10", 13" and 18" Flat Roof **Installation Instructions**



10821 North 23rd Avenue Phoenix, AZ 85029 800-363-9865 www.nltubular.com



IMPORTANT: Please take the time to read through the ENTIRE instructions prior to starting any work. Light Pipe material is very sharp when cut. Please use extreme caution when handling the light pipe. AVOID LEAVING THE PIPE EXPOSED TO THE SUN WITHOUT THE PROTECTIVE COATING OR DIFFUSERS IN PLACE PRIOR TO INSTALLATION.

FOAM ROOF INSTALLATION NOTE: For existing foam roof installations, elastomeric sealant and mesh is required at Step 8. Elastomeric sealant and mesh is NOT required if skylight installation is completed PRIOR to foaming the roof.

PARTS LIST

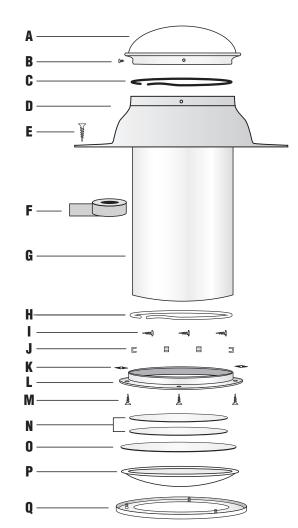
- A. Clear UV Protected, High Impact Acrylic Dome
- **B.** (4) Phillips Head Stainless Steel ¼" Self-Tapping Screws
- C. Black Nylon Horse Hair Gasket (self-adhesive)
- D. Commercial Pure Grade Aluminum Flat Roof Flashing
- E. (8) 1 1/2" Phillips Head Stainless Steel Screws
- F. Heavy Duty Foil Tape
- G. Light Pipe, (2) 24" sections
- H. White Nylon Horse Hair Gasket (self-adhesive)
- 1. (8) Phillips Head Stainless Steel ½" Self-Tapping Screws
- J. (4) U-channel PVC self-adhesive tabs (8 for 18" model)
- K. (3) Black Speed Nuts
- L. Ceiling Ring
- M. (3) 1 ½" Phillips Screws
- N. (2) Small Clear Polycarbonate Lenses
- **O.** (1) Large Clear Polycarbonate Lens
- P. High Impact Acrylic Diffuser
- Q. White Powder Coated Aluminum Trim Ring

TOOLS NEEDED

- Drywall Saw
- Reciprocating Saw
- Measuring Tape
- Driver & Bits
- Phillips Screwdriver
- Flashlight
- Stud Finder
- Marking Pencil
- Tin Snips
- Wire
- Hammer
- Safety Goggles

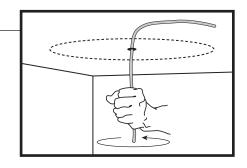
INSTALLATIONS ON EXISTING FOAM ROOFS:

• Elastomeric Sealant and Mesh



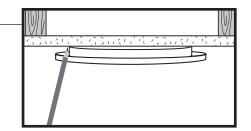
Step 1

Find the desired location for the ceiling trim ring and ensure that there are no obstructions in the attic space between the roof and ceiling. With a stud finder locate the ceiling joists and center the ceiling ring between 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.



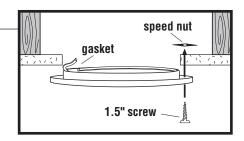
Step 2

If there are no obstructions, scribe a mark around the ceiling trim ring **(L)**, see diagram. Using a drywall saw, cut out the scribed mark in the ceiling.



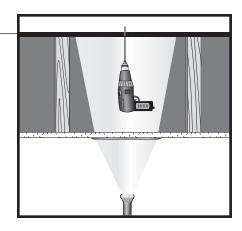
Step 3

Peel the protective covering off the white horse hair gasket (**H**) and apply gasket to the **INNER** lip of the ceiling ring (**L**). This gasket ensures a dust free fit between the light pipe and the ceiling ring. Secure the ceiling ring to the ceiling by inserting a 1½" flathead Philips screw (**M**) into one of the three pre-drilled holes and screwing it up through the drywall into the speed nut (**K**) provided. Repeat this process for all three screws.



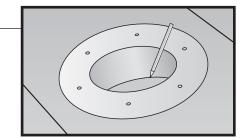
Step 4

For the roof cutout, place a step ladder under the ceiling ring hole and place a flashlight on top of the ladder, the resulting flashlight beam will mark the location for the centering hole of the flashing unit on the roof. With a drill bit and appropriate extension rods, drill a pilot hole in the marked location on the bottom side of the roof. If there is access to the attic space, a plumb bob may also be used.



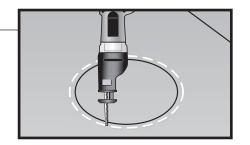
Step 5

On the roof, locate the centering hole and outline the diameter of the hole that the pipe will pass through by turning the flashing upside down and marking the inside lip of the flashing unit (see diagram).



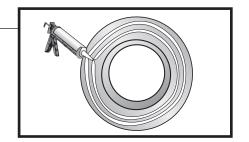
Step 6

With a reciprocating saw, cut the diameter of the hole 1" larger than the area marked in Step 1. <u>IMPORTANT:</u> The light pipe must pass between the roof rafters. DO NOT CUT THROUGH ANY FRAMING MEMBER.



