



ETA-Danmark A/S
Göteborg Plads 1
DK-2150 Nordhavn
Tel. +45 72 24 59 00
Internet www.etadanmark.dk

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-20/1129 of 2020/12/15

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:

FIREPRO® Acoustic Intumescent Sealant

Product family to which the above construction product belongs:

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

Manufacturer:

ROCKWOOL Ltd
Pencoed
Bridgend
South Wales
CF35 6NY

Manufacturing plant:

E/089

This European Technical Assessment contains:

12 pages including 3 annexes 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 – Fire Stopping and Fire Sealing Products Penetration Seals

This version replaces:

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Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

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1. Technical Description of the Product

- 1) FIREPRO® Acoustic Intumescent Sealant is an acrylic based 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) FIREPRO® Acoustic Intumescent Sealant has slight intumescent properties that cause it to swell on heating.
- 3) Certain seals require the use of Thermal Defense Wrap is used to insulate the service. The Thermal Defense Wrap is a 6mm thick foil faced ceramic based insulation material and is utilised externally to the FIREPRO® Acoustic Intumescent Sealant. See Annex C.
- 4) Certain seals require backfilling with mineral fiber 70mm thick, with a density of 80Kg/m³. See Annex A.
- 5) The FIREPRO® Acoustic Intumescent Sealant is supplied in liquid form contained within 310 ml & 380ml cartridges, 600ml foils or in 5, 10, 20 or 25 litre tubs. The sealant is gunned or trowelled into the aperture in or between the separating element/elements to a specified depth utilising various backing materials.

2. Specification of The Intended Use In Accordance With the applicable European Assessment Document (EAD)

The intended use of FIREPRO® Acoustic Intumescent Sealant is to reinstate the fire resistance performance of rigid and flexible wall constructions where they are penetrated by various cables and metallic pipes

- 1) The specific elements of construction that the system FIREPRO® Acoustic Intumescent Sealant may be used to provide a penetration seal in, are as follows:

Rigid walls: The wall must have a minimum thickness of 70 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m³.

Flexible walls The wall must have a minimum thickness of 70 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.

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

- 2) The FIREPRO® Acoustic Intumescent Sealant may be used to provide a penetration seal with pipes and cables (for details see Annex C).
- 3) The total amount of cross sections of services (including insulation) should not exceed 60% of the penetration area.
- 4) Services in walls and floors shall be supported at maximum 400mm from the face of the separating element.
- 5) The provisions made in this FIREPRO® Acoustic Intumescent Sealant assessment are based on an assumed working life of the FIREPRO® Acoustic Intumescent Sealant of 25 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.

3. Performance Of The Product And References To The Methods Used For Its Assessment.

	Characteristics	Assessment of characteristic
BWR 1 Mechanical resistance and stability		
BWR 2 Safety in case of fire		
	Reaction to fire	No performance assessed
	Resistance to fire	See Clause 3.1.2
BWR 3 Hygiene, Health and the Environment		
	Air permeability	See Clause 3.2.1
	Release of dangerous substances	See Clause 3.2.2
BWR 4 Safety in use		
	Durability and serviceability	See Clause 3.3.1
BWR 5 Protection against noise		
	Airborne sound insulation	See Clause 3.4.1

3.1 Safety in case of fire

3.1.1 Reaction to fire

No performance assessed.

3.1.2 Resistance to fire

FIREPRO® Acoustic Intumescent Sealant 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 FIREPRO® Acoustic Intumescent Sealant has been classified in accordance with EN 13501-2, as given in Annex C:

The seals may only be penetrated by the services described in Annex A; other parts or support constructions must not penetrate the seal.

The service support construction must be fixed to the building element containing the penetration seal or a suitable adjacent building element, in such a manner that in the case of fire, no additional load is imposed on the seal. Furthermore it is assumed that the unexposed face support is maintained for the required period of fire resistance.

Certain pipe configurations should be insulated with minimum 300mm long, 6mm thick Thermal Defence Wrap. See Annex C

Pipes must be perpendicular to the seal surface.

It is assumed that compressed air systems are switched off by other means in the case of fire.

The function of the pipe seal in case of pneumatic dispatch systems, pressurised air systems etc. is guaranteed only when the systems are shut off in case of fire.

The assessment does not cover the avoidance of destruction of the seal or of the abutting building

element(s) by forces caused by temperature changes in case of fire. This has to be considered when designing the piping system.

The approval does not address any risks associated with leakage of dangerous liquids or gases caused by failure of the pipe(s) in case of fire.

