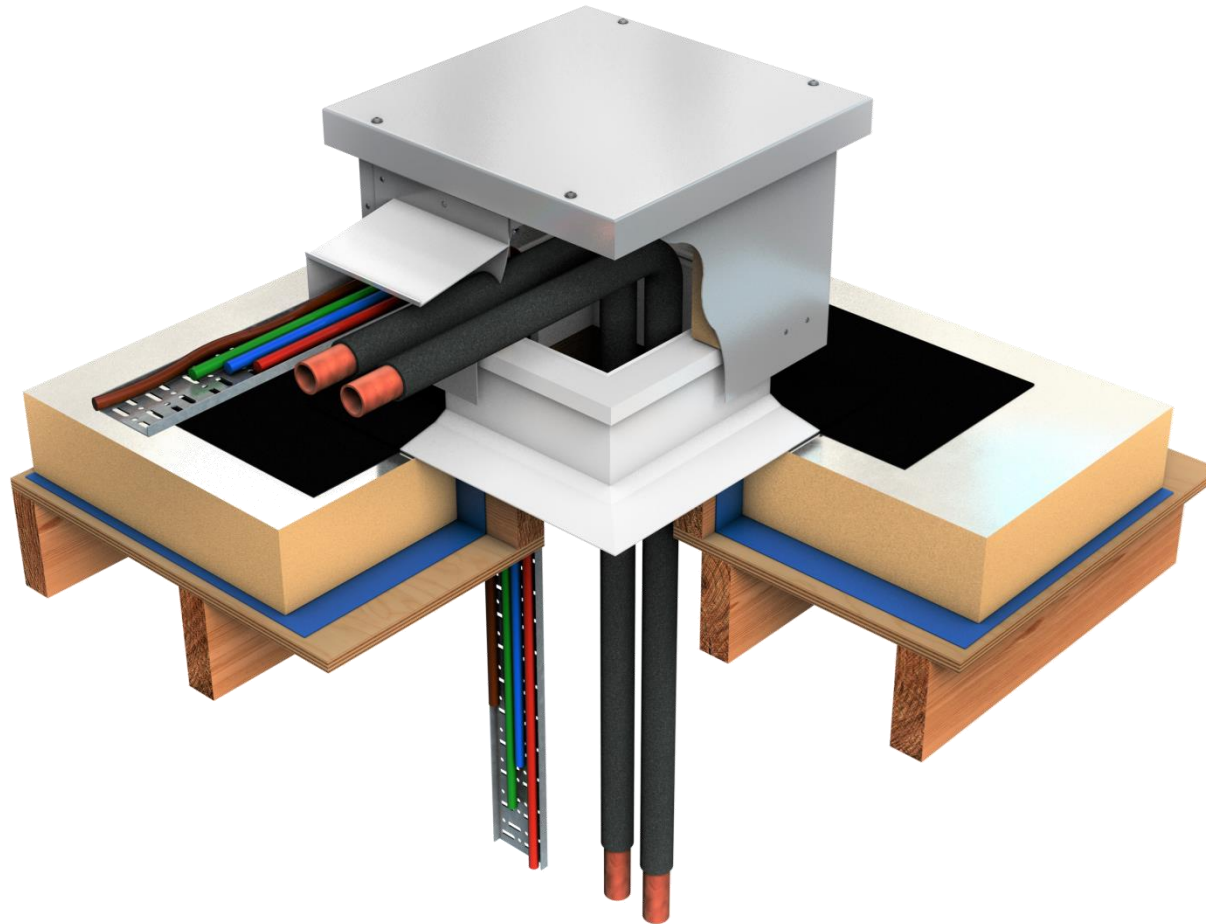


## Installation guidelines for standard S-Series ROOFBOX service cabinets



## Installation guidelines for standard S-Series ROOFBOX service cabinets

Main Contractor to verify adequacy of sub-structure

### Health & Safety

- As with all roof work beware of falls from height
- During installation, the installer must use approved methods and all necessary PPE to prevent persons and objects falling through the roof opening
- After installation the installer must ensure all roof openings are securely protected against persons or tools falling through them
- Beware of sharp edges. Ensure eye and hand protection is worn, especially when cutting or drilling the unit
- Units may be heavy and require more than one person to lift them safely.
- Never leave unfixed or loose parts on the roof where strong winds may cause them to blow off the roof

### Storage

- ROOFBOX units and any ancillary items should be stored at ground level until they are secured in position at roof level
- ROOFBOX units and ancillary parts should be kept dry.

