PARKHAUS-Oberflächenschutzsystem KLB-SYSTEM POLYMER
EC 5610 +

Crack-bridging, polymer-modified 2-component coating to be used as surface protection system OS 5b

Packaging units

Article no.	Content (kg)	Units/pallet
AK7204-00	30.00 kg	12

Product characteristics

Mixing ratio parts by weight	A : B = 1 : 2
Mixing ratio parts by volume	A : B = 100 : 76
Processing time	10 °C / 50 °F: 40 - 45 min. 20 °C / 68 °F: 25 - 30 min. 30 °C / 86 °F: 12 - 15 min.
Processing temperature	Minimum 10 °C / 50 °F - Maximum 30 °C / 86 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F: 8 - 12 hrs. 20 °C / 68 °F: 4 - 6 hrs. 30 °C / 86 °F: 2 - 3 hrs.
Curing	2 days until mechanical load at 20 °C / 68 °F
Further coatings	see curing time
Consumption	approx. 1.9 - 2.1 kg/m² (wet, after smoothing), per mm layer thickness (dry); after curing, minimum dry layer thickness of 2 mm based on TR maintenance
Colours	Grey
Shelf life	6 months (in original packaging) - Store Comp. A dry and frost-free, store Comp. B dry!

Product description

PARKHAUS-Oberflächenschutzsystem KLB-SYSTEM POLYMER EC 5610 + is an elastified, statically and dynamically crack-bridging 2-component wall coating, which can be used as surface protection system OS 5b based on the TR maintenance directive.

PARKHAUS-Oberflächenschutzsystem KLB-SYSTEM POLYMER EC 5610 + is flexible at low temperatures with an increased dynamic crack-bridging for use in underground parking garages or multi-storey car parks. Thus, **PARKHAUS-Oberflächenschutzsystem KLB-SYSTEM POLYMER EC 5610 +** effectively protects the concrete building against the penetration of harmful substances and de-icing salt, even with an increased risk of crack formation in the reinforced concrete. The product is not suitable for surfaces that are subject to vehicle or pedestrian traffic.

PARKHAUS-Oberflächenschutzsystem KLB-SYSTEM POLYMER EC 5610 + is applied in several layers onto the substrate (concrete or reinforced concrete). Based on the TR maintenance directive, the dry layer thickness must be at least 2 mm after hardening. Application is done with a squeegee, a trowel or a special brush. The

powder component is low-dust. It is recommended to finish with a sealing layer of **PARKHAUS-Oberflächenschutzsystem KLB-SYSTEM EC 5650.**

PARKHAUS-Oberflächenschutzsystem KLB-SYSTEM POLYMER EC 5610 + is resistant to frost and de-icing salt, thus permanently protecting the building fabric against the penetration of water and de-icing salt. The product also inhibits the diffusion of carbon dioxide into the building.

Area of application

- As crack-bridging layer(s) for surface protection system OS 5b for car parks in the interior and exterior.

Product features

- crack-bridging
- elastic
- moisture-blocking
- impervious to fluids
- increased durability to osmosis
- resistant to de-icing salt
- dust-reduced
- stable setting
- water vapour-permeable
- resistant to weather

Technical data

Viscosity - Component A+B	thixotropic	-	
Solid content	approx. 85	%	KLB method
Density - Component A+B	approx. 2.0	kg/l	DIN EN ISO 2811-2 (20 °C / 68 °F)
Tensile strength	>1.5 (at 23 °C / 73.4 °F), >4 (at -20 °C / -4 °F)	N/mm²	DIN 53504
Breaking strain	>25 (at 23 °C / 73.4 °F), >15 (at -20 °C / -4 °F)	%	DIN EN ISO 527-3
Shore-hardness A	ca. 71	-	DIN 53505 (after 7 days)
Diffusion equivalent air layer thickness Sd	>50	m	DIN EN ISO 7783-2

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

Included in systems

- System K8 - KLB PARKING OS5b Wall

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

Tests

The following external and internal test certificates are available :

- Test report (system test): Performance characteristics test, for the use as a surface protection system/product following DIN EN 1504-2 in consideration of DIN V 18026, “Surface protection systems for concrete from products according to DIN EN 1504-2” and in accordance with the DAfStb guidelines “Protection and maintenance of concrete components”.
- Complies with EN 1504-2

Note:

Please ask for the tested system build-up!

Build-up of coats

Surface protection system OS 5b

Coating with increased dynamic crack-bridging capability for surfaces that are not accessible to foot or vehicle traffic

- Prepare the substrate, e.g. by diamond grinding, compressed air blasting etc., then vacuum it off thoroughly.
- Before applying the first layer, the substrate must be wetted with water.
- Prior to the application of the scratch coat, the substrate must be sufficiently dry, but still pale-damp.
- Apply the scratch coat made of **EC 5610 +** onto the pale-damp substrate using a squeegee or smoothing trowel, consumption after smoothing approx. 1.0 - 1.2 kg/m², depending on the roughness depth.
- Roughness depth surcharge:

Roughness depth surcharge 0.5 mm dz of > 0.2 kg/m²

Roughness depth surcharge 1.0 mm dz of > 0.6 kg/m²

In accordance with the maintenance directive TR for concrete buildings, corresponding layer thickness surcharges are required when there is roughness. The control of the layer thicknesses and, if necessary, the adjustment of the resulting consumption quantities must be carried out by the processor.

