

Details for installation in flexible wall constructions (see Annex A of the ETA)

For walls thinner than the minimum thickness of the penetration seal (150 mm) the opening shall be lined with minimum 2 layers of $\geq 12,5$ mm thick type F gypsum boards according to EN 520:2004 (classification A2-s1,d0 according to EN 13501-1:2007+A1:2009) or silicate- or calcium silicate boards (classification A1 according to EN 13501-1:2007+A1:2009) with a minimum density of 450 kg/m^3 and a minimum thickness of 25 mm. The boards shall be at least 150 mm wide. The boards have to be installed and fixed according to the ETA-holder's installation instructions.

Alternatively the thickness of the wall can be increased to at least 150 mm by fitting a board frame, minimum 50 mm wide, around the opening. Minimum 1 layer of $\geq 12,5$ mm thick type F gypsum boards according to EN 520:2004 (classification A2-s1,d0 according to EN 13501-1:2007+A1:2009) or silicate- or calcium silicate boards (classification A1 according to EN 13501-1:2007+A1:2009) with a minimum density of 450 kg/m^3 can be used. The board frame has to be installed and fixed according to the ETA-holder's installation instructions.

When no lining is necessary or a board frame is used, the whole cavity within the wall has to be filled with insulation of class A1 or A2 according to EN 13501-1:2007+A1:2009 minimum 100 mm around the aperture.

Joints between the lining and the aperture have to be filled with „ZZ-Brandschutzsilikon NE“ (ZZ-Fire protection silicone NE), plaster or mineral mortar on both sides of the sealing according to the ETA-holder's installation instructions.

For timber stud walls there must be a minimum distance of 100 mm of the seal to any timber stud. The cavity between timber stud and seal must be closed completely with insulation with classification A1 or A2-s1,d0 according to EN 13501-1:2007+A1:2009. The dimensions of the timber studs shall be $\geq 50 \text{ mm} \times 75 \text{ mm}$ (breadth / depth).

Details for installation in rigid walls (see Annex B and C of the ETA)

For walls thinner than the minimum thickness of the penetration seal (150 mm) the opening shall be lined with minimum 2 layers of $\geq 12,5$ mm thick type F gypsum boards according to EN 520:2004 (classification A2-s1,d0 according to EN 13501-1:2007+A1:2009) or silicate- or calcium silicate boards (classification A1 according to EN 13501-1:2007+A1:2009) with a minimum density of 450 kg/m^3 and a minimum thickness of 25 mm. The boards shall be at least 150 mm wide. The boards have to be installed and fixed according to the ETA-holder's installation instructions.

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Details for installation in rigid floors (see Annex C of the ETA)

No additional information required.

2.4 Hygiene, health and environment

2.4.1 Air permeability

No Performance Determined.

2.4.2 Water permeability

No Performance Determined.

2.4.3 Release of dangerous substances

According to the manufacturer's declaration, the product specification has been compared with the list of dangerous substances of the European Commission to verify that it does not contain such substances above the acceptable limits.

A written declaration in this respect was submitted by the ETA-holder.

In addition to the specific clauses relating to dangerous substances contained in this ETA, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Directive, these requirements need also to be complied with, when and where they apply.

2.5 Safety in use

2.5.1 Mechanical resistance of stability

No Performance Determined.

2.5.2 Resistance to impact/movement

No Performance Determined.

2.5.3 Adhesion

No Performance Determined.

2.6 Protection against noise

2.6.1 Airborne sound insulation

No Performance Determined.

2.7 Energy economy and heat retention

2.7.1 Thermal properties

No Performance Determined.

2.7.2 Water vapour permeability

No Performance Determined.

2.8 General aspects relating to fitness for use

The Cable penetration seal „System ZZ-Brandschutzsilikon NE“ (System ZZ-Fire protection silicone NE) was tested according to ETAG 026-Part 2 clause 2.4.12.

The Cable penetration seal „System ZZ-Brandschutzsilikon NE“ (System ZZ-Fire protection silicone NE) fulfil the requirements for the intended use category.

According to ETAG 026-Part 2 clause 2.4.12.1.3.3 the use category of “ZZ-Brandschutzsilikon NE” (ZZ-Fire protection silicone NE) is Type X, intended for use at conditions exposed to weathering.

