

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-12/0279
of 12 October 2017

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

Halogenfreier Brandschutzschaum PB-165

Product family
to which the construction product belongs

product for use in penetration seals

Manufacturer

Polymeric GmbH
Landsberger Allee 378
12681 Berlin
DEUTSCHLAND

Manufacturing plant

Polymeric GmbH
Landsberger Allee 378
12681 Berlin
DEUTSCHLAND

This European Technical Assessment
contains

14 pages including 10 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

ETAG 026 Part 2: "Penetration Seals",
used as EAD according to Article 66 Paragraph 3 of
Regulation (EU) No 305/2011.

This version replaces

ETA-12/0279 issued on 23 August 2012

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Specific Part

1 Technical description of the products

The construction product "Halogenfreier Brandschutzschaum PB-165" is a 2-component polyurethane foam.

It is filled and delivered in cartridges. Depending on the pigmentation, the processed construction product takes a light yellow/grey or brick-red colour once it has cured.

Detailed specifications for identification and fire safety related performance criteria for 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 "Halogenfreier Brandschutzschaum PB-165" is intended for use as a component with a fire protection effect in penetration seals that are subject to fire safety requirements.

Construction products for penetration seals are used to seal openings in fire-resistant walls and ceilings, which are penetrated by pipes.

The resistance to fire of cable penetration seals, with and without services, consisting of the construction products listed in Annex 1 was demonstrated as part of this ETA.

Their function is to preserve the walls' or floors' resistance to fire in the area of openings where cables are run through walls. Penetration seals without services are used to demonstrate that the resistance to fire is ensured even if the number of cables that are run through the opening is small.

The construction product "Halogenfreier Brandschutzschaum PB-165" may be used for penetration seals in interiors with high humidity and temperatures above 0° C (use category type Z1).

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 service lines).

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 penetration seal containing the product	The resistance to fire depends on the design and installation of the penetration seal and on the other components forming the penetration seal. More details on the tested penetration seals and the related fire resistance classes are given in Annexes 1 to 10.

3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Content and release of dangerous substances	No dangerous substances ¹

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

In accordance with the European Technical Approval Guideline "Fire Stopping and Fire Sealing Products", ETAG 026, Part 2: "Penetration Seals", August 2011, which is used as European Assessment Document (EAD), the following legal base shall apply: 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 control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 12 October 2017 by Deutsches Institut für Bautechnik

Prof. Gunter Hoppe
Head of Department

beglaubigt:
Bisemeier

¹ 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)

Properties and performances criteria of the construction product

"Halogenfreier Brandschutzschaum PB-165"

Property	Description
Material	Polyurethane-based two-component foam* Delivery form: Cartridges with volumes of 150 ml, 265 ml, 280 ml or 310 ml
Color	After curing: pale yellow/ grey or brick-red
Density (free foaming)	100 kg/m ³ ± 15 kg/m ³
Fire behavior	Classification of fire behavior according to EN 13501-1: Class E

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.

Description of the additional components of the tested sealings in accordance to Annexes 3 to 10

"Brandschutzmatte PB-300"	Material: Intumescent building material according to ETA-17/0662 Classification of fire behavior according to EN 13501-1: Class E Density (delivery condition): 1,20 g/cm ³ ± 10 % Loss of mass on heating*: 49% - 59 % Expansion ratio**: 15,5 to 20,5 (sample thickness approx. 1,9 mm dicken Proben) Expansion pressure**: 0,75 to 1,2 N/mm ²
Boards for frames or additional panels	The frames consist of gypsum plasterboard according to EN 520, Typ F with a minimum thickness of 20 mm. Classification of fire behavior according to EN 13501-1: Class A2 The additional panels consist of strips of building boards Type "PROMATECT H" according to ETA-06/0206 with a minimum thickness of 250 mm. Classification of fire behavior according to EN 13501-1: Class A1

* The composition of the materials is deposited at DIBt.

** tested according to ETAG 026-2 (also see TR 024)

Halogenfreier Brandschutzschaum PB-165

Properties and performances

Annex 1

Performances of penetration seals, comprising the construction product "Halogenfreier Brandschutzschaum PB-165"

	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 3*	EI 60 bzw. E 90
2	Resistance to fire	EN 1366-3	100 mm thick flexible wall; design and layout of the penetration seal according to Annex 4*	EI 90
3	Resistance to fire	EN 1366-3	100 mm thick flexible wall; design and layout of the penetration seal according to Annex 5*	EI 90
4	Resistance to fire	EN 1366-3	100 mm thick flexible wall; design and layout of the penetration seal according to Annex 6*	EI 90
5	Resistance to fire	EN 1366-3	100 mm thick flexible wall; design and layout of the penetration seal according to Annex 7*	EI 90
6	Resistance to fire	EN 1366-3	150 mm thick rigid floor; design and layout of the penetration seal according to Annex 7*	EI 90
7	Resistance to fire	EN 1366-3	150 mm thick rigid floor; design and layout of the penetration seal according to Annex 8*	EI 60 bzw. E 90
8	Resistance to fire	EN 1366-3	150 mm thick rigid floor; design and layout of the penetration seal according to Annex 9*	EI 90
9	Resistance to fire	EN 1366-3	150 mm thick rigid floor; design and layout of the penetration seal according to Annex 10*	EI 90

* Illustrations without guarantee for completeness

The use of the construction product "Halogenfreier Brandschutzschaum PB-165" 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.

