

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-18/1069
of 25 January 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

PYROBAG

Product family
to which the construction product belongs

costruction product for use in penetration seals - pillows

Manufacturer

OBO Bettermann Produktion
Deutschland GmbH & Co. KG
Hüingser Ring 52
58710 Menden
DEUTSCHLAND

Manufacturing plant

BI

This European Technical Assessment
contains

11 pages including 7 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

The European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction shall be identified as such.

This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 25(3) of Regulation (EU) No 305/2011.

Specific Part

1 Technical description of the product

"PYROBAG" is a fire protective pillow, consisting of a case of tightly woven glass fibre fabric and a filling (dry mix).

The pillows have the dimensions given in Annex 2.

A detailed technical description (e.g. dimensions) and the fire safety related performance criteria for the construction products are given in Section 3.2 and Annex 1. Detailed information on the construction product's components is deposited with DIBt.

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 "PYROBAG" is intended for use as a component of a cable penetration seal.

Cable penetration seals are used to seal openings in fire-resistant walls and floors, which are penetrated by services. Their aim is to preserve the walls' or floors' fire resistance in the area of the penetrations.

This ETA has served to verify the resistance to fire of cable penetration seals containing the construction product "PYROBAG". Additionally, the cable penetration seal consisted of a calcium silicate board arranged below the pillows. For floor installations of the cable penetration seal, a wire mesh was arranged on both sides of the penetration seal.

More detailed information and data on the verified cable penetration seals are given in Annexes 3 to 7.

The construction product "PYROBAG" may be used for cable penetration seals of use category Z₁ (intended for use under internal conditions with high humidity, excluding temperatures below 0 °C) provided that the other components of the cable penetration seal, which are not covered by this ETA, meet the durability requirements. The resistance to fire of the cable penetration seals shall be verified on a case-by case basis.

The performances given in Section 3 apply exclusively to the cable penetration seals assessed as part of the ETA procedure (e. g. with respect to the design and arrangement of the cable penetration seals' components as well as the type and position of the services).

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

3.1 Intended use: use in penetration seals

3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire "case"	Class E according to EN 13501-1
Reaction to fire "filling"	Class E according to EN 13501-1
Resistance to fire of a cable penetration seal containing the product	The resistance to fire depends on the design and installation of the cable penetration seal and on the other components that make up the cable penetration seal. More details on the tested cable penetration seals and the related fire resistance classes are given in Annexes 1 to 7.

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

In accordance with European Assessment Document (EAD) no. 350454-00-1104, 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 25 January 2021 by Deutsches Institut für Bautechnik

Manuela Bernholz
Head of Section

beglaubigt:
Nadja Bisemeier

The factory manufactured construction product "PYROBAG" for cable penetration seals consists of a cover made of glass fabric and a filling made of a dry mixture.

Properties and performance criteria of the components of the construction product "PYROBAG"

Component	Description
"PYROBAG" Pillows consisting of glass fabric ¹ and filling (dry mixture) ¹	Dimension: see Annex 2 Glass fabric: Classification of the fire behaviour: Class E according to EN 13501-1:2018-12 Filling: Classification of the fire behaviour: Class E according to EN 13501-1:2018-12 Density of the filling: 260g/l

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

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

¹ The composition of the materials is deposited at DIBt.

Description of the additional components of the tested pipe penetration seals

"PROMATECT H"	Calcium silicate plate; declaration of performance Nr. 0749-CPR-06/0206-2013/1
Wire mesh	Dimensions: 50 mm x 50 mm x 4 mm und 10 mm x 10 mm x 1 mm, spot-welded in accordance to ISO 4783, galvanised in accordance to EN ISO 1461

Performance of cable penetration seals, tested with the construction product "PYROBAG"

	Essential requirement	Test method	Construction of the sample	Performance acc. EN 13501-2
1	Resistance to fire	EN 1366-3: 2009-07	150 mm thick rigid wall; design and layout of the cable penetration seal according to Annex 3*	EI 90
2	Resistance to fire	EN 1366-3: 2009-07	125 mm thick flexible wall; design and layout of the cable penetration seal according to Annex 6*	EI 90

* The illustrations are without guarantee for completeness.

