

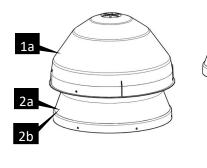
Solatube[®] SolaMaster[®] Series

Solatube[®] 330 DS Daylighting System *** Solatube[®] 750 DS Daylighting System *** Installation Instructions

Damba I :at *

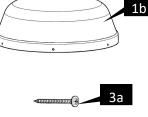
Open Ceiling

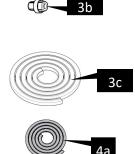
For Closed Ceiling, see back of this page.

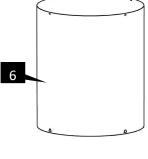
















7a

7b

Part	s List *	Quantity
	Outer Dome Options	
1	a. 750 DS Dome with Raybender® 3000 Technology	(1)
	b. 330 DS Dome with LightTracker™ Reflector	(1)
	Inner Dome Option	(1)
2	a. Inner Dome for 750 DS (Optional)	(1)
	b. Inner Dome for 750 DS (Optional, Polycarbonate*†)	(1)
	Dome Fasteners	
3	a. Dome Screw #8 X 1 5/8 in (40 mm)	(4)
5	b. Dome Spacer	(3)
	c. Dome Seal	(1)
	Tube Ring	(1)
4	a. Tube Ring Seal (Required for all Open Ceiling Units)	(1)
5	Roof Flashing (4 in (100 mm)*†, 8 in (200 mm)*†, 11 in (280 mm)*† or Curb Cap))	(1)
	a. Flashing Screws - #10 X 2 in (50 mm)	(21)
	Spectralight [®] Infinity Tubes	
6	a. 24 in (610 mm) Extension Tube with Tube Fastener Kit	(1)
	b. 48 in (1220 mm) Extension Tube with Tube Fastener Kit	(1)
	Tube Fastener Kit	(1)
7	a. Tube Screws - #8 X 9/16 in (14 mm)	(5)
	b. 2 in (50 mm) Foil Tape - 18 ft (5.5 m)	(1)
0	Diffuser for Open Ceiling	(1)
8	a. Diffuser Seal	(1)

Required Tools:

Saber or Reciprocating Saw	Utility Knife
Flat Bar	Caulking Gun
Tape Measure	Lumber Crayon
Screw Gun with Phillips Head	Metal Shears
Magnetic Compass	Required Safety Equipment
Hammer	Drill Bit #40 (3/32 in/2.5 mm)

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

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

*++ Some of these products are



and meet criteria for

UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings. See warning section for approved configurations.

Closed Ceiling

1b

3a

3c

4a

5a

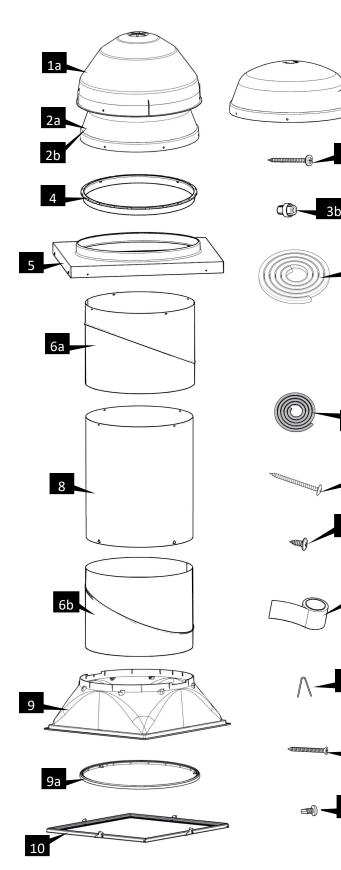
7a

9b

9c

9d

7b



Part	Parts List *	
	Outer Dome Options	
1	a. 750 DS Dome with Raybender® 3000 Technology	(1)
	b. 330 DS Dome with LightTracker™ Reflector	(1)
	Inner Dome Option	(1)
2	a. Inner Dome for 750 DS	(1)
	b. Inner Dome For 750 DS (Optional, Polycarbonate*†)	(1)
	Dome Fasteners	
3	a. Dome Screw #8 X 1 5/8 in (40 mm)	(4)
3	b. Dome Spacer	(3)
	c. Dome Seal	(1)
4	Tube Ring	(1)
4	a. Tube Ring Seal *†	(1)
5	Roof Flashing (4 in (100 mm)*†, 8 in (200 mm)*†, 11 in (280 mm)*† or Curb Cap))	(1)
	a. Flashing Screws - #10 X 2 in (50 mm)	(21)
	Spectralight [®] Infinity Tubes	
6	a. Top Tube with Angle Adapter	(1)
	b. Bottom Tube with Angle Adapter	(1)
	Tube Fastener Kit	(1)
7	a. Tube Screws - #8 X 9/16 in (14 mm)	(10)
	b. 2 in (50 mm) Foil Tape - 18 ft (5.5 m)	(2)
	Spectralight [®] Infinity Tubes	
8	a. 24 in (610 mm) Extension Tube (optional) with Tube Fastener Kit	(1)
	b. 48 in (1220 mm) Extension Tube (optional) with Tube Fastener Kit	(1)
	Transition Box (Plastic/Polymeric) or (Metal with Softlight Technology)	(1)
9	a. Natural Effect Lens (Optional)	(1)
	b. Transition Box Hold Down Clip	(4)
	c. Drill Tip Screw - #6 X 1 5/8 in (40 mm) (For Hard Ceiling Application Only)	(4)
	d. Drill Tip Screw - #8 X 5/8 in (16 mm)	(2)
10	Diffuser	(1)
*Com	popents shown not included in all kits, see label on how	

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

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

*** Some of these products are **FM**

and meet criteria for UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings. See

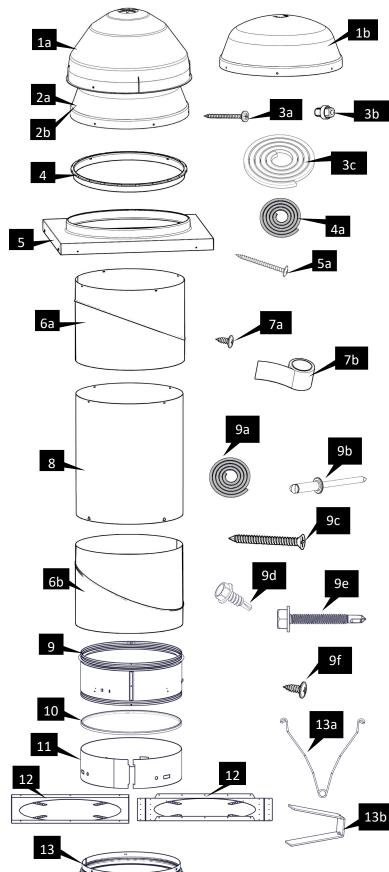
warning section for approved configurations.

For the most current Installation Instructions, please visit www.solatube.com/instructions

Solatube International, Inc. | 2210 Oak Ridge Way | Vista, CA 92081-8341 | www.solatube.com | T: 888.SOLATUBE

2

Closed Round Ceiling



Part	s List *	Quantity
	Outer Dome Options	
1	a. 750 DS Dome with Raybender® 3000 Technology	(1)
	b. 330 DS Dome with LightTracker™ Reflector	(1)
	Inner Dome Option	(1)
2	a. Inner Dome for 750 DS	(1)
	b. Inner Dome For 750 DS (Optional, Polycarbonate*†)	(1)
	Dome Fasteners	
3	a. Dome Screw #8 X 1 5/8 in (40 mm)	(4)
5	b. Dome Spacer	(3)
	c. Dome Seal	(1)
4	Tube Ring	(1)
4	a. Tube Ring Seal *†	(1)
5	Roof Flashing (4 in (100 mm)*†, 8 in (200 mm)*†, 11 in (280 mm)*† or Curb Cap))	(1)
	a. Flashing Screws - #10 X 2 in (50 mm)	(21)
	Spectralight [®] Infinity Tubes	
6	a. Top Tube with Angle Adapter	(1)
	b. Bottom Tube with Angle Adapter	(1)
	Tube Fastener Kit	(1)
7	a. Tube Screws - #8 X 9/16 in (14 mm)	(10)
	b. 2 in (50 mm) Foil Tape - 18 ft (5.5 m)	(2)
	Spectralight [®] Infinity Tubes	
8	a. 24 in (610 mm) Extension Tube (optional) with Tube Fastener Kit	(1)
	b. 48 in (1220 mm) Extension Tube (optional) with Tube Fastener Kit	(1)
	Round Closed Ceiling Housing	(1)
	a. Tube Ring Seal	(1)
	b. Rivet	(6)
9	c. Screw #8 x 2 1/2" (63 mm)	(6)
	d. Screw Hex Head - #8 x 5/8" (16 mm)	(6)
	e. Screw Hex Head - #8 x 2" (50 mm)	(6)
	f. Screw - #8 X 9/16 in (14 mm)	(1)
10	Natural Effect Lens	(1)
11	Spectralight [®] Infinity Reflective Sleeve	(1)
12	Mounting Plate (Hard Ceiling or Suspended Ceiling)	(1)
	Diffuser	(1)
13	a. Diffuser Torsion Spring	(3)
	b. Diffuser Spring Lock	(3)

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

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

*++ Some of these products are APPROVED and meet criteria for

UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings. See warning section for approved configurations.

