

# Tubular Skylight LED/Decorative Diffuser 10" & 13" Installation Instructions



WARNING: Please take the time to read through the ENTIRE instructions prior to starting any work. Not following the instructions will invalidate the warranty.

## Important Precautions & Helpful Hints...

- The Light Pipe material is very sharp when cut. Please use extreme caution when handling the light pipe.
- The Light Pipe is highly reflective, use proper eye protection when installing. Avoid leaving the pipe exposed to the sun without the protective coating. (The protective coating shouldn't be removed until Step 19.)
- Ensure normal safety precautions are taken when using tools and walking on roofs.
- Do not cut any structural members in the house.
- Ensure overhead utility line, wire runs, and plumbing or ventilation ducts will not interfere with the light pipe installation.
- Measure twice and cut once.
- We have supplied additional hardware for your convenience. (Parts will be left over.)

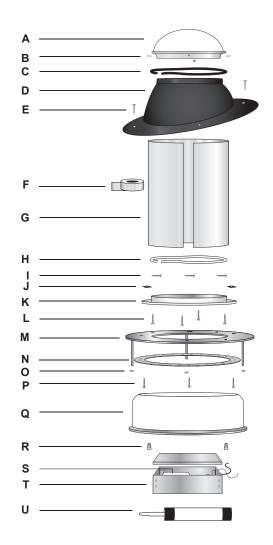
### **Components and Hardware Parts List:**

- A. Clear UV Protected, 100% High Impact Acrylic Dome
- B. Phillips Head Stainless Steel 1/4" Sheet Metal Screws
- **C.** Black Horsehair Gasket (self-adhesive)
- D. 1100 Series, Commercial Grade Aluminum Flashing
- E. Phillips Head Stainless Steel 11/2" Screws
- F. Heavy Duty Foil Tape
- G. Light Pipe
- H. White Horsehair Gasket
- I. 1/4" Tek Screws
- J. Black Speed Nuts
- **K.** Ceiling Ring
- L. 1<sup>1</sup>/<sub>2</sub>" Phillips Screws
- M. Anchor Ring
- N. LED Ring
- **O.** White Washers
- **P.** #6<sup>3</sup>/<sub>4</sub>" Screws
- **Q.** Decorative Diffuser
- R. Wire Nuts
- S. LED Driver
- T. LED Driver Enclosure
- U. Silicone

### **Tools Needed:**

- Channel Locks
- Step Down Drill Bit
- Silicone Gun
- Drill
- Drywall Saw
- Flashlight
- Flat Bar
- Ladder
- Hammer
- Marking Pencil

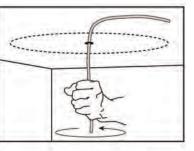
- Measuring Tape
- Plumb Bob
- Reciprocating Saw
- Safety Goggles
- Screwdriver
- ■Stud Finder
- String
- Tin snips
- Utility Knife
- Wire



Please allow 3 hours to complete the installation. Components and hardware are referenced to the corresponding numbers on the parts list on the front page.

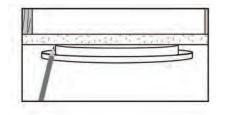
#### **STEP 1** To facilitate

installation, once the desired location is obtained, ensure that there are no obstructions in the attic between the roof and ceiling or on the roof. With a stud finder, locate the ceiling joists and center the Ceiling Ring (**K**) between the joists,

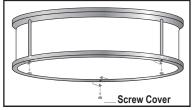


as close to the desired installation area as possible. Mark the center of the Ceiling Ring, drill a hole and insert piece of wire bent at a 90-degree angle. Rotate the wire around 360 degrees. While rotating, feel for resistance that could indicate wire runs or other obstructions.

**STEP 2** If there are no obstructions, scribe a mark around the inner ring of the Ceiling Ring. Add ½" to the outside of the scribed mark and use a drywall saw to cut out the hole in the ceiling.

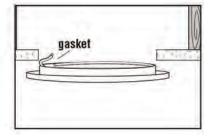


**STEP 3** On the bottom of the Decorative Diffuser (**Q**), grip the three screw covers by hand and unscrew them. You may need to use a screwdriver in the top of the screw while you turn the bottom piece.

