

# THANK YOU FOR CHOOSING ECOMAX TUBE SKYLIGHTS!

Get ready to enjoy Natural Daylight in your home.

#### WARNING: PLEASE READ ENTIRE GUIDE BEFORE PERFORMING THIS INSTALLATION. THE WARRANTY OF THIS TUBE SKYLIGHT DEPENDS ON FOLLOWING THE PROPER GUIDELINES FOR SEALING & CONNECTING ALL COMPONENTS TO THE ROOF & CEILING. \*\*\*IMPORTANT\*\*\*

DO NOT REMOVE REFLECTIVE TUBE FILM UNTIL YOU ARE CONNECTING TUBE SECTIONS OR UNTIL INSTALLING THROUGH ATTIC. MATERIAL IS HIGHLY REFLECTIVE, CAN CREATE A HOT SPOT AND CAUSE A FIRE IF DIRECTLY HIT BY SUN RAYS.

Although previous experience is not required, it is recommended that the person installing this unit have basic knowledge of Do-It-Yourself projects or is comfortable working on a roof and attic. For a faster install, use a second person when connecting the tube through the attic/roof.

## INCLUDED IN KIT FOR PITCHED/SHINGLE ROOF

### Skylight Components

- Dome Assembly with Light Scatter
- Pitched Flashing > for 3-6/12 roofs
- (2) 24" long Reflective Tubes
- Ceiling Assembly > with Tube Starter & Dual Diffuser
- Hardware Kit & Cutting Templates

## <u>Hardware Kit</u>

- #8 x ¼" Dome Screws
- #10 x 1 ½" Flashing Screws
- #8 x ½" Tube Screws
- Roof Sealant
- Weather Dust Gasket
- Aluminum Foil Tape
- Roof Template (not pictured)
- Ceiling Template (not pictured)



Before you begin: Place a large tarp on the floor to protect any floor finishes from falling debris; this will also make cleanup faster.

#### \*\*SAFETY FIRST\*\*

Please use the following items for your own safety & well-being

Safety Glasses
Face Mask
Gloves

Dress properly to protect yourself from home insulation & other materials

Dust pan & Brush to clean off roof & other debris

- Tape Measurer
- Pencil/Lumber Crayon
- Reciprocating Saw
- Electric Drill Drill, Phillips & Hex bits
- Ladder(s) for roof, attic & ceiling access
- Drywall Saw

• Wire hanger

Headlamp - for use in the attic

**REQUIRED TOOLS** 

- Stud Finder
- Utility Knife
- Caulking Gun
- Plumb bob optional

Rise in Inches

11

10

9



# STEP 1: CHOOSE AN INSIDE LOCATION FOR THE TUBE SKYLIGHT

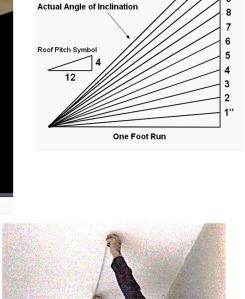
The concept of a Tube Skylight is to allow sunlight to enter through a clear domed "window" above the roof into a reflective tube and into a living area.

This install will have a straight run & your roof must have a 3/12-6/12 pitch to complete this install properly. Use the Roof Pitch Chart to determine if your roof is the right fit.

You can also download an app, such as PitchGauge from the GooglePlay store to better determine the pitch of your roof.

**TIP: SOUTH/SOUTHWEST SIDE OF ROOF** INSTALLATION IS BEST FOR OPTIMAL SUNLIGHT CAPTURE SINCE IT TENDS TO HAVE MORE EXPOSURE THROUGHOUT THE DAY.

Choose an appropriate location for the tube skylight inside. This may require adjustment when you get into the attic to fit the **tube** around any wood framing. Using the **tape measurer** and surrounding ceiling fixtures, measure to the desired location. Tap the ceiling or use a **stud finder** to mark *away* from any studs & mark an X with the **pencil/lumber crayon**.

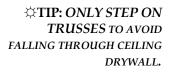


Roof Pitch Chart

# ☆TIP: NEVER CUT THROUGH STUDS, AS THIS CAN AFFECT THE CEILING STRUCTURE.

Use a **wire hanger** to poke a hole through the X, through drywall and through insulation in the attic. *If drywall is too thick, use electric drill with a 1/8" drill bit to make hole and insert wire hanger* to locate in the attic.

**PUT ON SAFETY GLASSES, FACE MASK & HEADLAMP BEFORE HEADING INTO ATTIC.** Locate **wire hanger** and move insulation to the side to expose where the ceiling cut will be made. If wire is not centered between joists, measure and drill new hole accordingly.









Eaves

Hip

Abutment

### **STEP 2: MARKING THE ROOF LOCATION**

AVOID ALL RIDGE, HIP AND VALLEY RAFTERS.

Be also careful in avoiding any electrical wires or plumbing elements.

TIP: LOOK FOR THE MOST DIRECT ROUTE FOR THE SKYLIGHT DOME.