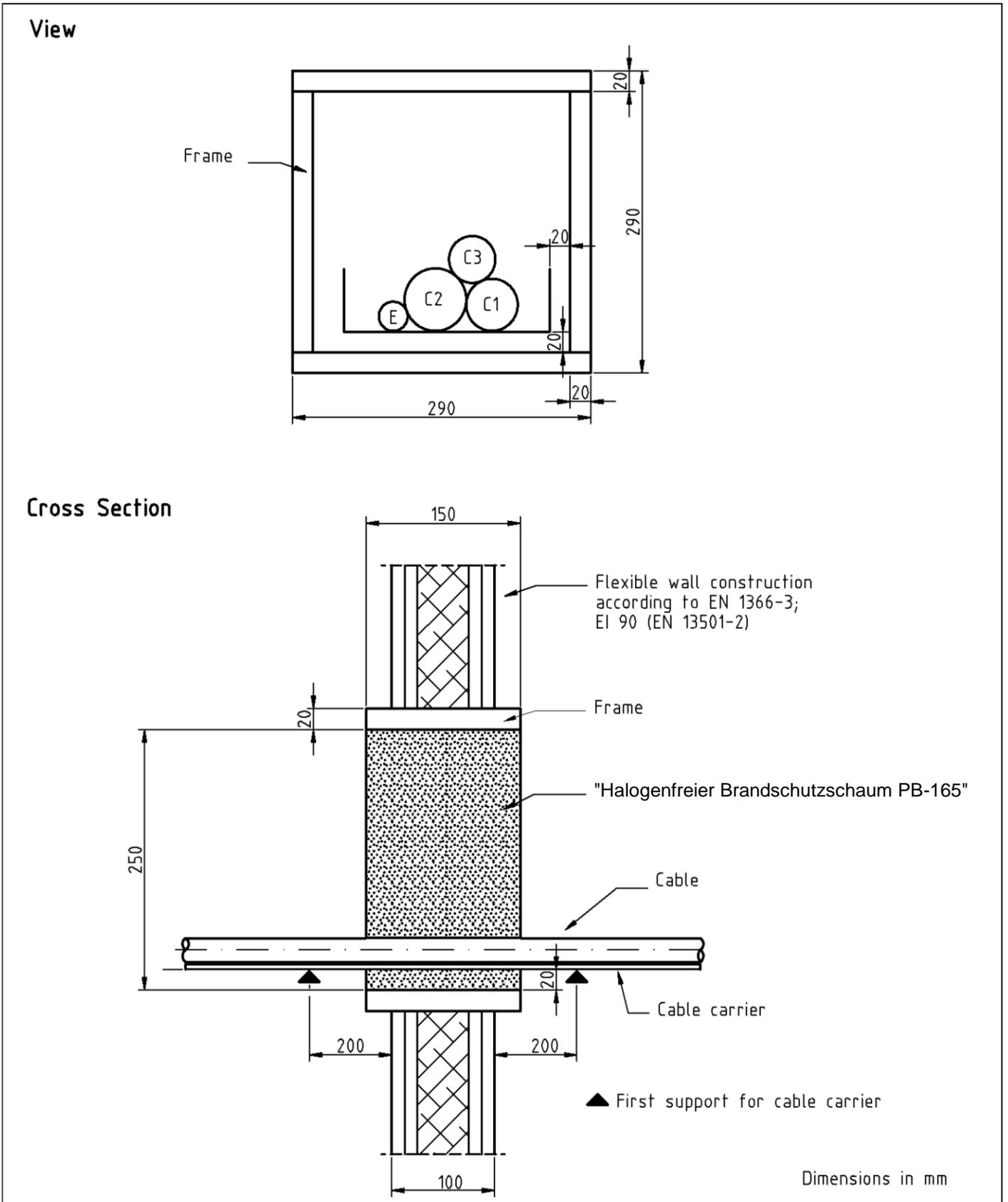
The tested/ illustrated seals are only examples for the use.

Halogenfreier Brandschutzschaum PB-165

Properties and performances

Annex 2

English translation prepared by DIBt



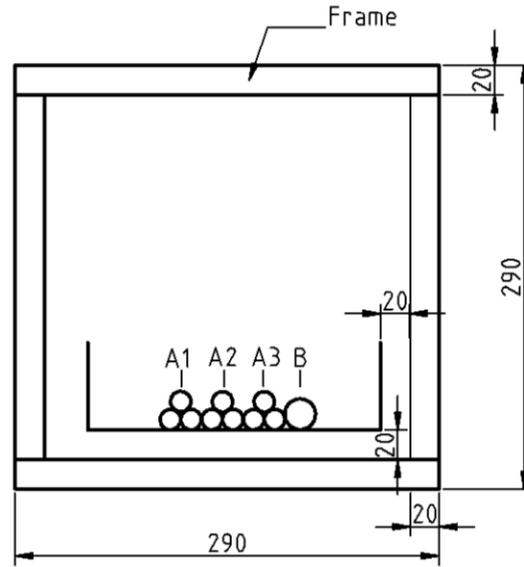
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Halogenfreier Brandschutzschaum PB-165

