

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-20/0237
of 18 August 2020

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

REHAU RAUSECURE compact

Product family
to which the construction product belongs

Construction product for use in penetration seals - pipe
collar

Manufacturer

Rehau AG + Co
Ytterbium 4
91058 Erlangen-Eltersdorf
DEUTSCHLAND

Manufacturing plant

REHAU AG + Co. Werk B

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

EAD 350454-00-1104

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Specific Part

1 Technical description of the product

"REHAU RAUSECURE compact" is a pipe collar consisting of a pipe collar enclosure and a fire-protective inlay.

The pipe collar enclosure is made of sheet steel and needs to be sufficiently protected against corrosion. The fire-protective inlay (insert) is made of an intumescent material, which expands under heat exposure.

The pipe collar has the dimensions given in Annex 2.

A detailed technical description (e.g. dimensions) and the fire safety related performance criteria for the construction product is given in Section 3.2 and Annexes 1 and 2. Detailed information on the construction product's components is deposited with Deutsches Institut für Bautechnik.

NOTE:

The characteristics listed are suitable both for identifying the construction product 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

Das Bauprodukt "REHAU RAUSECURE compact" is intended for use as a component of a pipe penetration seal for plastic pipes.

Pipe penetration seals are used to seal openings in fire-resistant walls and floors, which are penetrated by pipes. 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 pipe penetration seals containing two pipe collars (for wall installations) or one pipe collar (for floor installations). The pipe penetration seals also consisted of a seal and a PE soft foam stripe (acoustic insulation stripe) between the penetrating pipe and the circular edge of the surrounding building component.

More detailed information and data on the verified pipe penetration seals are given in annexes 3 to 6.

The construction product "REHAU RAUSECURE compact" may be used for pipe 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 pipe penetration seal, which are not the subject of this ETA, meet the durability requirements.

The resistance to fire of the pipe penetration seals shall be verified on a case-by case basis.

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

English translation prepared by DIBt

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 "Pipe collar housing"	Class A1 according to the commission decision 96/603/EC (current version)
Reaction to fire "Insert"	Class E according to EN 13501-1:2018-12
Resistance to fire of a pipe penetration seal containing the product	The resistance to fire depends on the design and installation of the pipe penetration seal and on the other components that make up the pipe penetration seal. More details on the tested pipe penetration seals and the related fire resistance classes are given in Annexes 1 to 6.

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 18 August 2020 by Deutsches Institut für Bautechnik

Maja Tiemann
Head of Department

beglaubigt:
Bisemeier

The factory manufactured construction product "REHAU RAUSECURE compact" for cable penetration seals consists of a pipe collar steel housing and an insert of an intumescent building material. They are used for pipe penetration seals.

Properties and performance criteria of the components of the construction product "REHAU RAUSECURE compact"

Component	Description
"Pipe collar housing"	Dimension: see Annex 2 Material: sheet steel, material number.: DX51D+Z according to EN 10346:2009 Classification of the fire behavior: Class A1 according to the commission decision 96/603/EC (current version)
"Insert"	Dimension: see Annex 2 Material: intumescent material* Classification of the fire behaviour: Class E according to EN 13501-1:2018-12

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.

* The composition of the materials is deposited at DIBt.

Description of the additional components of the tested pipe penetration seals

Sealing of the residual joint between pipe collar and soffit: mineral mortar, for exaple Gypsum mortar	Classification of the fire behavior: Class A1 according to the commission decision 96/603/EC (current version)
Acoustic insulation stripe	Material: closed porous PE foam of the type "steinophon 260" or "steinophon 290-TDZ"; Firma Steinbacher Dämmstoffe GmbH, Erpfendorf/Tirol Thickness: 5 mm Classification of the fire behaviour: Class E according to EN 13501-1:2018-12

Performance of pipe penetration seals, tested with the construction product "REHAU RAUSECURE compact"

	Essential requirement	Test method	Construction off he sample	Performance acc. EN 13501-2
1	Resistance to fire	EN 1366-3: 2009-07	100 mm thick flexible wall; design and layout of the pipe penetration seal according to annex 3	s. Annex 3 and 4
2	Resistance to fire	EN 1366-3: 2009-07	150 mm thick rigid wall; design and layout of the pipe penetration seal according to annex 4	s. Annex 5 and 6

The tested/illustrated pipe penetration seals are examples for the use.

