



weber REP 970

Concrete fine repair

- Cement based and polymer-modified (PMC)
- Applied by spraying or manually
- Slows down the penetration of humidity and carbon dioxide into the substrate concrete
- Resistant to salt and freezing
- Approved in the bridge repair instructions (SILKO) of the Finnish Road Authority

About this product

Salt and frost resistant, class R3 repair mortar. It is grey in colour. Maximum grain size 0.6 mm.

Product attributes

- Reinforced polymer

Application characteristics

- Hand applied
- Sprayable

Area of use

The purpose of the product is to close pores that occur in concrete surfaces and to level uneven surfaces prior to coating according to concrete repair principles 3.1. and 3.3. Product fulfills the requirements of R3-class according to SFS-EN 1504-3. It gives extra support to reinforcement by slowing down the penetration of humidity and carbon dioxide into the substrate.

Substrate

Concrete surfaces are cleaned thoroughly. Damaged concrete or coating is removed. Exposed rebars are protected with weber REP 05 Slurry Primer and deeper fillings are applied according to Weber's instructions for Repair Mortars. The substrate is moistened the day before coating. The quantity of water used depends on conditions at the site (e.g. weather, quality of base concrete). The substrate is moistened again just before the work is started. Work can be started when the water has been completely absorbed into the structure. The surface must be damp when coating is started.

Substrate type

- Concrete

Mixing

A sack of REP 970 powder (20 kg) is mixed into 3.6-4.0 litres of clean potable water mechanically with e.g. a drilling machine beater. Mixing is done in two stages: first the water is measured into the mixing vessel using a smaller amount of water than instructed and then the dry product is added evenly, mixing constantly. This way you obtain a homogenous and low-slump mix, which is left to set for 5-10 minutes. Then the substance is mixed again and the rest of the water is added. Do not use more water than instructed. Once prepared, the mortar remains usable for about 45 minutes.

| Product specification | |
|--------------------------------|---|
| Material consumption | Approx. 2 kg/m ² /mm |
| Recommended layer thickness | 0-5 mm |
| Recommended water content | 3.6-4.0 l/20 kg of dry mix |
| Mixed volume | Approx. 12-13.6 l/20 kg |
| Pot life (Operating time) | Approx. 45 minutes |
| Binder | CEM II A 42,5 R, Fast-setting Portland cement and polymer |
| Aggregate | Natural sand and limestone 0-0.6 mm |
| Additive | Additives that improve workability, adhesion and tightness |
| Adhesion strength 28 days | > 1.5 MPa (EN 1542) |
| Compressive strength 28 days | > 25 MPa (EN 12190) |
| Restrained shrinkage/expansion | Adhesion strength after test > 1.5 MPa (EN 12617-4) |
| Fire class | A2 (EN 13501-1) |
| Frost resistance | Salt-frost resistant (EN 13687-1) |
| Carbonation resistance | Pass (EN 13295) |
| Chloride content | < 0.05% (SFS-EN 1015-17) |
| Capillary absorption | ≤ 0.5 kg/(m ² ·h ^{0.5}) (SFS-EN 13057) |
| Equipment recommendations | Weber Pump Set to normal sacks. Stator 50/7R or Superstar 0,5, steel reinforced hose maximum of 40 m. |
| Storage conditions | Shelf life is approx. 12 months from the date of production (unopened package, in dry conditions) |
| Package | 20 kg sack |
| Certifications | CE |

Work instructions

The minimum temperature of the mixture is +5 °C. REP 970 can be applied by spraying and levelling can be done afterwards using an expanded plastic float. REP 970 can also be spread manually in a 2-3 mm thick layer using a trowel. A chosen structure can be achieved by brushing the surface. However, the surface may also be left with the coating as sprayed on.

After-treatment

After-treatment is significant in terms of the adhesion, strength and tightness properties of REP 970. After-treatment includes keeping the fresh repair mortar continuously wet for 72 hours. After-treatment may be boosted and the drying effects of sun and wind prevented by covering the repaired surface with plastic. It is advisable for the working area to be covered in order to neutralise environmental conditions, for example. After-treatment is finished by gradually decreasing the moistening. This way the mortar will avoid the shock of sudden drying, which might cause cracking or failure to grip.

Please observe

Instructions for use are guidelines only. For example, the required after-treatment time may vary depending on the working conditions. It may be affected by air temperature, wind and the water absorption capacity of the substrate. That is why a suitable application is chosen for each target in order to achieve sufficient adhesion, strength and tightness.

Disclaimer

As there are different conditions at every opportunity, Weber can not be held responsible for anything other than the information provided under the heading "Product Specification". Examples of information and circumstances, which are outside Saint-Gobain (whether specifically stated or not) include storage, construction, processing, interoperability with other products, workmanship and local conditions.

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