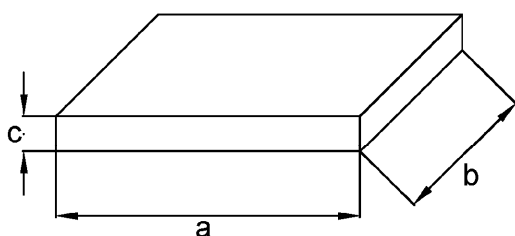
The illustrations in Annexes 2 to 7 are without guarantee for completeness.

The tested/illustrated cable penetration seals are examples for the use. The use of the construction product "PYROBAG" in cable penetration seals shall be in accordance with national requirements for planning, design and execution and in accordance with the installation instruction of the manufacturer.

PYROBAG	Annex 1
Description of the construction product, properties and performances	

PYROBAG

Bag size & weight



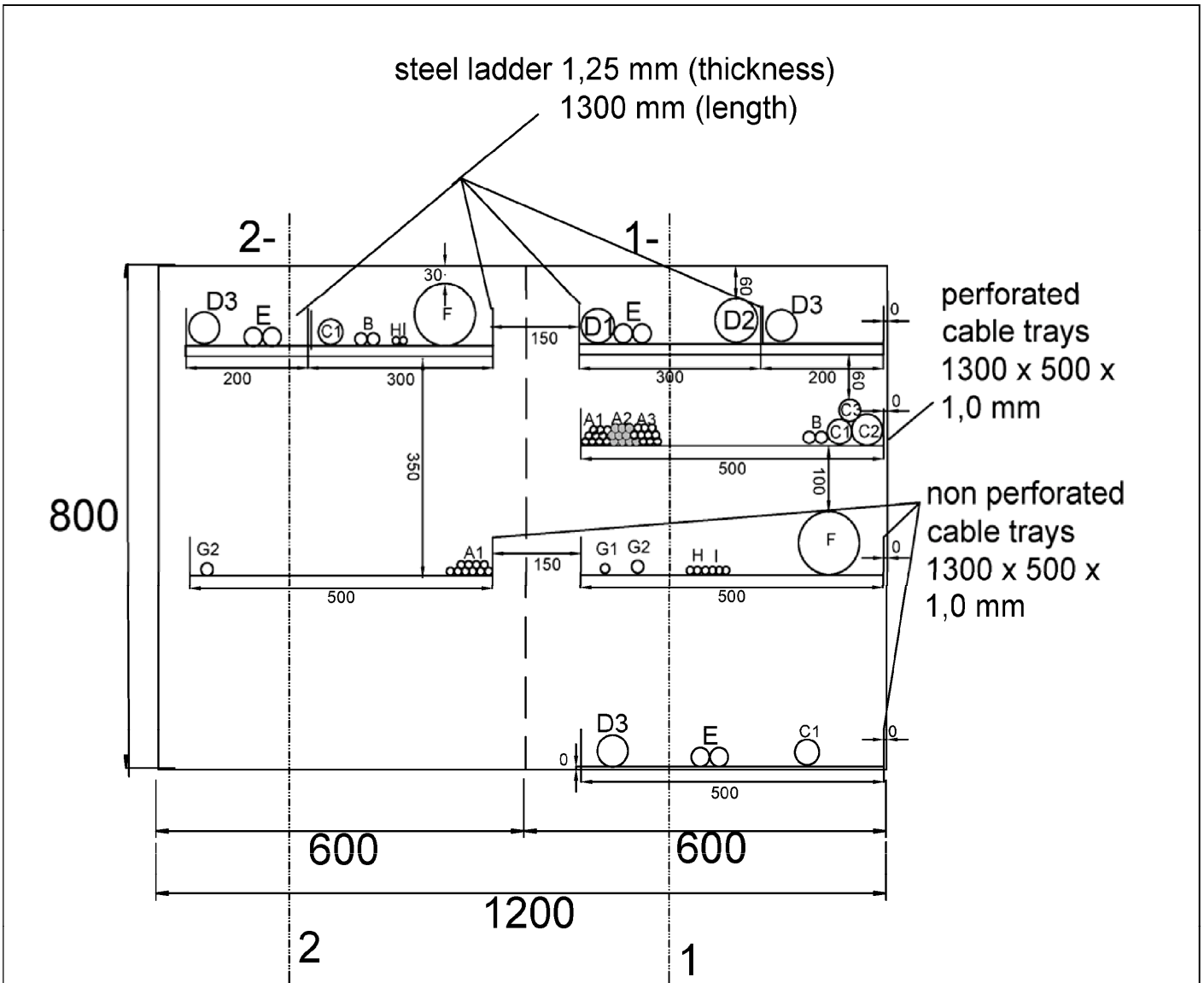
a x b x c (mm)	weight (g)
350 x 120 x 10	180
350 x 170 x 23	330
350 x 170 x 40	630