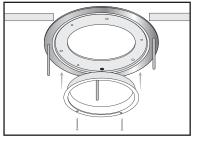


Remove the Decorative Diffuser Cover and Silver Trim to expose the inside the Anchor ring of the Decorative Diffuser.

**STEP 4** Place the White Horsehair Gasket **(H)** in the lip of the Ceiling Ring where the Light Pipe will terminate.

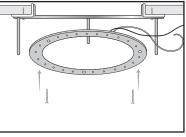


**STEP 5** Place the Ceiling Ring inside of the Anchor Ring. Line the countersunk screw holes on the Ceiling Ring with the larger holes on the Anchor Ring. Place the Ceiling Ring/Anchor Ring assembly in the hole cut in Step 2. Secure the assembly to the ceiling by inserting a 1½" Phillips



Screw (L) into one of the three countersunk holes and screw it through the drywall into one of the provided Speed Nuts (J). Repeat this process for the other two screws.

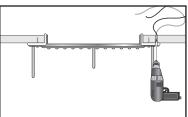
**STEP 6** Place the three White Washers **(O)** on the three #6<sup>3</sup>/<sub>4</sub> " Screws **(P)**. Then place the LED Ring **(N)** on the Ceiling Ring with the LEDs facing downward. Secure the LED Ring to the Ceiling Ring using the <sup>1</sup>/<sub>4</sub> " Tek Screws **(I)**.



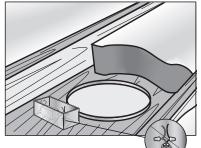
Note: The holes on the LED Ring will not line up with the holes on the Ceiling Ring. You must drill through the ceiling ring.

**STEP 7** Find the hole with the Grommet on the Anchor Ring,

Grommet on the Anchor King, and drill vertically through the Grommet into the ceiling to create a <sup>3</sup>/<sub>8</sub> " hole. Feed the wires from the LED Ring up trough through the hole.



**STEP 8** Gain access to the attic space. Snap open the LED Driver Enclosure **(T)**, and unscrew one of the threaded nuts and washers on the LED Driver Enclosure. (These will be used to secure the Driver Enclosure to the Ceiling Ring from the room below.) Locate



the wires from the LED Ring, and feed them up through the threaded hollow bolt on the LED driver enclosure. Using the Wire Nuts, connect the red and black wires from the LED Driver (S) to the black and white wires of the LED Ring. Be sure the wires are connected positive to positive and negative to negative. Place the threaded hollow bolt from the LED Driver Enclosure into the drilled 3/8" Grommet hole in the Ceiling Ring. Tighten the nuts on the hollow bolt on the LED Driver Enclosure from the attic side first and then tighten the bolt on the ceiling side.

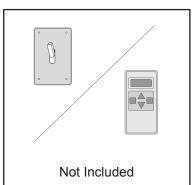
STEP 9 Run house power to the LED Driver Enclosure. and wire it to the LED Driver. following local building codes. (The LEDs may be activated by a wall switch or a remote control.) Replace the Driver Enclosure Lid.

STEP 10 On the roof, locate the centering hole and outline

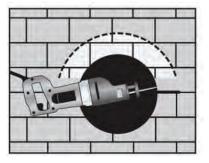
the diameter of the hole that

flashing unit.

the Light Pipe will pass through by turning the 1100 Series, Commercial Grade Aluminum Flashing (D) upside down and marking the inside of the



STEP 13 For a pitched roof installation, you will need to cut through roofing nails which secure the shingles above the area where the skylight flashing needs to be inserted. Hold the reciprocating saw sideways under the shingles starting at the 3 o'clock position. Proceed in a sweeping motion



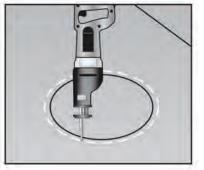
counterclockwise, through the 12 o'clock position, until you reach the 9 o'clock position, as per the illustration.

**STEP 14** Caulk the underside of the Flashing with the provided Silicone (U). Two concentric rings of Caulk are sufficient.

