



Operating and Maintenance

DE Series Louvred Face Diffuser into clip-in ceiling





DE Series Louvred Face Diffuser into clip-in ceiling

Product Description

DE Louvred Face Diffuser

Tools Required

- 1 x Pop riveter
- 1 x ø3.5mm drill bit
- 1 x Battery operated drill

Installation instructions:

1- Install the plenum box, suspending it from its mounting holes with drop rods (supplied by others). Centralise the plenum in both directions within the opening where the diffuser is to be fitted (**Figures 1**).



Figure 1: Centralise plenum

2- Remove the core from the diffuser that is to be installed. This core is held in place using wire spring clips commonly referred to as a “bunny clips”.

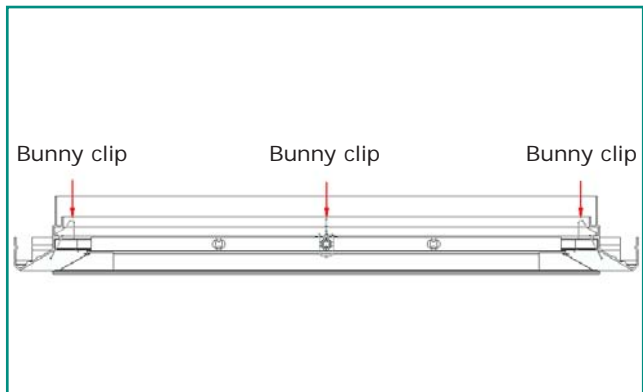


Figure 2: Locate bunny clips

3- Locate the bunny clips holding the core in position as shown in **Figures 2 & 2a**. Please note that there will be at least one clip fitted on all four sides, though there could be more dependent on the diffuser size.

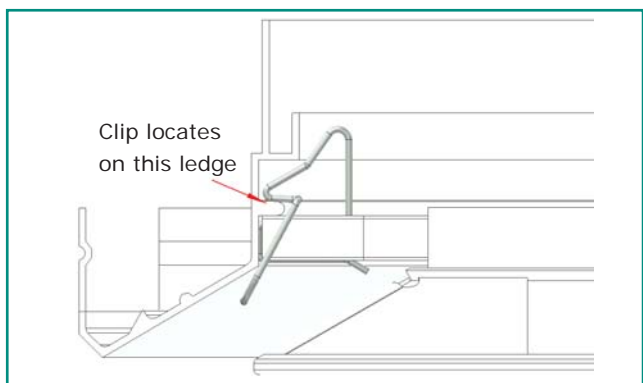


Figure 2a: Bunny clip detail

4- Push the bunny clip towards the centre of the diffuser. This will disengage the clip from the outer frame and release that side of the core (**Figures 3**).

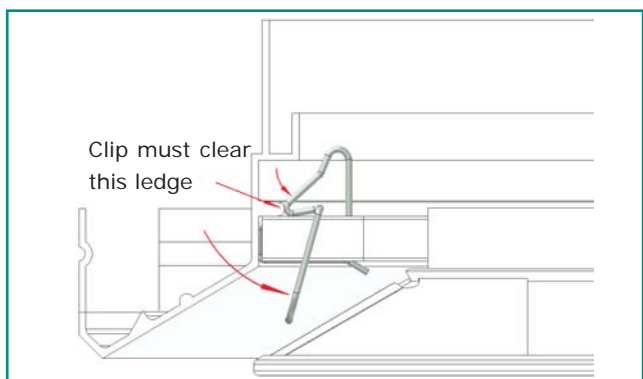


Figure 3: Push clip inwards to release



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Installation instructions:

5- Repeat this operation on the remaining three sides, taking care to support the core, so as not to allow it to drop out onto the floor.

6- Lower the core from the diffuser and store away to prevent damage. (**Figure 4**).

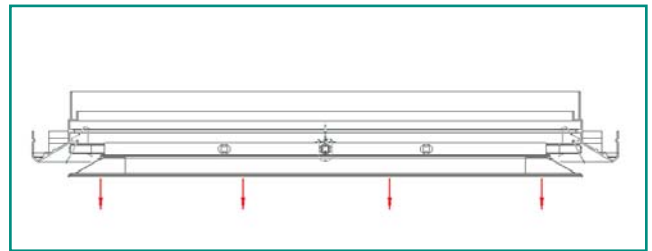


Figure 4: Lower core from diffuser frame

7- Offer up the diffuser frame and locate it within the opening of the plenum (**Figure 5**), so that it is positively located against the base of the diffuser stack (**Figure 6 & 6a**).

