

# ASHGRID™ firewall systems



## superior firewall performance

New range of Firewall details incorporating:

- Standard Cavity Depth Constructions  
to match non-Firewall elevations
- Fast Track Construction
- Horizontal System  
that eliminates any potential 'rippling' in external cladding
- Firewall System Selector

[www.ashandlacy.com](http://www.ashandlacy.com)



ASH•LACY



Since the introduction of Ashgrid in the early 1990s, Ash & Lacy Building Systems have provided support bar solutions, including numerous fire systems, to offer contractors a fully engineered system in line with current Building Regulations (Part L).

More recent changes to part B have led to the review of current Firewall details and this document provides information on Firewall constructions that offer benefits such as a reduced cavity depth to match non-Firewall elevations, as well as a separate 'fast track' installation option.

Also introduced is a Horizontal cladding Firewall, which provides a specifically engineered solution that eliminates the potential for any "rippling effect" in the external cladding face.

Further to this a Firewall system selector has been set up to cover our full range of Firewall details, this is detailed in the matrix below.

The Ash & Lacy Ashgrid & Ashwall™ BX48 and Firewall systems have been fully tested by Ash & Lacy Building Systems and certified by Bodycote Warrington Fire.

### System set out - brackets & insulation

All of the Ash & Lacy assessments have been carried out to ensure ease of installation with the fewest possible components and are based on an external wall application. To maintain integrity during a fire the spacer brackets must be positioned so that they do not exceed the width of the insulation strips and thus prevent insulation dropping down the cavity during a fire.

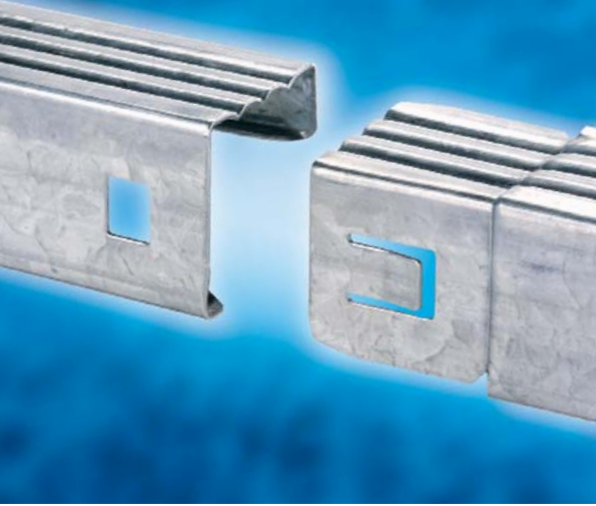
The brackets can be easily placed to ensure that they fall as close to the centre of the insulation strip as possible. For example if the width of the insulation strip is 1200mm, the first line of clips should clamp the insulation in place at the start of the elevation. The second line of clips should then be positioned central to the insulation strip at 600mm along the elevation and the rest of the clips can then be placed to suit the strip width subject to loadings.

When using Ashgrid the bracket set out is not so critical provided that the first line of insulation has a bracket positioned in the centre. Working outwards from this point at 1m centres then means that there will be at least one bracket per insulation strip width. In all instances when using Ash & Lacy firewall constructions the responsibility lies with the installing contractor in ensuring the firewall meets the project specification and meets Building Regulations approved document B. In terms of cavity barriers, compartmentalisation and insulation integrity, all constructions assessed with two layers of glass fibre are based on a wall being 1000mm or more from the relevant boundary and are assessed to BS476.

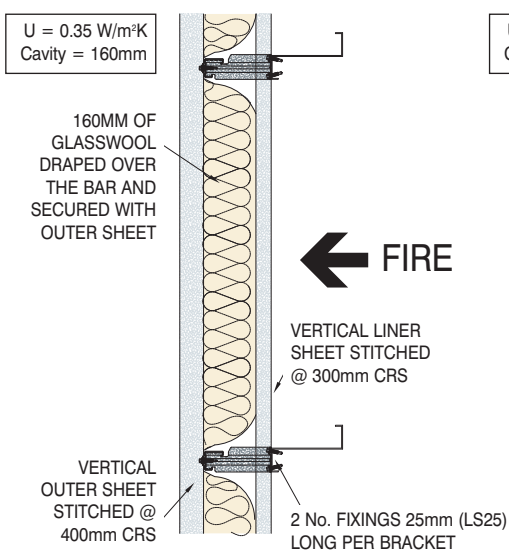
### Firewall System Selector

Report No	122298	122298	122298	131336	134697	170432
<b>Test criteria/ integrity to BS476</b>	240min integrity 15mins insulation	240min integrity 15mins insulation	240min integrity 15mins insulation	240min integrity 30mins insulation	240min integrity 30mins insulation	240min integrity 15/30mins insulation
<b>Wall type</b>	Internal fire	Internal fire	Internal fire	Internal fire	External fire	Internal fire
<b>Construction</b>	BX48 horizontal wall	Top Hat horizontal wall	Ashgrid Vertical wall	Ashgrid Vertical wall	Top Hat horizontal wall	BX48
<b>Insulation type</b>	Glasswool	Glasswool outside bar only	Glasswool outside bar only	Glasswool and rockwool	Rockwool and rockwool	Glasswool or Rockwool+Glasswool*
<b>Material thickness</b>	Outer 0.5mm steel Liner 0.4mm steel	Outer 0.5mm steel Liner 0.4mm steel	Outer 0.5mm steel Liner 0.4mm steel	Outer 0.5mm steel Liner 0.4mm steel	Outer 0.5mm steel Liner 0.4mm steel	Outer 0.5mm steel Liner 0.4mm steel
<b>Drg No</b>	FD19	FD18	FD17	FD01A	FD022	FD24
<b>Tested fixing method for liner</b>	Stitch/rivets at 300 ctrs	Stitch/rivets at 300 ctrs	Stitch/rivets at 300 ctrs	Stitch/rivets at 300 ctrs	Stitch/rivets at 300 ctrs	Stitch/rivets at 300 ctrs

