



Technical Manual

Plasterboard Stud Walls

Double Layer



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WALL 17 - Angles one side (Circular)

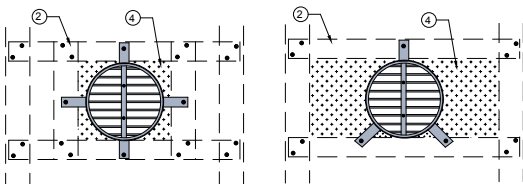
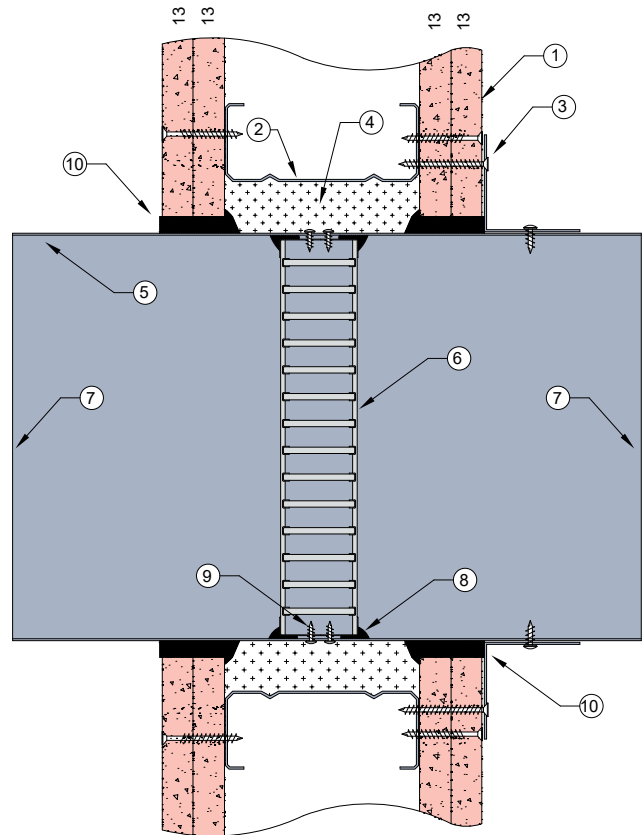
116mm overall wall thickness



FIRE RATED PLASTERBOARD WALLS

DESCRIPTION

- 1 2 x 13mm fire rated plasterboard wall.
- 2 Steel channel lining out aperture to all four sides.
- 3 25mm x 40mm x 40mm x 1mm steel angle brackets fixed to steel framing and damper casing with steel fixings.
- 4 Cavity around penetration filled with rockwool.
- 5 Z275 galvanised steel casing minimum thickness 0.6mm.
- 6 Lorient LVH44C intumescent fire damper screw fixed into casing.
- 7 Casing terminates with breakaway joints, as per AS1682.2.
- 8 Fire damper perimeter sealed with Lorient intumescent sealant.
- 9 Fire damper fixed to casing with 2 x steel screws.
- 10 Gap between casing and aperture filled full depth with Lorient intumescent sealant. Maximum annular gap between casing and wall 25mm.



Circular LVH44 tied back to studs with steel track to ensure damper is fully supported within the framing structure of the wall.
Internal cavity around LVH44C packed out with rockwool to retain wall insulation.

Fyre DAMPER

LVH44C in steel casing penetrating fire rated Plasterboard wall

FRL -/120/30

Fire Resistance in accordance with

AS1530.4 2014

Approval Ref

EXOVA EWFA 33233400

Max cell size

450mm diameter

Note: LVH44C can achieve -/120/120 when fitted with R1.0 Polyester insulated flexible duct.

