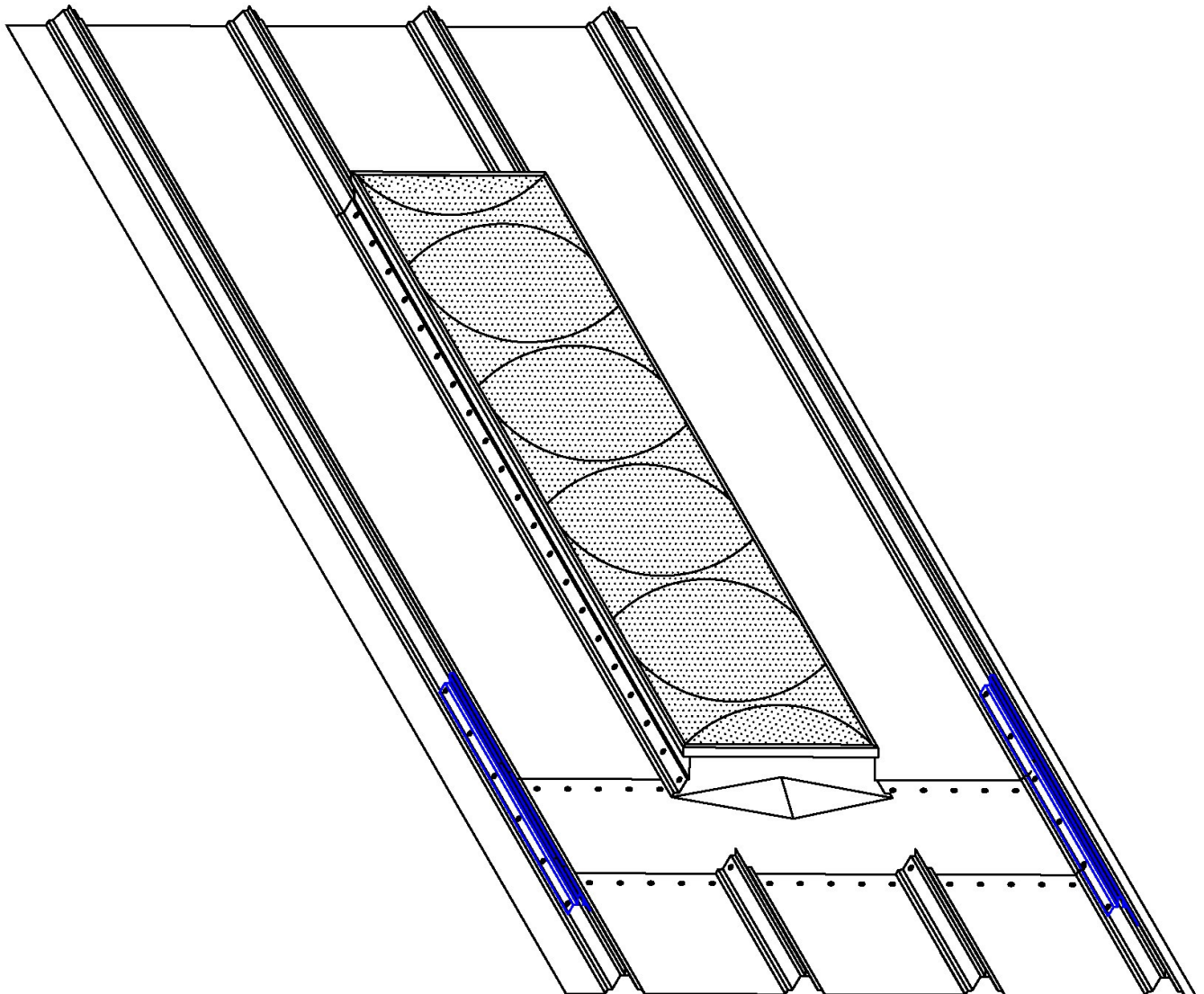# RS24-10 Single-Section Skylight System
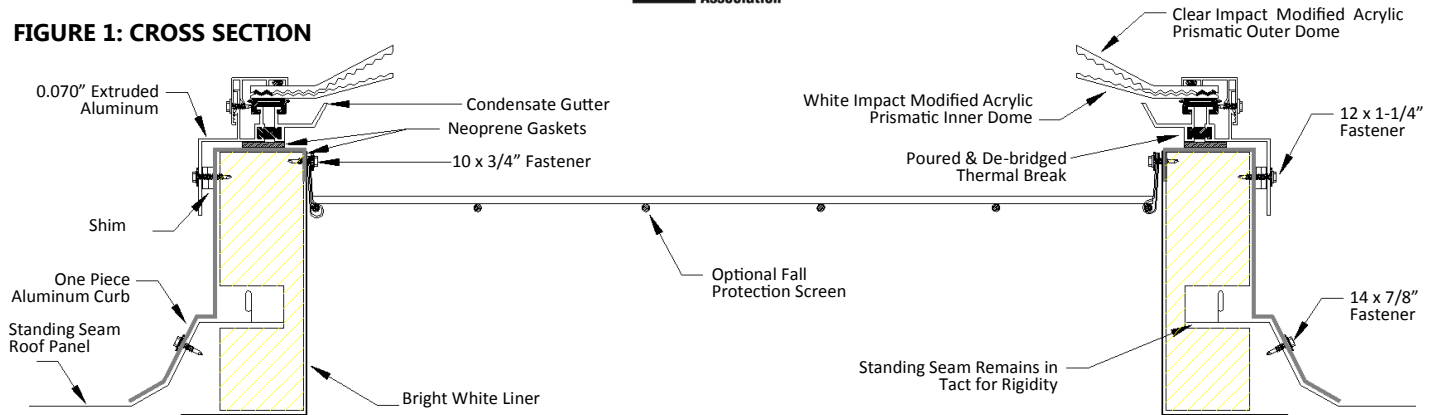under/over seam clip double diverter

