Deutsches Institut für Bautechnik

Public-law institution jointly founded by the federal states and the Federation

European Technical Assessment Body for construction products

Member of EOTA
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European Technical Assessment ETA-25/0805 of 10 October 2025

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	SikaSeal-661 Fire Collar
Product family to which the construction product belongs	Pipe collar used for penetration seals
Manufacturer	Wolman Wood and Fire Protection GmbH Robert-Hansen-Straße 1 89257 Illertissen GERMANY
Manufacturing plant	Wolman Wood and Fire Protection GmbH Robert-Hansen-Straße 1 89257 Illertissen
This European Technical Assessment contains	9 pages including 5 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	350454-00-1104

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Specific part

1 Technical description of the product

The construction product "SikaSeal-661 Fire Collar" is a pipe collar consisting of a pipe collar housing and an intumescent inlay.

The pipe collar housing is made of steel sheet which shall be protected against corrosion. The pipe collar housing is closed using a screw connection.

The intumescent inlay is made of an intumescent material which expands when exposed to fire. The intumescent material is formed in two half shells and is fixed in the pipe collar housing by an adhesive and clips.

The pipe collar is manufactured in the sizes given in Annex 2.

Detailed technical specifications and performance criteria relevant for fire safety for the pipe collar are given in section 3.1 and the Annexes 1 and 2.

NOTE:

The characteristics listed can serve 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 product is used as a component of a pipe penetration seal for pipes.

Pipe penetration seals are intended to be used to close openings in fire-resistant walls and ceilings through which pipes have been passed and are used to maintain the fire resistance of the walls or ceilings in the area of the penetrations

The construction product "SikaSeal-661 Fire Collar" is intended to be applied to plastic pipes. In the event of fire, the intumescent effect of the intumescent inlay prevents heat transmission and fire spreading in the area of these pipes.

Within the scope of this ETA, the fire resistance was demonstrated for pipe penetration seals for single arranged plastic pipes which penetrate walls and floors and for mixed penetration seals[1] (associated blank seals[1] included) which consisted of the components listed in Annex 3. Thereby the construction product "SikaSeal-661 Fire Collar" was applied to plastic pipes.

Detailed information and data on the verified penetration seals are given in Annexes 1 to 5. The performances given in Section 3 relate 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 services).

The verification and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of at least 10 years for "SikaSeal-661 Fire Collar" when used under use conditions of type Z_1 or Z_2 according to EOTA TR 024. The indications given on the working life cannot be interpreted as a guarantee given by the manufacturer, but are to be regarded only as a means for choosing the right product in relation to the expected economically reasonable working life of the works.

[1] Mixed penetration seals are used to seal off openings penetrated by both cables and pipes. Blank penetration seals serve to demonstrate the preservation of the fire resistance in case of a low number of services passing through the opening.

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 according to EN 13501-1
Fire resistance of a penetration seal containing the product	The fire resistance depends on the construction/installation of the penetration seal and on the other components incorporated in the penetration seal. Details on the verified penetration seals and the related fire resistance classes are given in Annexes 1 to 5.

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

In accordance with EAD No. 350454-00-1104, the applicable European legal act is: 1999/454/EC.

The system to be applied is: 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 10 October 2025 by Deutsches Institut für Bautechnik

Amelung-Sökezoğlu
Head of Section

beglaubigt:
Zielaskowski

Deutsches Institut für Bautechnik DIBt

Description of the construction product

The pipe collar consists of a pipe collar housing made of steel sheet and an inside fixed intumescent inlay made from an intumescent material (type, trade name and chemical composition deposited)

Properties and criteria for the performance of the construction product "SikaSeal-661 Fire Collar"

	Properties/Performance criteria	Parameter
1	Dimensions of the pipe collar housing	see Annex 2
2	Dimensions of the intumescent inlay	see Annex 2
3	Reaction to fire classification of the pipe collar housing	class A1
4	Reaction to fire classification of the intumescent inlay	class E

The properties listed can be used both for identifying the construction products as well as for the implementation of the factory production control by the manufacturer.

