

Installation Instructions



CALL US FIRST

Do not return to the store!

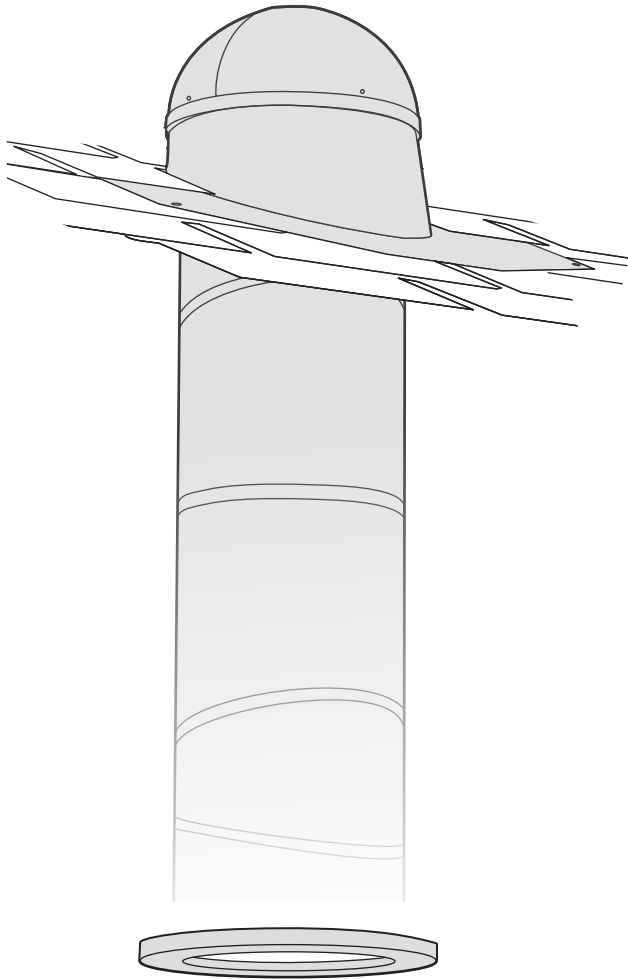
For assistance with your Tubular Skylight installation, or for additional product information, call our toll-free customer service number:

1-866-635-4968, or visit us online at www.odl.com.

Important

Be sure to first read through and then follow completely all step-by-step instructions.

This will help to insure proper installation and functionality. Expect installation to take from 1 to 3 hours.



Section-i

What You Need To Know

REVIEW THIS INFORMATION PRIOR TO BEGINNING INSTALLATION

These instructions have been designed to help install your ODL® Tubular Skylight easily and safely. We've included a parts list, list of tools required, installation instructions for a variety of ceiling types, handy tips, and safety precautions. Please read these instructions thoroughly before installing your ODL® Tubular Skylight. Pay particular attention to the assembly diagrams, assembly order, and part names. Identify and organize all parts before assembly. Make a list of the tools and components you will need for each installation location. Following these instructions carefully will greatly enhance your ability to install your tubular skylight and enjoy flawless performance for many years.

Caution

The tubular skylight is not designed to hold your weight or the weight of tools or other objects. Walking/placing objects on the skylight could cause personal injury and property damage. A damaged skylight should be repaired immediately.

For safe installation and use, do not deviate from these installation instructions.

Warning:

Working on a roof is potentially dangerous but you can significantly reduce the risk by following these precautions:

- Never work in wet, windy or cold conditions. Roofing materials can be slippery when wet; asphalt shingles are brittle when cold and may crumble underfoot. Plan your installation for a calm, dry day.
- Wear shoes with slip-resistant soles.



WARNING

POTENTIAL FIRE HAZARD. After removing the film lining from the interior of tube shaft, a reflective inner surface is created. **DO NOT** leave tube shaft components unattended or exposed to direct sunlight prior to full installation. Exposed surfaces may catch fire or incur heat damage as a result of focused sunlight until the tube shaft is fully installed with diffuser in place.

Safety information:

- Wear safety glasses and work gloves when using power tools.
- Use protective work gloves while handling tube sections to protect hands from sharp edges.

Pre Installation Checklist:

Tube Installation/Location

- Your tubular skylight kit comes with enough tubing for a 48" installation – if you require more tubing, you can purchase additional extension tubes through your retailer.
- For best results always attempt to install the tube as straight as possible (this would locate the dome/flashing directly above the ceiling diffuser).
- Make sure that the location you pick on your roof for your dome/flashing is exposed to direct sunlight throughout the day. You will not want any trees, chimneys, etc. to cast a shadow on your tube.
- Before installation, carefully survey the attic area of your desired location. Make sure your tube can avoid any wiring, plumbing, roof valleys, ceiling mounted registers/fans, etc.

For cathedral ceiling, see Section 10.
For long tube shaft installation, see Section 11.
For metal roof installations, see Section 12.
For tile roof installations, see Section 13.
For 14" skylight with 16" on-center rafter spacing see Section 4.

Building Codes:

- Consult your local building official about local construction ordinances before starting your installation.
- Consult your community covenants. Some subdivisions may not allow tubes on the street side of home.

Determining roof pitch:

- "Roof Pitch" is how far the roof drops vertically for every 12" of horizontal run.
- ODL Tubular Skylights are for roof slopes of 3:12 to 12:12.

Section-ii

Limited Warranty for ODL Tubular Skylights

Effective 02/04

Visit odl.com/warranty_SKY.htm,
for warranty registration.

To validate your warranty,
please register online within 10 days.

Tell us more...
Rate your new ODL product at odl.com

Warranty Coverage

Subject to the conditions, exclusions and limitations herein, ODL Incorporated ("ODL") warrants that its Tubular Skylight Product ("Product") is free from defects in material and workmanship that would render the Product unfit for its normal and recommended use.

THIS LIMITED LIFETIME WARRANTY APPLIES AND EXTENDS ONLY TO THE ORIGINAL CONSUMER PURCHASING THIS PRODUCT. THE DURATION OF THIS WARRANTY BEGINS ON THE DATE OF PURCHASE BY THE CONSUMER.

Exclusions from Coverage

This warranty does not cover:

- Defects or damages arising out of shipment by common carriers, private transportation or other means of transportation.
- Defects or damages arising out of improper handling or cleaning, defective or improper installation (including installation not in accordance with ODL's installation instructions), accident, act of God, intentional human act, misuse or abuse, or any other circumstances beyond the control of ODL.
- Products installed in or submitted to high heat, high moisture, high vibration, or extreme temperature changes.
- Products subjected to stress resulting from (i) localized application of heat, (ii) movement of building and /or building components, or (iii) expansion or contraction of framing members.
- Replacement products beyond the balance of the remaining warranty period applicable to the original Product or accessory which is replaced.
- Labor, shipping or other charges incurred or claimed by the Customer.
- Accessories, flashing or other installation materials manufactured or sold by persons other than ODL.

Warranty Claim Procedures

If the Customer discovers a defect in the Product or an accessory which is covered by this warranty, the Customer must follow this procedure:

1. The Customer must promptly call Customer Service at 1-866-635-4968, or present a written claim to the Customer Service Manager, ODL Incorporated, 215 East Roosevelt Avenue, Zeeland, Michigan 49464.

2. The Customer must use reasonable diligence to include in the written claim all of the following:

- a. An adequate description of the claimed defect(s);
- b. Identification of Product (size, design, type and model number).; c. Date of the Customer's purchase, place of purchase, and the date of delivery to the Customer.

3. The Consumer must, if requested by ODL, permit ODL or its representative to inspect the Product either in person or via appropriate photographs of said Product.

Remedies

After receiving a valid claim, ODL will, at its option, provide a replacement Product (or part, as appropriate) of like kind and design.

If ODL elects to provide a replacement Product, the limited warranty on the replacement will last only for the balance of the original Product warranty period. If the Customer fails to provide satisfactory proof of the date of purchase, the date of manufacture shall be used instead.

ODL'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE ABOVE, AND ODL WILL IN NO EVENT BE RESPONSIBLE FOR SHIPPING, LABOR, REMOVAL OF ORIGINAL PRODUCT, INSTALLATION OF REPLACEMENT PRODUCT, FINISHING EXPENSES, OR OTHER CHARGES, COSTS OR CLAIMS INCURRED BY THE CONSUMER.

Disclaimer of Warranty

NO IMPLIED WARRANTY, INCLUDING WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY TO THE PRODUCT (OR ANY REPLACEMENT) BEYOND THE DURATION OF THIS WRITTEN WARRANTY. (Some states or provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.)

Limitation of Remedies

THE REMEDIES SET FORTH ABOVE ARE THE CONSUMER'S EXCLUSIVE REMEDIES FOR BREACH OF WARRANTY OR NEGLIGENCE. IN NO CASE SHALL ODL BE LIABLE TO THE CONSUMER OR ANY OTHER PERSON FOR ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. (Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.)















Unless modified in a later writing signed by both ODL and Consumer, this warranty is the complete and exclusive warranty related to the Product, and it supersedes all earlier agreements and other communications relating to the Product. No employee of ODL or any other party is authorized to make any warranty in addition to this warranty. Invalidation of any one or more of the other provisions of this warranty shall not invalidate or affect one of the other provisions. This warranty is not transferable.

This warranty gives the Consumer specific legal rights, and the Consumer may also have other legal rights which may vary from state to state.





Section-iii

Tools & Parts Identification

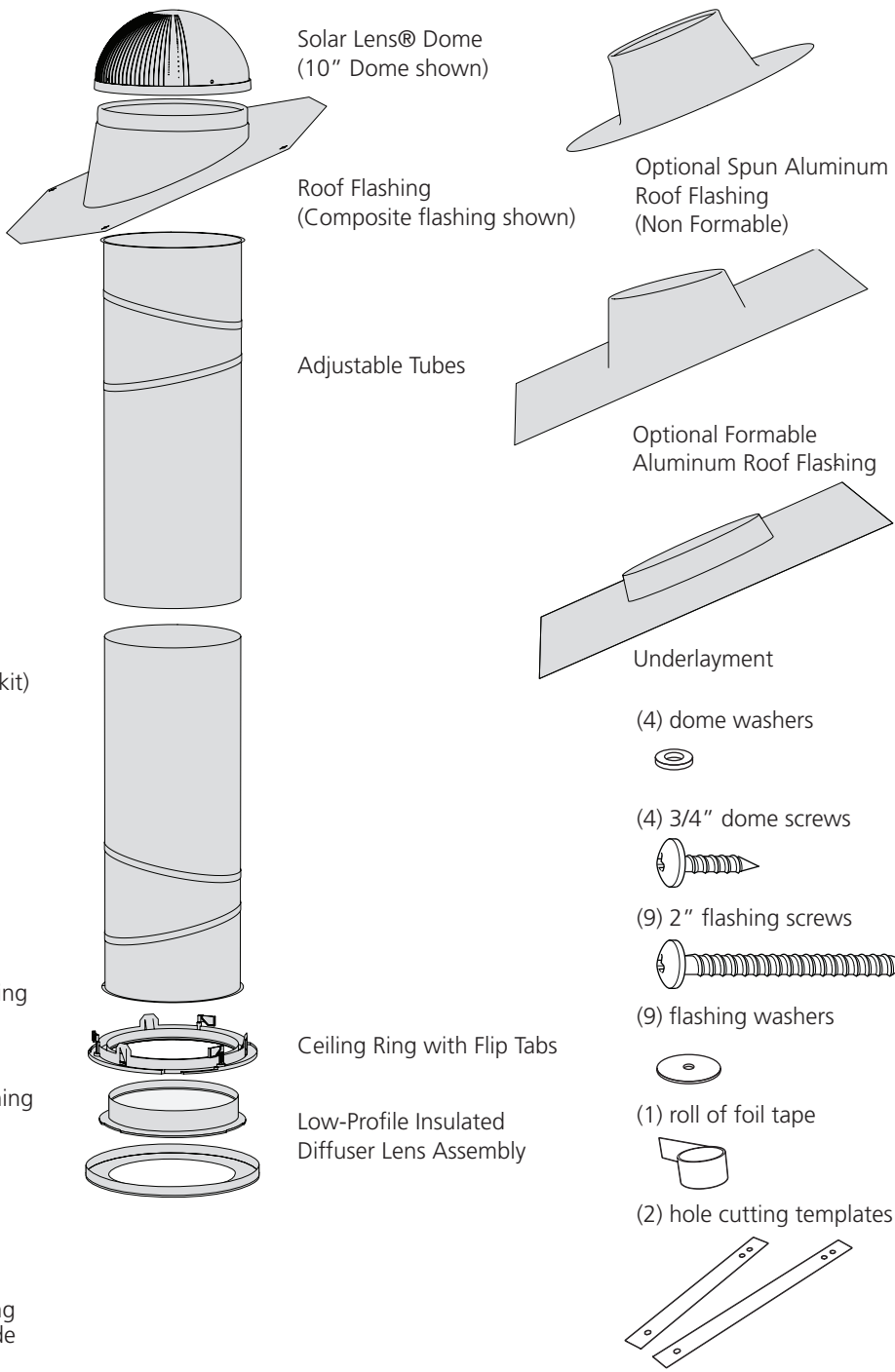
TOOLS

-  Carpenter Pencil
-  Claw Hammer
-  Coat Hanger Wire
-  Flat Pry Bar
-  Ladder
-  Metal Shears
-  Phillips Screwdriver
-  Plumb Line
-  Power Drill
-  Power Saw
-  Safety Equipment
-  Measuring Tape
-  Non-Curing/Non-Hardening Roof Sealant (Not provided in kit)
-  Exterior Silicone (Not provided in kit)

