



Approval body for construction products and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and Laender Governments



European Technical Assessment

ETA-18/1152 of 20 March 2023

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

This version replaces

Deutsches Institut für Bautechnik

FIRETEX Concrete WB

Intumescent products for fire sealing and fire stopping purposes

Sherwin-Williams Coatings Deutschland GmbH Rieter Tal 1 71665 Vaihingen/Enz DEUTSCHLAND

Sherwin-Williams Coatings Deutschland GmbH Rieter Tal 1 71665 Vaihingen/Enz

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

EAD 350005-00-1104, Edition May 2015

ETA-18/1152 issued on 16 June 2020

Deutsches Institut für Bautechnik Kolonnenstraße 30 B | 10829 Berlin | GERMANY | Phone: +49 30 78730-0 | Fax: +49 30 78730-320 | Email: dibt@dibt.de | www.dibt.de



European Technical Assessment ETA-18/1152 English translation prepared by DIBt

Page 2 of 7 | 20 March 2023

The European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction shall be identified as such.

This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 25(3) of Regulation (EU) No 305/2011.



Page 3 of 7 | 20 March 2023

European Technical Assessment ETA-18/1152 English translation prepared by DIBt

Specific Part

1 Technical description of the product

Object of this European technical assessment (ETA) is the intumescent construction product "FIRETEX Concrete WB" and its variants with the top-coats "FIRETEX Top WB" or "FIRETEX Top SB".

In case of fire exposed to high temperatures the applied intumescent product expands and generates foam. This foam restricts the passage and propagation of heat, smoke, flames or any combination of them. During the reaction in case of fire no relevant expansion pressure occurs.

The construction product "FIRETEX Concrete WB" is a white, solvent-free, water-born coating material for mineral substrates. Applied on the substrate it forms tight, elastic layers.

The product essentially consists of intumescent substances and binder.

Subsequently a top-coat can be applied. The suitability of the top-coats "FIRETEX Top WB" and "FIRETEX Top SB" was proofed concerning reaction to fire by testing in accordance with EAD 350005-00-1104 (assessment for all colours incl. Black and Red).

When using a topcoat, however, it must be assumed that foaming will be slightly delayed or reduced, depending on the application thickness.

Under final use conditions the product may contribute to the resistance to fire of the coated fireresistant construction elements, kits, assemblies or special constructions.

The technical characteristics used for the fire sealing and fire stopping effect of the construction product "FIRETEX Concrete WB" and the variants with top-coat are given in Annex 1.

The intumescent construction product "FIRETEX Concrete WB" is applied directly on the mineral substrate of a density of at least 650 kg/m³ or of a reaction to fire class A2-s1,d0 acc. to EN 3501-1 or better – preferably by spray application. The application by brush or roller is possible too. The nominal thickness (dry film) is between 0,5 mm and 1,85 mm depending on the application method, the quality of the substrate and the kind of treated construction element. The maximal applied quantity is 3,50 kg/m².

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

The construction product "FIRETEX Concrete WB" is assessed on the basis of EAD 350005-00-1104¹ as an intumescent product for fire sealing and fire stopping purposes without specific final use (IU 1).

The product "FIRETEX Concrete WB" is intended to be used as essential component on or in and between construction elements, assemblies and special assemblies 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.

The performance given in Section 3 is only valid if the intumescent construction product "FIRETEX Concrete WB" is used considering the remarks and the boundary conditions of clause 3.3.

The test and assessment methods on which this ETA is based lead to the assumption of a working life of the intumescent construction product "FIRETEX Concrete WB" of at least 10 years.

1



European Technical Assessment ETA-18/1152

Page 4 of 7 | 20 March 2023

English translation prepared by DIBt

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 its assessment

3.1 Safety in case of fire (BWR 2)

3.1.1 Reaction to fire

Essential characteristic	Performance acc. to EN 13501-1 ²
Reaction to fire "FIRETEX Concrete WB" (applied quantity $\leq 3,5$ kg/m ²), without top-coat on mineral substrates of a density ≥ 650 kg/m ³	class B-s1,d0
Reaction to fire "FIRETEX Concrete WB" with the top-coat added "FIRETEX Top SB" (applied quantity $\leq 180 \text{ g/m}^2$) on mineral substrates of a density $\geq 650 \text{ kg/m}^3$	class C-s1,d0
Reaction to fire "FIRETEX Concrete WB" with the top-coat added "FIRETEX Top WB" (applied quantity $\leq 160 \text{ g/m}^2$) on mineral substrates of a density $\geq 650 \text{ kg/m}^3$	class C-s1,d0

The listed classification concerning reaction to fire of the evaluated product "FIRETEX Concrete WB" with or without a specified top-coat is only valid on mineral substrates of reaction to fire class A2-s1,d0 in accordance with EN 13501-1² or higher (also see EN 13238³) and only for the specified maximum application quantities of the top coats.

