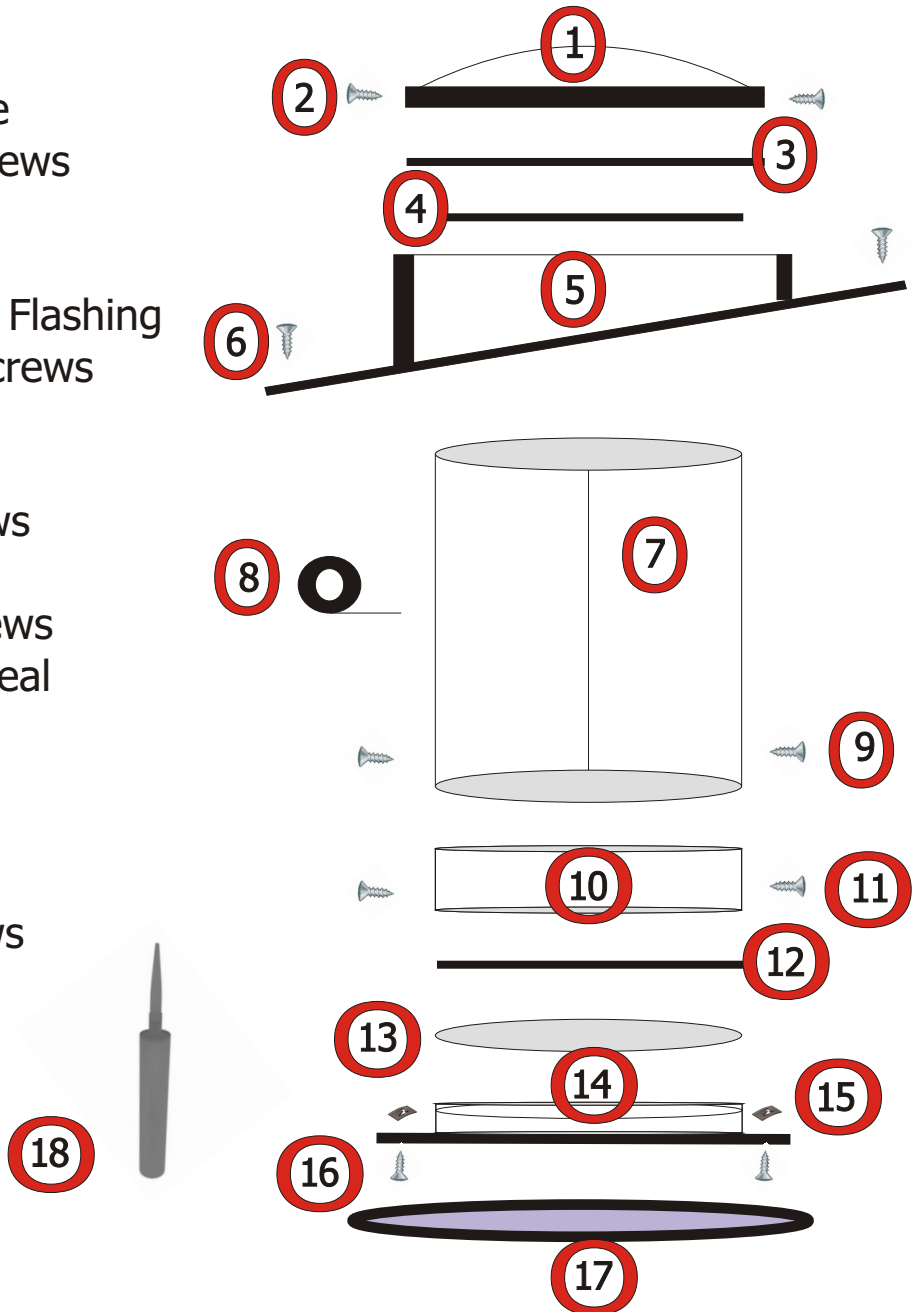


!Caution! Read the following very carefully!

