



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

- Caulk
- Caulking Gun
- Channel Locks
- Clamp
- Driver & Bits
- Gloves
- Marking Pencil
- Measuring Tape
- Philips Screwdriver
- Reciprocating Saw
- Safety Goggles
- Step Down Drill Bit
- Stud Finder
- Tin Snips
- Utility Knife

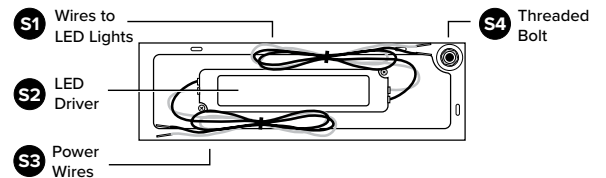
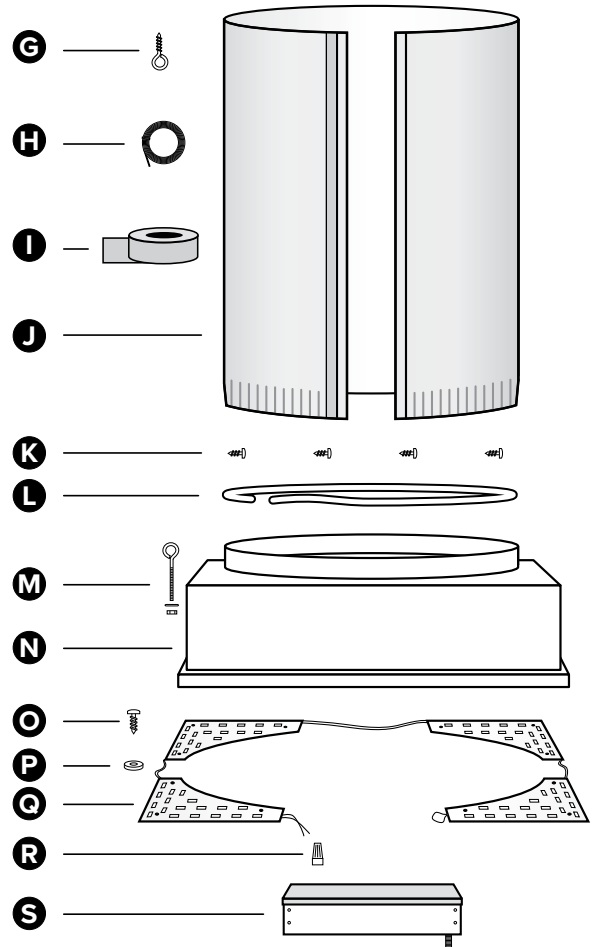
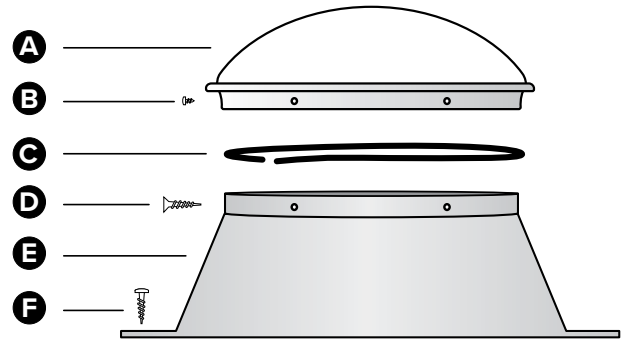
For Foam Roof Installations only:

- Elastomeric Sealant and Mesh

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.

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.** (6) Phillips Head Stainless Steel 1/2" 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.** (12) 3/4" Self-Tapping Tek Screws
- P.** (12) White Washers
- Q.** LED Quadrants
- R.** (4) Wire Nuts
- S.** LED Driver Enclosure:
 - S1.** Wire to LED Lights
 - S2.** LED Driver
 - S3.** Power Wires
 - S4.** Treaded Bolt

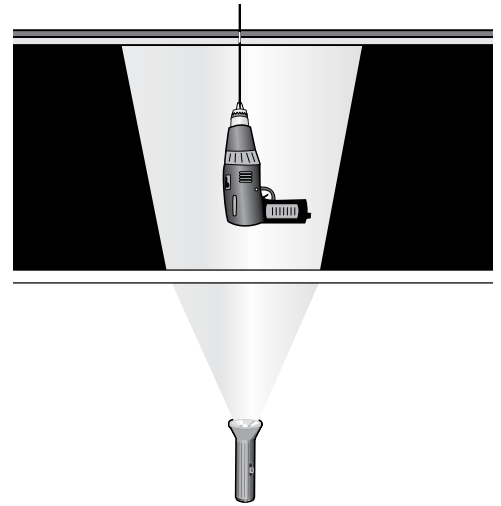


IMPORTANT INSTALLATION POINTERS – PLEASE READ BEFORE BEGINNING:

1. Ensure normal safety precautions are taken when using tools, ladder and walking on roofs. Install only in dry weather.
2. 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.**
3. 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.
4. Although adjustable elbows are available, straight light pipe runs result in higher light output and easier installation.
5. Prior to starting the job, cut packing straps on the light pipe and uncoil the tubes.

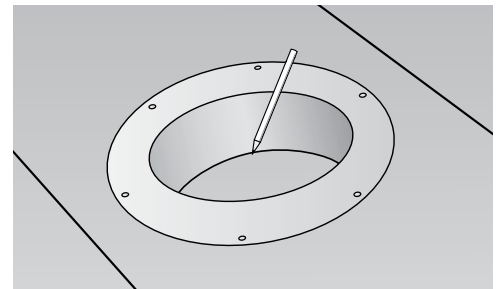
STEP 1

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 transition box 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

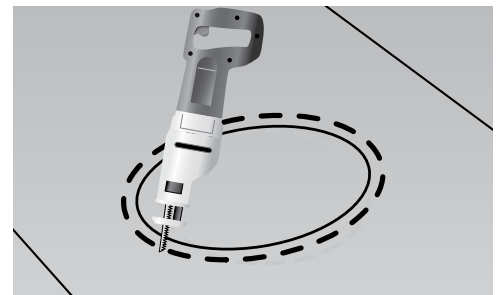
On the roof, locate the centering hole drilled in Step 1 and outline the diameter of the hole that the pipe will pass through by turning the flashing (E) upside down and marking the inside lip of the flashing unit.



STEP 3

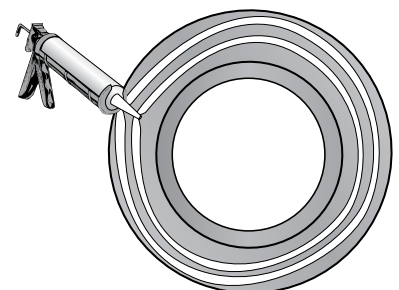
With a reciprocating saw, cut the diameter of the hole **1" LARGER** than the area marked in Step 2.

IMPORTANT: The light pipe must pass between the roof rafters. **DO NOT CUT THROUGH ANY FRAMING MEMBER.**



STEP 4

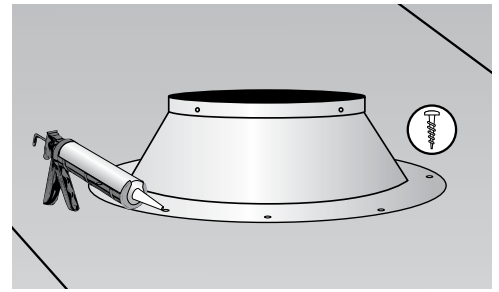
Caulk the underside of the flashing (E) with caulk. Two concentric rings of caulking material is sufficient. Turn the flashing right-side-up and center over hole cut in Step 3. Press firmly down on flashing until caulk slightly squeezes out at the edges of the flashing.



STEP 5

Secure the flashing to the roof with the Philips head 1 ½" 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.

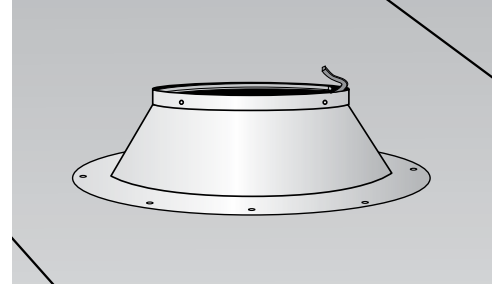
NOTE: For installations on **EXISTING** foam roofs, use elastomeric sealant and mesh to completely seal the flashing.



