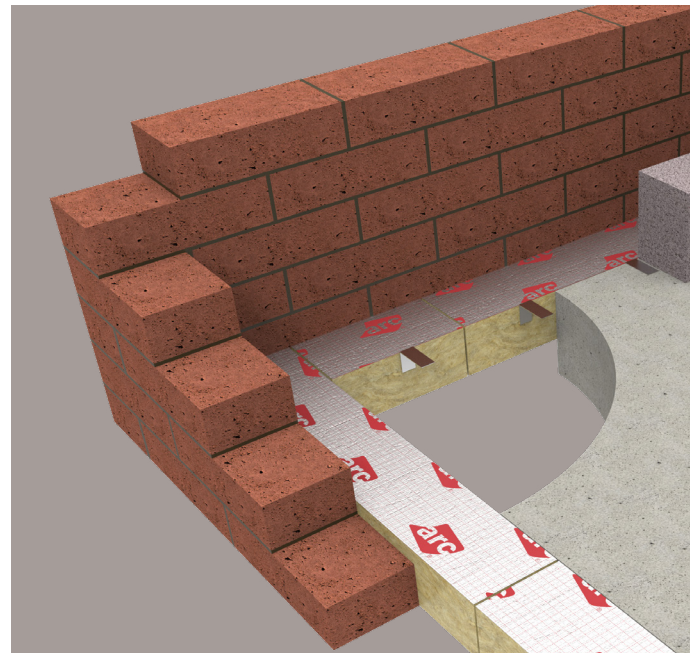




FIRE STOP SLAB

Cavity fire barrier for masonry construction

- » Up to three hours fire integrity
- » Foil faced to provide a smoke barrier
- » Suitable for horizontal or vertical applications
- » Cut to size on site or factory finished
- » Available to suit cavity widths up to 450mm
- » Mechanically fixed to inner leaf using ARC fixing brackets
- » Tested in accordance with EN1366-4 against both masonry and CP Board
- » Third-party certificated by IFC Certification



FIRE STOP SLAB

Application

ARC Fire Stop Slab provides up to three hours fire integrity horizontally or vertically within external masonry walls. It is ideal for use at separating floor levels and is designed to be mechanically fixed using ARC fixing brackets. ARC Fire Stop Slab is manufactured from rockfibre mineral wool insulation with a class 'O' reinforced aluminium foil facing to both sides offering excellent resistance to smoke.

Installation

ARC Fire Stop Slab should be fitted into the cavity as the external brickwork progresses. Lengths of barrier should be tightly butt jointed, with care taken to ensure there are no gaps.

A 5mm compression fit is required. When cutting on-site, it is important to ensure the cut size is suitable for the as-built cavity, as no gaps can remain between the barrier and the internal or external leaf.

ARC Fixing Brackets are used to mechanically fix the barrier to the inner leaf (masonry or CP board). Following the fitting instructions to the right, the ARC Fixing Bracket is folded into shape, and then mechanically fixed to the inner leaf using masonry screws. ARC Fire Stop Slab can then carefully be pushed into place on the bracket. The bracket should sit in the middle of the barrier's depth, and be installed at a minimum of 600mm centres or 2 per length, whichever is higher.

Fire Properties

ARC Fire Stop Slab has been tested for fire resistance at Warrington Fire, achieving up to 3hrs fire integrity between two masonry leaves, and up to 2hrs fire integrity when installed between one leaf of masonry and one leaf of CP board. Tests were carried out in accordance with EN1366-4.

IFC certificate number: IFCC 1731

Where usage falls outside of this scope, for example when used with external cladding, or with an SFS wall system, performance of the cavity barrier could be affected by the structural integrity and fire performance of the surrounding construction.

Before selecting a product, designers and specifiers must ensure all parts of the construction that make up the internal or external leaf of the wall are suitable to support a cavity barrier for the length of fire integrity required. Fire test data for the components and/or system must be reviewed, including through-wall performance, and with particular attention paid to any deflection or distortion which could cause gaps to form between the substrate and cavity barrier.

ARC Building Solutions Ltd cannot accept liability for failure where usage is outside of the certificated scope of application, including but not limited to, where deflection or distortion of wall or cladding systems has allowed gaps to form around the cavity barrier, or where the barrier is not fitted in accordance with the manufacturer's guidelines.