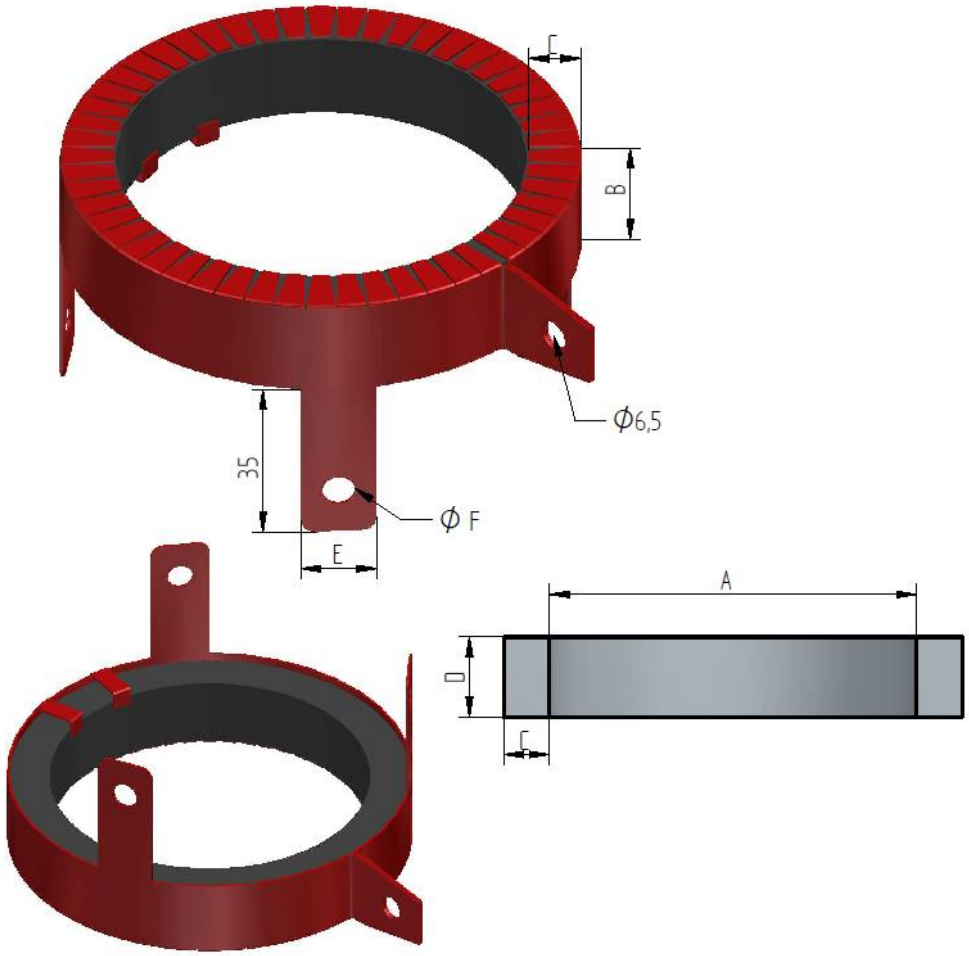
Implementation details for the factory production control are included in the test plan.

Performance of the penetration seals containing the construction product "SikaSeal-661 Fire Collar" tested within the scope of the issue of this ETA

	Essential requirement	Test method	Design of the test specimen	Performance
1	Resistance to fire	EN 1366-3	100 mm thick flexible wall; design and layout of the penetration seal according to Annex 4*	See Annex 4
2	Resistance to fire	EN 1366-3	150 mm thick aerated concrete floor; design and layout of the penetration seal according to Annex 4*	See Annex 4
3	Resistance to fire	EN 1366-3	120 mm thick penetration seal; design and layout of the tested penetration seal according to ETA-25/0809 (Details see Annex 5)*	EI 90

* Illustration without guarantee for completeness.
The use of the construction product "SikaSeal-661 Fire Collar" 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.

SikaSeal-661 Fire Collar	Annex 1
Properties of the construction product "SikaSeal-661 Fire Collar" and performance of a penetration seal containing "SikaSeal-661 Fire Collar"	



Pipe-outer diameter	Pipe collar			Intumescent inlay		Fixing clamp		drillhole clamps F
	Type	inner-diameter A	length B	tickness C	length D	width E	number	
50	DN 50	58	20	10	18	15	3	6,5
63	DN 63	71	20	10	18	15	3	6,5
75	DN 75	83	20	10	18	15	3	6,5
90	DN 90	98	30	15	28	20	3	8,5
110	DN 110	118	30	15	28	20	3	8,5
125	DN 125	133	45	20	43	20	4	8,5
140	DN 140	148	45	20	43	20	4	8,5
160	DN 160	168	45	20	43	20	4	8,5
200	DN 200	210	100	20	98	20	6	8,5

