

**CURB DETAILS**

EN3010 - SINGLE ROOF CURB

EN3030 - DOUBLE ROOF CURB

EN3098 - PURLIN CAVITY FRMAING INSTALLATION (LIGHTWEIGHT CURBS)

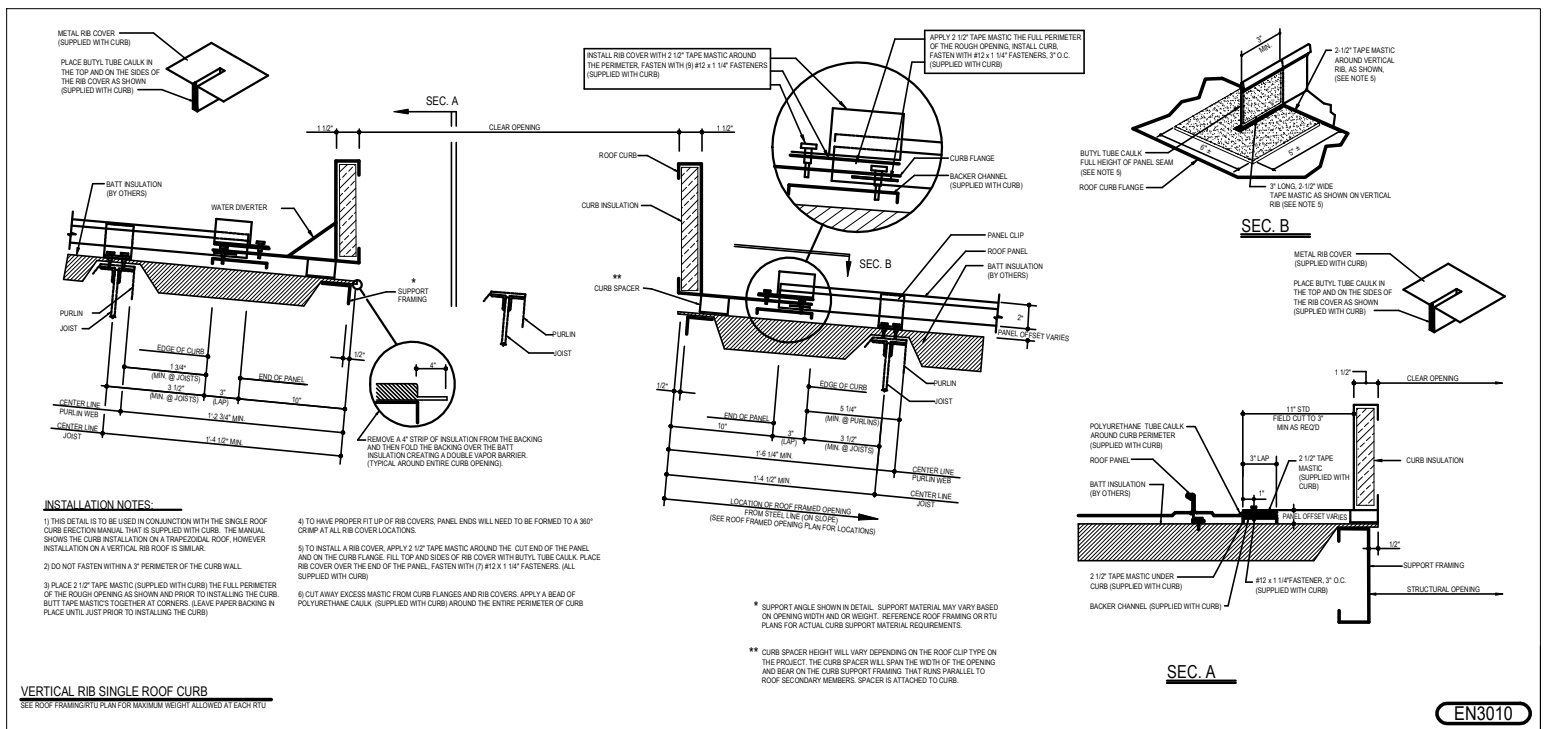
EN3099 - LIGHTWEIGHT ROOF CURB INSTALLATION

