

Operating and Maintenance

SDFC Series for Plasterboard ceiling



SDFC Series for Plasterboard ceiling

Product Description

SDFC Fixed Blade Swirl Diffusers

Tools Required

- 1 x Large cross head screwdriver
- 1 x Pop riveter
- 1 x ø3.5mm drill bit
- 1 x Power drill

Plenum Installation:

1- Install the plenum box in its desired position prior to fitting of the ceiling by suspending it from its mounting holes with drop rods (supplied by others). Raise or lower the plenum as required to give a dimension of 20 to 25mm from the proposed ceiling face (**Figures 1**). Once you are happy with it's position then secure the plenum in place using the lock nuts on the drop rods.

2- After the ceiling has been installed, mark out the required diffuser position then cut out the appropriate clearance hole size (**Figures 2**). The recommended hole sizes are as follows:

Model	Cutout Size
SDFC-125	160
SDFC-160	200
SDFC-200	250
SDFC-250	300
SDFC-315	370
SDFC-400	460

3- Offer up the diffuser into the ceiling opening making sure that the stack on the rear of the diffuser is correctly located in the plenum mounting collar (**Figures 3**).

Take the fixing screw from the fitting kit supplied, remove its plastic cap and secure the diffuser to the plenum mounting bar using hand tools only as shown in(**Figures 3a**).

Take care not to over tighten the screw as this could distort to the diffuser face.

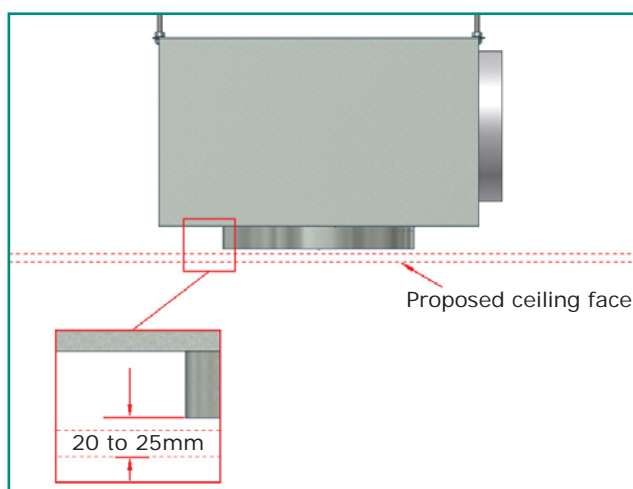


Figure 1: Install plenum box

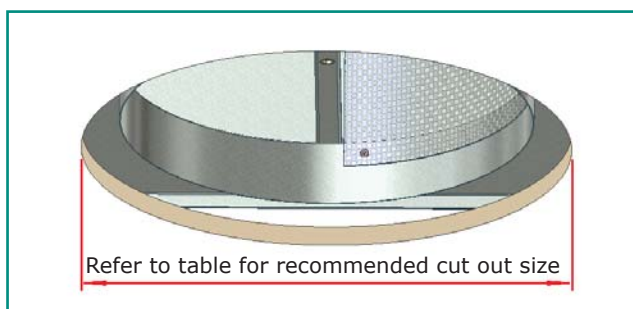


Figure 2: Cut out clearance hole

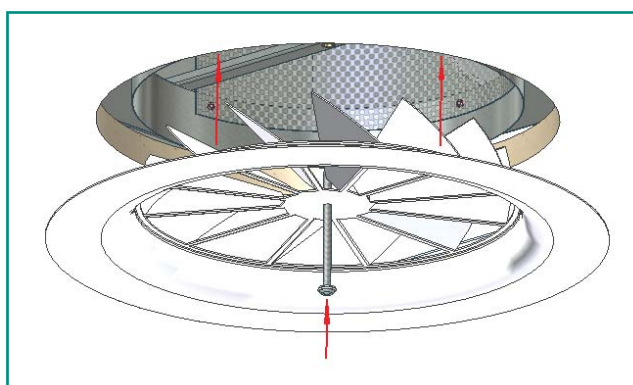


Figure 3: Offer up diffuser to ceiling opening

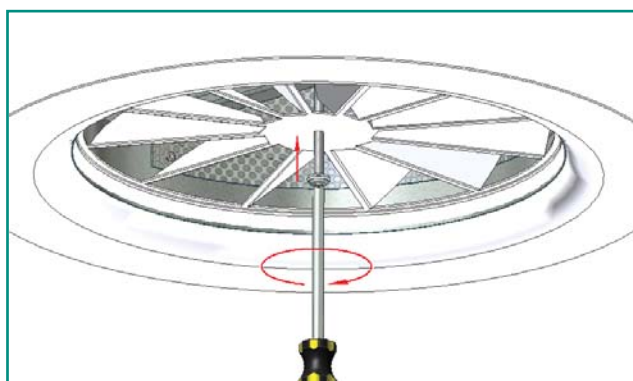


Figure 3a: Screw diffuser in place

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Plenum Installation:

4- Clip the plastic cap back over the head of the fixing screw (**Figures 4**).

