

**Approval body for construction products
and types of construction**

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

**ETA-13/0386
of 18. September 2015**

General Part

Technical Assessment Body issuing the
European Technical Assessment:

Trade name of the construction product

Product family
to which the construction product belongs

Manufacturer

Manufacturing plant

This European Technical Assessment
contains

This European Technical Assessment is
issued in accordance with Regulation (EU)
No 305/2011, on the basis of

This version replaces

Deutsches Institut für Bautechnik

Poresta floor-level shower systems

Watertight covering kit for wet room floors and walls
based on watertight boards

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10 pages including 3 annexes which form an integral part
of this assessment

Guideline for European technical approval of "Watertight
Covering Kits for Wet Room Floors and/or Walls",
ETAG 022 Part 3: "Kits based on inherently watertight
boards", November 2010,
used as European Assessment Document (EAD)
according to Article 66 Paragraph 3 of Regulation (EU)
No 305/2011.

ETA-13/0386 issued on 24 May 2013

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Specific Part

1 Technical description of the product

"Poresta floor-level shower systems" is a watertight covering kit for wet rooms. The kit consists of the following components:

- Watertight boards on the basis of expanded polystyrene (EPS) the water exposed side clutched with a mineral mortar:

Product	Main dimensions			Description
	Length [mm]	Width [mm]	Thickness [mm]	
Poresta BF KMK	800 – 1800	800 – 1500	45 – 60	without slope or penetration, for walls and floors
Poresta BF KMK	800 – 1800	800 – 1500	45 – 60	with penetration for point-shaped floor gully for a thickness of floor construction ≥ 45 mm
Poresta BF 95	800 – 1800	800 – 1500	30 -40	with penetration for point-shaped floor gully for a thickness of floor construction ≥ 95 mm
Poresta BF 70	1200	1200	70	with penetration for point-shaped floor gully for a thickness of floor construction ≥ 70 mm
Poresta Limit S	900 – 2000	900 – 1200	45 - 65	with penetration for linear floor gully
Poresta Limit S 95	1200	1200	95	with penetration for linear floor gully for a thickness of floor construction ≥ 95 mm
Poresta BFR	1400	1200	120	with adapter for linear floor gully
Poresta BFR 75	1200	1200	75	with one penetration for a linear floor gully for a thickness of floor construction ≥ 75 mm
Poresta Slot	1200	1200	65	with one penetration for a linear floor gully at two edges
Poresta Slot S	1200 – 2000	1200	60 -105	with one penetration for a linear floor gully at one edge
Poresta Plus Ge	1000 – 1400	1000 – 1200	50 - 60	for floors with in the wall integrated gullies

The geometry of the boards can be quadratic, rectangular pentagonal or quadrantic. Prefabricated parts with maximum dimensions for length ≤ 2700 mm and width ≤ 2400 mm are possible. The boards for the floor are sloped in direction to the floor gully. Partially the floor gullies are inserted by manufacturing plant. The gully is not part of the kit.

Other dimensions of the boards for length and width can be cut from a board.

- Adhesive for the boards "Poresta Profi Flex" and "PCI Bicolit Classic" on the basis of cement mortar and "Ceresit CM UltraFlex" on the basis of a reaction resin according to EN 12004¹
- Sealing mass "Poresta KMK", "Poresta KMK 2K" and "Sopro TDS 823" according to EN 14891²
- sealing tape
"Poresta KMK T", width 120 mm
- sealing details
"Poresta KMK TI", side length 118 mm
"Poresta KMK TA", side length 118 mm
"Poresta KMK TM 10 - 20", main dimensions 120 x 120 mm
"Poresta KMK TM 40 - 50", main dimensions 250 x 250 mm
"Poresta KMK TM 70 - 100", main dimensions 250 x 250 mm
- adhesives for tiles on the basis of cement mortar according to EN 12004
Sakret FFK Mapei Adesilex P9
Schönox PFK plus ARDEX X 77
Sopro No. 1

The kit is intended to be used on a substrate and under a wearing surface, e. g. tiles. The wearing surface and its jointing material are not part of the kit, but are considered during the assessment of the intended use of the product.

Annex A1 shows the system build-up and Annex A2 shows the sealing details.

2 Specification of the intended use in accordance with the applicable European assessment Document

The intended use of the watertight covering kit under a wearing surface is to create a floor and wall watertight covering for indoor wet areas at possible operating temperature of 5 °C till 40 °C.

The following uses are intended:

- Floor and/or wall surfaces with only occasional direct exposure to water, e. g. at a good distance from shower or bathtub;
- Floor and/or wall in shower areas or around bathtubs used for a few showers daily, e. g. in ordinary dwellings, multifamily houses and hotels;
- Floor and/or wall surfaces with exposure to water more frequent or of longer duration than normally anticipated in dwellings, e. g. public wet rooms, schools and sport facilities.

