



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. AVOID LEAVING THE PIPE EXPOSED TO THE SUN WITHOUT THE PROTECTIVE COATING OR DIFFUSERS IN PLACE PRIOR TO INSTALLATION.

#### **TOOLS/MATERIALS NEEDED**

- Clamp
- Gloves
- Marking Pencil
- Measuring Tape
- Philips Screwdriver
- Reciprocating Saw
- Safety Goggles
- Stud Finder
- Tin Snips
- Utility Knife

## **PRECAUTIONS:**

- **1.** Ensure normal safety precautions are taken when using tools, ladder and walking on roofs.
- 2. Do not cut any structural members in the house.
- 3. Install only in dry weather.

#### **MATERIALS/TOOLS TO BUILD A CURB:**

- Pressure-Treated Lumber (2" x 10")
- Hand or Circular Saw
- Wood Screws
- Galvanized Nails
- Roofing Material (matching existing roofing)

#### **TUBULAR SKYLIGHT KIT PARTS:**

- A. Clear UV Protected, High Impact Acrylic Dome
- B. (4) Phillips Head Stainless Steel 1/4" Self-Tapping Screws
- C. Black Nylon Horse Hair Gasket (self-adhesive)
- D. (4) 1 1/2" Flathead Philips Screws
- E. Commercial Pure Grade Aluminum Flat Roof Flashing
- F. (8) 1 1/2" Philips Head Stainless Steel Screws
- G. (2) Screw Eye Bolts
- H. Support Cable Wire
- I. Heavy Duty Foil Tape
- J. (2) 24" Light Pipe Sections
- K. (4) Philips 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

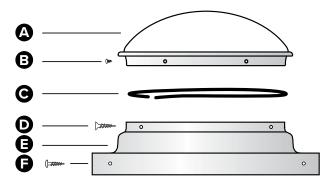
# Close-up of Screws:

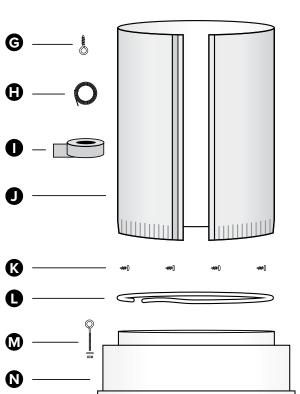












#### **IMPORTANT INSTALLATION POINTERS – PLEASE READ BEFORE BEGINNING:**

- 1. 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. Ensure that hole on roof is between framing trusses. DO NOT CUT ANY STRUCTURAL FRAMING.
- **2.** When determining the location of the unit, southern exposure is recommended. Also consider potential problems such as objects shading the unit during certain times of the day.
- **3.** Although adjustable elbows are available, straight light pipe runs result in higher light output and easier installation.
- **4.** Prior to starting the job, **cut packing straps on the light pipe and uncoil the tubes**.

#### STEP 1

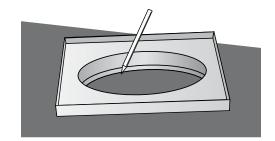
Assemble a curb with the outside dimensions slightly smaller than the width of flashing (outer dimension approximately 27.5" x 27.5"). The size of curb will vary depending on roofing material. Build curb using pressure-treated lumber secured at all four corners with wood screws or galvanized nails (use 2" x 10" lumber and adhere to local building codes).

NOTE: Do not build curb prior to being on job site.



#### STEP 2

On the roof, find the desired location to install the unit. Ensure that the curb placement is **NOT** over any structural trusses. 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 as shown.



# 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.** 



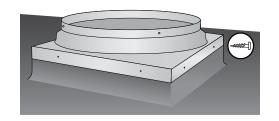
## STEP 4

Center the curb over opening and toe-nail into existing roofing using galvanized nails. If necessary, build blocking to ensure the curb is secure. Wrap curb with roofing material to prevent leaking.



#### STEP 5

Attach the skylight flashing **(E)** to the curb using (8)  $1\frac{1}{2}$ " Phillips pan head stainless steel screws **(F)** provided through the pre-drilled holes on the skylight flashing lip.



#### STEP 6

Peel the protective backing off the black nylon horse hair gasket (C) and apply gasket to the INNER lip the flashing collar.

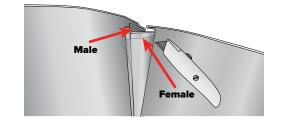
**NOTE:** If also installing a security bar (sold separately), place the black horse hair gasket 3/4" BELOW THE EDGE of the flashing rim in order to leave room to attach the security bar.



