Technical Information Sheet
Article No. 0941

Repair Mortar LW EP 2 K
Two-component, light-weight mortar for concrete repairs.

Test certificates: 85 1962 TU Brunswick, B-84-546 D
57/5005-2 TU Brunswick, TNO Delft

Range of use
To be used for repairing concrete surfaces. It is especially for the repair of filigree building elements that have been damaged by steel corrosion. Also for fast repairs of individual, small-surfaced defects as well as broken off edges. Lightweight, high strength reproductions and copies of figures, balusters, cornices and other profiled elements, such as for example reliefs, can also be produced with Repair Mortar LW EP 2 K. It can also be used for the restoration and repair of natural stone.

Characteristic data of the product

<table>
<thead>
<tr>
<th>Comp. A</th>
<th>Comp. B</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>concrete grey</td>
<td>clear</td>
</tr>
<tr>
<td>Odour:</td>
<td>neutral</td>
<td>amine-like</td>
</tr>
<tr>
<td>Density g/cm³:</td>
<td>0.78</td>
<td>0.92</td>
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<tr>
<td>Viscosity:</td>
<td>--</td>
<td>approx. 10 mPas</td>
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<tr>
<td>Compressive strength:</td>
<td>48.5 N/mm²</td>
<td>18.0 N/mm²</td>
</tr>
<tr>
<td>Flexural/tensile strength:</td>
<td>18.0 N/mm²</td>
<td>3.5 N/mm² concrete failure</td>
</tr>
<tr>
<td>Adhesional/tensile strength:</td>
<td>5.350 N/mm²</td>
<td>3.5 N/mm² concrete failure</td>
</tr>
<tr>
<td>E-modulus:</td>
<td>32 x 10⁻⁶/K</td>
<td>32 x 10⁻⁶/K</td>
</tr>
<tr>
<td>Working time:</td>
<td>75 minutes (1 kg)</td>
<td>75 minutes (1 kg)</td>
</tr>
<tr>
<td>Temperature expansion coefficient:</td>
<td>32 x 10⁻⁶/K</td>
<td>32 x 10⁻⁶/K</td>
</tr>
</tbody>
</table>

Property profile
- Can be worked overhead
- Excellent adhesion in combination with Bonding Agent
- Allows quick continuation of work through short hardening time
- Low density
- Can be feathered out to nearly 0 mm
- Low-tension, shrink-free hardening
- Reliable protection of reinforcement steel even with little coverage
- Greater layer thicknesses in one working operation are possible
- Water impermeable as of 5 mm layer thickness
- Can be worked over with Fine Repair Mortar.

Working instructions
The two components are packaged in special containers in the proper mixing ratio. The mixture should be produced according to the DBV Code of Practice “The use of cold-cured resins in concrete construction - part 3.2 - Using cold-cured resin on concrete”. The hardener component (B) should be completely added to the resin component. For smaller amounts (up to 10 litres) use a mixer on a counter-current principle. Drills with a max. speed of 400 rpm can be used as a drive. The minimum mixing time of 2 minutes should be observed. The larger the amount to be mixed and/or the more viscous the components, the longer must be mixed. Streaks indicate insufficient mixing. Especially for varying viscous components, the lesser mixed material on the edge and bottom of the container as well as on the mixing paddles should be scraped off and added to the mixture. Afterward, fill the mixture into a separate container and mix again. It is then ready-to-use. When mixing larger amounts of a filled
system (mortar), use suitable mixing equipment, for example a Beba positive mixer. Insufficient mixing leads to the formation of blisters and causes soft, incompletely cured spots. The prepared mortar should be applied within the given pot-life with clean tools, compacted well and smoothed. When smoothing surfaces, clean tools thoroughly and moisten with V 101 thinner; however, avoid dripping. If work is continued with Fine Repair Mortar, the surface of Repair Mortar LW EP 2 K must be roughened with a broom or hard brush. Eventually used boarding should be covered with a polyethylene foil as a parting agent.

System constituents

- Bonding Agent EP 2 K
  Art. No. 0900
- Repair Mortar LW EP 2 K
  Art. No. 0941

Substrate

The substrate must be dry and load-bearing capable. Minimum adhesional/tensile strength: 1.5 N/mm². Before applying the mortar, prime the substrate with Bonding Agent EP 2 K. Repair Mortar LW EP 2 K is the applied to the still fresh bonding layer. Observe DBV Code of Practice - "The use of cold-cured resins in concrete construction", part 2, "Substrate".

Mixing ratio

15 : 1 parts by weight

Tools and cleaning

Filling knife, trowel, stainless steel float, plasterer's float, mixing equipment.

Notes

Object and ambient temperature must be at least +8°C while working and hardening.

Higher temperatures and larger amounts reduce pot-life, lower temperatures lengthen working time.

Personal protective equipment

Suitable nitrile-gloves, protection goggles and splash guard.

For further information are found at our tools programme.

Packaging, application rate and shelf-life

Packaging:
3 kg tin containers with hardener (Comp. B) inside

Application rate:
Per mm layer thickness: 0.930 kg/m², corresponding to 0.930 kg/litre

Shelf-life:
At least 9 months stored cool but frost-free in original, closed and unmixed containers.

Safety, ecology, disposal

Further information concerning safety during transport, storage and handling as well as for disposal is found in the latest Safety Data Sheet.