Dimensions [mm]

PYROBAG

Description of the pillows – sizes and weights

Annex 2

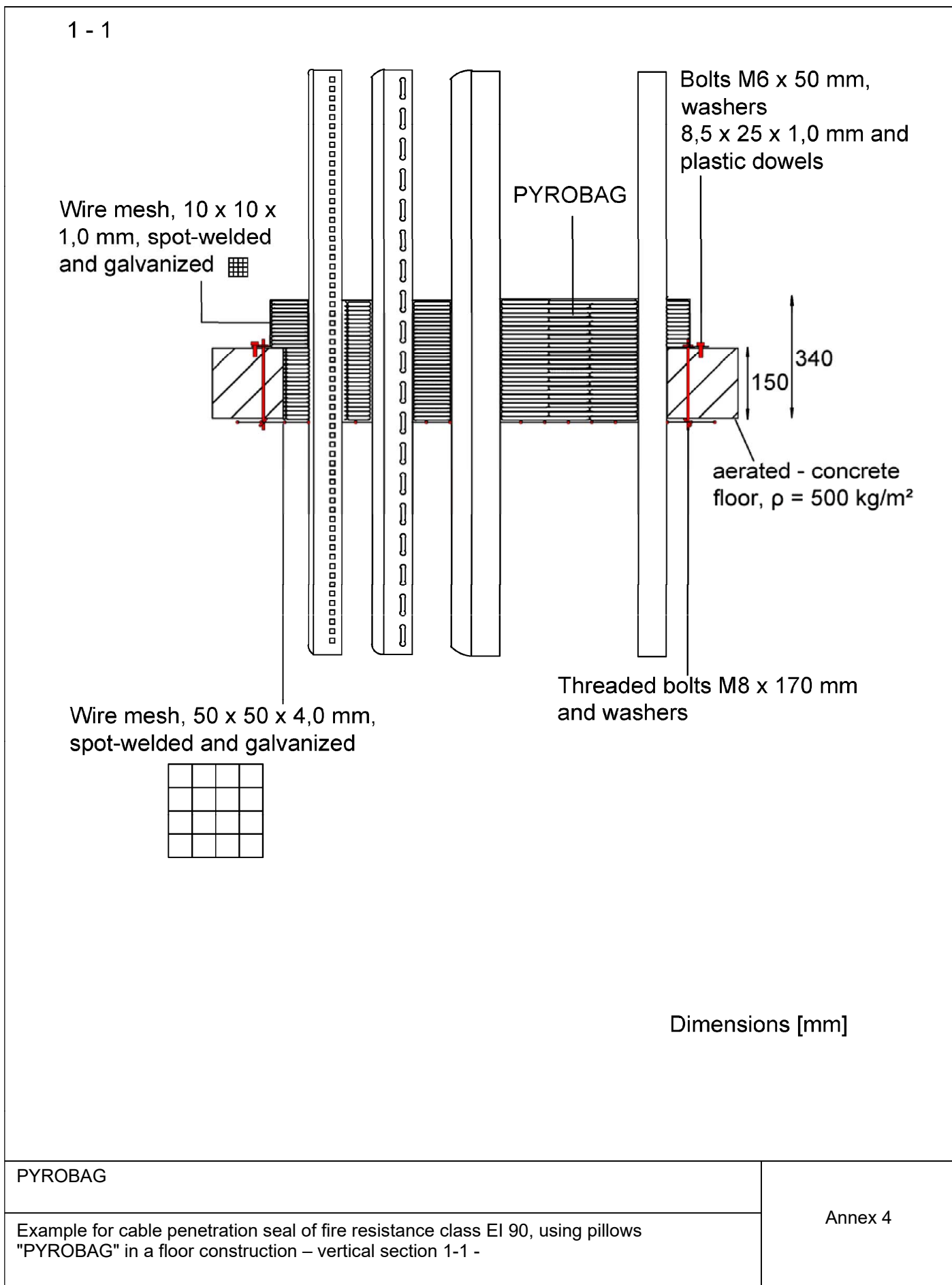


Cables in accordance with EN 1366-3:2009, Tab.A1

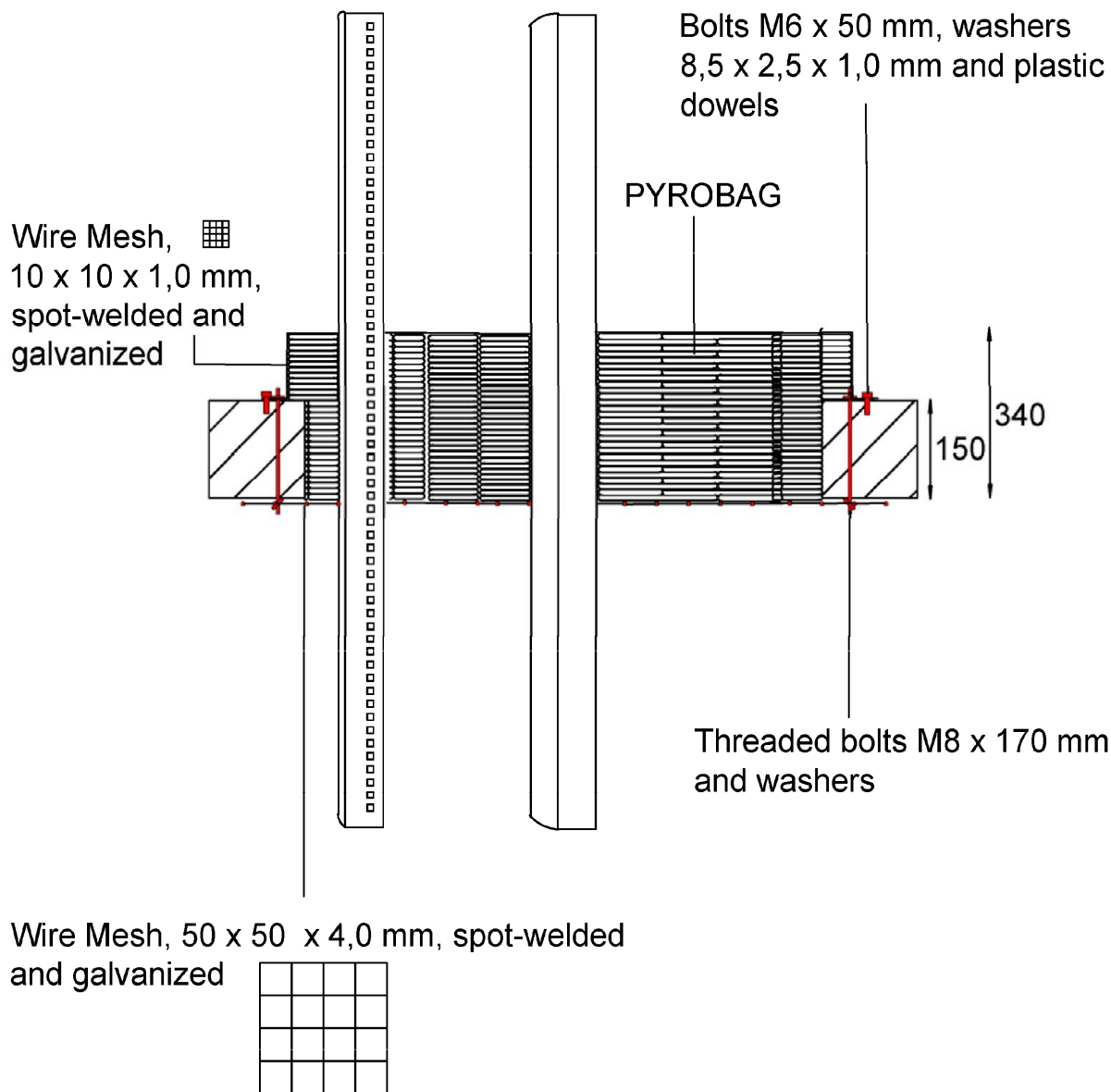
Dimensions [mm]

Electronic copy of the ETA by DIBt: ETA-18/1069

PYROBAG	Annex 3
Example for cable penetration seal of fire resistance class EI 90, using pillows "PYROBAG" in a floor construction – front view and description of the installations -	



