

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-17/0943
of 11 March 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

Brandschutz-Rohbauelement...

Product family
to which the construction product belongs

product for penetration seals

Manufacturer

Dallmer GmbH & Co. KG
Sanitärtechnik
Wiebelsheidestraße 25
59757 Arnsberg
DEUTSCHLAND

Manufacturing plant

Dallmer GmbH & Co. KG
Sanitärtechnik
Wiebelsheidestraße 25
59757 Arnsberg
DEUTSCHLAND

This European Technical Assessment
contains

12 pages including 8 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 products

The construction product "Brandschutz-Rohbauelement..." consists essentially of a stainless steel sleeve with a flexible collar held by securing brackets, a socket and a viscous sealant.

The sealant, which is applied to the inner side the sleeve, is made of an intumescent material which expands under heat exposure.

The product can be designed in the design variants described in Annex 3.

A detailed technical description to the construction product is 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 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

The construction product "Rohbau-Brandschutzelement..." is intended for use as a component with a fire protection effect in penetration seals that are subject to fire safety requirements.

Construction products for penetration seals are used to seal openings in fire-resistant floors, which are penetrated by services.

Within the framework of this ETA, the resistance to fire of pipe penetration seals consisting of the construction products listed in Annex 1 was demonstrated.

The aim of pipe penetration seals is to preserve the fire resistance of the floor in the area where pipes connected to a floor drain have been fed through; the remaining opening between the floor drain and the circular edge of the building component shall be completely filled with a non-combustible mineral mortar of floor quality. The floor drain's odour trap needs to be filled with water.

More detailed information and data on the verified penetration seals are given in Annexes 2 to 8.

The construction product "Brandschutz-Rohbauelement..." is only intended for use in penetration seals applied under dry internal conditions without frost (relative humidity between 50 % and 85 % and temperatures between +5 °C and 90 °C ± 5 °C) only.

The performances in Section 3 relates exclusively to the penetration seals tested as part of this assessment (e.g. with respect to the design and arrangement of the penetration seal components and 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
Resistance to fire of a penetration seal containing the product	The resistance to fire depends on how the penetration seal is designed and installed and on the other components forming the penetration seal. More details on the tested penetration seals and the related fire resistance classes are given in Annexes 1 to 8.

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

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 11 March 2020 by Deutsches Institut für Bautechnik

Maja Tiemann
Head of Department

beglaubigt:
Bisemeier

The factory produced construction products "Brandschutz-Rohbauelement..." essentially consist of an insertion element made of stainless steel with mortar guard and built-in hangers, a pipe collar and an intumescent material.

"Brandschutz-Rohbauelement..."

Component	Description
Insertion element with built-in hangers	dimensions: see Annex 2 material: stainless steel (material number: 1.4301) thickness of the stainless steel sheet: $\geq 0,7$ mm (insert element) resp. ≥ 1 mm (built-in hangers) classification of the fire behavior: class A1 according to the commission decision 96/603/EC (in the amended version)
Mortar guard	flexible flange material: PVC
Pipe collar	dimensions: see Annex 2 material: PVC acc. to EN 1566
Sealing compound	material: intumescent material "Multifoam AK" ¹ thickness: 9 mm thickness tolerance: 8,8 mm up to 9,5 mm loss of mass on heating: 57,0 % up to 67 % (tested on 450°C over 30 minutes) density: 1300 kg/m ³ \pm 100 kg/m ³ expansion ratio: 13,5 bis 17,0 (sample thickness 9 mm on 450° C without applied weight) Expansion pressure: 0,32 up to 0,54 N/mm ² (sample thickness 9 mm on bei 300 ° C, method A) classification of the fire behavior according to EN 13501-1: Class E

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

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

Description of the additional components of the tested sealings

Drain body	see Annex 4 to 8
Attachment piece	see Annex 4 to 8
Sealing of the residual joint between pipe collar and soffit: Gypsum mortar	Classification of the fire behavior: class A1 according to the commission decision 96/603/EC (in the amended version)

¹ The material specifications are deposited at the DIBt.

