⚠ **Warning: this product is designed for installation by professional roofing installers, who are responsible for establishing a safe method of work. All risks involved, including those involved in roof access and working around (and if necessary across) an open roof aperture must be assessed, and suitable precautions taken to minimise those risks, with a safe method of work established and documented for each project.**

Instructions must be followed **carefully** and in the correct order otherwise warranty may be invalidated and/or the non-fragility of the rooflight may be affected.
Impact drivers must not be used.

TB294
**Mardome
Glass Link
Single Modules**

Installation Instructions

August 2020

mardome*glassLink*
Modular Flat Glass Rooflights

Mardome Glass Link Installation Instructions Single Modules

Mardome Glass Link is a bespoke product. These instructions illustrate a typical installation - actual component sizes and jointing details may vary. Refer to Brett Martin Daylight Systems Technical Department for items specific to the installation being carried out.

Contents:

1. Unit Handling Rules
2. Unpacking Modules
3. Part identification and Supplied Fixings
4. Typical installation sequence
5. Appendices
   o A - Rooflights that include opening modules
   o B - Rooflights with 15°-35° pitch across span
6. Wiring Diagrams - 230V C20 / 230V HCVA / 24V
7. Parts List (supplied seperately)

FOR OPENING UNITS
Cable will exit through the bottom of the frame.
Ensure upstand is prepared before installation begins.
Refer to approval drawing for cable positioning detail.
If approval drawings do not specify cable exit point, please contact BMDS.

Equipment Required: (not supplied)

- Tape measure
- Cordless Drill (An angled drill may be required where rooflights are in close proximity to anything else on a roof)
- Sealant gun
- Additional T27 Security Torx bit (if required, 1 supplied)
- 8mm Hex Nut driver

BRETT MARTIN
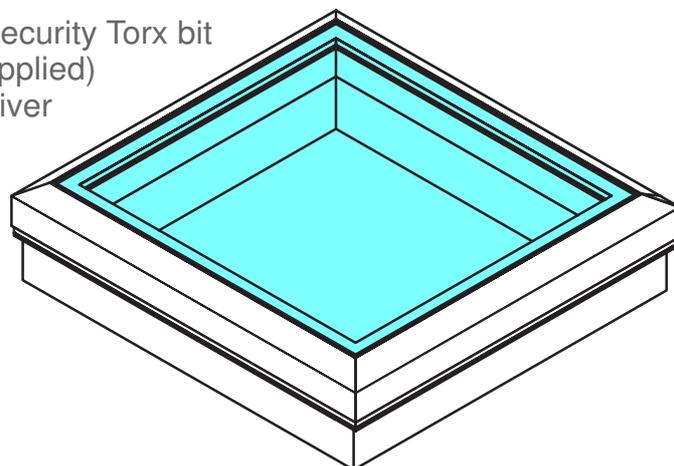
Daylight Systems

FOR TECHNICAL
INFORMATION / QUERIES
PLEASE CONTACT YOUR SUPPLIER
www.brettmartin.com
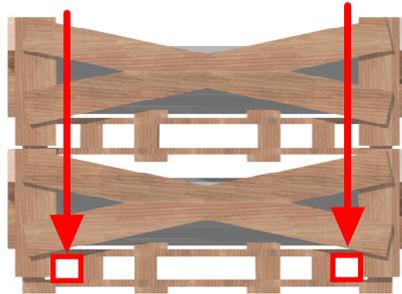
Unit Handling Rules

CRANE LIFT RULES

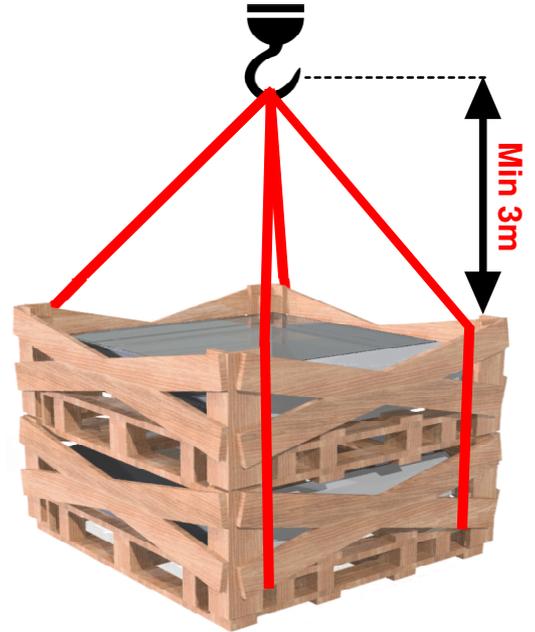INDIVIDUAL WEIGHT LESS THAN 120KG: 2 STACK MAXIMUM

INDIVIDUAL WEIGHT MORE THAN 120KG: DO NOT STACK

Min 3m

PLEASE NOTE:
ALL CRANE OPERATIONS MUST BE CONDUCTED BY A **SUITABLY TRAINED AND QUALIFIED** PERSON

ALWAYS STRAP AT EDGE OF PALLETS

THE LIFTING HOOK SHOULD BE NO LESS THAN 3M ABOVE THE LID
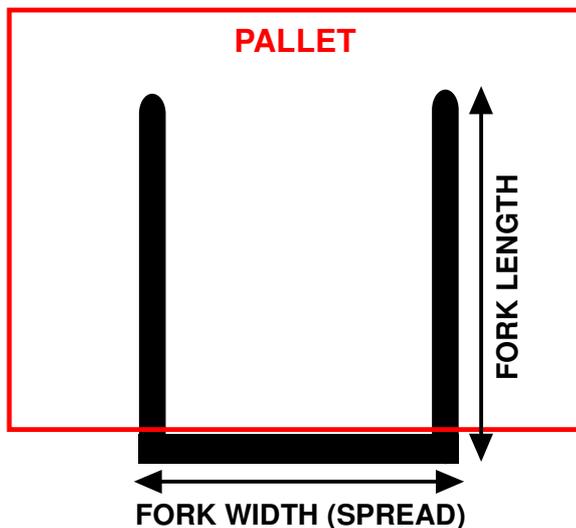
FORK LIFT RULES

DO NOT LIFT WITH A FORK WIDTH (SPREAD) OR LENGTH LESS THAN THE MINIMUM SET OUT ON APPROVAL DRAWINGS.
IF IN DOUBT PLEASE CONTACT SUPPLIER.

