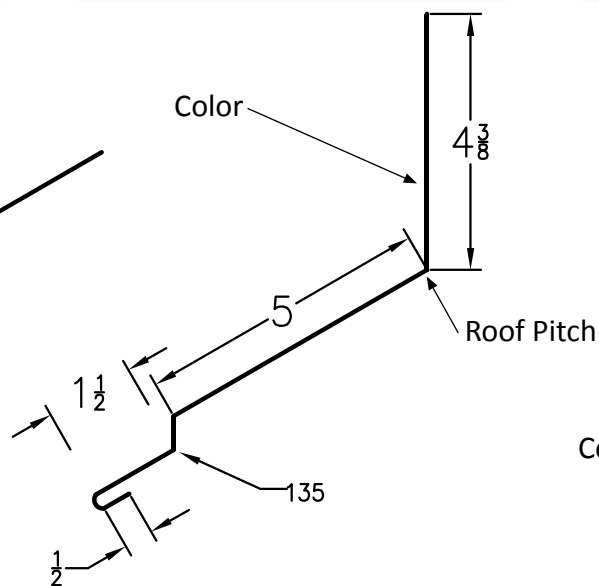
ENDWALL (VSEW)



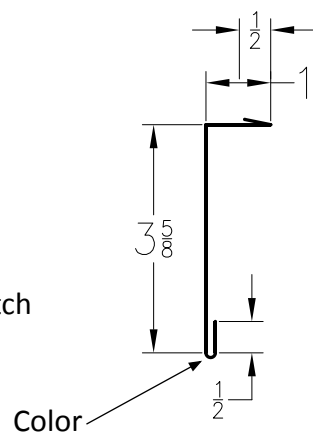
VALLEY FLASHING (VSVF)



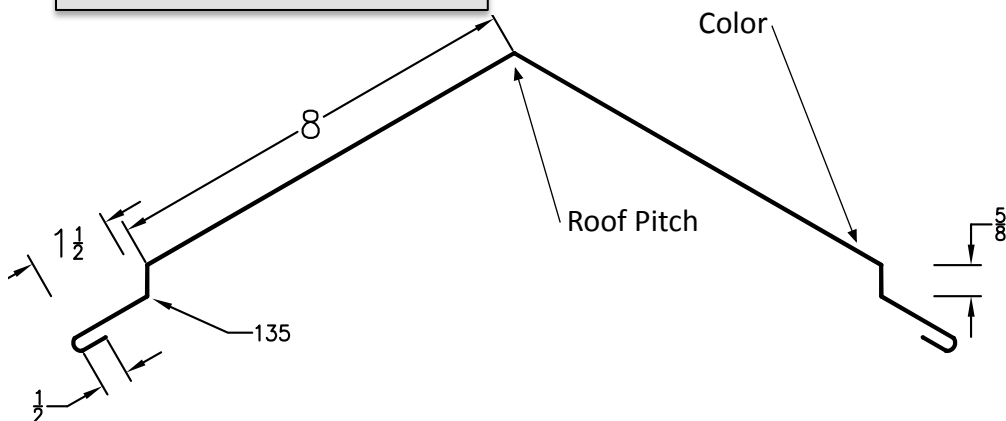
VENTED ENDWALL (VSWV)



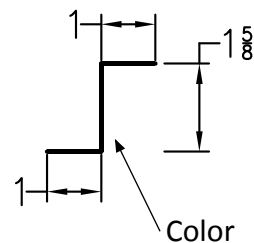
REGLET (VSRF)



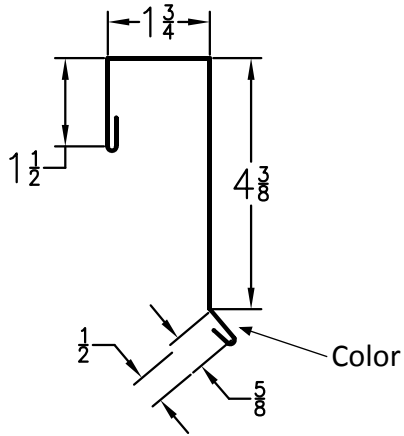
VENTED RIDGE (VSRFV)



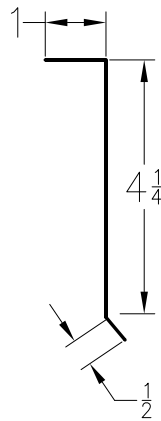
ZEE CLOSURE (VSZF)