3 Evaluation of Conformity and CE Marking

3.1 Attestation of Conformity system

According to the Decision 1999/454/EC of the European Commission⁵ system 1 of the attestation of conformity applies for fire-resistance-performance. This system of attestation of conformity is to be described in the following:

System 1: Certification of the conformity of the product by a Notified Certification Body on the basis of:

- a) Tasks of the manufacturer
 - 1) Factory Production Control
 - 2) Further testing of samples taken at the factory in accordance with a prescribed control plan
- b) Tasks of the Notified Body
 - 3) Initial type-testing of the product
 - 4) Initial inspection of factory and of factory production control
 - 5) Continuous surveillance, assessment and approval of factory production control

Additionally according to the Decision 2001/596/EC of the European Commission⁶ system 3 of the attestation of conformity is to be used in relation to the reaction-to-fire performance. This system of attestation of conformity is to be described in the following:

System 3: Declaration of conformity of the product by the manufacturer:

- a) Tasks of the manufacturer
 - 1) Factory Production Control
- b) Tasks of the Notified Body
 - 2) Initial type-testing of the product

3.2 Responsibilities

3.2.1 Tasks of the manufacturer

3.2.1.1 Factory production control

The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall insure that the product is in conformity with this European technical approval.

The manufacturer shall draw up and keep up-to-date documents defining the factory production control that applies. The documentation to be carried out by the manufacturer and the applicable procedures shall be appropriate to the product and manufacturing process. The factory production control shall ensure the conformity of the product to an appropriate level. This involves:

- a) the preparation of documented procedures and instructions relating to factory production control operations.
- b) the effective implementation of these procedures and instructions.

⁵ Official Journal of the European Communities no. L 178, 14.7.1999, p. 52

⁶ Official Journal of the European Communities no. L 209, 2.8.2001, p. 33

- c) the recording of these procedures and their results.
- d) the use of these results to correct any deviations, repair the effects of such deviations, treat any resulting instances of non-conformity and, if necessary, revise the factory production control to rectify the cause of non-conformity.
- e) a procedure to ensure that both the approval Body and the Notified (Certification) Bodies are advised before any significant change to the product, its components or manufacturing process, is made.
- f) a procedure to ensure that personnel involved in the production processes and the quality control procedures are qualified and adequately trained to carry out their required tasks.
- g) that all testing and measuring equipment is maintained and up to date calibration records are documented.
- h) maintenance of records to ensure every batch produced is clearly labelled with the batch number, which allows traceability to its production to be identified.

The manufacturer may only use components stated in the technical documentation of this European technical approval.

For the components which the ETA-holder does not manufacture by himself, he shall make sure that factory production control carried out by the other manufacturers gives the guaranty of the components compliance with the European technical approval.

The factory production control and the provisions taken by the ETA-holder for components not produced by himself shall be in accordance with the control plan⁷ relating to this European technical approval which is part of the technical documentation of this European technical approval. The control plan is laid down in the context of the factory production control system operated by the manufacturer and deposited at the Österreichisches Institut für Bautechnik.

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the control plan.

3.2.1.2 Other tasks of the manufacturer

The manufacturer shall provide a technical data sheet and an installation instruction with the following minimum information:

➤ technical data sheet:

a) Field of application:

- 1) Building elements for which the penetration seal is suitable, type and properties of the building elements like minimum thickness, density, and – in case of lightweight constructions – the construction requirements.
- 2) Services for which the penetration seal is suitable, type and properties of the services like material, diameter, thickness etc. in case of pipes including insulation materials; necessary/allowed supports/fixings (e.g. cable trays).
- 3) Limits in size, minimum thickness etc. of the penetration seal.

b) Construction of the penetration seal including the necessary components and additional products (e.g. backfilling material) with clear indication whether they are generic or specific.

➤ Installation instruction:

- a) Steps to be followed.
- b) Procedure in case of retrofitting.

The manufacturer shall, on the basis of a contract, involve a body (bodies) which is (are) notified for the tasks referred to in section 3.1 in the field of approval product in order to undertake the actions laid down in section 3.3. For this purpose, the control plan referred to in sections 3.2.1.1

⁷ The control plan is a confidential part of the European technical approval and only handed over to the Notified Body or Bodies involved in the procedure of conformity.

and 3.2.2 shall be handed over by the manufacturer to the Notified Body or Bodies involved.

