Marvin Skylight and Awaken
Installation Instructions

ABSTRACT: Please read these instructions in their entirety before beginning to install your Marvin Skylight and Awaken products. These installation instructions demonstrate the installation of a Marvin Skylight or Awaken in new wood frame construction using an industry approved water management system. For installation using other construction methods, such as remodeling, replacement, and recessed openings refer to the latest version of ASTM E2112, "Standard Practice for Installation of Exterior Windows, Doors and Skylight installation suggestions. The same information for ASTM E2112 can be found on the ASTM website, www.astm.org.

Regional standard practices, environmental conditions, and codes may vary and supersede the procedures contained within. The responsibility for compliance is yours: the installer, inspector, and owner(s).

The English language version of this instruction is the official version and shall take precedence over any translation.

NOTE: Numbers listed in parentheses () are metric equivalents in millimeters rounded to the nearest whole number.

Hazards and Warnings

> ## ⚠ WARNING!
>
> **Do NOT lift or move without proper equipment.**
> **Read, understand, and follow all lift equipment manufacturers' instructions and safety information.**

> ## ⚠ WARNING!
>
> This product can expose you to chemicals including titanium oxide, which is known to the state of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

> ## ⚠ WARNING!
>
> This product can expose you to chemicals including methanol, which is known to the state of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

After Market Products

Alterations to Marvin products including window films, insulating or reflective interior window treatments or additional glazings can cause excessive heat buildup and/or condensation. They may lead to premature failures not covered under warranty by Marvin Windows and Doors.

Before purchasing or applying any product that may affect the installation or performance of Marvin windows or doors, contact the manufacturer of after-market product/glazings that are not supplied by Marvin and request written product use, associated warranties and damage coverage. Provide this information and warranties to the end user and/or building owner for future reference.

Installer and Builder Information

- Always provide a copy of these instructions for the current homeowner.

- Plan sizing of rough opening and clearance from exterior finishing systems to allow for normal materials shrinkage or shifting (e.g. wood structure with brick veneer; allow adequate clearance at the sill). Failure to do so can void the Marvin warranty coverage.

- Refer to the Technical Installation Specifications section for technical specifications regarding the installation of this product. These installation requirements as well as the details in the section must be followed to achieve the advertised Performance Grade (PG) rating of this product.

- It is the responsibility of the builder, installer, and subcontractors to protect the interior and exterior of windows or doors from contact with harsh chemical washes, construction material contamination and moisture. Damage to glazing, hardware, weather strip and cladding/wood can occur. Protect with painters tape and/or protective sheathing as required. Follow all guidelines regarding material use, preparation, personal safety and disposal.

- Contact your Marvin supplier if you have any questions regarding product and materials used in manufacturing or questions on replacement parts.

- Please refer to the PDF version of this instruction for further information regarding best practices installer and builder information, code, and other legal requirements. The PDF version is the official document of record.

Tools Needed

- Safety glasses
- Pry bar
- Square
- Drill/driver
- T20 Torx or #2 Phillips bits
- Hammer
- Pencil
- Saw
- Suction cups for handling glass panels
- Utility knife
- Aviation snips, shear, or tin snips
- Gloves
- Tape measure

Additional Supplies Needed

- Flashing
- Sealant
- Weather resistive barrier/roofing membrane
- Rags/paper towel/glass cleaner

Included Supplies

- Mounting flange
- Flashing covers
- **Skylight Unit**: Weep hole covers and tube of silicone
- **Awaken Unit:** Wall remote. Customer can order one to three options. Each option will come with one remote. Plus you can add up to 2 additional sets of each option type that you have (ex you could have a maximum of 3 LED, 3 Venting and 3 shade remotes)
- **Optional:** Installation Flashing Kit (rigid flashing and flexible flashing) and Rain Diverter

Deck Mounted Installation
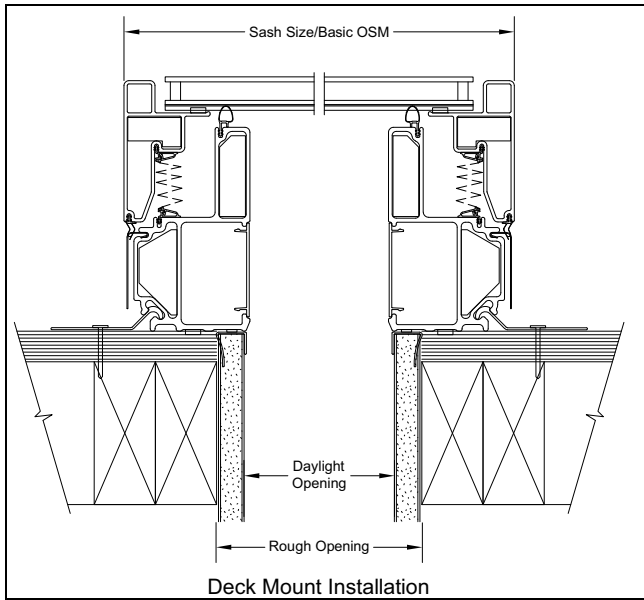
Figure 1 Awaken Deck Mount Installation
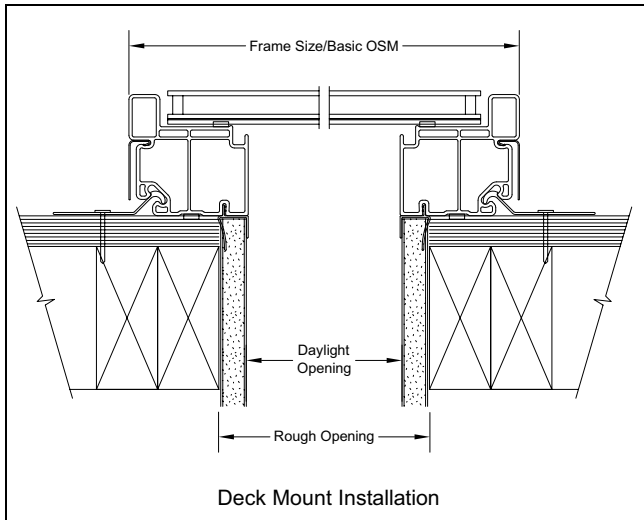
Figure 2 Skylight Deck Mount Installation

1. Install frame lumber. See Figure 3

Figure 3

2. Cut rough opening according to the measurements in the chart. See Figure 4.

		RO Width			
	CN	**16**	**24**	**32**	**48**
RO Height	**36**	14.5 x 34.5	22.5 x 34.5	30.5 x 34.5	46.5 x 34.5
	48	14.5 x 46.5	22.5 x 46.5	30.5 x 46.5	46.5 x 46.5
	60	14.5 x 58.5	22.5 x 58.5	30.5 x 58.5	46.5 x 58.5
	90	14.5 x 88.5	22.5 x 88.5	30.5 x 88.5	46.5 x 88.5
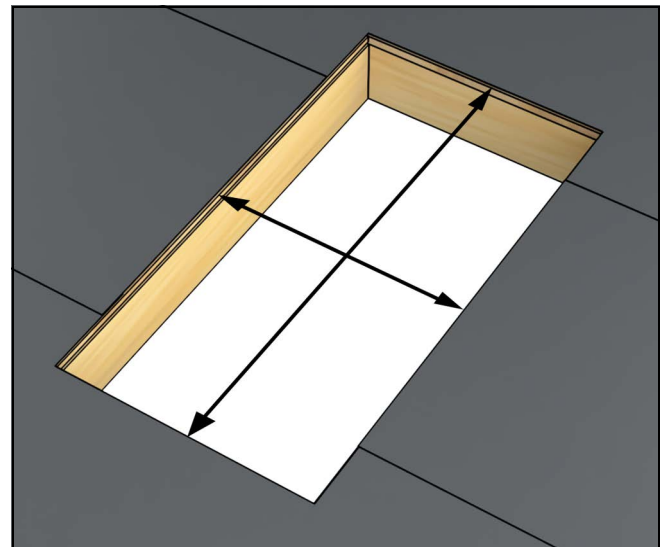
Figure 4

3. Remove 6" of existing roofing and underlayment around the rough opening as shown in Figure 5.
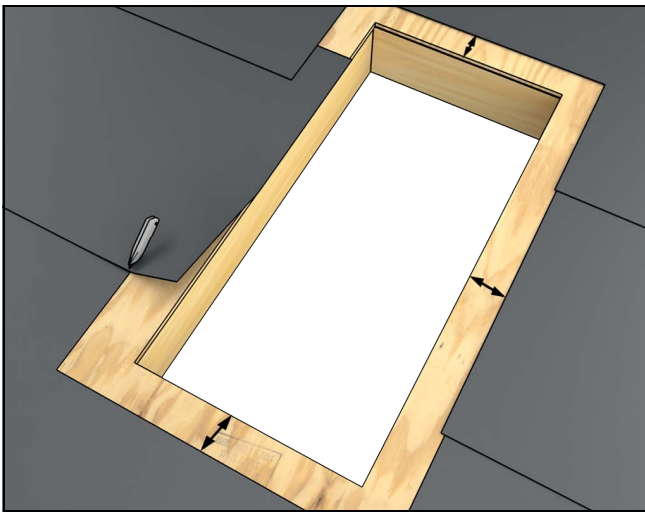
Figure 5