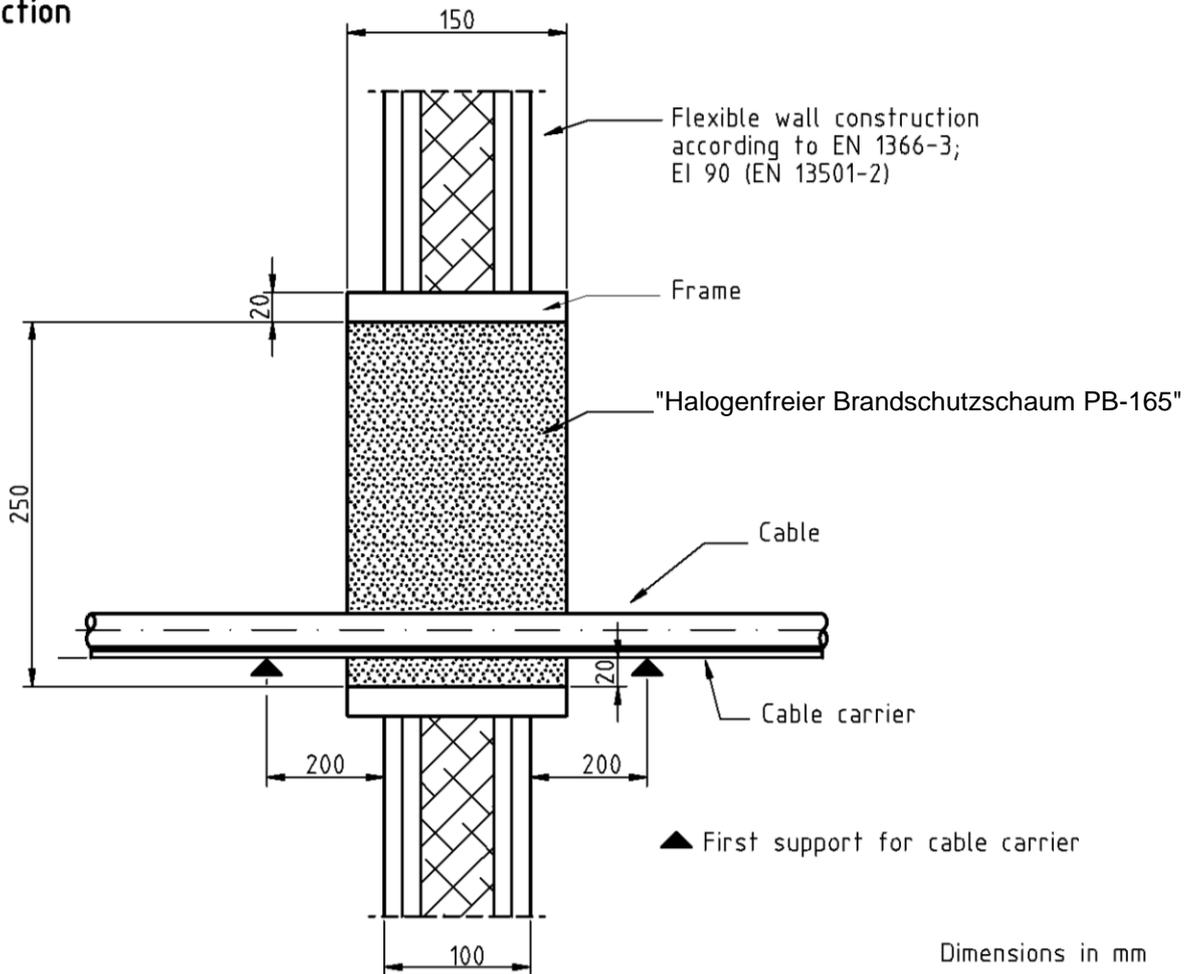
Use as a part of a cable penetration seal with the fire resistance class EI 60 or E 90
 - Example for installation in a wall; view and cross section -

