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# **European Technical Assessment**

# ETA 15/0203 of 29/04/15

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011:			
Trade name of the construction product	fischer FFB-ES FireBarr Elastoseal		
Product family to which the construction product belongs	Fire Stopping and Sealing Product , Linear Joint and Gap Seal		
Manufacturer	FISCHERWERKE GMBH & CO Weinhalde 14-18 72178 Waldachtal Germany		
Manufacturing plant(s)	E/091		
This European Technical Assessment contains	15 pages including 3 Annex(es) which form an integral part of this assessment.		
	Annex(es) A - C Contain(s) confidential information and is/are not included in the European Technical Assessment when that assessment is publicly available.		
This European Technical Assessment issued in accordance with regulation (EU) No 305/2011, on the basis of	ETAG 026, edition 2011, used as European Assessment Document (EAD)		

### **General Comments**

- 1. This European Technical Assessment is issued by Warrington Certification Limited on the basis of ETAG 026 Fire Protective Products Part 1: General June 2013, and Part 2: Fire Stopping and Fire Sealing Products Aug 2011, Used as European Assessment Document.
- 2. This European Technical Assessment is not to be transferred to manufacturers or agents of manufacturers other than those indicated on page 1, or manufacturing plants other than those indicated on page 1.



#### 1 SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL ASSESSMENT

## 1 Technical Description of the Product

(Detailed information and data are given in Annexes)

- 1) fischer FFB-ES FireBarr Elastoseal is an acrylic based sealant used to form linear gap seals where gaps are present in floor constructions.
- 2) The fischer FFB-ES FireBarr Elastoseal is supplied in liquid form contained within 310 ml & 380ml cartridges, 600ml foils or in 5, 10, 20, 25 kg tubs or 250 litre drums. The sealant is gunned, trowelled or sprayed into the aperture in or between the separating element/elements to a specified depth utilising stone wool backing material.
- 3) fischer FFB-ES FireBarr Elastoseal is applied 1mm thick, on to the unexposed surface of 100mm thick, 80 kg/m³ Stone Wool. The Stone wool is manufactured in accordance with EN13162:2001

Internal use- ETAG 026-3 (used as European Assessment Document EAD) Type Z<sub>1</sub>

# 2 Specification Of The Intended Use In Accordance With The Relevant EAD

#### 2.1 Intended Use

The intended use of system fischer FFB-ES FireBarr Elastoseal is to reinstate the fire resistance performance of gaps in and joints between joints in rigid floor constructions.

1) The specific elements of construction that the system fischer FFB-ES FireBarr Elastoseal may be used to provide a gap or joint seal in, are as follows:

Rigid Floors: The floor must have a minimum thickness of 150 mm and comprise

concrete, aerated concrete or masonry, with a minimum density of 650

kg/m<sup>3</sup>.

Rigid Walls: The wall must have a minimum thickness of 150 mm and comprise concrete,

block, aerated concrete or masonry, with a minimum density of 650 kg/m<sup>3</sup>.

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

- 2) The system fischer FFB-ES FireBarr Elastoseal may be used to provide a linear joint or gap seal with specific supporting constructions and substrates (for details see Annex C).
- 3) The maximum permitted joint/gap width for system fischer FFB-ES FireBarr Elastoseal is 200 mm.
- 4) The maximum movement capability of system fischer FFB-ES FireBarr Elastoseal is ≤ 25%
- 5) 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, provided that the conditions laid down in sections 4.2/5.1/5.2 for the packaging/transport/ storage/installation/use/repair are met. The indications given on the working life cannot be interpreted as a guarantee given by the producer, 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.

## 2.2 Use Category

Type  $Z_1$ : 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

The assessment of fitness for use has been made in accordance with EOTA ETAG 026 Part 3: 2011-08-08 (used as European Assessment Document, EAD)

ETAG Clause No.	ETA Clause No.	Characteristic	Assessment of characteristic		
		Mechanical resistance and stability	Not relevant		
		Safety in case of fire	See Clause 3.1		
2.4.1	3.1	Reaction to fire	Class F according to EN 13501-1		
2.4.2	3.2	Resistance to fire	See clause 3.2 & Annex C		
		Hygiene, Health and the Environment			
2.4.3	3.3	Air permeability	See clause 3.3		
2.4.4	3.4	Water permeability	See clause 3.4		
2.4.5	3.5	Dangerous substances	See clause 3.5		
		Safety in use			
2.4.6	3.6	Mechanical resistance and stability	No performance determined		
2.4.7	3.7	Resistance to impact/movement	No performance determined		
2.4.8	3.8	Adhesion	No performance determined		
		Protection against noise	No performance determined		
2.4.9	3.9	Airborne sound insulation	Rw (C;C <sub>tr</sub> )= 30(-2;-9)		
		Energy, Economy and Heat Retention			
2.4.10	3.10	Thermal properties	No performance determined		
2.4.11	3.11	Water vapour permeability	No performance determined		
		General aspects relating to fitness for use			
2.4.12	3.12	Durability and serviceability	<b>Z</b> <sub>1</sub>		



#### 3.1 Reaction to fire

fischer FFB-ES FireBarr Elastoseal is classified 'F' in accordance with EN 13501-1.

