



## GV Standard 3 Wall Box

Operation and Maintenance Manual

# **GV Standard 3-Wall Box Rooflight**

## **Operation and Maintenance Manual**

### **Contents**

<b><u>Section Description</u></b>	<b><u>Page</u></b>
Contents & Introduction	2
Controls and Operation	3
Manual Override	4
Troubleshooting	5
Standard Glass Specification and Breakage Instruction	6
General Maintenance and Safety	7
Cleaning the 3 Wall Box	7
COSHH and Safe Disposal	8
Warranty Information	8

### **Introduction**

Thank you for purchasing a GV Standard 3-Wall Box (figure 1). We hope that it gives you many years of service. Should you have any queries beyond this manual, please do not hesitate to contact Glazing Vision.



Figure 1 – 3 Wall Box

## **Controls and Operation**

### **Control switch**

The standard operation is via the supplied wall switch (figure 2) and can be operated using two different methods as explained below:

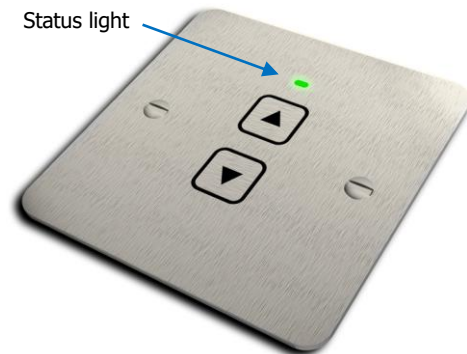


Figure 2 – Control switch

1. **'One touch' operation** – Press and release the control switch in either the up or down (open/closed) direction as required. The product will open or close fully. Press the control again to stop the product if you want it partially open or closed.
2. **'Press & hold' operation** – Press and hold the control switch until the product has reached the position you want. When you release the switch the product will stop in that position. If you continue to press the switch the product will stop when it becomes either fully open or closed.

### **Status light**

The status light (LED) will illuminate green if the product is working normally or intermittent green when closing due to rain. If the status light displays another colour please refer to the troubleshooting section.

### **Remote Control (Optional):**

The remote control (figure 3) functions in the same way as the control switch allowing the rooflight to be opened and closed from a short distance away. The remote control is powered by one long life A23 12V battery. The battery cover plate is found on the rear of the remote and can be accessed by pushing down and sliding the rear cover to one side.



Figure 3 – Remote control

### **Building management (Optional):**

The 3-Wall box can be connected to a building management system. Please contact Glazing Vision Ltd for further details if required.

### **Rain sensor (optional):**

The rain sensor (figure 4) automatically closes the rooflight when it rains. If moisture is detected on the rain sensor when rooflight is opened, a special built in heater activates for 60 seconds to evaporate standing water. If after 60 seconds water is still detected, the rooflight will close. This feature enables the rooflight to differentiate between rain and standing water / morning dew.



Figure 4 – Rain sensor

## **Manual Override**

The 3-Wall box is equipped with a manual override function. This is an emergency fail safe should the unit not open or close for any reason. The override hole is located internally on the treadplate approximately 250mm from the centre of the rooflight (figure 5).

