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Solutions

Prepared by:

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Approved body No.:

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Product Name:

FirePro® SP FireStop EN

Project No.:

4791060931.1

Report No.:

4790634702-01

Issue number:

03

Date of Issue:

9th July 2024

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This classification report consists of twenty-six pages and may only be used or reproduced in its entirety.

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1. Introduction

This classification report defines the classification assigned to the element FirePro® SP FireStop EN, in accordance with the procedures given in BS EN 13501-2: 2016.

2. Details of classification product

2.1 General

The element FirePro® SP FireStop EN is defined as a fire resisting linear joint and gap sealing system to be used to reinstate the performance of floors and walls.

2.2 Product description

The element FirePro® SP FireStop EN is fully described in the test reports provided in support of classification detailed in clause 3.1.

3. Test reports in support of classification

3.1 Summary of test reports

Name of laboratory	Name of sponsor	Test and Date	Test method
Warringtonfire Testing and Certification Limited - Notified Body No. 1121	Rockwool Limited	WF No. 517434/R, 14/04/2022	BS EN 1366-4:2021
		WF No. 518732/R, 31/05/2022	
		WF No. 514261/R, 15/04/2022	
		WF No. 517720/R, 28/04/2022	
		WF No. 532699A/R, 20/06/2023	
	WF No. 537524/R, 27/10/2023		
	Rockwool Limited	WF No. 535663/R, 25/08/2024	BS EN 1366-3:2021

3.2 Results

Summary of report No.: WF No. 517434/R

A fire resistance test in accordance with BS EN 1366-4: 2021, on linear gap seals installed in a rigid wall supporting construction.

Specimen	Integrity (minutes)		Insulation (minutes)
	Cotton pad	Sustained flames	
A	144	144	132
B	83	87	83
C	68	72	68
D	144	144	144

Summary of report No.: WF No. 518732/R

A fire resistance test in accordance with BS EN 1366-4: 2021, on linear gap seals installed in a vertical supporting construction, made up of aerated concrete lintels, steel framing systems and composite panel systems.

Specimen	Integrity (minutes)		Insulation (minutes)
	Cotton pad	Sustained flames	
A	132	132	132
B	132	132	61
E	132	132	132

Summary of report No.: WF No. 514261/R

A fire resistance test in accordance with BS EN 1366-4: 2021, on linear gap seals installed in a rigid floor supporting construction.

Specimen	Integrity (minutes)		Insulation (minutes)
	Cotton pad	Sustained flames	
A	50	50	50
B	61	61	61
C	132	132	132
D	132	132	132

Summary of report No.: WF No. 517720/R

A fire resistance test in accordance with BS EN 1366-4: 2021, on linear gap seals installed in a rigid floor supporting construction, with 600 mm thick upstands made up of aerated concrete lintels, steel framing systems and composite panel systems.

Specimen	Integrity (minutes)		Insulation (minutes)
	Cotton pad	Sustained flames	
A	97	97	97
B	132	132	128
C	132	132	132
D	69	69	69
E	121	132	22
F	132	132	26

Summary of report No.: WF No. 537524/R

A fire resistance test in accordance with BS EN 1366-4: 2021, on linear gap seals installed in a rigid floor supporting construction, with 600 mm thick upstands made up of aerated concrete lintels.

Specimen	Integrity (minutes)		Insulation (minutes)
	Cotton pad	Sustained flames	
C	132	132	132
D	132	132	132
E	132	132	132
F	132	132	132

Summary of report No.: WF No. 532699/A

A fire resistance test in accordance with BS EN 1366-4: 2021, on linear gap seals installed in a rigid floor supporting construction.

Specimen	Integrity (minutes)		Insulation (minutes)
	Cotton pad	Sustained flames	
C	132	132	128

Summary of report No.: WF No. 535663

A fire resistance test in accordance with BS EN 1366-3: 2021, on linear gap seals installed in a rigid floor supporting construction with Masonry Support Brackets partially penetrating the Specimens.

Specimen	Integrity (minutes)		Insulation (minutes)
	Cotton pad	Sustained flames	
C2	144	144	144
C3	144	144	144

4. Classification and field of application

4.1 Reference of classification

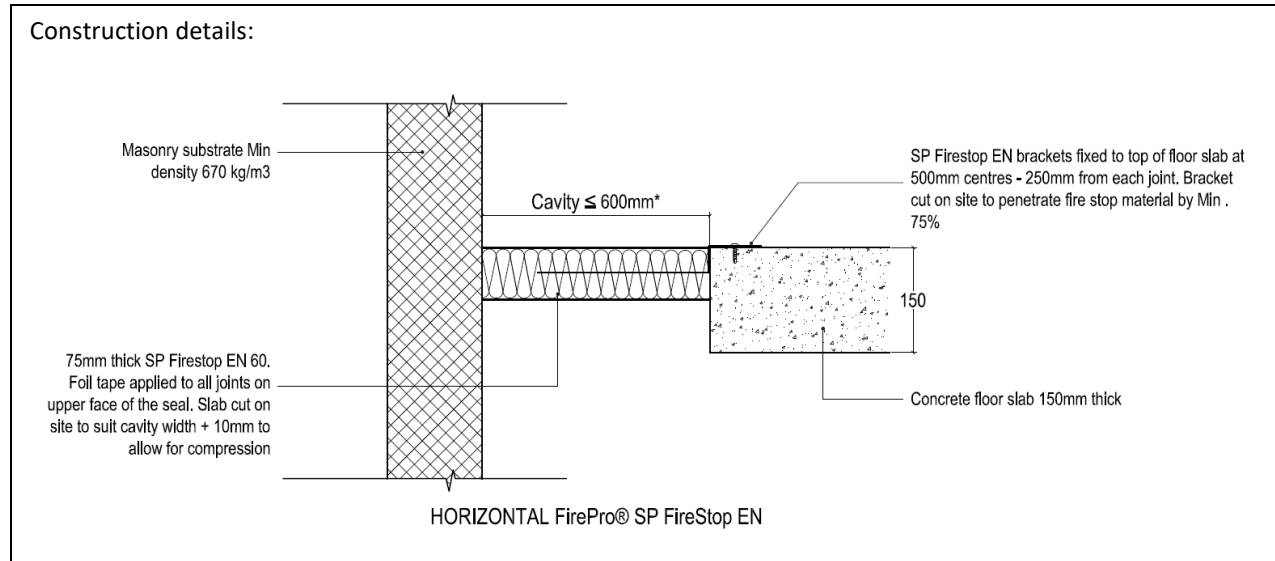
This classification has been carried out in accordance with Clause 7 of EN 13501-2:2016.

4.2 Classification

The element, product name FirePro® SP FireStop EN is classified according to the following combinations of performance parameters and classes as appropriate.