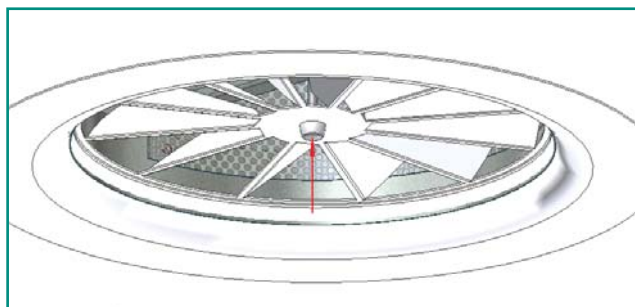


Figure 4: Fit plastic cap over screw

Duct Mount Installation

An alternative method of installing this range of diffusers is the use of a steel duct mount collar.

This allows rigid ductwork to be connected directly to the rear of the diffuser. These duct mounts are supplied to order, and the installation instructions are as follows:

1- Prior to the installation of the ductwork, fit the duct mount collar into the vertical section of the ductwork, by first orientating the collar so that it's mounting bar 'U' channel is open to the base of the ductwork.

2- Slide the collar up inside the ductwork until the end of the ductwork is level with the top of the swage line (**Figures 5**). Secure the collar to the ductwork by pop riveting or screwing them together (**Figures 5a**).

3- Install the ductwork in its desired position prior to fitting of the ceiling by suspending it from the floor slab with drop rods (supplied by others).

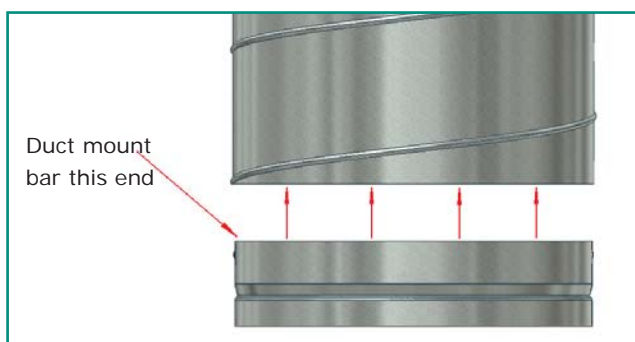


Figure 5: Insert collar in ductwork

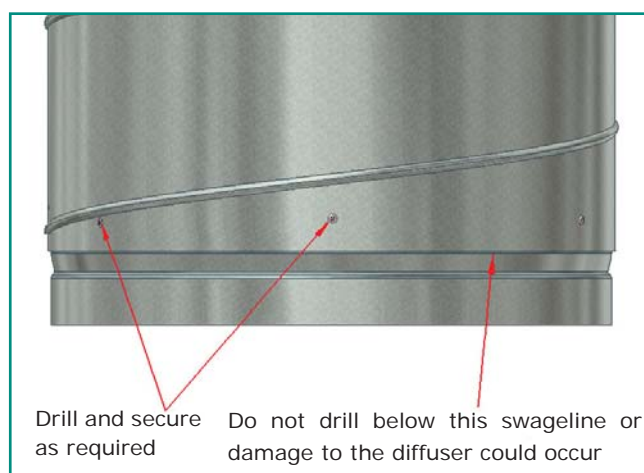


Figure 5a: Secure collar in place

4- Raise or lower the ductwork as required to give a dimension of 20 to 25mm from the bottom of the duct mount collar to the proposed ceiling face (**Figures 6**). Once you are happy with it's location then secure the ductwork in position using the lock nuts on the drop rods.

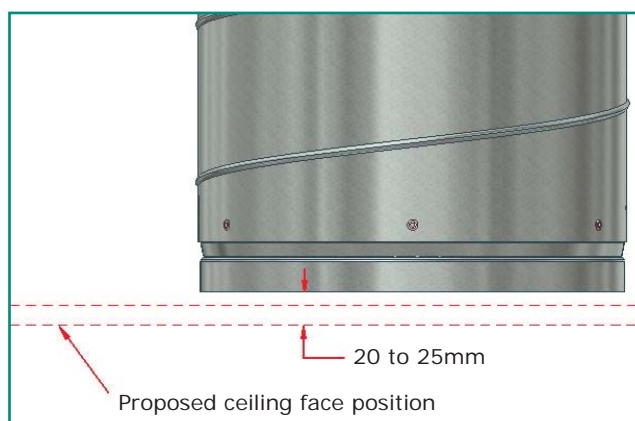


Figure 6: Position duct above the proposed ceiling face location

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Duct Mount Installation

5- After the ceiling has been installed, mark out the required diffuser position then cut out the appropriate clearance hole size (**Figures 7**). The recommended hole sizes are listed in the plenum installation instructions.

