

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-16/0417
of 2 December 2016

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

CT-Cable Box

Product family
to which the construction product belongs

Construction product for use in penetration seals

Manufacturer

Wichmann
Brandschutzsysteme GmbH & Co. KG
Siemensstraße 7
57439 Attendorn
DEUTSCHLAND

Manufacturing plant

Werk 1

This European Technical Assessment
contains

10 pages including 6 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

Guideline for European technical approval of "Fire
Stopping and Fire Sealing Products", ETAG 026 Part 2:
"Penetration Seals",
used as European Assessment Document (EAD)
according to Article 66 Paragraph 3 of Regulation (EU)
No 305/2011.

**European Technical Assessment
ETA-16/0417**

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1 Technical description of the product

The construction product "CT Cable Box" consists of a housing and a fire protection inlay.

The housing is made of steel sheet and shall be sufficiently protected against corrosion. The fire protection inlay consists of four fire protection packs arranged within the housing which expand under heat exposure.

The construction product is produced with the dimensions stated in Annex 2.

Detailed technical descriptions and fire safety related performance criteria for the construction product are given in Annex 1.

Detailed information on the construction product's components are deposited with Deutsches Institut für Bautechnik.

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 "CT Cable Box" is used as a component in cable penetration seals.

The cable penetration seals are used to seal openings in fire-resistant walls, which are penetrated by cables. Their aim is to preserve the wall's fire resistance in the area of the penetrations.

Within the scope of this ETA, the fire resistance was demonstrated for cable penetration seals consisting of several "CT Cable Box" units stacked on top of each other.

The cable penetration seals further included plug seals on both sides of the "CT Cable Box" ("smoke sealing plugs"). The seals consisted of a foam material covered with aluminium foil and a silicone used to seal the remaining gaps of the cable box.

The remaining joints between the installed construction product "CT Cable Box" and the adjacent building element's aperture edges were sealed with plaster.

More detailed information and data on the assessed penetration seals are given in Annexes 1 to 6. The performance characteristics given in Section 3 apply exclusively to these penetration seals (e.g. with respect to the design and arrangement of the components of the penetration seals as well as the type and position of the cables).

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
Fire resistance of a penetration seal (details see Annexes 2 to 6), incorporating the product ^{1,2}	Class EI 90 in accordance with EN 13501-2 (see Annexes 3 to 6)

¹ The fire resistance depends on how the penetration seal is designed and installed and on the cables used. Annexes 2 to 6 include details on the penetration seals for which the fire resistance indicated was demonstrated.

² Technical provisions of the Member States relating to the design of electrical cable systems and the admissibility of cable penetrations remain unaffected.

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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", January 2008, 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

The 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 2 December 2016 by Deutsches Institut für Bautechnik

Prof. Gunter Hoppe
Head of Department

beglaubigt:
Bisemeier

Properties and criteria for the performance of the construction product "CT-Cable Box"

Component	Description
"Steel sheet casing" The material specifications are deposited at the DIBt.	Sheet steel Dimension according to annex 2
"Mifa"-Packet The material specifications are deposited at the DIBt.	fire protection board with mineral fibre boards on both sides, wrapped with aluminium compound foil; Reaction to fire classification of the aluminium compound foil according to EN 13501-1: no performance assessed Reaction to fire of the fire protection board according to EN 13501-1: no performance assessed Reaction to fire of the mineral fibre boards according to EN 13501-1: class A1
"Palusol packet" The material specifications are deposited at the DIBt.	Hermetically sealed packet made of polystyrene thickness ca. 1,5 mm, inside assembled stripes of fire protection boards
Support for the cable-tray The material specifications are deposited at the DIBt.	Soft foam dimension: 40 mm (Depth) X 10 mm (Height) x Width _{inside} ;
"smokesealing" The material specifications are deposited at the DIBt.	aluminum laminated foam Reaction to fire according to EN 13501-1: Class C-s2, d0