Other Roofing Applications

-  Formable Aluminum Flashing (All pitched roof types - including Metal, Tile, and Shingled Applications)
-  Secondary Underlayment Flashing (Required for use w/ Formable Flashing)
-  Seamless Aluminum Flashing (Flat Roof Applications)
-  Severe Weather Tube w/ Seamless Aluminum Flashing (Severe Weather Regions / Dade County & Texas Gulf Coast approved)

PARTS



NOTE
Read through the section specific to your roof for additional parts and tools.

Section-1

Determine The Desired Position Of The Tubular Skylight In The Ceiling

TOOLS & PARTS

-  Carpenter Pencil
-  Claw Hammer
-  Coat Hanger Wire
-  Measuring Tape
-  Phillips Screwdriver

These instructions outline the step-by-step process to install an ODL Tubular Skylight. Before starting, review all instructions and become familiar with the parts shown on the previous page.

SPECIAL NOTES

- Always use safe procedures.
- Wear safety glasses when working with tools.
- Check all measurements before cutting or drilling.
- It is helpful to have a second person assist during installation.

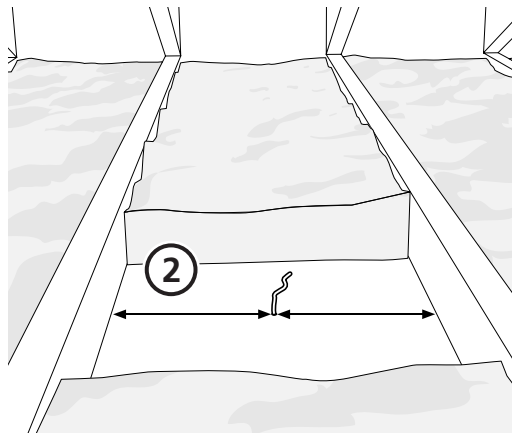
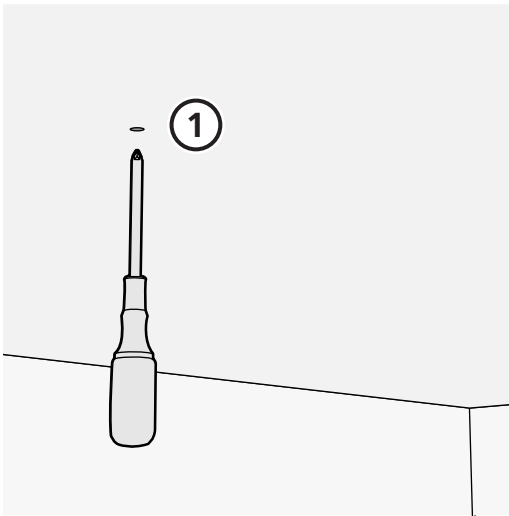
- 1 Using a stud finder or hammer, find a location between the ceiling joists. Push a screwdriver or nail through the desired position.

Cut and insert a section of coat hanger wire through the hole. This will make it easier to identify the hole location in the attic.

NOTE

Refer to Pre-installation Checklist for tube location tips in section i.

- 2 In the attic, locate the coat hanger wire. Adjust its location, centering the opening for the tube between the framing members. Check wire visibility in the ceiling below as well as from the hole that will be cut in the roof.



Section-2 Locating The Roof Position

TOOLS & PARTS

-  Carpenter Pencil
-  Claw Hammer
-  Ladder
-  Measuring Tape
-  Phillips Screwdriver
-  Plumb Line
-  Safety Equipment

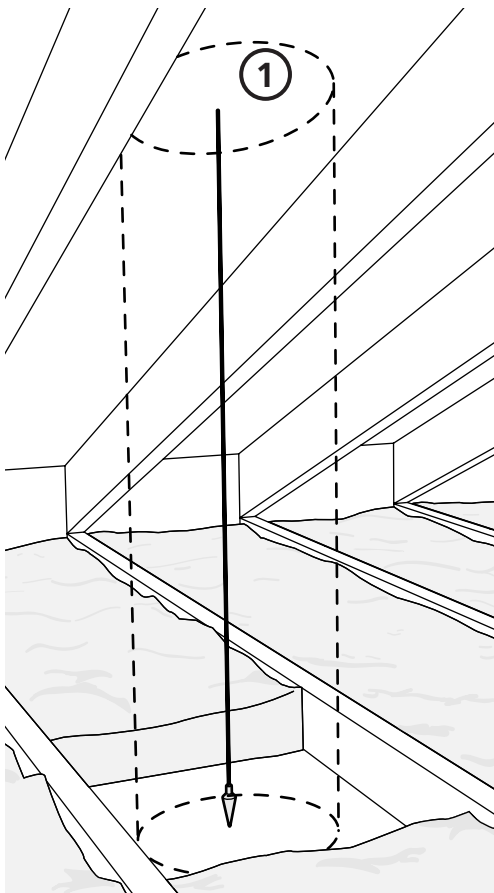
- 1 Straight Tube Installation**
In the attic, use a plumb line to find a straight location from the ceiling hole to the roof location. Center the opening for the tube between the framing members. Drive a nail up into the roof deck and through the shingles.

- 2 Angled Tube Installation**
In the attic, if there are obstructions at the roof location (valleys, wires, pipes, ducts, framing, etc.), adjust tubes up to a combined 45° angle to find a path that avoids interference. Center the opening for the tube between the framing members. Drive a nail up into the roof deck and through the shingles.

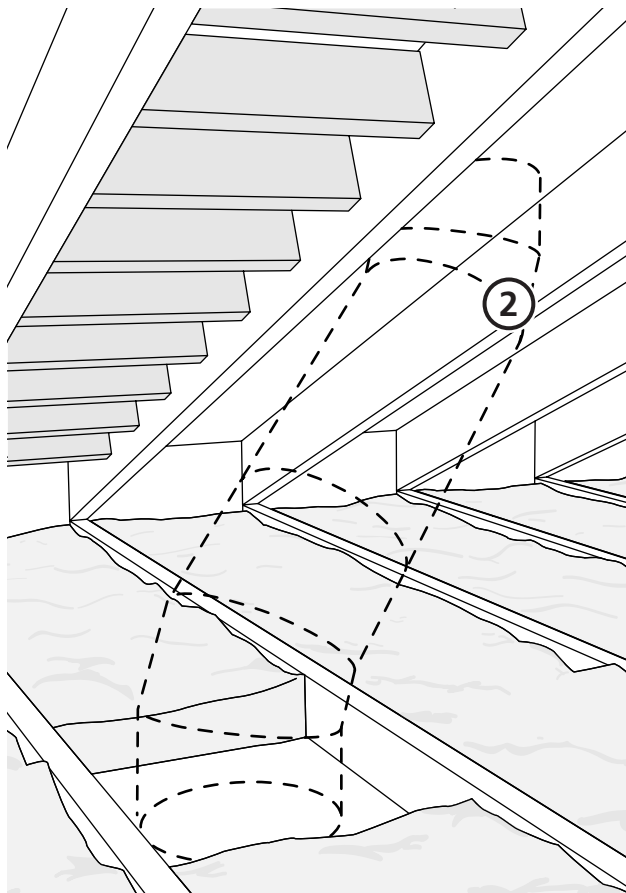
NOTE

Trial-fitting your tubing will help in determining adjustability and need for additional extensions.

Straight Tube Installation



Angled Tube Installation



Section-3

Prepare The Components

TOOLS & PARTS

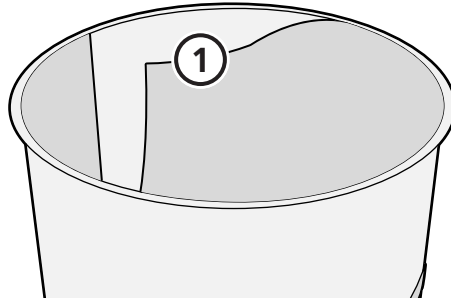


Adjustable Tubes



Hole Cutting Template

- 1 Remove protective film from inside all tubes.

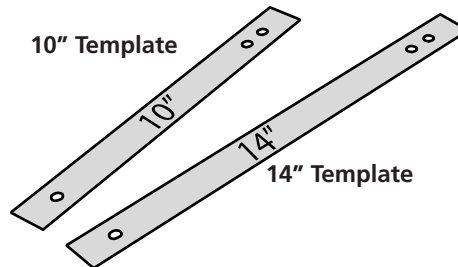


WARNING

POTENTIAL FIRE HAZARD. After removing the film lining from the interior of tube shaft, a reflective inner surface is created. **DO NOT** leave tube shaft components unattended or exposed to direct sunlight prior to full installation. Exposed surfaces may catch fire or incur heat damage as a result of focused sunlight until the tube shaft is fully installed with diffuser in place.

CAUTION

From the hardware pack, be sure to use the correct hole cutting template for the selected tube size.



TIP

It is recommended that you put all of your tools and rooftop components in a box or bag for easy transfer to the roof. See Section 4.

Section-4a

On The Roof

TOOLS & PARTS

-  Carpenter Pencil
-  Ladder
-  Safety Equipment
-  Power Drill
-  Power Saw
-  Hole Cutting Template



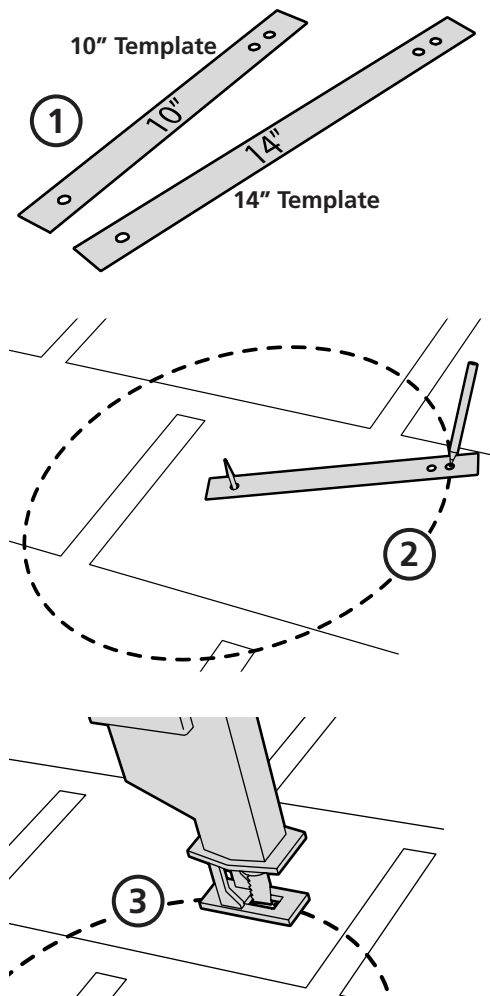
IMPORTANT

For 14" skylight with 16" on-center rafter spacing, see below.
See Section 12 for metal roof installation.
See Section 13 for tile roof installation.

