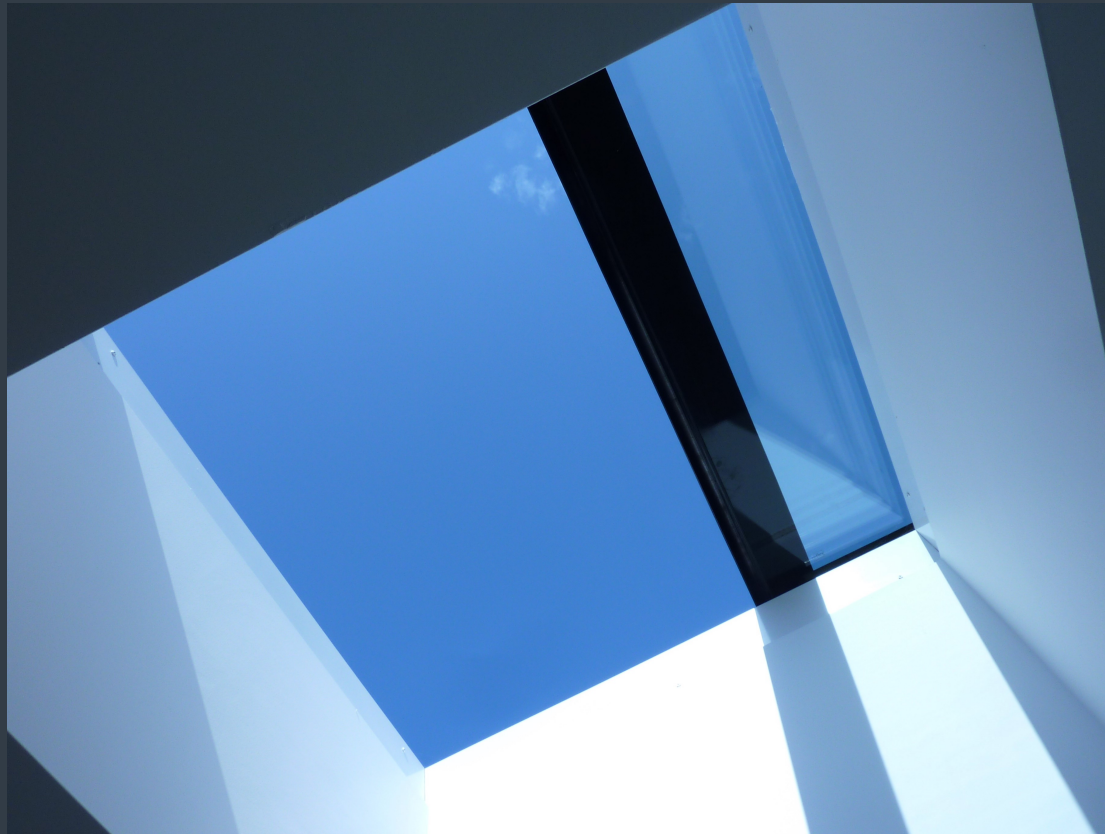


# ROOF MAKER

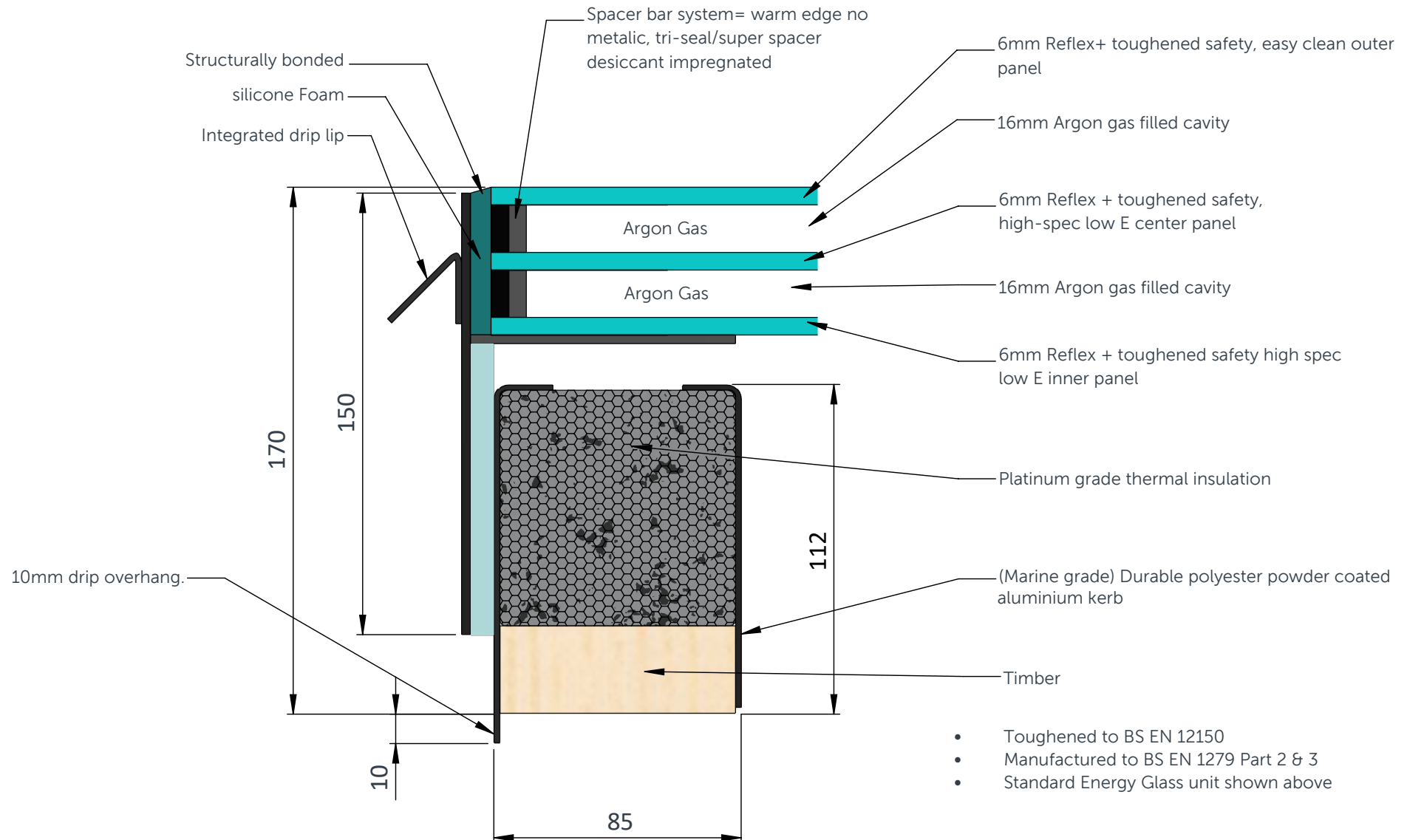
WORLD CLASS ROOFLIGHTS



PRODUCT SPECIFICATION AND INSTALLATION GUIDE

SLIDE OPENING FLAT ROOFLIGHT

## SLIDE OPENING FLAT ROOFLIGHT: STANDARD PRODUCT SPECIFICATION



## SLIDE OPENING FLAT ROOFLIGHT: INSTALLATION INSTRUCTIONS

### ON DELIVERY OF YOUR NEW SLIDE OPENING FLAT ROOFLIGHT, YOU WILL RECEIVE;

- Your Slide Opening Flat Rooflight
- Control box (200mm x 120mm x 75mm) with 3 pin power flex\*
- Remote control and key remote\*
- Long Screws\*

*\*additional accessories come in a  
separate cardboard box*

### IN ADDITION TO YOUR NEW SLIDE OPENING FLAT ROOFLIGHT, YOU WILL NEED;

- Silicone Adhesive Sealant  
(high quality; Dow Corning 791  
recommended)
- Drill, bits and screws as required
- Materials to prepare a timber kerb

### INSTALLATION GUIDE

Make sure to read through all steps and understand all requirements before beginning assembly. We also recommend that you study the 'cable location guide' which provides further guidance on how to run the rooflight cabling into the property as part of the installation. This is located at the end of this guide, alongside the wiring guide and a roof section diagram

*Please take precaution when moving heavy objects and working at height. Be sure to use the correct equipment. Guide weights based on size, are shown on the chart to the right.*



GUIDE WEIGHTS	
Size (mm)	Weight (kg)
