



Technical Manual

# Laminated Plasterboard Shaft Walls



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# WALL 30 – Laminated Plaster

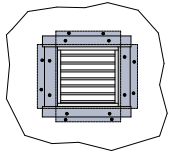
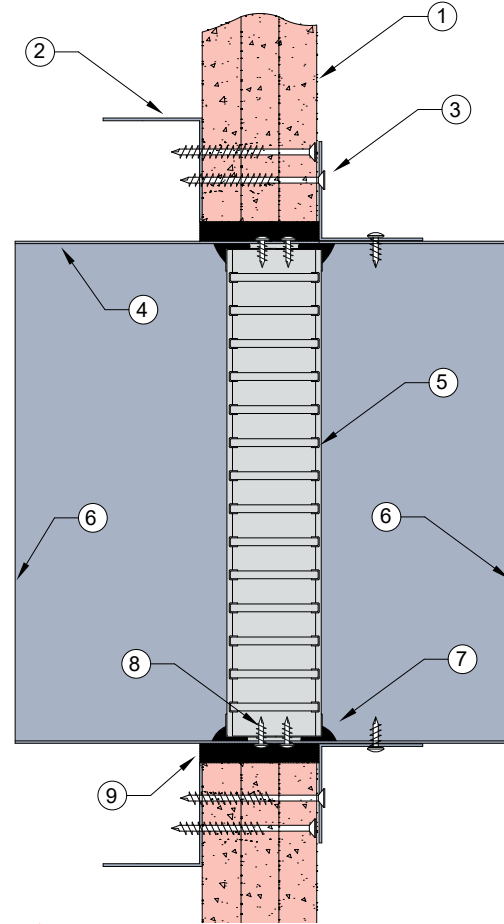
39mm or 48mm thick



SHAFT WALLS

**DESCRIPTION**

- 1 3 x 13mm or 3 x 16mm fire rated plasterboard.
- 2 40mm x 40mm 0.6mm Z275 steel angle fixed through wall with 60mm long steel needle point screws.
- 3 40mm x 40mm x 0.6mm 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 60mm long steel needle point screws at 150mm centres or at least 2 per side.
- 4 Z275 galvanised steel casing minimum thickness 0.6mm.
- 5 Lorient LVH44 intumescent fire damper screw fixed into casing.
- 6 Casing terminates with breakaway joints, as per AS1682.2.
- 7 Fire damper perimeter sealed with Lorient intumescent sealant.
- 8 Fire damper fixed to casing with 2 x steel screws (100mm centres).
- 9 Gap between casing and aperture filled with Lorient intumescent sealant. Maximum annular gap between casing and wall 25mm.



Rondo 40 x 40mm equal angle fixed around aperture to provide anchor point for fixing angle brackets 4 off fixing angles required as shown.

## FIRE DAMPER

**LVH44 in steel casing penetrating fire rated laminated Plasterboard Shaft wall**

**FRL -/120/-**

**Fire Resistance in accordance with**

AS1530.4 2014

**Approval Ref**

EXOVA EWFA 33233400

**Max single cell size**

600mm x 600mm

**INSTALLATION INSTRUCTIONS**

- ▶ Prepare the wall opening to accept the fire damper and install in wall, as shown in system detail.
- ▶ Fix reinforcing angles to inside of wall as shown above. Fix angle brackets to damper casing, as per point 2 & 3.
- ▶ Centralise in aperture and mechanically fix through wall into opposing angle. Firestop the gap between the casing and wall with Lorient intumescent sealant, note fill details in point 9.
- ▶ Ductwork shall be connected with breakaway joints, as per point 6.
- ▶ 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 31 - Laminated Plaster (Circular)

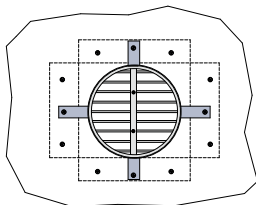
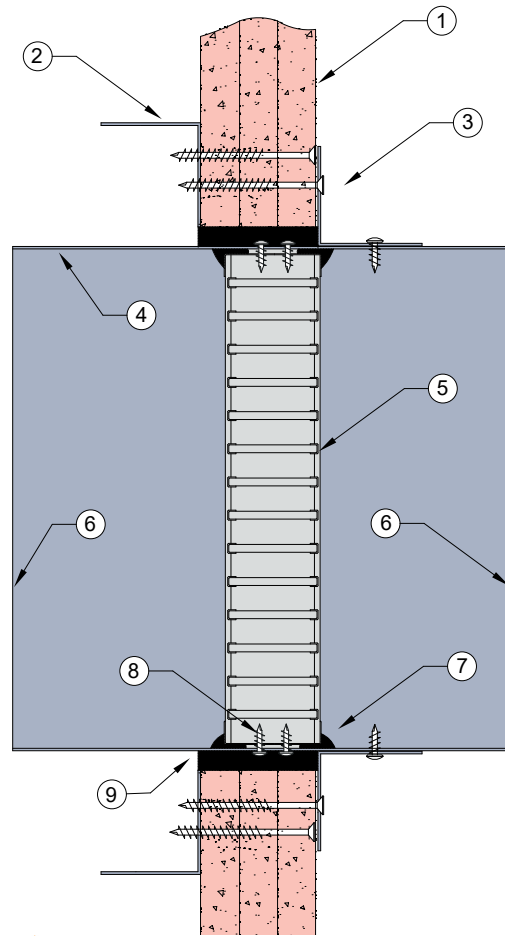
39mm or 48mm thick



