



CERTIFICATE OF APPROVAL

No CF 512

This is to certify that, in accordance with
TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

FSI LIMITED

**Westminster Industrial Estate, Tamworth Road,
Measham DE12 7DS**

Tel: 01530 515130 Fax: 01530 273564

Have been assessed against the requirements of the Technical Schedule(s)
denoted below and are approved for use subject to the conditions
appended hereto:

CERTIFIED PRODUCT

**Silverseal Mortar & Silverseal
HSFM Compound**

TECHNICAL SCHEDULE

**TS03 Penetration Sealing
Systems**

Signed and sealed for and on behalf of CERTIFIRE

Sir Ken Knight
Chairman - Management Council

Issued: 20th November 2006
Revised: 16th January 2014
Valid to: 10th April 2017

Page 1 of 3



CERTIFICATE No CF 512

FSI LIMITED

Silverseal Mortar & Silverseal HSFM Mortar

1. This approval relates to the use of Silverseal & Silverseal HSFM Mortar for the fire protection where services are penetrating walls and floors. The detailed scope is given in the Approval Matrix included in this Certificate. This shows the thickness and acceptable services for Silverseal & Silverseal HSFM Mortar required to provide fire resistance periods in accordance with BS 476: Part 20: 1987 of up to 240 minutes for differing services and wall/floor constructions. The scope of certification complies with the guidelines stated in the ASFP Red Book: 3rd Edition for 3rd party certification schemes.
2. This certification is designed to demonstrate compliance of the product or system specifically with Approved Document B (England and Wales), Section 2 of the Technical Standards (Scotland), Technical Booklet E (N. Ireland). If compliance is required to other regulatory or guidance documents there may be additional considerations or conflict to be taken into account.'
3. The product is approved on the basis of:
 - i) Initial type testing
 - ii) Audit testing at the frequency specified in TS03
 - iii) A design appraisal against TS03
 - iv) Inspection and surveillance of factory production control
4. The concrete floors and/or masonry or concrete walls shall be at least as thick as the sealing system as shown in the Approval matrix and have at least the same fire rating as that required for the penetration seal.
5. The services which may be fitted through the seals are electrical cables of various sizes from communication cables to power cables. The cables may be mounted in steel trunking or conduits. If fitted in trunking, the inside of the trunking around the cables must be filled with Silverseal Mortar where it passes through the seal.
6. Other services which may be fitted through the seals are steel, copper or plastic pipes.
7. Plastic pipes must be fitted with intumescent closing devices, or similar, which have been shown by certification in the required orientation to be suitable for use with this type of penetration sealing system and suitable for the fire rating specified.
8. The approval relates to ongoing production. Product and/or its immediate packaging is identified with the manufacturers' name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application where appropriate.

Further information regarding the details contained in this data sheet may be obtained from FSi Limited (Tel: 01530 515130).

Further information regarding the CERTIFIRE certification and other approved products can be obtained from CERTIFIRE (Tel: 01925 646777).

CERTIFICATE No CF 512 FSI LIMITED

Silverseal Mortar & Silverseal HSFM Mortar

Product Name:		Silverseal Mortar & Silverseal HSFM Mortar				
Coating / WFT:		Not applicable				
Penetrating Services				Fire Rating (min)		
		Maximum Aperture Dimension (mm)	Minimum Seal Depth (mm)		Integrity	Insulation
			loadbearing	Non-loadbearing		
Walls or floors	No service	1200	100	75	120	120
		1200	150	100	240	240
	Cables or Trunking or Dampers or Pipes ** (<60mm dia)	1200	100	75	120	0*
		1200	150	100	240	0*
Maximum Opening Area:		1.44m ² with a maximum service loading of 25% within each penetration seal				
Wall thickness:		The floors and walls shall be a minimum of 100mm thick. The minimum density for the concrete of the floor or wall is 780kg/m ³ and for walls made of concrete blocks is 600kg/m ³ .				
Application Technique:		<p>Floors: Temporary or permanent shuttering will be required. In all instances where the span of the Silverseal Mortar exceeds 600mm, additional reinforcement e.g. re-bars will be necessary. For the floor seals fitted with reinforcement, the bars shall be 12mm diameter at 150mm centres. They shall be positioned at mid-thickness and supported at their ends on steel angles, typically 30mm x 30mm x 1.2mm thick, which are fastened to the concrete floor with all steel expanding anchors, at maximum 500mm centres.</p> <p>Walls: Silverseal Mortar should be progressively built up in order to avoid slumping. Usually a single shuttering board is used.</p>				
Service Coat-Back :		Depends upon the service and insulation value required which is not evaluated by this approval.		U Value:	Not known	
Service Support Requirements:		In all cases the services shall be supported adjacent to either face of the penetration seal				
Air Permeability: EN1026		Pressure (Pa)	Positive pressure (m ³ /h/m ²)	Negative pressure (m ³ /h/m ²)	Weather Capability:	Not evaluated by this approval
		50	0.14	0.42		
		100	0.83	0.14		
Acoustic Rating: BS EN ISO 10140-2:2010		Not evaluated by this approval			Loadbearing Capability	See BCAL Report 3269

* Depends upon the service. Performance not evaluated by this approval

** Plastic pipes must be fitted with suitable fire protective collars or wraps