\* Subject to insulation integrity requirements, please check with Ash & Lacy Technical Department



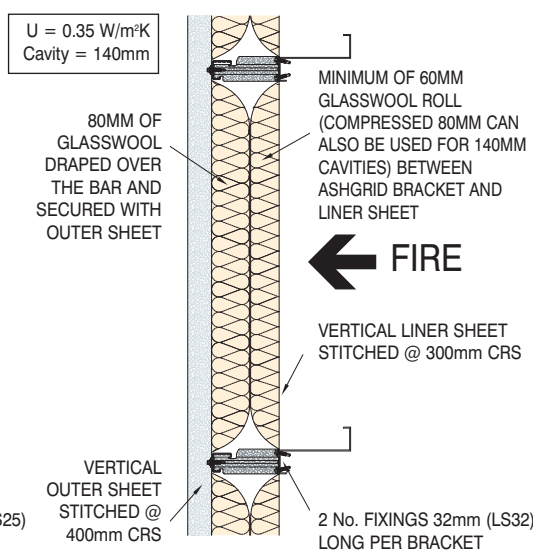
### Fast Track Firewall 15mins Insulation Integrity



**Timed rating:** 4hr fire wall  
**Insulation thickness :** 160mm insulation to provide 0.35 W/m<sup>2</sup>K U/value.  
**Insulation integrity:** 15mins  
**Details:** FD17, FD18 & FD19  
**Assessment no:** 122298  
**Bracket depth:** 160mm  
**Applications:** BX48 Horizontal, Top Hat Horizontal, Ashgrid Vertical

These options allow for all of the glass fibre insulation to be tucked over the outside of the bar and be compressed behind the outer cladding sheets. In such cases the correct torque must be used on the fixing gun and spreader washers used on fixings to reduce the amount of deformation about the fixing.  
 Thicker insulation is required in this arrangement for thermal requirements due to the amount of compression.

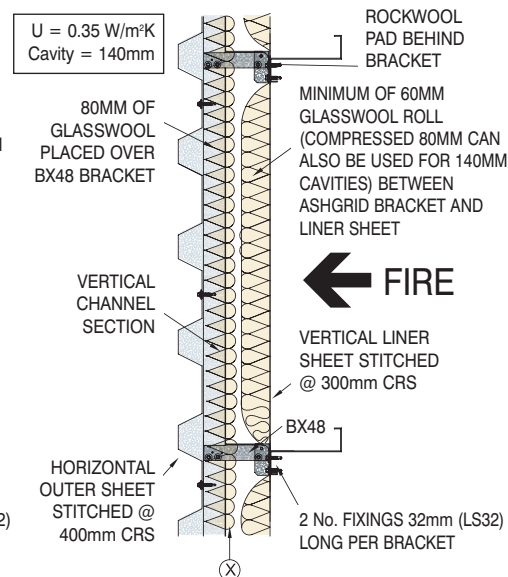
### Standard Cavity Depth Constructions 15mins Insulation Integrity



**Timed rating:** 4hr fire wall  
**Insulation thickness:** 140mm insulation to provide 0.35 W/m<sup>2</sup>K U/value.  
**Insulation integrity:** 15mins  
**Details:** FD15, FD16 & FD20  
**Assessment no:** 131336  
**Bracket depth:** 140mm  
**Applications:** BX48 Horizontal, Top Hat Horizontal, Ashgrid Vertical

These constructions utilise two layers of quilt, one tucked under the spacer bracket and one tucked over the outside of the bar for ease of construction.  
 The bracket depth is 140mm to match non-Firewall elevations and removes the need for a deeper Firewall construction, while providing 0.35 W/m<sup>2</sup>K U/value. (135mm deep TH arrangement).  
*Please refer to selector for details of 30 mins integrity option.*

### Metallic Silver Horizontal Cladding Construction 15mins Insulation Integrity



**Timed rating:** 4hr fire wall  
**Insulation thickness:** 140mm insulation to provide 0.35 W/m<sup>2</sup>K U/value.  
**Insulation integrity:** 15mins  
**Details:** FD24  
**Assessment no:** 170432  
**Bracket depth:** 130 with rockwool barrier pad  
**Applications:** BX48 Horizontal cladding

This construction negates the need for insulation to pass between the outer sheet and Ashwall bar, eliminating the risk of a 'rippling' effect when laying Metallic Silver cladding horizontally.  
 Two layers of glass fibre insulation are incorporated, one tucked under the bar and one pushed over and hung off the bracket. The additional thermal break is catered for by the inclusion of a Rockwool pad on the back face (fire side of the bracket)

In all cases refer to full assessments for notes on supporting methods.

further information is available on our website [ashandlacy.com](http://ashandlacy.com)

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West Bromwich. Bromford Lane, West Bromwich, West Midlands B70 7JJ

Tel: 0121 525 1444 Fax: 0121 525 3444

also at: London. Gateway 3, Davis Road, Off Cox Lane, Chessington, Surrey KT9 1TD

Tel: 020 8391 9700 Fax: 020 8391 9701

Glasgow Unit 4b, Albion Trading Est, South Street, Whiteinch, Glasgow G14 0SY

Tel: 0141 950 6040 Fax: 0141 950 6080

E-mail enquiries to: [sales@ashandlacy.com](mailto:sales@ashandlacy.com)

Ash & Lacy reserve the right to amend product specifications without prior notice.  
The information, technical details and fixings advice are given in good faith but are intended  
as a guide only. For further information please contact Ash & Lacy Building Systems.  
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