



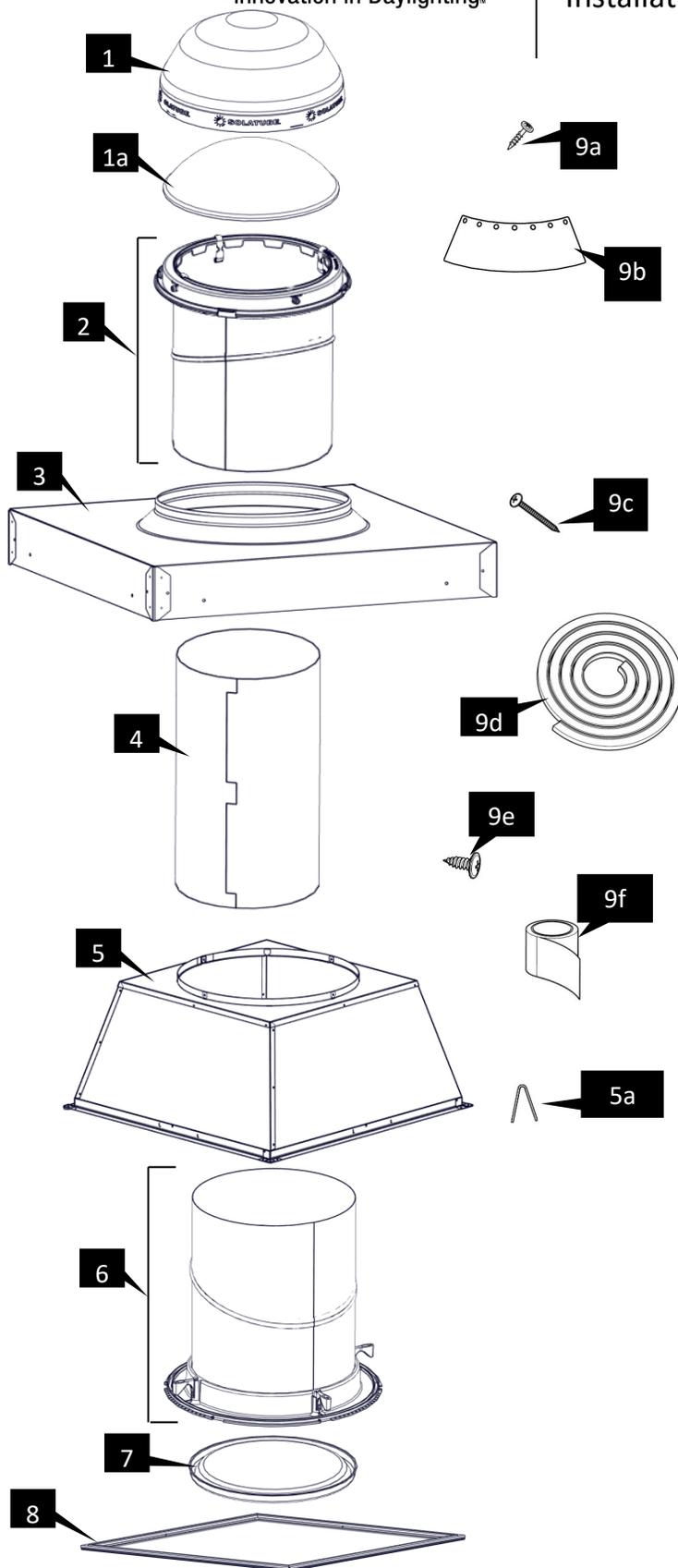
# SOLATUBE®

Innovation in Daylighting.

