13" Curb Mount 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.

PARTS LIST

- 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 ½" Phillips Head Stainless Steel Screws (USED FOR DROP CEILING INSTALLATIONS ONLY)
- **E.** Commercial Pure Grade Aluminum Curb Flashing
- F. (8) 1 1/2" Phillips Head Stainless Steel Screws
- G. Heavy Duty Foil Tape
- H. Light Pipe, (2) 24" sections
- I. White Nylon Horse Hair Gasket (self-adhesive)
- J. (8) Phillips Head Stainless Steel ½" Self-Tapping Screws
- K. (4) U-channel PVC self-adhesive tabs
- L. (3) Black Speed Nuts
- M. Ceiling Ring
- N. (3) 1 1/2" Phillips Screws
- O. (2) Small Clear Polycarbonate Lenses
- P. (1) Large Clear Polycarbonate Lens
- Q. High Impact Acrylic Diffuser
- R. White Powder Coated Aluminum Trim Ring

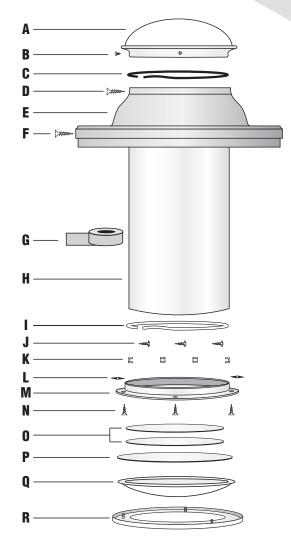
TOOLS NEEDED

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

MATERIALS/TOOLS TO BUILD CURB

- 2" x 10" Pressure Treated Lumber
- Hand or Circular Saw
- Wood Screws

- Galvanized Nails
- Roofing Material (to match existing roofing)





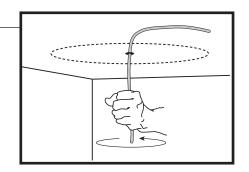
IMPORTANT: Prior to beginning installation, it is critical to plan the placement of the tubular skylight so that curb flashing and ceiling trim ring are aligned. Ensure that the curb is not installed over any framing trusses. **DO NOT CUT ANY STRUCTURAL FRAMING.**

INSTALLATION POINTERS

- When determining location of the unit, southern exposure is recommended. Also consider potential problems such as objects shading the unit during certain times of the day.
- Although adjustable elbows are available for use, straight light pipe runs result in higher light output and easier installation.
- Prior to starting the job, cut packaging straps on the light pipe and uncoil the tubes.
- It is highly critical to check for obstructions above the ceiling which may hinder the installation. If possible, visually check to ensure that there are no electrical wires or other obstructions where you plan to install the skylight. If you can not check visually, use a piece of wire as outlined in Step 1.

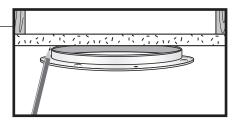
Step 1

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 (L) between joists as close to the desired installation area as possible. Mark the center of the ceiling ring (L), 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.



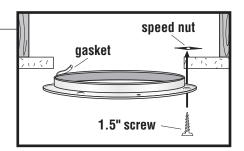
Step 2

If there are no obstructions, scribe mark around the ceiling ring inner ring (M). Using a drywall saw, cut out the scribed mark in the ceiling.



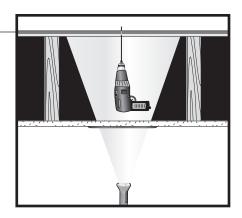
Step 3

Install the ceiling ring (M) on the ceiling. Place ceiling ring in the hole cut in Step 2. Peel the protective covering off the white horse hair gasket (I) and apply gasket to the inner lip of the ceiling ring (M). This gasket ensures a dust free fit between the light pipe and the ceiling collar. Secure the ceiling collar to ceiling by inserting a 1½" Phillips flathead screw (N) into one of the three pre-drilled dimpled holes and screwing it up through the drywall into speed nut (L) provided. Repeat this process for the other two screws.



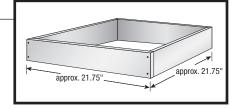
Step 4

Place a ladder under ceiling ring hole and place a flashlight on top of ladder. The resulting flashlight beam will mark the location for centering hole. With a drill bit and appropriate extension rods, drill a pilot hole in the marked location on bottom side of roof. If attic is accessible, a plumb-bob may also be used.



