AODISI

FIRE TECHNOLOGY

产品资料与销售咨询

PRODUCT DOCUMENTATION & SALES CONTACT

KERAFIX ® FLEXpremium H - Certificate / Approval ETA-18/0538-en

澳迪斯防火科技（廊坊）有限公司

Aodisi Fire Technology (Langfang) Co., Ltd.

销售及选型联系 / Sales & product enquiries

19931333348

492048031@qq.com

www.gmfireproof.com

以上为销售联系信息，不替代安全数据表中的应急联系电话。
原始技术内容及制造商、检测机构和证书签发信息见后续资料页。

Sales contact only; emergency contacts in safety data sheets remain applicable.
Original technical, manufacturer and certification details follow.

ETA-Danmark A/S
Göteborg Plads 1
DK-2150 Nordhavn
Tel. +45 72 24 59 00
Fax +45 72 24 59 04
Internet www.etadanmark.dk

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

MEMBER OF EOTA

European Technical Assessment ETA-18/0538 of 15/06/2018

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:	KERAFIX FLEXpremium H
Product family to which the above construction product belongs:	Fire Stopping and Sealing with high performance intumescent material used in penetration seals.
Manufacturer:	Rolf Kuhn GmbH Jägersgrund 10 57339 Erndtebrück / Germany Tel. + 49 2753 5945-0 Fax + 49 2753 5945-52 Internet www.kuhn-brandschutz.com
Manufacturing plant:	Plant 01
This European Technical Assessment contains:	6 pages including 1 annex 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:	European Assessment Document (EAD) no. 350005-00-1104 *"Intumescent products for fire sealing and fire stopping purposes"*
This version replaces:	-

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II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of product

Technical description of the product
KERAFIX FLEXpremium H is a grey-black coloured flexible intumescent material that foams up and expands under pressure with thermal influence. In case of fire it will foam up and create a pressure resistant and solid foam body.

KERAFIX FLEXpremium H is supplied in standard length 25000 mm and 50000 mm up to the width of 340 mm and in the thickness of 0,8 to 3,6 mm.

The intumescent product may be equipped on one side with a self-adhesive tape and/or on the other side with a lamination; both-side lamination with e.g. fabric is also possible.

KERAFIX FLEXpremium H can be installed, according to the manufacture, in fire classified doors made of steel, aluminium or wood. It can be installed in glazing, facades and safety cabinets and it can be installed in drywall construction, rigid wall or floor structures for inspection openings ceiling constructions gaps and pipe penetrations.

Detailed specifications for identification and performance criteria relevant for fire safety with regard to the construction product is given in Annex 1.

2 Specification of the intended use in accordance with the applicable European Assessment Document

The KERAFIX FLEXpremium H is a flexible intumescent material that foams up and expands under pressure with thermal influence for use with products made from of wood, steel or aluminium.

Table 1 – components of the verified penetration seals

Product type	Trade name
Intumescent	KERAFIX FLEXpremium H

Detailed information and data on the verified penetration seals are given in Annex 1.

The verification and assessment methods on which this European Technical Assessment is based, lead to the assumption of a working life for the KERAFIX FLEXpremium H of at least 10 years.

The indications given on the working life cannot be interpreted as a guarantee given by the manufacturer, but are to be regarded only as a means for choosing the right product in relation to the expected economically reasonable working life of the works.

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

Characteristic	Assessment of characteristic
3.2 Safety in case of fire (BWR 2)	
Reaction to fire	KERAFIX FLEXpremium H 1,0 mm to 3,0 mm intumescent is classified as **Euroclass E** in accordance with EN 13501-1.
Resistance to fire	The performance *"Resistance to fire"* shall be demonstrated separately for the final use according to the relevant EN-standard and classified according to the EN 13501-2.
3.3 Hygiene, health and the environment (BWR 3)	
Air and water permeability	**NPA** – (No Performance Assessed)
Release of dangerous substances*)	**NPA** – (No Performance Assessed)

*) 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.

3.9 General aspects

The verification of durability is part of testing the essential requirements for the construction product Kerafix FLEXpremium H. The product may be used in end-use applications according to the provisions for category X without expecting significant changes of the characteristics relevant for fire sealing and fire stopping properties and the performance, regard Annex 1 for further information.

The proof and its assessment concerning applicability under climate conditions were carried out in accordance with EOTA TR 024 clause 4.2.3 Testing reactive materials intended for type X-applications.

Additionally, the product was tested under specific application conditions according to EOTA TR 024, section 4.3:

- Exposure to a constant temperature of 80 °C for 40 days,
- Exposure to permanent wetness (water-immersion and permanent condensation) 4 weeks
- Exposure to solvents such as Butylacetat, Butanol, solvent naphtha and fuel oil
- Subsequent overpainting (tested with coatings on the basis of acryl dispersion, alkyd resin, polyurethane acryl and epoxide resin)
- Exposure to intimate contact with plastics (PVC, PE)
- Exposure to intimate contact with metals (steel, copper aluminum)

After the exposure according to EOTA TR 024 no essential changes of the intumescent properties, expansion rate and expansion pressure could be detected.

4 Assessment and verification of constancy of performance (AVCP)

4.1 AVCP system

According to the decision 1999/454/EC of the European Commission, as amended by 2001/596/EC, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) is 1.

5 Technical details necessary for the implementation of the AVCP system, as foreseen 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 prior to CE marking.

Issued in Copenhagen on 2018-06-15 by

Thomas Bruun
Managing Director, ETA-Danmark

Annex 1
Product details and definitions
Product and performance of the KERAFIX FLEXpremium H

Property	Method	Range
Thickness of strips	The determination has been carried out according to chapter 3.1.2.1 of EOTA TR No 024.	0,8 mm to 3,6 mm
Density	The determination has been carried out according to chapter 3.1.5 of EOTA TR No 024.	1,10 g/cm^3 - 1,68 g/cm^3
Expansion ratio	The determination has been carried out according to chapter 3.1.11 of EOTA TR No 024. Tested at 550 °C for 30 minutes. Method 1 with a load of 5 g/cm^2.	21,8 nominal thickness 1,0 mm max +/- 20 [%] interval 17,4 - 26,2 19,4 nominal thickness 3,0 mm max +/- 20 [%] interval 15,5 - 23,3
Expansion pressure	The determination has been carried out according to chapter 3.1.12 of EOTA TR No 024. Tested at 300 °C. Test method 4 without lateral restriction.	1,349 N/mm^2 nominal thickness 1,0 mm max +/- 25 [%] interval 1,012 - 1,686 1,234 N/mm^2 nominal thickness 3,0 mm max +/- 25 [%] interval 0,926 - 1,534