KLB-SYSTEM ABDICHTUNG
CW 510

Low-emission and elastic 2-component polyurethane floor waterproofing with static crack-briding, tested according to EAD 030352-00-0503

Packaging units

Article no.	Packaging	Content (kg)	Units/pallet
AK6956-51	Bucket combo	10.00 kg	30
AK6956-31	Hobbock combo	30.00 kg	12

Product characteristics

Mixing ratio parts by weight	A : B = 100 : 25
Mixing ratio parts by volume	A : B = 100 : 30
Processing time	10 °C / 50 °F: 40 - 45 min. 20 °C / 68 °F: 25 - 30 min. 30 °C / 86 °F: 10 - 15 min.
Processing temperature	Minimum 10 °C / 50 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F: 16 - 18 hrs. 20 °C / 68 °F: 8 - 10 hrs. 30 °C / 86 °F: 6 - 8 hrs.
Curing	2 - 3 days until mechanical load at 20 °C / 68 °F 7 days until chemical load at 20 °C / 68 °F
Further coatings	After 8 - 10 hours, but after 24 hours at the latest at 20 °C / 68 °F
Consumption	approx. 1.3 - 1.5 kg/m² per mm
Colours	grey
Shelf life	12 months (originally sealed)

Product description

KLB-SYSTEM ABDICHTUNG CW 510 is a low-emission 2-component polyurethane waterproofing, which is used for sealing floors in wet areas based on EAD 030352-00-0503 (former ETAG 022). Due to its innovative formulation, the coating compound has good elasticity, high static crack-bridging of > 0.4 mm at 23 °C / 73.4 °F as well as a good low-temperature flexibility, while also being sufficiently firm to stabilise the wearing layer in the case of higher loads.

With its respective system components, **KLB-SYSTEM ABDICHTUNG CW 510** is suitable for use in areas where moderate to very high wet loads (W1-I to W3-I according to DIN 18534 Part 3) are to be expected. These include, for example, private bathrooms, showers in sports, leisure and health facilities, swimming pool edgings, kitchens or other food areas, etc., also with constant water contact.

Besides the floor sealant **KLB-SYSTEM ABDICHTUNG CW 510**, the waterproofing system consists of other coordinated components, the sealing tapes, corners and sleeves, the primer, the coating and the sealer. Further information can also be found in the KLB tool catalogue. In wet areas, the waterproofing can be overcoated with the **PU 410, PU 420, PU 424** reactive resin coatings. On walls, the stable **KLB-SYSTEM ABDICHTUNG CW 512** is an alternative.

Alternatively, the waterproofing can be used within **SYSTEM H2 "KLB KITCHEN LOW-VOC PU"**. For this purpose, **KLB-SYSTEM ABDICHTUNG CW 510**

is combined with **KLB-SYSTEM POLYURETHAN PU 424** and mixed sand **KLB-Mischsand 3/1** as a base layer for subsequent scattering with coloured sand **KLB-Colorsand CQS-46xx**. This coloured sand scattered coating is then sealed with **KLB-SYSTEM POLYURETHAN PU 484**. In addition to this, **KLB-SYSTEM ABDICHTUNG CW 510** can be used as waterproofing layer in **System H1**. The wearing layer must be installed in sufficient thickness. Seek advice from us!

The waterproofing offers resistance to water, salts, saline solutions, bases as well as diluted acids. Conditionally resistant to solvents such as petrol, fuels, grease, oil, etc.

Area of application

- Tested composite waterproofing underneath synthetic resin coverings based on W1-I to W3-I according to DIN 18534.
- Sealing of floor surfaces in commercial kitchens as well as the beverage and food industry.
- Waterproofing layer for floors in wet areas according to EAD 030352-00-0503 (former ETAG 022).
- In wetrooms such as private bathrooms or showers in sports, leisure and health facilities, swimming pool edgings, etc.
- Suitable for the incorporation of sealing ribbons and sleeves.

