Deutsches Institut für Bautechnik

Member of EOTA
www.eota.eu

Approval body for construction products and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and Laender Governments

Designated according to Article 29 of Regulation (EU) No 305/2011 and member of EOTA (European Organisation for Technical Assessment)

European Technical Assessment ETA-12/0416 of 18 April 2016

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	KEMPEROL AC Speed KEMPEROL AC Speed+
Product family to which the construction product belongs	Liquid applied roof waterproofing on the basis of polymethylmethacrylate
Manufacturer	KEMPER SYSTEM GmbH & Co. KG Holländische Str. 32-36 34246 Vellmar DEUTSCHLAND
Manufacturing plant	KEMPER SYSTEM GmbH & Co. KG Holländische Straße 32-36 34246 Vellmar KEMPER SYSTEMS Italia s. r. l. Via A. Meucci, 9 20060 - Pozzo d'Adda (Milano)
This European Technical Assessment contains	7 pages including 2 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 "Liquid applied roof waterproofing kits", ETAG 005 Part 4: "Specific stipulations for kits based on flexible unsaturated polyester", Version March 2000, amended March 2004, used as European Assessment Document (EAD) according to Article 66 Paragraph 3 of Regulation (EU) No 305/2011.

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This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 25(3) of Regulation (EU) No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

Specific Part

1 Technical description of the product

The liquid applied roof waterproofing "KEMPEROL AC Speed"/"KEMPEROL AC Speed+" is a kit, which consists of the components:

- Primer "KEMPERTEC AC Primer", depending on the type of substrate
- liquid applied roof waterproofing on the basis of a polymethylmethacrylate
- polyester fleece layer "KEMPEROL 120 Fleece" or "KEMPEROL 165 Fleece"

For an adequate adhesion of the waterproofing layer – depending on the type of substrate – a primer is required. In general the primer belonging to the substrate is given in the manufacturer technical documents[1]. In single cases the manufacturer is responsible to give guidance which pretreatment/primer is required.

The minimum layer thickness of the roof waterproofing applied is 1.8 mm.

As an assembled system these components form a homogeneous seamless roof waterproofing.

The components and the system build-up of the roof waterproofing "KEMPEROL AC Speed" / "KEMPEROL AC Speed+" are given in Annex A.

2 Specification of the intended use in accordance with the applicable EAD

The product is used for the waterproofing of roof surfaces against penetration of atmospheric water.

The product is suitable for compressible substrates (e.g. insulation boards) and non compressible substrates (e.g. steel, concrete).

In the technical file the manufacturer give information concerning the substrates which the product is suitable for and on how these substrates shall be pre-treated.

The levels of use categories are given in Annex A.

The verification and assessment methods on which this European Technical Assessment is based lead to the assumption of working life of the product 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.

The levels of use categories and performances given in Section 3 are only valid if the liquid applied roof waterproofing is used in compliance with the specifications and conditions given in Annex B and the installation instructions of the manufacturer stated in the technical documents.

[1] The manufacturer's technical documents comprises all information necessary for the production and the installation of the product as well as for repair of the roof waterproofing made from that and it is deposited with DIBt.

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
External fire performance	See Annex A
Reaction to fire	See Annex A

3.3 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Water vapour permeability	See Annex A
Watertightness	See Annex A
Release of dangerous substances	The chemical composition of the product has to be in compliance with the composition deposited at the Technical Assessment Body (DIBt). The product does not contain dangerous substances according to TR 034 (version September 2015)
Resistance to mechanical damage (perforation)	See Annex A, Levels of use categories
Resistance to plant roofs	See Annex A

3.4 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Resistance to wind loads	See Annex A
Slipperiness	See Annex A

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. 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 October 1998 (98/599/EC) (OJ L 287 of 24.10.98, p. 30), as amended by Decision of the Commission of 8 January 2001 (2001/596/EC) (OJ L 209 of 02.08.2001, p. 33), 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
Liquid applied roof waterproofing kits	For uses subject to external fire performance regulations	B_{ROOF} (t1)	3
	For uses subject to reaction to fire	E	3
	All other roof waterproofing uses (all other characteristics)	—	3

