

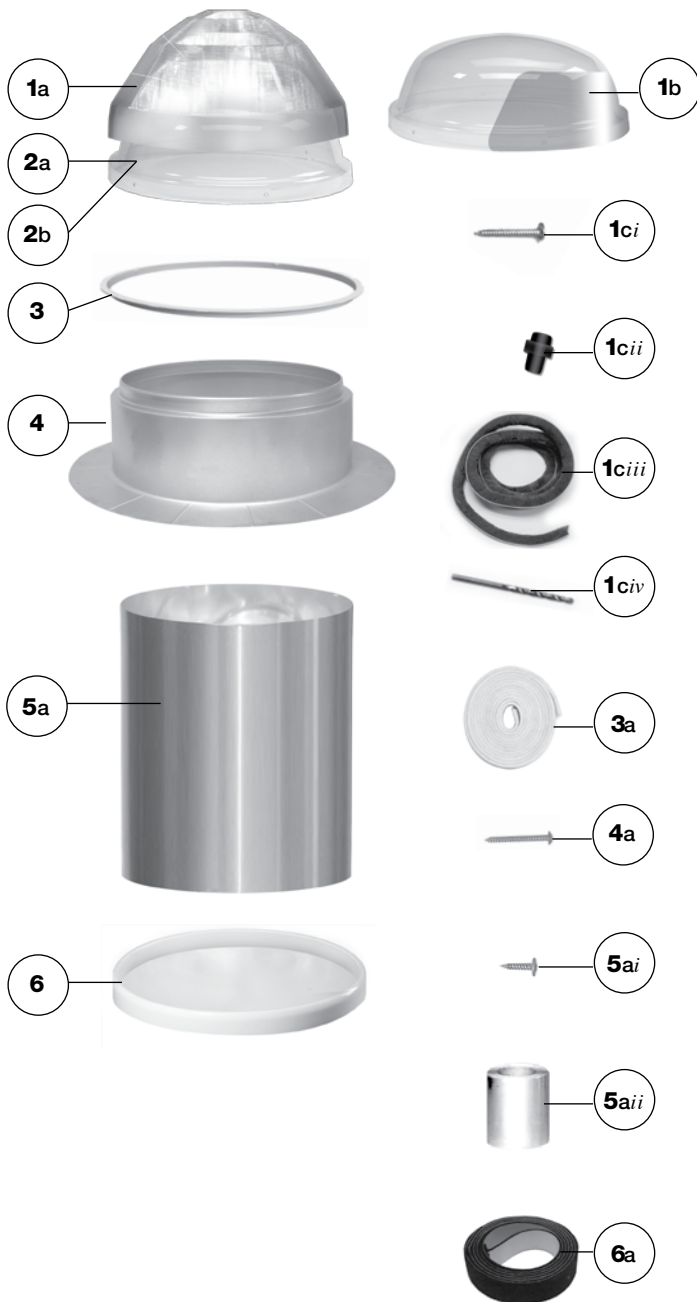
Solatube® SolaMaster® Series

Solatube 330 DS & 750 DS (21 in/530 mm Daylighting System) Installation Instructions

Please read all warnings and instructions before beginning the installation.

OPEN CEILING

For Closed Ceiling, see back of this page.



OPEN CEILING PARTS LIST

	Quantity
1. Outer Dome Options	
a. 750 DS Dome with Raybender® 3000 Technology	(1)
b. 330 DS Dome with LightTracker™ Reflector	(1)
c. Dome Fasteners	
i. Dome Screw #8 X 1 5/8 in (40 mm)	(4)
ii. Dome Spacer	(4)
iii. Dome Seal	(1)
iv. Drill Bit #40 (0.0985 in/2.5 mm)	(1)
2. Inner Dome Option	
a. Inner Dome for 750 DS (Optional, Required for ENERGY STAR)	
b. Inner Dome for 750 DS (Optional, Polycarbonate*)	
3. Tube Ring	(1)
a. Tube Ring Seal	(1)
4. Roof Flashing [4 in (100 mm), 8 in (200 mm), 11 in (280 mm) or Curb Cap]	(1)
a. Flashing Screws - #10 x 2" (50 mm)	(21)
5. Spectralight® Infinity Tube	
a. 24 in (610 mm) Extension Tube	(1)
i. Tube Screws - #8 x 3/8 in (10 mm)	(5)
ii. 2 in (50 mm) Foil Tape – 18 ft (5.5 m) Roll	(1)
Order optional Angle Adapters or Additional Extension Tubes if required.	
6. Diffuser for Open Ceiling	(1)
a. Diffuser Seal	(1)

Required Tools and Materials:

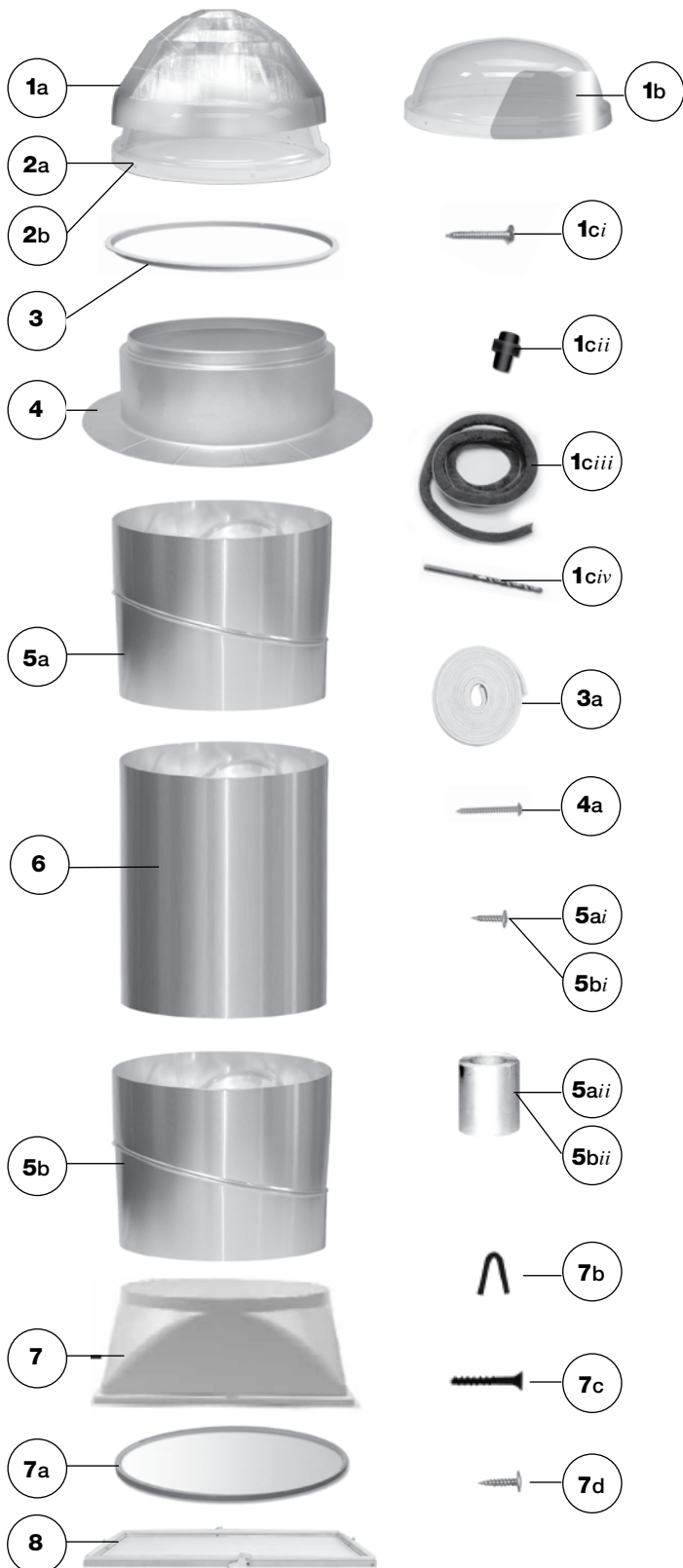
1. Roof Sealant – 3 tubes (10.5 fl. oz./310.5ml)
2. Electric Drill
3. Saber or Reciprocating Saw
4. #2 Phillips Head Screw Driver/Screw Gun
5. Utility Knife or Razor Knife
6. Tape Measure
7. Flat Bar
8. Metal Shears
9. Flashlight
10. Caulking Gun
11. Ladder
12. Plumb Bob
13. Magnetic Compass
14. Required Safety Equipment

*Required for HVHZ areas.

Please read all warnings and instructions before beginning the installation.

CLOSED CEILING

For Open Ceiling, see front of this page.



CLOSED CEILING PARTS LIST

	Quantity
1. Outer Dome Options	
a. 750 DS Dome with Raybender® 3000 Technology	(1)
b. 330 DS Dome with LightTracker™ Reflector	(1)
c. Dome Fasteners	
i. Dome Screw #8 X 1 5/8 in (40 mm)	(4)
ii. Dome Spacer	(4)
iii. Dome Seal	(1)
iv. Drill Bit #40 (0.0985 in/2.5 mm)	(1)
2. Inner Dome Option	
a. Inner Dome for 750 DS (Optional, Required for ENERGY STAR)	
b. Inner Dome for 750 DS (Optional, Polycarbonate*)	
3. Tube Ring	(1)
a. Tube Ring Seal*	(1)
4. Roof Flashing [4 in (100 mm), 8 in (200 mm), 11 in (280 mm) or Curb Cap]	(1)
a. Flashing Screws - #10 x 2" (50 mm)	(21)
5. Spectralight® Infinity Tubes	
a. Top Tube with Angle Adapter	(1)
i. Tube Screws - #8 x 3/8 in (10 mm)	(5)
ii. 2 in (50 mm) Foil Tape – 18 ft (5.5 m) Roll	(1)
b. Bottom Tube with Angle Adapter	(1)
i. Tube Screws - #8 x 3/8 in (10 mm)	(5)
ii. 2 in (50 mm) Foil Tape – 18 ft (5.5 m) Roll	(1)
6. Spectralight® Infinity 24 in (610 mm) Extension Tube (optional)	
7. Transition Box	(1)
a. Natural Effect Lens	(1)
b. Transition Box Hold Down Clip	(4)
c. Drill Tip Screw - #6 x 1 5/8 in (40 mm)	(4)
d. Drill Tip Screw - 5/8 in	(2)
8. Diffuser	(1)

Required Tools and Materials:

1. Roof Sealant – 3 tubes (10.5 fl. oz./310.5ml)
2. Electric Drill
3. Saber or Reciprocating Saw
4. #2 Phillips Head Screw Driver/Screw Gun
5. Utility Knife or Razor Knife
6. Tape Measure
7. Flat Bar
8. Metal Shears
9. Flashlight
10. Caulking Gun
11. Ladder
12. Plumb Bob
13. Magnetic Compass
14. Required Safety Equipment

*Required for HVHZ areas.



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, 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 doubts 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.**
- Sheet metal edges may be sharp. Use protective gloves to avoid lacerations.
- Solatube Daylighting System 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:
 - o Clear area below your work space of all people, animals and other items.
 - o Avoid working on surfaces that are slippery or wet.
 - o Use foot wear with excellent traction.
 - o Use only strong, well supported ladders.
 - o Work only in calm dry weather.
 - o 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 electrical 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.
- The Solatube Daylighting System is 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 dome is broken or cracked, or if the product is otherwise damaged, the structural capacity may be weakened, and the system should be repaired immediately. For safe installation and use, do not deviate from these installation instructions.

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 ask your Solatube dealer for additional information.

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

- Allow at least 3 hours for the installation, particularly if this is your first installation.
- All adhesives, seals and tapes are recommended to be applied to a dry surface at a minimum of 70°F (21°C) for maximum performance.
- 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.
- Avoid roof locations shaded by tress, ridges and chimneys, or near water channels or valleys.
- Avoid roof areas with obstructions such as fire sprinklers, HVAC equipment, gas, water or drain pipes, air ducts, or flues.
- Measure the distance between the roof and the ceiling. If you don't have enough tubing, contact your Solatube dealer for additional tubes.
- Ensure the roof is adequate to endure a Solatube Daylighting System installation without damaging its waterproofing properties.