Step 5

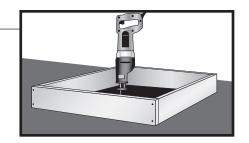
Assemble a curb with the **outside** dimensions slightly smaller than the width of flashing (approximately $21\frac{3}{4}$ " x $21\frac{3}{4}$ "). The size of curb will vary depending on roofing material. Use pressure-treated lumber secured at all four corners with wood screws or galvanized nails (use 2" x 10" lumber - adhere to local building codes).



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

Step 6

On the roof, locate the centering hole drilled in Step 3. Center the curb over the hole and ensure that the curb placement is NOT over any structural trusses. Outline the inside perimeter of the curb with a marking pencil. Using a reciprocating saw, cut out opening. **DO NOT CUT STRUCTURAL FRAMING.**



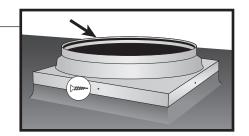
Step 7

Place 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.



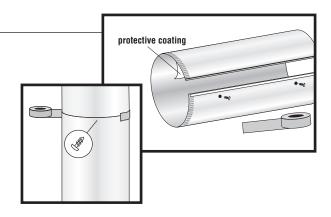
Step 8

Attach the skylight flashing **(E)** to the curb using the (4) 1 ½" Phillips head stainless steel screws **(F)** provided through the pre-drilled holes on the skylight flashing lip. Peel the protective backing off the black nylon horse hair gasket **(C)** and apply gasket to the **INNER** lip the flashing collar.



Step 9

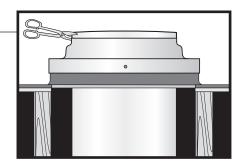
To assemble light pipe (H), peel back the protective coating that covers the mirror coating about 1" from the opposite edge of the double sided tape. Remove paper backing from the double-sided tape and overlap tube ends and seal edges. Put pressure on both sides of seal to ensure a good bond. Secure tube using the (2) ½" self-tapping screws (J) provided. Then place foil tape (G) 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) ½" self-tapping screws (J) provided and seal joints with foil tape (G).



Step 10

Insert light pipe **(H)** through the curb-mount flashing **(E)** with crimped end down and gently rock pipe back and forth with slight downward pressure until pipe terminates evenly with the inner collar of the ceiling ring **(M)**. Clamp light pipe to flashing lip so that it does not slip down. Trim any excess light pipe with tin snips.

NOTE: Use caution, light pipe is extremely sharp.

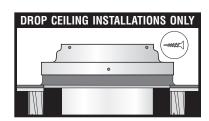


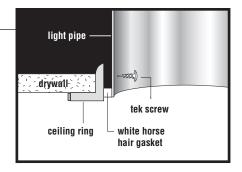
Step 11

Back inside, secure the bottom of light pipe to ceiling ring with (4) tek screws (J).

ON DROP CEILING INSTALLATIONS ONLY:

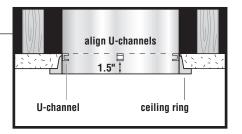
Do not attach the light pipe to the ceiling ring on drop ceiling installations. The light pipe must be attached to the flashing on the roof using (4) 1 ½" Phillips flat head screws (**D**). Clamp light pipe to the flashing lip to prevent it from falling through while securing all four screws through the counter-sinked holes on flashing.





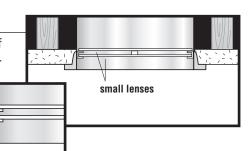
Step 12

Remove paper backing from the adhesive tape on the U-channels (K) and place 1.5" from bottom of light pipe equidistant from each other so legs of the U-channels align vertically.



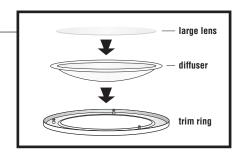
Step 13

Remove protective film from both sides of small lenses (O). Place one lens on TOP of the U-channel leq (K) and the other lens on the BOTTOM of U-channel leq (K) (see closeup).



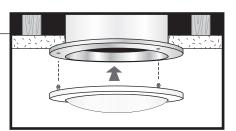
Step 14

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



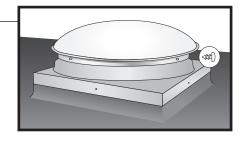
Step 15

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



Step 16

Place the dome (A) on top of the flashing unit. Secure the 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.



You can register online at www.nltubular.com or

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

REGISTRATION

Natural Light Tubular Skylight Installer:			
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Were you satisfied with the installation job? Ν

What made you choose our product?