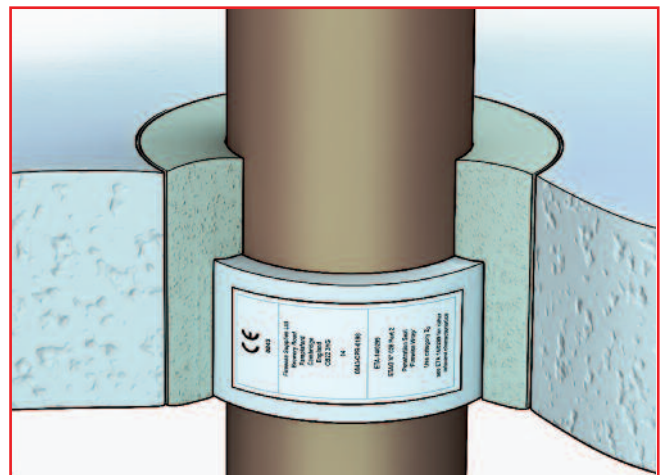
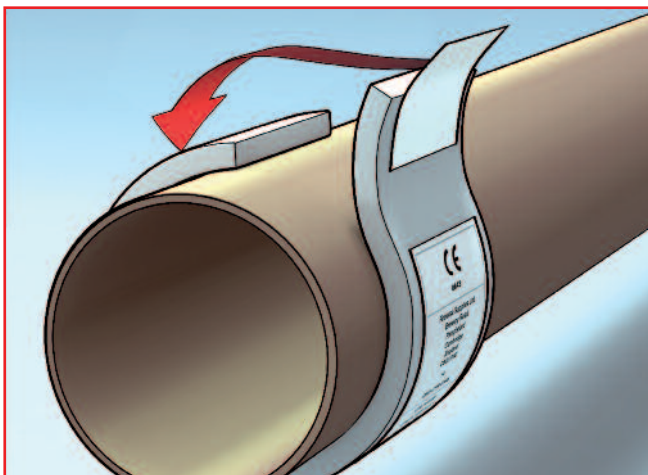


firewise

supplies Ltd

Technical Data Firewise FR Fire Wraps



Related Firewise Products



Technical Data - Firewise FR Fire Wraps

Product Description

Firewise FR fire wraps provide a robust and economic fire seal to provide fire resistance in concrete and blockwork compartment walls and floors where openings in these construction elements are formed to accommodate building services. In a fire attack situation, the intumescent lining within the fire wrap expands to form a robust char barrier which prevents the passage of flames and hot gases through voids created by thermal degradation of the building services and in addition restricts temperature rise on the non-fire side of the wall or floor.

Firewise FR fire wraps are made from multiple layers of a flexible 1.8mm thick water-resistant intumescent material contained within a polythene sleeve. The fire wraps are fastened around services with an adhesive tab. Firewise FR fire wraps are supplied in 16 standard sizes. Firewise FR fire wraps are particularly suitable when fittings are located close to the wall or floor and where the fire seal requires installing within the depth of the separating element.

Physical Properties

Composition:	Plastic sleeve with intumescent liner
Intumescent activation temperature:	Approximately 160° C
Intumescent expansion pressure:	146.8 kPa mean peak pressure for 1.85mm thick material in a 8.27mm gap
Intumescent expansion volume ratio:	10.75 mean ratio at 2.84 kPa
Service temperature:	-15°C - +75°C

Firewise FR Fire Wraps contain no hazardous materials and are asbestos free. This data sheet should be read in conjunction with the MSDS for this product.

Fire Performance

Scope of use of CE marked wraps in accordance with ETAG 026-2. Refer to ETA 14/0299 for further details – available from Firewise.

Construction	Pipe Outside Diameter	Product Code	Integrity (mins)	Insulation (mins)	Width x Layers	Pipe Wall Thk (mm)	Pipe Material		
Concrete/Masonry Walls - min. 100 mm thick - min. density 650 kg/m ³ - refer to Fig A	Up to 55 mm	WF055CE	120	120	50 x 2	2.2 – 8.1	uPVC		
	56 – 82 mm	WF082CE							
	83 – 110 mm	WF110BCE							
	Concrete Floors - min. 150 mm thick - min. density 650 kg/m ³ - refer to Fig B	125 mm	WF125ACE	180	90	50 x 2	3.2 – 9.2	Insulated mild steel & stainless steel. Insulation 25 mm thick	
		160 mm	WF160ACE	120	90		3.2 – 11.8		
		Up to 60 mm (110 mm with insulation)	WF110BCE	240	90		8.0 – 14.2		
		61 – 75 mm (111 – 125 mm with insulation)	WF125ACE	120	45				
		76 – 110 mm (126 – 160 mm with insulation)	WF160DCE	120	45				
		111 – 150 mm (161 – 200 mm with insulation)	WF200BCE	120	45				
		151 – 219 mm (201 – 269 mm with insulation)	WF270CE	120	45		1.2 – 14.2		
		Up to 42 mm (92 mm with insulation)	WF110BCE	240	20				
		43 – 75 mm (93 – 125 mm with insulation)	WF125ACE	240	20				
		Mortar Seal - within concrete floor, as above - min. 100 mm thick - refer to Fig C	76 – 108 mm (126 – 158 mm with insulation)	WF160DCE	240		20		75 x 2
50 mm	WF055CE		180	180	50 x 2	2.2 – 8.1	uPVC		
82 mm	WF082CE								
110 mm	WF110BCE								
Mortar Seal - within concrete floor, as above - min. 100 mm thick - refer to Fig C	50 mm		WF055CE	240	240	75 x 2	3.6 – 8.1	uPVC	
	82 mm		WF082CE						
	110 mm		WF110BCE						
	125 mm		WF125BCE						
	160 mm	WF160CCE	180	180	75 x 4	3.2 – 11.8			
	160 mm	WF160CCE				6.2	PE/ABS/SAN+PVC		
	110 mm	WF110CCE				180	180	75 x 1	3.4
160 mm	WF160BCE	4.0							
Mortar Seal - within concrete floor, as above - min. 100 mm thick - refer to Fig C	110 mm	WF110ACE	60	60	75 x 1	4.3	PE		
	125 mm	WF125BCE	180	180		75 x 2		4.9	
	200 mm	WF200ACE						75 x 7	7.8
	250 mm	WF250CE							7.8