Annex 3

View



Cross Section

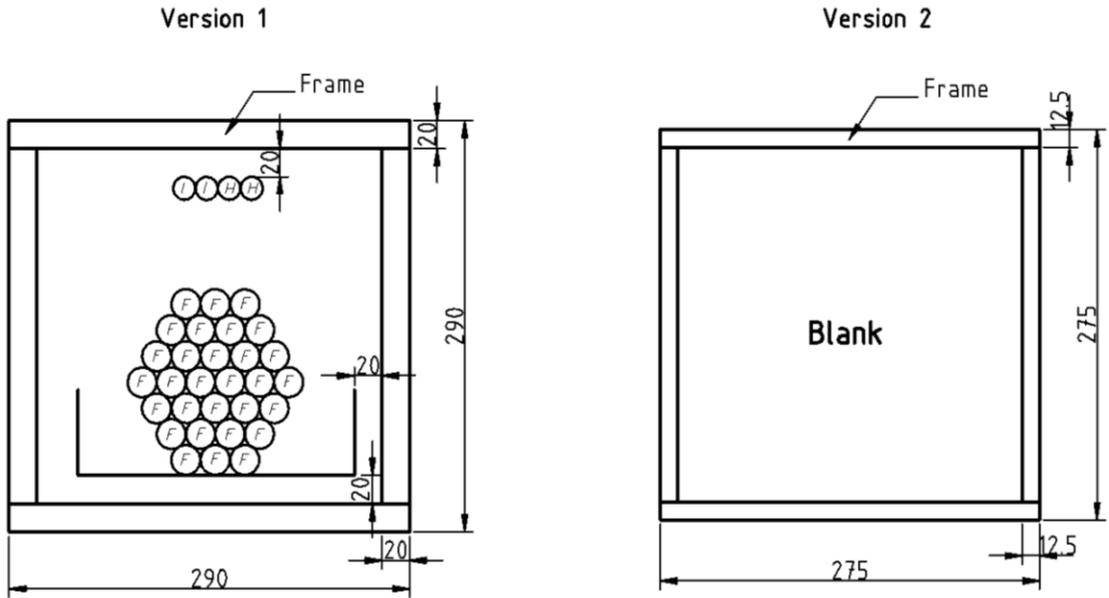


Halogenfreier Brandschutzschaum PB-165

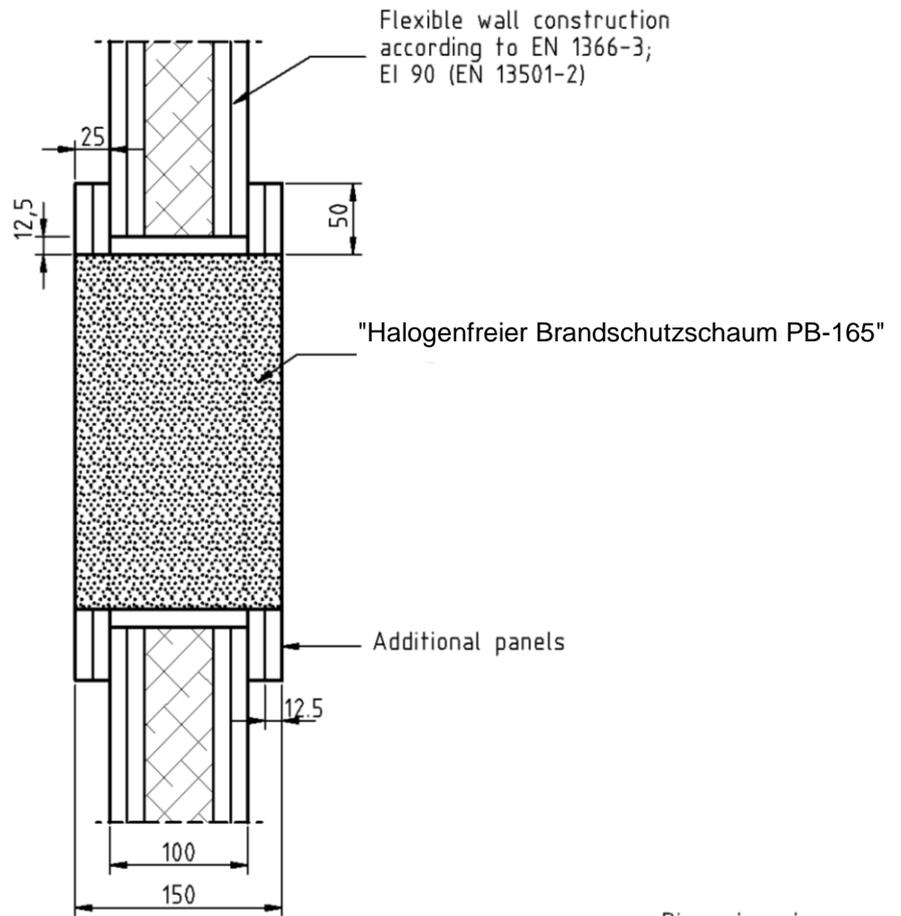
Use as a part of a cable penetration seal with the fire resistance class EI 90
 - Example for installation in a wall; view and cross section -