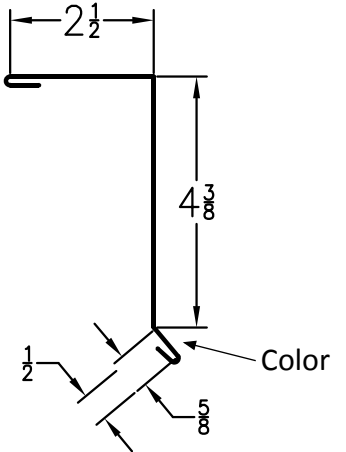
STANDARD GABLE (VSGS1)



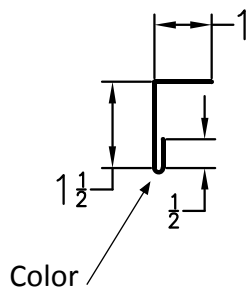
GABLE SUPPORT (VSGSF)



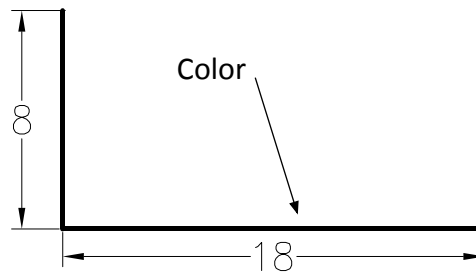
ALT GABLE (VSGS2)



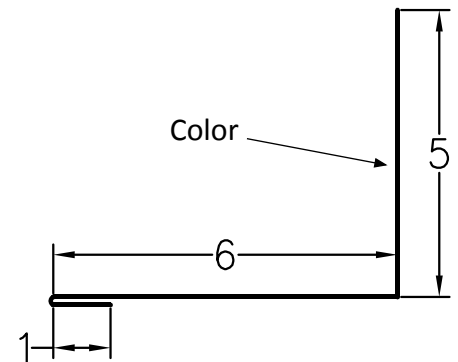
ALT L CLOSURE (VSLF)



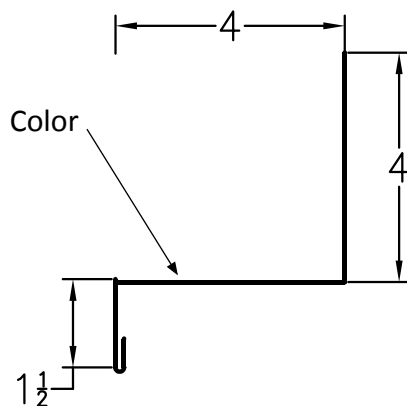
BACK PAN (VSPAN)



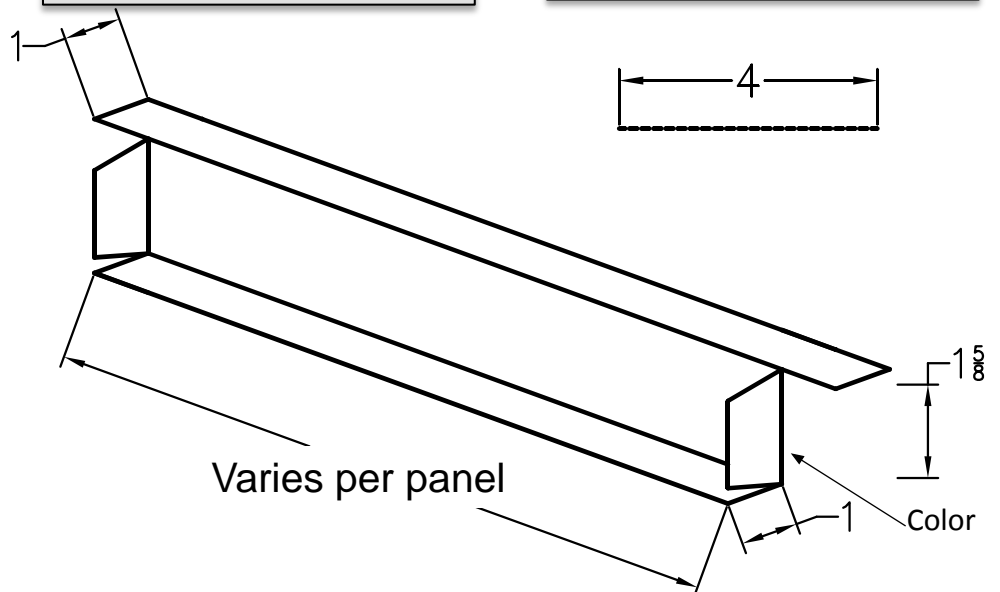
CURB HEAD (VSCH)