4. Mark skylight corners locations 4" from RO opening. See Figure 6
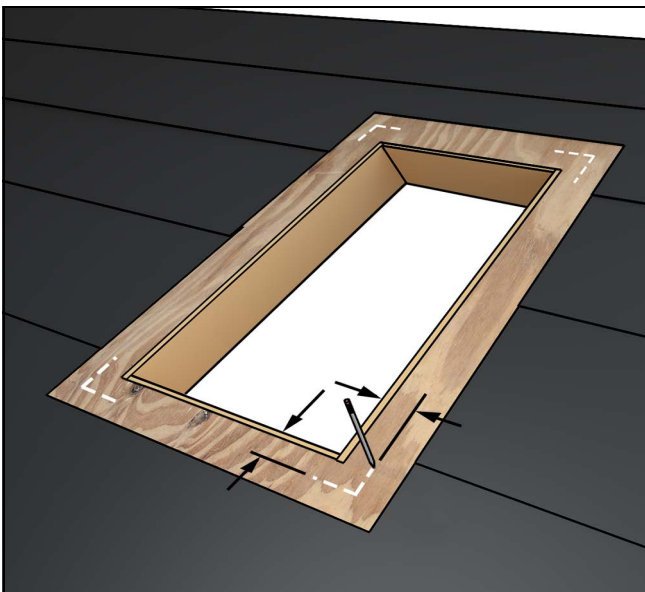
Figure 6

5. If installing an ***Awaken product***, create a notch in rough opening for the power wire as needed. The center of the notch is nominally 1-3/8" to the sill RO edge. See Figure 7. Create notch large enough to run Romex cable per applicable electrical specification. Notch can be covered with plates as needed. If the drywall is not installed tight into the lining groove, add on-site insulation and trim for finished appearance and to prevent conditions that may contribute to condensation. *Note: Electrician needs to meet or exceed local codes. Unshielded wire should be covered by plate, anything under 1-1/2" no plate is required. Electrical route may need to be notched.*

NOTE: Properly insulate in light well to eliminate air/ thermal.
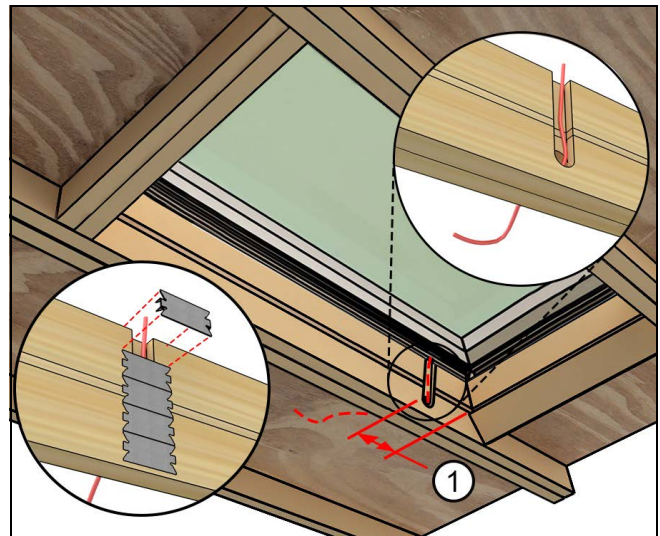
Figure 7

1	1-3/8" to the sill RO edge

⚠ CAUTION!

Sharp edges on mounting flange and flashing covers.

6. Install mounting flanges. Install on ground, may need to use force to insert in kerf. Corners of flange are sharp, use caution when installing. See Figure 8.
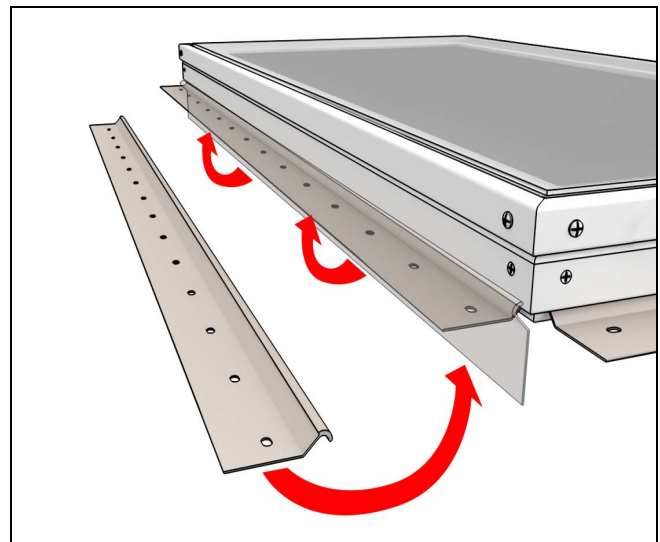
Figure 8

⚠ WARNING!

Mounting flanges can rotate in and/or out.

7. Center unit over rough opening as shown in Figure 9. To position unit do not slide unit, lift or use suction cups for positioning. Sliding unit will cause damage to foam sealing gasket.
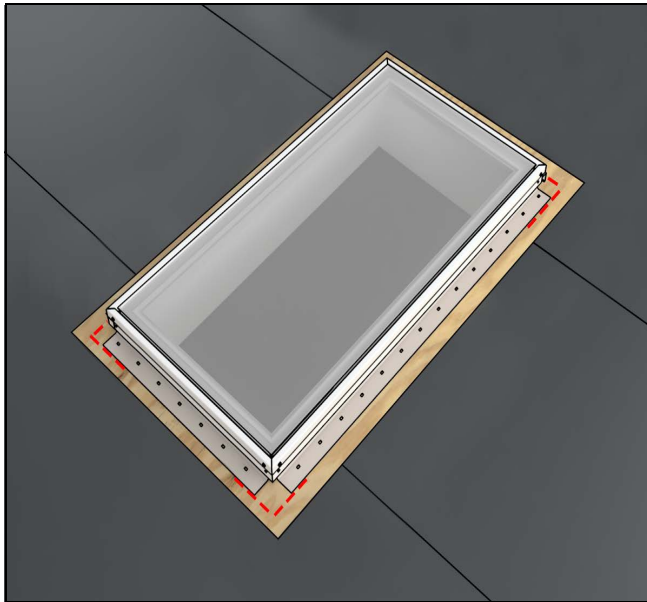
Figure 9

8. Anchor unit with appropriate fasteners, 1-1/2" roofing nails or minimum of #8 x 1-1/2 exterior grade screws, one fastener per pre-drilled hole in mounting flange. See Figure 10.
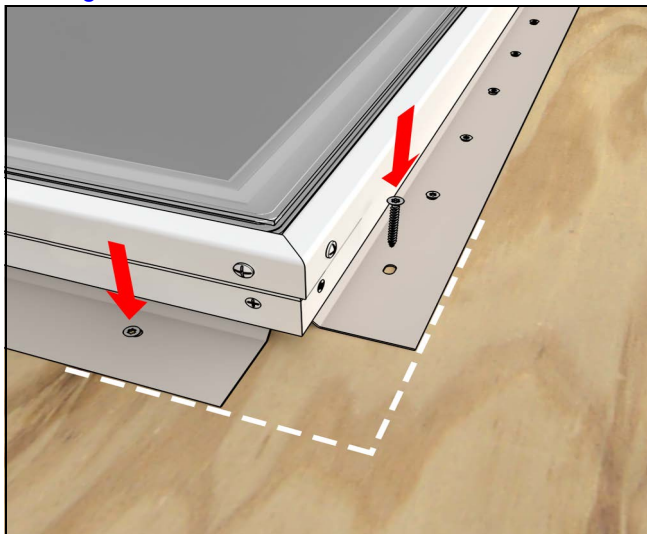

Figure 10

9. To ensure waterproofing, unit frames should be completely wrapped in supplied adhesive flexible flashing. This adhesive flexible flashing must be applied before installing the rigid flashing. *Note: Flexible flashing cannot interfere with kerf.* See Figure 11.

⚠ WARNING!

Do not stretch flexible flashing - will release from surface if stretched.

Take precautions - rigid flashing can puncture.
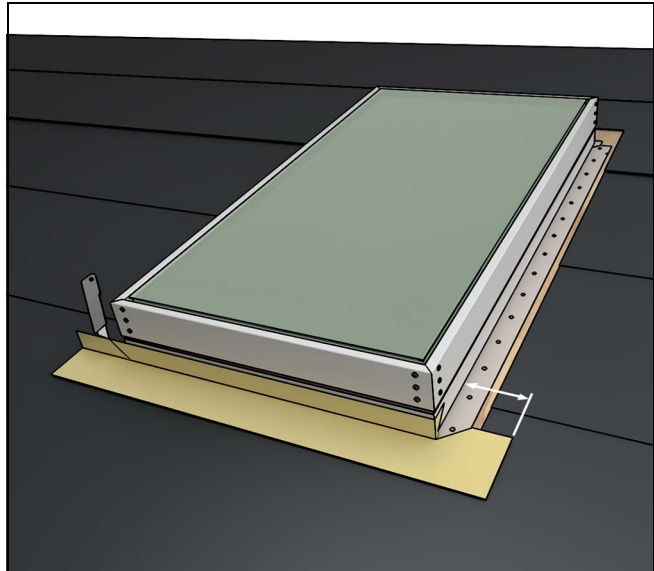
Figure 11

10. Wrap the jambs with adhesive flexible flashing and create water-shedding laps over roofing underlayment. See Figure 12.
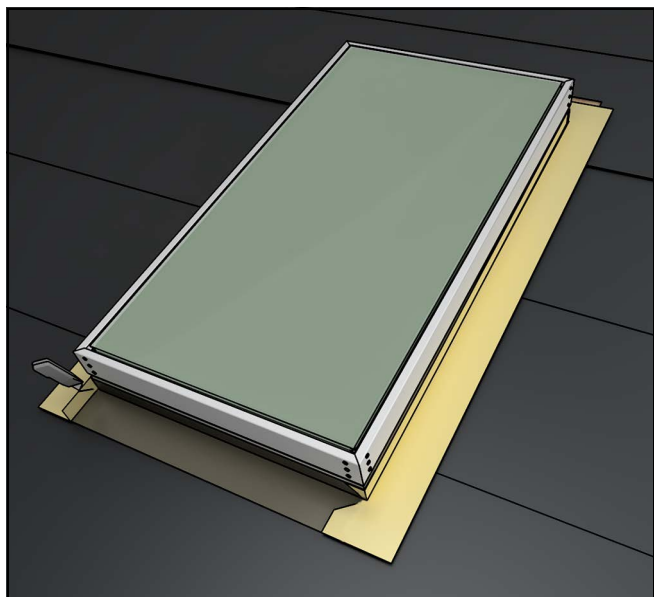
Figure 12