3.1.2 Resistance to fire

The performance "Resistance to fire" shall be demonstrated separately for every intended final use and shall be classified when requested.

3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Content of dangerous substances	No dangerous substances ⁴ Use categories: IA1 and S/W2
Release of dangerous substances in accordance with EN 16516 ⁵ for "FIRETEX Concrete WB" with topcoat "FIRETEX Top WB" (tested for a applied quantity of 150 g/m ²)	Test results after 28 days: TVOC < 0,19 mg/m ³ (limit value \leq 1 mg/m ³) TSVOC < 5 µg/m ³ (limit value \leq 0,1 mg/m ³)

- ² EN 13501-1:2019-05
 - 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
 - EN 13238:2010-06 Reaction to fire tests for building products; Conditioning procedure and general rules for selection of substrates
- 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)
- ⁵ EN16516:2018-01 Construction products; Assessment of release of dangerous substances; Determination of emissions into indoor air

3



European Technical Assessment

ETA-18/1152

Page 5 of 7 | 20 March 2023

English translation prepared by DIBt

The detailed chemical composition of the intumescent construction product "FIRETEX Concrete WB" was assessed at DIBt and is deposited here. The manufacturer's safty datasheet for the product, version 3.0 of 29/01/2019 shall be considered.

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 relevant fire protective performance were carried out for environmental conditions of type Z_1 – product intended for frost-protected indoor use at changing or permanent higher relative humidity and temporary condensation (re-drying condensation) without any rain or UV-radiation – in accordance with EAD 350005-00-1104, clause 1.2.2.

Result:

The intumescent construction product "FIRETEX Concrete WB" without top-coat may be used under use conditions of type Z_1 (frost-protected indoor use with changing relative humidity) and under use conditions of type Z_2 (dry, frost-protected indoor use) without having to fear essential changes in the relevant fire sealing and fire stopping properties and the resulting performance.

In order to demonstrate the suitability of the product for outdoor-use, the freshly applied product "FIRETEX Concrete WB" was subsequently covered with the top-coats described in section 1 and afterwards tested and assessed concerning the fire protective performance for climatic use conditions of type X – product intended for out-door use at free weathering (rain, UV, frost) – in accordance with EAD 350005-00-1104, clause 1.2.2.

Result:

The intumescent construction product "FIRETEX Concrete WB" with the top-coats "FIRETEX Top WB" or "FIRETEX Top SB" may be used under use conditions of type X (out-door use), without having to fear essential changes in the relevant fire sealing and fire stopping properties and the resulting performance.

The relevant characteristics of these two-layers variants using the suitable top-coats described in section 1 are given in annex 1.

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.

Consequently, System 1 for the assessment and verification of constancy of performance (AVCP) (see Annex V in conjunction with Article 65(2) of Regulation (EU) No 305/2011) applies in accordance with the following table:

Product	Intended use	Characteristic	System
"FIRETEX Concrete WB"	Component effective in the view of safety in case of fire (BWR2) used on or between massive mineral construction products, elements, kits and special assemblies	Reaction to fire properties relevant for the fire sealing and fire stopping effect	1



European Technical Assessment ETA-18/1152

Page 6 of 7 | 20 March 2023

English translation prepared by DIBt

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

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 20 March 2023 by Deutsches Institut für Bautechnik

Otto Fechner Head of Section *beglaubigt:* Dr.-Ing. Dierke English translation prepared by DIBt



ANNEX 1

CHARACTERISTICS RELEVANT FOR THE FIRE SEALING AND FIRE STOPPING EFFECTS OF THE CONSTRUCTION PRODUCT:

"FIRETEX Concrete WB"

Characteritic	Nominal level and tolerances	Test method		
"FIRETEX Concrete WB" without topcoat (Type Z ₁ and Z ₂)				
thickness (dry film)	0,5 mm (500 μm) up to 1,85 mm (1850 μm)			
density	1400 kg/m ³ ± 100 kg/m ³	see control plan		
Non-volatile components	78,0 % ± 5 %			
Expansion ratio	at the nominal thickness 0,5 mm: 26,5 to 40,0			
	at the nominal thickness 1,5 mm: 30,5 to 60,0			
"FIRETEX Concrete WB" with the topcoat "FIRETEX Top SB" (Type X)				
max applied quantity of the topcoat	180 μm	see control plan		
Expansion ratio	at the nominal thickness 0,5 mm: 15,0 to 45,0			
"FIRETEX Concrete WB" with the topcoat " FIRETEX Top WB" (Type X)				
max applied quantity of the topcoat	160 μm	see control plan		
Expansion ratio	at the nominal thickness 0,5 mm: 28,0 to 45,0			

The chemical reaction of foaming starts at ca 200 °C.