Brandschutz-Rohbauelement...	Annex 1
Description of the construction products, properties and performances	

Performance of penetration seals comprising the construction product "Brandschutz-Rohbauelement..."

	Essential requirement	Test method	Construction of the sample	Performance acc. to EN 13501-2
1	Resistance to fire	EN 1366-3	150 mm thick rigid floor; design of the penetration seal acc. to Annex 5*	EI 120
2	Resistance to fire	EN 1366-3	150 mm thick rigid floor; design of the penetration seal acc. to Annex 6*	EI 120
3	Resistance to fire	EN 1366-3	150 mm thick rigid floor; design of the penetration seal acc. to Annex 7*	EI 120
4	Resistance to fire	EN 1366-3	150 mm thick rigid floor; design of the penetration seal acc. to Annex 8*	EI 120

* Illustrations without guarantee for completeness

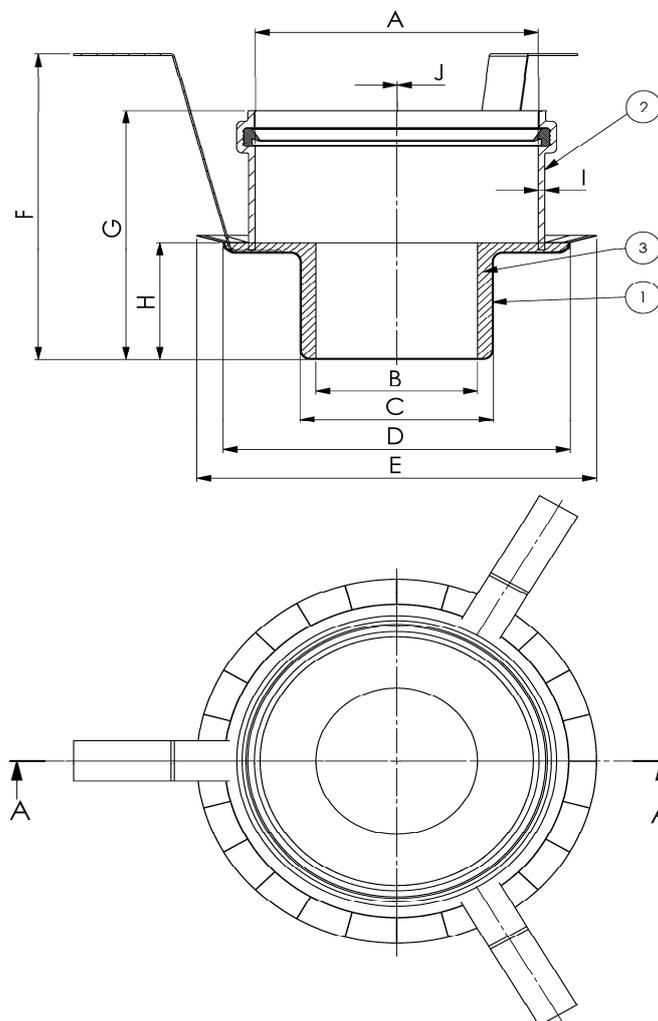
The use of the construction product "Brandschutz-Rohbauelement..." in penetration seals shall be in accordance with the national requirements for planning, design and execution and in accordance with the installation instruction of the manufacturer.

The tested/ illustrated seals are only examples for the use.

Brandschutz-Rohbauelement...

Description of the construction products, properties and performances

Annex 2



Description	Art.-No.	A	B	C	D	E	F	G	H	I	J
Brandschutz-Rohbauelement 1	515018	160	92	110	197,5	227	191	156	73	3,75	0
Brandschutz-Rohbauelement 2	515025	110	70	87	157	189	135,5	108,5	50	3,3	0
Brandschutz-Rohbauelement 11	515308	110	70	87	157	189	161,5	81,5	50	3,3	15