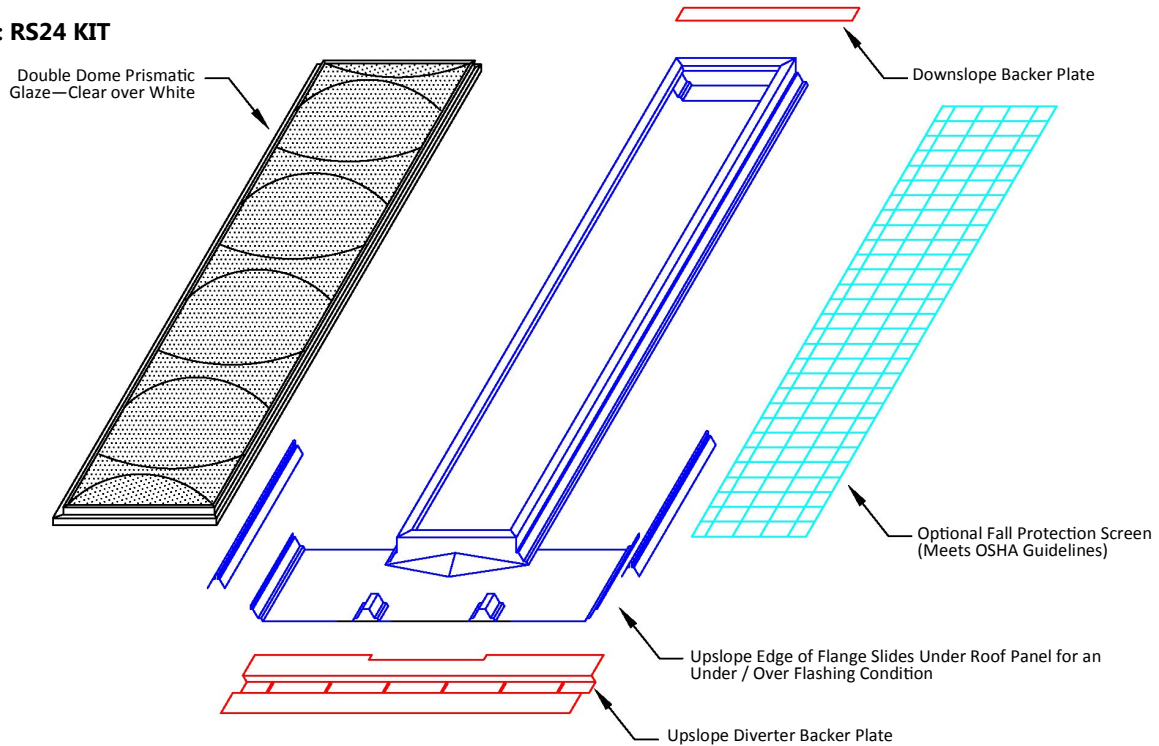**?** **Questions or Need Assistance? 800-423-1619**

US Patent D750,282

American Architectural Manufacturers Association

FIGURE 1: CROSS SECTION

- 0.070" Extruded Aluminum
- Condensate Gutter
- Neoprene Gaskets
- 10 x 3/4" Fastener
- Shim
- One Piece Aluminum Curb
- Standing Seam Roof Panel
- Bright White Liner
- Clear Impact Modified Acrylic Prismatic Outer Dome
- White Impact Modified Acrylic Prismatic Inner Dome
- 12 x 1-1/4" Fastener
- Poured & De-bridged Thermal Break
- Optional Fall Protection Screen
- 14 x 7/8" Fastener
- Standing Seam Remains in Tact for Rigidity

FIGURE 2: RS24 KIT

- Double Dome Prismatic Glaze—Clear over White
- Downslope Backer Plate
- Optional Fall Protection Screen (Meets OSHA Guidelines)
- Upslope Edge of Flange Slides Under Roof Panel for an Under / Over Flashing Condition
- Upslope Diverter Backer Plate

CONSTRUCTION

- 0.080" Aluminum Under/Over Fully Welded & Assembled Base
- 0.070" Extruded Aluminum Thermally Broken Skylight Frame
- 2" Rigid Vertical Insulation with Bright White Metal Liner
- 1/8" x 1" Neoprene Gasket Seals Skylight Frame
- Clear, 100% Impact Modified Acrylic Prismatic 0.177" Outer Dome
- White, 100% Impact Modified Acrylic Prismatic 0.118" Inner Dome
- 2-1/2" Triple Bead Mastic Tape, Polyurethane Sealant
- #5 Tek Shoulder Screws
- Long-Life Self Drillers w/ Washers: 12-14 x 1-1/4" & 14 x 7/8"
- Long-Life Self Drillers w/o Washers: 12 x 1-1/4" & 10 x 3/4"
- Expansion Joint Covers with 1/4" Flanged Shoulder Spacers

PERFORMANCE

- 70% Visible Light Transmittance with 100% Haze Factor
- 0.50 Solar Heat Gain Coefficient
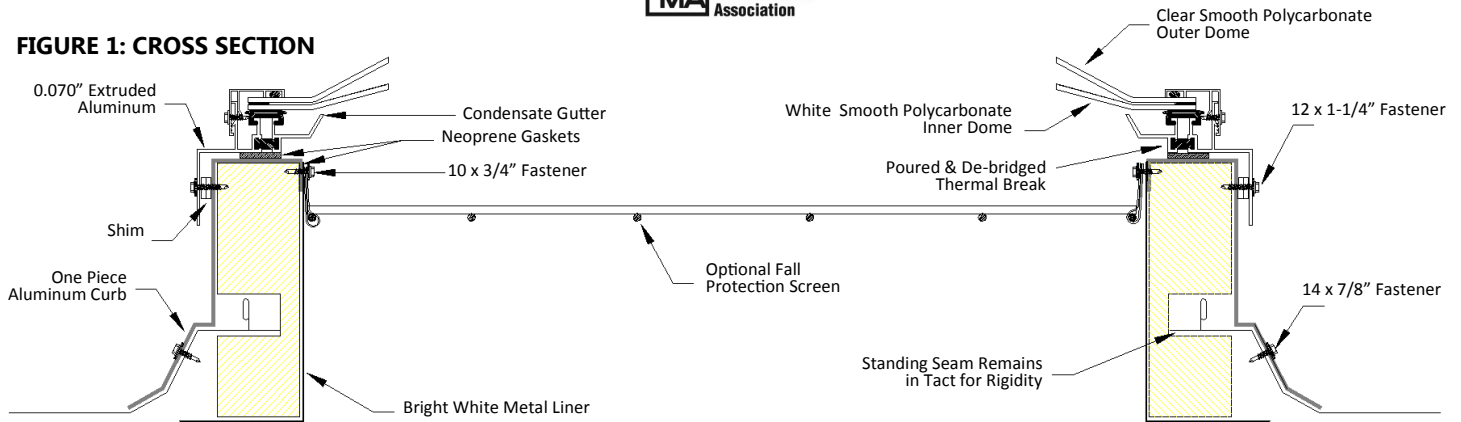- 0.65 U Factor or 1.54 R Value
- AAMA/WDMA/CSA 101/I.S.2/A440-08

