

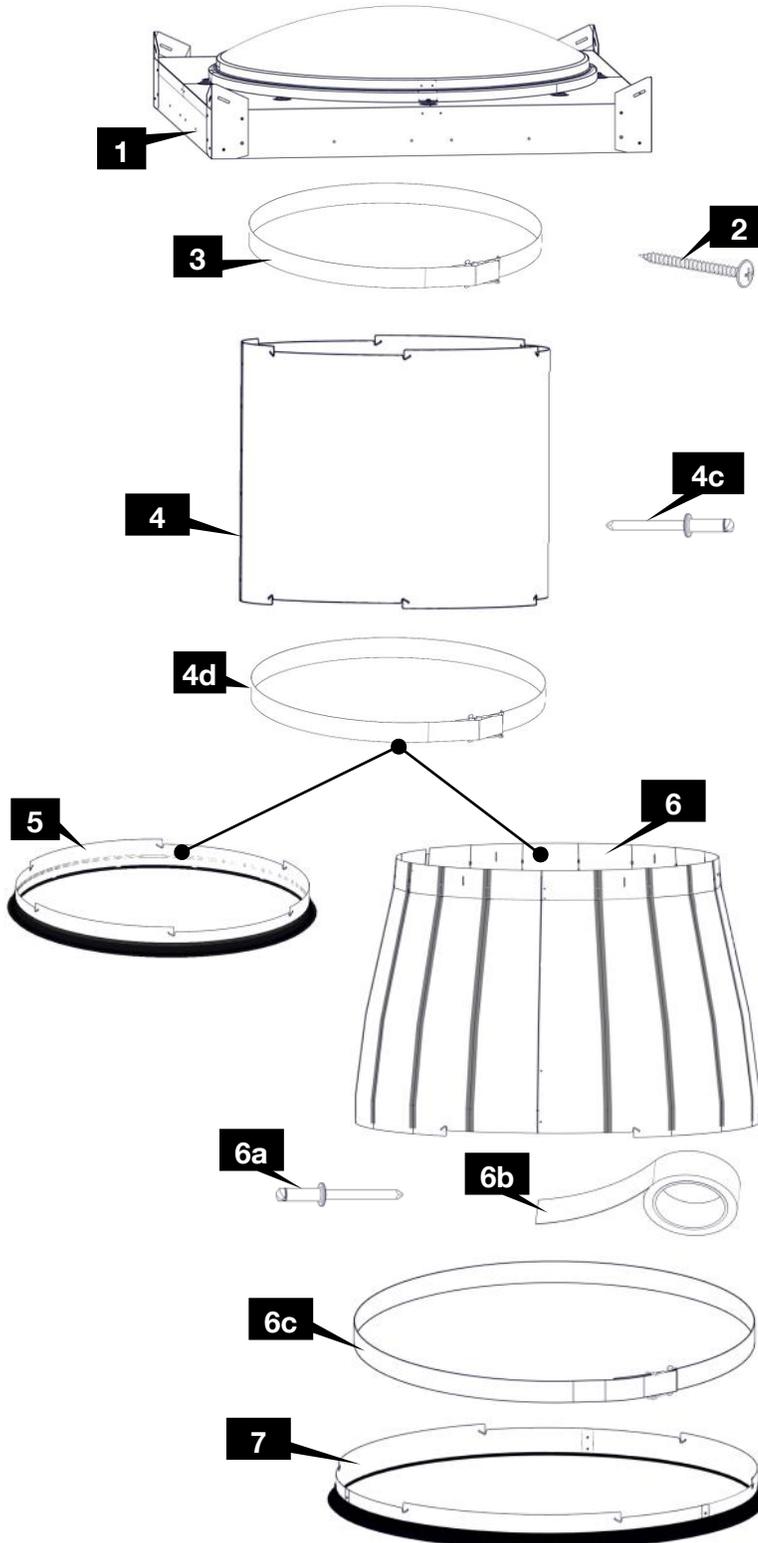


SOLATUBE
Innovation in Daylighting.

Solatube® SkyVault™ Series

Solatube® M74 DS Daylighting System

Installation Instructions



Parts List		Quantity
	Pre-Assembled Roof Assembly Options *	(1)
1	a. M74 DS Single Dome Roof Assembly with Insulated Curb Cap Flashing *†	
	b. M74 DS Dual Dome Roof Assembly with Insulated Curb Cap Flashing *†	
	c. M74 DS Single Dome Roof Assembly with Insulated Curb Cap Flashing and Security Guard *†	
	d. M74 DS Dual Dome Roof Assembly with Insulated Curb Cap Flashing and Security Guard *†	
2	Flashing Screws - #10 X 2 in (50 mm)	(16)
3	Tube Belt with Belt Latch	(1)
4	Spectralight® Infinity Tubes with Tab Locks	
	a. 24 in (610 mm) Extension Tube with Tube Fastener Kit	(1)
	b. 48 in (1220 mm) Extension Tube with Tube Fastener Kit	(1)
	c. Tube Rivets	(15)
	d. Tube Belt with Belt Latch	(1)
5	Pre-Assembled Diffuser *†	(1)
6	Amplifier Assembly *†	(1)
	a. Amplifier Rivets	(15)
	b. 3/4 in (19.5 mm) Foil Tape - 10 ft (3.0 m)	(2)
	c. Amplifier Belt with Belt Latch	(1)
7	Pre-Assembled Amplifier Diffuser *†	(1)

Required Tools:

Tape Measure	Rivet Gun
Screw Gun with Phillips Head	Required Safety Equipment
Level	

* The M74 DS Single Dome Options meet High Velocity Hurricane Zone (HVHZ) Requirements.

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

For the most current Installation Instructions, please visit 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.**
- 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

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Daylighting Systems Installation Tips (Continued)

- Allow 1/2 hour (30 min) for the installation excluding curb fabrication, 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 from curb to diffuser level. 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 and seals are recommended to be applied to a clean and dry surface at a minimum of 70°F (21°C) for maximum performance.
- For installations where high levels of soot or debris may be present it may be necessary to use foil tape to seal all joints and tube seams to prevent excess debris from entering the tubing.
- It is recommended to use foil tape to seal all joints and tube seams for installations in cold climates or where humid conditions may be present in order to prevent warm or moist air from entering the tubing.

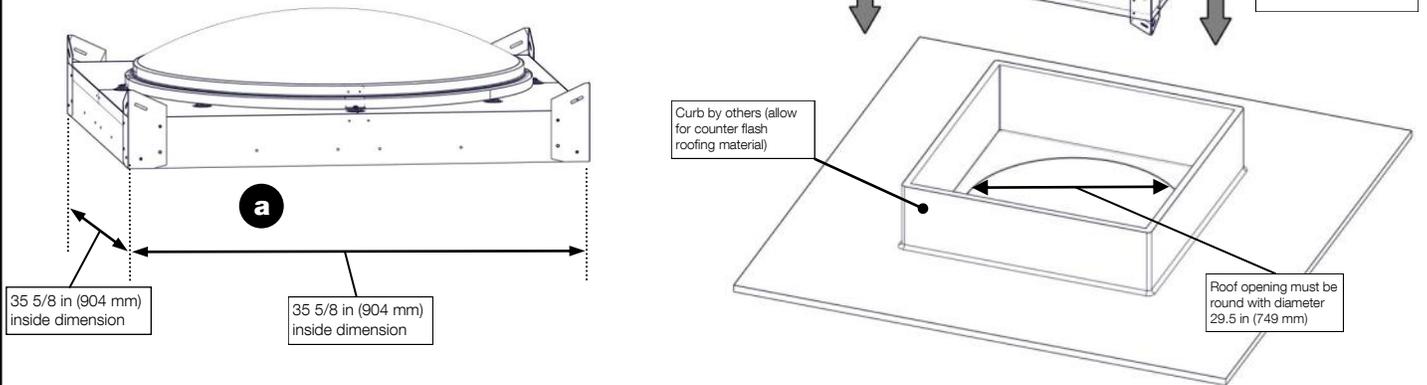
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M74 DS Installation Instructions