### Installation

- These installation guidelines should be read completely prior to installation
- Any project-specific drawings provided by Nicholson must be reviewed prior to installation and installation must be conducted in conformance with them
- The installation of the ROOFBOX units should be undertaken by a competent person
- Final weathering details are the responsibility of the installing contractor or subsequent contractors
- Air permeability should be minimised using appropriate mastic seals at the base and the top of the kerb.
- ROOFBOX units should be installed prior to the running of services through the roof opening
- Pipes and cables should be independently supported from the structure and not relying on the ROOFBOX for support.
- ROOFBOX units installed should not exert pressure on services passing through the unit.

### Maintenance

- ROOFBOX units should be inspected regularly to check for damage
- Damage to the paintwork should be reinstated as soon as possible with touch-up paint available from Nicholson
- ROOFBOX units should be washed down with a water & mild detergent solution annually to preserve the PPC finish.
- ROOFBOX units with a standard PPC finish should not be installed in a marine environment. Please speak to Nicholson for further information

For any questions relating to the installation of these units please call;

NICHOLSON STS LTD  
+44 (0) 1763 295 828  
info@nicholsonsts.com

## Installation guidelines for standard S-Series ROOFBOX service cabinets

### ROOFBOX Standard Unit Penetration Zones

Please ensure that the services to be passed through the ROOFBOX unit will fall into the penetration zone for the selected units.

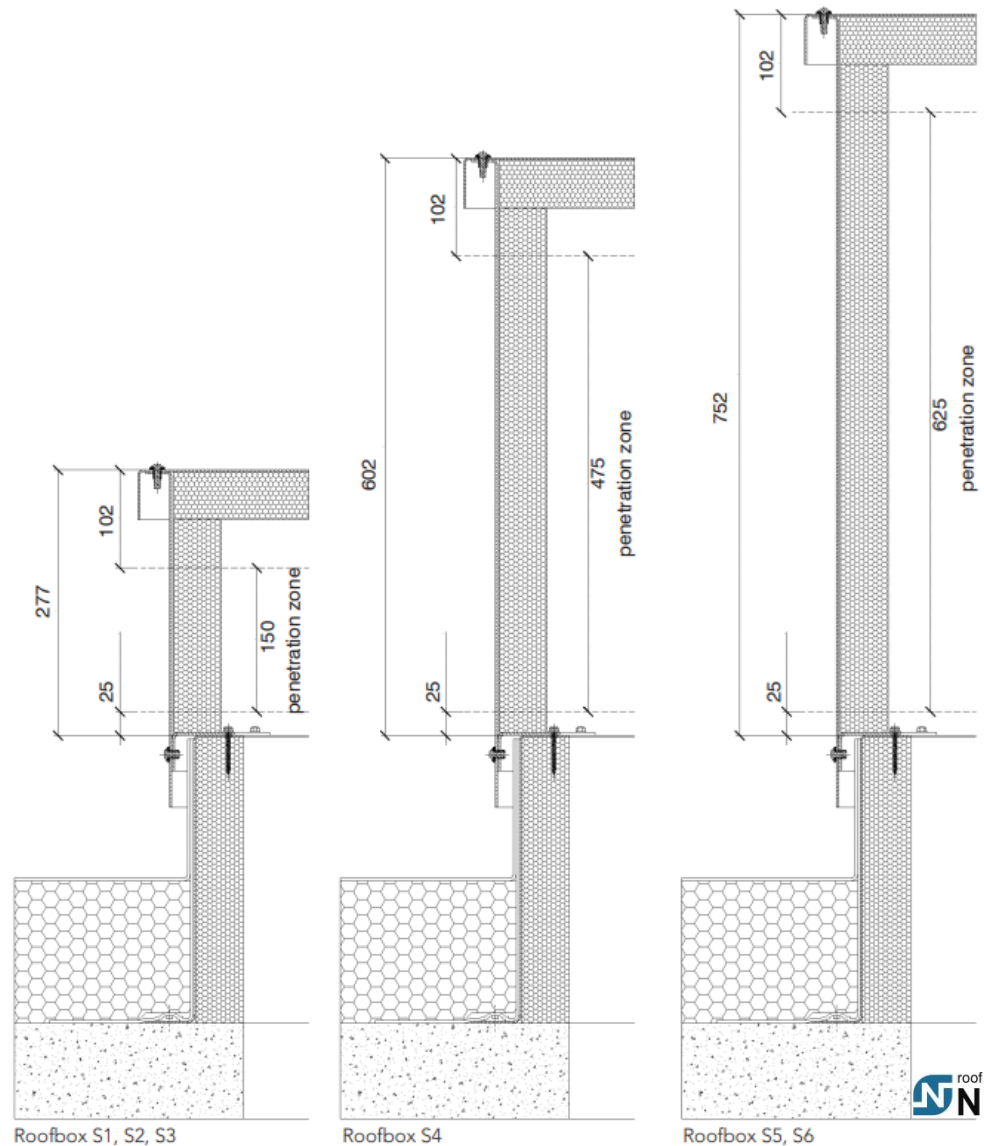
NOTE – Units can be raised or lowered by selecting the correct height kerb section.

