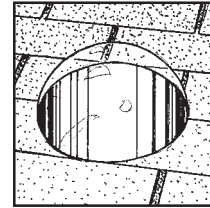


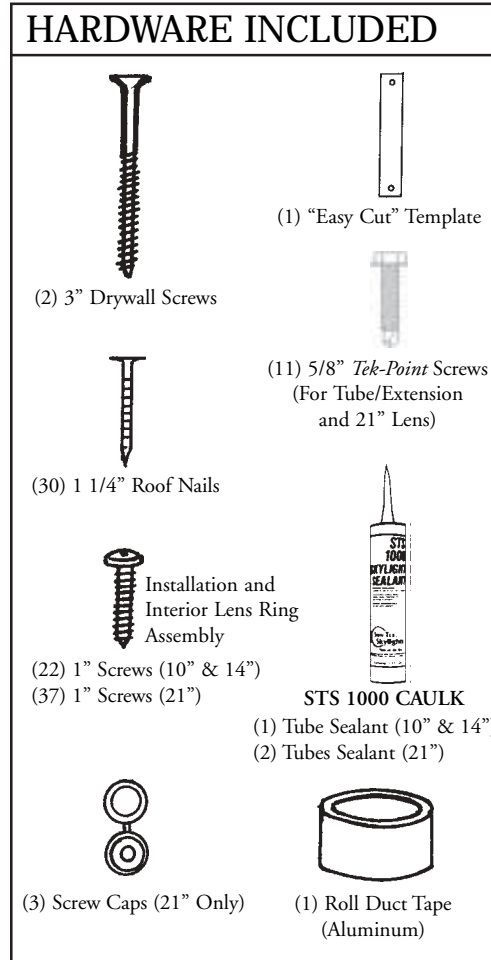
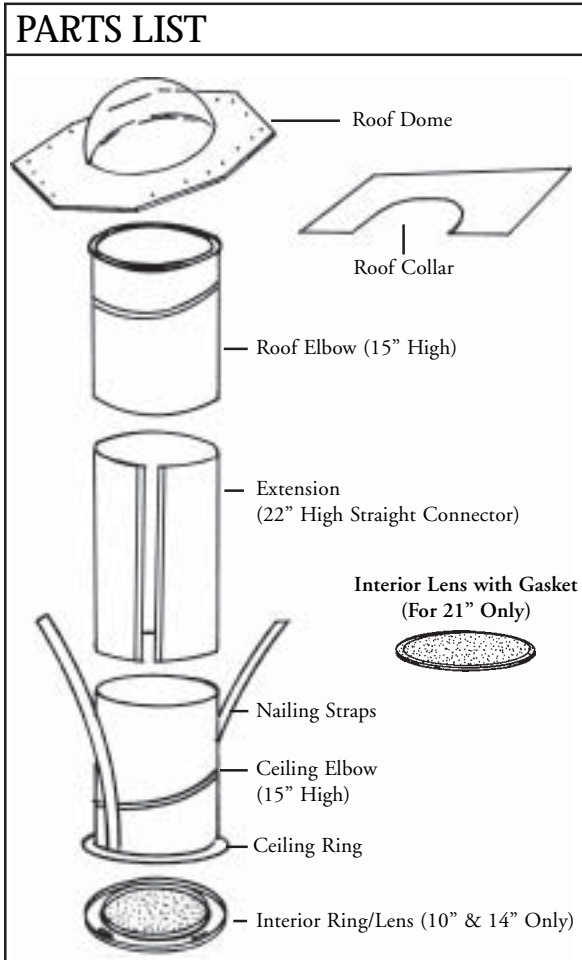


INSTALLATION INSTRUCTIONS SELF-FLASHING TUBULAR SKYLIGHTS SIZES 10" 14" 21"



**For inaccessible attic spaces, see
"Shallow Attic" Section (10" & 14" Tube Only)**

Recommended minimum 18" tube length for proper light transfer.



Instructions are intended for roofs with minimum 2:12 pitch and asphalt shingles

GETTING STARTED

1. Read the instructions completely, making sure that you have all of the tools needed to finish the job.
2. Determine where in the room you want the light from the Sun-Tek Tube to shine. (**Hint: For best results, always try to center the light source in the room.**) For optimum light, place on the south facing slope of the roof, if possible, and try to avoid shaded areas.