The manufacturer shall make a declaration of conformity, stating that the construction product is in conformity with the provisions of this European technical approval

3.2.2 Tasks of the Notified Bodies

The Notified Body (Bodies) shall perform the:

- initial type-testing of the product
The results of the tests performed as part of the assessment for the European technical approval can be used unless there are changes in the production line or plant. In such cases, the necessary initial type testing has to be agreed between the Österreichisches Institut für Bautechnik and the Notified Bodies involved.
- initial inspection of factory and of factory production control
The Notified Body (Bodies) shall ascertain that, in accordance with the control plan, the factory (in particular the employees and the equipment) and the factory production control are suitable to ensure continuous and orderly manufacturing of the components according to the specifications mentioned in clause 2 of this ETA.
- continuous surveillance, assessment and approval of factory production control
The Notified Body (Bodies) shall visit the factory at least once a year for surveillance of this manufacturer having a FPC system complying with a quality management system covering the manufacturing of the approval product components. It has to be verified that the system of factory production control and the specified automated manufacturing process are maintained taking into account the control plan

These tasks shall be performed in accordance with the provisions laid down in the control plan of this European technical approval.

The Notified Body (Bodies) shall retain the essential points of its (their) actions referred to above and state the results obtained and conclusions drawn in written report.

- In the case of Attestation of Conformity system 1:
The Notified Body involved by the manufacturer shall issue an EC certificate of conformity of the product stating the conformity with the provisions of this European technical approval.

In cases where the provisions of the European technical approval and its control plan are no longer fulfilled, the Certification Body shall withdraw the certificate of conformity and inform the Österreichisches Institut für Bautechnik without delay.

3.3 CE marking

The CE marking shall be affixed either on the product itself, on a label attached to it, on its packaging or on the commercial documents accompanying the components of the product. The letters « CE » shall be followed by the identification number of the Notified Body involved and be accompanied by the following additional information:

- the name or identifying mark and address of the ETA-holder
- the last two digits of the year in which the CE marking was affixed
- the number of the EC certificate of conformity for the product
- the number of the European technical approval
- the number of the ETAG (ETAG N° 026 part 2)
- the designation of the product (trade name)
- the use category in accordance with the ETA section 1 and 2
- for other relevant characteristics (e.g. resistance to fire) see ETA-13/0123

4 Assumptions under which the fitness of the product for the intended use was favourably assessed

4.1 Manufacturing

The European technical approval is issued for the product on the basis of agreed data/information, deposited with the Österreichisches Institut für Bautechnik, which identifies the product that has been assessed and judged. Changes to the product or production process, which could result in this deposited data/information being incorrect, should be notified to the Österreichisches Institut für Bautechnik before the changes are introduced. The Österreichisches Institut für Bautechnik will decide whether or not such changes affect the ETA and consequently the validity of the CE marking on the basis of the ETA and if so whether further assessment or alterations to the ETA, shall be necessary.

4.2 Installation

The ETA is issued under the assumption that the installation of the approval product shall be in accordance with the manufacturer's technical literature.

5 Indications to the manufacturers

5.1 Packaging, transport and storage

In the accompanying document and/or on the packaging the manufacturer shall give information as to transport and storage.

At least the following shall be indicated: storing temperature, maximum duration of storage and required data related to minimum temperature for transport and storage.

