



Applications

Product intended for levelling, filling and repairing concrete structures on both horizontal and vertical surfaces according to concrete repair principles 3.1. Product fulfills the requirements of R3-class according to SFS-EN 1504–3. Suitable for concrete structures with strength ranging from 20 MPa to 35 MPa. For firmer concrete surfaces, **webervetonit REP 45** Repair mortar should be used.

Substrate

Concrete surfaces are cleaned carefully. Damaged concrete is removed either mechanically (chipping, milling) or with wet sandblasting, for example. After mechanical removal, the structure must be wet sandblasted to remove the partially damaged surface layer. The surface is then pressure-washed. Any remaining iron mountings are carefully cleaned of rust until they conform to a cleanliness level of at least Sa 2 (using sandblasting, wet sandblasting, a high-pressure water jet or a steel brush). No separate anti-corrosion layer is needed because compound includes corrosion inhibitor. However, the repair mortar must be applied immediately after cleaning of steels. The substrate is moistened 24 hours before commencing the repair work. The volume of water used depends on local conditions (e.g. weather, quality of the existing concrete surface). The substrate is moistened just before commencing the repair work. The repair work can get underway once all the water has been absorbed into the structure. The substrate must be moist but not shiny at the start of the application. On smooth (but undamaged) or unevenly absorbent substrates, adhesion can be ensured by priming the surface with **weber REP 05** Slurry Primer. In such cases, REP 25+ is then applied on top of the wet REP 05, which has been brushed carefully onto the substrate. The lowest temperature at which the mortar can be applied is +5 °C. Avoid applying the mortar in direct sunlight or in strong winds.

Mixing

REP 25+ is mixed mechanically using a drilling machine beater. A sack of REP 25+ (25 kg) is mixed with 3.4–3.8 litres of clean potable water. The mixing takes place in two stages: first, the minimum amount of water is measured into the mixing vessel and the dry product is added while mixing continuously. This creates an even, relatively rigid compound, which is left to stand for 5–10 minutes. Then the compound is mixed again and the remaining water is added as needed. Do not exceed the stated maximum amount of water! The mixed mortar remains usable for approximately 45 minutes.

Work instructions

Adhesion layer is applied by brushing REP 25+ with flowable consistency to the steel reinforcement and concrete substrate. Also REP 05 may be used as adhesion layer. For levelling, each layer should be 5–30 mm in thickness. When

filling in holes and cracks, each layer can be up to 100 mm in thickness. The ambient temperature and the temperature of the substrate must remain above +5 °C for the entire duration of the application as well as for 5 days afterwards.

Curing

Aftercare plays a crucial role in ensuring optimal adhesion, strength and firmness of the repair mortar. Aftercare comprises keeping the fresh repair mortar moist for a period of five days after the application. The efficiency of aftercare can be increased by covering the surface with plastic, and therefore also reducing the effects of sun and wind. In order to prevent plastic from shrinking and cracking, the surface must be covered immediately after the repair mortar has been applied. The structure should be protected with a plastic sheet whenever possible in order to counter the effects of weather conditions, for example. Towards the end of the aftercare period, the volume of moistening is reduced gradually to prevent the shock of sudden drying, which may cause cracking and failure of the adhesion.

Please note!

The instructions and layer thickness values are for guidance only. The number and thickness of layers may vary depending on the conditions. Contributing factors include ambient temperature, wind and the absorbency of the substrate. This is why each application should be tailored to the individual conditions in order to achieve sufficient adhesion, strength and firmness.

Disclaimer

Restrictions on the use of the product: cf. Weber's design and work instructions and the general delivery terms.