1 Place Pre-Assembled Roof Assembly onto Curb

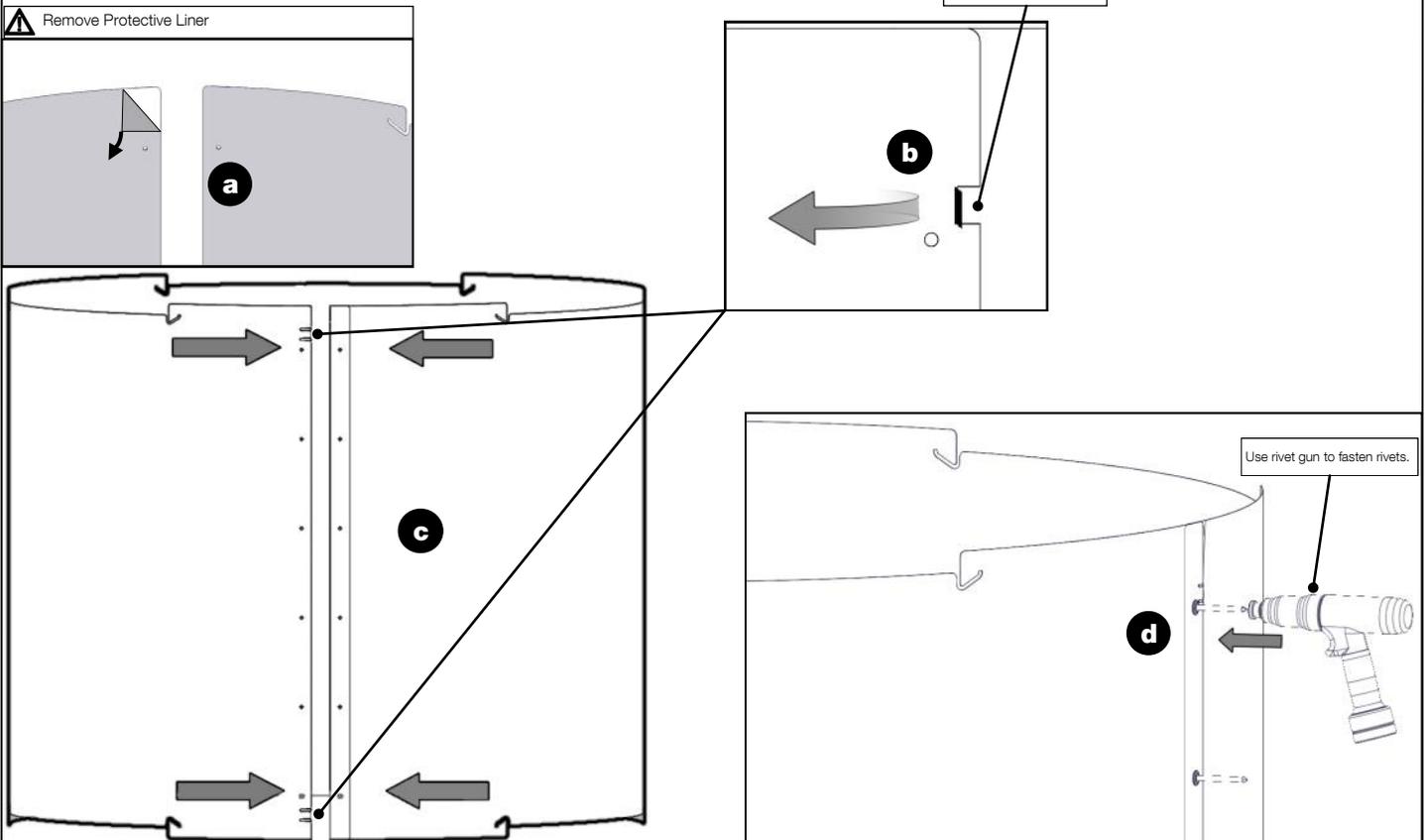
Note: Curb provided by others.
 Note: To prevent scratches do not remove protective liner from dome until installation is complete.



Curb Construction Details: Curb provided by others.
 Curb OD: 34 3/8 in (873 mm) x 34 3/8 in (873 mm) to allow for 0.5 in (13 mm) waterproofing membrane.
 Metal Curb OD: 35 in (890 mm) x 35 in (890 mm). If membrane layer is to be applied to outside of metal curb, use curb OD above.
 Framing Member Thickness: 1.5 in (38 mm) minimum 2.5 in (64 mm) maximum including insulation.
 Curb Height: 7.5 in (191 mm) minimum. Refer to local building code requirements.
 Curb Aspect: Level curb top and plumb curb walls. For sloped roofs add cricket to divert water.

2 Assemble Extension Tube

Align pre-punched holes and install rivets.



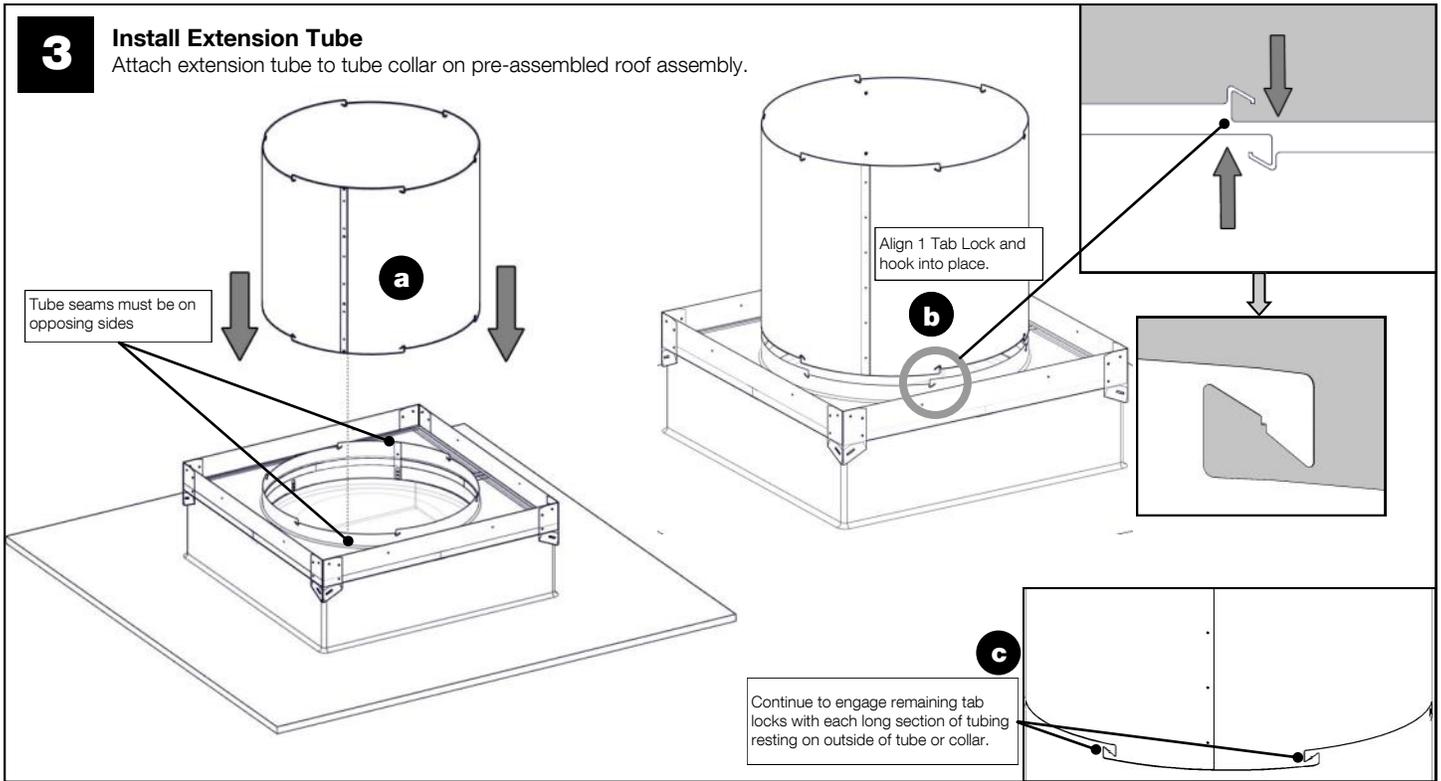
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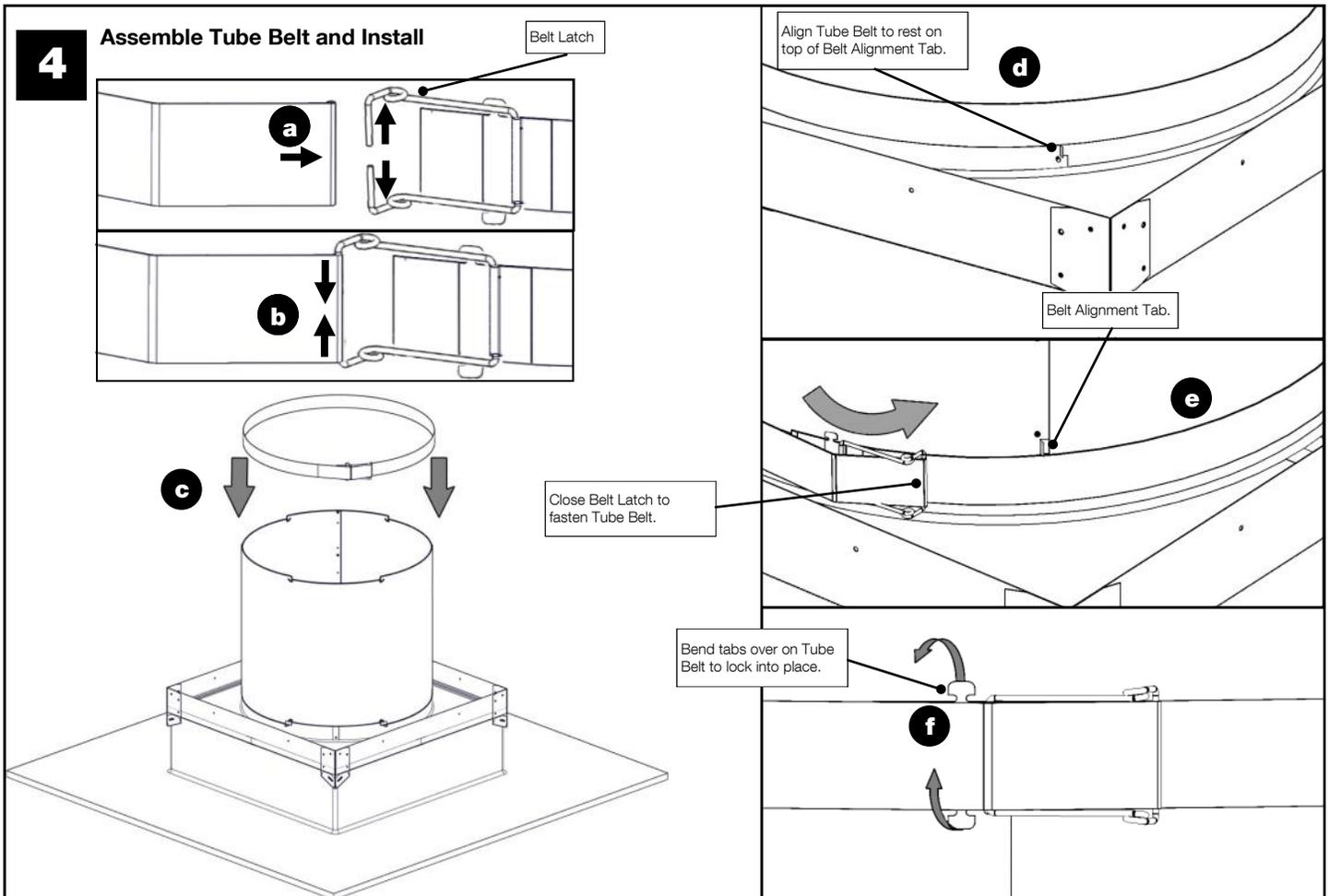
Install Extension Tube

Attach extension tube to tube collar on pre-assembled roof assembly.