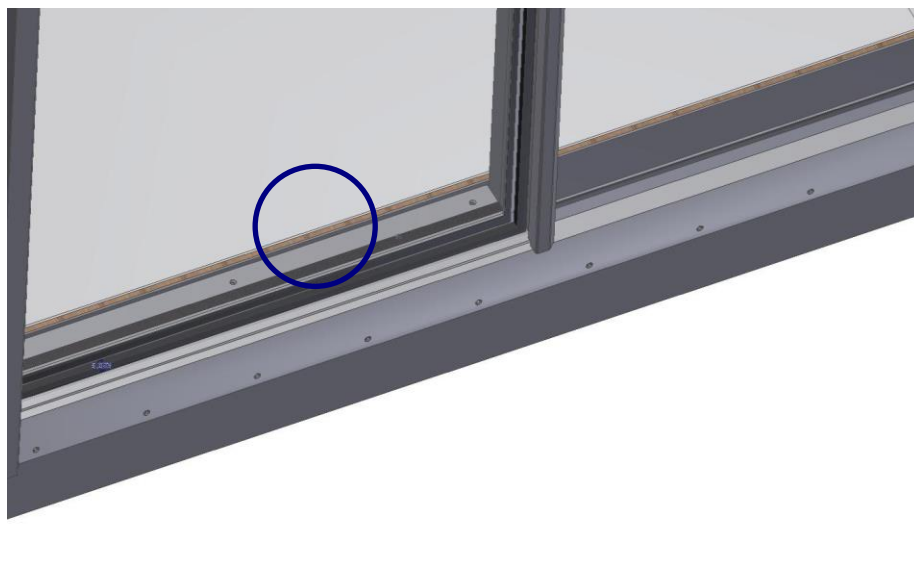


Figure 5 – Manual override location

To override the electric mechanism, insert a 6mm Allen key (supplied with the rooflight) through the hole and engage with the corresponding hexagonal feature on the override. Rotate the Allen key in a clockwise direction to disengage the motor. To engage the motor, rotate the Allen key in an anti-clockwise direction. If you have trouble rotating the Allen key fully, gently rock the sliding section back and forth to engage/disengage the drive.

If a solenoid bolt is fitted, this will also need to be disengaged before the door can be opened. This can be done simply by unscrewing the solenoid bolt from the framework, taking care to not disrupt the cables.

When fully disengaged, the rooflight will be able to be pushed by hand to open or close it, however it will not be secure.

## **Troubleshooting**

The 3-Wall Box control board monitors the operation of the rooflight. If a fault is detected, the board will stop the rooflight to prevent possible damage. Fault and standard conditions are indicated by the status light on the control switch (figure 2). The table below shows the various status light displays and their meanings. Although the rooflight will still operate following detection of a fault please observe the status displayed and attempt to resolve the issue with the suggested action. Avoid operating rooflight if fault persists. In this case, contact Glazing Vision for further assistance.

<b>Status light shown:</b>	<b>Meaning:</b>
Continuous Green	Lit whilst the rooflight is in motion under the control of the operate switch or remote control with no faults present. If the rooflight is one-touch opened or closed LED will remain lit until motion stops.
Intermittent Green	Flashes whilst the rooflight is in motion but not under control of the operate switch or remote control. Flashing will stop when motion stops. (i.e. whilst controlled by rain sensor)
Continuous Red	Lit whilst the battery is at 'low level' (regardless of whether mains is present or not). The control system will ignore requests to open from sealed state. Rooflight will close but not open.
Intermittent Red	Lit whilst the rooflight is in motion and no mains is present. To tell you there is a power failure and the batteries are not being charged. Rooflight will open and close for a limited number of operations.
Continuous Blue	Indicates a seal timeout, opening timeout or closing timeout condition. LED remains lit, if mains is present, until control switch is pressed.
Intermittent Blue	Indicates an over-current or undercurrent condition. Flashes, if mains is present, until control switch is pressed.
Continuous Yellow	Indicates that a safety device is active, preventing rooflight operation.

If a fault occurs please refer to the table below. Some faults with the unit may be easily corrected without the need for a site engineer, however if you are unsure, please contact Glazing Vision Ltd.

<b>Status Light Shown</b>	<b>Possible Cause</b>	<b>Action</b>
Continuous Green (No Fault)		No action required
Intermittent Green (No Fault)		No action required
Continuous Red (Low Battery)	Batteries are at low level, possibly coming to the end of their service life.	Check that the mains electrical supply is switched on and connected to the rooflight. Leave rooflight for 24 hours then check status again. If fault persists, contact Glazing Vision.
Intermittent Red (Mains supply absent)	No mains electricity is getting to the rooflight.	Reconnect mains electrical supply to rooflight.
Continuous Blue (Sealing Fault)	Is there a mechanical obstruction preventing the sliding frame from moving?	If possible, look at the mechanisms and remove any obvious obstructions.
	Is the sliding frame frozen to the base?	Attempt to open the rooflight once ice has melted.
	Has the rooflight been left inactive for a long period (a month or longer)?	A sealing fault is likely after a long period of inactivity. If fault persists, contact Glazing Vision.