1000x1000	102
1500x1000	133
2000x1000	168

PLEASE NOTE - weights stated can vary and work to a +/- 10% tolerance.

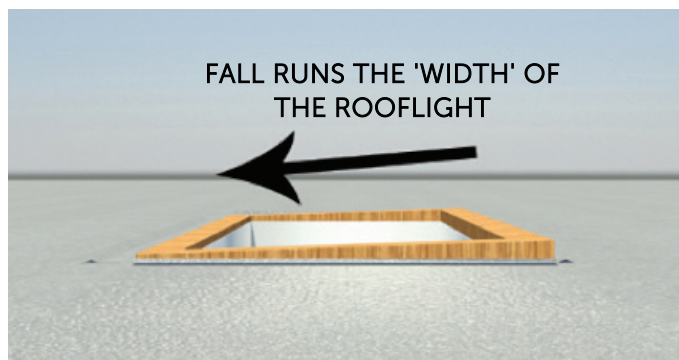
## STEP ONE

### PREPARE A TIMBER KERB FOR YOUR ROOFLIGHT

Prepare a 70mm width timber kerb for your rooflight. This should be a minimum of 30mm in height from the finished roof level (at the lowest side). The internal dimensions of your kerb should match the internal dimensions of the rooflight/size ordered.

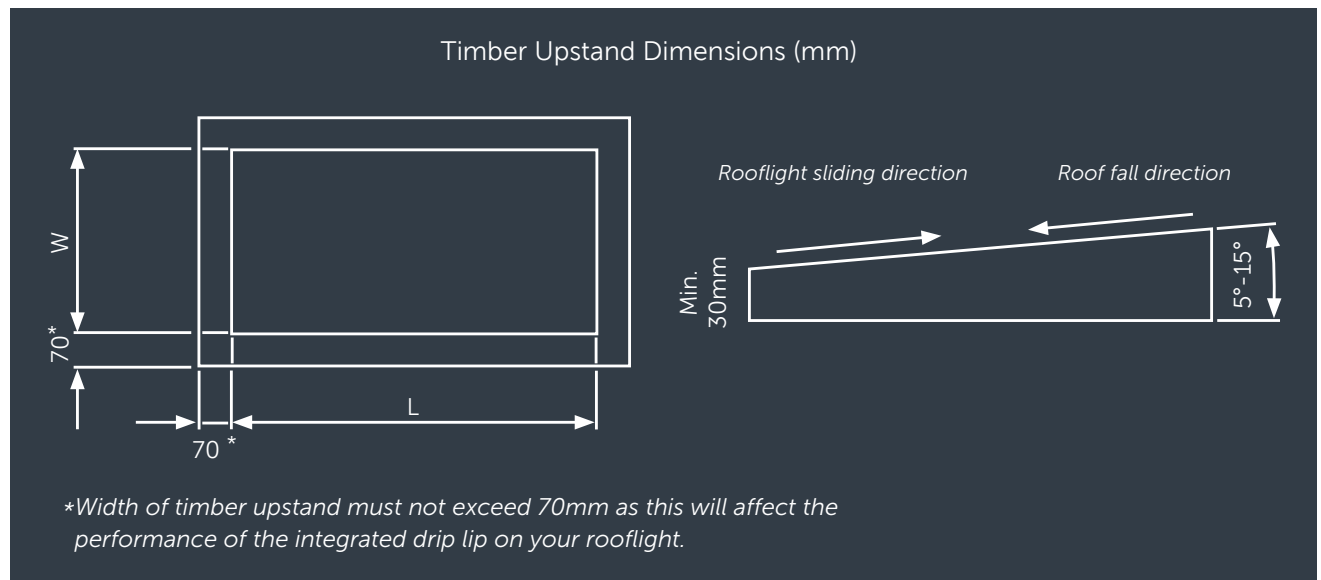
### SETTING THE DIRECTION OF THE FALL

The rooflight always opens across the 'width' of the rooflight, so the fall will need to be set across the width of your timber kerb, allowing it to open 'uphill.'



Your Slide Opening Flat Rooflight needs a slight pitch of 5°-15° for rain to run off. If your roof does not have this pitch, build the angle into your kerb.

**IMPORTANT** - Ensure that the rooflight opens uphill, toward the highest side of the timber kerb (as shown below) with the rain sensor side being located at the lowest side of the timber kerb (which is the side that it opens away from). For this reason, we advise that you create your fall on the 2 shorter sides of the kerb in preparation for this. There should also be a minimum space of 1000mm at the side of the kerb, in the direction that the unit opens. This is vital to ensure there is sufficient clearance for the lid to fully open without obstruction.