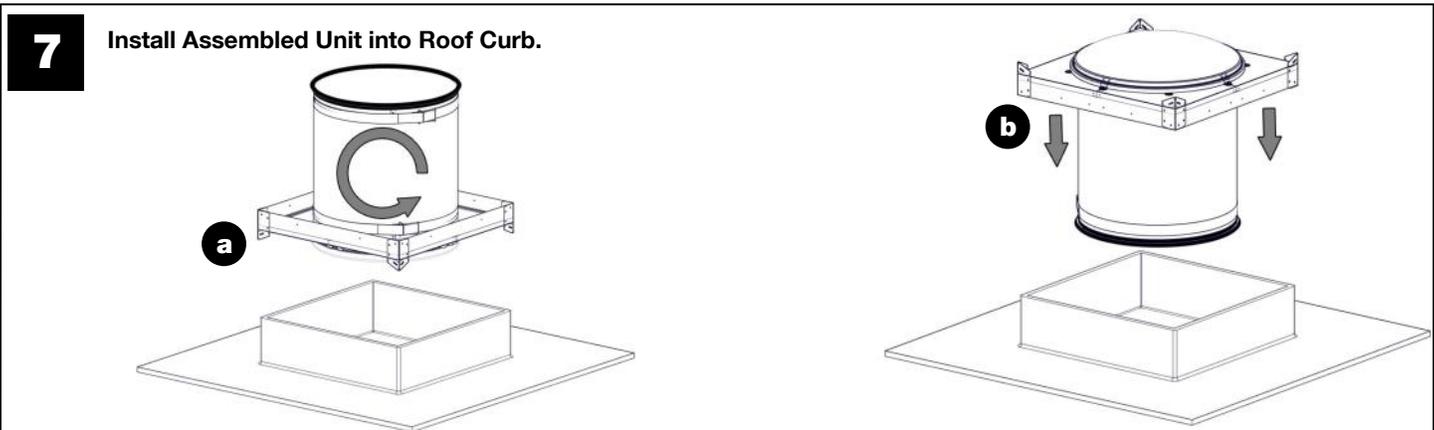
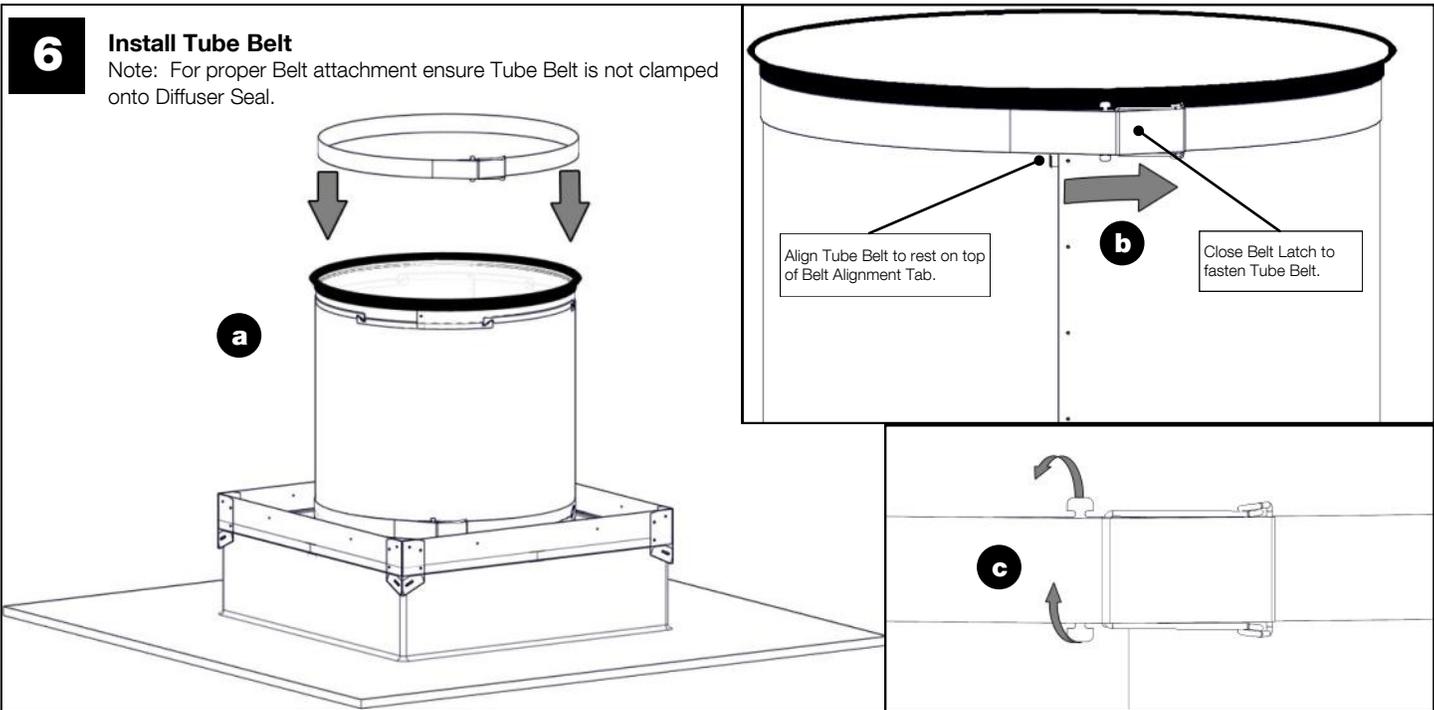
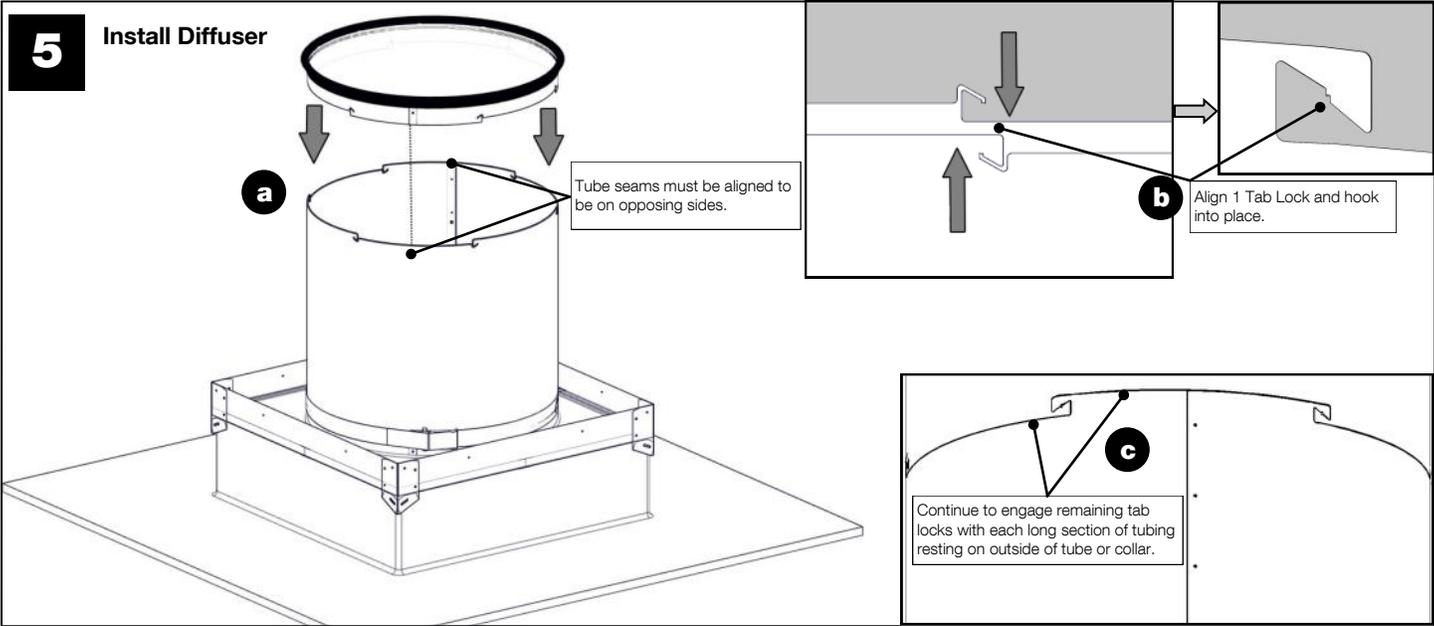
4

