

FIREPRO

CI/SfB

FD40R DATASHEET – Nov 14

FIRE PROTECTIVE BUILDING PRODUCTS

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Product specifications can change. Contact us to ensure you have our latest datasheet

FD40R INTUMESCENT FIRE DAMPER for CIRCULAR DUCTS (STANDARD SIZES)

FIRE TESTED TO AUSTRALIAN, NZ & BRITISH STANDARDS

ECONOMICAL & SIMPLE INSTALLATION

NO MOVING PARTS

NO CONTINUING OPERATIONAL CHECKS REQUIRED

Operation

Firepro FD40R Intumescent Fire Dampers are installed with ducting systems where they pass through fire rated walls and floors. In normal conditions the damper allows air-flow through the duct. When a fire occurs the intumescent material within the damper swells rapidly to form a non-combustible, insulating fire stopping barrier.

Description

Firepro FD40R Fire Dampers consist of a circular steel tube (spigot) with a circular grill inside. The grill contains the intumescent material. The damper comes complete with fixing brackets for the most common method of application.

The circular steel spigot is galvanised steel with a length of 350mm. Spigot diameters are 100mm, 125mm, 150mm, 200mm, 250mm, 300mm. All measurements are nominal.

Fire Testing

Firepro FD40R Intumescent Dampers are tested to AS1530:4, BS476:20-22, AS/NZ1668:1 and AS1682:1.

Floors: When installed in concrete floors FD40R achieves -/120/90 in sizes up to 300mm diameter. When a 400mm strip of FD40-I insulation is applied to the exposed damper and ducting above the floor -/120/120 is achieved for FD40R up to 300mm diameter.

Walls: When installed in fire rated Gypsum Plasterboard, Concrete or Brick walls, FD40R achieves -/120/60 without additional FD40-I insulation and -/120/120 with the insulation applied to both sides of the damper and ducting.

Fitting

Installation is simple and brackets for the most common installation method are included with all orders. A bead of Firepro M707 Intumescent Sealant is applied around the outside of the spigot in a continuous bead on both sides over the wall or floor joint. FD40-I Insulation Strips are used if 2 Hour insulation is required. See reverse for application instructions.

For Other Situations

FD40R is one of a wide range of intumescent grills and fire dampers available from Firepro.

For square and rectangular intumescent grills see datasheets for FG10, FG40, FG50, and FG51.



SIZES MANUFACTURED	
FD40R-100	100mm Nominal Diameter
FD40R-125	125mm Nominal Diameter
FD40R-150	150mm Nominal Diameter
FD40R-200	200mm Nominal Diameter
FD40R-250	250mm Nominal Diameter
FD40R-300	300mm Nominal Diameter

NOTE: This Datasheet should be read in conjunction with the Firepro FD40R Installation sheet.

NOTE: The technical information and suggestions for use and application presented herein represent the best information available to us and are believed to be reliable. If used beyond the situations detailed on this datasheet we advise confirming their suitability before installation. All dimensions are nominal.

We reserve the right to make changes or to withdraw designs and products without notice.

INSTALLATION INSTRUCTIONS

FD40R Circular Fire Damper (in floors)

