

## DECLARATION OF PERFORMANCE

### DoP-FS-1005

for fischer FFB-ES FireBarr Elastoseal (Fire stopping and fire sealing products: Penetration Seals)

EN

1. Unique identification code of the product-type: DoP-FS-1005
2. Intended use/es: Maintenance of the fire resistance of a separating element at the position where services pass through, see appendix, especially annexes, 1-2.
3. Manufacturer: fischerwerke GmbH & Co. KG, Klaus-Fischer-Str. 1, 72178 Waldachtal, Germany
4. Authorised representative: -
5. System/s of AVCP: 1
6. European Assessment Document: EAD 350454-00-1104  
European Technical Assessment: ETA-20/1103; 2020-12-11  
Technical Assessment Body: ETA-Danmark A/S  
Notified body/ies: 2531 - DBI Certification A/S
7. Declared performance/s:  
**Safety in case of fire (BWR 2)**  
Reaction to fire: Bs-1, d0  
Resistance to fire: Annexes 7-11  
  
**Hygiene, health and the environment (BWR 3)**  
Air permeability (material property): Annex 4  
Water permeability (material property): NPD  
Content, emission and/or release of dangerous substances: Annex 4  
  
**Safety and accessibility in use (BWR 4)**  
Mechanical resistance and stability: NPD  
Resistance to impact/movement: NPD  
Adhesion: NPD  
Durability: Annex 5  
  
**Protection against noise (BWR 5)**  
Airborne sound insulation: Annex 5  
  
**Energy economy and heat retention (BWR 6)**  
Thermal properties: NPD  
Water vapour permeability: Annex 5
8. Appropriate Technical Documentation and/or Specific Technical Documentation: -

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:



Dr.-Ing. Oliver Geibig, Managing Director Business Units & Engineering  
Tumlingen, 2020-12-18



Jürgen Grün, Managing Director Chemistry & Quality

This DoP has been prepared in different languages. In case there is a dispute on the interpretation the English version shall always prevail.

The Appendix includes voluntary and complementary information in English language exceeding the (language-neutrally specified) legal requirements.

## 1 Technical Description of the Product

1. fischer FFB-ES FireBarr Elastoseal is a coated mineral wool board type penetration seal used to reinstate the fire resistance performance of wall constructions, where they have been provided with apertures for the penetration of services.
2. The fischer FFB-ES FireBarr Elastoseal is supplied in liquid form contained within 310 ml & 380 ml cartridges, 600 ml foils or in 5, 10, 20, 25 kg tubs or 250 litre drums. The sealant is gunned, trowelled or sprayed into stone wool backing material.
3. fischer FFB-ES FireBarr Elastoseal is applied 1mm WTF, on to the unexposed surface of 80 kg/m<sup>3</sup> Stone Wool. The Stone wool is manufactured in accordance with EN13162:2001. The stone wool may be installed in different orientations dependant on the application.
4. fischer FFB-ES FireBarr Elastoseal may be installed in conjunction with fischer FCPS Coated Panel System (coated external faces) ETA-20/01067 to form the perimeter of the penetration seal.
5. Fischer FFB-ES FireBarr Elastoseal may be installed in conjunction with fischer FiGM Intumescent Graphite Mastic according to ETA-20/1105 around specific penetrations.

## 2 Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

The intended use of fischer FFB-ES FireBarr Elastoseal is to reinstate the fire performance of wall constructions, where they have been provided with apertures for the penetration of services.

The specific elements of construction that the system fischer FFB-ES FireBarr Elastoseal may be used is as follows:

Flexible walls	The wall must have a minimum thickness of 100 mm and comprise timber or steel studs lined on both faces with minimum 2 layers of 12.5 mm thick, 'Type F' Gypsum boards according to EN 520. In timber stud walls, no part of the penetration shall be closer than 100 mm to a stud, the cavity must be closed between the penetration seal and the stud and minimum 100 mm of insulation of class A1 or A2 according to EN 13501-1, is provided within the cavity between the penetration seal and the stud.
Rigid walls:	The wall must have a minimum thickness of 100 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 600 kg/m <sup>3</sup> .
Rigid walls:	The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 600 kg/m <sup>3</sup> .