- Apply the coating **EC 5610 +** onto the pale-damp susbstrate using a squeegee, 2 mm coating trowel or smoothing trowel (with block toothing 6 mm), consumption before smoothing approx. 2.0 - 2.5 kg/m²; consumption after smoothing witht the squeegee approx. 1.8 - 2.2 kg/m² (wet). Please note that smoothing leads to material loss.
- After hardening, apply the second coating layer with **EC 5610 +** using a squeegee, 2 mm coating trowel or smoothing trowel (with block toothing 6 mm), consumption before smoothing approx. 2.0 - 2.5 kg/m²; consumption after smoothing with the squeegee approx. 1.8 - 2.2 kg/m². Please note that smoothing leads to material loss.
- Processing can also be done with the smoothing trowel (with block toothing 4 mm), which implies a consumption before smoothing of approx. 1.6 - 2.0 kg/m² and a consumption after smoothing with the squeegee of approx. 1.3 - 1.7 kg/m². If the application quantity is at the lower limit, a further coating layer with a 4 mm block toothing may be necessary to achieve the required total layer thickness of 2 mm (when cured).
- Optionally, the surface of the last coating layer can be smoothed after approx. 1 - 3 hours, depending on the temperature, using a rubbing board with foam rubber.
- It is recommended to seal with **EC 5650** in two layers. The first levelling coat is diluted with 5 - 10% of water, approx. 0.15 - 0.17 kg/m²; for the top layer, use approx. 0.15 - 0.2 kg/m². For alternative sealers, please check their adhesion.

Important notes:

The maintenance directive TR for concrete buildings requires compliance with the layer thicknesses for attaining the certified properties, such as crack-bridging in class B 2 according to DIN EN 1062-7 at -20 °C/-4 °F.

For OS 5b, a minimum layer thickness of 2.0 mm (in cured state, plus the roughness depth layer thickness surcharge dz).

Please observe the TR maintenance directive for further requirements.

Substrate

The substrate to be coated must be non-slip, sufficiently resistant to tension and compression, clean as well as be free from weakly-bonded and sandy components or any impurities. Materials impairing adhesion such as grease, oil, and paint

residues should be removed with suitable measures. The latter must be ground off before application, especially in the overlap area of EC 5610. Surfaces suitable for coating are concrete C20/25 or reinforced concrete. For other substrates, please seek advice from us. The substrate has to have adequately high strength for the intended occupational use. The substrates to be coated should be prepared mechanically, e.g. by diamond grinding, compressed air blasting or others. The surface strength must then be at least 1.0 N/mm² (smallest admissible single value is 0.6 N/mm²). 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 in the product information of **EC 5610 +**.

Mixing

Combo-packaging will be supplied in the correctly measured mixing ratio. Only in the correct mixture of both components can the described processing and material properties be achieved. Partial quantities need to be weighed out in the right mixing ratio of both components. At first, empty all of Component A into the sufficiently large mixing container (mortar bucket), then add Component B while stirring. Blend with a slow speed (200 - 400 r/pm) or a compulsive mixer for at least 3 minutes until a homogeneous, ready-to-use compound forms. It is only after approximately 3 minutes that the viscosity required for application is reached.

The required mixing time is at least 2 - 3 minutes and depends on the mixer used and the respective on-site climate conditions. Important: pay attention to consistent mixing times. Inaccurate mixing ratios of the different components or too short a mixing time will lead to useless results.

Processing

Before starting work, divide up the work areas. Distribute the trowel coating onto the surface evenly and without any delay, then apply it up the wall with a squeegee or smoothing trowel in the recommended layer thickness (see section "Build-up of coats"). When applying with a wide brush, max. of 3% water can be added. For the application of the second and third layer using the squeegee, 2 mm coating trowel or smoothing trowel (with block toothing 4 mm or 6 mm), the specified drying times must be observed. Optionally, the surface of the last coat ing layer can be smoothed after approx. 1 - 3 hours, depending on the temperature, using a rubbing board with foam rubber.

Floor and air temperature as well as the material temperature must not fall below 10 °C / 50 °F and must not exceed 30 °C / 86 °F. If working conditions are not complied with, the technical properties of the end product may deviate from those specified.

Cleaning

To remove fresh contamination and to clean tools, use water immediately. Hardened material can only be removed mechanically.

Storage

Store Component A in a dry, frost-free location, store Component B dry. Bring to a suitable working temperature before application. Process complete packaging units only, if possible! For partial withdrawals, adhere to the mixing ratio.

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: ZP1

Indication of VOC-content:
(EG-Regulation 2004/42) Maximum Permissible Value 140 g/l (2010,II,j/wb): Ready-for-use product contains < 140 g/l VOC.

CE marking

CE

1119	
KLB Kötztal Lacke + Beschichtungen GmbH Günztalstraße 25 RFA-89335 Ichenhausen	
23	
EC5610-V1-082023	
DIN EN 1504-2:2004	
Revêtement de protection de surface DIN EN 1504-2: ZA.1d,ZA.1f,ZA.1g	
Perméabilité au CO_2	SD > 50m
Perméabilité à la vapeur d'eau	Classe I
Absorption d'eau capillaire et perméabilité à l'eau	< 0,1 kg/m²*h0,5
Essai d'arrachement pour évaluation de l'adhérence	> 0,8 N/mm²
Réaction au feu	E
Résistance aux alternances de température	satisfaite
Propriétés du comportement de la fissure	B.2 (-20 °C)
exposition artificielle aux intempéries	satisfaite

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

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