Fixing Bracket Fitting Instructions



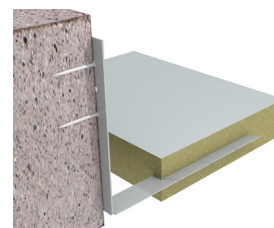
Two brackets are available: small for up to 160mm cavity and large for sizes up to 450mm.



Now bend the bracket into an 'L' shape at the fold point (a small 'U' shape cutout on each side).



Once folded the bracket can be fixed to the block (or CP board). It is recommended to use at least two fixing points to ensure strength. Non-combustible fixings of appropriate type and strength for the substrate and application should be selected.



Now impale the insulation onto the bracket as can be seen in this cross-section. Please note two brackets should be used for each piece, approx. 150mm inwards from each end.



FIRE STOP SLAB

Standard Dimensions: Full Slab

Product Code	Description	Thickness	Dimensions
FFS600/100	ARC Fire Stop Slab	100mm	100 x 600 x 1200mm
FFS SB	ARC Small Fixing Bracket ≤ 160mm cavity	n/a	n/a
FFS LB	ARC Large Fixing Bracket ≤ 450mm cavity	n/a	n/a

Standard Dimensions: Cut Pieces

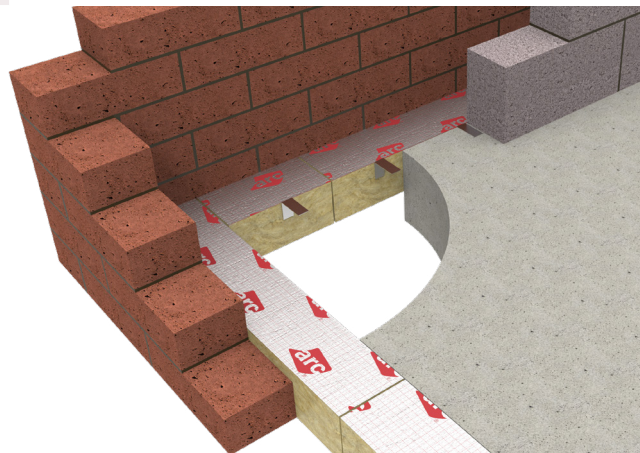
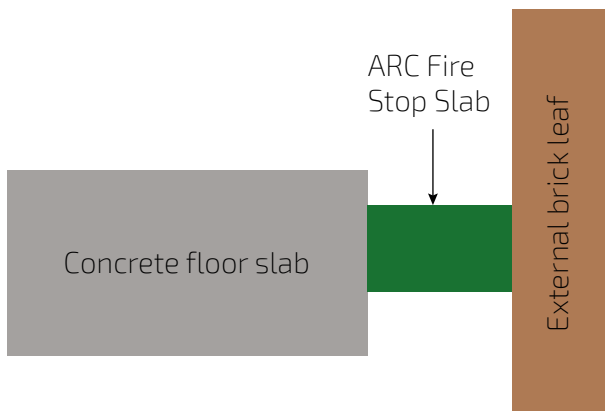
Product Code	Maximum Cavity Size	Substrate Type	Dimensions	Fire Performance		Pack Quantity	Packs Per Pallet
				Integrity	Insulation		
FFB50	50mm	Masonry	55 x 100 x 1200mm	3hrs	45mins	48	10
FFB60	60mm	Masonry	65 x 100 x 1200mm	3hrs	45mins	40	10
FFB70	70mm	Masonry	75 x 100 x 1200mm	3hrs	45mins	40	10
FFB80	80mm	Masonry	85 x 100 x 1200mm	3hrs	45mins	30	10
FFB90	90mm	Masonry	95 x 100 x 1200mm	3hrs	45mins	24	10
FFB100	100mm	Masonry	105 x 100 x 1200mm	3hrs	45mins	24	10
FFB110	110mm	Masonry	115 x 100 x 1200mm	3hrs	45mins	24	10
FFB120	120mm	Masonry	125 x 100 x 1200mm	3hrs	45mins	18	10
FFB130	130mm	Masonry	135 x 100 x 1200mm	3hrs	45mins	18	10
FFB140	140mm	Masonry	145 x 100 x 1200mm	3hrs	45mins	18	10
FFB150	150mm	Masonry	155 x 100 x 1200mm	3hrs	45mins	18	10
FFB160	160mm	Masonry	165 x 100 x 1200mm	3hrs	45mins	12	12
FFB170	170mm	Masonry	175 x 100 x 1200mm	3hrs	45mins	12	12
FFB180	180mm	Masonry	185 x 100 x 1200mm	3hrs	45mins	12	12
FFB190	190mm	Masonry	195 x 100 x 1200mm	3hrs	45mins	12	10
FFB200	200mm	Masonry	205 x 100 x 1200mm	3hrs	45mins	12	10
FFB210	210mm	Masonry	215 x 100 x 1200mm	3hrs	45mins	12	10
FFB220	220mm	Masonry	225 x 100 x 1200mm	3hrs	45mins	12	8
FFB230	230mm	Masonry	235 x 100 x 1200mm	3hrs	45mins	12	8
FFB240	240mm	Masonry	245 x 100 x 1200mm	3hrs	45mins	10	8
FFB250	250mm	Masonry	255 x 100 x 1200mm	3hrs	45mins	10	8
FFB260	260mm	Masonry	265 x 100 x 1200mm	3hrs	45mins	8	10
FFB270	270mm	Masonry	275 x 100 x 1200mm	3hrs	45mins	8	10
FFB280	280mm	Masonry	285 x 100 x 1200mm	3hrs	45mins	8	10
FFB290	290mm	Masonry	295 x 100 x 1200mm	3hrs	45mins	8	10
FFB300	300mm	Masonry	305 x 100 x 1200mm	3hrs	45mins	8	10
FFB325	325mm	Masonry	330 x 100 x 1200mm	2hrs	45mins	6	10
FFB350	350mm	Masonry	355 x 100 x 1200mm	2hrs	45mins	6	10
FFB375	375mm	Masonry	380 x 100 x 1200mm	2hrs	45mins	6	10
FFB400	400mm	Masonry	405 x 100 x 1200mm	2hrs	45mins	4	10
FFB425	425mm	Masonry	430 x 100 x 1200mm	2hrs	45mins	4	10
FFB450	450mm	Masonry	455 x 100 x 1200mm	2hrs	45mins	4	10
FFB50-450	50-450mm	CP Sheathing Board one side	As Above	2hrs	45mins	As Above	