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INSTALLATION INSTRUCTIONS

- ▶ Prepare the wall opening to accept the fire damper and install in wall as shown in this system detail.
- ▶ Fill cavity around penetration with rockwool, as per point 4.
- ▶ Fix angle brackets to casing with steel self drilling screws or pop rivets, as detailed in points 3.
- ▶ Centralise in aperture and mechanically fix to wall. Firestop the gap between the casing and wall with Lorient intumescent sealant, note fill details in point 10.
- ▶ Ductwork shall be connected with breakaway joints, as per point 7.
- ▶ Ensure product identification labels are conspicuously positioned for easy identification.
- ▶ Ensure convenient access is provided to allow for AS1851 inspection and maintenance routines.
- ▶ **Note: Damper casings and mounting flanges supplied by Trafalgar Fire.**

WALL 18 - Angles on Both Sides

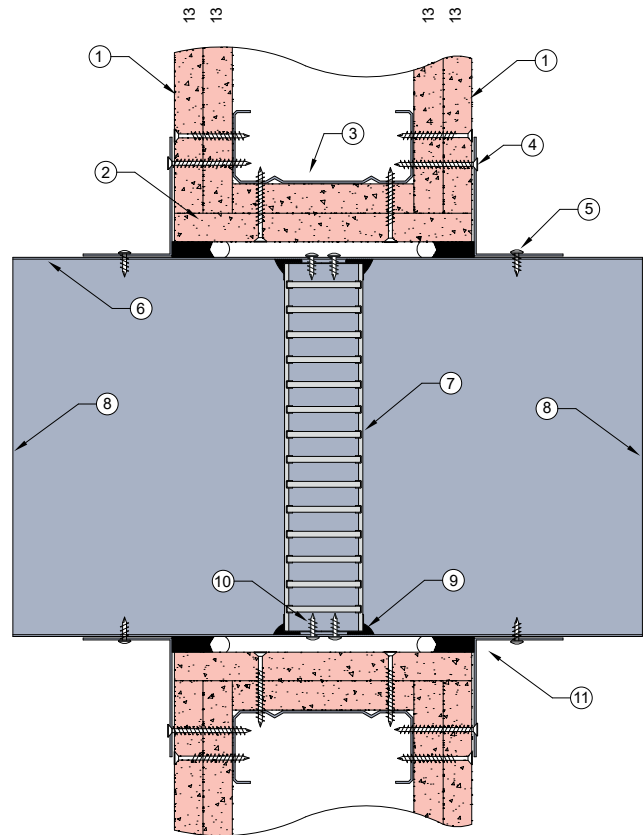
116mm overall wall thickness



FIRE RATED PLASTERBOARD WALLS

DESCRIPTION

- 1 2 x 13mm fire rated plasterboard.
- 2 2 x 13mm fire rated plasterboard lining aperture.
- 3 Steel stud framing out aperture.
- 4 Angles fixed to steel framing at 150mm centres or at least 2 per side.
- 5 0.6mm (min) Z275 galvanised steel angles to all four sides. Angle dimensions shall be continuous and at least 2 x the dimension of the gap between the damper casing and the penetrated element.
Each angle fixed to damper casing with steel fasteners at 150mm centres or at least 2 per side.
- 6 Z275 galvanised steel casing minimum thickness 0.6mm.
- 7 Lorient LVH44 intumescent fire damper screw fixed into casing.
- 8 Casing terminates with breakaway joints, as per AS1682.2.
- 9 Fire damper perimeter sealed with Lorient intumescent sealant.
- 10 Fire damper fixed to casing with 2 x steel screws.
- 11 Gap between casing and aperture filled with Lorient intumescent sealant. Backing rod used as required to control sealant fill depth to at least 25mm. Maximum annular gap between casing and wall 25mm.



