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# European Technical Assessment ETA-18/0237 of 2024/08/23

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:	FLAMMOTECT-A
Product family to which the above construction product belongs:	Linear Joint & Gap Sealing for building components
Manufacturer:	Flamro Brandschutz-Systeme GmbH Am Sportplatz 2 DE-56291 Leiningen Tel +49 4105 4090 0 Internet <u>www.flamro.de</u>
Manufacturing plant:	Flamro Brandschutz-Systeme GmbH Plant LEI
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:	The ETA with the same number, issued on 2018-05-16

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# II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

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

The joint sealing "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.

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(s) in accordance with the applicable European Assessment Document (hereinafter 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  $\leq 200$  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 "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 "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% (nonmovement 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 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.

# **3** 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 <b>Euroclass E</b> 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.
<b>3.2 Hygiene, health and the environment (BWR3)</b> Content, emission and/or release of dangerous substances <sup>*)</sup>	No performance assessed
Air permeability (material property)	No performance assessed
Water Permeability (material property)	No performance assessed
<b>3.3</b> Safety in use (BWR4) Mechanical resistance and stability	No performance assessed
Resistance to impact/movement	No performance assessed
Adhesion	No performance assessed
Durability	Use category 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
<b>3.4 Protection against noise (BWR5)</b> 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
*) In addition to the specific clauses relating to dangerous substances con	tained in this European technical Assessment, there may be other requirements

\*) 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.

See additional information in section 3.9 - 3.10.

#### **3.9** Methods of verification

The assessment of the performance of "FLAMMOTECT-A" is in relation to the applicable BWR's has been made in accordance with the European Assessment Document (EAD) no. EAD 350141-00-1106: Linear joint and gap seals.

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

The verification of durability is part of testing the essential characteristics. The joint sealing "FLAMMOTECT-A" may be used in end-use applications according to the provisions for use category X (external use) without expecting significant changes of the characteristics relevant for fire protection. Products that meet requirements for type X, meet the requirement for all other types.

If the joint sealing according to this ETA is to be exposed to specific stresses, further tests are necessary.

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.

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 (hereinafter AVCP) system applied, with reference to its legal base

#### 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 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 ETA-Danmark prior to CE marking

Issued in Copenhagen on 2024-08-23 by Thomas Bruun Managing Director, ETA-Danmark

### Annex A Tabular listing of used products

Table 1.0		T1.:-1	C	
Designation	Manufacturer	Thickness [mm]	Gross density [Kg/m <sup>3</sup> ]	Classification
FLAMMOTECT-A coating Fire protection coating/ablative coating	Flamro Brandschutz-Systeme GmbH Am Sportplatz 2 DE-56291 Leiningen	-	1410	Class E in accordance with DIN EN 13501-1 K-3676/127/10-MPA BS
FLAMMOTECT-A solid emulsion Solid fire protection coating, ablative coating	Flamro Brandschutz-Systeme GmbH Am Sportplatz 2 DE-56291 Leiningen	-	1410	Class E in accordance with DIN EN 13501-1 K-3676/127/10-MPA BS
FLAMMOTECT-A <b>Filler</b> Filling compound, ablative coating	Flamro Brandschutz-Systeme GmbH Am Sportplatz 2 DE-56291 Leiningen	-	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:

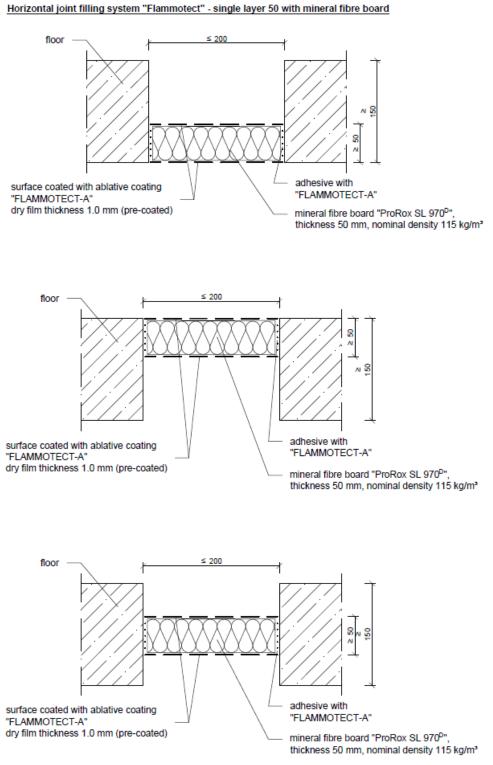
The joint sealing system "FLAMMOTECT-A" is used for sealing linear joints in or between the: Rigid walls: Concrete, cellular concrete or masonry Rigid floors: Concrete or cellular concrete