For the most current Installation Instructions, please visit <http://solatube.com/instructions>

Introduction

These installation instructions cover the following Solatube Daylighting System configurations:

Open Ceiling Applications

- Solatube 330 DS-O (21 in/530 mm Daylighting System)
- Solatube 750 DS-O (21 in/530 mm Daylighting System)
- Solatube 750 DS-O-DAI (21 in/530 mm Daylighting System) – Dual Dome

General overview for Open Ceiling installation:

1. Locate ceiling and roof placement
2. Install flashing
3. Install tubing
4. Install diffuser
5. Install dome

For Open Ceiling installation, please refer to the Open Ceiling Instructions Section for full details of the installation process.

Closed Ceiling Applications

- Solatube 330 DS-C (21 in/530 mm Daylighting System)
- Solatube 750 DS-C (21 in/530 mm Daylighting System)
- Solatube 750 DS-C-DAI (21 in/530 mm Daylighting System) – Dual Dome

General overview for Closed Ceiling installation:

1. Locate ceiling and roof placement
2. Install flashing
3. Install transition box and bottom tube
4. Install tubing
5. Install dome
6. Install diffuser

For Closed Ceiling installation, please refer to the Closed Ceiling Instructions Section for full details of the installation process.

In all installations, the flashing and dome installation is the same. For phased construction, flashing and dome may be installed during roofing process. Tubing and diffuser may be installed during interior finish phase. To complete the installation, please reference the appropriate sections depending upon the application.

See Optional Installation Section:

1. Dome Edge Protection Band (page 10)
2. Wire Suspension Kit (page 11)

Locating Ceiling And Roof Location

MARKING THE INTERIOR LOCATION

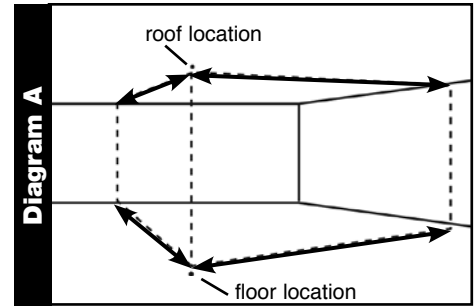
Note: Requires 21 3/4 in (555 mm) of clearance between structural members.

Step 1: Determine location for optimum light performance. Make sure there are no obstructions in the tube's path to roof or obstructions on roof restricting flashing or path of direct sunlight. Place a mark on the floor at chosen location (**Diagram A**).

ROOF LOCATION FOR OPEN CEILING APPLICATIONS

Step 2: There are two options to mark roof location.

Option A: Using a lift, mark underside of roof structure directly over location with a plumb bob or laser. Center mark between structural members. Transfer location to the rooftop surface with a screw or drill bit.
Option B: Take measurements from two perpendicular outside walls of building to the approximate position on the floor. On rooftop, measure distance from the same outside walls and mark flashing location (**Diagram A**).



ROOF LOCATION FOR CLOSED CEILING APPLICATIONS

Suspended T-Bar Ceiling and Hard Ceiling

Step 2: Run a line from underside of roof down to center of ceiling location. Adjust the roof flashing location if necessary to avoid obstacles and ensure proper clearance. Mark location. Transfer location to rooftop surface with a screw or drill bit.

Flashing Installation Instructions

ROOF FLASHING INSTALLATION

Flat/Low Pitch Roof

For built-up and cap sheet follow instructions below. For roll roof systems, foam, PVC, metal, single ply, bitumen, EPDM, or torchdown roofs, consult a commercial roofing contractor for alternate flashing applications.

Step 1: Turn flashing upside down and center it over roof mark, then trace inside circumference onto roof surface with a lumber crayon (**Diagram B**). Cut through roof deck 1/2 in (15 mm) outside marked line (**Diagram C**). Be careful not to cut any framing members, concealed pipes or electrical wires.

Step 3: Turn flashing upright. Center flashing on roof hole and trace outer edge of flashing. Apply a 3/4 in (20 mm) bead of sealant to roof 1 in (25 mm) inside perimeter of marked line, a 3/4 in (20 mm) bead of sealant on underside of flashing 1 in (25 mm) in from outside edge, and between layers of roofing exposed by flashing hole (**Diagram D**). Replace flashing to marked location and check for a proper seal. Fasten flashing to roof with sixteen 2 in (50 mm) flashing screws*. Tighten screws until sealant is a minimum of 1/8 in (3 mm) and a maximum of 1/4 in (5 mm) thick between flashing and roofing material. Do not over tighten. Coat screw heads with sealant. Apply another bead of sealant to outer edge of lashing, spreading it evenly to seal flashing edge and roof surface.

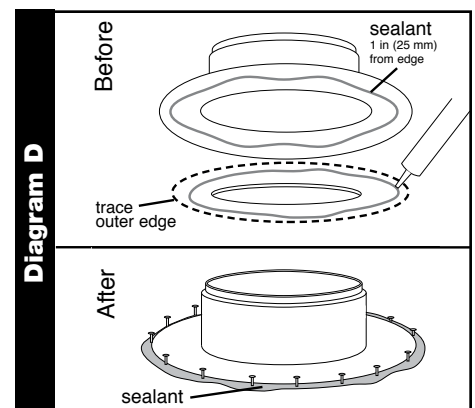
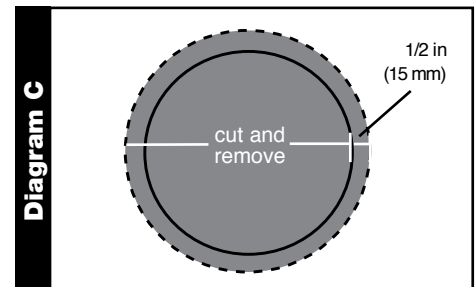
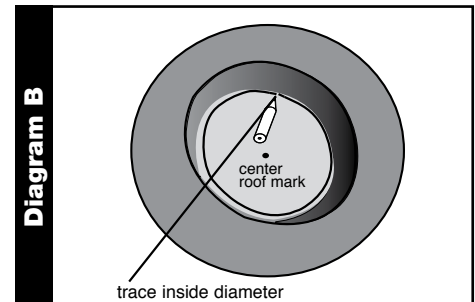
Pitched Roof

Step 1: With flashing upright, center over roof mark and trace inside circumference onto roof with a lumber crayon. Using a utility knife or razor knife, cut shingles 1/2 in (15 mm) outside marked line to expose roof deck. Turn flashing upside-down, center over roof location, and mark line on inside edge (**Diagram B**). Use saber or reciprocating saw, cut 1/2 in (15 mm) outside marked line (**Diagram C**). Be careful not to cut any framing members, concealed pipes or electrical wires.