Step 7

Caulk **underside** of flashing **(D)** with the provided caulking material. Two concentric rings of caulking material is sufficient. Turn flashing right-side-up and center over hole cut in Step 6. Press firmly down on flashing until caulk slightly squeezes out at the lip of the flashing.

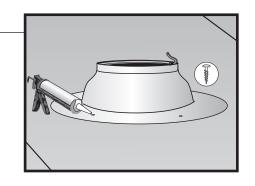


Step 8

Peel the protective backing off the black horse hair gasket (C) and apply gasket on the inner lip of the flashing collar.

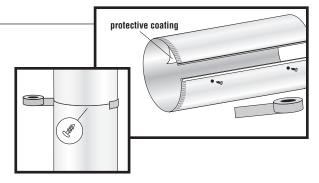
Secure flashing with the Phillips head $1 \frac{1}{2}$ " screws **(E)** provided. Evenly space the screws around the lip of the flashing. Place first screw at the 12:00 o'clock position, then next diagonally over from it at 6:00. The third screw should go at 9:00 and the next screw diagonally across at 3:00, etc. Caulk over the screw heads, since it will be exposed to the weather.

NOTE: For installations on EXISTING foam roofs, use elastomeric sealant and mesh to completely seal the flashing.



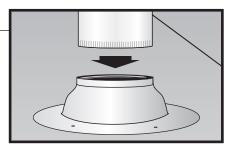
Step 9

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)** ½" sheet metal screws **(I)** provided. Then place foil tape **(F)** over the entire seam to strengthen seal. When joining two pipe sections together, place crimped end into the next section of pipe. Secure with a ½" sheet metal screws provided and seal joints with foil tape. **IMPORTANT:** Remove protective coating that covers the mirror finish inside the tube.



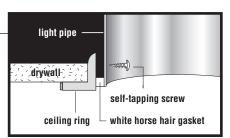
Step 10

Insert light pipe (G) through the flashing (D) with CRIMPED END DOWN and gently rock pipe back and forth with slight downward pressure. Slide the pipe down until it terminates evenly with the inner collar of the ceiling ring (L).



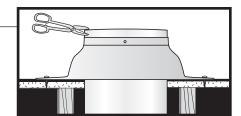
Step 11

Back inside, secure bottom of light pipe to ceiling ring with two tek screws (I). Trim any excess light pipe with tin snips. **NOTE:** Use caution, light pipe is extremely sharp.



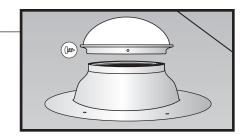
Step 12

Back on the roof, if there is excess pipe sticking out of the flashing, using tin snips, cut from the top down to the lip of the flashing and trim off the excess pipe. **NOTE:** Use caution, light pipe is extremely sharp.



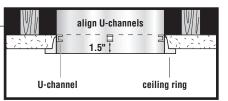
Step 13

Place dome (A) on top of the flashing unit. Secure dome to flashing by screwing in the (4) self-tapping Phillips head 1/4" (B) screws provided into the pre-drilled holes in the dome collar.



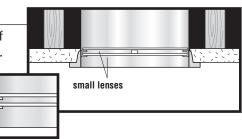
Step 14

Remove paper backing from the adhesive tape on the U-channels (J) and place $1\frac{1}{2}$ " from bottom of light pipe equidistant from each other so legs of the U-channels align vertically.



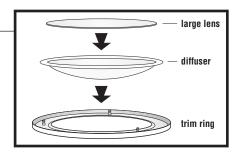
Step 15

Remove protective film from **both sides** of small lenses (N). Place one lens on TOP of the U-channel leg (J) and the other lens on the BOTTOM of U-channel leg (see close-up).



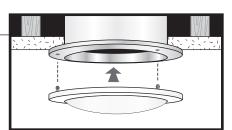
Step 16

Place the diffuser (P) into the white powder coated trim ring (Q). Remove protective film from **both sides** of large lens (O) and place on top of diffuser.



Step 17

Line up the three steel pins of the white ceiling trim ring (Q) with the holes on the ceiling ring (L). Push up to snap in place.



WARRANTY

This Natural Light Tubular Skylight has a 25 year warranty against manufacturers defects and deterioration.

IMPORTANT: PLEASE COMPLETE AND MAIL THE CARD BELOW AS SOON AS YOUR TUBULAR SKYLIGHT IS INSTALLED. This card will serve as proof of your purchase, should you misplace your original invoice. The manufacturer warrants this product and its components to be free from defects in material and manufacturer's workmanship for a period of twenty five years from the date of installation. This warranty is subject to proper installation of the unit in accordance with the manufacturer's written installation instructions. The manufacturer will not be liable for any special, incidental or consequential damages in any way related to, or arising out of, defects in, or damage to, the tubular skylight. This warranty gives you specific legal rights, and you may have other rights which vary from state to state concerning exclusion or limitation of incidental or consequential damages.

Please fill out the form and mail it to: Natural Light Energy Systems • 10821 North 23rd Avenue • Phoenix, AZ 85029 or register online at www.nltubular.com

REGISTRATION

Installer Name::	Date of Purchase:
Customer Name:	Phone:
Address:	Email:
Customer Survey Are you satisfied with the performance? Y N	Were you satisfied with the installation job? Y N
What made you choose our product?	