OPTIONS

- 4" x 4" x 3/16" galvanized steel fall protection screen
- RS24 Custom Length—Increments of 5': _____
- Panel Offset Height: 3/8", 1-3/8", Custom _____
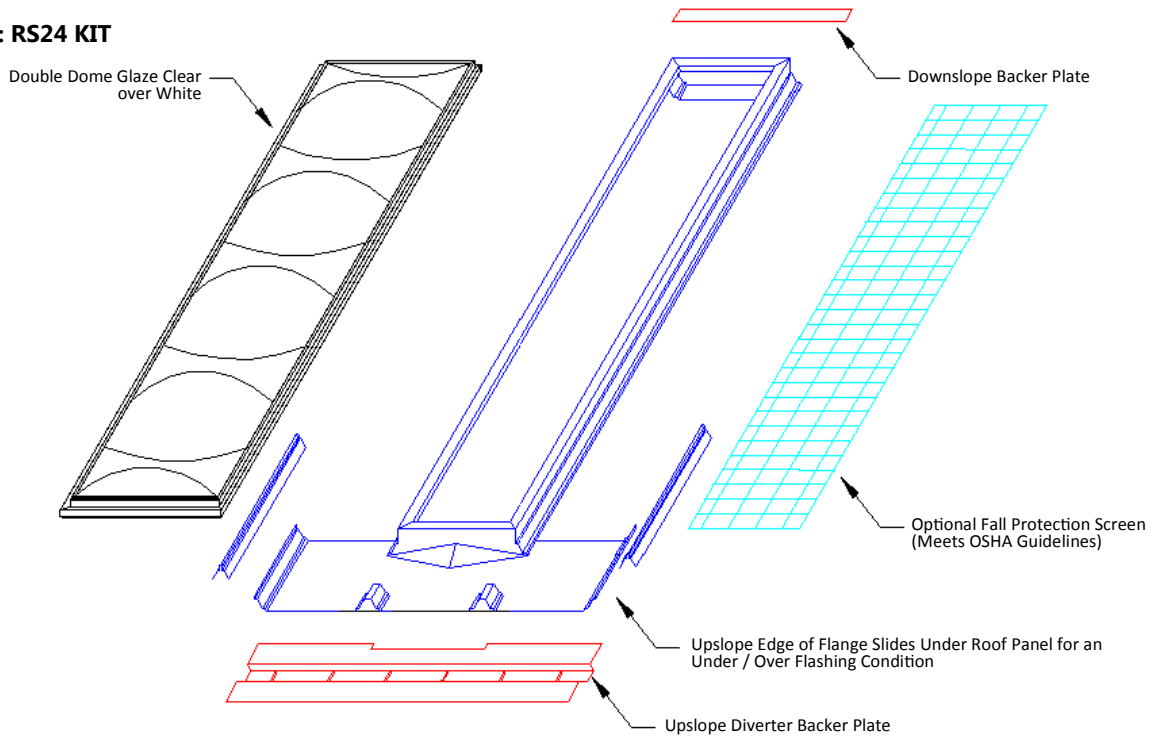- Liner Height: 5-7/8", Custom _____
- Liner Base: 3", Custom _____

Customer		Date		Model		Quantity	
Project Name		Roof Panel		Panel Offset Height	3/8"	1-3/8"	

R&S Manufacturing and Sales

AAMA American Architectural Manufacturers Association

FIGURE 1: CROSS SECTION

- Clear Smooth Polycarbonate Outer Dome
- 0.070" Extruded Aluminum
- Condensate Gutter
- Neoprene Gaskets
- White Smooth Polycarbonate Inner Dome
- 12 x 1-1/4" Fastener
- 10 x 3/4" Fastener
- Poured & De-bridged Thermal Break
- Shim
- Optional Fall Protection Screen
- One Piece Aluminum Curb
- 14 x 7/8" Fastener
- Standing Seam Remains in Tact for Rigidity
- Bright White Metal Liner

FIGURE 2: RS24 KIT

- Double Dome Glaze Clear over White
- Downslope Backer Plate
- Optional Fall Protection Screen (Meets OSHA Guidelines)
- Upslope Edge of Flange Slides Under Roof Panel for an Under / Over Flashing Condition
- Upslope Diverter Backer Plate

CONSTRUCTION

- 0.080" Aluminum Under/Over Fully Welded & Assembled Base
- 0.070" Extruded Aluminum Thermally Broken Skylight Frame
- 2" Rigid Vertical Insulation with Bright White Metal Liner
- 1/8" x 1" Neoprene Gasket Seals Skylight Frame
- Clear Smooth Polycarbonate 0.118" Outer Dome
- White Smooth Polycarbonate 0.118" Inner Dome
- 2-1/2" Triple Bead Mastic Tape, Polyurethane Sealant
- #5 Tek Shoulder Screws
- Long-Life Self Drillers w/ Washers: 12-14 x 1-1/4" & 14 x 7/8"
- Long-Life Self Drillers w/o Washers: 12 x 1-1/4" & 10 x 3/4"
- Expansion Joint Covers with 1/4" Flanged Shoulder Spacers

PERFORMANCE

- 60% Visible Light Transmittance with 98% Haze Factor
- 0.26 Solar Heat Gain Coefficient
- 0.70 U Factor or 1.43 R Value
- AAMA/WDMA/CSA 101/I.S.2/A440-08

OPTIONS

4" x 4" x 3/16" galvanized steel fall protection screen

RS24 Custom Length—Increments of 5' ————

Panel Offset Height: 3/8", 1-3/8", Custom ————

Liner Height: 5-7/8", Custom ————

Liner Base: 3", Custom ————

Miami-Dade County Control Approved ————

Customer		Date		Model		Quantity	
Project Name		Roof Panel		Panel Offset Height	3/8"	1-3/8"	

SKYLIGHT DOMES & SCREENS
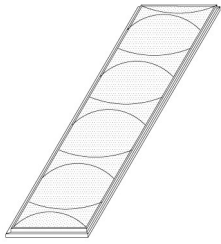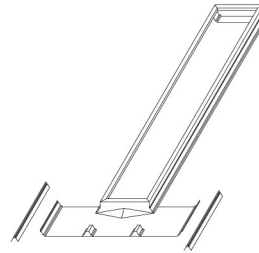
10' Normal Frame
Qty _____
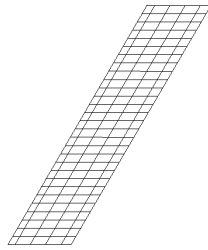
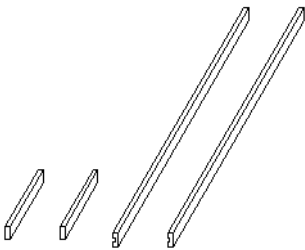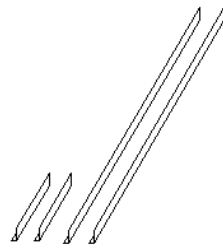10' Safety Screen
Qty _____

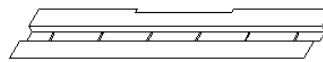## SLYLIGHT CURB

10' Complete Curb
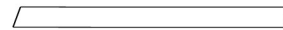Qty _____

CURB INSULATION & LINERS

10' Insulation Set
Qty _____

10' Curb Liner Set
Qty _____

BACKER CHANNELS

Upslope Backer Channel
Qty _____

Downslope Backer Channel
Qty _____

FASTENERS

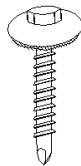#5 1/4"-14x1-1/4"
Shoulder TEK 2
5/16" Hex Head
Qty _____

#12 14x1-1/4" TEK
Longlife Hex Head
w/ Integral Washer
Qty _____

#14 x 7/8" TEK
Longlife Hex Head
w/ Integral Washer
Qty _____

#12 x 1-1/4" TEK
Longlife Hex Head
w/ Integral Washer
Qty _____

#10 x 3/4" TEK
Longlife Hex Head
w/ Integral Washer
Qty _____
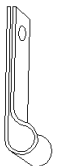
Safety Screen Clip
Spaced 12" o/c
Qty _____

SEALANTS

2-1/2" Triple Bead
Tape Mastic
Qty _____
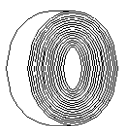
Polyurethane Sealant
10 OZ Cartridge
Qty _____

⚠️ **IMPORTANT:** *The RS24 Skylight System is designed to be installed after the roof has been put in place. The skylight system includes components required to allow the units to expand and contract with the roof sheeting.*