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

- 1) The fischer FFB-ES FireBarr Elastoseal may be used to provide a penetration seal in conjunction with specific supporting constructions and substrates (for details see Annex A).
- 2) The provisions made in this European Technical Assessment are based on an assumed working life of the fischer FFB-ES FireBarr Elastoseal of 10 years, The indications given on the working life cannot be interpreted as a guarantee given by the producer or the Technical Assessment Body, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

## **Use Category**

Type Z<sub>1</sub>: Intended for use in internal conditions with humidity equal to or higher than 85% RH excluding temperatures below 0°C, without exposure to rain or UV.

### 3 Performance of The Product And References To The Methods Used For Its Assessment

Characteristic	Assessment of characteristic
<b>BWR 1 Mechanical resistance and stability</b>	
<b>BWR 2 Safety in case of fire</b>	
Reaction to fire	See clause 1.1
Resistance to fire	See clause 1.2
<b>BWR 3 Hygiene, Health and the Environment</b>	
Air permeability	See clause 2.1
Release of dangerous substances	See clause 2.2
<b>BWR 4 Safety in use</b>	
Durability and serviceability	See clause 3.1
<b>BWR 5 Protection against noise</b>	
Airborne sound insulation	See clause 4.1
<b>BWR 6 Energy, Economy and Heat Retention</b>	
Water vapour permeability	See clause 5.1
<b>BWR 7 Sustainable use of natural resources</b>	

#### 3.1 Safety in case of fire

##### 3.1.1 Reaction to fire

fischer FFB-ES FireBarr Elastoseal is classified as Bs – 1, d0 in accordance with EN 13501-1 with the following field of application:

- Applications covered by this ETA
- Applied to stone wool with a minimum density of 80 kg/m<sup>3</sup>.
- Used in any substrate of class A2 or better, with a density of 870 kg/m<sup>3</sup> or higher.

##### 3.1.2 Resistance to fire

fischer FFB-ES FireBarr Elastoseal has been tested in accordance with BS EN 1366-3: 2009 based upon the test results and the field of direct application specified within EN 1366-3: 2009, the system Fischer FFB-ES FireBarr Elastoseal has been classified in accordance with EN 13501-2, as given in Annex A:

## 3.2 Hygiene, Health and the environment.

### 3.2.1. Air permeability

The product was tested according to the EN1026:2000 test method using BS EN 1314-1 test data submitted as comparable evidence. The results of the testing are as follows:

Product Tested				
Pressure (Pa)	Results under positive chamber pressure		Results under negative chamber pressure	
	Leakage (m <sup>3</sup> /h)	Leakage(m <sup>3</sup> /m <sup>2</sup> /h)	Leakage (m <sup>3</sup> /h)	Leakage(m <sup>3</sup> /m <sup>2</sup> /h)
50	0.1	0.1	1.0	1.4
100	0.3	0.4	1.1	1.5
150	0.6	0.8	1.5	2.1
200	0.8	1.1	0.9	1.3
250	1.1	1.5	1.3	1.8
300	1.2	1.7	1.7	2.4
450	2.4	3.3	3.5	4.9
600	4.5	6.3	5.3	7.4

### 3.2.2. Content and release of Dangerous Substances

The applicant have presented a declaration that fischer FFB-ES FireBarr Elastoseal releases no dangerous substances in compliance with Council Directive 76/769/EEC of 27th July 1976 on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations (incl. All amendments and adaptations).

The manufacturer declares that the product contains no dangerous substances according to current European and National regulations.

The applicant has submitted a written declaration that the product and/or constituents of the product contains no substances which have been classified as dangerous according to Directive 67/548/EEC and Regulation (EC) No. 1272/2008 and listed in the 'indicative list on dangerous substances' of the EGDS – taking into account the installation conditions of the construction product and the release scenarios resulting from there.

