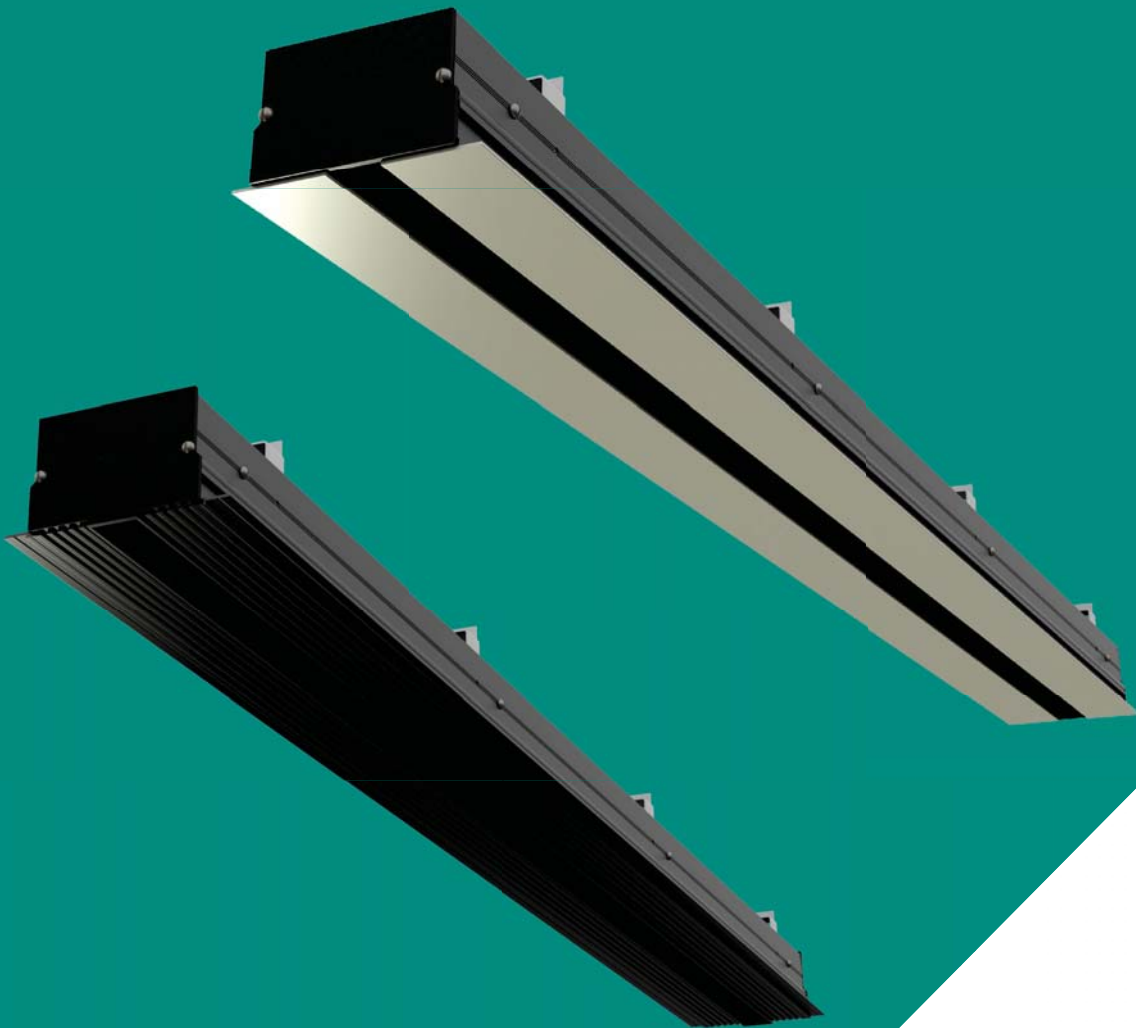




Operating and Maintenance

HFC High Flow Coanda

HFD High Flow Directional





High Flow Diffuser

HF

Product Description

HFC High Flow Coanda

HFD High Flow Directional

HFC-PL High Flow Coanda Plasterline

HFD-PL High Flow Directional Plasterline

Tools Required

- 1 x Medium Cross Head Screwdriver
- Impact Driver for Plaster Frame

Note: Power tools are not recommended for connecting the diffuser to the plenum due to the risk of damage caused by the over-tightening of the Hanging Bracket Screws.