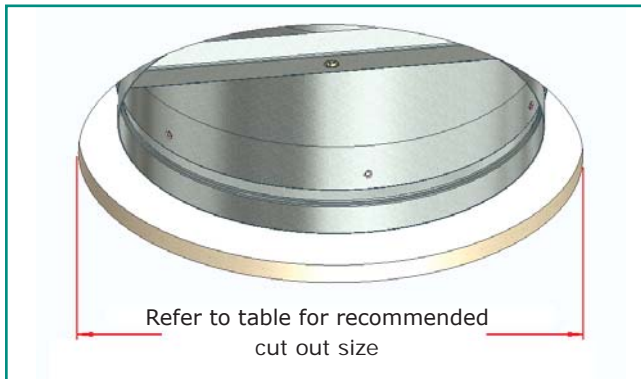


Figure 7: Cut clearance hole

6- Offer up the diffuser into the ceiling opening making sure that the stack on the rear of the diffuser is correctly located in the duct mounting Collar (**Figures 8**).

Take the fixing screw from the fitting kit supplied, remove its plastic cap and secure the diffuser to the plenum mounting bar using hand tools only as shown in (**Figures 8a**).

Take care not to over tighten the screw as this could distort to the diffuser face.

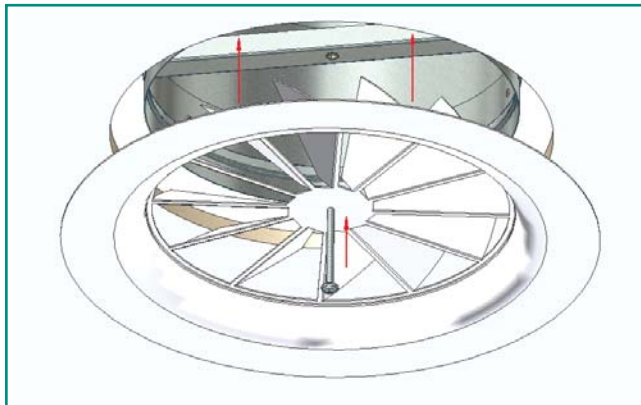


Figure 8: Offer diffuser into opening

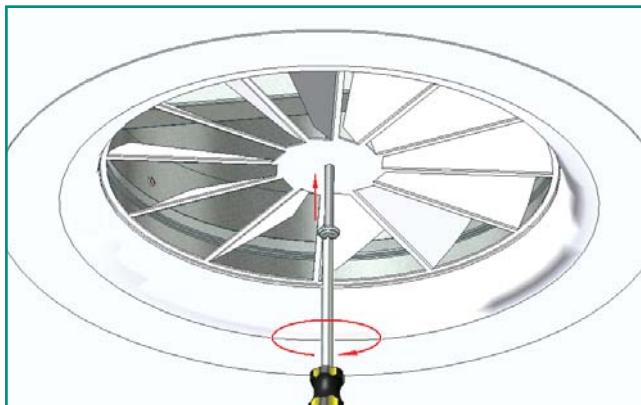


Figure 8a: Screw diffuser to duct collar

7- Clip the plastic cap back over the head of the fixing screw (**Figures 9**).

Cleaning and Maintenance:

To clean, use warm soapy water and a damp cloth. Wipe down the blades and face of the diffuser and leave to dry.

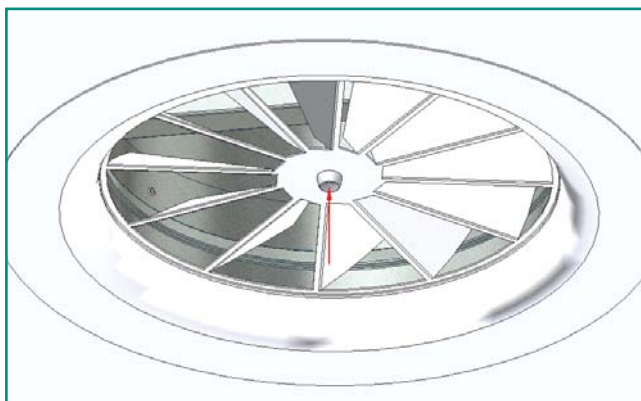


Figure 9: Refit plastic cap

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

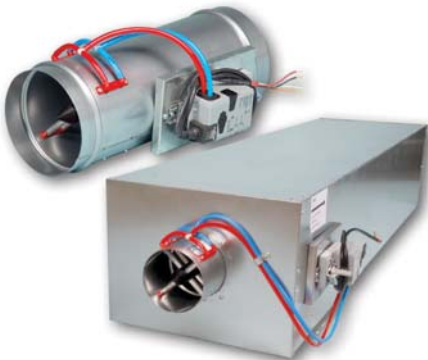
Designed to be installed in various ceiling systems, we have a complete range to suit both performance and aesthetical requirements. Most diffusers are made from aluminium and can be ordered with or without plenum boxes for easy duct work. Diffusers can be ordered in customer specified colours (PPM/G);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