Technical Data Sheet

weber.rep 768

Grouting concrete 4 mm

Quick-setting cement-based grouting concrete for statically and dynamically highly stressed components

Fields of application

As cement-based concrete for grouting and anchoring components subject to high static and dynamic loads (for ex. turbines, generators, compressors, diesel engines and other power equipment), such as socket foundations, steel mounting parts, concrete joints, recesses, anchor bolts (fastening bolts), machine sole plates and base frames, bridge bearings and bridge transition structures, craneway rails, bedding joints in pre-cast concrete sections, rigid joints between steel and concrete columns, post fixings etc.
Also suitable for pre-stressed concrete parts as well as for reinforced or non-reinforced concrete.
For use indoors and outdoors.

Description

weber.rep 768 is a factory-mixed, free-flow and non-shrink cement-based grouting concrete.
It fulfills the German specifications of the guideline “Production and use of cement-based grouting concrete and grouting mortars” (DAfStb - German Committee for Reinforced Concrete).

Composition

Cement, additives, fillers

Main features

- high resistance to frost and thawing salts after full drying
- exceptional high flow performance
- very high early and final strengths
- self-levelling
- anti-corrosive
- shrinkage-compensated
- self-compacting

Saint-Gobain Weber GmbH
Schanzenstr. 84, D-40549 Düsseldorf
Contact: export.de.weber@saint-gobain.com

- controlled volume expansion
- maximum grain size: approx. 4 mm
- for use indoors and outdoors

Technical values

Undergrouting thickness:	20 mm - 120 mm
Largest grain size:	approx. 4 mm
Application temperature (substrate):	+5°C - +30°C
Pot life:	> 90 minutes
Fresh mortar density:	2.3 kg/dm³
Compressive strength (1 day):	43 N/mm²
Compressive strength (28 days):	83 N/mm²
Class of slump flow (acc. to DAfStb):	650 - 740
Swelling value (24 hours):	≥ 0.1 vol-%
Reaction to fire (EN 13501-1):	A 1

Quality control

weber.rep 768 is subject to a regular quality control by external monitoring and self-monitoring.

General notes

- Limits of use: do not use weber.rep 768 as coating on horizontal areas.
- All characteristics mentioned in this data sheet are based on a temperature of +20°C without draught and a relative humidity rate of 70%.
- Low temperatures will reduce the flowability and delay the early mechanical strengths, high temperatures accelerate the strength development and reduce the pot life.
- Like all cement-based materials, weber.rep 768 may cause non-iron-metals in the transitional area of the contact surface (e.g aluminium, copper, lead, zinc) to loosen under certain conditions.

Special notes

- Comply with the national standards and/or guidelines relating to grouting works (for ex. above-mentioned guideline of DAfStb; if not issued and if necessary, request technical advice.
- Do not add foreign substances during mixing and application.

Substrate preparation

- The substrate must be sufficiently rough and frost-free; its capillaries must be open.
- Remove dirt, grease, loose and all adhesion-impairing particles and substances.
- Expose corroded reinforcing steel bars and proceed to de-rusting by sand blasting in accordance with EN ISO 12944-4 up to the brightness scale SA 2 ½;
- Make sure that the average tensile strength (pull-off strength) of the substrate is at least 1.5 N/mm^2, by using appropriate mechanical means.
- Thoroughly pre-wet the substrate until it is water-saturated (at least 4 hours) prior to grouting works. Remove standing water and allow to dry until it is dull-moist.
- The substrate preparation must be adapted to the specific job site conditions.

Working instructions

Mixing

- Mix the bag content (25 kg) with 2.3 - 2.9 litres of water in accordance with the ambient temperature until lump-free, using either an electric drill and an appropriate stirrer (for ex. weber.sys Rührpaddel no. 8) or a force-action mixer.
- First thoroughly mix 4/5 of the water quantity during 2 minutes; afterwards pour 1/5 of the water quantity and mix for at least 2 minutes.
- According to the required consistency the water amount can be reduced by maximal 10%.
- Do not mix more material than can be applied within 90 minutes.

Application

- Pour weber.rep 768 into the prepared cavities immediately after mixing.
- Do not mix more material than can be applied within 90 minutes.
- Manual application: pour by gravity or a head hopper, fixed on one side of the formwork.
- Mechanical application: use screw pumps when grouting large areas.
- Place weber.rep 768 slowly, without interruption and from one side, ensuring a continuous flow during the complete grouting operations to avoid trapping air.
- Bubble-free grouting is best achieved by providing a sufficient number of ventilation holes or slots in the construction design, which will prevent air entrapment.
- In case of areas which are not square, pour the product from the longest side.

- For the undercasting of steel or machine components install a non-absorbent, leak-proof, compact and inflexible formwork. It should be of adequate length, treated with the release agent weber.tec 780 and sealed to prevent leakage of pre-wetting water and grout.
- Any vibration of weber.rep 768 is not required.
- weber.rep 768 is allowed for undergrouting thicknesses of 20 - 120 mm; the area to be grouted should be shuttered, depending on geometry of the filling space and the grout thickness.
- Clean mixing equipment and tools with water (fresh product). Hardened material can only be removed mechanically.

Aftercare

- Protect from too rapid drying out (dehydration) due to high temperatures, excessive sunlight and draughts at the latest when the material surface starts to set and during at least 5 days; use a curing compound, moist textile membranes, polythene foils etc.
- In warm or windy conditions protect the applied material by mist-spraying with clean water or protective tarpaulins until initial set has started.
- In cold conditions cover with insulated tarpaulin, polystyrene or other insulating material.

Practical information

Water demand:
2.3 liters at +30°C up to 2.9 liters at +5°C / 25 kg

Tools:
Forced-action mixer or electric drill + stirrer weber.sys Rührpaddel no. 8, head hopper or screw pump

Storage:
The product can be stored at least 12 months in its original unopened packaging, if kept dry.

Consumption / yield

per mm layer thickness:	approx. 2 kg/m²

25 kg powder yield 12 - 13 liters of grouting mortar.

200 kg powder yield 100 liters of grouting mortar.

Packagings

Type	Sales unit	Number / euro-pallet
Paper bag	25 kg	40 bags

The information in this technical data sheet is based on our current knowledge and experience at the time of printing. However, they do not guarantee in the legal sense.

Saint-Gobain Weber GmbH
Schanzenstr. 84, D-40549 Düsseldorf
Contact: export.de.weber@saint-gobain.com