In addition to the specific clauses relating to dangerous substances contained in this European Technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

The use category of fischer FFB-ES FireBarr Elastoseal in relation to BWR 3 (Hygiene, health and environment) is IA1, S/W3

### 3.3 Safety and accessibility in use

#### 3.3.1 Durability

fischer FFB-ES FireBarr Elastoseal satisfies the general aspects relating to fitness for use: Durability and serviceability: EAD 350454-00-1104, Issue September 2017 for Type Z1 environmental conditions: Products for penetration seals intended for uses at internal conditions with high humidity, excluding temperatures below 0°C.

### 3.4 Protection against noise

#### 3.4.1 Airborne sound insulation

Product was tested according to EN ISO 140-10 for a single number rating and measured airborne sound insulation was expressed as a single number rating in accordance with EN ISO 717-1

The single number rating following these tests was calculated as

$$R_w (C;C_{tr})= 30(-2;-9)$$

### 3.5 Energy, Economy and Heat Retention

#### 3.5.1 Water vapour permeability

Tested in accordance with BS EN 1027 : 2000 and provided the following results

Product tested		
Pressure (Pa)	Duration	Observations
50	15 minutes	No leakage observed
100	5 minutes	No leakage observed
150	5 minutes	No leakage observed
200	5 minutes	No leakage observed
250	5 minutes	No leakage observed
300	5 minutes	No leakage observed
450	3 minutes 50 seconds	At a total duration of 48 minutes 50 seconds the right hand edge of the sample joint to subframe separated and began to allow water leakage off the sample

#### **4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base**

According to the decision 1999/454/EC of the European Commission the system of assessment and verification of constancy of performance (see Annex V to the Regulation (EU) No 305/2011) given in the following table apply:

<b>Products</b>	<b>Intended use/s</b>	<b>AVCP System</b>
Fire stopping and fire sealing products	For fire compartmentation and/or fire protection or fire performance	System 1

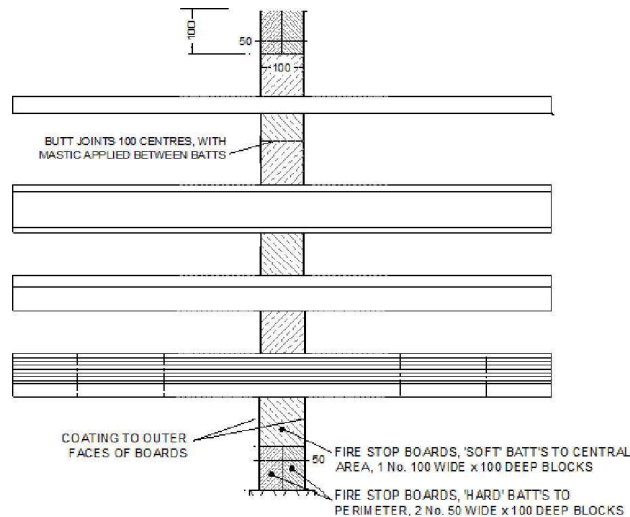
## Annex A

### Resistance to Fire Classification of fischer FFB-ES FireBarr Elastoseal

#### A.1 Flexible or rigid wall constructions according to 2.2.1 with thickness of minimum 100 mm

Construction details:

- fischer FFB-ES FireBarr Elastoseal is applied 1mm WTF, on to the unexposed surface of 80 kg/m<sup>3</sup> Stone Wool. The Stone wool is manufactured in accordance with EN13162:2001
- All joints and junctions sealed with fischer FFB-ES FireBarr Elastoseal
- Max opening 730mm wide x 1200mm high Elastoseal
- <sup>1</sup>Optional x 50mm fischer FCPS Coated Panel System installed as perimeter seal max opening 730mm wide x 1200mm high (min 100mm edge cover)
- <sup>1</sup>Max opening 530mm wide x 900mm high Elastoseal when installed in conjunction with fischer Coated Panel System FCPS perimeter
- Services positioned min 50mm to the edge of the seal



