



## European Technical Approval ETA-13/0543

English translation prepared by DIBt - Original version in German language

Handelsbezeichnung  
*Trade name*

Fugenfüll-System "PYRO-SAFE Fugenabdichtung"  
*joint filling system "PYRO-SAFE Fugenabdichtung"*

Zulassungsinhaber  
*Holder of approval*

svt Brandschutz  
Vertriebsgesellschaft mbH International  
Glüsinger Straße 86  
21217 Seevetal  
DEUTSCHLAND

Zulassungsgegenstand  
und Verwendungszweck  
*Generic type and use  
of construction product*

Linienförmige Fugenabdichtungen und Brandsperren  
*Linear Joint and Gap Seals*

Geltungsdauer:  
*Validity:* vom  
*from*  
bis  
*to*

6 June 2013  
6 June 2018

Herstellwerk  
*Manufacturing plant*

1

Diese Zulassung umfasst  
*This Approval contains*

16 Seiten einschließlich 8 Anhänge  
*16 pages including 8 annexes*

## I LEGAL BASES AND GENERAL CONDITIONS

- 1 This European technical approval is issued by Deutsches Institut für Bautechnik in accordance with:  

Council Directive 89/106/EEC of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products<sup>1</sup>, modified by Council Directive 93/68/EEC<sup>2</sup> and Regulation (EC) N° 1882/2003 of the European Parliament and of the Council<sup>3</sup>;

Gesetz über das In-Verkehr-Bringen von und den freien Warenverkehr mit Bauprodukten zur Umsetzung der Richtlinie 89/106/EWG des Rates vom 21. Dezember 1988 zur Angleichung der Rechts- und Verwaltungsvorschriften der Mitgliedstaaten über Bauprodukte und anderer Rechtsakte der Europäischen Gemeinschaften (Bauproduktengesetz - BauPG) vom 28. April 1998<sup>4</sup>, as amended by Article 2 of the law of 8 November 2011<sup>5</sup>;

Common Procedural Rules for Requesting, Preparing and the Granting of European technical approvals set out in the Annex to Commission Decision 94/23/EC<sup>6</sup>;

Guideline for European technical approval of "Fire Stopping and Fire Sealing Products - Part 3: Linear Joint and Gap Seals", ETAG 026-03.
- 2 Deutsches Institut für Bautechnik is authorized to check whether the provisions of this European technical approval are met. Checking may take place in the manufacturing plant. Nevertheless, the responsibility for the conformity of the products to the European technical approval and for their fitness for the intended use remains with the holder of the European technical approval.
- 3 This European technical approval is not to be transferred to manufacturers or agents of manufacturers other than those indicated on page 1, or manufacturing plants other than those indicated on page 1 of this European technical approval.
- 4 This European technical approval may be withdrawn by Deutsches Institut für Bautechnik, in particular pursuant to information by the Commission according to Article 5(1) of Council Directive 89/106/EEC.
- 5 Reproduction of this European technical approval including transmission by electronic means shall be in full. However, partial reproduction can be made with the written consent of Deutsches Institut für Bautechnik. In this case partial reproduction has to be designated as such. Texts and drawings of advertising brochures shall not contradict or misuse the European technical approval.
- 6 The European technical approval is issued by the approval body in its official language. This version corresponds fully to the version circulated within EOTA. Translations into other languages have to be designated as such.

1 Official Journal of the European Communities L 40, 11 February 1989, p. 12  
2 Official Journal of the European Communities L 220, 30 August 1993, p. 1  
3 Official Journal of the European Union L 284, 31 October 2003, p. 25  
4 *Bundesgesetzblatt Teil I 1998*, p. 812  
5 *Bundesgesetzblatt Teil I 2011*, p. 2178  
6 Official Journal of the European Communities L 17, 20 January 1994, p. 34

## II SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL APPROVAL

### 1 Definition of the product and intended use

#### 1.1 Definition of the construction product

##### 1.1.1 Description of the joint filling system

This European technical approval applies for the joint filling system with the designation "PYRO-SAFE Fugenabdichtung".

The joint filling system mainly consists of mineral fibre boards, a special coating<sup>7</sup> and a filler<sup>7</sup>.