FIRE STOP SLAB

Typical Detail: Masonry cavity

This detail shows the ARC Fire Stop Slab installed horizontally between the concrete slab edge and external brickwork.

Cavity Width	Fire Performance	
	Integrity	Insulation
Up to 300mm	180mins	45mins
Up to 450mm	120mins	45mins



Environment

No CFCs or HCFCs are involved in the manufacturing process of ARC's rockfibre mineral wool insulation. The material presents no known threat to the environment and is classed as ODP and GWP zero.

ARC Fire Stop Slab has a Green Guide rating of A+.

Health and Safety

ARC Building Solutions has an approved Health and Safety Policy and is committed to working and supplying products safely. ARC's rockfibre mineral wool is not classed as a possible human carcinogen. We have assessed products as required by Substances Hazardous to Health Regulations (COSHH). An ARC COSHH data sheet is available and can be downloaded from ARC's website.

Standards

ARC Fire Stop Slab is manufactured using rockfibre mineral wool which achieves a fire classification of Euroclass A1 as defined in BS EN 13501-1, and conforms to BS EN 13162 and EN16001 Energy Management Systems.

ARC's rockfibre mineral wool insulation has a thermal conductivity of 0.035W/mK.

Storage and Packaging

ARC Fire Stop Slabs are supplied in polythene packs which are designed for transporting and protecting the products. It is not recommended that the packs are stored in direct sunlight. When storing the barriers for longer periods of time it is recommended that the product should be stored indoors, or under cover.

Any information provided within this document is intended for guidance only. Expert technical advice should be sought before specification or installation of any product. It is of particular importance to ensure that any fire barrier or fire stopping product is tested for use with the exact application intended. ARC Building Solutions Ltd cannot accept liability for failure where usage is outside of the standard application, including but not limited to, where deflection or distortion has allowed gaps to form around the barrier, or where the barrier is not fitted in accordance with the manufacturer's guidelines.

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Certificate Number 19310
ISO 9001, ISO 14001
ISO 45001