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:

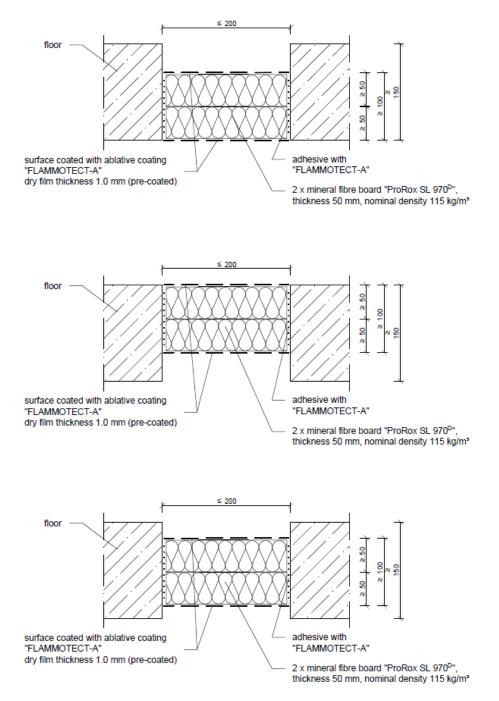
thickness of 150 mm:			
Application A	Application B	Application C	Application D
Fire resistance class of	Fire resistance class of	Fire resistance class of vertical linear	Fire resistance class of
vertical linear joint seals	horizontal linear joint seals	joint seals system with lamella mat	horizontal linear joint seals
system with fiber board in	system with mineral fiber	in floor: EI 120	system with lamella mat in
wall: EI 120	board in wall: EI 120		wall: EI 120
			а а
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
Fire resistance class of	Fire resistance class of single	Fire resistance class of joint seals	Fire resistance class of joint
Fire resistance class of double layer 50 linear joint	Fire resistance class of single layer 50 linear joint seals	Fire resistance class of joint seals stuffed with loose mineral wool in	Fire resistance class of joint seals with filler in wall and
Fire resistance class of double layer 50 linear joint seals system with mineral	Fire resistance class of single layer 50 linear joint seals system with mineral fiber	Fire resistance class of joint seals stuffed with loose mineral wool in	Fire resistance class of joint seals with filler in wall and
Fire resistance class of double layer 50 linear joint seals system with mineral	Fire resistance class of single layer 50 linear joint seals system with mineral fiber	Fire resistance class of joint seals stuffed with loose mineral wool in floor: EI 120	Fire resistance class of joint seals with filler in wall and
Fire resistance class of double layer 50 linear joint seals system with mineral fiber board in floor: EI 120	Fire resistance class of single layer 50 linear joint seals system with mineral fiber	Fire resistance class of joint seals stuffed with loose mineral wool in floor: EI 120	Fire resistance class of joint seals with filler in wall and

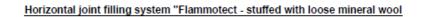
#### Page 10 of 15 of European Technical Assessment no. ETA-18/0237, issued on 2024-08-23 Annex C Field of installation, technical drawings