Assemble Tube Belt and Install



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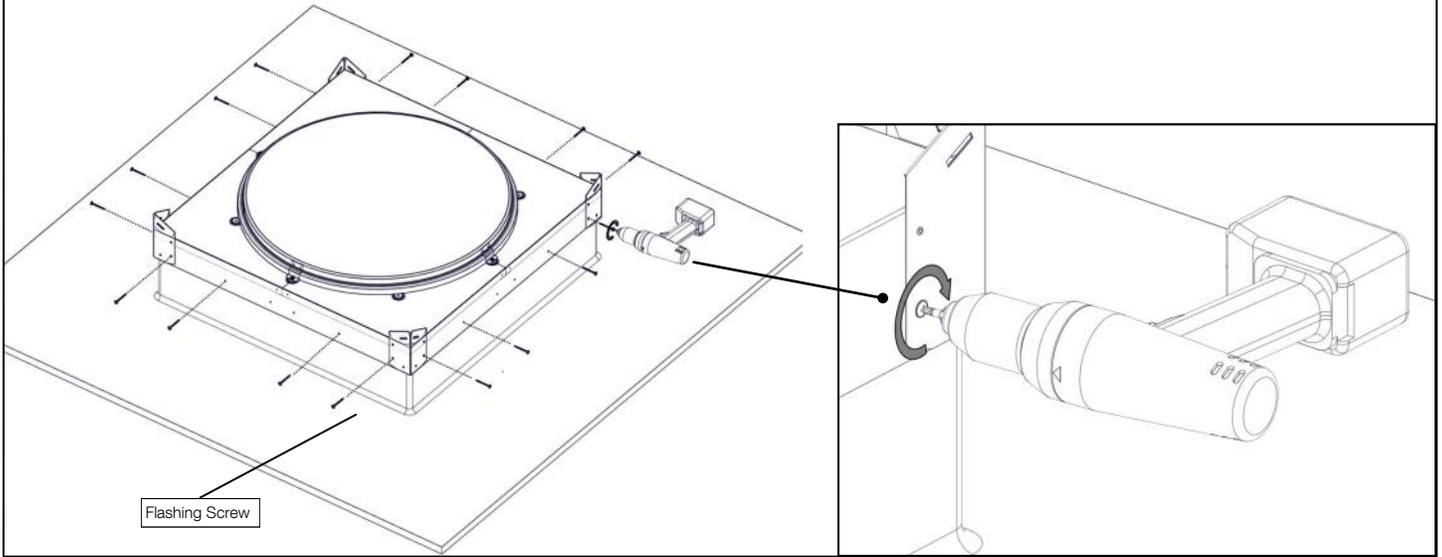
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8

Fasten Roof Assembly to Curb

Remove Protective liner from dome.

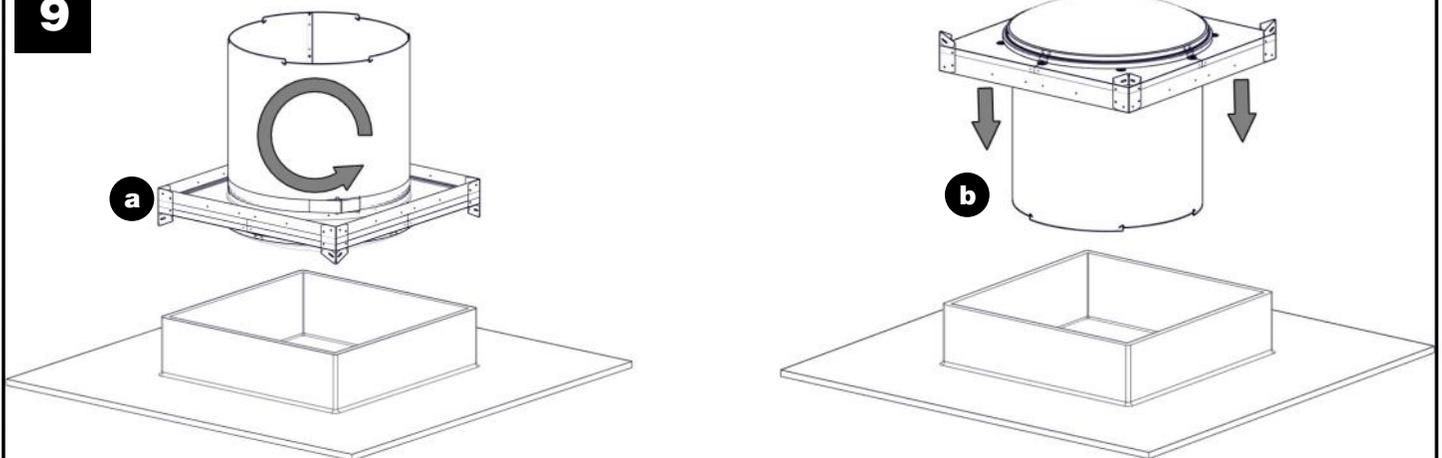


Alternate Instruction for Multiple Tube Attachment

Note: If installing more than 48 in (1220 mm) of tubing use the following steps.*

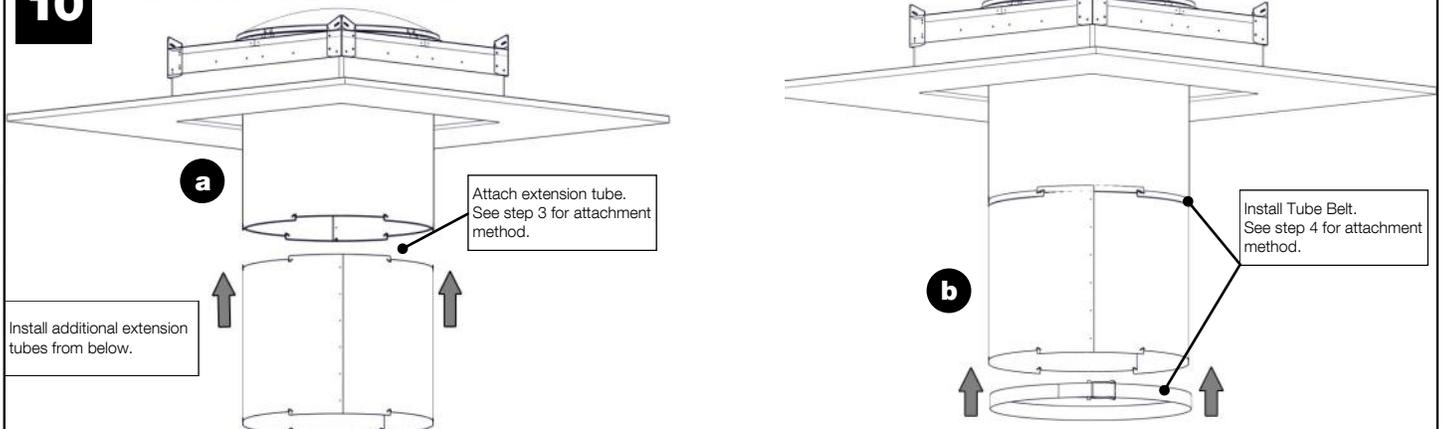
9

Install Assembled Unit into Roof Curb.



