

ROOF MAKER

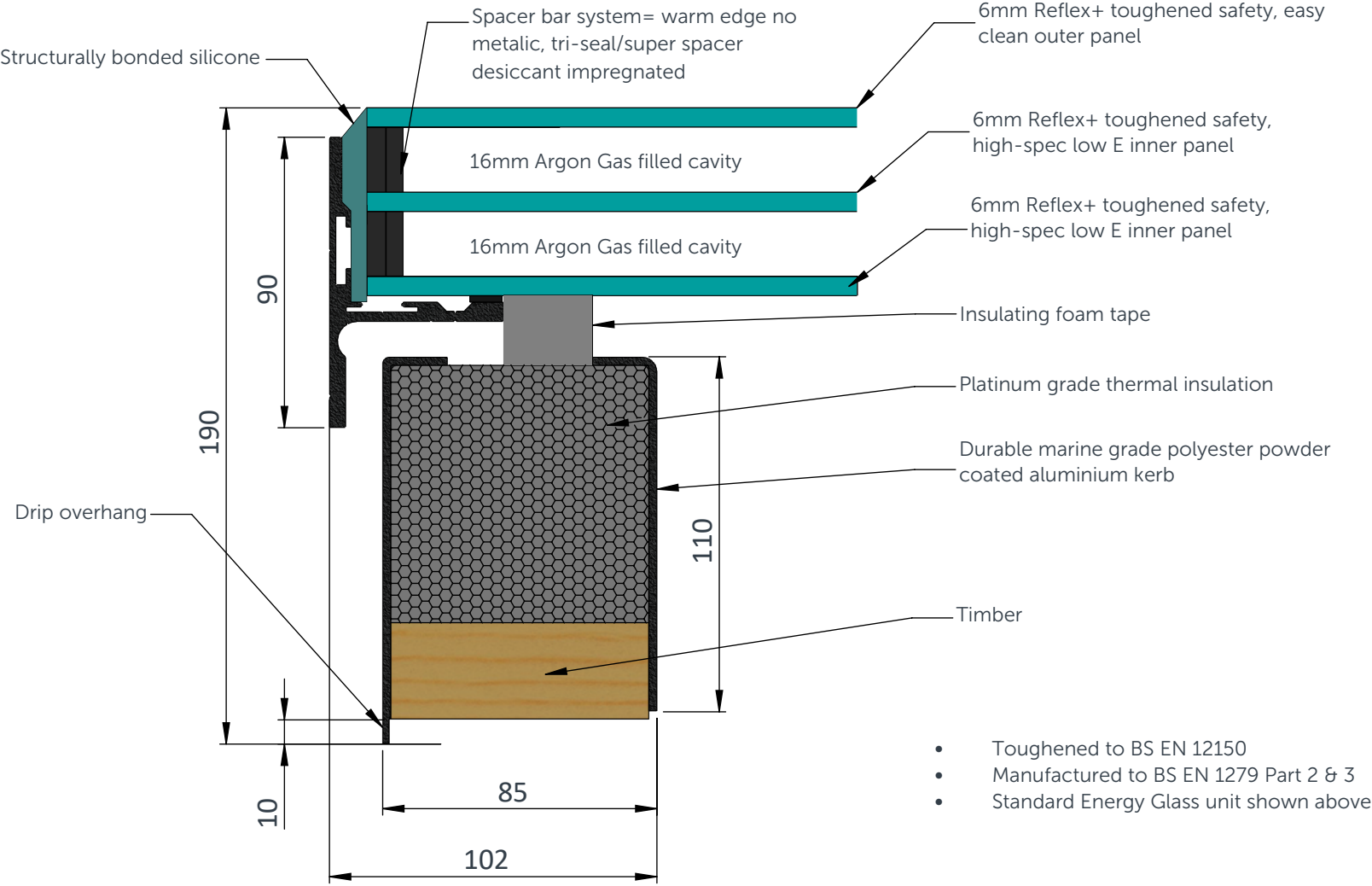
WORLD CLASS ROOFLIGHTS



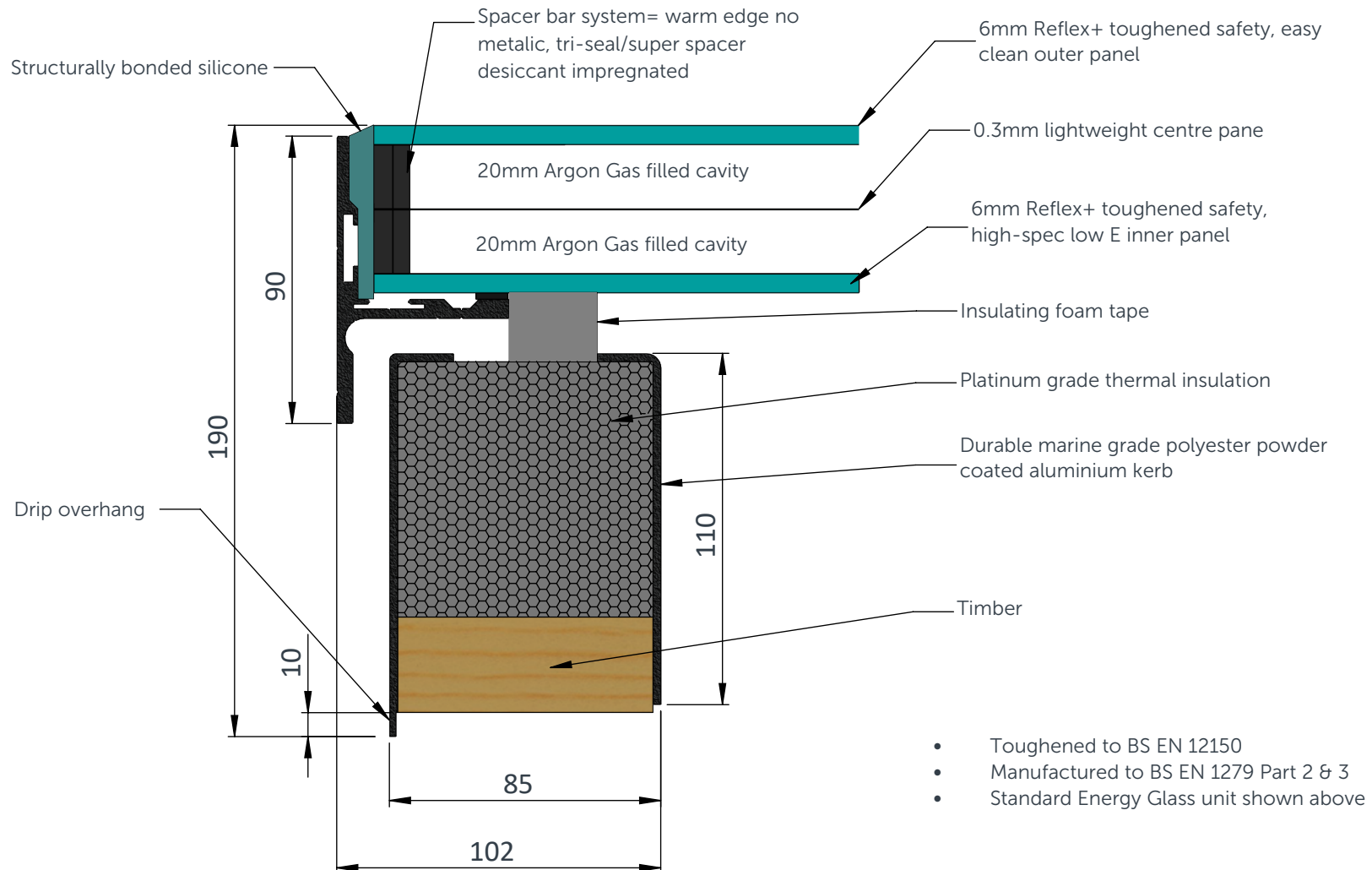
PRODUCT SPECIFICATION AND INSTALLATION GUIDE

HINGED OPENING FLAT ROOFLIGHT

HINGED OPENING FLAT ROOFLIGHT: STANDARD PRODUCT SPECIFICATION



HINGED OPENING FLAT ROOFLIGHT: PRODUCT SPECIFICATION (LARGER ROOFLIGHTS WITH LIGHTWEIGHT GLAZING UNIT)



HINGED OPENING FLAT ROOFLIGHT: INSTALLATION GUIDE

ON DELIVERY OF YOUR NEW HINGED OPENING FLAT ROOFLIGHT, IN ADDITION YOU WILL RECEIVE;

*CONTROL, REMOTE AND RAIN SENSOR

- Control switch combo unit (86x86x35mm)
- Remote control
- Long Screws for fixing the rooflight to the timber kerb