INDIVIDUAL WEIGHT MORE THAN 120KG: DO NOT STACK

INDIVIDUAL WEIGHT LESS THAN 120KG: 2 STACK MAXIMUM

PALLET

FORK LENGTH

FORK WIDTH (SPREAD)

Brett Martin Daylight Systems cannot be held responsible for any damage caused as a result of incorrect handling

Unpackaging Modules

1. Using a 8mm Hex Nut Driver, unscrew and remove all the coach screws and spacer washers from the module.

60mm x 5 Coach screws
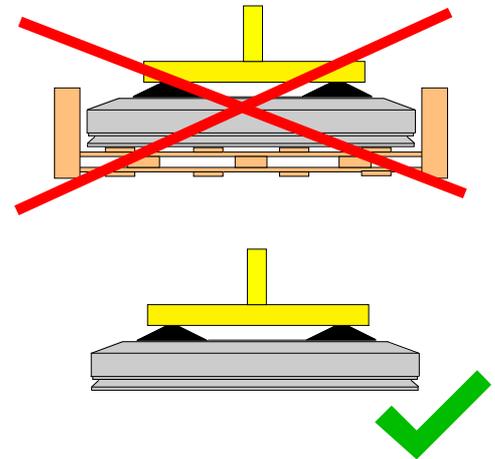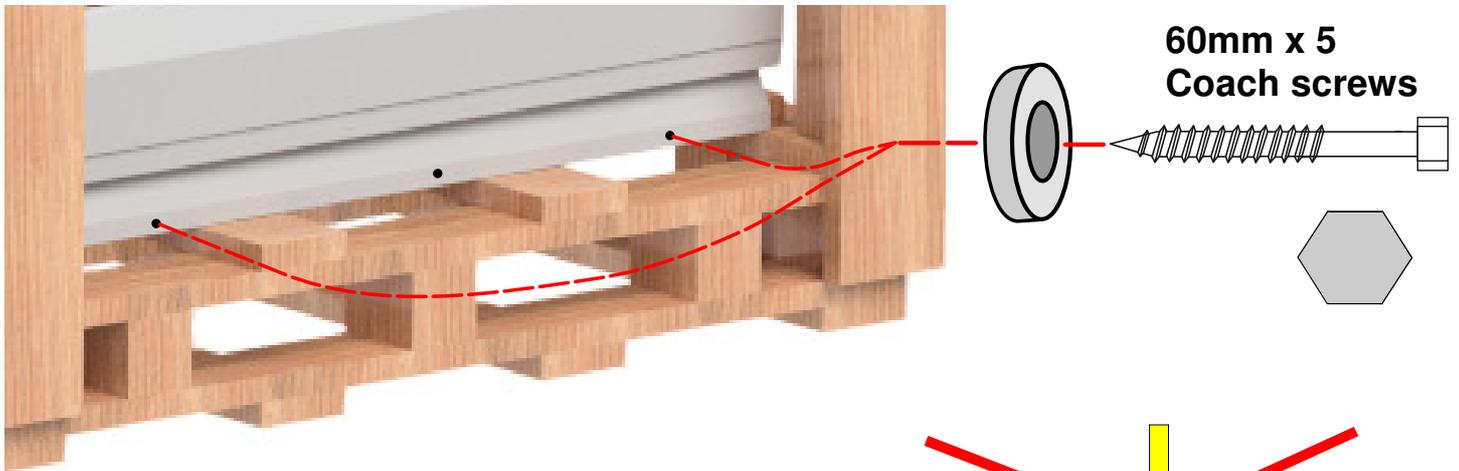
ⓘ When using a Glass Lifter ensure to unscrew module from pallet before lifting, if lifting with pallet is required, a crane/forklift must be used

ⓘ Brett Martin Daylight Systems cannot be held responsible for any damage caused as a result of incorrect handling.
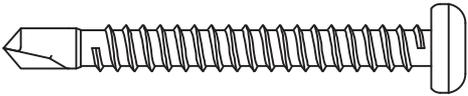
Part Identification

Please refer to corresponding parts list, supplied separately, which details quantities of parts specific to the installation being carried out
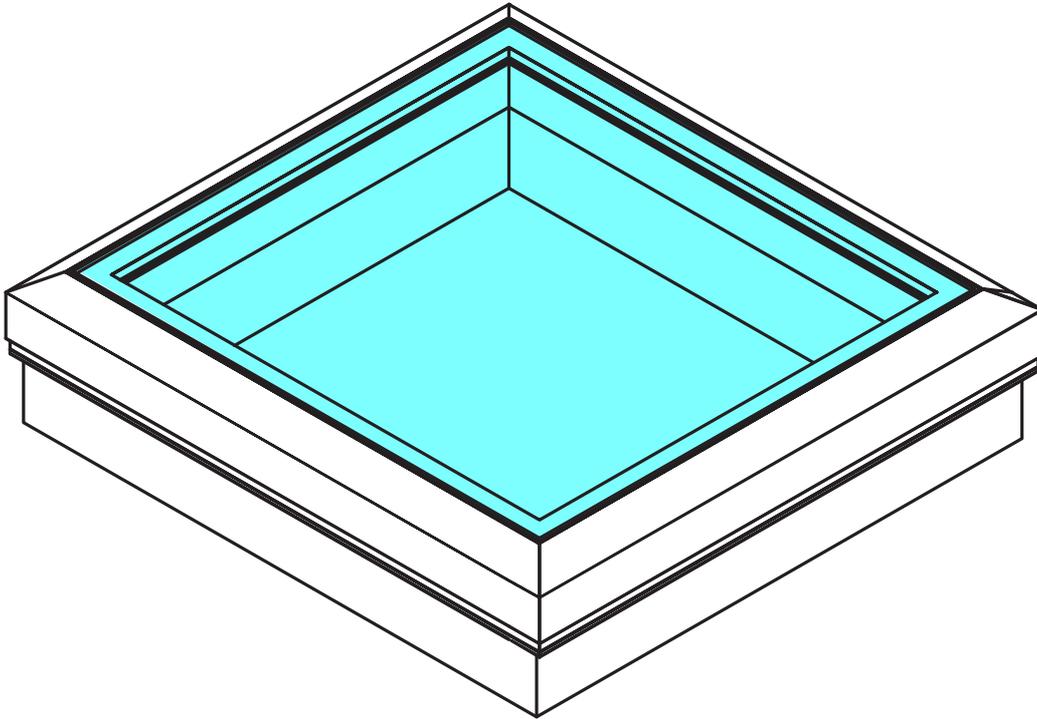
(A) Rooflight

Supplied Fixing Accessories

Item	Description	Locations
	T27 Self drill Security Torx screw 50mm	
	Aluminum Spacer 12mm x 5mm	Upstand
	Sealing Washer	
	40 x 120mm Plastic Packers Assorted sizes (for side fixing application only)	
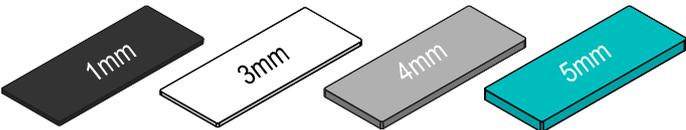
1 Check all parts collate with Installers Parts List (supplied seperately)