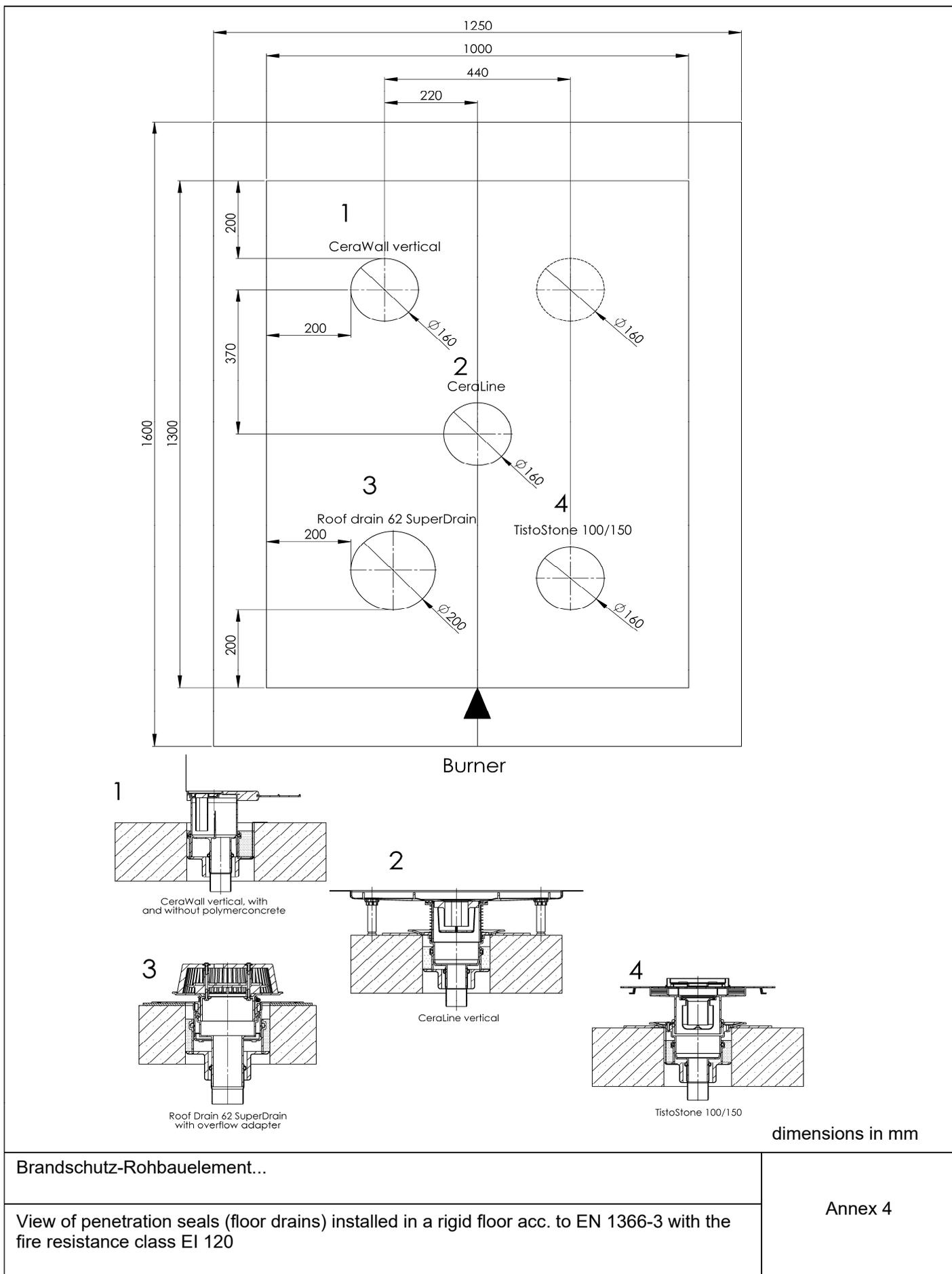
Pos.	Description	Quantity	Material		
			515018	515025	515308
1	Insertation element with built-in hangers and mortar guard	1	1.4301 / PVC	1.4301 / PVC	1.4301 / PVC
2	Pipe collar DIN EN 1566	1	PVC	PVC	PVC
3	Intumescent material	1	Multifoam	Multifoam	Multifoam