It is not recommended that homeowners attempt to install this tubular system themselves. While not a complicated process, it takes some expertise, and must be done right to ensure a watertight and heat proof system. It is our recommendation that you have a licensed contractor install our product. If you choose to do it yourself, be aware of the following safety precautions: Avoid wet or slippery roofs. Use extreme care when using ladders or on heights. The tubing & Flashing have sharp edges; use protective gloves. Do not leave tubing in sunlight, it can get very hot, burn you and ignite objects. Leave protective film on until ready to install. Keep children away from components and the installation location.

Tools needed: tape measure, marking pen, sheet rock saw, plumb-bob, dust mask for attic, safety glasses, head lamp, tin snips, pry bar, saws-all and screw gun.

1. High Impact Acrylic Dome
2. (8) 1.25" Zinc Coated Screws
3. EPDM Uv Dome Seal
4. Upper EPDM Tube Seal
5. 24 gauge G90 galvanized Flashing
6. (10) 1.25" Zinc Coated Screws
7. Spectralume Tubing
8. Tubing tape
9. (4) 1/2" Zinc Coated Screws
10. Receiving Collar
11. (4) 1/2" Zinc Coated Screws
12. Receiving Collar EPDM seal
13. Heat Shield
14. Fire Mounting Ring
15. Flat Speed Nuts
- (4) 10" (5) 14" (8) 18"
16. 1.25" Zinc Coated Screws
- (4) 10" (5) 14" (8) 18"
17. Optifuse Diffuser
18. Sealant



This product is designed to diffuse light. It will diffuse the light in a wide circular pattern. For best results avoid installing near a wall or a corner. This will prevent light diffusion. Once it hits a wall, it cannot be diffused. If, for example, you want light to spread throughout your whole kitchen, it would be best to center the tube in the middle of the room. If you wish to light up one specific area, then you would want to position it directly over that area.



Fig 1: Insert screw to locate center of tube.

Step 1) Determine the approximate location in the ceiling where you want the tube. Get a measurement from known locations, a wall, a ceiling vent, a ceiling light, etc. Go into the attic and use the measurement locations to determine if the desired location is clear (no obstacles). It can't conflict with roof trusses, vents or anything that is on the attic side of your ceiling. When you are sure there is enough clearance, put a screw down through the ceiling to mark the center-line location. Each size tube needs a minimum distance from the rafters. The 10" tube needs 6 inches, the 14" needs 7.5" and the 18" needs 9.5". (See Fig.



Fig 2a: Use plumb bob to locate roof center.

Step 2) Using a plumb line, hold the string onto the roof deck until it lines up with your screw on the ceiling. Once lined up, mark it and (See Fig. 2a&b) place a screw through the roof deck. This will be your center location on the roof. It doesn't have to be perfectly in alignment but should be as close as you can reasonably get it.



Fig 2b: Put a 2" screw through the roof deck.



Fig 3: Use flashing as a template.

Step 3) Using the protruding screw as a center point, take the flashing and use it as your template. Mark the outline with a felt marker, chalk or something similar. (See Fig. 3) Once that is done, proceed to cut out the square outline, using a saw-sall or some other appropriate tool. Be careful not to cut any trusses!

Step 4) You will need to notice some important features of the flashing. There is a "high" and "low" sidewall. The low sidewall should be pointing toward the peak roof line and the high sidewall should be pointing away or down slope. Using a prybar remove nails from shingles 5" from edge. Dry set the flashing to make sure it fits. Trim the shingles as needed to give a 1" valley around flashing. Below the shingles, is a layer of black felt. Slice the felt back 5" at 9:00 and 3:00 position right above the first layer of shingles in order for the flashing to slide under. (See Fig 4a) Put a bead of sealant between the felt and the roof deck and a bead on the underside of the flashing. (See Fig 4b) Now slide the flashing underneath the felt and shingles. (See Fig 4c) Once you are sure the flashing is in the proper location, use the provided screws to screw the flashing securely to the roof. Three on the top and two on each sides under roof material and three at the bottom of the flashing base. Apply sealant over all screws and under any loose shingles.



Fig 4a

Cut a 5" slit at 9 and 3 o'clock positions.



Fig 4b

Seal under felt and flashing with supplied sealant.



Fig 4c

Slide the flashing underneath the felt and shingles.



Fig 5a

Mark ceiling with template gauge.