2 Check internal and external upstand dimensions with reference to BMDS approval Drawings

Approval Drawings

Min 75mm

Min 75mm

Min 75mm

Min 75mm

Internal Length
External Length

Internal Span
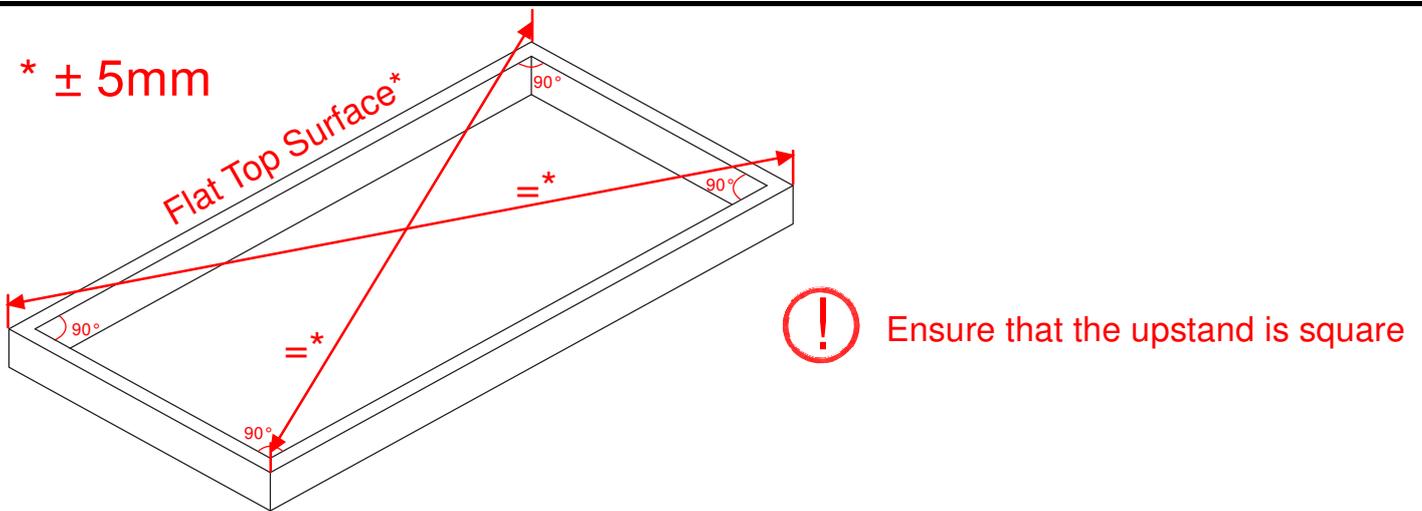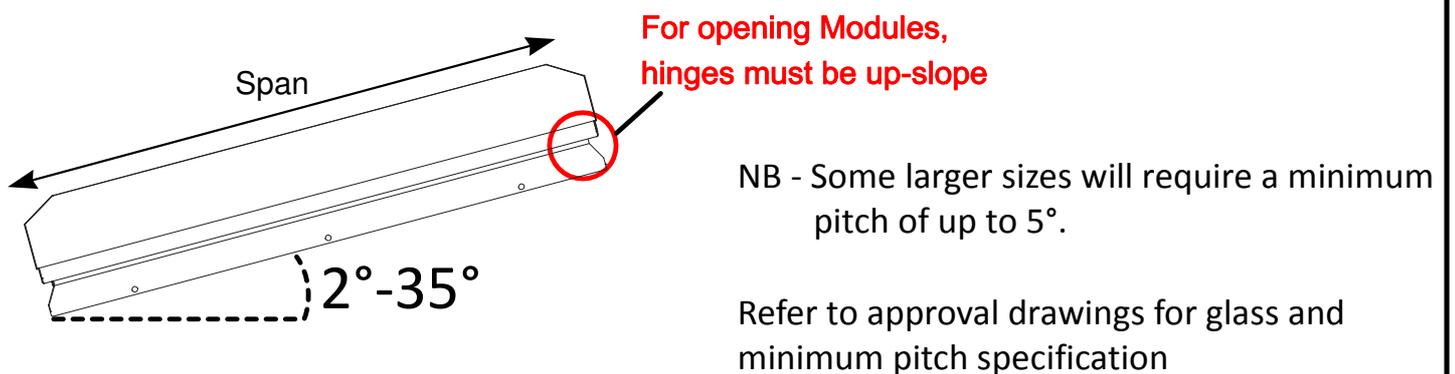External Span

External Tolerance +15mm/ **-0mm**
Internal Tolerance **+0mm**
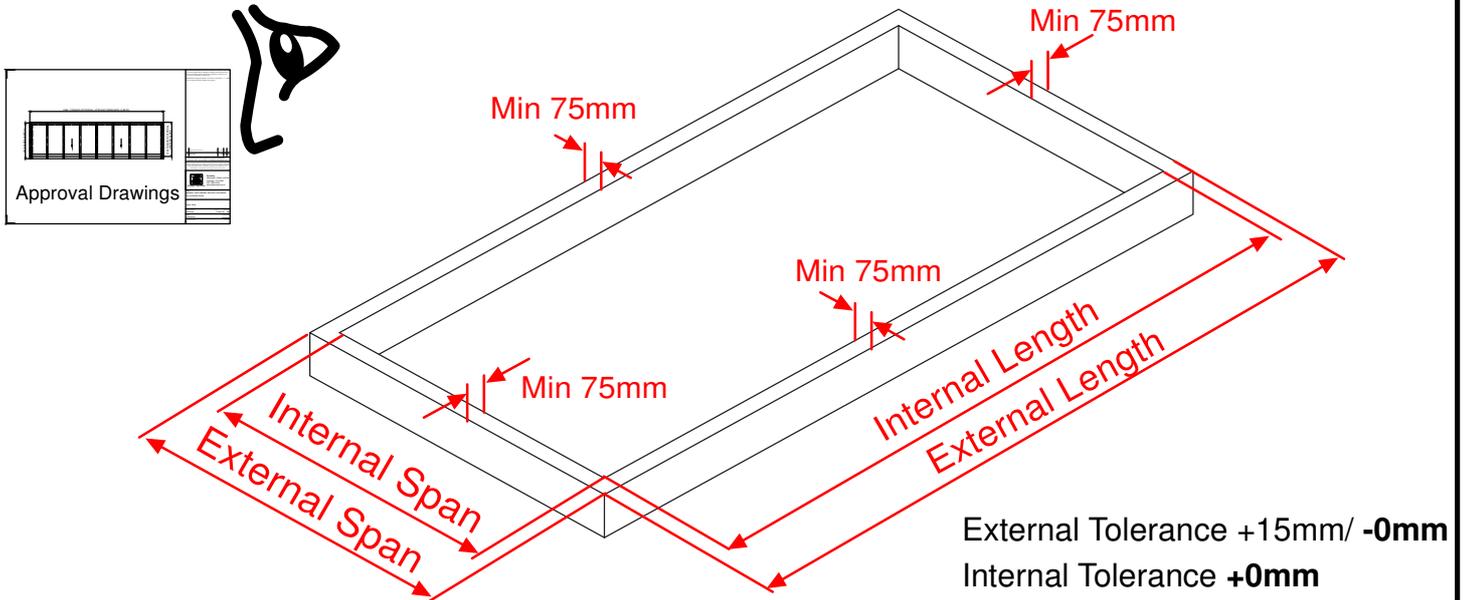
3 Compare diagonal upstand measurements

