

Approval body for construction products  
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and  
Laender Governments



## European Technical Assessment

ETA-10/0117  
of 3 June 2015

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

ROKU<sup>®</sup> Strip

Product family  
to which the construction product belongs

Intumescent product for fire sealing and fire  
stopping purposes

Manufacturer

Rolf Kuhn GmbH  
Jägersgrund 10  
57339 Erndtebrück  
DEUTSCHLAND

Manufacturing plant

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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 Regulation (EU)  
No 305/2011, on the basis of

European Assessment Document (EAD)  
350005-00-1104 "Intumescent products for fire  
sealing and fire stopping purposes"

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## Specific part

### 1 Technical description of the product

Object of this European technical assessment is the intumescent construction product "ROKU<sup>®</sup> Strip".

In case of fire exposed to high temperatures the intumescent product expands and generates 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 technical characteristics used for fire sealing and fire stopping effect of the construction product "ROKU<sup>®</sup> Strip" are given in Annex 1.

The construction product "ROKU<sup>®</sup> Strip" is a flexible material produced in form of mats and strips up to a width of 320 mm (tolerance in width:  $\pm 0,5$  mm) and in a range of nominal thickness between 1,0 mm to 8,0 mm. The intumescent product may be equipped on one side with a self-adhesive tape<sup>1</sup> and with a lamination of polyester<sup>1</sup> foil.

The product essentially consists of intumescent substances and a binder and may contribute the resistance to fire in case of fire, if used in fire resisting construction products, kits, elements and assemblies.

The product is delivered in coils or rolls or cut into strips, mats, panels or cut-outs of different shape. The product may be cut as desired on-site.

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

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

"ROKU<sup>®</sup> Strip" is intended to be used as essential component in, between or on construction products, assemblies, construction 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 products and construction elements by foaming due to the effect of high temperatures and restricts the fire propagation.

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

The performances given in Section 3 are only valid if the intumescent construction product "ROKU<sup>®</sup> Strip" is used considering the remarks and the boundary conditions of clause 3.4.

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 "ROKU<sup>®</sup> Strip" of at least 10 years<sup>2</sup>.

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.

<sup>1</sup> type, manufacturer and specific parameters deposited with DIBt  
<sup>2</sup> results of long-term aging (natural-aging) available

English translation prepared by DIBt

**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
Reaction to fire	Class E according to EN 13501-1 <sup>3</sup>

The intumescent construction product "ROKU<sup>®</sup> Strip" - the origin variant and the described laminated variants – meets the requirements of class E according to EN 13501-1 concerning reaction to fire.

**3.1.2 Resistance to fire**

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

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

Essential characteristic	Performance
Content and release of dangerous substances	No dangerous substances

The detailed chemical composition of the intumescent construction product "ROKU<sup>®</sup> Strip" was assessed at DIBt and is deposited with DIBt.

**3.3 Sustainable use of natural resources (BWR 7)**

No performance was determined for the sustainable use of natural resources.

**3.4 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 proof and its assessment concerning applicability under climatic conditions of type X (outdoor application) were carried out in accordance with EOTA Technical Report 024<sup>4</sup>, clause 4.2.

Conclusion:

The intumescent construction product "ROKU<sup>®</sup> Strip" as well cuts made from may be used under use conditions type X (outdoor application) without expecting 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**

According to EAD No. 35 0005-01-1104 "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 (are): 1

(see Regulation (EU) N° 305/2011 annex V in conjunction with Article 65, paragraph 2). See the the following table

<sup>3</sup> EN 13501-1 Fire classification of construction products and building elements, Part 1 and A1:2009 Classification using test data from reaction to fire tests

<sup>4</sup> EOTA TR 024 Characterisation, Aspects of Durability and Factory Production Control for Reactive Materials, Components and products; amended version July 2009

Product	Intended use	characteristic	System
"ROKU® Strip" without /with Polyester foil or self-adhesive tape or cuts from it	Components effective in the view of safety in case of fire (BWR) used in construction 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 the AVCP system, as provided for in the applicable EAD**

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at Deutsches Institut für Bautechnik.

Issued in Berlin on 3 June 2015 by Deutsches Institut für Bautechnik

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*beglaubigt:*  
Dr.-Ing. Dierke

**ANNEX 1**

**CHARACTERISTICS RELEVANT FOR THE FIRE SEALING AND FIRE STOPPING EFFECTS of THE CONSTRUCTION PRODUCT "ROKU® Strip"**

Characteristics	Test method	Range and tolerance
Thickness of strips	TR 024, clause 3.1.2	1,0 mm to 8,0 mm Tolerance: ± 10 % of nominal thickness
Expansion ratio	TR 024, clause 3.1.11 Method 1 at 550 °C for 30 minutes with a top load	nominal thickness 1,5 mm 18,0 to 38,0 nominal thickness 7,0 mm 11,0 to 34,0
Expansion pressure	TR 024, clause 3.1.12 Method 4 at 300 °C	nominal thickness 1,5 mm ≥ 0,80 N/mm <sup>2</sup> nominal thickness 7,0 mm ≥ 0,40 N/mm <sup>2</sup>