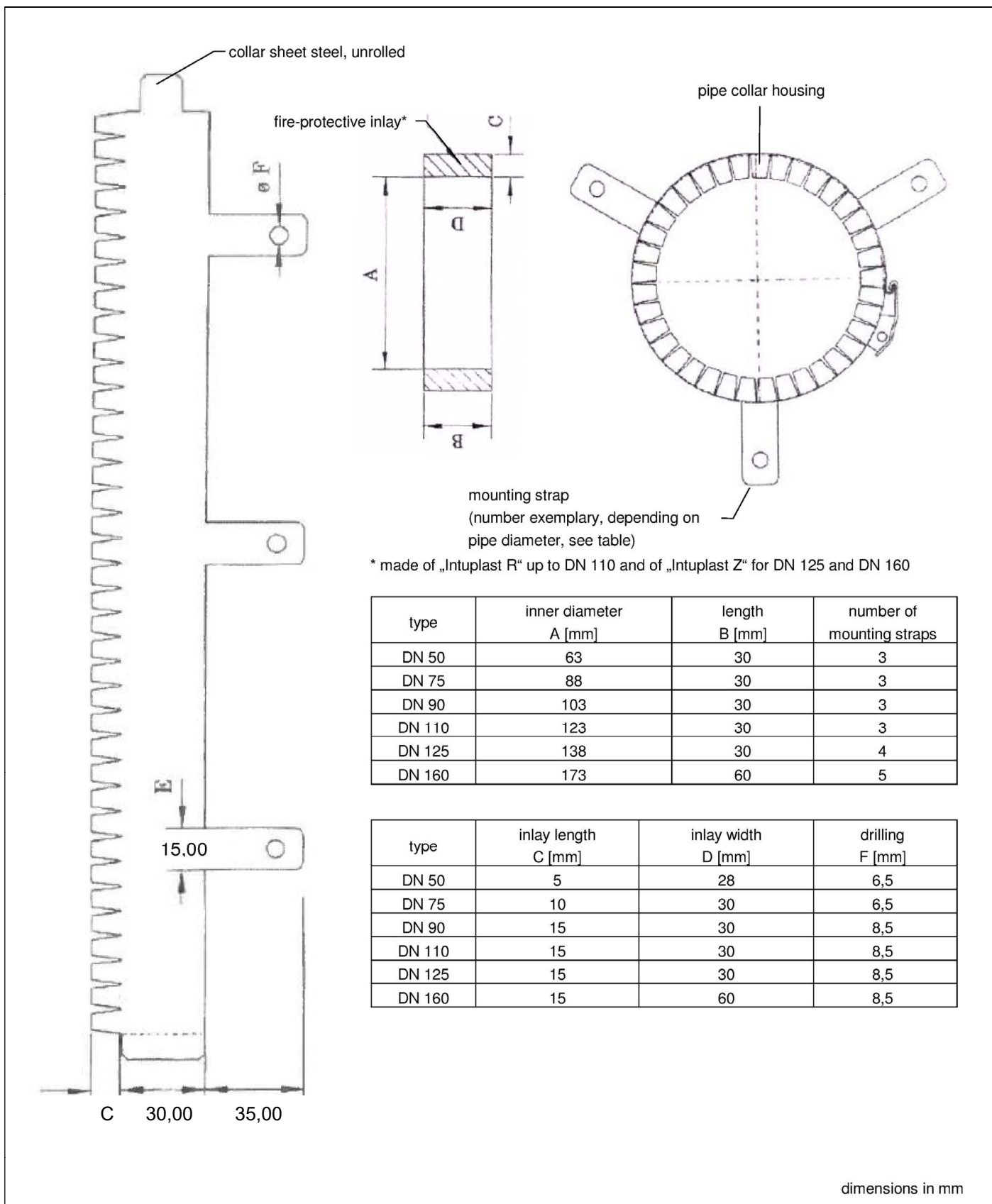
The illustrations are without guarantee for completeness.