TOOLS NEEDED

- | | |
|--|--------------------------|
| Pencil | Caulking Gun |
| Ladder | Plumb bob |
| Jig Saw | Razor knife or tin snips |
| Tape Measure | Pry bar |
| Screwdriver (Phillips) | |
| Safety equipment (glasses, gloves, etc.) | |

MARKING AND CUTTING THE HOLES

Note: Do not cut holes until both ceiling and roof hole locations are marked.

Marking the Center- Ceiling

3. Locate the center of the ceiling hole and make sure it is free of any obstructions in the attic. One of the following methods may be helpful:

3a. Have an assistant in the attic while you tap on the ceiling to indicate where the tube will be located. Minor adjustments may need to be made as a result of obstructions that need to be avoided, such as framing members, A/C ducts, etc. Using a pencil, mark the location. **(See Drawing 3.4)**

- Or -

3b. Take measurements from landmarks such as AC registers, light fixtures, etc. and transfer those measurements to the attic. Using a small nail, tap it through the drywall to mark the desired location.

4. Put "Easy Cut" template over or through the screw and place a pencil in the other hole, and draw a circle on the ceiling. Leave the screw in the ceiling. **(See Drawing 3.4)**

5. Using a plumb bob, find the location on the underside of the roof that lies directly above the drywall screw, that indicates the center of the ceiling hole. Mark that location with a pencil mark. Using page titled "**DETERMINING ROOF PITCH**", determine which slope best represents the roof where your tube is to be installed. Drop the mark for the roof hole directly down the slope by the amount indicated for the slope of your roof. For example **(See Drawing 5A)**, if your roof is a 3:12 pitch, you would move the mark for the center of roof hole $1\frac{1}{2}$ " down the slope of the roof for a flat ceiling and $15/16$ " for a cathedral ceiling. Mark the location with a 3" drywall screw by screwing up through the roof deck.

If the above method does not work for your application, take both elbows into the attic and place where you want the openings to be. Adjust and move the elbows until they align with each other and trace the outside and find the center. This is the center location for your roof and ceiling holes.

Cutting the Hole in the Ceiling

6. Cut hole opening in the drywall using a key hole or jig saw. Use the screw to hold the cut out section.

Marking the Center- Roof

7. Place the "Easy cut" template over the screw that protrudes up through the roof and scratch out a circle using a nail or screw, and cut through shingle and felt. **(See Drawing 7,8)**

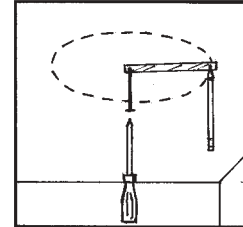
Cutting the Hole in the Roof

8. Using a key hole or jig saw, cut the hole in the roof.

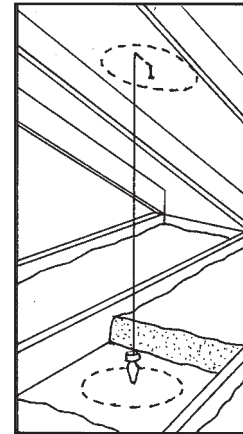
Removing the Shingles

9. Using a pry bar, carefully remove enough shingles to allow the flange of the tube to lie flat on the felt paper. The flange of the dome should sit on top of the shingle at the bottom of the opening, therefore, do not remove it. Carefully pull the nails or fasteners out of all the shingles that are being removed, being sure **NOT TO DAMAGE THE**

3. 4.



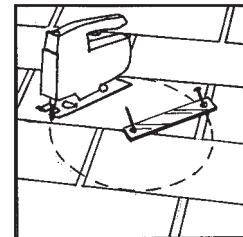
5.



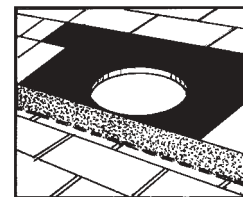
5A.



7. 8.



9.