Step 2: Using a flat bar, break asphalt sealing tabs of the shingles and carefully pull out staples or nails above the midpoint to upper edge of hole. Remove enough shingles to expose felt underlay at the middle of flashing hole.

Step 3: Apply 1/2 in (15 mm) bead of sealant around underside of flashing along line of screw holes. Turn flashing upright and center over roof hole; fasten flashing to roof with sixteen 2 in (50 mm) flashing screws.* Tighten screws until sealant is a minimum of 1/8 in (3 mm) and a maximum of 1/4 in (5 mm) thick between flashing and roofing material. Do not over tighten. Coat screw heads with sealant. Replace shingles. Fill all fastening holes and secure shingles tabs every 4 in (100 mm) with roofing sealant (**Diagram E**).

*For High Velocity Hurricane Zones, increase flashing screws to 21.



For the most current Installation Instructions, please visit <http://solatube.com/instructions>

Curb Cap

Note: Local climate conditions and building codes may require curb insulation.

Cap inside dimensions are 27 in x 27 in (685 mm x 685 mm). Allow space between cap and curb to counter flash roofing material. Maximum outside diameter of curb assembly (including roof covering) is 26 1/2 in x 26 1/2 in (675 mm x 675 mm) (**Diagram F**).

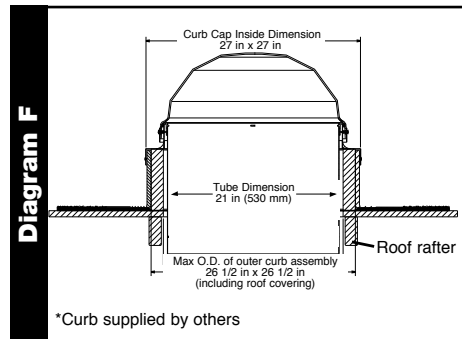
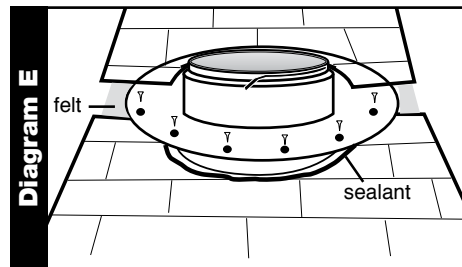
Step 1: Center curb cap onto constructed or manufactured curb. Check that cap fits and that there are no obstructions in the way of tube's path.

Step 2: Apply 1/4 in (5 mm) bead of roof sealant on top of curb where it will make contact with bottom of cap.

Step 3: Fasten cap to curb with eight 2 in (50 mm) flashing screws through sides of cap. Do not over tighten screws.

Metal Roof

Consult a commercial roofing contractor for alternate flashing applications or use a curb cap (curb supplied by others).



Dome Installation Instructions

DOMES INSTALLATION INSTRUCTIONS

Note: There are three dome configurations available in the Solatube SolaMaster® Series. Each can be used with an Open Ceiling or a Closed Ceiling Application:

- o Solatube 330 DS Outer Dome
- o Solatube 750 DS Outer Dome
- o Inner Dome* with Solatube 750 DS Outer Dome

Please see the appropriate section for your application.

Note: The tube ring must be placed on the flashing prior to the installation of the dome. When the flashing and dome are installed as an initial phase before tubing installation, the tube ring is used without an attached top tube.

Note: Do not apply tube ring seal (required for Open Ceiling applications only) until final tubing assembly installation onto flashing. **Once seal is applied, tube ring cannot be removed.**

330 DS OUTER DOME INSTALLATION

Step 1: Remove backing from the dome seal and firmly adhere it 1/4 in (5 mm) below top edge of the flashing turret (**Diagram G**).

Step 2: Peel protective liner from LightTracker™ Reflector. Using a magnetic compass, position reflector with reflective side facing inside and due south. Insert mounting tabs between top tube and tube ring (**Diagram H**).

Note: This step requires that the top tube is connected to the tube ring.

Step 3: If using the optional Secondary Diffuser, place diffuser with ridged edge down on top of the tube ring.

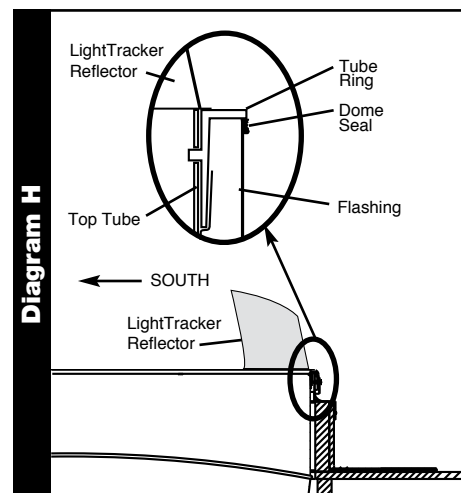
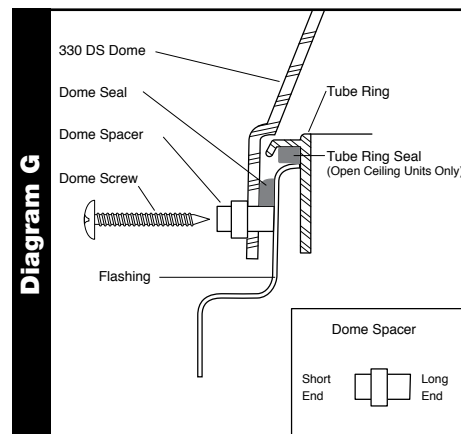
Step 4: Place dome onto tube ring until it rests evenly. Insert the long end of the three (3) dome spacers into three (3) of the six (6) dome holes leaving every other hole open. Using spacers as a guide, pre-drill screw holes through flashing using provided drill bit.

Note: Do not use a larger drill bit to ensure screws fasten appropriately.

Step 5: Fasten dome to flashing using three (3) 1 5/8 in (40 mm) dome screws** securing tight against spacer (**Diagram G**). Do not over tighten screws.

*Acrylic inner dome required for ENERGY STAR; polycarbonate inner dome required for HVHZ areas.