Description of the additional components of the tested sealings

Sealing the gaps and joints on the surface of the "CT-Cable Box": Silikon vom Typ "KÖDISIL HAC"	Silicone sealant Reaction to fire according to EN 13501-1: Class E
Sealing of residual joint between cable box and soffit: gypsum	Reaction to fire classification: Class A1 according to the commission decision 96/603/EG (in the amended version)

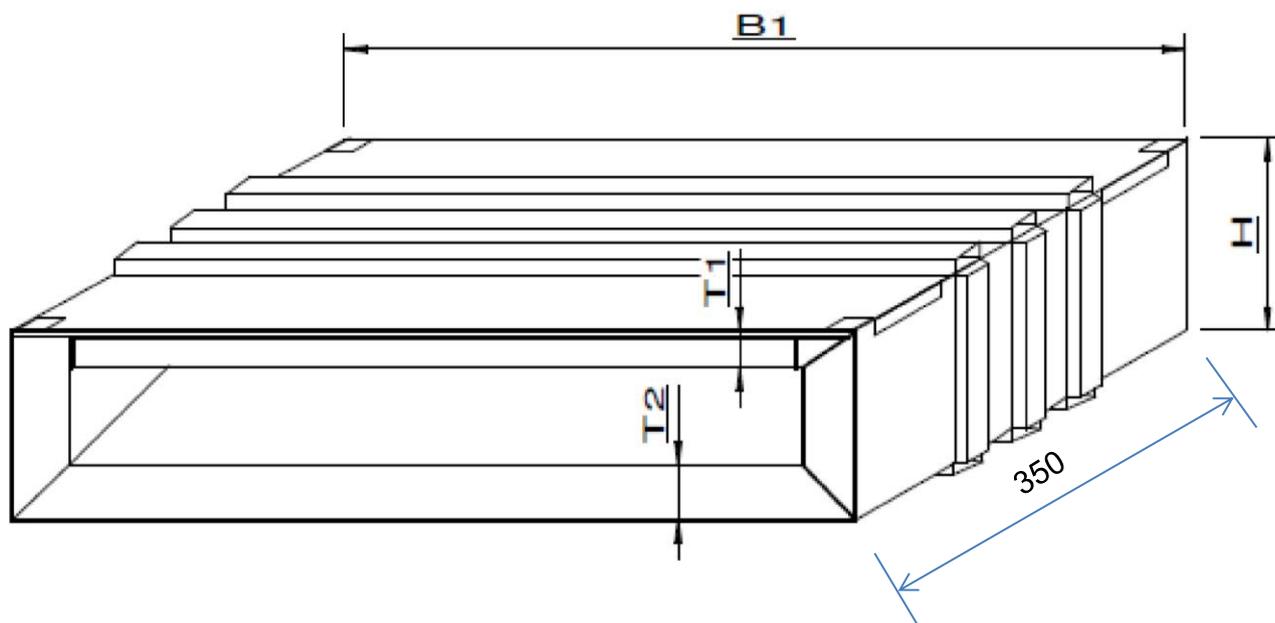
The illustrations on annexes 2 till 6 are without guarantee for completeness.

The use of the construction product "CT-Cable Box" shall be in accordance with national requirements for planning, design and execution and in accordance with the installation instruction of the manufacturer.

CT-Cable Box

Description of the construction products, properties and performances;
Properties of the additional ingredients of the tested sealings containing the construction product "CT-Cable Box"