STEP 6

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

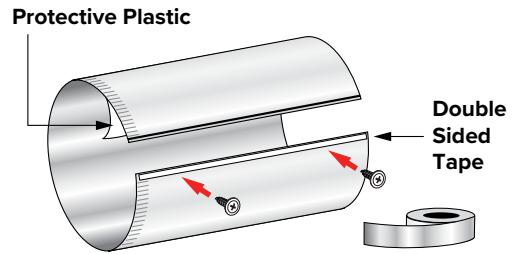
NOTE: If also installing a security bar (sold separately), place the black horse hair gasket ¾" BELOW THE EDGE of the flashing rim in order to leave room to attach the security bar.



STEP 7

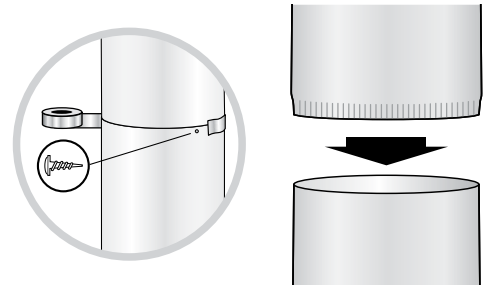
Assemble the light pipe sections (J) by peeling back the protective plastic that covers the mirrored interior about 1" from the opposite edge of the double sided tape. Remove the paper cover over the double sided tape. Overlap the edges of the light pipe to seal. Put pressure on both sides of the seal to ensure a good bond. Secure tube using the (2) ½" sheet metal screws (K) provided. Then, place foil tape (I) over the entire seam to strengthen seal.

IMPORTANT: Remove all the plastic from the light pipe interior to avoid having the color of the plastic reflecting through the diffuser.



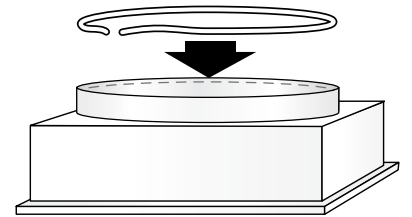
STEP 8

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) ½" self-tapping screws (K) and seal joints with heavy-duty foil tape (I).



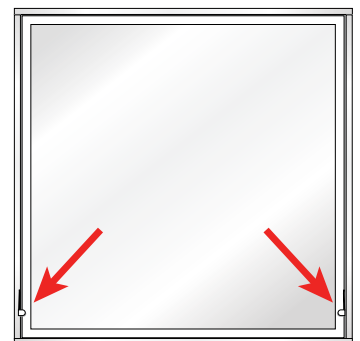
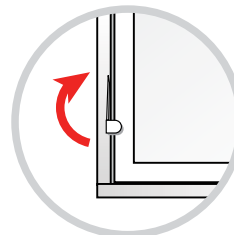
STEP 9

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.



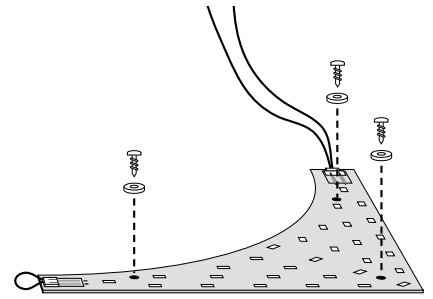
STEP 10

Remove the diffuser by pulling down on the two small tabs on the outside frame of the transition box (N).



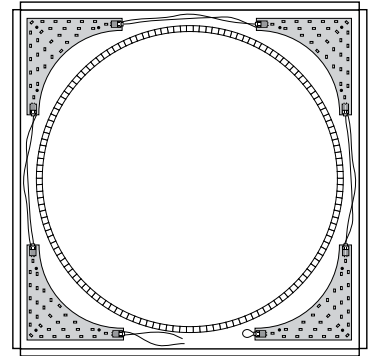
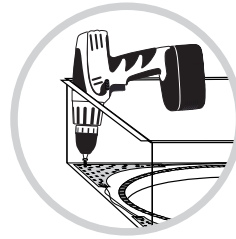
STEP 11

Place a white washer (**P**) on each of the (12) $\frac{3}{4}$ " self-tapping screws (**O**) and place the screws through the pre-drilled holes on the LED quadrants (**Q**). Make sure you place the screws in from the blue/gray side with exposed LEDs (bottom).