LVH44 in steel casing penetrating fire rated Plasterboard wall

FRL -/120/30

Fire Resistance in accordance with

AS1530.4 2014

Approval Ref

EXOVA EWFA 33233400

Max single cell size

600mm x 600mm

INSTALLATION INSTRUCTIONS

- ▶ Line out the wall opening to accept the fire damper, as shown in this system detail.
- ▶ Centralise the damper casing and firestop the gap between the casing and wall with Lorient intumescent sealant, see point 11 for fill details.
- ▶ Perimeter angles are mechanically fixed to casing with steel self drilling screws and to wall with appropriate length needle point drywall screws, as detailed in points 4 & 5.
- ▶ Ductwork shall be connected with breakaway joints, as per point 8.
- ▶ Ensure product identification labels are conspicuously positioned for easy identification.
- ▶ Ensure convenient access is provided to allow for AS1851 inspection and maintenance routines.
- ▶ **Note: Damper casings and mounting flanges supplied by Trafalgar Fire.**

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WALL 19 - Duct to Grille

116mm overall wall thickness



FIRE RATED PLASTERBOARD WALLS

DESCRIPTION

- 1A** 2 x 13mm fire rated plasterboard, or
- 1B** 2 x 16mm fire rated plasterboard

- 2** Fire rated plasterboard lining aperture (To be the exact same as selected 1A or 1B selection).

- 3** Steel stud framing out aperture.

- 4** Angles fixed to steel framing at 150mm centres or at least 2 per side.

- 5** 0.6mm (min) Z275 Gal steel angles to all four sides. Angle dimensions shall be continuous and at least 2 x the dimension of the gap between the damper casing and the penetrated element.
Each angle fixed to damper casing with steel fasteners at 150mm centres or at least 2 per side.

- 6** Steel damper casing 0.6mm (min) Z275 Gal steel.

- 7** Lorient LVH44 intumescent fire damper screw fixed into casing.

- 8** Casing terminates with breakaway joints, as per AS1682.2.

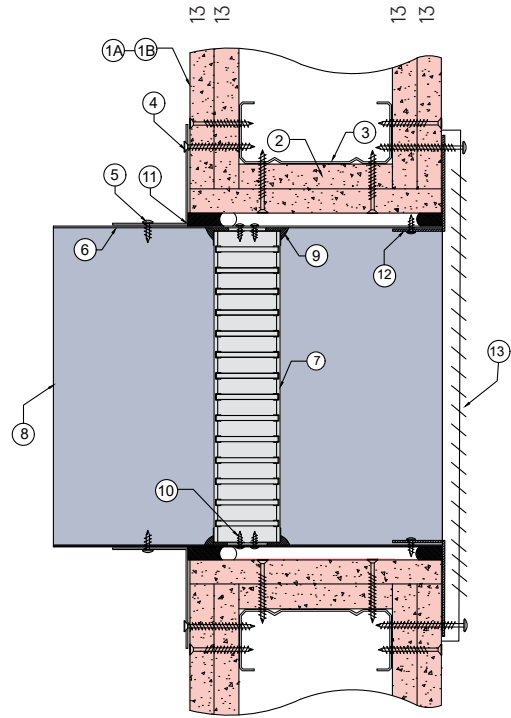
- 9** Fire damper perimeter sealed with Lorient intumescent sealant.

- 10** Fire damper fixed to casing with 2 x steel screws (100mm centres).

- 11** Gap between casing and aperture filled with Lorient intumescent sealant. Backing rod used as required to control depth to 25mm deep. Maximum annular gap between casing and wall is 25mm.

- 12** Casing either turned out or fitted out with angles to all four sides fixed in place with steel self-drilling screws.

- 13** Cover grille (by others) screw fixed in place to cover aperture.



LVH44 in steel casing penetrating fire rated Plasterboard wall

FRL Up to -/120/30

Fire Resistance in accordance with

AS1530.4 2014

Approval Ref

EXOVA EWFA 33233400

Max single cell size

600mm x 600mm

INSTALLATION INSTRUCTIONS

- ▶ Line out the wall opening to accept the fire damper, as shown in this system detail.
- ▶ Centralise the damper casing and firestop the gap between gap and casing and wall with Lorient intumescent sealant, see point 11 for fill details.
- ▶ Perimeter angles are mechanically fixed to casing with steel self-drilling screws and to wall with appropriate length needle point drywall screws, as detailed in points 4 & 5 & 12.
- ▶ Ductwork shall be connected with breakaway joints, as per point 8.
- ▶ Cover grille screw fixed with appropriate length screws, ensuring screws fixed into steel stud.
- ▶ Ensure product identifications labels are conspicuously positioned for easy identification.
- ▶ Ensure convenient access is provided to allow for AS1851 inspection and maintenance routines.
- ▶ **Note: Damper casings and mounting flanges supplied by Trafalgar Fire.**

