

# 21" Flat Roof/Transition Box Installation Instructions



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www.nltubular.com

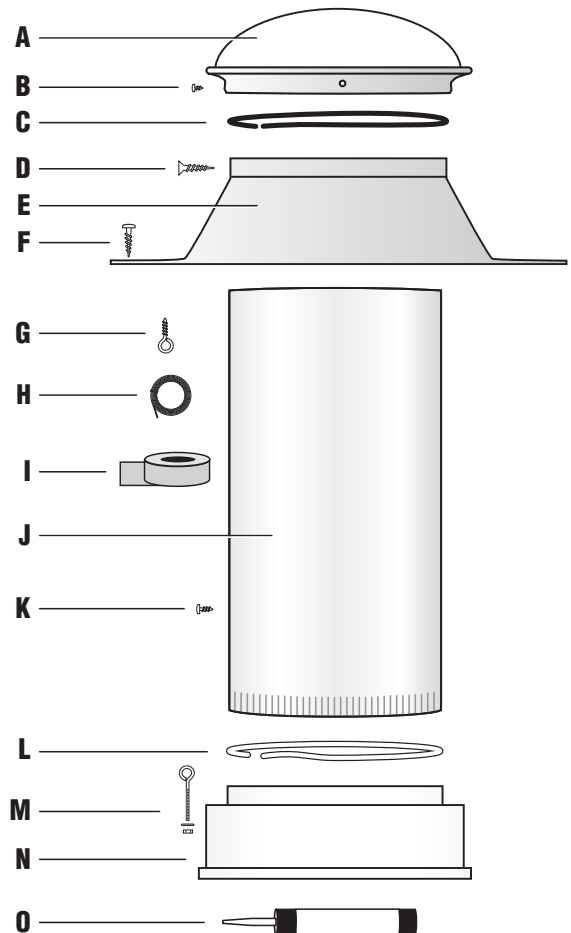
**IMPORTANT:** Please take the time to read through the ENTIRE instructions prior to starting any work. Light Pipe material is very sharp when cut. Please use extreme caution when handling the light pipe. AVOID LEAVING THE PIPE EXPOSED TO THE SUN WITHOUT THE PROTECTIVE COATING OR DIFFUSERS IN PLACE PRIOR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

## 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. (4) 1 ½" Phillips Flat Head Stainless Steel Screws
- E. Commercial Pure Grade, 1100 Series Aluminum Flashing
- F. (8) 1 ½" Phillips Head Stainless Steel Screws
- G. (2) Screw Eye Bolts
- H. Support Cable Wire
- I. Heavy Duty Foil Tape
- J. Light Pipe, (2) 24" sections
- K. (4) Phillips Head Stainless Steel ½" Self-Tapping Screws
- L. White Nylon Horse Hair Gasket (self-adhesive)
- M. (2) Eye Bolt, Washer and Nut
- N. White Powder Coated Transition Box
- O. Caulk

## TOOLS NEEDED

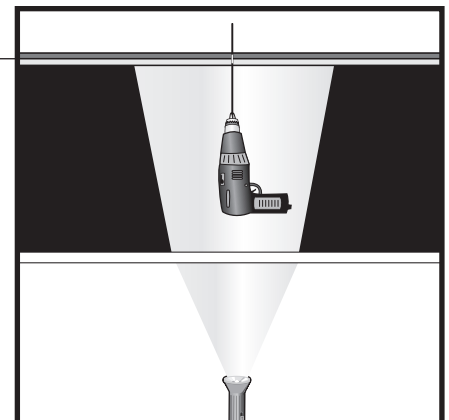
- Reciprocating Saw
- Phillips Screwdriver
- Marking Pencil
- Measuring Tape
- Clamp
- Tin Snips
- Driver & Bits
- Stud Finder
- Hammer



**IMPORTANT:** Prior to beginning installation, it is critical to plan the placement of the tubular skylight so that the flashing and transition box are aligned. Install the ceiling grid system accordingly.