5.2 Use, maintenance and repair

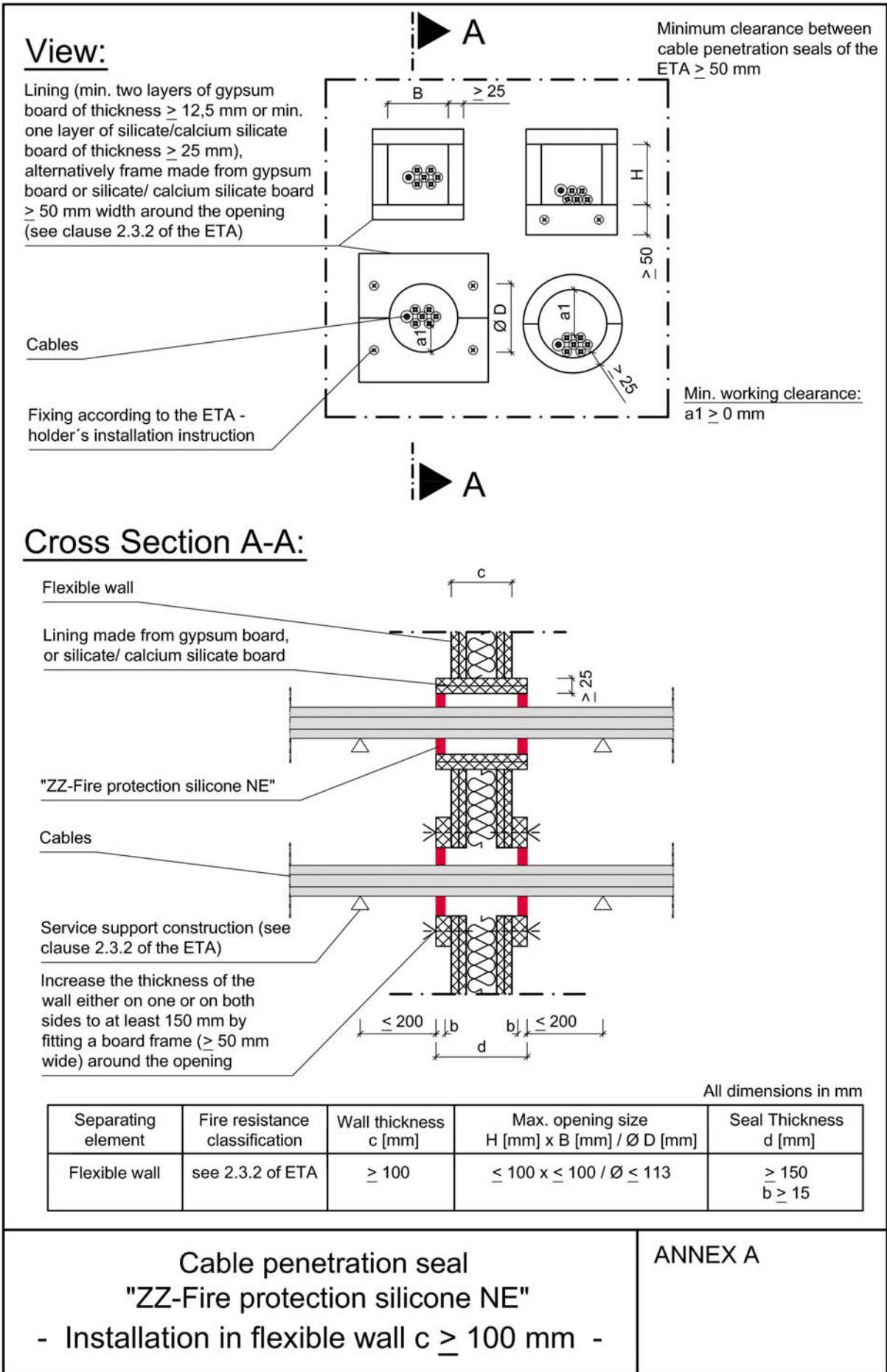
The product shall be installed and used as described in this ETA.

