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Health and Safety

Symbols in this user manual

Warning/Caution!



General

Please read this manual carefully in advance and make it accessible to all persons involved in a suitable and appropriate place. We point out that not observing the instructions in this document may affects the warranty.

It is not permissible to make changes or modify this product other than those specified in this document.

Personnel

Work should be carried out by competent person

PPE

Appropriate personal protective equipment should be used. All operatives should follow guidance for the specific building site.



We recommend the following: Safety shoes or boots, work gloves, eye protection, helmet, high viz clothing, hearing protection, face mask.

HANDING + STORAGE

No special precautions are required, when handling air transfer grilles, but they should always be treated with care. The products do not fall within the scope of COSHH regulations.

Intumescent air transfer grilles should be stored away from heat, in the dry, and protected from impact damage.

Installation





No site cutting of apertures permitted as this will invalidate the certification.

Where apertures are pre-cut by a CERTIFRE approved licensed door processor, Intumescent air transfer grilles may be fitted on site by NON-CERTIFIRE approved staff however, the Intumescent air transfer grille must be fitted into apertures prepared in line with the relevant CERTIFRE certificate for the air transfer grille. Care must be taken to ensure all fitting instructions are followed, including any constraints imposed by the CERTIFIRE certificate with regards to position of the air transfer grille within the door assembly.

Maintenance

INTUMESCENT FIRE BLOCK & AIR TRANSFER GRILLES

Swegon intumescent air transfer grilles, Including those positioned behind cover grilles, will require periodic cleaning with a damp cloth. Visually inspect the air transfer grilles structure and free pathway for signs of corrosion, dirt or dust. The use of intumescent materials means there are no moving parts. The product is trouble free in operation and easy to maintain – periodic testing is unnecessary.

FIRE DOOR - LVV40 AIR TRANSFER GRILLE WITH COVER GRILLES INTO TIMBER FIRE DOOR

DESCRIPTION

1 - FD30: 44mm thick fire door FD60: 54mm thick timber fire door

- 2 Pressed steel cover grille to door fasteners -25mm wood screws
- 3 Pressed steel cover grille
- 4 LVV40 intumescent air transfer grille
- **5** Intumescent air transfer grille to door fasteners 25mm wood screws
- 6 Use sealant to bed air transfer grille into door

In order to comply with CF564, the upper edge of the grille shall be no higher than 3000mm from floor level. The lower edge of the grille shall be no closer than 200mm to floor level. Consult door manufacturers before cutting out in relation to permissable aperture sizes and locations

If the door leaf core does not comprise a solid timber lamel core (i.e. a core of chipboard, flaxboard etc.), the aperture provided in the leaf should be lined to full width using hardwood, with a minimum density of 650kg/m3 and a thickness of at least 6mm. This hardwood liner may be omitted should the leaf have been tested.

CONTENTS

- LVV40 air transfer grille
- Cover grille (optional)

TOOLS REQUIRED

- Power drill
- Screw driver
- 25mm wood screws
- Lorient intumescent sealant

LVV40 into a fire door FD30/60

Fire Resistance in accordance with

BS 476-22:1987

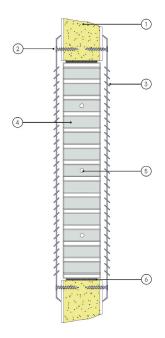
Approval Ref

WF185829/A Certifire CF564

Max single cell size

600mm x 600mm

LVV40 air transfer grilles are supplied 2mm less than the nominal size e.g. a 300mm x 300mm is actually 298mm x 298mm.



Note: Screw holes based on 600mm square grille. Location and number may vary depending on the size of the grille. Max centres 200mm.