# ROOF MAKER

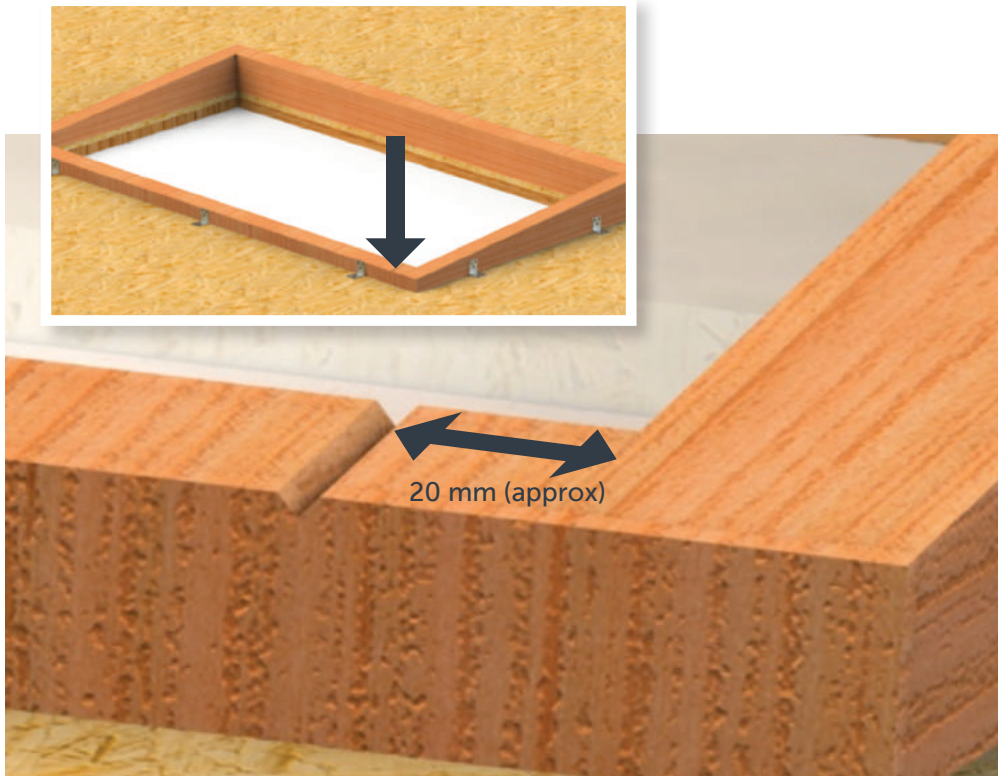
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Call us: 0116 269 6297  
Mon-Fri 9-5pm

## STEP TWO

### RAIN SENSOR

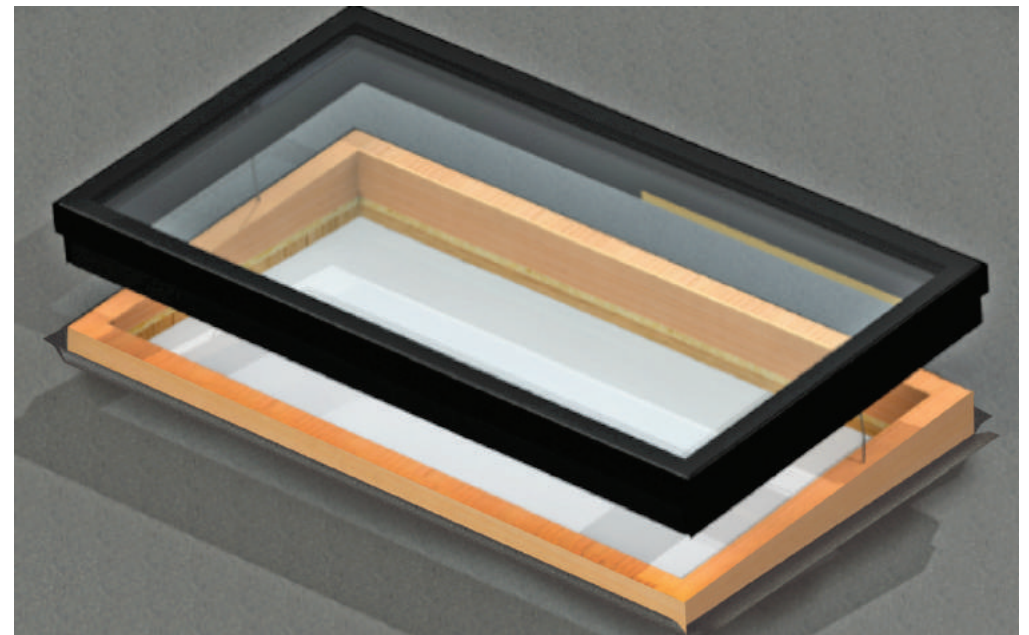
It is advised that a small groove/notch (5mm max depth) is cut into your kerb in line with where the rain sensor will be positioned. This will allow you to run the wire through for your rain sensor. ***The rain sensor is always located at the right hand side as the below diagram shows.***



## STEP THREE

### CREATE HOLES/GROOVES IN THE TIMBER KERB TO RUN THE ROOFLIGHT CABLING INTO THE PROPERTY

First, mount the supplied control box in a desired location i.e. ceiling void. Access panel may be added at your discretion. Trial fit your rooflight and mark a suitable location to drill a hole/s or create notches for the rooflight's electrical cables - ***Again, please refer to the cable location guide, which can be found on page 7 of this document.***