* ± 5mm

Flat Top Surface*

90°

90°

90°

90°

=*

=*

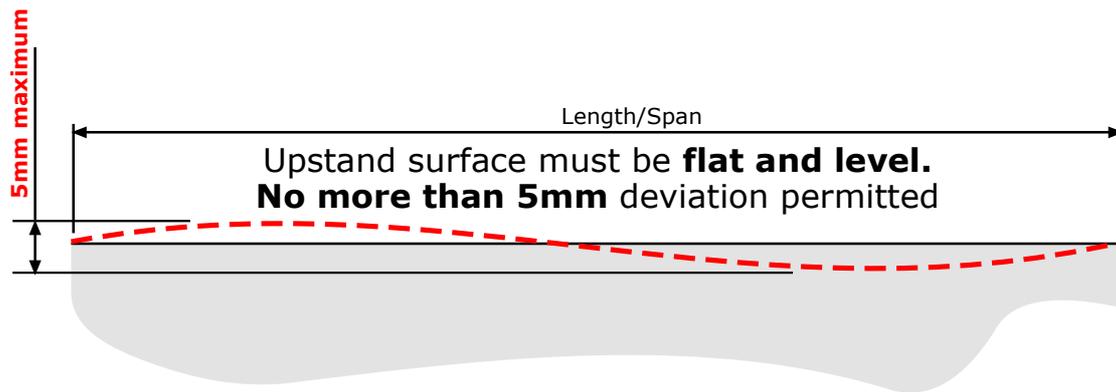⚠ Ensure that the upstand is square

4 Check the pitch of the rooflight length and span
(Refer to Appendix B if span pitch is between 15° and 35°)

Span

For opening Modules, hinges must be up-slope

2°-35°

NB - Some larger sizes will require a minimum pitch of up to 5°.

Refer to approval drawings for glass and minimum pitch specification

5 Check the flatness of the upstand

5mm maximum

Length/Span

Upstand surface must be **flat and level.**
**No more than 5mm** deviation permitted

Upstand fixings
must be flush

Upstand must be
fully weatherproofed

6 Apply sealant to the upstand

1. Apply a 10mm bead of sealant on the outside edge of the top surface of the upstand, offering full contact between rooflight and upstand, covering any undulations.

2. Apply a second bead of sealant 35mm in from the first.

35mm

Sealant
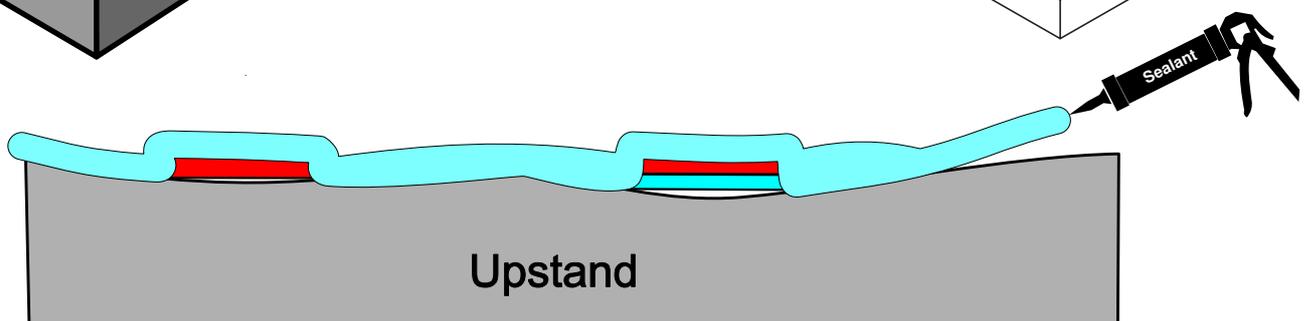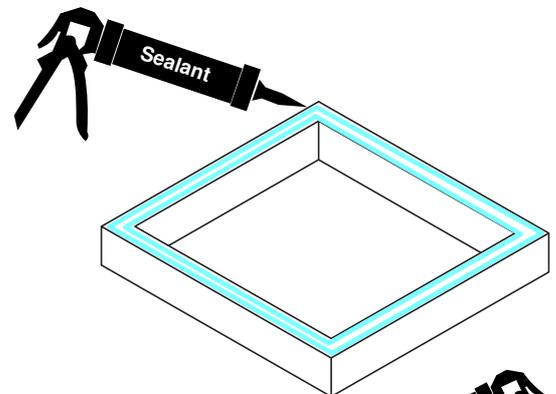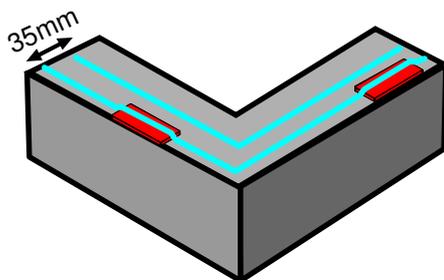
Sealant

Upstand

! Ensure enough sealant is applied to fill all undulations.
Sealant must be applied on top of the packers.

7   Place module onto the upstand

⚠ Take care when placing modules to avoid injury

For opening units power cable must be routed into building as required. Be careful not to crush the cables.
Cable will exit through the bottom of the frame.
Refer to approval drawing for cable positioning detail.