- 1 Select the correct hole cutting template for the tube (10" or 14").
- 2 Locate the protruding nail. Use the correct hole-cutting template to trace the diameter of the outer template hole.
- 3 Use a reciprocating/sabre saw to cut the roof hole.

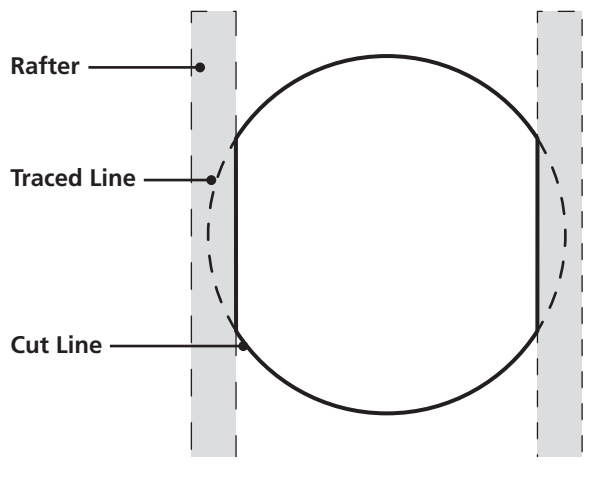
TIP

Drill a hole inside the traced circle to insert saw blade.











IMPORTANT

For 14" skylight with 16" on-center rafter spacing, the 14" template will draw a line that overlaps the rafters. Be sure to adjust your cutting angle to avoid cutting into the rafters. (See illustration)



Section-4b On The Roof

TOOLS & PARTS

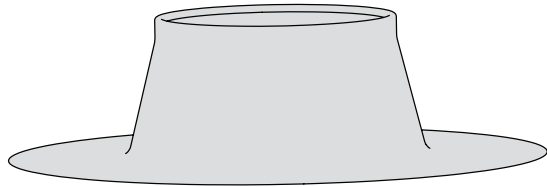
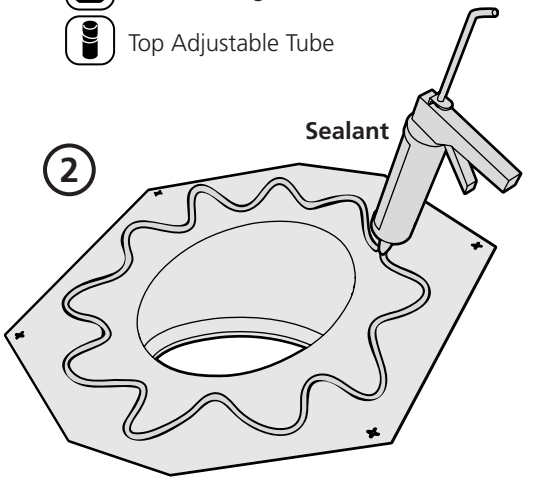
-  Caulk Gun
-  Claw Hammer
-  Flat Pry Bar
-  Ladder
-  Phillips Screwdriver
-  2" Screws
-  3/4" Washers
-  Roofing Sealant
-  Safety Equipment
-  Roof Flashing
-  Top Adjustable Tube

TIP
The vertical seam of the reflective tube should point to the East or West to avoid irregular light patterns in your room.

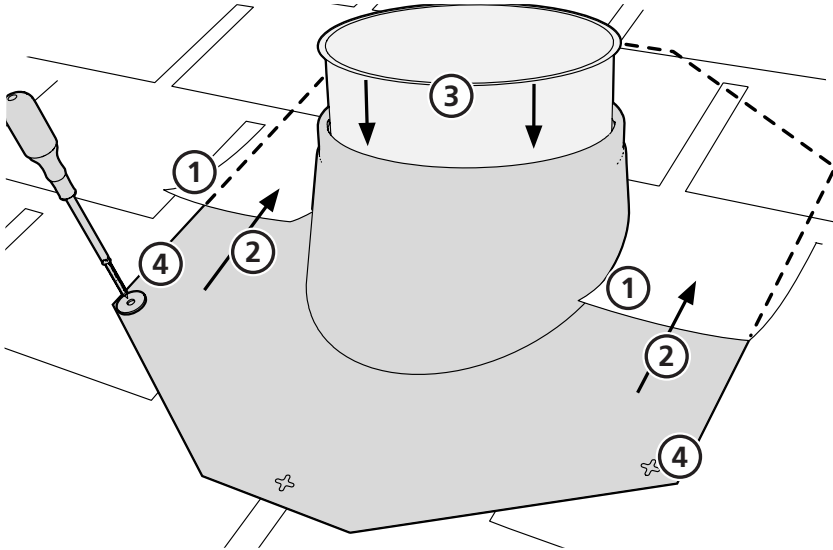
- 1 Use a flat pry bar to carefully break the seals on the shingles upslope above the cuthole. Use a claw hammer to remove nails on the shingles above the cut hole.
- 2 Generously apply roof sealant around bottom of flashing. Slide top and sides of roof flashing under top shingles.

STOP
IMPORTANT
For short shaft cathedral style installation see Section 10. Do not install dome yet.

- 3 Slide Top Adjustable Tube (pink label) into the flashing to check for proper alignment.
- 4 Secure flashing to roof with 2" Flashing Screws and Washers. For aluminum flashing (Both Spun Severe Weather & Formable. See images on pg. 4), use 9 screws & washers in an evenly spaced, circular pattern around the 10" or 14" hole. The circular pattern should be a 21" diameter for the 10" unit and a 24" diameter pattern on the 14" unit. For injection molded flashing, use 8 screws and washers in the preformed holes for the 10" and 14" unit. Seal screw heads with roof sealant. Spun aluminum flashing does not have pre-drilled holes.











Optional Spun Aluminum Roof Flashing
(Non Formable)



Section-4c On The Roof

TOOLS & PARTS

-  Ladder
-  Phillips Screwdriver
-  Safety Equipment
-  3/4" Dome Screws
-  Dome Washers
-  Top Adjustable Tube
-  Solar Dome
-  Exterior Clear Pure Silicone

- 1 For angled tube installation, reach and adjust the Adjustable Tube so it points to the wire in the ceiling, or adjust the angle of the tube and then insert tube into flashing.

NOTE

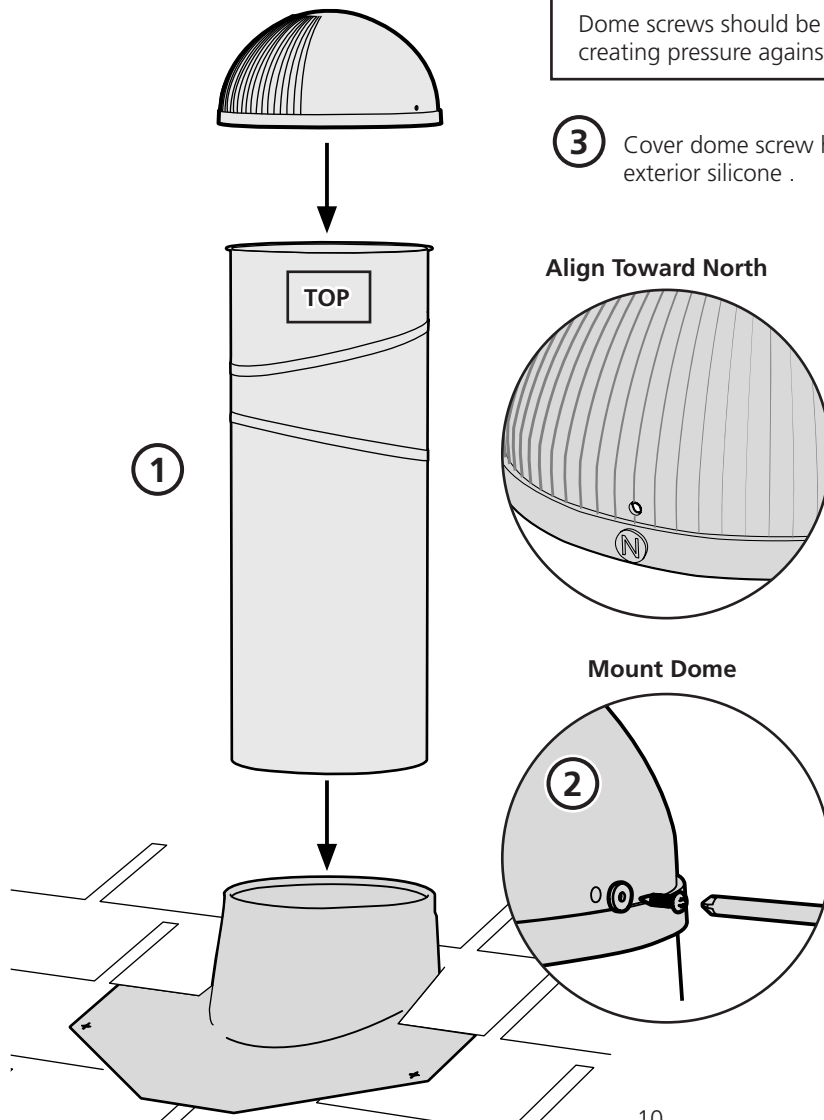
Adjust tubes by lightly turning, using one hand on each end.

- 2 Using the 3/4" dome screws and dome washers (dome washers have the rubber backing – rubber backing should face the dome), mount the dome on the flashing aligning the "N" (molded into outer edge of the dome) towards the North.

TIP






Dome screws should be snug but do not over tighten creating pressure against the dome.

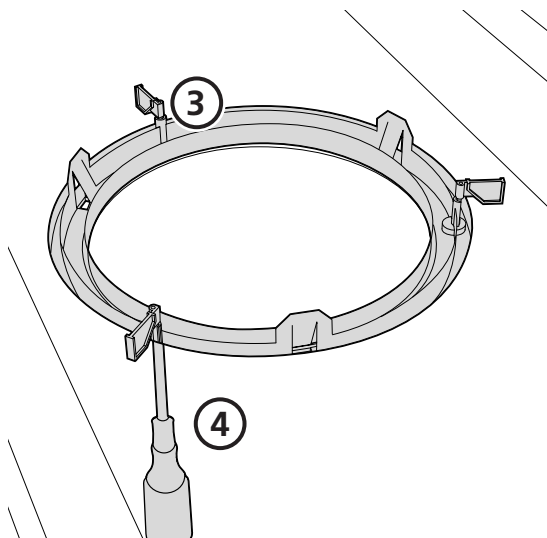
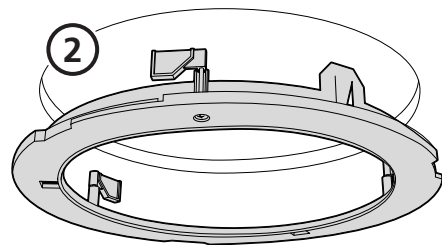
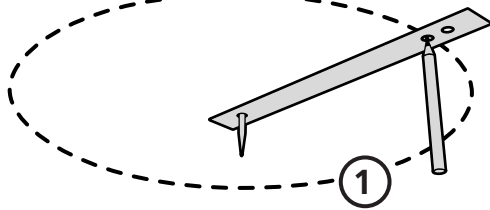
- 3 Cover dome screw heads and washers with an exterior silicone .



Section-5 Inside The Room

TOOLS & PARTS

-  Pencil
-  Phillips Screwdriver
-  Power Saw
-  Hole Cutting Template
-  Ceiling Trim Ring



STOP

IMPORTANT

For 14" skylight with 16" on-center rafter spacing, see below.

- 1 Using the **correct** (10" or 14") Hole Cutting Guide for your size tube, and a pencil, locate protruding wire in the ceiling and trace the diameter of the ceiling inner hole using the template marked "A".

