

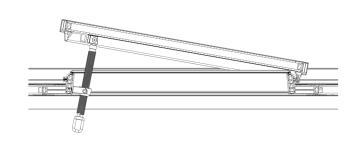
Roof Vent
Installation Guide

# **ROOF VENT INSTALLATION GUIDE**



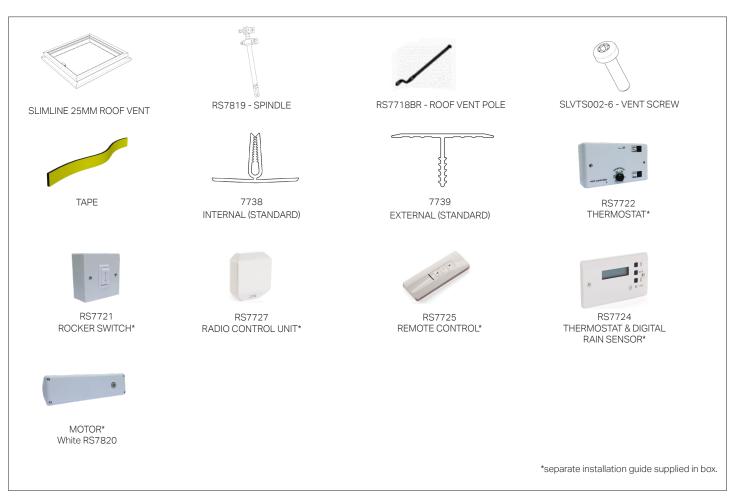
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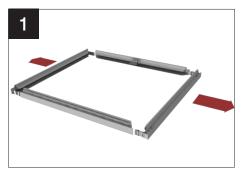


# COMPONENT LIST - (DEPENDANT ON ANCILLARIES CHOSEN)

# **SECTION 1**

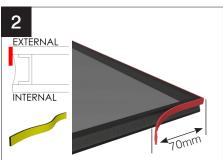


#### **ROOF VENT SASH SECTION 2**

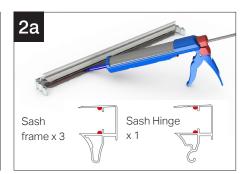


Unwrap the sash and pull two side sections out as shown above.

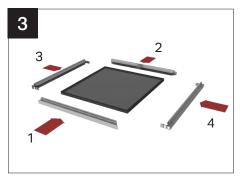
Remove any protective handling tape around the perimeter of the unit prior to installation.



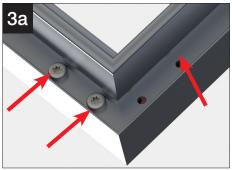
Apply length of foam tape directly to the lower edge of the outer pane of the glass unit as shown. Start by applying the tape 70mm up the side of the glass unit and continuing to wrap around the lower edge of the glass unit, finishing 70mm up the opposite side.



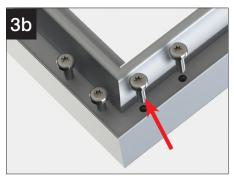
For pitches below 10° it is recommended that the glass is sealed in by running a bead of silicone along the length of each sash section as shown above. For pitches above 10° it is advisable to do the same.



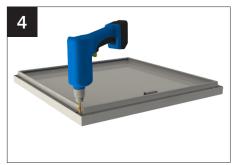
Once tape has been applied, assemble the sash in the sequence shown above and ensure the tape is directed against section 2.



If the pre-drilled holes appear out of alighment as shown above in red simply slacken off the factory fitted screws.



The two sections can then be readjusted so they are in line and square. Then the non factory fitted screws can be fixed down.



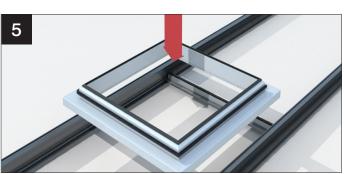
Finally re-fasten the factory fitted screws.



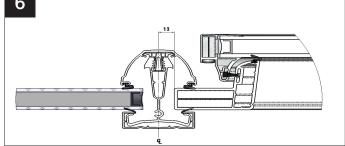
On the hinge side of the sash fill the hole shown above at either end with a blob of silicone.

\*NOTE\* The roof vent has been successfully tested by the BBA at 25° up to 1200Pa without sealant.

# VENT MAIN FRAME INTO ROOF



Peel back any protective film prior to fitting. Fit upper glazed unit and internal muntin bar. Carefully lower the vent frame into position onto the internal upper muntin bar.



Ensure the vent is central between the transoms. As shown above there should be a 13mm gap between the bar centre and the frame. Use glazing packers if necessary.