SHINGLES AS THEY WILL BE USED AGAIN. Leave plastic covering on dome until roof installation is complete.

**FOR SHALLOW ATTIC INSTALLATION INSTRUCTIONS-
READ THE FOLLOWING 1 S.A-10 S.A.**

Marking and Cutting the Holes

1 S.A. Before drilling or cutting any holes, make sure the intended location is free of obstructions. Place a screw or nail through one side of the template and attach to the ceiling. Mark the ceiling with a pencil by rotating the template (**See Drawing 3.4**). Remove the template. Using a drill bit (1/4" minimum) **with extension**, drill perpendicular to the ceiling and up through the roof.

2 S.A. Cut the hole in the ceiling.

3 S.A. Using the template, centered at the hole in the roof, mark the roof and cut the hole.

4 S.A. Remove the protective film from inside the ceiling elbow and the extension, if extension is necessary.

IF EXTENSION IS NEEDED

5 S.A. Wrap the extension around the ceiling elbow, overlap 1 to 2 inches. Remove the backing to the tape on the extension and press the extension together. Attach the extension to the ceiling elbow using three *Tek-Point* screws as shown (**See the X's on Drawing 5 S.A.**). Seal all seams and joist with duct tape.

6 S.A. Place the nailing straps along the outside of the tube and hold in place with tape. If additional strapping is needed, attach securely with screws. (**Additional strap not provided**)

7 S.A. Push the tube up through the ceiling until the metal ring on the bottom of the ceiling elbow is flush and snug with the ceiling. Mark the tube from the roof flush with the roof deck (**See dotted line on Drawing 7 S.A.**). Pull the tube back out of the opening. Pull straps out of tube and cut the tube 1" above the mark.

8 S.A. Fold the straps along the sides and into the tube. Push the tube up through the ceiling hole until the ceiling elbow metal ring is flush and snug with the ceiling.

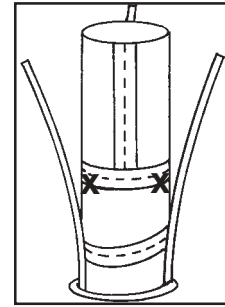
9 S.A. Nail the straps to the roof deck 2" from the opening and cut off the excess strap. Make cuts every 1" around the tube down to the roof deck to form tabs. Bend the tabs over flush with the roof deck (**See Drawing 9 S.A.**). Seal the top of the tube to prevent air exchange between the attic and the tube. Putty tape works well. (**Putty tape not included**)

10 S.A. The roof should be shingled up to the bottom of the roof opening before the dome is installed. (**Follow Instructions 13-21**)

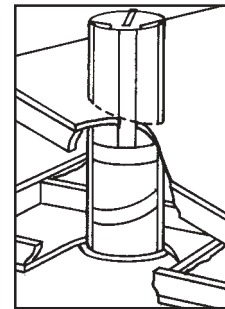
Assembly of Tube

10. Insert the roof elbow through the hole in the roof so that the flange of the elbow is resting flat on the roofing felt. To help minimize adjustments during the assembly process, place the seam in the elbow in the 12 o'clock position (**top of the opening**).

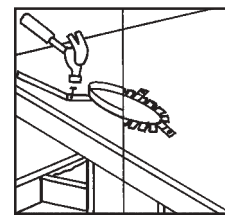
5 S.A.



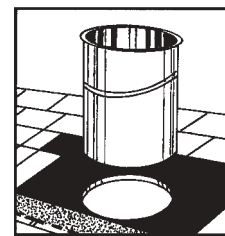
7 S.A.



9 S.A.



10.



10A.



Slide the elbow to the bottom of the opening and place the roof collar under the flange from the top of the opening (See Drawing 10A). Place the two roofing nails in the roof collar to hold it in position. Remove plastic protection sheet from inside the roof elbow.