EN3100 - LIGHTWEIGHT ROOF CURB

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EN3010 - SINGLE ROOF CURB

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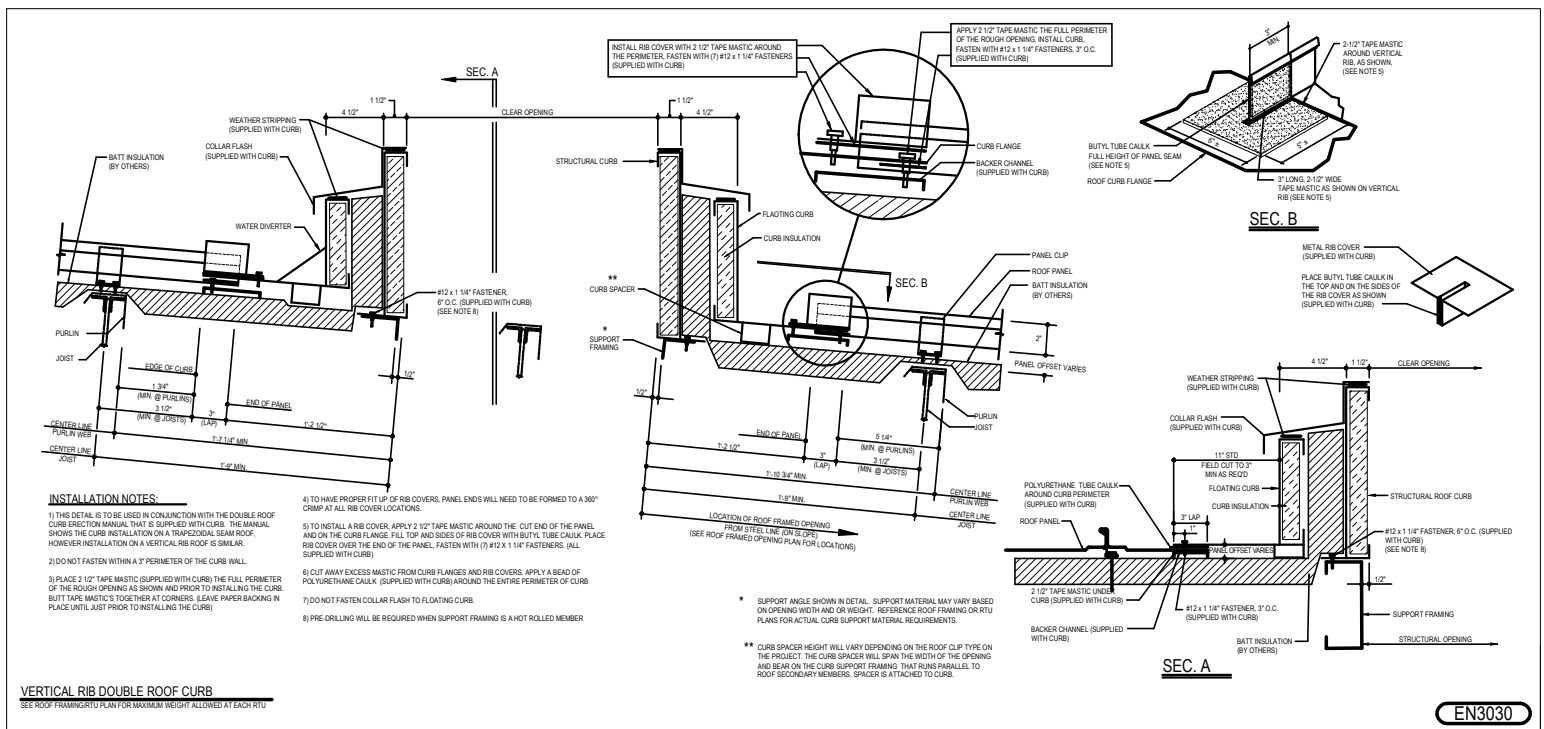