## STEP 7

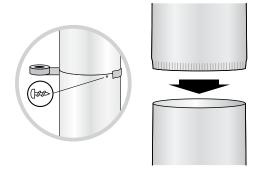
Using a utility knife, score the protective film by cutting along the outside of the channel of the light pipe. Then peel off all of the protective plastic film from all areas of the light pipe (J). To assemble the light tube, insert the light pipe into the channel so that it forms a round tube. After insertion, pull both sides back to ensure the pipe is locked into place.

**IMPORTANT:** All of the plastic must be removed to avoid having the color of the plastic reflecting through the diffuser.



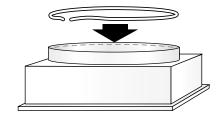
#### STEP 8

Join the two light pipe sections (J) together by placing the crimped end of one of the sections into the non-crimped end on the other section. Secure with (2)  $\frac{1}{2}$ " self-tapping screws (K) and seal joints with heavy-duty foil tape (I).



#### STEP 9

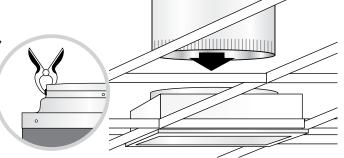
Peel the protective backing off the white nylon horse hair gasket **(L)** and apply gasket on the INSIDE COLLAR of the transition box **(N)** ½" DOWN from top of the collar.



#### STEP 10

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.

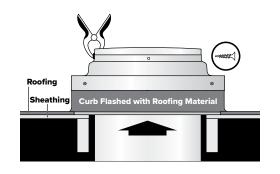
**TIP:** To prevent light pipe from slipping through the hole, clamp light pipe to flashing or have someone hold it in place until it is secured.



#### **STEP 11**

Slide light pipe (with trim ring facing down) through the opening on the flashing. Secure the light pipe to the flashing with the (4) Phillips flathead 1½" screws **(D)** provided through the (4) pre-drilled holes on the flashing lip.

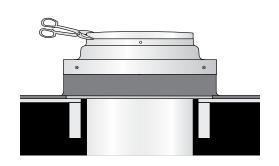
**TIP:** To prevent light pipe from slipping through the hole, clamp light pipe to flashing or have someone hold it in place until it is secured.



## **STEP 12**

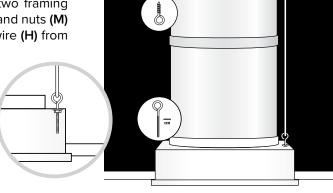
If there is excess pipe sticking out of the flashing, using tin snips, cut from the top down to the lip of the flashing and trim off the excess pipe.

**CAUTION:** The light pipe is extremely sharp, handle with care and wear gloves.



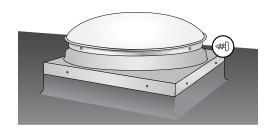
# STEP 13

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 inset). Attach the cable wire (H) from the screw eye bolt in the framing to the eye bolt on transition box.



## **STEP 14**

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





# 21" Tubular Skylight Lifetime Limited Warranty

Natural Light Energy Systems (hereinafter NLES) warrants any tubular skylight manufactured by NLES to be free from defects in materials and workmanship to the original residential purchaser (hereinafter CONSUMER) from the date of purchase. All aspects of the Warranty are subject to the following limitations, terms and conditions.

## 1. DURATION OF WARRANTY

If a NLES tubular skylight (hereinafter "Equipment") is determined to have a defect in material or workmanship, NLES will, at its sole discretion, repair or replace the defective part at NO CHARGE to the CONSUMER, (excluding labor, and applicable shipping and handling costs) for the duration of the CONSUMER's ownership of the original equipment (hereinafter "LIFETIME").

#### 2. LIMITATIONS OF COVERAGE

This Warranty extends only to the CONSUMER for damage resulting from defects in materials and workmanship, it does not extend to damage caused by the CONSUMER'S neglect or abuse, or by accident, to damage caused by wind, hail or abnormal weather conditions, or to damage caused by acts of God, civil insurrection or extraordinary circumstances which are beyond the control of NLES.

NLES shall not be liable for any direct or indirect damage resulting from the use of the Equipment, and in no event shall the extent of the Warranty coverage exceed the purchase price of the Equipment.

NLES assumes no liability for the determination of the proper equipment necessary to meet a CONSUMER'S requirements, nor does it authorize others to assume such obligations on its behalf.

## 3. MISCELLANEOUS

In order to be considered for validation, all claims for Warranty coverage must be accompanied by a copy of the purchase agreement indicating the date of initial installation, NLES reserves the right to inspect the tubular skylight prior to honoring any Warranty claim.

This Warranty gives you specific legal rights, and you may have other rights which may vary from state from state. Any and all inquiries or claims under this Warranty must be submitted in writing to Natural Light Energy Systems, Attn: Warranty Department, 10821 N. 23rd Avenue, Phoenix, AZ 85029 or by e-mail to info@nltubular.com.