**For HVHZ, dip half the length of dome screw in roof sealant.



750 DS OUTER DOME INSTALLATION

Step 1: Remove backing from the dome seal and firmly adhere it 1/4 in (5 mm) above the base of the flashing landing (**Diagram I**).

Step 2: From the inside of the dome, insert the short end of the three (3) dome spacers into the dome holes. Place dome on flashing. Using spacers as a guide, pre-drill screw holes through flashing using provided drill bit.

Note: Do not use a larger drill bit to ensure screws fasten appropriately.

Step 3: Fasten dome to flashing using three (3) 1 5/8 in (40mm) dome screws,* securing tight against spacer (**Diagram I**). Do not over tighten screws.

INNER DOME WITH 750 DS OUTER DOME INSTALLATION

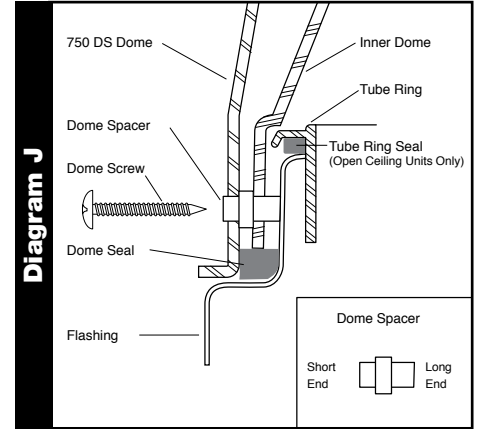
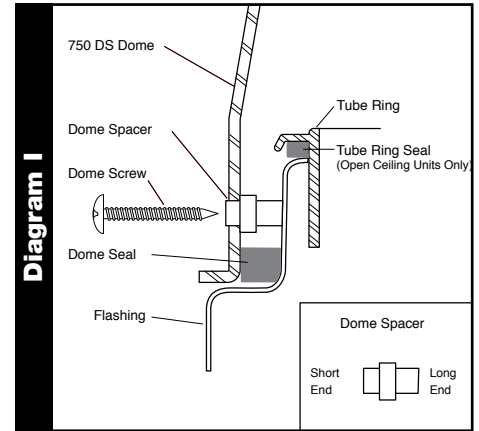
Step 1: Remove backing from the dome seal and firmly adhere it to the base of the flashing landing (**Diagram J**).

Step 2: Place inner dome onto tube ring until it rests evenly. Insert the long end of the three (3) dome spacers into three (3) of the six (6) inner dome holes leaving every other hole open. Place 750 DS Outer Dome over the inner dome, pulling the outer dome walls over each spacer until the short end of the spacer snaps into the outer dome hole. Using spacers as a guide, pre-drill screw holes through flashing using provided drill bit.

Note: Do not use a larger drill bit to ensure screws fasten appropriately.

Step 3: Fasten dome to flashing using three (3) 1 5/8 in (40mm) dome screws,* securing tight against spacer (**Diagram J**). Do not over tighten screws.

*For HVHZ, dip half the length of dome screw in roof sealant.



Open Ceiling Installation Instructions

OPEN CEILING TUBE INSTALLATION

Note: Top Tube can be either a Top Tube with Angle Adapter or 24 in (610 mm) Extension Tube. Each tube is notched for assembly to the tube ring.

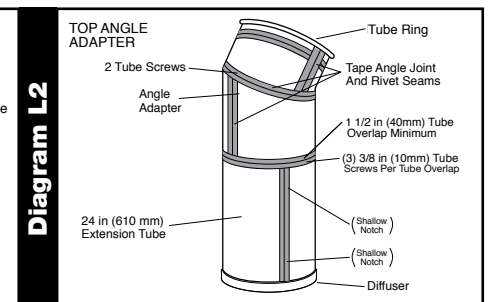
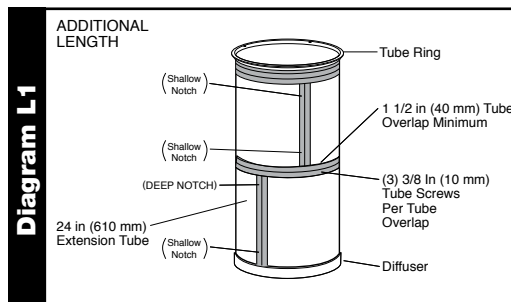
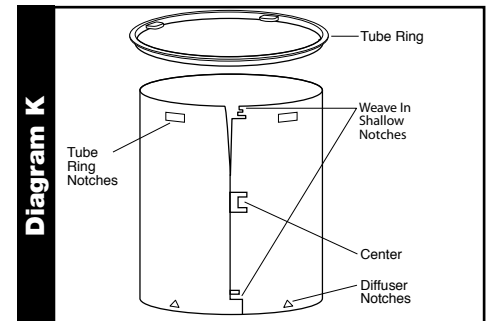
Step 1: To form an extension tube as a top tube, weave opposite sides of the tube through the shallow notches and weave center tab (**Diagram K**). Firmly apply foil tape to seam, working out all the wrinkles.

Step 2: Slip tube ring over the end of the tube and snap the four tube ring tabs through the tube notches (**Diagram K**). Apply foil tape to the tube ring and tube surface.

Step 3: If installation requires additional length or an angle adapter as the top tube, assemble tubing as illustrated in **Diagram L1 and L2**. Insert small diameter end of extension tube into tube above with a minimum 1 1/2 in (40 mm) overlap.

Note: The tube assembly must terminate with a 24 in extension tube to accept the diffuser.

Note: When using an angle adapter, insert tube assembly into flashing opening. Adjust angle adapter so assembly hangs plumb down into building with tube ring resting on top of flashing.



Step 4: Make corresponding marks on tube ring and flashing to align assembly when reinserted (**Diagram M**). Remove assembly and tape angle joint and tube rivet seam with foil tape. Screw two 3/8 in (10 mm) tube screws into angle adapter joint (**Diagram L1 & L2**).

Note: If a sharp angle is necessary, the angle adapter may need to be adjusted with tube assembly inserted into flashing straight first.

OPEN CEILING DIFFUSER ASSEMBLY AND INSTALLATION

Note: Only the 24 in (610 mm) Extension Tube is notched to accept the Open Ceiling Diffuser.