Detailer Notes:

- 1) N/A

EN3030 - DOUBLE ROOF CURB

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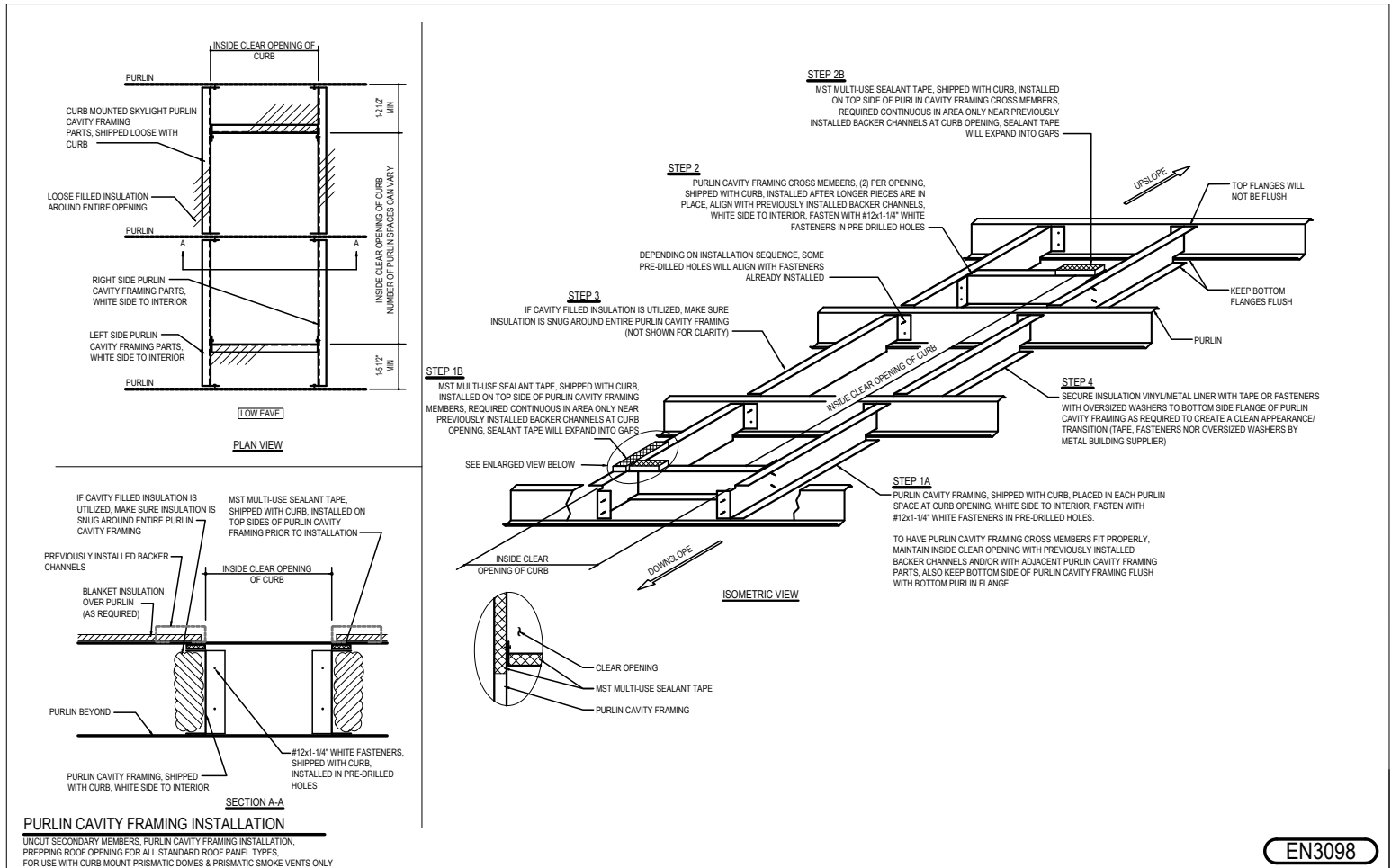


Detailer Notes:

- 1) N/A

## EN3098 - PURLIN CAVITY FRAMING INSTALLATION (LIGHTWEIGHT CURBS)

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### Detailer Notes:

- 1) THIS DETAIL IS A DUPLICATE OF DETAILS DL0098, EN3098, AND EN6098. WHEN MAINTENANCE IS REQUIRED, BE SURE TO UPDATE THE ADDITIONAL DETAILS AS REQUIRED (PD ONLY).