1 The curb upslope flange is located near the upslope purlin. Reference the center line of the purlin top web for center of the opening. Remove 8" of the roof panel where the skylight will be installed.
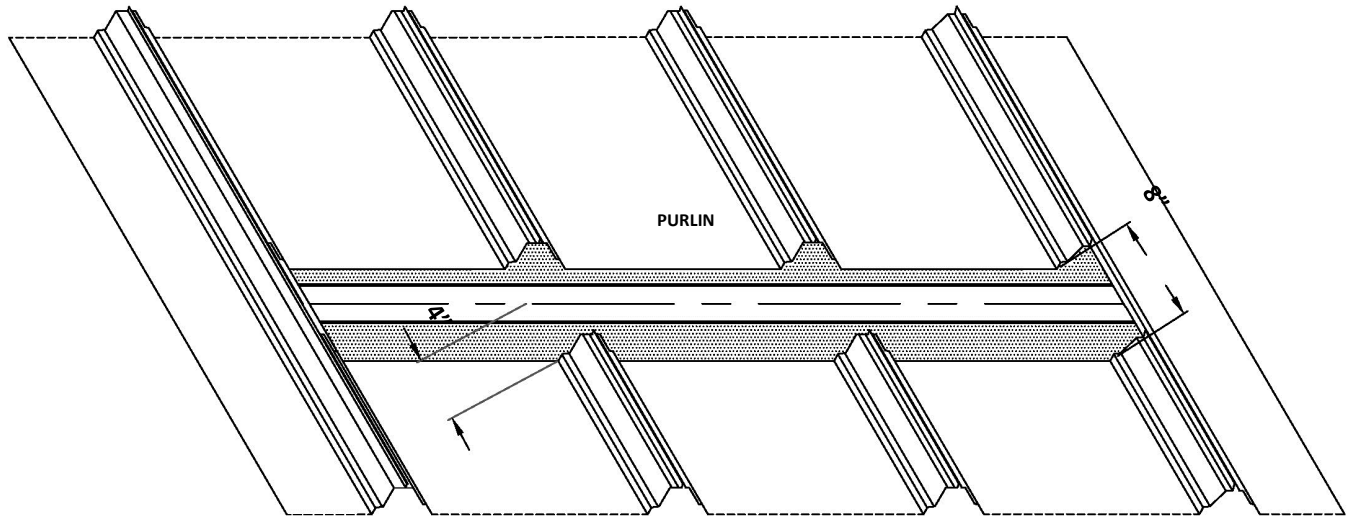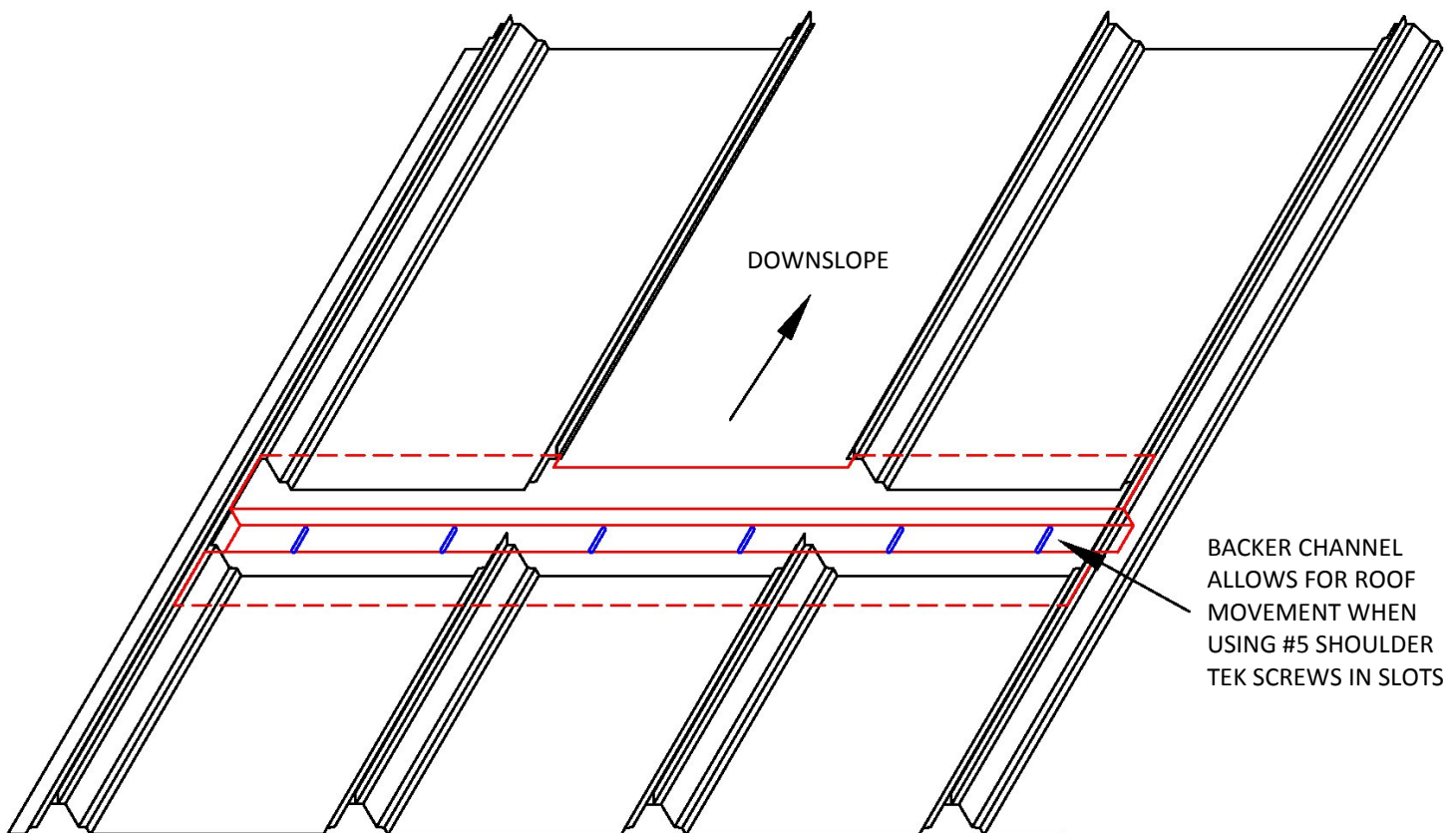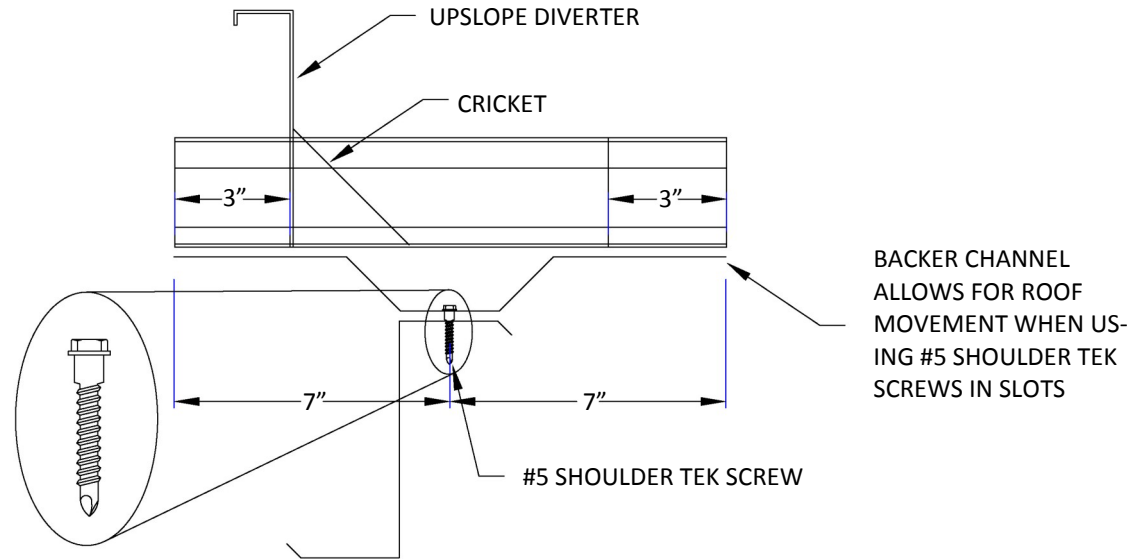