2 - 2

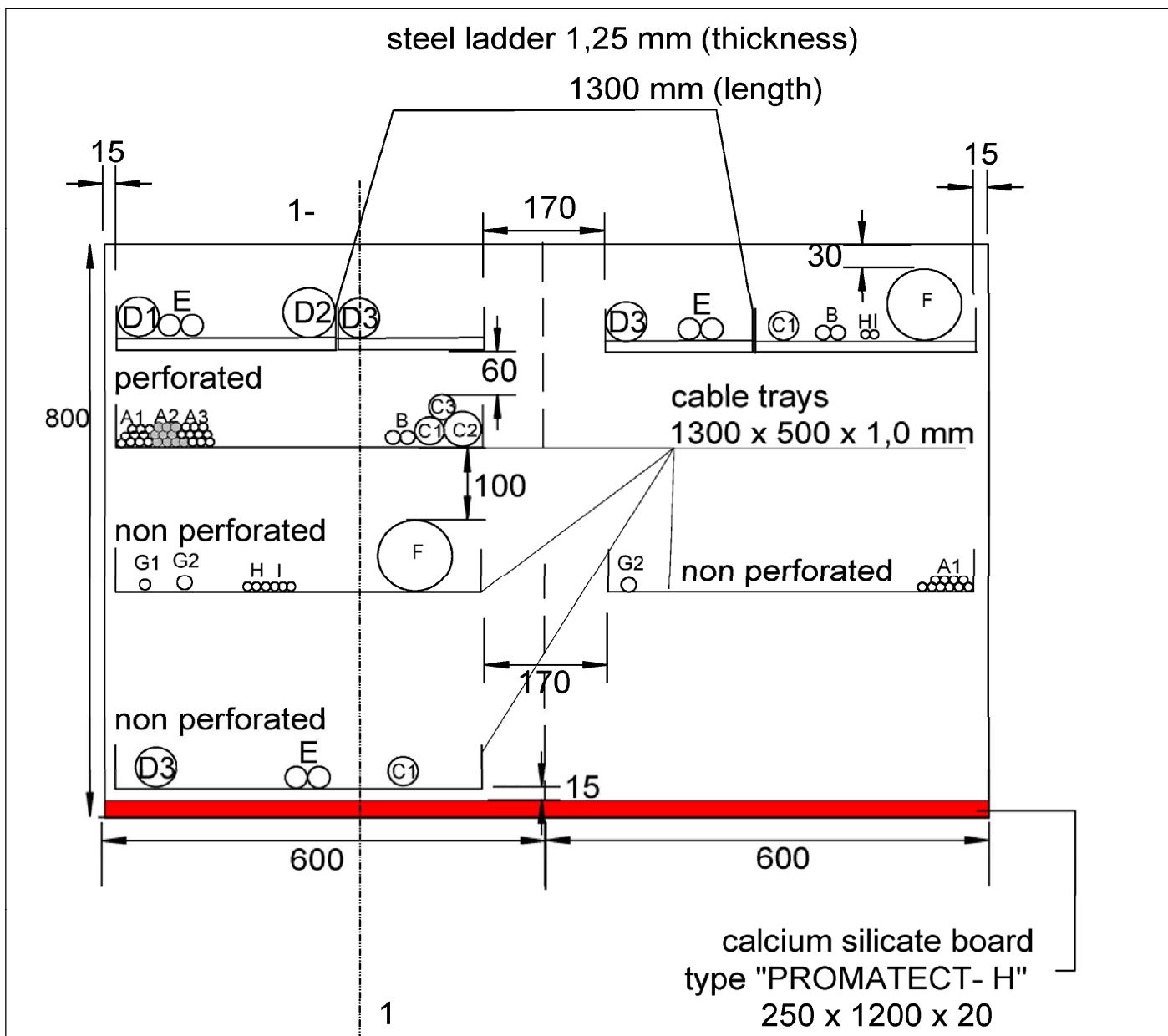


Dimensions [mm]

PYROBAG

Example for cable penetration seal of fire resistance class EI 90, using pillows "PYROBAG" in a floor construction – vertical section 2-2 -

