Fire Rated Door Transfer Grilles



Polyaire Fire Rated Door Transfer Grilles allow air to move freely between rooms in normal conditions, while helping to maintain the fire resistance of the door, wall or duct they are fitted into.

At the heart of the set is a 38mm intumescent fire block. When exposed to the heat of a fire, the intumescent slats swell to many times their original size and close the aperture, forming a solid barrier against the passage of fire and smoke.

Supplied as a set: one pair of Polyaire cover grilles, one fitted to each face of the door, with the fire rated block sandwiched between them in the door aperture. Cover grilles can be finished in any RAL colour to suit the interior. Cover grilles finished to any RAL colour; fire block standard finish is black. Cover grilles must not touch the Pyrogrille fire block.

Features & Benefits

- Up to 60 minutes fire integrity in timber fire doors (tested to BS EN 1634-1:2014)
- Up to 120 minutes fire integrity in walls and ducts (BS 476: Part 20: 1987)
- Independently assessed by Warringtonfire: Assessment Report WF 407822
- Slim 38mm fire block suits standard fire door leaf thicknesses
- Approximately 60% free area for effective air transfer
- No moving parts, so no routine maintenance
- Square, rectangular and circular sizes, made to suit the aperture
- Suitable for positive and negative pressure positions, full door height
- Cover grilles finished to any RAL colour; fire block standard finish is black

Fire Performance & Maximum Sizes

Application	Fire Integrity	Test / Assessment Basis	Maximum Grille Size
Timber fire door (FD30)	30 minutes	BS EN 1634-1:2014, assessed in WF 407822	Up to 750mm in height or width, max area 0.45m^2
Timber fire door (FD60)	60 minutes	BS EN 1634-1:2014, assessed in WF 407822	Up to 690mm in height or width, max area 0.42m^2
Steel stud or blockwork wall	60 minutes	BS 476: Part 20: 1987, assessed in WF 407822	Up to 750mm in height or width, max area 0.45m^2; or up to 850mm W x 200mm H
Steel stud plasterboard wall	120 minutes	BS 476: Part 20: 1987 (WF 391348)	600 x 600mm (as tested)
Circular, direct in blockwork wall	Up to 120 minutes	BS 476: Part 20: 1987, assessed in WF 407822	Up to 600mm diameter
Square duct	Up to 120 minutes	BS 476: Part 20: 1987, assessed in WF 407822	Max area 0.28m^2

Size limits apply to one dimension at a time, not both together. In fire doors, the door manufacturer's fire test evidence and door leaf requirements (for example, grille to leaf edge distance) take precedence. Always check the maximum aperture permitted for the specific door leaf.

Technical Details

Component	Specification
Fire block	Intumescent air transfer grille, 38mm thick (40mm variant also covered by the assessment)
Free area	Approximately 60%
Fire block finish	Black as standard; other colours available on request
Cover grilles	Pair of Polyaire cover grilles, one each side of the door, sitting over the aperture. Powder coated to any RAL colour
Shapes	Square, rectangular and circular. Circular sizes to suit standard and non-standard ducting
Moving parts	None
Fire seal at perimeter	Pyromas A intumescent sealant, applied to both sides

Installation

- The fire block has predrilled holes in its side frame. Fix by screwing through the side frame into the aperture wall.
- Seal any gap around the block perimeter with Pyromas A intumescent sealant on both sides.
- Fit the cover grilles over the aperture on each face of the door.
- Circular grilles in ducts: screw through the duct wall into the grille frame, then seal the perimeter on both sides.
- Not for use in areas of high or constant humidity.
- Duct applications are not suitable for systems with forced extraction through the grille, unless the system shuts down when fire is detected.
- Installation should be carried out by a competent installer, in line with the tested method.

Maintenance

With no moving parts, no maintenance is required. A periodic inspection and wipe down with a damp cloth is recommended. Do not immerse in water.

How to Order

When ordering, please state:

- Fire resistance required (30, 60 or 120 minutes)
- Application: timber fire door, wall or duct
- Aperture width and height, or diameter for circular
- Door leaf thickness (door applications)
- Cover grille RAL colour, or fire block only
- Example: Fire Rated Door Transfer Grille set, FD60 timber door, 54mm leaf, 450 x 300mm aperture, cover grilles RAL 9016.

Certification

Fire performance is supported by Warringtonfire Assessment Report WF 407822, Issue 3, valid until 12 June 2029, based on test reports WF 391348 (BS 476: Part 20: 1987) and WF 391351 (BS EN 1634-1:2014). A full copy of the assessment report is available on request.

Please contact our Sales Office on for selection guidance on the above:

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