# ROOF MAKER

WORLD CLASS ROOFLIGHTS

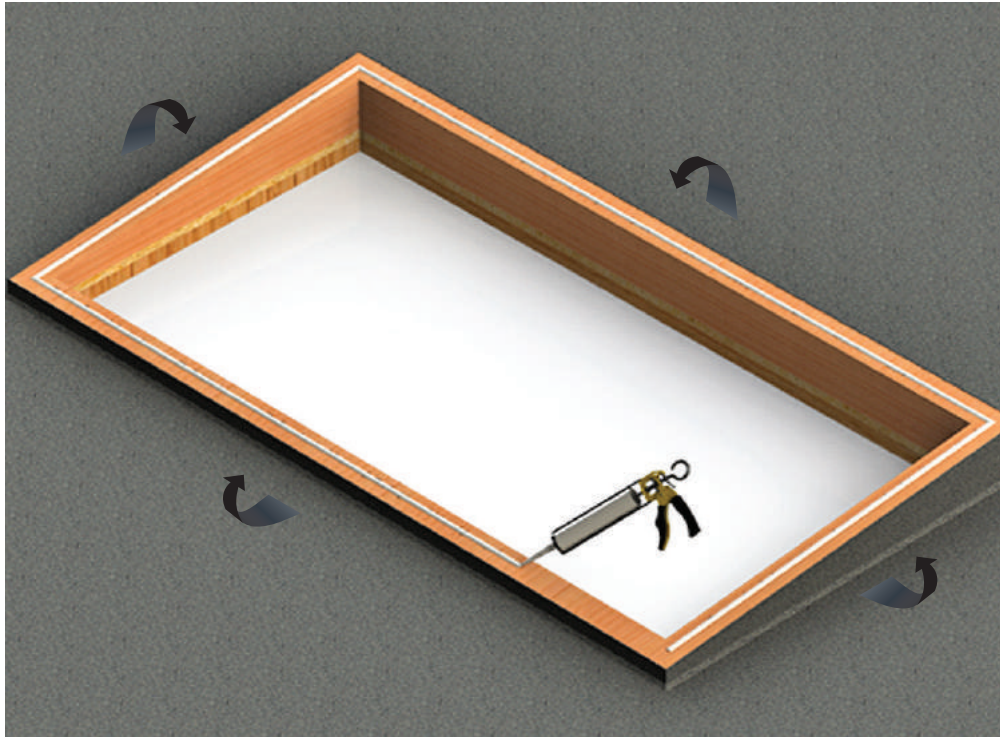
Call us: 0116 269 6297  
Mon-Fri 9-5pm

## STEP FOUR

### APPLY SILICONE AROUND THE TOP FACE OF THE TIMBER KERB

Apply the flashing/roof membrane to the sides of the kerb (Leaving the top face as exposed timber) and apply a thick bead of silicone around the top face, as shown.

You can now place the rooflight onto the kerb and connect it to the power supply, ready to open the rooflight and fix it with the provided long screws. The wiring guide can be found toward the end of this document.