11. Wrap the top frame of the unit with adhesive flexible flashing. See Figure 13.
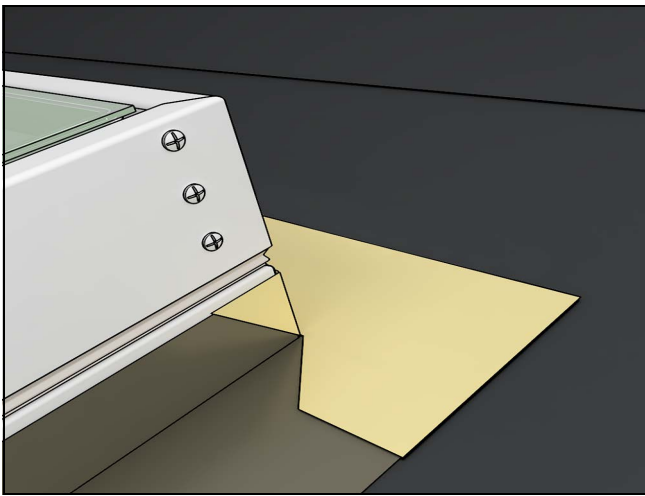
Figure 13

12. Cut out 3" diamond/square from adhesive flexible flashing. Apply diamond shaped corner patches to all corners. Stretch patches over each corner. See Figure 14.
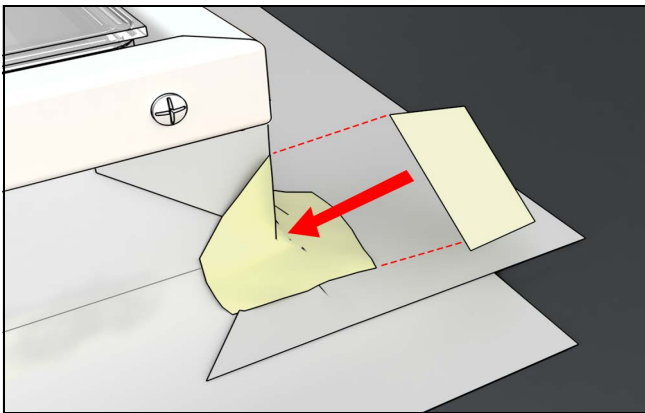
Figure 14

13. Place sill saddle centered on frame and bend over tabs. See Figure 15.
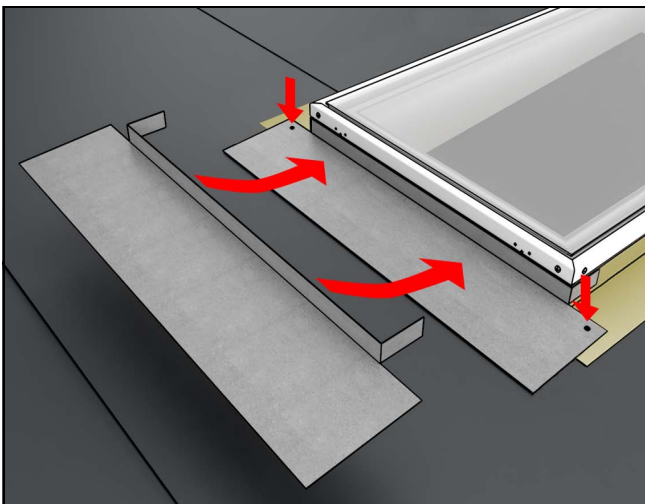
Figure 15

14. First step flashing placed a minimum of 4" beyond the sill of unit. *Note: remove material of vertical leg that extends beyond sill saddle.* See Figure 16.
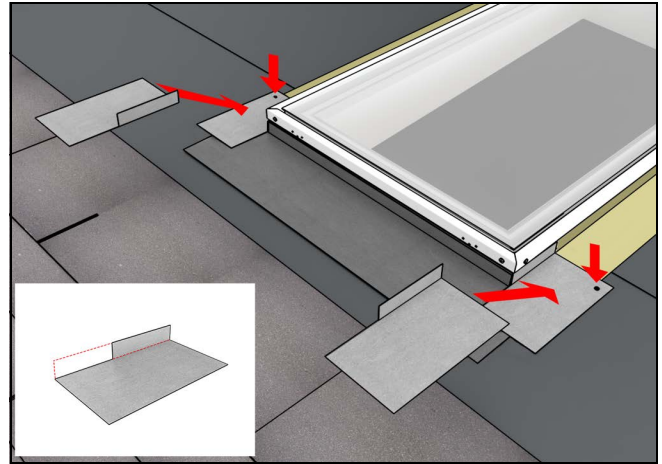

Figure 16

15. Place the second step flashing as shown in Figure 17. *Align with bottom of shingle.* Repeat steps until near the head jamb. See Figure 18.
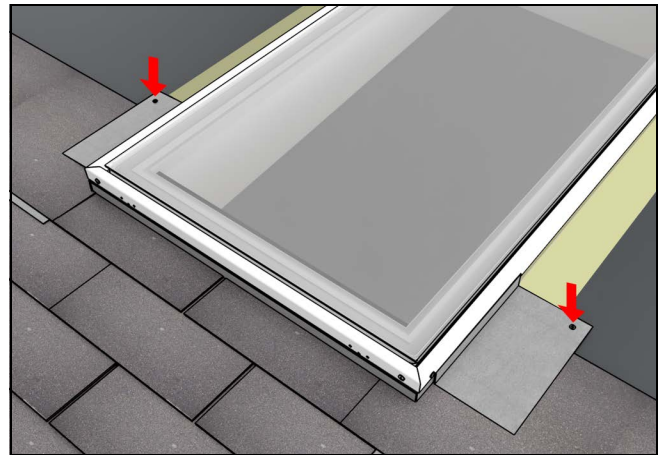
Figure 17
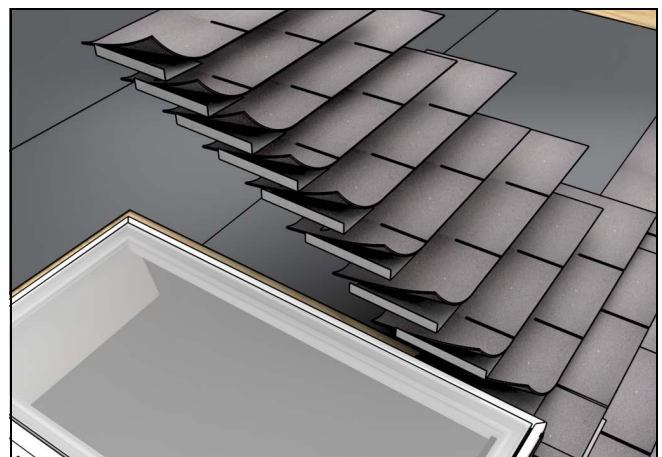
Figure 18

16. Last course is extended beyond the head jamb 2"-4". *Note: vertical leg removed flush to head jamb.* See Figure 19.
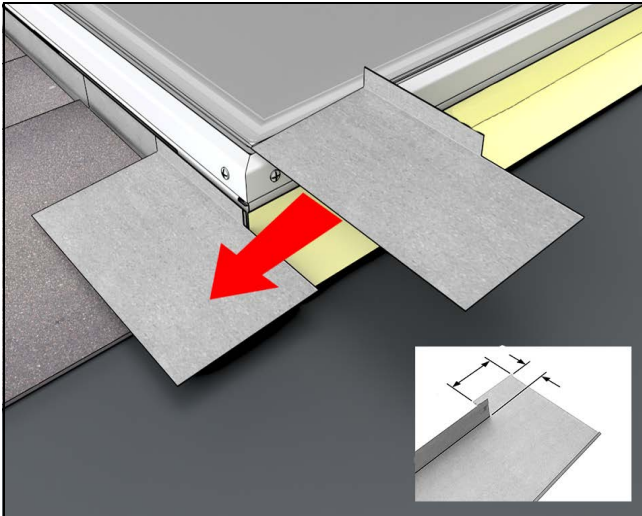
Figure 19

17. Head jamb saddle installed with tabs bent around jamb step flashing. See Figure 20.
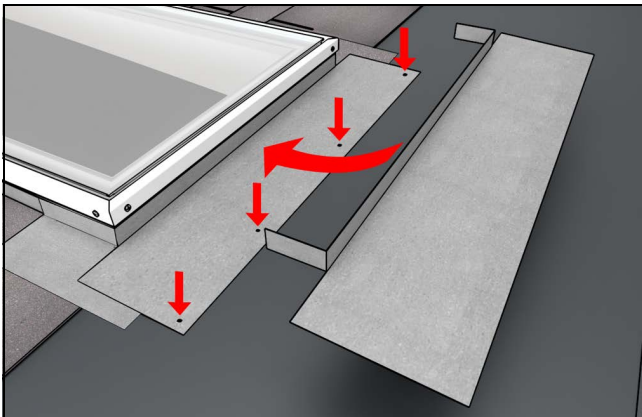
Figure 20

18. On Skylight units only: Peel off the backing from the adhesive located on the weep diverter component (Figure 21). Insert the legs of the weep diverter into the pre-drilled holes on the sill of the Skylight unit (Figure 22). Press the weep diverter component firmly against the Skylight sill to activate the adhesive.