#### 3.2 Resistance to fire

System fischer FFB-ES FireBarr Elastoseal has been tested in accordance with BS EN 1366-4: 2006 based upon the test results and the field of direct application specified within EN 1366-4: 2006, the system fischer FFB-ES FireBarr Elastoseal has been classified in accordance with EN 13501-2, as given in Annex C:

The seals may only be used in the elements of construction described in Annex C and against the substrates described in Annex C.

Provisions shall be taken such that floor joint seals cannot be stepped on e.g. by covering with wire mesh or floor finishes.

### 3.3 Air permeability

System fischer FFB-ES FireBarr Elastoseal has been tested in accordance with BS EN 1314-1 to provide the following results:

Pr	oduct tested			
	Results under positive chamber pressure		Results under negative chamber pressure	
Pressure (Pa)	Leakage (m³/h)	Leakage (m³/m²/h)	Leakage (m³/h)	Leakage (m³/m²/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



#### 3.4 Water permeability

Tests conducted in accordance with BS EN 1027: 2000. The results of the test were as follows:

Pressure (Pa)	Duration(mins)	Observations
50	15	
100	5	
150	5	
200	5	No leakage observed
250	5	
300	5	
450	3.50secs	A total duration of 48 mins 50 secs the right hand edge of the sample joint to subframe separated and began to allow water leakage of the sample

#### 3.5 Dangerous substances

fischerwerke GmbH & Co has presented a declaration that fischer FFB-ES FireBarr Elastoseal does not contain any substance of high concern with regards to REACH Regulations and are compliant with the requirements reference to <a href="http://ec.europa.eu/enterprise/construction/cpd-ds/index.cfm">http://ec.europa.eu/enterprise/construction/cpd-ds/index.cfm</a>

Confirmation has further been declared that all dangerous chemical substances  $\geq 1.0$  % w/w as well as all toxic, carcinogenic, toxic for reproduction and mutagenic chemical substances  $\geq 0.1$  % w/w (Status: 29. adaption – 2004/73/EG – of the EU directive 67/548/EEC - classification, packaging and labeling of dangerous substances) are stated in the fischer FFB-ES FireBarr Elastoseal safety data sheets (according to91/155/EEC including amendments) and have been considered for the classification of the products according to the directive 1999/45/EG (classification of preparations, including amendments).

All dangerous chemical substances are below the classification limits of 67/548/EEC.

In addition to the specific clauses relating to dangerous substances contained in this European technical approval, 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.

#### 3.6 Mechanical resistance and stability

No performance determined.



#### 3.7 Resistance to impact/movement

No performance determined.

#### 3.8 Adhesion

Not relevant.

#### 3.9 Airborne sound insulation

The results of the test provided the following single number rating in accordance with BS EN 10140-2:2010:

Rw(C;Ctr) = 30(-2;-9)

#### 3.10 Water vapour permeability

No performance determined.

## 3.11 Durability and serviceability

fischer FFB-ES FireBarr Elastoseal has been tested in accordance with EOTA Technical Report - TR024 – Edition November 2006, for the type  $Z_1$  use category specified in ETAG 026-3 (used as European Assessment Document, EAD), and the results of the tests have demonstrated suitability for penetration seals intended for use in internal conditions with humidity equal to or higher than 85% RH excluding temperatures below  $0^{\circ}$ C, without exposure to rain or UV.

# 4 Assessment And Verification Of Constancy Of Performance (Hereinafter AVCP) System Applied, With References 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 uses	Level or Class	System
Fire stopping and fire sealing products	For fire compartmentation and / or fire protection or fire performance	Any	System 1



# 5 Technical Details Necessary For The Implementation Of The AVCP System, As Provided For In The Applicable EAD.

#### **Tasks for the Manufacturer**

#### **Factory production control**

The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall ensure that the product is in conformity with this European technical assessment.

The manufacturer may only use constituent materials stated in the technical documentation of this European technical assessment.

The factory production control shall be in accordance with the Control Plan of 18.10.13 relating to the European Technical Assessment ETA— 15/0203 which is part of the technical documentation of this European technical assessment. The "Control Plan" is laid down in the context of the factory production control system operated by the manufacturer and deposited at Warrington Certification Limited.

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the Control Plan.



#### Other tasks of manufacturer

#### Additional information

The manufacturer shall provide a technical data sheet and an installation instruction with the following minimum information:

- (a) Technical data sheet:
  - Field of application:
    - Building elements for which the linear joint seal is suitable, type and properties of the building elements like minimum thickness, density, and - in case of lightweight constructions – the construction requirements.