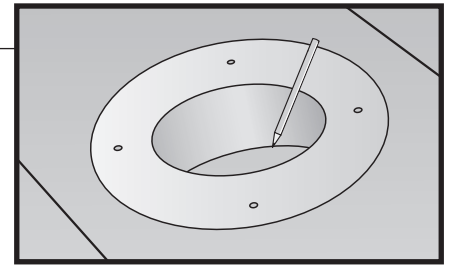
## Step 1

For the roof cutout, choose the location for the tubular skylight installation. If the drop ceiling is already installed, remove the ceiling tile that the tubular skylight will replace. Set up a ladder under the location 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.



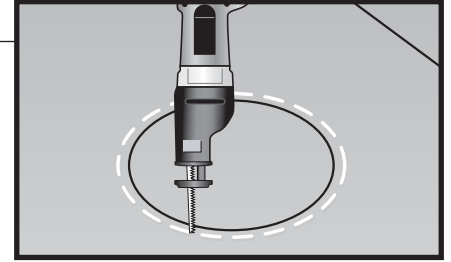
## Step 2

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



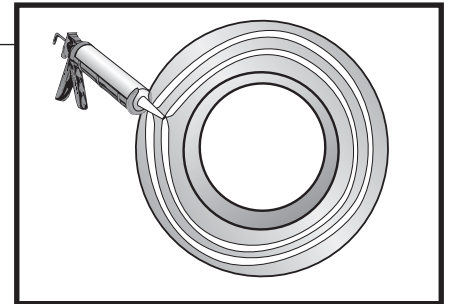
## Step 3

With a reciprocating saw, cut the diameter of the hole 1" larger than the area marked in Step 2. **IMPORTANT: The light pipe must pass between the roof rafters. DO NOT CUT THROUGH ANY FRAMING MEMBER.**



## Step 4

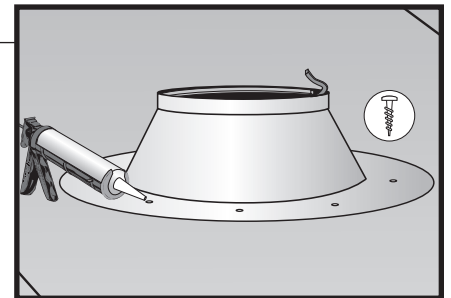
Caulk **underside** of flashing with the provided caulking material (O). Two concentric rings of caulking material is sufficient. Turn flashing right-side-up and center over hole cut in Step 3. Press firmly down on flashing until caulk slightly squeezes out at the lip of the flashing.



## Step 5

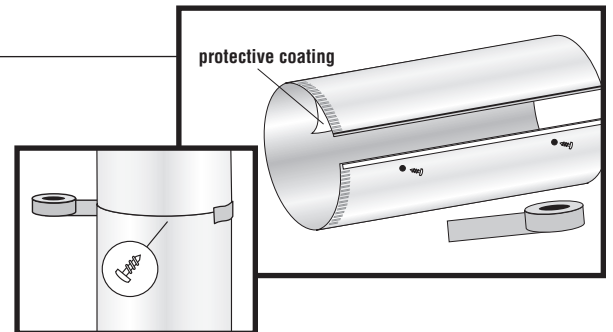
Peel the protective backing off the black horse hair gasket (C) and apply gasket on the inner lip of the flashing collar.

Secure flashing with (8) Phillips head 1 1/2" screws (F) 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.