# Solatube® SolaMaster® Series

## Solatube® 300 DS Daylighting System

### Installation Instructions



Parts List *		Quantity
1	Dome with Raybender® 3000 Technology	(1)
	a. Shock Inner Dome**	
2	Top Tube Assembly including: Dome Ring, Dome Ring Seal, Spectralight® Infinity Top Tube with Angle Adapter.	(1)
3	Roof Flashing (Curb Cap Shown)	(1)
4	Spectralight® Infinity Tubes	
	a. 16 in (406 mm) Extension Tube with Tube Fastener Kit	(1)
	b. 24 in (610 mm) Extension Tube with Tube Fastener Kit	(1)
5	Metal Transition Box with Softlight Technology	(1)
	a. Transition Box Hold Down Clip	(4)
6	Bottom Tube Assembly including: Spectralight® Infinity Bottom Tube with Angle Adapter, Ceiling Ring	(1)
7	Effect Lens	(1)
8	Diffuser	(1)
9	Seal and Fasteners	
	a. Dome Ring Screws - #8 X 1.25 in (32 mm)	(5)
	b. LightTracker™ Reflector	(1)
	c. Flashing Screws - #10 X 2 in (50 mm)	(8)
	d. Expansion Joint Seal	(1)
	e. Tube Screws - #8 X 9/16 in (14 mm)	(10)
	f. Foil Tape - 2 in (51 mm) X 18 ft (5.5 m) roll	(1)

#### Required Tools:

Keyhole Saw	Saber or Reciprocating Saw
Hammer	Flat Bar
Utility Knife	Caulking Gun
Tape Measure	Screw Gun with Phillips Head
Lumber Crayon	Required Safety Equipment
Magnetic Compass	Metal Shears
Hammer	

\*Components shown not included in all kits, see label on box.

\*\*†Required for High Velocity Hurricane Zone (HVHZ) areas.

For the most current Installation Instructions, please visit [www.solatube.com/instructions](http://www.solatube.com/instructions)

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# **WARNING**



**Do not proceed with the installation until you have read the entire instructions, including these warnings. Use of materials or methods not authorized by Solatube International will result in an invalid warranty.**

Solatube International, Inc. (seller) assumes no responsibility or obligation whatsoever for the failure of an architect, contractor, installer, or building owner to comply with all applicable laws, ordinances, building codes, electrical codes, energy codes, fire and safety codes and requirements, roof warranties and adequate safety precautions. Installation of this product should be attempted only by individuals skilled in the use of the tools and equipment necessary for installation. Protect yourself and all persons and property during installation. If you have any doubt concerning your competence or expertise, consult a qualified expert before proceeding.



## **Install at your own risk!**

Solatube product installations may be dangerous and include the potential for death, personal injury and property damage. The hazardous conditions include but are not limited to the following:

- **During installation, the Solatube Daylighting System's reflective tubes may focus sunlight, causing intense heat or fire. Remove protective film only after the parts have been installed. Prior to and during installation, do not leave tubes in contact with combustible materials or unattended, especially near direct sunlight. Avoid skin burns.**
- **Do not leave debris from installation process unattended. Scrap from tubing and foil tape are highly reflective and if left unattended can focus sunlight and can cause intense heat or fire. Clean up all unused material and trash and store or discard in proper covered locations.**
- Solatube Daylighting System and Solar Star products may have sharp edges. Always wear leather or canvas gloves while handling and installing products.
- Solatube product installations require climbing and working at dangerous heights, including on ladders, scaffolding, roofs and in attic spaces. Risk of death, personal injury and property damage may result from a fall, or from falling objects. Use extreme caution to minimize risk of accidental injury, including, but not limited to the following procedures:
  - Clear area below your work space of all people, animals and other items.
  - Avoid working on surfaces that are slippery or wet.
  - Use foot-wear with excellent traction.
  - Use only strong, well supported ladders.
  - Work only in calm dry weather.
  - When in the attic, ensure that your weight is supported at all times with structurally sound framing; drywall material is not designed to carry a person's weight.
- To reduce the risk of fire, electric shock, and personal injury, basic safety precautions should always be followed when using electric tools, including always wearing safety goggles or other suitable eye protection, and ensuring work area is clear of all electrical wires, gas pipes, water pipes, and other obstacles.
- When working in the attic or other dusty areas, use of a mask or respirator is recommended to avoid lung irritation. Attic spaces may be dark, confined, and subject to extreme temperatures. Beware of sharp protruding objects. Do not attempt installation without having someone within range of your voice or close enough to come to your aid if necessary.
- Solatube products are not designed to withstand the weight of a person, tools or other objects. Walking or placing objects on the system could cause personal injury and property damage. If the product is damaged, the structural capacity may be weakened; therefore the system should be repaired immediately. For safe installation and use, do not deviate from these installation instructions.
- Additional support is recommended for long vertical and all horizontal tube runs. Review local building requirements and consult with appropriate building code official for proper material and placement of additional support. Avoid galvanic reaction (corrosion) if dissimilar metals are used.