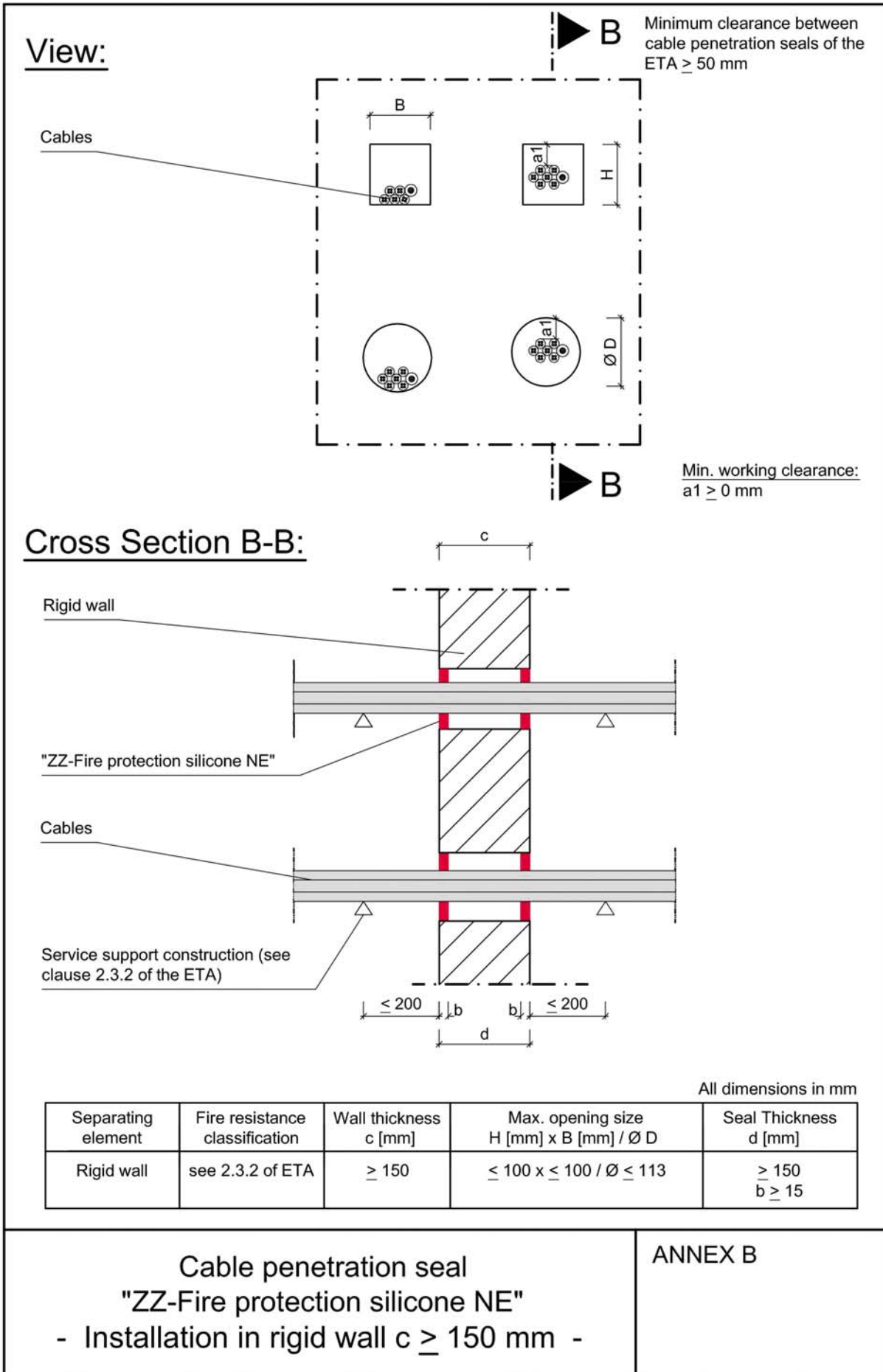
The assessment of the fitness for use is based on the assumption that necessary maintenance and repair if required is carried out in accordance with the manufacturer's instructions during the assumed intended working life.

