

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-16/0132
of 20 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

NOVASIT BM

Product family
to which the construction product belongs

Product for use in penetration seals

Manufacturer

FLAMRO Brandschutz-Systeme GmbH
Am Sportplatz 2
56291 Leiningen
DEUTSCHLAND

Manufacturing plant

Werk 10

This European Technical Assessment
contains

7 pages including 3 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 "NOVASIT BM" is a mortar which is intended to be used in penetration seals. It is supplied in powder form in bags, in cement grey color.

A detailed technical description and the fire-safety-related performance criteria of the construction products are given in Annex 1.

NOTE:

The characteristics listed are suitable both for identifying the construction products 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 "NOVASIT BM" is intended to be used as a component with a fire protection effect in building elements or parts thereof or constructions that are subject to fire-protection requirements. Heat transmission and spread of fire are restricted in the event of fire.

The construction product "NOVASIT BM" is intended for use in penetration seals.

Penetration seals are used to seal openings in fire-resistant walls or floors, which are penetrated by services. Penetration seals are used to maintain the fire resistance of the wall or floor in the area of these penetrations.

Within the scope of this ETA the fire resistance of penetration seals was demonstrated that consisted of a wrapping around the services with an intumescent material and a sealing. Of the opening with "NOVASIT BM" (see table 1).

More detailed information and data on the verified penetration seals are given in Annexes 1 to 3. The performances given in Section 3 relate exclusively to these penetration seals (e.g. with respect to the design and arrangement of the penetration seals' components and the type and position of the services).

Table 1 – components of the verified penetration seals

Product type	Trade name
mortar	"NOVASIT BM"
Intumescent material in form of mats, thickness 1,5 mm	"DG-CR"

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 A1 in accordance with EN 13501-1
Fire resistance of a pipe penetration seal comprising the product ¹ (details see Annex 2)	EI 120-U/U ¹ in accordance with EN 13501-2
Fire resistance of a cable penetration seal comprising the product ¹ (details see Annex 3)	EI 240 ¹ in accordance with EN 13501-2

3.2 General aspects

Testing the essential characteristics includes the verification of durability.

The construction product "NOVASIT BM" may be used for the installation of penetration seals in dry indoor environment with temperatures above 0 °C (use category Z₂).

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

In accordance with the European Assessment Document (EAD) no. 350454-00-1104, the following legal base shall apply: 1999/454/EC.

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

Issued in Berlin on 20 December 2021 by Deutsches Institut für Bautechnik

Christina Pritzkow
Head of section

beglaubigt:
Meske-Dallal

¹ The fire resistance depends on how the penetration seal is designed and/or installed and on the penetrating services: Annexes 1 to 3 include details on the penetration seals for which the fire resistance indicated was demonstrated.

Properties and performances criteria of the construction product "NOVASIT BM"

Property	Performance criterion
Fire behavior	Classification of fire behavior according to EN 13501-1: A1
Compressive strength	M 2,5
Density	$\rho \geq 900 \text{ kg/m}^3$
initial shear strength	0,15 N/mm ² (table value)
Contents of chlorides	$\leq 0,10 \text{ M.-%}$
Water vapour permeability μ	5/20 (table value)
Thermal conductivity $\lambda_{10, \text{dry, mat}}$	$\leq 0,25 \text{ W/(m}^2\text{K)}$ for P = 50% (table value) $\leq 0,27 \text{ W/(m}^2\text{K)}$ for P = 90%

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.

Performances of penetration seals, comprising the construction product "NOVASIT BM"

	Essential requirement	Test method	Construction of the sample	Performance acc. to EN-13501-2
1	Resistance to fire	EN 1366-3	150 mm thick rigid wall; design and layout of the penetration seal according to Annex 2*	EI 120 – U/U
2	Resistance to fire	EN 1366-3	150 mm thick rigid floor; design and layout of the penetration seal according to Annex 2*	EI 120 – U/U
3	Resistance to fire	EN 1366-3	240 mm thick rigid wall; design and layout of the penetration seal according to Annex 3*	EI 240
4	Resistance to fire	EN 1366-3	200 mm thick rigid floor; design and layout of the penetration seal according to Annex 3*	EI 240

* The illustrations are without guarantee for completeness.