Fire Performance

Scope of use of wraps tested in accordance with EN1363-1:1999 & EN1366-3:2004.

Firewise FR fire wraps can be used as a fire seal for thermoplastic pipes and electrical cables in large bunches.

Construction/Service	Integrity	Insulation
Mineral wool boards - refer to Fig D		
uPVC plastic pipes	Up to 90 mins*	Up to 90 mins*
Masonry walls & concrete floors - refer to Figs A, B & C		
cable bunches	240 mins	240 mins
plastic pipes	240 mins	240 mins
plastic pipes >160 ≤ 250mm	180 mins	180 mins
plastic pipes >250 ≤ 315mm	120 mins	120 mins

*depending on pipe size

Wrap Size	Product Code	Fire Rating (mins)	Width x Layers
55mm	WF055CE	240	50 x 2
82mm	WF082CE	240	50 x 2
110mm	WF110ACE	60	50 x 1
110mm	WF110BCE	90*/240	50 x 2
110mm	WF110CCE	180	75 x 1
125mm	WF125BCE	240	75 x 2
160mm	WF160BCE	60*/180	75 x 3
160mm	WF160CCE	240	75 x 4
200mm	WF200ACE	180	75 x 7
250mm	WF250CE	180	75 x 7
315mm	WF315	120	75 x 10

* in mineral wool boards

Installation Instructions

Fig A. Cast-into Concrete/Blockwalls

1. Please refer to the detail shown.
2. A fire wrap is required on both sides of the wall unless the fire risk is limited to one side only.
3. Ensure there is sufficient annular space around the pipe or cables to allow for the thickness of fire wrap (see dimensional data). For CE installations this should be minimal.
4. Position a fire wrap around the pipe/cables and fasten using the self-adhesive tab. Slide the wrap along the pipe/cables so that the edge is flush with one side of the wall. Repeat this for the other side of the wall.
5. Once the fire wrap is securely fastened, fill the annular space with a suitable FR Mortar or other solid non-combustible material.

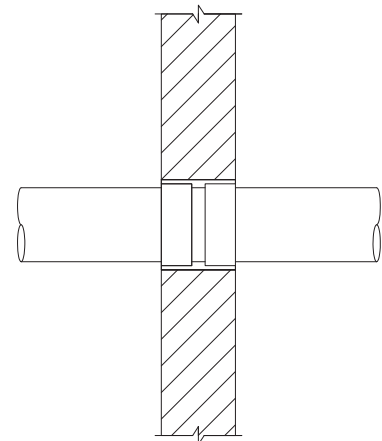


Fig B. Cast-into Concrete Slab

1. Please refer to typical detail shown.
2. Ensure there is sufficient annular space around the pipe or cables to allow for the thickness of fire wrap (see dimensional data). For CE installations this should be 30mm.
3. Position a fire wrap around the pipe/cables and fasten using the self-adhesive tab. Slide the wrap along the pipe/cables so that the edge is flush with the soffit of the floor.
4. Once the fire wrap is securely fastened, fill the annular space with a suitable FR Mortar or other solid non-combustible material.
5. Check that the edge of the fire wrap is fully visible at the surface.

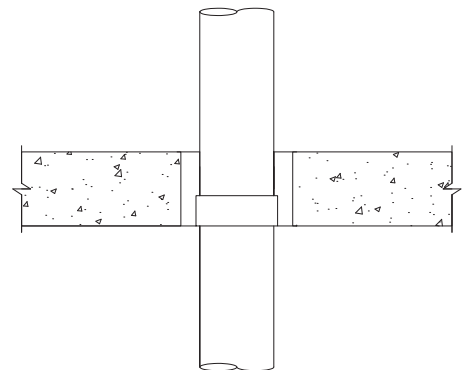


Fig C. Cast-into Mortar Seal

1. Please refer to typical detail shown.
2. Ensure there is sufficient annular space around the pipe or cables to allow for the thickness of fire wrap (see dimensional data). For CE installations this should be 75mm max.
3. Position a fire wrap around the pipe/cables and fasten using the self-adhesive tab. Slide the wrap along the pipe/cables so that the edge is flush with the soffit of the floor.
4. Once the fire wrap is securely fastened, fill the annular space with a suitable FR Mortar or other solid non-combustible material.
5. Check that the edge of the fire wrap is fully visible at the surface.