PURLIN

2 Remove 116-1/2" of roof sheeting as shown below. Do not remove roof clips when crossing purlins. Clean the sheeting area and remove metal shavings.
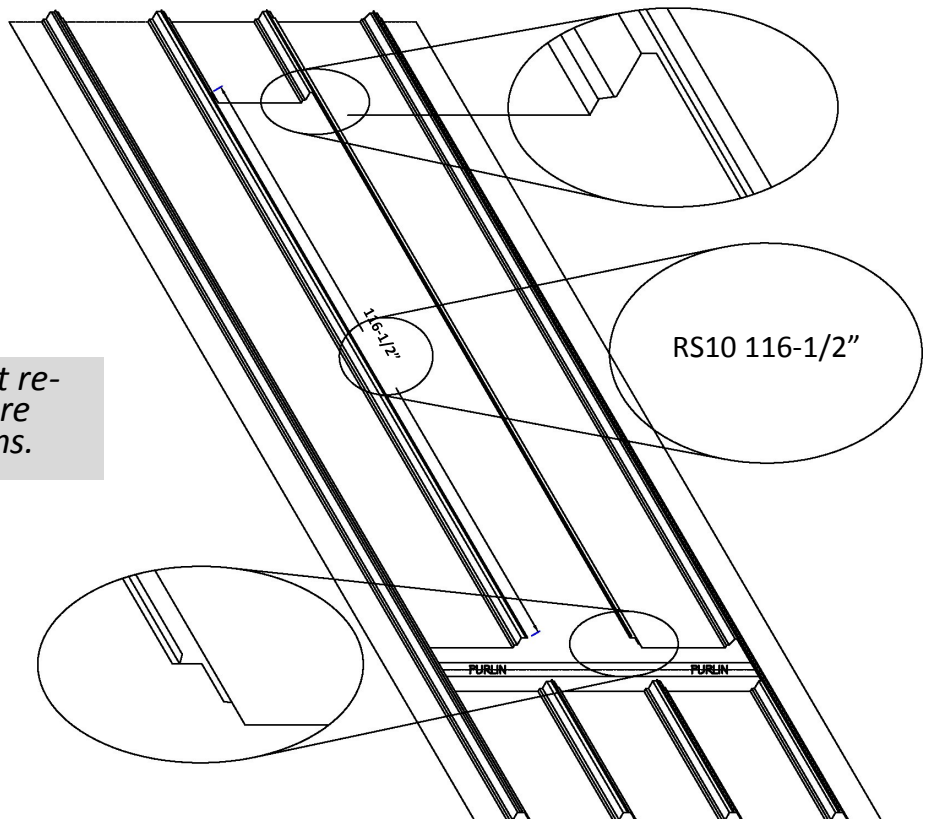
⚠️ **IMPORTANT:** *Do not remove roof clips where skylights cross purlins.*


116-1/2"

RS10 116-1/2"

PURLIN   PURLIN

3 Place the steel upslope backer channel, with the 1" notch facing into the opening as shown below, under the roof sheeting and onto the purlin. Fasten the channel with six #5 shoulder tek screws to allow for roof movement.

UPSLOPE DIVERTER

CRICKET

3"   3"

BACKER CHANNEL ALLOWS FOR ROOF MOVEMENT WHEN US-ING #5 SHOULDER TEK SCREWS IN SLOTS

7"   7"

