

# Bathroom Ventilation Kit

## Product Installation Guide



### Parts List



**Ventilation grille assembly**  
 Ventilation housing  
 6 x Screw backing tabs  
 Ventilation screen

### 100mm in-line fan motor assembly

Single phase induction motor  
 Spring operated, non-return flap to prevent backdraughts  
 Mounting bracket  
 Ducting (two x 3 metre lengths)  
 Soffit/fascia external exit vent  
 Integral timer



**Pull switch**  
 6A 2-way ceiling switch, can also be wired as 1-way (BS EN 60669-1)

**Please note and understand the following before beginning installation:**

- Read through this installation guide and the separate instructions provided with the fan motor. If you have any questions, please contact the supplier before commencing installation.
- The Solatube Bathroom Ventilation Add on Kit is intended for use solely as a component of Solatube Daylighting Systems and should be used only in the manner intended by the manufacturer.
- This unit is for general ventilating use only in bathrooms, toilets, shower rooms and utility rooms. It is not suitable for use in kitchens.
- Electrical wiring must be carried out by suitably qualified persons, and in accordance with all applicable codes and standards, including fire-rated construction. Solalighting Limited (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.
- Before installing or servicing the unit, switch off power at the consumer unit and take measures to prevent power from being switched accidentally, eg lock it or securely fasten a prominent warning label to the consumer unit to indicate it must not be switched on.
- Exhaust fans must always be vented to the outdoors.
- If this unit is to be installed over a bath or shower, the circuit must be marked as appropriate for the application and be connected to a circuit breaker or trip switch and comply to current IEE regulations.
- Never place a switch where it can be reached from a bath or shower.
- Do not use this fan with any solid-state speed control device.

This guide is for installing the Solatube Bathroom Ventilation Kit as an add-on to the Solatube 160 DS Daylighting System (250 mm diameter). The optional Solatube Electric Light Add-on Kit may also be installed with the Solatube Bathroom Ventilation Kit. Please refer to the installation guide for the Solatube Brighten Up Series, and, if using, the Solatube Electric Light Add-on Kit installation guide to complete your installation.

### Options (included only if specified)



**Universal pitched roof-mounted exit vent**



**Solatube Electric Light Add-on Kit**

## Motor assembly specification

**Fan motor assembly:** 100 mm in-line

**Motor:** Powerful, yet quiet unobtrusive single phase induction motor with backward curved centrifugal impellers for a large airflow providing a long maintenance-free life

**Supply:** 220-240V – AC 50Hz

**Airflow:** Extract rates of 110m<sup>3</sup>/hr / 31 litres per second

**Compliance:** Designed to comply with the 2006 Building Regulations on Ventilation (F1) CE label

**Max operating temperature:** 40°C

**Moisture:** Suitable for a wide range of applications including bathrooms, toilets, shower rooms and utility rooms. Not suitable for kitchens.

**Fan Speed:** 1400 rpm

**Maximum pressure:** 120 Pa

**Flexible duct:** Local Building Codes may require air duct (class 0) for certain fire-rated installations

### Step 1 – marking location for the fan motor assembly

Refer to the Solatube Brighten Up Series installation guide to mark the ceiling and roof location of the Solatube 160 DS Daylighting System.

In the roof void, locate a mounting location that allows the fan to be installed **horizontally**. Check that wiring can be run to the planned location and that the ducting supplied can reach this location from the roof exit and ceiling location respectively, allowing for a u-bend in the duct to act as a condensation trap. Refer to the installation instructions supplied with the fan motor assembly (**diagram A**).

### Step 2 – mark the location for the ventilation housing

Using the grille assembly as a guide, make a template from card (you could use the Solatube packaging), ensuring you cut the template 20mm smaller than the outer edge of the grille assembly.

Place the template on the ceiling surface within the roof void, ensuring it aligns with your ceiling marker and draw a line around the template (**diagram B**).

### Step 3 – install the ventilation housing

Cut along the line and remove the ceiling material. Remove the screw backing tabs from the ventilation housing. Secure the ventilation housing with six No.6 (40mm) drywall (ceiling) screws and the six screw backing tabs (**diagram C**).