dimensions in mm

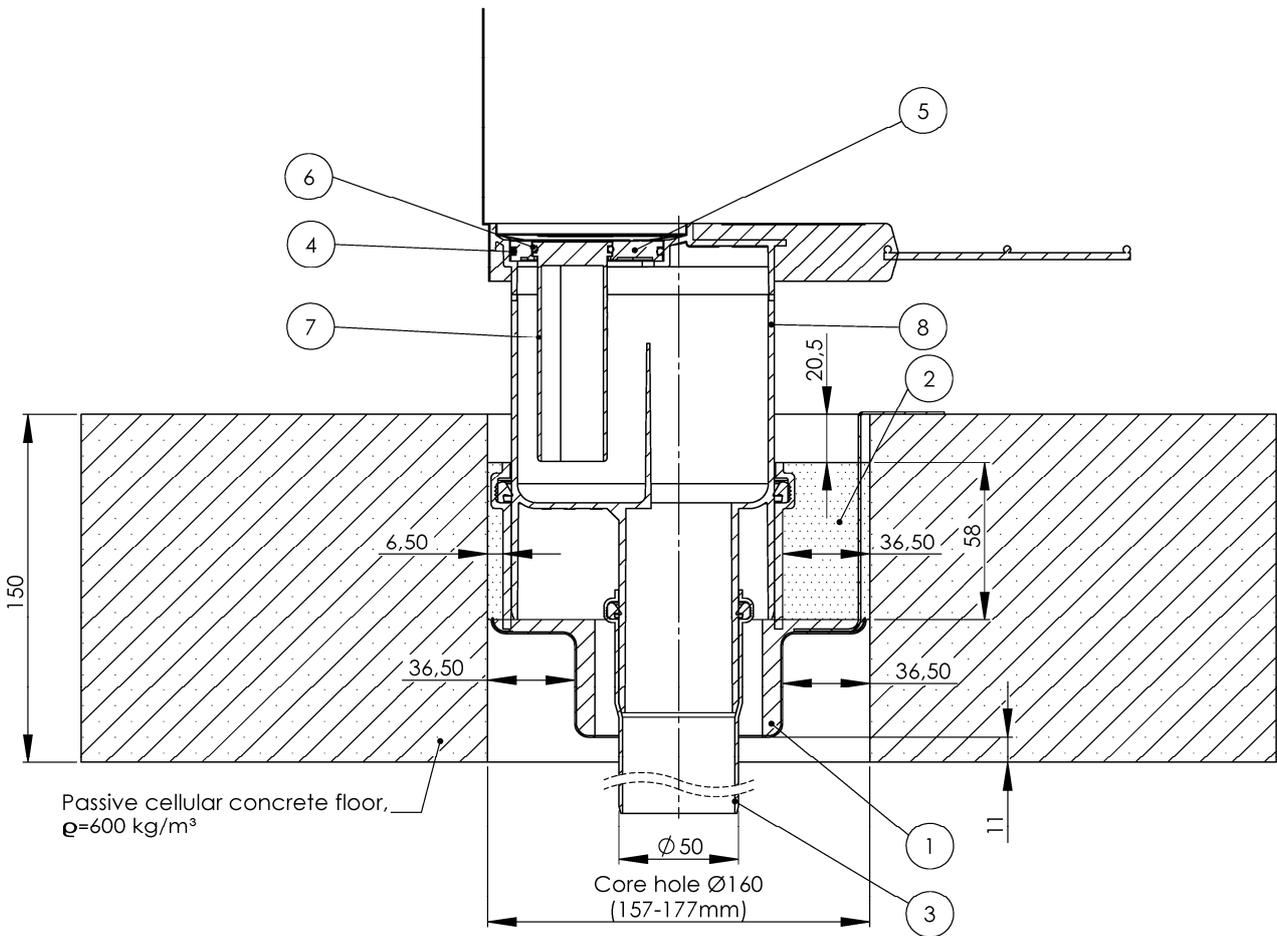
Brandschutz-Rohbauelement...