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WALL 24 - Timber Stud

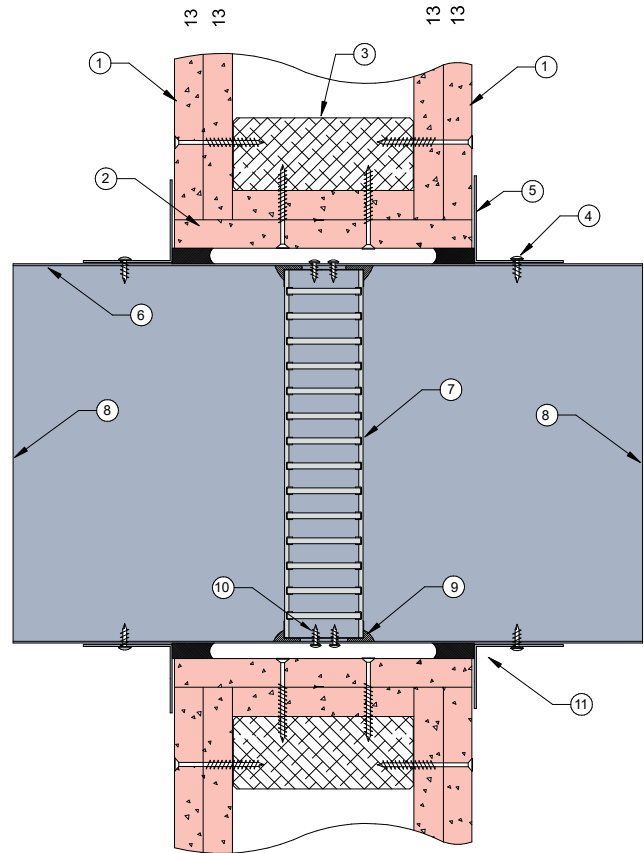
116mm overall wall thickness



FIRE RATED PLASTERBOARD WALLS

DESCRIPTION

- 1 2 x 13mm fire rated plasterboard.
- 2 2 x 13mm fire rated plasterboard lining aperture.
- 3 Timber stud framing out aperture.
- 4 Each angle fixed to damper casing with steel fasteners at 150mm centres or at least 2 per side.
- 5 0.6mm (min) Z275 galvanised steel angles to all four sides. Angle dimensions shall be continuous and at least 2 x the dimension of the gap between the damper casing and the penetrated element.
- 6 Z275 galvanised steel casing minimum thickness 0.6mm.
- 7 Lorient LVH44 intumescent fire damper screw fixed into casing.
- 8 Casing terminates with breakaway joints, as per AS1682.2.
- 9 Fire damper perimeter sealed with Lorient intumescent sealant.
- 10 Fire damper fixed to casing 2 x steel screws (100mm centres).
- 11 Gap between casing and aperture filled with Lorient intumescent sealant. Backing rod used as required to control sealant fill depth to at least 25mm. Maximum annular gap between casing and wall 25mm.