Figure 21
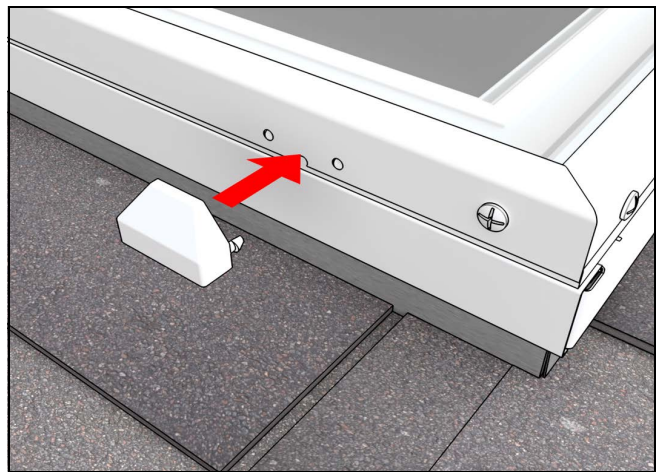
Figure 22

19. Install the jamb flashing covers by inserting the notched leg into the frame kerf (Figure 23). Using a flat edge, bend the tab(s) on the header and sill of the jamb cover to a horizontal position. Install the head jamb and sill cover by aligning the slot on the covers with the folded tabs on the jamb covers and inserting the notched leg into the frame kerf (Figure 24 and Figure 25). Bend the tabs down to secure the flashing covers. Rigid flashing and flexible flashing are not shown, please refer to steps above.
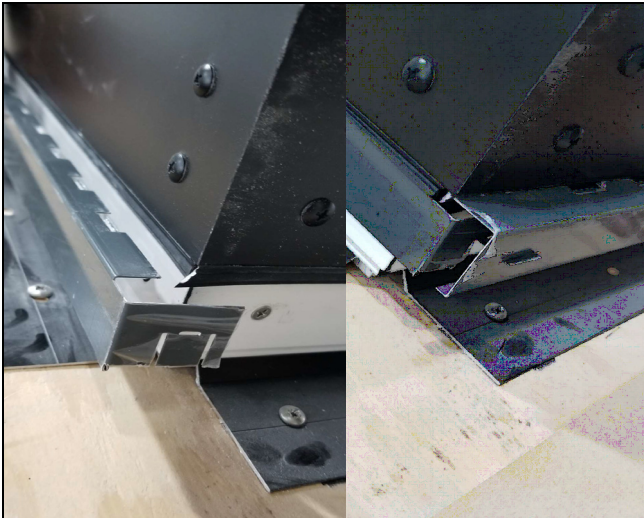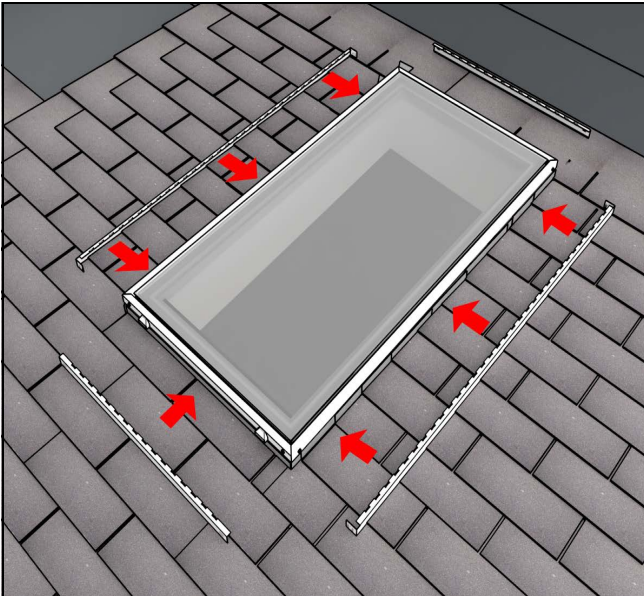
Figure 23

Figure 24

Figure 25

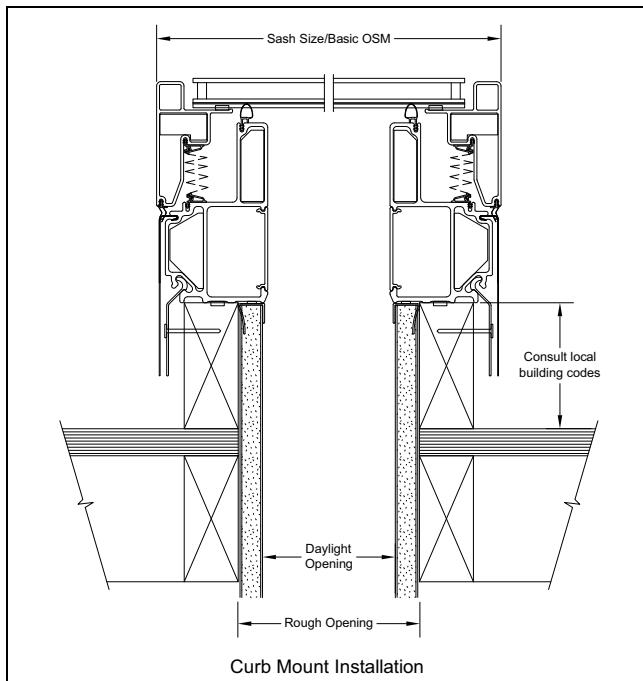# Curb Mounted Installation

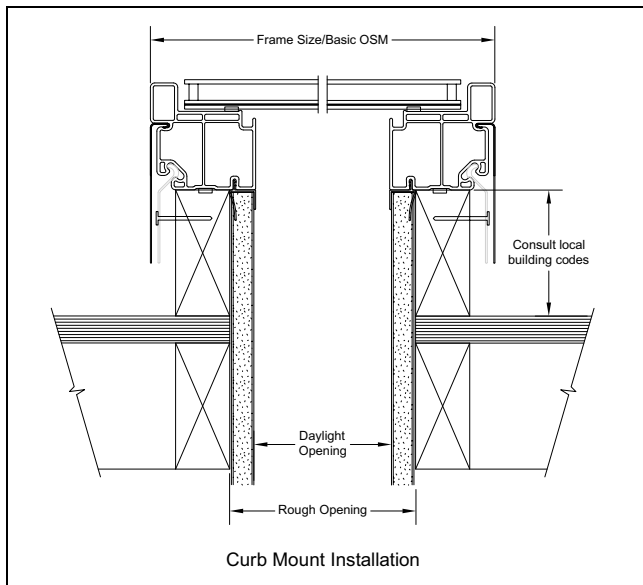**Figure 26 Awaken Curb Mounted Installation**

Figure 27 Skylight Curb Mounted Installation

1. Install frame lumber.

2. Cut rough opening according to the measurements in the chart. Build curb according to measurements in the chart. Use lumber with an actual thickness of 1½" (38) and a minimum height of 3½" (90). Curb height and attachment should comply with building codes and local regulations and be secure enough to transfer the skylight loads to the framing members. See Figure 28.

		RO Width			
	CN	**16**	**24**	**32**	**48**
RO Height	**36**	14.5 x 34.5	22.5 x 34.5	30.5 x 34.5	46.5 x 34.5
	48	14.5 x 46.5	22.5 x 46.5	30.5 x 46.5	46.5 x 46.5
	60	14.5 x 58.5	22.5 x 58.5	30.5 x 58.5	46.5 x 58.5
	90	14.5 x 88.5	22.5 x 88.5	30.5 x 88.5	46.5 x 88.5
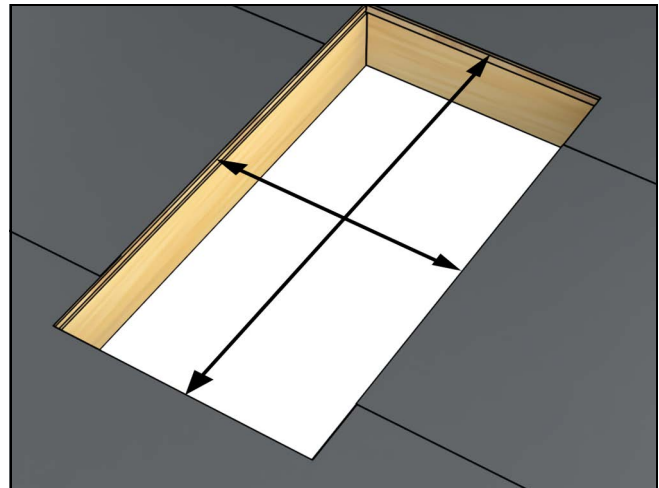
Figure 28

3. Remove 6" of existing roofing and underlayment around the rough opening as shown in Figure 29. Attach curb to roof deck, see Figure 30.
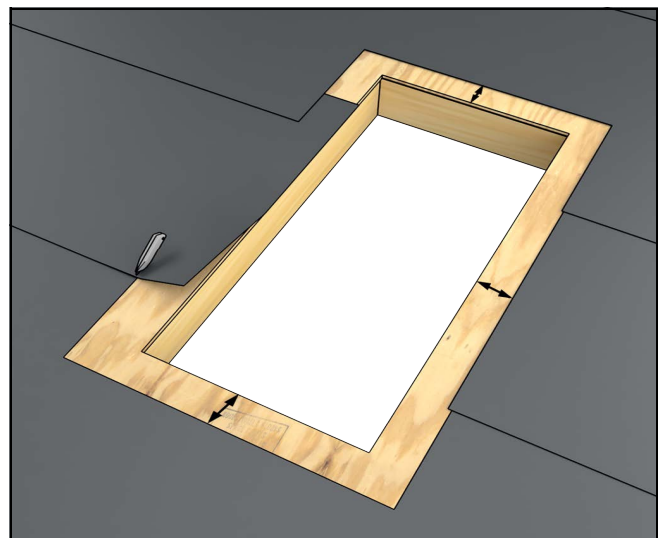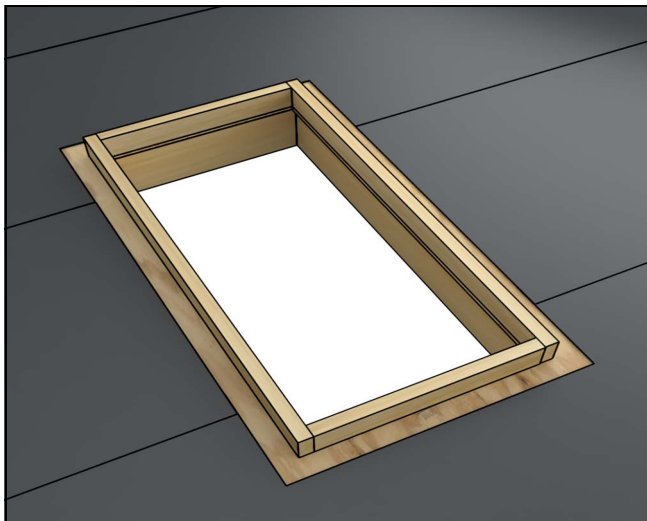