Annex 4

View



Cross Section: Blank



Dimensions in mm

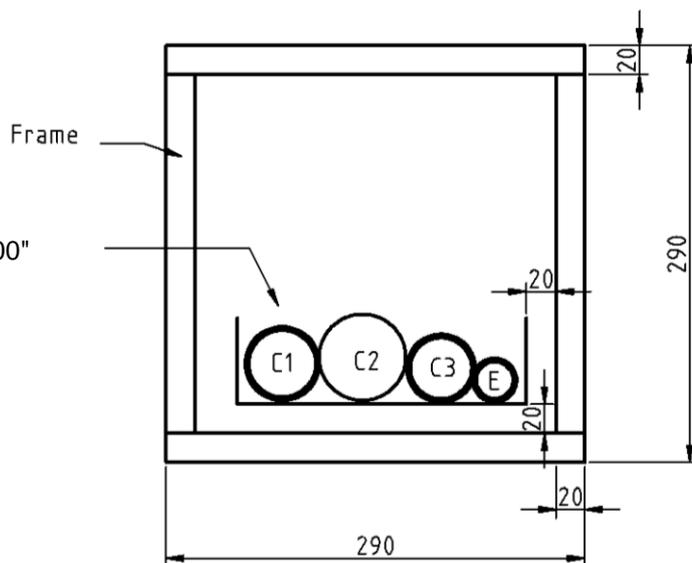
Halogenfreier Brandschutzschaum PB-165

Use as a part of a cable penetration seal with the fire resistance class EI 90
- Example for installation in a wall; view and cross section -

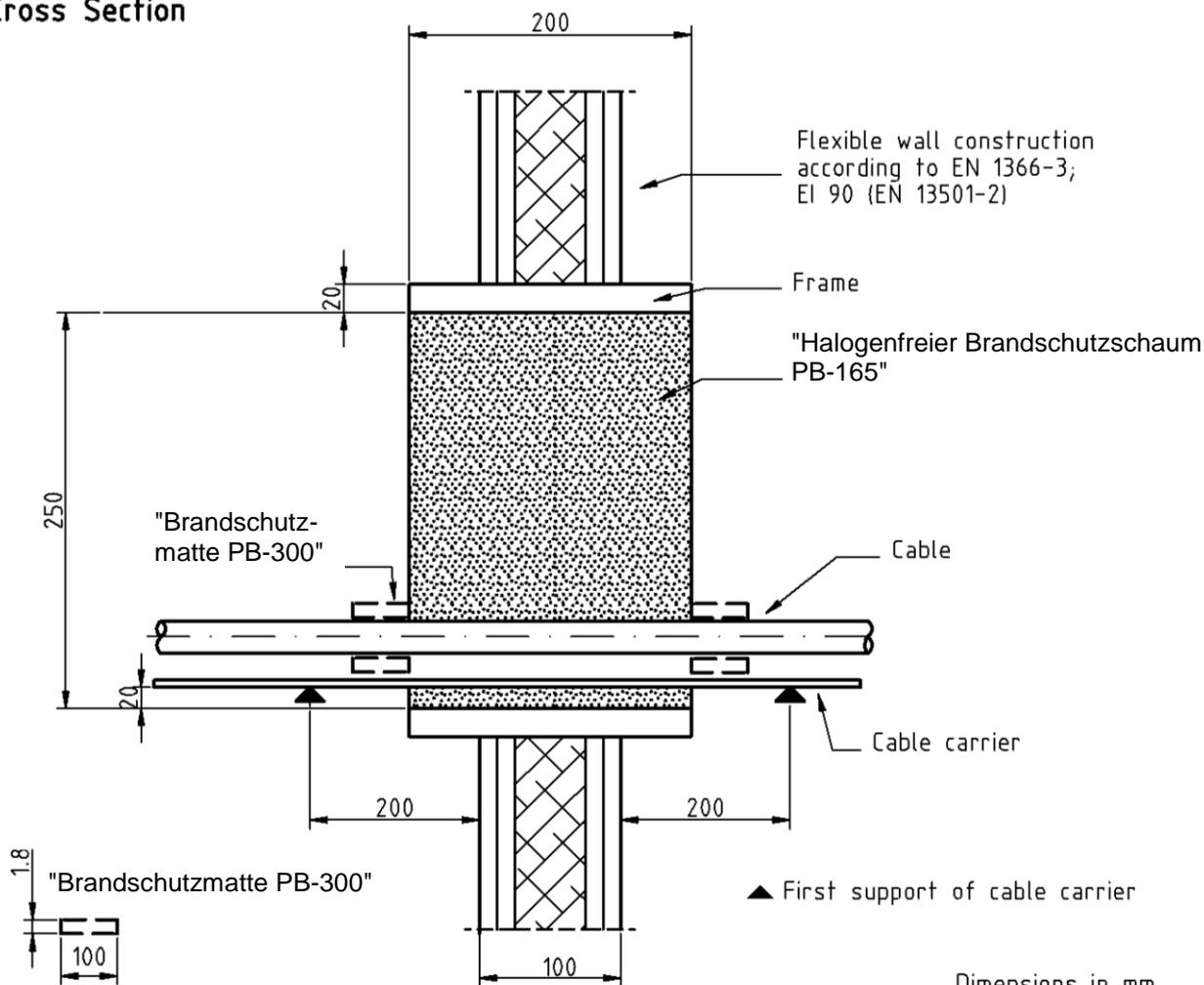
Annex 5

View

Wrapping of the cables
C1 and E with
"Brandschutzmatte PB-300"