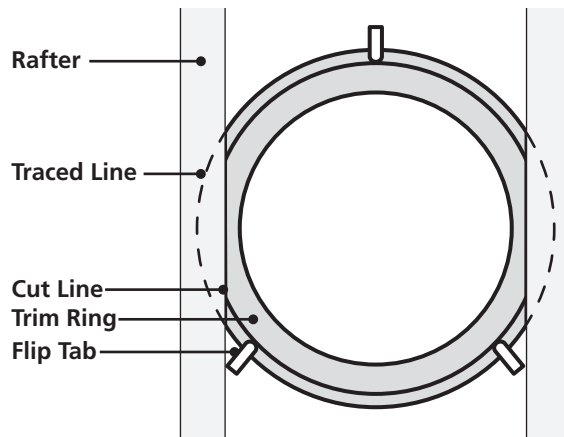
TIP

You may have to drill a hole inside the traced diameter circle to insert saw blade.

- 2 Use a keyhole/drywall saw to cut the hole.
- 3 Slide the Trim Ring up into your ceiling hole. Make sure the flip tabs are turned in. Reach through hole and turn flip tabs out to hold ring in place.
- 4 Secure the ceiling trim ring by tightening the screws.




IMPORTANT

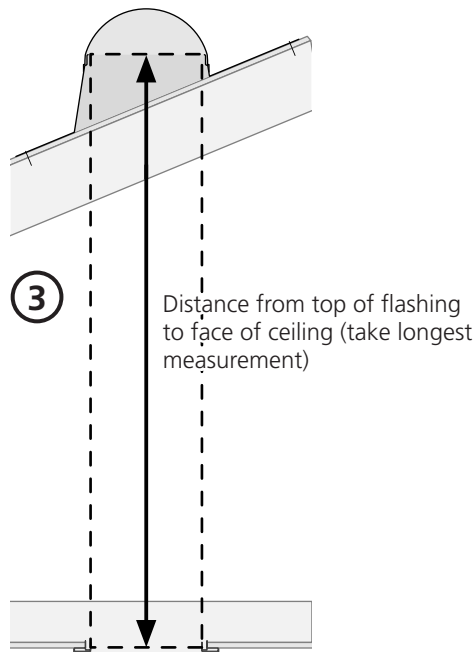
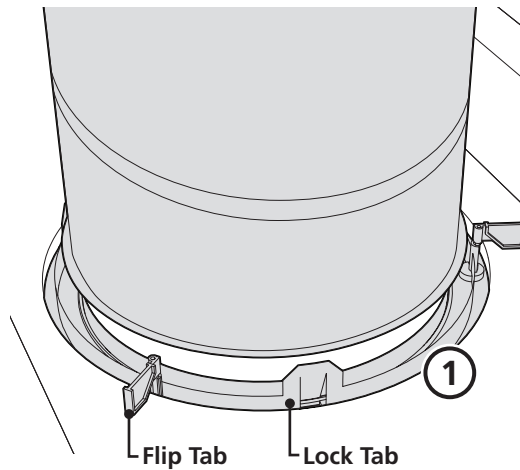
For 14" skylight with 16" on-center rafter spacing, the 14" template will draw a line that overlaps the rafters. Be sure to adjust your cutting angle to avoid cutting into the rafters. (See illustration)



Section-6 In The Attic

TOOLS & PARTS

-  Measuring Tape
-  Bottom Adjustable Tube
-  Foil Tape



TIP

The vertical seam of the reflective tube should point to the East or West to avoid irregular light patterns in your room.



IMPORTANT

At this point, if you purchased a dimmer or combo kit, this is where you reference the dimmer instructions, packaged with the dimmer unit.

1

Gently set the Bottom Adjustable Tube flange down on the trim ring. Do not snap in place at this time.

2

If you have an angled installation you will need to twist your Bottom Adjustable Tube (blue label) so it lines up with the Top Adjustable Tube above. (Be sure you have removed the protective film.)

NOTE

Adjust tubes by lightly turning, using one hand on each end.

3

Measure distance from the top of Roof Flashing to ceiling (See illustration) to determine proper trimming of length of tubes. Refer to "**Tube Length Chart**" in Section 8 for cutting recommendations if you need to shorten the tubes.

4

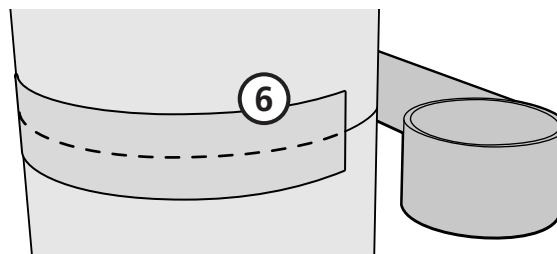
Slide Bottom Adjustable Tube over the outside of Top Adjustable Tube.

5

Now you can push down to lock the Bottom Adjustable Tube securely into the lock tabs of the ceiling trim ring.

6







Tape ALL seams securely with Foil Tape to keep dust, moisture, and insects out of the tube.



Section-7

When Cutting Your Tube...

TOOLS & PARTS

-  Carpenter Pencil
-  Metal Shears
-  Safety Equipment
-  Safety Glasses
-  Extension Tubes
-  Gloves

IMPORTANT

Once contact is made with adhesive strip on an Extension Tube, parts cannot be repositioned.

- 1 Be sure to measure and cut if necessary, before removing adhesive strip and assembling the Extension Tube. Wear gloves when working with sharp edges.

TIP

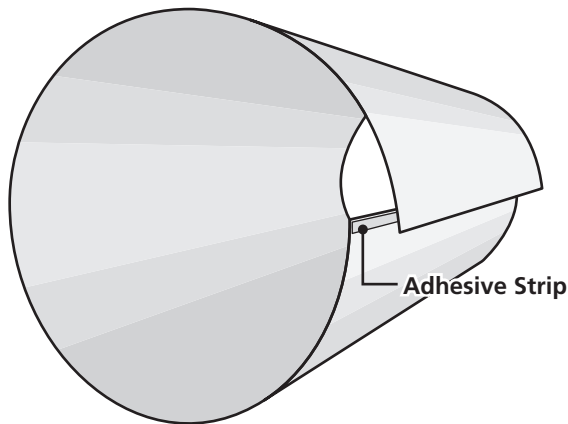
When trimming Extension Tubes, always measure and start from the wide end where tube end diameter = 10" or 14".

- 2 After referring to "**Tube Length Chart**" in Section 8, use metal shears to shorten the Extension Tube. Allow for a 1" overlap at each end where you will connect each tube to another.

- 3 Once Extension Tubes are sized to the proper length, remove tan backing paper from adhesive strip on edge of Extension Tube. Beginning at one end of the Extension Tube, over-lap the edges of the tube/s, aligning the edge of the tube along the crimp on the other side.

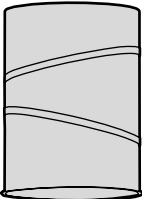
(Once contact is made with adhesive strip, parts cannot be repositioned.)

Trimmed Extension Tube



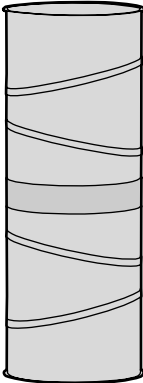
Section-8 Tube Length Chart

Less Than 25"

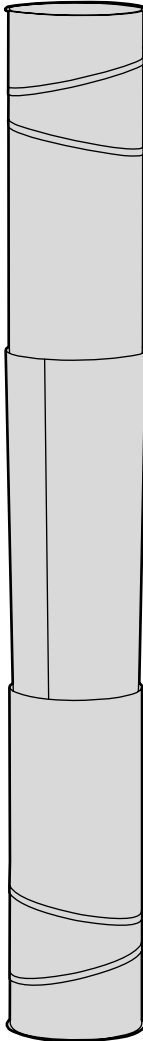


(Must use bottom adjustable tube only)

26" Through 48"



More Than 48"



Tube Extension
(Sold separately)

Section-9

Inside The Room

TOOLS & PARTS



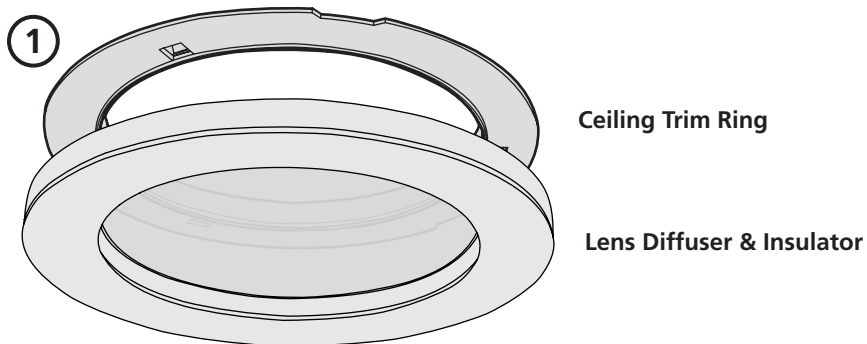
Diffuser Lens Assembly

- 1 Install the Diffuser Assembly by aligning the Diffuser with the three tabs on the Trim Ring. Turn clockwise until snug in place on the ceiling.

TIP

Diffuser should be rotated at least through two "clicks". (Full rotation is four "clicks") to attach to Trim Ring.






Installation Complete!



Section-10a

Cathedral Ceiling/Short Shaft Installation

TOOLS & PARTS

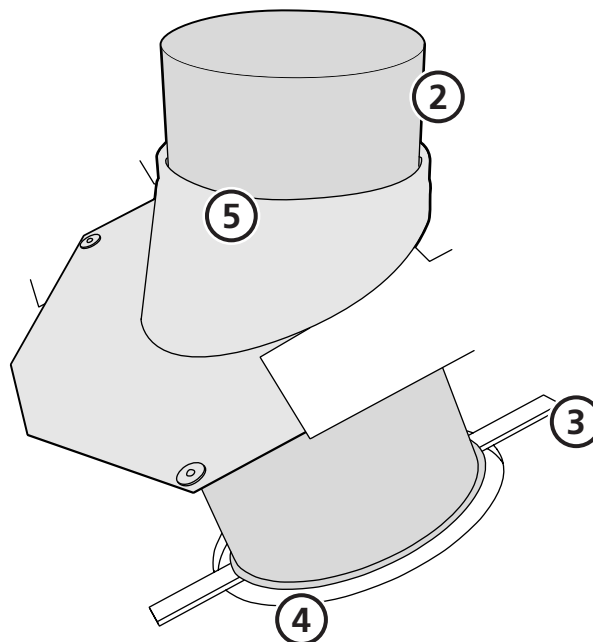
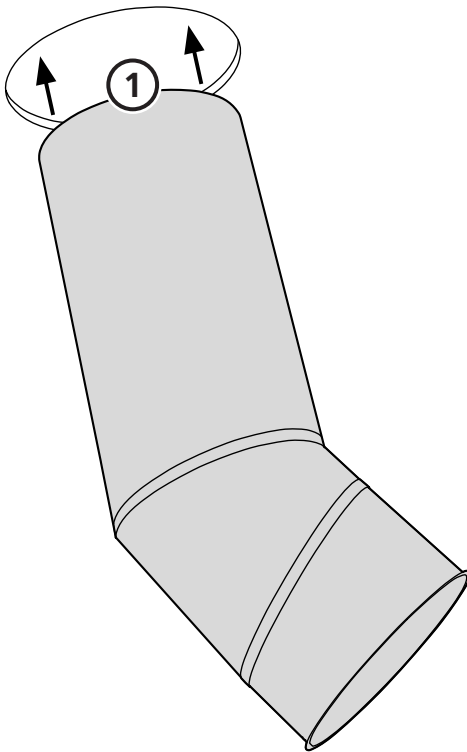
-  Ladder
-  Pencil/Marker
-  Safety Equipment
-  Shim
-  Bottom Adjustable Tube

Start with regular installation instructions beginning in Section 1.

NOTE

The solar powered dimmer will not work with a cathedral ceiling or some short installations due to space restrictions.






- 1** Place bottom adjustable tube (blue label) (with the flanged end down) through the rough-cut hole in the ceiling.
- 2** Guide the top portion of the tube up through the roof flashing so it protrudes upward through the flashing collar on the roof.
- 3** Place a temporary shim or ruler across the ceiling opening. (Approx 1/8" thick)
- 4** Center the tube over the ceiling cut-out, resting the tube down onto the shim. (The shim will keep the tube from falling through the ceiling.)
- 5** On the roof, mark the protruding tube at the top of the flashing collar with a felt pen. This will indicate where the extra length of tubing must be trimmed off for a short shaft install.