Sheet thickness= 0,63 mm

Dimensions in mm

SikaSeal-661 Fire Collar

Dimensions of the construction product "SikaSeal-661 Fire Collar"

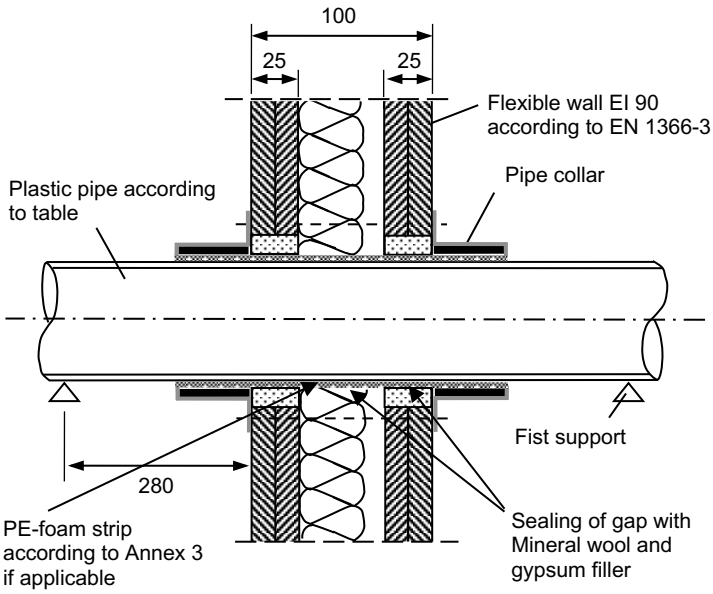
Annex 2

Description of additional components of the tested penetration seals

Designation/Manufacturer	Describtion
"SikaSeal-646 Fire Coating" Wolman Wood and Fire Protection GmbH 89257 Illertissen Deutschland	**Intumescent material**, coating according to ETA-25/0809
"SikaSeal-647 Fire" Wolman Wood and Fire Protection GmbH 89257 Illertissen Deutschland	**Intumescent material**, putty according to ETA-25/0808
"Hardrock 040" ("Hardrock II") Deutsche Rockwool Mineralwoll GmbH 45966 Gladbeck Deutschland	**Mineral fiber board** according to DIN EN 13162 Thickness: 60 mm Nominal density: 150 kg/m³ Reaction to fire class according to DIN EN 13501-1: class A1
"FPB D150" Knauf Insulation d.o.o. Skofja Loka Slovenien	**Mineral fiber board** according to DIN EN 13162 Thickness: 60 mm Nominal density: 150 kg/m³ Reaction to fire class according to DIN EN 13501-1: class A1
"Rohrschale 800" ("Lapinus Rohrschale") Deutsche Rockwool Mineralwoll GmbH 45966 Gladbeck Deutschland	**Mineral fiber pipe section** according to DIN EN 14303 Thickness: 30 mm Nominal density: 100 kg/m³ Reaction to fire class according to DIN EN 13501-1: class A1
"Steinophon 290-TDZ" Steinacher Dämmstoffe GmbH A-Erpfendorf	**Strip of foam material** Material: PE-foam Thickness: 5 mm

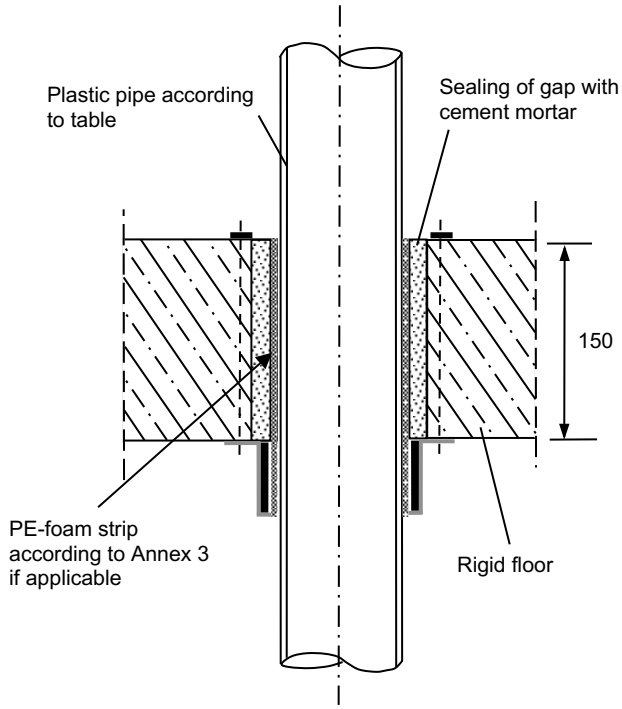
SikaSeal-661 Fire Collar	Annex 3
Description and properties of additional components of the pipe penetration seal "SikaSeal-661 Fire Collar"	

