

Reactive sealing (waterproofing)

codex Epo 2000

Flexible, two-component epoxy composite seal for use below ceramic flooring

Areas of application:

codex Epo 2000 is a flexible, crack-covering, smoothable and chemical-resistant epoxy composite seal for use under ceramic floor coverings. For use in areas of application with high chemical and mechanical loads. Suitable for wall and floor coverings in interior and exterior areas.

With general test certificate by building authorities (abP) for load classes A, B and C as well as load classes A0 and B0 according to ZDB Bulletin "Composite seals", January 2010 edition.

Among other things, suitable for/on:

- ▶ swimming pools, saline pools and thermal springs
- ▶ Laboratories
- ▶ Large kitchens
- ▶ Butcher's shops, slaughterhouses
- ▶ Food industry
- ▶ Textile industry, paper industry
- ▶ Accumulator rooms
- ▶ Sewage works
- ▶ Chemicals industry
- ▶ Cement screeds
- ▶ Concrete
- ▶ Mastic asphalt screed
- ▶ Dense substrates such as metal, glass and plastics
- ▶ Warm water floor heating

Specially suited for areas which require a high level of resistance to chemicals, abrasive water courses, fuels, oils, etc.



Product advantages / Properties:

Highly-flexible 2-component epoxy resin, blended together from resin A and hardener B. Easy to process/hardens quickly, very good resistance to weathering, water, chemicals, salts and mechanical stress.

- ▶ Smooth consistency
- ▶ Easy to process
- ▶ Bridges cracks and hardens without tension
- ▶ Resistant to chemicals
- ▶ Watertight
- ▶ Interior and exterior use
- ▶ Nonylphenol-free
- ▶ Solvent-free
- ▶ EMICODE EC 1 R / Very low emission

Technical data:

Container type:	Tin container
Pack size:	6 kg
Storage period:	12 months
Colour:	grey
Mix ratio	A : B = 1 : 3.7
Processing temperature:	+ 10 °C to + 25 °C
Processing time:	approx. 40 minutes
Can be walked on:	after approx. 1 day*
Can take mech. stress:	after approx. 1 day*
Resistant to chemicals:	after approx. 7 days*
Fire class:	E

* at 23 °C and 50 % rel. humidity

Substrate preparation:

The substrate must be stable, dry, level, free from cracks, clean, strong enough to support loads, free of materials that negatively affect the bonding strength. Completely remove dirt and residue from mould release agents, paints/coatings. Test uneven surfaces in accordance with applicable standards/fact sheets and report any defects. If necessary, mechanically pre-treat smooth concrete surfaces, poorly adhesive layers or unstable layers and sweep so that they are free from dust. Level out uneven surfaces with suitable codex fillers. Pre-coat heavily absorbent and all mineral surfaces such as concrete, cement plaster and cement screed surfaces before sealing with UZIN PE 460 two-component epoxy sealing primer and within 3 days, continue working on the surface with codex Epo 2000. In the case of longer waiting times, prime with Epoxy Primer-Sealer UZIN PE 460 and broadcast with UZIN Quartz Sand to form a dry excess. Allow primer to dry completely (scratch test).

Follow the product data sheets that apply to the codex products which are also jointly used.

Preparation:

1. To mix: Fully add resin components A to basic components B and mix thoroughly for at least 2 minutes with a suitable mixer. Decant the mixed material into two, clean containers and stir again. Do not thin the material.
2. Before sealing the surface, the corner and butt joints, channeling, feed-throughs, floor drains etc. need to be sealed using codex sealing strips and codex sealing sleeves.
3. For sealing, apply codex Epo 2000 to the substrate using 3 mm C3 teeth and immediately, using some additional material, turn the grooves over using the non-toothed side of the trowel. Stretch to form a compact layer.
4. Repeat the procedure after the first layer has dried. To create a colour difference, mix codex Epo 2000 with 0.1% UZIN dyeing agent.
Minimum dry thickness of the layer at each point: 1 mm.
5. To clean: Immediately after use, clean tools using UZIN VE 124. Hardened material can only be mechanically removed.
6. After allowing the last sealing layer to dry completely the tiles and sheets/panels can be laid using codex Epoxiflex Plus.

