Deutsches Institut für Bautechnik

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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-09/0146 of 14 January 2019

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	Schlüter-KERDI / Schlüter-KERDI-DS
Product family to which the construction product belongs	Waterproofing kit based on polymeric membranes for in- and outdoor walls and floors of wet areas and swimming pools
Manufacturer	Schlüter-Systems KG Schmölestraße 7 58640 Iserlohn DEUTSCHLAND
Manufacturing plant	Schlüter-Systems KG, manufacturing plant 58313 Schlüter-Systems KG, manufacturing plant 58453
This European Technical Assessment contains	9 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	EAD 030400-00-0605
This version replaces	ETA-09/0146 issued on 14 June 2013

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Specific part

1 Technical description of the product

The watertight system "Schlüter-KERDI" / "Schlüter-KERDI-DS" is a kit. It consists of the following components:

- plain waterproofing membrane "Schlüter-KERDI" on the basis of polyethylene with polyester covering fleece on both sides, d = 0,5 mm
- or waterproofing membrane "Schlüter-KERDI-DS" on the basis of polyethylene with polyester covering fleece on both sides, d = 0,6 mm
- adhesive "ARDEX DITRA FBM" on the basis of cement mortar for gluing the membrane to the substrate and the wearing surface to the membrane
- sealing tape "Schlüter-KERDI-KEBA" on the basis of fleece covered polyethylene for sealing joints
- collar "Schlüter-KERDI-KM" on the basis of fleece covered polyethylene for sealing of pipe penetrations
- corner strip "Schlüter-KERDI-KERECK" on the basis of fleece covered polyethylene membrane for sealing in and out going corners
- assembly glue "Schlüter-KERDI-COLL-L" on the basis of two-component acrylic dispersion for gluing "Schlüter-KERDI-KEBA", "Schlüter-KERDI-KM" and "Schlüter-KERDI-KERECK" to the polyethylene membrane

The kit is intended to be used under a wearing surface, e.g. tiles. The wearing surfaces 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 show the system build-up for wet areas and Annex A2 shows the components for sealing details.

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

The intended use of the watertight system "Schlüter-KERDI" / "Schlüter-KERDI-DS" is to create a watertight covering under a wearing surface for in- and outdoor walls and floors of wet areas and swimming pools for the following uses:

(A)

- 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 and lower galleries of swimming pools

(B)

- floor and/or wall surfaces in swimming pools against pressing water from inside up to a height of water or 10 m

The collars, sleeves belonging to the kit are used for sealing pipe penetrations and floor gullies and sealing tapes and preformed corners are used for sealing joints, corners and edges.

The watertight system in combination with covering tiles may only be used on sustainable, flexible or rigid substrates.

The product shall 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 verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the waterproofing kit of at least 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 performance given in Section 3 is only valid if the waterproofing kit is used in compliance with the specifications and conditions given in Annex B1 and the installation instructions of the manufacturer stated in the technical documents[1].

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	See Annex A1

[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.

3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic		**Performance**	
Content, emission and/or release of dangerous substances			
Substance/s classified as EU-cat. Carc. 1A and/or 1B[a)]		The kit does not contain these dangerous substances actively used.[b)]	
Substance/s classified as EU-cat. Muta. 1A and/or 1B[a)]			
Substance/s classified as EU-cat. Acute Tox. 1, 2 and/or 3; Repr. 1A and/or 1B; STOT SE 1 and/or STOT RE 1[a)]		The kit does contain a substances classified as Acute Tox. 3, labeled with H301.[b)]	
SVOC and VOC	Exclusively the component "Schlüter-KERDI" was tested for the emission of dangerous substances using the loading factor L of 1,0 m^2/m^3 and therefore assessed: [c)]		
		3 days	28 days
	Carcinogens (Cat. 1A/1B)	< 0.01 mg/m^3	< 0.001 mg/m^3
	TVOCspez	< 10.0 mg/m^3	< 1.0 mg/m^3
	TSVOC		< 0.1 mg/m^3
	TVOC without NIK[2]		< 0.1 mg/m^3
	R-value (dimensionless)		< 1
Use scenarios regarding BWR 3 in accordance with EOTA TR 034: IA 2			
a) In accordance with Regulation (EC) No 1272/2008. b) Assessment based on the detailed manufacturers' statements on dangerous substances for all components except "ARDEX DITRA FBM". c) Statement according to test report.			
Water vapour diffusion resistance		See Annex A1	
Water tightness		See Annex A1	
Water tightness after mechanical damage - Resistance to impact		See Annex A1	
Water tightness after mechanical damage - Resistance to static loading		See Annex A1	
Water tightness at sealing and around penetrations at low and high temperatures		See Annex A1	
Water tightness at joint sealings under high pressure		See Annex A1	
Bond strength		See Annex A1	
Shear resistance of joints		See Annex A1	
Crack bridging ability		See Annex A1	
Resistance to freeze/thaw		See Annex A1	
Resistance to heat ageing		See Annex A1	
Resistance to chlorine water		See Annex A1	
Resistance to alkalinity		See Annex A1	
Resistance to heat aging of the joints		See Annex A1	
Resistance to water aging of the joints		See Annex A1	