Concrete Floor

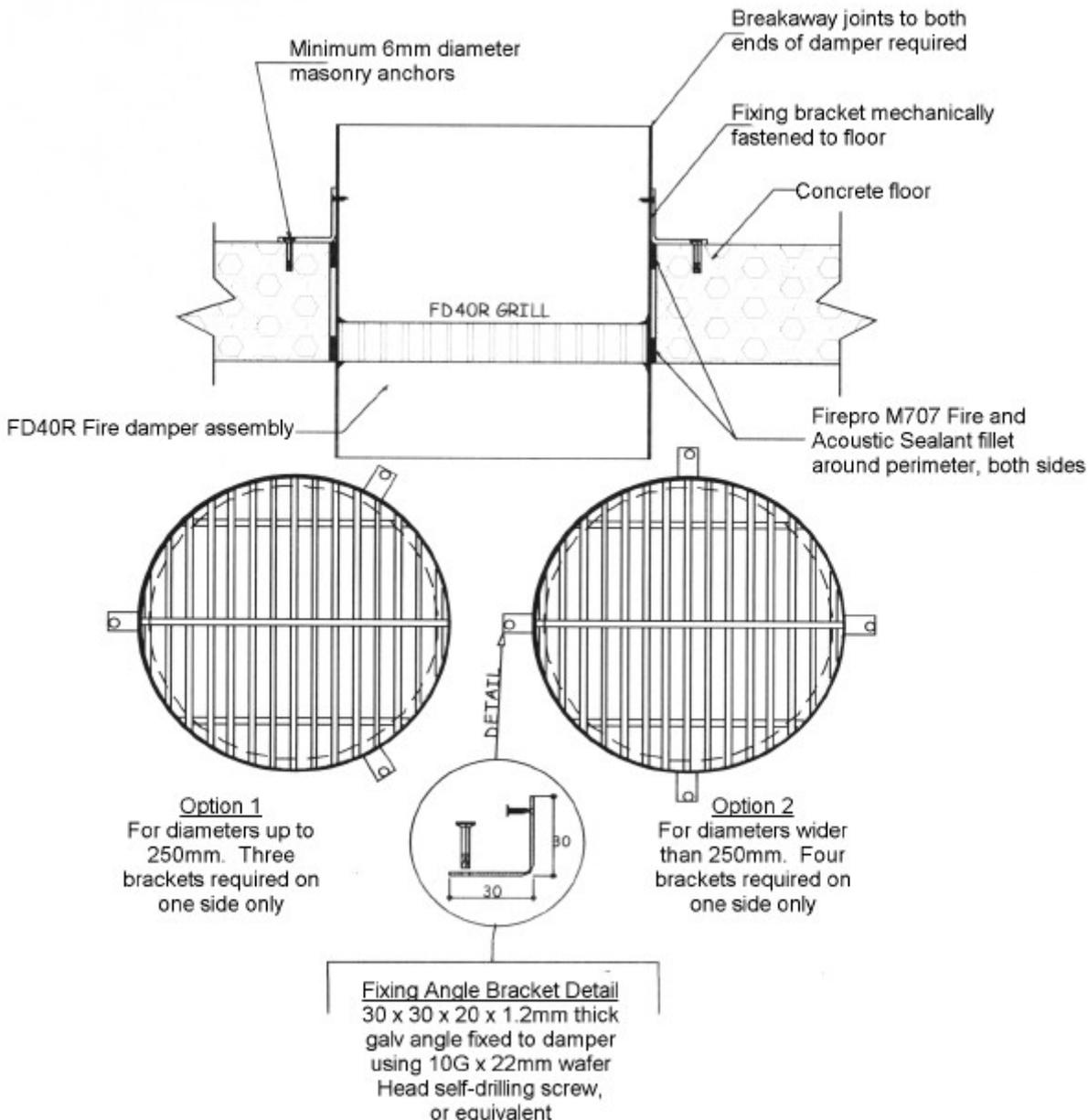
Fix the supplied mounting brackets to damper, with a minimum of 10G x 22mm Wafer Head Self Drilling Screws, using either three or four brackets as per option 1 or 2 below. Ensure that the mounting bracket is positioned so that when the damper is inserted into the floor that the entire thickness of the grill is within the floor thickness

Fix mounting brackets, using a minimum 6mm masonry anchor, to perimeter of concrete opening.

Apply Firepro M707 Fire and Acoustic Mastic around the perimeter of the damper on both sides of the floor ensuring that the mastic is applied to a minimum depth of 15mm between the damper and floor. A maximum clearance of 10mm applies.

Fix ductwork to damper using approved breakaway connections compliant with AS1682.2.

For 2 Hour insulation apply 400mm wide FD40-I Insulation Strip to the damper and ducting above the floor for damper sizes up to 300mm diameter. (Not required for 1 Hour Insulation).