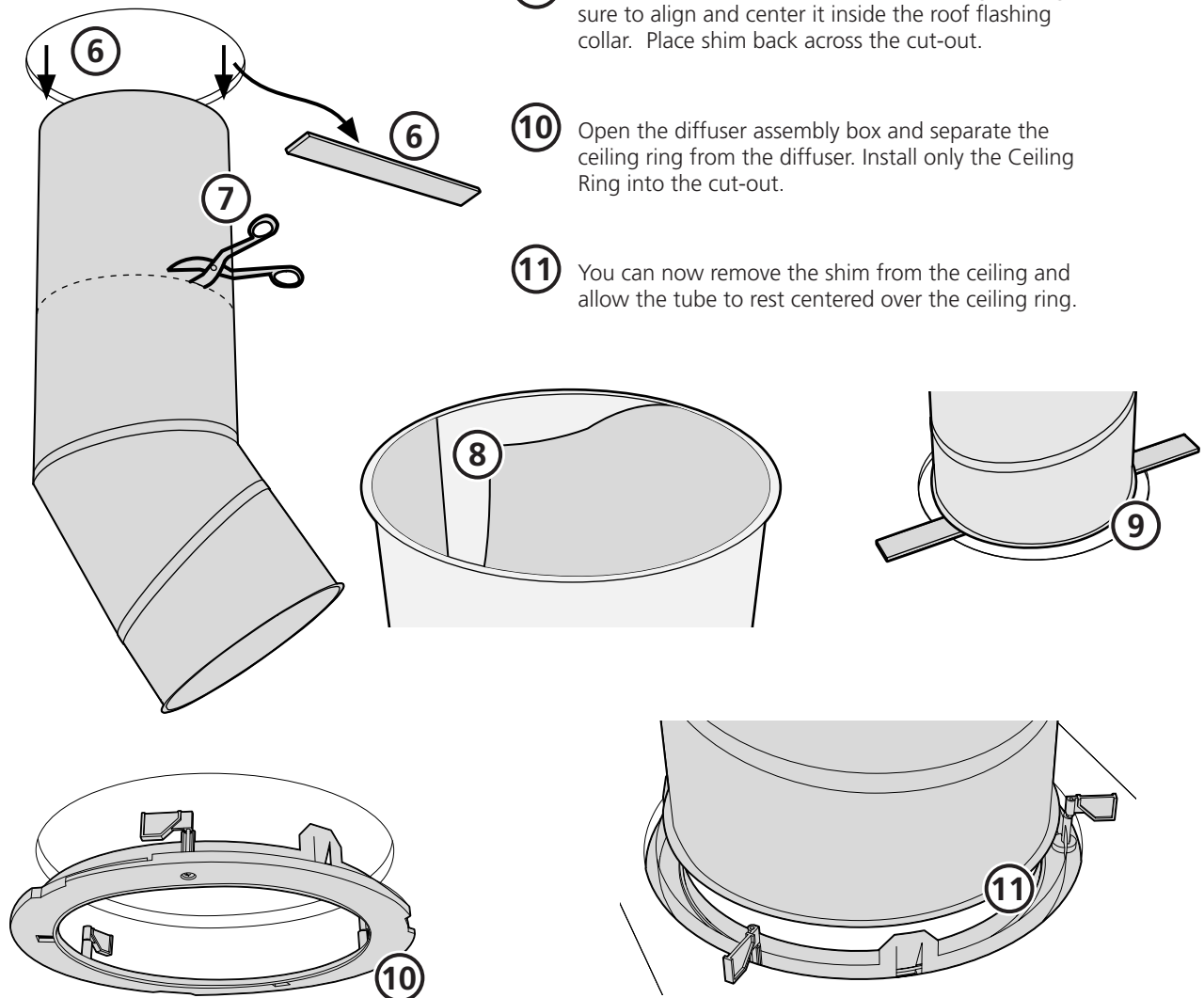
Section-10b

Cathedral Ceiling/Short Shaft Installation

TOOLS & PARTS

-  Gloves
-  Ladder
-  Metal Shears
-  Safety Equipment
-  Bottom Adjustable Tube
-  Ceiling Ring


- 6** At the ceiling, slide the temporary shim out of your way and pull tube section back out of the ceiling
- 7** Wearing protective gloves, carefully trim away the excess aluminum tubing using your felt pen marks as a guide.
- 8** Remove the protective film from the inside of the tubing.
- 9** Place the tube section back into the ceiling making sure to align and center it inside the roof flashing collar. Place shim back across the cut-out.
- 10** Open the diffuser assembly box and separate the ceiling ring from the diffuser. Install only the Ceiling Ring into the cut-out.
- 11** You can now remove the shim from the ceiling and allow the tube to rest centered over the ceiling ring.



Section-10c

Cathedral Ceiling/Short Shaft Installation – On The Roof

TOOLS & PARTS

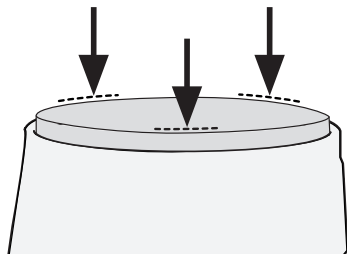
-  Ladder
-  Phillips Screwdriver
-  Safety Equipment
-  3/4 Dome Screws
-  Dome Washers
-  Bottom Adjustable Tube
-  Diffuser
-  Solar Lens Dome

12 Use gloves! The trimmed edge of the tube will be sharp! Carefully press downward on the trimmed end of the tube. It will lock down into the 3 plastic locking tabs located in the Ceiling Trim Ring, securing the tube into the rubber gasket in the ceiling trim ring.

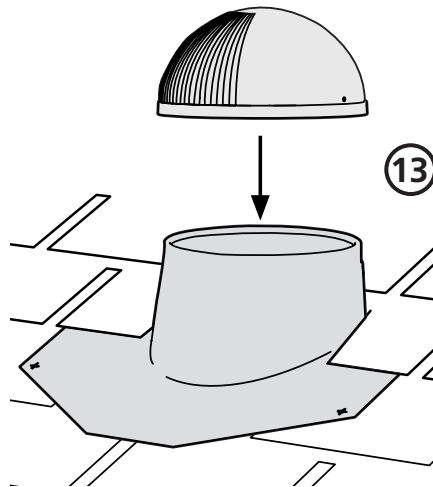
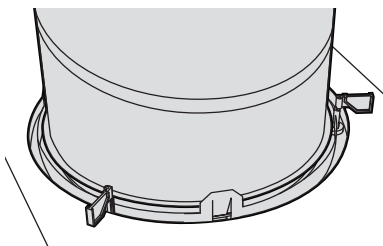
13 Install the Solar Lens Dome onto the flashing collar. See dome install instructions Section 4c, then return to this page for further instructions.

14 Rotate the Insulated Ceiling Diffuser onto the Ceiling Trim Ring. See Section 9.

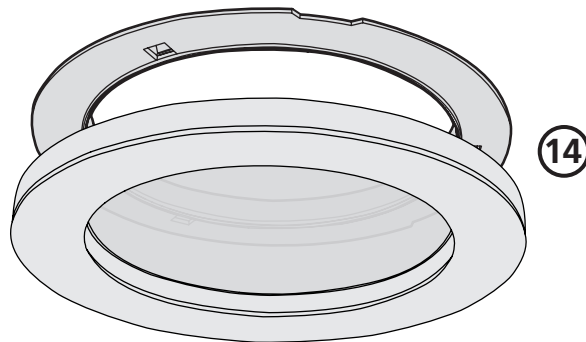
Installation Complete!



12



13







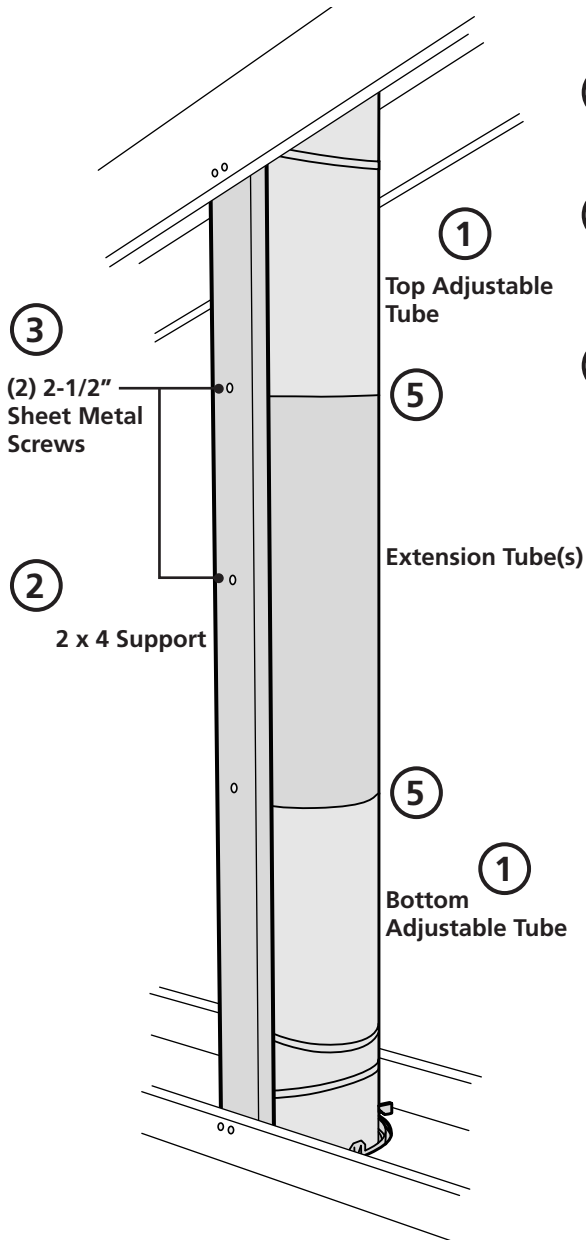
14

Section-11

Long Shaft Installation

TOOLS & PARTS

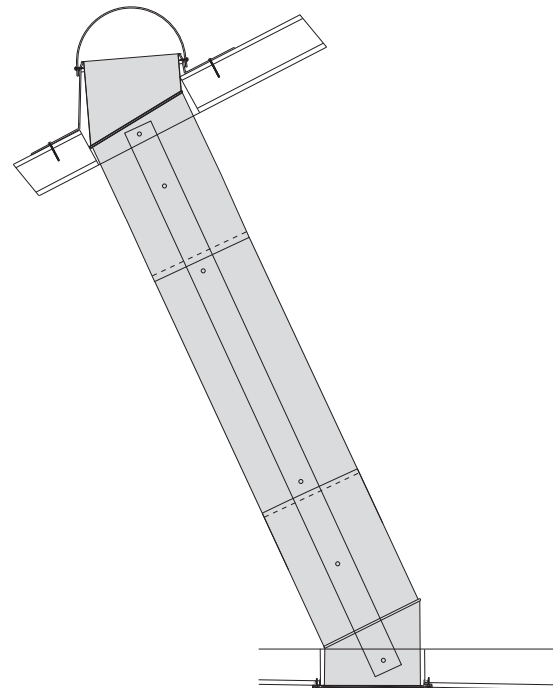
-  (2) 2-1/2" Pan Head Sheet Metal Screws (Not Included)
-  3/32" Bit
-  Drill
-  Phillips Drill Bit



Long Shaft Installation

For long shaft installation, use steps listed below, referring to those listed on previous pages for more specific install details.

- 1 On roof, locate and install Top Adjustable Tube (pink label) into roof flashing. Install Ceiling Ring at ceiling. Install Bottom Adjustable Tube (blue label) in attic as seen in diagram.
- 2 Frame 2 x 4 support between joists. Span from roof to ceiling with a length of 2 x 4 flat to outside of each Adjustable Tube creating a "spine".
- 3 Put a (2) 2-1/2" pan-head, sheet metal screw (not included) in each connecting extension.
- 4 Slide next tube section in and attach with screw/s. Continue until all but one extension is connected. Cut and install last section of extension tube.
- 5 Tape ALL joints. Go to Section 9 to continue standard install.