Approval Drawings
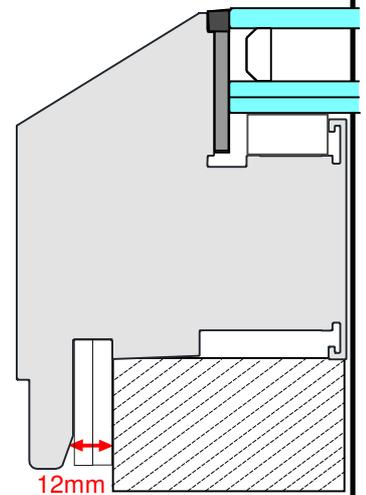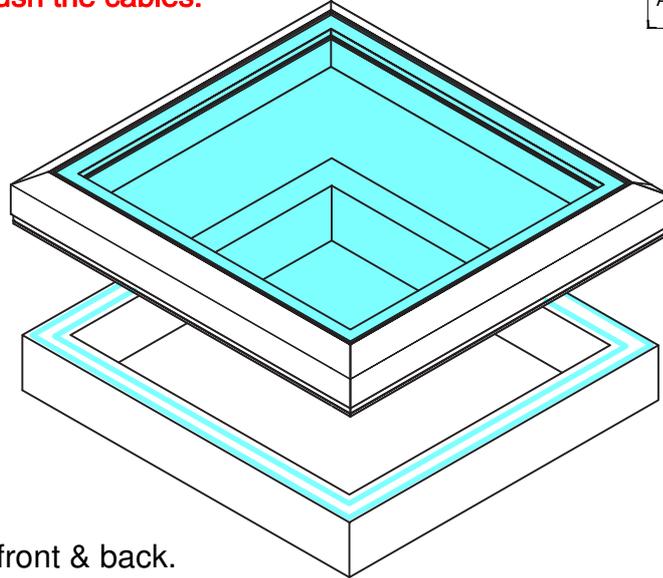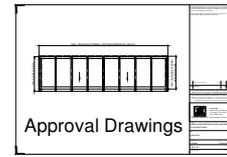
- Ensure an even gap at the front & back. Module must be parallel to the upstand.

- Nominal 12mm spacing between frame and upstand. (adjust as necessary to accommodate any variation in upstand dimensions)

12mm

---

8   Fix the module to the upstand

- Insert all fixings through supplied packers
- Screw heads should finish flush with external profile

⚠ DO NOT OVERTIGHTEN FIXINGS

Screw ➡ Spacer ➡ Washer ➡ Packers
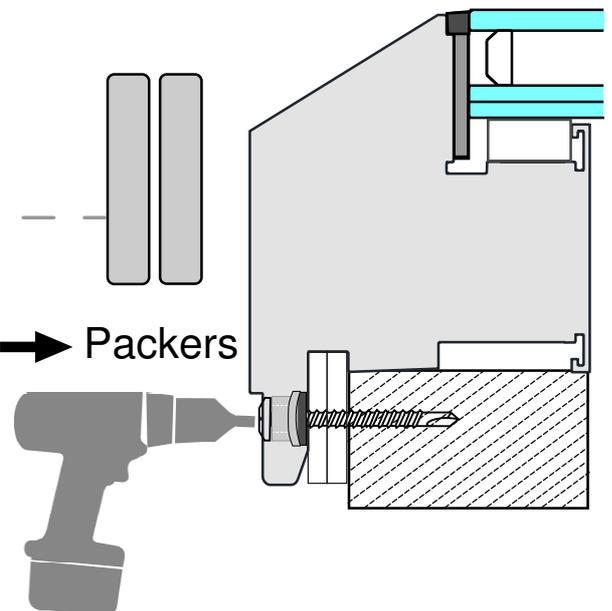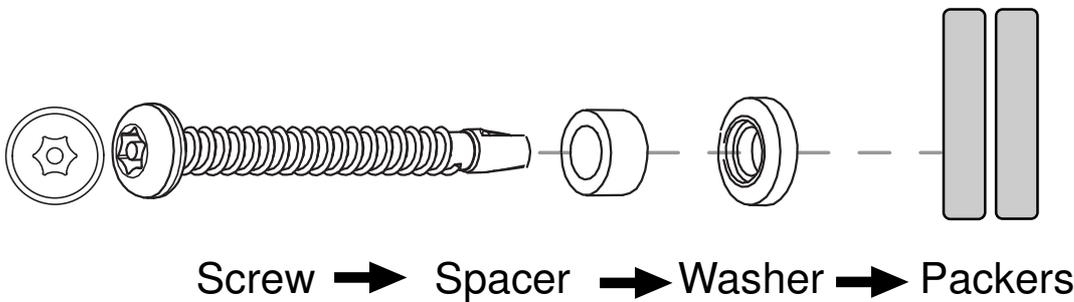
ⓘ Required packers will depend on upstand dimension tolerance.

APPENDICES

A Insert packing rod and apply a bead of sealant at the ridge

15°-35°

Insert packing rod between plastic packers

Sealant

TF44 Controller
If the TF44 option has been supplied, refer to the separate wiring instructions supplied with it.

⚠️ **Please** note that all wiring and commissioning must be undertaken by a *suitably trained and qualified person.*

