

Operating and Maintenance

WFO-^{*}S Series Floor Diffuser
(Slab floor or wall installation)



WFO-*S Series Floor Diffuser

Product Description

WFO Floor Diffusers

Tools Required

- 1 x Small Flat Bladed Screwdriver

Note: Power tools are not recommended for this installation due to the risk of damage caused by the over-tightening of the toggle clamp screws.

Installation instructions:

For a trouble free installation of the WFO-*S series floor diffuser, follow these simple instructions:

- 1- Cast the steel sleeve into its required position in the concrete slab.
- 2- Prior to installation, remove the diffuser disc and damper / dirt tray.
- 3- Locate the toggle clamp in the slot on either side of the diffuser basket (**Figures 1**).

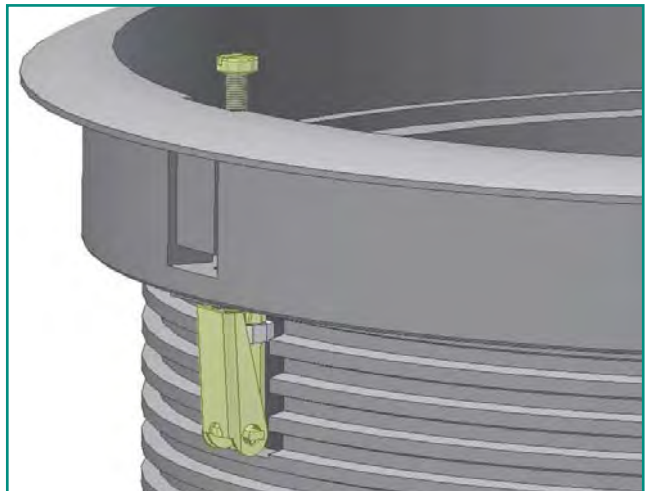


Figure 1: Locate toggle in slot

- 4- Once the toggle clamps are positioned as shown in **Figures 2** then the diffuser basket is ready to be installed.



Figure 2: Ready for installation

- 5- Place diffuser Basket in the sleeve opening, ensuring that the basket flange is sitting flush with the slab face (**Figures 3**).



Figure 3: Place diffuser basket in opening

WFO-*S Series Floor Diffuser

Installation instructions:

6- When the diffuser basket is placed in the opening, it should look like (**Figures 4**).



Figure 4: Diffuser basket in opening

7- Push the screw heads down flush with the inside of the diffuser basket. This will allow the toggles to pass the floor opening and spring open into the steel sleeve (**Figures 5** and **Figures 6**).

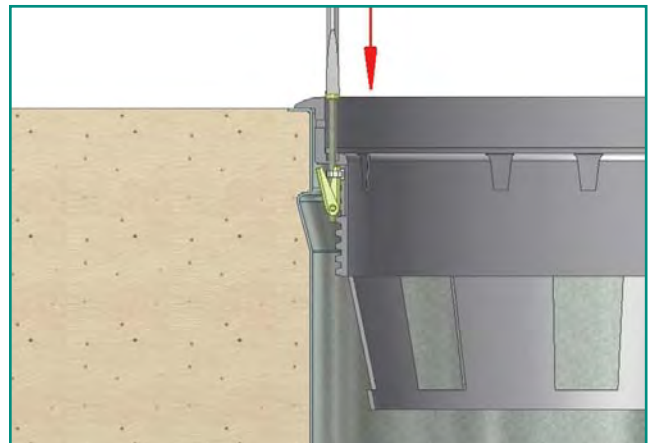


Figure 5: Push the screw downwards

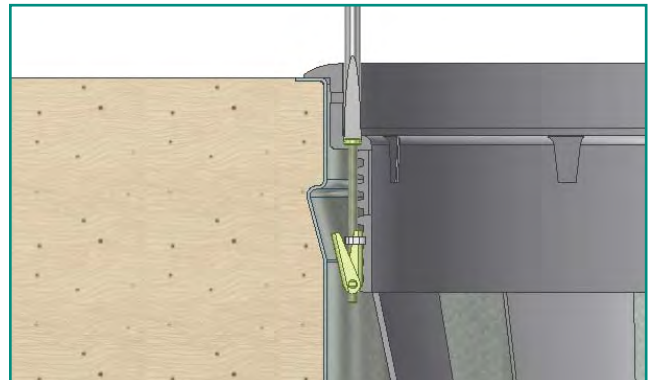


Figure 6: until the toggle springs free

8- Tighten the toggle clamp screws until they bite on the interior of the steel sleeve (**Figures 7**). **Do not over tighten these screws or you will risk damaging the screw or clamp.**