The watertight board is intended to be used on flexible substrates e. g. plywood, chipboard, gypsum, anhydrite or similar material vulnerable to water and on rigid substrates e. g. masonry or concrete.

1	EN 12004:2007	Adhesives for tiles - Requirements, evaluation of conformity, classification and designation
2	EN 14891:2013	Liquid applied water impermeable products for use beneath ceramic tiling bonded with adhesives - Requirements, test methods, evaluation of conformity, classification and designation

The product should be used in connection with the following types of gullies:

Stainless steel or plastics – type PE, PP or ABS – with clamping ring and collar or prefabricated by PORESTA.

The gullies are not part of the kit. It is up to the responsibility of the user to use suitable products of the given type.

The performances given in Section 3 are only valid if the watertight covering kit is used in compliance with the specifications and conditions given in Annex B.

The verifications and assessment methods on which this European Technical Assessment is based lead the assumption of working life of the watertight covering kit of 25 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

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

3.1 Mechanical resistance and stability (BWR 1)

Not applicable

3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	See Annex A1

3.3 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Release of dangerous substances:	
Component: Tile adhesive (CE-marked)	according to EN 12004
Component: Sealing mass (CE-marked)	according to EN 14891
All other components	The chemical composition of the construction kit has to be in compliance with the composition deposited at the Technical Assessment Body (DIBt). The product does not contain dangerous substances specified in TR 034 (version April 2014) expect: VOC, SVOC: The release of dangerous substances to indoor air is not verified with this ETA
Vapour permeability	See Annex A1, declared value
Watertightness	See Annex A1
Crack bridging ability	See Annex A1, category
Bond strength	See Annex A1, category
Scratching resistance	See Annex A1, declared value

Essential characteristic	Performance
Joint bridging ability	See Annex A1, category
Watertightness around penetration	See Annex A1, category

3.4 Safety and accessibility (BWR 4)

Essential characteristic	Performance
Slipperiness	See Annex A1, declared value

3.5 Protection against noise (BWR 5)

Not applicable

3.6 Energy economy and heat retention (BWR 6)

Not applicable

3.7 Sustainable use of natural resources (BWR 7)

For the sustainable use of natural resources no performance was investigated for this product.

3.8 General aspects

The verification of durability and serviceability is part of testing the essential characteristics and by additional tests on the kit respectively on the components:

Essential characteristic	Performance
Dimensional stability	See Annex A1, declared value
Resistance to temperature	See Annex A1, category
Resistance to water	See Annex A1, category
Resistance to alkalinity	See Annex A1, category
Resistance to mechanical wear	See Annex A1, declared value
Cleanability	See Annex A1, declared value
Reparability	See Annex A1, statement of the manufacturer
Thickness	See Annex A1, declared value
Applicability	See Annex A1, declaration

The verification of durability and serviceability is only ensured if the specifications of intended use according to Annex B and the specifications of the technical file of the manufacturer are kept.

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

According to Decision of the Commission of 12 September 2003 (2003/655/EC) (OJ L 231 of 17.09.2003, p. 12) the system of assessment and verification of constancy of performance (see Annex V and Article 65 Paragraph 2 to Regulation (EU) No 305/2011) given in the following table applies.

Product	Intended use(s)	Level or class	System
Watertight covering kits for wetroom floors and walls	For building works	-	2+
	For uses subject to regulation on reaction to fire	E	3

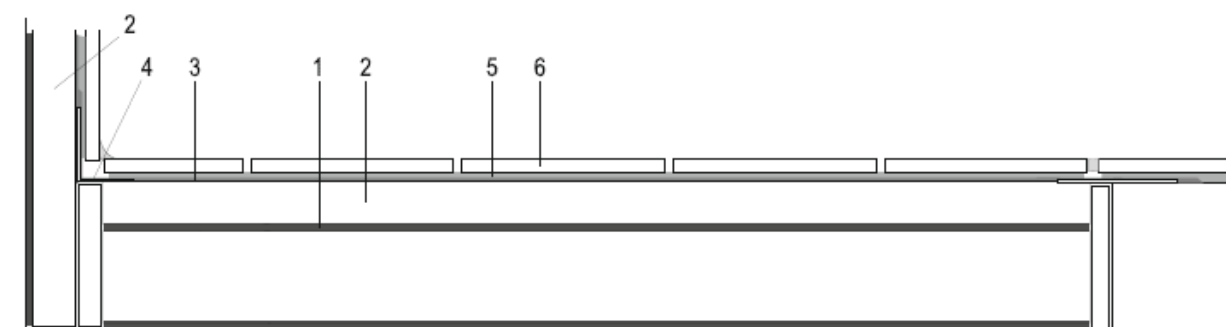
5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at Deutsches Institut für Bautechnik.