INSTALLATION INSTRUCTIONS

- Ensure that cutting an aperture in the door will not detract from the fire integrity of thendoor. Contact the manufacturer to establish the maximum size and optimum position.
- Cut the aperture to the required size with a maximum gap all around of 3mm.
- Apply Lorient intumescent sealant to the inside faces of the aperture.
- Fit the LVV40 into the aperture and ensure that it is positioned equidistant from each face and parallel from both faces of the door.
- Fit retaining wood screws through predrilled holes in LVV40 outer uprights into door.
- Clean off surplus sealant and ensure outer edge of LVV40 is fully sealed.
- Position pressed steel cover grille centrally over one face of the LVV40 and fix using 25mm wood screws.
- Repeat to other face if two cover grilles are to be fitted.



FIRE DOOR- LVH44 AIR TRANSFER GRILLE WITH COVER GRILLES INTO MINERAL COMPOSITE FIRE DOOR

DESCRIPTION

- 1 44mm thick mineral composite fire door
- 2 Grille to door fasteners 25mm wood screws
- **3** Pressed steel cover grille
- 4 LVH44 intumescent air transfer grille
- ${\bf 5}$ Intumescent air transfer grille to door fasteners 25mm wood screws
- 6 Intumescent liner

In order to comply with CF564, the upper edge of the grille shall be no higher than 3000mm from the floor level. The lower edge of the grille shall be no closer than 200mm to floor level.

Consult door manufacturers before cutting out in relation to permissable aperture sizes and locations.

CONTENTS

- LVH44 air transfer grille
- Intumescent liner(LX4402)
- Cover grille (optional)

TOOLS REQUIRED

- 25mm wood screws
- Power drill
- Screw driver

LVH44 into a mineral composite fire door FD120

Fire Resistance in accordance with

BS 476-22:1987

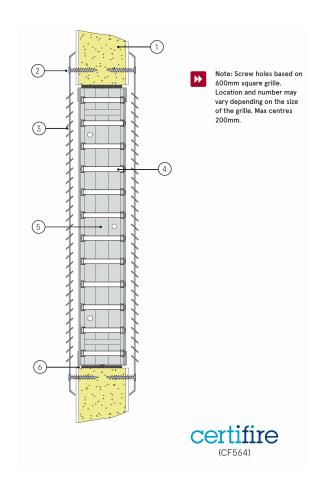
Approval Ref

WFRC 397901 CF564*

Max single cell size

600mm x 600mm

*Any rectangular shape up to 0.2025m2 LVH44 air transfer grilles are supplied 2mm less than the nominal size e.g. a 300mm x 300mm is actually 298mm x 298mm.



INSTALLATION INSTRUCTIONS

- Ensure that cutting an aperture in the door will not detract from the fire integrity of the door. Contact the manufacturer to establish the maximum size and optimum position.
- Cut the aperture to the required size with a maximum gap all around of 3mm.
- Pre-drill vertical outer frames of LVH44 to accept fixing
- Apply Lorient intumescent liner to the inside faces of the aperture.
- Fit the LVH44 into the aperture and ensure that it is positioned equidistant from each face and parallel from both faces of the door.
- Fit retaining wood screws through predrilled holes in LVH44 vertical outer uprights into door.
- Position pressed steel cover grille centrally over one face of the LVH44 and fix using screws.
- Repeat to other face if two cover grilles are to be fitted.



FIRE DOOR - LVH44 AIR TRANSFER GRILLE WITH COVER GRILLES INTO STEEL FIRE DOOR

DESCRIPTION

- 1 44mm thick steel door
- 2 Pressed steel cover grille to door
- **3 -** Pressed steel cover grille
- 4 LVH44 intumescent air transfer grille
- **5** Intumescent air transfer grille to door fasteners self tapping screws (3.2mm x 16mm)
- **6** Use intumescent sealant to bed air transfer grille into

In order to comply with CF564, the upper edge of the grille shall be no higher than 3000mm from the floor level. The lower edge of the grille shall be no closer than 200mm to floor level. Consult door manufacturers before cutting out in relation to permissable aperture sizes and locations.

