

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-22/0191
of 15 August 2022

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

CONEL FLAM Kitt II

Product family
to which the construction product belongs

Intumescent products for fire sealing and fire stopping
purposes

Manufacturer

CONEL GmbH
Margot-Kalinke-Straße 9
80939 München
DEUTSCHLAND

Manufacturing plant

Werk 02

This European Technical Assessment
contains

6 pages including 1 annex which forms an integral part of
this assessment

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

EAD 350005-00-1104, edition May 2015

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Specific Part

1 Technical description of the product

Object of this European technical assessment (ETA) is the intumescent product "CONEL FLAM Kitt II".

In case of fire, exposed to high temperatures the intumescent products expand the intumescent products and generate foam. This foam seals joints and gaps, closes voids and openings and restricts this way the passage and propagation of heat, smoke, flames or any combination of them.

The construction product "CONEL FLAM Kitt II" does not generate essential expansion pressure during the foaming reaction.

The construction product "CONEL FLAM Kitt II" is a viscous, non-halogen, white, water-based dispersions, which essentially consist of intumescent substances and binder. It is preferably delivered in cartridges.

The technical characteristics relevant for the fire sealing and fire stopping effect of the construction product "CONEL FLAM Kitt II" are given in Annex 1.

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

The construction product "CONEL FLAM Kitt II" is assessed on the basis of European Assessment Document N° 350005-00-1104, edition May 2015¹ as an intumescent product for fire sealing and fire stopping purposes without specific final use (IU 1).

The construction product "CONEL FLAM Kitt II" is intended to be used as an essential component in, between or on construction products, construction elements, kits and special constructions which meet requirements concerning the safety in case of fire e.g. in pipe and cable penetration seals or on the surface of construction elements. In case of fire, the product delays the heat transfer through fire resistant construction elements, assemblies or special constructions by expanding under the impact of high temperatures and restricts the spread of fire.

The performance "resistance to fire" shall be tested for the specific final use, if requested.

The performance given in Section 3 is only valid when the intumescent construction product "CONEL FLAM Kitt II" will be used considering the remarks and the boundary conditions of clause 3.2.

The tests and assessment methods on which this European Technical Assessment is based lead to an assumption of working life of the intumescent construction product "CONEL FLAM Kitt II" in final use of at least 10 years.

The indication given on the assumed working life cannot be interpreted as a guarantee given by the producer, because it is essentially determined of the use conditions in final use of the works.

¹ Official Journal of the EU N° C 378/02 of 13 November 2015

3 Performance of the products and references to the methods used for the assessment**3.1 Safety in case of fire (BWR 2)****3.1.1 Reaction to fire**

Essential characteristic	Performance
Reaction to fire	in accordance with EN 13501-1 ² ; class E

3.1.2 Resistance to fire

The performance "Resistance to fire" shall be demonstrated separately for the intended final use if requested.

3.2 General aspects

The evidence of durability is part of testing the basic works requirements and the achievement of the performance assessed. The durability is only presumed, if the provisions for the intended use are considered.

The assessment of the durability regarding to the product's fire safety performance was done for climatic use conditions of type Z₁ – frost protected indoor use at relative humidity of above 85 % temporarily and re-drying condensation and for type Z₂ - dry indoor frost-protected use in accordance with EAD Nr. 350005-00-1104, clause 1.2.2.

Conclusion:

The intumescent construction product "CONEL FLAM Kitt II" may be used permanently in dry, frost-protected rooms also with changing relative humidity without having to fear essential changes in the relevant fire sealing and fire stopping properties and the resulting performance.

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. So 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) according to the following table:

Product	Intended use	Characteristic	System
"CONEL FLAM Kitt II"	Components effective in the view of safety in case of fire used in construction products, construction elements, kits and special constructions	- Reaction to fire - properties relevant for the fire sealing and fire stopping effect	1

² EN 13501-1:2007

Fire classification of construction products and building elements, Part 1 Classification using test data from reaction to fire tests of the products

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

The technical details necessary for the implementation of the system of Assessment and Verification of Constancy of Performance are laid down in the control plan (confidential part of this ETA) deposited at Deutsches Institut für Bautechnik.

Issued in Berlin on 15 August 2022 by Deutsches Institut für Bautechnik

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Head of Section

beglaubigt:
Dr.-Ing. Dierke

ANNEX 1

CHARACTERISTICS RELEVANT FOR THE FIRE SEALING AND FIRE STOPPING EFFECTS OF THE CONSTRUCTION PRODUCTS

"CONEL FLAM Kitt II"

Characteristics	Range and tolerances	Test method
Density (as delivered)	1200 kg/m ³ to 1385 kg/m ³	see control plan
Content of non-volatile components (fresh)	65,0 % ± 5 %	
Loss of mass at a certain temperature (hardened)	61,0 % ± 5 % (at 400 °C for 30 minutes)	
Expansion ratio	35,0 to 55,0 (at 400 °C without a top load for 30 minutes, sample thickness ca. 2 mm)	

The product does not create a remarkable expansion pressure during foaming.
The chemical reaction starts at approximately 250 °C.