

UL INTERNATIONAL (UK) LTD Wonersh House, Building C, The Guildway, Old Portsmouth Road, Guildford. GU3 1LR. United Kingdom.





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 Assessment**

ETA 18/0931 of 12/12/2018

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: **UL International (UK) Ltd** 

Trade name of the construction product

Knauf FPP - fire protection polymer

Product family to which the construction product belongs

Fire Stopping and Sealing Product:

Linear Joint and Gap Seals

**Manufacturer** 

Knauf Sp. Z o.o. ul. Światowa 25 02-229 Warsaw Poland

Manufacturing plant(s)

A/003

This European Technical Assessment contains

This European Technical Assessment is

issued in accordance with regulation (EU) No 305/2011, on the basis of

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

EAD 350141-00-1106, September 2017.

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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#### I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

#### 1 Technical description of the product

- 1) Knauf FPP fire protection polymer is a sealant used to form linear gap seals where gaps are present in wall and floor constructions and linear joint seals where wall and floor constructions abut.
- 2) The Knauf FPP fire protection polymer is supplied in liquid form contained within 200 ml, 300 ml, 380 mm and 600 ml containers. 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.
- 3) Knauf FPP fire protection polymer contains no carcinogenic substances or mutagenic substances, flame retardants or antimicrobiological agents.
- 4) The applicant has submitted a written declaration that the product and/or constituents of the product contains no substances which have been 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.
- 5) The use catagory of Knauf FPP fire protection polymer in relation BWR 4 (safety in use) is IA1, S/W3

## 2 Specification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter EAD): EAD 350141-00-1106, September 2017

Detailed information and data is given in Annex A.

The intended use of system Knauf FPP - fire protection polymer is to reinstate the fire resistance performance of gaps in and joints in and between flexible wall and rigid wall constructions, gaps in and joints between rigid floor constructions.

The specific elements of construction that the system Knauf FPP - fire protection polymer may be used to provide a gap or joint seal in, are as follows:

Flexible walls: The wall must have a minimum thickness of 100 mm and comprise steel studs

lined on both faces with minimum 2 layers of 12.5 mm thick boards.

Rigid walls: The wall must have a minimum thickness of 150 mm and comprise concrete,

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

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.

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

The system Knauf FPP - fire protection polymer may be used to provide a linear joint or gap seal with specific supporting constructions and substrates (for details see Annex A).

- 3) The maximum permitted joint/gap width for system Knauf FPP - fire protection polymer is 30 mm.
- 4) The maximum movement capability of system Knauf FPP - fire protection polymer when used as a linear joint or gap seal within the scope of this ETA is ≤ 7.5%
- 5) The provisions made in this European Technical Assessment are based on an assumed working life of the Knauf FPP - fire protection polymer of 10 years, provided that the conditions laid down in the manufacturers' instructions and datasheet for the packaging/transport/ storage/installation/use/ repair are met. The indications given on the working life cannot be a regulation of the control of the c interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of
  - Type X: intended for use at conditions exposed to weathering and all lower classes.