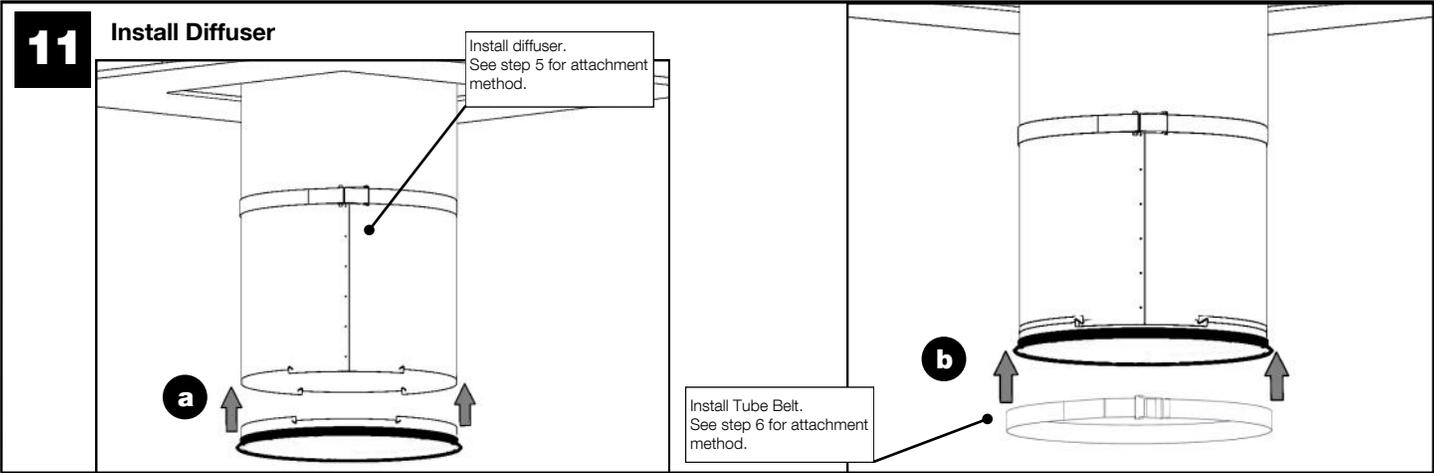
10

Install Additional Extension Tubes

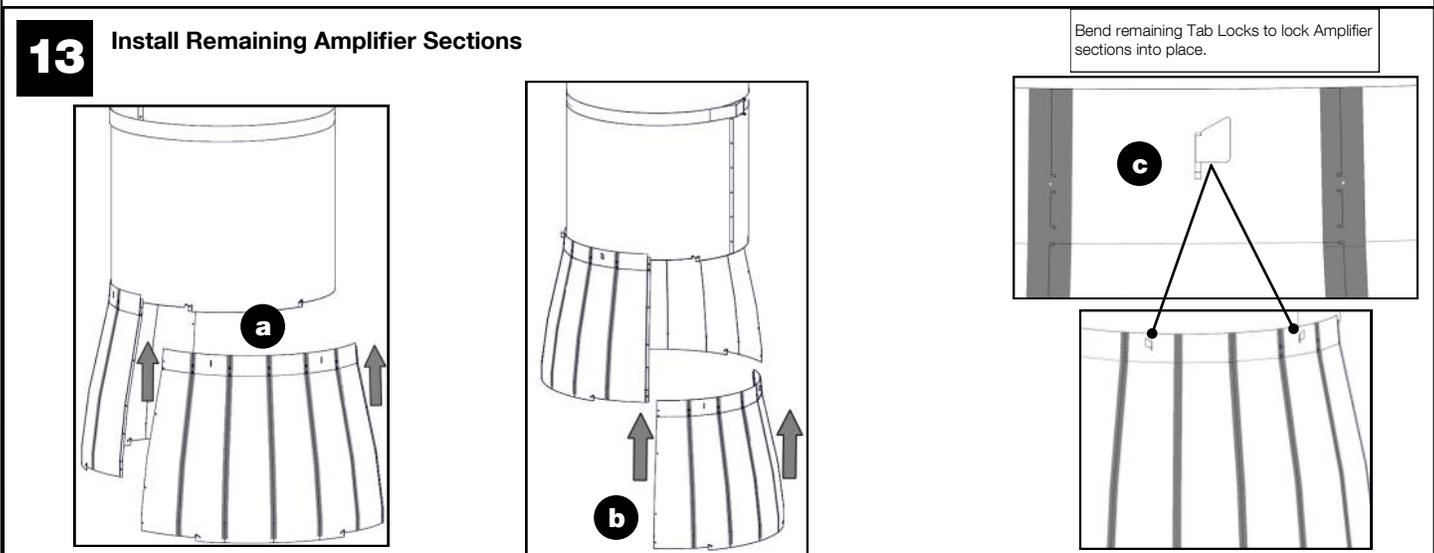
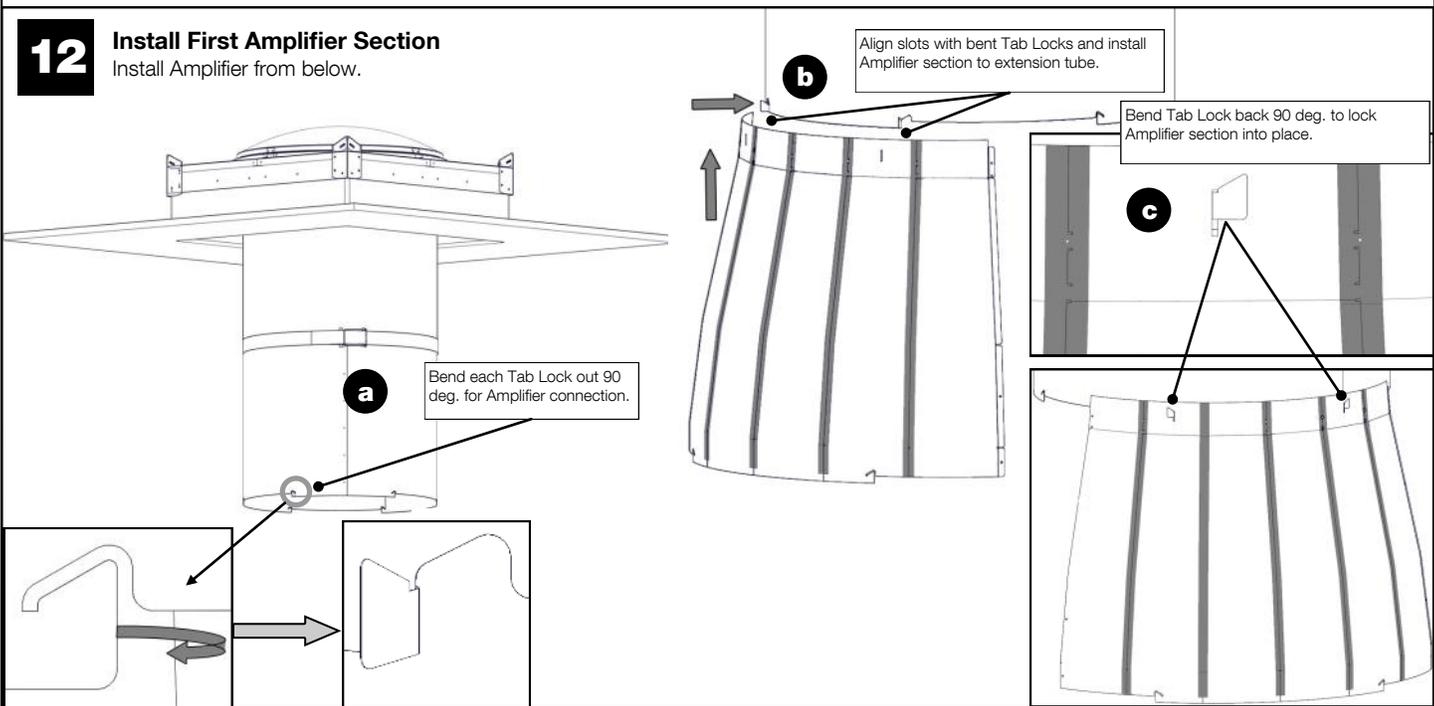


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Amplifier Installation Instructions



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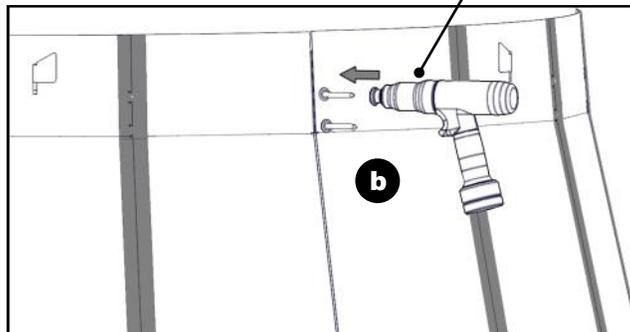
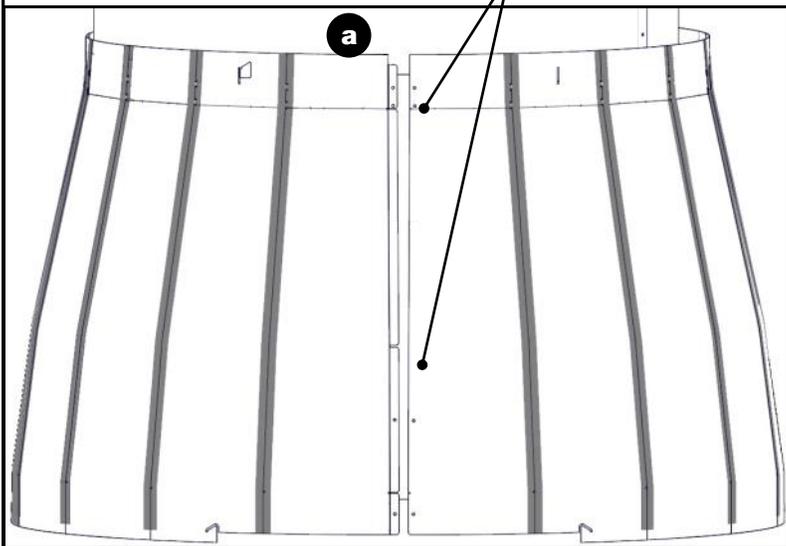
14

Fasten Amplifier Sections

Align pre-punched holes and install rivets.

Align Amplifier sections to ensure flat section overlaps to sit on top of offset.

Use Rivet gun to fasten rivets for each Amplifier section.

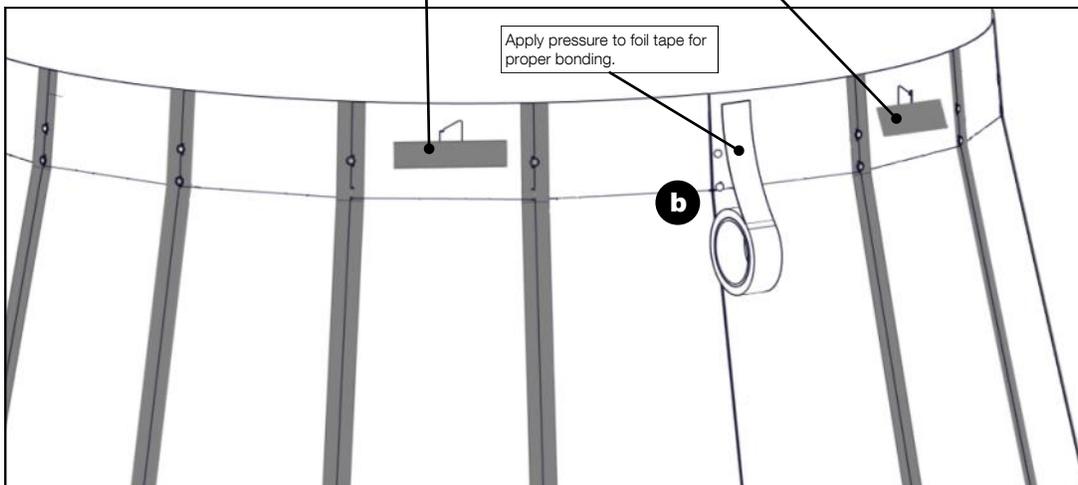
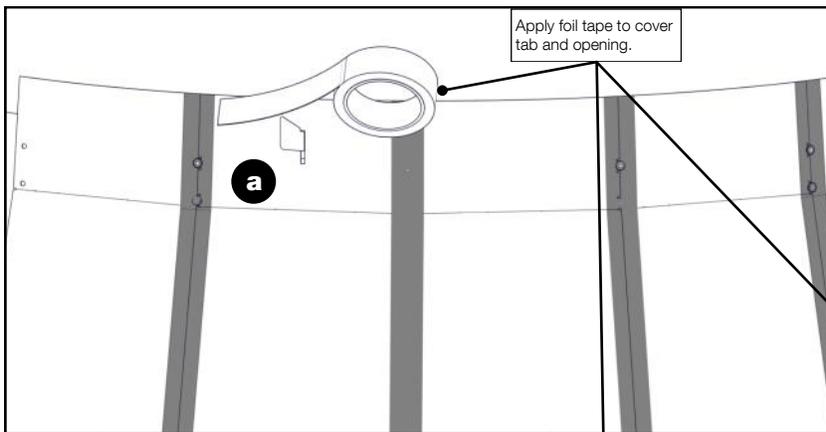


15

Apply Foil Tape

Apply foil tape to cover tab and opening.

