Deutsches Institut für Bautechnik

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European Technical Assessment Body for construction products

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European Technical Assessment ETA-17/0958 of 15 June 2026

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the European Technical Assessment:	Deutsches Institut für Bautechnik
Trade name of the construction product	Kerafix Flextrem 100
Product family to which the construction product belongs	Intumescent products for fire sealing and fire stopping purposes
Manufacturer	KuhnOdice Germany GmbH Jägersgrund 10 57339 Erndtebrück GERMANY
Manufacturing plant	1[1]
This European Technical Assessment contains	6 pages including 1 annex which form an integral part of this assessment
This European Technical Assessment is issued in accordance with Article 95(4) of Regulation (EU) 2024/3110, on the basis of	EAD 350005-00-1104, May 2015
This version replaces	ETA-17/0958 issued on 27 June 2018

[1] adress deposited with DIBt

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Specific Part

1 Technical description of the product

Object of this European Technical Assessment (ETA) is the intumescent construction product "Kerafix Flextrem 100" and the described modifications.

When exposed to high temperatures in case of fire, the intumescent product expands and generates foam. This foam seals joints and gaps, closes voids and openings. Thus, the foam restricts the passage and the spread of heat, smoke, flames or any combination of these.

The flexible intumescent construction product "Kerafix Flextrem 100" is produced in form of mats, strips and cuts and consists essentially of intumescent substances and a binder. It is produced in nominal thicknesses between 0,5 mm and 2,0 mm with a tolerance in thickness of ± 0,1 mm and in nominal thicknesses greater 2,0 mm to 3,0 mm with a tolerance in thickness of ± 0,2 mm and in any width between 5 mm to 340 mm or may be processed into blanked-out pieces or to strips at the factory.

The construction product "Kerafix Flextrem 100" and cuts of it may be laminated on one side or may be completely wrapped with a PVC-foil or an acrylic foil.

This ETA also covers the following modifications besides the non-laminated basic variant named "Kerafix Flextrem 100":

- laminated with PVC-foil[2] of different colours on one side; named "Kerafix Flextrem 100 DF",
- laminated with PE-sellotape[2] on one side, named "Kerafix Flextrem 100 ZPE",
- laminated with textile tape[2] on one side, named "Kerafix Flextrem 100 GW",
- laminated with aluminium foil[2] on one side, named "Kerafix Flextrem 100 AF",
- laminated with a glass fibre interface[2], named "Kerafix Flextrem 100 GV",
- equipped with a glass fibre reinforcement mesh[2], named "Kerafix Flextrem 100 GG",
- completely wrapped with PVC-foil[2] or acrylic foil[2], named "Kerafix Flextrem 100 E".

The product and all its modifications may be additionally equipped with a self-adhesive tape[2] on one side.

The construction product is delivered in rolls or factory-made strips/cuts.

The technical characteristics relevant for fire sealing and fire stopping effects of the construction product "Kerafix Flextrem 100" are given in Annex 1.

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

The construction product "Kerafix Flextrem 100" is assessed on the basis of EAD 350005-00-1104[3] as an intumescent product for fire sealing and fire stopping purposes without defined final intended use (IU 1).

The construction product is intended to be used as an essential component in construction products, construction elements, assemblies, kits and special constructions which need to meet requirements concerning the safety in case of fire.

In case of fire, the product delays the heat transfer through fire resistant construction products and construction elements by expanding under the impact of high temperatures and thus restricting the spread of fire.

The performance given in section 3 is only valid if the construction product "Kerafix Flextrem 100" is used in compliance with the instructions and conditions of section 3.3.

[2] Type, manufacturer and characteristics deposited with DIBt.
[3] Official Journal of the EU N° C 378/02 of 13/11/2015

The test and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the intumescent construction product "Kerafix Flextrem 100" of at least 10 years[4] in final use.

The indications given on the working life cannot be 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 the works.

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

3.1 Safety in case of fire (BWR 2)

3.1.1 Reaction to fire

Essential characteristic	Performance
"Kerafix Flextrem 100" without any lamination	Class E in accordance with EN 13501-1[5]
"Kerafix Flextrem 100 DF", "Kerafix Flextrem 100 ZPE", "Kerafix Flextrem 100 GW", "Kerafix Flextrem 100 GG", "Kerafix Flextrem 100 GV", "Kerafix Flextrem 100 AF", "Kerafix Flextrem 100 E"	

3.1.2 Resistance to fire

The performance "resistance to fire" shall be determined separately for every final use and shall be classified, if required for the construction element concerned.