NOVASIT BM

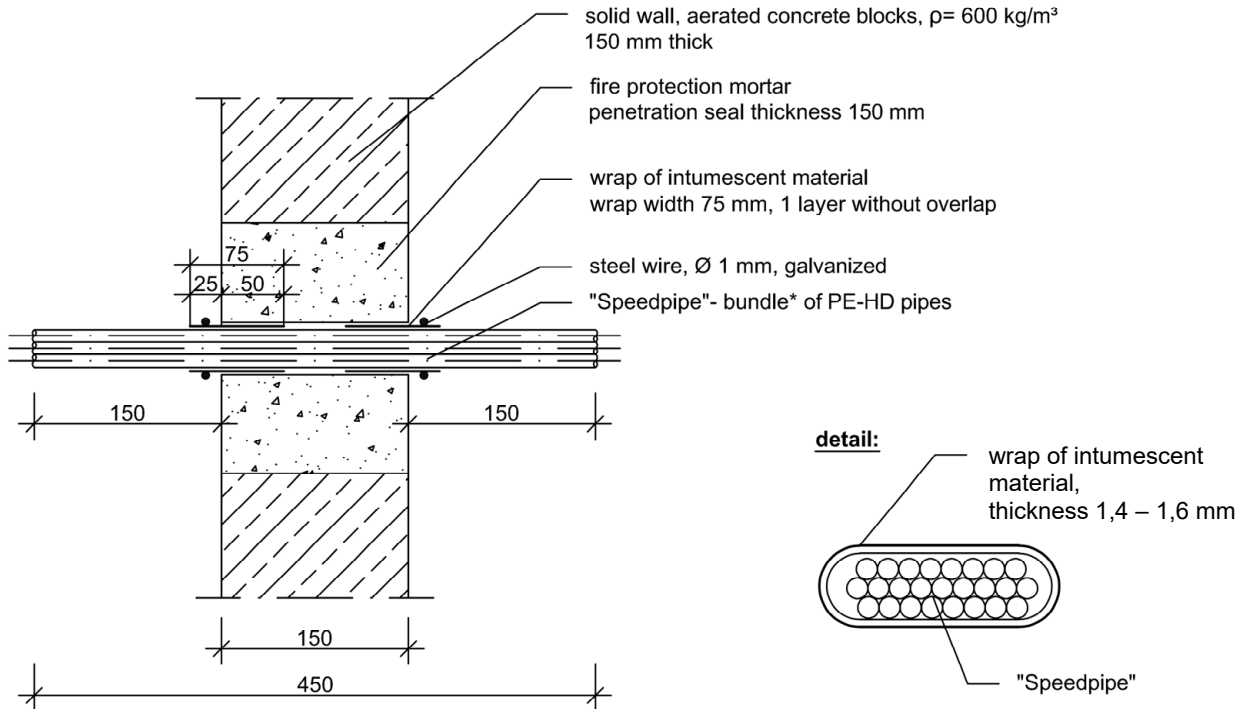
Properties and performances criteria

Annex 1

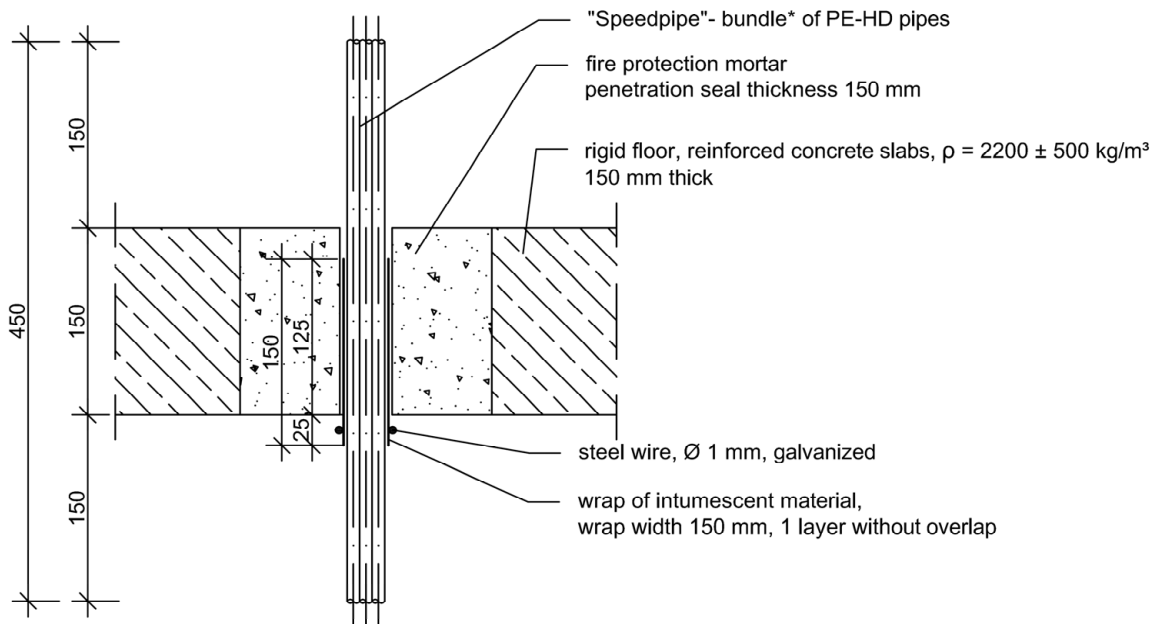
English translation prepared by DIBt

"Novasit BM" (EI 120)

wall installation



floor installation



* "Speedpipe"-bundle