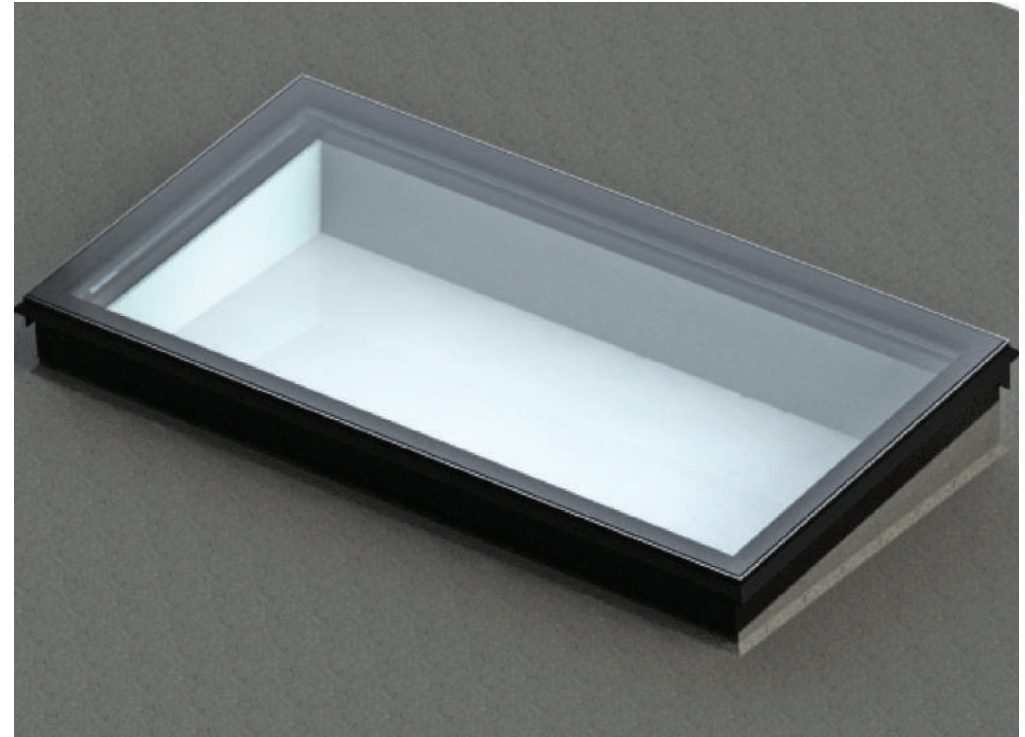


## STEP FIVE

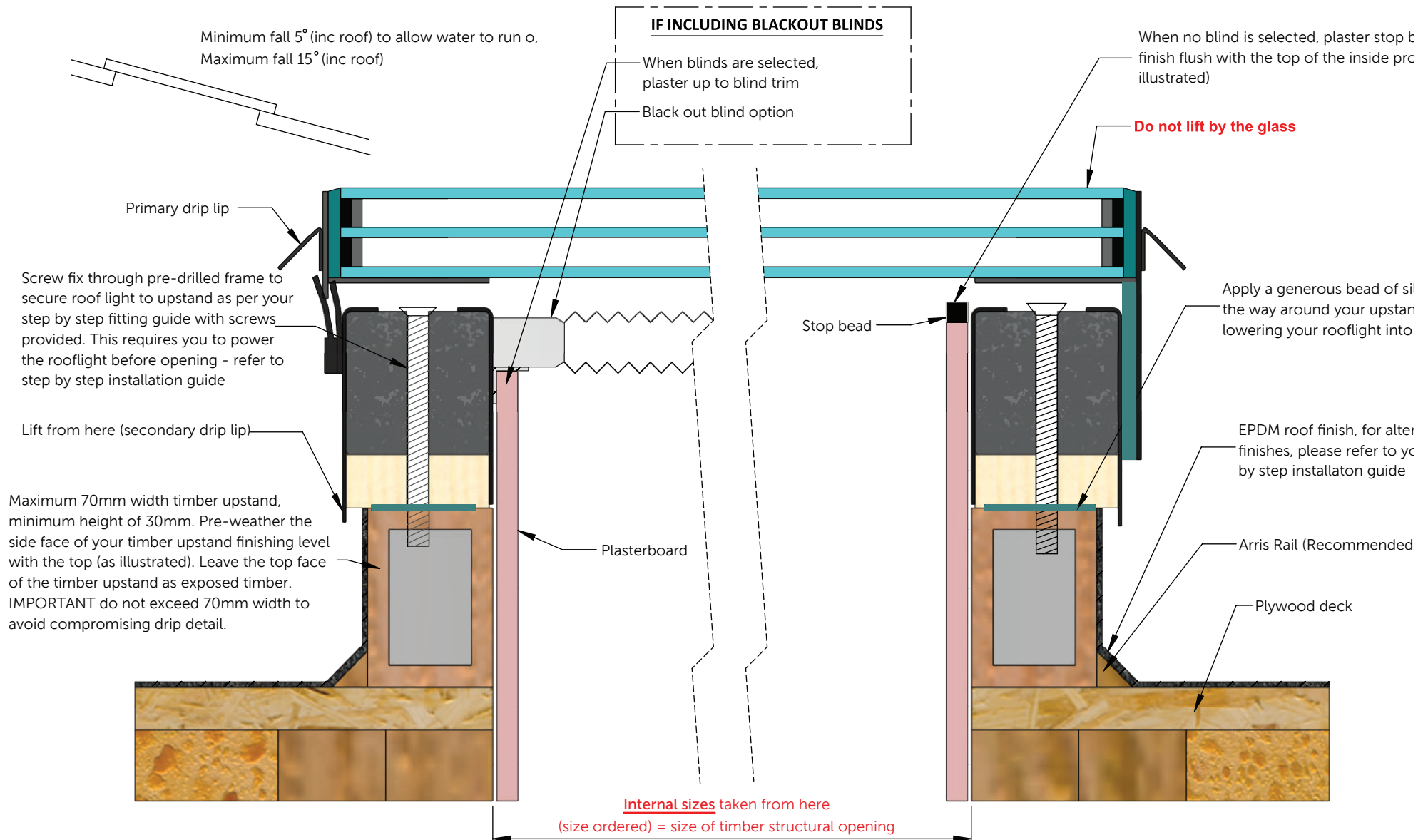
### SCREW FIX THE ROOFLIGHT TO THE TIMBER KERB

Open the rooflight via the remote control and secure it to your kerb through the preformed holes with the long screws in the top of the rooflight's base frame. For plastering finish guidelines, please follow the roof section fitting guide, included on page 6 of this document.

Your Slide Opening Flat Rooflight is now fully installed.

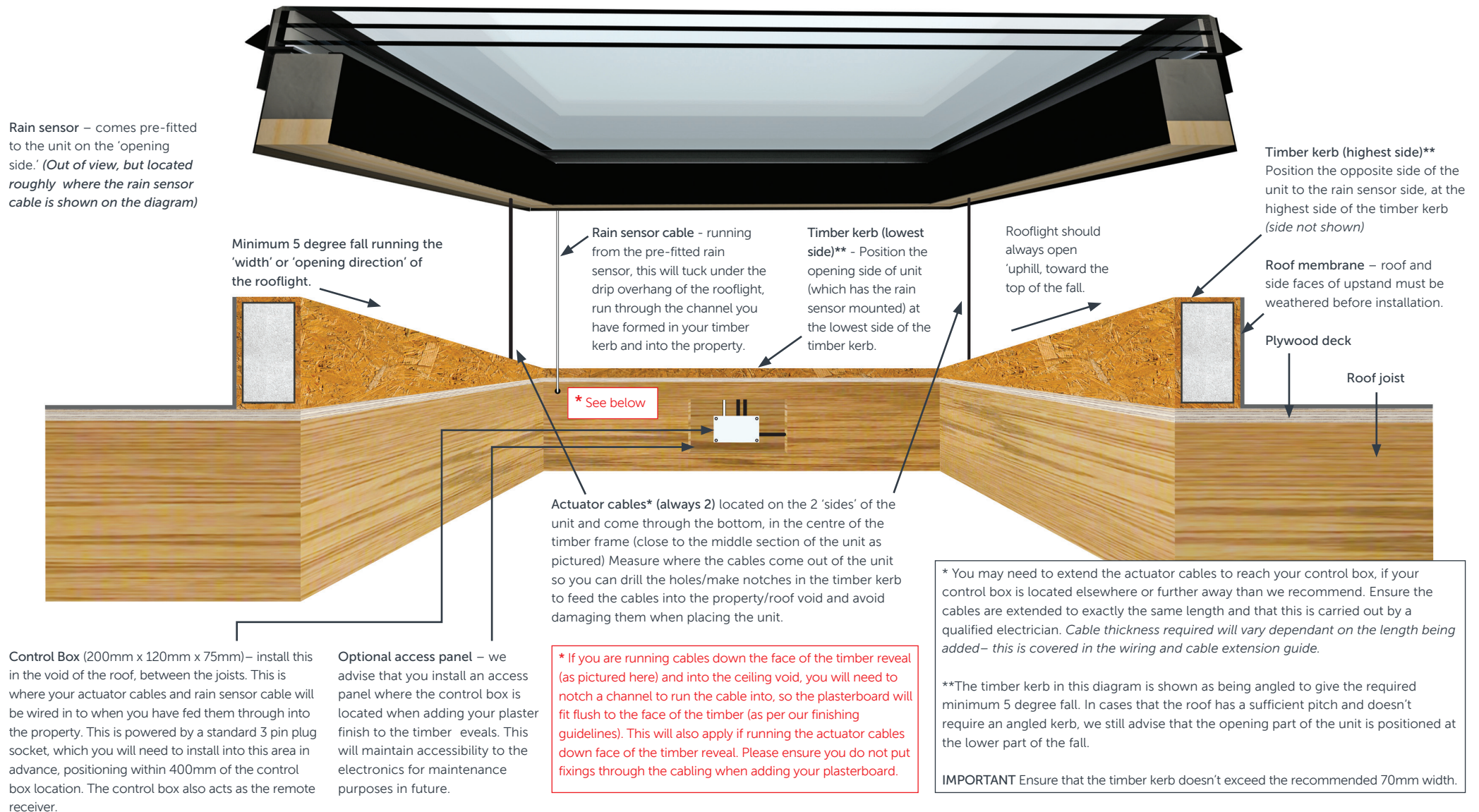


## ROOF SECTION FITTING GUIDE





## SLIDE OPENING FLAT ROOFLIGHT - CABLE LOCATION GUIDELINES (not to scale)





## REMOTE CONTROLLED ROOFLIGHTS: WIRING AND CABLE EXTENSION GUIDE

### Wiring Guide - Control Box

The diagram below shows the PCB located inside the control box. The dimensions of the control box are 200mm x 120mm x 75mm and we advise this to be consealed but kept accessible, as explained in the seperate cable location guide. The diagram below explains how to connect the power supply, the rooflight actuator/s, rain sensor and also covers the wiring for an optional rocker switch, should this be required. There are various different types of actuator cabling, which will vary dependant on the type and size of the rooflight. These options can be found overleaf along with guidelines on how to wire them in to the motor output pairs.