The Rain sensor comes pre-mounted to the rooflight as mentioned in the guide

*IF CONTROL SWITCH CONTROLLED...

- Control switch
- Long Screws for fixing the rooflight to the timber kerb

**All additional accessories and components will come with your rooflight delivery and be packaged in a cardboard box.*

IN ADDITION TO YOUR NEW HINGED 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)
500x400	33
700x700	57
1000x1000	93
1500x1000	127
2000x1000	161
2500x1000*	152
3000x1000*	178
1500x1200	146
2000x1200*	143
2500x1200*	173
1500x1500*	173

**rooflights in this size are constructed using lightweight triple glazed units*

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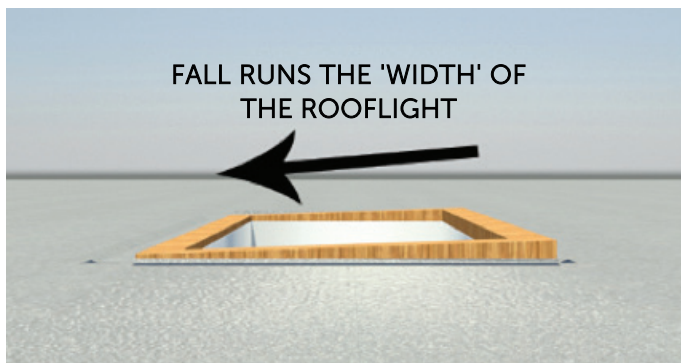
STEP ONE