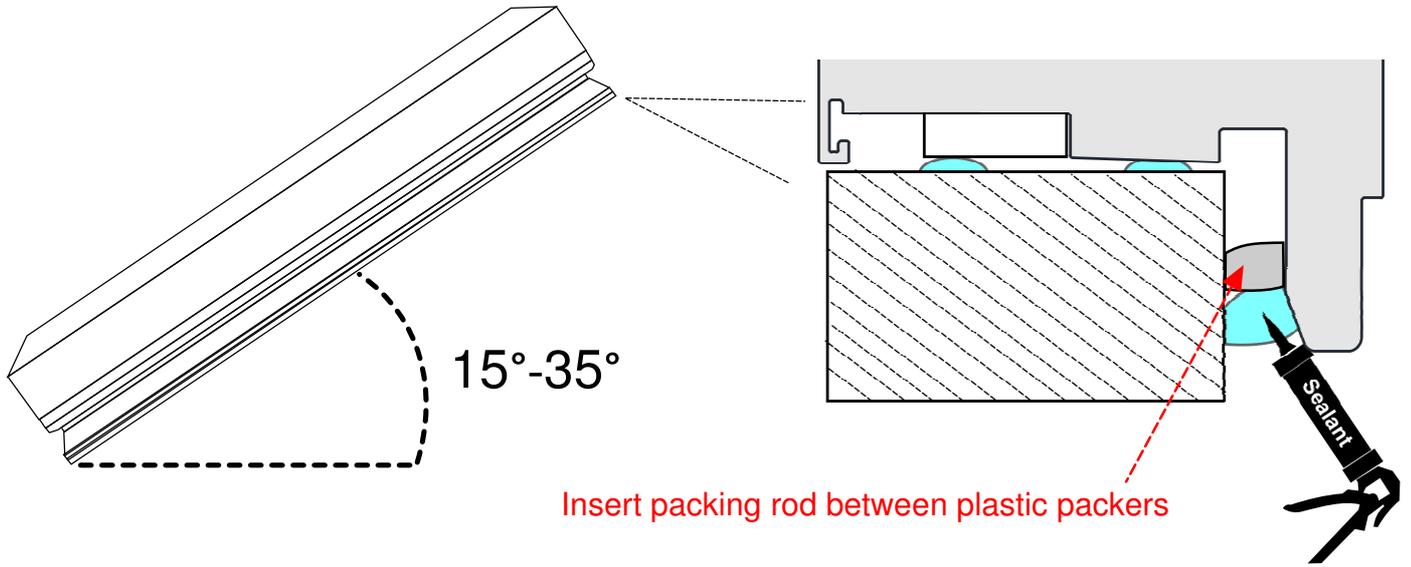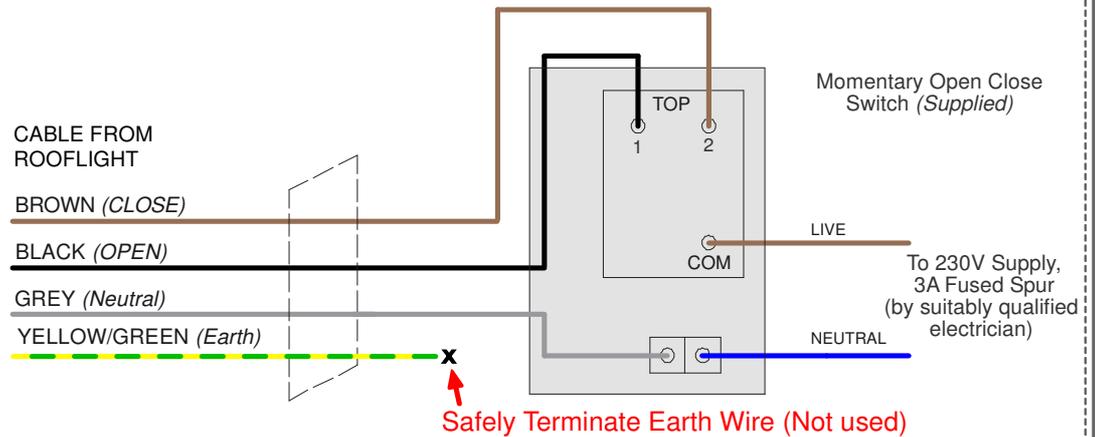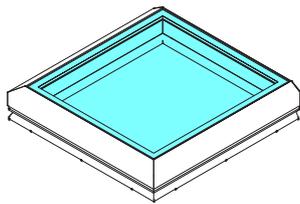Additional care must be taken when pairing the rain sensor to avoid any risk of electric shock. The installer must ensure that all wiring runs, cable thickness and earthing etc. meet current regulations.

230V (AC) actuators must not be operated by supplying continuous power. They must only be operated using a momentary control switch (as supplied) or by using a suitable controller with a timed pulse for the opening period required (approx 60 to 120 seconds for full operation). Feeding continuous power to a 230V actuator will damage the unit over time and void any warranty. Actuators have a 12 month limited warranty from delivery of the unit.

Electrical equipment, accessories and packaging should be recycled for environmental protection. Do not dispose of electrical equipment in household waste!

TYPE 1 - 230V C20

Wall Switch

CABLE FROM ROOFLIGHT

BROWN *(CLOSE)*

BLACK *(OPEN)*

GREY *(Neutral)*

YELLOW/GREEN *(Earth)*

Momentary Open Close Switch *(Supplied)*

TOP
1   2

COM

LIVE

NEUTRAL

To 230V Supply, 3A Fused Spur (by suitably qualified electrician)

Safely Terminate Earth Wire (Not used)

TYPE 2 - 230V HCVA

Wall Switch

8mm Hex Nut driver

CABLE FROM ROOFLIGHT

OPUS IP20 COMFORT SWITCH (SUPPLIED)

BLACK *(OPEN)*

BROWN *(CLOSE)*

GREY *(NEUTRAL)*

YELLOW/GREEN *(EARTH)*

PHASE

NEUTRAL

EARTH

To 230V Supply, 3A Fused Spur (by suitably qualified electrician)
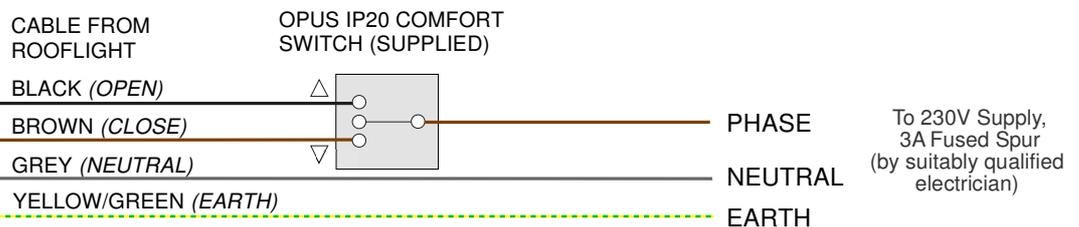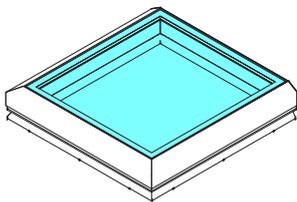
TYPE 3 - 24V

24V transformers are to be located and mounted separately from the rooflight by an electrical contractor.

DO NOT CONNECT 230V SUPPLY DIRECTLY TO ROOFLIGHT
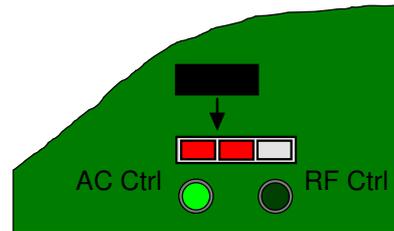
FLEX1 ACDC
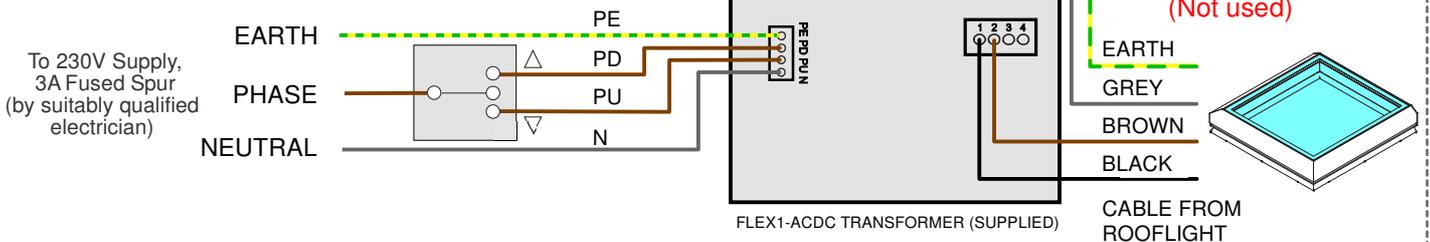TRANSFORMER (SUPPLIED)

