

WEBER REP 45



- Repair mortar with plastic fiber for repair without formwork
- Repair class R4 EN 1504-3
- High through-carbonization resistance

ABOUT THIS PRODUCT

REP 45 is a dry mix with plastic fiber intended for repair of concrete without formwork. Only mixed with water to obtain a ready-to-use repairs with high strength and normally good adhesion and durability. REP 45 is part of Weber's system for concrete repairs. Repair class R4 according to 1504-3.

AREA OF USE

REP 45 is used for reconditioning and repairing concrete both outdoors and indoors. Designed to repair concrete without formwork in layer thicknesses of 5-50mm. (50mm on limited surfaces). In thick widespread repairs, the mortar is applied in several layers. When laying on horizontal surfaces or surfaces with horizontal support, the REP 45 can be applied in one layer. Contains plastic fiber for reducing crack risk. REP 45 is intended for the repair of very high-grade concrete (minimum C32/40)

PRODUCT SPECIFICATION

Material consumption	Approx 20 kg/m ² Rep 45 per m ² in 10mm layer thickness
Minimum layer thickness	5mm
Maximum layer thickness	50mm
Recommended water content	Approx 3,0 l / 20 Kg
Pot life (Operating time)	About 60min at +20°
Curing start	3-8 hours
Binder	Cem II 52,5 N (Portlandcement)
Fiber	Yes
Aggregate	Natural gravel/sand 0-2mm
Additive	Polypropylene fibre
Adhesion strength	Concrete surface >2,0 MPa
Compressive strength 3 days	>25 MPa according to EN 12390-3
Compressive strength 7 days	>30 MPa according to EN 12390-3
Compressive strength 28 days	>40 MPa according to EN 12390-3. For accredited strength testing report at 28 days, contact Weber.
Exposure class	X0, XC4, XS2, XD2, XF4, XA1 according to EN 206-1
Repair class	R4 according to EN 1504-3
Frost resistance	Yes, according to SS 13 72 44 1A (salt environment)
Waterproof	Yes, according to SS 137214
Air content	5-8%
Watertightness	High density, corresponds to concrete C40/50
Water cement ratio	0,40
Storage conditions	The storage time for sacks on wrapped pallet is about 12 months from the packing day.
Package	20 kg sack

and where high strength is required. A 20mm layer resists through carbonation for 50 years. When repairing concrete with normal strength, REP 25 is used.

SUBSTRATE

Concrete, adhesionsludge

PRETREATMENT

Loose, porous and greasy contaminants as well as crack-filled concrete, surface area and paint are removed by concrete milling, chipping hammer or similar. Steel-smoothed and other smooth surfaces are roughened. For concrete with reinforcing steel, carbonated concrete must be removed. This is checked with "Concrete indicator". If strong red coloration of moist concrete is obtained, the concrete is not carbonated.1. Reinforcing steel and other potting components are mechanically cleaned

from concrete residues and rust by steel brushing or blasting.² There must be no cracks, dirt or poor concrete on adjacent concrete surfaces. The use of a chipping hammer should be done with care so that no new damage occurs. The edges between the repair site and the undamaged surface must not be sloping. The connections are made perpendicular.³ Incorporation with the sludge use Weber Betoheft (see product sheet) is carried out in thickness 2-3mm. The substrate must be moist but still absorbent. The sludge is made with a brush so that both reinforcing steel and concrete surfaces are completely covered.

MIXING

REP 45 is mechanically mixed (drilling machine with whisk or flat mixer) about 5 minutes with max 3.0 l water per sack of 20 kg, which gives you about 11 l "ready to use product". Mix the powder in water. If the mortar is not mixed mechanically, the frost resistance can be adversely affected.

WORK INSTRUCTIONS

1. REP 45 is applied when the Betoheft slurry use has hardened but not dried, almost wet in wet. The REP 45 is applied with a suitable tool and is built up to the desired thickness. For thicker repairs, the next layer is applied at the earliest when the first layer is stiffened. On horizontal surfaces, REP 45 can be used in thickness up to about 50mm. Prevent rapid dehydration. Water at least 7 days or cover with plastic. The surfaces should then be treated with Weber Krympspärr to reduce the risk of cracks. 2. After finishing repairs with REP 45, the entire surface can be slammed with 2-3mm Betoheft to achieve uniform structure. Apply with syringe, putty, brush or soft brush.

Moisten the REP 45 before the slurry. Betoheft gives a "carbonation-braking", smooth and porphyric surface, which is suitable for painting if desired.

AFTER-TREATMENT

Prevent rapid dehydration from sun, wind, heat radiation, etc. At the risk of rapid dehydration recommended protection coverage alternatively a few days after watering. After that, the surfaces should be treated with Weber Krympspärr to reduce the risk of cracks, all painting is done with paint suitable for concrete eg. weber Concrete paint. Finishing can also be done with REP 990 Concrete protection, which is a highly elastic protection. (See product sheet.)

PLEASE OBSERVE

Winter handling: At a temperature lower than + 5 ° C, the strength growth stops. If there is a risk of lower temperature in the next few days, it is advisable not to start repairing if protective devices such as cladding and heating cannot be achieved.

SAFETY REGULATION

Always read the applicable safety data sheets, use personal protective equipment and follow the workplace safety regulations.

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.