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### European Technical Assessment ETA-18/0237 of 2018/05/16

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 66 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:

PYRO-SAFE FLAMMOTECT-A

Product family to which the above construction product belongs:

Linear Joint & Gap Sealing for building components

Manufacturer:

svt Brandschutz Vertriebsgesellschaft mbH

International

Glüsinger Straße 86 D-21217 Seevetal

Tel.: 0049 4105/40 90 0 Internet: <u>www.svt.de</u>

Manufacturing plant:

svt Brandschutz Vertriebsgesellschaft mbH

International

Glüsinger Straße 86 D-21217 Seevetal

This European Technical Assessment contains:

15 pages including 3 annexes which form an integral

part of the document

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, based on: European Assessment Document (EAD) No. 350141-

00-1106 Linear joint and gap seals

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 joint sealing "PYRO-SAFE FLAMMOTECT-A" essentially consists of lamella mat Klimarock and an ablative coating.

It is delivered as Joint sealing between neighboring building components, solid walls and floors, fire resistance class according to table 3 of this ETA.

Suitable for both indoor and outdoor use in the use category X according to EAD 350141-00-1106.

Detailed specifications for identification and performance criteria for fire safety regarding the construction products are given in the annexes of this ETA.

# 2 Specification of the intended use in accordance with the applicable EAD

The thickness of the joint sealing for wall and floor seals are  $\leq 100$  mm.

The width of the joint sealing for wall and floor seals are < 200 mm.

The intended use of the product is to form linear joints or gap seals with movement capability less than 7.5% (non-movement joints).

The position of the joint sealing in the joint is in the lower part, the upper part or in the middle part.

Orientation of the application of "PYRO-SAFE FLAMMOTECT-A"

- Installation of joint sealing in horizontal components
- Installation of vertical joint sealing in vertical components
- Installation of horizontal joint sealing in vertical components
- Installation of horizontal wall joints connection to floors
- Installation of horizontal floor joint connection to walls

Classification of the joint sealing "PYRO-SAFE FLAMMOTECT-A":

Double layer 50 joint seal system: EI 120 Single layer 50 joint seal system: EI 60/E 120

More information in table 3: "Performance of the product and references to the methods used for its assessment" to be used to form linear joint or gap seals with movement capability less than 7.5% (non-movement joints).

The joint sealing system are to be installed according to the manufacturers installation manual.

The provisions made in this European Technical Assessment are based on an assumed intended working life of the PYRO-SAFE FLAMMOTECT-A of 10 years, provided the manufacturers conditions 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 or Assessment Body, 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.

### ${\bf 3} \quad \text{Performance of the product and references to the methods used for its assessment} \\ *$

Characteristic	Assessment of characteristic
3.1 Safety in case of fire (BWR2)	
Reaction to fire	The product is classified as Euroclass E in accordance with EN13501-1, and the EC Delegated regulation 2016/364/EU.
Resistance to fire	Classification according to EN 13501-2: Fire resistance class of vertical linear joint seals system with mineral fiber board in wall: EI 120
	Fire resistance class of horizontal linear joint seals system with mineral fiber board in wall: EI 120
	Fire resistance class of vertical linear joint seals system with lamella mat in floor: EI 120
	Fire resistance class of horizontal linear joint seals system with lamella mat in wall: EI 120
	Fire resistance class of double layer 50 linear joint seal system with lamella mat in floor: EI 120
	Fire resistance class of single layer 50 linear joint seal with mineral fiber board in floor: EI 60/E 120
	Fire resistance class of joint seals with loose mineral wool in floor: EI 120
	Fire resistance class of joint seals with filler in wall and floor: EI 120
	See Annex B for further information of fire resistant designs.
3.2 Hygiene, health and the environment (BWR3) Content, emission and/or release of dangerous substances	No performance assessed
Air permeability (material property)	No performance assessed
Water Permeability (material property)	No performance assessed
3.3 Safety in use (BWR4) Mechanical resistance and stability	No performance assessed
Resistance to impact/movement	No performance assessed
Adhesion	No performance assessed
Durability	The product fulfils the provisions related to durability in EAD 350141-00-1106 for use condition X.

Characteristic	Assessment of characteristic
Movement Capability	No performance assessed
Cycling of perimeter seals for curtain walls	No performance assessed
Compression set	No performance assessed
Linear expansion on setting	No performance assessed
3.4 Protection against noise (BWR5) Airborne sound insulation	No performance assessed
3.5 Energy Economy and heat retention (BWR6)	
Thermal insulation	No performance assessed
Water vapour permeability	No performance assessed
*) See additional information in section $3.9 - 3.10$ .	