Cross Section



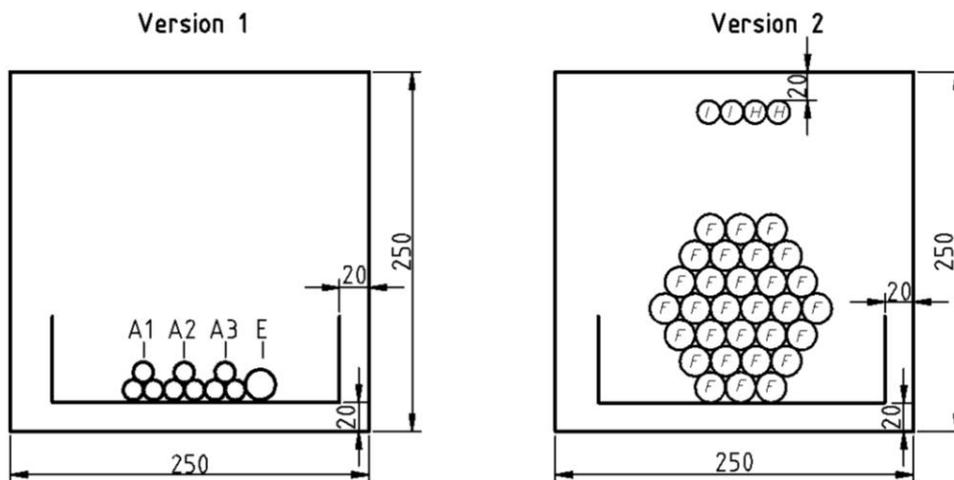
Dimensions in mm

Halogenfreier Brandschutzschaum PB-165

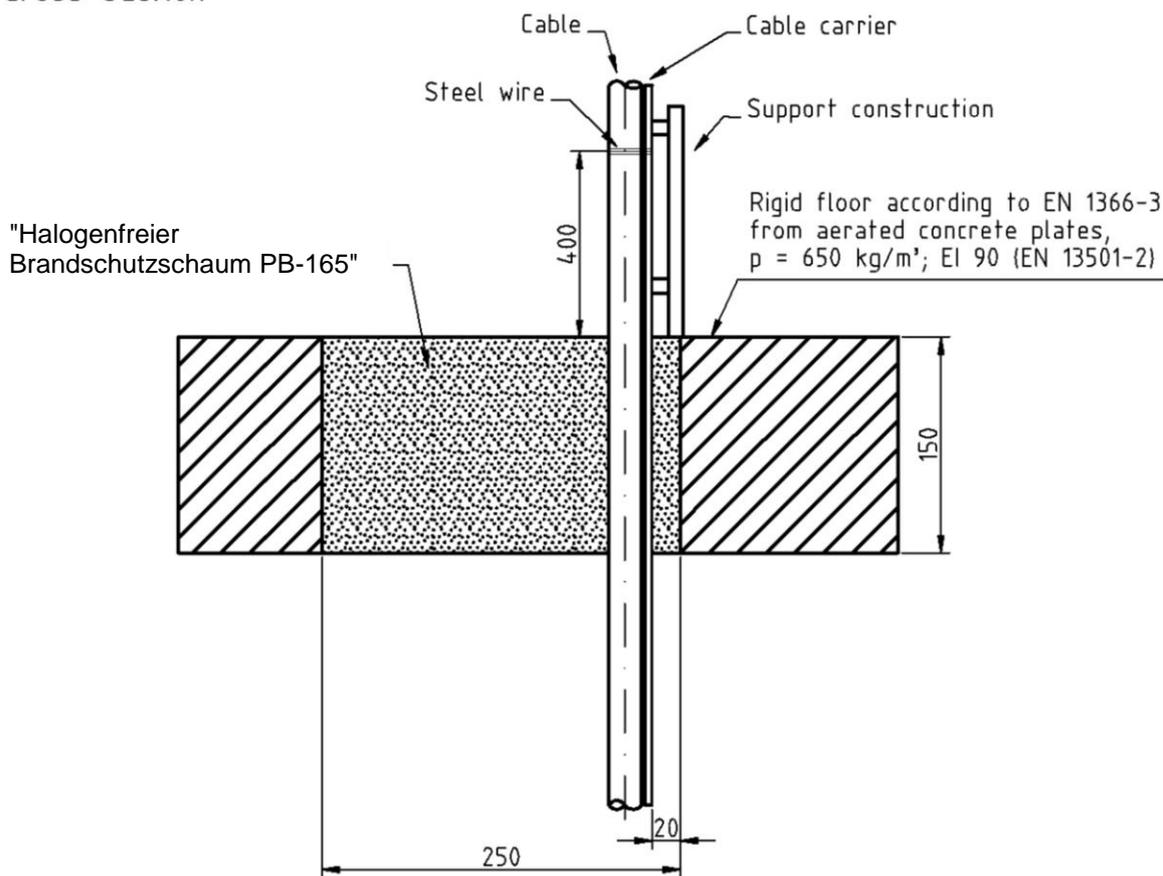
Use as a part of a cable penetration seal with the fire resistance class EI 90
- Example for installation in a wall; view and cross section -