#### Control Input/Outputs Key

GND: Ground (-ve)

12V: +12V DC regulated supply

#### 1: Safety Switch Signal Input

Connect to any ground, GND, to stop/switch off the output

#### 2: Thermostat Signal Input

Connect to any ground, GND, to switch output to 'down'

#### 3: Rain Sensor Signal Input

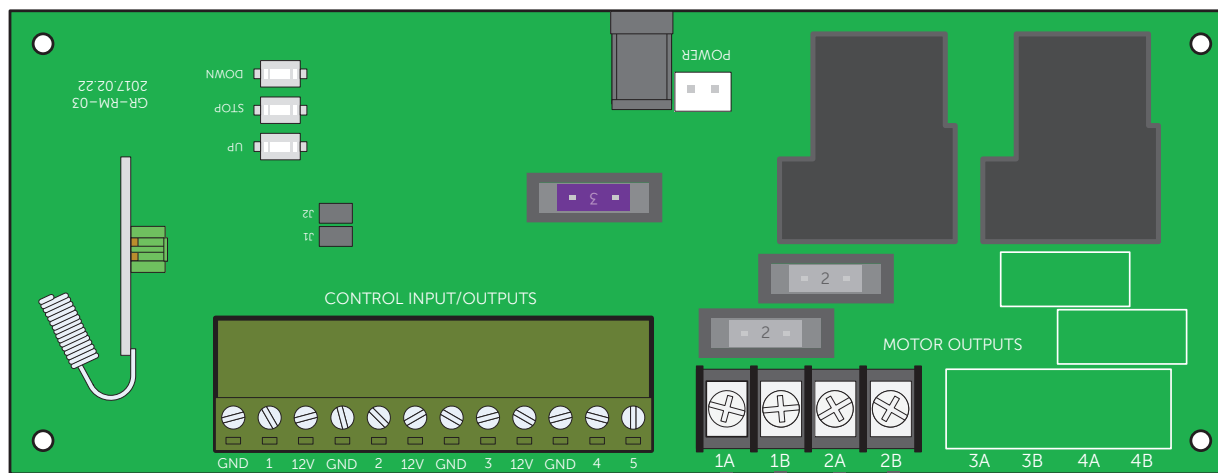
Connect to any ground, GND, to switch output to 'down'

#### 4: Control up

Connect via switch any ground, GND, to switch output to 'UP'

#### 5: Control down

Connect via switch any ground, GND, to switch output to 'DOWN'



#### Kemo Rain Sensor

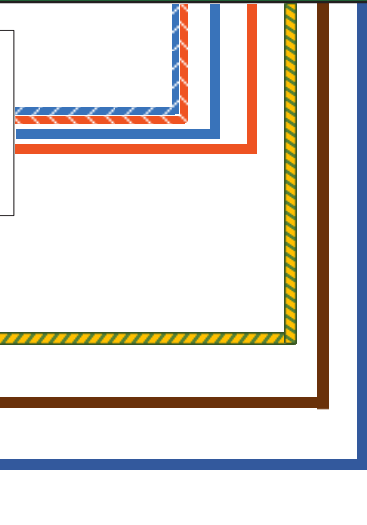
Connect:

Orange to any "12V"

Blue to "3"

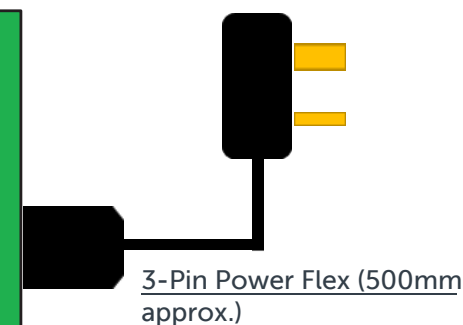
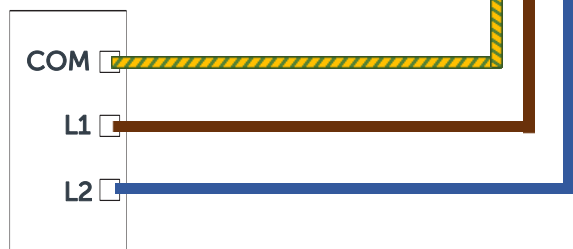
Orange/white to any "GND"

Blue/white also to any "GND"



### Optional Rocker Switch Integration

Adding a rocker switch uses zero voltage switching and requires a '2 way and off' retractive switch, that springs back to the central (off) position when not engaged (can be provided as an additional extra). Connect L1 on the switch into number 4 (control up) and L2 into 5 (control down). Lastly, connect common on the switch to ground (GND) as the diagram to the right shows. A 1.5mm 'twin and earth' cable is sufficient for this.



Use the provided 3-pin power flex cable to plug the control box in to the mains power supply. Please use the provided plug and do not remove to wire directly to the mains supply. We advise that you run the plug socket off a fused spur.

#### Motor Output Pairs to Actuator(s)

If only using one actuator then either of the output pairs 1A and 1B or 2A and 2B can be used. Each numbered output is individually fused and is capable of supplying up to 2.1A continuous at 24VDC. The polarity at each output inverts when swapping between 'up' and 'down'. Outputs 3 and 4 are not used (cables here shown as grey – please see overleaf, which shows various types of cabling and where cables need to be wired into the output pairs, which is dependent on the type/size of rooflight being installed).

