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according to Article 29 of the
Regulation (EU)
No 305/2011 of the European
Parliament and of the Council
of 9 March 2011



European Technical Assessment ETA-21/0996 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 FPG Graphite – Fire Protection Graphite

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:

28 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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I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

- 1) Knauf FPG Graphite – Fire Protection Graphite is a sealant and pipe closure device used to form penetration seals where insulated metallic pipes, combustible pipes, combustible cable conduits and cables penetrate walls and floors.
- 2) The Knauf FPG Graphite – Fire Protection Graphite is supplied in liquid form contained within 310 & 380ml cartridges and 600 ml foil packs. The sealant is gunned into the aperture in the separating element and around the service or services, to a specified depth utilising mineral fibre insulation backing material.
- 3) 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.

- 4) The use category of Knauf FPG Graphite – Fire Protection Graphite 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.

The intended use of system Knauf FPG Graphite – Fire Protection Graphite is to reinstate the fire resistance performance of flexible wall, rigid wall and floor constructions, and timber wall and floor constructions, where they are penetrated by services.

- 1) The specific elements of construction that the system Knauf FPG Graphite – Fire Protection Graphite may be used to provide a penetration seal in, are as follows:

- 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.
- Timber walls: The wall must have a minimum thickness of 100 mm and comprise solid wood or cross-laminated timber
- 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/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.
- Timber floors: The floor must have a minimum thickness of 150 mm and comprise solid wood or cross-laminated timber.

* 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.

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.

Where a backing material is described in Annex A, this can be replaced with Knauf FPG Graphite – Fire Protection Graphite if the total seal depth is the same or greater.

- 2) The system Knauf FPG Graphite – Fire Protection Graphite may be used to provide a penetration seal with specific supporting constructions and substrates (for details see Annex A).
- 3) The provisions made in this European Technical Assessment are based on an assumed working life of the Knauf FPG Graphite – Fire Protection Graphite of 30 years, provided that the conditions laid down in the manufacturers datasheet and instructions 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.
- 4) Type Z₂: intended for use at internal conditions with humidity classes other than Z₁, excluding temperatures below 0°C.

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

Product-type: Sealant/Pipe closure	Intended use: Penetration Seal
Basic Requirement	Performance
BWR 2 Safety in case of fire	
Reaction to fire	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 substances	Use categories: IA1, S/W2 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*	53 (0;-1) dB
BWR 6 Energy economy and heat retention	
Thermal properties	No performance assessed
Water vapour permeability	No performance assessed

* At 25 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 <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 Technical details necessary for the implementation of the AVCP system, as provided for 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 2021-11-25 by

Thomas Bruun

Managing Director, ETA-Danmark

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