### ROOFBOX Standard Kerb Heights

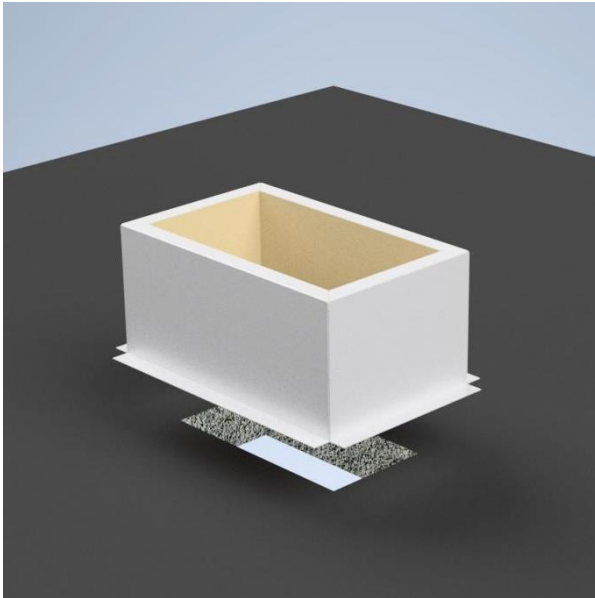
There is a range of standard Kerb heights 150/200/375/450/600

ROOFBOX units S1 – S3 can be combined with all kerb heights

ROOFBOX units S4 – S6 can be combined with kerbs AB200 – AB600 only



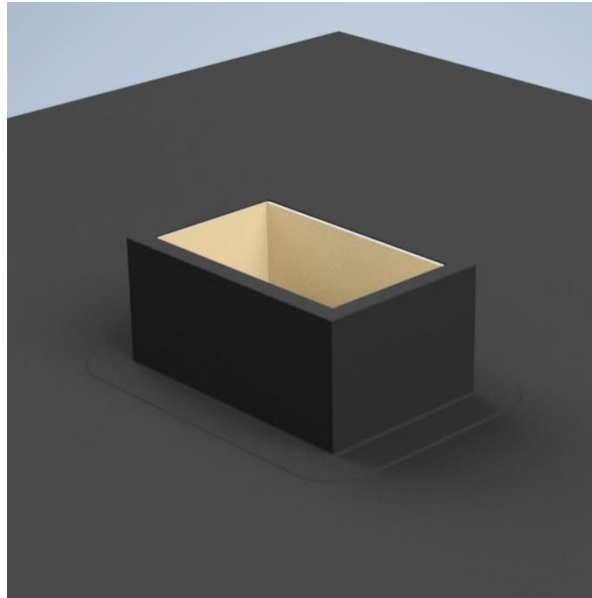
## Installation guidelines for standard S-Series ROOFBOX service cabinets



### 1. Fixing the Kerb (if Roofbox is supplied c/w upstand)

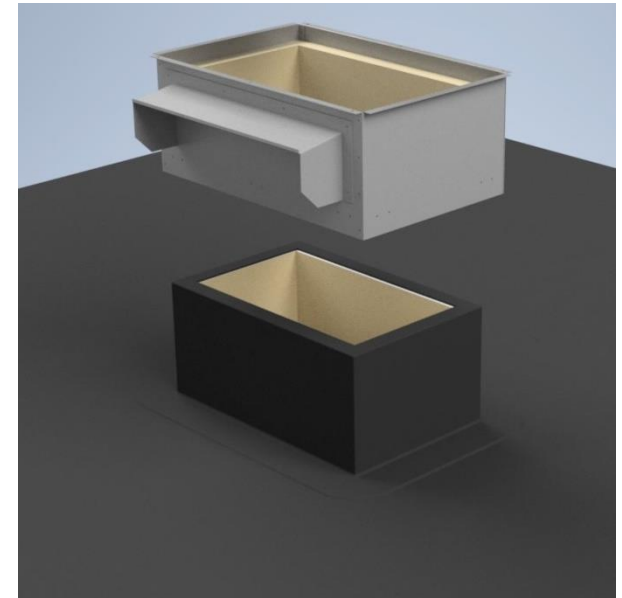
The kerb section should be separated from the unit by releasing the internal fixings allowing the kerb to be fixed to the substrate with a mastic seal and using suitable fixings through the kerb flange

The kerb should be fitted ensuring it is level and flat.



