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# European Technical Assessment ETA-21/0195 of 2021/04/23

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:	Fire Putty
Product family to which the above construction product belongs:	<ul><li>Fire Stopping and Sealing Product:</li><li>Penetration Seals</li></ul>
Manufacturer:	FireSeal AB Esbogatan 14 164 07 Kista Sweden
Manufacturing plant:	A/001
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, September 2017
This version replaces:	-

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### SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

#### 1 <u>Technical description of the product</u>

- 1) Fire Putty is a one part, non-setting fire resistant putty material, used to reinstate the fire resistance performance of wall and floor constructions where they have been provided with apertures for the penetrations of multiple services.
- 2) Fire Putty is supplied in 1kg tubs and is kneaded to the correct shape for installation. Fire Putty is also supplied in sheet form for sealing of electrical socket penetrations.
- 3) The applicant has submitted a written declaration that Fire Putty does not contain substances which have to be 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.

4) The use category of Fire Putty in relation to BWR 3 (Hygiene, health and environment) is IA1, S/W2

### 2 <u>Specification of the intended uses of the product in accordance with the applicable European Assessment</u> <u>Document (Hereinafter EAD): EAD 350454-00-1104</u>

Detailed information and data is given in Annex A.

- 1) The intended use of Fire Putty is to reinstate the fire resistance performance of flexible wall and rigid wall and floor constructions where they are penetrated by various cables and wires.
- 2) The specific elements of construction that the system Fire Putty may be used to provide a penetration seal in, are as follows:
  - a. Flexible walls: The wall must have a minimum thickness of 100 mm and comprise steel studs or timber studs\* lined on both faces with minimum 2 layers of 12.5 mm thick boards.
  - b. Rigid walls: The wall must have a minimum thickness of 100 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m<sup>3</sup>.
  - c. Rigid floors: The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m3

\* no part of the penetration seal may 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 must be provided within the cavity between the penetration seal and the stud.

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

- 3) The System Fire Putty may be used to provide a penetration seal with cables and wires (for details see Annex A).
- 4) The system Fire Putty may be used to seal apertures in the separating element up to 120mm diameter. The minimum permitted separation between adjacent seals/apertures is 200mm. Services within the system Fire Putty seal do not require a minimum separation, except where specifically detailed in Annex A.
- 5) Services shall be supported at maximum 300 mm from both faces of the wall.
- 6) The provisions made in this European Technical Assessment are based on an assumed working life of the Fire Putty 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 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.
- 7) Type Y<sub>2</sub>: Intended for use at temperatures below 0°C, but with no exposure to rain nor UV. Includes lower classes.

# 3 <u>Performance of the product and references to the methods used for its assessment</u>

Product-type: Putty		Intended use: Penetration Seal	
	Essential characteristic	Product performance	
	BWR 2 Safe	ty in case of fire	
	Reaction to fire	No performance assessed	
	Resistance to fire	Annex A	
BWR 3 Hygiene, health and environment			
	Air permeability	No performance assessed	
	Water permeability	No performance assessed	
	Content, emission and/or release of	Use categories: IA1, S/W2	
	dangerous substances	Declaration of manufacturer	
	BWR 4	Safety in use	
	Mechanical resistance and stability		
	Resistance to impact/movement	No performance assessed	
	Adhesion		
	Durability	Y <sub>2</sub>	
BWR 5 Protection against noise			
	Airborne sound insulation	No performance assessed	
BWR 6 Energy economy and heat retention			
	Thermal properties	No performance assessed	
	Water vapour permeability	No performance assessed	

### 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 – Commission Decision of date 22nd June 1999 on the procedure for attesting the conformity of construction products pursuant to Article 20(2) of Council Directive 89/106/EEC as regards fire stopping, fire sealing and fire protective products, published in the Official Journal of the European Union (OJEU) L178/52 of 14/07/1999, see <u>https://eur-lex.europa.eu/oj/direct-access.html</u> of the European Commission<sup>1</sup>, as amended, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) given in the following table(s) applies (apply).

Product(s)	Intended use(s)	Level(s) or class(es)	System(s)
Fire stopping and Fire Sealing Products	For fire compartmentation and/or fire protection or fire performance	Any	1

### 5 <u>Technical details necessary for the implementation of the AVCP system, as provided for in the applicable</u> <u>EAD</u>

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 2021-04-23 by

Thomas Bruun

Managing Director, ETA-Danmark

<sup>&</sup>lt;sup>1</sup> Official Journal of the European Communities L178/52 of 14/7/1999

# ANNEX A – Resistance to Fire Classification – Fire Putty

## A.1 Flexible and Rigid wall constructions with wall thickness of minimum 100 mm

### A.1.1 Cable penetration seal with 20 mm deep Fire Putty to both faces



Services	Classification
Electrical cables – Type A1, in a bundle of up to 10 no.	EI 120
Electrical cables – Type A2, in a bundle of up to 10 no.	E 120, El 90
Electrical cables – Type A3, in a bundle of up to 5 no.	E 120, El 90
Electrical cable – Type C1, 1 no.	E 120, El 90
Electrical cable – Type C2, 1 no.	E 120, El 90
Electrical cable – Type C3, 1 no.	E 120, El 60
Electrical cable – Type D1, 1 no.	E 120, El 60
Electrical cable – Type D2, 1 no.	EI 120
Electrical cables – Type E, in a bundle of up to 4 no.	EI 120
Electrical wire – up to 24mm diameter, 1 no.	E 120, El 45
Electrical wire – Type G2, 1 no.	E 120, El 60
Telecommunication cables up to 21 mm $\emptyset$ in a bundle of up to 32 no.	EI 120
Telecommunication cables up to 21 mm $\emptyset$ in a bundle of up to 144 no.	E 120, EI 60