3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Content and release of dangerous substances	No dangerous substances[6]

The detailed chemical composition of the intumescent construction product "Kerafix Flextrem 100" was assessed by DIBt and is deposited with DIBt.

3.3 General aspects

Durability testing shall be an integral part of assessing the basic works and performance requirements. The following specific provisions for use shall be complied with to ensure the durability of the performance.

The testing and the assessment of the relevant product performance were carried out for environmental conditions of type X - product intended for outdoor use at conditions exposed to weathering (rain, UV,frost) - in accordance with EOTA Technical Report 024 (EOTA TR 024)[7], section 4.2.3

[4] Results (historical data) of long-term aging (10 years exposure to natural weathering) available

[5] EN 13501-1 Fire classification of construction products and building elements, Part 1 Classification using test data from reaction to fire tests and A1:2009

[6] In accordance with the Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 (published in the Official Journal of the EU N° L 353 of 31/12/2008, p 1)

[7] EOTA TR 024 Characterisation, Aspects of Durability and Factory Production Control for Reactive Materials, Components and products; edition as amended July 2009

Result:

The intumescent construction product "Kerafix Flextrem 100" and its modifications and cuts can be used under use conditions of type X (outdoor use) without having to fear essential changes in the relevant fire sealing and fire stopping properties and the resulting performance. This assessment includes the unrestricted in-door use under climatic use conditions of type Y_1, Y_2, Z_1 and Z_2.

Additionally, the product "Kerafix Flextrem 100" was tested under specific durability conditions in accordance with EOTA TR 024, section 4.3

- Exposure to a constant temperature of 80 °C for 40 days
- Exposure to solvents (tested with butyl acetate, butanol, solvent naphtha and fuel),
- Subsequent over-painting (tested with coatings on the basis of acryl dispersion, alkyd resin, polyurethane-acryl and epoxy resin)
- Exposure to permanent wetness (water immersion and constant condensation for 4 weeks)
- Exposure to intimate contact to plastics (PVC, PE)

The characteristics "expansion ratio" and "expansion pressure" did not change essentially due to these exposures.

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with the European Assessment Document EAD No 350005-00-1104 the Decision of the commission N° 1999/454/EC of 22 June 1999 (OJ of the EU L 178 of 14 July 1999, p 42), amended by EC Decision 2001/596/EC of 8 January 2001 (OJ of the EU L 209 of 2 August 2001, p 33) is the legal basis for the determination of the AVCP system.

System 1 applies for the assessment and verification of constancy of performance (AVCP) (see Annex V in conjunction with Article 65 (2) of the Regulation (EU) N° 305/2011) in accordance with to the following table:

Product	Intended use	Characteristic	System
"Kerafix Flextrem 100" and the modifications according to section 1	Components effective in view of safety in case of fire (BWR 2) used in construction products, construction elements, kits and special assemblies	reaction to fire, properties relevant for the fire sealing and fire stopping effect	1

5 Technical details necessary for the implementation of the procedure for assessment and verification of constancy of performance (AVCP) system 1, as provided for in the applicable European Assessment Document

The technical details necessary for the implementation of the system for assessment and verification of constancy of performance are laid down in the control plan (confidential part of this ETA) deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 15 June 2026 by Deutsches Institut für Bautechnik

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beglaubigt:
Haberstroh

ANNEX 1

CHARACTERISTICS OF THE CONSTRUCTION PRODUCT RELEVANT FOR THE FIRE SEALING AND FIRE STOPPING EFFECTS OF "Kerafix Flextrem 100"

The following values are valid for the basic variant without any additional lamination

Characteristic	**Test method**[8]	**Range of determined values and tolerances**
Nominal thickness	TR 024, cl. 3.1.2	0.5 mm to ≤ 2.0 mm (tolerance ± 0.1 mm) > 2.0 mm to 3.0 mm (tolerance ± 0.2 mm)
Expansion ratio	TR 024, cl. 3.1.11 method 1 at 450 °C for 30 minutes without a top-load	nominal thickness 0.5 mm: 35.0 to 54.0 nominal thickness 3.0 mm: 15.0 to 32.0
Expansion pressure	TR 024, cl. 3.1.12 method 4 at 300 °C	0.65 N/mm^2 to 2.00 N/mm^2

The intumescent reaction starts at ca. 200 °C.

[8] Details of test method are deposited with DIBt.