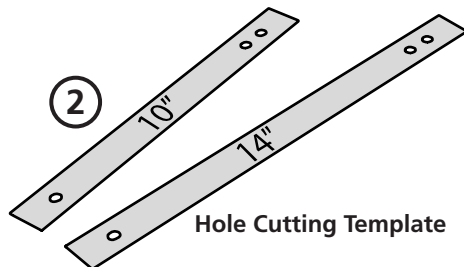
Optional Long Shaft Installation, showing Adjustable Tubes at an angle.

Section-12a

Metal Roofing Installation- Using Formable Aluminum Flashing

TOOLS & PARTS

-  Drill
-  Drill Bit (For Metal)
-  Gloves
-  Hole Cutting Template
-  Power Saw



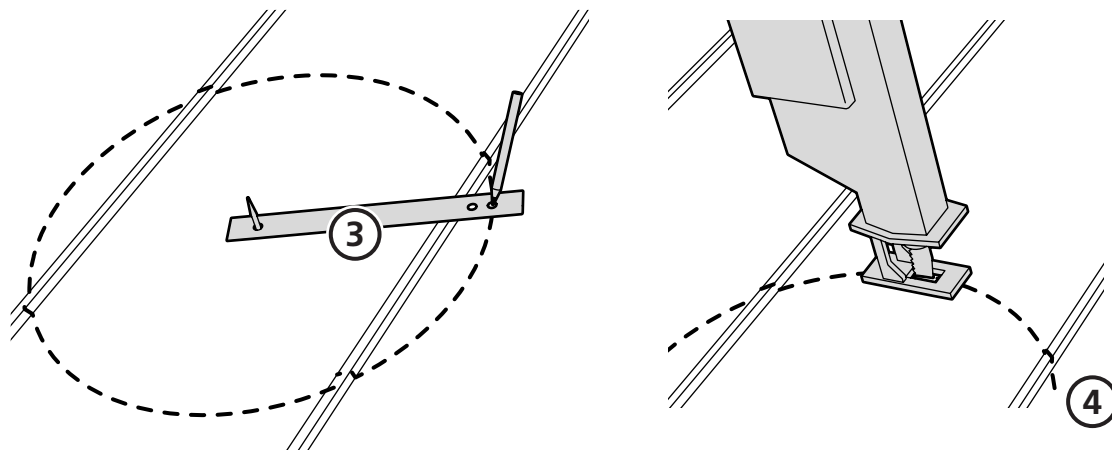
Cut Hole In Roof

Start with regular installation instructions beginning in Section 1.

- ① After finding your roof location, drill up through the roof until it pushes carefully through the panel, on the roof side. (An assistant on the roof is recommended during this step.)
- ② Select the correct Hole Cutting Template for the tube (10" or 14").
- ③ Locate the drilled hole. Use the correct Hole Cutting Template to trace the diameter using the outer template hole. A nail inserted into the hole will help guide the template.
- ④ Use a reciprocating/sabre saw to cut the roof hole. Use a blade specifically for metal cutting. Use gloves for safety.

TIP







Drill a hole inside the traced circle to insert saw blade.



Section-12b

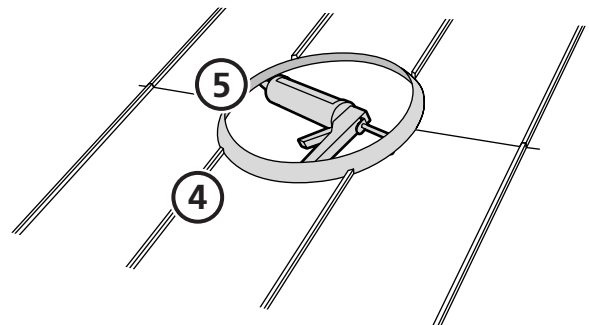
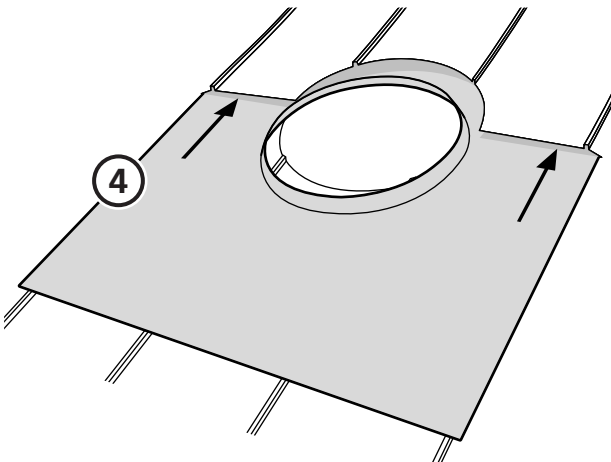
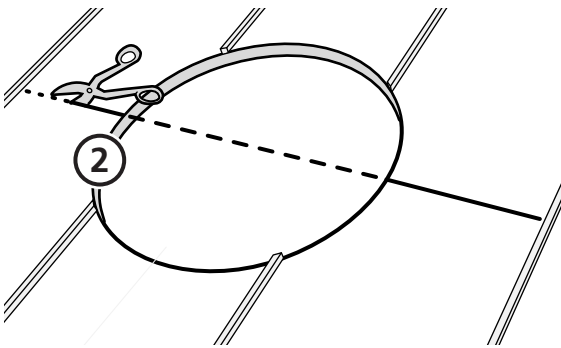
Metal Roofing Installation- Using Formable Aluminum Flashing

TOOLS & PARTS

-  Caulk Gun
-  Measuring Tape
-  Metal Shears
-  Roofing Sealant
-  Safety Equipment
-  Plastic Underlayment Flashing

Cut Slit In Roof Panel

- 1 Draw a horizontal line across the center of the hole in the roof, running side to side the entire width of the Formable Flashing.
- 2 Cut a slit through the METAL ROOF PANEL ONLY across the horizontal line. Use gloves for safety.
- 3 With your safety gloves on, be sure your cut is smooth and free of sharp edges.
- 4 Slide the Plastic Underlayment Flashing through the slit under the upper metal panel and felt paper. Then down under the lower metal panel. Be sure the opening is aligned with the cut hole.
- 5 Run a continuous bead of sealant between the Underlayment Flashing and the next layer of roofing around the opening.



Plastic Underlayment Flashing fully inserted underneath metal roof

Section-12c

Metal Roofing Installation- Using Formable Aluminum Flashing

TOOLS & PARTS

-  Drill
-  Phillips Screwdriver
-  Gloves
-  Roofing Sealant
-  Hole Cutting Template
-  Formable Main Flashing
-  (9) 2" Screws
-  (9) 3/4 Washers

Position & Secure Flashing

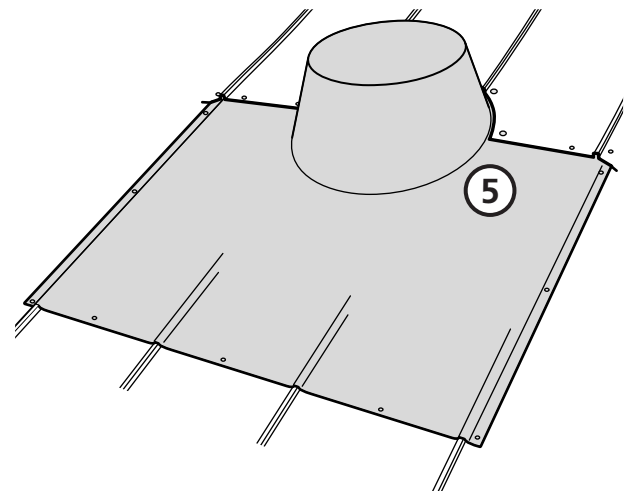
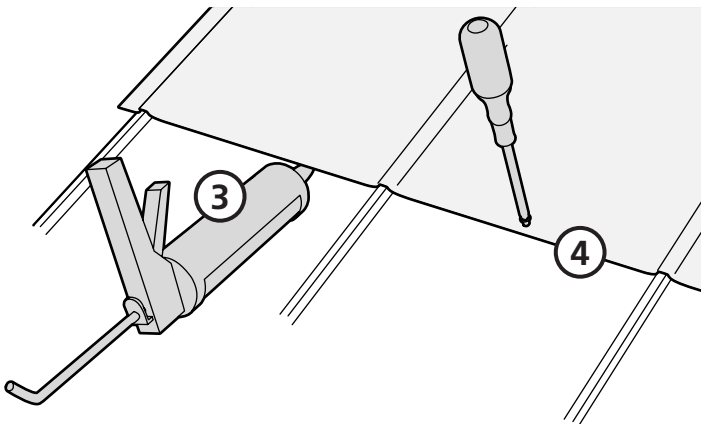
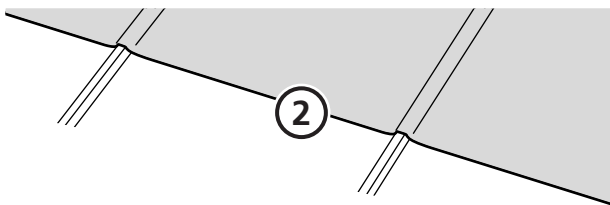
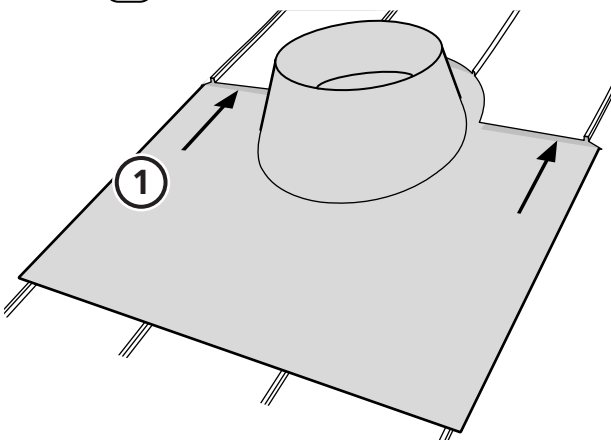
- 1** Slide the UPPER portion of the main flashing under the metal panel through the slit. Be sure to align the flashing directly over the hole.
- 2** "Dry-fit form" the lower side of the flashing to conform to the panel ridges.
- 3** Once flashing is formed over the panel ridges to your satisfaction, apply a generous bead of sealant to the underside of the LOWER flashing section.
- 4** Press formed flashing down around roofing material.
- 5** Attach with (9) 2" screws and 3/4 diameter washers in an evenly spaced circular pattern around the 10" or 14" hole. The circular pattern should be 21" diameter on the 10" unit and 24" diameter on the 14" unit.

Add additional 2" pan head screws as needed to secure edge of flashing.

Refer back to Section 4c for complete installation.

IMPORTANT






Be sure to dab sealant on all screw heads to ensure a leak-free installation.



Section-13a

Tile Roof Installation Using Formable Aluminum Flashing

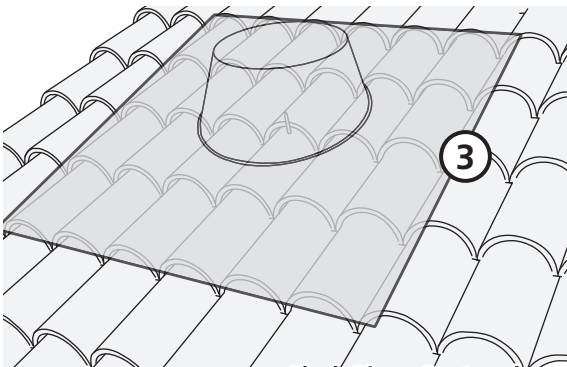
TOOLS & PARTS

-  Drill
-  Drill Bit
-  Formable Aluminum Flashing
-  Pencil
-  Spike/Rod

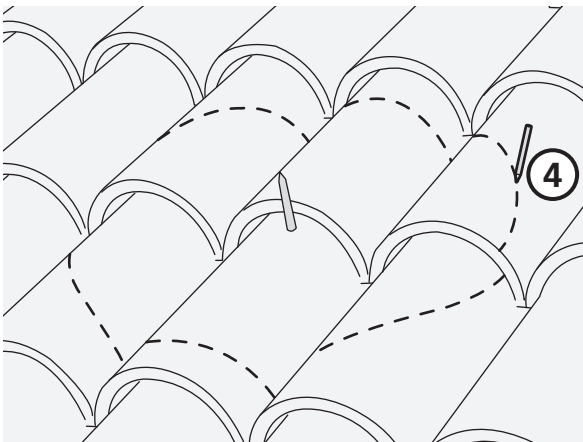
Find Hole Location On Roof

Start with regular installation instructions beginning in Section 1.