Wall installation - section:



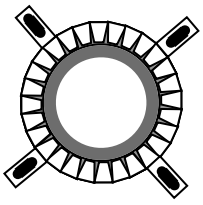
Pipe	class
PVC-U 75 x 1,8	EI 120-U/U
PVC-U 75 x 3,6	EI 90-U/U
PVC-U 110 x 1,8	EI 120-U/U
PVC-U 110 x 5,3	EI 90-U/U
PVC-U 160 x 1,8	EI 120-U/U
PVC-U 160 x 7,7	EI 90-U/U
PVC-U 200 x 4,0	EI 120-U/U
PVC-U 200 x 9,6	EI 90-U/U
PE-HD 75 x 1,9	EI 90-U/U
PE-HD 75 x 4,3	EI 90-U/U
PE-HD 110 x 2,7	EI 120-U/U
PE-HD 160 x 3,9	EI 120-U/U
PE-HD 200 x 4,9	EI 120-U/U

Floor installation - section:



Pipe	class
PVC-U 75 x 3,6	EI 90-U/U
PVC-U 110 x 1,8	EI 120-U/U
PVC-U 110 x 5,3	EI 90-U/U
PVC-U 160 x 7,7	EI 120-U/U
PVC-U 200 x 4,0	EI 120-U/U
PVC-U 200 x 9,6	EI 120-U/U
PE-HD 75 x 1,9	EI 120-U/U
PE-HD 75 x 4,3	EI 120-U/U
PE-HD 110 x 2,7	EI 120-U/U
PE-HD 110 x 6,3	EI 120-U/U

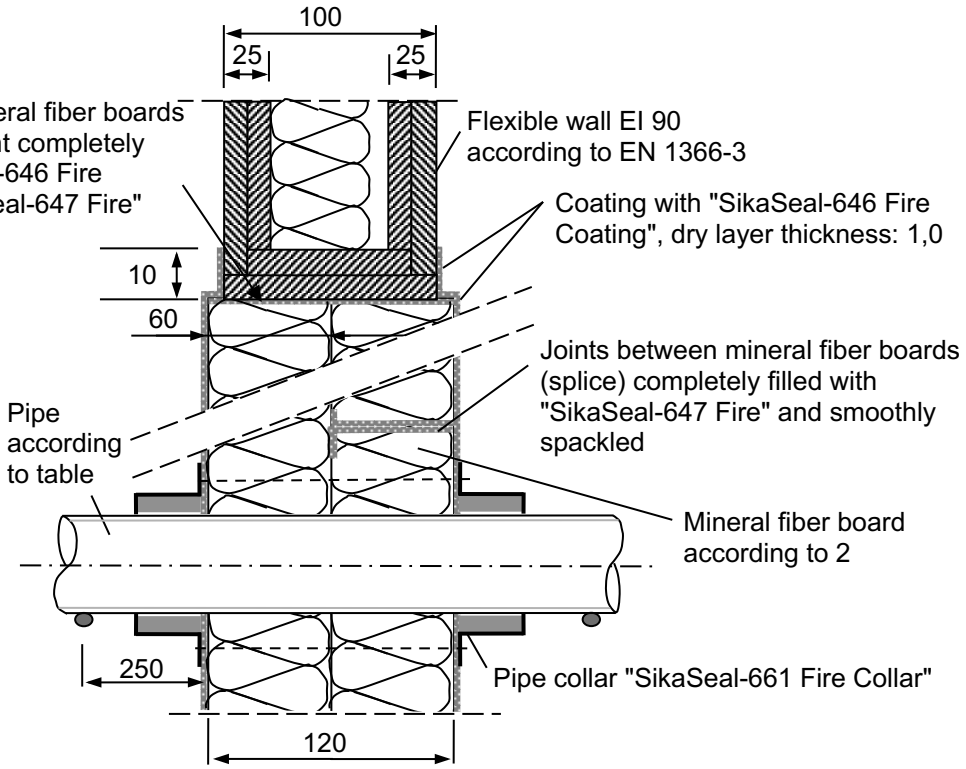
Front view (example):