Annex 6

View



Cross Section



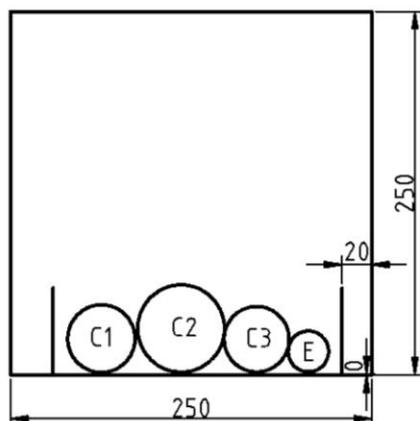
Dimensions in mm

Halogenfreier Brandschutzschaum PB-165

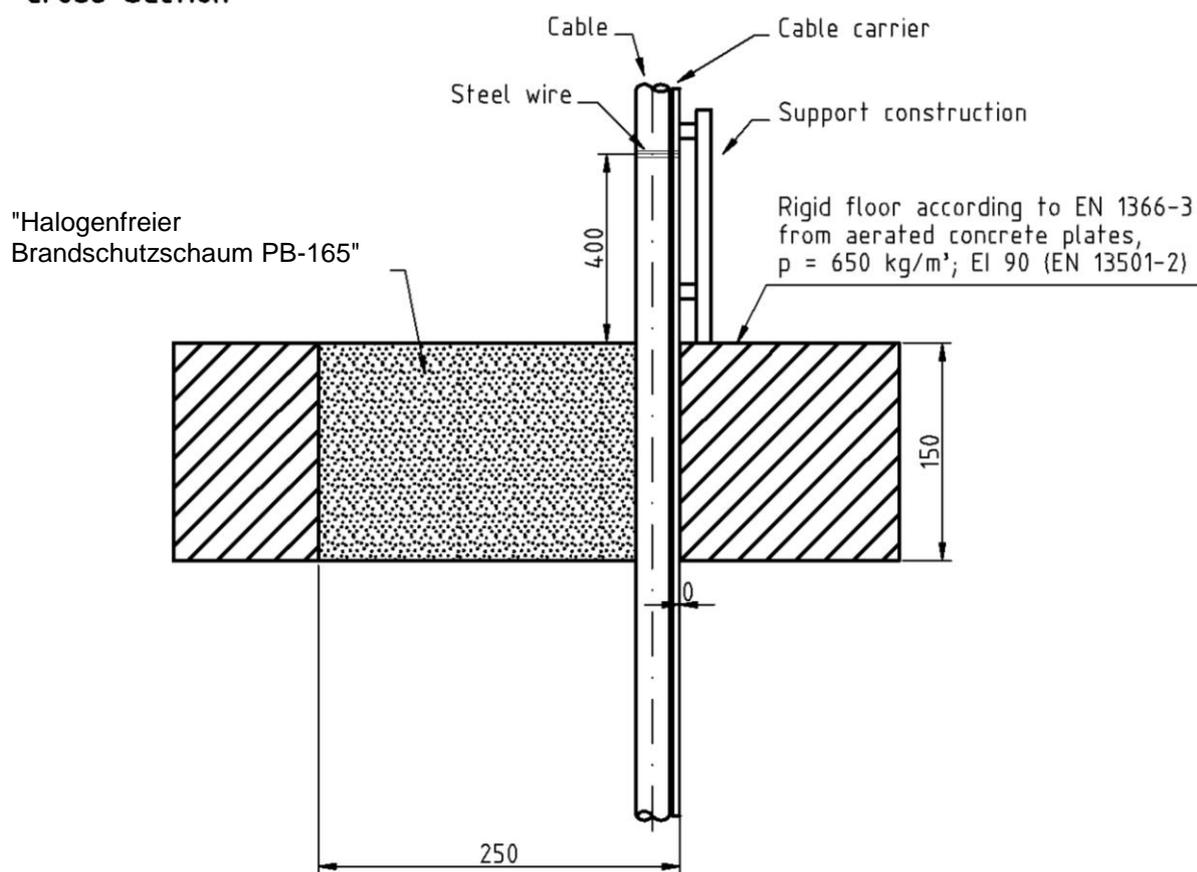
Use as a part of a cable penetration seal with the fire resistance class EI 90
- Example for installation in a floor; view and cross section -

Annex 7

View



Cross Section



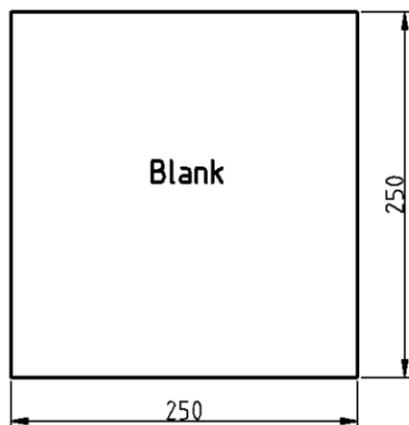
Dimensions in mm

Halogenfreier Brandschutzschaum PB-165

Use as a part of a cable penetration seal with the fire resistance class EI 60 or E 90
- Example for installation in a floor; view and cross section -