Cable entry via glands (not supplied)

24V - Wall Switch & Wall Switch With Rain Sensor

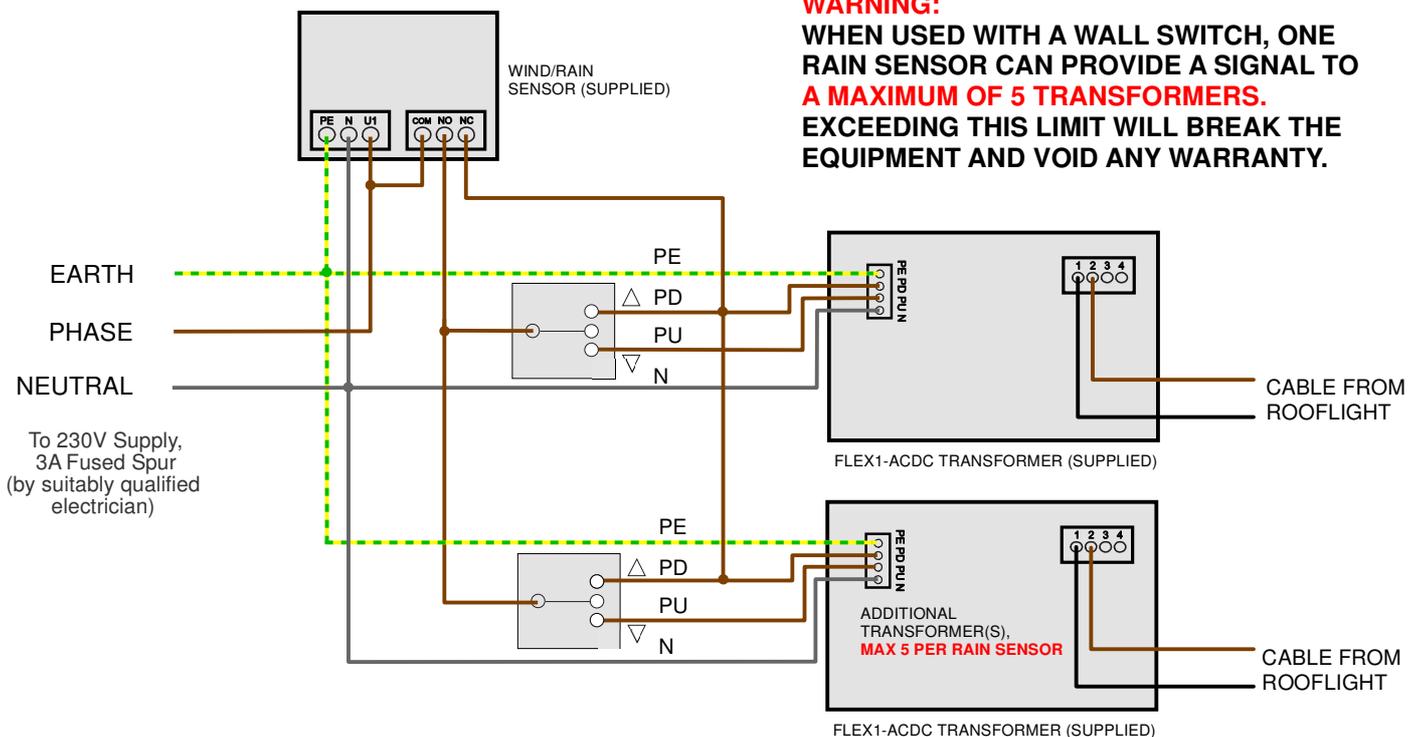### Transformer Settings (Wall Switch)

Before supplying power to the transformer, ensure the centre and left hand pins below the RF module terminal are connected using the black plastic connector supplied.

AC Ctrl   RF Ctrl

Wall Switch

To 230V Supply,
3A Fused Spur
(by suitably qualified electrician)

EARTH — PE
PHASE — PD / PU
NEUTRAL — N

PE PD PU N

1 2 3 4

← Safely Terminate Grey & Earth Wire (Not used)

EARTH
GREY
BROWN
BLACK

CABLE FROM ROOFLIGHT

FLEX1-ACDC TRANSFORMER (SUPPLIED)

Wall Switch & Rain Sensor

WIND/RAIN SENSOR (SUPPLIED)

PE N U1   COM NO NC

WARNING:
WHEN USED WITH A WALL SWITCH, ONE RAIN SENSOR CAN PROVIDE A SIGNAL TO A MAXIMUM OF 5 TRANSFORMERS. EXCEEDING THIS LIMIT WILL BREAK THE EQUIPMENT AND VOID ANY WARRANTY.

EARTH
PHASE
NEUTRAL

PE
PD / PU
N

PE PD PU N

1 2 3 4

CABLE FROM ROOFLIGHT

FLEX1-ACDC TRANSFORMER (SUPPLIED)

To 230V Supply,
3A Fused Spur
(by suitably qualified electrician)

PE
PD / PU
N

PE PD PU N

1 2 3 4

ADDITIONAL TRANSFORMER(S),
MAX 5 PER RAIN SENSOR

CABLE FROM ROOFLIGHT

FLEX1-ACDC TRANSFORMER (SUPPLIED)

24V - Remote & Remote With Rain Sensor - Wiring and Mounting

Transformer Settings (Without Wall Switch)

Before supplying power to the transformer, ensure the centre and right hand pins below the RF module are connected using the black plastic connector supplied.

