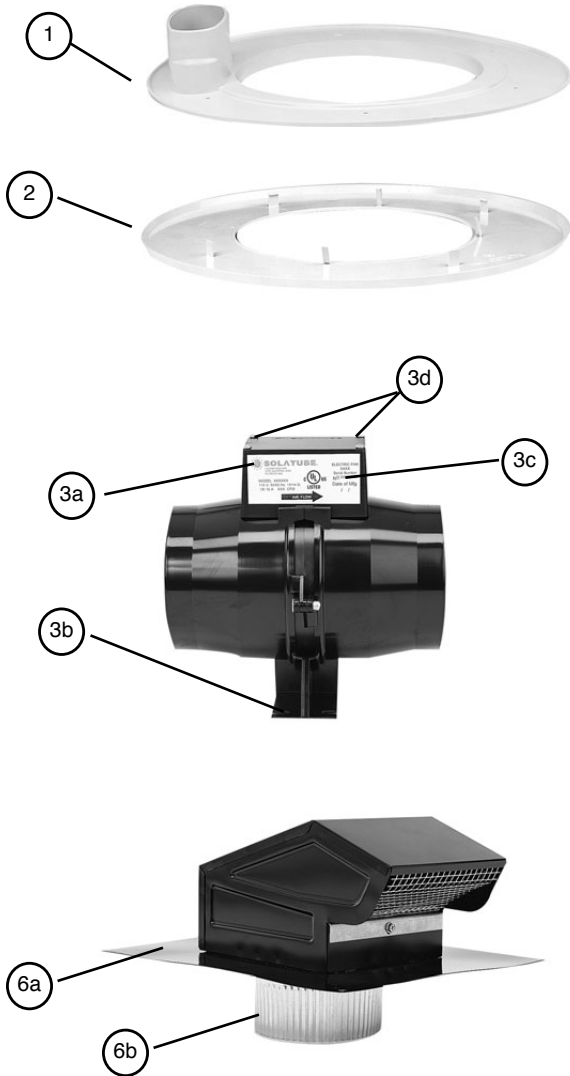


Solatube® 250mm Ventilation Add-on Kit Installation Instructions

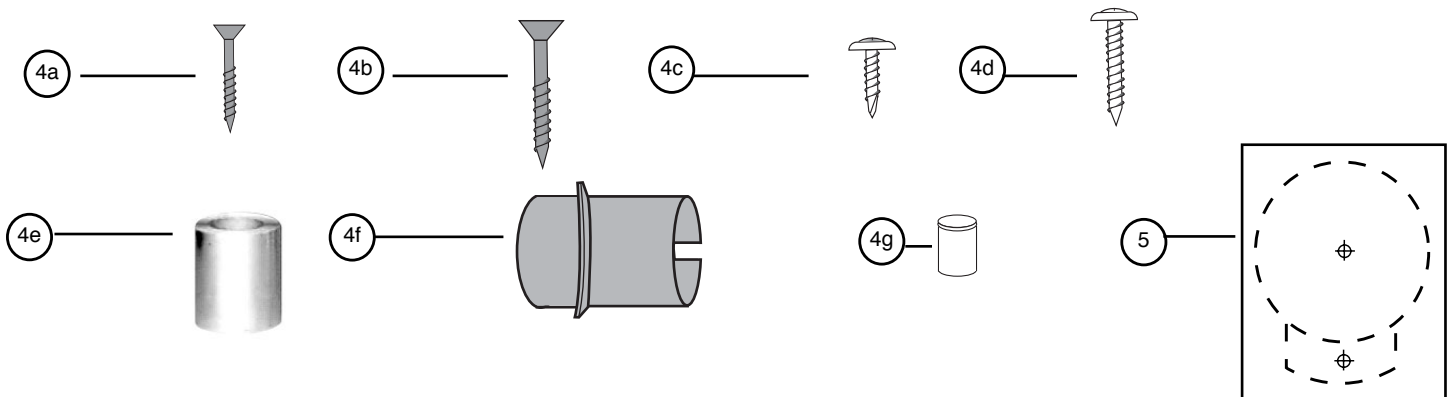
Please read all warnings on page 2 before beginning the installation