Annex 8

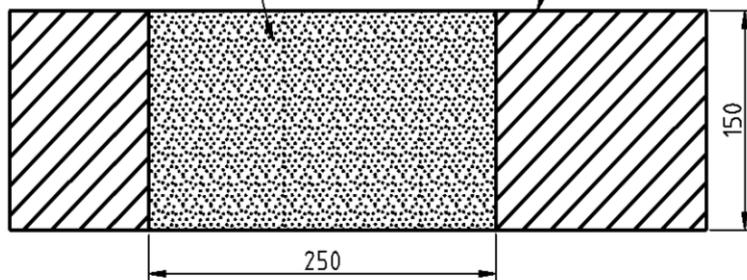
View



Cross Section

"Halogenfreier
Brandschutzschaum PB-165"

Rigid floor according to EN 1366-3
from aerated concrete plates,
 $\rho = 650 \text{ kg/m}^3$; EI 90 (EN 13501-2)



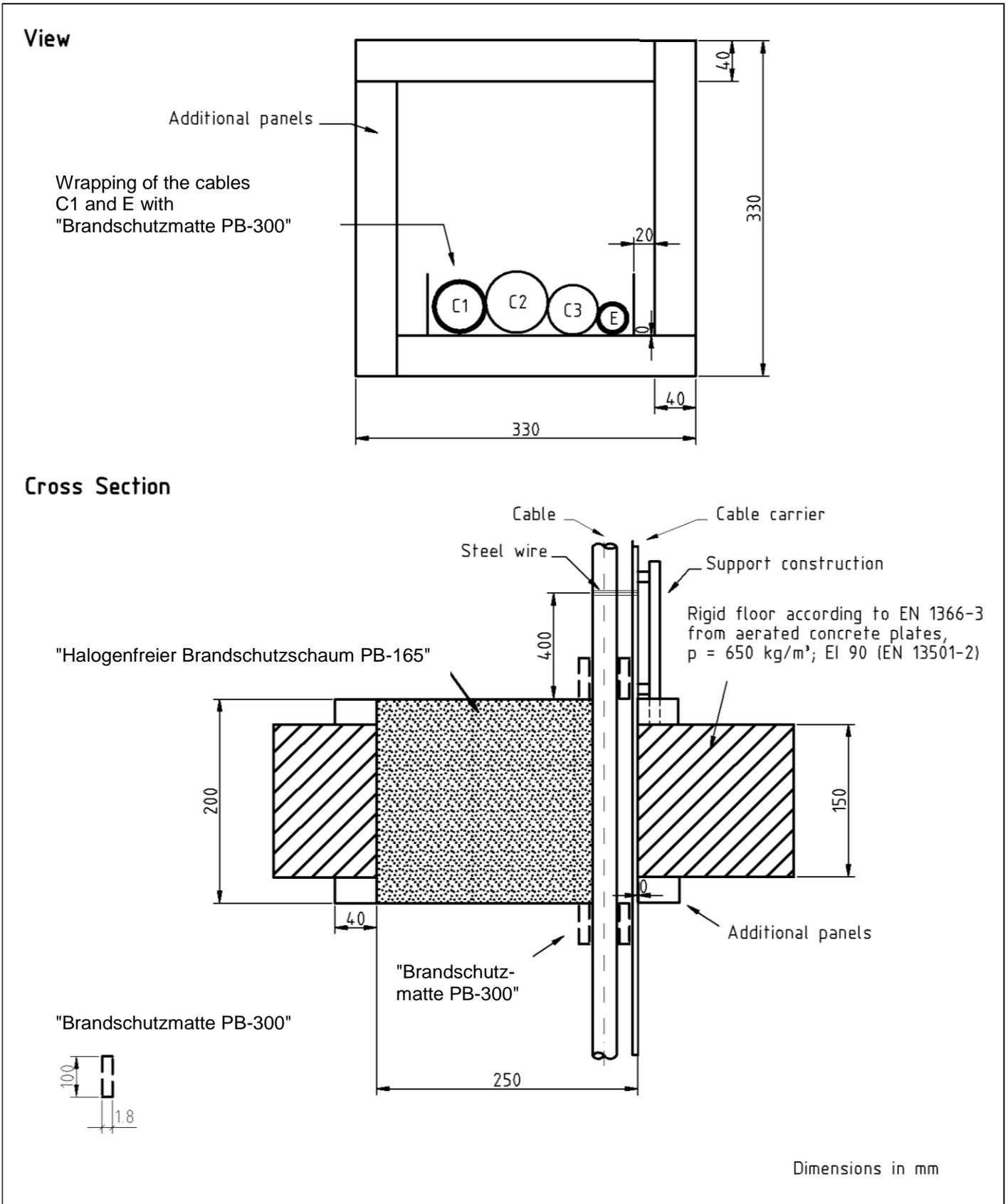
Dimensions in mm

Halogenfreier Brandschutzschaum PB-165

Use as a part of a cable penetration seal with the fire resistance class EI 90
- Example for installation in a floor; view and cross section -

Annex 9

English translation prepared by DIBt



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Halogenfreier Brandschutzschaum PB-165

Use as a part of a cable penetration seal with the fire resistance class EI 90
- Example for installation in a floor; view and cross section -

Annex 10