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INSTALLATION INSTRUCTIONS FD40R Circular Fire Damper (in walls)

Masonry Wall (Bolted on One Side Application Method)

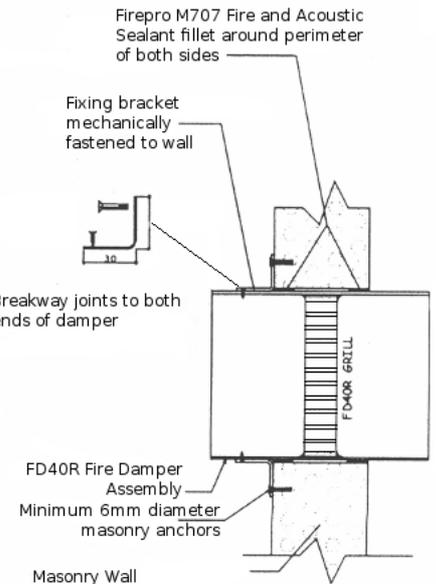
Fix the supplied mounting brackets to damper, with a minimum of 10G x 22mm Wafer Head Self Drilling Screws, using either three or four brackets. Ensure the mounting bracket is positioned so that when the damper is inserted into the wall that the entire thickness of the grill is within the wall thickness.

Fix brackets, using a minimum 6mm masonry anchor, to perimeter of concrete opening.

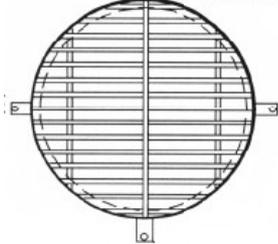
Apply Firepro M707 Fire and Acoustic Mastic around the perimeter of the spigot on both sides of the wall ensuring that the mastic is applied to a minimum depth of 15mm between the spigot and wall. Allow a maximum clearance of 10mm around sides.

Fix ductwork to damper using breakaway connections compliant with AS1682.2.

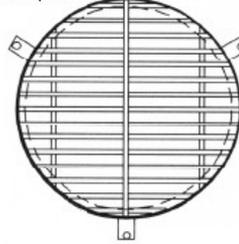
For 2 Hour insulation apply 400mm wide FD40-I Insulation Fire Strip to exposed length of damper and ducting (Not required for 1 Hour Insulation).



For diameters wider than 250mm
four brackets required



For diameters up to 250 mm
three brackets required



FIXING ANGLE BRACKET DETAIL

30 X 30 X 20 X 1.2mm thick
galv angle fixed to damper using
10g x 22mm wafer head
self-drilling screws, or equivalent

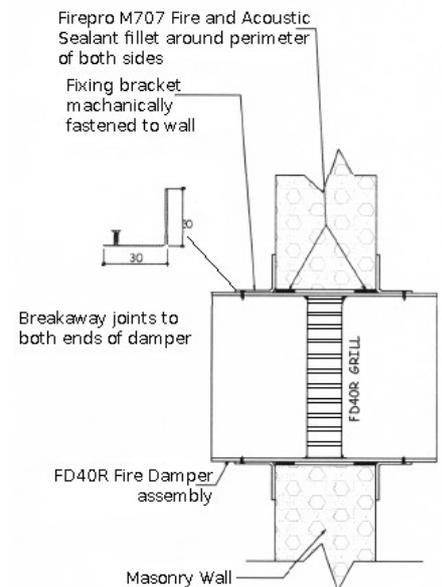
Masonry Wall (Clamped Application Method)

Fix the supplied mounting brackets to damper, with a minimum of 10G x 22mm Wafer Head Self Drilling Screws, using either three or four brackets as per option 1 or 2. Ensure that the mounting bracket is positioned so that when the damper is inserted into the wall that the entire thickness of the grill is within the wall thickness.

Apply Firepro M707 Fire and Acoustic Mastic around the perimeter of the spigot on both sides of the wall ensuring that the mastic is applied to a minimum depth of 15mm between the spigot and wall. Allow a maximum clearance of 10mm around sides.

Fix ductwork to damper using breakaway connections compliant with AS1682.2.

For 2 Hour insulation apply 400mm wide FD40-I Insulation Fire Strip to exposed length of damper and ducting (Not required for 1 Hour Insulation).