For the most current Installation Instructions, please visit www.solatube.com/instructions

Table of Contents:

Section	<u>Page</u>
Warnings	4-5
Curb Cap	6
Closed Ceiling	6-11
Closed Round Ceiling	11-17
Open Ceiling	18-19
Curb Cap Insulation	20
Self-Flashing	21-22
DSA Requirements	22
Turret Extension	
0-90 Degree Angle Adaptor	23
Dome Edge Protection Band	24
Hard Ceiling	25
Suspension Wire Kit	26-27
Natural Effect Lens	
Thermal Insulation Panel (TIP)	
Closed Ceiling TIP with Daylight Dimmer	33-34
Notes	35

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.
 - For the most current Installation Instructions, please visit www.solatube.com/instructions
 - Solatube International, Inc. | 2210 Oak Ridge Way | Vista, CA 92081-8341 | www.solatube.com | T: 888.SOLATUBE

Δ

- 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**



- 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.
- For installations where high levels of suit or debris may be present it may be necessary to use foil tape to seal the diffuser to the tubing to prevent the excess debris from entering the tubing.
- FM (Factory Mutual): The 750 DS Dual Dome with Polycarbonate Inner Dome and the 330 DS with Polycarbonate Dome, when used with the Dome Edge Protection Band, meet requirements for FM Approvals.



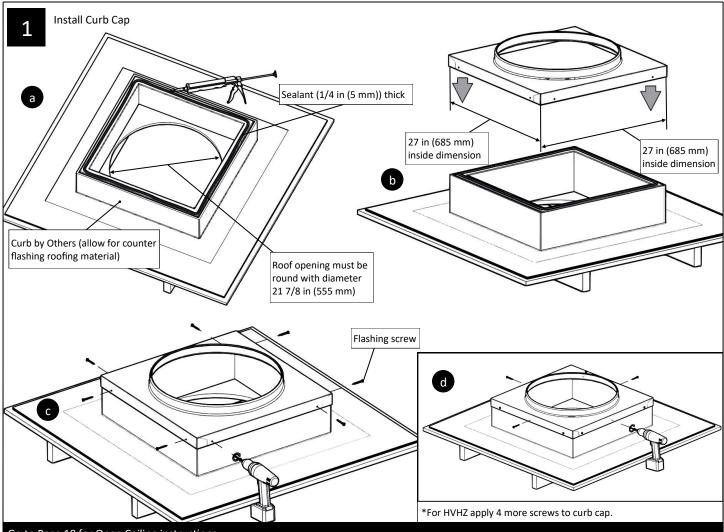
UFC-4-010-01: All SolaMaster assemblies meet requirements for United Facilities Criteria (UFC) DoD minimum antiterrorism standard for buildings.



Daylight Dimmer Installation Tips

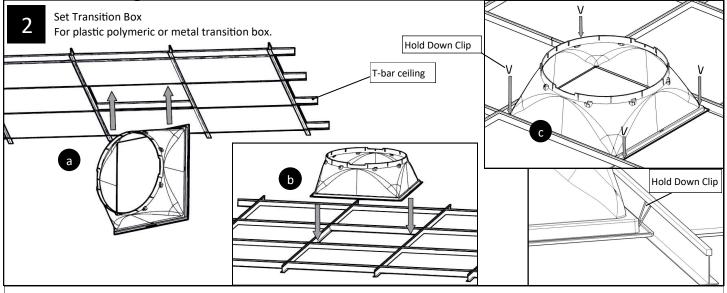
- Install Solatube Daylight Dimmer only on a properly aligned Solatube Daylighting System.
- Use only UL recognized components approved for this listing.

Curb Cap Installation Instructions



Go to Page 18 for Open Ceiling instructions.

Closed Ceiling Installation Instructions

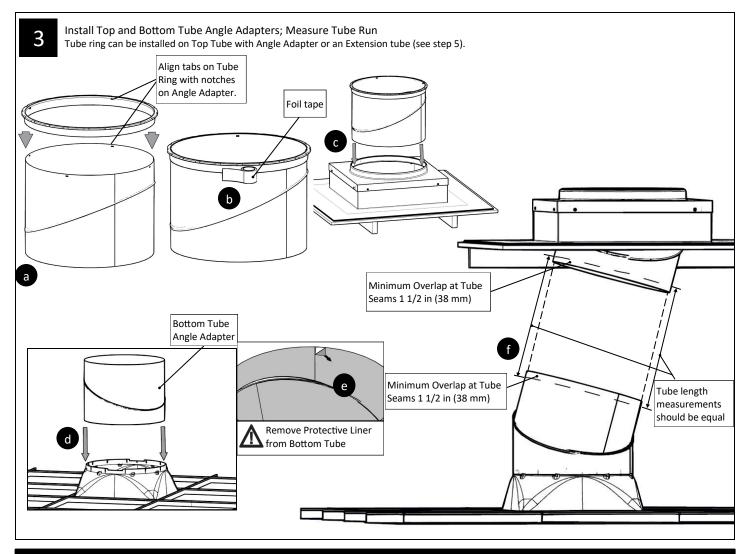


For DSA (Division of the State Architect) project, please see additional fastening requirements in accessories section on page 22.

For the most current Installation Instructions, please visit www.solatube.com/instructions

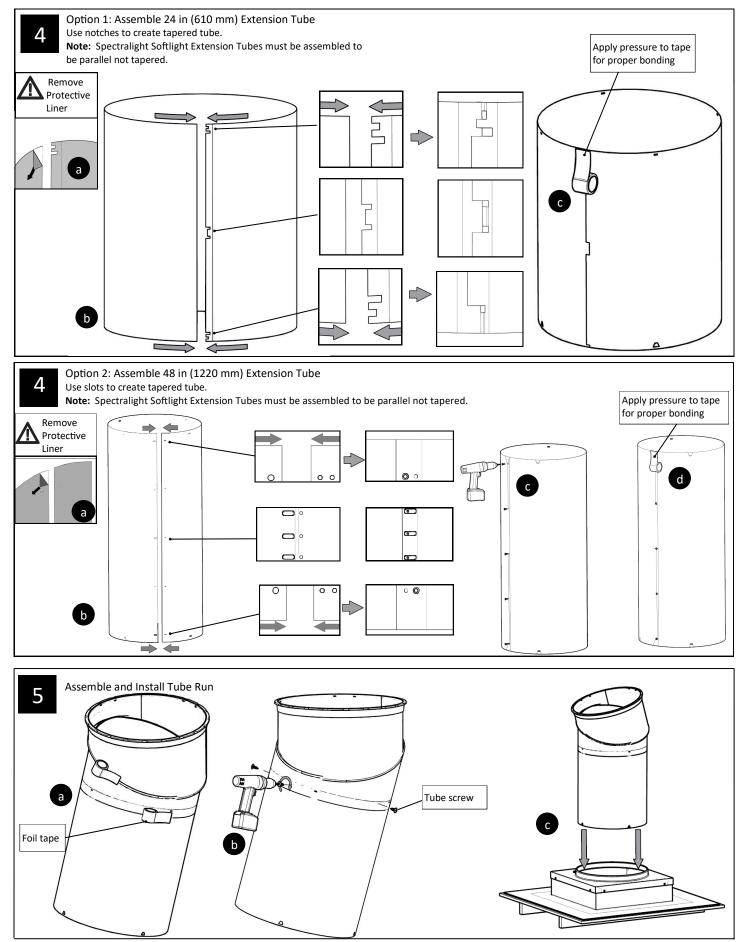
Solatube International, Inc. | 2210 Oak Ridge Way | Vista, CA 92081-8341 | www.solatube.com | T: 888.SOLATUBE

6



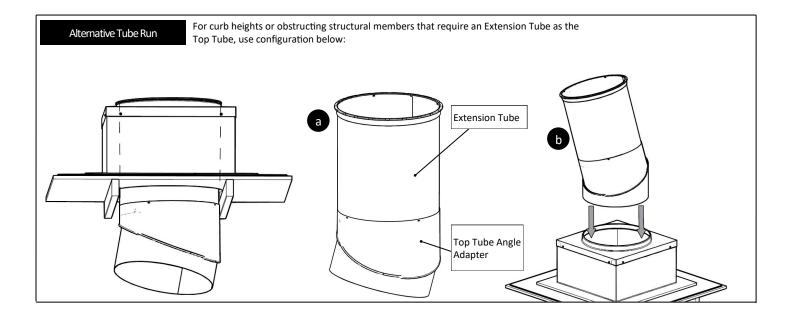
Note: For use with Metal Transition Box

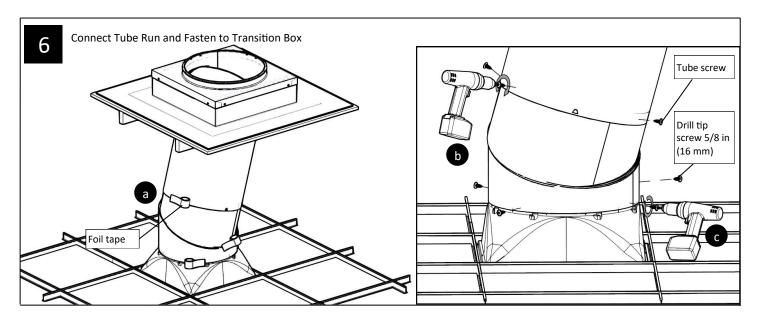
Install Spectralight Softlight Tubing at bottom of tube run for best results. Use no more than one (1) Softlight Extension Tube for each assembly. Tube Ring Tube Ring Angle Adaptor Angle Adaptor Softlight Tube as Last Extension Tube Softlight Tube as Last Extension Tube