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

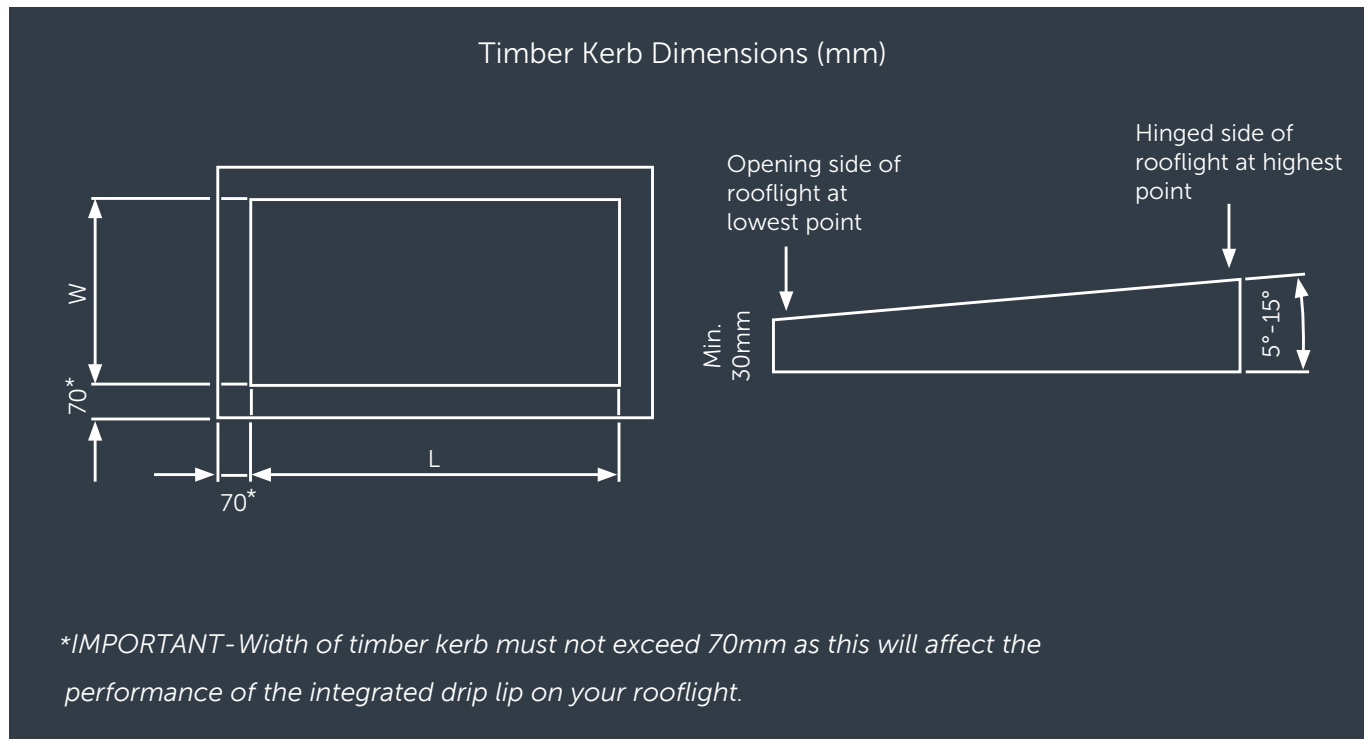
The rooflight always opens across the 'width' of the rooflight, so the hinges and motors will always be located on the longer sides of the rooflight, which are the sides that should be set 'level.'



Your hinged opening rooflight needs to be pitched between 5°-15° for rain to run off. If your roof does not have this pitch, build the angle into your kerb.

IMPORTANT - You will also need to ensure that the hinged side of your rooflight is located at the highest side of the timber Kerb, with the opening side being located at the lowest side of the timber kerb. For remote controlled rooflights, the rain sensor will be located on the opening side.

It is also important that the hinged side of the rooflight and the side that opens (rain sensor side) are set 'level,' with the sides that are pitched between 5°-15° running between these 2 sides.



ROOF MAKER

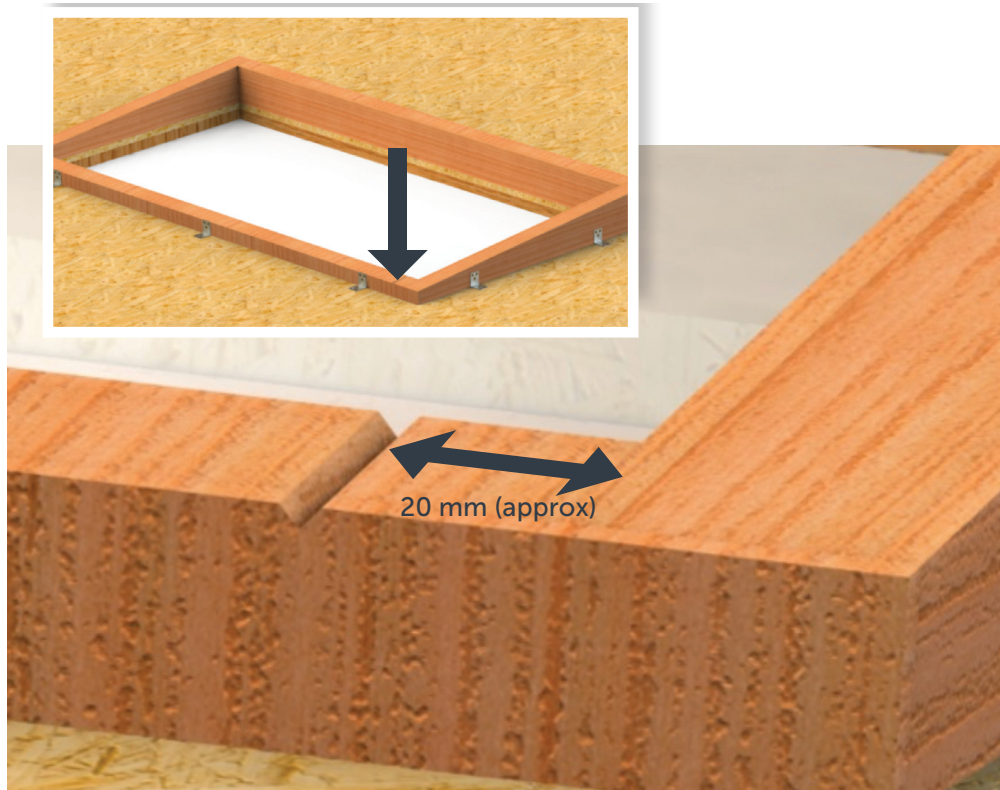
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STEP TWO

RAIN SENSOR (FOR REMOTE CONTROLLED/RAIN SENSOR ROOFLIGHTS ONLY)