PARTS LIST

	QTY.
1. Ventilation Ceiling Plate	(1)
2. Ventilation Diffuser Plate	(1)
3. In-line Fan Motor Assembly including	
a. Wire Junction Box	(1)
b. Mounting Bracket	(1)
c. UL/CE Label	(1)
d. Wire Junction Box Screws - #6 X 13mm (1/2")	(4)
4. Ventilation Fastener Kit including	
a. Ceiling Plate Screws - #8 x 38mm (1 1/2")	(6)
b. Bottom Tube Ceiling Screws - #8 X 64mm (2 1/2")	(4)
c. Duct Screws - #8 X 13mm (1/2")	(12)
d. Fan Motor Mounting Screws - #8 X 25mm (1")	(4)
e. 51mm (2") Foil Duct Tape - 2m (6') long	(2)
f. Cable Connector	(1)
g. Connector Block	(3)
5. Ceiling Plate Template	(1)
6. Optional Ventilation Cap including	sold separately
a. Ventilation Cap With Flashing	(1)
b. Duct Connector	(1)
Additional Material Recommended - Not Supplied	
1. Acrylic Caulk	
2. Extra Roof Sealant for Ventilation Cap	
3. 51mm (2") Flashing Screws for Ventilation Cap	(4)
4. 102mm (4") Insulated Air Duct	(1)

NOTE: Not all items are shown or are to scale.





WARNING



Do not proceed with the installation until you have read the entire instructions, including these warnings.

CAUTION: For general ventilating use only. Do not use in kitchens. Do not use to exhaust hazardous or explosive materials and vapors.

WARNING: To reduce the risk of fire, electrical shock, or injury to persons, observe the following:

1. Use this unit only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.
2. Before installing, servicing or cleaning unit, switch power off at service panel and lock service panel to prevent power from being 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.
3. Installation work and electrical wiring must be done by qualified persons in accordance with all applicable codes and standards including fire-rated construction.
4. When cutting or drilling into a wall or ceiling, do not damage electrical wiring and other hidden utilities.
5. Exhaust fans must always be vented to the outdoors.
6. If this unit is to be installed over a tub or shower, the circuit must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter) - Protected Branch Circuit.
7. Never place a switch where it can be reached from a tub or shower.
8. Do not use this fan with any solid-state speed control device.
9. Insulated Air Duct contains fiber glass wool which has been classified as a possible cancer hazard by inhalation. Fiber glass wool may cause temporary irritation to skin and or respiratory tract. Take appropriate precautionary measures when handling.

NOTE: Understand the following before beginning installation:

1. Read and understand both the Solatube® Brighten Up® Series and the Solatube 250mm Ventilation Add-on Kit installation instructions.
2. Follow all electrical codes and building code requirements within your jurisdiction.
3. Use appropriate safety glasses, gloves, hard hats, restraints and other equipment to avoid unnecessary accidents.
4. Motor is impedance protected. If motor becomes jammed or if another condition causes overheating, an internal fuse will fail.
5. Use house wiring suitable for 90 C and run it from wall switches to Fan Motor Assembly Junction Box and/or to Light Add-on Kit Junction Box location. Fan Motor Assembly Junction Box to be used only for wiring Solatube Ventilation Add-on Kit or Solatube Light Add-on Kit. Fan Motor Assembly Junction Box not to be used for other fixtures. Fan Motor Assembly suitable for residential and non-rated residential assemblies only. For romex connections use one (1) 14/3, one (1) 12/3 or two (2) 14/3 cables only.
6. Use Ventilation Add-on Kit only as a component of Solatube tubular skylight products, including Light Add-on Kit.
7. Any alteration or misuse of Solatube products will void warranty.

SPECIFICATIONS: 250mm Ventilation Add-on Kit

Fan Motor Assembly:	102mm (4") in-line
Motor:	Impedance protected
Supply:	230 volt – 50-60Hz or optional
Amps:	0.19 Amp
Airflow:	3.11 cfm (cubic Meters/minute)
Insulation:	IC (Insulation may contact Fan Motor Assembly)
Moisture:	Suitable for wet or damp locations

Flexible Duct:

- 1) 102mm (4") diameter air duct (Class 1).
- 2) Local building codes may require air duct (Class 0) for certain fire-rated installations.