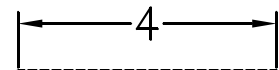
CURB SIDEWALL (VSSWC)



END DAM (VSED)



PERF (VSPF)





CHAMPION METAL
a Taylor Metal Company

Custom Trim Order

Customer Name: _____ Job Name: _____

Drawing #: _____ Pitch: _____ # of Pieces: _____

Description: _____

Hems: ☐ Open ☐ Closed ☐ Slightly Open

Drawing #: _____ Pitch: _____ # of Pieces: _____

Description: _____

Hems: ☐ Open ☐ Closed ☐ Slightly Open

Drawing #: _____ Pitch: _____ # of Pieces: _____

Description: _____

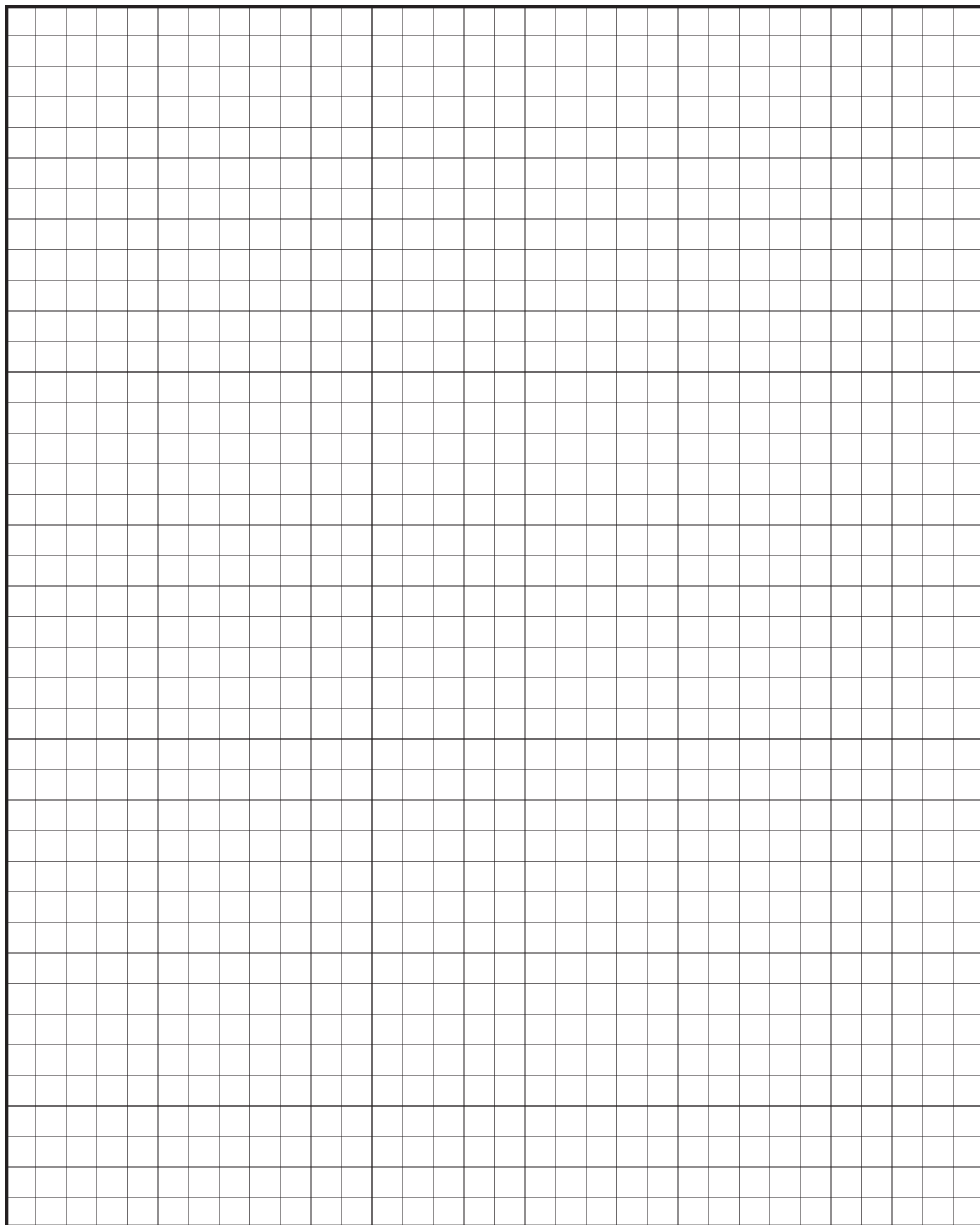
Hems: ☐ Open ☐ Closed ☐ Slightly Open

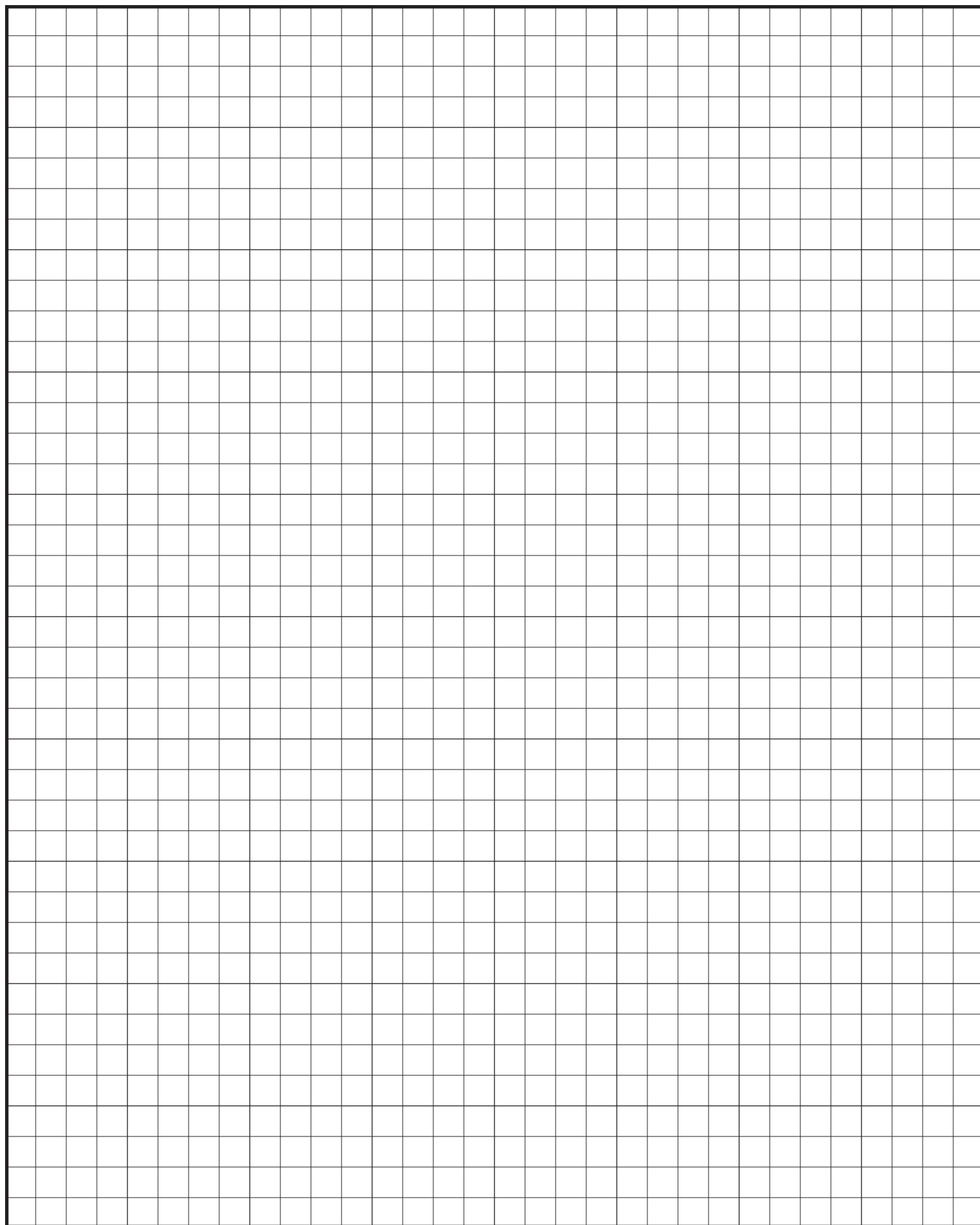
Drawing #: _____ Pitch: _____ # of Pieces: _____

Description: _____

Hems: ☐ Open ☐ Closed ☐ Slightly Open

Please provide a drawing for each flashing with precise measurements and angles
Fax to: 425-485-2710





WOODINVILLE BRANCH
5927 234th St. SE
Woodinville, WA 98072

Office: 425-485-3003
Toll Free: 1-800-574-1388
Fax: 425-485-2710



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