#5 SHOULDER TEK SCREW

DOWNSLOPE

BACKER CHANNEL ALLOWS FOR ROOF MOVEMENT WHEN USING #5 SHOULDER TEK SCREWS IN SLOTS

4 Secure the upslope curb, and sides in place. Mark a line matching the outline of the curb.

DOWNSLOPE

UPSLOPE CURB
ASSEMBLY UNDER
ROOF PANEL

UPSLOPE
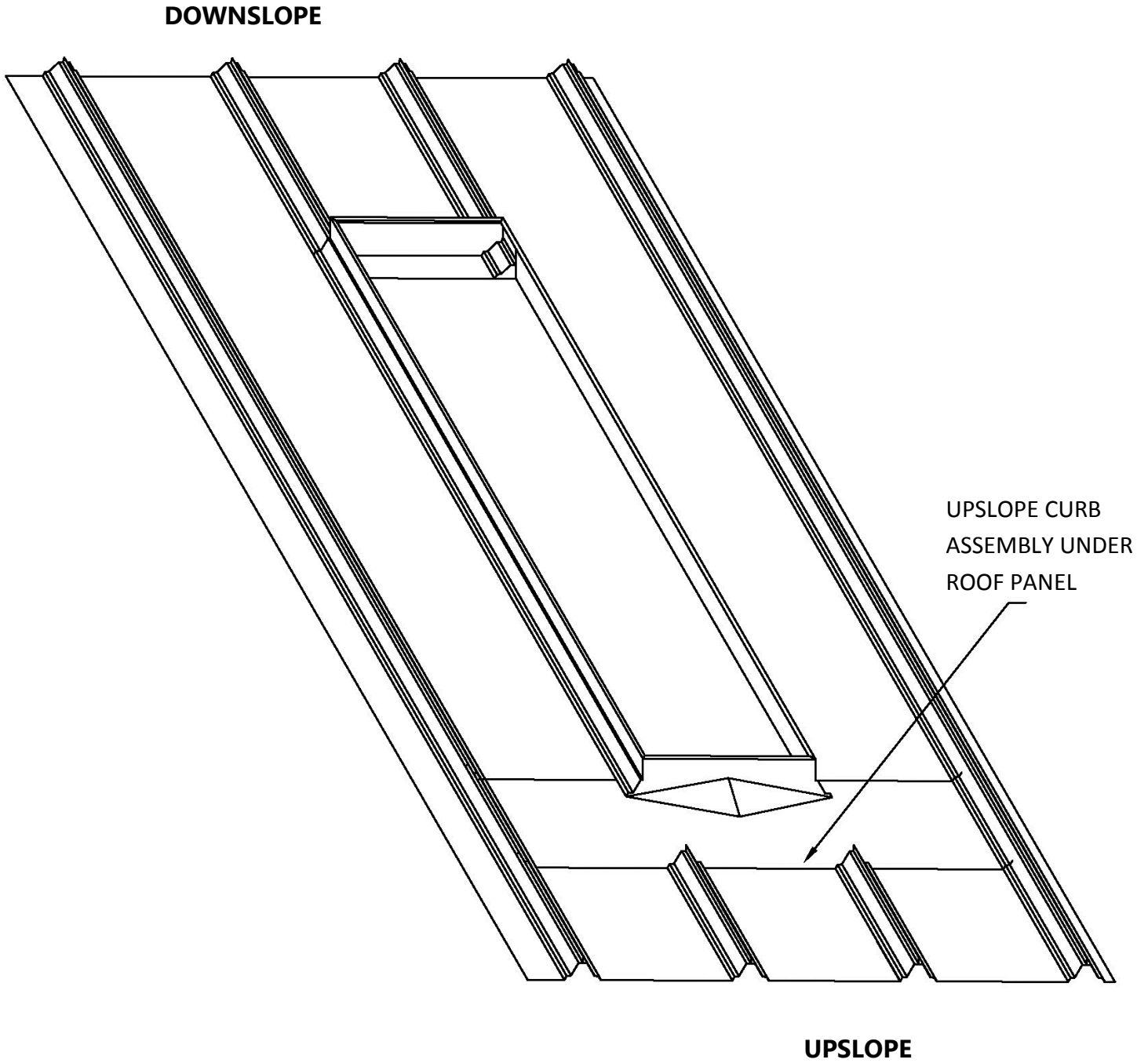
5

- Remove curb and clean the sealing surfaces. Place 2-1/2" of butyl sealant over the panel within the outline drawn in step 4. Place 2-1/2" of butyl sealant over the leading edge of the curb.

- Run a 3/8" bead of polyurethane over all mastic surfaces. Prepare the seam clips and expansion joint face with mastic and polyurethane sealants and as shown below.
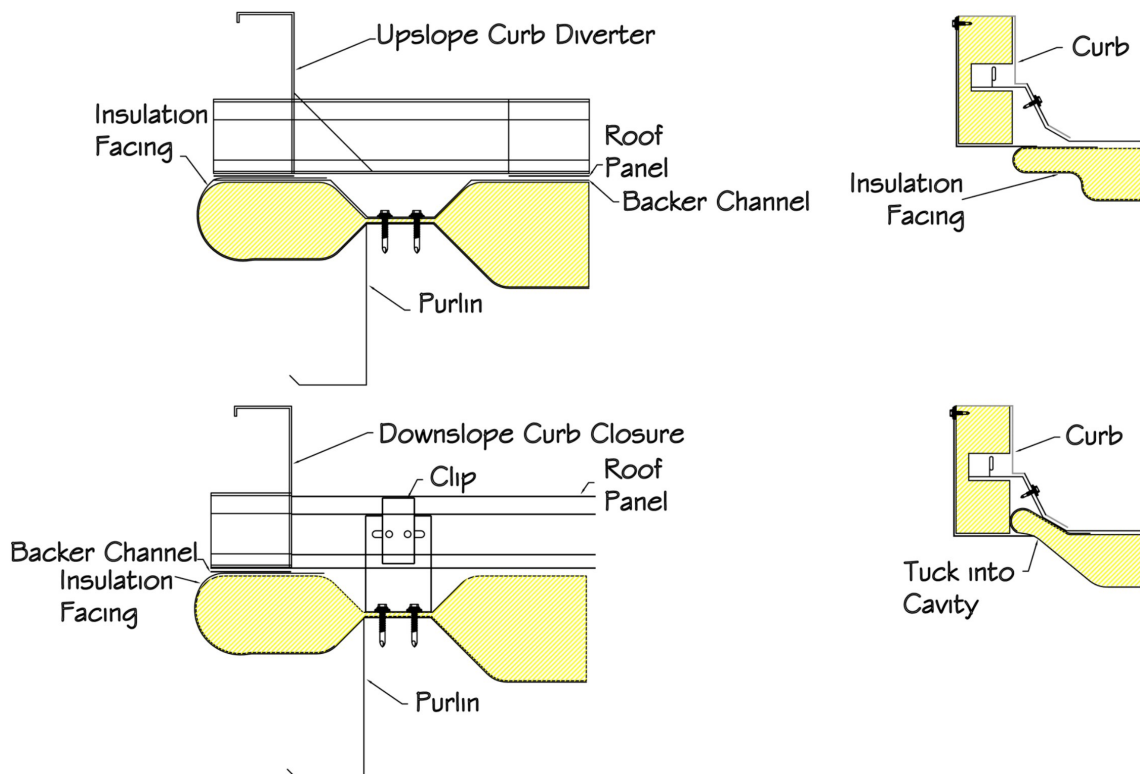
DOWNSLOPE

