

Seire

SEIRECEM EP FLOW

Epoxy-cement levelling mortar

Easy to apply

Vapor barrier

Good chemical and mechanical resistance

Impermeable to liquids

Low VOC, solvent-free

Self-levelling (1,5 – 3,0 mm)

Can be overcoated with resin-based floor finishes after 24 hours

For indoor and outdoor use



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SEIRECEM EP FLOW

Epoxy-cement leveling mortar

Product description:

SEIRECEM EP FLOW is a three-component, epoxy-modified, self-leveling cementitious mortar for the preparation, leveling and protection of pavements.

Thanks to its properties, SEIRECEM EP FLOW prevents the formation of blisters in resin-based floor finishes on temporarily damp substrates and not subject to phreatic pressure. A breathable coating can be applied once SEIRECEM EP FLOW is dry to the touch.

After curing, SEIRECEM EP FLOW is resistant to the passage of water, chemicals, frost and weathering.

Applications:

- Levelling and renovation of concrete pavements, cement and sand screeds, indoors and outdoors.
- Temporary moisture barrier in floors under epoxy, PU and polyaspartic coatings (thickness $\geq 2\text{mm}$).
- Levelling layer in epoxy, PU, polyaspartic systems, ...
- Creation of surfaces for the placement of ceramic wall tiles, natural stone, wood and light pavement (PVC, linoleum, ...).
- Applicable on industrial flooring, laboratories, warehouses, parking garages, hangars, workshops, production and processing areas, and generally for premises subject to medium intensity and frequency traffic.

Substrate Preparation:

The substrate must have a compressive strength higher than 25 N/mm^2 and a tensile strength higher than $1,5 \text{ N/mm}^2$, may be moist but not waterlogged and must be hard, solid and free of laitance, grease, oils, waxes, dust or other loose particles such as paint, release agents, limescale, mortar, plaster, adhesive residues, etc., which may impair adhesion to the substrate.

Substrate preparation must be carried with specialist machinery; sanding, milling or diamond tools depending on the state of the substrate. Subsequently, a vacuum will be carried out.

Properly treat and seal all joints or gaps in the concrete substrate where differential movement is expected (for example expansion joints).

Primer:

Prior to applying SEIRECEM EP FLOW, the absorbent substrates must be primed with SEIRE WP FAST PRIMER. (see the corresponding Technical Sheet), alternatively, the substrate can be moistened to saturation (as indicated in the SEIRECEM EP TIXO Technical Data Sheet).

On non-absorbent substrates, it will be primed with SEIRE WP PRIMER. (see the corresponding Technical Data Sheet). Do not allow the primer to dry for any longer than indicated in its Technical Sheet - otherwise, it will need to be sanded and re-primed.

Mixture:

Stir the liquid components of SEIRECEM EP FLOW before mixing. Pour the content of component A into the container of component B and thoroughly mix the two liquid components with a stirrer at low speed for a minimum of 30 seconds until homogenise.

Pour the mix A+B in in a container of approximately 30 liters, add component C and continue stirring for approximately 3 more minutes until a homogeneous mixture is obtained.

It is not advisable to carry out partial mixtures by volume.

After the three components are mixed, 1kg of SEIRECEM EP FLOW will remain workable for 60 minutes at temperatures between 18°C and 20°C .

Once the pot life is exceeded, the mixed product loses its characteristics and must be discarded.

Recommendations:

After mixing the three components of SEIRECEM EP FLOW use immediately.

Protect the surface from sunlight and air currents to avoid drying too quickly.

Note that higher temperatures shorten time of use and lower temperatures lengthen it.

Ensure proper ventilation if applying in confined places to avoid possible condensation.

In outdoor applications, it is recommended to apply when temperatures drop (at sunset), otherwise, excessive heat (especially in summer) could cause the appearance of bubbles.

Limitations:

Do not use SEIRECEM EP FLOW where ambient and/or substrate temperatures are less than 8°C or less than 3°C above the dew point.

Do not use where ambient and/or substrate temperatures exceed 30°C or where ambient humidity exceeds 80%.

Avoid application if contact with water is expected (rain, condensation, ...) in the 24 hours following application.

The application of coatings that are not permeable to water vapor can only be done when the surface humidity of SEIRECEM EP FLOW is less than 4% (normally after 24 hours at 20°C).

Not applicable on substrates subjected to phreatic pressure.