R	E	I	W		t	t	-	M	S	C	IncSlow	sn	ef	r	G	K
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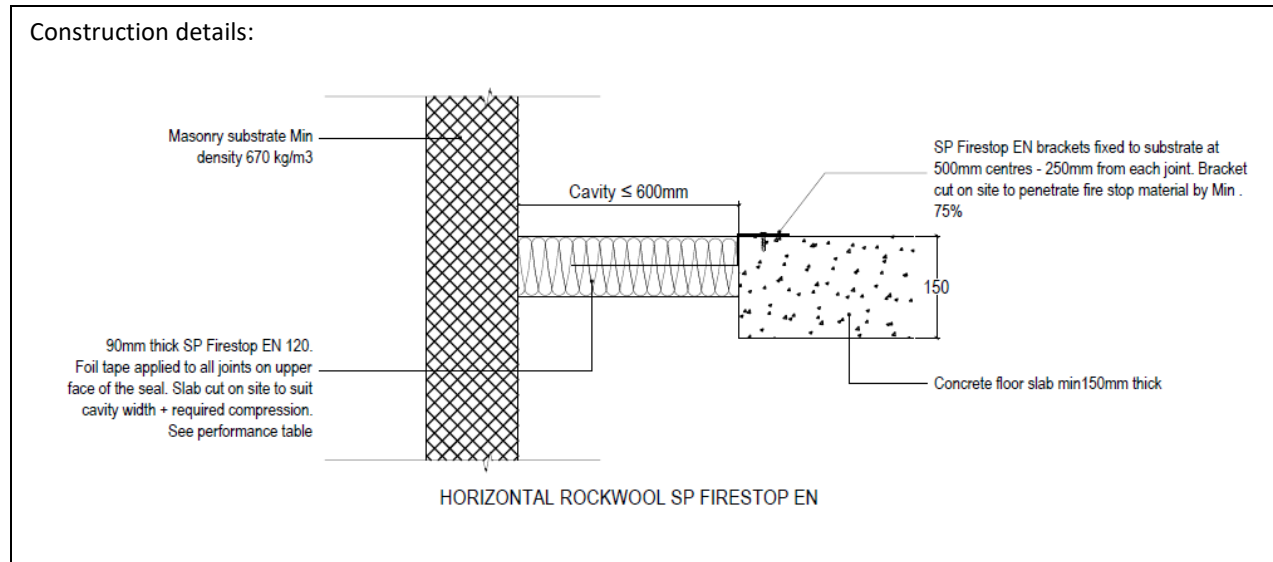
Horizontally oriented FirePro® SP FireStop EN Systems within rigid floors



Width of seal to be compressed by a minimum of 10 mm for installation
 Fixing brackets to project a minimum of 75% of the width of the fire stop material
 *Max joint width as shown below

FirePro® SP FireStop EN 60 within 150mm thick rigid floors

Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
75 mm	400 mm	SP/L	AAC-AAC	EI 60 – H – X – F – W 00 to W 400
75 mm	600 mm	SP/L	AAC-AAC	EI 30 – H – X – F – W 00 to W 600



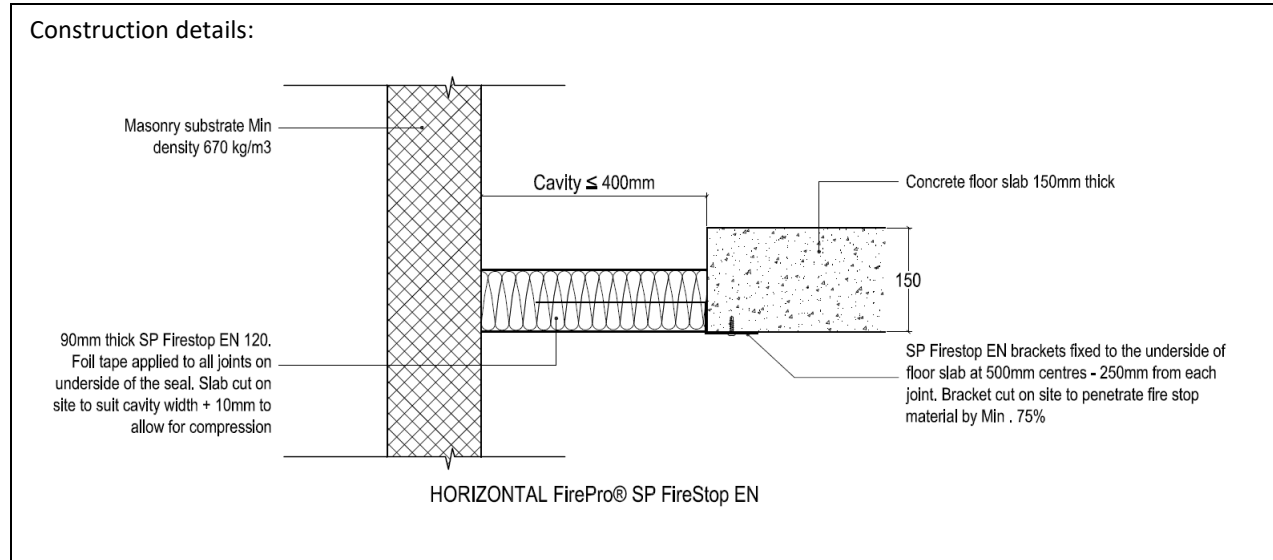
For Joints up to 400 mm (with 10 mm seal compression) and 300 mm (with 5 mm seal compression), the SP FireStop EN 120 can be mounted at any position within the depth of the floor slab. Joints between 400 & 600 mm shall be mounted on the top of the slab.

Fixing brackets to project a minimum of 75% of the width of the fire stop material

*Max joint width as shown below

A DPC can be incorporated within the cavity construction for joint widths up to 400 mm, with 10 mm seal compression.

FirePro®SP FireStop EN 120 within 150mm thick rigid floors					
Seal Thickness	Max Joint width	Bracket reference	Seal compression	Substrates	Classification
90 mm	200 mm	SP/L	0 mm	AAC-AAC	EI 120 – H – X – F – W 00 to W 200
90 mm	300 mm	SP/L	5 mm	AAC-AAC	EI 120 – H – X – F – W 00 to W 300
90 mm	400 mm	SP/L	10 mm	AAC-AAC	EI 120 – H – X – F – W 00 to W 400
90 mm	600 mm	SP/L	10 mm	AAC-AAC	EI 60 – H – X – F – W 00 to W 600
90 mm	600 mm	SP/XL	10 mm	AAC-AAC	EI 90 – H – X – F – W 00 to W 600

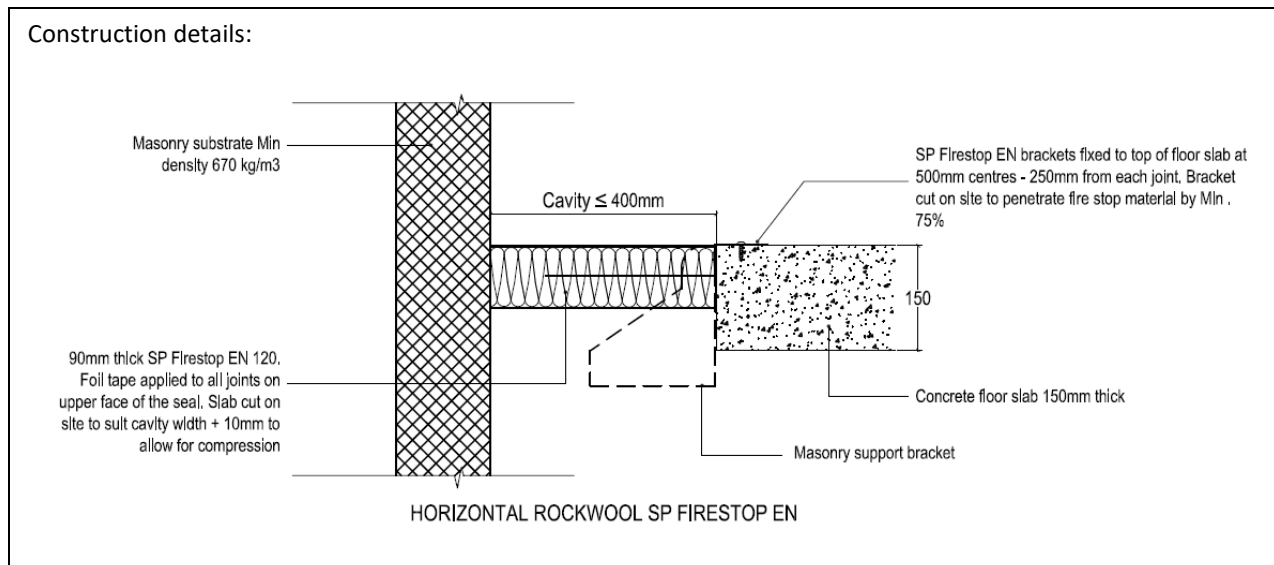


Width of seal to be compressed by a minimum of 10 mm for installation

Fixing brackets to project a minimum of 75% of the width of the fire stop material

