

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-20/0413
of 15 September 2020

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the
European Technical Assessment:

Trade name of the construction product

Product family
to which the construction product belongs

Manufacturer

Manufacturing plant

This European Technical Assessment
contains

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

Deutsches Institut für Bautechnik

"Viega Brandschutz-Band type F" (tape) and
"Viega Brandschutz- Paste type F" (fire sealant)

Intumescent products for fire sealing and fire stopping
purposes

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

EAD 350005-00-1104, Edition May 2015

¹ Address known at DIBt

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Specific Part

1 Technical description of the product

Object of this European technical assessment (ETA) are the intumescent construction products "Viega Brandschutz-Band Typ F" (tape) and "Viega Brandschutz-Paste Typ F" (fire sealant).

In case of fire exposed to high temperatures the intumescent products expand and generate foam. This generated 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 "Viega Brandschutz-Paste Typ F" (fire sealant) is a soft mastic of anthracite colour and will be delivered in cartridges, as tubular good or in pails or canisters. The product essentially consists of intumescent substances and a binder. When applied the product generates flexible layers which expand in case of fire.

The construction product "Viega Brandschutz-Band Typ F" (tape) consists of the supporting material, a glass fiber fabric², and the factory-applied intumescent soft mastic "Viega Brandschutz-Paste Typ F". "Viega Brandschutz-Band Typ F" (tape) is produced of the nominal thickness $1,7 \text{ mm} \pm 0,2 \text{ mm}$. Other thicknesses, several widths and an additional self-adhesive lamination are possible, but are not assessed in this ETA. Cutting in-situ is allowed.

The technical characteristics used for fire sealing and fire stopping effect of the construction products "Viega Brandschutz-Band Typ F" (tape) and "Viega Brandschutz-Paste Typ F" (fire sealant) are given in Annex 1.

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

The construction products "Viega Brandschutz-Band Typ F" and "Viega Brandschutz-Paste Typ F" are assessed on the basis of EAD 350005-00-1104, edition May 2015³ as an intumescent product for fire sealing and fire stopping purposes without specific final use (IU 1).

The construction products "Viega Brandschutz-Band Typ F" and "Viega Brandschutz-Paste Typ F" are intended to be used as essential components in, between or on construction products, elements, kits and special constructions which meet requirements concerning the safety in case of fire. In case of fire, the product delays the heat transfer through fire resistant construction elements, assemblies and special constructions by expanding under the impact of high temperatures and thus restricting 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 if the intumescent construction products "Viega Brandschutz-Band Typ F" and "Viega Brandschutz-Paste Typ F" are used considering the remarks and the edge conditions of clause 3.3.

The tests and assessment methods on which this European Technical Assessment is based lead to an assumption of working life of the intumescent construction products "Viega Brandschutz-Band Typ F" and "Viega Brandschutz-Paste Typ F" in final use of at least 10 years.

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.

² type, manufacturer and specific parameters deposited with DIBt
³ Official Journal of the EU N° C 378/02 of 13 November 2015

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

3.1 Safety in case of fire (BWR 2)

3.1.1 Reaction to fire

Products	Performance
"Viega Brandschutz-Band Typ F" (tape) thickness: 1,7 mm ± 0,2 mm	Class E according to EN 13501-1 ⁴
"Viega Brandschutz-Paste Typ F" (fire sealant)	

3.1.2 Resistance to fire

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

3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Content of dangerous substances	No dangerous substances ⁵

The detailed chemical composition of the intumescent construction products "Viega Brandschutz-Band Typ F" and "Viega Brandschutz-Paste Typ F" was assessed at DIBt and is deposited with DIBt.

3.3 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 testing and the assessment of the durability regarding to the product's performance was done for climatic use conditions of type X - out-door use – in accordance with EAD Nr. 350005-00-1104, clause 1.2.2.

Conclusion:

The intumescent construction products "Viega Brandschutz-Band Typ F" and "Viega Brandschutz-Paste Typ F" may be used under use conditions of free weathering/out-door without having to fear essential changes in the relevant fire sealing and fire stopping properties and the resulting performance. This assessment includes the use under climatic conditions of type Typs Z₂, Z₁, Y₂ and Y₁.

The product was additionally tested under specific conditions without any essential change in performance for

- Exposure to a constant temperature of 80 °C for 40 days,
- Exposure to solvents (tested with Butylacetat, Butanol, solvent naphtha and fuel)
- Subsequent over-painting (tested with coatings on the basis of acryl dispersion, alkyd resin, polyurethanacryl and epoxide resin,
- Exposure to permanent wetness (water immersion and permanent condensation) for 4 weeks.

The essential characteristics and the resulting performance did not change due to these exposures.

⁴ EN 13501-1:2019-05 Fire classification of construction products and building elements, Part 1 and A1:2009 Classification using test data from reaction to fire tests

⁵ 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)

English translation prepared by DIBt

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
"Tangit FP 440"	Components effective in the view of safety in case of fire (BWR) used in construction products, elements, kits and assemblies	Reaction to fire properties relevant for the fire sealing and fire stopping effect	1

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 (AVCP) are laid down in the control plan (confidential part of this ETA) deposited at Deutsches Institut für Bautechnik.

Issued in Berlin on 15 September 2020 by Deutsches Institut für Bautechnik

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Referatsleiter

beglaubigt:
Dr.-Ing. Dierke

ANNEX 1

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

**"Viega Brandschutz-Band Typ F" (tape) and
"Viega Brandschutz-Paste Typ F" (fire sealant)**

Characteristics	Range and tolerance	Test method ¹
"Viega Brandschutz-Band Typ F" (tape)		
Nominal thickness	1,7 mm ± 0,2 mm	See control plan
Mass per unit area	1,40 kg/m ² to 1,80 kg/m ²	
Loss of mass at a certain temperature	32,0 % ± 5 % (at 500 °C for 30 minutes)	
Expansion ratio	13,5 to 23,0 (at 500°C with a top-load for 30 minutes)	
Expansion pressure	1,00 N/mm ² to 1,45 N/mm ² (at 300 °C without lateral restriction)	
"Viega Brandschutz-Paste Typ F" (fire sealant)		
Density	1120 kg/m ³ to 1200 kg/m ³	see control plan
Content of non-volatile components	75,0 % ± 5 %	
Loss of mass at a certain temperature	46,0 % ± 5 % (at 500 °C for 30 minutes)	
Expansion ratio	18,0 to 23,5 (at 500 °C with a top-load for 30 minutes; thickness of the samples ca. 2 mm)	
Expansion pressure	1,00 N/mm ² to 1,45 N/mm ² (at 300 °C without lateral restriction)	

¹ Details of the test method are deposited with DIBt