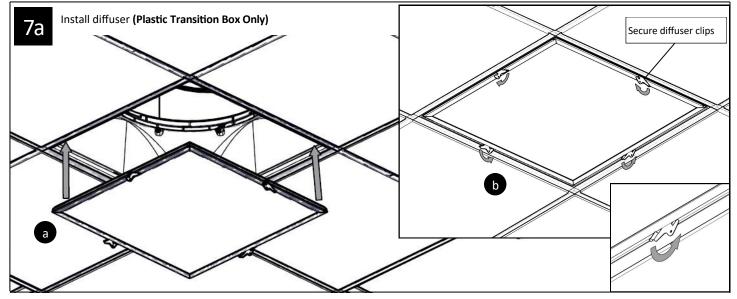


For the most current Installation Instructions, please visit www.solatube.com/instructio Solatube International, Inc. | 2210 Oak Ridge Way | Vista, CA 92081-8341 | www.solatube.com | T: 888.SOLATUBE

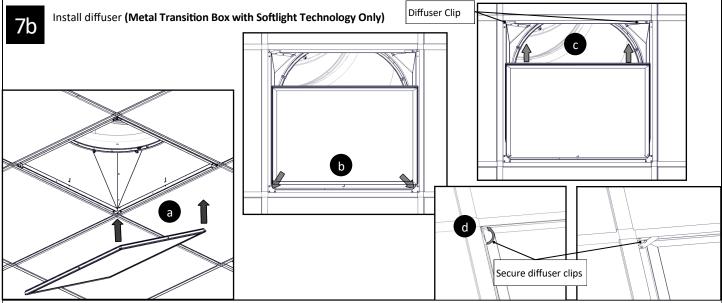
8



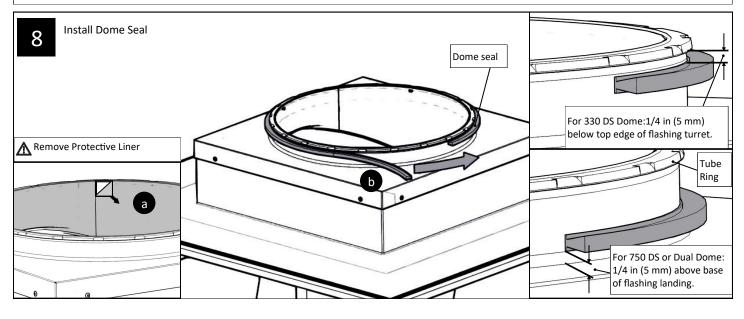




For the most current Installation Instructions, please visit www.solatube.com/instructions Solatube International, Inc. | 2210 Oak Ridge Way | Vista, CA 92081-8341 | www.solatube.com | T: 888.SOLATUBE

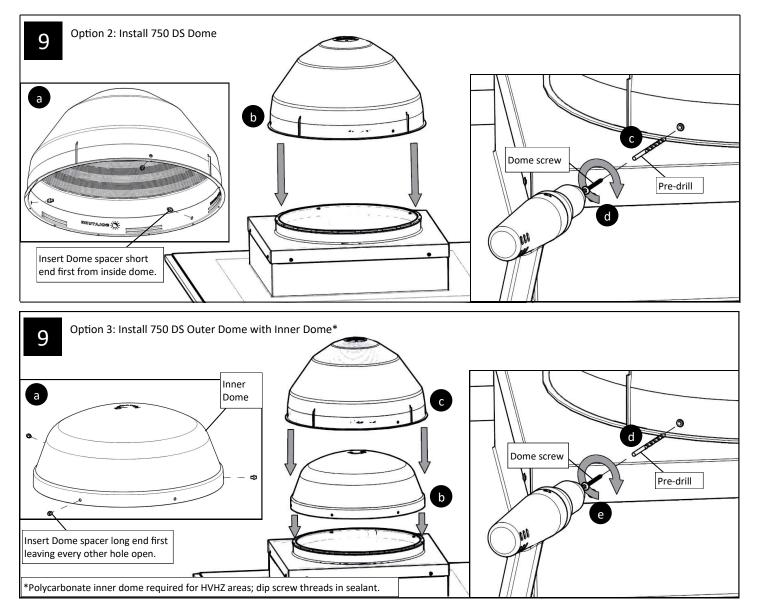


Note: Do not press diffuser into metal transition box too far. Ensure that diffuser is flush with transition box frame.

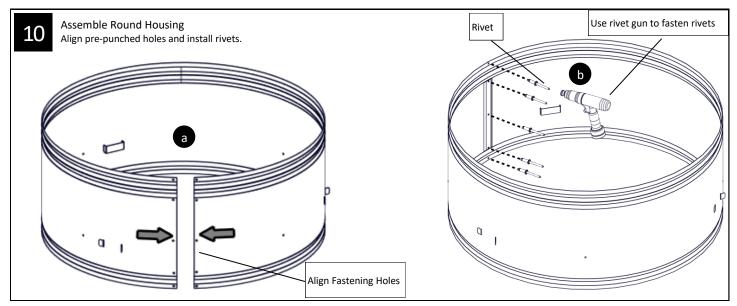


Option 1: Install 330 DS dome 9 Reflective side of LightTracker™ Reflector faces South in Northern Hemisphere (North in Southern Hemisphere). Insert dome spacer long С end first. b Pre-drill d 0-100 LightTracker™ а Reflector tabs fit between Top Tube and Tube Ring. Dome screw е **M** Insert dome screws and spacers evenly leaving every other hole open.

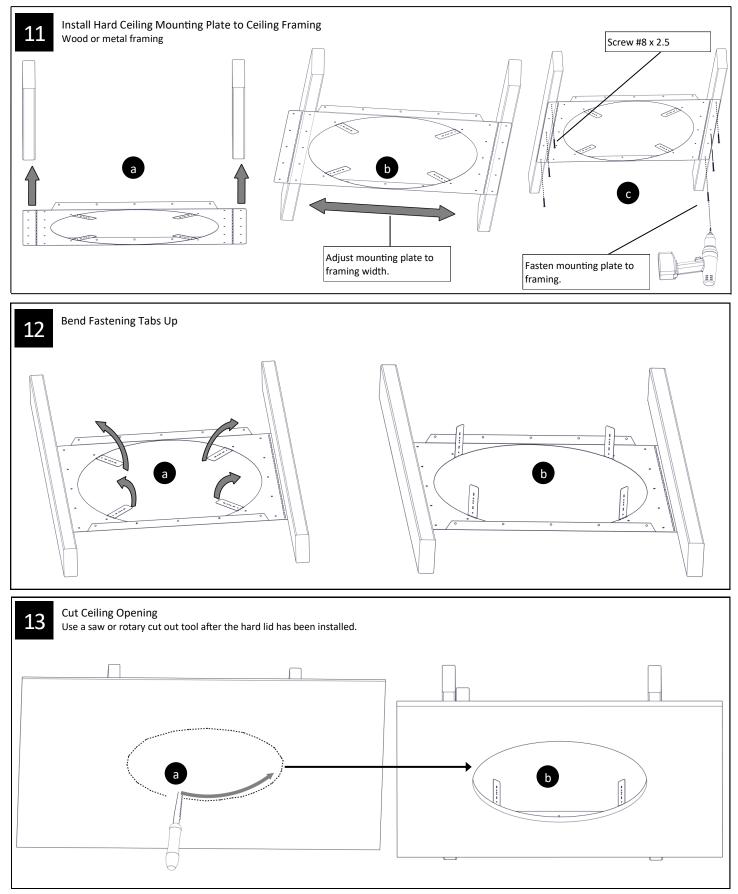
For the most current Installation Instructions, please visit www.solatube.com/instructions