Annex 1



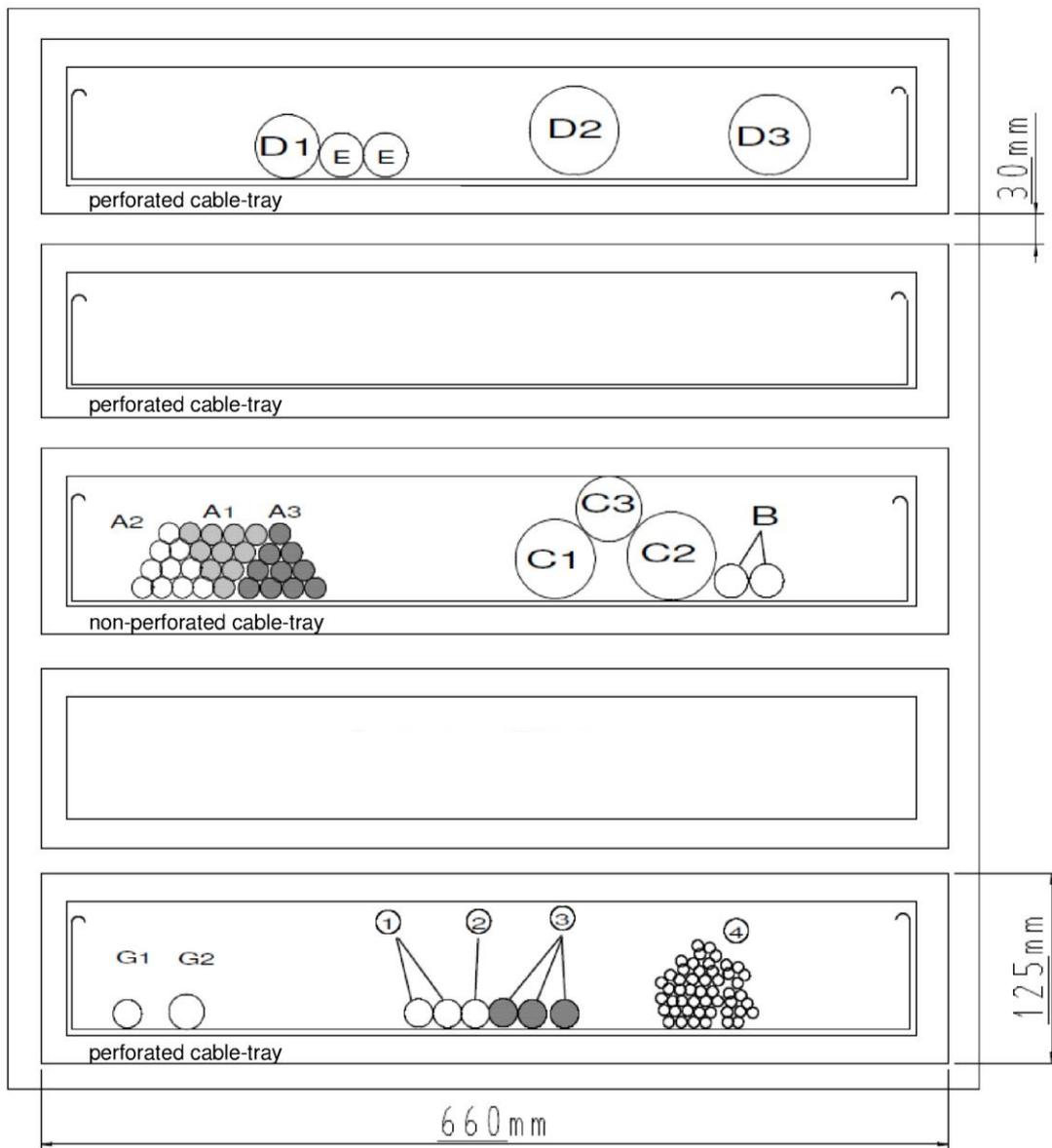
Box	T1	T2	B1	H
70-130-350	17	20	130	70
98-350-350	20	30	350	98
125-660-350	25	30	660	125

all dimensions in mm

CT-Cable Box

Dimensions of the building product "CT-Cablebox"