**EN3099 - LIGHTWEIGHT ROOF CURB INSTALLATION**

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**SAFETY PRECAUTION:**  
WORKERS SHOULD MAINTAIN A CONSTANT AWARENESS OF THEIR LOCATION IN RELATION TO THE ROOF EDGE AND ANY ROOF OPENINGS AT ALL TIMES. DO NOT WALK OR STAND ON CURB FRAMING UNTIL PANELS ARE SECURED PROPERLY.

- DO NOT FASTEN OR ATTACH BACKER SUPPORT/CROSS CHANNELS TO SECONDARY.
- BACKER SUPPORT AND CROSS CHANNELS ARE DESIGNED TO "FLOAT".

ROOF SECONDARY IS NOT DESIGNED TO BE CUT AND MUST REMAIN CONTINUOUS BELOW THE BACKER CHANNEL FRAMING AS SHOWN.

	AA MIN DIM	BB MIN DIM
PURLIN	6"	3"
JOIST	4 1/2"	4 1/2"

**INSTALLATION PROCEDURE (RETRO-FIT):**

- 1) DETERMINE ROOF CURB LOCATION(S). IF POSSIBLE, TRY TO CENTER OPENING/CURB OVER A MAJOR RIB/SEAM. KEEP OPENING MINIMUM 2" FROM EDGE OF RIB. SEE SECTION A-A.
- 2) FOLLOW ROOF PANEL CUT-OUT PROCEDURES (AT RIGHT) FOR PROPERLY CUTTING OPENING IN ROOF PANEL.
- 3) INSTALL BACKER SUPPORT CHANNELS (SIDES), USING CAUTION NOT TO TEAR/CUT ROOF INSULATION WHEN PLACING WITHIN OPENING.
- 4) CENTER BACKER FRAMING OVER SECONDARY MAKING SURE THE ENDS OF THE BACKER SUPPORT CHANNELS REST ON SECONDARY EQUALLY. (IF A NON-THERMAL BLOCK ROOF APPLICATION, THE BACKER SUPPORT CHANNELS WILL COME FACTORY NOTCHED AT SECONDARY).
- 5) INSTALL BACKER CROSS CHANNELS (UPSLOPE/DOWNSLOPE), WITH FACTORY NOTCHED ENDS, ON TOP OF BACKER SUPPORT CHANNELS AND UNDER ROOF PANEL.
- 6) FOLLOW INSULATION TIE-OFF PROCEDURE (FROM BELOW) FOR PROPERLY REMOVING INSULATION FROM ROOF OPENING.