Brandschutz-Rohbauelement – sizes and design variants

Annex 3



English translation prepared by DIBt



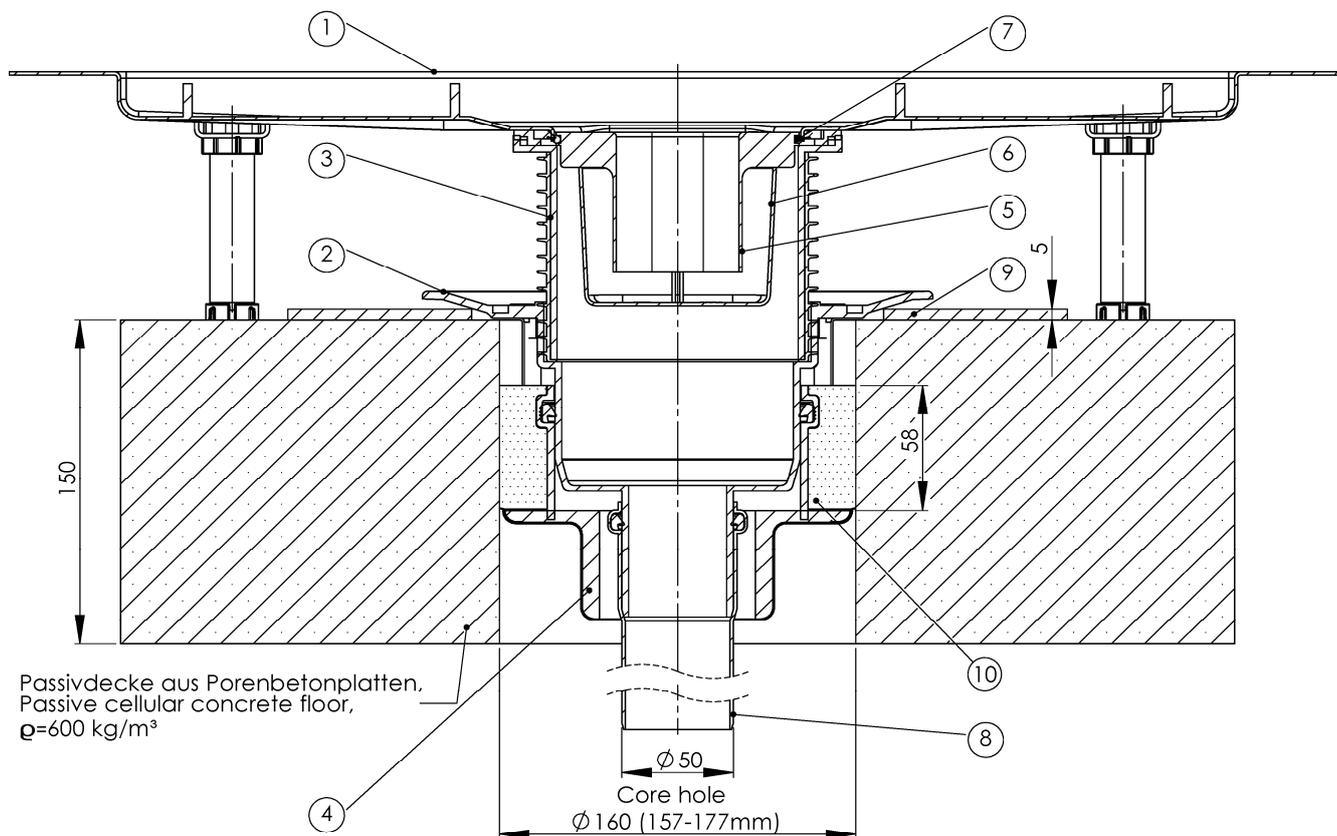
POS-NO.	DESCRIPTION	QUANTITY	MATERIAL
1	Brandschutz Rohbauelement 11	1	Stainless steel 1.4301 / Multifoam
2	Grouting with dimensionally stable, non-combustible building materials, such as Concrete, cement or gypsum mortar	1	according to EN13501-1 class A1
3	HT-Pipe DN50 according to EN 1451-1 PP, wall thickness 1,8 mm	1	PP-C
4	O-Ring seal $\varnothing 98 \times 3$, NBR 70	1	NBR 70
5	Changeable adapter to CeraWall vertical	1	PP-C
6	O-Ring seal $\varnothing 58 \times 2,5$, NBR 50	1	NBR 50
7	Trap for CeraWall vertical	1	PP-C
8	Drain body CeraWall vertical	1	ABS / Polymer-concrete

dimensions in mm

Brandschutz-Rohbauelement...

