

FORTE® opravný beton

Serial Number 0917

fast-curing compound for minor concrete work and concrete repairs

Features:

FORTE opravný beton (FORTE repair concrete) is made from cement, graded silica sand and refining additives. It is characterized by rapid solidification and hardening, high adhesion to the surface, strength, frost resistance and excellent processability. **FORTE opravný beton** is designed for concrete repair and minor concrete work, which must be able to withstand load after a short time. According to ČSN EN 13813, **FORTE opravný beton** is a cementitious screed material CT-C30-F6.

Usage:

FORTE opravný beton is designed for minor concrete work, for interior and exterior concrete repair, anchoring, filling potholes and repairing horizontal surfaces in the thickness of one layer from 2 to 50 mm. **FORTE opravný beton** is suitable for quick repairs and construction of floors and balconies before using waterproofing materials **FORTISOL**, **FORTISOL 1K**. The surface can be walked on after 2 hours from the repairing. **FORTE opravný beton** is not suitable for bituminous materials, wood, plastics and metals.

Technical data:

Appearance	white powdery substance
Bulk density	1800 ± 100 kg/m ³
Processing time (20 °C, 65 % rel. humidity)	20 minutes
Walkable (20 °C)	after ca. 2 hours
Application of the next layer	after min. 2 hours
Adhesion to concrete (after 28 days, 20 °C, 55 % rel. humidity)	min. 1,0 MPa
Compressive strength (after 1 day, 20 °C, 55 % rel. humidity)	min. 15,0 MPa
Compressive strength (after 7 days, 20 °C, 55 % rel. humidity)	min. 25,0 MPa
Compressive strength (after 28 days, 20 °C, 55 % rel. humidity)	min. 30,0 MPa
Tensile strength (after 24 hours, 20 °C, 55 % rel. humidity)	ca. 4,0 MPa
Tensile strength (after 7 days, 20 °C, 55 % rel. humidity)	ca. 6,0 MPa
Tensile strength (after 28 days, 20 °C, 55 % rel. humidity)	ca. 6,0 MPa
Dosage of water	0,13 kg/kg mass 1,625 kg/bag 12,5 kg

Shade:

grey (in raw material colour)

Consumption:

ca. 20,5 kg of dry mix / 1m² / 1 cm thick layer.

Packaging:

12,5 kg paper bags with PE liner

Storage:

When stored in a dry environment in original undamaged containers on a pallet or wooden grating material, the product is storable for 6 months from the date of manufacture (indicated on the packaging).

Surface preparation:

The surface for **FORTE opravný beton** must be volume stable, coherent, free of dirt, grease and loose particles, moistened to "damp" stage. To achieve high-quality connection before using **FORTE opravný beton**, it is suitable to create a connecting bridge from a mixture of **FORTE opravný beton** with water in a ratio of approx. 5 : 1, i.e. 1 kg of dry mixture + 0,2 kg of water.

Application:

FORTE opravný beton is prepared by mixing the dry mixture with clean cold water in a ratio of about 0,13 kg of water per 1 kg of dry mixture (i.e. 1,6 to 1,7 liters of water per 12,5 kg bag) and stirring (e.g. electrical drill with a mixer at low speed) for 3 minutes, into an easily workable mixture. The prescribed amount of water needs to be followed. Larger quantities of water are not desirable! This material is prepared without any additives and should level in thickness of 2–50 mm. For concrete work, add gravel grain with size 4–8 mm into properly mixed mixture at a rate of 2 kg of gravel to 3 kg of dry mix of **FORTE opravný beton** and re-mix. This creates a dense, well-processable material. For anchoring into the ground, it is suitable to increase proportion of gravel 4–8 mm grain size to 1 kg of gravel to 1 kg of dry mix **FORTE opravný beton**. The prepared material is processed by conventional procedures. When using the connecting bridge, it is necessary to apply a **FORTE opravný beton** on the connecting bridge. The edges of the repairs can be adjusted so that the surface hardening material can be smooth or rough. After about 2 hours the material can be walked on. The layer must set for 12 hours to be protected against rapid heat, rain and frost. The compound can be processed at a temperature (surface) and the environment between 5 °C to 25 °C. Processing time of prepared mass is about 20 minutes at 20 °C. **FORTE opravný beton**, which already shows signs of cooling, is not good for use! While repairing, the expansion joints must be respected. Used equipment should be washed with water after use.

Waste disposal:

Described on safety data sheet of the product.

Safety and hygiene at work:

According to the law, the product is classified as health hazard. Causes serious eye damage. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and possible. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Dispose of contents/container in accordance with the relevant national legislation. Other details are on the Safety data sheet of the product.