The use of the construction product "REHAU RAUSECURE compact" in pipe penetration seals shall be in accordance with national requirements for planning, design and execution and in accordance with the installation instruction of the manufacturer.

REHAU RAUSECURE compact

Description of the construction product, properties and performances

Annex 1

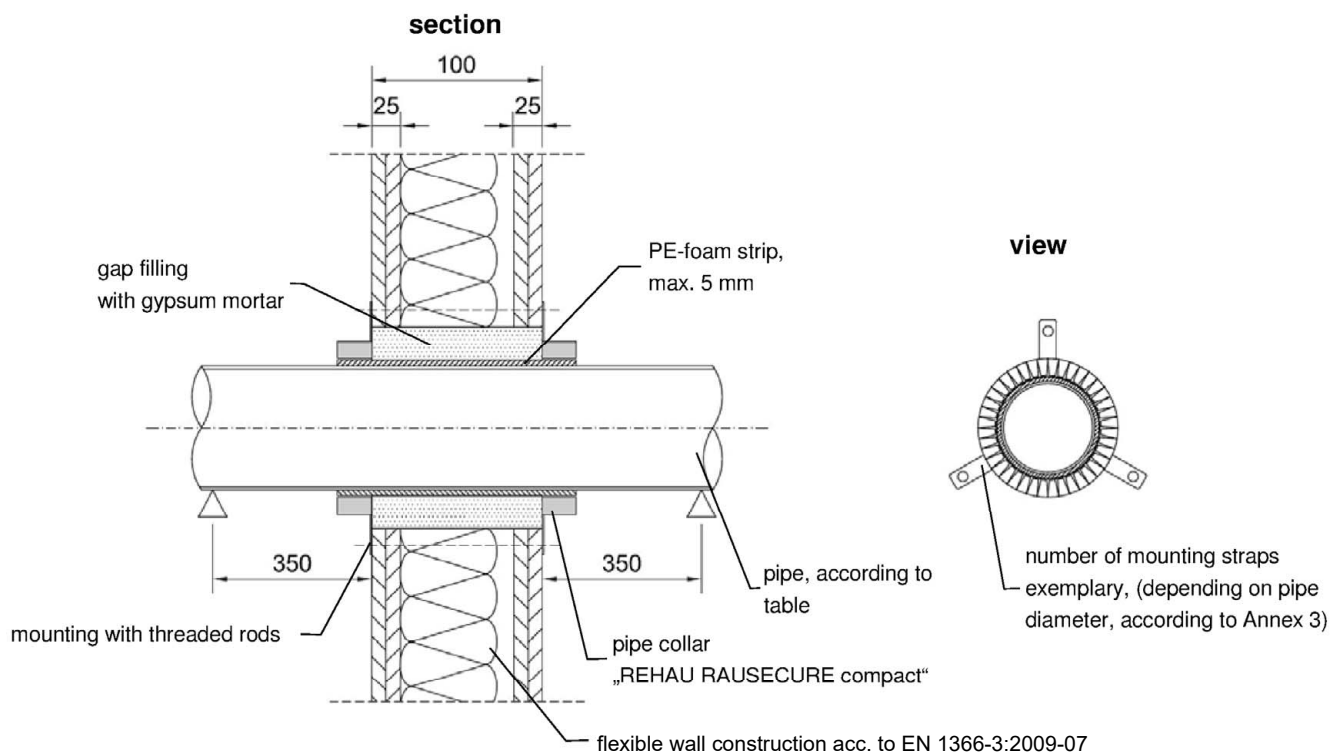


REHAU RAUSECURE compact

Design of the pipe collar in the size DN 50 to DN 160

Annex 2

Wall installation



collar size	type of pipe	Ø pipe	mounting	fire resistance period	pipe end configuration
DN 50	RAUPIANO PLUS	50	M6	120	U/U
DN 75	RAUPIANO PLUS	75	M8	120	U/U
DN 110	RAUPIANO PLUS	110	M8	90	U/U