Figure 29

Figure 30

4. If installing an *Awaken product*, create a notch in rough opening for the power wire as needed. The center of the notch is nominally 1-3/8" to the sill RO edge. See Figure 31. Create notch large enough to run Romex cable per applicable electrical specification. Notch can be covered with plates as needed. If the drywall is not installed tight into the lining groove, add on-site insulation and trim for finished appearance and to prevent conditions that may contribute to condensation. *Note: Electrician needs to meet or exceed local codes. Unshielded wire should be covered by plate, anything under 1-1/2" no plate is required. Electrical route may need to be notched.*

NOTE: Properly insulate in light well to eliminate air/ thermal.
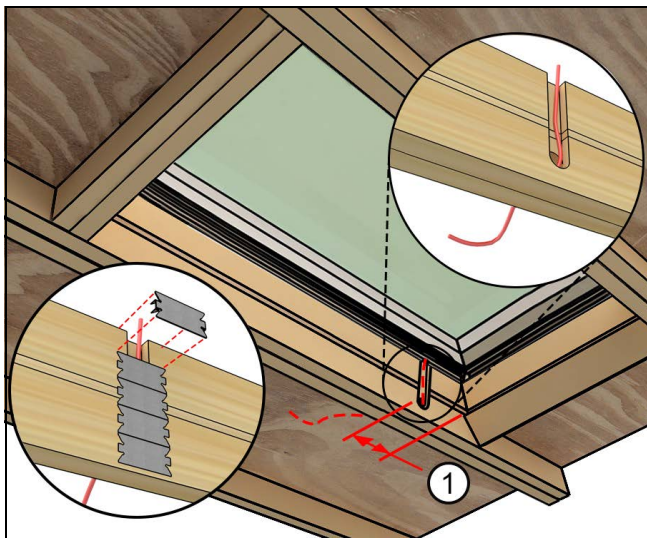
Figure 31

1	1-3/8" to the sill RO edge

To ensure waterproofing, curbs shall be completely wrapped in adhesive flexible flashing as indicated. Underlayment must be applied before installing the rigid flashing. Wrap the bottom and the corners of the curb with the adhesive flexible flashing and create water-shedding laps over roofing underlayment. See Figure 32.

NOTE: Skylight curbs with heights over 3½" (90) may require additional underlayment material for proper installation. Peel off backing from adhesive skylight underlayment prior to applying it to roof decking and skylight curb. Ensure that surfaces are clean, dry and free of debris.
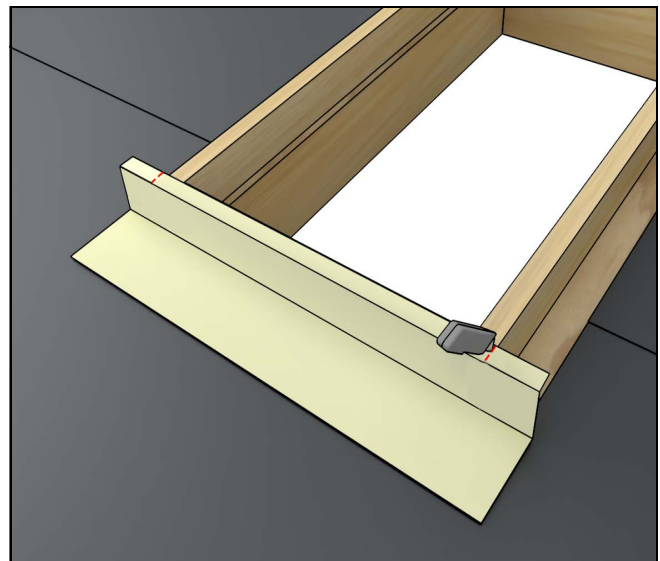

Figure 32

⚠ WARNING!

Do not stretch flexible flashing - will release from surface if stretched.

Take precautions - rigid flashing can puncture.

5. Wrap the top and the corners of the curb with adhesive skylight underlayment and create proper water-shedding lap. See Figure 33
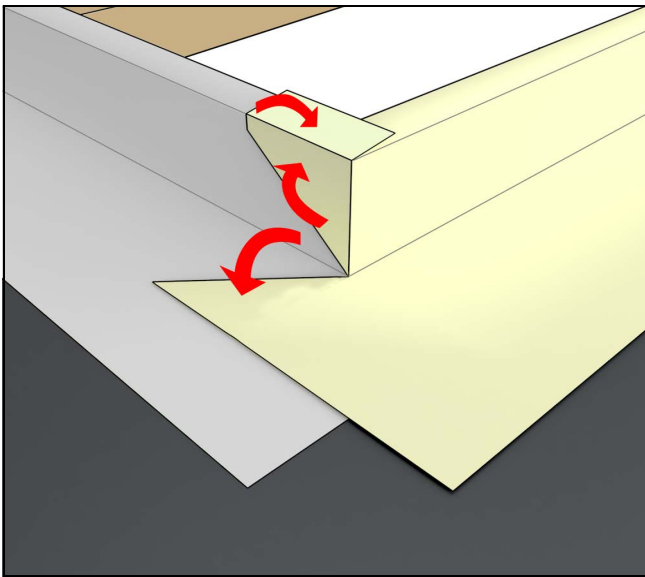
Figure 33

6. Place sill saddle centered on frame and bend over tabs. See Figure 34.
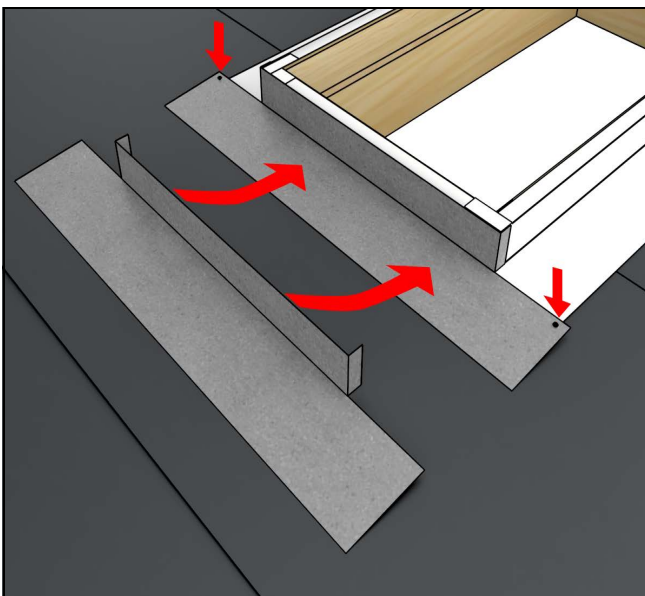

Figure 34

7. First step flashing placed a minimum of 4" beyond the sill of unit. *Note: remove material of vertical leg that extends beyond sill saddle.* See Figure 35.
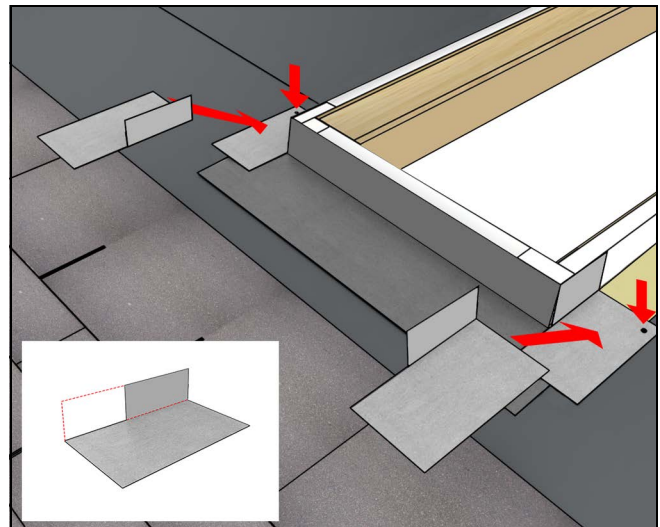

Figure 35

8. Place the second step flashing as shown in Figure 36. *Align with bottom of shingle.* Repeat steps until near the head jamb. See Figure 37.
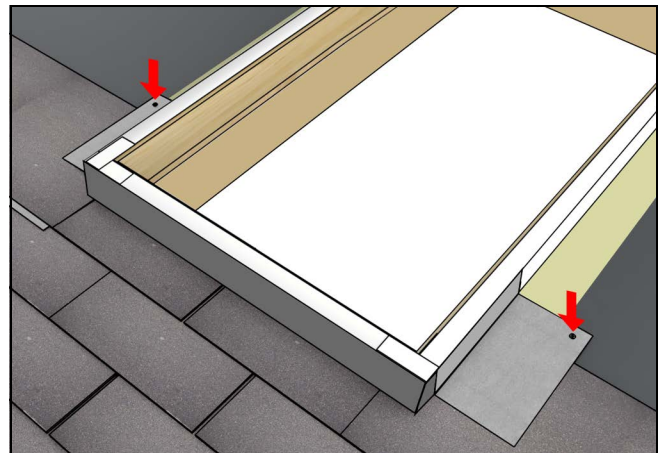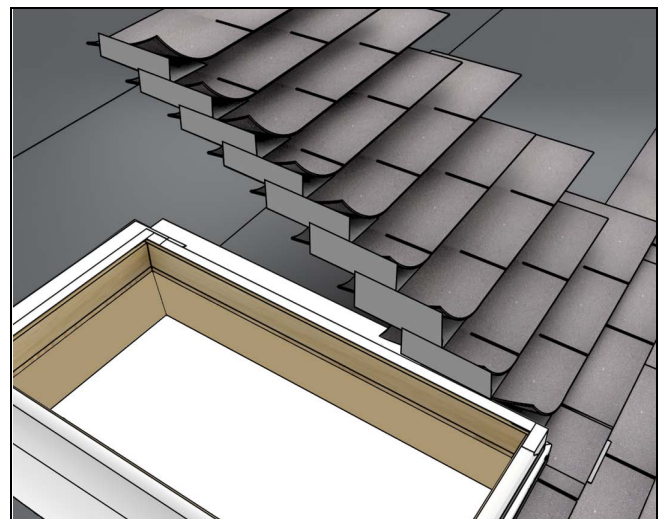