Plenum Box Installation

- 1- Align the centreline of the plenum box with the centre of the ceiling opening
- 2- Install the plenum box, suspending it from its mounting holes with Drop Rods (supplied by others). Use locknuts and washers above and below the mounting holes to set the plenum box height. If using gripple wire, 4 No. lengths must be used to fix the plenum to individual fixings in the soffit, located vertically, in line with the plenum mounting holes.
- 3- Check that the plenum box is level and aligned with the ceiling opening, ensuring that the distance from the bottom of the hem to the ceiling face is within the 45 to 55mm range (see figure 1). When this has been achieved, tighten the locknuts to secure the plenum position.

It is essential that all the plenums be installed in the ceiling void prior to the diffuser installation.

For continuous diffuser runs, Waterloo recommend that longitudinal angle (supplied by others) are attached to the sides of the plenums to prevent the plenum boxes pulling the diffuser out of alignment.

Waterloo also recommends that all mitre sections be installed prior to the fitting of continuous runs of active or dummy diffusers.

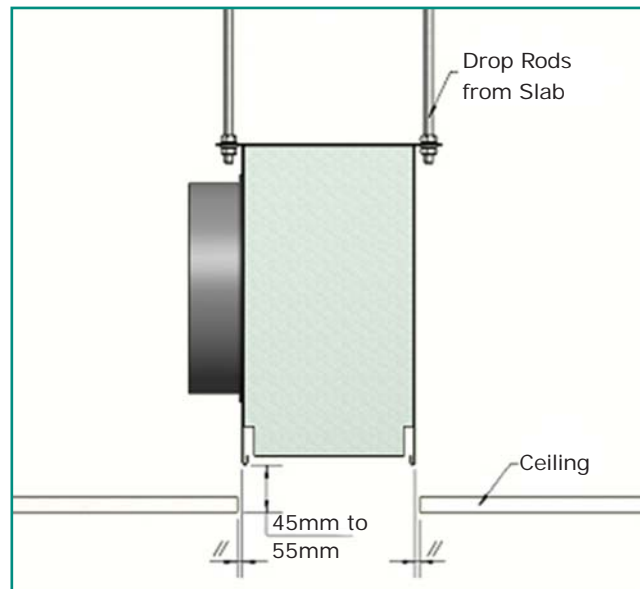


Figure 1- Plenum installation detail



High Flow Diffuser Installation (Standard and Plaster Line)

Installation examples are shown as Plasterline for ceiling installation or the standard High Flow for the wall mounting, although either can be used for each location.

The installation of the High Flow Slot Diffuser as follows:

1- Make sure that the sliding paddle is positioned centrally within the diffuser. (**Figure 2 & 2a**), and fix saddle loosely onto back-strap on rear of diffuser, adjusting via the screw head, through the access hole in the front of the paddle.

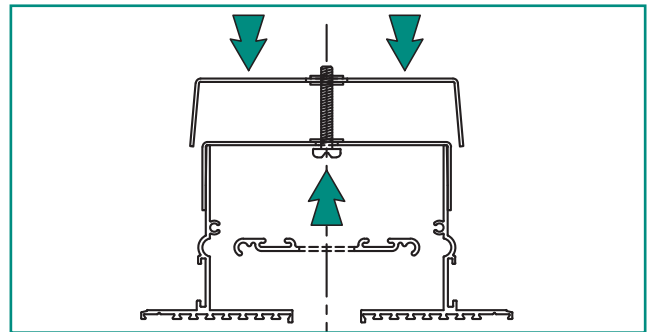


Figure 2

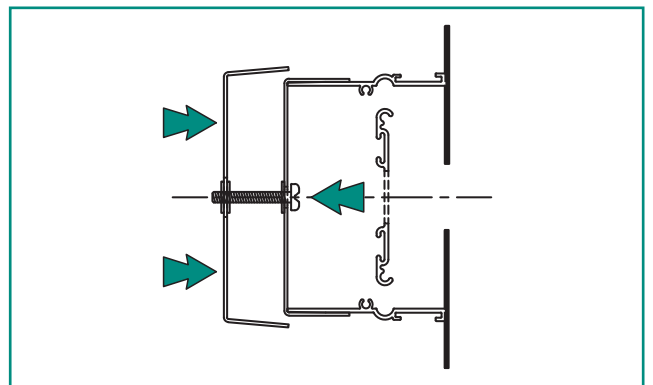


Figure 2a

2- Push diffuser through the ceiling/wall cutout, into the plenum. Apply force to the screw head, through the access holes using a crosshead screwdriver, until the saddles spring past the hem of the plenum, locking the diffuser to the plenum (**Figure 3 & 3a**).