Method of application:

Pour the mixture onto the primed substrate and spread evenly using the appropriate trowel or a dowel leveller until the proper thickness is obtained.

Immediately spike-roll in two directions at right angles to remove trowel marks, thus helping air escape and ensuring desired thickness and finish. The application thickness is from 1.5 to 3 mm, up to 5 mm in delimited areas and of little extension (patches).

Do not add solvent or thinners at any stage.

Approximative consumption:

$2.25 \text{ Kg/m}^2/\text{mm}$

Cleaning of tools and equipment:

SEIRECEM EP FLOW can be cleaned immediately after use with water. If the product is allowed to harden, it will have to be removed mechanically.

Residues/spillages:

Any spillage from any of the components must be removed immediately with sand, vermiculite or other inert material and collected in a suitable container for proper handling and treatment.

Residues from spillage and empty containers must be dealt with in accordance with local regulations.

See product safety sheet for further information.

Storage:

SEIRECEM EP FLOW can be stored for up to 12 months in its original unopened packaging. The product should be stored in a dry place between $+5^\circ\text{C}$ and $+30^\circ\text{C}$. Keep away from icy conditions, direct sunlight and sources of heat.

Precautions:

Contains cement. Reacts alkalinely. Protect skin and eyes.

After curing, the product is physiologically and ecologically neutral.

Resin: Hazardous to health if swallowed. Causes serious skin and eye irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects. Contains epoxy components.

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Epoxy-cement leveling mortar

Catalyst: Hazardous to health if swallowed. May cause an allergic skin reaction. Causes severe skin burns and eye damage. Toxic to aquatic life with long lasting effects.

During mixing or application, the following precautions should be taken: ensure adequate ventilation and avoid contact of the material with the eyes, nostrils, mouth or skin. Avoid contact with hands, protecting them with gloves and protective cream if necessary. In case of contact with eyes, rinse immediately with plenty of water and consult a doctor. If on skin: Wash with plenty of soap and water (do not use solvents). Avoid prolonged skin contact, especially those who have allergic reactions to epoxy materials. Wear always protective gloves and eye protection. Take care of personal hygiene after work, or during breaks, always washing your hands. Take care when removing gloves not to contaminate the inside of the gloves.

In case of accidental ingestion of the product, seek immediate medical attention, do not induce vomiting. If eye or skin irritation persists: Get medical advice/attention.

After curing, the product is physiologically and ecologically neutral.

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

See product safety sheet for further information.

Technical data

(based on tests conducted in our laboratory according to current regulations)

Mixing ratio:	As indicated on packaging
Fresh mortar density:	Approx. 2.25 kg/L
Consumption:	Approx. 2.25- 2.40 Kg/m ² /mm
Workability time (20°C):	Approx. 60 minutes
Dry to touch (20°C):	Approx. 6-8 h
Recoatable (20°C):	Approx. 24h
Concrete adhesion (UNE EN 13892-8):	≥2 N/mm ² (28 days)
Flexural strength (UNE EN 196-1):	≥10 N/mm ² (28 days)
Compressive strength (UNE EN 196-1):	≥45 N/mm ² (28 days)
Packaging:	Kits of 25,4 kg
Storage:	Approx. 12 months in a dry place and in original unopened packaging



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8006195
EN 1504-2:2004
SEIRECEM EP FLOW
Self-leveling epoxy-cement micromortar
EN 1504-2

Capillary absorption:	≤ 0,1 Kg/(m ² h ^{0,5})
Adhesion:	≥ 2,0 MPa
Water Vapor Permeability:	Sd < 5 m (permeable)
Reaction to fire:	F
Hazardous substances:	Complies with 5.3 de EN 1504-2



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8006195
EN 13813:2002
SEIRECEM EP FLOW
Self-leveling epoxy-cement micromortar
EN 13813: CT C40-F10-IR24.5-B2.0
modified polymer

Compressive resistance:	≥ 40 N/mm ²
Flexural resistance:	≥ 10 N/mm ²
Adherence:	≥ 2 N/mm ²
Impact resistance:	> 24,5 Nm
Reaction to fire:	F

Seire takes responsibility for the quality of its products. The application recommendations given are based on tests and practical experience. We will not be held responsible for the product or its application in case of any dosage or application other than as described and recommended. For any questions about this product, please contact our Technical Department. This data sheet remains valid until a new edition is issued. Seire does not take responsibility for the content of data sheets collected on internet from sites other than the official Seire (www.seire.net)

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