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designated according to Article 29 of the Regulation (EU) No 305/2011 and member of EOTA (European Organisation for Technical Assessment, www.eota.eu)

| European | Technical |
|-----------------|-----------|
| Assess | sment |

ETA 23/0974 of 29/02/2024

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: UL International (Netherlands) B.V.

Trade name of the construction product

Knauf FPC Panel / FPC Flex

Product family to which the construction product belongs

Fire Stopping and Sealing Product:Linear Joint and Gap Seals

Manufacturer

Knauf Sia Daugavas iela 4, Saurieši, Stopiņu pagasts, Ropažu novads, LV-2118, Latvija

A/003

Manufacturing plant(s)

This European Technical Assessment contains

This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of

Corrigendum No. 1

Type error amendment in ETA number, page 1

15 pages including 1 Annex which forms an integral part of this assessment.

EAD 350141-00-1106, September 2017.

01/03/2024

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I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

- 1) Knauf FPC Panel / FPC Flex is a coated mineral wool board used to form linear gap seals where gaps are present. The intended use of Knauf FPC Panel / FPC Flex is to reinstate the fire resistance performance of floor to floor / floor to wall joints and wall gaps. Typical locations of linear joints include floors, the perimeter of floors, walls, ceilings and roofs.
- 2) The Knauf FPC Panel is supplied coated on one face, referenced 1-S, or on both faces, referenced 2-S. Cut the required board(s) to suit the linear gap dimensions (see Annex A). All exposed and cut edges of the board can be sealed with Knauf FPC Coating or Knauf FPA Acrylic prior to fitting which will act as an adhesive (optional). The board(s) must be friction fitted into the gaps with a tight fit. All joints, gaps or imperfections in the installed seal must be filled with Knauf FPA Acrylic on the coated exposed side(s) of the board(s).
- 3) The applicant has submitted a written declaration that Knauf FPC Panel / FPC Flex 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 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 catagory of Knauf FPC Panel / FPC Flex 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 350141-00-1106

Detailed information and data is given in Annex A.

- 1) The intended use of Knauf FPC Panel / FPC Flex is to reinstate the fire resistance performance of gaps in and joints between rigid floors and between rigid floors and rigid wall constructions, gaps in and joints between rigid floor constructions.
- 2) The specific elements of construction that the system Knauf FPC Panel / FPC Flex may be used to provide a linear joint or gap seal in, are as follows:

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

aerated concrete, concrete, blockwork or masonry with a minimum

density of 650 kg/m³.

b) Rigid walls: The wall must have a minimum thickness of 100 mm and comprise

concrete, aerated concrete blockwork or masonry, with a minimum

density of 650 kg/m³.

c) Flexible walls:

The wall must have a minimum thickness of 100 mm and comprise steel or timber studs* lined on both faces with minimum 2 layers of 12.5 mm thick boards. Apertures are not required to be lined. Flexible wall solutions may also be used in rigid walls, with a minimum density of $350 \, \text{kg/m}^3$.

* 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. (for details see Annex A)

- 3) The system Knauf FPC Panel / FPC Flex may be used to provide a linear joint or gap seal with specific supporting constructions and substrates (for details see Annex A).
- 4) The maximum permitted joint/gap width for system Knauf FPC Panel / FPC Flex is 600 mm.
- 5) The maximum movement capability of system Knauf FPC Panel / FPC Flex is ≤ 7.5%
- 6) Precautions are required to be taken to prevent a person stepping onto a horizontal linear joint seal or falling against a vertical, or sloped, linear joint seal.
- 7) The provisions made in this European Technical Assessment are based on an assumed working life of the Knauf FPC Panel / FPC Flex of 25 years, provided that the conditions laid down in the product datasheet 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.
- 8) Use category: Type Y₁: Intended for use at temperatures below 0°C with exposure to UV but no exposure to rain. Includes lower classes Y₂, Z₁, Z₂.

3 Performance of the product and references to the methods used for its assessment

| Product-type: Fire Rated Board Intended use: Linear Joint & Gap Seal | | | | | | | |
|--|--|--|--|--|--|--|--|
| Basic requirement for construction work | Essential characteristic | Performance | | | | | |
| BWR 2 Safety in case of fire | | | | | | | |
| EN 13501-1 | Reaction to fire | D – s1, d0 | | | | | |
| EN 13501-2 | Resistance to fire | Annex A | | | | | |
| BWR 3 Hygiene, health and environment | | | | | | | |
| Declaration of manufacturer & EN 16516 | Content, emission and/or release of dangerous substances | Use categories: IA1, S/W2 Declaration of manufacturer | | | | | |
| EN 1026:2000 | Air permeability (material property) | Annex B | | | | | |
| EAD 350141-00-1106, Annex C & EN 12390-8 | Water permeability (material property) | No performance determined | | | | | |
| | BWR 4 Safety in use | | | | | | |
| EOTA TR 001:2003 | Mechanical resistance and stability # | Pass | | | | | |
| EOTA TR 001:2003 | Resistance to impact/movement | No performance determined | | | | | |
| EOTA TR 001:2003 ISO 11600 & EAD 350141- 00-1106, Clause 2.2.13 | Adhesion | No performance determined | | | | | |
| EAD 350141-00-1106, Clause 2.2.12 | Durability | Y ₁ | | | | | |
| EAD 350141-00-1106, Clause 2.2.13 | Movement capacity | No performance determined | | | | | |
| EAD 350141-00-1106, Clause 2.2.14 | Cycling of perimeter seals for curtain walls | No performance determined | | | | | |
| EAD 350141-00-1106, Clause 2.2.15 | Compression set | No performance determined | | | | | |
| EAD 350141-00-1106, Clause 2.2.16 | í l Linear expansion on setting | | | | | | |
| BWR 5 Protection against noise | | | | | | | |
| EN 10140-1,2,4,5/ EN ISO 717-1 | Airborne sound insulation* | Rw (C;Ctr) = 55 (-1;-1) dB | | | | | |
| BWR 6 Energy economy and heat retention | | | | | | | |
| EN 12664, EN 12667, EN 12939, EN ISO 8990, EN ISO 6946, EN ISO 10456 | Thermal properties | No performance determined | | | | | |
| EN ISO 12572, EN 12086, EN ISO 10456 | Water vapour permeability | No performance determined | | | | | |
| * Knauf EPC Panel 50mm 2-S | | | | | | | |

^{*} Knauf FPC Panel 50mm 2-S

[#] Impact tests were conducted with single Knauf FPC Panel 50mm 2-S and is relevant for 50mm Knauf FPC Panel or thicker

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>

Tasks of 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 initial / raw / 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 7th February 2023 relating to the European Technical Assessment ETA 23/0974 issued on 29/02/2024 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 UL International (Netherlands) B.V.

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

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

Other tasks of the 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 penetration 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 penetration seal
 - Construction of the penetration seal including the necessary components and additional products (e.g. backfilling material) with clear indication whether they are generic or specific.
 - Services which the penetration seal is suitable, type and properties of the services like material, diameter, thickness etc. in case of pipes including insulation materials; necessary/allowed supports/fixings (e.g. pipe trays)
- (b) Installation instruction:
 - Steps to be followed
 - · Procedure in case of retrofitting
 - Stipulations on maintenance, repair and replacement

6 Issued on:

29th February 2024

Report by:

Verified by:

Validated by:

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For and on behalf of UL International (Netherlands) $\mbox{B.V.}$