

KLB-SYSTEM ABDICHTUNG CW 512



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

Packaging units



Article no.	Packaging	Content (kg)	Units/pallet
AK6957-61	Hobbock combo	10.00 kg	30

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. 25 °C / 77 °F: 15 - 20 min.
Processing temperature	Minimum 10 °C / 50 °F, Maximum 25 °C / 77 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F: 16 - 18 hrs. 20 °C / 68 °F: 8 - 10 hrs. 25 °C / 70 °F: 7 - 9 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/m ² per mm
Packaging	Combo packaging 6 kg
Colours	grey
Shelf life	12 months (originally sealed)

Product description

KLB-SYSTEM ABDICHTUNG CW 512 is a low-emission, trowelable 2-component polyurethane wall waterproofing, which is used as composite sealing 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 flexibility to cold temperatures. In addition to this, it is very resistant to moisture and chemical substances such as diluted bases or diluted acids.

With its respective system components, the wall waterproofing is suitable for use in areas where 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 **KLB-SYSTEM ABDICHTUNG CW 512**, the waterproofing system consists of other coordinated components, e.g. the reinforcement fleece, the sealing tapes, corners and sleeves, the primer, the wall coating and the sealer. Further information can also be found in the KLB tool catalogue. On floor surfaces, the flowable **KLB-SYSTEM ABDICHTUNG CW 510** is an alternative.

KLB-SYSTEM ABDICHTUNG CW 512 is applied in two layers. It can be used as composite waterproofing underneath **KLB-SYSTEM EC 450 DECOR** or **KLB-SYSTEM POLYURETHAN PU 662**. In addition to this, **CW 512** can be sealed without any further utility layer with **PU 806 E Wall** as well as **PU 811 E Wall** for use in kitchen areas and bathrooms.

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

KLB-SYSTEM ABDICHTUNG CW 512 is certified by EMICODE® EC 1^{PLUS}, thus meets the requirements for a sustainable building certification according to DGNB, LEED or BREEAM; not only the German requirements of AgBB or ABG, but also the emissions regulations of many other European countries.

Area of application

- Tested composite waterproofing underneath synthetic resin coverings based on W3-I according to DIN 18534.
- Waterproofing layer for walls in wet areas according to EAD 030352-00-0503 (former ETAG 022).
- Suitable for wall surfaces in commercial areas, e.g. dairies, large kitchens, breweries, laboratories, ceramic worktops in kitchens or labs.
- Wetrooms such as private bathrooms or showers in sports, leisure and health facilities, swimming pool edgings, etc.

Product features

- low-emission formulation
- EMICODE® EC 1PLUS certified
- good processing properties
- stable setting
- low-shrink
- static crack-bridging
- extremely resistant to mechanical loading
- good resistance to water and chemicals
- coatable with reactive resins

Technical data

Solid content	> 99.8	%	KLB method
Density - Component A+B	approx. 1,36	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Water absorption	< 0.3 %	%	DIN 53495
Tensile strength	> 5	N/mm ²	DIN EN ISO 527
Elongation at break	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.

Included in systems

- **System N4 - KLB DECOR LOW-VOC Wall EC**

Please visit our website to get more information about our KLB systems: www.klb-koetzal.com

Tests

The following external and internal test certificates are available:

- Tested based on EAD 030352-00-0503 (former ETAG 022).
- Complies with the stipulations of the PG-AIV-N (P 14176/24-731)
- Static crack-bridging on EAD 030352-00-0503: 0.4 mm
- Certified as low-emission according to EMICODE with the EC 1^{PLUS} label.
Compliant with AgBB for recreation rooms.

Note:

Please ask for the tested system build-up!