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.*

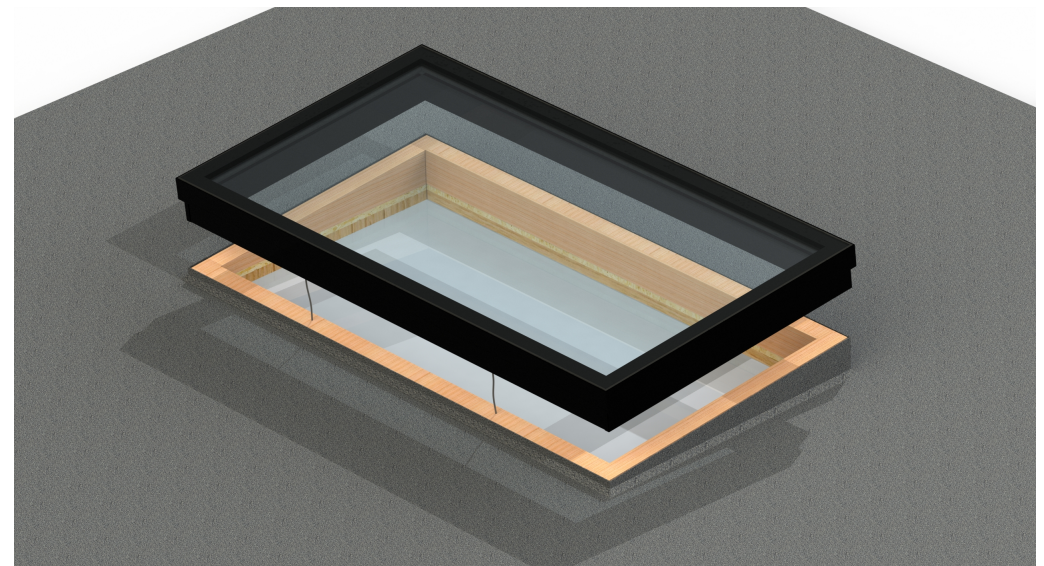


STEP THREE

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

Trial fit your rooflight and mark a suitable location to drill a hole/s or create notches for the rooflight's actuator cables - *Please refer to the cable location guide located on page 11 of this document, if you have opted for the remote controlled/rain sensor option. This gives advice as to where we recommend the control box can be located within the property.*

You do not need to refer to this guide if you have a control switch controlled rooflight. For switch controlled rooflights, you will just be extending the actuator cable/s to your chosen location of the control switch in the room below.



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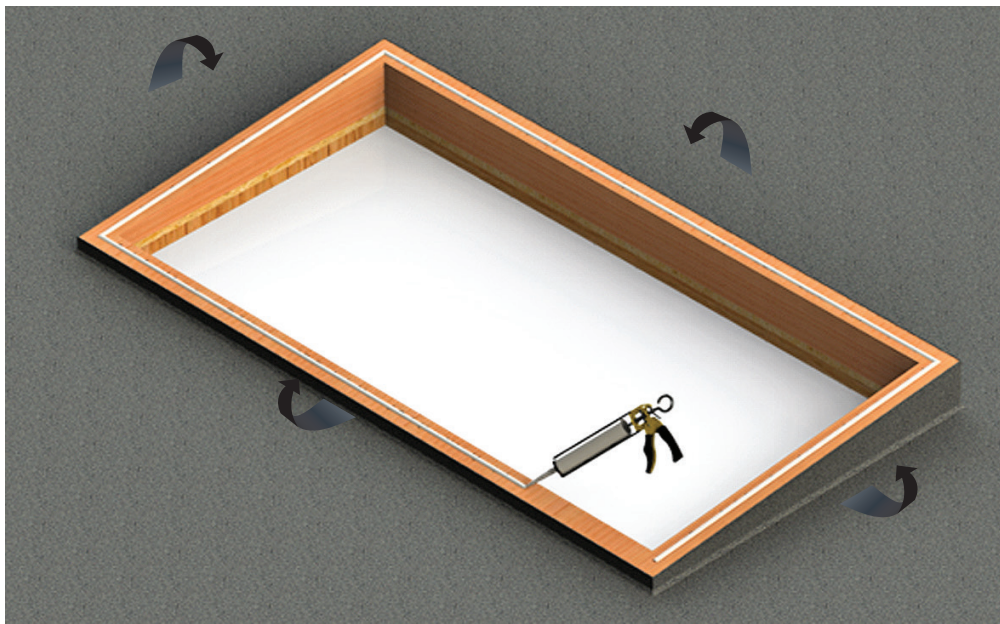
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STEP FOUR

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, closer to the outside edge of the kerb.

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 guides for both control switch and remote controlled variations, can be found at the end of this document.