The joint filling system shall be installed in accordance with Annex 3 using the components listed in Annex 1.

##### 1.1.2 Description of the components of joint filling system

The components of the joint filling system

- the mineral fibre boards "ProRox SL 970<sup>D</sup>", produced by Deutsche Rockwool Mineralwoll GmbH
- the coating "PYRO-SAFE FLAMMOPLAST KS1", produced by svt Brandschutz Vertriebsgesellschaft mbH International
- the filler (putty) "PYRO-SAFE FLAMMOPLAST KS3", produced by svt Brandschutz Vertriebsgesellschaft mbH International
- Loose mineral wool "ProRox LF 970", produced by Deutsche Rockwool Mineralwoll GmbH shall comply with the specifications given in Annex 1.

#### 1.2 Intended Use

##### 1.2.1 General

The joint filling system "PYRO-SAFE Fugenabdichtung" is used for sealing horizontal and vertical linear joints (structural joints such as linear butt joints)

- in or between fire-resistant separating wall constructions
- in or between fire-resistant separating floor constructions
- in or between fire-resistant separating wall and floor constructions.

The joint filling system is intended to maintain or reinstate the fire resistance performance of separating building elements where they are interrupted or separated by joints.

The maximum lateral stretching capability of the joint filling system is 7.4 %.

The joint filling system is not intended for load transmission.

The joint filling system may be used for sealing linear joints in or between the following separating building elements:

- rigid walls made of concrete, reinforced concrete or masonry with a minimum density  $600 \text{ kg/m}^3 \pm 20 \%$
- rigid floors made of concrete or reinforced concrete with a minimum density  $2200 \text{ kg/m}^3 \pm 20 \%$ .

The minimum thickness of the separating building elements shall be 180 mm.

The separating building elements shall be classified according to EN 13501-2 for the required fire resistance period.

For further details on fire resistant designs, see Annex 2.

<sup>7</sup> Details of the material specifications are deposited with the Deutsches Institut für Bautechnik.

### 1.2.2 Use Category

The joint filling system "PYRO-SAFE Fugenabdichtung" may be used in interiors, frost-protected without permanent but temporary moisture exposure (see section 2.4). The coating "PYRO-SAFE FLAMMOPLAST KS1" and the filler "PYRO-SAFE FLAMMOPLAST KS3" were evaluated for use category Z<sub>1</sub> (intended for use at temperatures between 0 °C and +40 °C, but without exposure to rain or UV-radiation) according to EOTA TR 024.

### 1.2.3 Working life

The provisions made in this European technical approval are based on an assumed working life of the joint filling system "PYRO-SAFE Fugenabdichtung" of 10 years, provided that the conditions laid down in sections 4 and 5 for the packaging, transport, storage, installation, use, maintenance and repair are met. 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 Characteristics of the product and methods of verification

### 2.1 General

2.1.1 The assessment of fitness for use has been made in accordance with ETAG 026 Part 3.

For the evaluation of the joint filling system, the product properties "reaction to fire", "fire resistance", "emission of dangerous substances" and "durability and serviceability" were taken into consideration.

2.1.2 The product properties specified in sections 2.2 to 2.4 only apply to the joint filling system and its components described in this ETA. Deutsches Institut für Bautechnik shall be immediately notified of any changes to the materials, composition, dimensions or properties of these components. Deutsches Institut für Bautechnik will decide if a new evaluation is required.

### 2.2 Safety in case of fire

#### 2.2.1 Reaction to fire

The mineral fibre boards, the coating and the filler comply with the fire reaction classes in accordance with EN 13501-1 specified in Annex 1.

#### 2.2.2 Fire resistance

The joint filling system "PYRO-SAFE Fugenabdichtung" has been tested in accordance with ETAG 026-3 and EN 1366-4 in combination with building elements according to section 1.2.1. For the fire resistance classified according to EN 13501-2, see Annex 2.

### 2.3 Emission of dangerous substances

The coating "PYRO-SAFE FLAMMOPLAST KS1" and the filler "PYRO-SAFE FLAMMOPLAST KS3" do not contain/release dangerous substances specified in TR 034. The chemical composition of the materials was made available for assessment to the Deutsches Institut für Bautechnik.