The durability assessment does not take account of the possible effect of substances permeating through the pipe on the penetration seal.

3.2 Hygiene, Health and the environment

3.2.1 Air permeability

FIREPRO® Acoustic Intumescent Sealant has been tested in accordance with BS EN 1314-1 to provide the following results:

Product tested		Pyrocoustic intumescent sealant		
Pressure (Pa)	Results under positive chamber pressure		Results under negative chamber pressure	
	Leakage (m ³ /h)	Leakage (m ³ /m ² /h)	Leakage (m ³ /h)	Leakage (m ³ /m ² /h)
50	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0
150	0.0	0.0	0.1	2.8
200	0.0	0.0	0.1	2.8
250	0.0	0.0	0.1	2.8
300	0.0	0.0	0.0	0.0
450	0.1	2.8	0.1	2.8
600	0.1	2.8	0.1	2.8

3.2.2 Release of dangerous substance

Rockwool Ltd has presented a declaration that FIREPRO® Acoustic Intumescent Sealant does not contain any substance of high concern with regards to REACH Regulations and are compliant with the requirements reference to <http://ec.europa.eu/enterprise/construction/cpd-ds/index.cfm>

Confirmation has further been declared that all dangerous chemical substances ≥ 1.0 % w/w as well as all toxic, carcinogenic, toxic for reproduction and mutagenic chemical substances ≥ 0.1 % w/w (Status: 29. adaption – 2004/73/EG – of the EU directive 67/548/EEC - classification, packaging and labelling of dangerous substances) are stated in the FIREPRO® Acoustic Intumescent Sealant safety data sheets (according to 91/155/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.

The use category of FIREPRO® Acoustic Intumescent Sealant in relation to BWR 3 (Hygiene, health and environment) is IA3, S/W3

3.3 Safety and accessibility in use

3.3.1 Durability and serviceability

FIREPRO® Acoustic Intumescent Sealant has been tested in accordance with EOTA Technical Report - TR024 – Edition November 2006, for the type Z1 use category specified in EAD 350454-00-1104 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 0oC, without exposure to rain or UV.

3.4 Protection against noise

3.4.1 Airborne sound insulation

The results of the test provided the following single number rating:

Rw (C;Ctr)= 38(-2;-7)

4 Assessment And Verification Of Constancy Of Performance (Hereinafter AVCP) System Applied, With References To Its Legal base

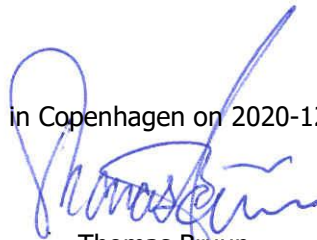
According to the decision 1999/454/EC of the European Commission the system of assessment and verification of constancy of performance (see Annex V to the Regulation (EU) No 305/2011) given in the following table apply:

Products	Intended 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 forseen 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 2020-12-15 by



Thomas Bruun
Managing Director, ETA-Danmark

Annex A

Reference Documents

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
EOTA TR 024	Characterisation, Aspects of Durability and Factory Production Control for Reactive Materials, Components and Products

ANNEX B

DESCRIPTION OF PRODUCT AND PRODUCT LITERATURE

FIREPRO® Acoustic Intumescent Sealant

A detailed specification of the product is contained in document "Evaluation Report" relating to the European Technical Assessment of FIREPRO® Acoustic Intumescent Sealant which is a non-public part of this ETA.

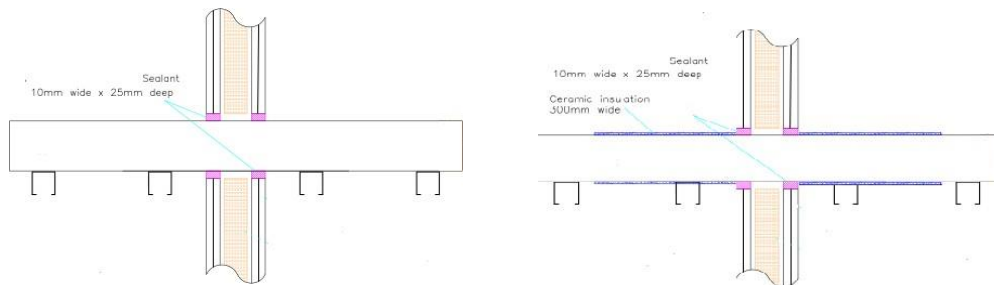
Annex C

Resistance to Fire Classification of FIREPRO® Acoustic Intumescent Sealant

C.1 Flexible and Rigid wall constructions with wall thickness of minimum 120 mm

C.1.1 Penetration seal with FIREPRO® Acoustic Intumescent Sealant installed flush to both faces of wall

Construction details: Metallic pipes (insulated and un-insulated) penetrating through the wall construction. 25mm off FIREPRO® Acoustic Intumescent Sealant applied flush with both faces of the wall.