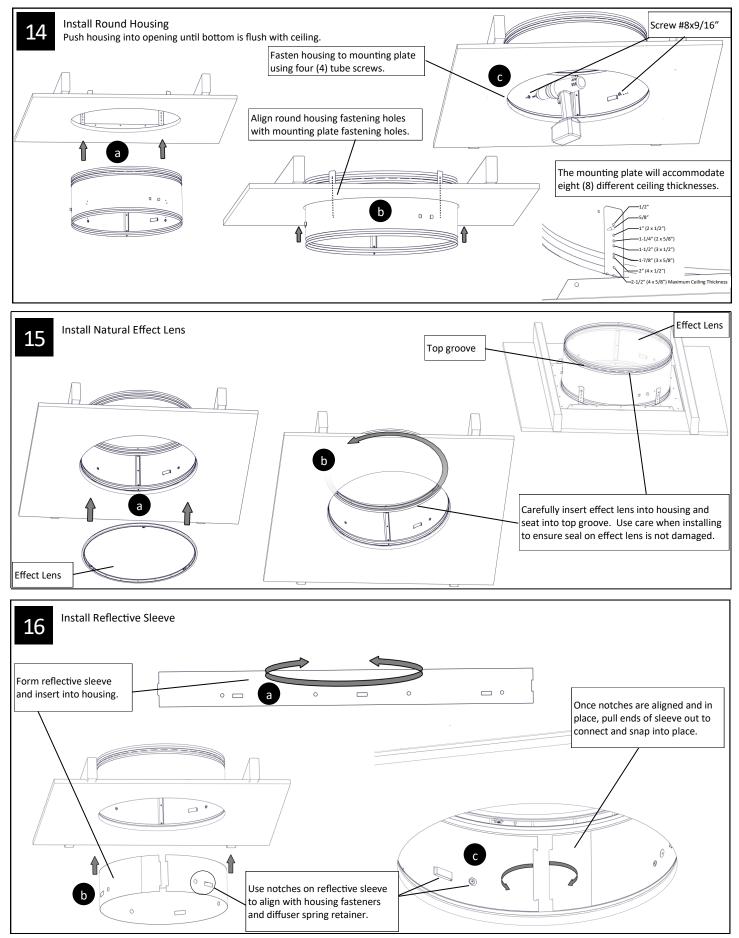
Round Closed Ceiling Installation Instructions



Hard Ceiling New Construction Installation Instructions (No ceiling in place)

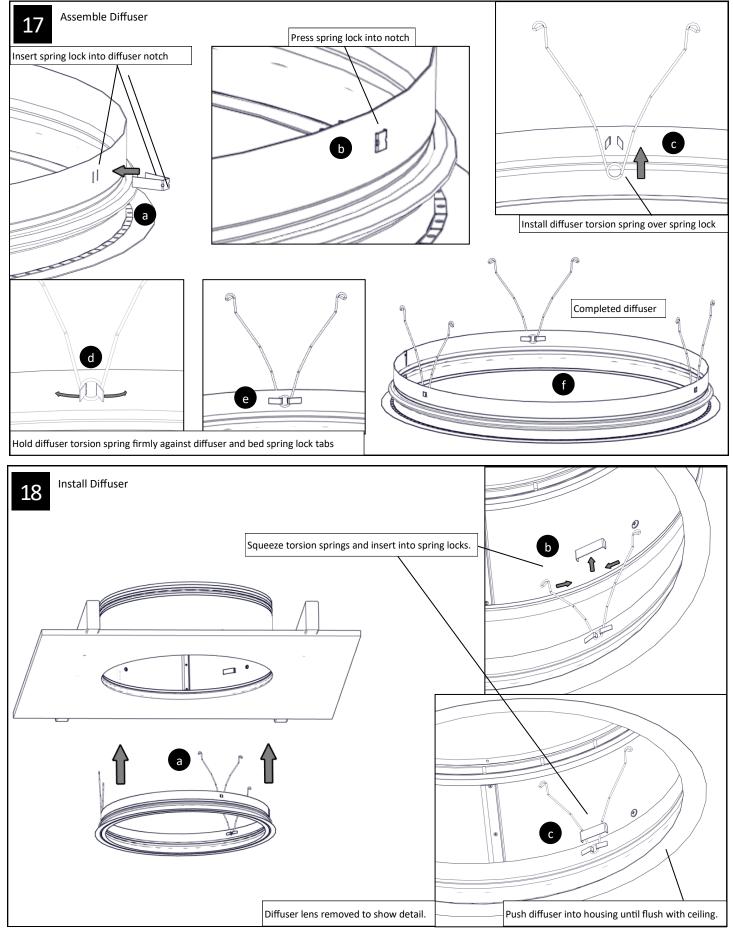


For the most current Installation Instructions, please visit www.solatube.com/instructions

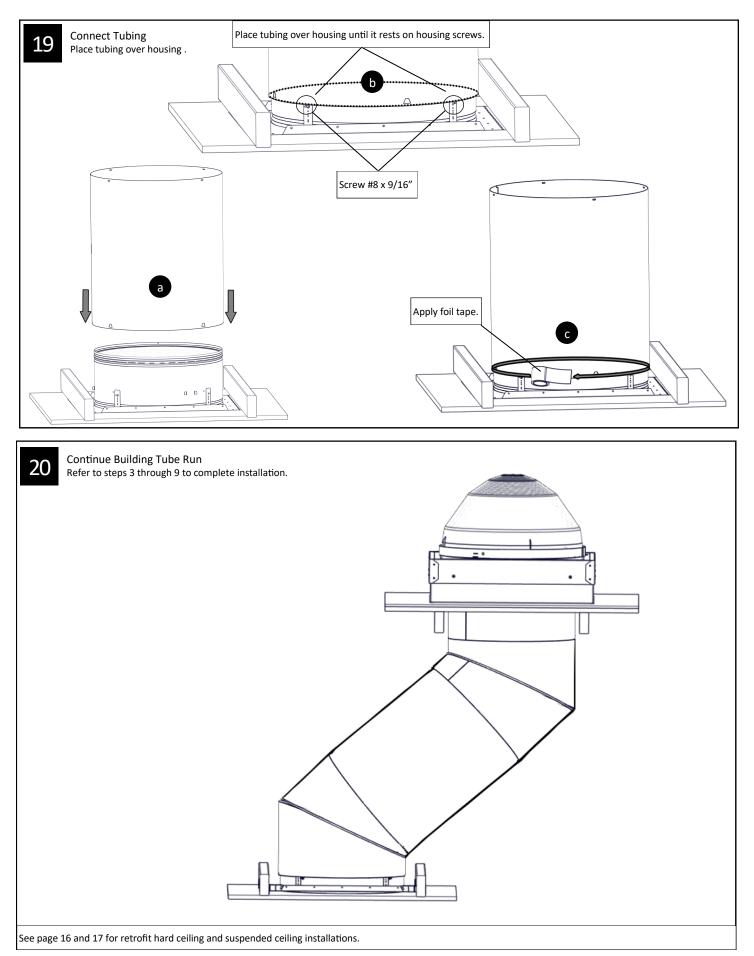


For the most current Installation Instructions, please visit www.solatube.com/instructions Solatube International, Inc. | 2210 Oak Ridge Way | Vista, CA 92081-8341 | www.solatube.com | T: 888.SOLATUBE

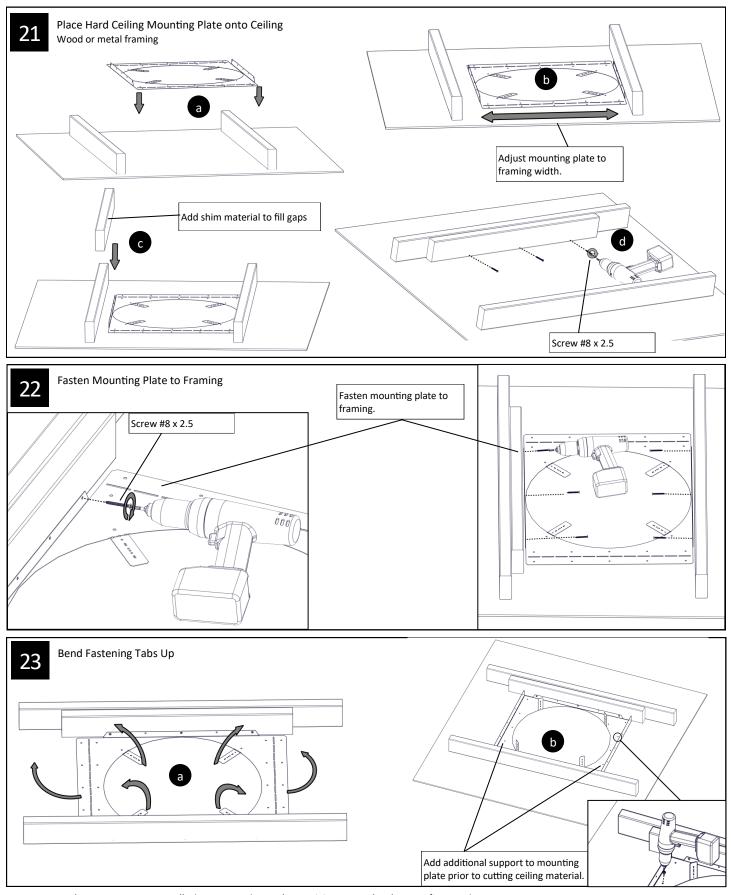
13



For the most current Installation Instructions, please visit www.solatube.com/instructions



