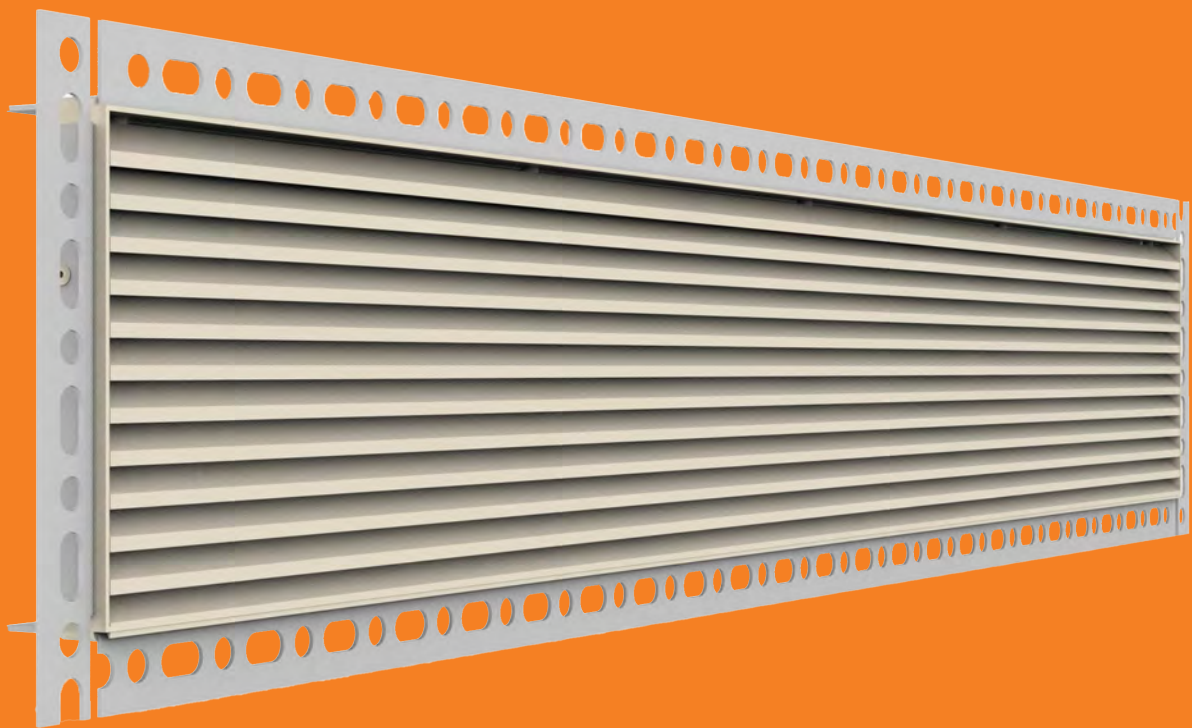


# Operating and Maintenance

APN 0° 6mm thick blade, 12.5mm pitch

APM 15° 6mm thick blade, 12.5mm pitch



## Plasterline Linear Grilles Installation

APM

APN

### 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 wall face is within the 20 to 30mm 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.

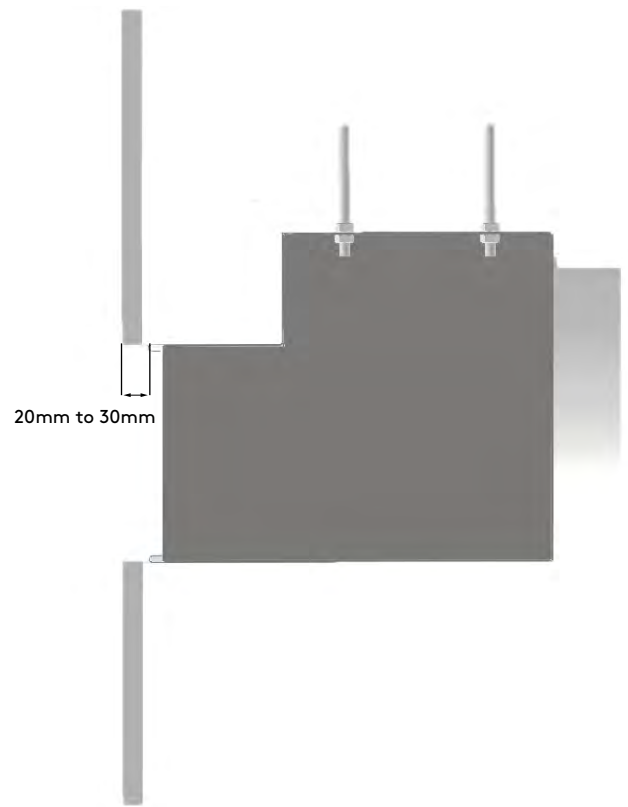
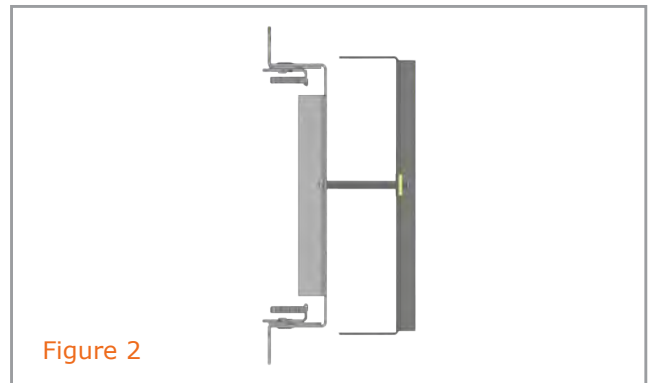