NOTE: For an air infiltration seal, apply a 5mm bead of sealant to the back of the ventilation housing prior to installation.

### Step 4 – install the fan motor assembly & switch

Please refer to the separate installation guide enclosed for mounting and wiring the motor assembly and switch. Ensure the fan motor is mounted horizontally.

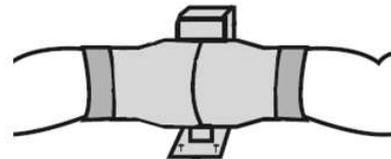
### Step 5 – connect the ducting

Run the air duct from the 100mm diameter upstand spigot to the inlet of the fan motor assembly. On the exhaust side of the fan motor assembly, run the air duct to the fascia/soffit exit vent or optional roof vent (see separate installation guide provided with optional roof vent).

For best venting performance, make the air duct run as short as possible with minimum bends, cutting the duct as necessary.

Ensuring an overlap of at least 25mm, secure the duct at each connection using the zip ties supplied and then cover with duct tape to create a seal (**diagram D**).

Diagram A



Select a mounting location that allows the fan motor to be installed horizontally

Diagram B

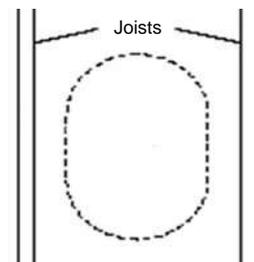


Diagram C

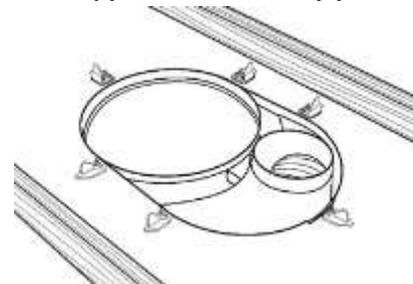
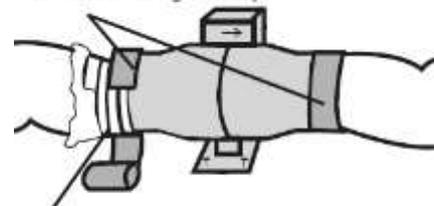


Diagram D

Secure the duct at each connection using duct tape



Overlap the ducting a minimum of 25mm at each connection

### Step 6 – fit the ventilation screen

Align the Ventilation screen with the Ventilation housing and snap into place by pushing gently upwards (**diagram E**).

### Step 7 – fit the Effects lens and ceiling fitting

Insert the Effects lens straight up into the bottom tube assembly until it sits into the recess at the base of the bottom tube assembly, with the clear plastic tab pointing downwards. Then place the ceiling fitting up into the lower edge of the bottom tube assembly, aligning the male and female lugs, and twist to secure in place (**diagram F**).

You have now completed installation of your Solatube Bathroom Ventilation Kit.

Diagram E

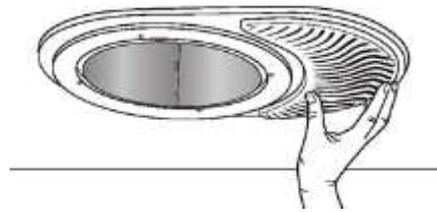
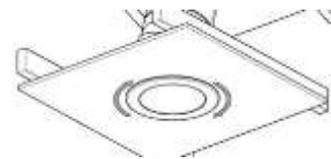
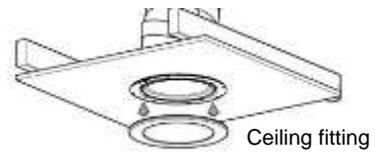
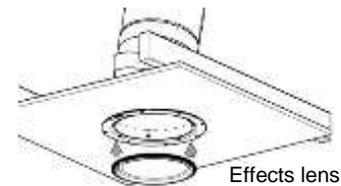


Diagram F



If you have any questions regarding the installation of your Solatube Bathroom Ventilation kit please contact us – we shall be delighted to help.



Solatube Scotland

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