FirePro®SP FireStop EN 120 within 150mm thick rigid floors – Installed from below only

Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
90 mm	250 mm	SP/L	AAC-AAC	EI 120 – H – X – F – W 00 to W 250
90 mm	400 mm	SP/L	AAC-AAC	EI 60 – H – X – F – W 00 to W 400



Width of seal to be compressed by a minimum of 10 mm for installation
 Fixing brackets to project a minimum of 75% of the width of the fire stop material

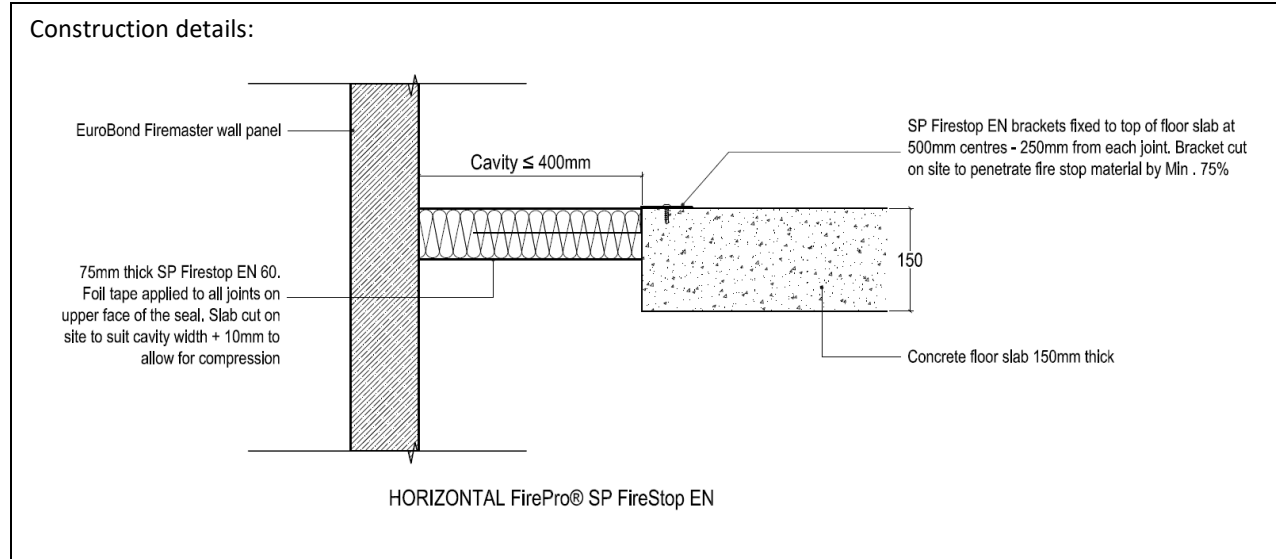
FirePro®SP FireStop EN 120 within 150mm thick rigid floors – Masonry support brackets.

Where Masonry support brackets are mounted within the joint aperture facing. The SP FireStop EN 120 shall be positioned within the joint, such that the top edge of the masonry support bracket, does not fully penetrate through the foil on the upper face of the product.

Service	Seal Thickness	Max Joint Size*	Bracket reference	Substrates	Classification
180 mm deep x 50 mm wide Masonry support bracket	90 mm	1100 x 400 mm	SP/L	AAC-AAC	EI 120

*This has also been tested as linear joint seal which allows unlimited length for joints with a maximum width of 400mm, see page 9. In combination this would allow for a continuous length of joint seal along with the partial penetrations at 350 mm centres.

Horizontally oriented FirePro® SP FireStop EN Systems between rigid floors and Composite walls



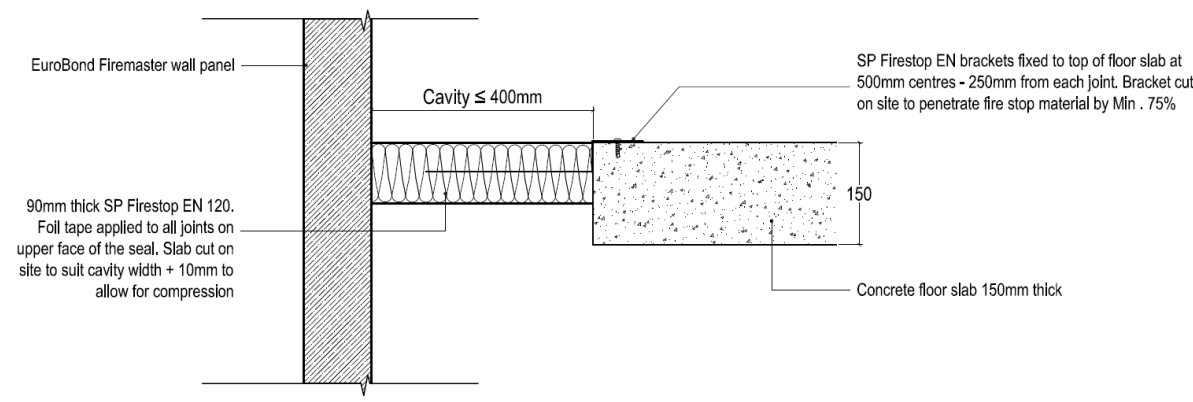
Width of seal to be compressed by a minimum of 10 mm for installation

Fixing brackets to project a minimum of 75% of the width of the fire stop material

FirePro® SP FireStop EN 60 between 150mm thick rigid floors and Eurobond Firemaster Composite walls (Min 100mm thick)

Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
75 mm	400 mm	SP/L	AAC-Firemaster wall	E 60 – H – X – F – W 00 to W 400 EI 15 – H – X – F – W 00 to W 400

Construction details:



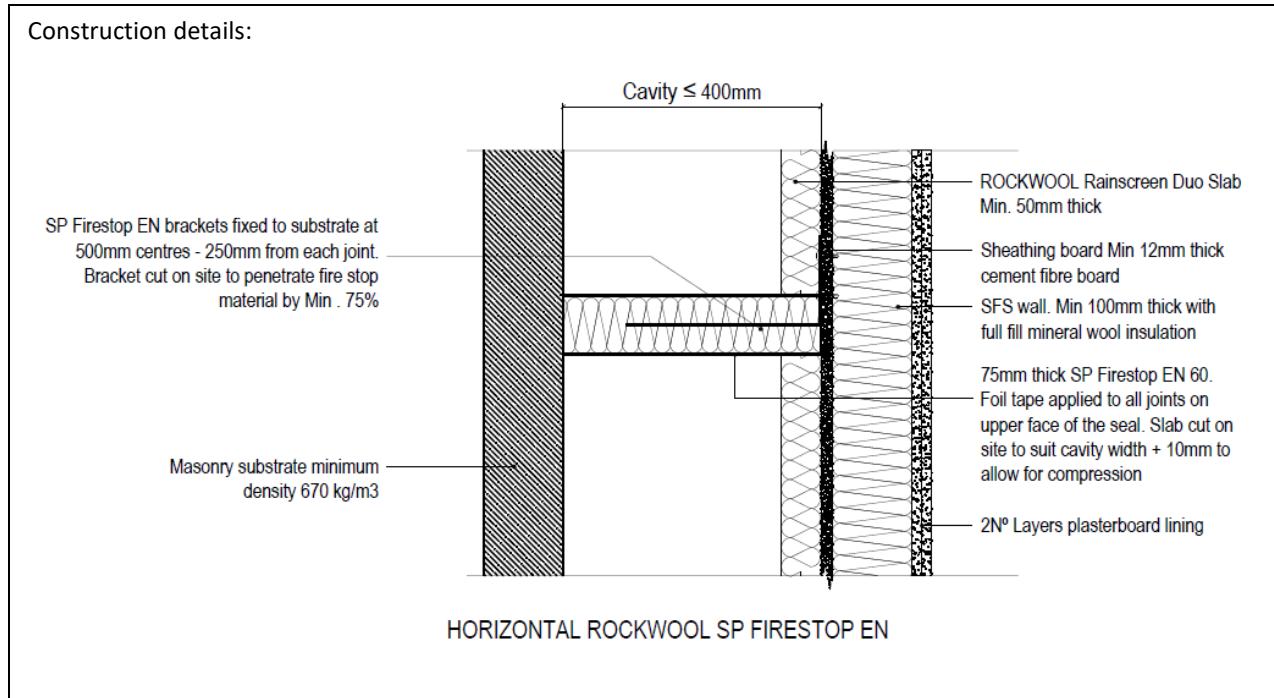
HORIZONTAL FirePro® SP FireStop EN

Width of seal to be compressed by a minimum of 10 mm for installation
 Fixing brackets to project a minimum of 75% of the width of the fire stop material