## **Electrical Components**

- Before installing, servicing, or cleaning unit, switch power off at service panel and lock service panel to prevent power from becoming switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device such as a tag to the service panel.

## **Re-Roofing**

- Solatube products require special care if removed for re-roofing. In order to ensure proper removal and re-installation, please contact your Solatube International representative.

**Please refer to the installation tips for the appropriate product below:**



## **Daylighting Systems Installation Tips**

These instructions are a step-by-step guide for the installation of a Solatube Daylighting System in the following conditions. For other roof types, please contact your Solatube International representative for additional information.

**Built Up Flat Roof - Single Ply/Membrane - Asphalt Shingle - Low/No Pitched - Pitched - Prefabricated Curbs - Metal Roof Panels**

For the most current Installation Instructions, please visit [www.solatube.com/instructions](http://www.solatube.com/instructions)

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### Daylighting Systems Installation Tips (Continued)

- Allow at least 2-3 hours for the installation, particularly if this is your first installation.
- During the day, turn off all the lights in the room to see how much natural light comes in through the windows, and determine the best position for the Solatube Daylighting System. To light a specific area, place the system over the area, not in the center of the room. This will prevent the desired area from being shaded by tall objects in the room.
- Measure the distance between the roof and the ceiling. If you don't have enough tubing, contact your Solatube International representative for additional tubing.
- Avoid roof locations shaded by trees, ridges and chimneys, or near water channels or valleys. Also avoid roof areas with obstructions such as fire sprinklers, HVAC equipment, gas, water or drain pipes, air ducts or flues and make sure that the roof is adequate to endure an installation without damaging its waterproofing properties or weakening the building structure.
- All adhesives, seals and tapes are recommended to be applied to a clean and dry surface at a minimum of 70°F (21°C) for maximum performance.
- Foil tape contains a pressure sensitive adhesive and pressure must be applied at all seams for proper bonding. Foil tape is not intended for use as structural support of the extension tubes. For structural integrity use manufacturer supplied fasteners on all overlapping extension tube joints.
- Uninstalled product that is stored and exposed to excessive heat and or humidity can experience damage. Store product prior to installation in a cool dry place.



### Daylight Dimmer Installation Tips

- Install Solatube Daylight Dimmer only on a properly aligned Solatube Daylighting System.
- Use only UL recognized components approved for this listing.

# Curb Cap Installation Instructions

**1** Install Curb Cap

Sealant (1/4 in (5 mm)) thick

27 in (685 mm) inside dimension

27 in (685 mm) inside dimension

Curb by Others (allow for counter flashing roofing material)

Roof opening must be round with diameter 16 1/2 in (419 mm)

Flashing screw

**a**

**b**

**c**

**d**

\*For HVHZ apply 4 more screws to curb cap.

For Self-Flashing instructions see the Solatube Brighten Up Series installation instructions. P/N: 951780

**2** Set Metal Transition Box

T-bar ceiling

Hold Down Clip

Note: Hold Down Clips must be installed.