Intermittent Blue (Over-current)	Is there a mechanical obstruction preventing the sliding frame from moving?	Remove any obstruction preventing movement and try again. If fault persists contact Glazing Vision.
3 Wall Box opens or closes for no apparent reason.	This should only occur if a rain sensor or building management system is fitted.	When either of these devices activates your rooflight the status LED will flash green. This is not a fault condition.

## **Standard Glass Specification and Breakage Instructions**

### **Glass Specification**

The standard glass used within the 3 Wall Box comprises a 6mm toughened outer pane, a 16mm argon filled silicone sealed cavity and a 6mm soft coat Low E coated toughened inner pane. However, various options are available at time of order. If specific data is required for the glazing please contact Glazing Vision for a glass data sheet for the specification installed within your product.

### **Breakage Instructions**

Should the double glazed unit break for any reason, due to the unique method of bonding the glass unit into the frame, new framework may need to be supplied. Glass breakage is not covered in the product warranty unless the breakage is a direct result of Glazing Vision Limited or its product failing. In the event of the glass being damaged please contact Glazing Vision for assistance.

## **General Maintenance & Safety**

To keep the 3 Wall Box in good working order there are a few basic points that should be observed:

- Do not place anything on the lid or cause obstruction to the lid of the 3 Wall Box when opening the unit as this may cause damage to the unit's mechanisms.
- Do not walk or sit on the unit.
- Make sure fingers and other obstructions are clear of the rooflight before closing the unit (although there is a circuit board overload cut out, damage/injury may be caused).
- Do not allow unauthorised persons (e.g. children) to operate the rooflight as this may lead to injury or damage to the product.
- It is recommended that a general inspection is carried out on the unit wherever possible at least once every 6 months.
- Glazing Vision, if required, can offer a service / maintenance contract. Please contact our office for further details.
- Keep the frame clear of general dirt and debris particularly around the opening mechanism.
- Do not use any abrasives or aggressive cleaners on the painted framework or glass of the unit as this may affect the finishes.

## **Cleaning the 3 Wall Box**

Due to the 3-Wall boxes unique bonding method and the built in pitch, there should be no water ponding on the glass when installed correctly. Any standard glass-cleaning product can be used to clean the glass unit. However take care not to use abrasive materials or cleaners as this may affect the unit and its finish. The framework of the unit can be cleaned using warm soapy water with a soft lint free cloth.

## **COSHH and Safe Disposal**

The battery and control electronics are the only hazardous materials used in the construction of the 3-Wall box. Wherever possible when disposing of the 3-wall box recycle as much as possible and dispose of the batteries correctly. Do not burn any plastic materials. The following materials are used throughout the 3-wall box:

### **Framework**

- Aluminium sheets and angles
- Polyester powder coated finish
- Stainless steel fixings
- Upvc solid bar
- Low modulus silicone
- Polypropylene brush strip
- Closed cell PIR foam insulation
- EPDM rubber gaskets
- PVC foam tape
- Polyethylene backing rod
- Toughened glass panes
- Aluminium spacer bar
- Hardwood insulation

### **Mechanisms and control**

- Stainless steel fixings
- Stainless steel bearings
- Magnetic reed switches (various)
- Standard insulated spade terminals
- Stainless steel push switch (access)
- Printed circuit board
- SPST rocker switch
- Copper wiring
- Electric motor (various)

## **Product Warranty**

A warranty document will be provided with the product. If this is misplaced it can be found at [www.glazingvision.co.uk/resources/warranties/](http://www.glazingvision.co.uk/resources/warranties/).