### 2. Waterproofing the Kerb section

The kerb should be dressed with waterproofing membrane in accordance with best practice details and parameters as set out by the roof system manufacturer.

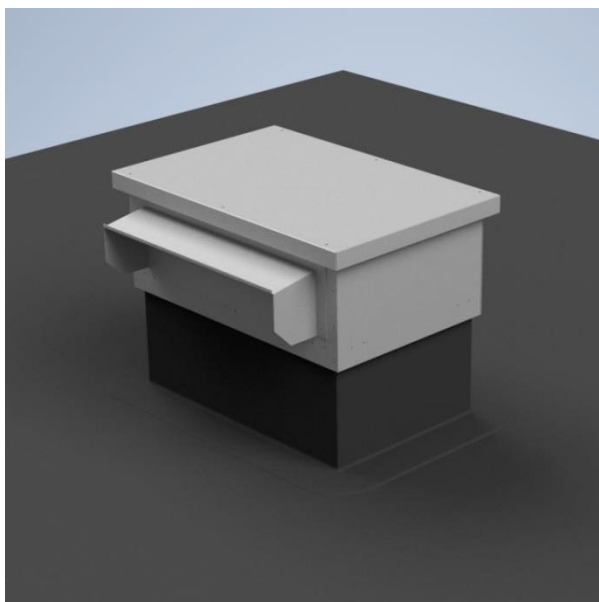


### 3. Fitting the ROOFBOX unit

Fit the ROOFBOX cabinet onto the weathered kerb upstand. If required, install a mastic seal between the cabinet and the upstand (to reduce air-permeability)

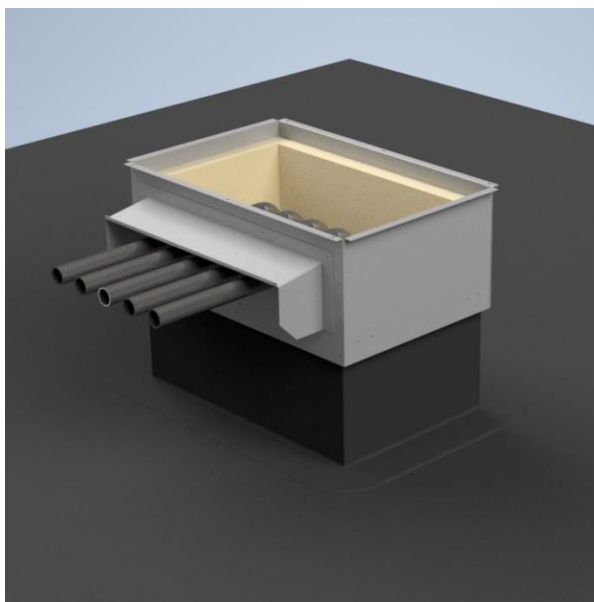
Install adequate hold-down fixings to secure the cabinet, ensuring the fixings are installed into an adequate fixing substrate

## Installation guidelines for standard S-Series ROOFBOX service cabinets



### 4. Replace the lid

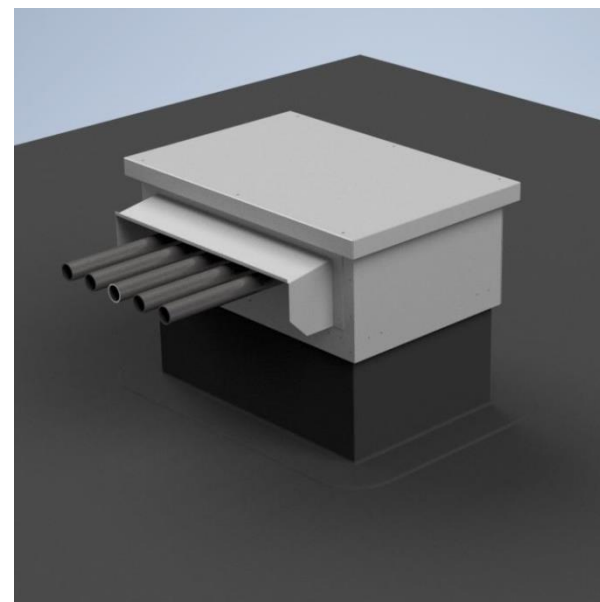
Replace the lid and secure to the unit using the fixing provided, the unit should now be weathertight and can be left until the services are ready to be brought through the unit.