Penetration seal (floor drain) of the type "CeraWall senkrecht" under use of "Brandschutz-Rohbauelement 11"

Annex 5



POS.-NO.	DESCRIPTION	QUANTITY	MATERIAL
1	Floor channel CeraLine	1	Stainless steel 1.4301
2	Drain body 30	1	PP-C
3	Drain body CeraLine oval vertical $\varnothing 114,3\text{mm}$	1	PP-C/TPE
4	Brandschutz-Rohbauelement 2 S10, with Multifoam	1	Stainless steel 1.4301/ Multifoam
5	Drain Trap oval 109x48x74,5mm	1	PP-C
6	Drain trap insert oval 109x48x74,5mm	1	PP-C
7	O-Ring seal 80x3,5mm	1	NBR
8	HT-Pipe DN50 according to EN1451-1 PP, wall thickness 1,8 mm	1	PP-C
9	Sound insulating collar, Schaumfolie Gefizell TDZ	1	PS
10	Grouting with dimensionally stable, non-combustible building materials, such as concrete, cement or gypsum mortar	1	according to EN13501-1, class A 1

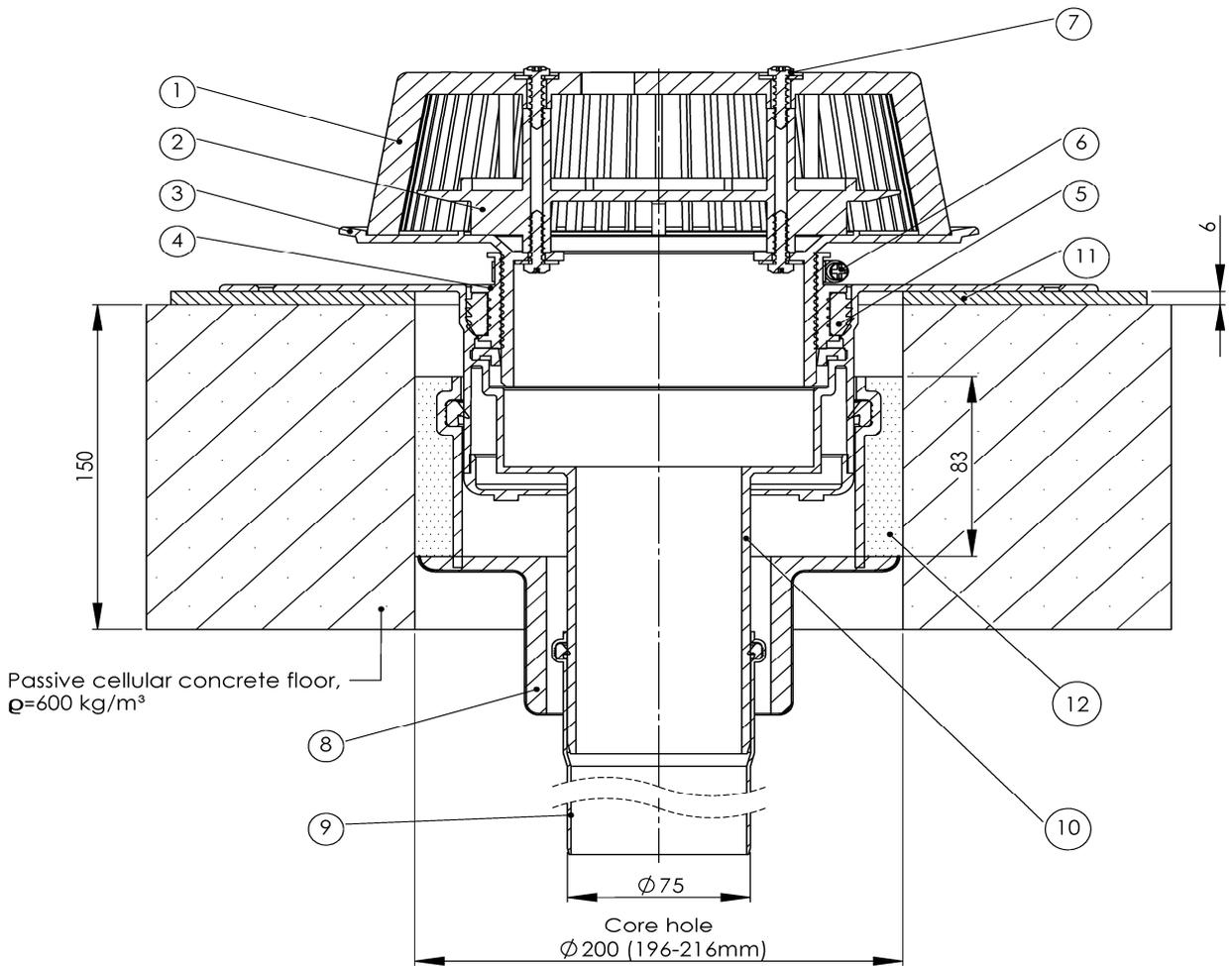
dimensions in mm

Brandschutz-Rohbauelement...

Penetration seal (floor drain) of the type "CeraLine senkrecht" under use of "Brandschutz-Rohbauelement 2"

Annex 6

English translation prepared by DIBt



POS.-NO.	DESCRIPTION	QUANTITY	MATERIAL
1	Domed grating 63T Dallmer/HL	1	PP-C
2	Pressure disc for overflow adapter	1	PP-C
3	High adjustment for overflow adapter	1	PP-C
4	Threaded adapter for overflow adapter	1	TPU
5	Seal Ø 136,5 mm	1	NBR
6	Hose clamp DIN3017, 9mm wide, Ø120-140mm	1	Chromium Steel
7	Screw RS-Plast rs 6,5 x 25 - A2	4	Stainless Steel 1.4301
8	Brandschutz-Rohbauelement 1 S15, with Multifoam	1	Stainless Steel 1.4301/ Multifoam
9	HT-Pipe DN70 according to EN 1451-1 PP, wall thickness 1,8 mm	1	PP-C
10	Drain Body 62 FPO DN 70 DALLMER	1	PP-C
11	Sound insulating collar, Schaumfolie Gefizell TDZ	1	PS
12	Grouting with dimensionally stable, non-combustible building materials, such as Concrete, cement or gypsum mortar	1	according to EN13501, class A1