Step 5: Locate four (4) ribs along outside edge of diffuser. Center these ribs to align with tube notches on the bottom end of the 24 in extension tube. Slide diffuser over the end of the tube until the diffuser clips snap into the tube notches (**Diagram N**). Using the edge of the diffuser as a template, mark a line around the perimeter of the tube. Remove the diffuser.

Step 6: Remove liner from diffuser seal. Apply the seal on the side of the guide line closest to the end of the tube around the tube's perimeter. Trim the seal to tightly butt the ends.

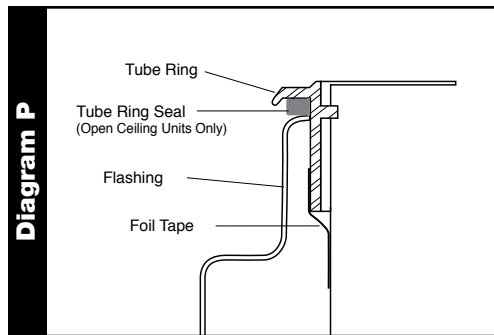
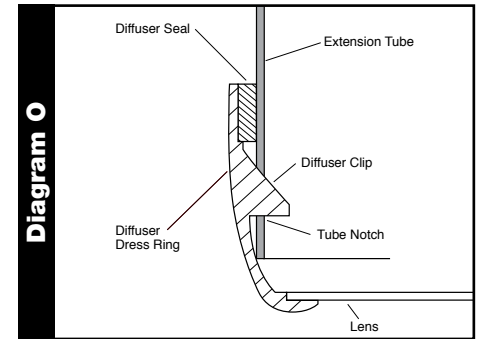
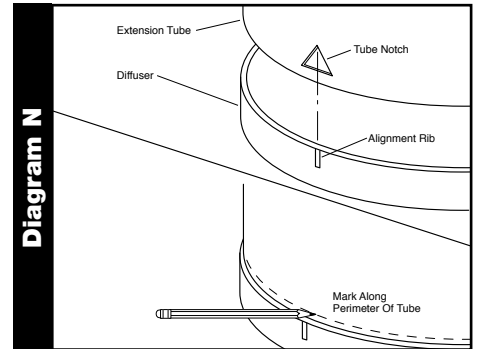
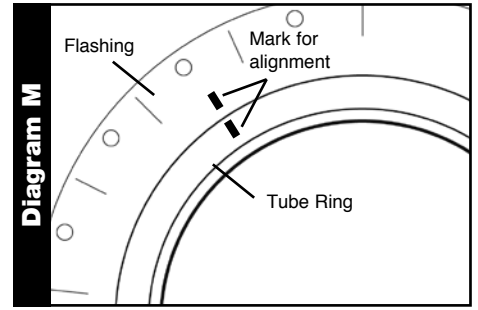
Step 7: Remove protective liner from all tubing pieces. Re-assemble diffuser over the end of the tube until the diffuser clips snap into the tube notches (**Diagram O**).

TUBE RING SEAL AND FINAL ASSEMBLY INSTALLATION

Step 8: Remove adhesive liner from tube ring seal and install tube ring seal on underneath side of tube ring (**Diagram P**). Re-insert assembly into flashing opening, being careful to align marks.

Note: Tube ring seal will adhere to flashing when final assembly is installed.

Proceed to Dome Installation Instructions.



Closed Ceiling Installation Instructions

Suspended Ceiling

Step 1: Remove ceiling panel at chosen location. Transition box will replace a 2 ft x 2 ft (600 mm x 600 mm) ceiling panel. When installing into 2 ft x 4 ft (600 mm x 1200 mm) ceiling panel system, insert a 2 ft (600 mm) cross T-bar.

Hard Ceiling

Step 1: Cut 22 7/8 in x 22 7/8 in (580 mm x 580 mm) square opening through ceiling material. Add blocking to open ends and shim sides of opening to measure 21 3/4 in x 21 3/4 in (555 mm x 555 mm) (**Diagram Q**).

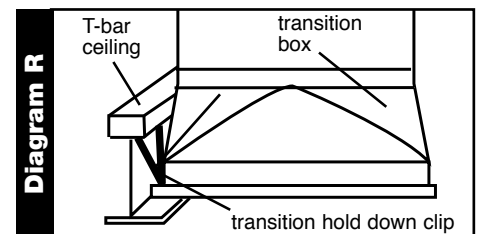
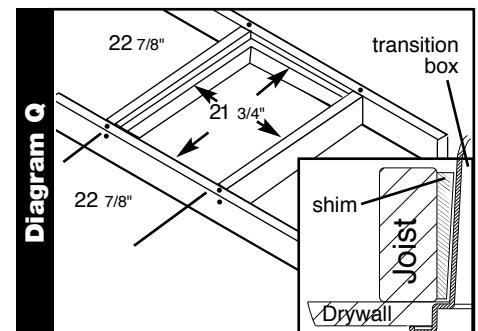
TRANSITION BOX INSTALLATION

Note: Rotate the clips on the transition box to either remove or replace the effects lens.

Suspended Ceiling

Step 2: Place transition box into suspended ceiling grid. Fasten transition box to T-bar ceiling grid using four V-shaped transition hold down clips (**Diagram R**). Install clip above suspended ceiling, 2 in (50 mm) in from each corner of the transition with "V" point of clip pressing downward against wall of transition and with legs leaning against vertical wall of T-bar. Push the legs of the clip downward until legs wedge under shoulder at top of T-bar (**Diagram R**).

Step 3: Remove protective liner from inside of bottom tube and place tube over round section of transition box (**Diagram S**). Adjust bottom tube angle to align with roof flashing location (**Diagram T**).



Hard Ceiling

Step 2: Remove protective liner from inside of bottom tube and slide tube over the round section of transition box (**Diagram S**). Insert transition box assembly into shimmed ceiling opening from the bottom.

Step 3: Adjust bottom tube angle to align with roof flashing (**Diagram T**). Anchor in place using four (4) 1 5/8 in (40 mm) drill tip screws. Drive one screw through each side of transition box 1 1/2 in (40 mm) up from the bottom.

CLOSED CEILING TUBING INSTALLATION

Note: Top Tube can be either a Top Tube with Angle Adapter or a 24 in (610 mm) Extension Tube. Each tube is notched for assembly to the tube ring.

