

Rigid Wall or Floor construction (CSS)

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.

General

This method of installation is effectively suitable for most wall types of rigid construction, where they are of an equal or greater density to the lightweight board partition tested. Details shown are essentially for an existing dry wall partition. However this installation method may be used for masonry or block work walls or concrete floors, as long as they have a greater density than the partition shown. Also a drywall partition may be built around the damper, as long as the clearances are followed.

Damper installation method

- 1) Measure the overall damper casing diameter. Calculate the finished square hole size by adding 10mm ± 5mm to both width and height (For drywall partitions, calculate the hole to cut size by adding two board thicknesses to the finished hole width and height).
- 2) Mark out the hole on the partition and cut it out, cutting the top and bottom edges first to maintain stability
- 3) For drywall partitions, frame out the hole with stud and track and cover this with board. Finish edges with joint filler
- 4) Install the damper and fasten one Installation Flange so that the blade in it's closed position is in the centre of the wall
- 5) Fill the 4 triangular voids between the damper and the edges of the hole with fire rated stone wool
- 6) Fit the remaining Installation Flange

Actuator

- 1) The control mode/actuator is supplied fitted. This should be checked for damage and the manual operation of the damper checked.
- 2) Check that the Electrical Thermal Release (ETR) is still firmly connected through the damper case. If it is not, the actuator/control mode may not work electrically.
- 3) A special feature of the Actionair CSS 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 9999:2008

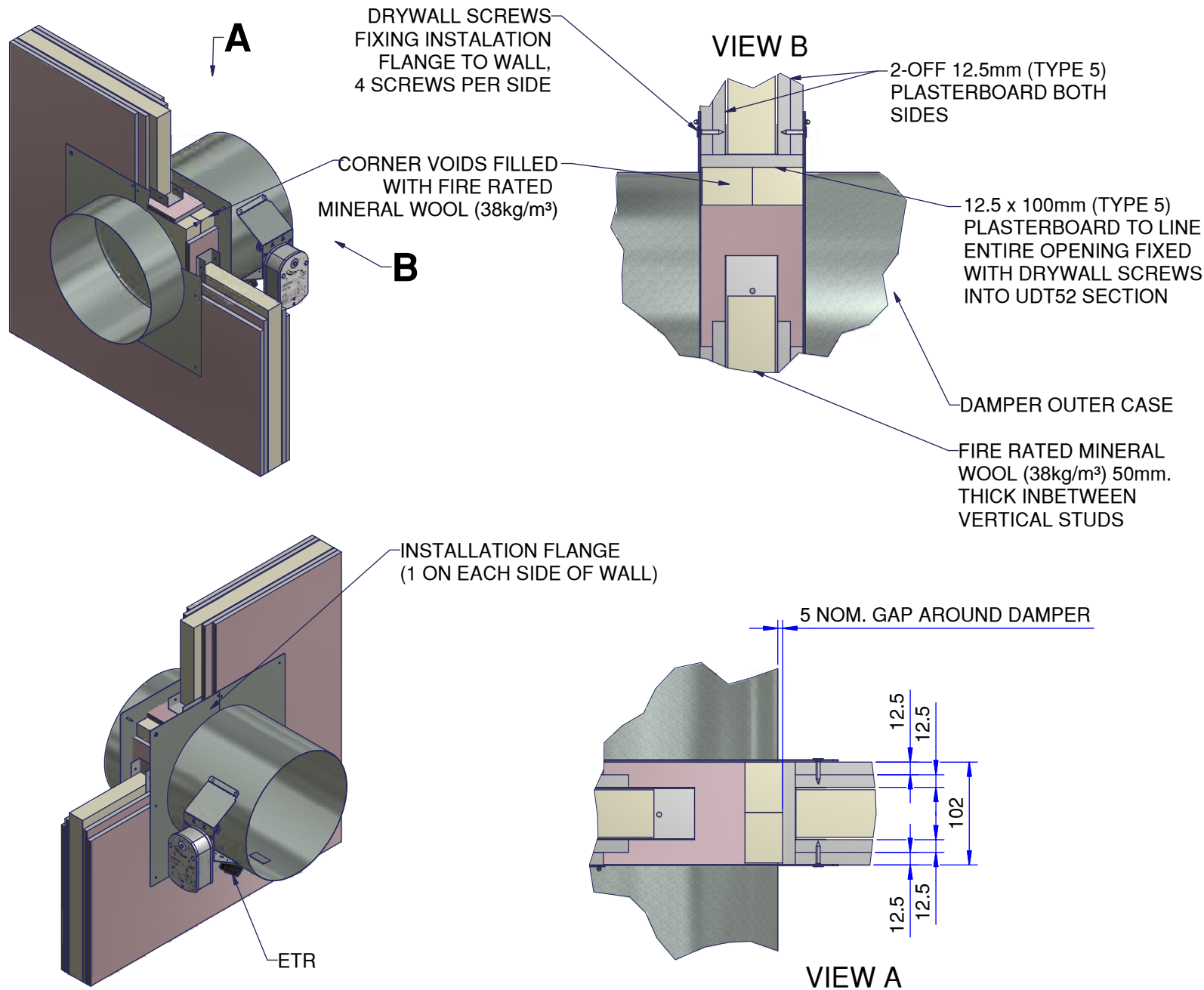
- 1) For dampers this is generally at least once per year for units with spring operation.
- 2) Units operating in dust laden atmospheres, should be checked more often to suit the severity of the system
- 3) Units associated with systems may be required to be checked, as part of the system, as often 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 micro switches (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 micro switches are feeding back to.