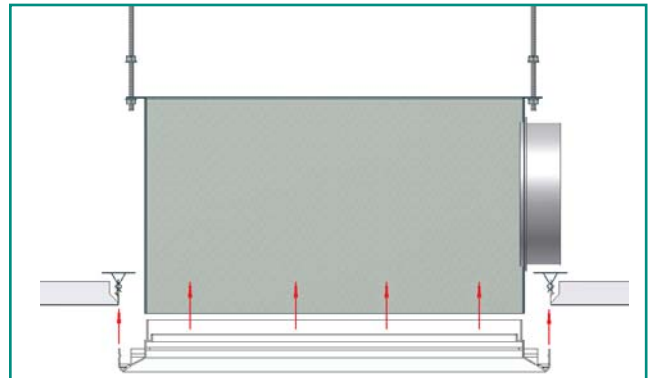


Figure 5: Offer up diffuser frame

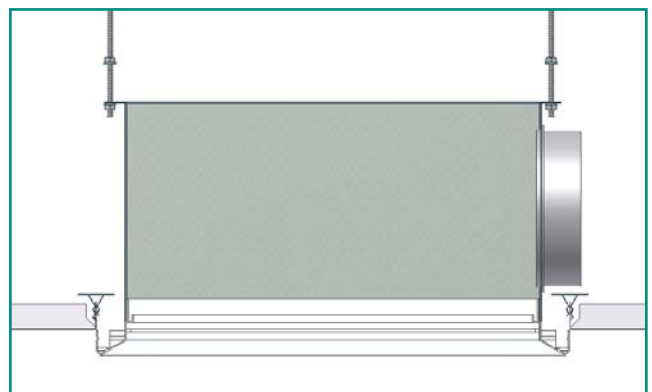


Figure 6: Locate diffuser in plenum

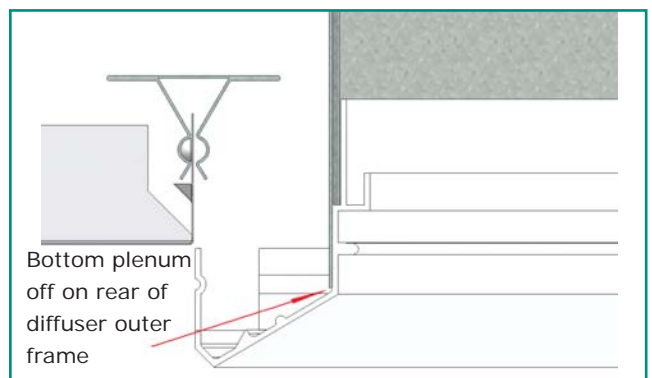


Figure 6a: Butt plenum on frame



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Installation instructions:

8- Drill through the diffuser frame and plenum wall. Secure them using pop rivets or screws (**Figure 7**). Repeat this on all sides.

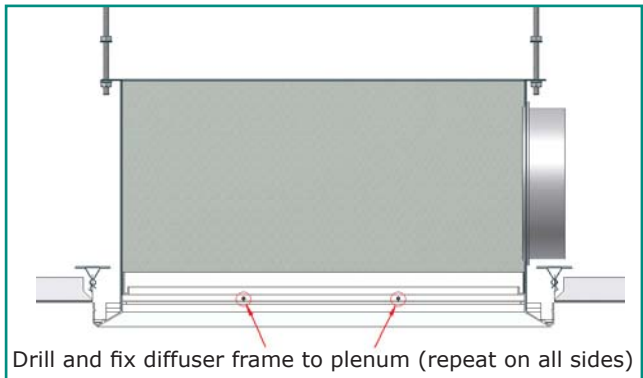


Figure 7: Drill and fix frame and plenum

9- Raise the plenum up on the drop rods to draw the diffuser frame into the tee bar, as shown in (**Figure 8**), until the diffuser face is in the required position (**Figure 9**).



Figure 8: Raise the plenum and diffuser

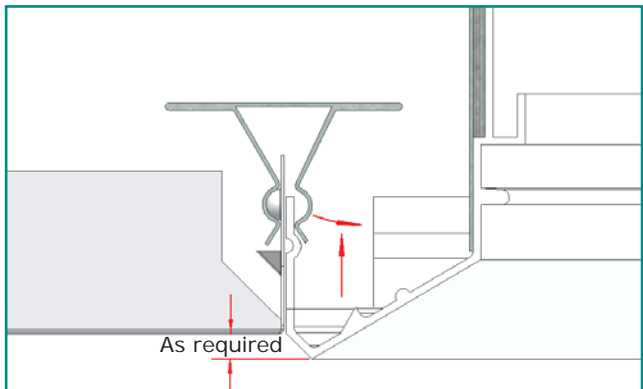


Figure 9: Adjust to required position



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Installation instructions:

10 Once you are happy with it's positioning, secure the plenum using the lock nuts on the drop rods.

11 Replace the core, by centralising it in the diffuser opening, whilst resting the bunny clips on the retaining ledge within the frame (**Figure 10 & 10a**).