11. The shingles that have a curved cut in them should have the curve trimmed $\frac{1}{4}$ " larger to allow for the thickness of the dome material. (NOTE: **Dry fit the shingles into position to keep sealant from getting on the dome.**)

12. Place a $\frac{3}{8}$ inch diameter bead of **STS 1000 sealant (included)** around the opening on the roof set back from the edge $1\frac{1}{4}$ ". Place a second $\frac{3}{8}$ inch bead set back $1\frac{1}{4}$ " from the first bead. (See Drawing 12)



13. Remove protective film from bottom of dome. Place the dome over the opening with the "This Edge Down" sticker to the bottom of the opening. Center over the opening, and press into place (See Drawing 13). **IMPORTANT: Bottom flange of skylight MUST go on top of shingles.**

14. Fasten the dome to the roof using the screws provided. Do not nail or screw through flange except where holes are provided. **DO NOT OVER TIGHTEN.**

15. Run a bead of **STS 1000 sealant** around the perimeter of the flange where it touches the roof. Also, seal the head of every installation screw. **NOTE: USE OF ANY SEALANT OTHER THAN STS 1000, VOIDS WARRANTY.** Take plastic covering off dome.

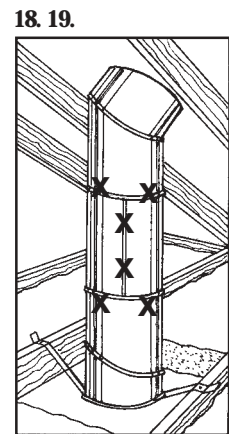
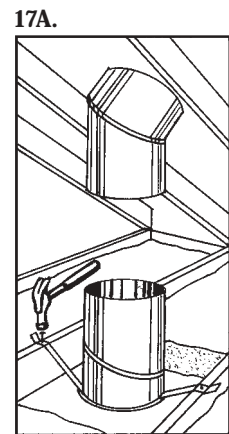
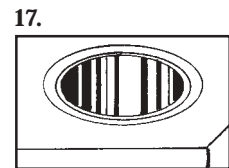
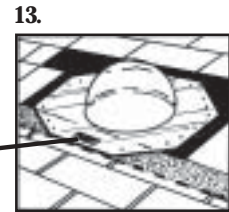
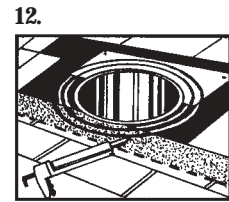
16. Replace the shingles from the bottom up. Roofing nails are provided. **CAUTION: DO NOT PUT A NAIL THROUGH THE FLANGE OF THE DOME.** The bottom flange of the dome can be covered with a shingle but **DO NOT** seal this shingle down to the top of the flange.

17. Push the interior elbow up through the ceiling hole (See Drawing 17). From inside the attic, pull the elbow up so that the flange is flush with the ceiling. Align ceiling elbow seam with the seam in the roof elbow. Pull a nailing strap snugly to a rafter and nail into place with $1\frac{1}{4}$ " roofing nails. Repeat with the second nailing strap. If a nailing position cannot be reached with the nailing strap, an additional 2 x 4 may need to be added between the joists. Remove plastic protection sheet from inside the ceiling elbow (See Drawing 17A).

18. Rotate both the ceiling and roof elbows so that they align with each other. The elbows rotate best when handled gently. **REMINDER: ALL PLASTIC PROTECTION IN ELBOWS AND EXTENSIONS SHOULD BE REMOVED BY THIS TIME.** Fit the straight connector on the outside of the elbows to confirm fit. While holding the straight connector in position, remove the backing on the double sided tape and press firmly to adhere the tube to itself.

19. Attach the extension to the elbows using the *Tek-Point* screws provided. Equally space 3 screws through the overlap at the extension and the elbows and 2 screws through the overlapped seams of the extension. (See the X's on Drawing 18 & 19)

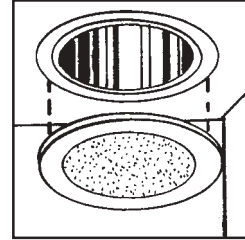
19A. Use the duct tape to seal all joints and seams in the tube assembly. *Sun-Tek* recommends for maximum thermal performance wrapping the tube with insulation to reduce heat loss and condensation.



