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European Technical Assessment ETA-21/0997 of 2021/11/25

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:

Knauf FPA Acrylic

Product family to which the above construction product belongs:

Fire Stopping and Sealing Product:

Penetration Seals

Manufacturer:

Knauf Sp. z .o.o. Ul. Swiatowa 25 PL-02-229 Warzaw

Manufacturing plant:

A/003

This European Technical Assessment contains:

86 pages including 2 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

This version replaces:

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Page 2 of 86 of European Technical Assessment ETA-21/0997 issued on 2021-11-25

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I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

- Knauf FPA Acrylic is a sealant used to form a penetration seal around metallic pipes, plastic pipes, composite pipes, combustible cable conduits and electrical cables to reinstate the fire resistance performance of wall and floor constructions, where they have been provided with apertures for the penetration of services.
- 2) The Knauf FPA Acrylic is supplied in liquid form contained within 310 & 380ml cartridges and 300 to 600ml foil packs. The sealant is gunned into the aperture in the separating element/elements and around the service or services, to a specified depth utilising mineral fibre insulation backing material.
- Knauf FPA Acrylic contains no carcinogenic substances or mutagenic substances, flame retardants or antimicrobiological agents.
- 4) The applicant has submitted a written declaration that Knauf FPA Acrylic 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. An emission report has also been provided.
 - 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.
- 5) The use category of Knauf FPA Acrylic in relation to BWR 3 (Hygiene, health and environment) is IA1, S/W2

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

Detailed information and data is given in Annex A.

- 1) The intended use of system Knauf FPA Acrylic is to reinstate the fire resistance performance of flexible wall constructions, rigid wall constructions and rigid floor constructions where they are penetrated by various metal pipe services with and without combustible insulation, plastic pipes, combustible cable conduits, composite pipes and electrical cables.
- 2) The specific elements of construction that the system Knauf FPA Acrylic may be used to provide a penetration seal in, are as follows:

a. Flexible walls: The wall must have a minimum thickness of 75 mm and comprise

steel studs or timber studs* lined on both faces with minimum 1 layer

of 12.5 mm thick boards.

b. Timber walls: The wall must have a minimum thickness of 100 mm and comprise

solid wood or cross-laminated timber.

c. Rigid walls: The wall must have a minimum thickness of 75 mm and comprise

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

650 kg/m³.

d. 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.

e. Timber floors: The floor must have a minimum thickness of 150 mm and comprise

solid wood or cross-laminated timber.

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

Knauf Fire Protection Systems which involve services penetrating both sides of a flexible wall may also be used in the situation where the services penetrates one side of the wall only and the remaining side of the wall is not penetrated at the same point (i.e. the services continues on the inside of the wall). All fire integrity and thermal insulation ratings for such single-sided penetrations remain the same as for the equivalent double-sided penetration.

- 3) The system Knauf FPA Acrylic may be used to provide a penetration seal with specific single insulated metal pipes, uninsulated metal pipes, plastic pipes, combustible cable conduits, composite pipes and with specific electrical cables, single or in a bundle (for details see Annex A).
- 4) Apertures in the separating element shall be maximum Ø 504 mm, 300 x 300 mm or 100 x 1000 mm. The annular space/gap around the services shall be infilled with Knauf FPA Acrylic sealant and in some cases a mineral fibre insulation backing material. Blank seals up to 300 x 300 mm are permitted. For full details, see Annex A.
- 5) Pipes shall be supported at maximum 350 mm away from both faces of the wall constructions and from the upper face of floor constructions.

^{*} 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.

- 6) Where a backing material is described in Annex A, this can be replaced with Knauf FPA Acrylic if the total seal depth is the same or greater.
- 7) Where single sided top face seals are described in Annex A, these can also be used in composite floors if the thickness of the concrete where the seal is placed is the same or greater than the required depth of the fire seal.
- 8) Where PP pipes are mentioned in Annex A, this includes PP-MV, PP-H, PP-R and similar if the pipe is according to EN 1451-1 or DIN 8077/8078. Where PE pipes are mentioned, this includes PE-LD, PE-MD, PE-HD, PE-X and similar according to EN 1519-1, EN 12201-2 or EN 12666-1.
- 9) The provisions made in this European Technical Approval are based on an assumed working life of the Knauf FPA Acrylic of 30 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.
- 10) Type Z_2 : Intended for uses in internal conditions with humidity lower 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

Product-type: Sealant	Intended use: Penetration Seal				
Essential characteristic	Product Performance				
BWR 2 Safety in case of fire					
Reaction to fire	Class B-s1, d0				
Resistance to fire	Annex A				
BWR 3 Hygiene, health and environment					
Air permeability	Annex B				
Water permeability	No performance assessed				
Content, emission and/or release of dangerous	Use categories: IA1, S/W2				
substances	Declaration of manufacturer				
BWR 4 Safety in use					
Mechanical resistance and stability	No performance assessed				
Resistance to impact/movement	No performance assessed				
Adhesion	No performance assessed				
Durability	Z ₂				
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 <u>ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (HEREINAFTER AVCP) SYSTEM</u> 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 https://eur-lex.europa.eu/oj/direct-access.html) of the European Commission¹, 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 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 2021-11-25 by

Thomas Bruun

Managing Director, ETA-Danmark

 $^{^{1}}$ Official Journal of the European Communities L178/52 of 14/7/1999