

The FDR fire damper is installed on the ventilation duct inlet on walls or ceilings between fire compartments. The FDR fire damper can be installed on concrete and masonry walls or ceilings/plates or on lightweight panel walls. The fire-resistance class of the FDR damper is EI 120 (v_h) S.

Installation on concrete and masonry walls or slabs:
When the damper is installed on a wall, the blade shaft must always be horizontal.

1

The size of the installation hole is the nominal size of the side of the product +100 mm (W+100) x (H+100).



2

After delivery, remove the protective plastic cover and ensure that the fire damper is intact.



3

The fire damper is centred in the installation hole.



4

Fix the fire damper on a structure (wall / plate) via the flange with screws.



5

After fixing the product, check the diagonal dimension.



6

Verify the correct operation of the product by closing and opening the shutoff blade on the electric actuator with the power off, using the hexagonal spanner (included in the delivery). With the manual model, this is done by setting the shutoff blade by the setting handle and releasing the locking pin, which closes the blade.



7

During grouting of the installation hole, the fire damper and actuator shall be covered with plastic, for instance.



8

Grouting and sealing will be performed through the entire thickness of the wall with fine-grained concrete or fire prevention mastic, such as GBG (from Palokatkomiehet Oy), CP 637 (Hilti), or Sealfire W1000 (Würth).



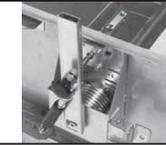
9

Grouting can be performed also from the flange side, by opening the filling doors (and closing them afterwards).



10

The manual actuator is set.



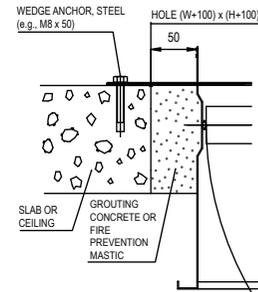
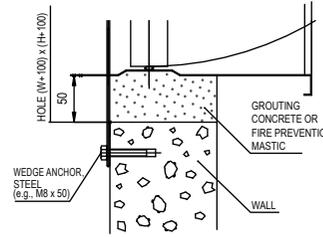
11

The ducts are attached to the damper using a fillet joint.

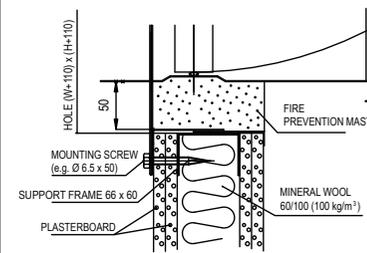


Installation on concrete and masonry walls or slabs:

In installation of the damper on a wall, the blade shaft must always be horizontal.



Installation on lightweight or panel walls:

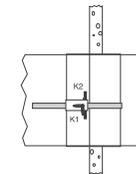


Testing of a fire damper equipped with a manual actuator:

The fire damper is opened and the spring set by turning the setting handle anti-clockwise. To lock the damper in this position, lift the locking pin (with black knob) in the fuse shaft. The fire damper is closed by releasing the locking pin, which closes the blade. If the setting fails, the released fuse must be replaced and the correct operation of the new fuse verified. Simultaneously, the electrical and mechanical operation of the microswitches, which are available as accessories, should be tested.

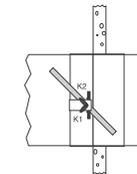
Wiring diagram for the microswitches of a manual model

Limit switches K1 and K2: Pizzato, type FR 538-HO



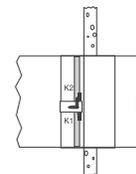
Damper open

K1: 13/14 closed
21/22 open
K2: 13/14 open
21/22 closed



Damper running

K1: 13/14 open
21/22 closed
K2: 13/14 open
21/22 closed

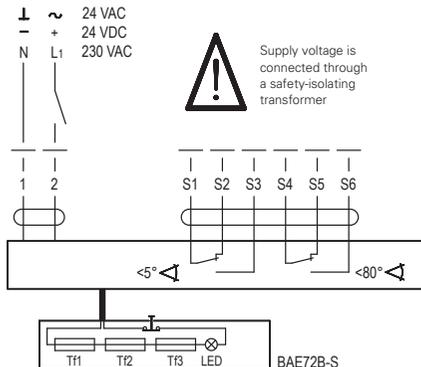


Blade closed

K1: 13/14 open
21/22 closed
K2: 13/14 closed
21/22 open

Connection and testing of a damper equipped with an actuator:

The supply and operating voltage of the motor shall be verified prior to connection (24 VAC/VDC, 230 VAC). The electric actuator can be tested by means of the fuse switch when the power is on, or by means of a hexagonal spanner (included in the delivery) when the power is off. The final testing is always performed via the control system. See also the instructions on the motor's data plate. The fire damper opens when the power is on, and it closes when the power is off.