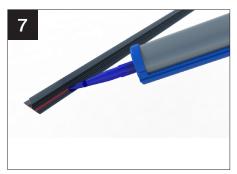
**SECTION 3** 

# VENT MAIN FRAME INTO ROOF

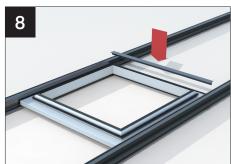
# **SECTION 3**



If existing glazing is 32/35mm a packer will have been pre-fitted to the frame.

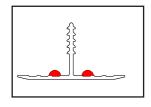


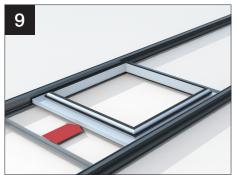
Run a bead of appropriate sealant ensuring a continuous run along the external upper muntin bar. Please see section view for bead positioning.



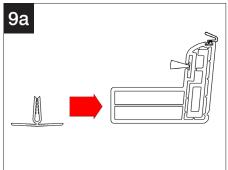
Locate the external upper muntin bar with the internal muntin bar, knock into place. The lower muntin may need to be supported from underneath whilst secure into final position.

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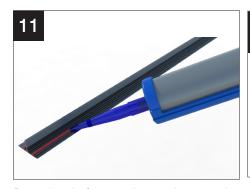




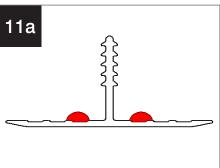
Slide the internal lower muntin bar into place under the vent frame. See cross section 9a for further detail.



Remove any handling tape around the perimeter of the unit. Take care lowering the glazed unit into position on the internal lower muntin bar.



Run a bead of appropriate sealant ensuring a continuous run along the external lower muntin bar. Please see cross section for bead positioning.

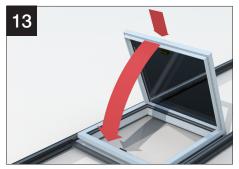


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Locate the external lower muntin bar with the internal lower muntin bar, knock into place. The lower muntin may need supporting from underneath whilst secured into final postion.

# FITMENT OF MECHANICAL WINDER

# **SECTION 4**



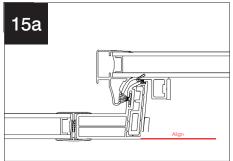
When the sealant on the mainframe has cured, re-fit the outer sash by holding vertically and re-engage on to the hinge, before lowering into position.

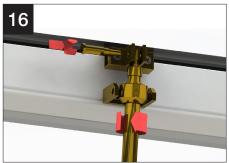


Using the screws provided attach the spindle bracket to the sash bracket (already attached to vent sash) taking care not to damage the glazed unit.

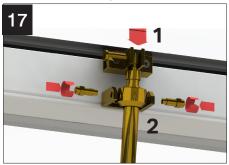


Align the winder bracket with bottom of vent frame (see section detail 15a for further information). Centrally align the winder bracket with the sash bracket. Once in position securely fit bracket in place using screws provided.





Attach the winder head to the sash bracket, using the plunger pin. Hold the winder at the relevant angle. Turn the winder body clockwise until it locks with the sash bracket.

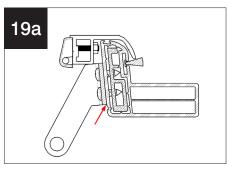


Apply downward force to the sash bracket (see 1). Turn the connection collar until the holes on the collar are approximately 3mm above the holes in the winder bracket (see 2). Holding the connection collar in place, turn the winder body anti-clockwise to loosen the sash bracket. This will enable you to fit the holding bolts without affecting the winder set-up.

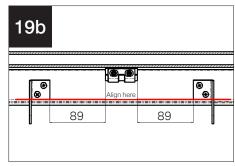
# FITMENT OF ELECTRIC MOTOR (IF SELECTED)



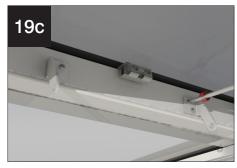
Using the nuts and bolts provided attach the Align motor brackets vertically using the motor bracket to the sash bracket taking care extrusions details as shown. not to damage the glazed unit.



# **SECTION 4**



Mark out as shown 89mm from edge of sash bracket to edge of motor bracket. Then mark the holes using the motor bracket as a template. Use a 2.5mm drill bit to pilot drill through the frame.



provided.



Secure the brackets to the frame using screws Fit provided securing bolts into the motor body through the location holes in the brackets.



Finished mounted motor in situ. Note: For further details, refer to motor instruction guide which can be located in the motor box.

