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Authorised and notified
according to Article 29 of the
Regulation (EU)
No 305/2011 of the European
Parliament and of the Council
of 9 March 2011

MEMBER OF EOTA



European Technical Assessment ETA-20/1103 of 2020/12/11

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:

fischer FFB-ES FireBarr Elastoseal

Product family to which the above construction product belongs:

Fire Stopping, Fire Sealing & Fire Protective Products.
Fire Retardant Products

Manufacturer:

fischerwerke GmbH & Co. KG
Klaus-Fischer-Straße 1
72178 Waldachtal
Germany

Manufacturing plant:

fischerwerke GmbH & Co. KG

This European Technical Assessment contains:

13 pages including 1 annex which form an integral part of the document

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:

EAD 350454-00-1104 Firestopping and fire sealing products, Penetration Seals, Issued September 2017

This version replaces:

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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/m³ 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 ³ .
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 ³ .

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 Z₁: 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
BWR 1 Mechanical resistance and stability	
BWR 2 Safety in case of fire	
Reaction to fire	See clause 1.1
Resistance to fire	See clause 1.2
BWR 3 Hygiene, Health and the Environment	
Air permeability	See clause 2.1
Release of dangerous substances	See clause 2.2
BWR 4 Safety in use	
Durability and serviceability	See clause 3.1
BWR 5 Protection against noise	
Airborne sound insulation	See clause 4.1
BWR 6 Energy, Economy and Heat Retention	
Water vapour permeability	See clause 5.1
BWR 7 Sustainable use of natural resources	

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/m³.
- Used in any substrate of class A2 or better, with a density of 870 kg/m³ 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				
	Results under positive chamber pressure		Results under negative chamber pressure	
Pressure (Pa)	Leakage (m ³ /h)	Leakage(m ³ /m ² /h)	Leakage (m ³ /h)	Leakage(m ³ /m ² /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:

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

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark A/S prior to CE marking

Issued in Copenhagen on 2020-12-11 by



Thomas Bruun

Managing Director, ETA-Danmark

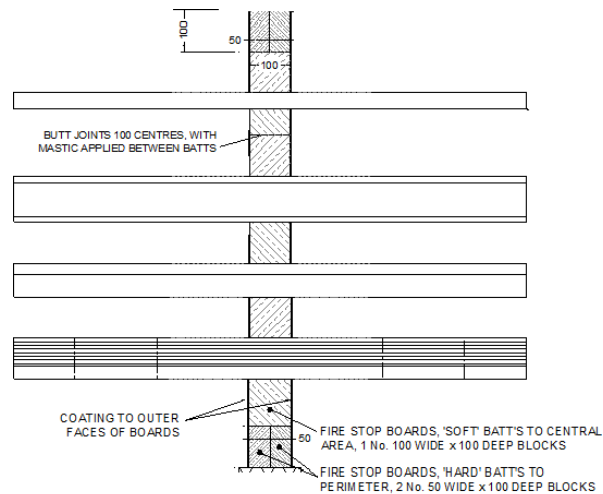
Annex A

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/m³ 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
- ¹Optional x 50mm fischer FCPS Coated Panel System installed as perimeter seal max opening 730mm wide x 1200mm high (min 100mm edge cover)
- ¹Max 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

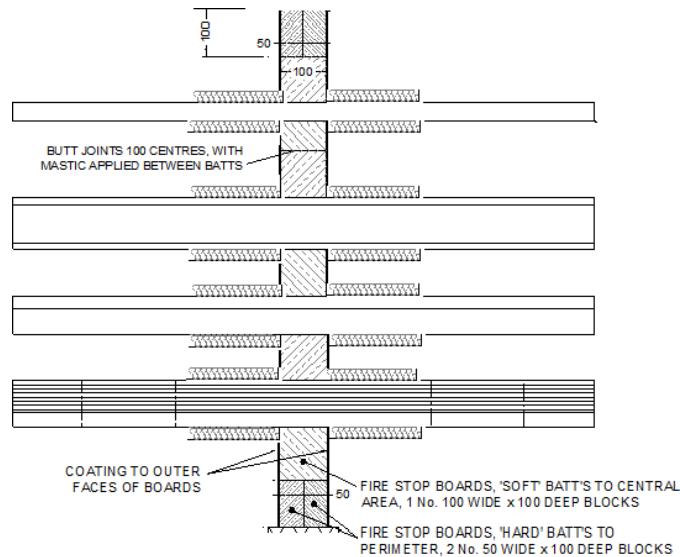
Service(s)	Classification
Electrical cables up to 21mm dia	EI60
Electrical cables 22 - 80 mm dia	E60 EI45
Cable trays and ladders	E60 EI30
100 mm diameter bundle telecommunication cable type "F"	EI60
Unsheathed electrical cables up to 24mm dia	E60 EI45
Steel or Copper Conduits up to 16mm	E60 EI30

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

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/m³ 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
- ¹Optional x 50mm fischer FCPS Coated Panel System installed as perimeter seal max opening 730mm wide x 1200mm high (min 100mm edge cover)
- ¹Max 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/m³ 200mm (LI)
- Services positioned min 50mm to the edge of the seal



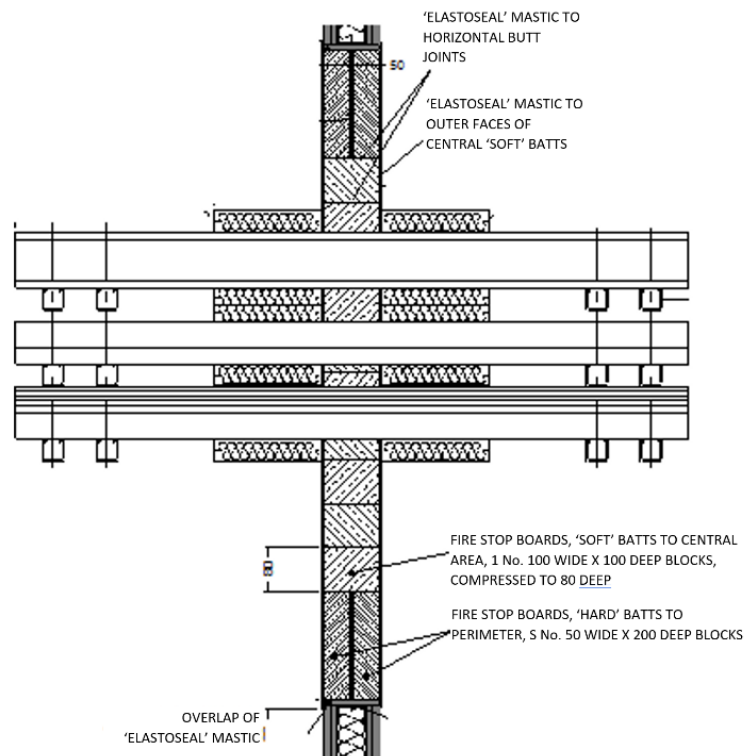
A.2.1

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

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/m³ 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
- ¹Optional x 50mm fischer FCPS Coated Panel System installed as perimeter seal max opening 730mm wide x 1200mm high (min 100mm edge cover)
- ¹Max 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/m³ 200mm (LI)
- Services positioned min 50mm to the edge of the seal



A.3.1

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