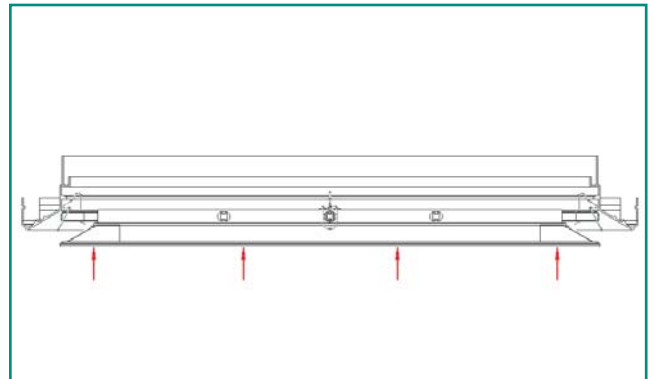


Figure 10: Locate core in diffuser opening

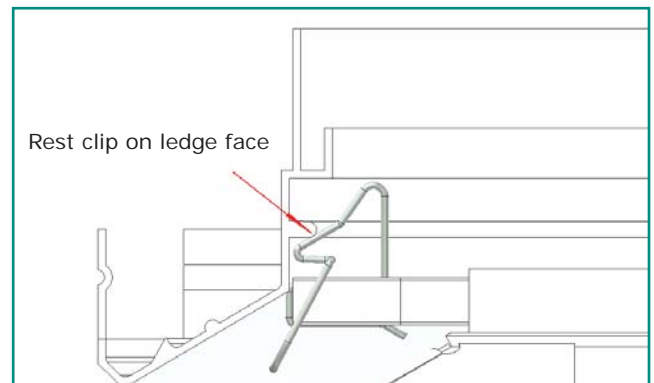


Figure 10a: Rest bunny clip on ledge

12 Carefully, push upwards to allow the bunny clips to re-engage (**Figure 11**). They will now spring back into the locked position (**Figure 11a**) so retaining the core in the diffuser.

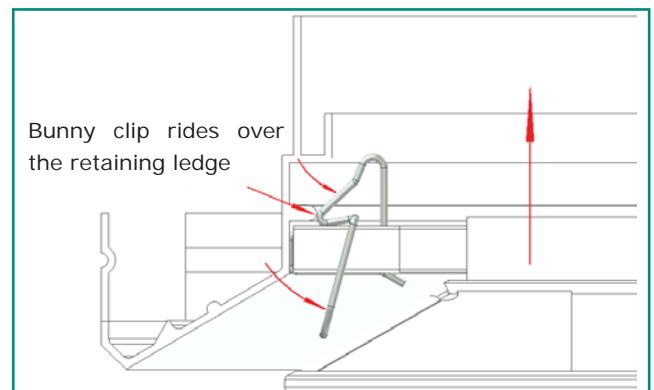


Figure 11: Clip rides over ledge

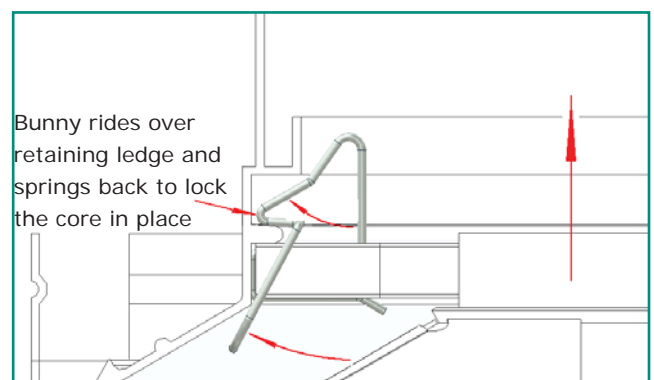


Figure 11a: Clip springs into position



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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.

If a deeper clean is required then simply remove the diffuser core as previously described, then clean the interior faces of the diffuser frame and the whole of the diffuser core then reassemble.



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

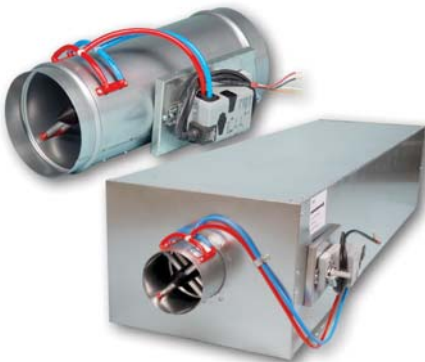
Designed to be installed in various ceiling systems, we have a complete range to suit both performance and aesthetic requirements. Most diffusers are made from aluminium and can be ordered with or without plenum boxes for easy duct work. Diffusers can be ordered in customer specified colours (PPM/G);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

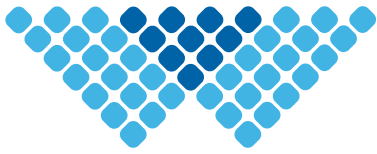
EXTERNAL LOUVRES

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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