### 5. Install the services

SEE Pg3 FOR PERMISSABLE PENETRATION ZONES  
SEE Pg6-10 FOR SERVICE FLASHING DETAILS  
To install the services through the unit, the lid should be removed. Holes for each service penetration should be drilled keeping the apertures as small as possible and as close to the underside of the weathering hood as possible. Each service penetration should be sealed to the unit using a suitable mastic sealant..

NOTE! Services should be installed with a fall away from the unit to stop water tracking along the pipework.



### 6. Replace the lid ensuring it is firmly secured with the fixing bolts provided.

Further weathering hoods can be ordered separately and added to the ROOFBOX at any time.

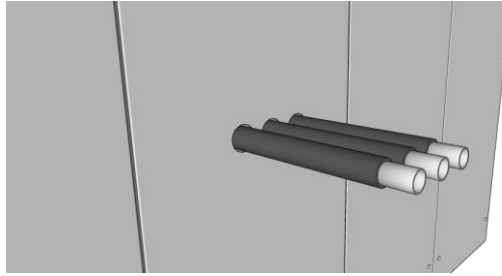
## Weathering details - pipes and cables

Nicholson recommend seals to be made directly to the services rather than to their covering insulation.



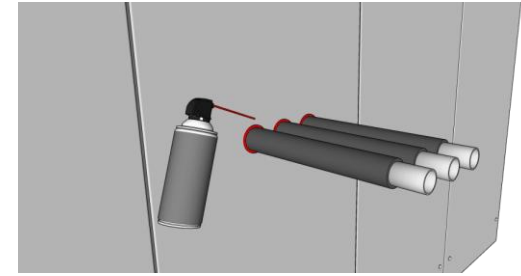
### Step 1

Cut or drill the correct size hole for each service penetration. Allow a 5mm tolerance around the services (including any insulation). Make good cut edges with touch up paint.



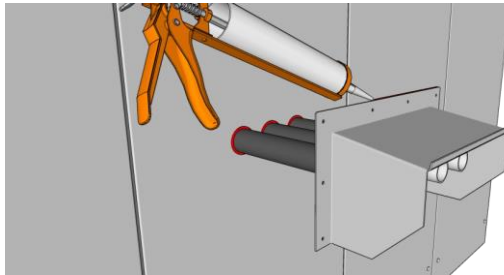
### Step 2

Install the services through the Roofbox panel - ensure that any services penetrating the Roofbox have a fall of at least 1° away from the panel face.



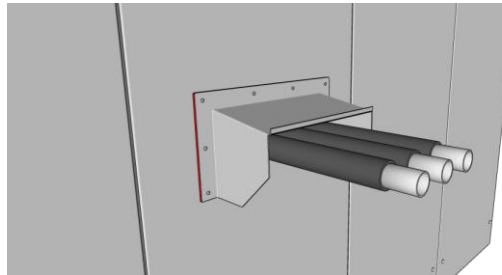
### Step 3

Using a proprietary mastic sealant, or if necessary, a proprietary filler foam, seal between the services and the Roofbox panel.



### Step 4

Apply a mastic seal to the weathering hood.



### Step 5

Fix the weathering hood as low as possible over the services to provide weather protection to the service penetrations. Use the 25mm self-sealing fixing screws supplied in the Roofbox fixing pack.

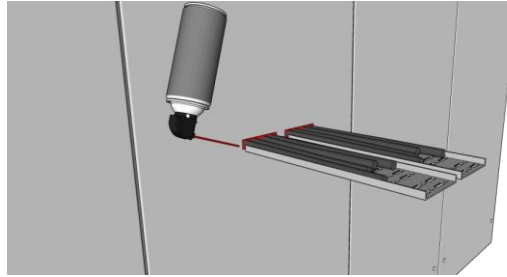
## Weathering details - cable trays and ladders

Nicholson recommend seals to be made directly to the services rather than to their covering insulation.