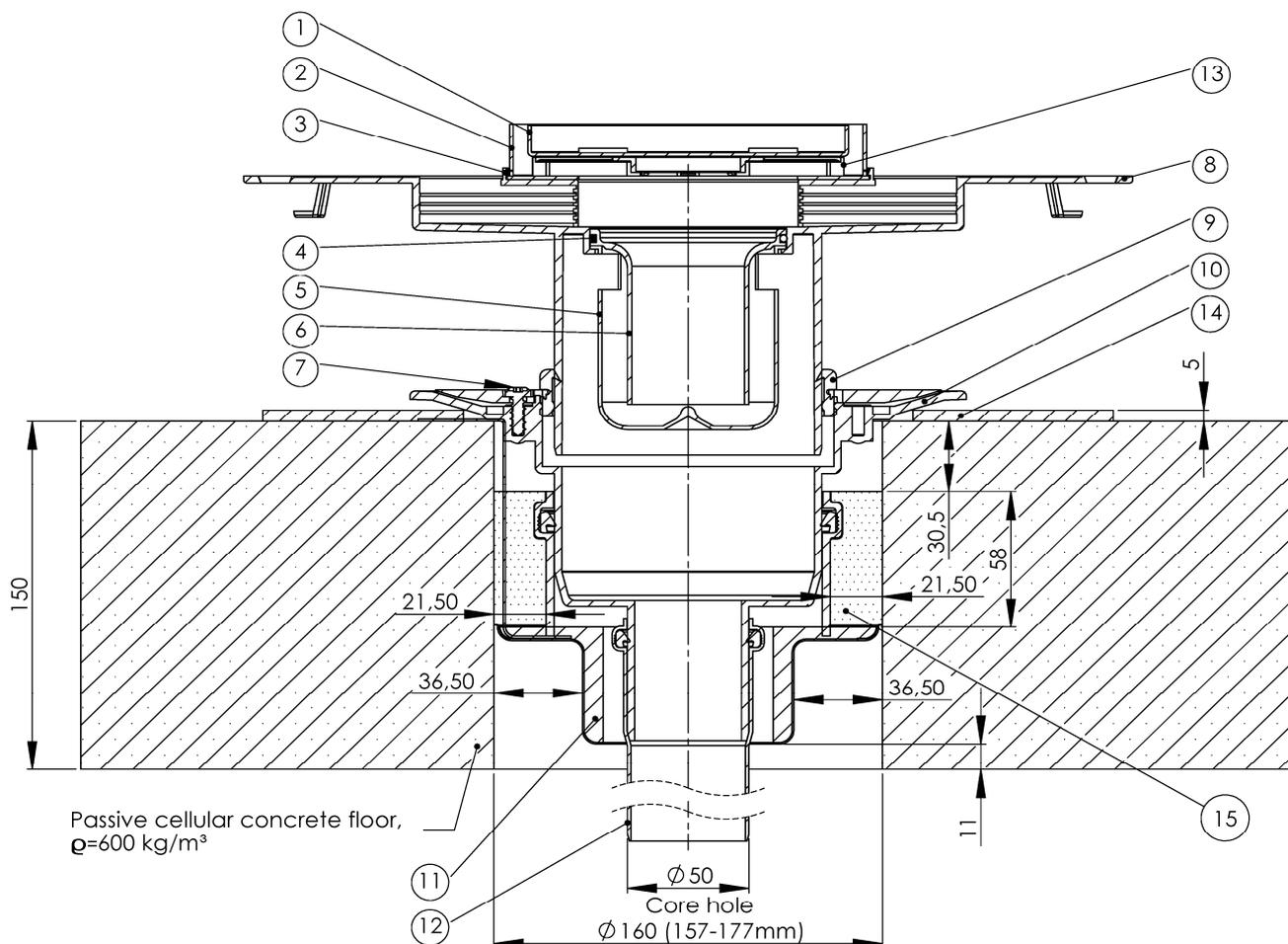
dimensions in mm

Brandschutz-Rohbauelement...

Penetration seal (floor drain) of the type "Dachablauf 62 SuperDrain mit Notentwässerungseinheit" under use of "Brandschutz-Rohbauelement 1"

Annex 7

English translation prepared by DIBt



Passive cellular concrete floor,
 $\rho=600 \text{ kg/m}^3$

POS.-NO.	DESCRIPTION	QUANTITY	MATERIAL
1	Inside frame TistoStone 100x100/150x150	1	Stainless steel 1.4301
2	Outside frame TistoStone 100x100/150x150	1	Stainless steel 1.4301
3	Hight adjustment frame TistoStone 100x100/150x150	1	ABS
4	O-Ring seal 74x3mm	1	NBR
5	Drain trap insert 48/49 CD	1	PP-C
6	Drain trap 48/49 CD	1	PP-C
7	Screw RS-Plast 6,5 x 17	3	Stainless steel 1.4301
8	Extension TistoStone 100x100/150x150mm	1	PP-C
9	CD-seal 10	1	PPC/TPE
10	Drain body 30	1	PPC
11	Brandschutz-Rohbauelement 2 S10, with Multifoam	1	Stainless steel 1.4301 / Multifoam
12	HT-Pipe DN 50 according to EN1451-1, PP, wall thickness 1,8 mm	1	PP-C
13	Distance element TistoStone 100x100/150x150	1	ABS
14	Sound insulating collar, Schaumfolie Geficell TDZ	1	PS
15	Grouting with dimensionally stable, non-combustible building materials, such as Concrete, cement or gypsum mortar	1	according to EN13501-1, class A1

dimensions in mm

Brandschutz-Rohbauelement...

Penetration seal (floor drain) of the type "TistoStone 100/150" under use of "Brandschutz-Rohbauelement 2"

Annex 8