Hold Down Clip

**a**

**b**

**c**

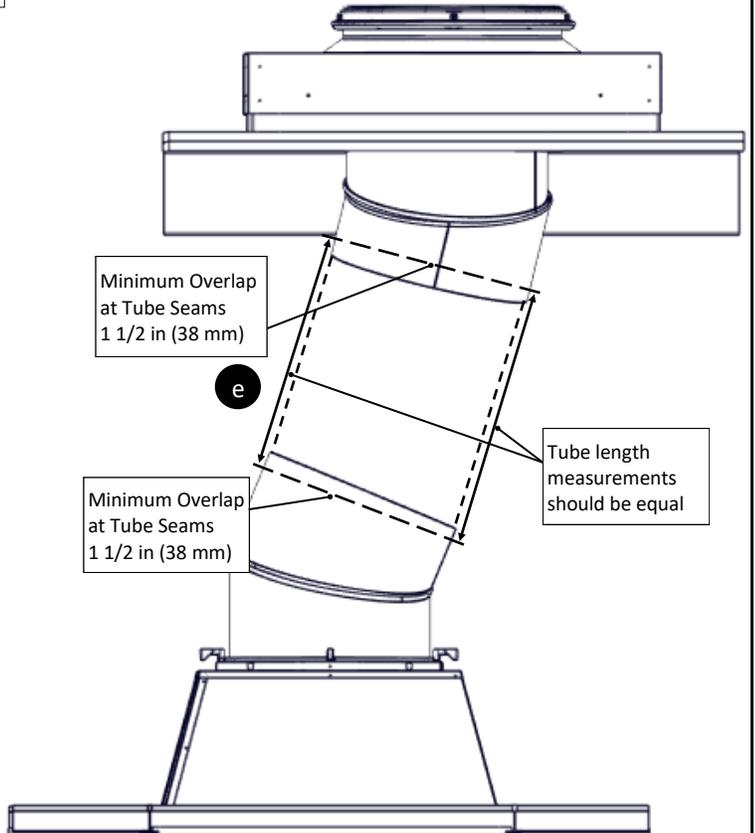
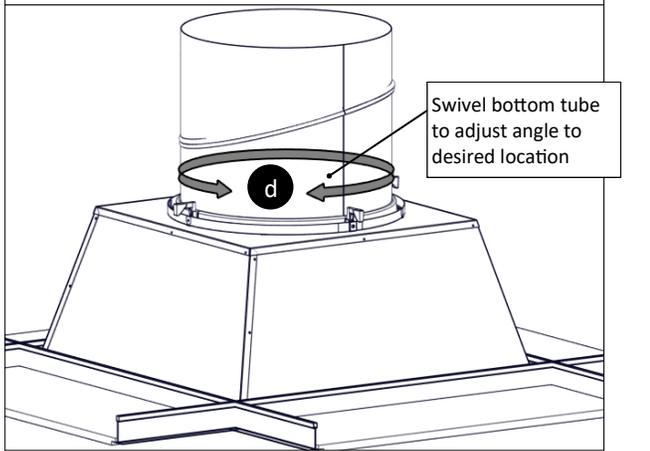
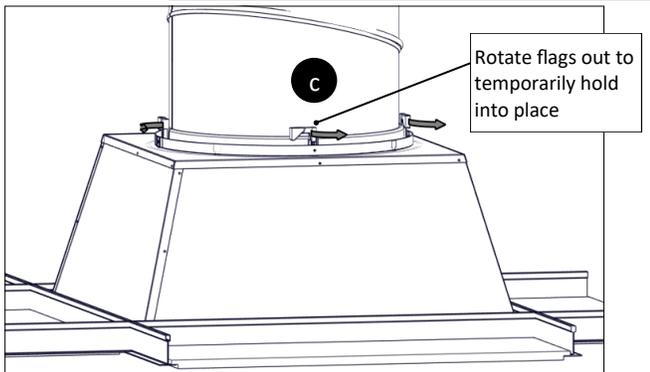
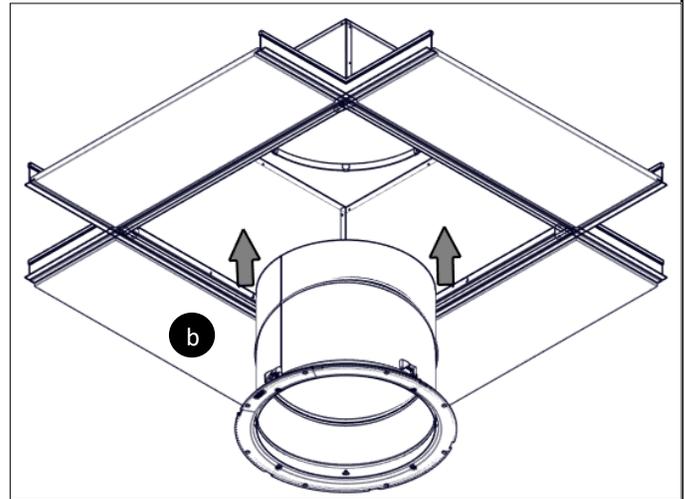
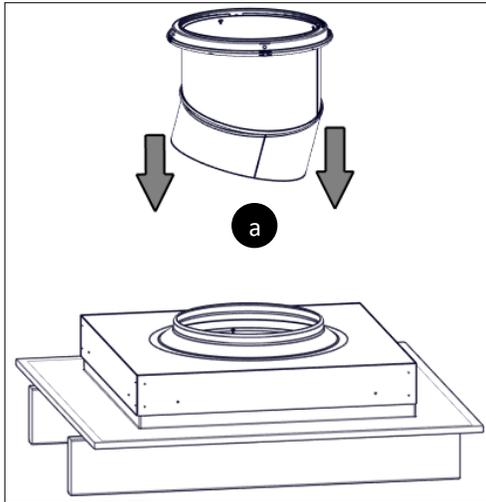
**d**