Use a plumb bob (or tape measurer as plumb bob) to mark roof above the **wire hanger** hole with an X using the **pencil/lumber crayon**. Screw 2 <sup>1</sup>/<sub>2</sub>" screw or drill a small hole through the X on the underside of the roof. This marks where to cut the hole for the tube skylight **flashing** on top of the roof.

/alle

**TIP:** The straighter & more vertical markings will make the easiest install.



Centerline of

ridge (verge)

Gable wal

#### **STEP 3: CUT ROOF HOLE**

Necessary items for roof install:

dome assembly with light scatter, dome screws, pitched flashing, roof template, flashing screws, weather dust gasket, roof sealant, pencil/lumber crayon, utility knife, reciprocating saw, caulking gun, dust pan & brush.

On the roof, place roof template centered with the hole and trace around with pencil/lumber crayon.



Using a **reciprocating saw**, cut along the traced circle through the roof material, tar paper & wood panel.



For additional guidance or questions, please contact us directly at 480-813-3449 or via e-mail at daylight@solumax.net Manufactured by SOLUMAX LLC • Distributed by Solar Blaster LLC • Arizona, USA



# STEP 4: INSTALL FLASHING ON PITCHED/SHINGLE ROOF

Lift top shingles at 9 & 3 o'clock positions of hole. Carefully cut 4" long slits through rest of shingles and tar paper. *This is to slide half of the base flashing under, for water tight install.* 



Flip **flashing** over and using the **caulking gun**, apply a bead of **roof sealant** all around base edge.





**CTIP:** FLASHING BASE SHOULD SLIDE

**UNDER TOP SHINGLES, AND OVER** 

Slide **flashing** at cut slits (*slightly lift to avoid smearing sealant*) under the shingles and tar paper, center the **flashing** over the roof hole.



Using the **hex bit** on the **electric drill**, fasten the **flashing** to the roof with **#10 x 1 ½**" **flashing screws**. Screw the exposed predrilled holes first and fasten rest of screws about 7" apart.



Completely coat screw heads and exposed edges between **flashing** & shingles with **roof sealant**.

**CTIP:** IT IS VERY IMPORTANT TO SEAL THE FLASHING PROPERLY TO PREVENT ANY LEAKS FROM ARISING OVER TIME.





# STEP 5: CUT CEILING HOLE & PREPARE TUBES

Inside, center the **ceiling template** with appropriate hole and trace around to mark for cutting. Using a **drywall saw**, cut along the marked line. *Template can be used to catch drywall debris.* 

**TIP:** FOLLOW LINE CAREFULLY TO GET A GOOD FIT FOR CEILING RING AND TABS.



To determine how many tubes to connect, take the **tape measurer** and measure the distance between the flashing lip on the roof and ceiling hole.

Connect the seams of each **tube** by aligning with predrilled holes and fasten with  $#8 \times 1/2''$  **tube screws**. *Each tube is 24'' long.* 



**Tape** around and along section seams, making sure of full seal. Overlap any extra tape over **tube** edges.

☆TIP: TAPE MUST COMPLETELY COVER SCREWS & SEAM EDGES. Connect (2) **tube** sections by inserting the crimp edge into the top of a straight edge. Using (2) **tube screws**, one on each side, fasten edges together. MAKE SURE SCREW GOES THROUGH BOTH CONNECTED SECTIONS.







# STEP 6: CONNECT REFLECTIVE TUBES TO CEILING/ROOF

Take **ceiling assembly** apart by removing **decorative nuts** & **ring**.



Use a coin to lift tabs & remove **dual diffuser**.



Take connected **tube** sections and fasten with crimp edge down over tube starter. *Make sure crimp edge is completely covered by tube starter*. Connect using (2) **tube screws and aluminum foil tape**.





Optional: You can also fasten just (1) *tube* section to *tube starter/ceiling ring* and install remaining *tube* sections from the roof. Then fasten sections from inside attic with (2) *tube screws* & *aluminum foil tape*.

#### **STEP 7: INSTALL CEILING RING**

Install **tubes** & **ceiling ring** from inside up into the **flashing**.



Slowly fasten **ceiling ring screw tabs**. **Ceiling ring** has self-tightening wing nuts to connect with drywall. *Do not overtighten*.





If you have not done so yet, remove all **tube** film to expose reflective material. Use a paper towel to clean off any fingerprints or smudges inside the tube.



#### **STEP 8: INSTALLING DIFFUSER & DECORATIVE RING**

Fasten diffuser by squeezing tabs into diffuser edges.

Align **white decorative ring** with threaded pins & fasten with **decorative nuts**. *Inside installation is complete.* 



# STEP 9: CUTTING EXCESS TUBE & INSTALLING DOME



Back on the roof, install **weather dust gasket** between **flashing** lip & reflective **tube**. Gasket gives tube room to rise and fall slightly as it heats up, also preventing bugs and debris from getting inside.

With utility knife, score & cut along flashing lip excess tube sticking out; edges must be flush with flashing.



Install **dome assembly** over **flashing** lip and fasten with **#8 x** <sup>1</sup>/<sub>4</sub>" **dome screws**.

You've now completed your ECOMAX Tube Skylight install!