collar size	type of pipe	Ø pipe	mounting	fire resistance period	pipe end configuration
DN 50	RAUPIANO LIGHT	40	M6	120	U/U
DN 110	RAUPIANO LIGHT	110	M8	90	U/U

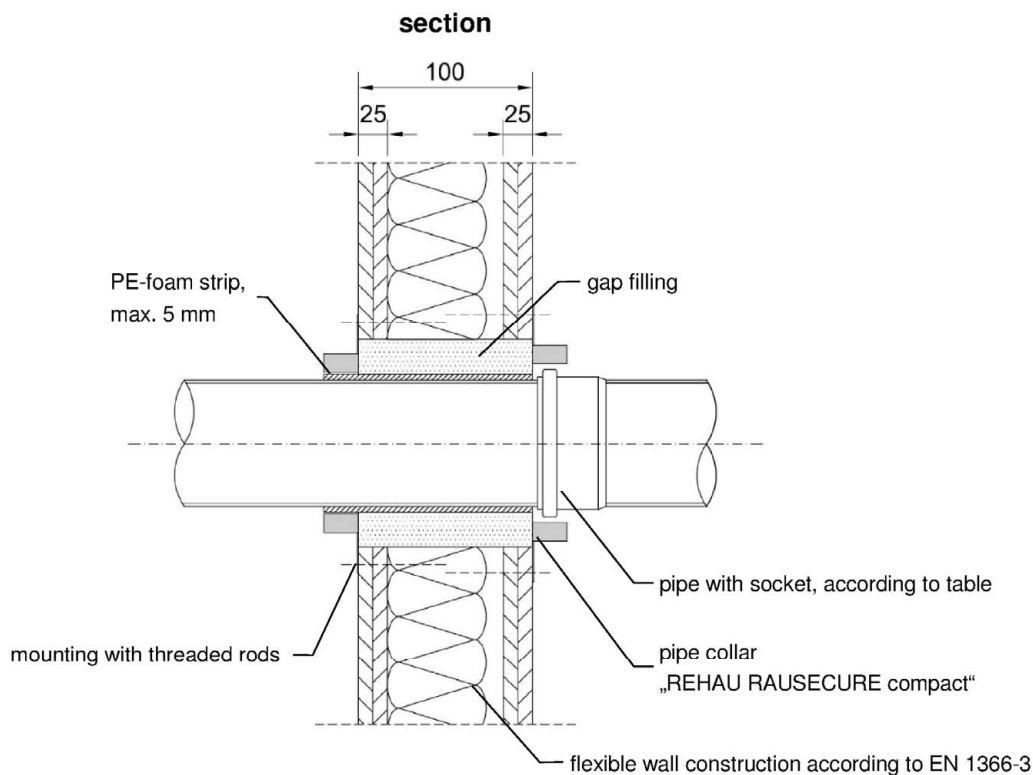
dimensions in mm

REHAU RAUSECURE compact

Example for the verification of the construction product "REHAU RAUSECURE compact" as a part of a pipe penetration seal, with a fire resistance (integrity and thermal insulation) for more than 90 minutes or 120 minutes

Annex 3

Wall installation – use over socket



collar size	type of pipe	Ø pipe	mounting	fire resistance period	pipe end configuration
DN 125	RAUPIANO PLUS	110	M8	120	U/U
DN 160	RAUPIANO PLUS	125	M8	120	U/U