[2] Available at www.dibt.de (German LCI list)

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

In accordance with EAD No. 030400-00-0605, the applicable European legal act is: 1999/90/EC

The system to be applied is: 2+

With regard to reaction to fire for products covered by this EAD the applicable European legal act is: 2001/596/EC

The system to be applied is: 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 with Deutsches Institut für Bautechnik.

Issued in Berlin on 14 January 2019 by Deutsches Institut für Bautechnik

BD Dipl.-Ing. Andreas Kummerow
Head of Department

beglaubigt:
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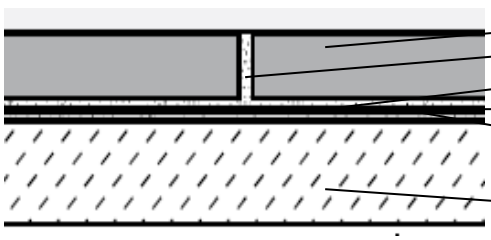

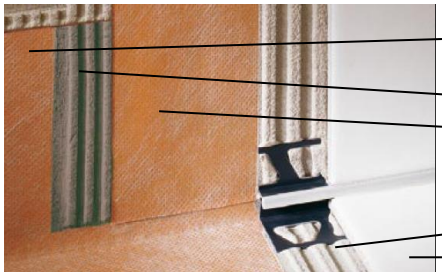

Characteristic		**Intended use**	**Result**
Minimum layer thickness of the waterproofing sheet		(A), (B)	0,5 mm
Working life		(A), (B)	25 years
Reaction to fire	EN 13501-1	(A), (B)	class E
Content, emission and/or release of dangerous substances		(A), (B)	see section 3.2
Water vapour diffusion resistance	Schlüter-KERDI	(A), (B)	S_d = 5,15 m
	Schlüter-KERDI-DS	(A), (B)	S_d > 100 m
Water tightness		(A)	watertight
		(B)	watertight, 10 m water column
Water tightness after mechanical damage - Resistance to impact		(A), (B)	watertight, drop height 300 mm
Water tightness after mechanical damage - Resistance to static loading		(A), (B)	watertight, drop weight 20 kg
Water tightness at sealing and around penetrations at low and high temperatures		(A)	watertight
Water tightness at joint sealings under high pressure		(B)	watertight, 10 m water column
Bond strength		(A), (B)	category 1 ≥ 0,2 MPa
Shear resistance of joints		(A), (B)	123 N/50 mm
Crack bridging ability		(A)	category 3
		(B)	1.5 mm
Resistance to freeze/thaw		(A), (B)	category 1 ≥ 0,2 MPa
Resistance to heat ageing		(A), (B)	category 1 ≥ 0,2 MPa
Resistance to chlorine water		(B)	category 1 ≥ 0,2 MPa
Resistance to alkalinity		(A), (B)	category 1 ≥ 0,2 MPa
Resistance to heat aging of the joints (deviation of the shear resistance from state of delivery)		(A), (B)	resistant, +8,94%
Resistance to water aging of the joints (deviation of the shear resistance from state of delivery)		(A), (B)	resistant, -11,48%

Schlüter-KERDI / Schlüter-KERDI-DS
Schlüter-Systems KG

System built up and performances of the product

Annex A1

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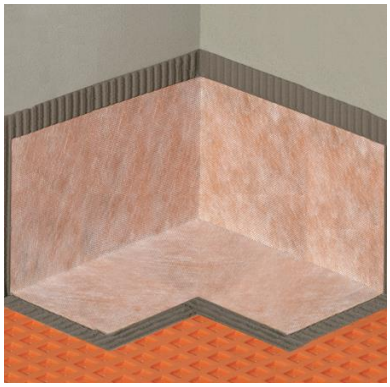
sealing tape Schlüter-KERDI-KEBA

bonded sealing tape
Schlüter-KERDI-KEBA

outgoing corner sleeve
Schlüter-KERDI-KERECK



ingoing corner sleeve
Schlüter-KERDI-KERECK

collar sleeve Schlüter-KERDI-KM

floor gully Schlüter-KERDI-DRAIN
(not part of the kit)

Schlüter-KERDI / Schlüter-KERDI-DS Schlüter-Systems KG	Annex A2
Components	

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Installation

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 documents 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.

Schlüter-KERDI / Schlüter-KERDI-DS Schlüter-Systems KG	Annex B1
Intended use Specifications	