

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-09/0155
of 9 December 2014

General Part

Technical Assessment Body issuing the
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

KEMPEROL 022 Sealing

Product family
to which the construction product belongs

Liquid applied covering kits for wet room floors and/or
walls

Manufacturer

KEMPER SYSTEM GmbH & Co. KG
Holländische Str. 32-36
34246 Vellmar
DEUTSCHLAND

Manufacturing plant

KEMPER SYSTEM GmbH & Co. KG
Holländische Str. 32-36
34246 Vellmar
DEUTSCHLAND

This European Technical Assessment
contains

8 pages including 3 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

Guideline for European technical approval of "Watertight
Covering Kits for Wet Room Floors and/or Walls",
ETAG 022 Part 1: "Liquid Applied Coverings with or
without Wearing Surface", Version April 2007,
used as European Assessment Document (EAD)
according to Article 66 Paragraph 3 of Regulation (EU)
No 305/2011.

This version replaces

ETA-09/0155 issued on 14 July 2009

The European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction has to be identified as such.

This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission according to Article 25 Paragraph 3 of Regulation (EU) No 305/2011.

1 Technical description of the product

The watertight covering "KEMPEROL 022 Sealing" is a kit. It consists of a two-component liquid waterproofing membrane on the basis of an epoxy modified polyurethane and a reinforcement fleece "KEMPEROL 500 Vlies" on the basis of polyester.

Details for sealing pipe penetrations, floor gullies, sealing joints, corners and edges belonging to the kit are cut of the polyester fleece.

The kit is intended to be used under a wearing surface, e.g. tiles, bonded with the adhesive "KEMPERDUR MT" on the basis of cement mortar. The adhesive is CE-marked according to EN 12004¹.

The wearing surface and the 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 for wet areas 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 under a wearing surface is to create a floor and wall watertight covering on 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 membrane is intended to be used on flexible substrate e.g. plywood, chipboard, gypsum, anhydrite or similar material vulnerable to water and on rigid substrates e.g. masonry or concrete.

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

Stainless steel or plastics – type PE or PP – with flange for attaching of collar/membrane or with clamping ring and collar

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

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.

¹ EN 12004:2007 Adhesives for tiles – Requirements, evaluation of conformity, classification and designation

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
Content and/or release of dangerous substances:	
Component: Tile adhesive (CE-marked)	According to EN 12004
All other components	The chemical composition of the product has to be in compliance with the composition deposited at the Technical Assessment Body (DIBt). The kit does not contain or release dangerous substances according to EOTA TR 034 (version April 2014)
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
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
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
Repairability	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

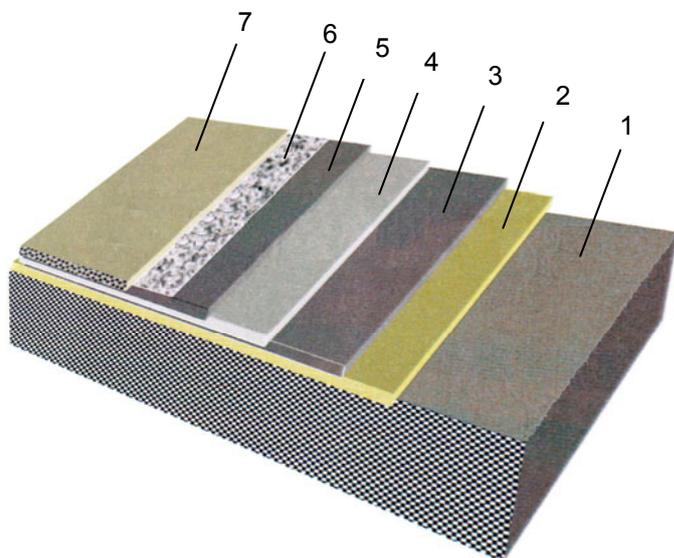
5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

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 9 December 2014 by Deutsches Institut für Bautechnik

Dirk Brandenburger
Head of Department

beglaubigt:
Hemme



- 1 Substrate
- 2 KEMPEROL 022
- 3 KEMPEROL 500 Vlies
- 4 KEMPEROL 022
- 5 Quartz sand (not part of the kit)
- 6 Adhesive KEMPERDUR MT
- 7 Protectionlayer (e.g. tiles)(not part of the kit)

Applicable to the watertight covering kit:	
Minimum layer thickness of the waterproofing layer	1.0 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	$s_d = 2,7 \text{ m}; \mu \approx 2.700$
Water tightness	watertight
Scratch resistance	npd
Resistance to mechanical wear	npd
Cleanability	npd
Reparability	reparabel
Slipperiness	npd
Applicability	applicable
Levels of categories according ETAG 022 with relation to:	
Use category related to BWR 3	IA2
Crack bridging ability	category 3: 1.5 mm
Bond strength	category 2: $\geq 0.5 \text{ MPa}$
Joint bridging ability	category 2: watertight
Water tightness around penetrations	category 2: watertight
Resistance to temperature	category 2: $\geq 0.5 \text{ MPa}$
Resistance to water	category 2: $\geq 0.5 \text{ MPa}$
Resistance to alkalinity	category 2: $\geq 0.5 \text{ MPa}$