For the mineral fibre boards "ProRox SL 970<sup>D</sup>" and the loose mineral wool "ProRox LF 970" technical data sheets, safety data sheets and tests reports were assessed.

Note: In addition to the specific clauses relating to dangerous substances contained in this European technical approval, 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 Directive, these requirements need also to be complied with, when and where they apply.

## 2.4 Durability and serviceability

The coating "PYRO-SAFE FLAMMOPLAST KS1" and the filler "PYRO-SAFE FLAMMOPLAST KS3" meet the requirements of use category Z<sub>1</sub> in accordance with ETAG 026 Part 3.

This means that the components/product can be exposed to the conditions of interiors, frost-protected rooms without permanent but temporary moisture exposure at temperatures between 0 °C and +40° C, but without exposure to rain or UV-radiation, without expecting significant changes in fire protection characteristics.

## 3 Evaluation and attestation of conformity and CE marking

### 3.1 System of attestation of conformity

According to the decision 1999/454/EC of the European Commission<sup>8</sup> and the amendment according to the Decision 2001/596/EC of the European Commission<sup>9</sup>, system 1 of the attestation of conformity applies.

In addition, according to the Decision 2001/596/EC of the European Commission<sup>9</sup> system 3 of the attestation of conformity applies with regard to reaction to fire.

These systems of attestation of conformity are detailed as follows:

System 1: Certification of the conformity of the product by a notified certification body on the basis of:

- (a) Tasks for the manufacturer:
  - (1) factory production control;
  - (2) further testing of samples taken at the factory by the manufacturer in accordance with a prescribed test plan;
- (b) Tasks for the notified body:
  - (3) initial type-testing of the product;
  - (4) initial inspection of factory and of factory production control;
  - (5) continuous surveillance, assessment and approval of factory production control.

System 3: Declaration of conformity of the product by the manufacturer on the basis of:

- (a) Tasks for the manufacturer:
  - (1) factory production control;
- (b) Tasks for the notified body:
  - (2) initial type-testing of the product.

### 3.2 Responsibilities

#### 3.2.1 Tasks for the manufacturer

##### 3.2.1.1 Factory production control

The manufacturer of the coating and the filler shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall insure that the product is in conformity with this European technical approval.

<sup>8</sup> Official Journal of the European Communities L 178/52 of 14/7/1999

<sup>9</sup> Official Journal of the European Communities L 209/33 of 2/8/2001

The manufacturer may only use raw and constituent materials stated in the technical documentation of this European technical approval.

The factory production control shall be in accordance with the control plan, which is part of the technical documentation of this European technical approval. The control plan is laid down in the context of the factory production control system operated by the manufacturer and deposited with Deutsches Institut für Bautechnik.<sup>10</sup>

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the control plan. The records shall include at least the following information:

- name of the construction product or the constituent material and the components,
- type of control or test,
- date of production and testing of the construction product or the constituent material or components,
- result of controls and testings and, if appropriate, comparison with requirements,
- signature of person responsible for factory production control.

The records shall be archived for at least five years. They shall be submitted to the notified body responsible for continuous surveillance and Deutsches Institut für Bautechnik upon request.

If the test results are insufficient, the manufacturer shall take appropriate measures to rectify the shortcomings. Construction products which do not meet the requirements shall be treated such that they cannot be mistaken for products in compliance. After rectification of the shortcoming – where technically possible and required to verify rectification of the shortcoming – the test in question shall be repeated.

#### 3.2.1.2 Other tasks for the manufacturer

The manufacturer shall, on the basis of a contract, involve a body which is notified for the tasks referred to in section 3.1 in the field of linear joint and gap seals in order to undertake the actions laid down in section 3.2.2. For this purpose, the control plan referred to in section 3.2.1.1 shall be handed over by the manufacturer to the notified body involved.

The manufacturer shall provide an installation instruction on every construction product according to this ETA containing at least the following information:

- type and properties (minimum thickness, density) and fire resistance of the building elements in which the joint filling system may be installed
- description or graphic presentation of the proper installation with information of the materials to be used (e. g. mineral fibre boards, coating, optional design with a steel frame)

The manufacturer shall make a declaration of conformity, stating that the construction product is in conformity with the provisions of the European technical approval ETA-13/0543.

