

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-14/0418
of 16 December 2021

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

"FLAMMOTECT-A"

Product family
to which the construction product belongs

Ablative coating for use in penetration seals

Manufacturer

FLAMRO Brandschutz-Systeme GmbH
Am Sportplatz 2
56291 Leiningen
DEUTSCHLAND

Manufacturing plant

Werk 1

This European Technical Assessment
contains

6 pages including 2 annexes 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

EAD 350454-00-1104

This version replaces

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Specific Part

1 Technical description of the product

The construction product "FLAMMOTECT-A" is an ablative fire coating. It is provided in the form of a white or grey liquid.

In case of fire, the construction product forms a protective layer on the surfaces to be protected. The protective layer either consumes energy or releases matter through chemical or physical processes. The protective layer thus prevents the passage of heat, flames and/or smoke.

A detailed technical description and fire safety related performance criteria in relation to the construction product are given in Annex 1.

NOTE:

The characteristics listed are suitable both for identifying the construction product as well as for performing the manufacturer's factory production control.

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

The construction product "FLAMMOTECT-A" is intended for use as a component with a fire protection effect in penetration seals that are subject to fire safety requirements. In the event of fire, its reactive effect helps prevent the passage of heat and the spread of fire. The construction product "FLAMMOTECT-A" is intended for use in penetration seals.

Construction products for penetration seals are used to seal openings in fire-resistant floors and walls, which are penetrated by services. Their function is to preserve the walls' or floors' resistance to fire in the area of openings where services were fed through.

This ETA served to verify the resistance to fire of penetration seals consisting of the products listed in Annex 1.

The performance data in Section 3 relates only to the penetration seals tested as part of this assessment (e.g. regarding the design and arrangement of the penetration seal components and the type and position of the services).

3 Performance of the product and references to the methods used for its assessment

3.1 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Class E in accordance with EN 13501-1
Resistance to fire of a cable penetration seal ¹ containing the product	EI 60 ¹ (wall application) bzw. EI 90 ¹ (floor application) in accordance with EN 13501-2

¹ The fire resistance depends on the design and installation of the penetration seal, on the other components forming the penetration seal and on the penetrating services: Annexes 1 and 2 include details on the penetration seals for which the fire resistance indicated was demonstrated.

3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Content and release of dangerous substances	No dangerous substances ²

3.3 Allgemeine Aspekte

Testing the essential characteristics includes the verification of durability.

The construction product "FLAMMOTECT-A" may be used under end-use conditions in accordance with the provisions applying to use category X (external use) without significant changes in the characteristics relevant for fire protection to be expected.

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with EAD No. 350454-000-1104 the applicable European legal act is: 1999/454/EC.

The system to be applied is: system 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 test plan (control plan) deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 16 December 2021 by Deutsches Institut für Bautechnik

Christina Pritzkow
Head of Section

beglaubigt:
Meske-Dallal

² In accordance with Regulation (EC) No 1272/2008 of the European Parliament and the European Council of 16 December 2008 (published in the Official Journal of the European Communities L 353 of 31 December 2008, p. 1)

The factory manufactured construction product "FLAMMOTECT-A" is an ablative fire stopping product. It is provided in the form of a white or grey liquid.

Properties and performances criteria of the construction product "FLAMMOTECT-A"

	Property/ Performance criteria	Parameter	Test method
1	Density	1410 g/l ± 70 g/l	EN ISO 2811-1
2	Nonvolatile components	66,0 % bis 86,0%	EN ISO 3251
3	Loss mass on heating	38,0 % bis 48,0 %	EN ISO 3451-1/EOTA TR 24 (2009) on 400°C over 30 Minutes
4	LOI	55,0 % ± 3 %	ISO 4589 Sample thickness ca. 1,5 mm
5	Flexibility of the coating	≥ 5 mm	EN ISO 1519 Sample thickness ca. 1,5 mm
6	Fire behavior	Klasse E	EN ISO 11925-2

The properties listed can be used both for the identification of the construction product and for the implementation of the factory production control of the manufacturer.

Implementation details for the factory production control are included in the inspection plan.

* The composition of the materials is deposited at DIBt.

Description of the additional components of the tested sealings

Soffit of the opening	Gypsum plasterboard acc. to EN 520, Typ F thickness: 12,5 mm Classification of fire behavior acc. to EN 13501-1: Class A1
Sealing of the residual opening	Loose mineral wool "RL", Deutsche Rockwool Mineralwoll GmbH, 45866 Gladbeck, Germany; EN 14303 Classification of fire behavior acc. to EN 13501-1: Class A1

Performances of tested penetration seals, comprising the construction product "FLAMMOTECT-A"

	Essential requirement	Test method	Construction of the sample	Performance acc. to EN 13501-2
1	Resistance to fire	EN 1366-3	100 mm thick flexible wall; design and layout of the penetration seal according to Annex 2*	EI 60
2	Resistance to fire	EN 1366-3	125 mm thick rigid floor; design and layout of the penetration seal according to Annex 2*	EI 90

* Illustrations in Annex 2 without guarantee for completeness

The tested/illustrated seals are only examples for the use.