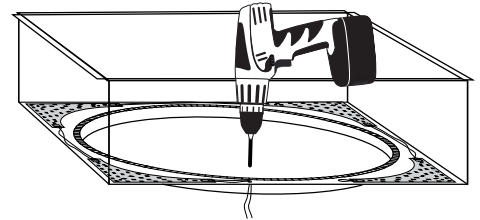
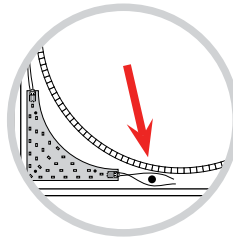
STEP 12

One by one, place and secure the LED quadrants (**Q**) into the each corner of the transition box by drilling the self-tapping screws (**O**) into the transition box, so that the LEDs face downward towards the room and quadrants are flush against the transition box.



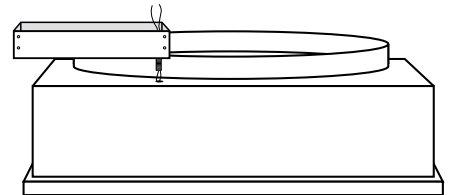
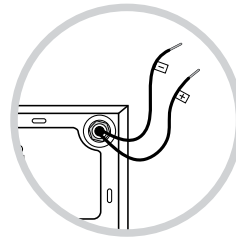
STEP 13

Drill a $\frac{1}{4}$ " hole through the transition box close to the LED quadrant (**Q**) with the loose wire. Feed the wire through the hole so it can connect to the LED driver (**S2**).



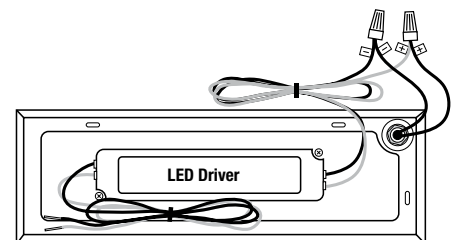
STEP 14

Open the LED driver enclosure (**S**) and feed the loose wire from the LED quadrant up the hollow, threaded bolt (**S4**) and into the LED driver enclosure.



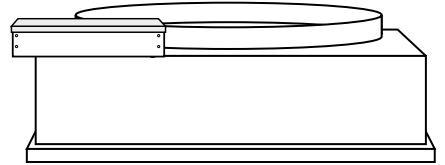
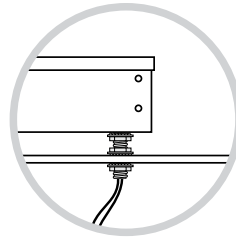
STEP 15

Using the wire nuts (**R**) provided, connect the loose wires from the LED quadrant to the LED driver wires (**S1**); make sure the positive wire (+) connects with the positive wire and the negative (-) with the negative. Carefully tuck all wires into the enclosure and replace the cover.



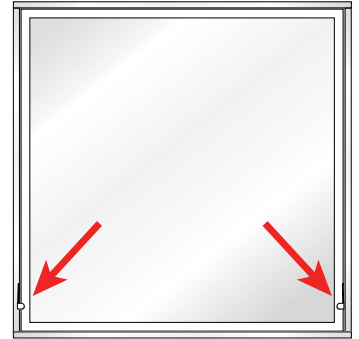
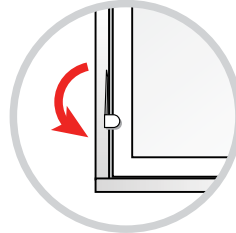
STEP 16

Secure the LED driver enclosure to the transition box by feeding the hollow, threaded bolt (S4) through the ¼" you cut and tightening one nut **INSIDE** the transition box and one nut on the **OUTSIDE** of the transition box.



STEP 17

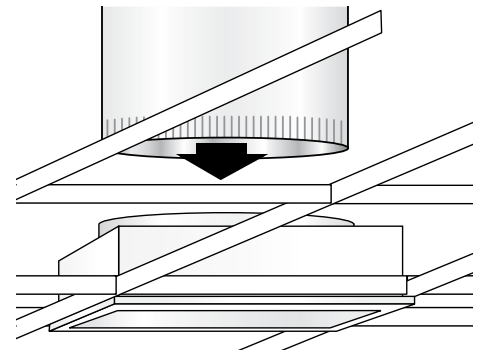
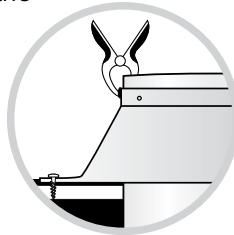
Replace the diffuser to the transition box by placing the flat tabs inside the frame first and then pushing the diffuser in place.