Apply pressure to foil tape for proper bonding.

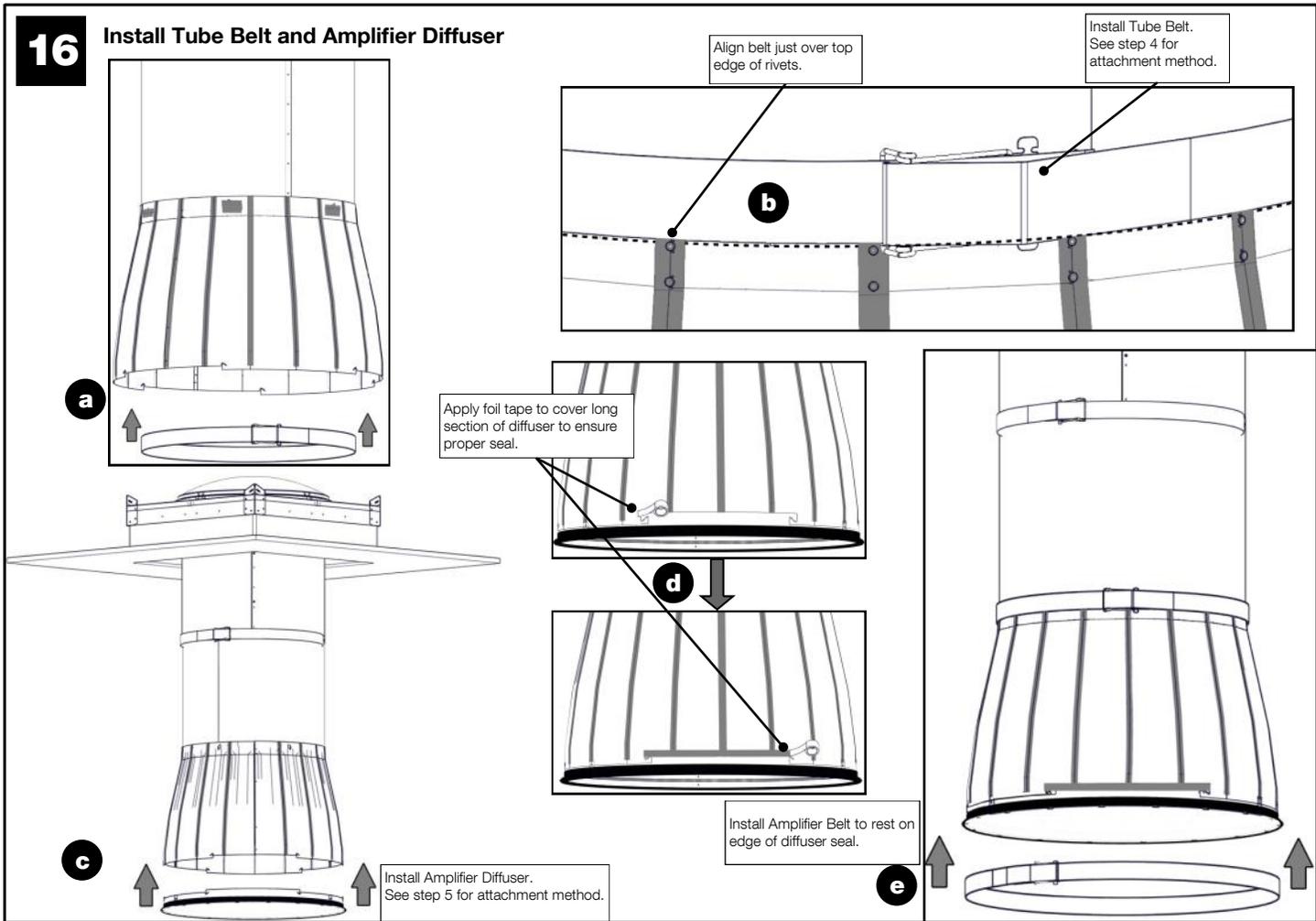


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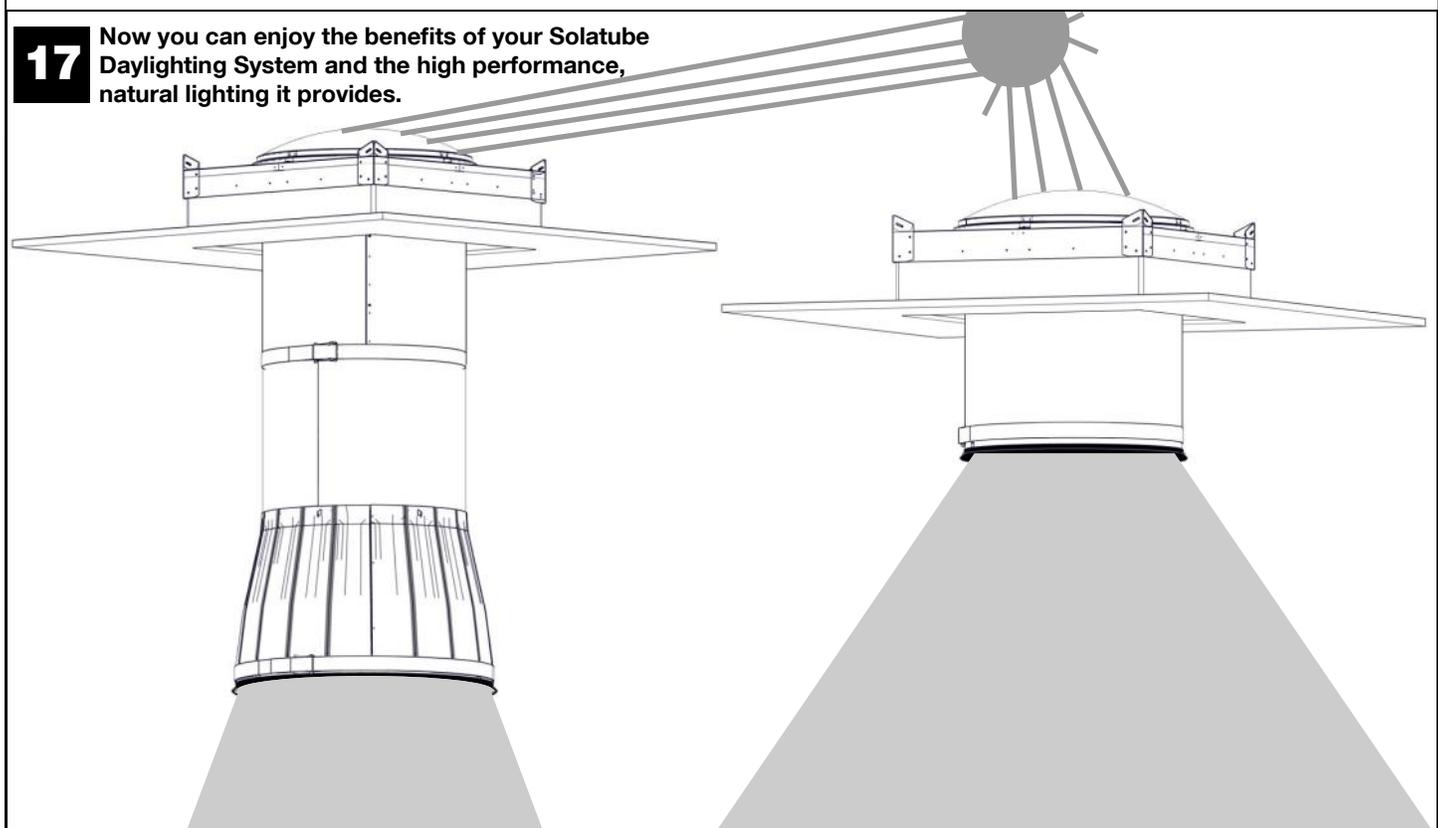
16