LVH44 in steel casing penetrating fire rated Plasterboard wall

FRL -/120/30

Fire Resistance in accordance with

AS1530.4 2014

Approval Ref

EXOVA EWFA 33233400

Max single cell size

600mm x 600mm

INSTALLATION INSTRUCTIONS

- ▶ Line out the wall opening to accept the fire damper, as shown in this system detail.
- ▶ Centralise the damper casing and firestop the gap between the casing and wall with Lorient intumescent sealant, see point 11 for fill details.
- ▶ Perimeter angles are mechanically fixed to casing with steel self drilling screws and to wall with appropriate length needle point drywall screws, as detailed in points 4 & 5.
- ▶ Ductwork shall be connected with breakaway joints, as per point 8.
- ▶ Ensure product identification labels are conspicuously positioned for easy identification.
- ▶ Ensure convenient access is provided to allow for AS1851 inspection and maintenance routines.
- ▶ **Note: Damper casings and mounting flanges supplied by Trafalgar Fire.**

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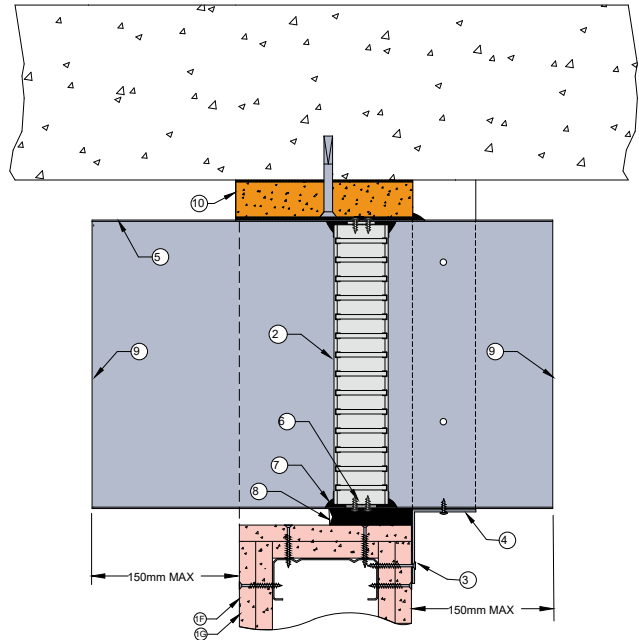
WALL 26 - Slab Mounted Damper



116mm overall wall thickness

DESCRIPTION

- 1F** 2 x layers of 13mm or
- 1G** 2 x layers of 16mm fire rated plasterboard
- 2** Lorient LVH44 intumescent fire damper.
- 3** Angles fixed to wall with steel screws at 150mm centres or at least 2 per side.
- 4** 0.6mm (min) Z275 galvanised steel angles to all three sides. Angle dimensions shall be continuous and at least 2 x the dimension of the gap between the damper casing and the penetrated element.
Each angle fixed to damper casing with steel fasteners at 150mm centres or at least 2 per side.
- 5** Z275 galvanised steel casing min thickness 0.6mm.
- 6** Fire damper fixed to casing with 2 x steel screws (100mm centres).
- 7** Fire damper perimeter sealed with Lorient intumescent sealant.
- 8** Gap between casing and aperture filled full depth (at least 50mm depth) with Lorient intumescent sealant. Maximum annular gap between casing and wall is 25mm.
- 9** Casing terminates with breakaway joint as per AS1682.2
- 10** 100mm wide x 25mm Trafalgar Corex (or 30-60mm Maxilite) board running full width of aperture. Bedded in Lorient intumescent sealant and mechanically fixed to slab with steel expanding anchors.



FIRE RATED PLASTERBOARD WALLS

LVH44 in steel casing penetrating fire rated Plasterboard wall - tight to slab

FRL -/120/30

Fire Resistance in accordance with

AS1530.4 2014

Approval Ref

EXOVA EWFA 33233400

Max size

600mm x 600mm

INSTALLATION INSTRUCTIONS

- ▶ Prepare the wall opening to accept the fire damper and install in wall, as shown in this system detail.
- ▶ Non-combustible or Intubatt block is fixed to slab, as per point 10.
- ▶ Lorient intumescent sealant liberally applied to block and duct containing damper is positioned and pushed up tight to block.
- ▶ Firestop the gap between the casing and wall with Lorient intumescent sealant, note fill details in point 8.
- ▶ 3 off perimeter angles are mechanically fixed to bottom and sides of casing with steel self drilling screws and fixed to wall with masonry anchors, as detailed in point 3.
- ▶ Ductwork shall be connected with breakaway joints, as per point 9.
- ▶ Ensure product identification labels are conspicuously positioned for easy identification.
- ▶ Ensure convenient access is provided to allow for AS1851 inspection and maintenance routines.
- ▶ **Note: Damper casings and mounting flanges supplied by Trafalgar Fire.**