#### 3.9 Methods of verification

The characteristic values of the joint sealing system are based on the EAD 350141-00-1106, September 2017.

### 3.10 General aspects related to the fitness for use of the product

The European Technical Assessment is issued for the product based on agreed data/information, deposited with ETA-Danmark, 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 ETA-Danmark before the changes are introduced. ETA-Danmark will decide if such changes affect the ETA and consequently the validity of the CE marking based on the ETA and if so whether further assessment or alterations to the ETA, shall be necessary.

PYRO-SAFE FLAMMOTECT-A are manufactured in accordance with the provisions of this European Technical Assessment using the manufacturing processes as identified in the inspection of the plant by the notified inspection body and laid down in the technical documentation.

# 4 Attestation and verification of constancy of performance (AVCP)

#### 4.1 AVCP system

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

# 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 2018-05-16 by

Managing Director, ETA-Danmark

## Annex A Tabular listing of used products

Table 1.0

Designation	Manufacturer	Thickness	Gross	Classification
		[mm]	density [Kg/m <sup>3</sup> ]	
PYRO-SAFE FLAMMOTECT-A coating Fire protection coating/ablative coating	svt Brandschutz Vertriebsgesellschaft mbH International, D-Seevetal	-	1410	Class E in accordance with DIN EN 13501-1 K-3676/127/10-MPA BS
PYRO-SAFE FLAMMOTECT-A solid emulsion Solid fire protection coating, ablative coating	svt Brandschutz Vertriebsgesellschaft mbH International, D-Seevetal	-	1410	Class E in accordance with DIN EN 13501-1 K-3676/127/10-MPA BS
PYRO-SAFE FLAMMOTECT-A Filler Filling compound, ablative coating	svt Brandschutz Vertriebsgesellschaft mbH International, D-Seevetal	-	1410	Class E in accordance with DIN EN 13501-1 K-3676/127/10-MPA BS
ROCKWOOL Klimarock Lamella mat/mineral fibre mats	DEUTSCHE ROCKWOOL GmbH & Co. KG D-Gladbeck	20-100	40-50	Class A1 in accordance to DIN EN 13501-1 (according to EC Certificate of Conformity No. 0751-CPD.2-0-03- 01/12 DEUTSCHE Rockwool GmbH & Co. KG
ROCKWOOL ProRox LF 970 Impregnated stone wool	DEUTSCHE ROCKWOOL GmbH & Co. KG D-Gladbeck	-	-	Class A1 in accordance to DIN EN 13501-1 (according to EC Certificate of Conformity No. 0751-CPD.2-0-03- 01/12 DEUTSCHE Rockwool GmbH & Co. KG
ROCKWOOL ProRox SL 790 <sup>D</sup> strong and rigid stone wool slab	DEUTSCHE ROCKWOOL GmbH & Co. KG D-Gladbeck	50	115	Class A1 in accordance to DIN EN 13501-1 (according to EC Certificate of Conformity No. 0751-CPD.2-0-03- 01/12 DEUTSCHE Rockwool GmbH & Co. KG

#### Annex B Fire resistant designs evaluated by this European Technical Assessment

#### Overview of the permitted applications and fire-resistant designs with regards of resistance to fire:

The joint sealing system "PYRO-SAFE FLAMMOTECT-A" is used for sealing linear joints in or between the:

Rigid walls: Concrete, cellular concrete or masonry

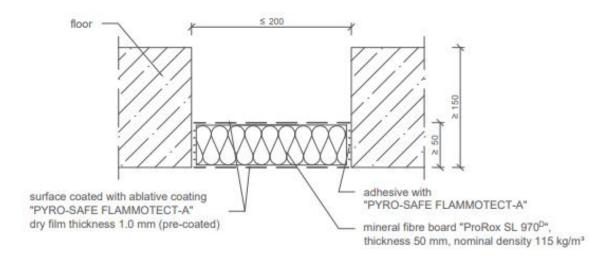
Rigid floors: Concrete or cellular concrete

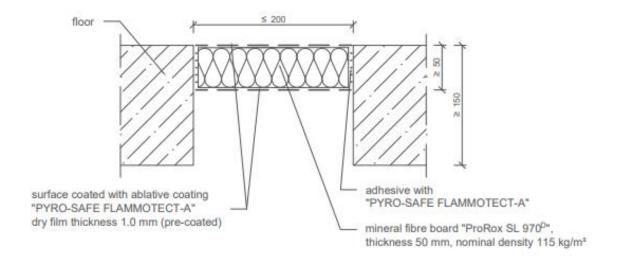
Table 2.0 provides an overview of the fire-resistant designs for the installation in rigid walls and rigid floors with a thickness of 150 mm:

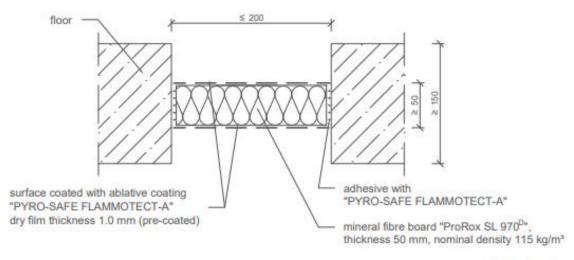
Application A	Application B	Application C	Application D
Fire resistance class of	Fire resistance class of	Fire resistance class of vertical linear	Fire resistance class of
vertical linear joint seals	horizontal linear joint seals	joint seals system with lamella mat in	horizontal linear joint seals
system with fiber board in	system with mineral fiber	floor: EI 120	system with lamella mat in
wall: EI 120	board in wall: EI 120		wall: EI 120
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Application E	Application F	Application G	Application H
Fire resistance class of	Fire resistance class of single	Fire resistance class of joint seals	Fire resistance class of joint
double layer 50 linear joint	layer 50 linear joint seals	stuffed with loose mineral wool in	seals with filler in wall and
seals system with mineral	system with mineral fiber	floor: EI 120	floor: EI 120
fiber board in floor: EI 120	board in floor: EI 60/ E 120		
	7//2 ///2		121 대왕 대학생

#### Field of installation, technical drawings

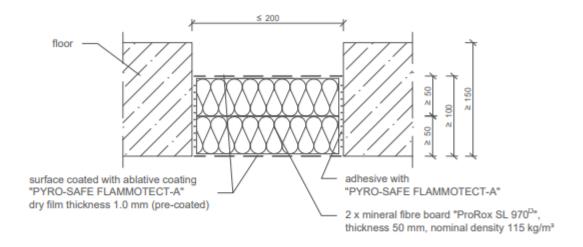
#### Horizontal joint filling system "PYRO-SAFE Flammotect" - single layer 50 with mineral fibre board

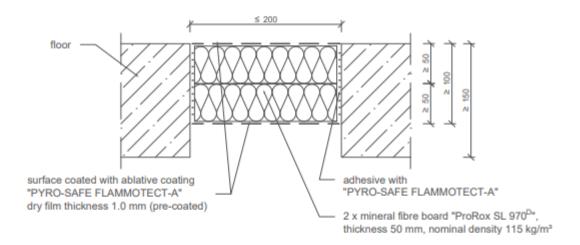


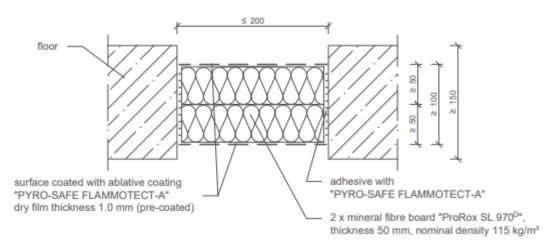




#### Horizontal joint filling system "PYRO-SAFE Flammotect" - double layer 50 with mineral fibre board



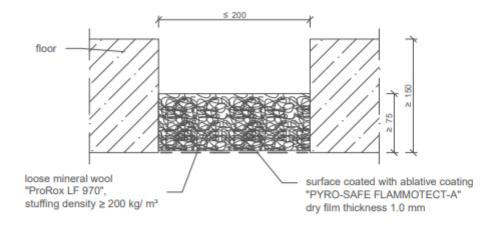




Dimensions in mm

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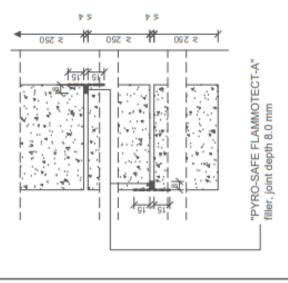
Horizontal joint filling system "PYRO-SAFE Flammotect - stuffed with loose mineral wool