Insert the RF receiver (supplied with the remote) into the terminal labeled RF Module.
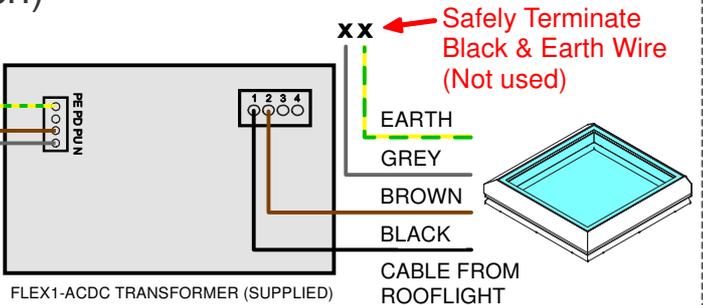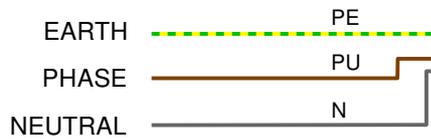
AC Ctrl   RF Ctrl

AC Ctrl   RF Ctrl

LipX AC R. 1
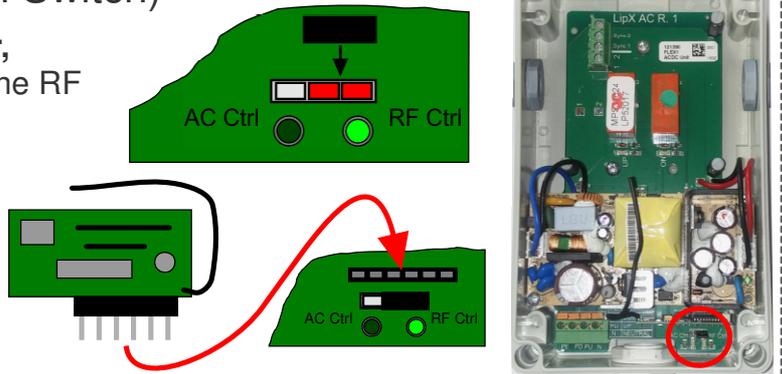
Transformer Wiring (Without Wall Switch)

To 230V Supply, 3A Fused Spur (by suitably qualified electrician)

EARTH — PE
PHASE — PU
NEUTRAL — N

PE PD PU N

1 2 3 4

x x ← Safely Terminate Black & Earth Wire (Not used)

EARTH
GREY
BROWN
BLACK

PLEASE SEE BELOW FOR RAIN SENSOR INSTALLATION

FLEX1-ACDC TRANSFORMER (SUPPLIED)

CABLE FROM ROOFLIGHT

Rain Sensor Wiring (Without Wall Switch)

ROOFLIGHT & RAIN SENSOR TO BE WIRED TO SEPARATE 230V POWER SUPPLY!

To 230V Supply, 3A Fused Spur **SUITABLE FOR OUTDOOR USE** (by suitably qualified electrician)
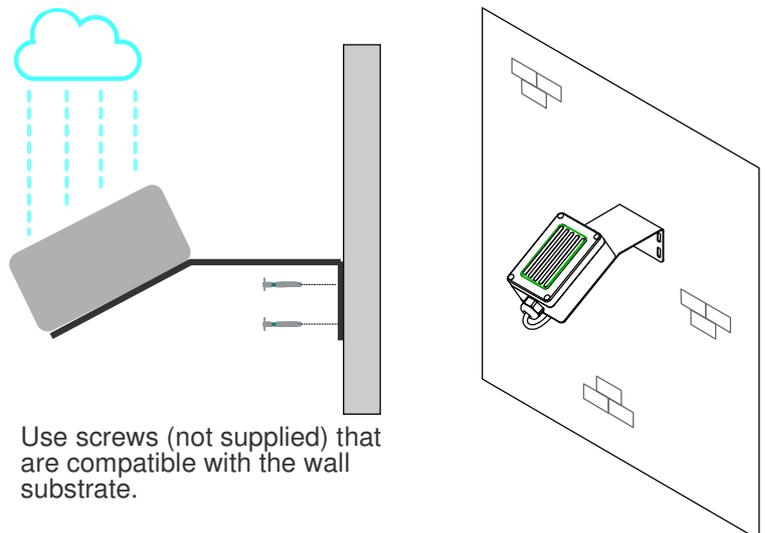
EARTH — PE
NEUTRAL — N
PHASE — U1

PE N U1
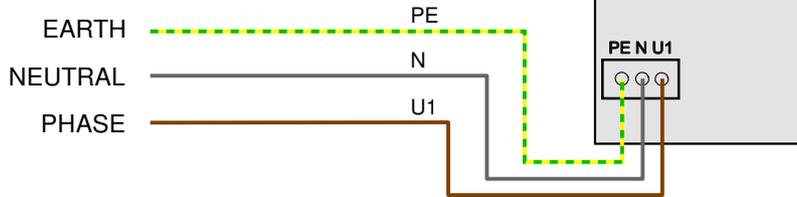
AR-24/250 RAIN SENSOR (SUPPLIED)

Rain Sensor Mounting

Rain Sensor mounted on a vertical exterior surface of the building, up to 400m from transformer(s) (with no obstacles around, however any construction around the sensor will influence the distance)

Sensor must be exposed to rain, so must not be mounted under an overhanging structure

Use screws (not supplied) that are compatible with the wall substrate.

24V - Remote & Rain Sensor - Pairing

Rain Sensor Pairing (Without Wall Switch)

WHEN USED WITH A REMOTE, ONE RAIN SENSOR CAN BE PAIRED TO A MAXIMUM OF 20 TRANSFORMERS.
ALL PAIRED TRANSFORMERS MUST BE WITHIN RANGE, SEE RAIN SENSOR MOUNTING FOR MORE INFORMATION.

LEARN TX DIP SWITCH
(AR-24/250 RAIN SENSOR)

1. When connected to mains, set the "Learn TX" DIP switch (located in the rain sensor) to ON.

2. Press and hold the program button (located in the transformer) until the red LED next to the button lights up. When the red LED lights up, release the program button.
   It is important to release the button as soon as the LED lights up as holding it down for too long will clear the memory, if this happens please see below for pairing remote.

3. Set the "Learn TX" DIP to "OFF" afterwards, and then test the rain sensor.
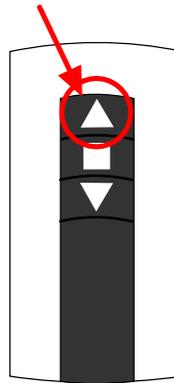
PROGRAM BUTTON
(FLEX1-ACDC TRANSFORMER)

Remote Pairing

Remotes come pre-paired to a receiver that should be mounted in the desired transformer.
If you want to pair a remote to multiple receivers, follow the instructions below.

UP button

1. Press and hold the program button (located in the transformer) until the red LED next to the button lights up. When the red LED lights up, release the program button.

2. Press UP on the remote, the LED will illuminate and turn off after one blink. The remote is now paired.

PROGRAM BUTTON
(FLEX1-ACDC TRANSFORMER)

Clearing Receiver Memory

You can clear ALL the paired devices from a receiver, to do this follow the steps below and then re-pair the desired equipment.

1. Press and hold the program button (located in the transformer) until the red LED next to the button lights up. Continue to hold the program button until the LED goes off.

2. The memory has now been deleted for ALL paired devices.