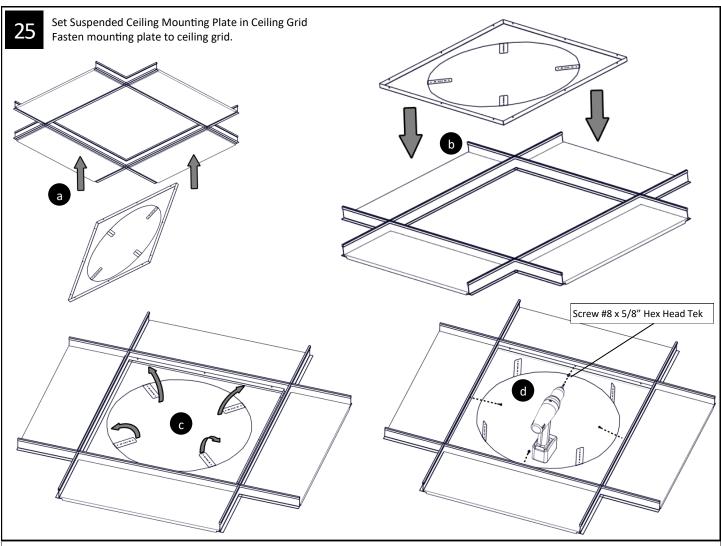
Hard Ceiling Retrofit Construction Installation Instructions (ceiling in place)



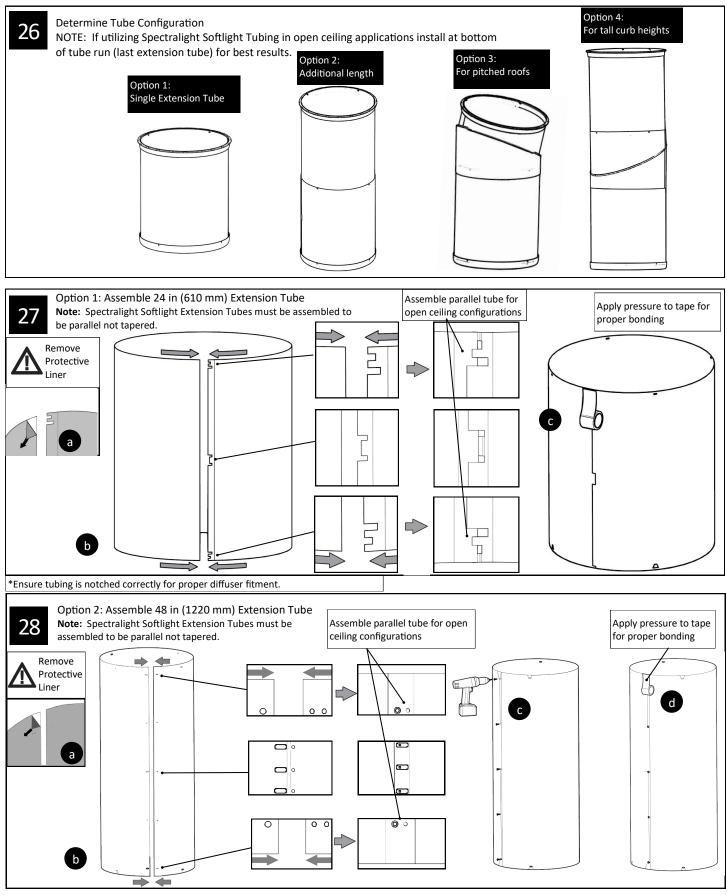
For the most current Installation Instructions, please visit www.solatube.com/instructions

24 Cut Ceiling Opening Use a saw or rotary cut out tool after the hard lid has been installed.

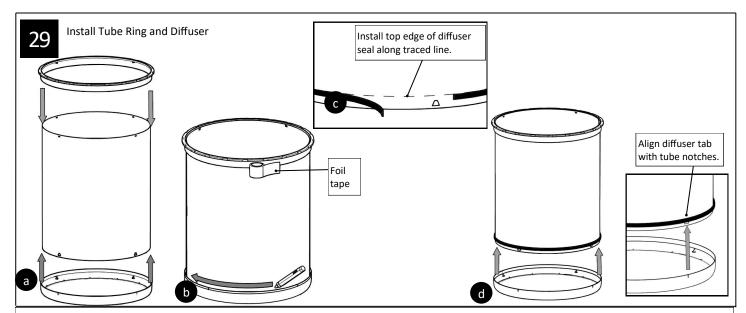
Suspended T-Bar Ceiling Installation Instructions



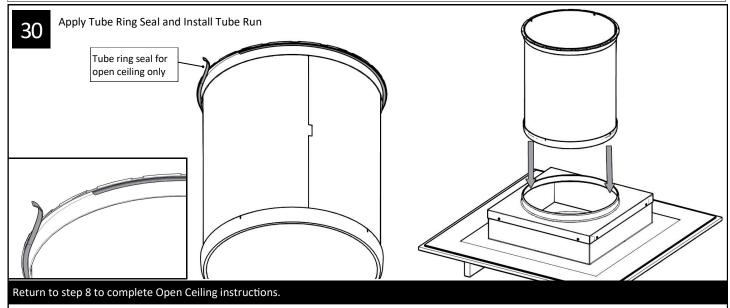
Follow steps 14 though 20 to complete installation.



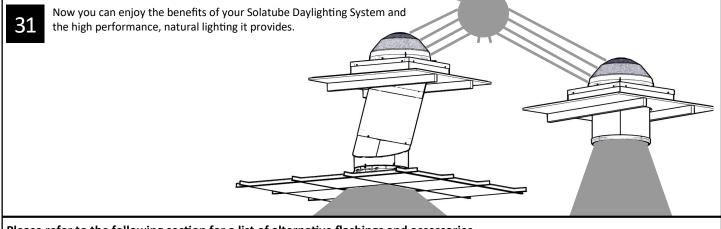
For the most current Installation Instructions, please visit www.solatube.com/instructions



* For installations where high levels of suit or debris may be present it may be necessary to use foil tape to seal the diffuser to the tubing to prevent the excess debris from entering the tubing.



For DSA (Division of the State Architect) projects, it is necessary to add suspension wires to all open ceiling applications. See page 22 for instructions.



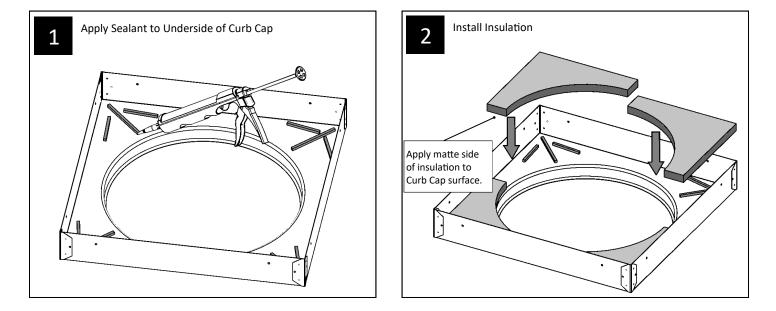
Please refer to the following section for a list of alternative flashings and accessories.

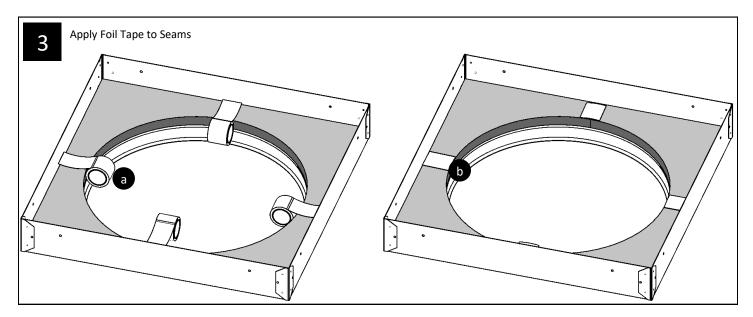
Curb Cap Flashing Insulation

Installation Instructions Appendix

Parts List		Quantity
1	330 DS / 750 DS Curb Insulation	(4)

Additional Materials and Tools Quantit		Quantity
1	Roof Sealant	(1)
2	Foil Tape	(1)



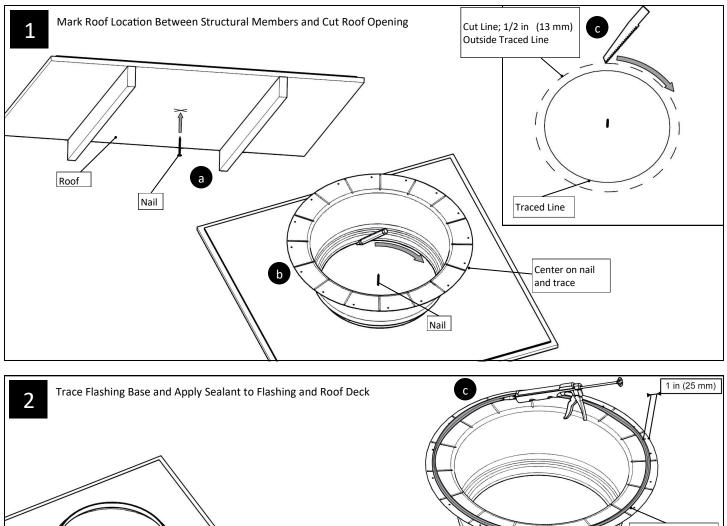


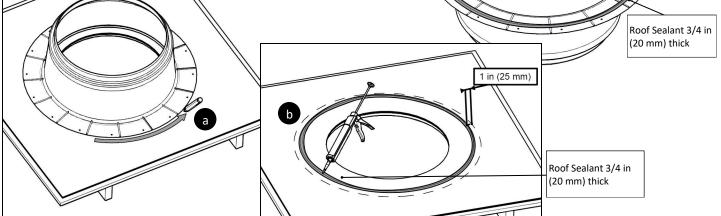
For the most current Installation Instructions, please visit www.solatube.com/instructions