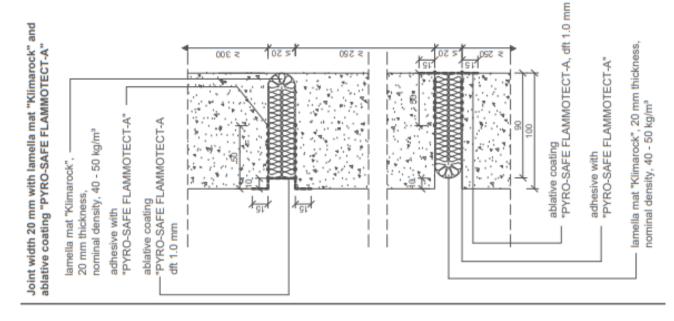
### Vertical joint filling system "PYRO-SAFE Flammotect" - double layer 50 with mineral fibre board floor surface coated with ablative coating "PYRO-SAFE FLAMMOTECT-A" dry film thickness 1.0 mm (pre-coated) 2 x mineralfibre mat "ProRox SL 970D", thickness 50 mm, nominal density 115 kg/m³ adhesive with "PYRO-SAFE FLAMMOTECT-A" ≥ 100 floor surface coated with ablative coating "PYRO-SAFE FLAMMOTECT-A" dry film thickness 1.0 mm (pre-coated) 2 x mineralfibre mat "ProRox SL 970D", thickness 50 mm, nominal density 115 kg/m3 adhesive with "PYRO-SAFE FLAMMOTECT-A" <u>| ≥ 50 | ≥ 50 |</u> ≥ 100 floor surface coated with ablative coating "PYRO-SAFE FLAMMOTECT-A" dry film thickness 1.0 mm (pre-coated) 2 x mineralfibre mat "ProRox SL 970D", thickness 50 mm, nominal density 115 kg/m3 adhesive with "PYRO-SAFE FLAMMOTECT-A"

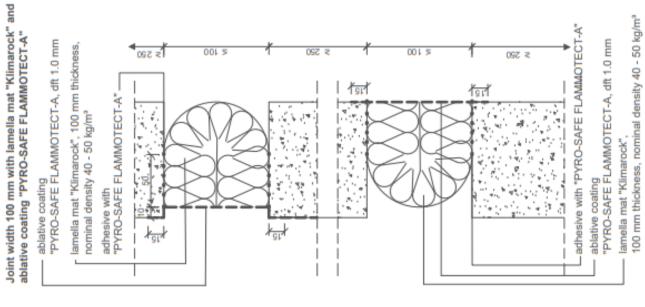
<u>≥ 50 </u> ≥ 50 ,

Dimensions in mm

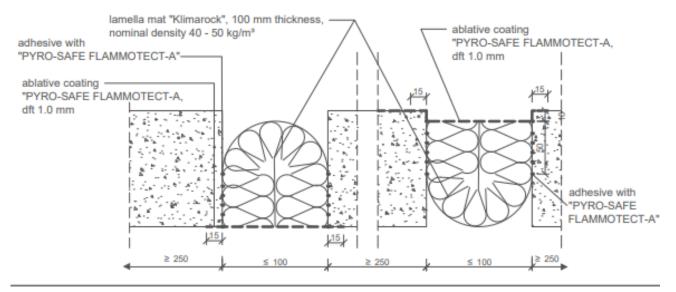


Joint width 4 mm with filler "PYRO-SAFE FLAMMOTECT-A"

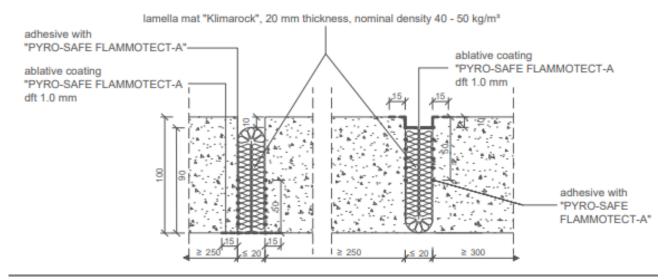




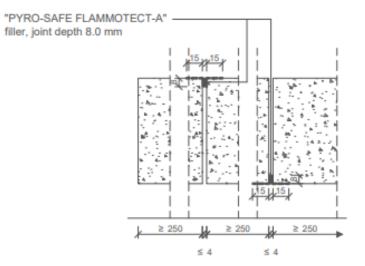
Page 15 of 15 of European Technical Assessment no. ETA-18/0237, issued on 2018-05-16 Joint width 100 mm with lamella mat "Klimarock" and ablative coating "PYRO-SAFE FLAMMOTECT-A"



Joint width 20 mm with lamella mat "Klimarock" and ablative coating "PYRO-SAFE FLAMMOTECT-A"



Joint width 4 mm with filler "PYRO-SAFE FLAMMOTECT-A"



Dimensions in mm