Figure 36

Figure 37

9. Last course is extended beyond the head jamb of 2"-4". *Note: Vertical leg should be removed flush to head jamb.* See Figure 38.
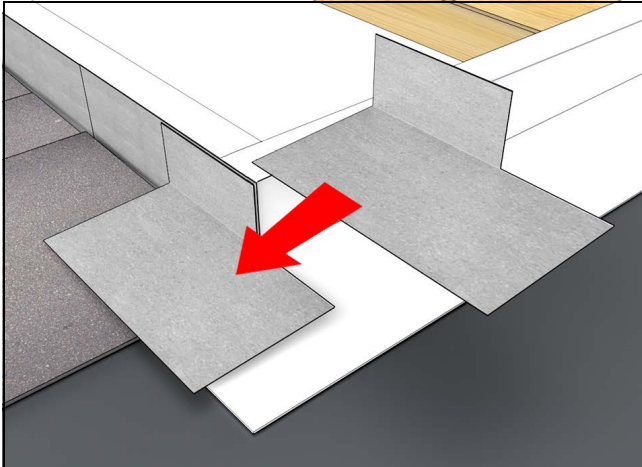
Figure 38

10. Head jamb saddle centered installed with tabs bent around jamb step flashing. See Figure 39.
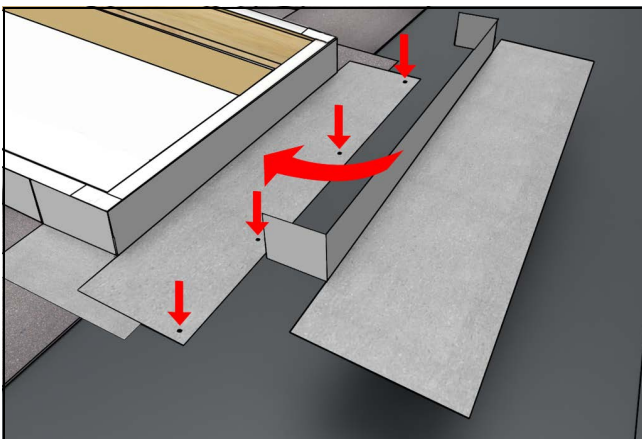

Figure 39

⚠ CAUTION!

Sharp edges on mounting flange and flashing covers.

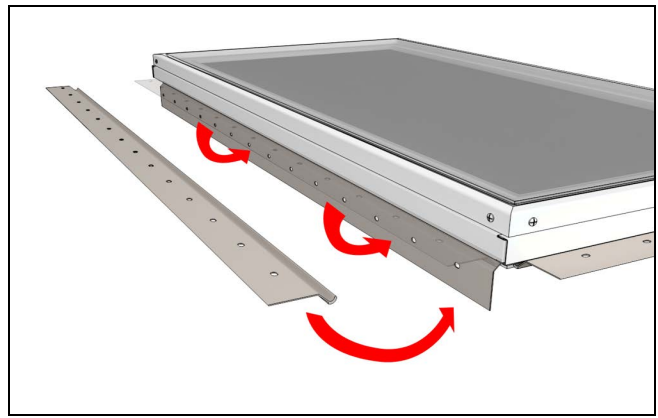**11.** Install mounting flanges. Install on ground, may need to use force to insert in kerf. Corners of flange are sharp, use caution when installing. See Figure 40.

Figure 40

⚠ WARNING!

Mounting flanges can rotate in and/or out.

12. Center the unit on top of the curb and secure with appropriate fasteners, 1-1/2" roofing nails or a minimum #8 x 1-1/2" pan head stainless steel screws (exterior grade 1-1/2" screws). *Note: Apply downward pressure to the top of the skylight frame while securing the screws. Do not over tighten the screws.* See Figure 41.

NOTE: To position unit do not slide unit, lift or use suction cups for positioning. Sliding unit will cause damage to foam sealing gasket.
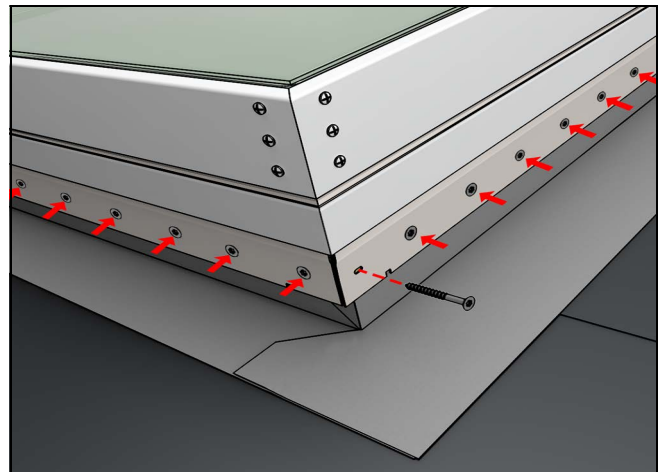

Figure 41

13. Apply flexible adhesive flashing tape to each corner by mounting flange, stay below the weather accessory kerf. See Figure 42. Flexible flashing should extend from corner at least 4" in each direction.
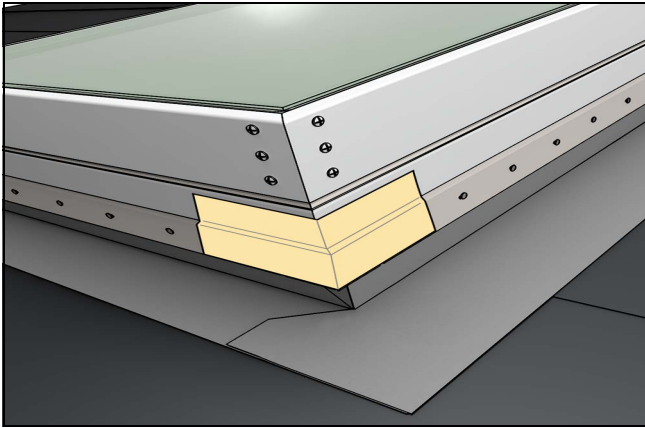
Figure 42

14. On Skylight units only: Peel off the backing from the adhesive located on the weep diverter component (Figure 43). Insert the legs of the weep diverter into the pre-drilled holes on the sill of the Skylight unit (Figure 44). Press the weep diverter component firmly against the Skylight sill to activate the adhesive.

Figure 43

Figure 44

15. Install the jamb flashing covers by inserting the notched leg into the frame kerf (Figure 45). Using a flat edge, bend the tab(s) on the header and sill of the jamb cover to a horizontal position. Install the header and sill jamb cover by aligning the slot on the covers with the folded tabs on the jamb covers and inserting the notched leg into the frame kerf (Figure 46 and Figure 47). Bend the tabs down to secure the flashing covers. Rigid flashing and flexible flashing are not shown, please refer to steps above.

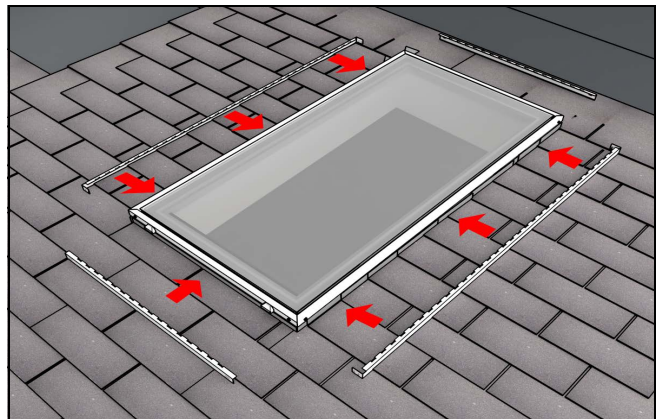**Figure 45 Deck Mount shown**

Figure 46 Deck Mount shown

Figure 47 Deck Mount shown

Metal Roof Rigid Flashing Installation (Deck Mount Only)

1. Metal roofing seams and high points that will interact with the apron should be cut and pressed to create a smooth transition from the deck to peaks.