#### A.1.1

Service(s)	Classification
Electrical cables up to 21mm dia	<b>EI60</b>
Electrical cables 22 - 80 mm dia	<b>E60 EI45</b>
Cable trays and ladders	<b>E60 EI30</b>
100 mm diameter bundle telecommunication cable type "F"	<b>EI60</b>
Unsheathed electrical cables up to 24mm dia	<b>E60 EI45</b>
Steel or Copper Conduits up to 16mm	<b>E60 EI30</b>

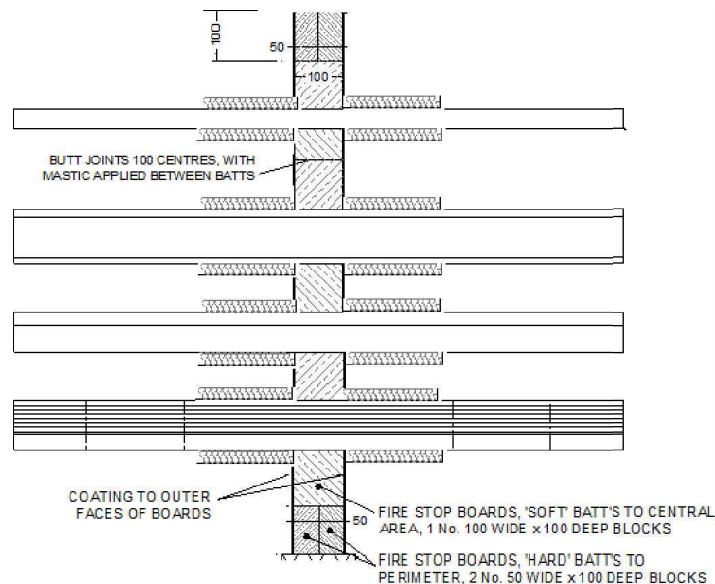


<b>Service(s)</b>	<b>Additional Sealing</b>	<b>Classification</b>
Single copper or mild steel pipe 42-159mm diameter and 2 – 14.2 mm wall		<b>E60 U/C</b>
Single copper or mild steel pipe 42-159mm diameter and 2 – 14.2 mm wall with sustained/continuous 20mm thick Armaflex AF	15mm deep x 10mm wide annulus FiGM Intumescent Graphite Mastic to both faces of the pipe	<b>E60 EI30 U/C</b>
Single UPVC pipe 40mm diameter and 1.9mm mm wall	25mm deep x 20mm wide annulus	<b>EI60 U/C</b>
Single UPVC pipe 200mm diameter and 8mm mm wall	FiGM Intumescent Graphite Mastic to both faces of the pipe	<b>EI60 U/C</b>

## A.2 Rigid wall constructions according to 2.2.1 with thickness of minimum 150 mm

Construction details:

- fischer FFB-ES FireBarr Elastoseal is applied 1mm WTF, on to the unexposed surface of 80 kg/m<sup>3</sup> Stone Wool. The Stone wool is manufactured in accordance with EN13162:2001
- All joints and junctions sealed with fischer FFB-ES FireBarr Elastoseal
- Max opening 730mm wide x 1200mm high Elastoseal
- <sup>1</sup>Optional x 50mm fischer FCPS Coated Panel System installed as perimeter seal max opening 730mm wide x 1200mm high (min 100mm edge cover)
- <sup>1</sup>Max opening 530mm wide x 900mm high Elastoseal when installed in conjunction with fischer Coated Panel System FCPS perimeter
- Services Insulated with Stonewool 40mm thick, 45Kg/m<sup>3</sup> 200mm(LI)
- Services positioned min 50mm to the edge of the seal