**INSTALLATION PROCEDURE (NEW CONSTRUCTION):**

- 1) DETERMINE ROOF CURB LOCATION(S). IF POSSIBLE, TRY TO CENTER OPENING/CURB OVER A MAJOR RIB/SEAM. KEEP OPENING MINIMUM 2" FROM EDGE OF RIB. SEE SECTION A-A.
- 2) ASSEMBLE BACKER SUPPORT/CROSS CHANNELS. PLACE (2) POP RIVETS IN EACH CORNER TO HELP HOLD BACKER CHANNELS TOGETHER AS REQ'D.
- 3) LAY BACKER FRAMING ON TOP OF INSULATION. (IF NO INSULATION IS UTILIZED THEN LAY DIRECTLY ON TOP OF SECONDARY).
- 4) CENTER BACKER FRAMING OVER SECONDARY MAKING SURE THE ENDS OF BACKER SUPPORT CHANNELS REST ON THE SECONDARY EQUALLY. (IF A NON-THERMAL BLOCK ROOF APPLICATION, THE BACKER SUPPORT CHANNELS WILL COME FACTORY NOTCHED AT SECONDARY).
- 5) START SHEETING OVER BACKER FRAMING. ATTACH ROOF PANELS PER STANDARD PRACTICE.
- 6) PLACE A FASTENER AT LOWER AND UPPER CORNER OF SUPPORT FRAMING.  
SEE ROOF PANEL CUT-OUT PROCEDURE (AT RIGHT) FOR THIS INSTALLATION. CONTINUE SHEETING ROOF PANELS AND PLACE A FASTENER AT OTHER LOWER AND UPPER CORNERS OF SUPPORT FRAMING.
- 7) FOLLOW INSULATION TIE-OFF PROCEDURE (FROM BELOW) FOR PROPERLY REMOVING INSULATION FROM ROOF OPENING.

**ROOF PANEL CUT-OUT PROCEDURE:**

WHEN FIELD CUTTING PANELS DO NOT USE ABRASIVE SAWS OR OTHER CUTTING METHODS WHICH PRODUCE HOT METAL PARTICLES AND/OR BURN THE CUT EDGES. THESE METHODS WILL DAMAGE THE PAINTED AND ALUMINUM COATED FINISH AND VOID ANY WARRANTIES. USE DOUBLE CUT SHEARS, NIBBLERS OR OTHER CUTTING DEVICES WHICH DO NOT PRODUCE HOT METAL PARTICLES OR BURNED EDGES.

- 1) FOR RETRO-FIT INSTALL, THE ROOF OPENING WIDTH DIMENSION WILL BE THE OUTSIDE OF CURB FLANGE DIMENSION MINUS (3/8)". THE ROOF OPENING LENGTH DIMENSION WILL BE THE INSIDE OF CURB DIMENSION. OTHER DIMENSIONS ARE LAID OUT AND CONFIRMED. DRILL A HOLE IN PANEL AT EACH CORNER AND CUT AWAY ROOF PANELS. USING CAUTION NOT TO CUT INTO ROOF INSULATION (IF UTILIZED).
- 2) FOR NEW CONSTRUCTION, PLACE A FASTENER AT EACH CORNER OF THE SUPPORT FRAMING AS SHOWN IN DETAIL "A" (THIS IS TEMPORARY AND WILL HELP ENSURE THE SUPPORT FRAMING DOES NOT MOVE DURING PANEL INSTALLATION). LOCATE CORNER FASTENERS UNDER ROOF PANELS. DRILL A HOLE IN ROOF PANEL AT EACH FASTENER LOCATION AND CUT AWAY ROOF PANELS. USING CAUTION NOT TO CUT INTO ROOF INSULATION (IF UTILIZED).
- 3) DEBURR ALL FIELD CUT PANEL CORRUGATIONS AND PANEL EDGES OF SHARP EDGES BEFORE PROCEEDING.

DEBURR ANY SHARP EDGES TO AVOID LINER TEAR. APPLY PATCH TAPE OVER SHARP EDGES IF NECESSARY.

**INSULATION TIE-OFF PROCEDURE AT BLANKET INSULATION:**

USE WITH PURLINS OR JOIST AS ROOF SECONDARY MEMBER TYPES.

- 1) REMOVE INSULATION BACKING FROM THE LINER WITHIN THE ROOF OPENING AREA. CUT LINER INSIDE OF THE ROOF OPENING AREA.
- 2) TUCK LINER UNDER ROOF PANEL AND ON TOP OF BACKER CHANNELS (SIDES).
- 3) FOLD LINER OVER UP/HILL/DOWN/HILL BACKER CHANNELS AND TAPE LINER TO BACKER CHANNELS.
- 4) OPTIONAL TIE-OFF PROCEDURE: INSTALL ROOF CURB (WITH PROPER SEALANTS UNDER CURB FLANGES). SECURE ROOF CURB. WRAP LINER UP AND OVER INNER CURB FLANGE PERIMETER. SECURE LINER WITH TAPE OR FASTENERS WITH OVERSIZED WASHERS (TAPE, FASTENERS NOR WASHERS NOT BY METAL BUILDING SUPPLIER).