FirePro® SP FireStop EN 120 between 150mm thick rigid floors and Eurobond Firemaster Composite walls (Min 100mm thick)

Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
90 mm	400 mm	SP/L	AAC-Firemaster wall	E 120 – H – X – F – W 00 to W 400 EI 15 – H – X – F – W 00 to W 400

Horizontally oriented FirePro® SP FireStop EN Systems between SFS Walls and masonry constructions.



Width of seal to be compressed by a minimum of 10 mm for installation

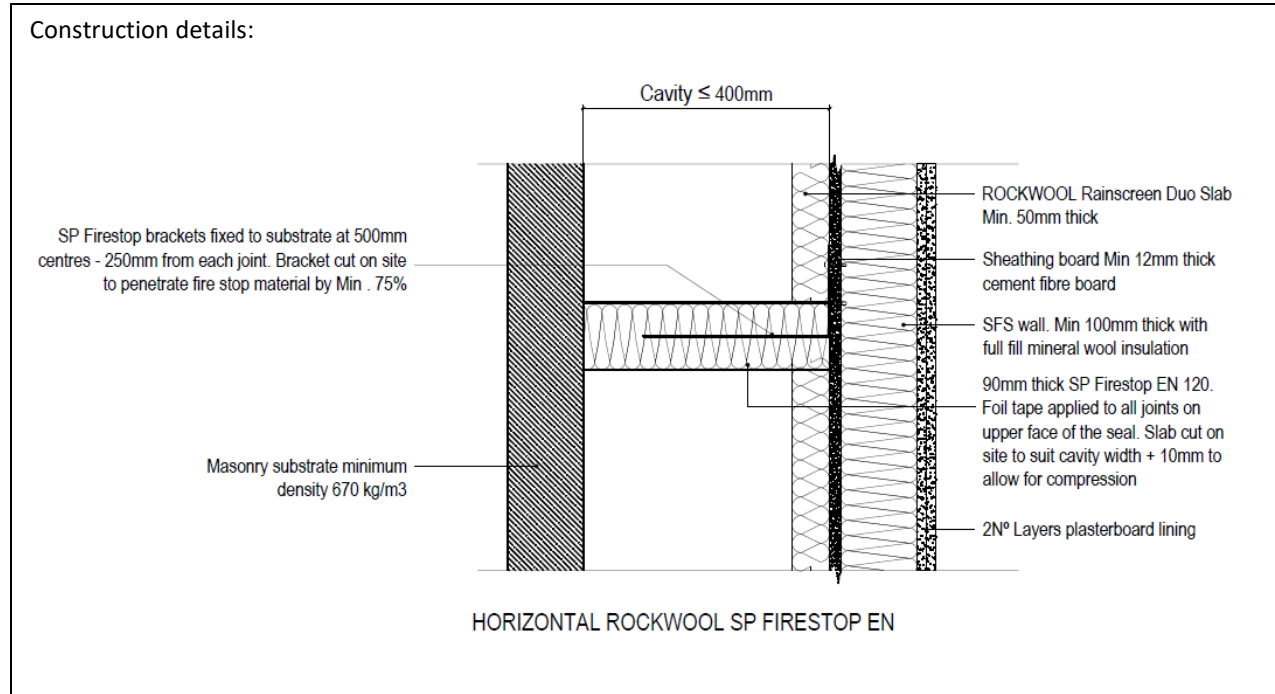
Fixing brackets to project a minimum of 75% of the width of the fire stop material

The SFS wall system shall comprise a 12mm thick cement fibre board to which the SP EN is fixed. The wall must be a min 100mm thick and consist of an insulated cavity with 2 x 12.5mm gypsum-based boards on the inner face.

The steel framing shall be fabricated using min of 0.5mm thick steel.

FirePro® SP FireStop EN 60 fixed to a SFS wall system and out to a masonry construction

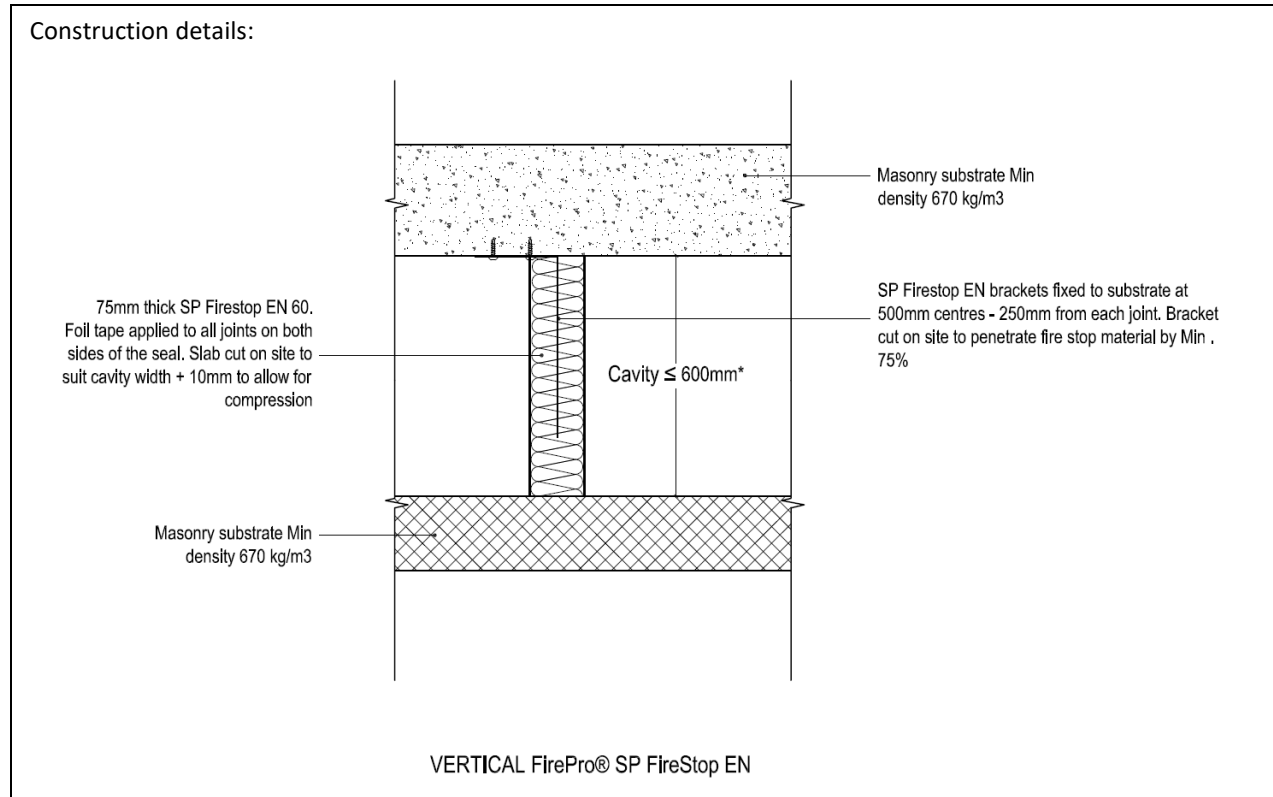
Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
75 mm	400 mm	SP/L	SFS wall - AAC	EI 60 – H – X – F – W 00 to W 400



Width of seal to be compressed by a minimum of 10 mm for installation
 Fixing brackets to project a minimum of 75% of the width of the fire stop material
 The SFS wall system shall comprise a 12mm thick cement fibre board to which the SP EN is fixed. The wall must be a min 100mm thick and consist of an insulated cavity with 2 x 12.5mm gypsum-based boards on the inner face.
 The steel framing shall be fabricated using min of 0.5mm thick steel.