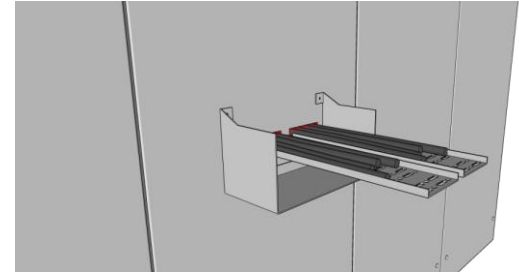
### Step 1

Cut a letterbox hole as small as possible.  
Make good cut edges with touch up paint.



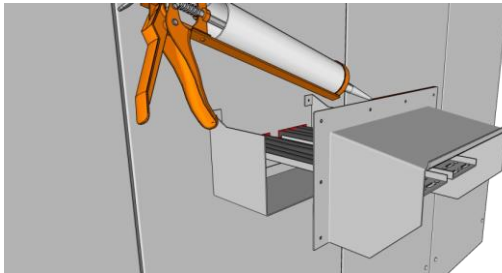
### Step 2

Run the services through the Roofbox panel - ensure a minimum 1° fall away from the Roofbox. Use the Roofbox gap filler to fill the open space in the letterbox holes.



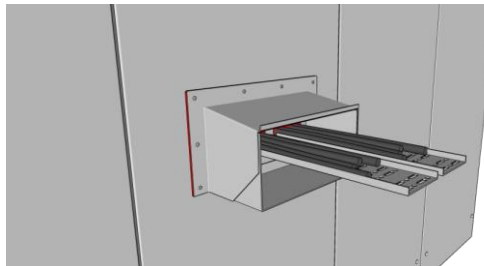
### Step 3

Fit the underhood to the panel, lift as high as possible



### Step 4

Apply a mastic seal to the weathering hood.



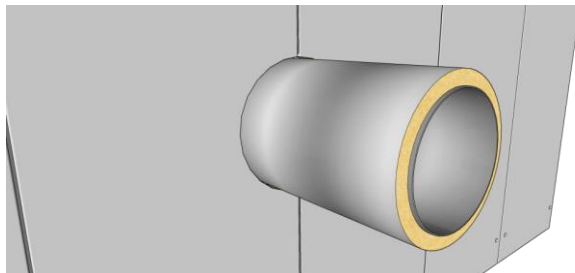
### Step 5

Fix the weathering hood as low as possible over the services to provide weather protection to the service penetration.



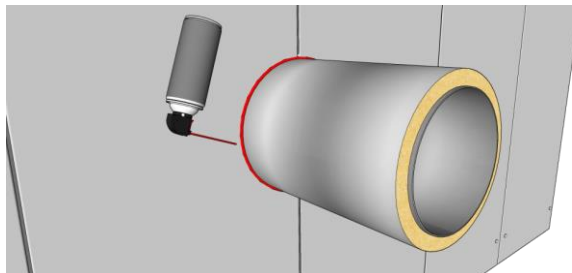
## Weathering details - applicable for both ROUND and SQUARE ducts using the two piece flashings

Nicholson recommend seals to be made directly to the services rather than to their covering insulation.



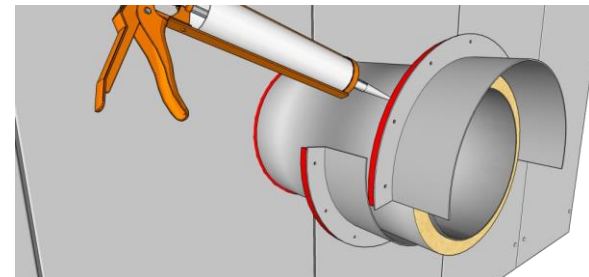
### Step 1

Ensure the panels are cut closely to the duct allowing a 5mm tolerance. Make good the paint finish to cut edges.



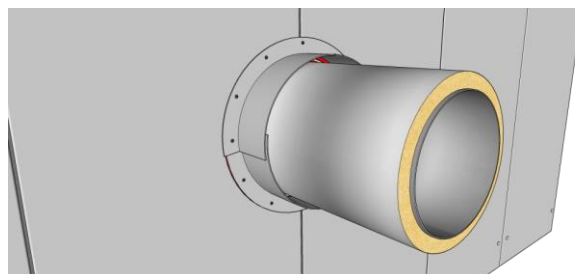
### Step 2

Seal the duct to the panel using the Roofbox gap filler or a proprietary mastic.