**SECTION B-B**

**SECTION C-C**

**SECTION B-B**

IF ORDERED AND SUPPLIED ONLY

**SECTION C-C**

**INSULATION TIE-OFF PROCEDURE AT PURLIN CAVITY FRAMING:**

USE WITH CAVITY FILLED INSULATION (BASKET) SYSTEMS AND/OR WITH METAL ROOF LINER IF ORDERED.

- 1) REMOVE ADDITIONAL INSULATION FROM WITHIN THE ROOF OPENING AREA TO BE ABLE TO INSTALL PURLIN CAVITY FRAMING. BUT NOT SO MUCH AS TO CREATE VOIDS. INSULATION NEEDS TO BE SNUG AROUND PURLIN CAVITY FRAMING.
- 2) INSTALL PURLIN CAVITY FRAMING PARTS WITH MULTI-USE SEALANT TAPE APPLIED ON TOP SIDE FLANGE, TO CREATE SEAL BETWEEN BACKER CHANNELS AND PURLIN CAVITY FRAMING.
- 3) FILL INSULATION VOIDS WITH ADEQUATE INSULATION, AS REQUIRED.
- 4) SECURE INSULATION VINYL/METAL LINER WITH TAPE OR FASTENERS WITH OVERSIZED WASHERS TO BOTTOM SIDE FLANGE OF PURLIN CAVITY FRAMING (TAPE, FASTENERS NOR OVERSIZED WASHERS BY METAL BUILDING SUPPLIER).

EN3099

**Detailer Notes:**

- 1) FOR USE WITH CURB MOUNT PRISMATIC DOMES & PRISMATIC SMOKE VENTS ONLY
- 2) THIS DETAIL IS A DUPLICATE OF DETAILS DL0099, EN3099, AND EN6099. WHEN MAINTENANCE IS REQUIRED, BE SURE TO UPDATE THE ADDITIONAL DETAILS AS REQUIRED (PD ONLY).

**EN3100 - LIGHTWEIGHT ROOF CURB**  
Download the DWG file by clicking here.

**SAFETY PRECAUTIONS:**  
WORKERS SHOULD MAINTAIN A CONSTANT AWARENESS OF THEIR LOCATION IN RELATION TO THE ROOF EDGE AND ANY ROOF OPENINGS AT ALL TIMES.

- DO NOT FASTEN OR ATTACH BACKER SUPPORT/CROSS CHANNELS TO SECONDARY FRAMING.
- BACKER SUPPORT AND CROSS CHANNELS ARE DESIGNED TO "FLOAT".