# THIS UNIT MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN TO THE 17th EDITION BS7671 REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

- 1. Remove the front panel by loosening the retaining screws.
- 2. Screw the back box to the surface of a masonry wall in the conservatory, at the usual height of a wall switch.
- 3. Choose appropriate knock out for cable entry and smooth edges to prevent damage to cable insulation.
- 4. In any situation where the mains cable is not plastered into the wall, the cable must be adequately secured as close as possible to the control box to prevent undue stress on the cable.
- 5. Connect the cables in accordance with the wiring diagram, bringing sheath as close as possible to the terminal blocks, to prevent contact of the inner insulation with other parts of the p.c.b. Note that a junction box will be required in the ridge, to bring all the actuator cables together. Run a single four-core cable from here to the control box. Note that a fused isolator must be installed, providing a contact separation of at least 3mm in all poles.
- 6. Replace the front panel.

THIS UNIT TO BE INSTALLED USING BASEC OR HAR APPROVED CABLE, AND MUST BE SUITABLY EARTHED NOTE: CABLE NOT SUPPLIED

# OPTIONAL AUTOMATIC VENT CONTROLLER

# **SECTION 5**

#### **NOTE: CABLE NOT SUPPLIED**

The Automatic Vent Controller is an integrated electronic thermostat and controller with rain sensor, for automatic and manual operation of motorised roof vents. The vents open automatically at high temperatures and close again when the temperature drops or rain is detected. Up to 6 actuators can be controlled by type RS7820.





#### **TECHNICAL SPECIFICATION**

Mains Supply: 230V 5A 50Hz

Output current to actuators: 5.2A max at 20% duty cycle

Opening impulse: Variable, 3 to 9 sec approx.

Closing impulse: 11 sec approx
Differential temp of thermostat: 2°C
Mounting angle of rain sensor: 15° to 45°

Cable for rain sensor: 0.5mm2 2 core round flexible cable. Ø5 to

7mm

**Working voltage of rain sensor:** 1V to 6V wet - 7.5V to 10V dry (a.c.)

Equivalent resistance of rain sensor: Less than 80k ohms wet.

Greater than 300k ohms dry **Finish:** White only

**Dimensions of controller:** 148 x 88 x 52 excluding thermostat

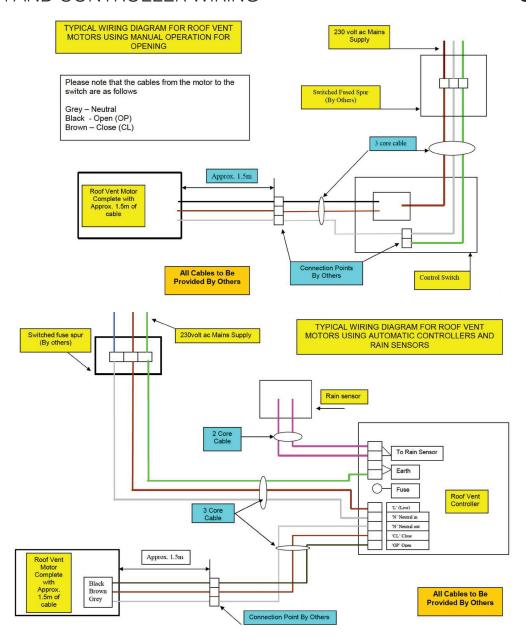
setting knob

Dimensions of rain sensor: 75 x 51 x 28 excluding cable gland

Weight of combined units in packing carton: 450g

# SWITCH AND CONTROLLER WIRING

# **SECTION 6**

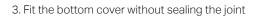


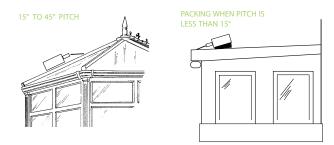
# INSTALLATION OF RAIN SENSOR

# **SECTION 7**

- 1. Pass the cable through the cable gland, strip the cable ends and crimp on the terminals supplied.
- 2. Push the terminals on to the blades. Do not over tighten the nuts and screws, or the conductive pattern many be damaged by indentation.

NOTE: Round 3A mains cable must be used to ensure that the cable gland grips the cable and forms a waterproof seal. (This cable carries only 9V a.c. however).





**Rain Sensor Mounting Position** 

4. Attach the unit with the self-adhesive pad provided to a convenient exposed part of the roof, with the black sensing pattern uppermost. The cable can point towards the ridge, gutter, or to either side. The unit must slope at a gradient of at least 15° to enable excess water to run off. Packing may be required on a lean-to roof to ensure this. Avoid shelter from overhanging eaves, especially if the conservatory is on the sheltered side of a taller building (house etc). In the UK the prevailing wind and most rainfall comes from the South-West. This is therefore the preferred side of the roof for the rain sensor, but check local conditions, especially on the East Coast or on Mainland Europe.



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