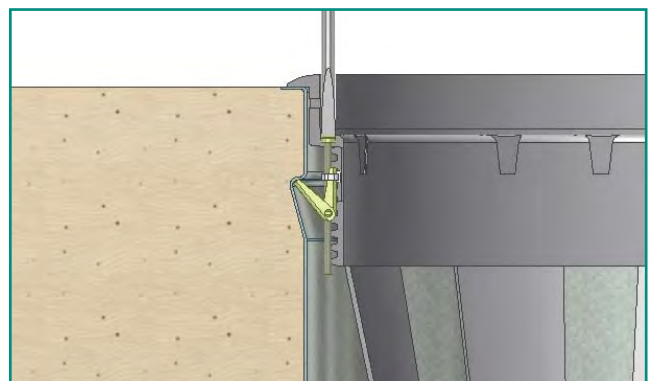


Figure 7: Tighten the screw until the clamp bites

WFO-*S Series Floor Diffuser

Commissioning

The WFO-*S series diffuser has the ability to control airflow by rotating the damper / dirt tray inside of the diffuser basket. The basket has a series of 8 dovetail shaped slots around its internal circumference for the installation of a location peg, which is used to align the damper to the required position.

1- Install the damper in the diffuser basket and rotate it, and align the damper location notch (marked with red arrow in **Figure 8**) with each of the 8 dovetail slots until you find the one that nearest matches your air opening slot requirements.

Please note that Waterloo recommend that the damper is positioned in the fully open position for installation.

2- Remove the Damper and install the Location Pin in the dovetail slot (**Figure 9**).

3- Reinstall the damper, taking care to align the notch in the damper Lip with the location peg in the basket (**Figure 10**).

4- Install the diffuser disc in the basket, taking care to locate the location pip on the disc with the location slot on the basket (**Figures 11**).

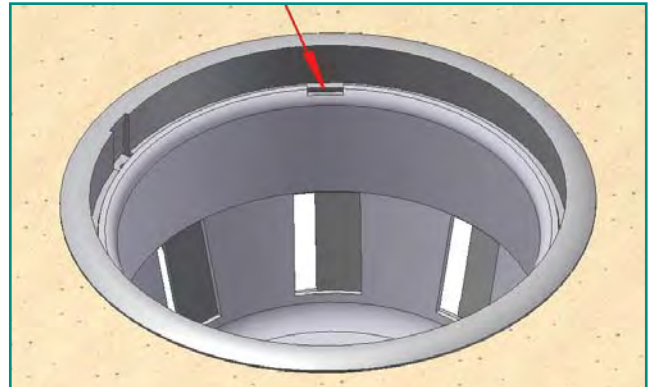


Figure 8: Install the damper and rotate until correct dovetail position is found

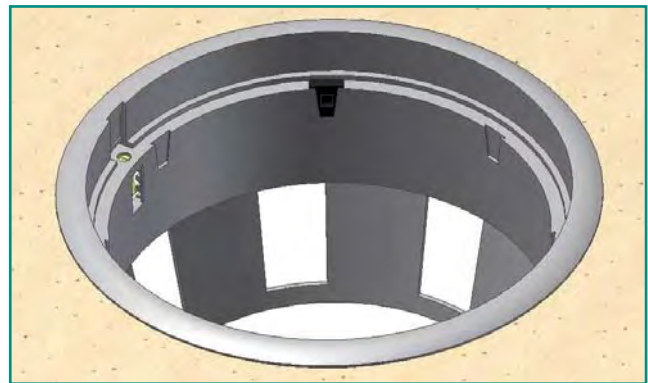


Figure 9: Install location peg in basket

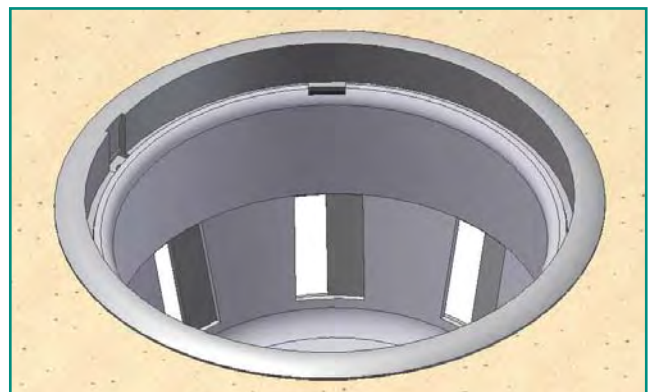


Figure 10: Install damper in basket

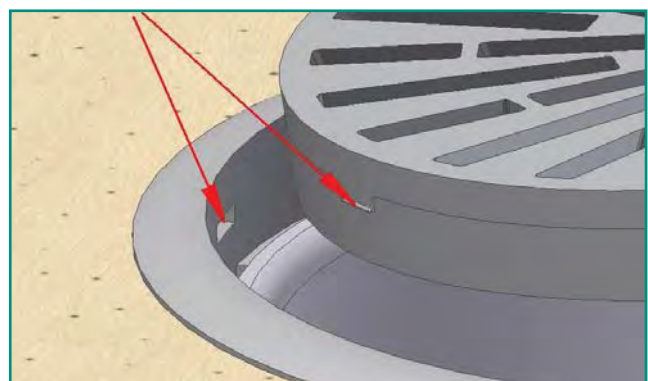


Figure 11: Location slot and pip

WFO-*S Series Floor Diffuser

Commissioning

5- Lower the disc into the basket, taking care to centre the alignment tab on the upper face with the slot the basket (**Figures 12**).