Installation:

- 1) Service access is required to the Fan Motor Assembly Junction Box.
- 2) Space requirements: Minimum 267mm (10 1/2") between ceiling joists and minimum 203mm (8") vertical clearance above ceiling is required.
- 3) Ventilation fan should remain on for a minimum of 10 minutes in a bathroom after a shower.

OVERVIEW

These instructions are for installing the Solatube® 250mm Ventilation Add-on Kit with the Solatube Brighten Up® Series 250mm tubular skylight. The Solatube Light Add-on Kit may also be installed in conjunction with the Ventilation Add-on Kit. Refer to the Solatube Brighten Up Series and the Solatube Light Add-on Kit instructions to complete the installation.

MARKING LOCATION

Step 1. Refer to the Solatube Brighten Up Series instructions, Step 1 and Step 2, to mark ceiling and roof location of the tubular skylight.

Step 2. In the attic, look for possible mounting locations for Fan Motor Assembly. Check that wiring can be run to the planned location. Ensure Insulated Air Duct will reach planned location of roof or side-wall vent (**Diagram A**).

Step 3. Check clearance for Ventilation Ceiling Plate vent intake hole. Place Ceiling Plate Template on ceiling surface and orient vent intake hole of template towards Fan Motor Assembly location. Drill 3mm (1/8") hole through the ceiling at the two (2) locator points printed on Template (center of tubular skylight and center of vent intake hole) (**Diagram B**). Go back inside and align Template with drilled holes. Tape Template to ceiling.

VENTILATION CEILING PLATE

Step 4. Cut through Template along line and remove drywall. Secure Ventilation Ceiling Plate with six (6) 38mm (1 1/2") ceiling plate screws (**Diagram C**).

NOTE: For an air infiltration seal, apply a 6mm (1/4") bead of acrylic caulk to the back of the Ventilation Ceiling Plate prior to installation.

MOUNTING FAN MOTOR ASSEMBLY

Step 5. Select a suitable Fan Motor Assembly location approximately 0.91m to 1.2m (3 to 4 feet) from Ceiling Plate intake hole toward roof or side-wall vent. Fan Motor Assembly can be installed at any angle without affecting performance. The arrow printed on UL/CE label on Fan Motor Assembly Wire Junction Box shows airflow direction. Point arrow away from Ceiling Plate intake and toward the roof or side-wall vent (**Diagram D**).

Step 6. To secure Fan Motor Assembly, screw four (4) 2mm (1") screws through Mounting Brackets on Fan Motor Assembly into building structure (**Diagram D**).

DUCT ASSEMBLY

Step 7. Install 102mm (4") Insulated Air Duct fully extended. Run Air Duct from Ventilation Ceiling Plate intake to Fan Motor Assembly. On the other side of the Fan Motor Assembly, run Air Duct to Duct Connector of Ventilation Cap. For best venting performance, make Air Duct run as short as possible with minimum bends.

Step 8. After desired length is determined, cut completely around Air Duct with scissors or knife. Cut wire with wire cutters (**Diagram E**).