For DSA (Division of the State Architect) projects, please see additional fastening requirements in SolaMaster installation instructions. P/N: 950160

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Install Top and Bottom Tube Angle Adapters; Measure Tube Run



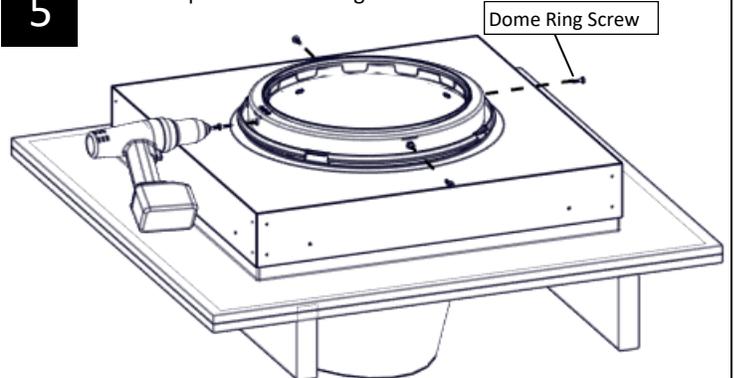
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Remove Top Tube and Tape all Seams



5

Fasten Top Tube to Flashing

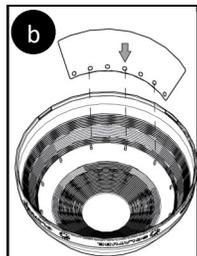
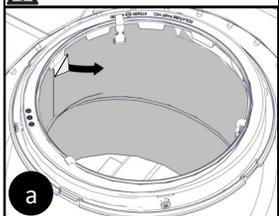


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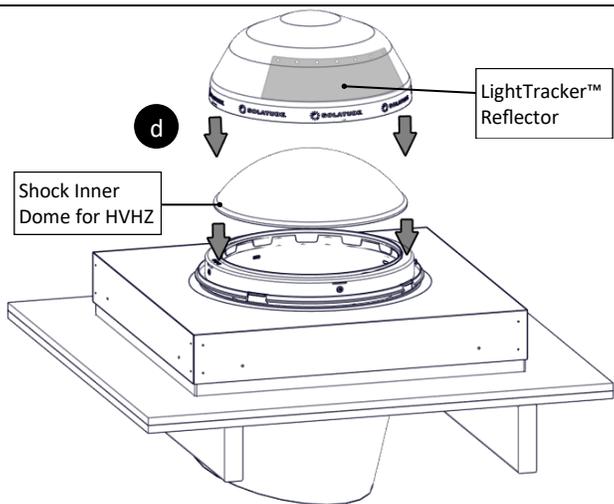
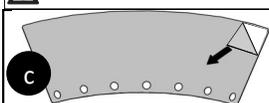
## Dome Installation

Reflective side of LightTracker™ Reflector faces South in Northern Hemisphere (North in Southern Hemisphere). Align and snap dome into place engaging all four snaps.