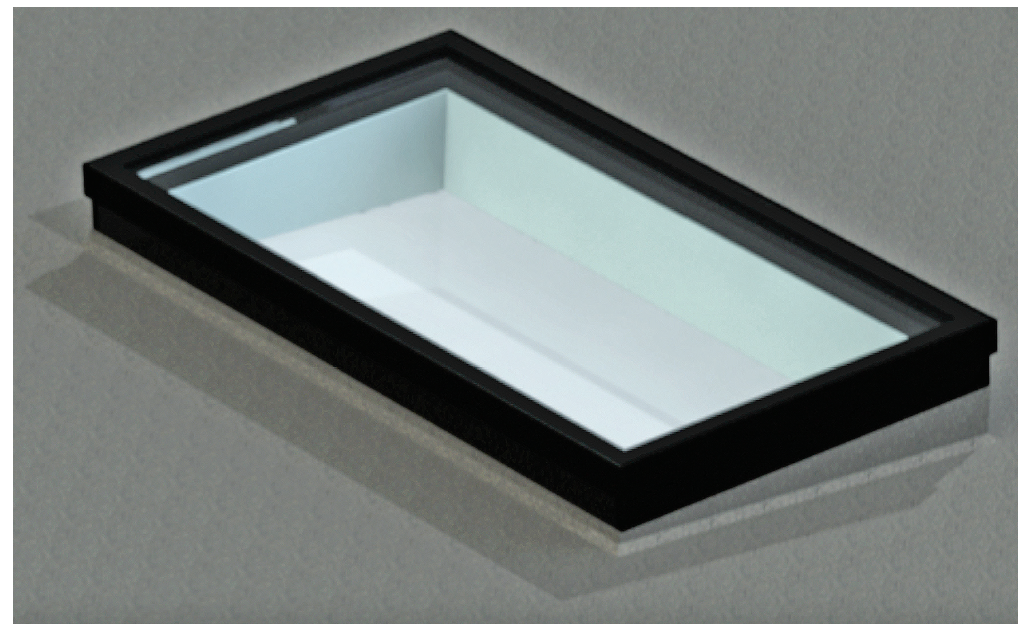


STEP FIVE

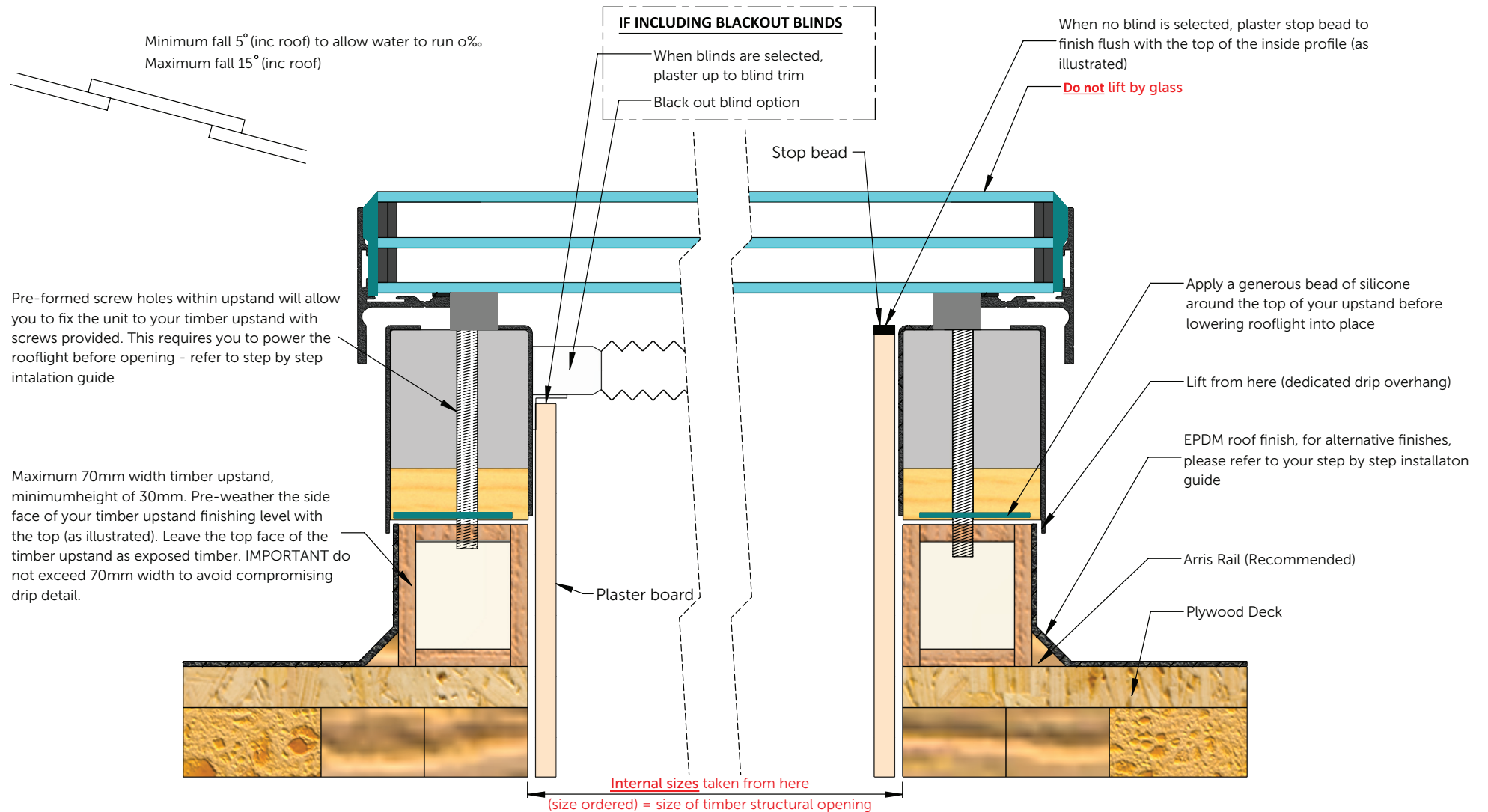
SCREW FIX THE ROOFLIGHT TO THE TIMBER KERB

Open the rooflight via the remote control switch and secure it to your kerb through the preformed holes in the top of the rooflight's base frame with the long screws*. For plastering finish guidelines, please follow the roof section fitting guide, on page 7 of this document. **Your Hinged Opening Flat Rooflight is now fully installed.**

*Wiring guides for both control switch controlled and remote controlled rooflights can be found on pages 8-16.