AAF10718

actionair INSTALLATION DETAIL



CONNECTING DUCTWORK OMMITED FOR CLARITY

IF YOUR PROPOSED INSTALLATION DETAIL DIFFERS FROM THAT SHOWN, PLEASE DISCUSS THIS WITH THE BUILDING CONTROL AUTHORITY (BCA) USING THIS DOCUMENT AND THE ASSOCIATED FIRE TESTS, ASSESSMENTS AND OTHER DOCUMENTS SHOWN BELOW, SO THE BCA CAN DECIDE WHETHER YOUR PROPOSED METHOD DIFFERS SUFFICIENTLY FOR IT TO BE UNACCEPTABLE TO THEM (THE BCA)

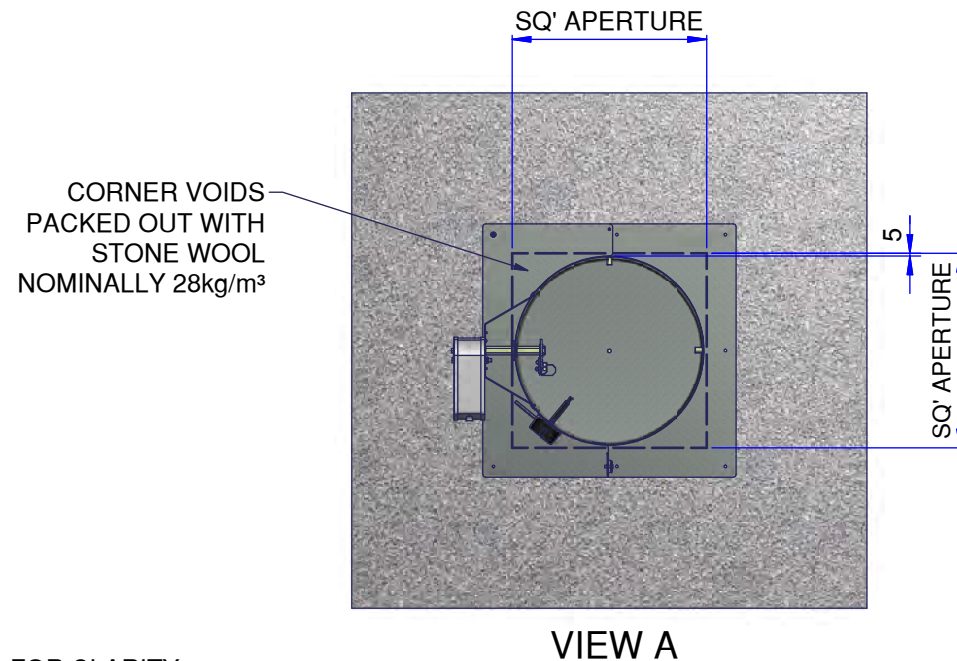
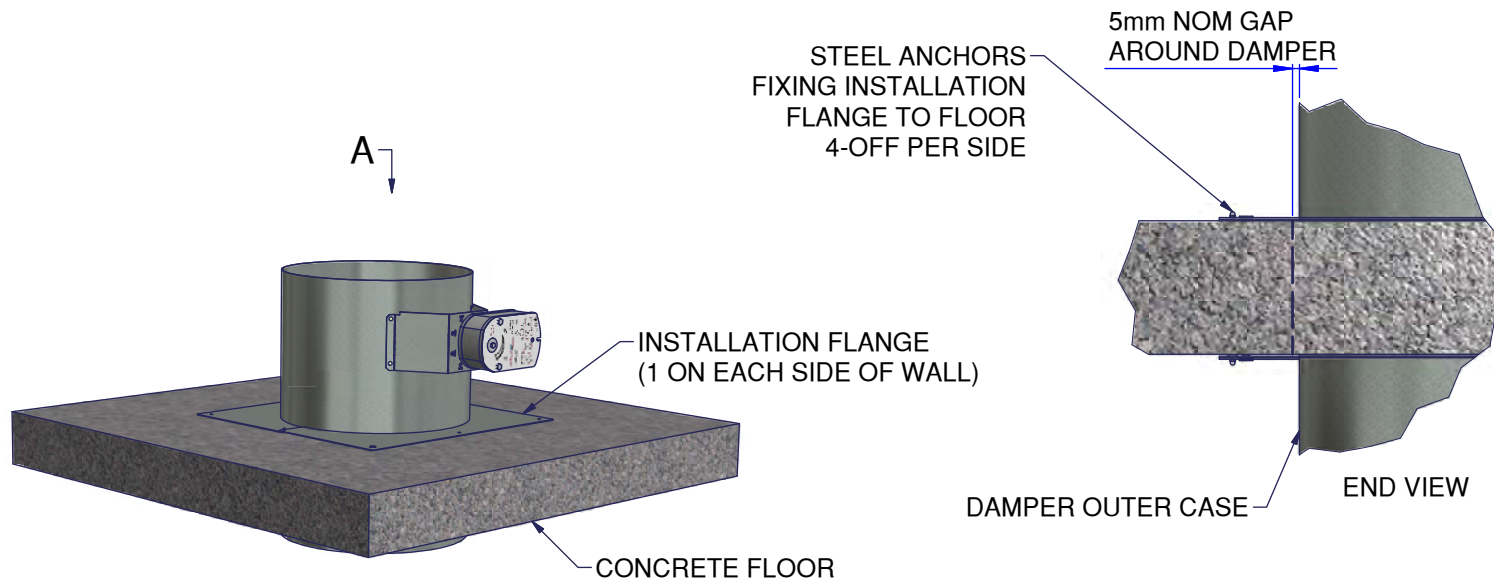
APPLICABLE TEST REPORT - BS EN1366-2 BRE 238072