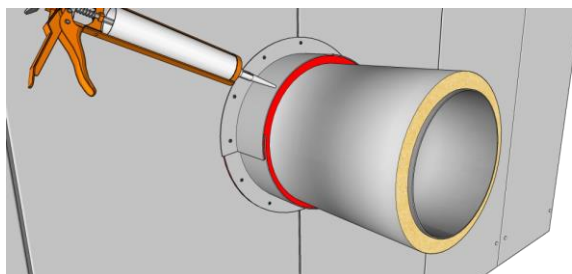
### Step 3

Slide the two halves of the split flashing over the duct ensuring the top part overlaps the lower part. Apply colour matched sealant to the back of the flange.



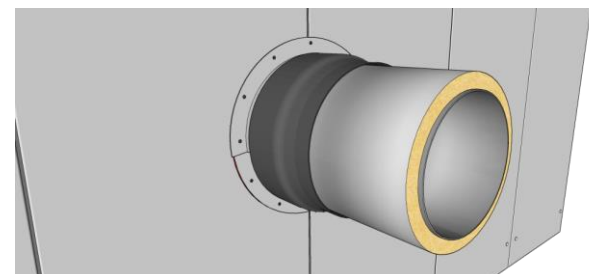
### Step 4

Fix the two parts to the panel using the colour matched fixings supplied. Apply a mastic seal between the two parts where they overlap.



### Step 5

Using Roofbox gap filler or a proprietary mastic, make a seal between the split circular flashing and the duct.



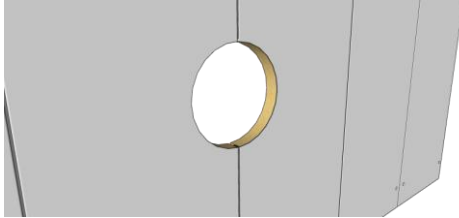
### Step 6

Apply a flexible self adhesive flashing to seal to the spigot and to the duct. The final lap should be on the underside of the duct.

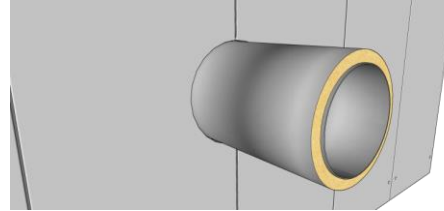


## Weathering details - applicable for both ROUND and SQUARE ducts using the one piece flashings

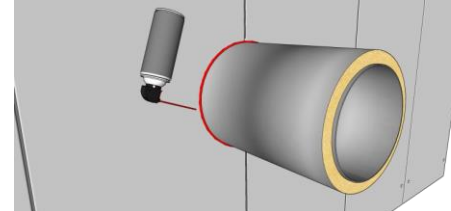
Nicholson recommend seals to be made directly to the services rather than to their covering insulation.



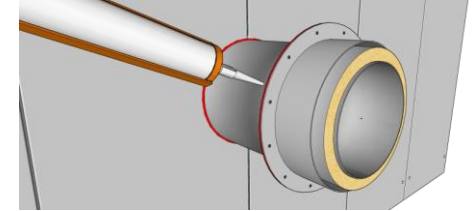
**Step 1**  
Cut installed panels to provide an aperture for the duct allowing 5mm tolerance including any insulation. Make good the paint finish to cut edges.



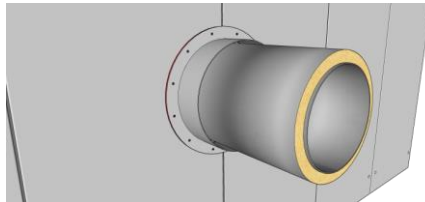
**Step 2**  
Install ductwork (including any insulation).



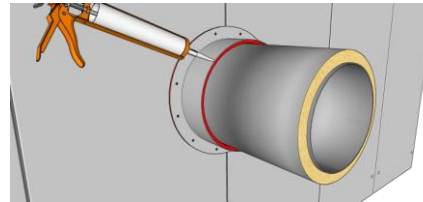
**Step 3**  
Use the Roofbox gap filler or a proprietary mastic to seal the duct to the hole.



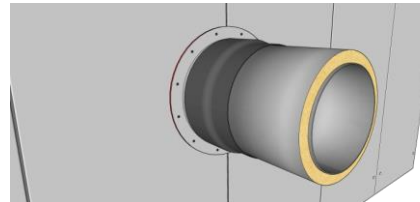
**Step 4**  
Slide the circular flashing over the duct and apply colour matched mastic to the back of the flange.