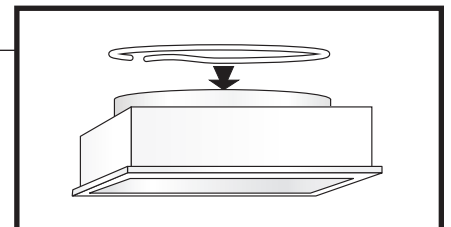
## Step 6

To assemble light pipe (J), peel back the protective coating that covers the mirror coating about 1" from the opposite edge of the double-sided tape. Remove paper backing from the double-sided tape and overlap tube ends and seal edges. Put pressure on both sides of seal to ensure a good bond. Secure tube using the (2) 1/2" self-tapping screws (K) provided. Then place foil tape (I) over the entire seam to strengthen seal. When joining two pipe sections together, place crimped end into the next section of pipe. Secure with (2) 1/2" self-tapping screws (K) provided and seal joints with foil tape (I).



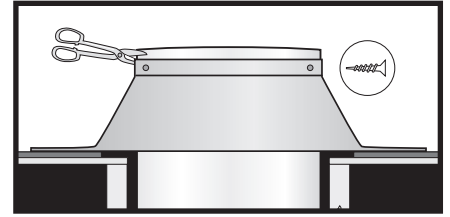
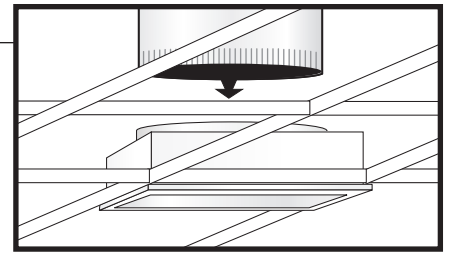
## Step 7

Peel the protective backing off the white nylon horse hair gasket (L) and apply gasket on the **INSIDE COLLAR OF THE TRANSITION BOX (N)** 1/2" down from top of the collar.



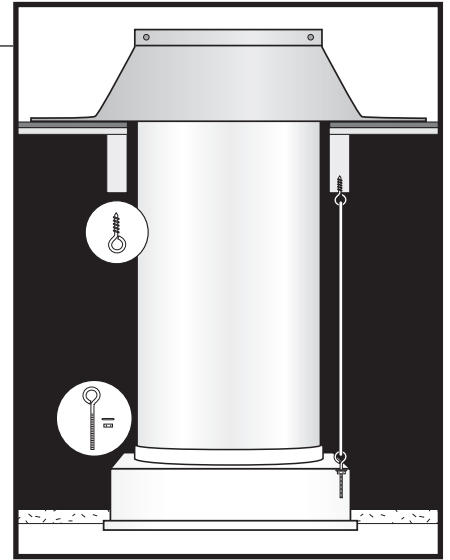
### Step 8

Install the transition box (N) into the ceiling grid system. From the roof, slide the light pipe assembly with the crimped edge down into the transition box collar. Secure the light pipe to the flashing with the (4) Phillips flat head 1 1/2" screws (E) provided through the (4) pre-drilled holes on the flashing lip. (To prevent light pipe from slipping through the hole, clamp light pipe to flashing or have someone hold it in place until it is secured.) 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. (Use caution when handling the light pipe - edges of the light pipe are extremely sharp when cut).



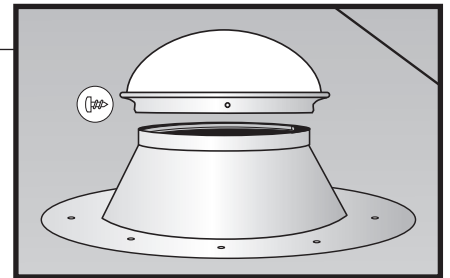
### Step 9

For additional stability, screw the (2) screw eye bolts (G) into the two framing members on both sides of the unit. Attach the (2) eye bolts, washers and nuts (M) through the sides of the transition box (see figure). Attach the cable wire (H) from the screw eye bolt in the framing to the eye bolt on transition box.



### Step 10

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



Please fill out the form and mail it to: Natural Light Energy Systems • 10821 North 23rd Avenue • Phoenix, AZ 85029

## REGISTRATION

Installer Name: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_

Customer Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

### 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? \_\_\_\_\_