SHAFT WALLS

**DESCRIPTION**

- 1 3 x 13mm or 3 x 16mm fire rated plasterboard.
- 2 40mm x 40mm x 0.6mm Z275 galvanised steel reinforcing angles fixed around aperture with 60mm long steel needle point screws.
- 3 0.6mm (min) 25mm x 40mm x 40mm Z275 galvanised steel angles fitted to casing with steel self drilling screws or pop rivets. Damper angles fixed through wall into reinforcing angles with 60mm needle point self drilling screws as shown.
- 4 Z275 galvanised steel casing minimum thickness 0.6mm.
- 5 Lorient LVH44C circular intumescent fire damper screw fixed into casing.
- 6 Casing terminates with breakaway joints, as per AS1682.2.
- 7 Fire damper perimeter sealed with Lorient intumescent sealant.
- 8 Fire damper fixed to casing with 2 x steel screws (100mm centres).
- 9 Gap between casing and aperture filled with Lorient intumescent sealant. Backing rod used as required to control sealant fill depth. Maximum annular gap between casing and wall 25mm.



Rondo 40mm x 40mm equal angle fixed around aperture to provide anchor point for fixing angle brackets  
4 off fixing angles required as shown.



**LVH44C in steel casing penetrating fire rated Plasterboard Shaft wall**  
**FRL -/120/-**

**Fire Resistance in accordance with**

AS1530.4 2014

**Approval Ref**

EXOVA EWFA 33233400

**Max size**

450mm diameter

**INSTALLATION INSTRUCTIONS**

- ▶ Prepare the wall opening to accept the fire damper and install in wall, as shown in system detail.
- ▶ Fix reinforcing angles to inside of wall as shown above. Fix angle brackets to damper casing, as per point 2 & 3.
- ▶ Centralise in aperture and mechanically fix through wall into opposing angle. Firestop the gap between the casing and wall with Lorient intumescent sealant, note fill details in point 9.
- ▶ Ductwork shall be connected with breakaway joints, as per point 6.
- ▶ 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 39 - ANGLE FREE

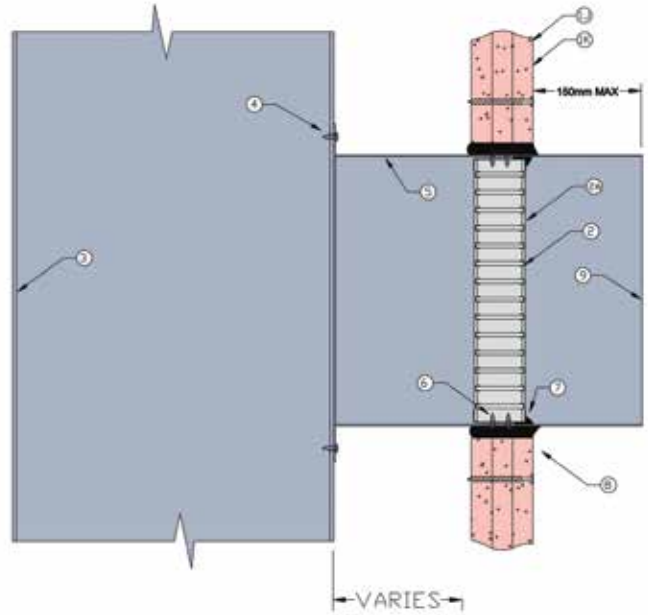
39mm or 48mm thick



SHAFT WALLS

**DESCRIPTION**

<b>1J</b>	3 x 13mm fire rated laminated plasterboard or
<b>1K</b>	3 x 16mm fire rated laminated plasterboard.
<b>2</b>	Lorient LVH44 or LVH44C intumescent fire damper.
<b>3</b>	Protected sheet metal riser.
<b>4</b>	Horizontal branch connected to riser with steel fixings or pop rivets.
<b>5</b>	Z275 galvanised steel branch min thickness 0.6mm.
<b>6</b>	Fire damper fixed to casing with 2 x steel screws (100mm centres).
<b>7</b>	Fire damper perimeter sealed with Lorient intumescent sealant.
<b>8</b>	Gap between casing and aperture filled full depth with Lorient intumescent sealant. Maximum annular gap between casing and wall is 25mm.
<b>9</b>	Casing terminates with breakaway joint as per AS1682.2.



## FIRE DAMPER

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

**FRL -/120/-**

**Fire Resistance in accordance with**

AS1530.4 2014

**Approval Ref**

EXOVA EWFA 33233400

**Max single cell size**

600mm x 600mm or  
450mm diameter  
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**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.**