2. Center the sill apron assembly on the sill of the skylight, bend tabs in, seat firmly to unit and deck. See Figure 48. Remove adhesive backing and press firmly at seams to allow for proper drainage and fasten with roofing nails. See Figure 49.
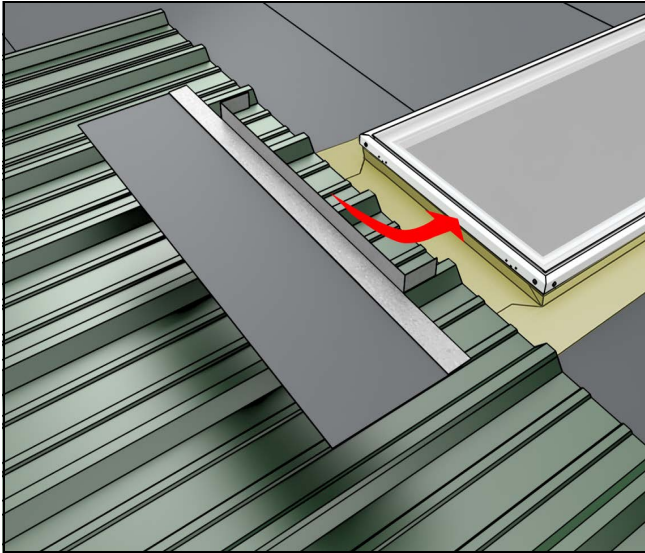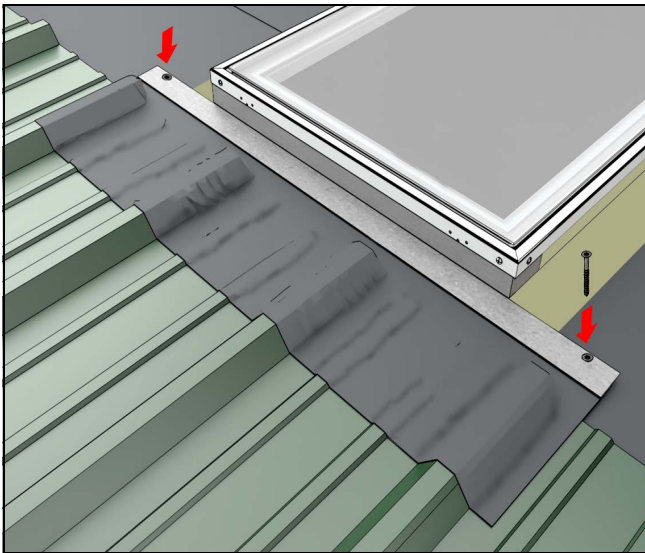

Figure 48

Figure 49

3. Remove material from vertical leg flush to sill apron assembly. Place jamb flashing tight to skylight jamb, align bottom of flashing to start of flexible apron material, mark back side of jamb flashing (2"). Attach with roofing nails. Repeat on opposite side. See Figure 50.
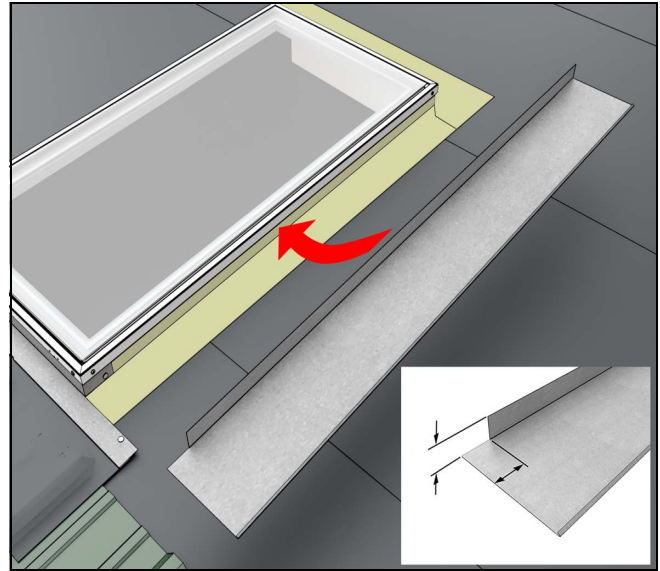

Figure 50

4. Cut both jamb flashings at the top, flush with the top/head of unit, bend tab down. *Note: Ensure the rigid flashing components do not interfere with flashing cover kerf.* Attach tabs with a roofing nail if needed. See Figure 51.
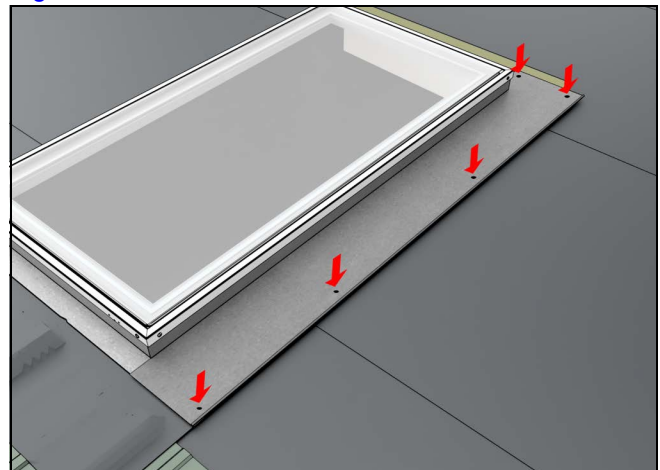

Figure 51

5. Center head jamb saddle and bend tabs over, press firmly to deck and unit. See Figure 52. Attach using roofing nail. *Note: No fasteners within 4" of unit.* See Figure 53.

Figure 52
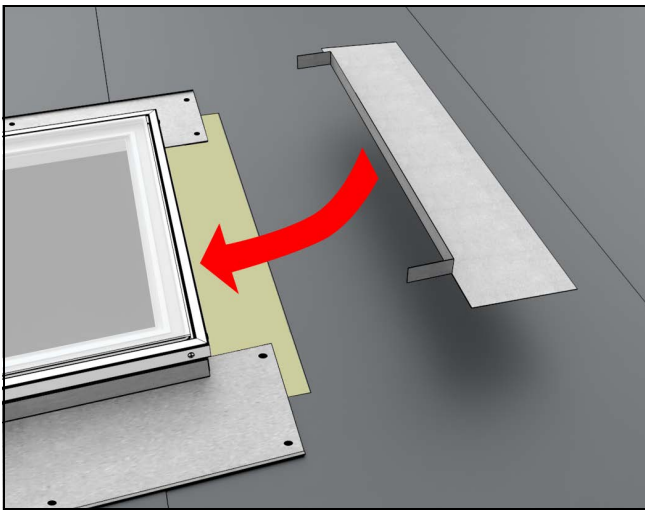

Figure 53

6. Place J-channel with the bottom flush with jamb flashing. Can be positioned tight against side of jamb flashing or moved away from unit to accommodate seam cut back. Top of J-channel is cut to length as needed not to interfere with top metal roof cut out. J-channel will be further secured with roofing screws. See Figure 54.
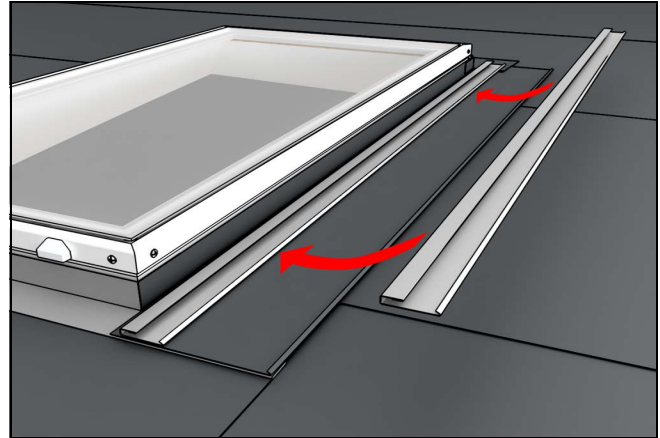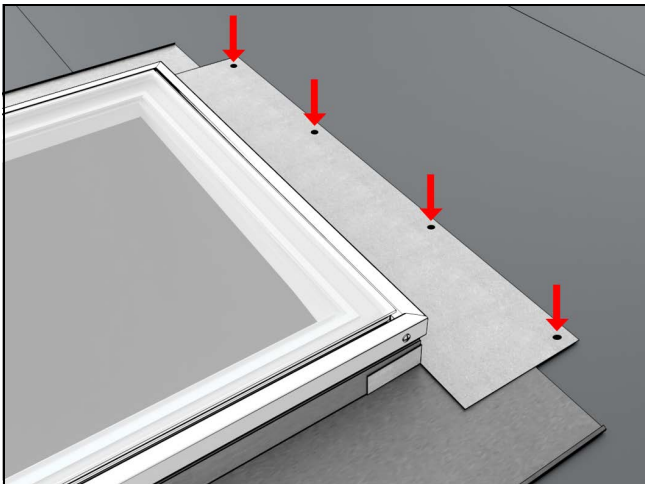

Figure 54

Awaken Electrical Component Installation

⚠ **WARNING!**

Electrical installation shall be done in accordance with the latest addition of the National Electrical Code (NFPA 70) and all local codes and ordinances.

PREP UNIT

1. Prepare the framing for electrical wiring. See Figure 55.

Notch out curb and framing as needed
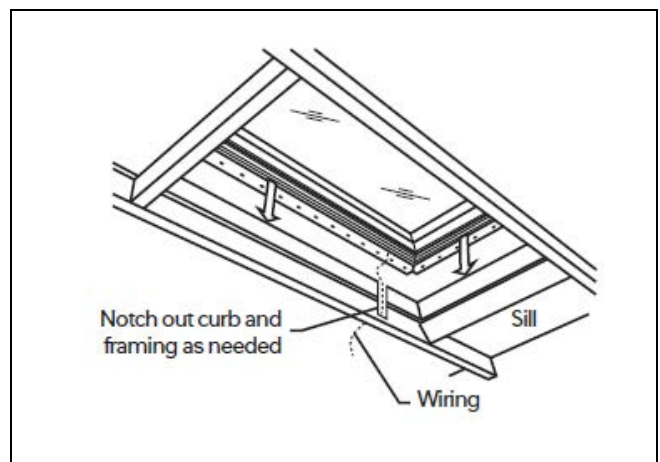
Sill

Wiring

Figure 55

USING THE CABLE FROM THE AWAKEN JUNCTION

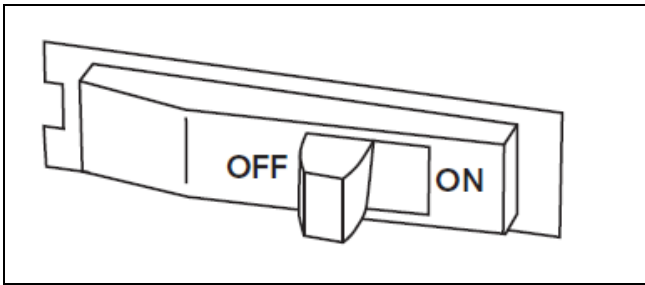1. Ensure the breaker is switched off. See Figure 56.

