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Authorized and notified according  
to Article 29 of the Regulation (EU)  
No 305/2011 of the European  
Parliament and of the Council of 9  
March 2011

MEMBER OF EOTA



## European Technical Assessment ETA-17/0978 of 18/12/2017

### General Part

#### Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the  
construction product:

Kerafix® Everseal NG-N L  
Kerafix® Everseal NG-N H  
Kerafix® Everseal NG-N P

Product family to which the  
above construction product  
belongs:

Fire Stopping and Sealing with high performance  
intumescent material used in penetration seals.

Manufacturer:

Rolf Kuhn GmbH  
Jägersgrund 10  
57339 Erndtebrück / Germany  
Tel. + 49 2753 5945-0  
Fax + 49 2753 5945-52  
Internet [www.kuhn-brandschutz.com](http://www.kuhn-brandschutz.com)

Manufacturing plant:

Rolf Kuhn GmbH  
Jägersgrund 10  
57339 Erndtebrück / Germany

This European Technical  
Assessment contains:

6 pages including 1 annex which form an integral part of  
the document

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

European Assessment Document (EAD) no. 350005-  
00-1104 "Intumescent products for fire sealing and fire  
stopping purposes"

This version replaces:

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## **II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT**

### **1 Technical description of product and intended use**

#### **Technical description of the product**

The construction products of the Kerafix® Everseal NG-N series are intumescent materials on the basis of exfoliated graphite that foams up under pressure with thermal influence.

The Kerafix® Everseal NG-N series is supplied in various geometries.

The Kerafix® Everseal NG-N series are also supplied as granules.

The Kerafix® Everseal NG-N series may be equipped with a lamination foil.

Detailed specifications for identification and performance criteria relevant for fire safety with regard to the construction products are given in Annex 1.

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

The Kerafix® Everseal NG-N series can be installed, according to the manufacture, e.g. in fire classified doors, glazing, facades and safety cabinets and safes.

Table 1 – components of the verified penetration seals

<b>Product type</b>	<b>Trade name</b>
Seal/granules	Kerafix® Everseal NG-N L
Seal/granules	Kerafix® Everseal NG-N H
Seal/granules	Kerafix® Everseal NG-N P

Detailed information and data on the verified penetration seals are given in Annex 1.

The verification and assessment methods on which this European Technical Assessment is based, lead to the assumption of a working life for the Kerafix® Everseal NG-N series of at least 10 years.

The indications given on the working life cannot be interpreted as a guarantee given by the manufacturer, 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 its assessment

Characteristic	Assessment of characteristic
<b>3.2 Safety in case of fire (BWR 2)</b>	
Reaction to fire	The intumescent material in the Kerafix® Everseal NG-N series is classified as <b>Euroclass E</b> in accordance with Commission Delegated Regulation 2016/364 and EN 13501-1.
Resistance to fire	<b>NPA</b> – (No Performance Assessed) The performance “ <i>Resistance to fire</i> ” shall be demonstrated separately for the final use according to the relevant EN-standard and classified according to the EN 13501-2.
<b>3.3 Hygiene, health and the environment (BWR 3)</b>	
Air and water permeability	<b>NPA</b> – (No Performance Assessed)
Release of dangerous substances*)	<b>NPA</b> – (No Performance Assessed)

\*) In addition to the specific clauses relating to dangerous substances contained in this European technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

#### 3.9 General aspects relating to fitness for use (ER 6)

##### Durability and serviceability:

The verification of durability is part of testing the essential requirements for the construction product Kerafix® Everseal NG-N series. The product may be used in end-use applications according to the provisions for category X without expecting significant changes of the characteristics relevant for fire sealing and fire stopping properties and the performance, regard Annex 1 for further information.

The proof and its assessment concerning applicability under climate conditions were carried out in accordance with EOTA TR 024 clause 4.2.3 Testing reactive materials intended for type X-applications.

## **4 Assessment and verification of constancy of performance (AVCP)**

### **4.1 AVCP system**

According to the decision 1999/454/EC of the European Commission, as amended by 2001/596/EC, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) is 1.

## **5 Technical details necessary for the implementation of the AVCP system, as foreseen in the applicable EAD**

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark prior to CE marking.

Issued in Copenhagen on 2017-12-18 by



Thomas Bruun  
Managing Director, ETA-Danmark

**Annex 1**  
**Product details and definitions**  
Product and performance of the Kerafix® Everseal NG-N series

Property	Method	Range
Thickness of strips	Kerafix® Everseal NG-N L. Determination has been carried out according to chapter 3.1.2.1 of EOTA TR No 024.	2,5 mm ± 1,0 mm
Weight per unit area	Kerafix® Everseal NG-N L. The determination has been carried out according to chapter 3.1.5 of EOTA TR No 024.	0,80 g/cm <sup>3</sup> - 1,08 g/cm <sup>3</sup>
Expansion ratio	Kerafix® Everseal NG-N L. The determination has been carried out according to chapter 3.1.11 of EOTA TR No 024. Tested at 450 °C for 30 minutes.	6,9 – 16,3
Expansion pressure	Kerafix® Everseal NG-N L. The determination has been carried out according to chapter 3.1.12 of EOTA TR No 024. Tested at 300 °C.	0,209 – 0,671 N/mm <sup>2</sup>

Property	Method	Range
Thickness of strips	Kerafix® Everseal NG-N H Determination has been carried out according to chapter 3.1.2.1 of EOTA TR No 024.	2,5 mm ± 1,0 mm
Weight per unit area	Kerafix® Everseal NG-N H The determination has been carried out according to chapter 3.1.5 of EOTA TR No 024.	0,77 g/cm <sup>3</sup> - 1,04 g/cm <sup>3</sup>
Expansion ratio	Kerafix® Everseal NG-N H The determination has been carried out according to chapter 3.1.11 of EOTA TR No 024. Tested at 450 °C for 30 minutes.	9,8 – 21,6
Expansion pressure	Kerafix® Everseal NG-N H The determination has been carried out according to chapter 3.1.12 of EOTA TR No 024. Tested at 300 °C.	0,463 – 0,816 N/mm <sup>2</sup>

Property	Method	Range
Thickness of strips	Kerafix® Everseal NG-N P Determination has been carried out according to chapter 3.1.2.1 of EOTA TR No 024.	2,5 mm ± 1,0 mm
Weight per unit area	Kerafix® Everseal NG-N P The determination has been carried out according to chapter 3.1.5 of EOTA TR No 024.	0,82 g/cm <sup>3</sup> - 1,10 g/cm <sup>3</sup>
Expansion ratio	Kerafix® Everseal NG-N P The determination has been carried out according to chapter 3.1.11 of EOTA TR No 024. Tested at 450 °C for 30 minutes.	11,6 – 22,7
Expansion pressure	Kerafix® Everseal NG-N P The determination has been carried out according to chapter 3.1.12 of EOTA TR No 024. Tested at 300 °C.	0,500 – 0,900 N/mm <sup>2</sup>