FIRE DAMPER FDR INSTALLATION INSTRUCTIONS AND CERTIFICATE

1.9.2012

www.halton.com

Halton

Installation on lightweight or panel walls:

When one is installing the damper on a wall, the blade shaft must always be horizontal.

1

The size of the installation hole is the nominal size of the side of the product plus 110 mm: (W+110) x (H+110).



2

A steel frame or a wooden joist must be mounted on the edges of the opening, supported against the wall joists.



3

Two installation frames (telescopic model) are fitted in the installation hole, one from each side.



4

The installation frames are attached to each other and fixed to the frame on the edges of the opening with steel screws of, for instance, Ø 4.8 x 25.



5

Fix the fire damper in the middle of the opening via the flange with screws (for instance, 6.5 x 50). Make sure that the screws are long enough to reach the steel frame or the wooden joist.



6

After fixing the product, check the diagonal dimension. Verification of the damper's correct operation is performed as in installation on a masonry wall (see panel 6).



7

During grouting of the installation hole, the fire damper and actuator shall be covered with plastic, for instance. Grouting and sealing will be performed through the entire thickness of the wall with fire prevention mastic, such as GBG (from Palokatkomiehet Oy), CP 637 (Hilti), or Sealfire W1000 (Würrth).



8

The grouting can be performed also from the flange side, by opening the filling doors (and closing them afterwards).



Modular installation

Dampers installed in the same duct:

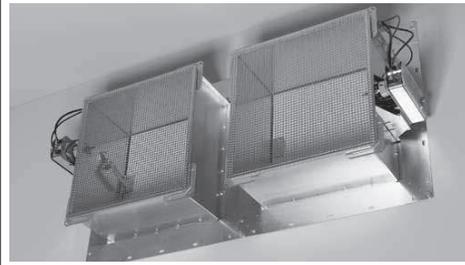
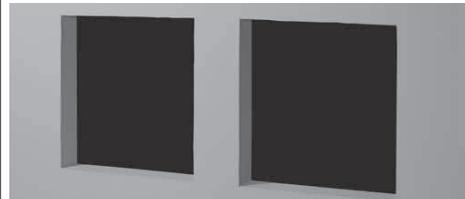
A space of at least 100 mm shall be left between fire dampers for installation/joining. The dampers are installed in the same way as individual dampers, but with the flanges overlapping. In the seam, the screw holes in the flanges are aligned one on the next. Insert strips of sheet metal (not included in the delivery) to cover and seal the spaces along the duct between the products. With a duct gasket, seal against the difference in level when installing the module in the ductwork.

Adjacent dampers in separate ducts:

A space of at least 200 mm shall be left between fire dampers for installation/joining. The dampers are installed in the same way as individual dampers, but with the flanges face to face.

Subsequent grouting of the space between the products and the installation hole:

For grouting of the product perimeters, follow the instructions given for full wall installation (see items 8 and 9) or lightweight wall installation (see items 7 and 8). Also grouting between products shall be done against the wall, extending for the entire thickness of the wall.



Installation certificate applying for the installation and control of fire dampers. This installation certificate must be filled in for each installed fire damper. This installation certificate applies only to Halton products.

CE marked with EC Certification of Conformity number 0809 – CPD – 0759.

Name of the installation location: _____

Address: _____

Individual product number from the type plate (production order no.): _____

Contractor contact details:

Company name: _____

Company telephone no.: _____

E-mail or Web address: _____

Installer's telephone no.: _____

Installer name(s): _____

Date of installation: _____

Installation location identification (section/floor/room): _____

Notes and considerations: _____

I hereby verify that the installation of this fire damper and ensuring of the tightness of the gland have been performed according to the manufacturer's installation instructions:

Place and date: _____, _____, 20_____

Installer's name and signature: _____

Installation supervisor's name and signature: _____

This installation certificate must be enclosed with the deed of transfer of the building in question, and a copy of it must be given to rescue officials upon request.