- 1 After finding your roof location, drill up through the roof. Then drive a 4"-6" rod or spike up through the roof sheathing until it pushes the tile/shingles upward on the roof side. (An assistant on the roof is recommended during this step.)
- 2 Carefully remove the lifted tile and remove the rod/spike from it's hole.
- 3 Position the Formable Aluminum Flashing piece perfectly centered over the punctured hole.
- 4 Trace the opening of the formable collar base so that your tiles are marked. This will assist in trimming the roofing materials to properly fit the flashing once in place.



Flash Piece Centered over Puncture Hole






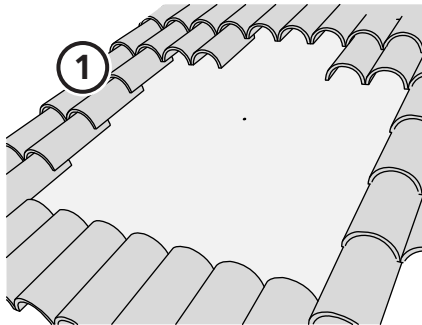
The Opening Of The Flashing's Collar Base Is Traced Onto The Tiles

Section-13b

Tile Roof Installation Using Formable Aluminum Flashing

TOOLS & PARTS

-  Gloves
-  Hole Cutting Template
-  Power Saw

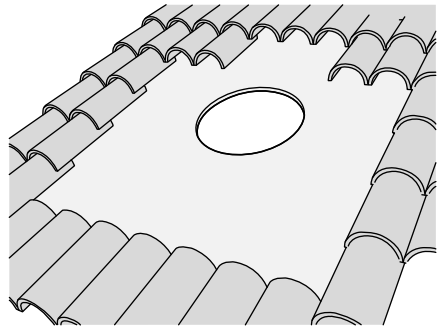
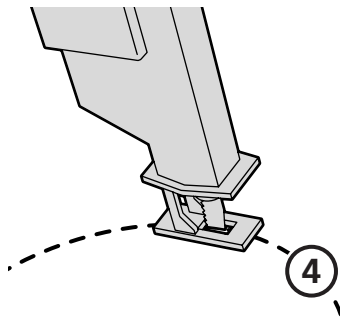
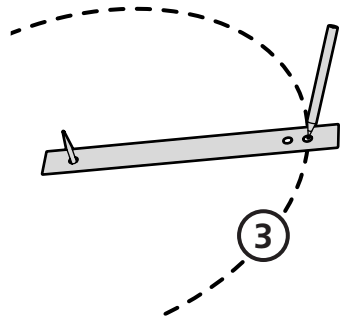
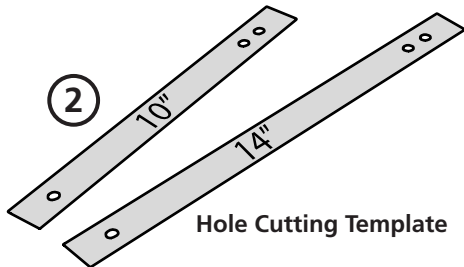


Remove Tiles & Cut Hole

- 1** Carefully remove the tiles or shingles from the "work area". Set them aside in the same order or pattern as when attached to the roof.
- 2** Select the correct hole cutting template for the tube (10" or 14").
- 3** Use the correct Hole Cutting Template to trace the diameter of the outer template hole. A nail inserted into the hole will help guide the template.
- 4** Use a reciprocating/sabre saw to cut the roof hole. Use gloves for safety.

TIP

Drill a hole inside the traced circle to insert saw blade.



Hole Cut in Roof Deck

Section-13c

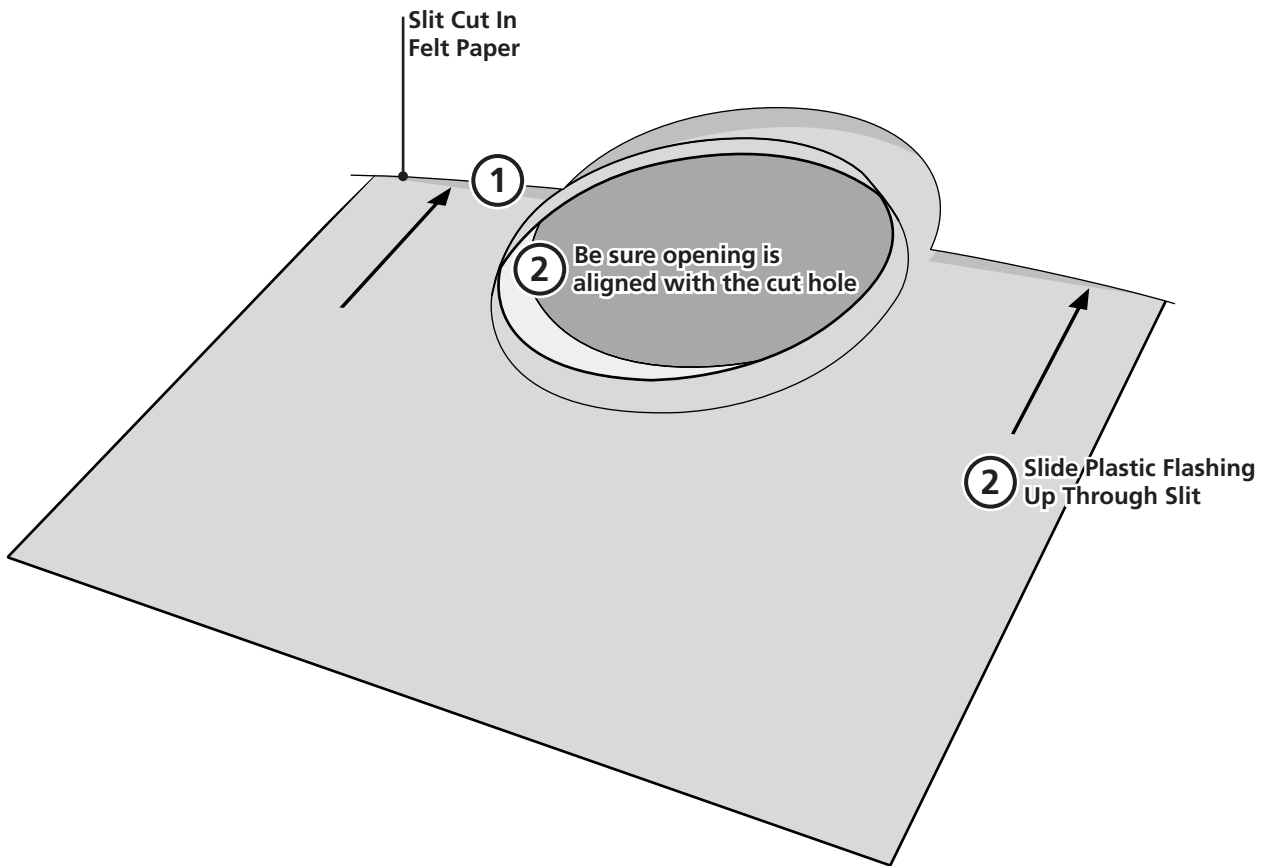
Tile Roof Intallation Using Formable Aluminum Flashing

TOOLS & PARTS

-  Metal Shears
-  Safety Equipment
-  Clear Plastic Underlayment

Position The Clear Plastic Underlayment

- 1** Cut a slit through the felt paper at the "3:00 and 9:00" positions. Be sure the slit is as wide as the Clear Plastic Underlayment.
- 2** Slide the Clear Plastic Underlayment up through the slit under the upper felt paper. Be sure the opening is aligned with the cut hole. Remove any fasteners/nails that obstruct the Clear Plastic Underlayment.



Section-13d

Tile Roof Intallation

Using Formable Aluminum Flashing

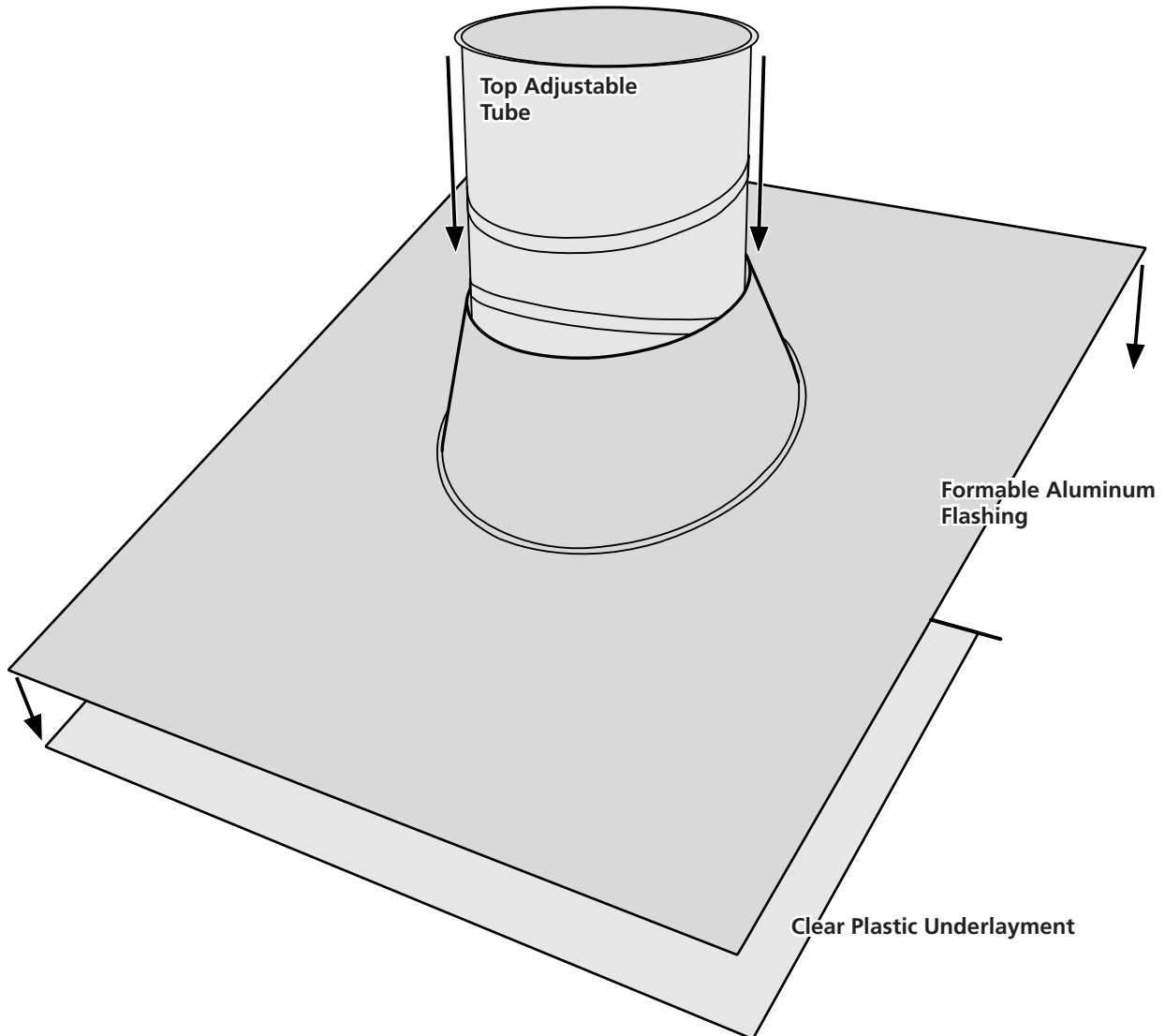
TOOLS & PARTS

-  Gloves
-  Power Saw
-  Formable Aluminum Flashing
-  Clear Plastic Underlayment
-  Top Adjustable Tube

Dry-Fit All The Parts

- 1** Do a practice run of installing the Clear Plastic Underlayment, Formable Aluminum Flashing, and the reflective tube. Remember to use protective gloves when handling metal.