ACTIONAIR REF: AA/F10718

120 MINUTES FIRE RESISTANCE INTEGRITY & LEAKAGE

www.actionair.co.uk

VERTICAL APPLICATION
CIRCULAR SMOKE SHIELD
DAMPER SIZE RANGE:
Ø100mm - Ø355mm



CONNECTING DUCTWORK OMITTED FOR CLARITY

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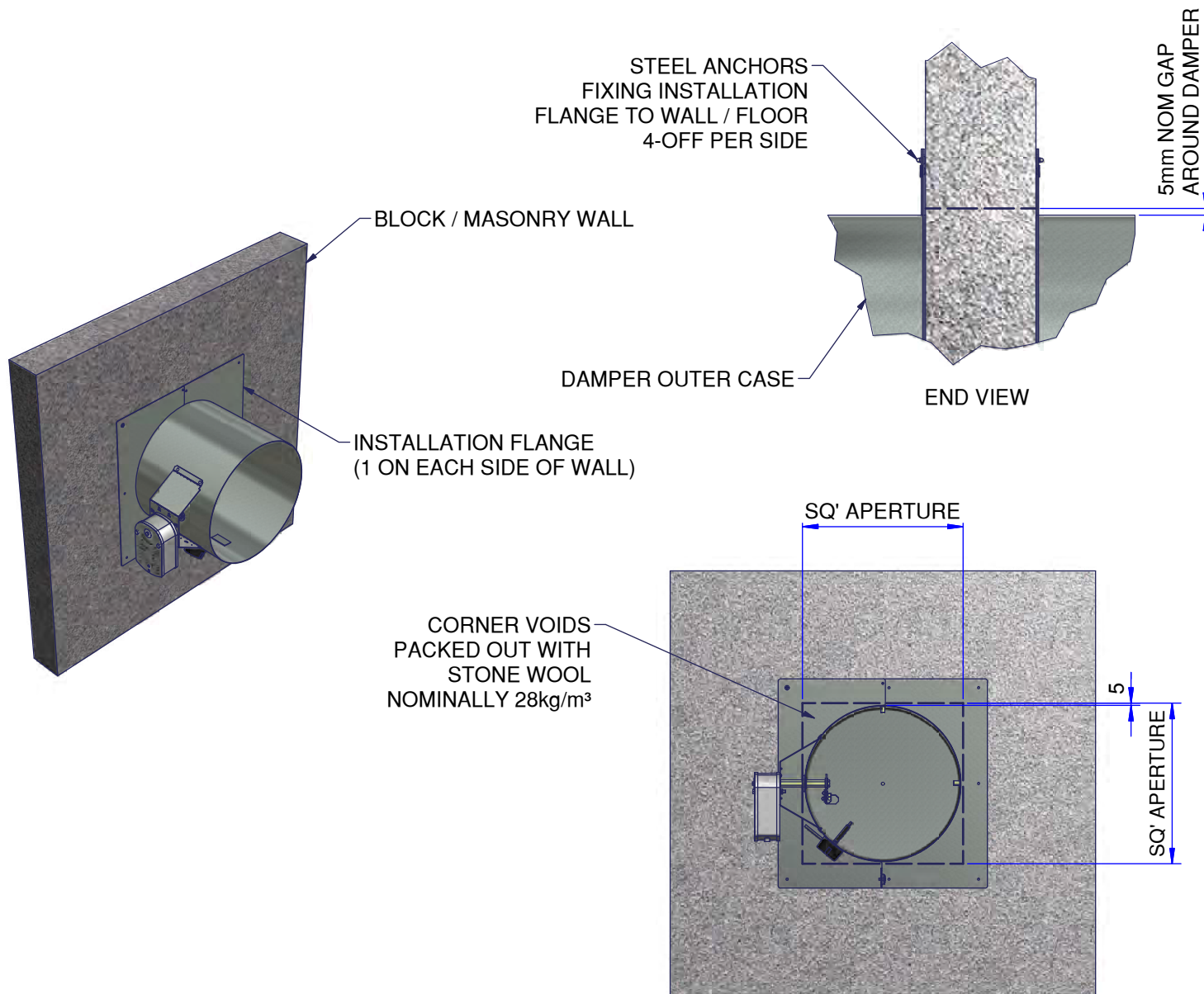
APPLICABLE TEST REPORT - BS EN1366-2 BRE 246994

ACTIONAIR REF: AA/F10719

120 MINUTES FIRE RESISTANCE INTEGRITY & LEAKAGE

www.actionair.co.uk

HORIZONTAL APPLICATION
CIRCULAR SMOKE SHIELD
DAMPER SIZE RANGE:
Ø100mm - Ø355mm



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APPLICABLE ASSESSMENT
BS EN1366-2
BRE CC270714C

ACTIONAIR REF: AAF10720

120 MINUTES
FIRE RESISTANCE
INTEGRITY & LEAKAGE

www.actionair.co.uk

VERTICAL APPLICATION
CIRCULAR SMOKE SHIELD
DAMPER SIZE RANGE:
Ø100mm - Ø355mm