Step 5) Use the supplied ceiling gauge template to mark for fire ring installation. You will notice one hole on one side and two on the other. The single hole goes over the screw in the ceiling. The other two holes are marked 10 and 14 which represent each size used. Use the hole that is appropriate for the size you purchased. If you are unable to use the ceiling gauge template, you can use the fire ring as an alternative. Trace the inside of the ring. Now you can proceed to cut your mounting hole in the ceiling, using a sheet rock saw. (See Fig. 5a) Mount the fire ring in the ceiling using (4) 1 1/4" screws and flat speed nuts. **Be careful with the speed nuts as they are sharp.** Screw through the holes until screw protrudes through backside of sheet rock. Then place speed nut on top of screw. Tighten until snug. Don't over tighten. (See Fig. 5b).



Fig 5b

Fasten fire ring with screws & speed nuts.

Step 6) Carefully slide the receiving collar up through the fire ring until it sits flush with the bottom and sits inside the lip. (See Fig. 6a) Make sure the white EPDM rubber strip stays in position at the bottom of the receiving collar. This will keep any dust from coming down from the attic into your room. Screw it into place with (4) ½” sheet metal screws. (See Fig 6b) You can now remove the protective film.



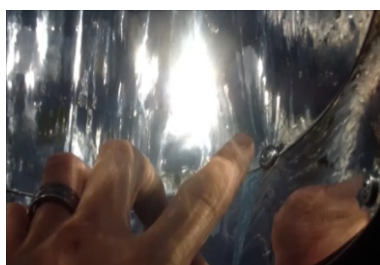
Slide in receiving collar, screw to fire ring, then measure tubing length.

To find the tubing length measure from the top of the receiving collar to the bottom of the hole in the flashing. (See Fig. 6c) Try and measure from the middle of the flashing. Add two inches. This will allow for overlap.

Step 7) Caution: Remove the protective plastic covering from the inside surface of all tubing material before proceeding to install the tubing! You are now ready to turn the provided tube sections into assembled tubes. This is best done on a flat level surface. Although these sections are pre-rolled, they must be fastened together with tape and two screws per section. This tubing is designed to telescope, one inside of the other. On the tubing you will notice a line running length wise. This is your guide. One end needs to be on one side of the line and the other end needs to be on the opposite side of the line. (See Fig. 7a) To temporarily hold in place use a 2” piece of tape. (See Fig. 7b) Now you can tape the 2’ joint with tape. (See Fig. 7c) Once you make enough 2’ sections, you will need to put all the sections together. Place the small end inside of the big end by 1”. (See Fig. 7d) Now tape the joint. (See Fig. 7e) Screw together with (2) ½” screws. (See Fig. 7f)

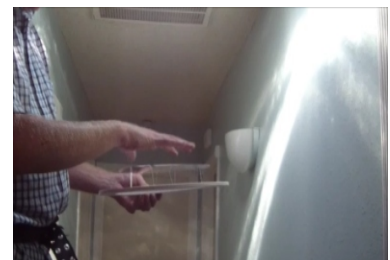


Step 8) Carefully insert the tube through the hole in the flashing and down into the receiving collar. (See Fig. 8a) It should sit inside the receiving collar. You should have at least 1” above the flashing hole and 1” inside the receiving collar. Now place the tube seal between the flashing and tube.. (See Fig. 8b) Cut tubing vertically just above the EPDM tube seal. Do this every 2”. (See Fig. 8c) This will create tabs you can fold over the seal onto the face of the pitch plate. If these segments are too long then trim to fit. (See Fig. 8d) Place the dome seal around the entire upper perimeter of the flashing. Once on, place pressure along entire edge of seal. (See Fig. 8d) Now you can install the dome over the seal onto the flashing and screw down with (8) 1 ¼” screws. (See Fig. 8e) If you have purchased (optional) upper diffuser lens, place it on top of folded tubing before installing dome.



On the interior at the location where the tube and receiving collar meet, place a screw to hold tube in place. (See Fig. 9a) Now tape the entire joint.

Place the heat shield on top of the diffuser. The diffuser has rare earth magnets that will attach directly to the fire ring.



CONGRATULATIONS! You have now completed the Sun Glo installation.