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

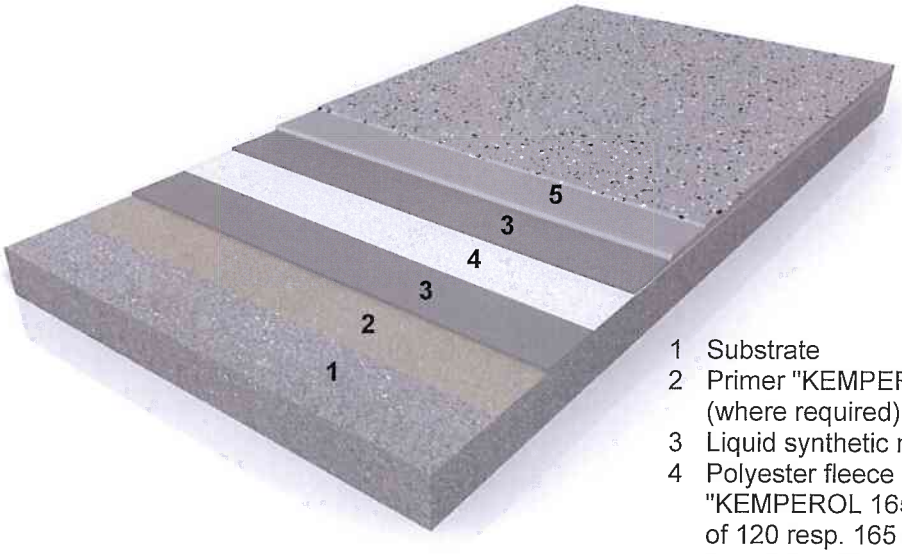
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at Deutsches Institut für Bautechnik.

Issued in Berlin on 18 April 2016 by Deutsches Institut für Bautechnik

Uwe Bender
Head of Department

beglaubigt:
Gnamou

Deutsches Institut für Bautechnik DIBt



1 Substrate
2 Primer "KEMPERTEC AC Primer" (where required)
3 Liquid synthetic material
4 Polyester fleece layer "KEMPEROL 120 Fleece" or "KEMPEROL 165 Fleece" with a nominal weight of 120 resp. 165 g/m²
5 Topping (optional: decorative finish)

Applicable to the roof waterproofing **"KEMPEROL AC Speed" / "KEMPEROL AC Speed+"**

Minimum layer thickness		1.8 mm
minimum quantity consumed		2.5 kg/m²
Levels of use categories according to ETAG 005 with relation to:		
Working life:		W3 (25 years)
Climatic zones:		M and S (moderate and severe climatic)
Resistance to mechanical damage (perforation):		P1 to P4 (low to special) (compressible substrates (e.g. insulation board and non compressible substrates (e.g. steel, concrete)
Roof slope:		S1 to S4 (from <5° to >30°)
Lowest surface temperature:		TL4 (-30 °C)
Highest surface temperature:		TH4 (90 °C)
Classification related to BWR 3		S/W 2
Performance of the product:		
External fire performance	EN 13501-5	class B_{ROOF} (t1)*
Reaction to fire	EN 13501-1	class E
Water vapour diffusion resistance factor μ		≈ 6600
Watertightness		pass
Statement on dangerous substances		see section 3.3
Resistance to plant roofs		root resistant for a minimum layer thickness 2,0 mm
Resistance to wind loads		≥ 50 kPa
Resistance to slipperiness		no performance determined

*Class B_{ROOF} (t_1)
The classification is valid for the following supporting decks:

- roof pitches ≤ 20°
- any non-combustible continuous deck with a minimum thickness of 5 mm

Any other roof systems for which classification documents for B_{ROOF} (t_1) according EN 13501-5 are available.

KEMPEROL AC Speed KEMPEROL AC Speed+	Annex A
System built-up and classifications	

Deutsches Institut für Bautechnik DIBt

Installation

The levels of use categories and the performances of the roof waterproofing 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 marked components of the kit,
- installation with the required tools and adjuvants,
- precautions during installation,
- inspecting the roof surface for cleanliness and correct preparation, if need be, applying a primer before applying the product,
- inspecting compliance with suitable weather and curing conditions,
- finding out the mix ratio depending on the ambient temperature,
- ensuring a thickness of the cured waterproofing of at least 1.8 mm by processing appropriate minimum quantities of material,
- inspections during installation and of the finished product and documentation of the results.

The information as to the

- method of repair on site,
- handling of waste products

shall be observed.

KEMPEROL AC Speed KEMPEROL AC Speed+	Annex B
Intended use Specifications	