**INSTALLATION PROCEDURES:**

- PRIOR TO INSTALLING CURB, MARK A LAP LINE ON THE UPSLOPE/DOWNSLOPE ROOF PANEL EDGES. PLACE CURB OVER OPENING. LINE-UP CURB FLANGES WITH 1/2" LAP LINE. CENTER CURB OVER OPENING (SIDE TO SIDE). MARK PANEL RIB LOCATIONS.
- NOTCH UPPER AND LOWER CURB FLANGES AS REQUIRED. SEE NOTCH DETAIL FOR DIMENSIONS. DRY-FIT CURB OVER OPENING. CHECK FOR PROPER FIT.
- IF A NEW CONSTRUCTION INSTALL AND THE 4" CORNER FASTENERS WERE UTILIZED, REMOVE FROM THE CORNERS OF FRAMING NOW, OTHERWISE OMIT NOTE.
- CLEAN OFF ALL DEBRIS, OIL, METAL SHAVINGS, ETC. FROM AROUND THE ROOF OPENING AND FROM ROOF CURB UNDERSIDE.
- INSTALL ALL PROPER TAPE MASTICS AROUND PERIMETER OF ROOF OPENING. NOTE DIFFERENT WIDTHS ARE USED. SEE DETAIL "A" AND NOTES A, B AND C.
- AFTER THE TAPE MASTIC PAPERS BACKING IS REMOVED, CAREFULLY SET CURB OVER OPENING. ALLOW AND FASTEN WITH #12x1-1/4" ROOF FASTENERS IN PRE-DRILLED FLANGE HOLES AND/OVER EVERY 24". IF BACKER SUPPORT FRAMING IS NOTCHED, DO NOT PLACE FASTENERS WITHIN 1/2" OF SECONDARY FRAMING EDGE. THIS ALLOWS FASTENER NOT TO INTERFERE WITH ROOF PANEL EXPANSION AND CONTRACTION. SEE DETAIL "D".
- PRIOR TO RIB COVER INSTALLATION, REVIEW NOTE E. SEE DETAIL "E" FOR PROPER PLACEMENT OF TAPE MASTIC/TUBE CAULK. PLACE CURB PERIMETER (INCLUDING RIB COVERS) IS CLEAR OF DEBRIS, OIL, METAL SHAVINGS, ETC. AS NECESSARY. TRIM AWAY EXCESS TAPE MASTIC OR TUBE CAULK FROM AROUND CURB COVERS.
- AFTER ALL ROOF CURB COMPONENTS HAVE BEEN INSTALLED, MAKE SURE AREA AROUND ENTIRE ROOF CURB PERIMETER (INCLUDING RIB COVERS) IS CLEAR OF DEBRIS, OIL, METAL SHAVINGS, ETC. AS NECESSARY.
- CUT AWAY EXCESS TAPE MASTIC OR TUBE CAULK FROM AROUND CURB COVERS. APPLY A BEAD OF POLYURETHANE CAULK (SUPPLIED WITH CURB) AROUND THE ENTIRE PERIMETER OF CURB.
- INSTALL HOLD-DOWN CLIPS ON THE INSIDE OF THE ROOF CURB FLANGE SIZES. SEE DETAIL "D". IF SECONDARY FRAMING MEMBER IS IN CURB OPENING AREA.
- INSTALL FALL PROTECTION/SAFETY SCREEN AND DOMED SKYLIGHT AS INSTRUCTED IN DETAILS BELOW.

**RECTOR NOTE:**  
PRIOR TO INSTALLATION OF THE CURB, THE ADJACENT PANEL SEAMS NEXT TO THE CURB MUST BE FORMED INTO THE FINAL SEAL.

**DETAIL "A":** FIELD NOTCH UPSLOPE AND DOWNSLOPE CURB FLANGES AT CORRELATION LOCATIONS. DO NOT OVERLAP NOTCHES. PROPER NOTCHING OF FLANGES IS CRITICAL TO WEATHERTIGHTNESS.

**DETAIL "B":** CONTINUOUS 2-1/2" WIDE TAPE MASTIC (SEE NOTES B & C).

**DETAIL "C":** BUTYL TUBE CAULK - FULL HEIGHT OF PANEL SEAM (SEE NOTE E).

**DETAIL "D":** FASTENERS #12x1-1/4" LOCATE IN PRE-DRILLED FLANGE HOLES. 3" O.C. (INCLUDED IN CURB PACKAGE).

**DETAIL "E":** POLYURETHANE TUBE CAULK AROUND ROOF CURB PERIMETER.

**SECTION A-A:** INSULATION NOT SHOWN FOR CLARITY. BACKER CHANNEL (SEES INCLUDED IN CURB PACKAGE). DO NOT ATTACH ROOF CURB OR BACKER CHANNEL TO SECONDARY FRAMING.

**SECTION B-B:** METAL RIB COVERS AT EACH PANEL CORRUGATION (WUPPLIED WITH CURB). ROOF CURB. FASTENERS #12x1-1/4" LOCATE IN PRE-DRILLED FLANGE HOLES. 3" O.C. (SUPPLIED WITH CURB). POLYURETHANE TUBE CAULK AROUND ROOF CURB PERIMETER/RIB COVERS (SUPPLIED WITH CURB). CONTINUOUS 1-1/2" TAPE MASTIC (BOTH SIDES) (SEE NOTE C).

