

Approval body for construction products  
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and  
Laender Governments



## European Technical Assessment

**ETA-15/0591**  
**of 10 March 2021**

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

Exterdens FB

Product family  
to which the construction product belongs

Intumescent products for fire sealing and fire stopping  
purposes

Manufacturer

Wolman Wood and Fire Protection GmbH  
Dr.-Wolmann-Straße 31-33  
76547 Sinzheim  
DEUTSCHLAND

Manufacturing plant

A, B, C, D

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

This version replaces

ETA-15/0591 issued on 26 February 2016

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## Specific Part

### 1 Technical description of the product

Object of this European Technical Assessment (ETA) is the intumescent construction product "Exterdens FB".

The European Technical Assessment is also valid for the construction product "Exterdens FB" in form of granulate and for strips and profiles equipped at the factory on one side with a self-adhesive tape (SK)<sup>1</sup>.

In case of fire, exposed to high temperatures, 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 technical characteristics relevant for the fire sealing and fire stopping effect of the construction product "Exterdens FB" are given in Annex 1.

The construction product "Exterdens FB" is an intumescent product of anthracite colour, manufactured as granulate or in form of flexible strips and profiles extruded of this granulate. The product essentially consists of intumescent substances and a binder.

The construction product "Exterdens FB" in form of strips and profiles is produced in a factory of nominal thicknesses between 1 mm and 5 mm (each with a tolerance of  $\pm 0,2$  mm), several nominal widths (each with a tolerance of  $\pm 0,5$  mm) and with a standard length of 100 m. Other dimensions are available on demand.

The intumescent strips and profiles are delivered in coils; the granulate is delivered in bags.

The strips and profiles can be equipped on one side with a self-adhesive tape for fixing the product on the substrate or can be fastened mechanically or by using a suitable adhesive, which is not part of this assessment.

The construction product "Exterdens FB" in form of strips and profiles and the variant equipped with self-adhesive tape may be cut on demand.

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

The construction product "Exterdens FB" is assessed on the basis of EAD 350005-00-1104<sup>2</sup> as an intumescent product for fire sealing and fire stopping purposes without a specifically defined final use (IU 1).

The construction product "Exterdens FB" and its variant with a self-adhesive tape are 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 elements and constructions assemblies by expanding under the impact of high temperatures and thus restricting the spread of fire in fire resistant construction elements and assemblies.

The performance given in Section 3 is only valid if the product "Exterdens FB" is used in accordance with the instructions and the conditions stated in section 3.3.

The tests and assessment methods on which this European Technical Assessment is based, lead to the assumption of working life of the intumescent construction product "Exterdens FB" of at least 10 years<sup>3</sup> in final use.

<sup>1</sup> type, manufacturer and specific parameters deposited at DIBt

<sup>2</sup> Official Journal of the EU N° C 378/02 of 13/11/2015

<sup>3</sup> results of long-term aging available (natural-aging exposed to weathering for 10 years)

The indication 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 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 this assessment

#### 3.1 Safety in case of fire (BWR 2)

##### 3.1.1 Reaction to fire

Essential characteristic	Performance
Reaction to fire	Class E in accordance with EN 13501-1 <sup>4</sup>

The intumescent construction product "Exterdens FB" in the origin variations with and without self-adhesive tape on one side meets the reaction to fire requirements of class E in accordance with EN 13501-1<sup>4</sup>.

##### 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.

#### 3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Content of dangerous substances	No dangerous substances <sup>5</sup>

The detailed chemical composition of the intumescent construction product "Exterdens FB" was assessed by DIBt and is deposited at DIBt.

#### 3.3 General aspects

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

The testing and the assessment of the product performance were carried out for environmental conditions of type X in accordance with EAD 350005-00-1104<sup>2</sup>, section 1.2.2.

Result:

The intumescent construction product "Exterdens FB" can be used under use conditions of type X – free weathering, 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 in-door use under use conditions of type Y<sub>1</sub>, Y<sub>2</sub>, Z<sub>1</sub> and Z<sub>2</sub>.

If the intumescent construction product "Exterdens FB" under final use conditions is exposed permanently to temperatures above 60 °C, a decrease of expansion pressure in case of fire cannot be excluded.

The over-painting with suitable decorative coatings is possible, if no influence on the foaming behaviour in case of fire is expected. The performance "reaction to fire" shall be determined separately with the intended coating.

<sup>4</sup> 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

<sup>5</sup> 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 EAD No. 35 0005-00-1104<sup>2</sup> "Intumescent products for fire sealing and fire stopping purposes", the applicable European legal act is: EC Decision 1999/454/EC of 22 June 1999, amended by EC Decision 2001/596/EC of 8 January 2001

The system to be applied is: **system 1**

See Regulation (EU) N° 305/2011 Annex V in conjunction with Article 65 (2) and the following table:

Product	Intended use	characteristic	System
"Exterdens FB" strips and profiles without or with self-adhesive tape (SK), granulate "Exterdens FB"	Components effective in view of safety in case of fire 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 system 1 of 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 for Assessment and Verification of Consistency of Performance are laid down in the control plan (confidential part of this ETA), deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 10 March 2021 by Deutsches Institut für Bautechnik

Otto Fechner  
Head of section

*beglaubigt:*  
Dr.-Ing. Dierke

## ANNEX 1

### CHARACTERISTICS RELEVANT FOR THE FIRE SEALING AND FIRE STOPPING EFFECT OF THE CONSTRUCTION PRODUCT

#### "Exterdens FB"

Characteristic	Range and tolerance	test method
Thickness	1,0 mm to 5,0 mm Tolerance for each $\pm 0,2$ mm	see control plan
Expansion ratio	14,0 to 40,0	
Expansion pressure	0,50 N/mm <sup>2</sup> to 1,80 N/mm <sup>2</sup>	

The chemical reaction in case of fire starts at ca. 200 °C.