CONTENTS

- LVH44 air transfer grille
- Cover grille (optional)

TOOLS REQUIRED

- Self tapping screws (3.2 x 16mm)
- Power drill
- Screw driver

LVH44 into a steel fire door FD120

Fire Resistance in accordance with

BS 476-22:1987

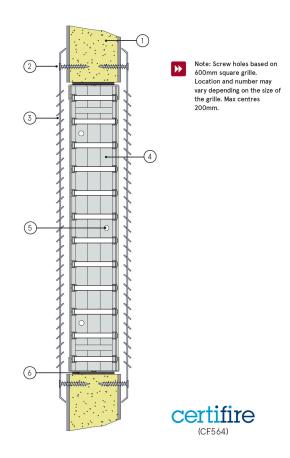
Approval Ref

WFRC C397901 CF564*

Max single cell size

600mm x 600mm

*Any rectangular shape up to 0.2025m2 LVH44 air transfer grilles are supplied 2mm less than the nominal size e.g. a 300mm x 300mm is actually 298mm x 298mm.



INSTALLATION INSTRUCTIONS

- Ensure that cutting an aperture in the door will not detract from the fire integrity of the door. Contact the manufacturer to establish the maximum size and optimum position.
- Cut the aperture to the required size with a maximum gap all around of 3mm.
- Pre-drill vertical outer frames of LVH44 to accept fixing screws.
- Apply Lorient intumescent liner to the inside faces of the aperture.
- Fit the LVH44 into the aperture and ensure that it is positioned equidistant from each face and parallel from both faces of the door.
- Fit retaining self tapping screws through pre-drilled holes in LVH44 vertical outer uprights into door.
- Position pressed steel cover grille centrally over one face of the LVH44 and fix using screws.
- Repeat to other face if two cover grilles are to be fitted.



WALL - LVV40 FITTED INTO RIGID WALL CONSTRUCTION

DESCRIPTION

- 1 Rigid wall construction
- 2 Mortar facing over irregular surface
- **3 -** Pressed steel or aluminium cover grille
- 4 LVV40 air transfer grille
- **5** Air transfer grille fixing screws into wall plugs
- **6** Use Lorient intumescent sealant to bed air transfer grille into the wall
- 7 Cover grille fixing screws into wall plugs.

In order to comply with CF564, the upper edge of the grille shall be no higher than 3000mm from floor level. The lower edge of the grille shall be no closer than 400mm to floor level.

CONTENTS

- LVV40 air transfer grille
- Cover grille (optional)

TOOLS REQUIRED

- 50mm screws
- Wall plugs for 50mm screws
- Lorient intumescent sealant

LVV40 into a rigid wall FR60

Fire Resistance in accordance with:

BS 476-22:1987

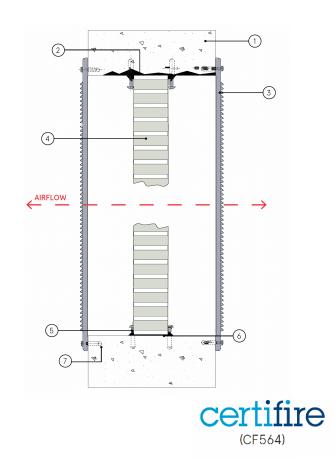
Approval Ref:

WF185829/A Certifire CF564

Max single cell size:

600mm x 600mm

LVV40 air transfer grilles are supplied 2mm less than the nominal size e.g. a 300mm x 300mm is actually 298mm x 298mm.



INSTALLATION INSTRUCTIONS

- Cut the aperture to the required size with a maximum gap all around of 5mm. If resulting aperture is out of square, irregular or oversized, make good with mortar.
- Trial fit the LVV40 into the aperture and ensure that it can be positioned within the section of the wall but not necessarily in the mid position, without jamming or twisting.
- Mark the position of drill points into wall either side of the LVV40.
- Remove the LVV40 from the wall aperture.
- Fix screws through side wall of LVV40 with a minimum of 4 screws. For larger units use a maximum of 200mm between centres.
- Position LVV40 and repeat installation of screws on closest side of the LVV40.
- Bed in sealant around LVV40. Clean off surplus and ensure outer edge of the air transfer grille is fully sealed.
- Position cover grille centrally over one face of the LVV40 and fix using wall plugs supplied.
- Repeat to other face if two cover grilles are to be fitted.