#### 3.2.2 Tasks for the notified bodies

The notified body shall perform the following tasks in accordance with the provisions laid down in the control plan:

- initial type-testing of the product,
- initial inspection of factory and of factory production control,

<sup>10</sup>

The control plan is a confidential part of the European technical approval and only handed over to the notified body involved in the procedure of attestation of conformity. See section 3.2.2.

- continuous surveillance, assessment and approval of factory production control according to the control plan

The notified body shall retain the essential points of its actions referred to above and state the results obtained and conclusions drawn in a written report.

The notified certification body involved by the manufacturer shall issue an EC certificate of conformity of the product stating the conformity with the provisions of this European technical approval.

In cases where the provisions of the European technical approval and its control plan are no longer fulfilled the certification body shall withdraw the certificate of conformity and inform Deutsches Institut für Bautechnik without delay.

### 3.3 CE marking

The CE marking of the coating and the filler shall be affixed on the packagings/pails itself or the label attached to it or on the packaging or on the accompanying commercial document, e. g. the EC declaration of conformity. The letters "CE" shall be followed by the identification number of the notified certification body, where relevant, and be accompanied by the following additional information:

- the name and address of the manufacturer (legal entity responsible for the manufacturer),
- the last two digits of the year in which the CE marking was affixed,
- the number of the EC certificate of conformity for the product
- the number of the European technical approval,
- the number of the guideline for European technical approval
- designation of the product (trade name)
- designation of the component (trade name)
- the use category (ies)

See ETA-13/0453 for other relevant characteristics.

For an example of the CE marking, see Annex 8.

## 4 Assumptions under which the fitness of the product for the intended use was favourably assessed

### 4.1 Manufacturing

The European technical approval is issued for the product on the basis of agreed data/information, deposited with Deutsches Institut für Bautechnik, which identifies the product that has been assessed and judged. Changes to the product or production process, which could result in this deposited data/information being incorrect, should be notified to Deutsches Institut für Bautechnik before the changes are introduced. Deutsches Institut für Bautechnik will decide whether or not such changes affect the approval and consequently the validity of the CE marking on the basis of the approval and if so whether further assessment or alterations to the approval shall be necessary.

### 4.2 Installation

#### 4.2.1 General

The characteristics of the product characteristics specified in this European technical approval only apply if the joint filling system is installed in accordance with the specifications in Annex 3 to 5 and the manufacturer's instructions of installation.

#### 4.2.2 Processing of the components of the jopint filling system

For details of the processing follow the manufacturer's instructions.

## 5 Indications to the manufacturer

### 5.1 Packaging, transport and storage

The coating "PYRO-SAFE FLAMMOPLAST KS1" and the filler "PYRO-SAFE FLAMMOPLAST KS3" shall be packaged for delivery in compliance with the usual delivery conditions and providing sufficient protection against the effects of normal handling and weather exposure or detrimental effects of moisture.

The packaging of the coating and filler shall contain the following information:

- Trade name or trademark or other symbol identifying the product
- The date of manufacture (day, month, year or coded information), the period for storage or the best-before-date

For further details on packaging, transport and storage follow the manufacturer's instructions.

### 5.2 Use, maintenance, repair

5.2.1 The fire protection properties of joint sealing systems "PYRO-SAFE Fugenabdichtung" shall not be affected by future changes to buildings or building elements.

5.2.2 The evaluation of serviceability is based on the assumption that any damage caused by impacts or contamination can be repaired by replacing and renewing damaged parts of the joint filling system. Damaged sections of the coating "PYRO-SAFE FLAMMOPLAST KS1" and the filler "PYRO-SAFE FLAMMOPLAST KS3" shall be only replaced by the identical product. The substitution shall be carried out carefully. The required quantity of material and the total thickness of material shall be maintained.

5.2.3 Horizontal floor joints shall be protected from stepping or damaging by taking appropriate protective measures. For further details follow the manufacturer's instructions.

Evaluation of the fire resistance of joint filling systems using such protective measures is not part of this European technical approval.