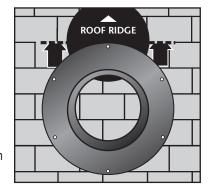


**STEP 11** Using a reciprocating saw, cut the diameter of the hole 2" larger than the area marked in Step 10.

#### IMPORTANT: Light pipe must pass between roof rafters. DO NOT CUT THROUGH ANY FRAMING MEMBER!

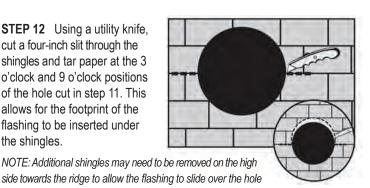


STEP 15 Taking care not to smear caulk on the exposed shingles, slide Flashing under the tar paper and shingles and force the Flashing up until the shingles come in contact with the raised portion of the Flashing. The bottom side of the Flashing will be on top of the shingles. Secure the Flashing with six Phillips Head Stainless Steel 1<sup>1</sup>/<sub>2</sub>" Screws (E).

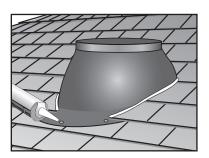


**STEP 12** Using a utility knife, cut a four-inch slit through the shingles and tar paper at the 3 o'clock and 9 o'clock positions of the hole cut in step 11. This allows for the footprint of the flashing to be inserted under the shingles.

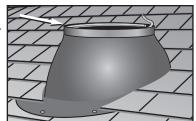
(see inset).



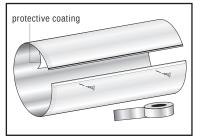
**STEP 16** Apply caulk over all exposed screw heads. Use remaining caulk to seal the areas where the 4" slits were made and around area where shingles meet with raised area of the flashing.



**STEP 17** Peel the protective backing off the Black Horsehair Gasket **(C)** and apply gasket on the inner lip of the Flashing collar.



**STEP 18** To assemble light pipe **(G)**, peel back the protective coating that covers the mirror coating about 1" from the opposite edge of the double sided tape, remove paper cover over double sided tape and overlap and seal edges. Put pressure on both sides of seal

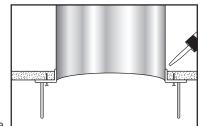


to ensure a good bond. Secure tube using the (2)  $\frac{1}{4}$  sheet metal screws (I) provided. Then place foil tape (F) over the entire seam to strengthen seal. When joining two pipe sections together; place the crimped end into the next section of pipe. Secure with a  $\frac{1}{2}$  sheet metal screws provided and seal joints with foil tape.

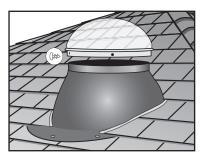
**STEP 19** Insert the Light Pipe through the Flashing with crimped end down towards the ceiling and gently rock pipe back and forth with slight downward pressure until the Light Pipe terminates evenly on the White Horsehair Gasket of the Ceiling Ring. Trim any excess Light Pipe above the Flashing with tin snips. Secure the bottom of the Light Pipe to the Ceiling Ring with two Tek Screws.

**STEP 20** Apply a layer of Caulk between the outside of the Light Pipe and the Ceiling Ring to make an air tight seal, preventing air leakage into the attic space. Wipe off any excess Caulk with a cloth. *NOTE: Use caution, the Light Pipe is extremely sharp.* 

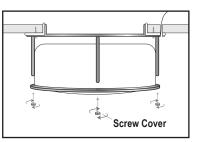




**STEP 21** Place the Clear UV Protected, 100% High Impact Acrylic Dome **(A)** on the top of the Flashing. Secure the Dome to the Flashing by screwing (4) Phillips Head Stainless Steel <sup>1</sup>/<sub>4</sub>" Sheet Metal Screws **(B)** through the pre-drilled holes on the Dome collar and into the lip of the Flashing.



**STEP 22** Replace the Decorative Diffuser Cover and Silver Trim by placing the Silver Trim in the groove at the bottom of the Decorative Diffuser Cover. Align the 3 holes in the Silver Trim up with the prongs on the Anchor Ring, and use the screw covers to secure it.



**STEP 23** Admire your new Natural Light Tubular Skylight and LED Decorative Diffuser!