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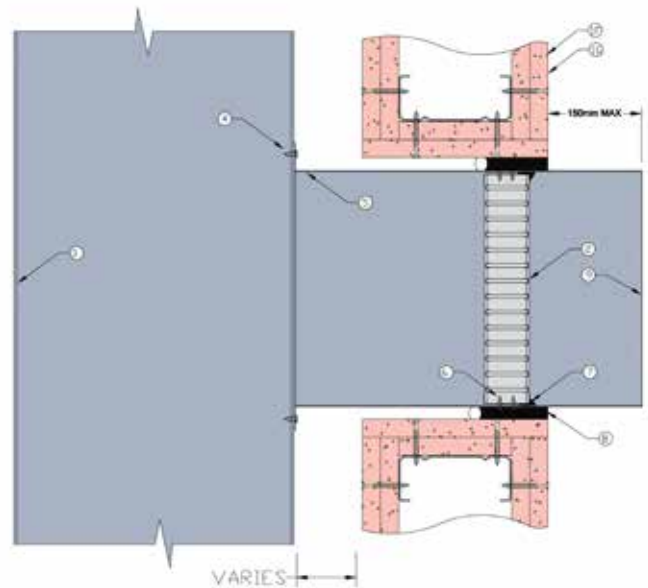
WALL 38 - Angle Free

116mm overall wall thickness



DESCRIPTION

- | | |
|----|--|
| 1F | 2 x layers of 13mm fire rated plasterboard wall or |
| 1G | 2 x layers of 16mm fire rated plasterboard wall. |
| 2 | Lorient LVH44 intumescent fire damper. |
| 3 | Protected sheet metal riser. |
| 4 | Horizontal branch connected to riser with steel fixings or pop rivets. |
| 5 | Z275 galvanised steel branch min thickness 0.6mm. |
| 6 | Fire damper fixed to casing with 2 x steel screws (100mm centres). |
| 7 | Fire damper perimeter sealed with Lorient intumescent sealant. |
| 8 | Gap between casing and aperture filled with Lorient intumescent sealant. Backing rod used as required to control sealant fill depth to at least 50mm. Maximum annular gap between casing and wall is 25mm. |
| 9 | Casing terminates with breakaway joint as per AS1682.2. |



FyRE DAMPER

Angle free LVH44 in steel casing connected to sheet metal riser penetrating fire rated Plasterboard shaft wall

FRL -/120/30

Fire Resistance in accordance with

AS1530.4 2014

Approval Ref

EXOVA EWFA 33233400

Max single cell size

600mm x 600mm

INSTALLATION INSTRUCTIONS

- ▶ Measure and mark the position of the damper in the horizontal branch, ensuring that it will be aligned within the shaft wall once the branch is attached to the riser and the shaft wall is constructed.
- ▶ Fix damper into branch with steel screws (point 6) and seal perimeter with Lorient intumescent sealant (point 7).
- ▶ Mechanically fix the branch to the vertical riser with steel screws or pop rivets (point 4).
- ▶ Once shaft wall has been constructed, firestop the gap between the casing and the wall with Lorient intumescent sealant - note fill depth details in point 8.
- ▶ Ductwork shall be connected with breakaway joints, as per point 9.
- ▶ Ensure product identification labels are conspicuously positioned for easy identification.
- ▶ Ensure convenient access is provided to allow for AS1851 inspection and maintenance routines.
- ▶ **Note: Damper casings and mounting flanges supplied by Trafalgar Fire.**

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