UPSLOPE

POLYURETHANE
2-1/2" MASTIC
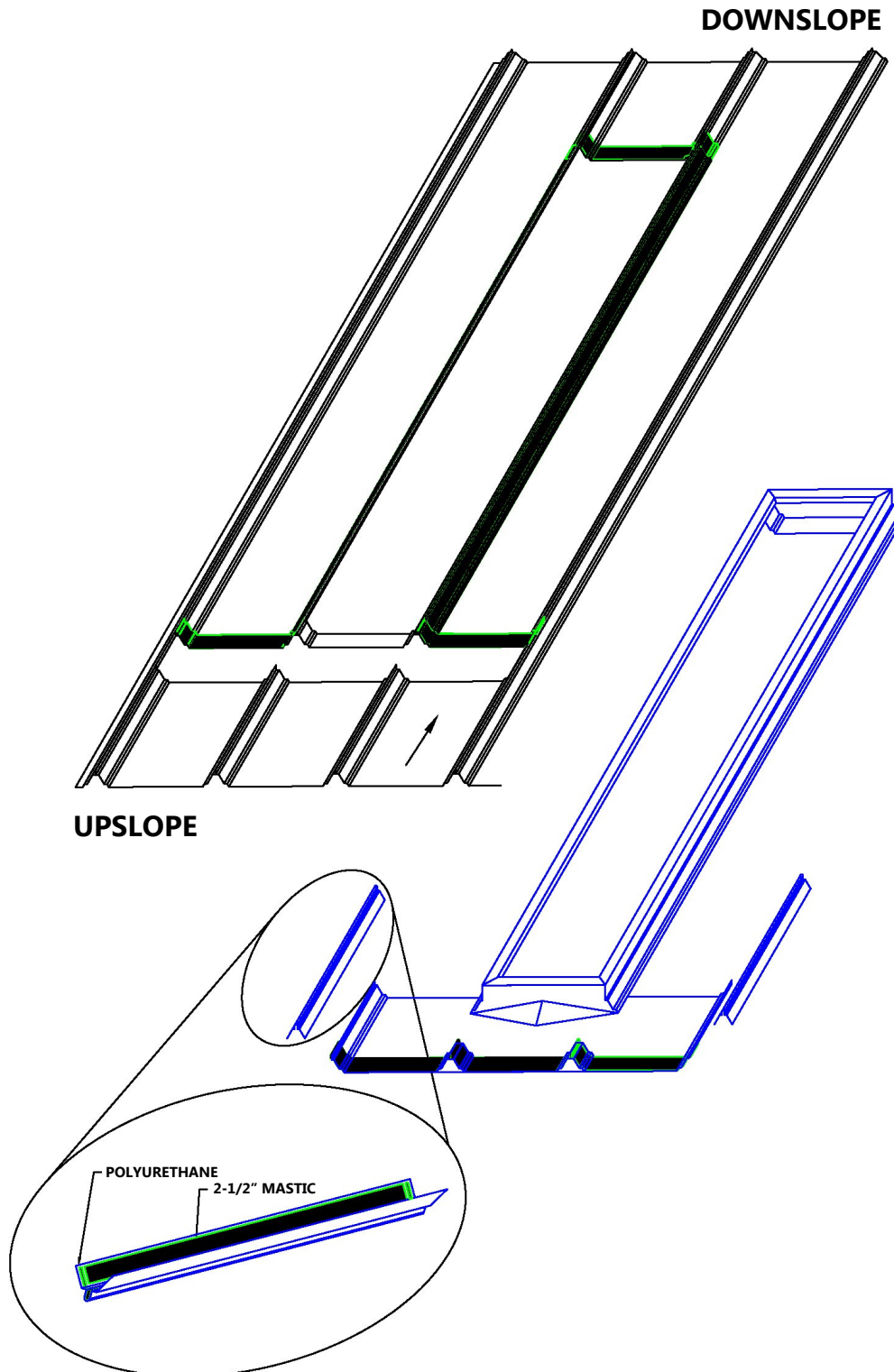
6

- Install the curb with the leading edge under the roof panel and with the sides and downslope over the panel.

- Locate the downslope backer channel under the roof panel and downslope flange. **The downslope mounting location must be within 12" of a purlin.**

- Upslope and downslope flanges are secured with #12-14 1-1/4" long life integrated washered head self drilling fasteners at 4" centers so that the sealing washer is flat on the outside surface. Secure sufficiently so a small amount of sealant is exposed along the sides.

- Attach the seam clips and side rails with #14 7/8" long life integrated washered head self drilling fasteners, 6" on center on both sides of the seam clips.

DOWNSLOPE BACKER CHANNEL

FASTEN
IN PANEL
SHOULDERS

#12-14 1-1/4"
HWHSD

UPSLOPE
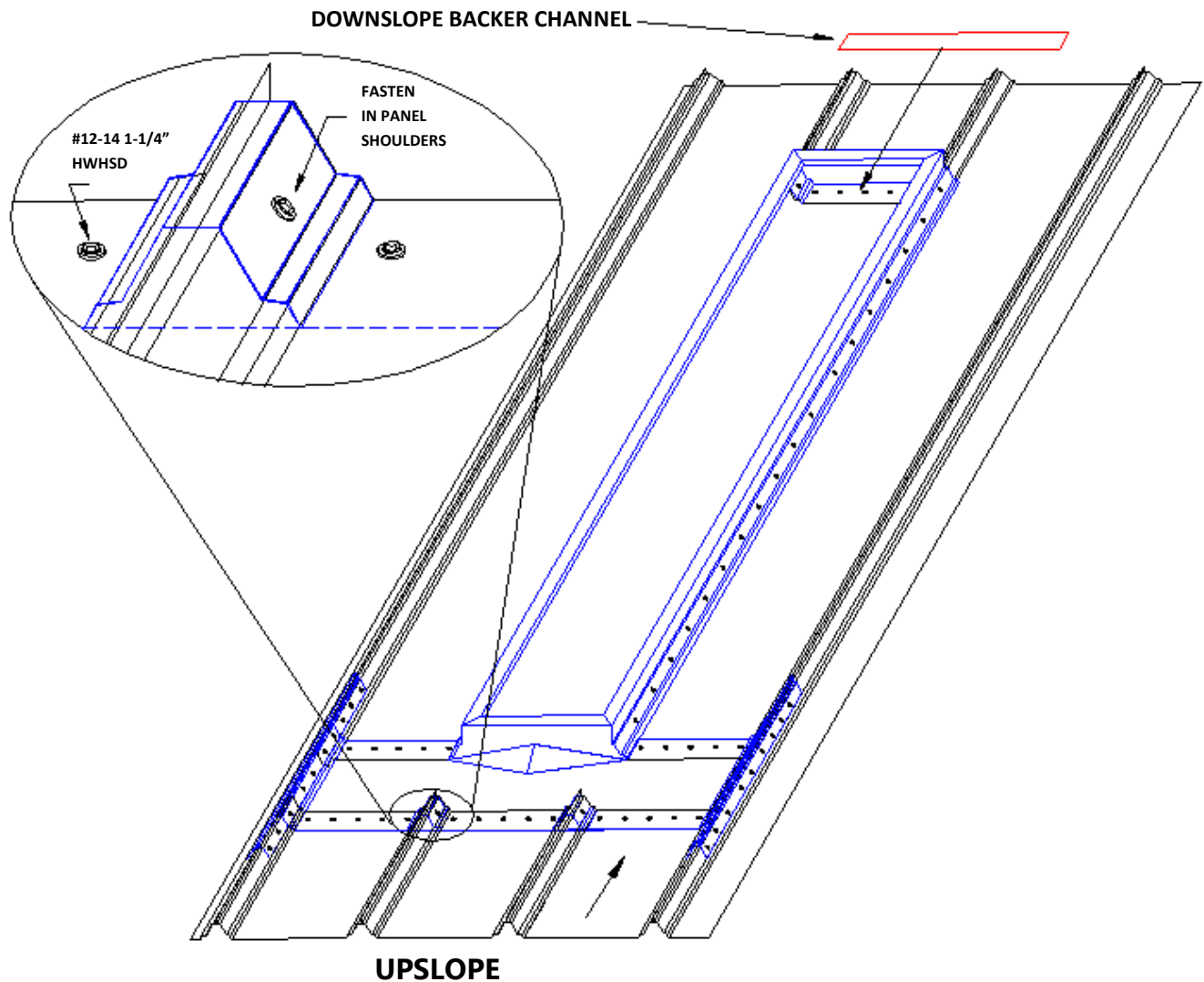
7 Remove the fiberglass insulation on the inside area, leaving a 2-3" perimeter The facing remains in place.   Cut the insulation facing as shown below.