Remove Protective Liner



Remove Protective Liner



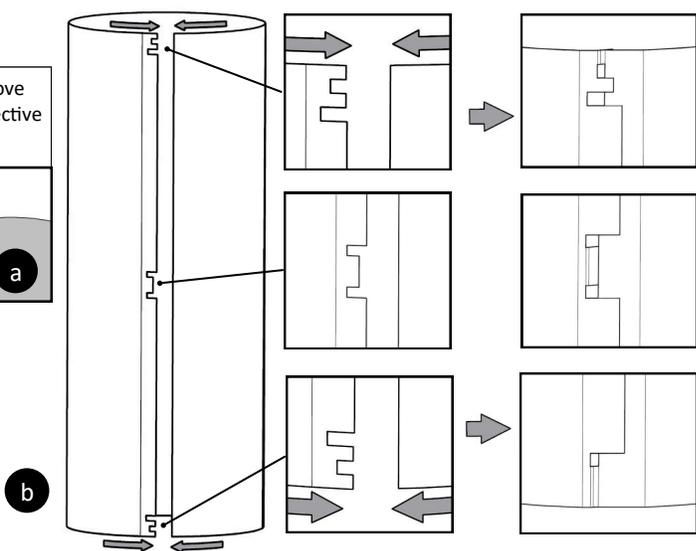
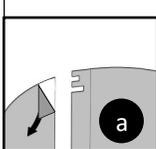
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## Assemble and Install Tube Run

Use notches to create a tapered tube.

**Note:** Spectralight Softlight Extension Tubes must be assembled to be parallel not tapered.

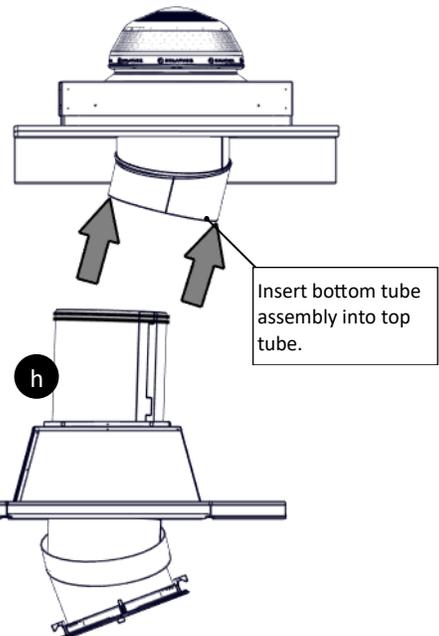
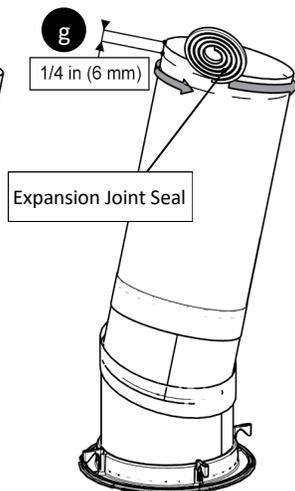
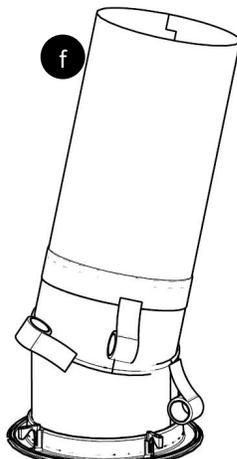
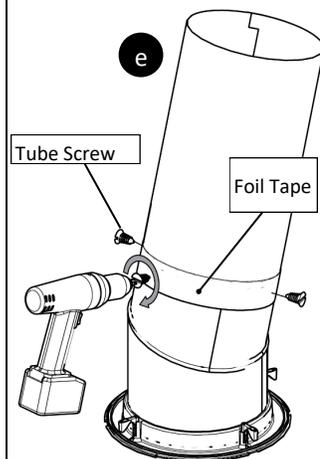
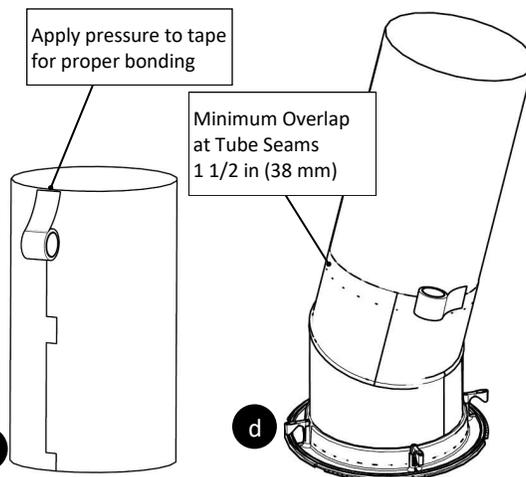
Remove Protective Liner