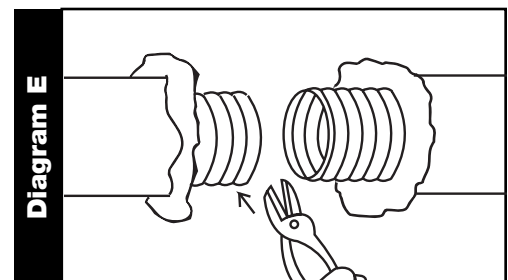
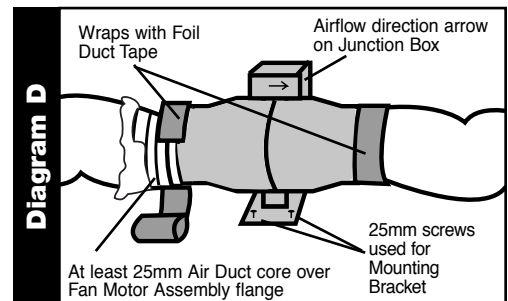
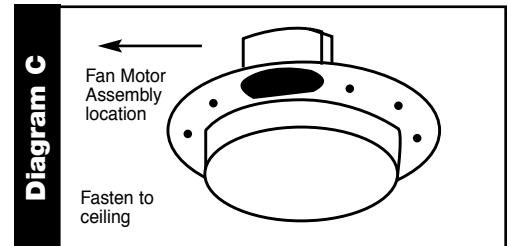
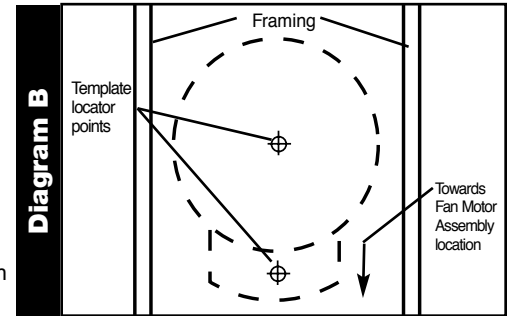
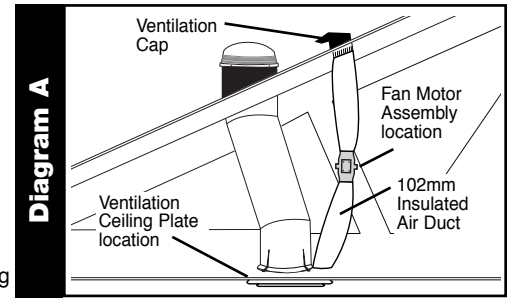
Step 9. Pull back Air Duct jacket and insulation from Air Duct core. Slide at least 25mm (1") of Duct core over Ceiling Plate intake, Fan Motor Assembly flange and Duct Connector. Tape core with at least one (1) wrap of Foil Duct Tape and secure with three (3) 13mm (1/2") Duct Screws. Pull insulated jacket over connection and secure with one (1) wrap of Foil Duct Tape (**Diagram D**). To prevent condensation from collecting on ceiling plate; in cold climates; form a "P" trap shape in duct between ceiling plate and fan motor.

Step 10. Strap Air Duct to framing every 1.5m (5').

WIRING

Step 11. Disconnect power before proceeding. If power disconnect switch is not in sight, lock it in the off position, and tag it to prevent unexpected application of power.

Step 12. To open Fan Motor Assembly Junction Box cover, remove the four (4) screws.



Step 13. Feed house wiring (with Earth \equiv) from wall switch to Junction Box located on the Fan Motor Assembly. Use Cable Connector provided to fasten cable to Junction Box. Use crimp sleeve to connect motor Earth wire (Green/Yellow) to house Earth wire. Use connector blocks provided to connect the (2) Live (Brown) and (2) Neutral (Blue) wires of Fan Motor Assembly to corresponding house wiring (**Diagram F1**). For wiring the Ventilation Add-on Kit and the Light Add-on Kit see (**Diagram F2**).

Step 14. Replace Junction Box cover and screws.

SOLATUBE 250MM TUBULAR SKYLIGHT INSTALLATION

Return to the Solatube Brighten Up Series installation instructions and complete through Step 15. Then read below.

BOTTOM ASSEMBLY

Step 15. Once Bottom Tube Ceiling Ring fits flush to Ventilation Ceiling Plate, pre-drill fastener holes in Ventilation Ceiling Plate by drilling through Bottom Tube Ceiling Ring screw holes with a 5mm (3/16") bit (**Diagram G**).

Step 16. Complete Step 16 through Step 18 of the Solatube Brighten Up Series instructions. In Step 18, use the four (4) 64mm (2 1/2") Bottom Tube Ceiling Ring Screws included in Ventilation Fastener Kit. Be careful not to over tighten screws.

Step 17. Complete Step 19 and Step 20 of the Solatube Brighten Up Series instructions. Once Diffuser has been installed, snap Ventilation Diffuser Plate over Solatube Diffuser (**Diagram H**).

Cleaning Note: Remove Ventilation Diffuser Plate before removing Solatube Diffuser.

INSTALLING OPTIONAL SOLATUBE VENTILATION CAP

Step 1. Locate the flashing a minimum of 5' (1.5m) from an operable window or skylight, 406mm (16") from a ridge or hip, and 24" (609mm) from a valley. Ventilation Cap may be side-wall mounted.

Step 2. In the attic, mark vent location by running a screw up through roof.