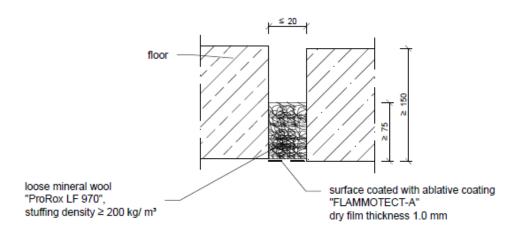
rieu of instantion, technical urawings



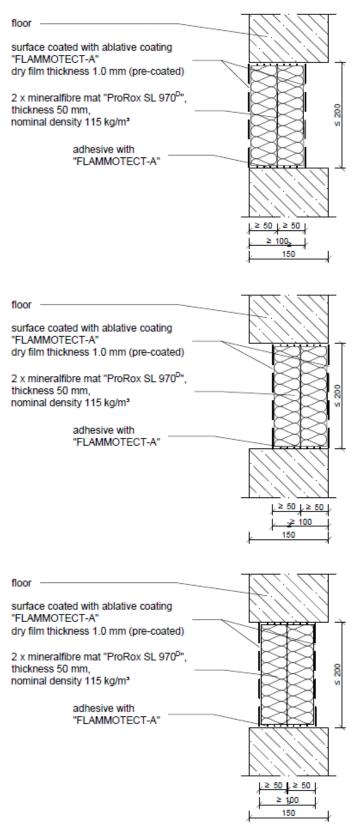
## Page 11 of 15 of European Technical Assessment no. ETA-18/0237, issued on 2024-08-23 Horizontal joint filling system "Flammotect" - double layer 50 with mineral fibre board

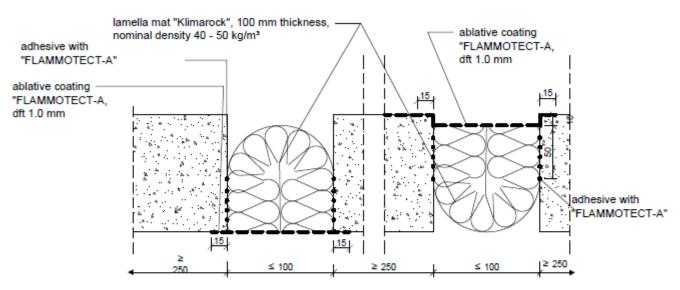






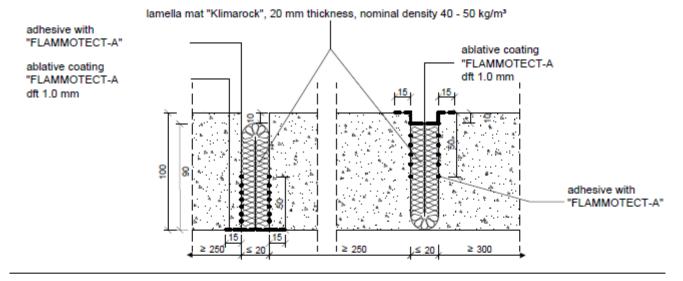
Vertical joint filling system "Flammotect" - double layer 50 with mineral fibre board



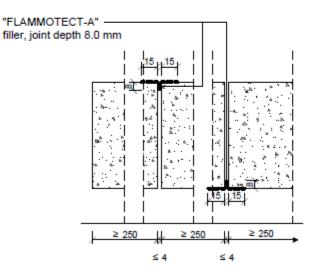


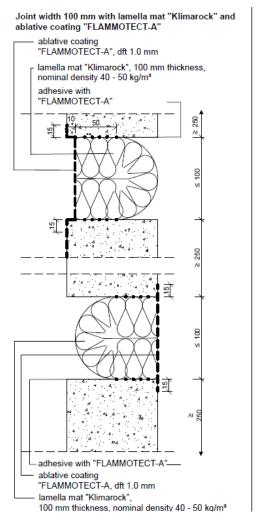
Joint width 100 mm with lamella mat "Klimarock" and ablative coating "FLAMMOTECT-A"

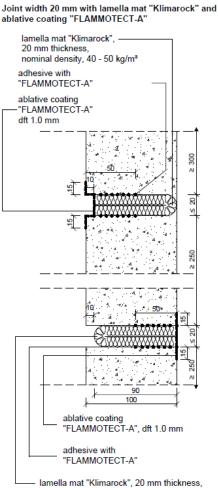
Joint width 20 mm with lamella mat "Klimarock" and ablative coating "FLAMMOTECT-A"



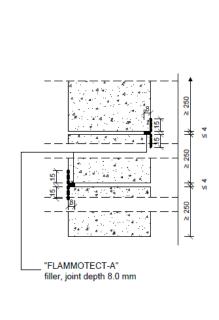
Joint width 4 mm with filler "FLAMMOTECT-A"







nominal density, 40 - 50 kg/m<sup>a</sup>



Joint width 4 mm with

filler "FLAMMOTECT-A"