Annex 2



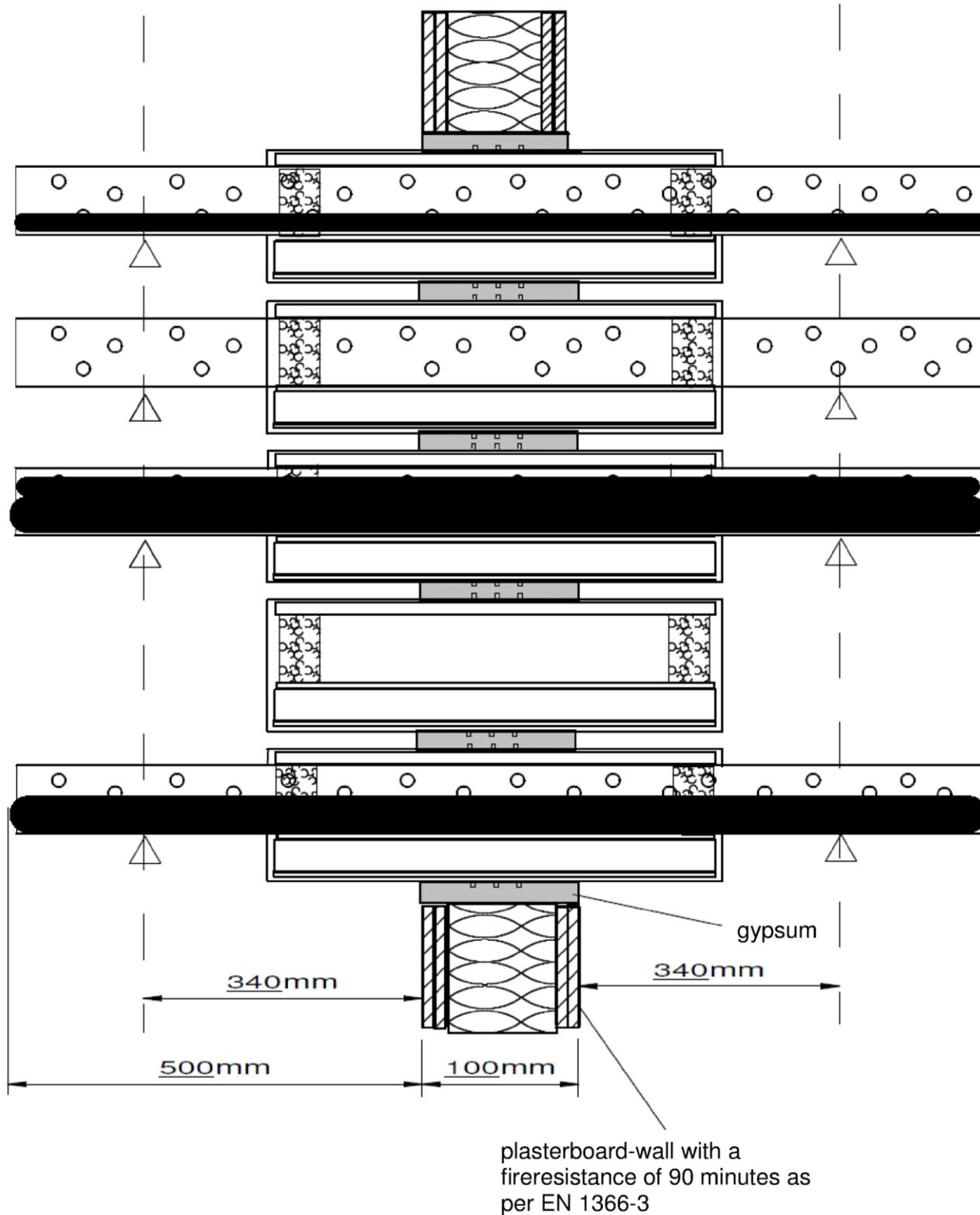
cable & configuration according to EN 1366-3 Tab. A1

- 1: 2 x conduit \varnothing 16 mm (Fe)
- 2: 1 x conduit \varnothing 16 mm (Cu)
- 3: 3 x conduit \varnothing 20 mm (PVC)
- 4: 29 bundled f-cable

CT-Cable Box

Use as a penetration seal with a fire resistance class EI 90
Layout of the test specimen – front view -