Annex 5



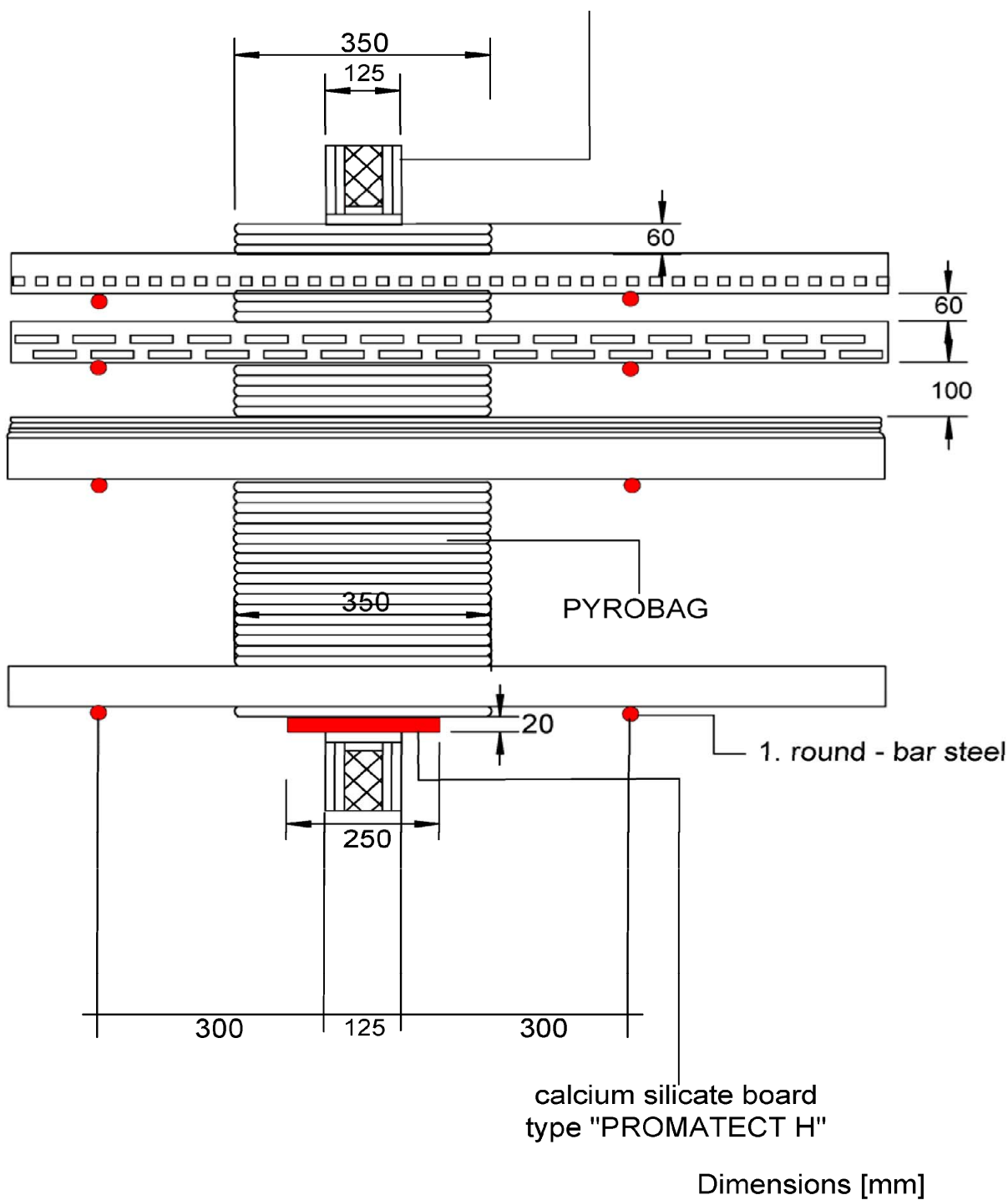
(Cables in accordance with EN 1366-3:2009, Tab. A1)

Dimensions [mm]

PYROBAG	Annex 6
Example for cable penetration seal of fire resistance class EI 90, using pillows "PYROBAG" in a flexible wall – front view and description of the installations -	

1 - 1

Flexible wall construction acc. EN 1366-3



PYROBAG

Example for cable penetration seal of fire resistance class EI 90, using pillows
"PYROBAG" in a flexible wall – vertical section 1-1 -

Annex 7