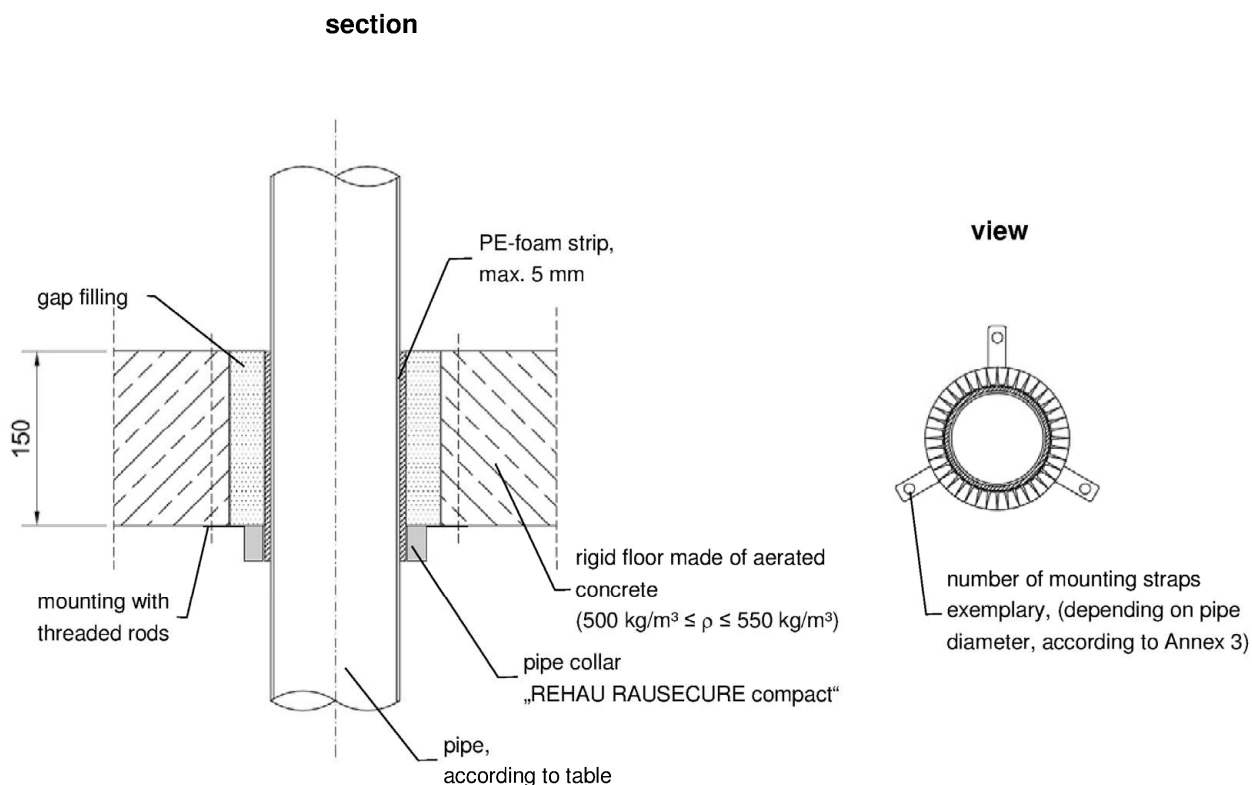
dimensions in mm

REHAU RAUSECURE compact

Example for the verification of the construction product "REHAU RAUSECURE compact" as a part of a pipe penetration seal, with a fire resistance (integrity and thermal insulation) for more than 120 minutes