**SECTION C-C:** BUTYL TUBE CAULK IN THIS AREA AS SHOWN (SUPPLIED WITH CURB).

**DOMED SKYLIGHT INSTALLATION:**

- HANDLE DOMED SKYLIGHT WITH CARE. INSIDE THE INSIDE OF THE UNIT IS CLEAR OF DEBRIS THROUGHOUT THE INSTALLATION PROCESS. DO NOT HIT SKYLIGHT FRAME WITH HAMMER OR ANY OTHER KIND OF Mallet. THIS MAY CAUSE THE UNITS TO SHIRT.
- PROPERLY ELEVATE DOMED SKYLIGHT FROM FLAT SURFACES DURING STORAGE TO PREVENT HEAT BUILDUP OR EXCESSIVE INTERNAL TEMPERATURE UNDER THE DOME. OTHERWISE DAMAGE CAN OCCUR TO INTERNAL COMPONENTS.
- CALLING THE TOP SIDE OF THE FALL PROTECTION/SAFETY SCREENS NOT REQUIRED. AN AIR SEAL TAPE IS PRE-INSTALLED TO THE UNDERSIDE OF THE SKYLIGHT.
- SET DOMED SKYLIGHT OVER PREPARED CURB. MAKING SURE SKYLIGHT IS SQUARE AND EQUALLY SPACED ON ALL FOUR SIDES OF CURB.
- ATTACH SKYLIGHT WITH PROVIDED SCREWS. BE SURE NOT TO DISTORT THE SKYLIGHT FRAME. CURB SCREWS JUST SNUG TO THE FLANGE. OVERTIGHTENING MAY CREATE FORCES WHICH MAY CRACK THE SKYLIGHT LENS.

**DOMED SKYLIGHT CLEANING:**

- WHEN CLEANING LENS, USE ONLY WATER OR WATER WITH MILD SOAP. USE A SOFT PAD TO MINIMIZE THE SCRATCHING.
- NEVER USE AMMONIA, ALCOHOL, AROMATIC, OR PETROLEUM BASED PRODUCTS TO CLEAN LENS. THEY WILL CAUSE DEFORMATION AND/OR CRACKING OF THE LENS AND WILL VOID THE WARRANTY.

**DETAIL "E" (LIGHTWEIGHT ROOF CURB INSTALLATION):** LIGHTWEIGHT ROOF CURB INSTALLATION. VERTICAL RIB ROOF PANEL. FOR USE WITH PRISMATIC DOMES AND PRISMATIC SMOKE VENTS ONLY.

**DETAIL "E" (VERTICAL RIB ROOF PANEL):** IF BACKER CHANNEL IS NOTCHED, PLACE CURB FLANGE FASTENERS WITHIN 1-1/2" OF SECONDARY FRAMING EDGE.

**DETAIL "E" (FALL PROTECTION / SAFETY SCREEN):** FALL PROTECTION / SAFETY SCREEN INSTALLATION.

- AS REQUIRED, CUT CURB INSULATION TO LENGTH TO FIT AROUND THE EXTERIOR PERIMETER OF ROOF CURB.
- PLACE CURB INSULATION INTO BOTTOM CURB SLOT WITH WHITE FACE EXPOSED.
- TAPE ANY ISSUES WITH WHITE INSULATION TAPE TAPE BY OTHERS.
- INSTALL TAPE MASTIC CONTINUOUS ALONG TOP FLANGE OF CURB.
- PLACE SAFETY SCREEN OVER CURB.
- DO NOT FULLY SEAL SAFETY SCREEN AT THIS STEP.
- TUCK THE CURB INSULATION INTO CHANNEL OF SAFETY SCREEN.
- FULLY SEAL SAFETY SCREEN TO TOP OF CURB TO NEXT INSTALLATION.

**Detailer Notes:**

1) N/A