Interior Lens (For 10" & 14" ONLY)

20. Lubricate the gasket on the lens using petroleum jelly or liquid soap. Push the gasket side of the ring/lens assembly into the ceiling elbow until the magnets make contact with the steel ring. (See Drawing 20)

20. (For 10" & 14" ONLY)

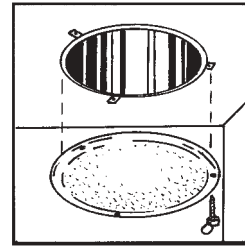


Interior Dome (For 21" ONLY)

20. Place the interior dome gasket around the edge of the interior dome.

21. Align the interior dome with the tabs on the interior tube and fasten screws as shown in Drawing 21. DO NOT OVER TIGHTEN. Snap the screw covers closed. The job is complete.

21. (For 21" ONLY)



Cleaning: Use a mild glass cleaner and a clean sponge or soft cloth.

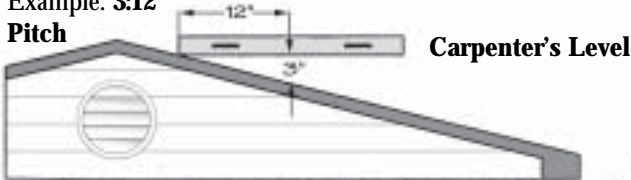
DETERMINING ROOF PITCH

There are two different ways to determine your roof slope.

Method One

- A. Take a carpenter's level and place it against your roof as shown in the illustration below. Be sure it is level.
- B. From the point where the level touches the roof, measure out 12 inches.
- C. From this point, measure the distance in inches from the bottom of the level to the roof.
- D. This will be the first number in the roof pitch. The second number is always 12.
- E. Use the chart below (See Amount of Drop) to determine the amount you will need to drop the mark for the roof hole down the slope of your roof as indicated below.