STEP 18

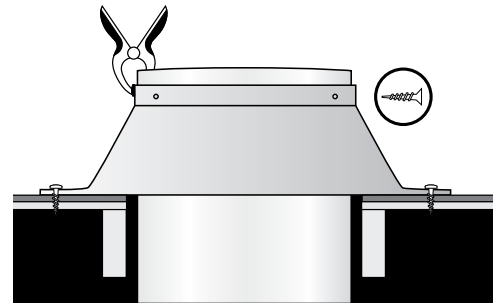
Install the transition box (N) into the ceiling grid system. From the roof, slide the light pipe assembly with the crimped edge down into the transition box collar.

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 19

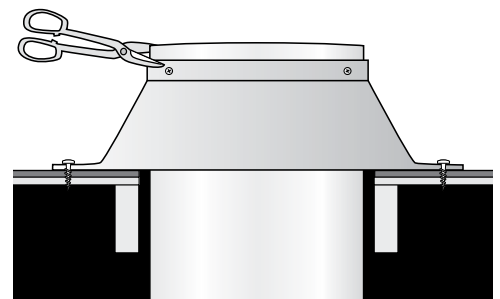
Secure the light pipe to the flashing with the (4) Phillips flat head 1 ½" screws (D) provided through the (4) pre-drilled holes on the flashing lip.



STEP 20

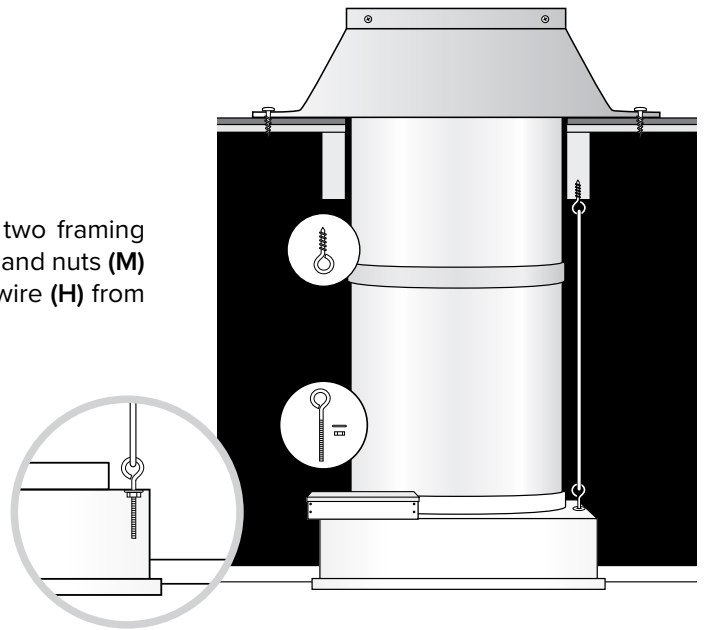
If there is excess pipe sticking out of the flashing, using tin snips, cut from the top down to the lip of the flashing and trim off the excess pipe.

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



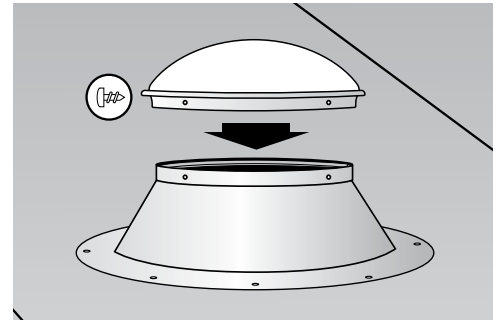
STEP 21

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.



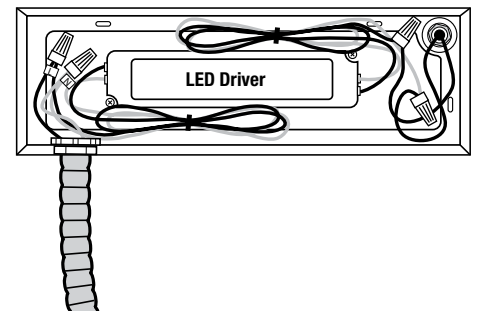
STEP 22

Place the dome (**A**) on top of the flashing. 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 23

Run power to the LED driver (**S**) per local electrical codes and use whichever control method is preferred, either manual switch, wireless remote control or occupancy sensor.





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 to 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.



To register your Tubular Skylight, please visit
www.nltubular.com/warranty-registration.html



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