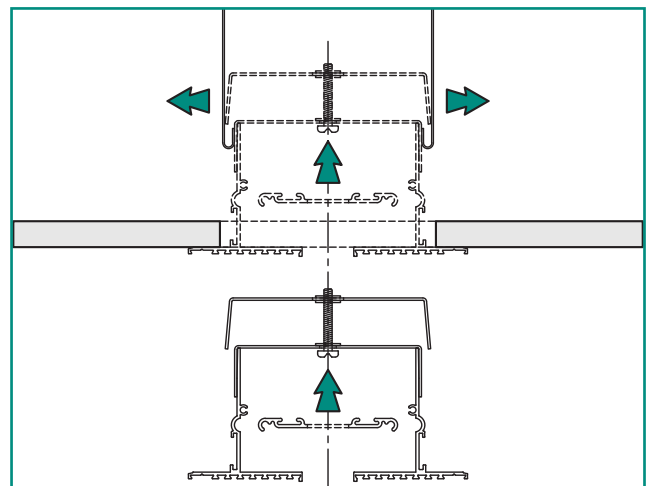


Figure 3

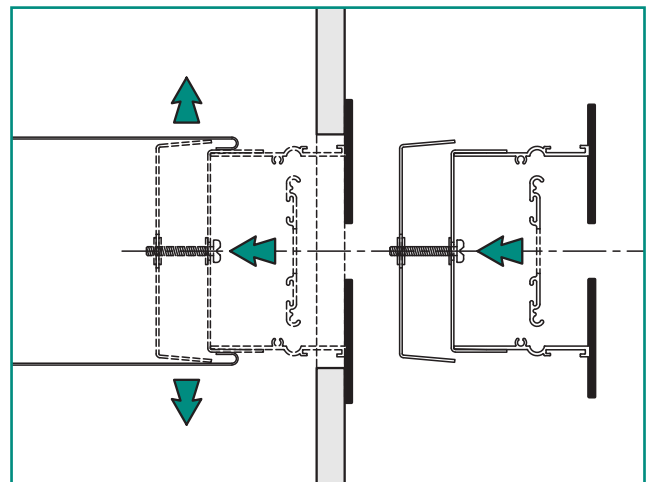


Figure 3a



High Flow Diffuser Installation (Standard and Plaster Line)

The installation of the High Flow Slot Diffuser as follows:

3- Using a crosshead screwdriver, tighten the adjustment screw until the diffuser is tight against the ceiling and screw has increased resistance when tightening (once again, power tools are not recommended at this stage (**Figure 4 & 4a**).

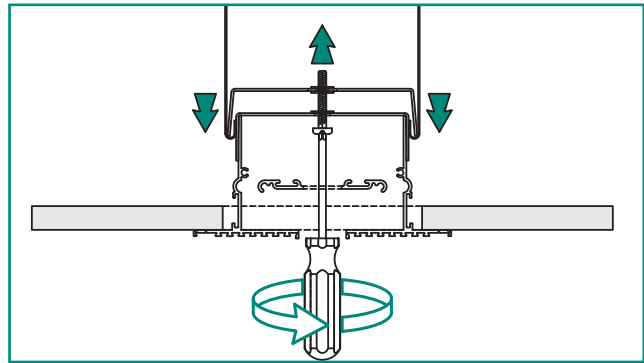


Figure 4

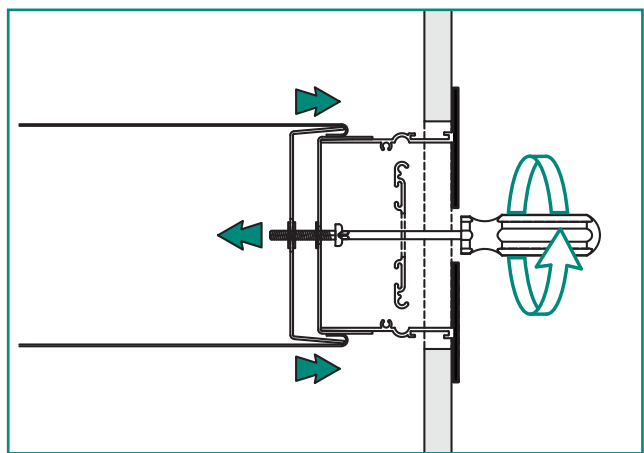


Figure 4a

4-

1- If using the plaster line version - once the diffuser is fixed into position, use either self-drilling screws and an impact driver, or holes and plasterboard screws at no greater than 300mm centres fixed into a timber frame behind the plasterboard.