Example: **3:12 Pitch**

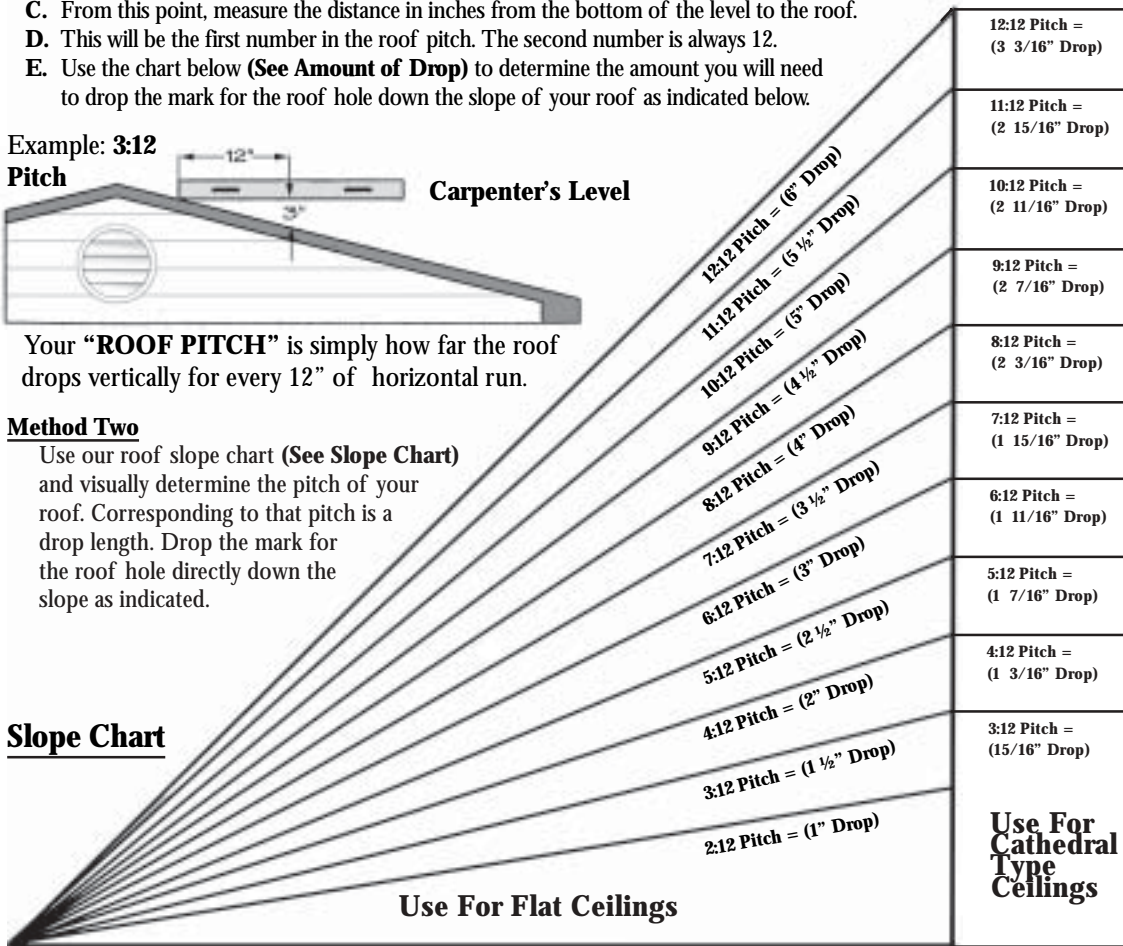


Your "ROOF PITCH" is simply how far the roof drops vertically for every 12" of horizontal run.

Method Two

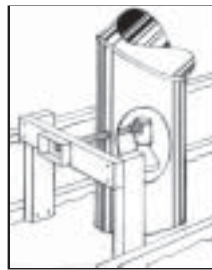
Use our roof slope chart (See Slope Chart) and visually determine the pitch of your roof. Corresponding to that pitch is a drop length. Drop the mark for the roof hole directly down the slope as indicated.

Slope Chart





All installation information is supplied in good faith, but without recommendation as to its use. No guarantee of the results of any use of this information is to be implied, since conditions of use are beyond our control. Please consult local building codes for compliance before installing. When assembling tube, do not place tools or other items on the dome as it may scratch.



Light Kit

You can use your Sun-Tek Tube as an extra light source DAY OR NIGHT with the addition of our special light kit.

Extension Tunnels

Extension tunnels are available for situations requiring more than 50 inches of tubing.

SUN-TEK TUBE LIMITED WARRANTY

Sun-Tek Manufacturing, Inc. ("Sun-Tek"), 10303 General Drive, Orlando, Florida 32824, (407) 859-2117, warrants this tubular skylight on the following terms and conditions: **A. Warranty Coverage:** This warranty applies to both the original purchaser and first consumer-owner. **B. Warranty Duration:** This warranty shall remain in effect for a period of ten (10) years after the date the tube is purchased or the date it is delivered to the first consumer-owner, whichever is later. **C. Warranty Application:** This warranty applied only to the materials and fabrication of the tube and does not apply to any defect or damage caused by improper use, improper installation, improper care, shipping damage or accident. This warranty does not cover any cosmetic changes in the tube, including, but not limited to, pitting, hazing, paint finish, discoloration. **D. Performance by Sun-Tek:** During the warranty period, Sun-Tek will provide free of charge an equivalent new tube (or component thereof) for one found to be defective in material or workmanship. Shipping costs of such replacements are not the responsibility of Sun-Tek. Sun-Tek will not be responsible for any costs of removal or re-installation. **E. Validation Procedure:** To obtain performance under this warranty, the purchaser must: (1) **On installed tubes, contact Sun-Tek for instructions before removing tube. Removal of tube from roof before inspection will void warranty.** (2) Notify Sun-Tek in writing of any claim within (30) days after the defect is discovered. (3) Sun-Tek or its authorized agents must examine the tube and determine to its satisfaction whether the defect is covered by this warranty; and (4) present a copy of the receipt as proof of purchase. **F. Implied Warranties:** IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESS WARRANTIES PROVIDED HEREON. Some states do not allow limitations of how long an implied warranty lasts, so the above limitation may not apply to you. **G. Incidental or Consequential Damages:** SUN-TEK SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, LOSS OF TIME OR REVENUE, DAMAGE RESULTING TO OTHER PROPERTY OR EXPENSES, except where states may not allow it. **H. Exclusive Warranty:** THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES. This warranty gives you specific legal rights. You may have other rights which vary from state to state.



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