

# EUCOFLOOR EP ECO 12

## WATER-BASED EPOXY CAST FLOOR, SCRAPING AND LEVELLING LAYER

### FIELD OF APPLICATION

EUCOFLOOR EP ECO 12 is a water-based, self-levelling epoxy cast floor intended for the protection of highly resilient floors, without an unpleasant odour. EUCOFLOOR EP ECO 12 is vapour open and can be applied onto a slightly damp surface. Can also be used as a damp open scraping and levelling layer.

- Can be applied indoors
- Protection of heavily loaded floors.
- Recommended for industrial floors in workshops, warehouses, garages, industry, military buildings, public buildings, shopping centres, heavily loaded areas, car parks, shops,...
- Protects and is liquid-tight.
- Concrete floors.
- Old tiles.
- Old resin coatings (epoxy)
- Etc.

### BENEFITS & FEATURES

- Damp open, water-based - solvent-free
- Almost odourless.
- Smooth and durable finish.
- Excellent adhesion.
- Very good chemical and mechanical resistance.
- Easy to process.
- Easy to maintain and seamless.
- Can be applied as a scraping layer or as a levelling layer or as a cast floor in 1 or 2 mm thickness.

### APPLICATION

#### Application conditions

EUCOFLOOR EP ECO 12 must be stored between +15 and +25°C, approximately 24 hours before application. The surface, the ambient temperature and the temperature of the equipment to be used must be between +5°C and +30°C.

Relative ambient humidity: max. 80%.

Substrate moisture content: < 10% (weight percent).

Compressive strength of the substrate: min. 25 N/mm<sup>2</sup>.

Tensile strength of the substrate: min. 1.5 N/mm<sup>2</sup>

Dew point before and during application and during curing: The temperature of the substrate must be +3°C higher than the dew point.

Provide sufficient ventilation after application to obtain good curing of the product.

#### Tools & complementary products

- Mixer with spindle.
- Squeegee, tooth comb or rake.
- Clean mixing containers.
- Masking tape.

#### Preparations

The surface to be treated can be dry or slightly damp and free of standing

water (moisture content <10%). Make cracks, fissures, joints and other parts showing water leaks completely water and leak proof with the EU-COCHEM BV EU-COINJECT injection resins. Existing screeds and concrete surfaces must be at least 28 days old. Remove loose, poorly adhering or insufficiently load-bearing parts mechanically. Then brush well and remove dust with an industrial vacuum cleaner. Repair the areas that are insufficiently flat with an equalising / levelling layer or mortar complementary to the system to be installed.

The surface must be free of dirt, grease, release agent, grease, old, demoulding oil, cement skin, old paint layers that do not adhere well, coatings, synthetic resin layers, adhesives, bitumen, ... or other matters that can adversely influence the adhesion.

The substrate must therefore also be mechanically pretreated. For example by bullet blasting, sandblasting or by sanding the surface.

When applying EUCOFLOOR EP ECO 12 on existing old epoxy coatings or floors, always sufficiently grind, degrease, make dust-free and clean the surface. Always use clean equipment and clean mixing containers.

Always apply a suitable primer before applying EUCOFLOOR EP ECO 12.

#### Preparation of the product

First mix component B mechanically for 2 minutes with a mixer and spindle. Then add the B component completely to the A component and mix again for at least 2 minutes until a homogeneous mixture is obtained.

Now add the filler - C component to the mixture while mixing again until a homogeneous and lump-free mass is obtained.

The mixing operations are carried out with a mixer at low speed (max. 300 rpm) in order not to include air in the resin. This avoids the formation of air bubbles in the mixture.

#### Application of the product

Process the product within 40 min. (at +20°C)

Pour the mixture onto the surface to be treated. Spread evenly with trowel, tooth comb or rake. In case of use as a levelling layer or cast floor, roll immediately with a dotted roller to eliminate air bubbles.

#### Finishing

48 hours (at 20°C) after applying EUCOFLOOR EP ECO 12 the next layer of the synthetic resin system can be applied.

#### Cleaning of the tools

Clean the used equipment with clear water. Cured product residue must be removed mechanically.

### MAINTENANCE AFTER APPLICATION

See the EU-COCHEM BV information leaflet SYNTHETIC RESIN FLOORS - CLEANING AND MAINTENANCE.

### TECHNICAL DATA

#### Consumption

Approx. 1.5 kg/m<sup>2</sup>/mm layer thickness

#### Technical data & reaction times

Property	Value
Basic raw materials	Epoxy - water-based - solvent-free
Composition	3 components
Density	Mixture (A+B+C): 1,5 kg/dm <sup>3</sup>

Pressure resistance	> 35 N/mm <sup>2</sup> .
Flexural strength	> 18 N/mm <sup>2</sup> .
Adhesion onto concrete	> 1.5 N/mm <sup>2</sup> .
Hardness (Shore D)	75-85
Fire class (EN 13501)	Bfl-s1
Aspect - colour	SATIN - Smooth - RAL or NCS on request
Water vapour permeability	WVP 6,67*10 <sup>-7</sup> g/m <sup>2</sup> .s.Pa
Water vapour transmission	WVT 9,75*10 <sup>-4</sup> g/m <sup>2</sup> .s
Water vapour permeability coefficient	$\sigma$ 1,44*10 <sup>-7</sup>
Wear resistance	< 15mg (CS10-1000tr-1kg)
Impact resistance (DIN EN ISO 6272)	>10 Nm
Heat resistance	100°C
Curing	Shrink-free.

Pot life after mixing: 40 minutes

Pedestrian accessible: After 24 hours.

Full mechanical load: After 2 days.

Full chemical resistance: After 7 days. (Attention: water is also a chemical product)

Full curing: after 7 days..

Times measured at +20°C. Lower temperatures extend the curing time.

### Chemical resistances

Good chemical resistance, also against organic chemical compounds (hydrocarbons). When used in applications with chemically contaminated water, it is advisable to consult your EUCCHEM BV representative.

### Additional documentation & referrals

Always consult all technical data sheets and material safety data sheets of the products to be used. Always work with clean tools in good condition.

## APPEARANCE - COMPOSITION - PACKAGING

EUCCHEM EP ECO 12 is available as follows:

20.61 kg set:

Comp. A : 2,28 kg

Comp. B: 5.83 kg

Comp. C: 12.5 kg

EUCCHEM EP ECO 12 can be stored in its original, unopened packaging and in a dry room. Do not store in direct sunlight and between +10°C and +30°C. It has a shelf life of 12 months after production date, provided it is stored under the conditions described above.

### ADDITIONAL COMMENTS

Expansion joints must be included in the system. Contraction joints, cracks and joints can be overcoated, if treated correctly, provided they are not active and do not / no longer follow the movements / settlement of the building. For special applications it is advisable to consult your EUCCHEM BV representative.

### SAFETY PRECAUTIONS

Always use personal protection in accordance with the local guidelines. Consult the appropriate safety sheets before use. All most recent safety data sheets are always available at [op www.eucochem.com](http://op.www.eucochem.com). When in doubt, contact our technical service.

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