



CEMLASTIK

TWO-COMPONENT ELASTIC WATERPROOF COATING ON POLYMER-CEMENT BASES

DESCRIPTION AND AREA OF USE

HydroBlocker Cemlastik is a two-component elastic coating comprised of a cementitious binder, selected fine-grained sands, special additives, and polymeric water dispersion. The content of special additives enables its flexibility even at very low temperatures, up to -20 °C.

HydroBlocker Cemlastik is especially suitable for all surfaces where cracks are expected in the surface due to dynamic loads that necessitate the waterproof layer's reliable flexibility.

It is appropriate for waterproofing balconies, terraces, swimming pools, bathrooms, ... just beneath ceramic tiles, mosaic, or stone cladding, suitable for both indoor and outdoor use.

ADVANTAGES OF USAGE

Fresh coating

- Because the components are already packaged in the correct proportions, they are easy to prepare: simply mix dry component A into liquid component B at the point of use.
- Easy to apply: brush, trowel, or roller.

Cured coating

- Provides watertightness
- Retains flexibility/elasticity even at very low temperatures (-20 °C)
- It bridges cracks up to 1 mm
- Resistant to freeze-thaw cycles and de-icing salts
- Protects concrete surfaces from carbonation (penetration of carbon dioxide - CO₂)
- Watertight - low capillary absorption
- For internal and external use
- UV resistant

According to the EN 14891 standard, HydroBlocker Cemlastik is classified in the highest class **CM 02P**, where CM = cementitious liquid-applied water impermeable coating, 02 = with improved crack bridging ability at very low temperature (-20 °C), and P = resistant to contact with chlorinated water.

TECHNICAL CHARACTERISTICS

Characteristic	Component A	Component B
Colour and appearance	grey powder	white liquid
Bulk density (g/L)	1400	-
Specific weight (g/mL)	-	1,02
Solids content (%)	100	50

DATA FOR FRESH MIXTURE (20 °C, 55% rel. humidity)

Colour	Grey to grey-green
Mixing ratio	Component A : Component B = 2,8 : 1,0
Specific weight of mixture (kg/m ³)	1700
Optimal application temperature (°C)	from 10 to 25
Workability time (min)	approx. 45 (20 °C)
Application thickness (mm)	Individual layer max. 2 mm Total thickness: min. 2 mm and max. 5 mm

DATA FOR CURED COATING (thickness 2mm)

Characteristic	Testing method	Standard requirements EN 1504-2	Results for HydroBlocker Cemlastik
Adhesive bond to concrete at 28 days (20 °C and 50% rel. humidity) [N/mm ²]	EN 1542	> 0.8	1.2
Adhesive bond to concrete at 7 days (20 °C and 50% rel. humidity) and 21 days after immersion in water [N/mm ²]	EN 1542	No requirement	1.1
Permeability to water vapor [m]	EN 7783-1 EN 7783-2	class I: $S_D < 5$ m class II: $5 \text{ m} \leq S_D \leq 50$ m class III: $S_D > 50$ m	$S_D = 6.3$
Capillary absorption and permeability to water [kg/m ² *h ^{0,5}]	EN 1062-3	$W < 0.1$	$W < 0.01$
Permeability to carbon dioxide [m]	EN 1062-6	$S_D > 50$	$S_D > 190$
Thermal compatibility, Part 1: Adhesion after freeze-thaw cycling with de-icing salt immersion [N/mm ²]	EN 13687-1	> 0.8	1.4
Reaction to fire	EN 13501-1	-	Euroclass F
Characteristic	Testing method	Standard requirements EN 14891	Results for HydroBlocker Cemlastik
Waterproofing (1.5 bar, 7 days)	EN 14891 – A.7	No penetration	No penetration
Crack bridging ability under standards conditions (+23 °C) [mm]	EN 14891 – A.8.2	≥ 0.75	1.10
Crack bridging ability at very low temperature (-20 °C) [mm]	EN 14891 – A.8.3	≥ 0.75	1.19
Initial tensile adhesion strength [N/mm ²]	EN 14891 – A.6.2	≥ 0.5	1.0
Tensile adhesion strength after contact with water [N/mm ²]	EN 14891 – A.6.3	≥ 0.5	0.8
Tensile adhesion strength after heat aging [N/mm ²]	EN 14891 – A.6.5	≥ 0.5	1.0
Tensile adhesion strength after freeze-thaw cycles [N/mm ²]	EN 14891 – A.6.6	≥ 0.5	0.5
Tensile adhesion strength after contact with chlorinated water [N/mm ²]	EN 14891 – A.6.7	≥ 0.5	0.6

COMPLIANCE

HydroBlocker Cemlastik complies with the requirements of the EN 14891 standard: Liquid applied water-impermeable products for use under ceramic tiling bonded with adhesives.

APPLICATION
Surface preparation

The protected surface must be free of dust, greasy stains, mould, and other impurities, as well as loose parts. If the



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surface is heavily soiled, very smooth, or has cement milk deposited on it, it must be mechanically cleaned first, such as by sandblasting, waterblasting, grinding, or brushing with a wire brush.

Before applying HydroBlocker Cemlastik, major damage must be repaired with a suitable repair mortar (Tekamal MSM, Tekamal Silika MSM, or Tekamal Alteks).