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

| Product-type: Sealant  | Intended use: Linear Joint & Gap Seal                    |                             |  |  |  |  |
|--|--|-----------------------------|--|--|--|--|
| Assessment method  | Essential characteristic                                 | Product Performance         |  |  |  |  |
|  | BWR 2 Safety in case of fire                             |                             |  |  |  |  |
| EN 13501-1   | Reaction to fire   | Class D-s2, d0              |  |  |  |  |
| EN 13501-2   | Resistance to fire                                       | Annex A                     |  |  |  |  |
|  | BWR 3 Hygiene, health and environment                    |                             |  |  |  |  |
| Declaration of manufacturer<br>& EN 16516                                  | Content, emission and/or release of dangerous substances | Declaration of manufacturer |  |  |  |  |
| EN 1026:2000   | Air permeability (material property)                     | No performance determined   |  |  |  |  |
| EAD 350141-00-1106,<br>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                      | No performance determined   |  |  |  |  |
| EOTA TR 001:2003   | Resistance to impact/movement                            | No performance determined   |  |  |  |  |
| EOTA TR 001:2003<br>ISO 11600 & EAD 350141-<br>00-1106, Clause 2.2.13      | Adhesion   | No performance determined   |  |  |  |  |
| EAD 350141-00-1106,<br>Clause 2.2.12                                       | Durability   | x                           |  |  |  |  |
| EAD 350141-00-1106,<br>Clause 2.2.13                                       | Movement capacity  | No performance determined   |  |  |  |  |
| EAD 350141-00-1106,<br>Clause 2.2.14                                       | Cycling of perimeter seals for curtain walls             | No performance determined   |  |  |  |  |
| EAD 350141-00-1106,<br>Clause 2.2.15                                       |  | No performance determined   |  |  |  |  |
| EAD 350141-00-1106,<br>Clause 2.2.16                                       | Linear expansion on setting                              | No performance determined   |  |  |  |  |
| BWR 5 Protection against noise   |  |                             |  |  |  |  |
| EN 10140-1,2,4,5/ EN ISO<br>717-1  | Airborne sound insulation                                | Rw(C;Ctr)= 45 (-3;-10) dB*  |  |  |  |  |
| BWR 6 Energy economy and heat retention                                    |  |                             |  |  |  |  |
| EN 12664, EN 12667, EN<br>12939, EN ISO 8990, EN ISO<br>6946, EN ISO 10456 | Thermal properties                                       | No performance determined   |  |  |  |  |
| EN ISO 12572, EN 12086, EN ISO 10456                                       | Water vapour permeability                                | No performance determined   |  |  |  |  |

\* At minimum 12 mm depth

## 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 http://eur-lex.europa.eu/JOIndex.do) 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<br>Sealing Products | For fire compartmentation and/or fire protection or fire performance | Any                   |           |

## 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 9<sup>th</sup> September 2013 relating to the European Technical Assessment ETA 18/0931 issued on 12/12/18 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 (UK) Ltd.

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

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<sup>&</sup>lt;sup>1</sup> 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 linear joint 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 joint seal
  - Construction of the linear joint seal including the necessary components and additional products (e.g. backfilling material) with clear indication whether they are generic or specific.
- (b) Installation instruction:
  - Steps to be followed
  - Procedure in case of retrofitting
  - Stipulations on maintenance, repair and replacement

#### 6 <u>Issued on:</u>

12th December 2018

Report by:

D. Yates

Project Engineer

Building and Life Safety Technologies

Reviewed by:

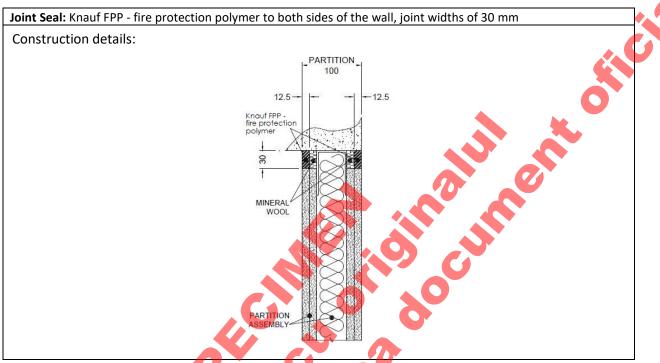
C. Johnson Staff Engineer

**Building and Life Safety Technologies** 

For and on behalf of UL International (UK) Ltd.

