



BAYCOSEAL[®] -IC-2K

Two-component crystalline waterproofing slurry



Description:

BAYCOSEAL-IC is a two component, cement based waterproofing slurry, that can penetrate into the concrete.

Areas of Application:

- Exterior and interior waterproofing in cellars, lift shafts, foundations, retaining walls,
- Waterproofing containers for drinking and service water, retaining basins, water treatment plants, garages, tunnels etc.
- Waterproofing beneath screeds (unbounded screeds or floating screeds.).

Properties/Advantages:

- Penetrates the capillaries in concrete.
- Continually active.
- Can be applied to damp substrates.
- Chloride free.
- Resists high levels of hydrostatic pressure.
- Carbonization barrier.
- Waterproofs retrospective cracks up to 0,4 mm.

Technical Data:

Basis:	sand/cement, inorganic
Colors:	grey, white
Bulk density:	1,98-2,12 kg/l
Mix:	25 kg BAYCOSEAL-IC powder
Mixing time:	component to 8 l liquid comp. 3 minutes (drill with 300 – 500 rpm)
Pot life:	30 to 40 minutes (at +23° C / 60% humidity)
Substrate/Application temperature:	min. approx. +5° C to max. approx. +30° C.
Compressive strength:	approx. 20 N/mm ² at 28 days(TS EN 12190)
Flexural strength:	approx. 6,0 N/mm ² at 28 days (TS EN 196-1)
Adhesion strength:	>1,0 N/mm ²

(TS EN 1542)

Water impermeability: > 13 bar negative or positive side

VOC content: 0

Surface Preparation:

The substrate must be sound, clean and have an open capillary structure. The surface must be porous and permit a good surface adhesion so that the chemicals can penetrate well into the concrete. Horizontal areas should have a rough surface. Smooth surfaces must be mechanically abraded in order to achieve good penetration.

- All adhesion inhibiting substances such as dirt, cement laitance, mould oil, hardeners, loose components, paint etc. must be removed by sand blasting, water jetting or other mechanical methods.
- Eradicate all ridges, gravel pockets and other damaged areas. Poor joints and visible cracks (non-dynamic) above 0,4 mm should be chased out 20 mm wide by 25 mm deep. Anchoring holes should be roughened.
- Plug water leaks with BAYCOSTOP-RAPID plugging cement.
- Repair damaged areas with the repair mortar BAYCOCRET-105 or BAYCOCRET-130 dependent on area of application.
- Pre-treat all connecting joints and construction joints with BAYCO-Joint-Tape-2000/-S and BAYCOSEAL-2K/M (see Technical Data Sheet).
- Thoroughly pre-wetting all surfaces before application of BAYCOSEAL-IC-2K with clean water. Repeated dampening may be necessary to ensure complete saturation, which promotes deeper penetrating crystalline growth. The substrate should be matt damp, without puddles or standing water.

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Product preparation:

Pour the liquid component into a clean mixing bucket and add slowly the powder component while mixing mechanically stirring (drill at 300 – 700 rpm) until a lump free, homogenous fluid or sprayable consistency is achieved. Only mix as much material as can be used within the pot life. After a maturing time of minimum 3 minutes, stir again.

Method of Application:

Application by a brush:

Spread two coats of BAYCOSEAL-IC-2K at the required quantity in a slurry consistency with a roofers brush or builders brush. Brush thoroughly and evenly, working into the substrate. Apply the second coat whilst the first coat is still tacky and hasn't dried out.

Application by air spray:

BAYCOSEAL-IC-2K can be applied with the aid of suitable compressed air spray equipment. Dependent of the final wet duty of the installation spray apply one or two coats in a circular motion. Apply the second coat whilst the first coat is still tacky and hasn't dried out.

Curing and protection:

- a) In exteriors or exposed areas: keep BAYCOSEAL-IC damp for min. 3 days. Protect areas exposed to the weather from sun, wind and frost with e.g. polythene sheets, canvas etc. Re-wet the area beginning from 1 day after the application in intervals with water. Alternatively, the surface can be covered with polythene. The fresh coating should be protected from rain for a minimum of 24 hours. Backfilling can take place 3 days after the last coat.
- b) Interiors: In areas with high humidity the material cures very well. In relatively dry areas keep the coating damp for 3 days. Ensure that there is adequate ventilation for 24 hours in areas of poor ventilation and deep pits.
- c) Containers and tanks: Filling is possible after 3 days. In the case of drinking water storage, the container must be thoroughly rinsed with drinking water before filling. When properly installed, BAYCOSEAL-IC-2K is permanently active.

Material consumption:

Ground moisture/non standing backwater:

1,5 kg/m² in one coat

Non-hydrostatic pressure:

2,5 kg/m² in two coats

Rising damp / hydrostatic pressure:

3,0 kg/m² in two coats

Cleaning:

With water when in the fresh state, remove dried material with suitable cleaning product.

Packaging:

25 kg bag + 8 kg drum

Storage:

12 months when stored dry and frost free in the original unopened packaging. Use opened packaging promptly.

Important Advices:

- Protect areas not to be treated with BAYCOSEAL-IC-2K from its' effects.
 - Consumption may increase on uneven substrates.
 - Lower temperatures extend, higher temperatures reduce curing times.
 - The reaction between BAYCOSEAL-IC-2K and free lime in concrete can lead to minor efflorescence. This is not detrimental and can be removed with a brush.
 - Different colorings are dependent on the differing dampness of the concrete.
 - Temperatures around +10° C to +15° C are to be expected in water containers. In order to guarantee complete hydration of the cement, keep the coating damp for an adequate length of time (constant relative humidity of > 80%) and protect against drying out. In general 7 days is sufficient. It is essential to avoid the formation of condensation or standing films of water during this time period. Where there is a danger of dropping below the dew point (condensation formation) install dehumidifiers until the mortar is cured. At no time should uncontrolled warm air be blown inside.
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- To increase pot life/working time at higher temperature store material in a cool environment above +5° C and only expose to warm temperature shortly before mixing. Additionally use of cold water can also increase pot life/working time, if water addition is necessary.
- BAYCOSEAL-IC may need up to one month to achieve its maximum waterproofing properties. Influencing factors are ambient temperature, humidity, concrete composition etc.