Step 4: When using an angle adapter for the top tube, slip tube ring over the end of the tube and snap the four (4) tube ring tabs through the tube notches. Apply foil tape to the tube ring and tube surface (**Diagram U**).

Step 5: If additional vertical tube length from flashing is required to align top tube angle with bottom tube angle, use an extension tube as the top tube (**Diagram V**). Form a large diameter extension tube by weaving opposite ends of tube through shallow notches and weave center tab (**Diagram W**). Slide tube ring over pre-notched end of extension tube, aligning tabs of tube ring into notches. Foil tape vertical seam and tube ring to extension tube. Install angle adapter onto end of top extension tube per instruction.

Step 6: Insert top tube assembly into flashing and rotate angle adapter so that top tube aligns with bottom tube. Measure distance between tubes. Top and Bottom tube lengths ("A" and "B") should be equal (**Diagram X**). Bottom angle adapter can also be adjusted to achieve this measurement. Record this length for later use in determining extension tube requirements.

Step 7: Remove top tube assembly. If extension tubes are not required, tape angle adapter joint and tube seam. Screw two (2) 3/8 in (10 mm) tube screws into angle adapter joint. If extension tubes are required, take top tube assembly to a level area where extension tubes can be made.

Note: If insulating flashing, affix fiberglass batt insulation around inside walls of flashing before inserting top tube assembly.

EXTENSION TUBE ASSEMBLY

Step 10: Add 4 in (100 mm) to measurement in Step 7. This accounts for 2 in (50 mm) of extension tube that is inserted into both bottom and top tubes. Determine the number of extension tubes needed with each extension tube having 1 1/2 in (40 mm) tube overlap.

Step 11: Extension tubes have deep and shallow notches on both ends of tube. Form tubes with a small diameter at the top (using deep notches) and a large diameter at the bottom (using the shallow notches) weaving the center tab (**Diagram W**). After forming the tube, firmly apply foil tape to vertical seam working out all wrinkles. Remove protective liner on inside of tube before installing. Tubes may be cut to length if necessary. If cut, always use factory cut end when joining extension tube to top tube.

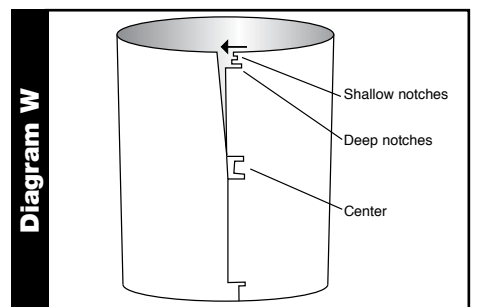
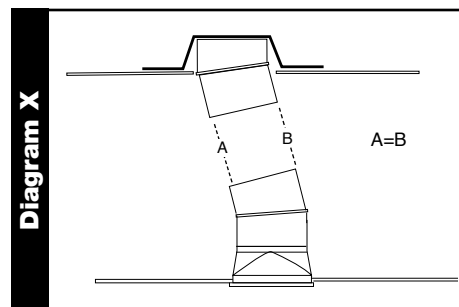
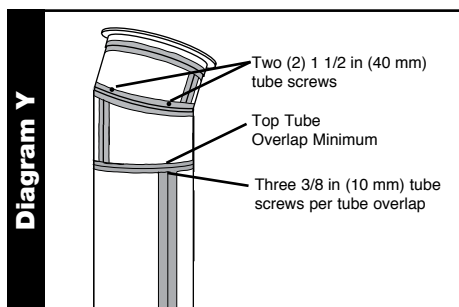
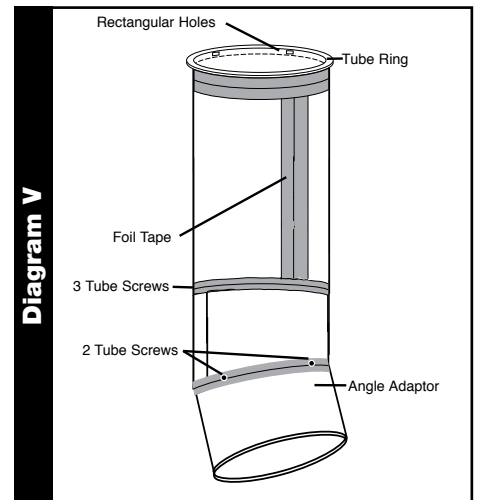
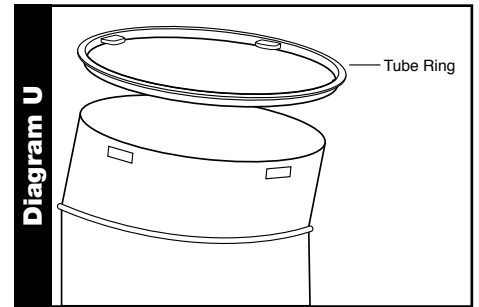
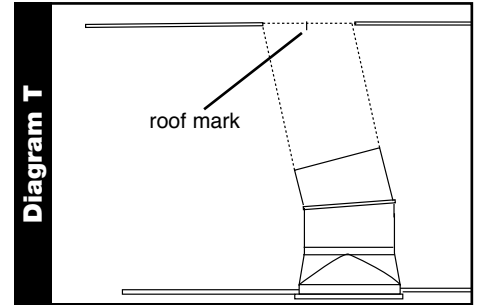
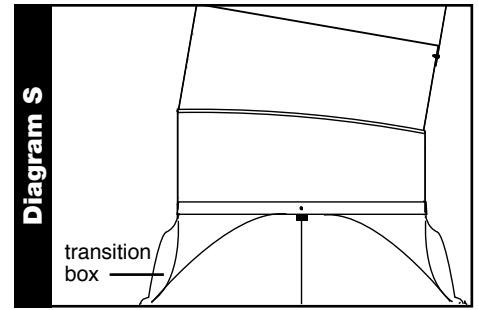
Step 12: Remove protective liner from inside of top tube. Insert small diameter end of extension tube into top tube with a minimum 1 1/2 in (40 mm) overlap. Telescope extension tubes together to achieve required tube length. Larger diameter end of tube is always oriented down. Firmly apply foil tape around each tube joint and screw three (3) 3/8 in (10 mm) tube screws through each overlapping tube joint (**Diagram Y**).