Annex 4

Floor installation



collar size	type of pipe	Ø pipe	mounting	fire resistance period	pipe end configuration
DN 50	RAUPIANO PLUS	50	M6	120	U/U
DN 110	RAUPIANO PLUS	110	M8	120	U/U
DN 160	RAUPIANO PLUS	160	M8	120	U/U

collar size	type of pipe	Ø pipe	mounting	fire resistance period	pipe end configuration
DN 50	RAUPIANO LIGHT	40	M6	120	U/U
DN 110	RAUPIANO LIGHT	110	M8	120	U/U

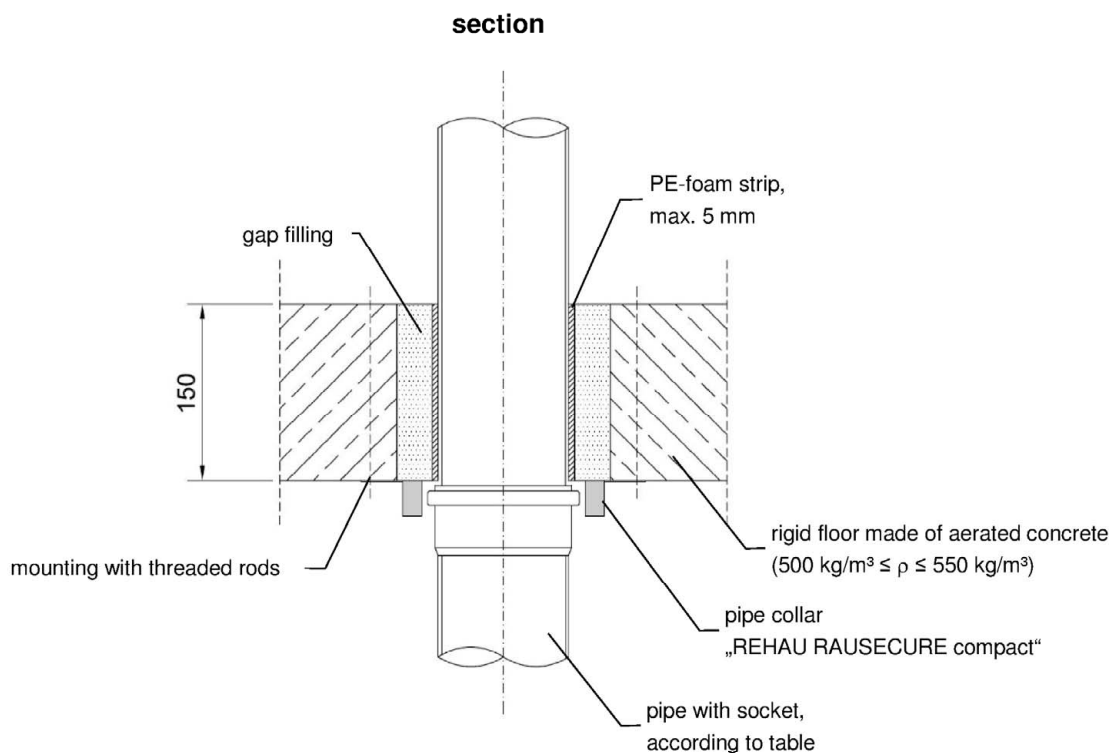
dimensions in mm

REHAU RAUSECURE compact

Example for the verification of the construction product "REHAU RAUSECURE compact" as a part of a pipe penetration seal, with a fire resistance (integrity and thermal insulation) for more than 120 minutes

Annex 5

Floor installation – use over socket



collar size	type of pipe	Ø pipe	mounting	fire resistance period	pipe end configuration
DN 75	RAUPIANO PLUS	50	M8	120	U/U

collar size	type of pipe	Ø pipe	mounting	fire resistance period	pipe end configuration
DN 75	RAUPIANO LIGHT	50	M8	120	U/U

dimensions in mm

REHAU RAUSECURE compact

Example for the verification of the construction product "REHAU RAUSECURE compact" as a part of a pipe penetration seal, with a fire resistance (integrity and thermal insulation) for more than 120 minutes

Annex 6