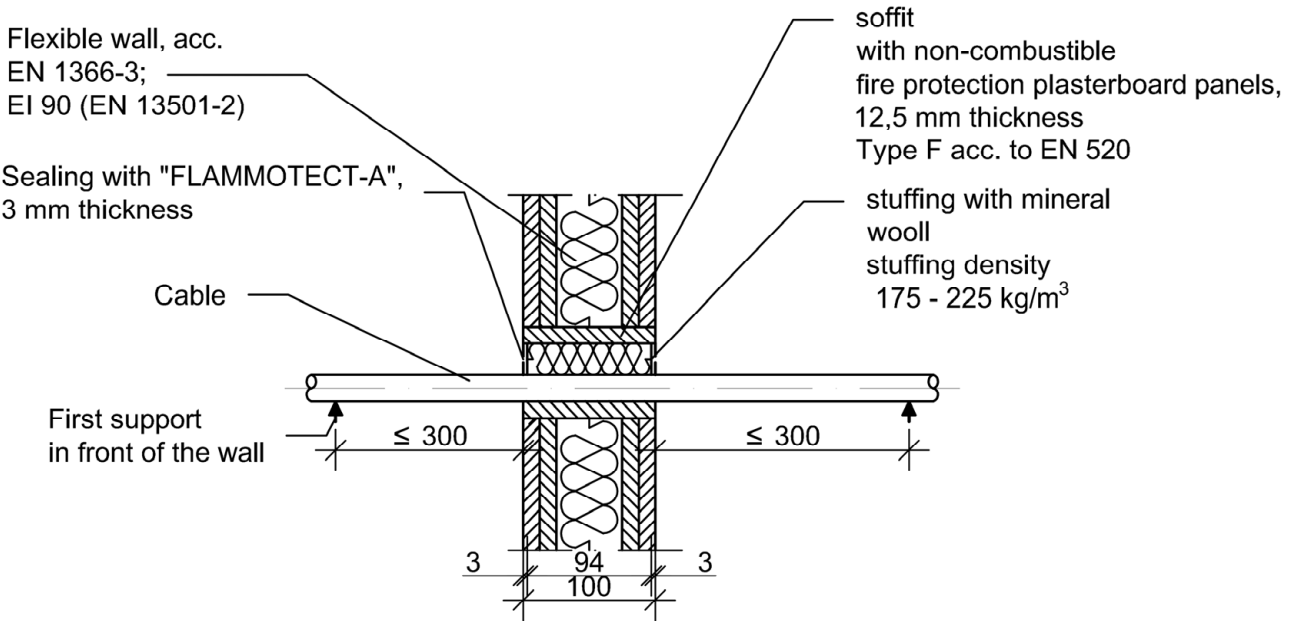
The use of the construction product "FLAMMOTECT-A" in penetration seals shall be in accordance with national requirements for planning, design and execution and in accordance with the installation instruction of the manufacturer.

"FLAMMOTECT-A"	Annex 1
Description of the construction products, properties and performances	

English translation prepared by DIBt

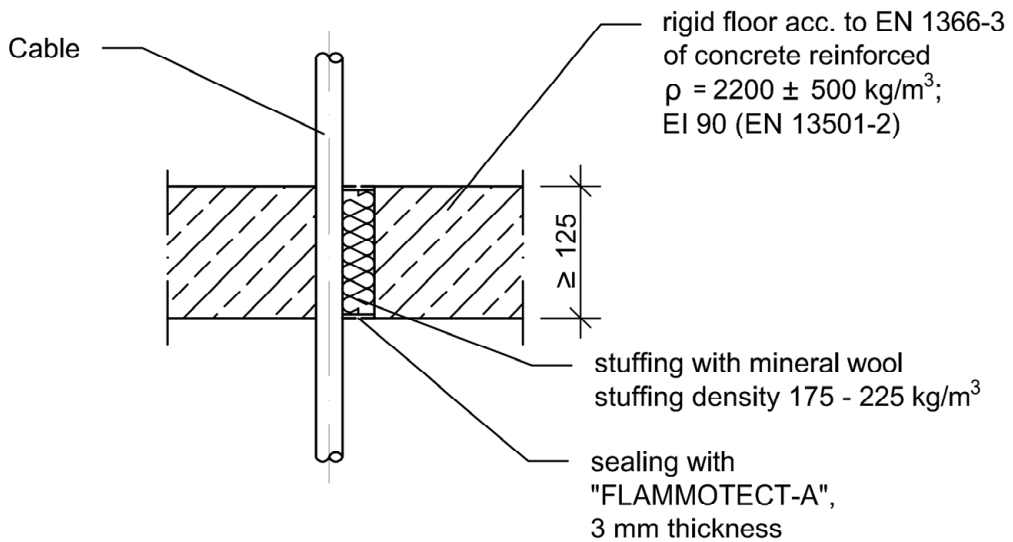
Wall installation

in rectangle wall openings 350 x 150 (W X H)



Floor installation

in rectangle openings 350 x 150 (W X H)



Cable	Name	Insulation/sheathing material	Standard	Ø [mm]
A1	NYJ-J 5x1,5 RE	PVC/PVC	HD 603.3G	13,2
A2	H 07 RN-F 5G1,5	EPR/PO	HD 22.4	11,4
A3	N2XH-J5x1,5 RE	XLPE/EVA	HD 604.5G	11,5
B	NYJ-J x 95 RM	PVC/PVC	HD 60.3.3G	19,2

dimensions in mm

"FLAMMOTECT-A"

Use as a part of a cable penetration seal with the fire resistance class EI 60 (wall installation) respectively EI 90 (floor construction)

Annex 2