1 x type SRV-G 50 / 5 x 12
1 x type SRV-G 50 / 7 x 10
1 x type SRV-G 50 / 24 x 7

dimensions in mm

NOVASIT BM

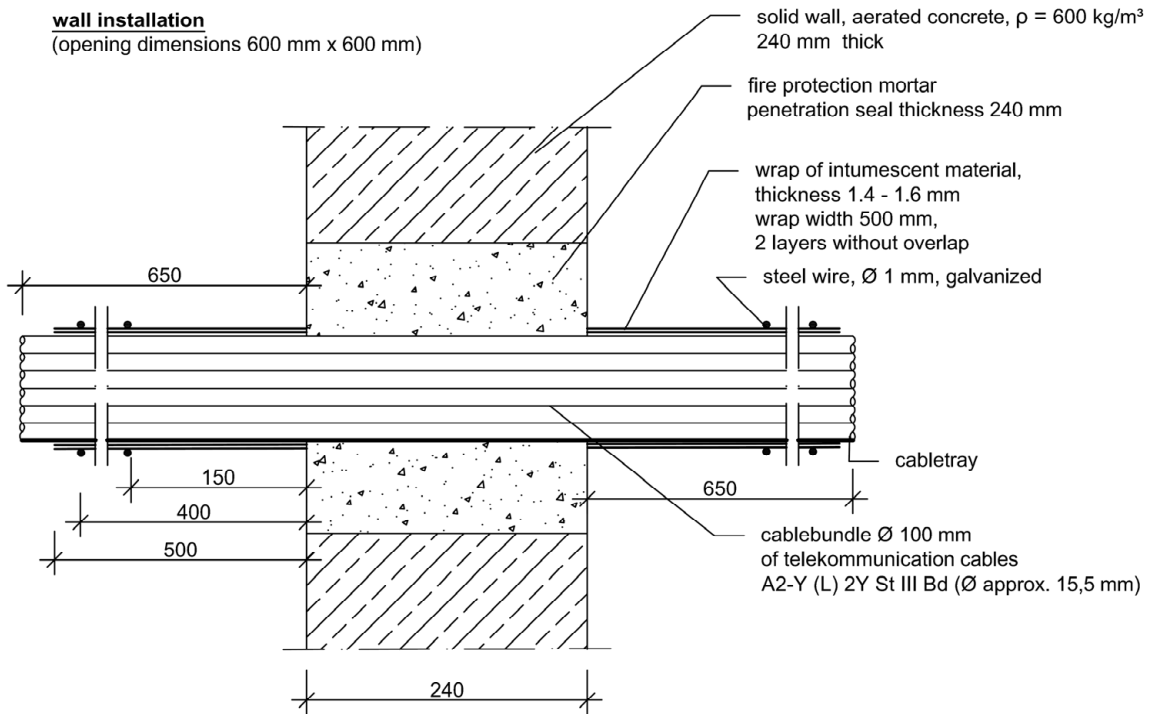
Examples for pipe penetration seals of resistance to fire class EI 120-U/U, using the mortar "NOVASIT BM"