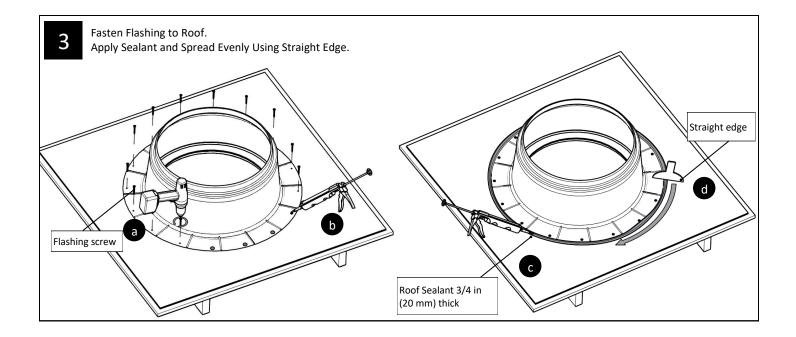
$Self-Flashing \ {\tt Installation \ Instructions \ Appendix}$

Parts List	Quantity
Self-Flashing (4 in (100 mm), 8 in (200 mm), 11 in (280 mm))	(1)
2 Flashing Screws - #10 X 2 in (50 mm)	(21)

Additional Materials and Tools Quantit		Quantity
1	Roof Sealant	(3)
2	Straight Edge	(1)



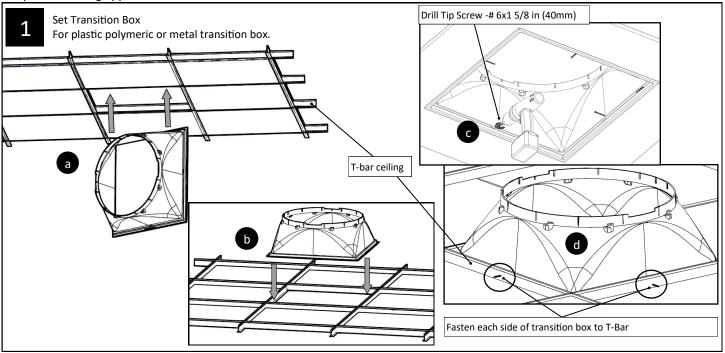




Requirements for DSA Projects Installation Instructions Appendix

Note: This section is intended to satisfy installations requirements for the DSA (Division of the State Architect).

Suspended ceiling application

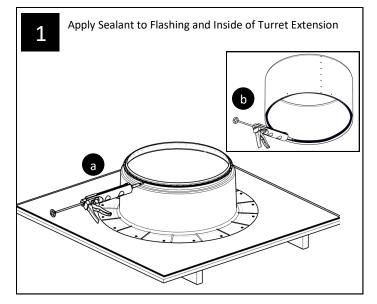


For the most current Installation Instructions, please visit www.solatube.com/instructions

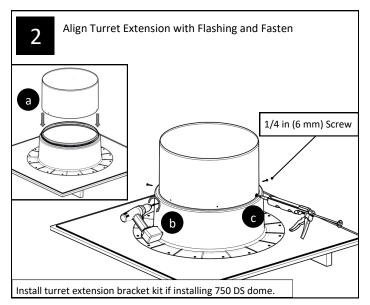
Turret Extension Installation Instructions Appendix

Parts List		Quantity
1	Turret Extension 12 in (300 mm), 24 in (600 mm), 36 in (900 mm), or 48 in (1200 m)	(1)
2	1/4 in (6 mm) screws*	(4)

* 3/4 in (20 mm) screws for 48 in (1200 mm) Turret Extension Only



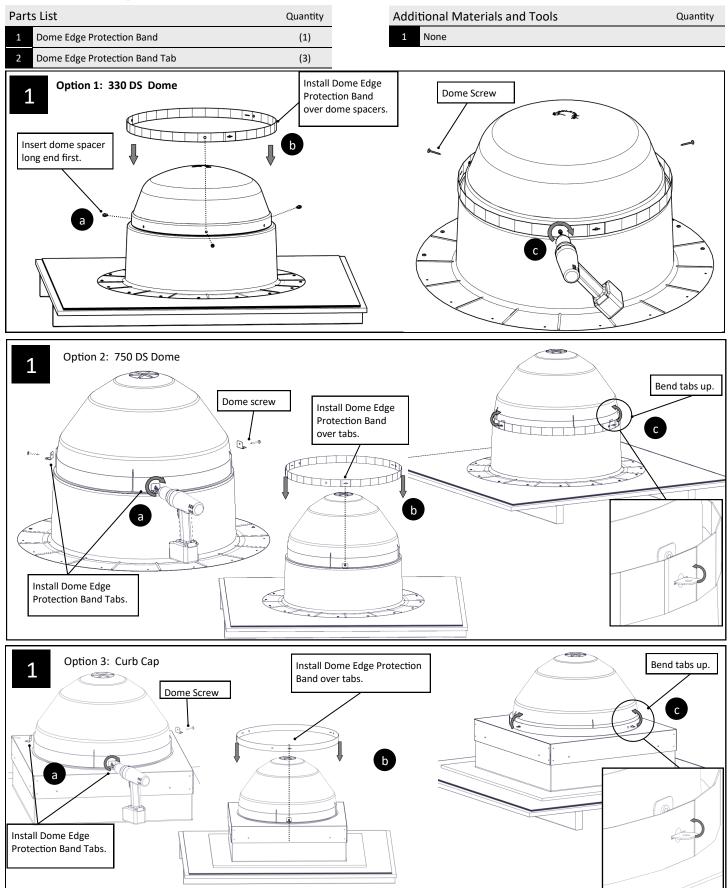
Additional Materials and Tools		Quantity
1	Roof Sealant	(1)



0-90 Degree Extension Tube Installation Instructions Appendix

Parts List	Quantity	Additional Materials and Tools Quantity
1 Top Tube Angle Adaptor	(1)	1 None
2 Inner Angle Adaptor	(1)	
3 Tube Screws - #8 X 9/16 in (14 mm)	(8)	
4 Foil Tape - 2 in (51 mm) X 6 ft (2 m)	(2)	
Assemble 0-90 Degree Angle Adaptor Minimum overlap at tube seams 1 1/2 in (38 mm) Adjust Angle Image: Image of the seam of		Top Tube Angle Adaptor

Dome Edge Protection Band Installation Instructions Appendix

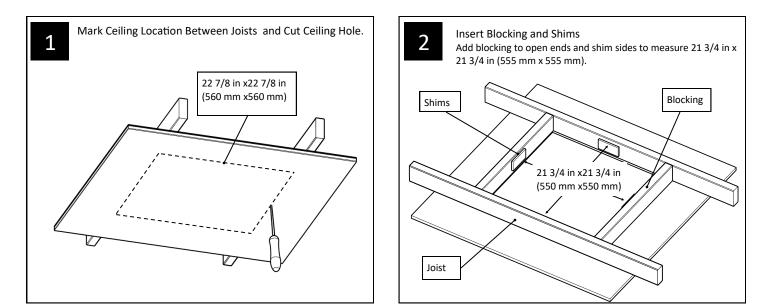


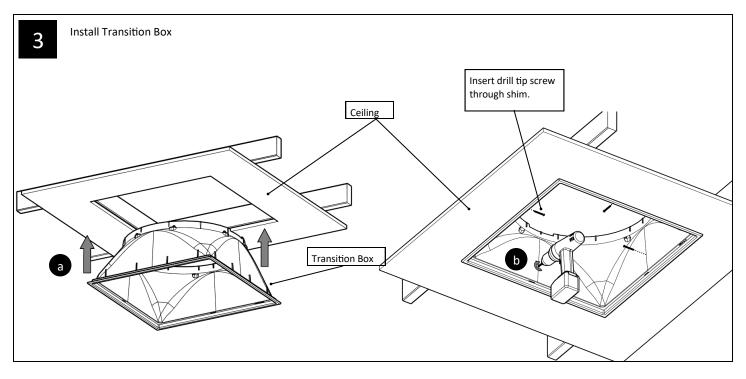
For the most current Installation Instructions, please visit www.solatube.com/instructions

Note: This application is intended for the plastic polymeric transition box only.