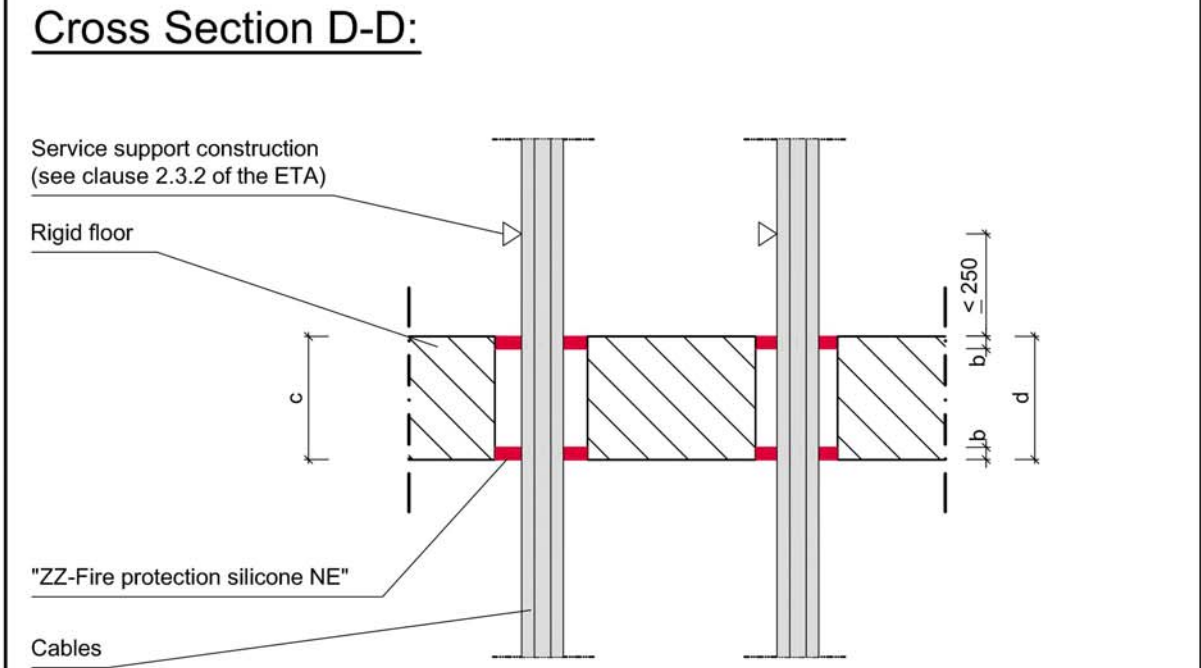
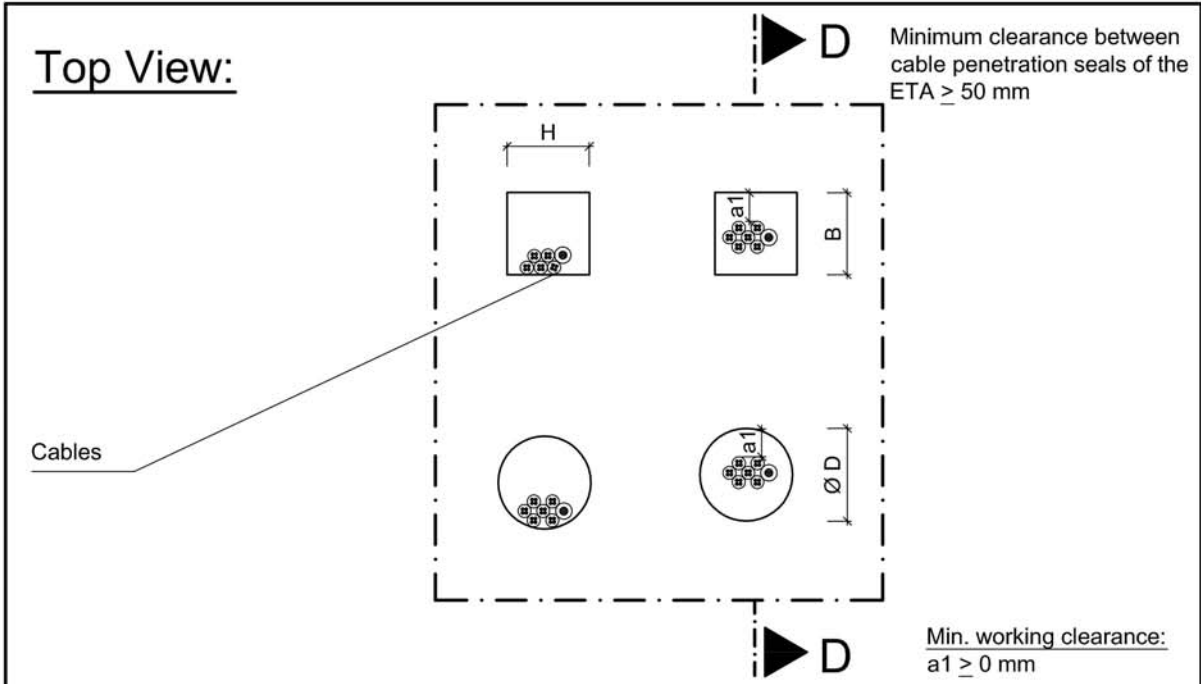
On behalf of Österreichisches Institut für Bautechnik

The original document is signed by:

Rainer Mikulits
Managing Director







All dimensions in mm

Separating element	Fire resistance classification	Floor thickness c [mm]	Max. opening size H [mm] x B [mm] / Ø D	Seal Thickness d [mm]
Rigid floor	see 2.3.2 of ETA	≥ 150	$\leq 100 \times \leq 100 / \leq 113$	≥ 150 $b \geq 15$

<p>Mixed penetration seal "ZZ-Fire protection silicone NE" - Installation in rigid floor $c \geq 150$ mm -</p>	<p>ANNEX D</p>
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