Dimensions in mm

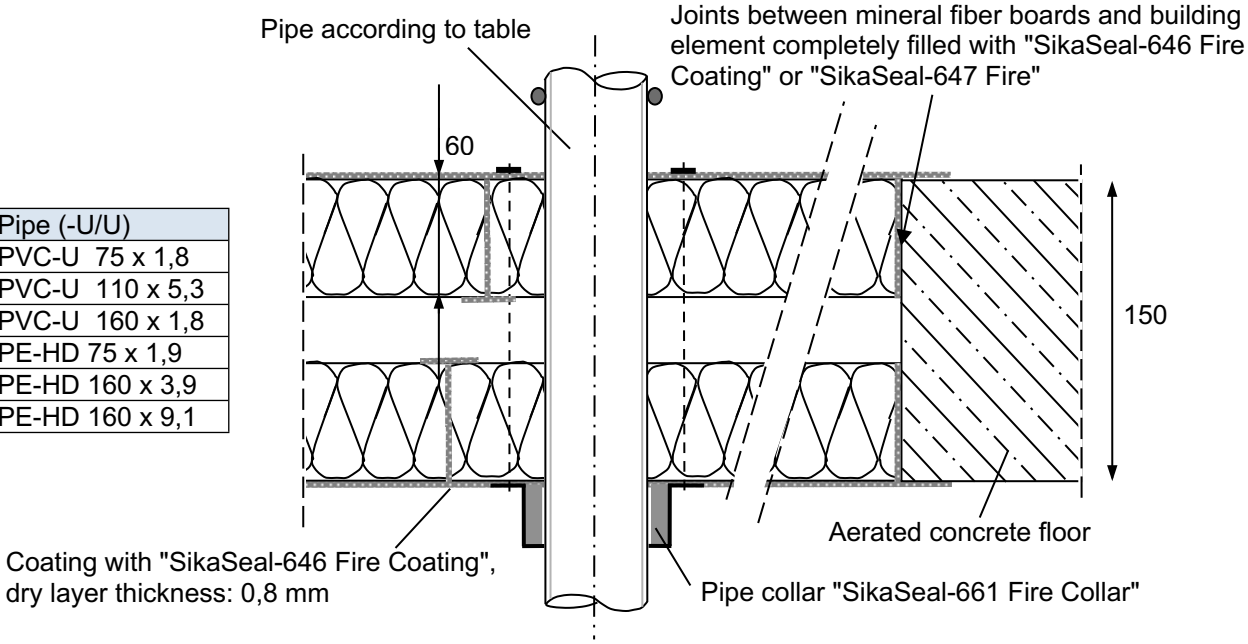
SikaSeal-661 Fire Collar	Annex 4
Use as part of a pipe penetration seal for installation in walls and floors – design of the test specimen (examples)	

Wall installation of the tested penetration seal: section
– Detail in the area of the collar "SikaSeal-661 Fire Collar"



Pipe (-U/U)
PVC-U 75 x 3,6
PVC-U 110 x 5,3
PVC-U 160 x 1,8
PE-HD 75 x 4,3
PE-HD 110 x 2,7
PE-HD 110 x 6,3
PE-HD 160 x 9,1

Floor installation of the tested penetration seal: section
– Detail in the area of the collar "SikaSeal-661 Fire Collar"



Pipe (-U/U)
PVC-U 75 x 1,8
PVC-U 110 x 5,3
PVC-U 160 x 1,8
PE-HD 75 x 1,9
PE-HD 160 x 3,9
PE-HD 160 x 9,1

Dimensions in mm

SikaSeal-661 Fire Collar	Annex 5
Use as part of a mixed penetration seal (**EI 90**) Installation in walls and floors – design of the test specimen in the area of the plastic pipes (front view and section of the entire test specimen see ETA-25/0809)	