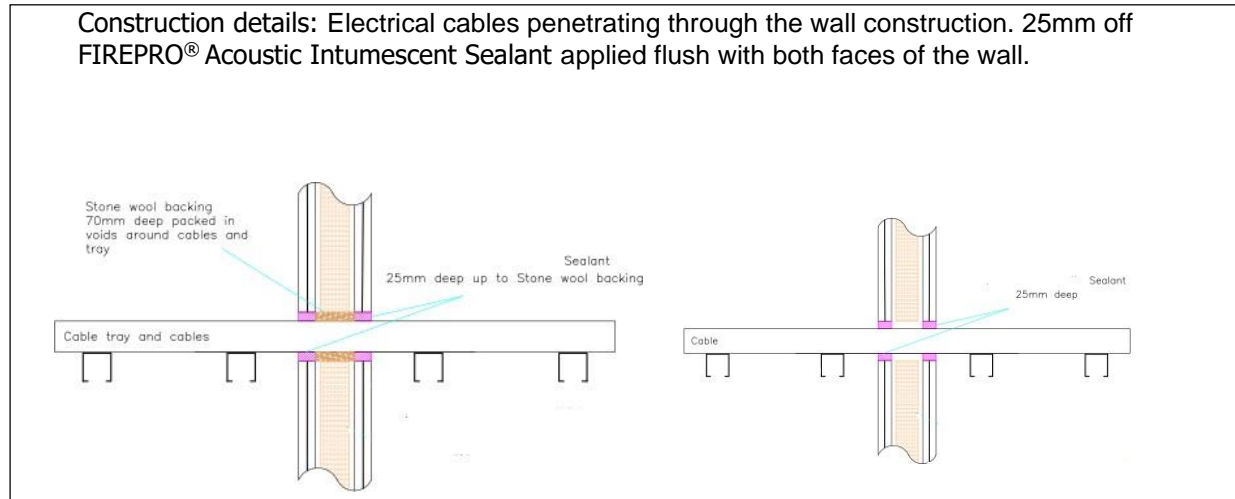
C.1.2

FIREPRO® Acoustic Intumescent Sealant Penetration Seals. Min 120 mm Thick Flexible or Rigid Wall.			
Penetration Specification	FIREPRO® Acoustic Intumescent Sealant (installed both faces)	Backing Material	Classification
Copper/Steel Pipe 15mm \varnothing , 0.8mm – 7.4mm wall thickness	10mm annulus x 25mm deep	N/A	E120 C/U EI20 C/U
Copper/Steel Pipe 40mm \varnothing , 0.8mm – 14.2mm wall thickness	10mm annulus x 25mm deep	N/A	E120 C/U EI15 C/U
Copper/Steel Pipe 40-159mm \varnothing , 1.8mm – 14.2mm wall thickness	10mm annulus x 25mm deep	N/A	E120 C/U
Copper/Steel Pipe 40mm \varnothing , 0.8mm – 14.2mm wall thickness*	10mm annulus x 25mm deep	N/A	E120 C/U EI90 C/U
Copper/Steel Pipe 40-159mm \varnothing , 1.8mm – 14.2mm wall thickness*	10mm annulus x 25mm deep	N/A	E120 C/U EI20 C/U

* Rockwool FIREPRO® TDW to the unexposed face 300mm long

C.2 Flexible and Rigid wall constructions according to 1.2.1 with wall thickness of minimum 120 mm

C.2.2 Penetration seal with FIREPRO® Acoustic Intumescent Sealant installed flush to both faces of wall



C.2.3

FIREPRO® Acoustic Intumescent Sealant Penetration Seals. Min 120 mm Thick Flexible or Rigid Wall.			
Penetration Specification	FIREPRO® Acoustic Intumescent Sealant (installed both faces)	Backing Material	Classification
Cables up to 21mm	490mm long x 100mm high x 25mm deep	70mm thick ROCKWOOL RW4 80Kg/m ³	E120 EI90
Perforated Cable Tray 450mm x 50mm			
Cables up to 21-50mm	200mm long x 100mm high x 25mm deep	N/A	E90 EI60