# ANNEX A – Resistance to Fire Classification – Knauf FPP - fire protection polymer

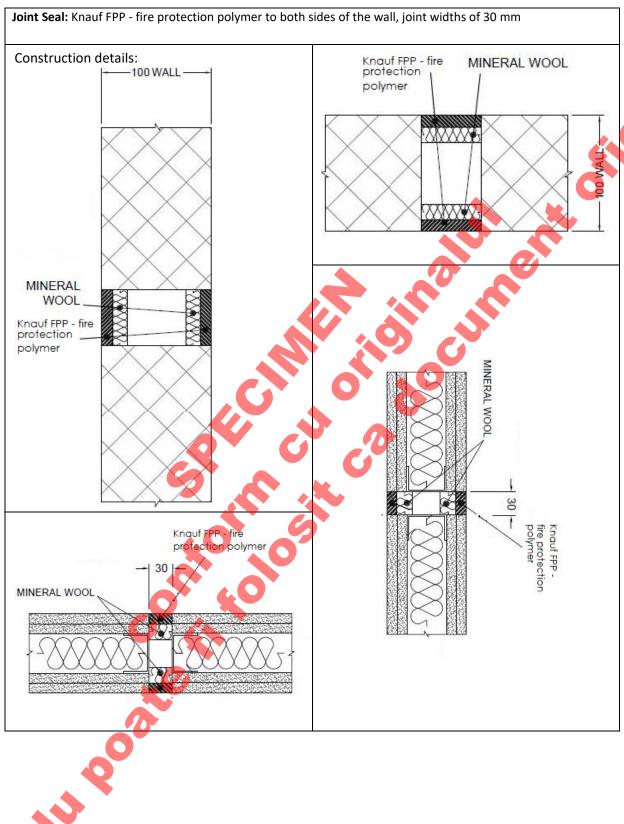
- A.1 Flexible and rigid wall constructions according to 1.2.1 with wall thickness of minimum 100 mm
- A.1.1 Linear joint seals, between head of flexible wall min. 100 mm thick and soffit of concrete floor



#### A.1.1.1

| Substrate                     | Depth<br>(mm) | Backing  | Classification            |
|-------------------------------|---------------|--|---------------------------|
| Plasterboard<br>/<br>concrete | 12.5 min.     | 12.5 mm Rockwool<br>Flexi 35 kg/m³ plus 50<br>mm steel partition<br>head track | EI 120 – T – X – F – W 30 |

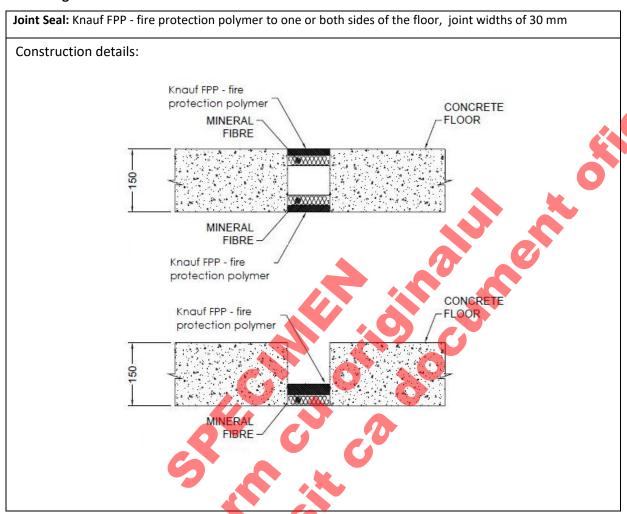
#### A.1.2 linear gap seals, within flexible walls up to 3m high or rigid walls min. 100 mm thick



| Substrate                             | Depth<br>(mm) | Backing                            | Classification   |
|---------------------------------------|---------------|------------------------------------|--|
| Plasterboard<br>/masonry/<br>concrete | 12.5 min.     | 12.5 mm Rockwool<br>Flexi 35 kg/m³ | EI 120 – T – X – F – W 30<br>EI 120 – V – X – F – W 30 |

#### A.2 Rigid floor constructions according to 1.2.1 with floor thickness of minimum 150 mm

## A.2.1 Linear joint or gap seal, between concrete floors and between the end of concrete floors and rigid walls



#### A.2.1.1

| Substrate | Depth<br>(mm)               | Backing                          | Classification  |
|-----------|-----------------------------|----------------------------------|---|
| Concrete  | 15 min. to<br>both<br>faces | 20 mm Rockwool Flexi<br>33 kg/m³ | EI 240 – H – X – F – W 30                             |
|           | 25 mm                       | 48 mm AES Fibre ≥<br>128kg/m³    | E 240 – H – X – F – W 30<br>EI 180 – H – X – F – W 30 |