Part	s List	Quantity	
1	Transition Box	(1)	
2	Drill Tip Screw 1 5/8 in (40 mm)	(4)	

Additional Materials and Tools		Quantity
1	Wood Blocking	(2)
2	Shims	(4)

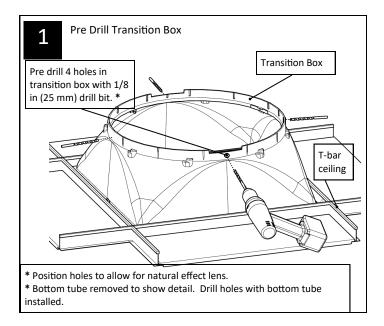




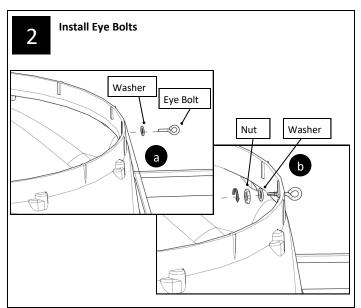
Suspension Wire Kit Installation Instructions Appendix

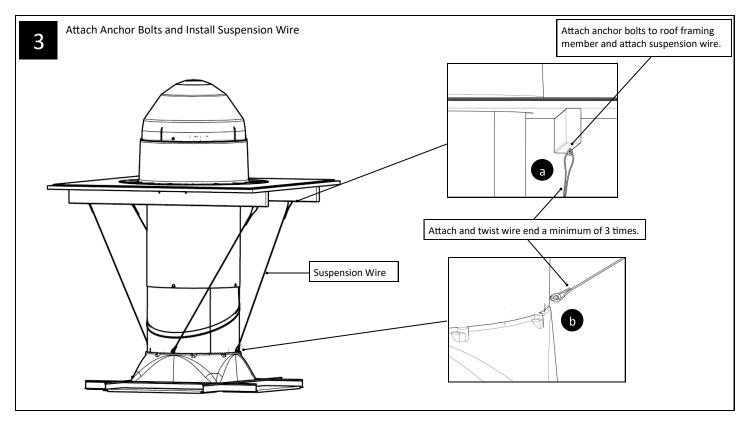
Plastic Polymeric Transition Box

Parts List		Quantity
1	12 Gauge Galvanized Wire 50 ft (15.25 m)	(1)
2	Anchor Bolts	(4)
3	Eye Bolt #8 1/8 in (25 mm) with Nut and (2) Washer	(4)



Additional Materials and Tools		Quantity
1	Drill Bit 1/8 in (3 mm)	(1)



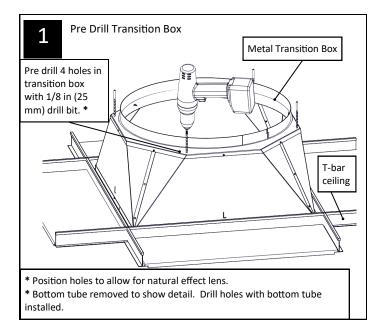


For the most current Installation Instructions, please visit www.solatube.com/instructions

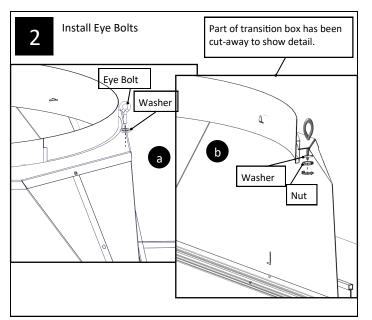
Suspension Wire Kit Installation Instructions Appendix

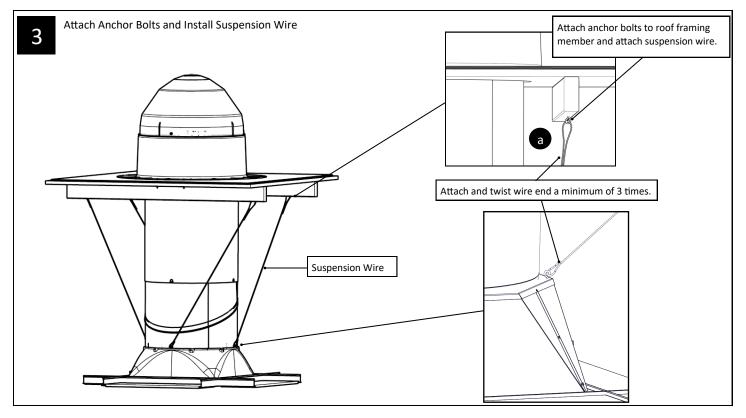
Metal Transition Box with Softlight Technology

Parts List		Quantity
1	12 Gauge Galvanized Wire 50 ft (15.25 m)	(1)
2	Anchor Bolts	(4)
3	Eye Bolt #8 1/8 in (25 mm) with Nut and (2) Washer	(4)



Additional Materials and Tools		Quantity
1	Drill Bit 1/8 in (3 mm)	(1)



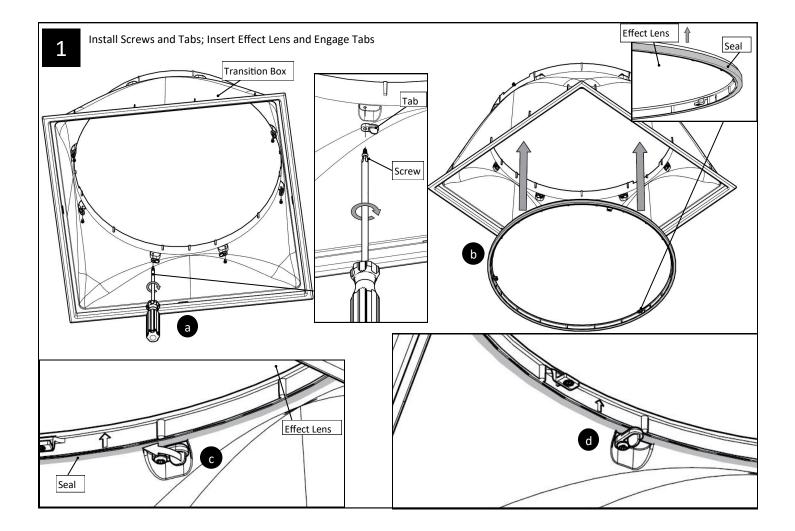


Natural Effect Lens Installation Instructions Appendix

Plastic Polymeric Transition Box

Parts List		Quantity
1	330 DS/750 DS Natural Effect Lens	(1)
2	Screw #6 X 3/8 in (10 mm)	(8)
3	Natural Effect Lens Tab	(8)

Additional Materials and Tools		Quantity
1	None	

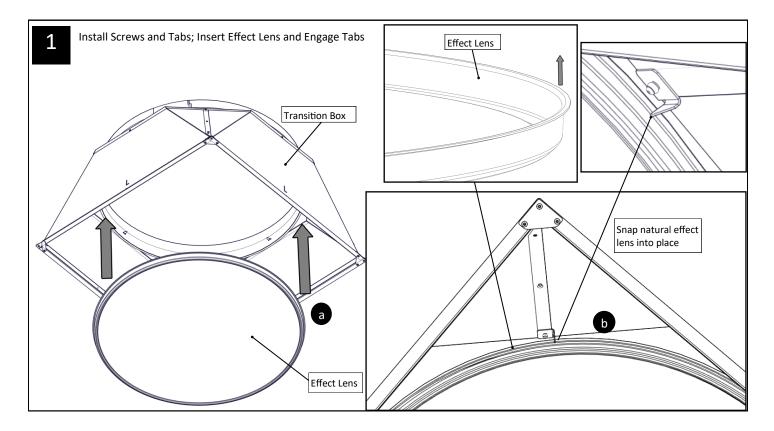


28

Natural Effect Lens Installation Instructions Appendix

Metal Transition Box with Softlight Technology

Parts List	Quantity	Additional Materials and Tools	Quantity
1 330 DS/750 DS Natural Effect Lens	(1)	1 None	

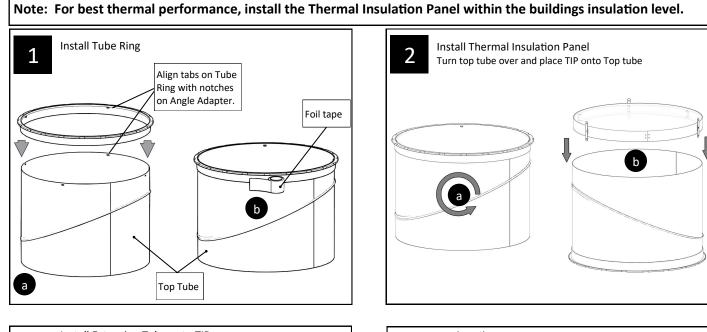


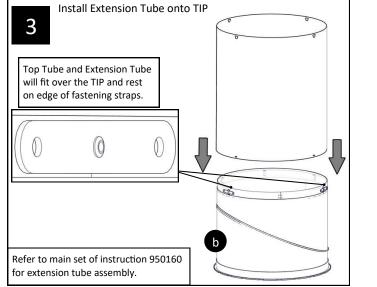
Thermal Insulation Panel (TIP) Installation Instructions Appendix