Annex 2

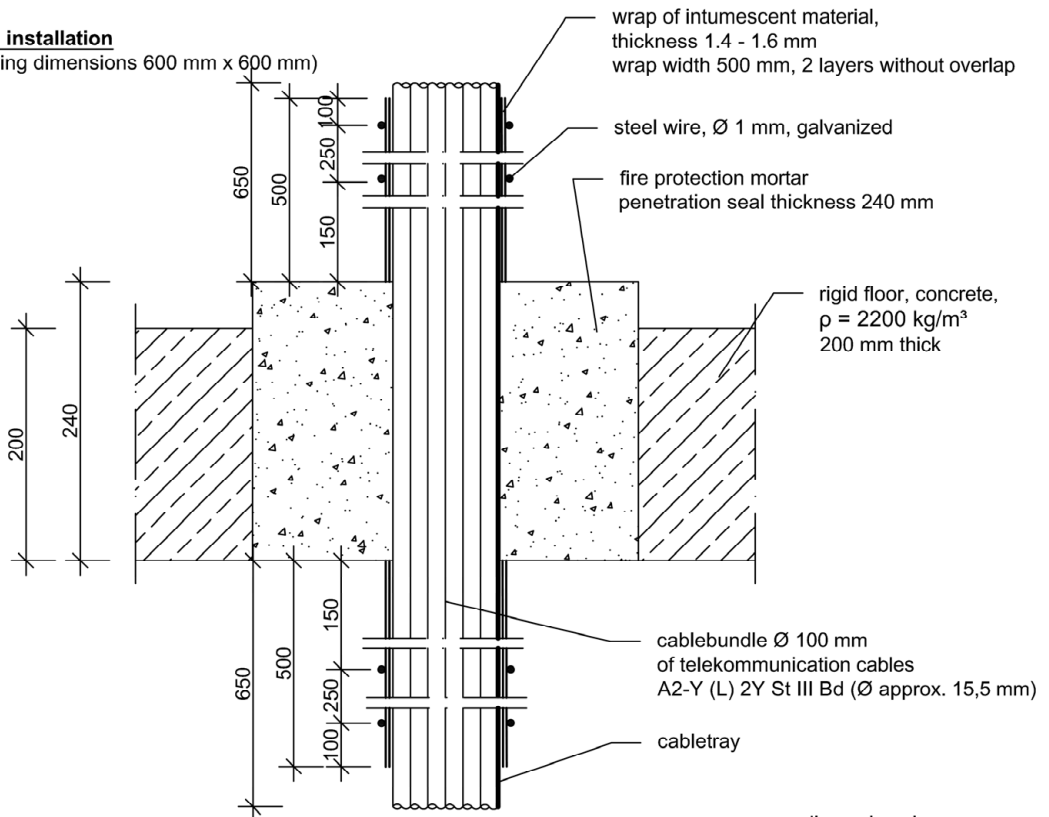
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"Novasit BM" (EI 240)

wall installation
(opening dimensions 600 mm x 600 mm)



floor installation
(opening dimensions 600 mm x 600 mm)



dimensions in mm

NOVASIT BM

Examples for cable penetration seals of resistance to fire class EI 240, using the mortar "NOVASIT BM"

Annex 3