Figure 12: Alignment tab and slot

6- Finally, push home disc and it's complete! (**Figures 13**).

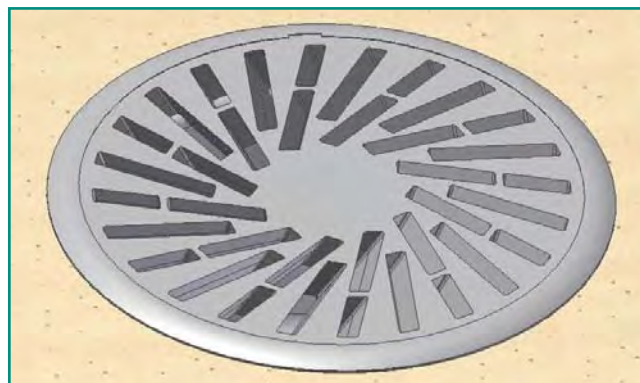


Figure 13: All finished!

WFO-*S Series Floor Diffuser

Cleaning and Maintenance:

1- To remove the diffuser disc, place the hook tool provided through one of the slots in the disc face and rotate it through 90 degrees (**Figures 14**).

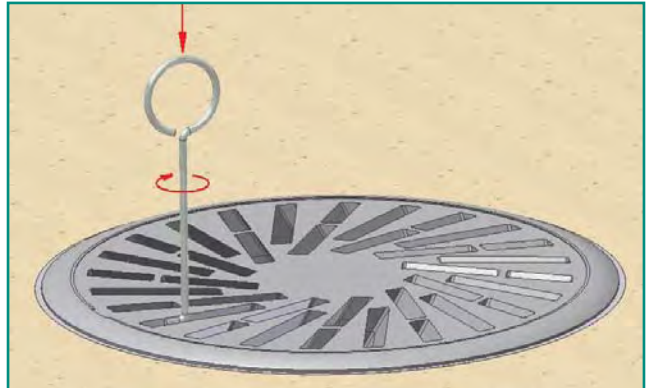


Figure 14: Insert hook & rotate 90 degrees...

2- Pull the hook in an upwards direction to lift the disc (**Figures 15**).

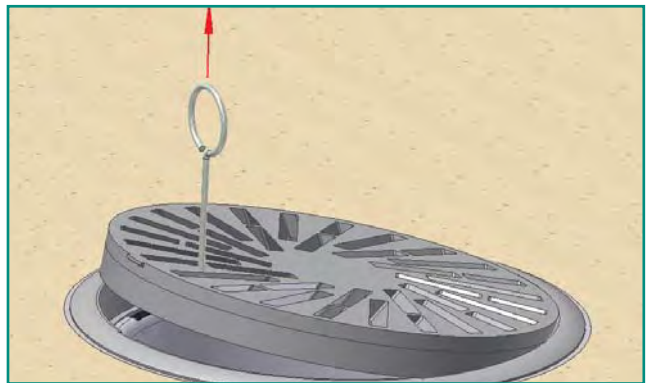


Figure 15: ...then pull hook upwards

3- Remove the damper / dirt tray and discard its contents (**Figures 16**).

4- To clean, simply wash the diffuser disc and damper / dirt tray in soapy water and leave to dry.

5- Reinstall damper / dirt tray and disc as per previous instructions.

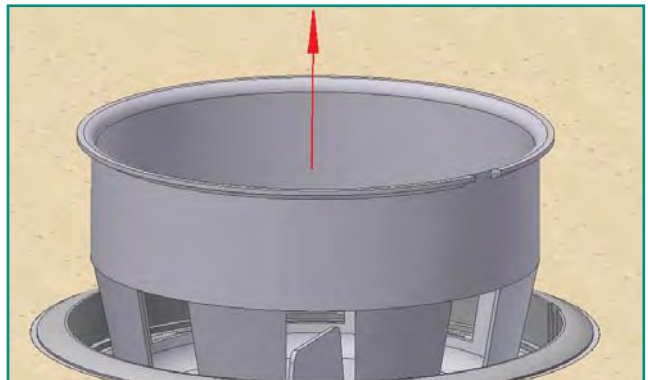


Figure 16: Remove damper / dirt tray

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

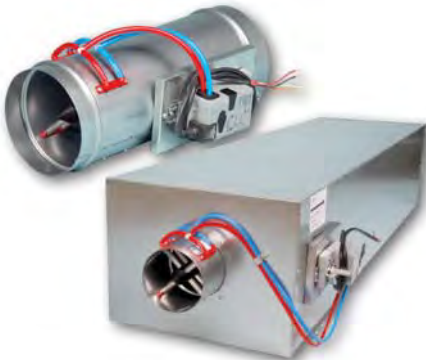
Designed to be installed in various ceiling systems, we have a complete range to suit both performance and aesthetical requirements. Most diffusers are made from aluminium and can be ordered with or without plenum boxes for easy duct work. Diffusers can be ordered in customer specified colours (PPM/G); 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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FM 27823



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