WALL - LVH44 AIR TRANSFER GRILLE FITTED INTO RIGID WALL WITH ANGLE FIXINGS

DESCRIPTION

- 1 Rigid wall construction
- **2** Lorient intumescent sealant around LVH44 perimeter to a maximum clearance of 25mm
- 3 Lorient LVH44 intumescent air transfer grille
- **4** Fixing angle: 20 x 20 x 1mm thick minimum galvanised steel angles fixed to air transfer grille unit with self tapping screws and to wall with masonry anchors

Fixing option 1: 20mm wide angle tabs, central to all four sides or at 200mm maximum centres.

Fixing option 2: Full width angles top and bottom only with 200mm fixing centres.

In order to comply with CF564, the upper edge of the grille shall be no higher than 3000mm from floor level. The lower edge of the grille shall be no closer than 200mm to floor level.

CONTENTS

- LVH44 air transfer grille
- Cover grille (optional)

TOOLS REQUIRED

- Angle fixings
- Self tapping screws (3.5 x 16mm)
- Masonry anchors
- Lorient intumescent sealant

LVH44 for rigid wall with angle fixings FR120

Fire Resistance in accordance with:

BS 476-22:1987

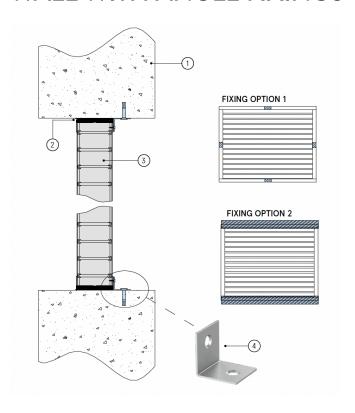
Approval Ref

WFRC C121316 (AW1) CF564*

Max single cell size

Any rectangular shape up to 600 x 600mm *0.2025m2

LVH44 air transfer grilles are supplied 2mm less than the nominal size e.g. a 300mm x 300mm is actually 298mm x 298mm.





INSTALLATION INSTRUCTIONS

- Fix the mounting angles onto the LVH44 air transfer grille using self tapping screws to one side only.
- Insert LVH44 into rigid wall opening. (Note: air transfer grille does not have to be centrally positioned in the opening).
- Fix the angles to the rigid wall with masonry anchors.
- Apply a bead of Lorient intumescent sealant to full depth around the perimeter of LVH44 as shown (note: maximum clearance of 25mm applies).
- Connect ductwork (or cover grille) directly to wall using approved breakaway connections to ensure compliance.



WALL - LVH44 INTO RIGID WALL WITH Z SECTION FIXINGS

DESCRIPTION

- 1 Rigid wall construction
- **2** Lorient intumescent sealant around LVH44 perimeter to a maximum clearance of 25mm
- 3 Lorient LVH44 intumescent air transfer grille
- **4** Fixing Z section: $40 \times 20 \times 1$ mm thick minimum galvanised steel Z section fixed to LVH44 with self tapping screws and to wall with masonry anchors.

Fixing option 1: 20mm wide tabs, central to all four sides or at 200mm maximum centres

Fixing option 2: Full width tabs top and bottom only with 200mm fixing centres.

In order to comply with CF564, the upper edge of the grille shall be no higher than 3000mm from floor level. The lower edge of the grille shall be no closer than 200mm to floor level.

