

Damper - Vertical in existing drywall partition (SS + DWFX-F)

Health and safety

This process must be undertaken by competent persons. More than one person may be required to ensure the safe handling of large dampers and other materials.

Use must be made of access equipment to ensure unsafe practices are not used to approach walls or difficult access areas.

Standard site PPE should be used (minimum steel toe cap boots, hard hat); together with any protective eyewear, gloves and masks, when drilling or cutting is being undertaken. The latter should also be used when handling the wall construction materials, as defined by the material suppliers. If loud equipment is being used, hearing protection should be used.

All waste materials should be collected and disposed of as defined by the relevant supplier.

Damper installation method

A photo storyboard for this method is included in the appendix. This includes an example to show how to calculate the hole size.

- 1) Measure the overall damper casing size, include the PTC shroud, but do not include the peripheral flange
- 2) Calculate the finished hole size by adding 25mm \pm 5mm to both width and height
- 3) Calculate the hole to cut size by adding two board thicknesses to the finished hole width and height
- 4) Mark out the hole on the partition and cut it out, cutting the top and bottom edges first to maintain stability
- 5) Frame out the hole with stud and track and cover this with board. Finish edges with joint filler
- 6) Drill clearance holes in the damper flange at 150mm centres and such that they will allow screws to pull into the stud and track around the hole
- 7) Install the damper and fasten
- 8) Back fill with mineral/stone wool and patress over this down to the spigot

Actuator fitting

- 1) The control mode/actuator should then be fitted using the instructions supplied with it.
- 2) Using the supplied drilling template, drill into the ductwork and fit the Electrical Thermal Release (ETR) into the duct (as good practice, this should be towards the top of the duct)
- 3) A special feature of the Actionair SmokeShield modes is that they may be adjusted from pointing straight out along the duct (standard configuration) through 90° to point either up or down if required.
- 4) The mode should be wired into the system using the site wiring detail, plus the details shown on the label.

Note: If the mode/actuator fitting instructions are missing, please contact the Actionair sales office for a new copy.

Commissioning

The procedure detailed under periodic maintenance should be followed

Periodic maintenance

As detailed in BS 5588-12

- 1) For dampers this is generally at least once per year for units with spring operation.
- 2) Units operating in dust laden atmospheres, should be checked more often to suit the severity of the system
- 3) Units associated with systems may be required to be checked, as part of the system, as often as once per week or month to ensure ongoing confidence in the life safety system. This may be seen as analogous to fire alarm systems.

Procedure

- 1) The units should be carefully inspected and cleaned of dust and debris
- 2) The units should then be lubricated with a light oil, by wiping this over all the surfaces
- 3) The mode should be operated to ensure that it is moving the blades from open to closed and the reverse.
- 4) If the microswitches (in the mode) are being used, it should be checked that they are actually indicating that the blades are open or closed. This is done by running a cycle and checking both the blades (open and closed) and the indication that the microswitches are feeding back to.