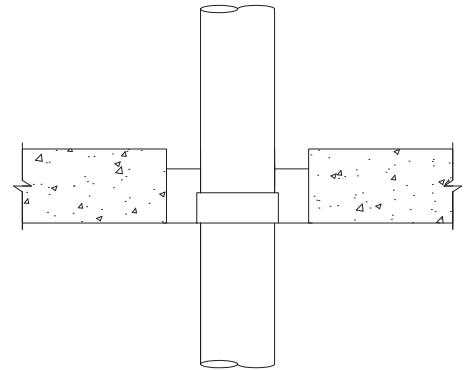
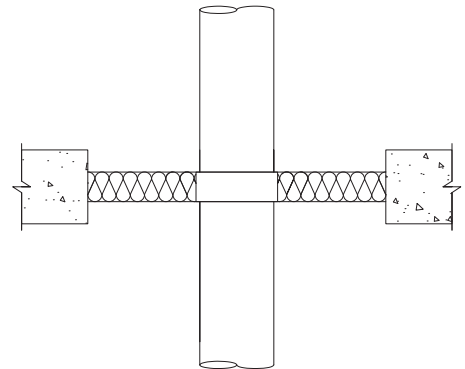


Fig D. Cast-into Mineral Wool Boards

1. Please refer to the detail shown.
2. Ensure there is sufficient annular space around the pipe to allow for the thickness of fire wrap (see dimensional data).
3. Position a fire wrap around the pipe and fasten using the self-adhesive tab. Slide the wrap along the pipe so that the wrap is fully positioned centrally within the mineral wool board.
4. Once the fire wrap is securely fastened, ensure any holes or gaps between the pipe and the mineral wool board are sealed using Firewise FR Intumescent Mastic.



UL INTERNATIONAL LIMITED
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Designated according to Article 28 of the Regulation (EU) No 305/2011 and member of EOTA (European Organisation for Technical Assessment, www.eota.eu)

Member of
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European Technical Assessment	ETA 14/0299 of 04/03/2015
Technical Assessment Body issuing the ETA and designated according to Article 28 of the Regulation (EU) No 305/2011: UL International (UK) Ltd	
Trade name of the construction product:	Firewise Wrap (Firewise Wrap 50 / Firewise Wrap 82 / Firewise Wrap 110 / Firewise Wrap 125 / Firewise Wrap 180 / Firewise Wrap 250)
Product family to which the construction product belongs:	Fire Stopping and Sealing Product: - Penetration Seals
Manufacturer:	Firewise Supplies Brewery Road Pampisford Cambridge England CB22 3HG
Manufacturing plant(s):	A006
This European Technical Assessment certifies:	11 pages including 1 Annex which forms an integral part of the assessment.
This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of:	ETAG 006-2, edition 2011, used as European Assessment Document (EAD).
This version replaces:	ETA 14/0299 issued on 18/09/2014

The text of this report's Technical Assessment in other languages shall fully correspond to the original issued document and shall be identical to this.

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EC CERTIFICATE

Notified Body No. 0843
CPR Notified Body UL International (UK) Ltd, World's Trade Center, The Gateway, One Pennsylvania Plaza, Gulfside, Surrey, GU3 1LR, United Kingdom

Certificate of consistency of performance
0843-CPR-0198

In compliance with the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 on Construction Products Regulation (CPR), this certificate applies to the construction product:

Firewise Wrap
Penetration Seal Classified for use in solid floors & Mastic Seals

A pipe/cable device used to fill penetration holes which conventional joint products form. The Firewise Wrap is supplied with intumescent fire stoppers with polyurethane adhesive. It is wrapped around the device and cast into the resulting mortar.

intended for use in the manufacturing site:

Firewise Supplies
Brewery Road
Pampisford
Cambridge
England
CB22 3HG

This certificate attests that all conditions concerning the assessment and verification of consistency of performance described in this ETC are:

ETA 14/0299
under system AACP 1 for the performance set out in this certificate are applied and that:

Firewise Wrap fulfils all the prescribed requirements for these performances.

This certificate was first issued on 18 September 2014 and will remain valid as long as the EOTA technical criteria for construction products in this class or the latest production control plan and test methods apply, unless suspended or withdrawn by the product certification body.

Certificate issue date: 18 September 2014

Authorised
Quality Engineering Manager
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0843
Firewise Supplies Ltd Brewery Road Pampisford Cambridge England CB22 3HG
14
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ETAG N° 026 Part 2
Penetration Seal 'Firewise Wrap'
Use category Z ₂
see ETA 14/0299 for other relevant characteristics