**Step 5**  
Fix the circular flashing to the panels using the 25mm colour matched fixings supplied.



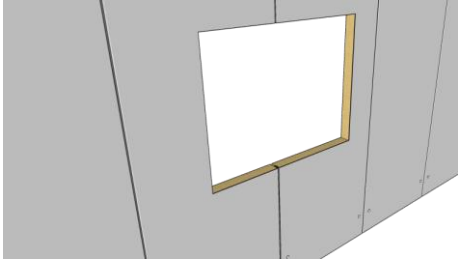
**Step 6**  
Using Roofbox gap filler or a proprietary mastic, make a seal between the duct and the circular flashing.



**Step 7**  
Apply a flexible self adhesive flashing sealing to the spigot and to the duct. The final lap should be on the underside of the duct.

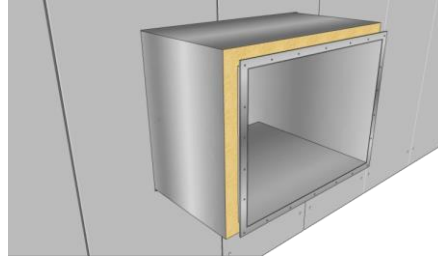
## Weathering details - Square and rectangular ducts using the universal flashing

Nicholson recommend seals to be made directly to the services rather than to their covering insulation.



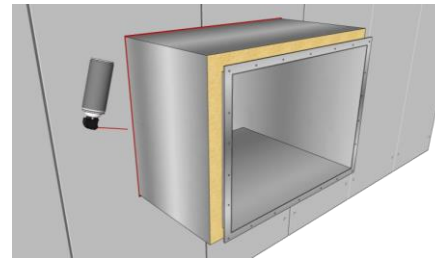
### Step 1

Cut the panels to make an aperture for the duct with a 5mm tolerance. Make good the paintwork to cut edges.



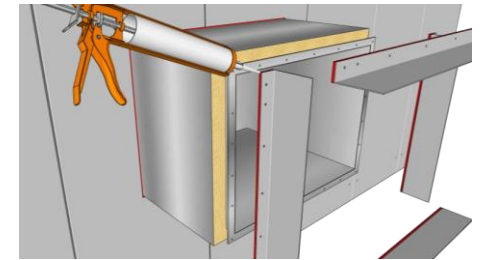
### Step 2

Install ductwork (and insulation if necessary) through the hole in panels. Ensure that duct falls 1 degree away from Roofbox.



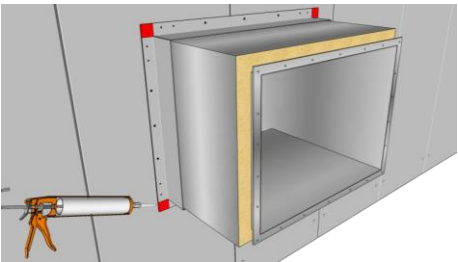
### Step 3

Seal between duct and panels using Roofbox gap filler or a proprietary mastic.



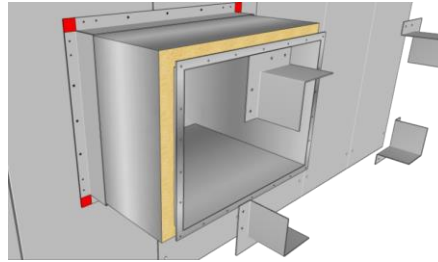
### Step 4

Arrange the straight lengths to match the duct and apply colour matching mastic to the back of the flange.



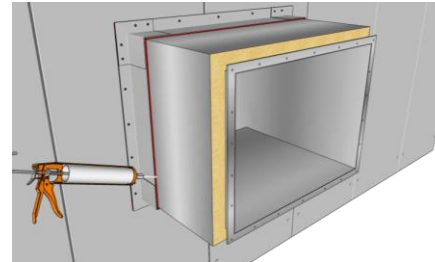
### Step 5

Fix the straight lengths to the panels around the duct using the colour matched screws. The lengths should just meet at the corners.



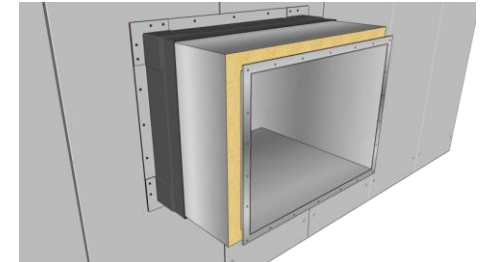
### Step 6

Fit the corner pieces using colour matched mastic to seal them. Fix in position with colour matched fixings supplied.



### Step 7

Seal between the flashing and the duct using a proprietary sealant.



### Step 8

Apply a flexible self adhesive flashing over the joint between the universal flashing and the duct. The final lap should be on the underside.