### A.1.1.1 Two side penetration seal with cables

- Type A1 cable = 5 x 1.5 mm<sup>2</sup> core HD603.3 electrical cable with PVC insulation, PVC sheath and 14 mm diameter
- Type A2 cable = 5 x 1.5 mm<sup>2</sup> core HD22.4 electrical cable with EPR insulation, PO sheath and 11.2-14.4 mm diameter
- Type A3 cable = 5 x 1.5 mm<sup>2</sup> core HD604.5 electrical cable with XLPE insulation, EVA sheath and 13 mm diameter
- Type C1 cable = 4 x 95 mm<sup>2</sup> core HD604.5 electrical cable with XLPE insulation, EVA sheath and 42 mm diameter
- Type C2 cable = 4 x 95 mm<sup>2</sup> core HD22.4 electrical cable with EPR insulation, PO sheath and 48.4-61 mm diameter
- Type C3 cable = 4 x 95 mm<sup>2</sup> core HD604.5 electrical cable with XLPE insulation, EVA sheath and 42 mm diameter
- Type D1 cable = 4 x 185 mm<sup>2</sup> core HD603.3 electrical cable with PVC insulation, PVC sheath and 52 mm diameter
- Type D2 cable = 4 x 185 mm<sup>2</sup> core HD22.4 electrical cable with EPR insulation, PO sheath and 64-80 mm diameter
- Type E cable = 1 x 185 mm<sup>2</sup> core HD603.3 electrical cable with PVC insulation, PVC sheath and 23-27 mm diameter
- Type G2 wire = 1 x 185 mm<sup>2</sup> H07V-R HD 21.3 electrical wire with PVC insulation and 19.3-23.3 mm diameter





A.1.2.1	Two side	penetration	seal with	metal pipes
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Pipe	Insulation type	Insulation thickness	Classification
Copper/steel 22mm Ø/0.9 mm wall	None	-	E 120 C/U, EI 30 C/U
Copper/steel 22mm Ø/0.9 mm wall	Continuous Sustained (CS) Stone wool, min. density 120 kg/m <sup>3</sup>	25 mm	EI 120 C/U
Copper/steel 22mm Ø/0.9 mm wall	Local interrupted (LI), min. 500mm both sides - K-Flex ST/Armaflex Class O	19 mm	EI 120 C/U
Steel 22mm Ø/1.2 mm wall	None	-	EI 120 C/U
Steel 22mm Ø/1.2 mm wall	Local interrupted (LI), min. 500mm both sides - K-Flex ST/Armaflex Class O	19 mm	EI 120 C/U
Steel 42mm Ø/3.2 mm wall	Local interrupted (LI), min. 500mm both sides - K-Flex ST/Armaflex Class O	19 mm	E 120, EI 60 C/U

### A.1.3 Electrical socket penetration seal with Fire Putty Electrical Box Protector to both faces



\* Or alternative acrylic based sealant with equivalent classification in accordance with EN 13501-2

## A.1.3.1 Electrical Box Protector

Socket	Electrical Box Protector	Internal or	Classification
		installation	
Double socket with plastic front and backbox, max. 148 x 88 mm	170 x 170	Internal	E 120, El 90
Double socket with plastic front and backbox, max. 148 x 88 mm	230 x 230	External	EI 90

## A.2 Rigid/concrete floor constructions with minimum thickness of 150 mm

## A.2.1 Cable penetration seal with 20 mm deep Fire Putty to both faces



A.2.1.1 Two side penetration seal with cables

Services	Classification
Electrical cables – Type A1, in a bundle of up to 10 no.	E 240, El 180
Electrical cables – Type A2, in a bundle of up to 10 no.	E 240, EI 180
Electrical cables – Type A3, in a bundle of up to 5 no.	EI 240
Electrical cable – Type C1, 1 no.	E 240, EI 60
Electrical cable – Type C2, 1 no.	E 240, El 180
Electrical cables – Type E, in a bundle of up to 4 no.	E 240, EI 30
Telecommunication cables up to 21 mm $\emptyset$ in a bundle of up to 10 no.	EI 240

- Type A1 cable = 5 x 1.5 mm<sup>2</sup> core HD603.3 electrical cable with PVC insulation, PVC sheath and 14 mm diameter
- Type A2 cable = 5 x 1.5 mm<sup>2</sup> core HD22.4 electrical cable with EPR insulation, PO sheath and 11.2-14.4 mm diameter
- Type A3 cable = 5 x 1.5 mm<sup>2</sup> core HD604.5 electrical cable with XLPE insulation, EVA sheath and 13 mm diameter
- Type C1 cable = 4 x 95 mm<sup>2</sup> core HD604.5 electrical cable with XLPE insulation, EVA sheath and 42 mm diameter
- Type C2 cable = 4 x 95 mm<sup>2</sup> core HD22.4 electrical cable with EPR insulation, PO sheath and 48.4-61 mm diameter
- Type E cable = 1 x 185 mm<sup>2</sup> core HD603.3 electrical cable with PVC insulation, PVC sheath and 23-27 mm diameter