(c)

Apply pressure to tape for proper bonding

Minimum Overlap at Tube Seams  
1 1/2 in (38 mm)



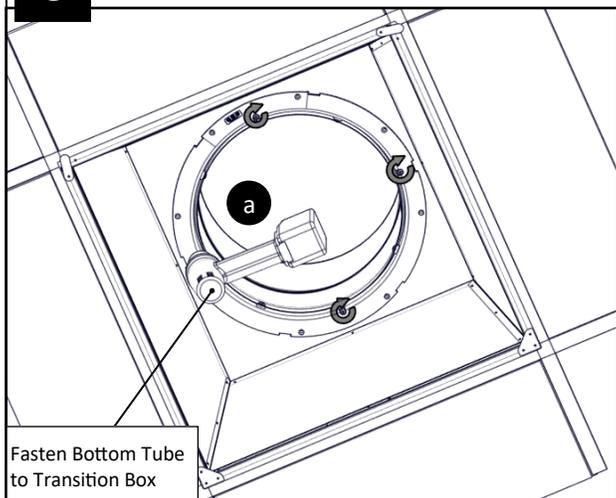
Apply foil tap to all seams and joints.

**Note:** Install Spectralight Softlight Tubing at bottom of tube run for best results. Use no more than one (1) Softlight Extension Tube for each assembly.

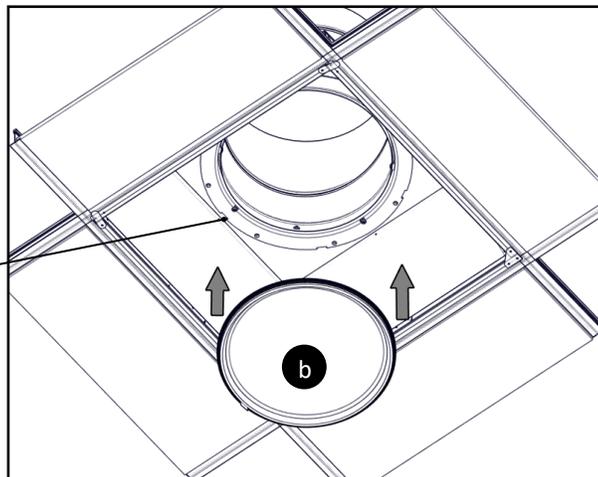
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Fasten Bottom Tube Assembly to Transition Box