Prof. Gunter Hoppe  
Head of Department

*beglaubigt:*  
von Hoerschelmann



### Components of the joint filling system "PYRO-SAFE Fugenabdichtung"

Table 1.0

Name/Manufacturer	Description
"ProRox SL 970 <sup>D</sup> " Deutsche Rockwool Mineralwoll GmbH, 45966 Gladbeck, Germany	Mineral fibre board according to EN 14303 thickness $\geq 50$ mm nominal gross density $\geq 120$ kg/m <sup>3</sup> Reaction to fire class according to EN 13501-1: Class A1
"PYRO-SAFE FLAMMOPLAST KS1" svt Brandschutz Vertriebsgesellschaft mbH International, 21217 Seevetal, Germany	Intumescent coating, does not create essential expansion pressure. Reaction to fire class according to EN 13501-1: Class E The chemical composition is deposited with the Deutsches Institut für Bautechnik.
"PYRO-SAFE FLAMMOPLAST KS3" svt Brandschutz Vertriebsgesellschaft mbH International, 21217 Seevetal, Germany	Intumescent filler (putty), does not create essential expansion pressure. Reaction to fire class according to EN 13501-1: Class E The chemical composition is deposited with the Deutsches Institut für Bautechnik.
"ProRox LF 970", Deutsche Rockwool Mineralwoll GmbH, 45966 Gladbeck, Germany	Loose mineral wool produced from molten stone Data sheet see Annex 6

joint filling system "PYRO-SAFE Fugenabdichtung"

Description of the components of the joint filling system "PYRO-SAFE Fugenabdichtung"

Annex 1

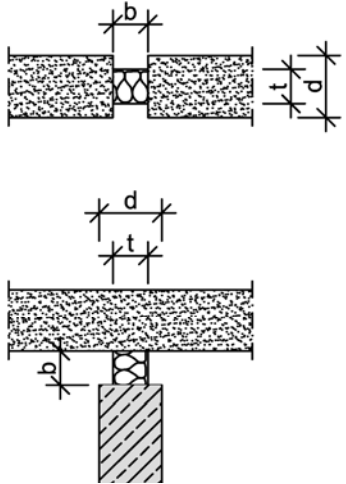
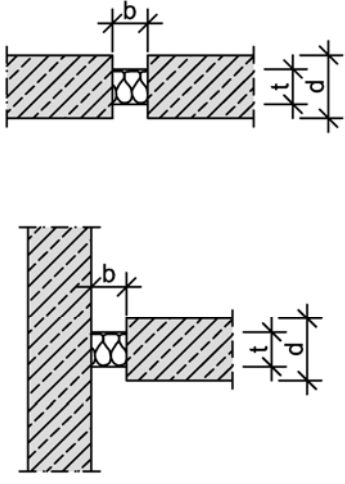
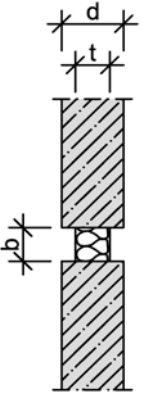
### Fire-resistant designs evaluated by this European technical approval

The joint filling system "PYRO-SAFE Fugenabdichtung" is used for sealing linear joints in or between the following separating building elements according to section 1.2.1:




- rigid walls
  - concrete, reinforced concrete or masonry with a minimum density  $600 \text{ kg/m}^3 \pm 20 \%$
- rigid floors
  - concrete or reinforced concrete with a minimum density  $2200 \text{ kg/m}^3 \pm 20 \%$ .

Table 2.0 provides an overview of the fire-resistant designs for the installation in rigid walls and rigid floors with a thickness  $\geq 180 \text{ mm}$ .

Table 2.0

Application (A)	Application (B)	Application (C)
Horizontal joints in or between floors or between walls and floors	Vertical joints in or between walls	Horizontal joints in walls
		
EI 120 - H - X - B - 20 to 100	EI 120 - V - X - B - 20 to 100	EI 120 - T - X - B - 20 to 100

**legend:**

	joint sealing	d	$\geq 180 \text{ mm}$
	wall	b	20 – 100 mm
	floor	t	100 mm

The joint filling system may be installed on any position within the joint.

joint filling system "PYRO-SAFE Fugenabdichtung"	Annex 2
Overview of the permitted applications and fire-resistant designs	

## Installation of the joint filling system "PYRO-SAFE Fugenabdichtung"

### 1. General

- 1.1 Before installing, all conditions are to be checked for compliance (e. g. type and thickness of the separating building elements, width of the joints) with the provisions of section 1.2 and Annexes 2 to 4.
- 1.2 It shall be ensured that the assumptions under which the fitness of the product for the intended use was evaluated are complied with (see Section 4).