ROOF SECTION FITTING GUIDE



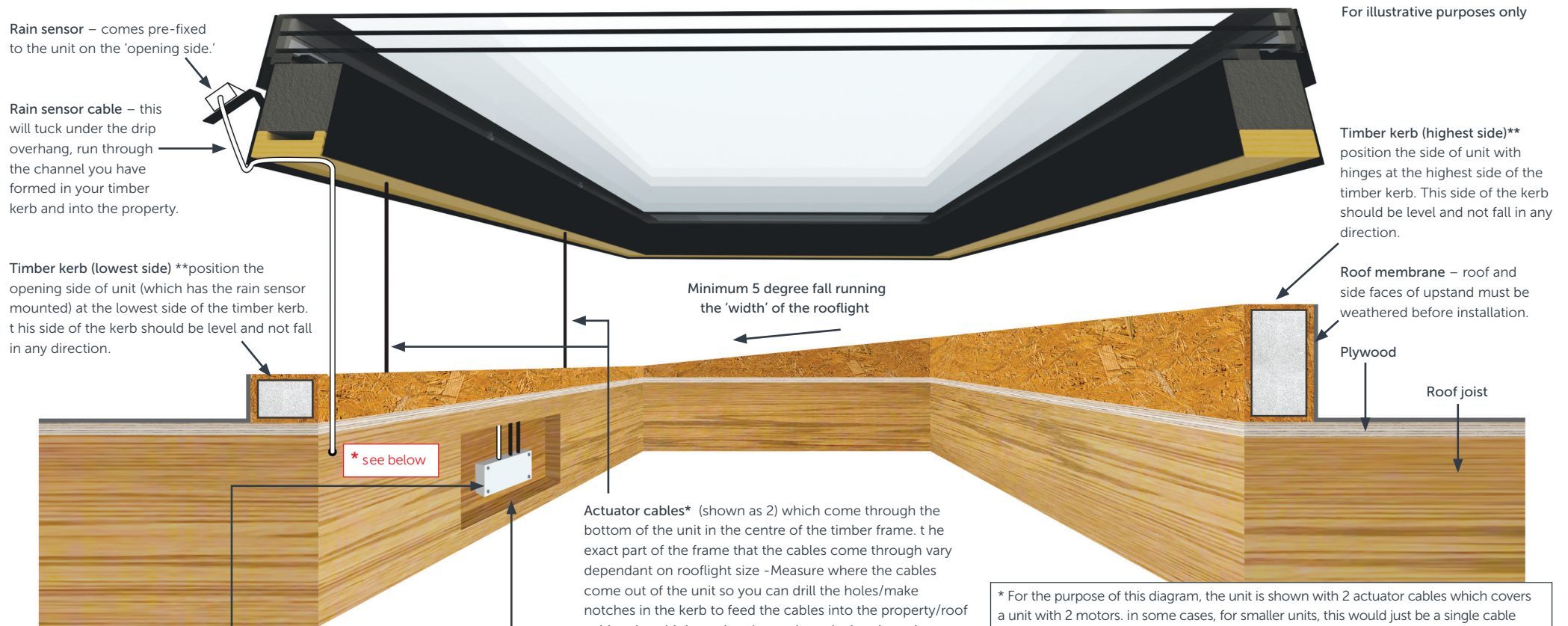
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HINGED OPENING FLAT ROOFLIGHT - CABLE LOCATION GUIDELINES (not to scale)

(REMOTE CONTROLLED ROOFLIGHTS WITH RAIN SENSOR)



Rain sensor – comes pre-fixed to the unit on the 'opening side.'

Rain sensor cable – this will tuck under the drip overhang, run through the channel you have formed in your timber kerb and into the property.

Timber kerb (lowest side) **position the opening side of unit (which has the rain sensor mounted) at the lowest side of the timber kerb. This side of the kerb should be level and not fall in any direction.

Minimum 5 degree fall running the 'width' of the rooflight

For illustrative purposes only

Timber kerb (highest side)** position the side of unit with hinges at the highest side of the timber kerb. This side of the kerb should be level and not fall in any direction.

Roof membrane – roof and side faces of upstand must be weathered before installation.

Plywood

Roof joist

* see below

Actuator cables* (shown as 2) which come through the bottom of the unit in the centre of the timber frame. The exact part of the frame that the cables come through vary dependant on rooflight size - Measure where the cables come out of the unit so you can drill the holes/make notches in the kerb to feed the cables into the property/roof void and avoid damaging them when placing the unit.

Control Box (86x86x35mm) – install this in the void of the roof, between the joists. This is where your actuator cables and rain sensor cable will be wired in to when you have fed them through into the property. This is powered by a standard 3 pin plug socket, which you will need to install into this area in advance, positioning within 400mm of the control box location. The control box also acts as the remote receiver.

Optional access panel – we advise that you install an access panel where the control box is located when adding your plaster finish to the timber reveals. This will maintain accessibility to the electronics for maintenance purposes in future.

* if you are running cables down the face of the timber reveal (as pictured here) and into the ceiling void, you will need to notch a channel to run the cable into, so the plasterboard will fit flush to the face of the timber (as per our finishing guidelines). This will also apply if running the actuator cables down face of the timber reveal. Please ensure you do not put fixings through the cabling when adding your plasterboard.

* For the purpose of this diagram, the unit is shown with 2 actuator cables which covers a unit with 2 motors. In some cases, for smaller units, this would just be a single cable or 1 motor. You may need to extend the actuator cables if your control box is located elsewhere. If you have 2 cables, ensure they are extended to exactly the same length. Ensure this is carried out by a qualified electrician. Cable thickness required will vary dependant on the length being added – this is covered in the wiring and cable extension guide.

**the timber kerb in this diagram is shown as being angled to give the required minimum 5 degree fall. In cases that the roof has a sufficient pitch and doesn't require an angled kerb, ensure that the opening part of the unit is still positioned at the lower part of the fall.

IMPORTANT ensure that the timber kerb doesn't exceed the recommended 70mm width.

REMOTE CONTROLLED ROOFLIGHTS: WIRING AND CABLE EXTENSION GUIDE

Wiring Guide - Control Box

The dimensions of the control box are 86x86x35mm. The control box doubles up as a wall mountable control switch, so it can either be mounted in a convenient and accessible location - or alternatively (if the optional remote was purchased) it can be concealed behind an access panel. The diagram below explains how to connect the power supply, the rooflight actuator/s and rain sensor. 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.

Mains Power 230v AC

We Recommend you run off a fused spur placed in an easy to access location, enabling you to isolate power to your rooflight if required.

Neutral to 'N'
Earth to 'E'
Live to 'L'

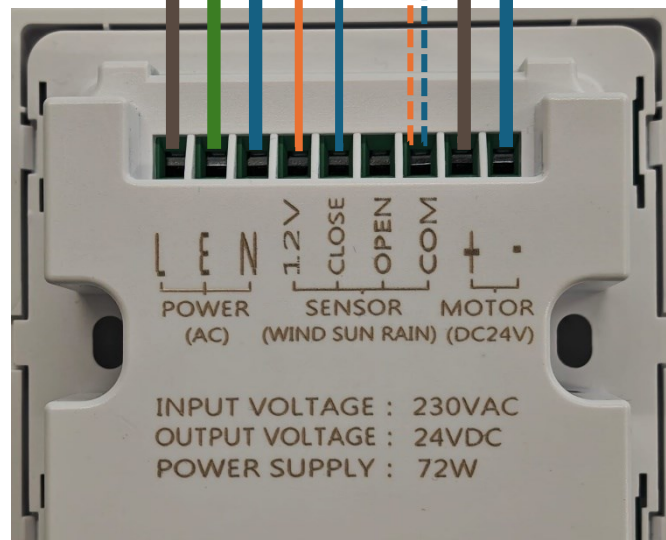
Optional Rain Sensor*

Solid Orange to '12V'
Solid Blue to 'CLOSE'
Orange/White to 'COM'
Blue/White to 'COM'

Rooflight Actuator*

Connect multiple actuators to the same the terminals for rooflight.