FirePro® SP FireStop EN 120 fixed to a SFS wall system and out to a masonry construction				
Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
90 mm	400 mm	SP/L	SFS wall - AAC	EI 120 – H – X – F – W 00 to W 400

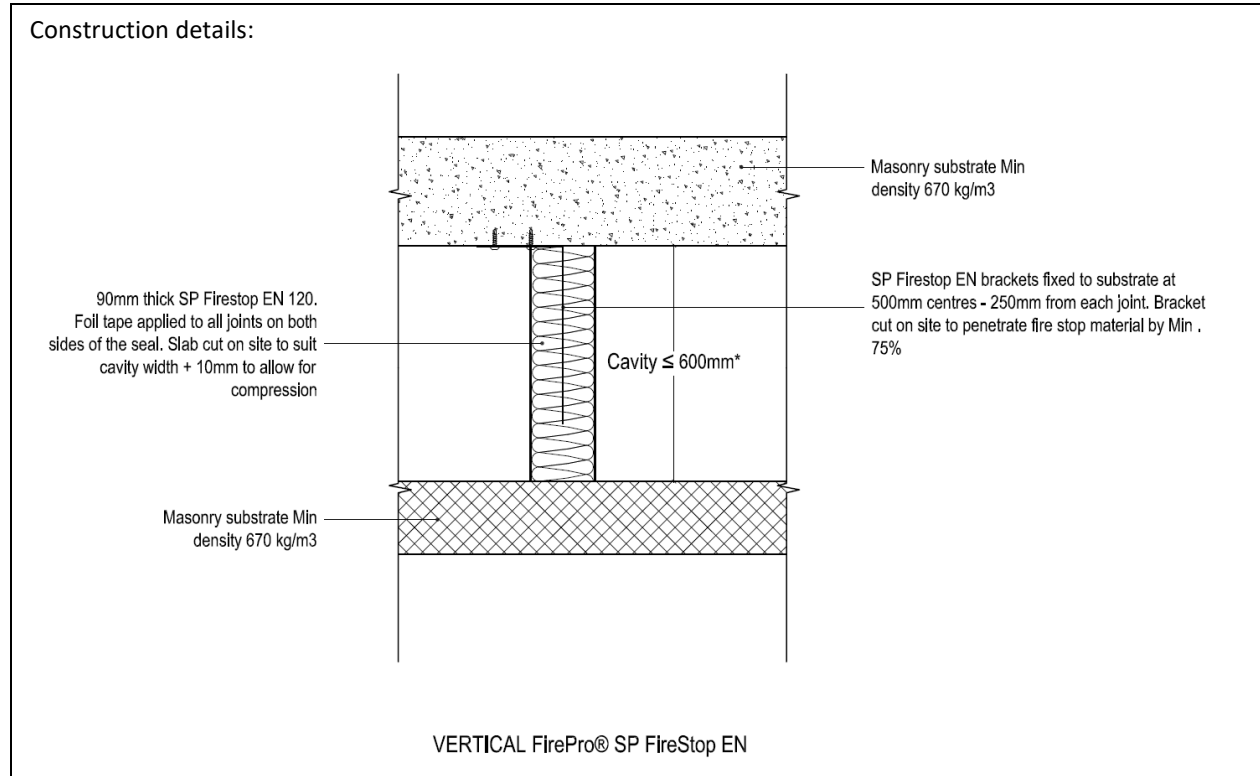
Vertically oriented FirePro® SP FireStop EN Systems within 150mm rigid walls



Width of seal to be compressed by a minimum of 10 mm for installation
 Fixing brackets to project a minimum of 75% of the width of the fire stop material
 *Max joint width as shown below

FirePro® SP FireStop EN 60 within 150mm thick rigid walls

Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
75 mm	400 mm	SP/L	AAC-AAC	EI 60 – V – X – F – W 00 to W 400
75 mm	600 mm	SP/XL	AAC-AAC	EI 60 – V – X – F – W 00 to W 600

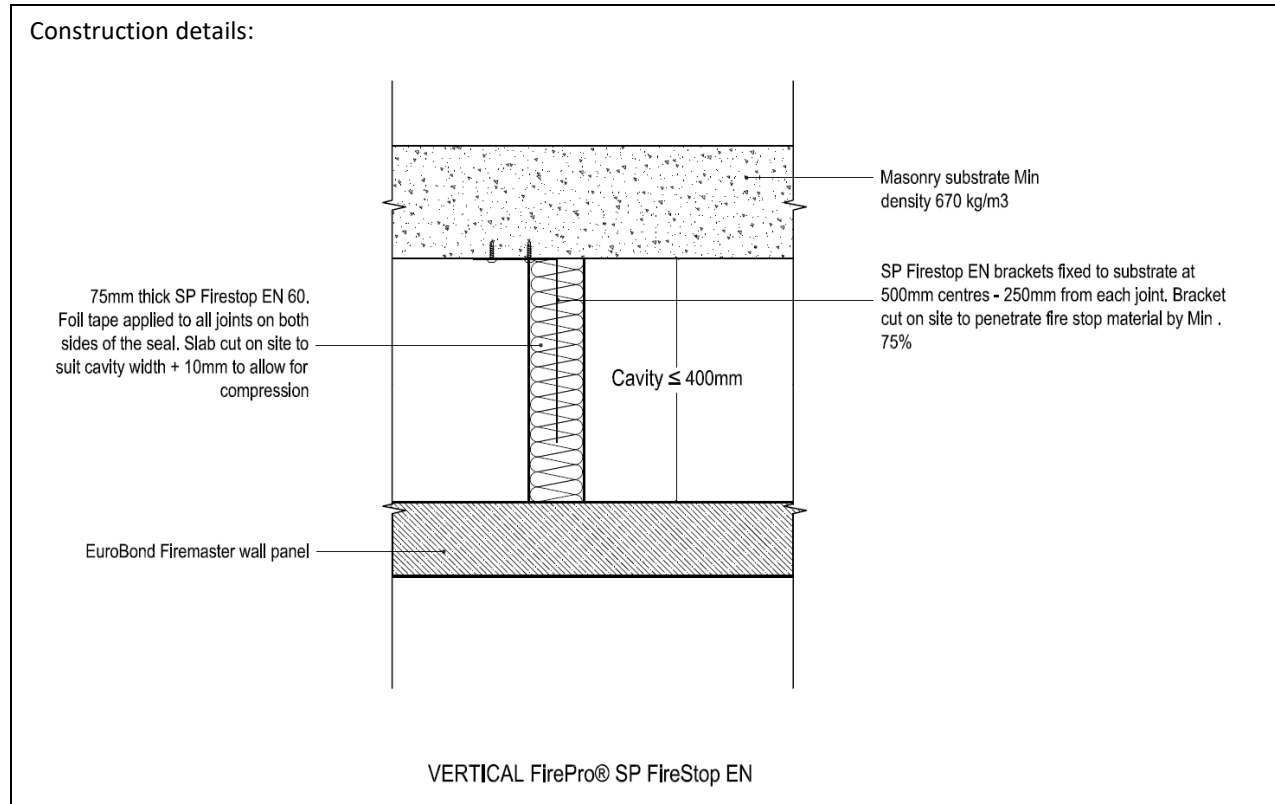


Width of seal to be compressed by a minimum of 10 mm for installation
 Fixing brackets to project a minimum of 75% of the width of the fire stop material
 *Max joint width as shown below