Issued in Berlin on 18 September 2015 by Deutsches Institut für Bautechnik

Dirk Brandenburger
Head of Department

beglaubigt:
Hemme



- 1 Adhesive "Poresta Profi Flex", "PCI Bicolit Classic", "Ceresit CM UltraFlex"
- 2 Watertight board "Poresta floor-level shower systems"
- 3 Sealing mass for Details "Poresta KMK", "Poresta KMK 2K", "Sopro TDS 823"
- 4 Sealing tape "Poresta KMK T"
- 5 Tile adhesive (see Annex A2)
- 6 Wearing surface (e. g. tiles) (not part of the kit)

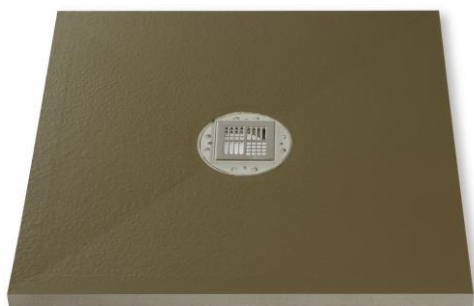
Applicable to the watertight covering kit:	
Thickness of the watertight boards	20 to 120 mm
Working life	25 years
Reaction to fire EN 13501-1	class E
Statement on dangerous substance	see section 3.3
Water vapour diffusion resistance factor (23 °C – 50/93 % r.h.)	$s_d > 172 \text{ m}$
Water tightness	watertight
Impermeability at sealings	pass
Scratch resistance	not relevant acc. ETAG 022-3
Dimensional Stability	all directions $< \pm 1 \%$
Resistance to mechanical wear	not relevant acc. ETAG 022-3
Cleanability	not relevant acc. ETAG 022-3
Reparability	no performance assessed
Slipperiness	no performance assessed
Applicability	applicable
Levels of categories according ETAG 022 with relation to:	
Use category related to BWR 3	IA 2
Crack bridging ability	category 1: 0.4 mm
Bond strength	category 1 and 2: $\geq 0.2 \text{ MPa}$ or 0.3 MPa (see Annex A2)
Joint bridging ability	category 0: not relevant
Water tightness around penetrations	category 2: watertight
Resistance to temperature	category 1 and 2: temperature resistant
Resistance to water	category 2: water resistant
Resistance to alkalinity	category 1 and 2: alkali resistant (50 °C/8 W)

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System built-up and classification

Annex A1

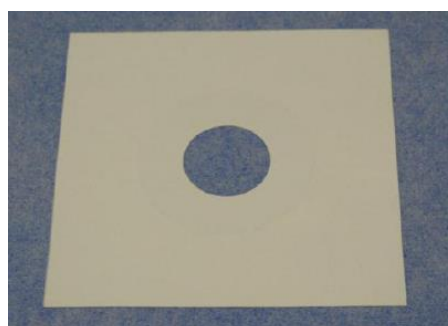
Components:



Example of a watertight board "Poresta BF xx"



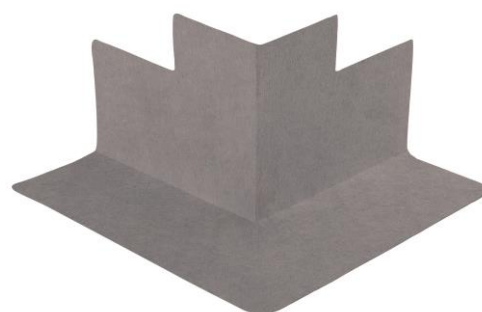
Sealing tape "Poresta KMK T"



Sealing sleeve "Poresta KMK TM xx-xx"



Ingoing Corner "Poresta KMK TI"



Outgoing Corner "Poresta KMK TA"

Tile adhesives	Bond strength category
Sakret FFK	1
SCHÖNOX PFK plus	1
Sopro N°1	2
Mapei Adesilex P9	2
ARDEX X 77	2

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Components

Annex A2

Installation

The levels of use categories and the performance of the waterproofing kit can be assumed only, if the installation is carried out according to the installation instructions stated in the technical file of the manufacturer, in particular taking account of the following points:

- installation by appropriately trained personnel,
- installation of only those components which are specified components of the kit,
- installation with the required tools and adjuvant,
- precautions during installation,
- inspecting the substrate surface for cleanliness and correct treatment,
- inspecting during installation and of the finished watertight membrane and documentation of the results.

Poresta floor-level shower systems poresta systems GmbH	Annex B
Intended use Specifications	