Install Tube Belt and Amplifier Diffuser

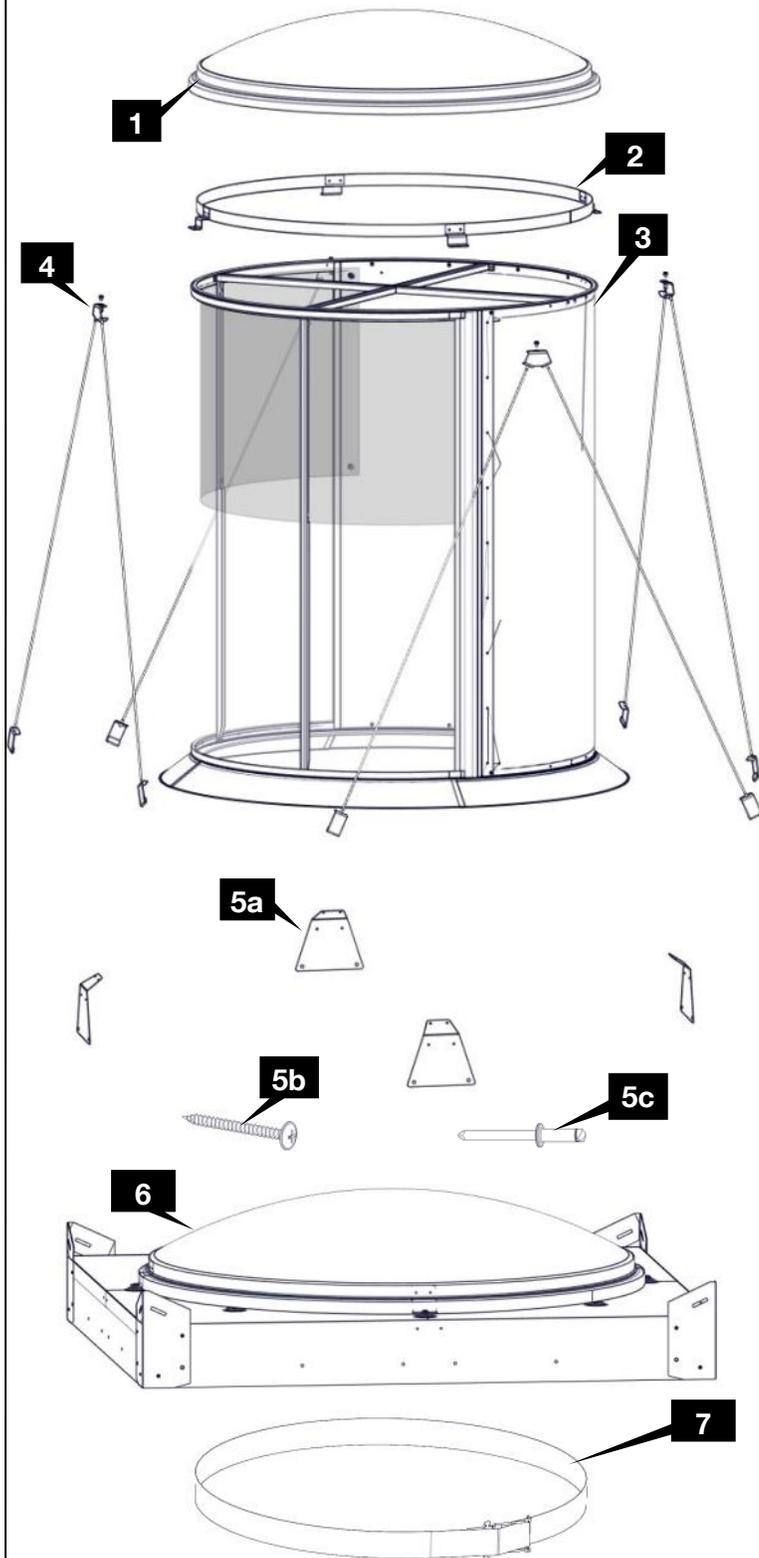


17

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



Collector with Raybender HD Installation Instructions Appendix



Parts List		Quantity
1	M74 DS Dome	(1)
2	Dome Retainer Band Assembly	(1)
3	M74 DS Cylinder Assembly with Raybender HD	(1)
4	Wire Rope Bridle Assembly	(4)
5	Cone Fastener Kit	
	a. Cone Clamp	(4)
	b. Flashing Screws - #10 X 2 in (50mm)	(24)
6	c. Cone Clamp Rivet	(17)
	Pre-Assembled Roof Assembly Options *	(1)
	a. M74 DS Single Dome Roof Assembly with Insulated Curb Cap Flashing *†	
	b. M74 DS Dual Dome Roof Assembly with Insulated Curb Cap Flashing *†	
7	c. M74 DS Single Dome Roof Assembly with Insulated Curb Cap Flashing and Security Guard *†	
	d. M74 DS Dual Dome Roof Assembly with Insulated Curb Cap Flashing and Security Guard *†	
7	Tube Belt with Belt Latch	(1)

Required Tools:

Tape Measure	Rivet Gun
Screw Gun with Phillips Head	Required Safety Equipment
Drill Bit #30	Nut Driver 3/8 in (15.875 mm)

* The M74 DS Single Dome Options meet High Velocity Hurricane Zone (HVHZ) Requirements.

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

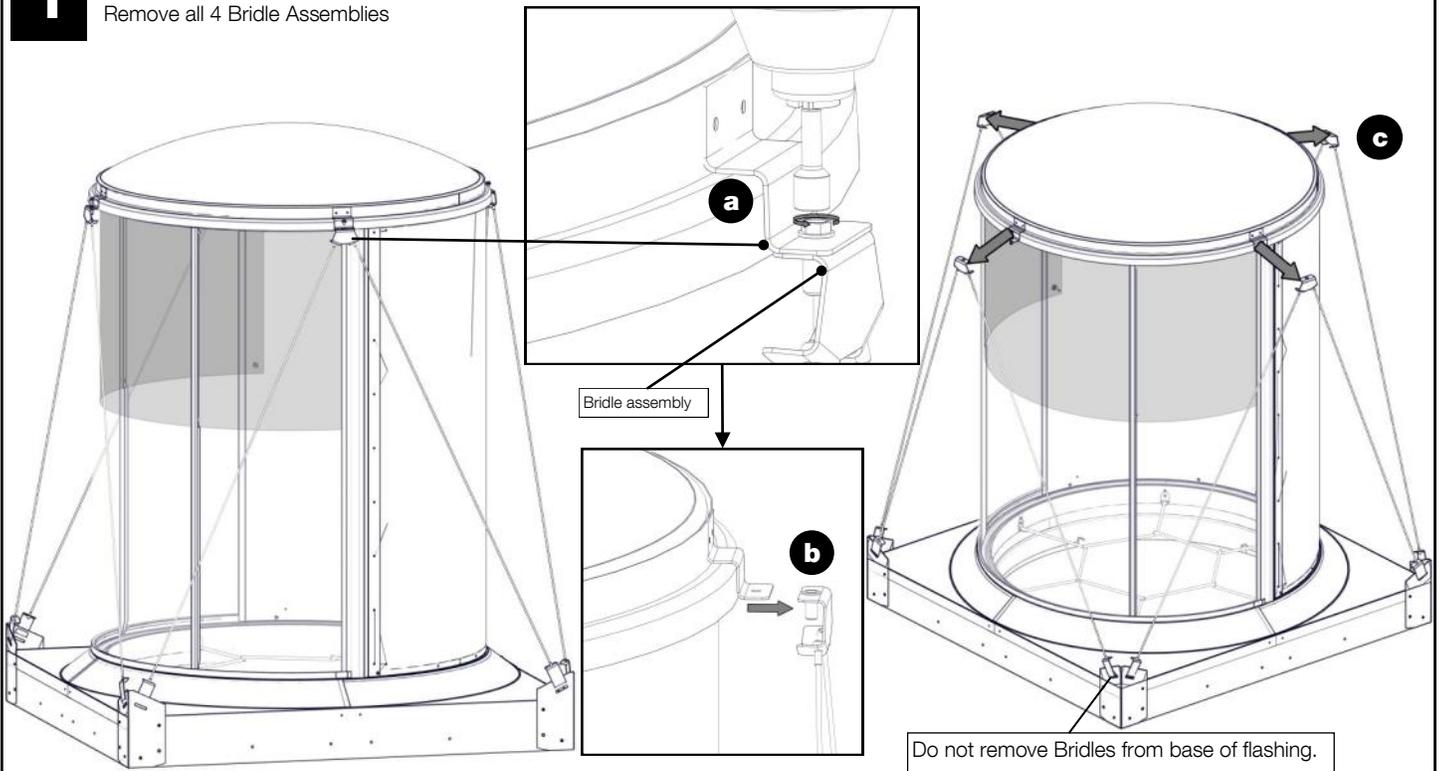
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1

Remove Bridle Assembly

Remove all 4 Bridle Assemblies

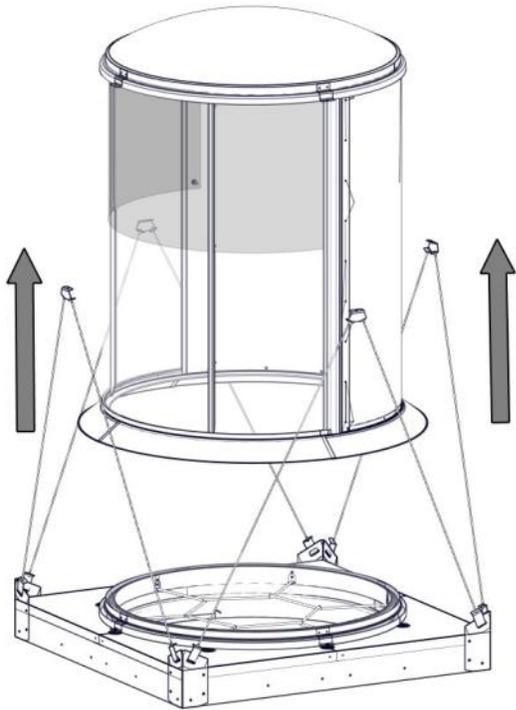


CAUTION: Unassembled Bridle Assemblies are a Trip Hazard. Use Caution During This Step.