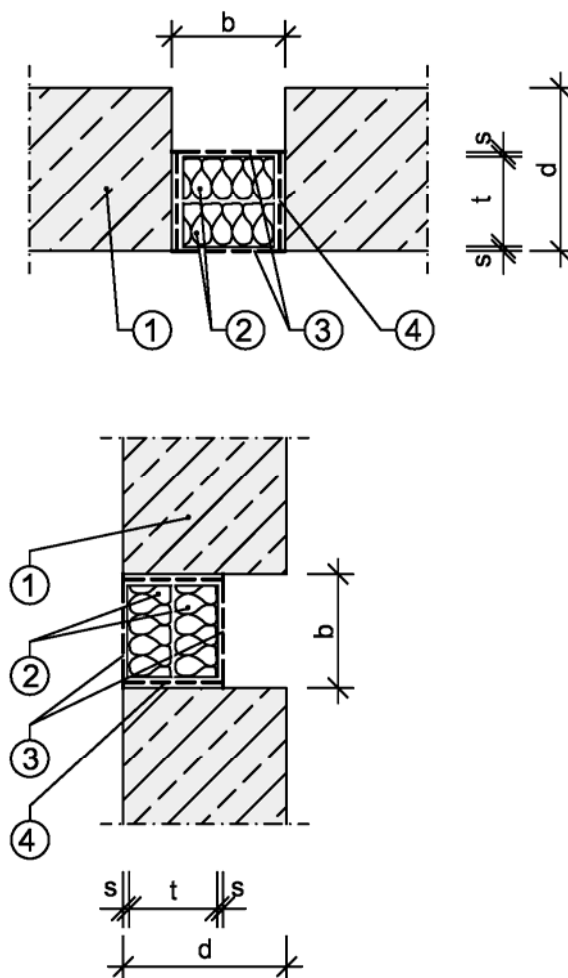
### 2. Installation

- 2.1 Before installing the joint filling system, the joints are to be cleaned of any contamination such as loose fragments of building elements or remains of installation foams. During the installation phase the transition area to the adjacent surface of the building element shall be taped with a usual masking tape.
- 2.2 The mineral fibre boards shall be coated one-side with "PYRO-SAFE FLAMMOPLAST KS1".
- 2.3 The reveals of the joint shall be coated with "PYRO-SAFE FLAMMOPLAST KS1" in the installation area of the mineral fibre boards.
- 2.4 The mineral fibre boards shall be cut into strips according to the joint width. The cutting edges of the mineral fibre boards shall be coated with "PYRO-SAFE FLAMMOPLAST KS1". The strips shall be installed in two densely juxtaposed layers into the joint in such a way that the pre-coated sides of the mineral fibre boards are arranged to the reveals and the joint is completely and tightly sealed with a thickness of  $\geq 100$  mm.
- 2.5 All remaining gaps and joints, insofar as they exist, shall be tightly filled and sealed with loose mineral wool and "PYRO-SAFE FLAMMOPLAST KS3" from both sides to a depth of at least 50 mm.
- 2.6 Finally the surfaces of the installed mineral fibre boards shall be coated with "PYRO-SAFE FLAMMOPLAST KS1" such that the thickness of the coating (dry layer thickness) is at least 1 mm.
- 2.7 In case of installing the joint filling system in ceilings, the reveals of the joint may be covered by a frame of 10 mm thick steal angles. Strips of non-combustible mineral fibre boards with a thickness of  $\geq 10$  mm and a density of  $\geq 35$  kg/m<sup>3</sup> shall be installed between the reveals and the frame.
- 2.8 During the construction phase, the joints shall be protected against weather exposure and moisture by appropriate measures, e. g. by covering with foils.
- 2.9 Apart from this, the specifications of the manufacturer's instructions of installation apply.