Annex 3

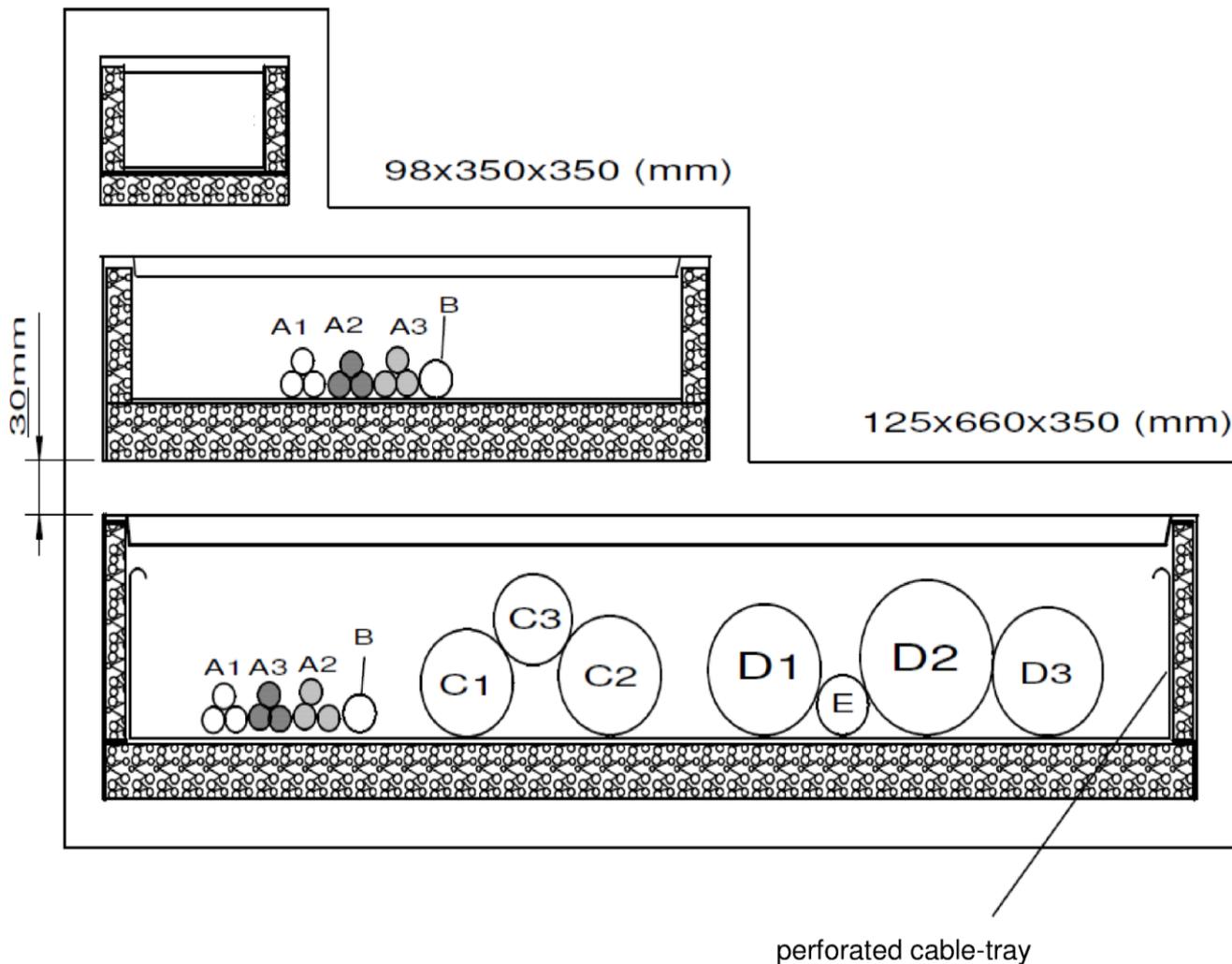


CT-Cable Box

Use as a penetration seal with a fire resistance class EI 90
Layout of the test specimen – cross section -