The surface to which HydroBlocker Cemlastik is applied must be thoroughly soaked with water, but without any standing water or water film. Before applying HydroBlocker Cemlastik to highly absorbent surfaces (e.g., Siporex), the surface must be pre-impregnated with a primer prepared of Cementol Elastosil 34 diluted with water in a 1:3 (1 part Cementol Elastosil 34 + 3 parts water) ratio.

Before applying HydroBlocker Cemlastik, the concrete or screed must be at least 28 days old.

Preparation of mortar

Pour component B (liquid) into a clean container, then slowly mix in the prescribed amount of component A (powder). Stir with a low-speed stirrer to entrain as little air as possible while allowing enough time to achieve a homogeneous, lump-free mass. Allow it to rest for approx. 5 min then remix and apply in approx. 45 min. The time of workability is determined by the temperature at which we work.

Mortar application

HydroBlocker Cemlastik is applied with a brush, throwel, or roller. It is critical that no air bubbles form between the surface and the freshly applied layer. It should be applied in at least two layers. The first layer has a thickness of approx. 1 mm, and the second/third layers are applied in the same manner in mutually perpendicular layers. The time between layer applications should be between 12 and 24 hours. The total thickness of the coating (all layers) should not exceed 5 mm. The surface between the individual layers should not be moistened. The optimum application temperature for HydroBlocker Cemlastik is 10 - 25 °C.

If HydroBlocker Cemlastik is used to seal terraces, balconies, or swimming pools, we recommend that the fibreglass mesh is pressed into the first layer of application. This must also be used when applying HydroBlocker Cemlastik to surfaces with surface cracks.

Implementation details

We recommend using elastic sealing tapes and angles from the HydroBlocker Tekatrak family to seal the joints between horizontal and vertical surfaces. Tekaflex MS 15 sealant can be used to glue together HydroBlocker Tekatrak 120 sealing tape and HydroBlocker Tekatrak KN or HydroBlocker Tekatrak KZ angles. However, we can use HydroBlocker Tekatrak SL 100 self-adhesive sealing tape.

The cured HydroBlocker Cemlastik coating is elastic, but it is insufficient for sealing expansion - construction joints. In such cases, a permanently elastic sealant Tekaflex MS 15 must be used while adhering to the correct dimensioning guidelines (see technical data sheet Tekaflex MS 15).

Fresh mortar curing

It is critical to keep the fresh coating from drying out too quickly by shielding it from the sun, wind, and drafts, as well as rain and frost.

Before filling a water tank with water, the coating must be air-cured for at least 28 days.

Finishing coverings (such as tiles, mosaics, and stone coverings) are laid after a minimum of 5 days. For laying, an improved adhesive of class C2 in accordance with EN 12004 is required.

Cleaning of tools and work accessories

All tools and work accessories must be thoroughly washed with water after completion of work. The cured coating can only be removed mechanically.

ADDITIONAL RECOMMENDATIONS AND WARNINGS

- Always use bags and canisters that have been originally packaged, sealed, undamaged, and safely stored.
- Do not apply the coating at temperatures below + 5°C or above + 35°C!
- Temperature influences application, binding, and curing times. We recommend that the surface temperature be 15–25°C before and during application, as well as 48 h after application, to achieve optimal coating properties.
- Low temperatures (below + 10°C) cause the binding and curing time to be extended; therefore, we recommend storing the coating in heated rooms and working during the warmest part of the day.
- Because the bonding time is shortened at high temperatures (above + 30°C), we recommend storing the coating in refrigerated rooms and working during the coldest part of the day.
- Each layer of HydroBlocker Cemlastik must be no thicker than 2 mm.
- For at least 24 hours, the freshly applied coating must be protected from precipitation and accidental water intrusions.
- Never apply the coating to a smooth, unclean surface!



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- Never add water or a dry mix to a mixture that has thickened significantly. Such a coating is discarded!
 - Because of its elasticity, HydroBlocker Cemlastik is NOT walkable and must be protected with finishing coatings (ceramic tiles, natural or artificial stone, etc.).
 - HydroBlocker Cemlastik should not be used as a topcoat in swimming pools.
 - It is suitable for the protection of cracked concrete as long as the cracks are not functional.
 - Please contact our technical service if you require any additional information or clarification.
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CONSUMPTION

approx. 1.7 kg / m² / mm

PACKAGING

- 34 kg: bag 25 kg of Component A + canister 9 kg of Component B
 - 8,1 kg bucket: pe bag 6 kg of Component A + bottle 2,1 kg of Component B
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STORAGE

- Store the product in tightly sealed packaging in a dry, airy location. Protect it from damage, water and moisture, and direct sunlight.
 - A safely stored product has a shelf life of at least one year after the date of production.
 - The product may still be used after the date of expiry, but the characteristics important for the intended use have to be examined.
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HEALTH, SAFETY AND ECOLOGY

The product contains cement, which irritates the eyes and skin. When in contact with skin, it may cause allergic reactions. Wear appropriate protective gloves during work and avoid contact with the eyes (goggles). Avoid inhaling dust. Follow the general instructions for working with chemicals: take care of cleanliness, do not eat, drink, or smoke during work. After finishing work, wash hands thoroughly with water. More information on safe handling and disposal of the product is available in the safety data sheet, which is provided on request, and is also available from the dealer or distributor where you purchased the product.

WARNING

Instructions and recommendations are given based on examinations in our laboratories and experience to date. Due to the specific conditions and method of work, we recommend preliminary tests for each individual case of use.

Since we cannot influence the course of work, we cannot be held responsible for its quality!