INSULATION

CUT LINE INSULATION FACING
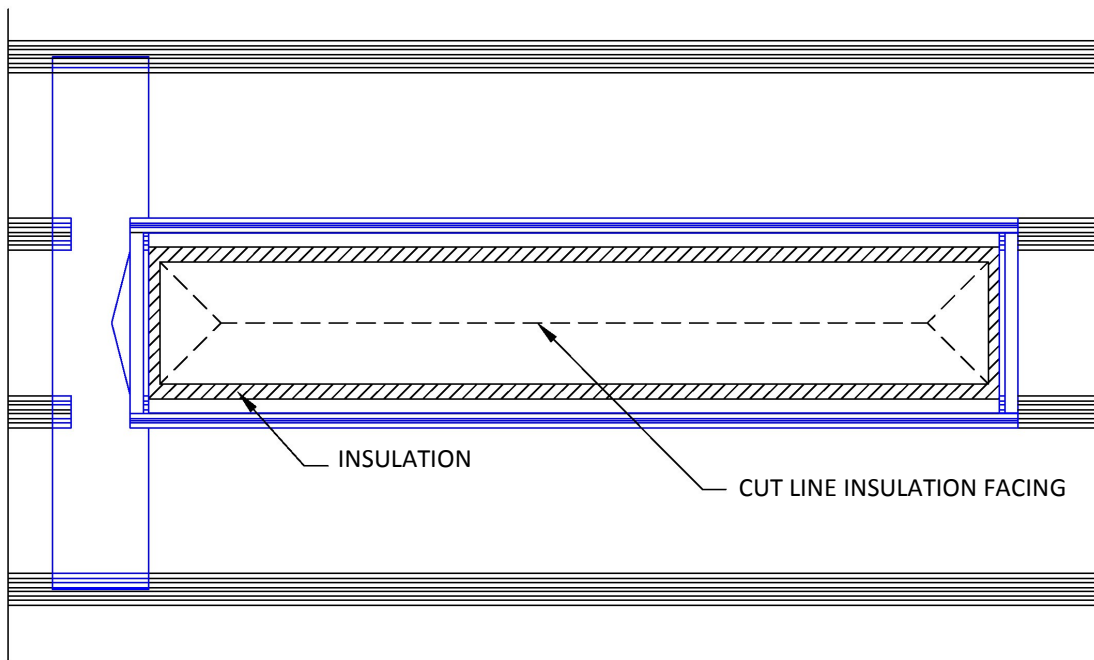
8 Terminate the exposed facing in any of the following ways. Tape the exposed facing if necessary.

Upslope Curb Diverter

Insulation Facing

Roof Panel

Backer Channel

Purlin

Curb

Insulation Facing

Downslope Curb Closure

Clip

Roof Panel

Backer Channel
Insulation Facing

Purlin

Curb

Tuck into Cavity

R&S
Manufacturing and Sales

9 Install the side wall insulation and liner panels as shown. The insulation is notched to surround the remaining roof panel. The liner panel is placed over the insulation and fastened with self-drilling screws in the pre-punched holes. If safety screen is included, position as shown in step 10, and use the self drilling fasteners to secure the liner and safety screen assembly at the same time using the same pre-punched holes.

GASKET

#10 x 3/4" FASTENER

SAFETY
SCREEN CLIP

SAFETY

INSULATION
FACTORY NOTCHED

LINER PANEL
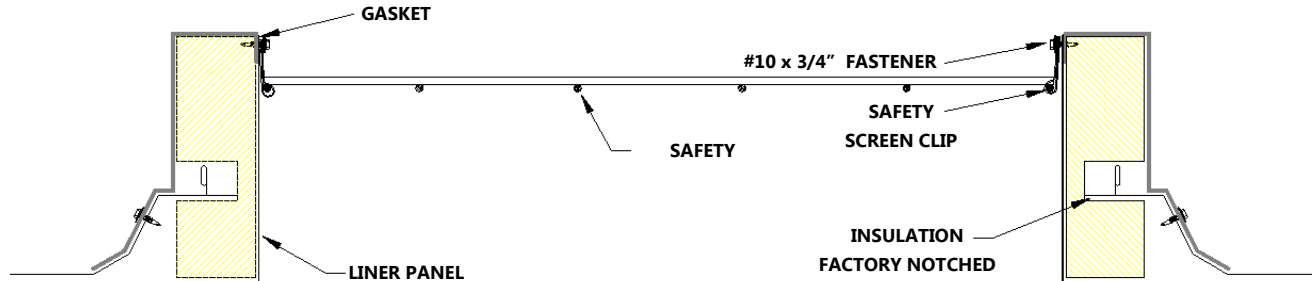
10 If the **safety screen** option is included, align the screen over the opening as shown. Using the clips, gasket, and fasteners provided, fasten a clip every 12" around the perimeter. See detailed clip positioning above.

UPSLOPE
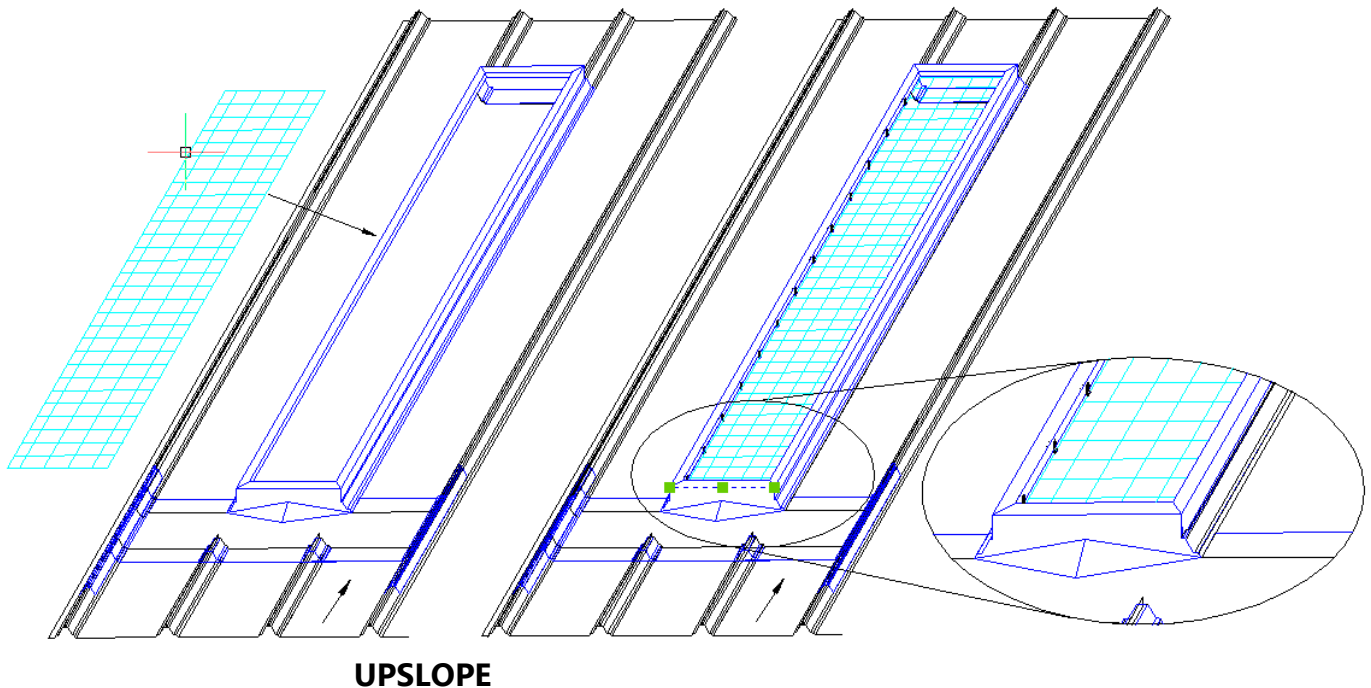
11 Install the RS24 skylight so it is centered on the curb and so it compresses the foam rubber gasket to the curb. Secure the skylight frame to the curb in pre-drilled holes with #12 1-1/4" self-drilling fasteners, shimming to avoid excessive stress on the skylight frame. *Do not over tighten the fasteners.*