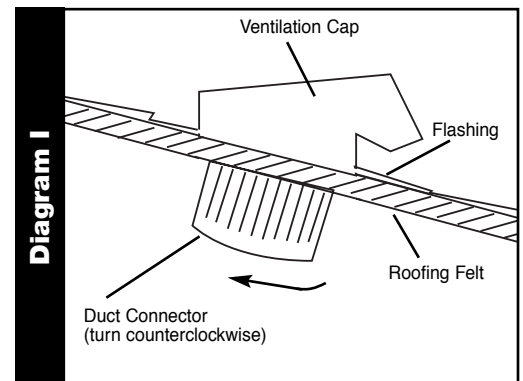
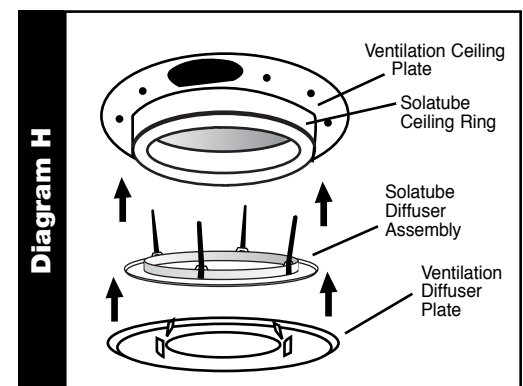
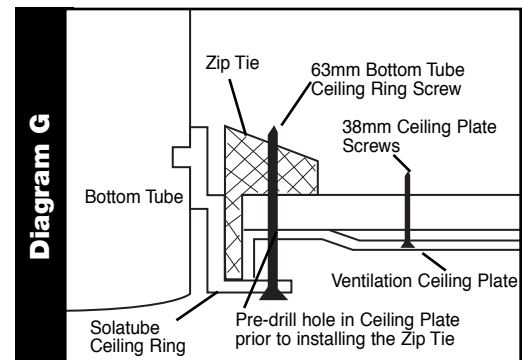
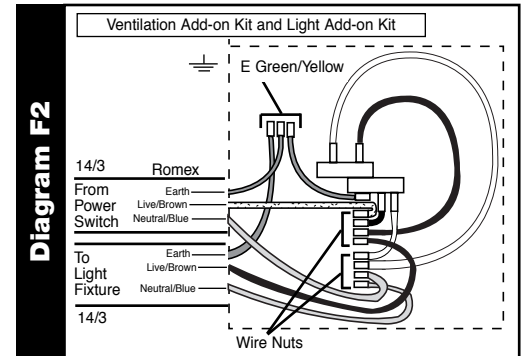
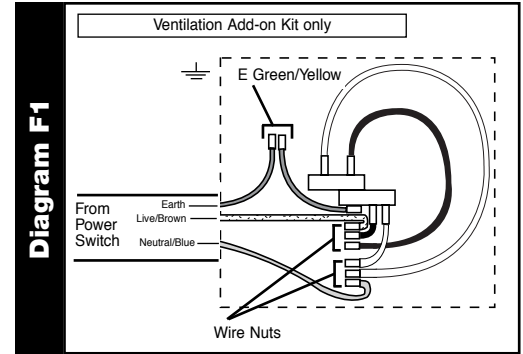
Step 3. Find the location on roof and cut a 152mm (6") round hole through the roof.

Step 4. Using flat bar, loosen the asphalt sealing tabs of the shingles and carefully pull out the staples or nails above the midpoint to the upper edge of the hole. Remove enough shingles to expose the roofing felt.

Step 5. With a caulking gun, apply a 13mm (1/2") bead of roof sealant (not provided) around the underside of the flashing base.

Step 6. Secure the flashing with four (4) screws 51mm (2") recommended, not provided) at least 1" (25mm) from edge of flashing flange. Seal all screw heads with sealant.

Step 7. When securing Insulated Air Duct to Ventilation Cap, use the Duct Connector (**Diagram I**). Thread flanged end of Duct Connector to the Ventilation Cap by turning it counterclockwise into the vent opening on the underside of the flashing. Flange will lock into place after one (1) revolution. Connect Air Duct per instructions above.



Solatube Global Marketing, Inc.
2235 Faraday Avenue, Suite R
Carlsbad, CA 92008 USA