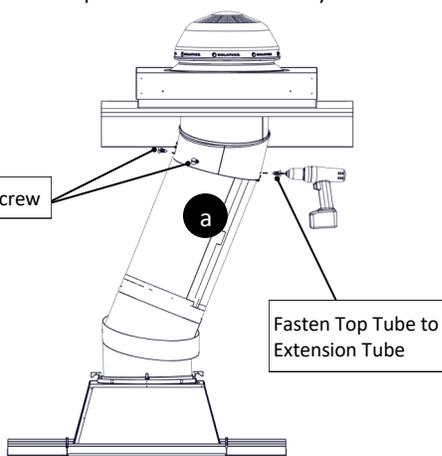
Install Effect Lens



9

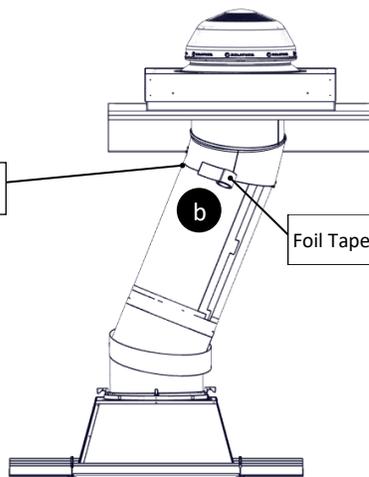
Fasten Top Tube to Tube Assembly

Tube Screw



Tape Seam

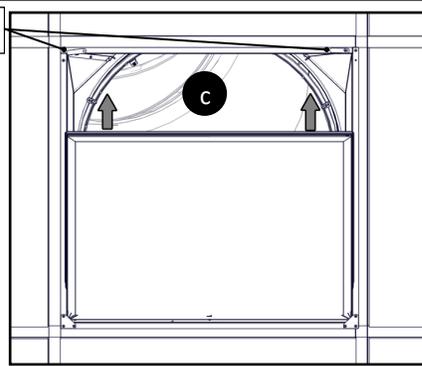
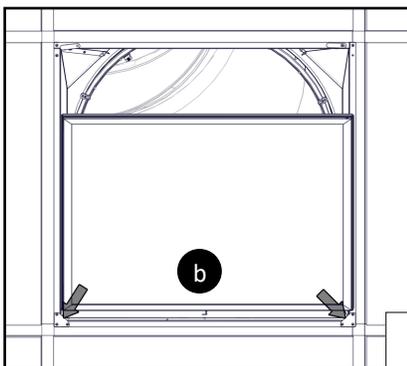
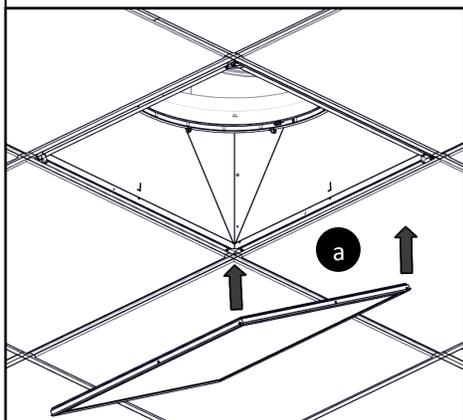
Foil Tape



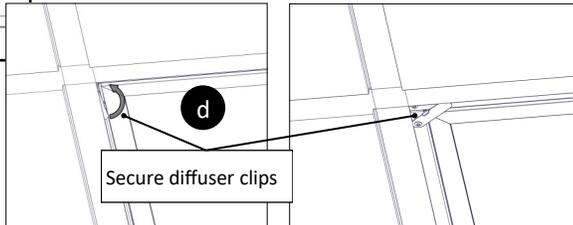
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Install diffuser

Diffuser Clip



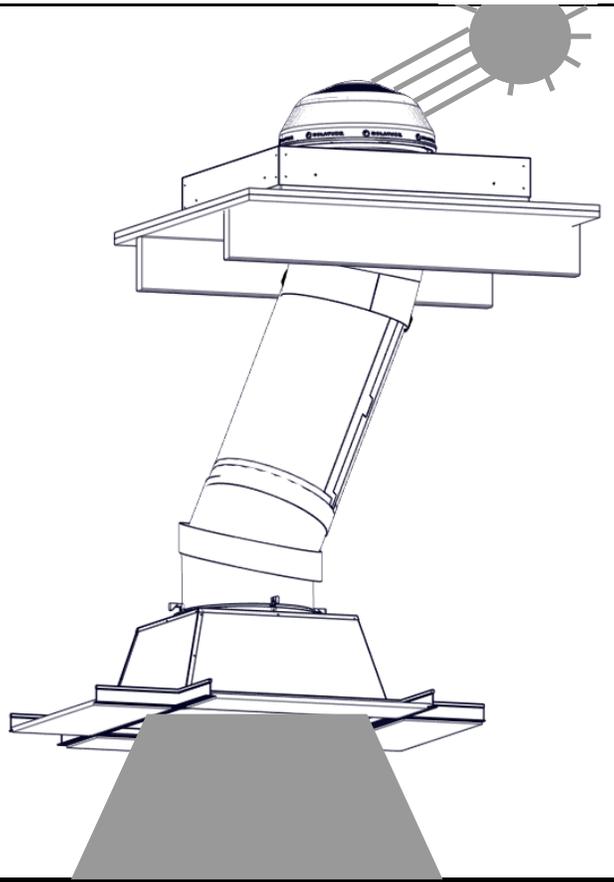
Secure diffuser clips



Note: Do not press diffuser into metal transition box too far. Ensure that diffuser is flush with transition box frame.

11

Now you can enjoy the benefits of your Solatube Daylighting System and the high performance, natural lighting it provides.



Please refer to the SolaMaster installation instructions part number 950160 for additional steps and accessories.

Scan the code to visit the Solatube SolaMaster Series installation instructions page.