2

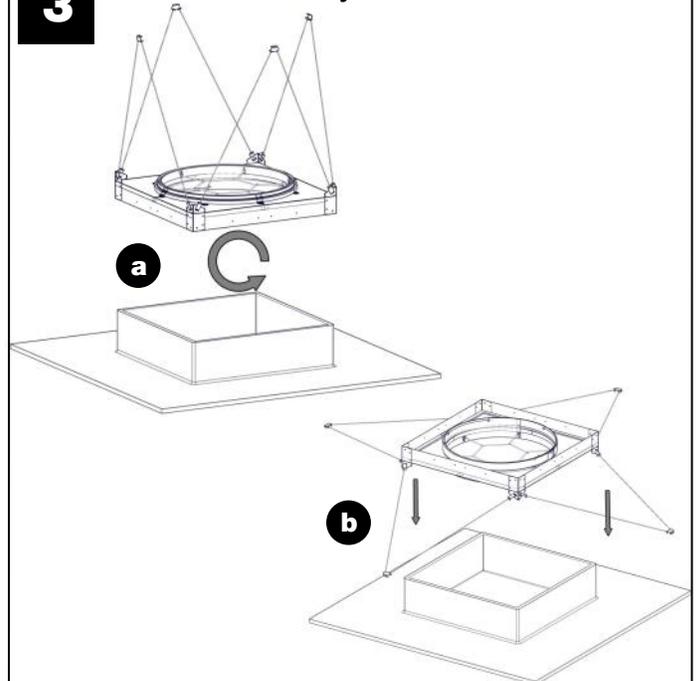
Remove Collector from Flashing

Remove collector and set aside.



3

Place Roof Assembly onto Curb

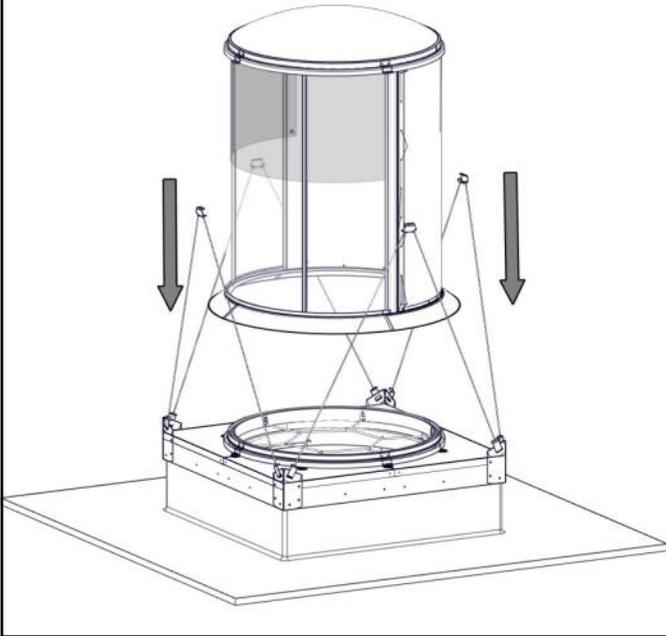


CAUTION: Unassembled Bridle Assemblies are a Trip Hazard. Use Caution During This Step.

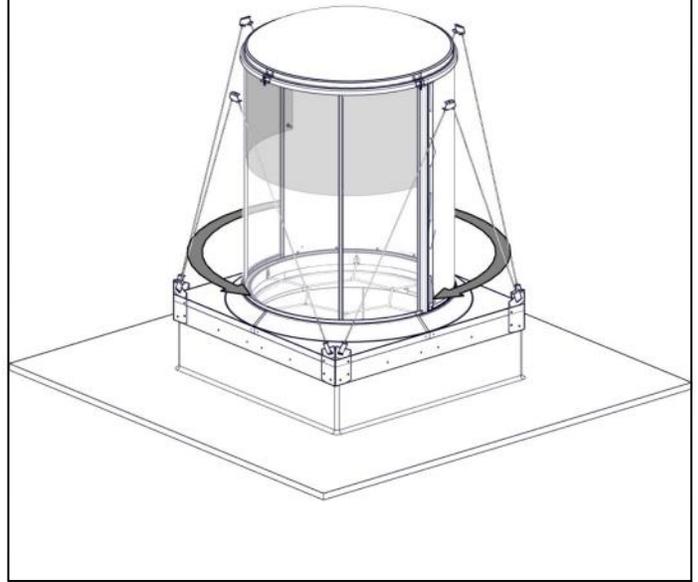
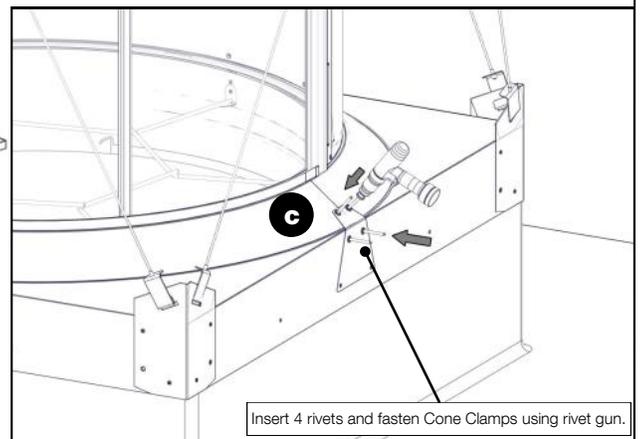
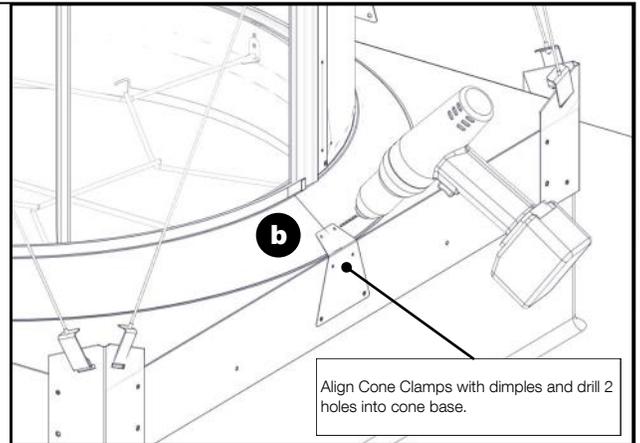
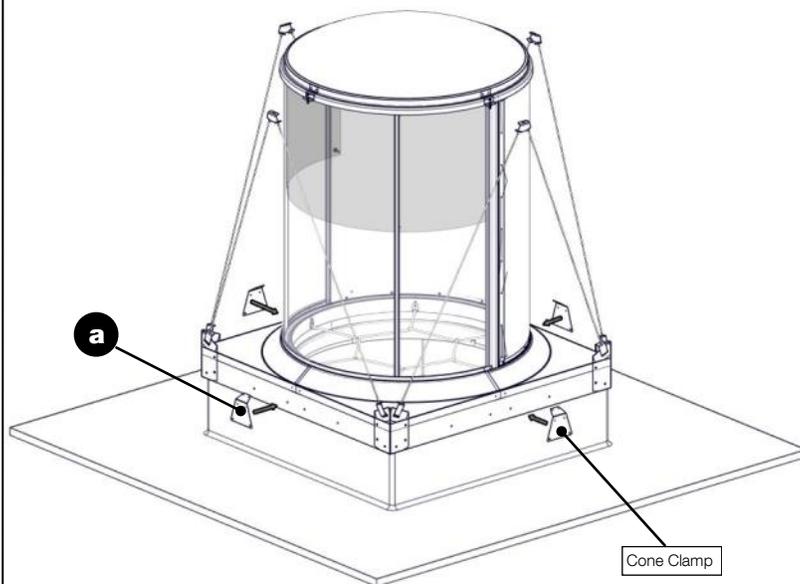
Please return to step 2 of the SkyVault Series installation instructions for tubing and diffuser attachment before proceeding to step 4 of these instructions.

4**Re-Install Collector**

Carefully place and center collector over roof assembly.

**5****Adjust Collector Position**

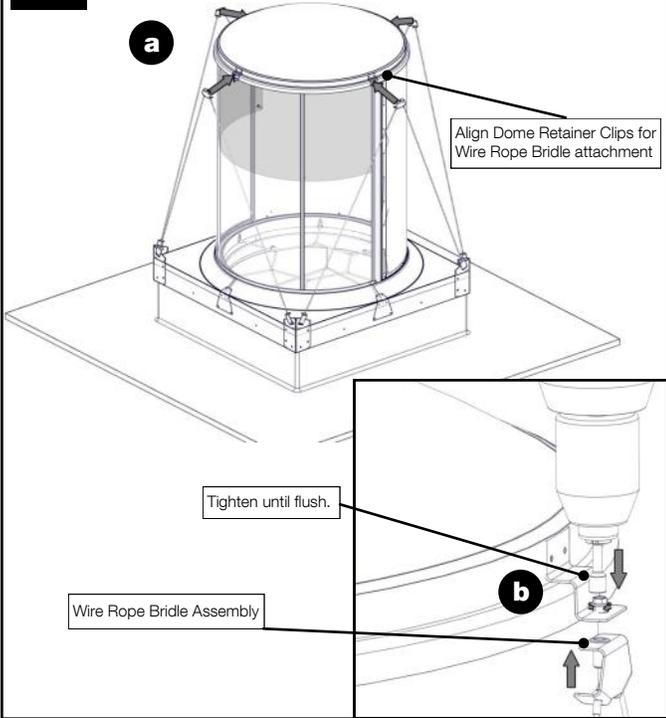
In the Northern Hemisphere position the Collector so the reflective side of the Light Tracker is facing due South (North in the Southern Hemisphere).

**6****Fasten Cone Clamps**For the most current Installation Instructions, please visit www.solatube.com/instructionsSolatube International, Inc. | 2210 Oak Ridge Way | Vista, CA 92081-8341 | www.solatube.com | T: 888.SOLATUBE

7

Re-Attach Bridle Assemblies

Carefully place and center collector over roof assembly.



8

Fasten Roof Assembly to Curb

Fasten 6 flashing screws per side.