If the laying is carried out using cement-type, codex flex grouts, directly after point 4. scatter UZIN pearl sand all over the second sealing layer whilst it is still fresh.

Consumption:

1st layer approx.	0.9 kg / m ²
2nd layer approx.	0.9 kg / m ²
Total approx.	1.8 kg / m ²

Important information:

- ▶ Original containers can be stored in moderately cool, dry conditions for at least 12 months. In cold conditions, the material becomes highly viscous.
- ▶ Best processed between 20 – 25°C. Low temperatures impair the processing consistency and delay the hardening. High temperatures shorten the can life and hardening time. Do not process under 10°C.
- ▶ In order to make sure the product is suitable in specific application areas, please request our consistency lists.
- ▶ If used in temperatures over 65°C, consult an application specialist.
- ▶ In the case of substrates made from various plastics, metal alloys and laying surfaces which are hard to assess, it is recommended that trial laying is carried out.
- ▶ The waiting times between the sealing layers should not exceed 24 hours. Do not apply epoxy resin-adhesives 72 hours after sealing.
- ▶ Only lay tiles after the last sealing layer has fully hardened. Only use reaction resin systems on reaction resin seals when carrying out further work. In all other cases, consult an application specialist.
- ▶ In the case of tiling work and work involving sheets/panels on the top of composite seals, make sure that there is good bedding over the entire area. Use appropriate application materials.
- ▶ Always apply the seal at least twice with an overall dry layer thickness of at least 1 mm at each point.
- ▶ codex Epo 2000 does not substitute the structural seals required under DIN 18 195. When waterproofing structures against ground moisture, follow the guidelines laid down in DIN 18 195 part 4.
- ▶ Among others, the following documents/texts are jointly applicable and/or are particularly recommended:
 - DIN 18 352 'Working with tiles and sheets/panels'
 - DIN 18 195 'Waterproofing structures'
 - ZDB bulletin 'Notes for carrying out composite seals involving tiled and sheet/panel sheathing and covering on indoor and outdoor areas'
 - AGI directive 'Requirements for sealed areas – sheet/panel coatings that work against chemical attacks'
 - BEB worksheet KH-6
 - DIN 18 352 'Working with tiles and sheets/panels'
 - DIN 18 157 'Carrying out ceramic work involving the thin bed method'
 - ZDB bulletins:
 - 'Coatings on cement screed surfaces'
 - 'Coatings on calcium sulphate screed surfaces'
 - 'Exterior coatings'
 - 'Interface coordination'
 - BEB bulletin:
 - 'Assessing and preparing substrates'
 - BEB worksheets KH-0/S, KH-1, KH-5, KH-6
 - AGI worksheet S10 'Protecting structures against chemical attack using sheet/panel coatings' (Protecting buildings against acid), parts 1 – 3

Protection of the Workplace and the Environment:

Solvent-free. Non flammable. Comp. A: Contains epoxy resin/Xi: Irritant. Comp. B: Contains amine hardener/C: Corrosive. Both components: May cause irritations or burns to eyes, skin or respiratory system. May cause sensitisation by skin contact. Use barrier cream, protective gloves and safety-goggles. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In liquid form, "N/hazardous to the environment", therefore do not allow into drains, water courses or landfill. Observe safety information on product label as well as safety data sheet. Once cured, has a neutral odour and presents no physiological or ecological risk. Does not contaminate the indoor air quality with either formaldehyde or other volatile compounds. EMI CODE EC 1 R – very low emission.

Disposal:

Where possible, collect product residues and re-use. Do not empty into drains, sewers or ground. Empty, scraped and drip-free metal containers are recyclable. Liquid residues as well as containers with liquid residues are special waste, those with mixed and cured residues are Construction Waste. Therefore collect waste material, mix both components and allow to harden, then dispose as Construction Waste.