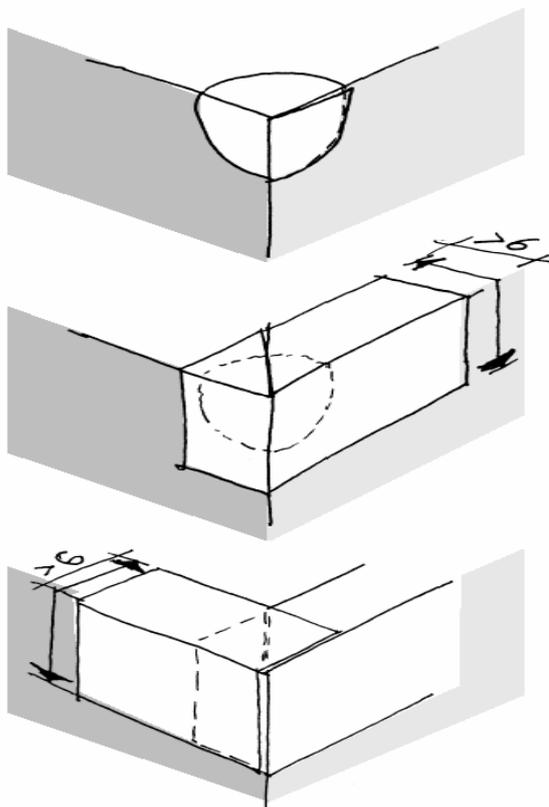
KEMPEROL 022 Sealing
KEMPER SYSTEM GmbH & Co. KG

System built-up and classification

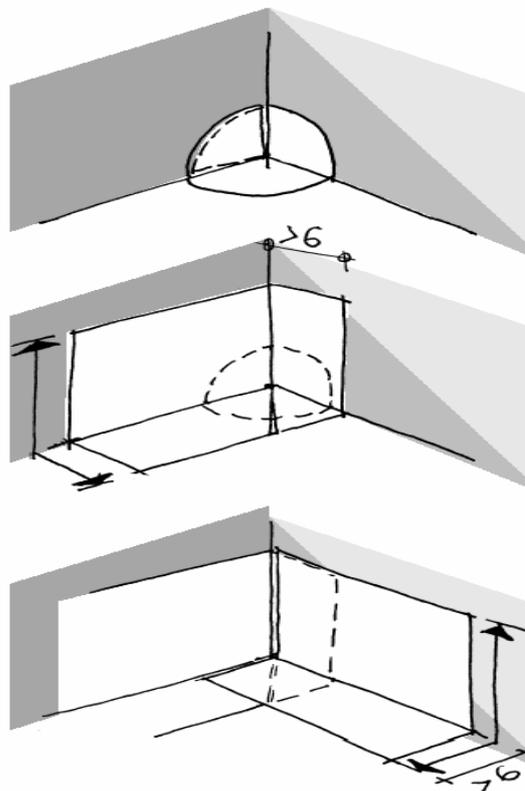
Annex A1

KEMPEROL 500 Vlies – Cuts for details

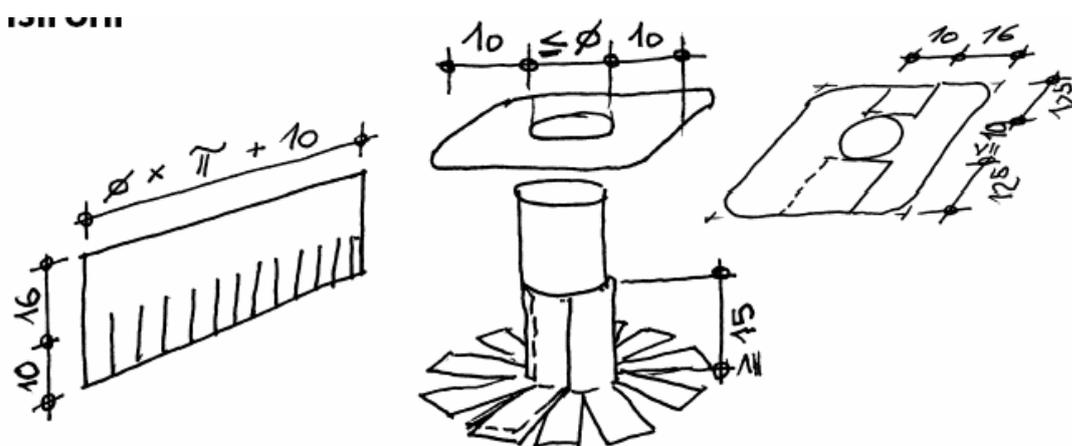
outgoing corner



ingoing corner



penetrations



KEMPEROL 022 Sealing
KEMPER SYSTEM GmbH & Co. KG

Cuts for details

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.