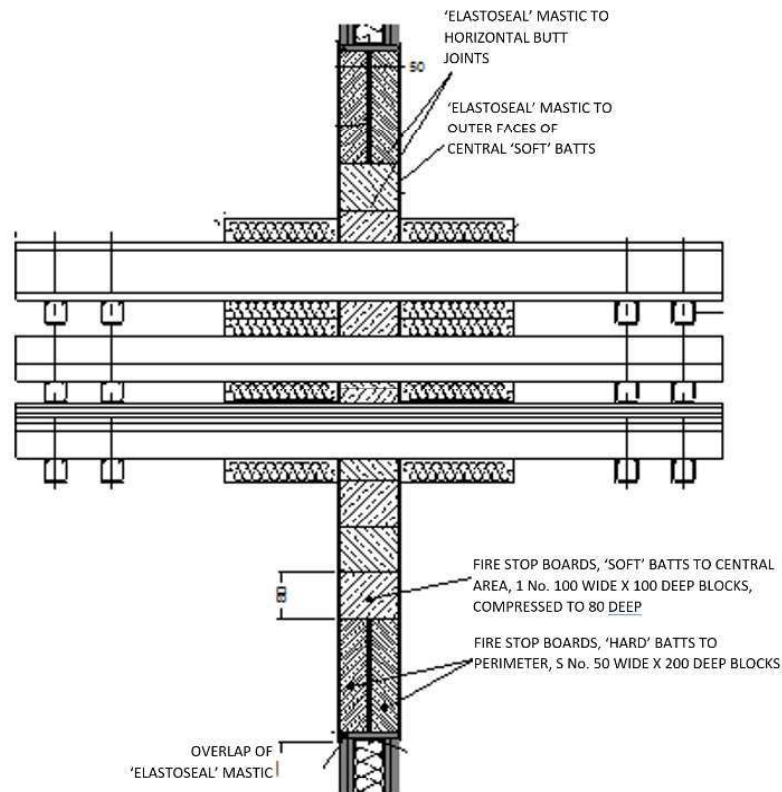
### A.2.1

Service(s)	Classification
Electrical cables up to 21mm dia	<b>EI120</b>
Electrical cables 22 - 50 mm dia	<b>E90 EI60</b>
Electrical cables 51 - 80 mm dia	<b>EI60</b>
Cable trays and ladders	<b>EI60</b>
100 mm diameter bundle telecommunication cable type "F"	<b>EI120</b>
Unsheathed electrical cables up to 24mm dia	<b>EI120</b>
<sup>1</sup> Steel or Copper Conduits up to 16mm	<b>EI120</b>
200mm Steel Pipe, 5mm -14.2mm wall thickness	<b>E90 EI30 U/C</b>
40mm Copper/Steel Pipe, 1.5mm -14.2mm wall thickness	<b>E120 EI60 U/C</b>
159mm Copper/Steel Pipe, 2mm -14.2mm wall thickness	<b>E120 EI20 U/C</b>

### A.3 Flexible or Rigid wall constructions according to 2.2.1 with thickness of minimum 100 mm

Construction details:

- fischer FFB-ES FireBarr Elastoseal is applied 1mm WFT, on to the unexposed surface of 80 kg/m<sup>3</sup> 100mm x100mm Stone Wool blocks compresses 20%. The Stone wool is manufactured in accordance with EN13162:2001
- All joints and junctions sealed with fischer FFB-ES FireBarr Elastoseal
- Max opening 800mm wide x 800mm high Elastoseal
- <sup>1</sup>Optional x 50mm fischer FCPS Coated Panel System installed as perimeter seal max opening 730mm wide x 1200mm high (min 100mm edge cover)
- <sup>1</sup>Max opening 430mm wide x 800mm high Flexi Seal when installed in conjunction with fischer Coated Panel System FCPS perimeter
- Services Insulated with Stonewool 40mm thick, 45Kg/m<sup>3</sup> 200mm(LI)
- Services positioned min 50mm to the edge of the seal



### A.3.1

<b>Service(s)</b>	<b>Classification</b>
Electrical cables up to 21mm – 50mm dia	<b>EI90</b>
Electrical cables 51 - 80 mm dia	<b>E90 EI60</b>
Cable trays and ladders	<b>EI90</b>
100 mm diameter bundle telecommunication cable type "F"	<b>EI120</b>
Unsheathed electrical cables up to 24mm dia	<b>E90 EI60</b>
Steel or Copper Conduits up to 16mm	<b>EI90</b>