2- For all types, the 20mm hole caps are clipped into the paddle holes & the blade moved into the desired position to give the air pattern required (**Figure 5 & 5a**). If the paddle is slid to the left the air flow will be to the left and if it is slid to the right the air flow will be to the right.

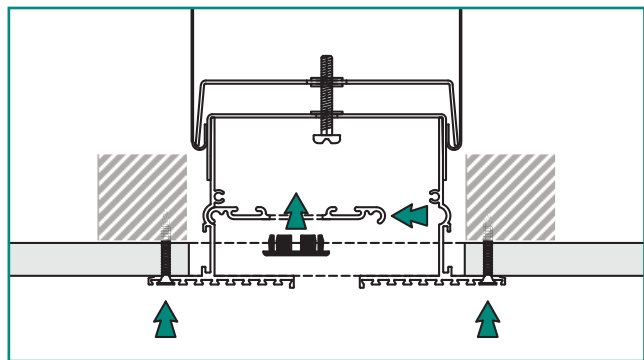


Figure 5

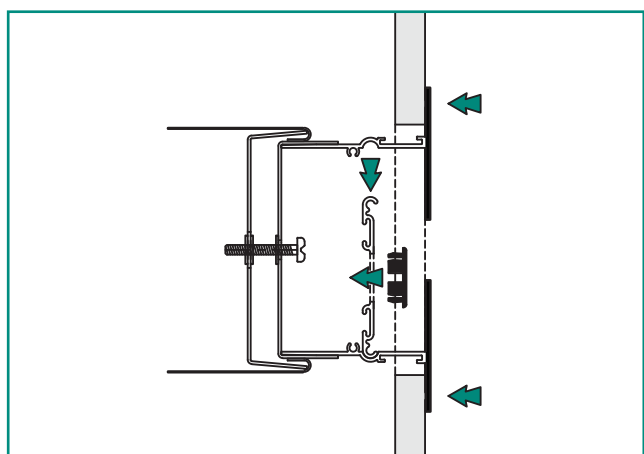


Figure 5a



High Flow Diffuser Installation (Standard and Plaster Line)

The installation of the High Flow Slot Diffuser is as follows:

5- Once the diffuser has been installed, the extrusion will require either skim tape or PVA applying the plasterers should make a recommendation as to the most effective method to achieve the best finish. Plaster can be skimmed up to the prevailing edge of the diffuser opening against the lip. Any plaster that goes in to the diffuser must be cleaned out to avoid effecting the diffusers performance (**Figure 6**).

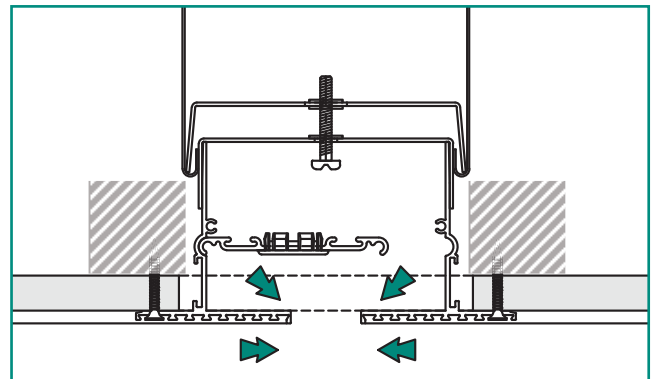


Figure 6

The diffuser sections can, be joined by screwing or riveting the alignment strips in position using the pre-punched holes in the outer frames on continuous runs (**Figure 7**).