#### WARNING

Ensure the combined load at the three "12V" output terminals does not exceed 1A. A single Kemo rain sensor should consume less than 0.2A, so if using a rain sensor there should be a further 0.8A available at 12VDC (~9W) to also operate thermostats, safety sensor switches and similar devices. DO NOT connect any 12V directly to any GND, or any of 1, 2, 3, 4, 5 to any 12V

# REMOTE CONTROLLED ROOFLIGHTS: WIRING AND CABLE EXTENSION GUIDE

## Wiring Guide - Actuator Cable Types

The table below shows the different types of actuator cabling provided when you have a remote controlled rooflight with a rain sensor. The cable type will vary dependant on the type and size of rooflight motor that is fitted. The table below has been broken down by rooflight type and provides advice on where to wire in to the motor output pairs inside the control box. If you need to extend either the actuator cables or rain sensor cable, we have instructions on how this can be done overleaf. We advise you follow these instructions to avoid experiencing voltage drop. You will need to extend the cables if you want to locate the control box further away from the rooflight than we advise in the cable location guide.

Slide Opening Rooflights & Lanterns	Hinged Opening Flat Rooflight & Hinged Opening Luxlite™ (cabling type varies dependant on required motor/s)	
	<div>2 core cable/s</div> <div></div> <div>If cabling is black      If cabling is grey</div>	<div>3 &amp; 4 Core cable/s</div> <div></div> <div>* "S" Synchronisation wires to be connected to each other inside the control box</div>
Slide opening flat rooflights and lanterns will always have 2 actuator cables. Wire in to the output pairs, as per the above diagram	<p>The 2 core cable options will vary between black and grey cabling. Ensure that you wire into the control box as per the relevant diagram above, as it is important that the polarity is correct. Some rooflights will have a single cable and some will have 2 cables.</p> <p>For single motor rooflights with a single cable, you can use either the 1a/1b or 2a/2b output pairs. For units with 2 motors/cables, you will use both output pairs</p>	<p>The 3 and 4 core options of cable will feature 1 or 2 synchronisation cables. These must be connected inside the control box and wired in to the output pairs as per the above diagrams, when there are 2 motors and 2 cables.</p> <p>In scenarios that there is a single motor &amp; cable, the synchronisation cables will be redundant and you can use either the 1a/1b or 2a/2b output pairs.</p>

## REMOTE CONTROLLED ROOFLIGHTS: WIRING AND CABLE EXTENSION GUIDE

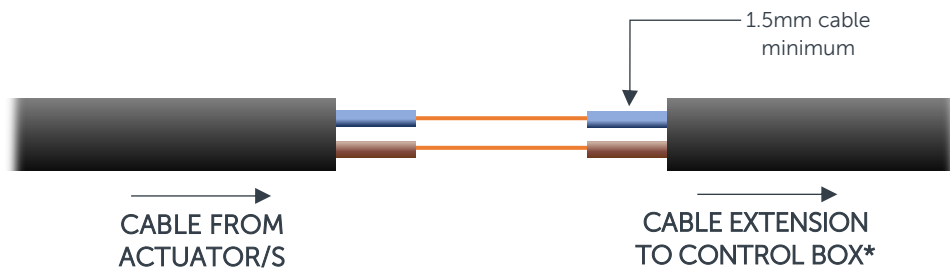
### Cable Extension Guide

This guide explains how to extend the cabling for opening rooflights, which feature remote controlled operation and rain sensors. In some scenarios, dependant on where your rooflight is located and where you wish to place the control box, extending the cables might be a requirement. Your electrician must ensure that a suitable cable is used to avoid voltage drop occurring. This guide covers the **Slide Opening Rooflight and Lantern** and the remote-controlled versions of the **Hinged Opening Flat Rooflight** and **Hinged Opening Luxlite™**.

Here you will find guidance for extending cables up to a length of 15 metres. If you do need to extend further than 15 metres, please contact our technical department for advice.

The cable extension requirements for the rain sensor cable are outlined below and remain the same for all rooflights covered in this guide.

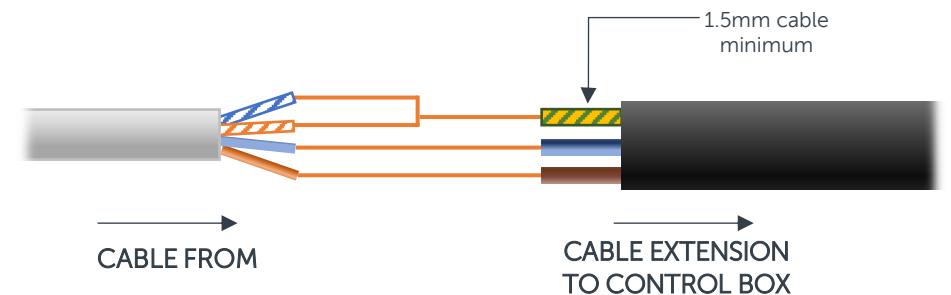
### 2 CORE ACTUATOR CABLE/S



For your extension cable, you will require a 2-core cable (minimum) with core cabling of a minimum 1.5mm diameter to avoid voltage drop, up to 10 metres. **If extending between 10-15 metres, use a minimum 2.5mm core cable.**

*\*If your rooflight has 2 actuator cables that need to be extended, please ensure they are extended to exactly the same length to avoid the motors operating at different speeds.*

### RAIN SENSOR CABLE



Rain sensor cable will be a 4-core cable;  
12-volt input (orange)  
Signal (blue)  
2 ground cables (white/orange) (white/blue)