Figure 56
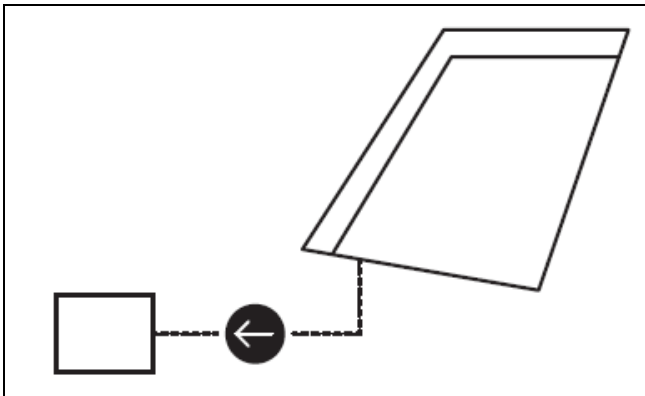
2. If needed, run the cable to a junction. See Figure 57.

Figure 57

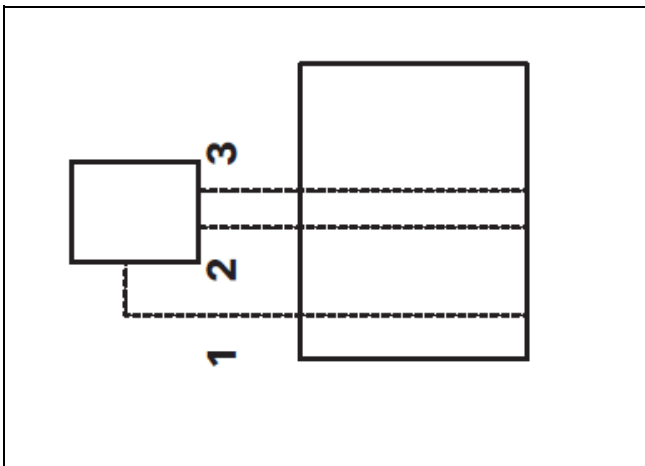3. Make the electrical connection. See Figure 58.

Figure 58

RUNNING A CABLE TO AWAKEN

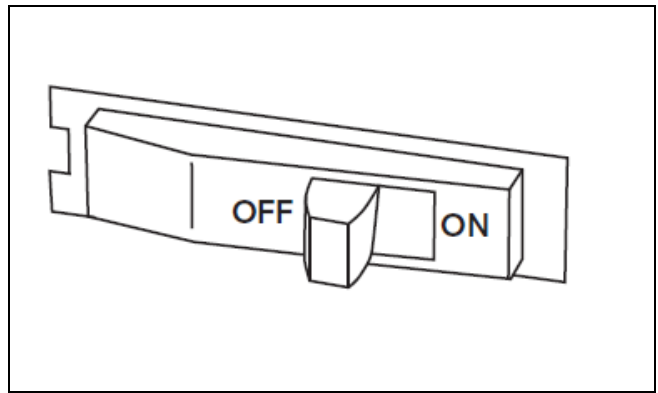1. Ensure the breaker is switched off. See Figure 59.

Figure 59
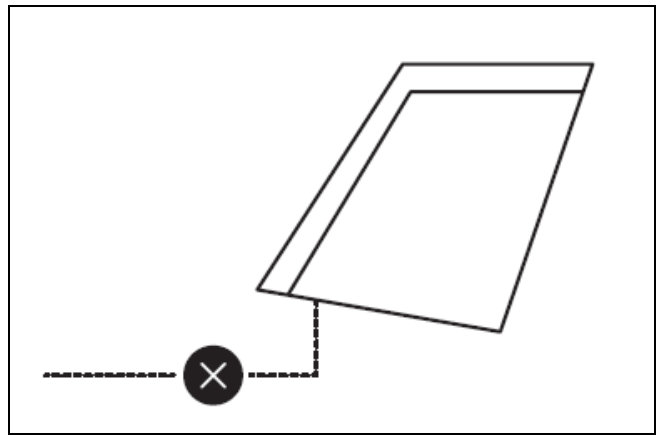
2. Remove the factory installed cable. See Figure 60.

Figure 60

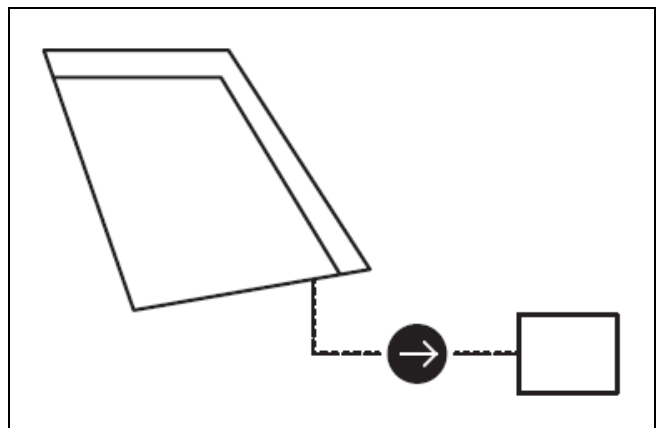3. Run your cable to Awaken built-in junction box. See Figure 61.

Figure 61

TESTING FUNCTIONALITY

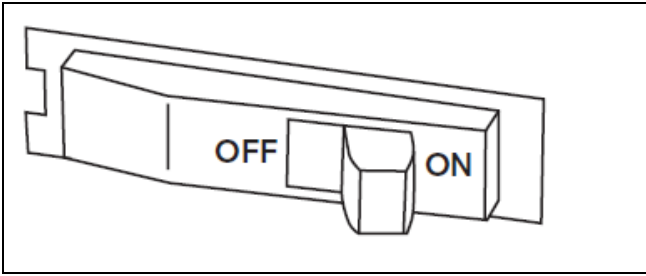1. Restore power with the breaker. See Figure 62.

Figure 62

2. Use the pre-associated Awaken remotes to validate skylight functionality. Alternatively download and install the Marvin Home App to test full functionality. See Figure 63.

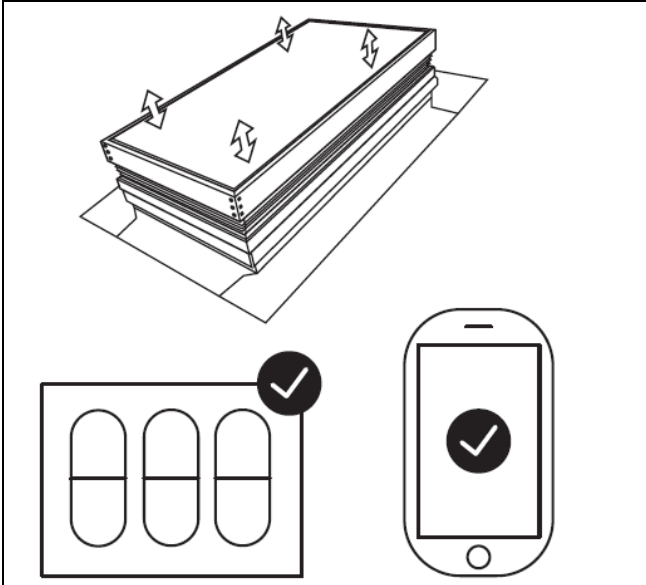**Figure 63**

App Installation

1. Download and install the Marvin Home App. Install following app instructions. See Figure 64.
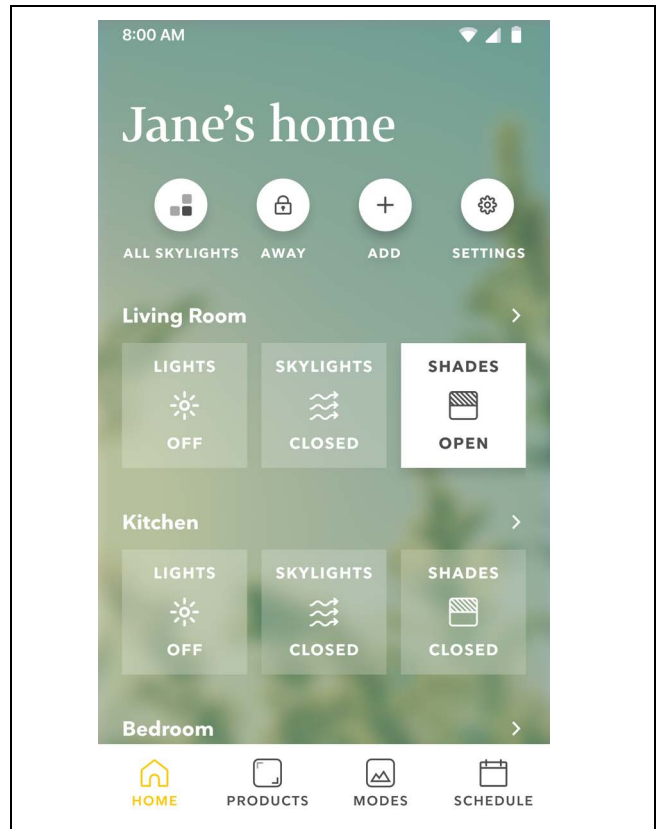

Figure 64

Technical Specifications

The following details are specified for proper installation of the unit to meet the advertised performance grade (PG) rating.

- Flashing materials must comply with ASTM E2112.

- Properly flash and seal unit.

- Sealants used for installation must be Grade NS Class 25 per ASTM C920 and compatible with the building exterior, exterior surface, and flashing/water management materials.

- Optional foams used for installation must be low expansion only. Foam and foam application must comply with ASTM E2112.

- The frame must not come into direct contact with chemically treated wood products.

- Flashing materials must comply with ASTM E2112.