Position the components in place. If the hole cut in the roof deck is too small to allow proper position of components, enlarge the hole with power saw.



Section-13e

Tile Roof Intallation

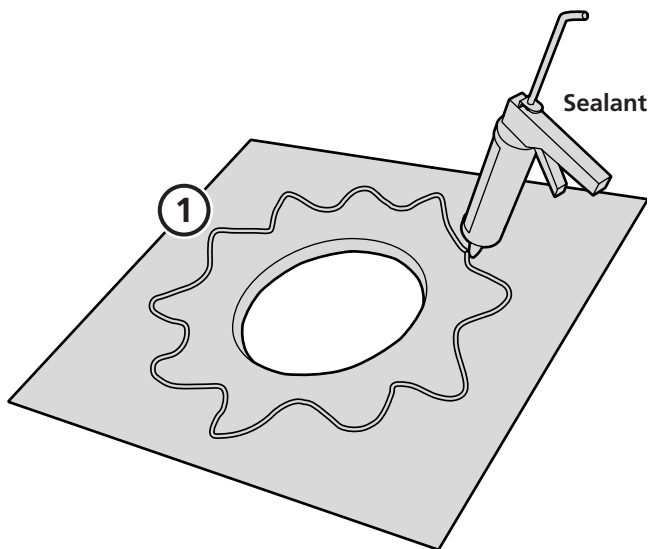
Using Formable Aluminum Flashing

TOOLS & PARTS

-  Caulk Gun
-  Roofing Sealant
-  Safety Equipment
-  Clear Plastic Underlayment

Seal The Clear Plastic Underlayment

- 1** Secure the Clear Plastic Underlayment to the roof deck by applying a generous, continuous bead of sealant on the underside of the flashing.



Section-13f

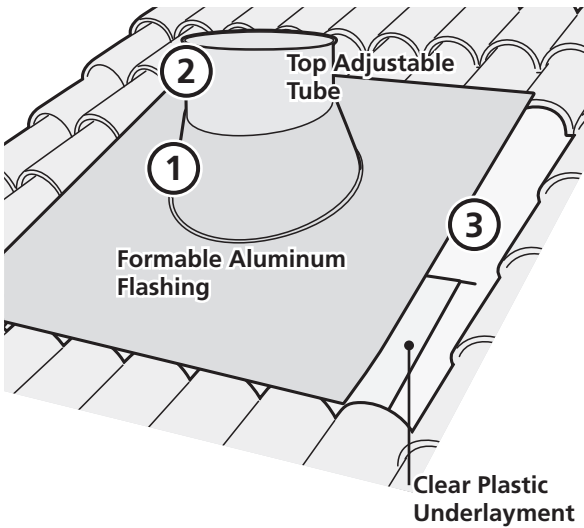
Tile Roof Intallation Using Formable Aluminum Flashing

TOOLS & PARTS

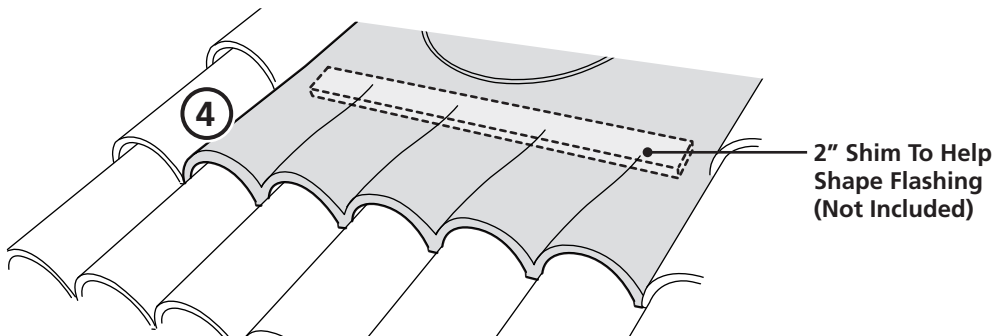
-  Gloves
-  Formable Aluminum Flashing
-  Clear Plastic Underlayment
-  Top Adjustable Tube

Position & Shape The Formable Aluminum Flashing

- 1 Position the Formable Aluminum Flashing in place by centering it's opening with the hole cut into the roof deck.
- 2 Centering is best achieved by inserting the reflective tube into the opening of the aluminum flashing letting the fit of the tube-to-roof hole serve as a guide.
- 3 The uphill half of the Formable Aluminum Flashing should be laying on top of the felt roofing paper, while the downhill half of the flashing should be laying on top of the downhill tiles.
- 4 Manually shape the downhill edge of the Formable Aluminum Flashing to match the surface of the tiles.



TIP
You might find it difficult contouring the Formable Aluminum Flashing to fit the downhill tiles. Try shifting those tiles further downhill to allow more aluminum to work with. Or add a 2" shim to the roof deck so the Formable Aluminum Flashing is angled to the roof rather than parallel to it.



Section-13g

Tile Roof Installation Using Formable Aluminum Flashing

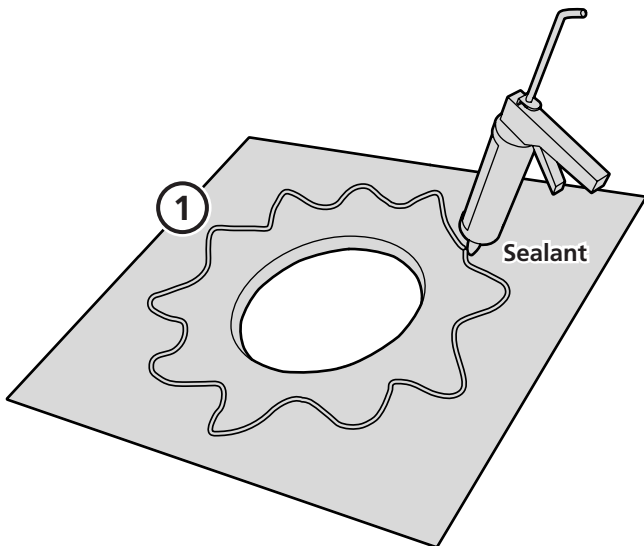
TOOLS & PARTS

-  Gloves
-  Formable Aluminum Flashing
-  (9) 2" Metal Flashing Screws
-  Washers
-  Phillips Screwdriver
-  Roofing Sealant

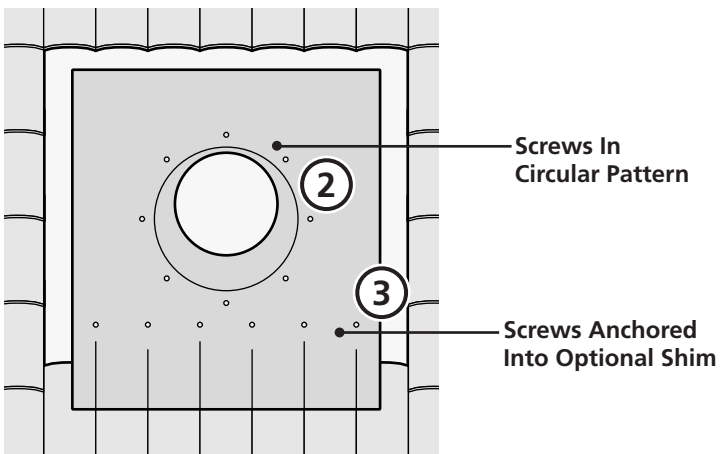
Secure The Formable Aluminum Flashing

- 1 Once the Formable Aluminum Flashing is shaped to match the downhill tiles, clean and dry the surfaces of aluminum, felt paper, and tile. Apply roofing sealant to all adjoining surfaces.
- 2 Secure the Formable Aluminum Flashing with the Metal Flashing Screws and Washers. The 9 screws provided should be installed in a circular, equally spaced pattern around the aluminum collar to improve water sealing. Dab roof sealant on each screw to create a water-tight seal.

The 10" unit has a 21" diameter screw pattern;
the 14" unit has a 24" diameter screw pattern



TIP
The optional wooden shim can be used as a screw anchor as well.



Section-13h

Tile Roof Intallation Using Formable Aluminum Flashing

TOOLS & PARTS



Gloves



Safety Equipment



Exterior Clear
Pure Silicone

Reinstall Tiles

- 1 Reinstall the trimmed tiles at the sides of the roof cutout, making sure to install them in the same pattern as they were removed, from bottom to top. These tiles need to be installed on top of the Formable Aluminum Flashing.

Make any required adjustments in trimming the tiles or shingles for a proper fit around the side of the formable flashing collar. A "proper fit" is one that is within 1"-2" of the aluminum vertical wall.

Attach these tiles with nails, caulk the heads of the nails with Exterior Silicone.

- 2 Reinstall the final tiles along the uphill edge of the formable flashing. This requires the row of tiles to be lifted slightly and may be necessary to loosen their attachments.

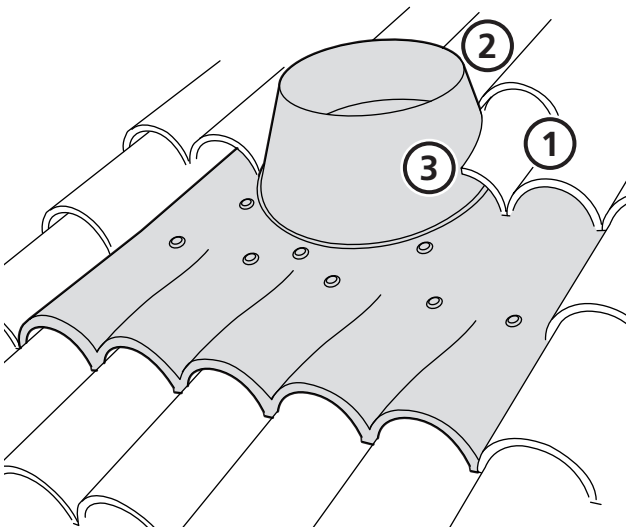
Secure the tiles with nails, caulk the heads of the nails with sealant.

- 3 Quick setting mortar may be used to fill in the gaps between the tile and aluminum collar to provide proper run-off of water.

Check all areas for proper sealing and water run-off.

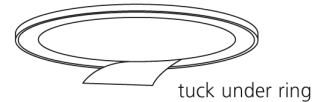
TIP Paint the Formable Aluminum Flashing to match the color of the tiles or shingles, if desired.

- 4 Install remaining components of the tubular skylight as instructed in standard installation starting in Section 4c.





① For new homes and projects requiring building permits cut out NFRC label once product installation is complete.

② Affix to diffuser ring as shown and secure with tape.




③ Label to remain in place until final inspection to qualify project for Energy Star.

Qualified for area indicated.
Admissible pour les régions indiquées.

<p>Canada energystar.nrcan-rncan.gc.ca</p>  <p>ENERGY STAR</p> <p>U.S. / É.U. energystar.gov</p>	 <p>■ = Qualified/Admissible</p>
--	--

cut out along dotted line, and place under diffuser ring after installation.

 <p>National Fenestration Rating Council® CERTIFIED</p>	<p>ODL RETAIL PRODUCTS <i>EZ Tubular Skylight</i></p> <p>ODL-K-7-00001-00001</p>
ENERGY PERFORMANCE RATINGS	
<p>U-Factor</p> <p>0.49 (U.S./I-P)</p>	<p>Solar Heat Gain Coefficient</p> <p>0.19</p>
<p>2.78 (Metric/SI)</p>	
ADDITIONAL PERFORMANCE RATINGS	
<p>Visible Transmittance</p> <p>—</p>	<p>Condensation Resistance</p> <p>—</p>
<p><small>Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product size. NFRC does not recommend any product and does not warrant the suitability of any product for any specific use. Consult manufacturer's literature for other product performance information. www.nfrc.org</small></p>	

U-Factor: The lower the value the lower the rate of heat flow. Less heat flows so heating and cooling bills are reduced.

Solar Heat Gain Coefficient (SHGC): Measures ability to block heat caused by sunlight. The lower the SHGC the more it reduces air conditioning costs.