Product features

- low-emission
- Total Solid according to GISCODE (Test method "Deutsche Bauchemie")
- solvent-free
- static crack-bridging
- good processing properties
- low-shrink
- good resistance to water and chemicals
- coatable with reactive resins

Technical data

Solid content	> 99.8	%	KLB method
Density - Component A+B	1.38	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Water absorption	< 0.1	%	DIN 53495
Tensile strength	> 5	N/mm²	DIN EN ISO 527
Breaking strain	> 100	%	DIN EN ISO 527
Shore-hardness A	> 90	-	DIN 53505 (after 7 days)
Shore-hardness D	ca. 35	-	DIN 53505 (after 7 days)

The values established in tests are average values. Deviations from the product specification may occur.

Tests

External test certificates are available:

- Tested based on EAD 030352-00-0503 (former ETAG 022), certificate pending.
- Complies with the stipulations of the draft version PG-AIV-N (update July 2021)
- Static crack-bridging of class A3 (according to DIN EN 1062-7 Procedure C) at 23 °C / 73.4 °F: > 0.4 mm

Note:

Please ask for the tested system buid-up!

Build-up of coats

Waterproofing layer underneath reactive resin coatings in wet areas

- Prepare the substrate such as concrete, cement screed or similar mechanically, e.g. with shot blasting.
- Prime with the epoxy resin base coat **EP 58**, consumption approx. 0.3 to 0.4 kg/m².
- Optionally, based on the roughness of the substrate, a levelling coat can be necessary, e.g. using **EP 58** and mixed sand **Mischsand 2/1**, in a mixing ratio of approx. 1 : 0.8 parts by weight. The consumption depends on the substrate roughness, approx. 0.6 - 1.2 kg/m² mixture.
- The epoxy resin primers **EP 57** or **EP 53 Spezialgrund AgBB** can be used as an alternative to **EP 58**.
- To achieve high adhesion to the substrate, open scattering with quartz sand, grain size 0.3/0.8 mm, consumption approx. 0.5 - 1.0 kg/m².
- Glue in sealing tapes with **CW 510**, such as the sealing ribbon **KLB-Dichtband DB 1200,** floor sealing sleeve **Bodenmanschette DB 1210**, wall sealing sleeve **Wandmanschette DB 1220**, inside corner element **Dichtinnenecke DB 1230**, or outside corner element **Dichtaußenecke DB 1240.**
- Within 24 hours, the first waterproofing layer with **CW 510** must be applied using the scraper **Toothed blade S6** or Pajarito TKB-S2, consumption approx. 0.8 to 1.2 kg/m².
- After hardening, the second waterproofing layer with **CW 510** is applied using the scraper **Toothed blade S6** or Pajarito TKB-S2, consumption approx. 0.8 to 1.2 kg/m².
- Then can follow the application of reactive resin coatings onto the waterproofing, e.g. with **PU 410, PU 420, PU 424.**
- **Attention:** in the case of such a subsequent coating of the sealing layer using **EP 202** or **EP 216 Universal** as a wear layer, either a thin layer of **CW 510** must be applied and completely scattered with quartz sand 0.3/0.8 mm, or the second waterproofing layer of **CW 510** must be scatterd in excess. The epoxy resin wearing layer may only be applied as scattered coating with a layer thickness of at least 4.5 mm.

SYSTEM H2 KLB KITCHEN LOW-VOC PU

- Prepare the substrate such as concrete, cement screed or similar mechanically, e.g. with shot blasting.
- Prime with **EP 58**, consumption approx. 0.3 to 0.4 kg/m².
- If required: apply a scratch coat with **EP 58** and mixed sand **KLB-Mischsand 2/1,** mixing ratio 1 : 0.8 parts by weight, consumption approx. 0.8 to 1.2 kg/m² mixture.
- The epoxy resin primer **EP 53 Spezialgrund AgBB** can be used as an alternative to **EP 58**.
- Openly scattering the fresh surface with quartz sand 0.3/0.8 mm, consumption approx. 0.5 - 1.0 kg/m². The surface must be pore-closed after hardening.
- Prepare and seal connections, inlets, penetrations and other elements using suitable sealing tapes with **CW 510**, such as the sealing ribbon **KLB-Dichtband DB 1200,** floor sealing sleeve **Bodenmanschette DB 1210**, wall sealing sleeve **Wandmanschette DB 1220**, inside corner element **Dichtinnenecke DB 1230**, or outside corner element **Dichtaußenecke DB 1240.**
- Within 48 hours, apply a first waterproofing layer with **CW 510**, using the scraper **Toothed blade S6** or alternatively, the Pajarito TKB-S2, consumption approx. 0.8 to 1.2 kg/m².
- Apply the second waterproofing layer with **CW 510**, using the scraper **Toothed blade S6** or alternatively, the Pajarito TKB-S2, consumption approx. 0.8 to 1.2 kg/m².
- After curing, apply the base coat consisting of **PU 424** and mixed sand **KLB-Mischsand 3/1** in a mixing ratio of 1 : 0.7 parts by weight. Smooth over the grain with a smoothing trowel and re-roll with a nylon roller (8 mm pile height) after 10 to 15 minutes. Consumption approx. 1.2 to 1.5 kg/m² (mixture).
- When freshly applied, cover the entire surface with coloured sand **Colorsand CQS-46xx** (see colour chart for sands), consumption approx. 2.5 to 3.5 kg/m².
- After curing, sweep off excess quartz sand and if necessary, grind and vacuum off all sanding dust.
- Apply the **PU 484** top selaer onto the clean, prepared surface using the rubber squeegee and subsequent rolling with a nylon roller (8 mm pile height) to achieve the desired surface or slip resistance. Consumption depending on grain size and