Figure 1- Plenum installation detail

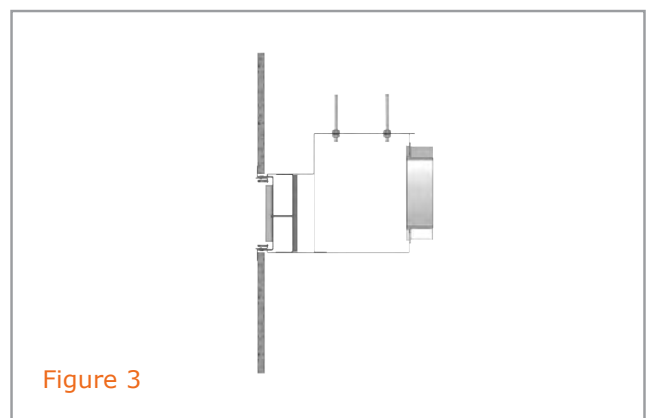
# Operating and maintenance instructions

## Plasterline Linear Grille Installation

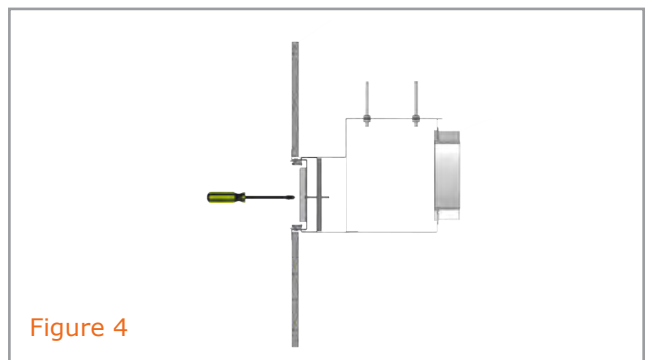
1. Carefully remove the grille core and loosely attached the saddle bracket to the plaster-in frame, through the brackets (figure 2)



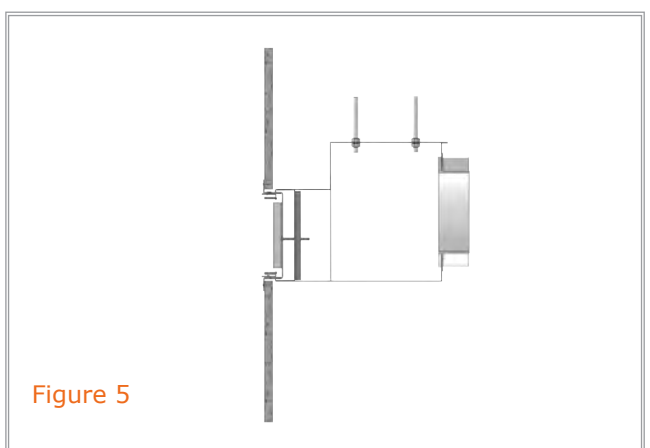
2. Push the diffuser through the ceiling / wall cut-out and align it with the plenum behind. Push the bracket past the hem of the plenum, ensuring the tabs on the bracket spring out and locate in the hem (figure 3).



3. Tighten the screw using a 'manual' screwdriver, until the frame is secured within the cut-out.  
**CAUTION:** Do not over tighten the screw – use of battery or power tools is not recommended (figure 4).



4. Using suitable self-tapping screws, secure the face of the frame by fixing through the frame and plasterboard into a timber (or purlin) behind. Fixings should be spaced at intervals no greater than 300mm (figure 5).

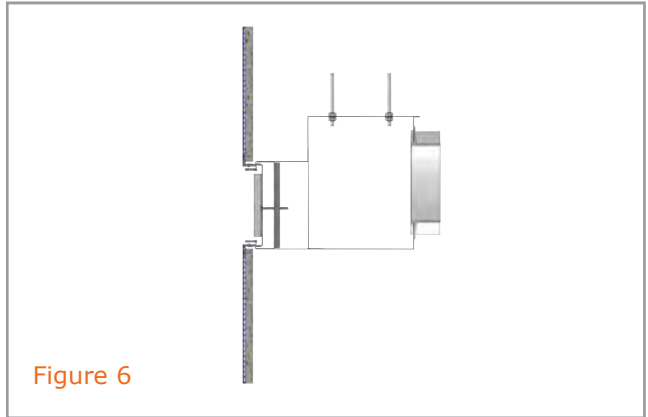


## Operating and Maintenance Instructions

### Plasterline Linear Grille Installation

5. Once the frame has been installed, scrim tape should be applied (and or PVA) prior to plastering to reduce the risk of cracks forming. \*Plaster should be applied up to the prevailing edge of the frame, any plaster on the inside of the frame must be removed to maintain the performance of the diffuser, prior to replacing the core (figure 6)

\*Please follow professional plasterers' recommendation to achieve the desired finish\*.



# 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

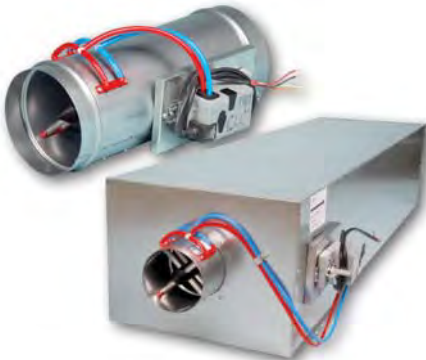
Designed to be installed in various ceiling systems, we have a complete range to suit both performance and aesthetical requirements. Most diffusers are made from aluminium and can be ordered with or without plenum boxes for easy duct work. Diffusers can be ordered in customer specified colours (PPM/G); 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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