Live (+)
Neutral (-)



* PLEASE NOTE WHEN EXTENDING CABLES...

From Rooflight Actuator – Your rooflight actuator/s will come with approx. 1 metre of cable, so extending your cables to the location of your control module will be necessary. Due to the motor/s being 24v, you need to ensure you use a cable with a minimum 2mm core thickness when extending your cables. If extending over 10m, increase thickness to 2.5mm core.


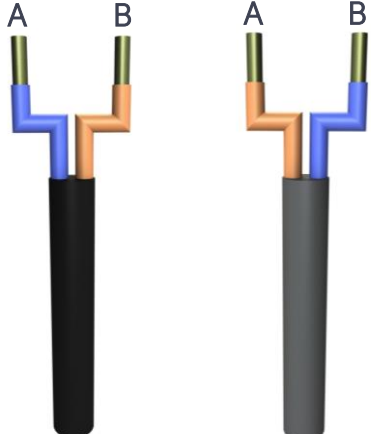
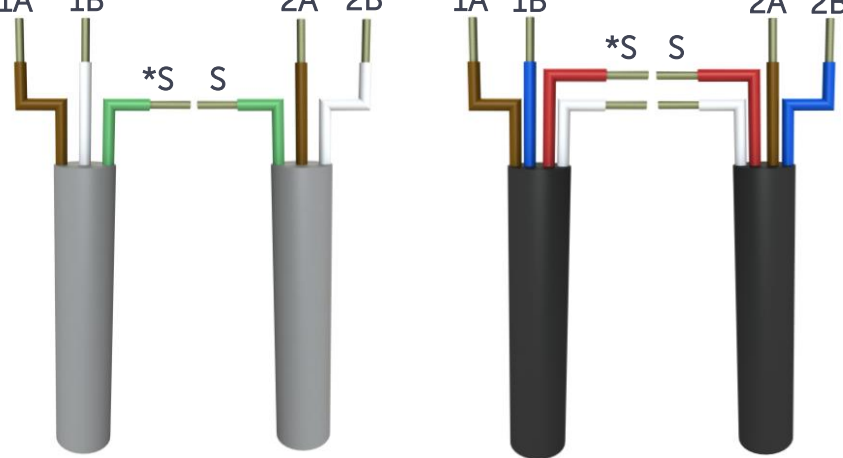
For 2 motors, you need to ensure both cables are the same length, to avoid your motors operating at different speeds.

From Rain Sensor – Please follow exactly the same guidance as the rooflight actuator in terms of cable thickness required. You may use a 3-core cable, as the orange/white & blue/white cables can run into a single core (both are wired to the COM terminal).

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)	
	<p style="text-align: center;"><u>2 core cable/s</u></p>  <p style="text-align: center;">If cabling is black If cabling is grey</p>	<p style="text-align: center;"><u>3 & 4 Core cable/s</u></p>  <p style="text-align: center;">* "S" Synchronisation wires to be connected to each other inside the control box</p>
<p>Slide opening flat rooflights and lanterns will always have 2 actuator cables. Wire in to the output pairs, as per the above diagram</p>	<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. 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 & 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

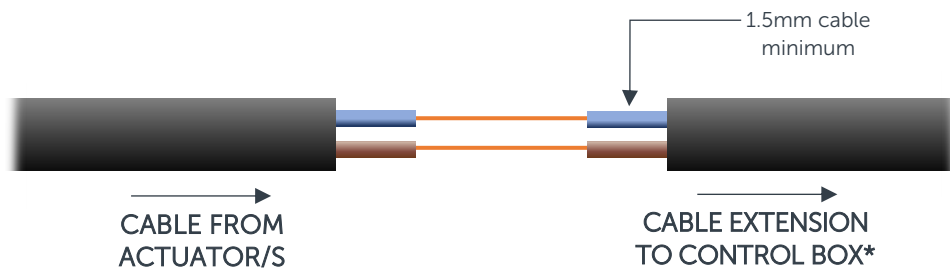
Cable Extension Guide

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.