Build-up of coats

Waterproofing layer for walls

- The coating is applied onto the prepared substrate (see section "Substrate").
- Prime with an epoxy resin base coat, e.g. **EP 53 Spezialgrund AgBB**, **EP 57** or **EP 58**, consumption approx. 0.2 to 0.25 kg/m².
- To achieve high adhesion to the substrate, open scattering with quartz sand, grain size 0.1/0.5 mm, consumption approx. 0.5 - 1.0 kg/m².
- Alternatively, prime with **EP 724 E Haftgrund Super** while adding 10 - 15% of water, consumption approx. 0.200 - 0.250 kg/m².
- Glue in sealing tapes with **CW 512**, 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 512** must be applied using the toothed trowel **Toothed blade R4** or a trowel, consumption approx. 0.8 to 1.2 kg/m². Immediately after application with the **Toothed blade R4**, the ridges of the fresh compound are flattened and smoothed with a smoothing trowel or a surface trowel to create a closed, smooth surface.
- After hardening, the second waterproofing layer with **CW 512** is applied using the toothed trowel **Toothed blade R4** or a trowel, consumption approx. 0.8 to 1.2 kg/m².
- If necessary for further coating layers with **CW 512** or **EC 450 DECOR**, the reinforcement fleece **Armierungsvlies VA 1044** can be inserted into the second waterproofing layer to improve the evenness of the surface.
- After 10 - 24 hours, **CW 512** might be ground (even out joints) and sealed with **PU 806 E Wall** as well as **PU 811 E Wall** - or alternatively, proceed with a utility layer made of **EC 450 DECOR**.

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. Materials impairing adhesion such as grease, oil and paint residues should be removed beforehand. Substrates must be sufficiently dry and suitable for the respective application.

Concrete substrates must be sufficiently mature and dry. For concrete, proceed with a mechanical preparation, e.g. with shot-blasting, then clean the surface and vacuum it off with a powerful industrial vacuum cleaner. Ceramic wall coverings must be ground on the surface until they are blunt. Gypsum plasterboards, gypsum/cement fibreboards as well as OSB chipboards generally need to be filled and joined at their joints. Drywall constructions must be permanently strong and torsion-resistant. According to DIN 18534, the substrate must be suitable for the expected load.

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. Stir up Component A before application. 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. In case of partial removal, Component A needs to be stirred up carefully with a clean stirring device.

Processing

Process the material immediately after mixing. It is applied with a suitable toothed trowel (**Toothed blade R4**) and smoothed evenly with a trowel.

Application is done in two layers. Please adhere to the minimum layer thickness (of at least 1 mm). To work seamlessly, always work "fresh-in-fresh" and define work areas before starting. If necessary, the reinforcement fleece **Armierungsvlies VA 1044** can be incorporated before the application of another trowel coat or to improve adhesion on subsequent layers.

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 clean tools, use thinner **VR 36**. 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 RU1

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.

VOC content

The product complies with the high requirements to low VOC contents, as required for sustainable construction. Therefore, these values are well below the limits set by the European Union directive 2004/42/EG (Decopaint Directive).

	Limit value	Actual content	
Decopaint Directive 2004/42/EG - Component A	< 500	2	g/l
Decopaint Directive 2004/42/EG - Component B	< 500	0	g/l
DGNB - Components A + B	< 0,5	PU40 RU1, Eurofins-geprüft	%
klima:aktiv – Components A + B	< 3	0.13	%
LEED - Components A + B	< 100	1.9	g/l
Minergie ECO ® - Components A + B	< 1(< 2)	0.13	%

(According to the Decopaint directive, single components are used for calculation. In the sustainable building rating systems, the mixture of both components in the correct mixing ratio is the determining factor.)



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

All stated information is based on our experience and technical preparation. We guarantee the correct and proper quality of our products. We do not assume any responsibility for the work not carried out by us, since we have no influence on the processing or processing conditions. We recommend on-site trials to be conducted in individual cases. With the publication of this new KLB product information, all prior information loses validity. The latest version is available electronically on our website www.klb-koetztal.com. In addition, our "General Terms and Conditions" apply.