joint filling system "PYRO-SAFE Fugenabdichtung"

Installation of the joint sealing system - Description

Annex 3

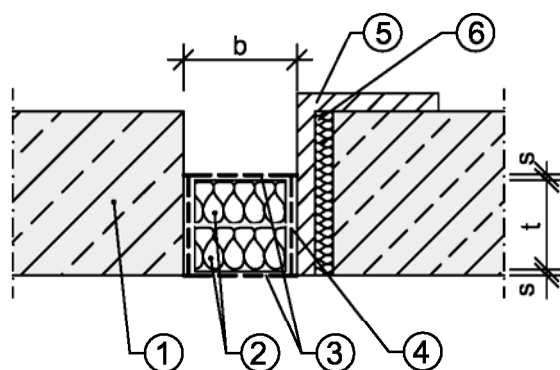


Construction and dimensions of the joint			
①	Thickness of the wall or floor	d	[mm] ≥ 180
	Joint width	b	[mm] 20 - 100
②	Mineral fibre board "ProRox SL 970 D" thickness 50 mm density ≥ 120 kg/m <sup>3</sup>	t	[mm] 100
③	Coating with PYRO-SAFE FLAMMOPLAST KS1	s	[mm] ≥ 1,0
④	Gluing with PYRO-SAFE FLAMMOPLAST KS1 and if necessary plugging with loose wool "ProRox LF 970" and filling with the filler PYRO-SAFE FLAMMOPLAST KS3		

joint filling system "PYRO-SAFE Fugenabdichtung"

Installation in floors and walls

Annex 4



- ① Floor
- ② Strip of mineral fibre board "ProRox SL 970 D" class A1, thickness 50 mm; density  $\geq 120 \text{ kg/m}^3$
- ③ Coating with PYRO-SAFE FLAMMOPLAST KS1; dry film thickness  $s \geq 1,0 \text{ mm}$
- ④ Gluing with PYRO-SAFE FLAMMOPLAST KS1 and if necessary plugging with loose wool "ProRox LF 970" and filling with the filler PYRO-SAFE FLAMMOPLAST KS3
- ⑤ Steel angular frame
- ⑥ Strip of 100 mm thick mineral fibre board, density  $\geq 35 \text{ kg/m}^3$

joint filling system "PYRO-SAFE Fugenabdichtung"

Installation in floors  
- Covering of the reveals with a frame of 10 mm thick steel angles -

Annex 5

PRODUKTDATENBLATT: ProRox LF 970  
PDS 30  
Ausgabe: 06.06.2012

Rockwool Technical Insulation  
ProRox - Industrieisolierung

## ProRox LF 970

NEUER  
NAME

Alter Name: Lose Steinwolle

### Produktbeschreibung

Die ProRox LF 970 ist eine lose gebundene, imprägnierte Steinwolle-Dämmmatte, die leicht für Stopfanwendungen auseinander gezogen werden kann.

### Anwendungsbereiche

Stopfdämmungen an geometrisch komplizierten Formen wie z.B. Rohrbögen, Armaturenkapfen oder sonstigen schwer zugänglichen Hohlräumen im Industrie- und Anlagenbau sowie im Bausektor.

### Produkteigenschaften

	Technische Daten								Norm/ Vorschrift	
	T in °C	50	100	150	200	250	300			
Wärmeleitfähigkeit $\lambda$ in Abhängigkeit von der Temperatur [Stopfdichte 100kg/m <sup>3</sup> ]	$\lambda$ in W/(mK)	0,040	0,049	0,057	0,067	0,075	0,091			EN 12667
Obere Anwendungsgrenztemperatur	680 °C								EN 14706	
Schmelzpunkt	> 1000 °C								DIN 4102-17	
Brandverhalten	nichtbrennbar, Euroklasse A1								EN 13501-1	
Wasseraufnahme	Wasseraufnahme < 1 kg/m <sup>2</sup>								EN 1609	
AS-Qualität	Anwendbar in Verbindung mit austenitischen Stählen								EN 13468 und AGI Q 132	
Wasserdampf-diffusionswiderstand	$\mu = 1$								EN 14303	