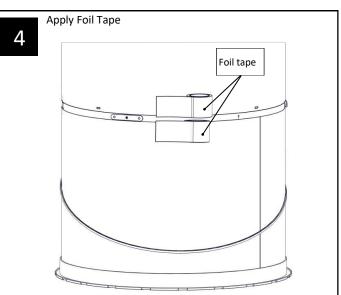
Parts List		Quantity
1	Thermal Insulation Panel (TIP)	(1)
2	Drill Tip Screw - #8 X 5/8 in (16 mm)	(4)
3	Tube Screws - #8 X 9/16 in (14 mm)	(6)
4	2 in (50 mm) Foil Tape - 6 ft (1.8 m)	(2)

Addit	tional Materials and Tools	Quantity
1	None	

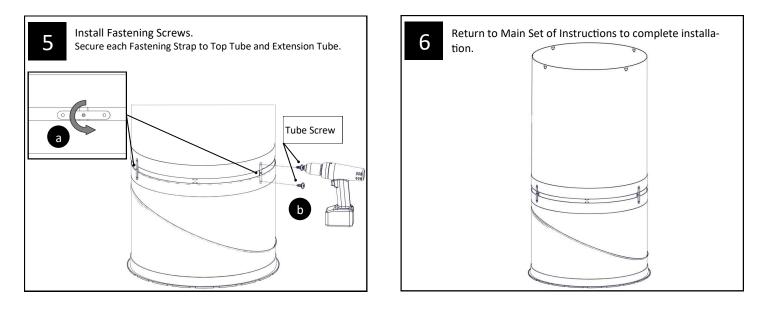
Open Ceiling TIP Installation Instructions For Applications with Insulation at Roof Level





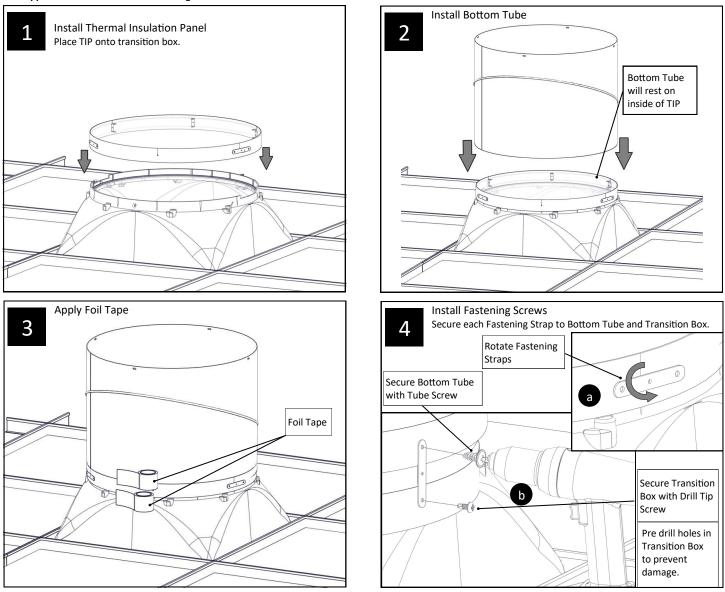


For the most current Installation Instructions, please visit www.solatube.com/instructions

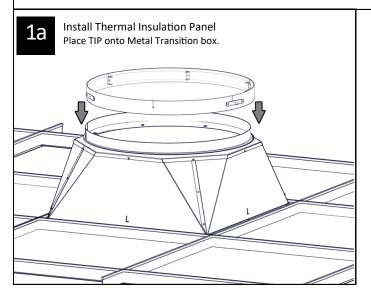


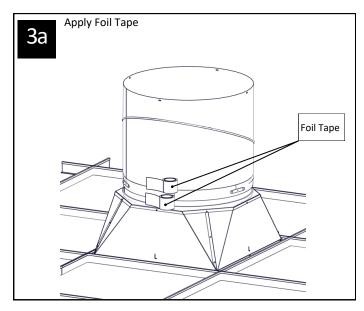
Closed Ceiling TIP Installation Instructions

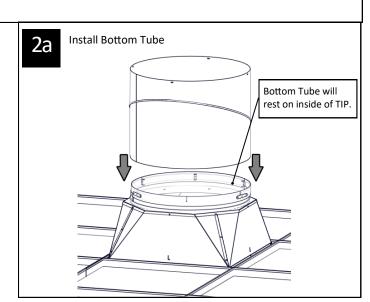
For Applications with Insulation at Ceiling Level with Plastic or Metal Transition Box

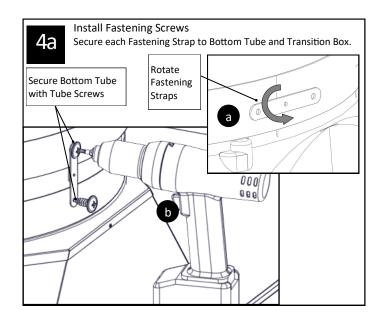


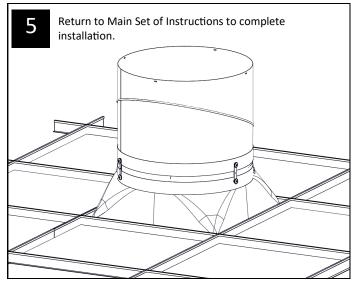
Metal Transition Box Option







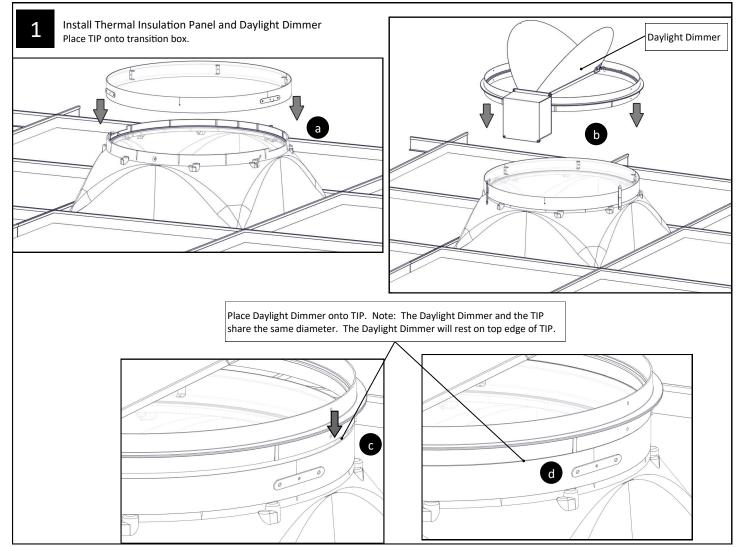


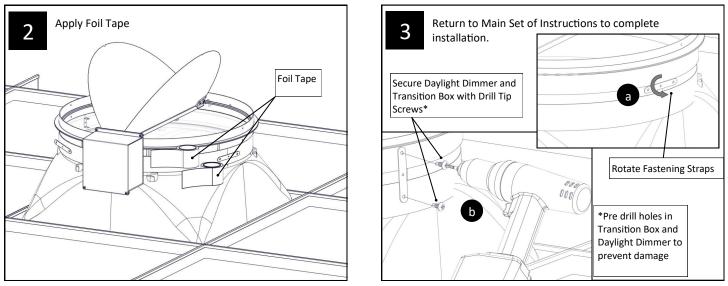


For the most current Installation Instructions, please visit www.solatube.com/instructions

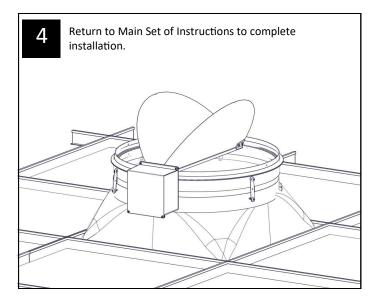
Closed Ceiling TIP with Daylight Dimmer Installation Instructions

For Applications with Insulation at Ceiling Level—Plastic or Metal Transition Box



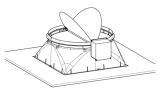


For the most current Installation Instructions, please visit www.solatube.com/instructions Solatube International, Inc. | 2210 Oak Ridge Way | Vista, CA 92081-8341 | www.solatube.com | T: 888.SOLATUBE



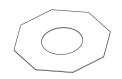
Solatube Solamaster[®] Series Additional Accessories

Add more function by upgrading your Solatube Daylighting System with any of these great accessories.



Daylight Dimmer

Because you don't need 100% of the light 100% of the time, the innovative Solatube Daylight Dimmer easily controls the amount of daylight entering a room with the convenience of a switch. Our patented variable butterfly baffle controls the light output.



Flashing Insulator

This insulating material helps to reduce condensation in cold climates when the flashing is exposed to a humid interior space. The insulator is affixed to the flashing base and the top tube slips through the opening, which provides a seal between the interior and metal flashing.



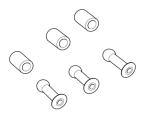
Open Ceiling Trim Ring

For use with the Solatube 330 DS and 750 DS Open Ceiling Configurations. The trim ring provides a finished appearance to the installation.



Security Bar

This stainless steel bar insets into the flashing turret across the diameter of the opening. The bar is fastened using rivets and inhibits entry through the dome.



Dome Security Kit

This kit consists of three rivets with nylon spacers, which replace dome screws. The dome security kit reduces the possibility of the dome being removed.

For the most current Installation Instructions, please visit www.solatube.com/instructions