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European Technical Assessment ETA-21/1000 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 FPM – Fire Protection Mortar

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:

100 pages including 2 annexes which form an integral part of the document

This European Technical Assessment is issued in accordance with Regulation (EU) No EAD 350454-00-1104

This version replaces:

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I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

- Knauf FPM Fire Protection Mortar is a gypsum based mortar 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) Knauf FPM Fire Protection Mortar is supplied as a dry material and is mixed with water to the required ratio prior to installation.
- 3) Knauf FPM Fire Protection Mortar when mixed is self-supporting in a wall and floor orientation and may be used with or without a permanent mineral fibre backing material depending upon the require application and classification (see Annex A).
- 4) Knauf Firewraps are required to be used in conjunction with Knauf FPM Fire Protection Mortar depending upon the required application and classification (see Annex A). Knauf Firewraps are the subject of ETA 18/0855.
- 5) The applicant has submitted a written declaration that Knauf FPM Fire Protection Mortar 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.
- 6) The use catagory of Knauf FPM Fire Protection Mortar 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 Knauf FPM – Fire Protection Mortar is to reinstate the fire resistance performance of flexible wall, rigid wall and floor constructions where they are penetrated by various cables, trays and metallic, plastic and composite pipes.

2) The specific elements of construction that the system Knauf FPM – Fire Protection Mortar 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^3 .

c. Rigid floors: The floor must have a minimum thickness of 100 mm and comprise

aerated concrete or concrete with a minimum density of 650 kg/m³.

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 FPM Fire Protection Mortar may be used to provide a penetration seal with cables, cable trays, plastic pipes, composite pipes and metallic pipes with and without insulation, with mixed services in the same seal/aperture (for details see Annex A).
- 4) The system Knauf FPM Fire Protection Mortar may be used to seal apertures in the separating element up to 2400 mm wide by 1200 mm high in a wall, and 2400 mm by 1200 mm in a floor. The additional sizes that are permitted in floors are:

Width (mm)	Length (mm)	
1100	2900	
1000	4000	
900	7000	
≤ 800	∞ (infinite)	

The minimum permitted separation between adjacent seals/apertures is 200 mm. Services within the system Knauf FPM – Fire Protection Mortar seal do not require a minimum separation, except where specifically detailed in Annex A.

5) Services in floors shall be supported at maximum 250 mm from the top face. Services in walls shall be supported at maximum 270 mm from both faces of the wall.

^{*} 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) The provisions made in this European Technical Assessment are based on an assumed working life of the Knauf FPM Fire Protection Mortar 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.
- 7) 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: Mortar	Intended use: Penetration Seal				
Essential characteristic	Product Performance				
BWR 2 Safety in case of fire					
Reaction to fire	Class 'A1'				
Resistance to fire	Annex A				
BWR 3 Hygiene, health and environment					
Air permeability	Annex B				
Water permeability	No performance assessed				
Release of dangerous substances	Use categories: IA1, S/W2				
Nelease of dangerous substances	Declaration of manufacturer				
BWR 4 Safety in use					
Mechanical resistance and stability					
Resistance to impact/movement	Suitable for use in walls and floors in Zone Types I, II, III & IV*				
Adhesion	, ,				
Durability	Z ₂				
BWR 5 Protection	n against noise				
Airborne sound insulation	Rw 48 (-1;-3) dB				
BWR 6 Energy economy and heat retention					
Thermal properties	No performance assessed				
Water vapour permeability	No performance assessed				

^{*}At dimensions up to those given in 2 4) and with soft and hard body impact

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 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

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¹ Official Journal of the European Communities L178/52 of 14/7/1999