Technische Daten jeweils bezogen auf den Herstellungszeitpunkt

Unsere technischen Informationen geben den Stand unseres Wissens und unserer Erfahrungen zum Zeitpunkt der Drucklegung wieder. Verwenden Sie bitte deshalb die jeweils neueste Auflage, da sich Erfahrungs- und Wissensstand stets weiterentwickeln. In Zweifelsfällen setzen Sie sich bitte mit uns in Verbindung. Beschriebene Anwendungsbeispiele können die besonderen Verhältnisse des Einzelfalles nicht berücksichtigen und erfolgen daher ohne Haftung. Unseren Geschäftsbeziehungen mit Ihnen liegen stets unsere Allgemeinen Verkaufs-, Lieferungs- und Zahlungsbedingungen in der jeweils neuesten Fassung zugrunde, die wir Ihnen auf Anforderung gern zur Verfügung stellen.

**ROCKWOOL**  
TECHNICAL INSULATION

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joint filling system "PYRO-SAFE Fugenabdichtung"

Technical documentation – loose mineral wool

Annex 6

### List of reference documents

ETAG No 026-1 (Edition January 2008)  
Guideline for European Technical Approval for Fire Stopping and Fire Sealing Products - Part 1: General

ETAG No 026-3 (Edition February 2008 and Progress File August 2011)  
Guideline for European Technical Approval for Fire Stopping and Fire Sealing Products - Part 3: Linear joint and gap seals

EN 13501-1:2010-01 Fire classification of construction products and building elements  
- Part 1: Classification using data from reaction to fire tests

EN 13501-2:2010-02 Fire classification of construction products and building elements  
- Part 2: Classification using data from resistance tests, excluding ventilation services

EN ISO 1182:2010-10 Reaction to fire tests for products – Non-combustibility test (ISO 1182:2010)

EN ISO 1716 Reaction to fire tests for products – Determination of the gross heat of combustion (calorific value) (ISO 1716:2010)

EN 1363-1:2012-10 Fire resistance tests – Part 1: General requirements

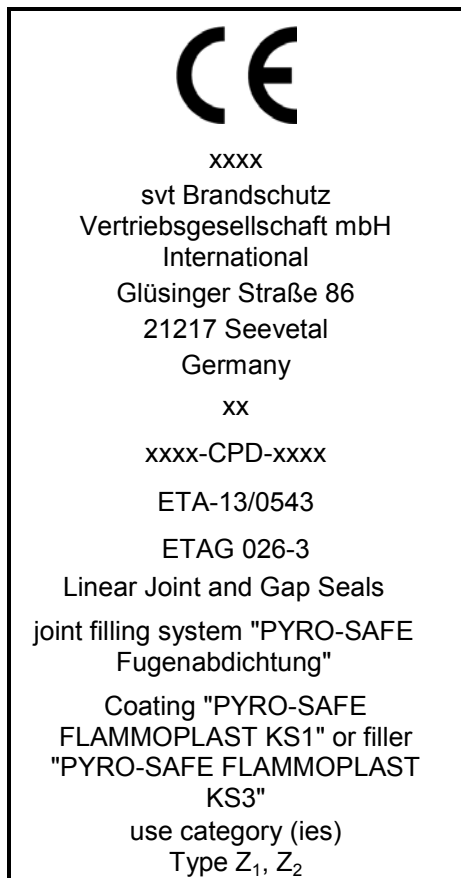
EN 1366-4:2010-08 Fire resistance tests for service installations – Part 4: Linear joint seals

EN 14303:2013-04 Thermal insulation products for building equipment and industrial installations – Factory made mineral wool (MW) products – Specification

joint filling system "PYRO-SAFE Fugenabdichtung"

Reference documents

Annex 7



"CE" marking

Identification number of notified certification body

Name and address of the producer (legal entity responsible for the manufacturer)

Two last digits of year of affixing CE marking.

Number of EC certificate of conformity

ETA number

ETAG number

Linear Joint and Gap Seals

Designation of the product (trade name)

Designation of the component (trade name)

use category (ies)

See ETA-13/0543 for other relevant characteristics (i.e. fire resistance class, dangerous substances).

joint filling system "PYRO-SAFE Fugenabdichtung"

Example of CE marking

Annex 8