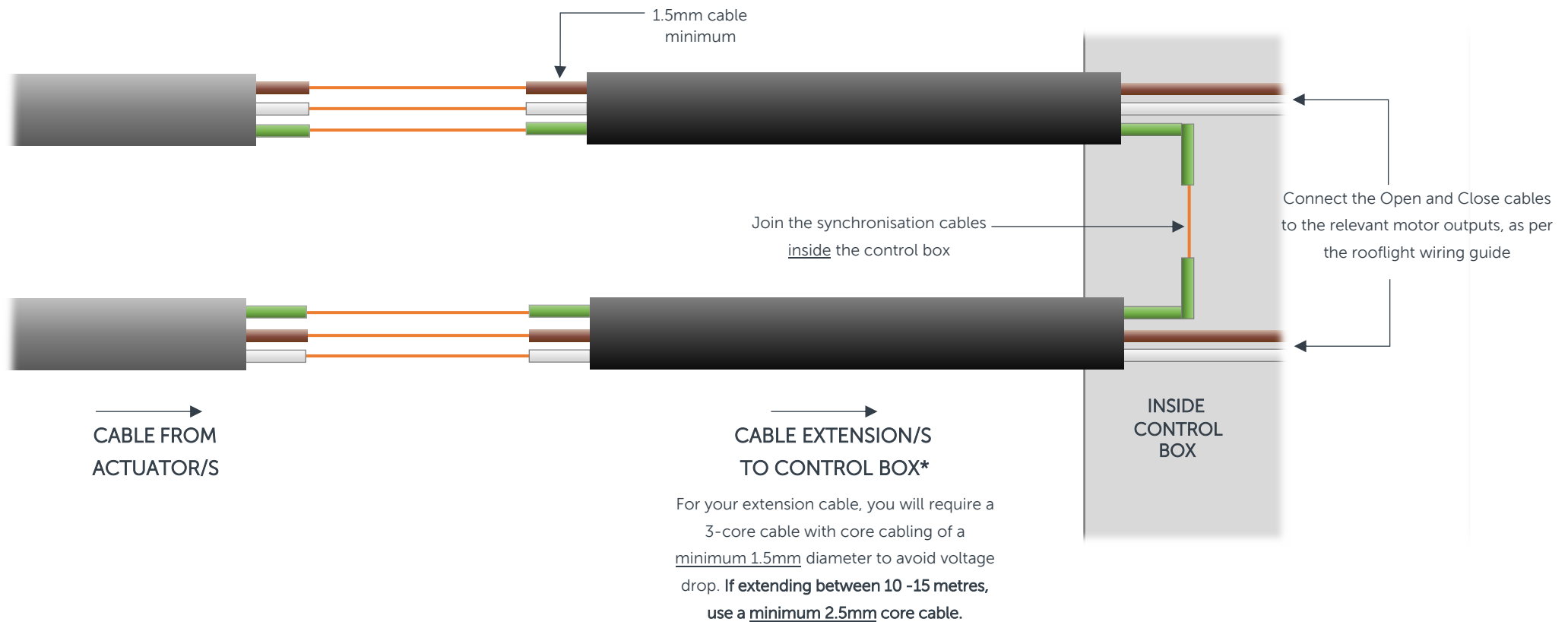
For your extension cable, you will require a 3-core cable with core cabling of a minimum 1.5mm diameter to avoid voltage drop, up to 10 metres. **If extending between 10 -15 metres, use a minimum 2.5mm core cable.**



## REMOTE CONTROLLED ROOFLIGHTS: WIRING AND CABLE EXTENSION GUIDE

### 3 CORE ACTUATOR CABLE/S

This is shown below as 2 cables to illustrate how the synchronisation cables are joined together inside the control box, when the rooflight has 2 actuators. Should you have a rooflight with just a single '3 core' cable from the actuator, the synchronisation (green) cable will be redundant

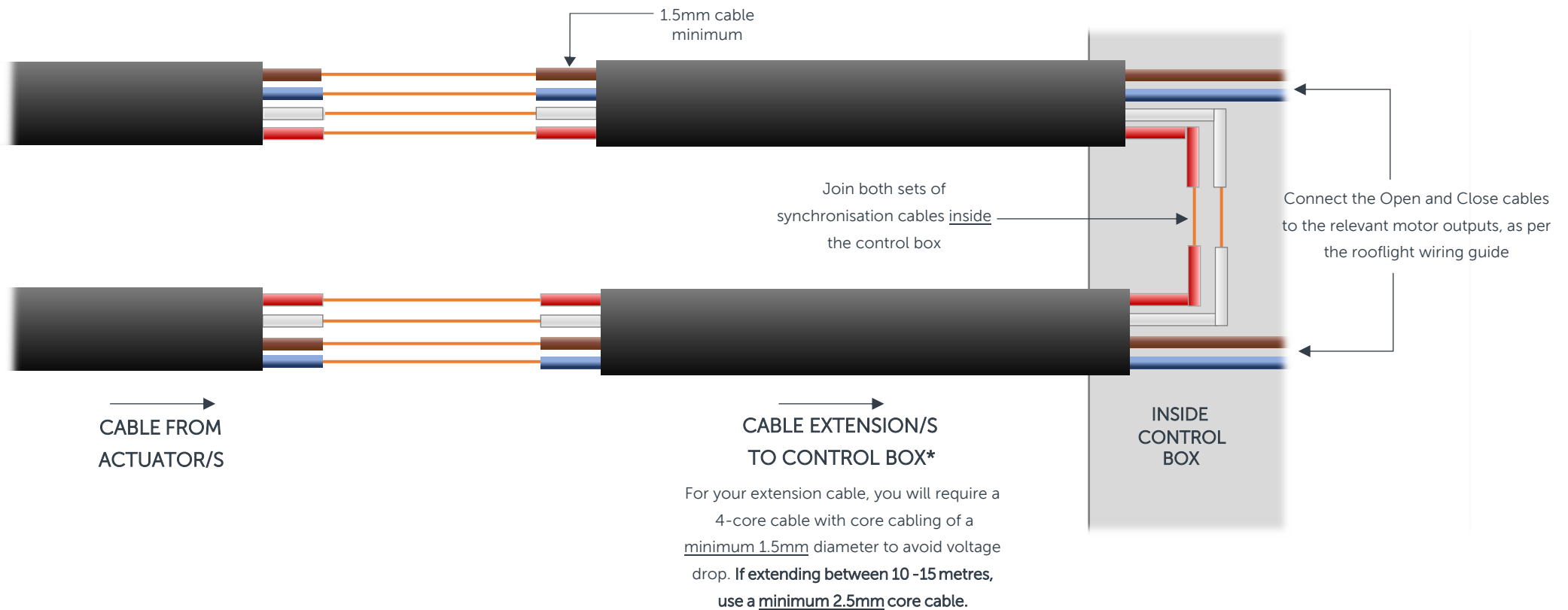


*\*If your rooflight has 2 actuator cables that need to be extended, please ensure they are extended to exactly the same length to avoid the motors operating at different speeds.*

## REMOTE CONTROLLED ROOFLIGHTS: WIRING AND CABLE EXTENSION GUIDE

### 4 CORE ACTUATOR CABLE/S

This is shown below as 2 cables to illustrate how both pairs of synchronisation cables are joined together inside the control box (when the rooflight has 2 actuators). Should you have a rooflight with just a single '4 core' cable from the actuator, the synchronisation (red and white) cables will be redundant.



*\*If your rooflight has 2 actuator cables that need to be extended, please ensure they are extended to exactly the same length to avoid the motors operating at different speeds.*