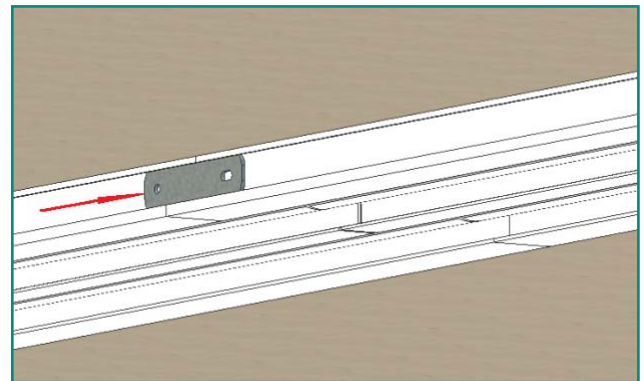


Figure 7: Position alignment

Product set up

To achieve a directional throw, the deflector must be moved to the side that the air is required to travel in once it leaves the diffuser (**Figure 8**)

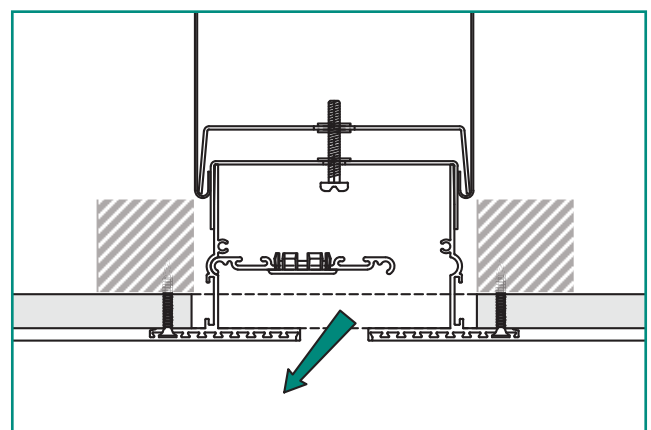


Figure 8

Cleaning and Maintenance

Waterloo recommend that the diffuser faces are cleaned with warm soapy water. For regular cleaning, a simple wipe down of all accessible faces will suffice, taking care not to damage the paint or anodised finish. Abrasive cleaners must not be used.

Waterloo Product Range



Waterloo Product Range

GRILLES

A complete range of products suitable for all wall, ceiling and floor applications. Most grilles are made from aluminium and have a range of fixed or moveable blades designed to give performance whilst remaining aesthetically pleasing to the eye. Grilles are made to customer specified sizes and colours (PPM/G); standard colour PPM9010 (20% Gloss White). The range is complemented by the Aircell range of polymer Grilles.



DIFFUSERS

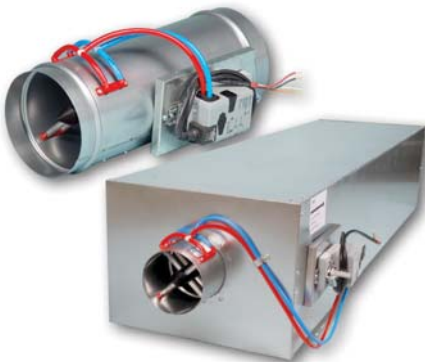
Designed to be installed in various ceiling systems, we have a complete range to suit both performance and aesthetic requirements. Most diffusers are made from aluminium and can be ordered with or without plenum boxes for easy duct work. Diffusers can be ordered in customer specified colours (PPM/G); standard colour is PPM 9010 (20% Gloss White). This range is complemented by the Aircell range of polymer Diffusers.



ACTIVE AND PASSIVE CHILLED BEAMS

The finest quality range of high output active beams, used for ventilated heating and cooling applications. These units have 4 pipe coils to allow heating and cooling circuits to run simultaneously, giving constant and responsive control. The design allows a large optimum capacity and also allows the customer to specify the nozzle type and pitch for individual circumstances.

Active beams are made from steel to a large range of customer specified sizes and as such are suitable for various different ceiling systems. Standard finish is PPM 9010, however other (PPM/G) colours are available on request.



AIR VOLUME CONTROL DAMPERS

Pressure independent Variable Air Volume and Constant Air Volume dampers made from zintec plate. Most volume dampers are regulated with an electronic motor and sensors and are calibrated to customer specifications before delivery.

The Constant Air Volume damper requires no power source as it is controlled via a mechanical device and calibrated before delivery. All volume dampers can be ordered with a single or double (insulation) skin.

EXTERNAL LOUVRES

A quality range of products for external wall applications. Made from aluminium, with birdscreen or insect screen options. All louvres are made to customer specified sizes and (PPM/G) colours; standard colour is PPM 9006.



DISPLACEMENT

A full range of recessed, semi-recessed, floor, wall and corner units providing high ventilation efficiency and excellent comfort. The very low pressure involved also offer quiet installations. Displacement units are available as wall or floor mounted, or indeed integrated within the architectural design.



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