FirePro® SP FireStop EN 120 within 150mm thick rigid walls

Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
90 mm	400 mm	SP/L	AAC-AAC	EI 120 – V – X – F – W 00 to W 400
90 mm	600 mm	SP/XL	AAC-AAC	EI 90 – V – X – F – W 00 to W 600

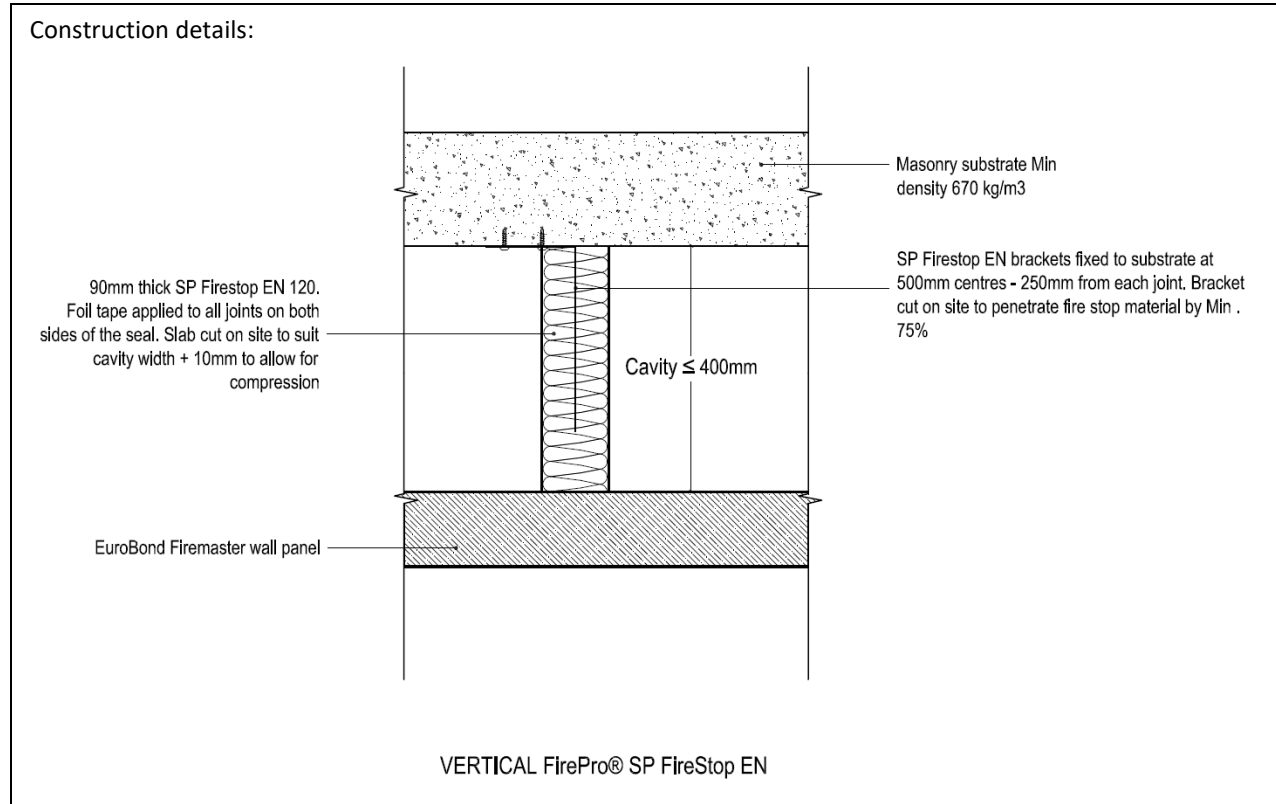
Vertically oriented FirePro® SP FireStop EN Systems between rigid walls and Composite walls



Width of seal to be compressed by a minimum of 10 mm for installation
 Fixing brackets to project a minimum of 75% of the width of the fire stop material

FirePro® SP FireStop EN 60 between rigid walls and Eurobond Firemaster Composite walls (Min 100mm thick)

Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
75 mm	400 mm	SP/L	AAC-Firemaster wall	EI 60 – V – X – F – W 00 to W 400



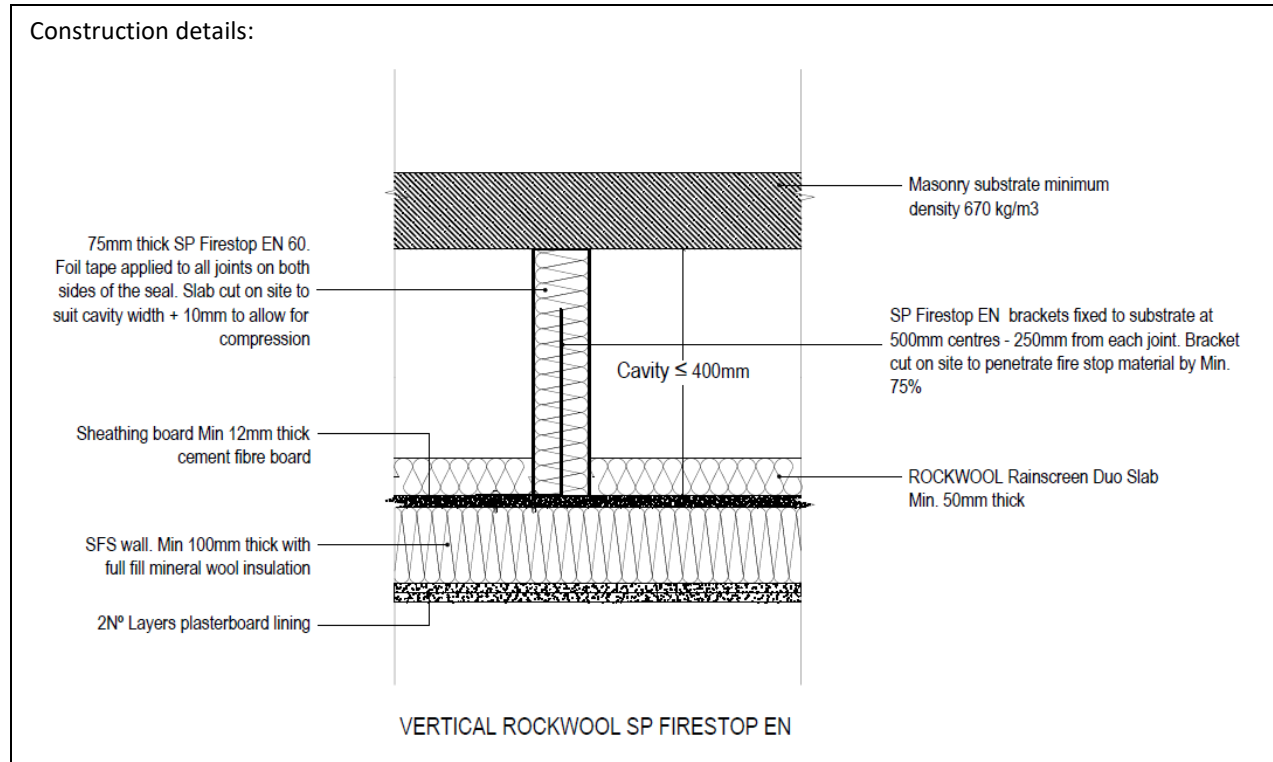
Width of seal to be compressed by a minimum of 10 mm for installation

Fixing brackets to project a minimum of 75% of the width of the fire stop material

FirePro® SP FireStop EN 120 between rigid walls and Eurobond Firemaster Composite walls (Min 100mm thick)

Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
90 mm	400 mm	SP/L	AAC-Firemaster wall	E 120 – V – X – F – W 00 to W 400 EI 60 – V – X – F – W 00 to W 400

Vertically oriented FirePro® SP FireStop EN Systems between SFS Walls and masonry constructions



Width of seal to be compressed by a minimum of 10 mm for installation

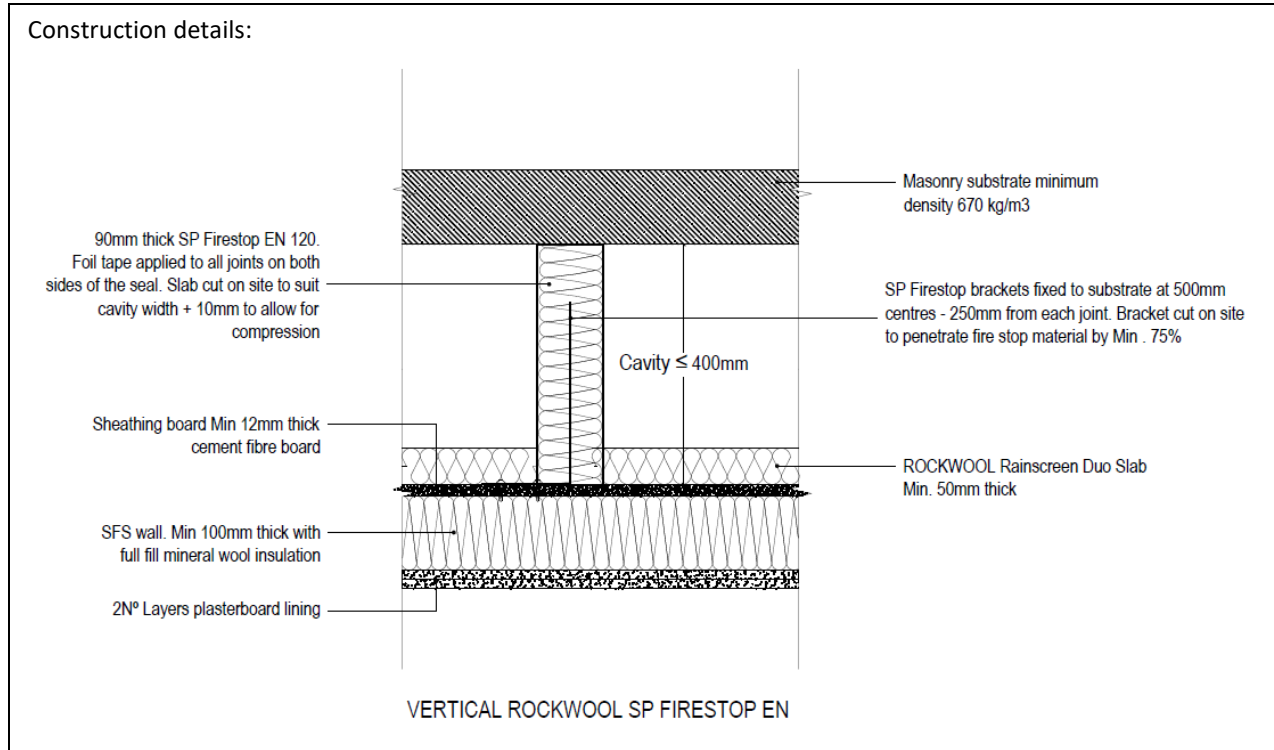
Fixing brackets to project a minimum of 75% of the width of the fire stop material

The SFS wall system shall comprise a 12mm thick cement fibre board to which the SP EN is fixed. The wall must be a min 100mm thick and consist of an insulated cavity with 2 x 12.5mm gypsum-based boards on the inner face.

The steel framing shall be fabricated using min of 0.5mm thick steel.

FirePro® SP FireStop EN 60 fixed to a SFS wall system and out to a masonry construction

Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
75 mm	400 mm	SP/L	SFS wall - AAC	EI 60 – V – X – F – W 00 to W 400



Width of seal to be compressed by a minimum of 10 mm for installation
 Fixing brackets to project a minimum of 75% of the width of the fire stop material
 The SFS wall system shall comprise a 12mm thick cement fibre board to which the SP EN is fixed. The wall must be a min 100mm thick and consist of an insulated cavity with 2 x 12.5mm gypsum-based boards on the inner face.
 The steel framing shall be fabricated using min of 0.5mm thick steel.

FirePro® SP FireStop EN 120 fixed to a SFS wall system and out to a masonry construction

Seal Thickness	Max Joint width	Bracket reference	Substrates	Classification
90 mm	400 mm	SP/L	SFS wall - AAC	EI 120 – V – X – F – W 00 to W 400

4.3 Field of Application – Linear Joint and Gap Seals

This classification is valid for the following end use applications (as defined in EN1366-4: 2021, referencing the following appropriate clauses of EN1366-4: 2021).

13.1 Orientation

The field of application regarding the orientation of the linear joint is given in Table 2. The possible orientation of linear joints (A to E) and of the specimens in the test (A to C) is illustrated in Figure 28.

Table 2 – Field of direct application regarding orientation

Orientation tested	Application
A	A, C, E ^a
B	B
D	C, D
Key	
A	linear joint in a horizontal test construction
B	vertical linear joint in a vertical test construction
C	horizontal linear joint in a vertical test construction
D	horizontal wall joint abutting a floor, ceiling or roof
E	horizontal floor joint abutting a wall
^a Orientation E will only be covered by test orientation A if shear movement was chosen and one face of the joint was fixed and the other face was moved.	

Table 2 only applies when both the supporting construction and the location of the seal within the linear joint remain unchanged. See 13.3.