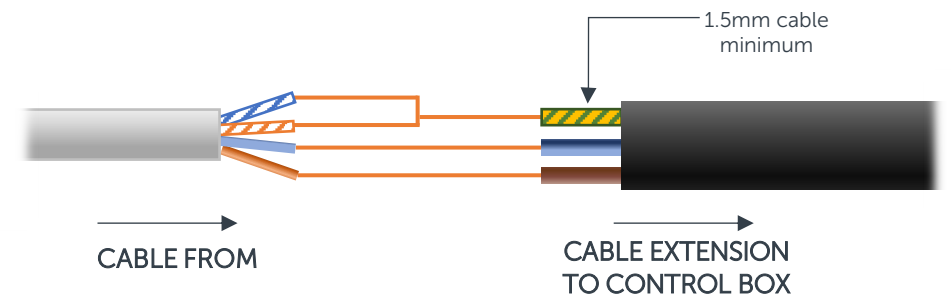
2 CORE ACTUATOR CABLE/S



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



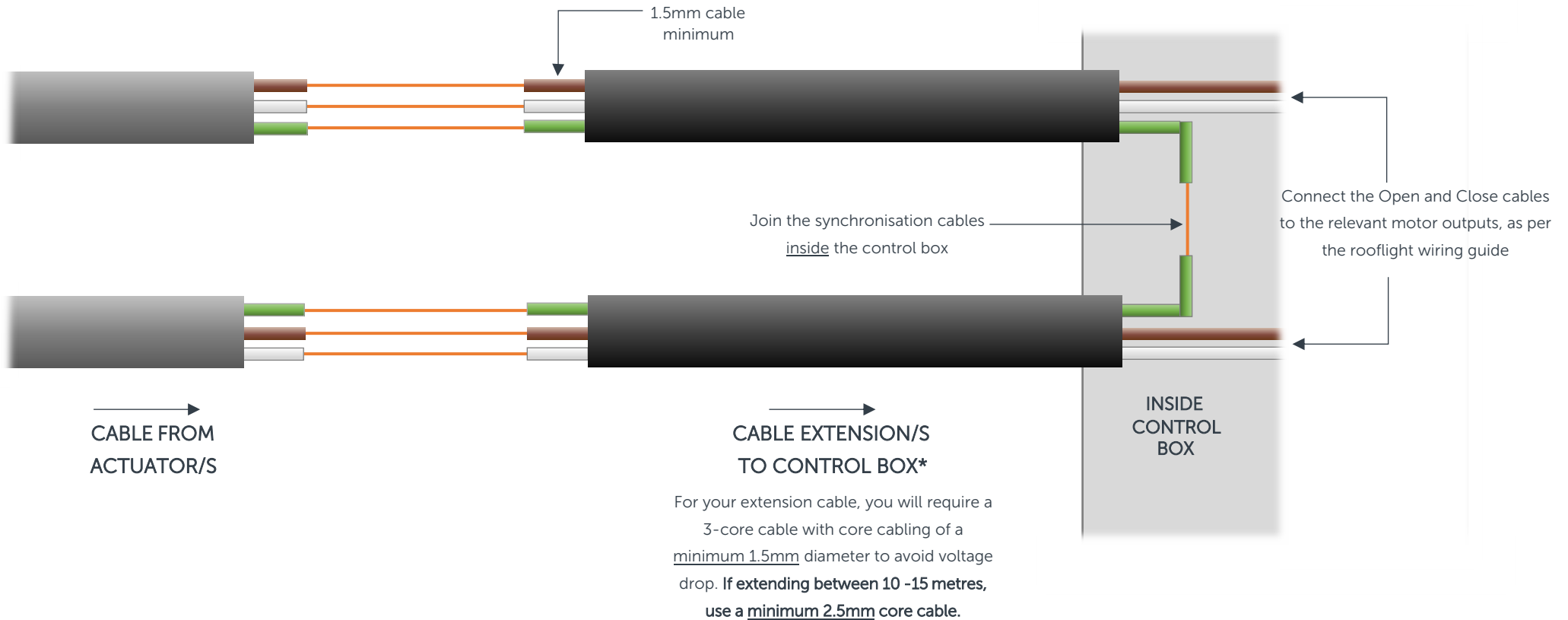
Rain sensor cable will be a 4-core cable;
12-volt input (orange)
Signal (blue)
2 ground cables (white/orange) (white/blue)

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

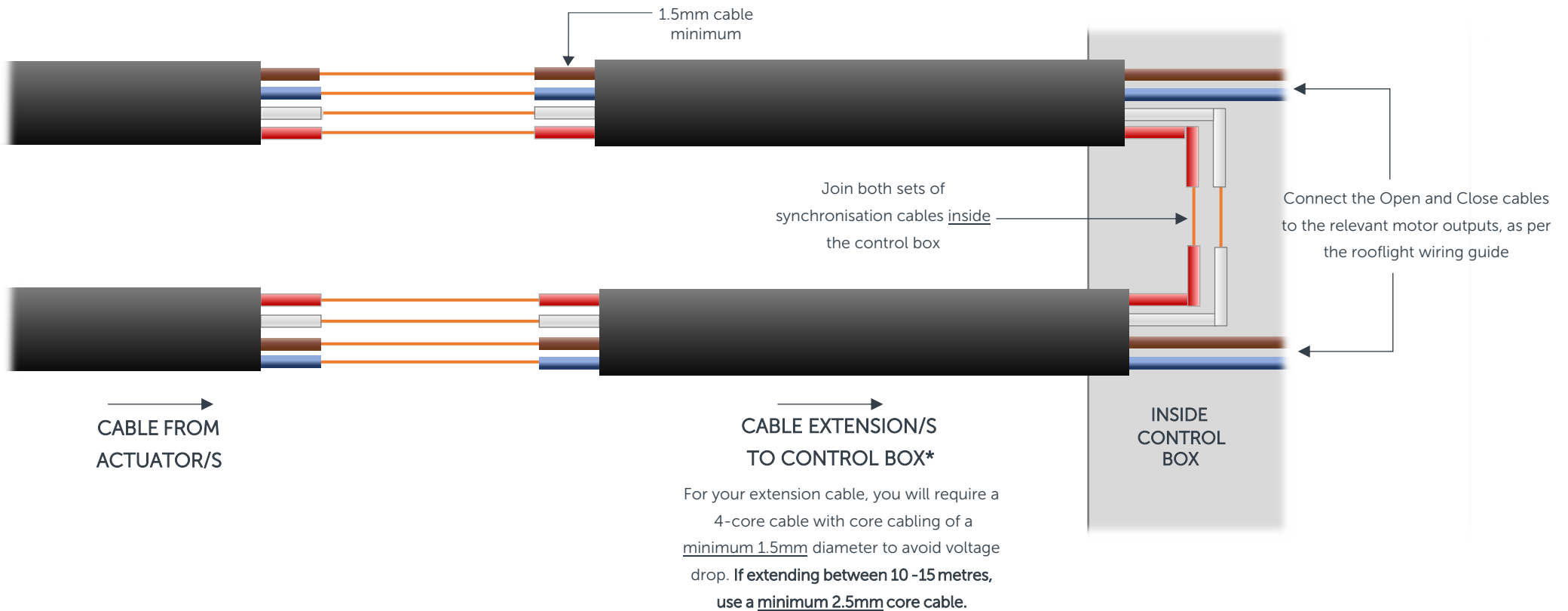


**If your rooflight has 2 actuator cables that need to be extended, please ensure they are extended to exactly the same length to avoid the motors operating at different speeds.*

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.*