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INSTALLATION INSTRUCTIONS continued

FD40R Circular Fire Damper

Plaster Board and Other Framed Walls

Plasterboard Walls

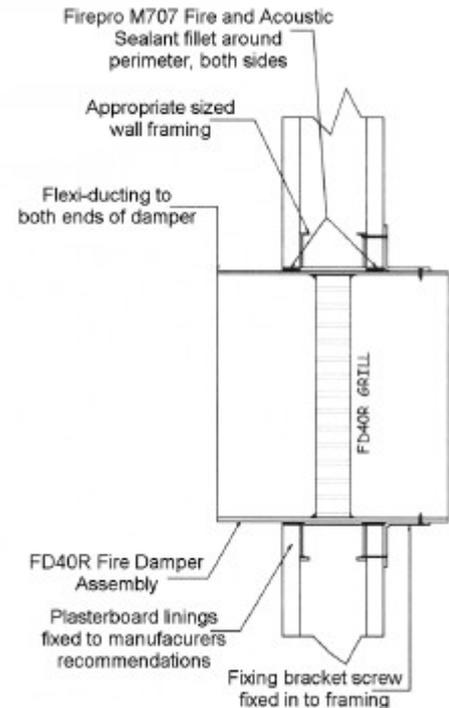
Fix the supplied mounting brackets to damper, with a minimum of 10G x 22mm Wafer Head Self-drilling Screws, using either three or four brackets as per option 1 or 2. Ensure that the mounting bracket is positioned so that when the damper is inserted into the wall that the entire thickness of the grill is within the wall thickness.

Fix brackets, using appropriate sized dry wall screws, to wall.

Apply Firepro M707 Fire and Acoustic Mastic around the perimeter of the damper and wall. Allow a maximum clearance of 10mm around sides.

Fix flexi-ducting to damper.

For 2 Hour insulation apply 400mm wide FD40-I Insulation Strip to each exposed length of Damper and ducting. (Not required for 1 Hour Insulation).



Plasterboard Walls (Alternative Angle Clamp method)

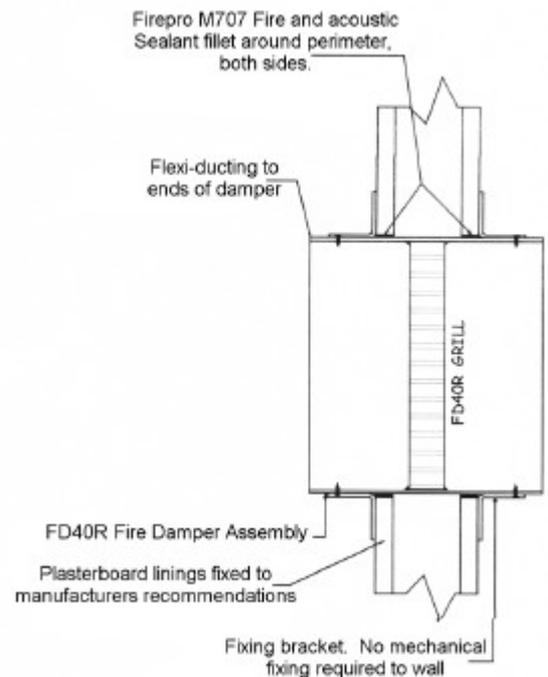
Fix the supplied mounting brackets to damper, with a minimum of 10G x 22mm Wafer Head Self-drilling Screws, using either three or four brackets as per option 1 or 2. Ensure that the mounting bracket is positioned so that when the damper is inserted into the wall that the entire thickness of the grill is within the wall thickness.

Fix angle brackets, using appropriate sized dry wall screws, to the damper only on both faces of the wall.

Apply Firepro M707 Fire and Acoustic Mastic around the perimeter of the damper and wall. Allow a maximum clearance of 10mm around sides.

Fix flexi-ducting to damper.

For 2 Hour insulation apply 400mm wide FD40-I Insulation Strip to each exposed length of Damper and ducting. (Not required for 1 Hour Insulation).



NOTE: This Installation Sheet should be read in conjunction with the Firepro FD40R Datasheet.