INSTALLATION OF TUBE ASSEMBLY

Step 13: Take tube assembly to roof flashing location. Insert through flashing and lower over bottom tube. Adjust top tube so tube ring rests evenly onto flashing. Make corresponding marks to tube ring and flashing for re-alignment of assembly when re-inserted (**Diagram Z**). Remove assembly and tape angle joint and tube rivet seam with foil tape. Screw two (2) 3/8 in (10 mm) tube screws into tube angle adapter joint (**Diagram Y**).*

Re-insert assembly into flashing and align marks.

***Note:** For HVHZ areas, apply tube ring seal. Remove adhesive liner and install tube ring seal on underneath side of tube ring (**Diagram P**).

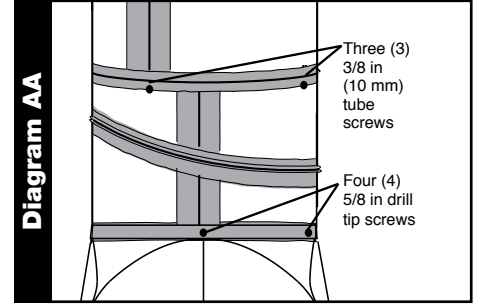
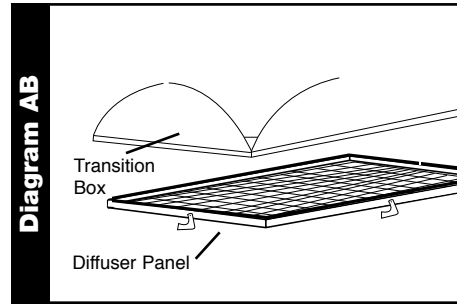
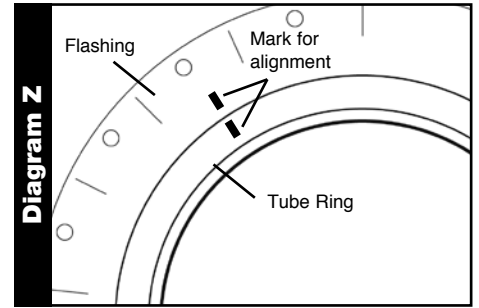


COMPLETION OF TRANSITION BOX INSTALLATION

Step 14: Foil tape bottom tube angle adapter and extension tube joints. Foil tape transition box to bottom tube. Screw three (3) 3/8 in (10 mm) tube screws into overlapping tube joint. Screw four (4) 5/8 in (40 mm) drill tip screws into overlapping tube and transition box (**Diagram AA**).

INSTALLATION OF DIFFUSER PANEL

Step 15: Position diffuser panel into transition box and lock in by pushing clips into notches provided. (**Diagram AB**).



Dome Edge Protection Band

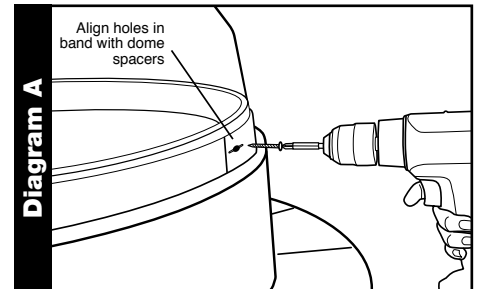
Addendum to parts list

	QTY
Dome Edge Protection Band	1
Dome Edge Protection Tab (for use with 750 DS Only)	3

Note: This procedure is for Solatube Daylighting System installations on fire-rated roofs requiring a Dome Edge Protection Band. Complete all steps up to the Dome installation prior to installing the Dome Edge Protection Band. For a 330 DS or 750 DS (with or without Inner dome) use the following steps.

330 DS

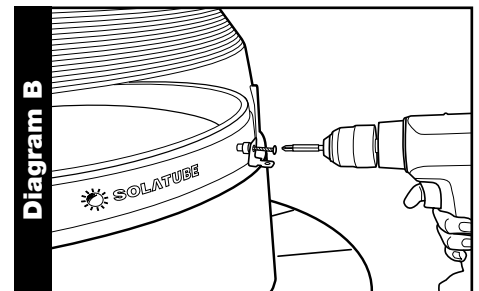
Step 1: Wrap the Dome Edge Protection Band around the outside of the dome edge. Ensure the holes on the band align with the dome spacers. **Diagram A**



Step 2: Fasten the Dome Edge Protection Band and the dome to the flashing according to the Dome Installation instructions. **Diagram A**

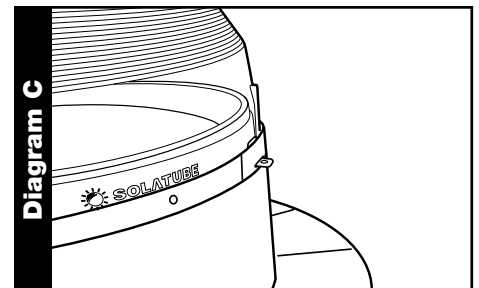
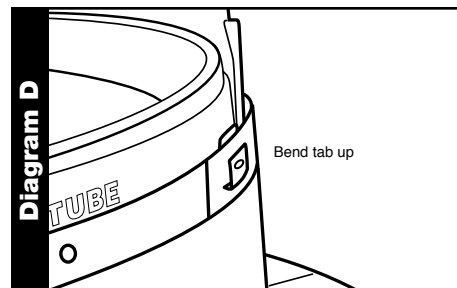
750 DS (with or without inner dome)

Step 1: Place tabs over spacers and fasten the tabs, spacers, and the dome to flashing. **Diagram B**



Step 2: Wrap the Dome Edge Protection Band around the outside of the dome edge and align the slits of the band to the tabs. **Diagram C**

Step 5: Bend all three tabs up until flat against the Dome Edge Protection Band. **Diagram D**



Suspension Wires

Suspension wires ordered separately.

Addendum to parts list

	QTY
Suspension eye screw - 3" 975mm)	4
Suspension wire -16 guage, galvanized (roll)	50'
Suspension eyebolt, nut and washers	4

After step 21 above, before installation of diffuser panel, complete the following steps:

Step 1: Insert the four eyebolts with one washer from outside of the transition placing another washer with nut on inside (**Diagram A**).

Step 2: Attach the four suspension eye screws into the roof framing at four suitable points. String anchor tie wire with minimum three wraps to each hanger fastener and transition box eyebolt. Ensure correct transition box location is maintained (**Diagram B**).