slip resistance: 0.450 to 0.700 kg/m². Check the consumption to achieve the required slip resistance level.

Substrate

The substrate to be coated must be even, dry, free of dust, sufficiently resistant to tension and compression as well as be free from weakly-bonded components or surfaces. Materials impairing adhesion such as grease, oil and paint residues should be removed with suitable measures. Observe the information issued by the trade associations, e.g. the most recent versions of BEB worksheets KH-0/U and KH-0/S as well as the notes provided in the product information for the recommended base coats, e.g. **EP 58**. The surface strength must then be at least 1,5 N/mm². For concrete, moisture content must not exceed 4.5 CM-%, remaining residual humidity. The possibility of moisture ingress from the rear must be permanently excluded.

Substrates must be sufficiently dry and suitable for the respective application. In general, the substrates should be made of concrete, screeds on concrete C20/25 (B 25), cement screed CT-C35-F5 (ZE 30) or others. Heated screeds must be "dry heated".

Before applying the composite sealant, the substrates should be prepared mechanically and primed with a suitable, recommended 2-component epoxy resin primer. The surface must be saturated, pore-free and primed carefully.

Mixing

Combo-packaging will be supplied in the correctly measured mixing ratio. The package of Component A has sufficient volume to contain the entire packaging unit of component B. Empty all of the hardener compound B into the resin component A. Blend with a slow speed mixer (200 - 400 r/pm) for at least 3 minutes until a homogeneous, streak-free compound forms. Then process the material immediately.

Processing

Process the material immediately after mixing. It is applied with a suitable notched trowel (**Toothed blade S6**). It is also possible to roll the surface with a steel spiked roller for optimum deaeration. This should be carried out time-delayed after approx. 10 - 20 minutes. To work seamlessly, always work “fresh-in-fresh” and define work areas before starting.

Floor and air temperature must not fall below 10 °C / 50 °F and humidity should not exceed 75 %. The specified hardening times apply for 20 °C / 68 °F. Lower temperature may increase; higher temperature may decrease the curing and processing times. Exposure to chemicals should be avoided during the first 7 days. The specified hardening times apply for 20 °C / 68 °F. Lower temperature may increase; higher temperature may decrease the curing and processing times. The surface can be walked on again after 24 hours and is fully loadable after 7 days.

Cleaning

To remove fresh contamination and to clean tools, use thinner **VR 36** immediately. Hardened material can only be removed mechanically.

Storage

Store in dry and frost-free conditions. Ideal storage temperature is between 10 - 20 °C / 50 - 68 °F. Bring to a suitable processing temperature before application. Tightly re-seal opened containers and use up the content as soon as possible.

Special remarks

This product is regulated by the German Ordinance on Hazardous Substances (GefStoffV), the German Ordinance on Industrial Safety and Health (BetrSichV), and transport regulations for hazardous goods. The necessary information is contained in the DIN Safety Data Sheet. Observe all identification information on the container label!

GISCODE: PU40

Indication of VOC-content:
(EG-Regulation 2004/42) Maximum Permissible Value 500 g/l (2010,II,j/lb): Ready-for-use product contains < 500 g/l VOC.

Please consider the latest version of this product information on our website.

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