Limits in size, minimum thickness etc. of the linear joint seal

- Construction of the linear joint seal including the necessary components and additional products (e.g. backfilling material) with clear indication whether they are generic or specific.
- (b) Installation instruction:
  - Steps to be followed
  - Procedure in case of retrofitting.

The manufacturer shall, on the basis of a contract, involve a body which is approved for the tasks referred to in section 3.1 in the field of penetration seals in order to undertake the actions laid down in section 3.3. For this purpose, the "control plan" referred to in sections 3.2.1.1 and 3.2.2 shall be handed over by the manufacturer to the approved body or bodies involved.

The manufacturer shall make a declaration of conformity, stating that the construction product is in conformity with the provisions of the European technical assessment ETA 15/0203



#### Tasks of approved bodies

The approved body shall perform the

- initial type-testing of the product,
- initial inspection of factory and of factory production control,
- continuous surveillance, assessment and approval of factory production control,

In accordance with the provisions laid down in the "Control Plan" of 18.10.13 relating to the European Technical Assessment 15/0203

The approved body shall retain the essential points of its actions referred to above and state the results obtained and conclusions drawn in a written report.

The approved certification body involved by the manufacturer shall issue an EC certificate of conformity of the product stating the conformity with the provisions of this European technical assessment.

In cases where the provisions of the European technical assessment and its "Control Plan" are no longer fulfilled the certification body shall withdraw the certificate of conformity and inform the Warrington Certification Limited without delay.



# **Signatories**

Responsible Officer

C. Abbott\* - Principal Certification Engineer

Approved

A. Kearns\* - Technical Manager

<sup>\*</sup> For and on behalf of Warrington Certification Limited.

### Annex A

## Reference Documents and LIST OF ABBREVIATIONS

References to standards mentioned in the ETA:

EN 13501-1 Fire classification of construction products and building elements – Part 1:

Classification using test data from reaction to fire tests

EN 13501-2 Fire classification of construction products and building elements – Part 2:

Classification using test data from fire resistance tests

Other reference documents:

EOTA TR 024 Characterisation, Aspects of Durability and Factory Production Control for

Reactive Materials, Components and Products

ETAG No. 026: Part 3 Guideline For European Technical Approval of Fire Stopping and Fire Sealing

Products, Part 3: Linear Joint Seals (used as European Assessment

Document, EAD)



### **Annex B**

# **Description of Product and Product Literature**

# fischer FFB-ES FireBarr Elastoseal

A detailed specification of the product is contained in document "Evaluation Report" relating to the European Technical Approval ETA -15/0203 issued on 29/04/15, of fischer FFB-ES FireBarr Elastoseal which is a non-public part of this ETA.



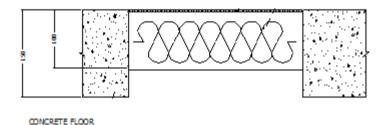
## **Annex C**

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

- C.1 Rigid floor constructions according to 2.2.1 with floor thickness of minimum 150 mm
- C.1.1 Linear joint or gap seal, horizontally orientated with sealant to the unexposed face.

#### Construction details:

- fischer FFB-ES FireBarr Elastoseal installed 1mm thick unexposed face of the seal
- Mineral fibre complying with EN13162:2010 or EN 14303:2010 Density 80kg/m<sup>3</sup>



### C.1.1.1

fischer FFB-ES FireBarr Elastoseal Linear Joint Seals in Rigid Floors 150 mm thick (min.)				
Depth	Backing	Substrat	Seal	Classification
Sealant		es	Orientation	
1 mm DFT	Stone Wool (Flexi Batt P100) 100mm thick (80kg/m³) Compressed 20%	AAC-AAC	Unexposed face	E 240 EI 180– H – M25 – F – W 00-200

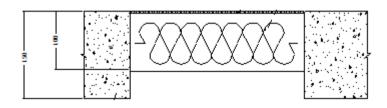


# C.2 Rigid wall constructions according to 2.2.1 with wall thickness of minimum 150 mm

# C.2.1 Linear joint or gap seal, horizontally orientated with sealant to the unexposed face.

#### Construction details:

- fischer FFB-ES FireBarr Elastoseal installed 1mm thick unexposed face of the seal
- Mineral fibre complying with EN13162:2010 or EN 14303:2010 Density 80kg/m<sup>3</sup>



Concrete wall

### C.2.1.1

fischer FFB-ES FireBarr Elastoseal Linear Joint Seals in Rigid Walls 150 mm thick (min.)				
Depth Sealant	Backing	Substrat es	Seal Orientation	Classification
1 mm DFT	Stone Wool (Flexi Batt P100) 100mm thick (80kg/m³) Compressed 20%	AAC-AAC	Unexposed face	E 240 EI 180- V - M25 - F - W 00-150