CONTENTS

- LVH44 air transfer grille
- Cover grille (optional)

TOOLS REQUIRED

- Z section fixings
- Self tapping screws (3.5 x 16mm)
- Masonry anchors
- Lorient intumescent sealant

LVH44 for rigid wall with Z section fixings

FR120

Fire Resistance in accordance with:

BS 476-22:1987

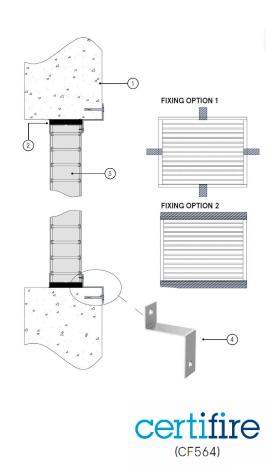
Approval Ref

WFRC C121316 (AW3) CF564*

Max single cell size

Any rectangular shape up to $600 \times 600 \text{mm}$ 0.2025m2 *

LVH44 air transfer grilles are supplied 2mm less than the nominal size e.g. a 300mm x 300mm is actually 298mm x 298mm.



INSTALLATION INSTRUCTIONS

- Fix the mounting Z section onto the LVH44 air transfer grille using self tapping screws to one side only.
- Insert LVH44 into rigid wall opening. (Note: air transfer grille does not have to be centrally positioned in the opening).
- Fix the Z section to the rigid wall with masonry anchors.
- Apply a bead of Lorient intumescent sealant to full depth around the perimeter of LVH44 as shown (note: maximum clearance of 25mm applies).
- Connect ductwork (or cover grille) directly to wall using approved breakaway connections to ensure compliance.



WALL - LVH44 AIR TRANSFER GRILLE FITTED INTO RIGID WALL WITH TAB PLATE FIXINGS

DESCRIPTION

- 1 Rigid wall construction
- **2** Lorient intumescent sealant around LVH44 perimeter to a maximum clearance of 25mm
- 3 Lorient LVH44 intumescent air transfer grille
- **4 Fixing tab:** $40 \times 20 \times 1$ mm thick minimum galvanised steel tabs fixed to LVH44 unit with self tapping screws and to wall with masonry anchors.

Fixing option 1: 20mm wide tabs, central to all four sides or at 200mm maximum centres

Fixing option 2: Full width tabs top and bottom only with 200mm fixing centres.

In order to comply with CF564, the upper edge of the grille shall be no higher than 3000mm from floor level. The lower edge of the grille shall be no closer than 200mm to floor level.

CONTENTS

- LVH44 air transfer grille
- Cover grille (optional)

TOOLS REQUIRED

- Tab plate fixings
- Self tapping screws
- (3.5 x 16mm)
- Lorient intumescent sealant

LVH44 for rigid wall with Z section fixings

FR120

Fire Resistance in accordance with:

BS 476-22:1987

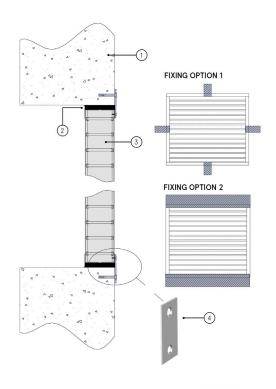
Approval Ref

WFRC C121316 (AW2) CF564*

Max single cell size

Any rectangular shape up to $600 \times 600 \text{mm}$ 0.2025m2 *

LVH44 air transfer grilles are supplied 2mm less than the nominal size e.g. a 300mm x 300mm is actually 298mm x 298mm.





INSTALLATION INSTRUCTIONS

- Fix the mounting tabs onto the LVH44 air transfer grille using self tapping screws to one side only.
- Insert LVH44 into rigid wall opening. (Note: air transfer grille does not have to be centrally positioned in the opening).
- Fix the tabs to the rigid wall with masonry anchors.
- Apply a bead of Lorient intumescent sealant to full depth around the perimeter of LVH44 as shown (note: maximum clearance of 25mm applies).
- Connect ductwork (or cover grille) directly to wall using approved breakaway connections to ensure compliance.