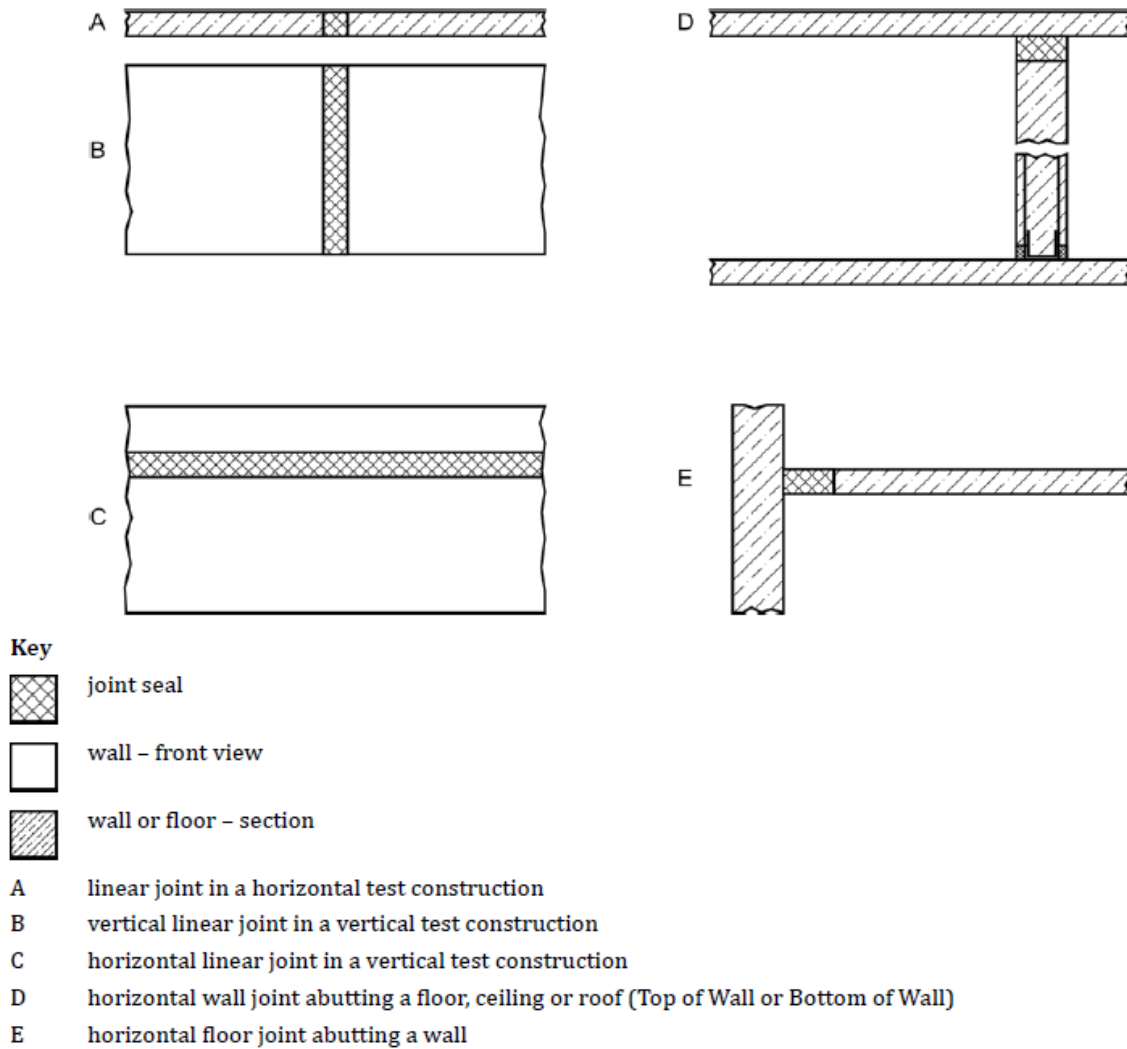


Figure 28 — Test and application orientation of joint seals

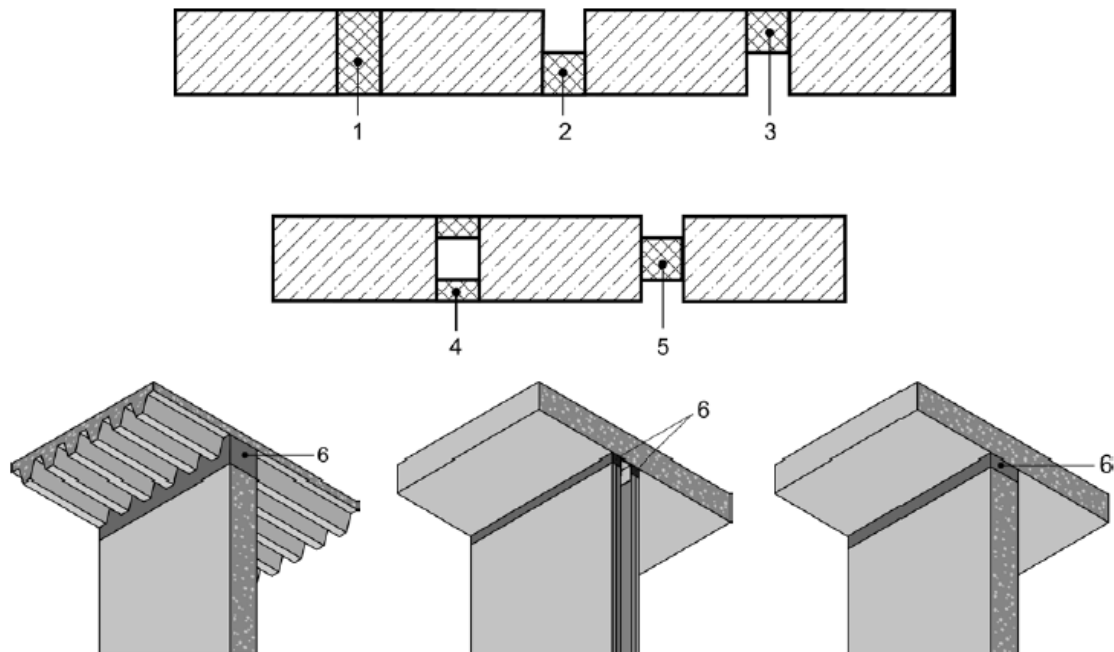
13.2 Supporting construction

Results obtained with autoclaved aerated concrete standard supporting constructions apply to aerated concrete, concrete, blockwork and masonry separating elements of a thickness and density equal to or greater than tested.

Test results obtained on a specific non-standard supporting construction apply only to that particular construction.

13.3 Seal position

Test results are valid only for the position (see Figure 17) in which the seal was tested, except that where the linear joint seal was fitted flush with the surface of the supporting construction and is exposed to the fire (see Figure 17, position 2), the result may also be applied to linear joint seals with positions 3 and 5.



Key

- 1 joint seal fills joint
- 2 joint seal at bottom of joint
- 3 joint seal at top of joint
- 4 joint seal forms one or more air cavities
- 5 joint seal centred in joint
- 6 joint seal at top of wall (flexible wall adjacent to a floor)

Figure 17 — Examples of joint seal position in a joint

13.5 Dimensions

Linear joint seal made of mineral wool (faced)

The results of a seal compressed in the A<>A direction (see Figure 4) cover smaller joint width, provided the degree of compression (%) exerted on the seal is equal to or greater than that used in the test.

The results of a seal compressed in the B<>B or C<>C directions (see Figure 4) cover smaller joint width and/or higher compression, provided the compression applied is not sufficient to induce a mechanical failure of the seal e.g. a de-lamination fracture of the mineral wool or facing.

The depth of a seal may be increased but not decreased.

In non-movement joints the density of the mineral wool may be increased.

If more than one layer of mineral wool strips has been used in the test the number of layers may be reduced but not increased, provided the degree of compression (%) exerted on the seal is equal to or greater than that used in the test.

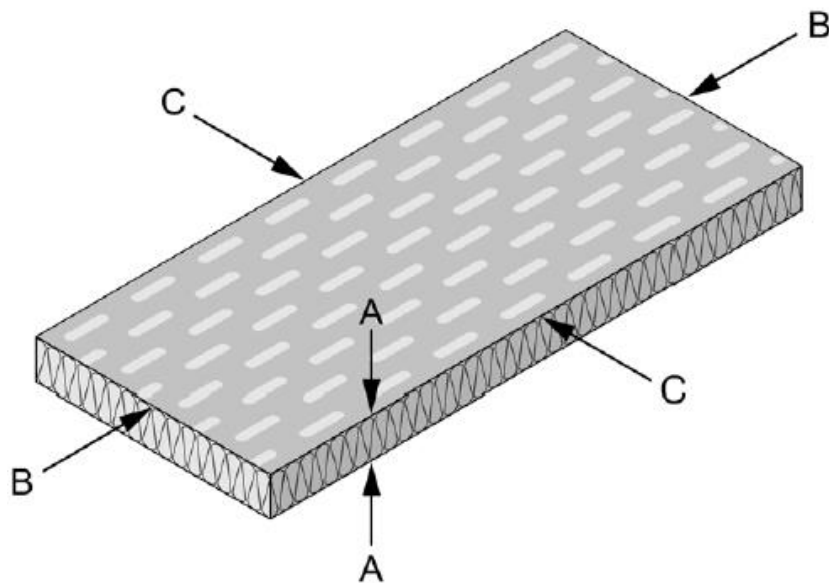


Figure 4 — Mineral wool - compression directions

5. Limitations

This classification report does not represent type approval or certification of the product.

6. Signatories

Report by:

A handwritten signature in black ink, appearing to read 'csweeney'.

Chris Sweeney
Project Engineer
Built Environment

Reviewed by:

A handwritten signature in blue ink, appearing to read 'chrisjohnson'.

Chris Johnson
Senior Staff Engineer
Built Environment

For and on behalf of UL International (UK) Ltd.