Annex 4

(Height x Width x Depth) 70 x 130 x 350 mm

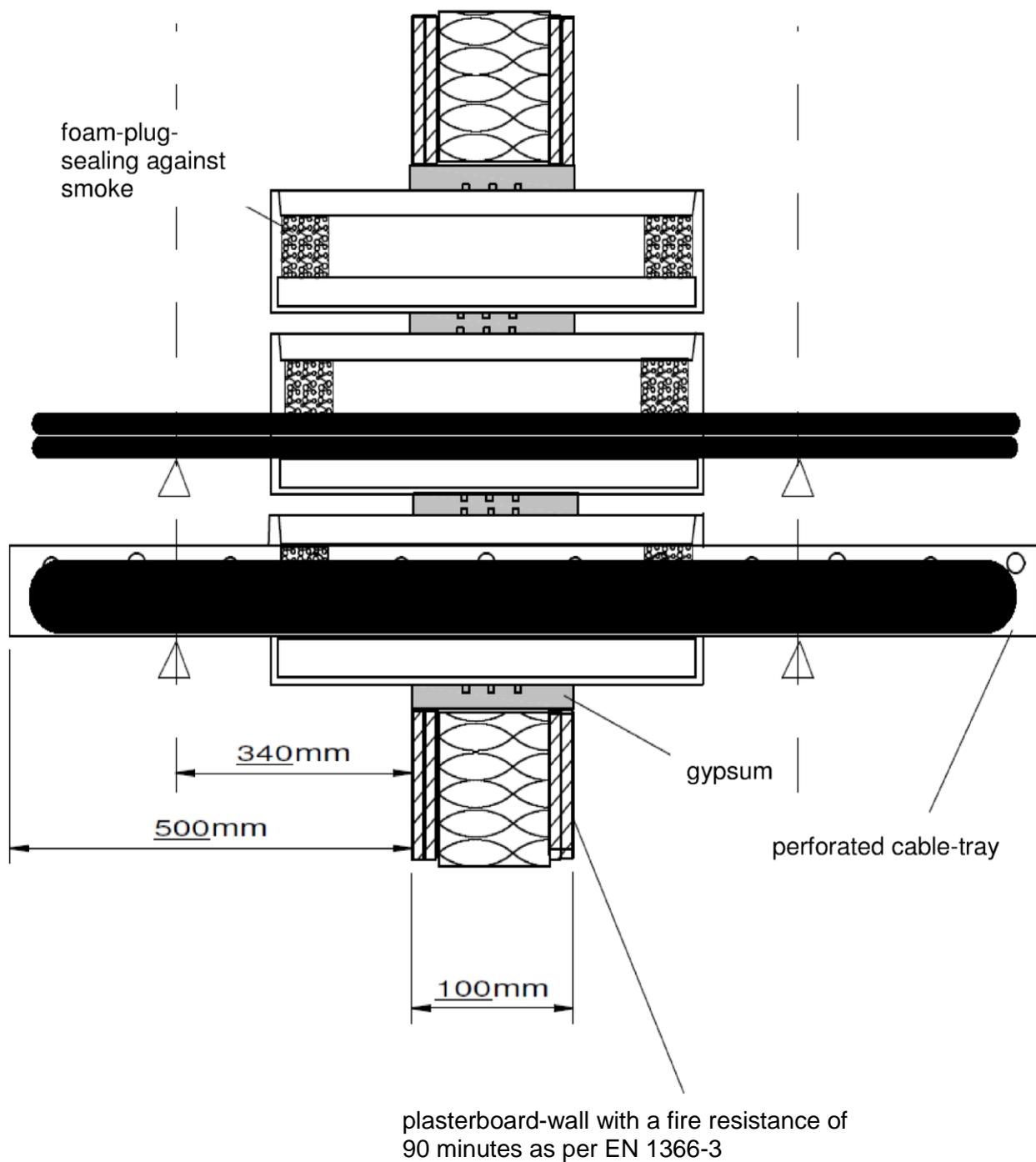


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CT-Cable Box

Use as a penetration seal with a fire resistance class EI 90
Layout of the test specimen – front view -

Annex 5



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CT-Cable Box	Annex 6
Use as a penetration seal with a fire resistance class EI 90 Layout of the test specimen – cross section -	