

# CreteGrout C 650

Cement Based, Non-Shrinking, Flowable Grout Mortar



## INFORMATION

CreteGrout C 650 is a cement-based, non-shrinking and flowable grout with high strength.

## APPLICATIONS

- Installation of structural elements in prefabricated concrete
- Power plants
- Production of curtain and column heads
- Installation of steel girders on the foundation
- Reinforced concrete and sheathing, reinforcement applications
- Fixing of all industrial machines, generators, compressors and pumps

## ADVANTAGES

- It is waterproof, resistant to chlorine, sulphate and oils.
- It is mixed with water and is easy to apply.
- It is resistant to freezing and thawing.
- It provides high adhesion to concrete and reinforcement.
- It has highly thixotropic properties.
- High compressive strength
- Does not require a primer
- No shrinkage
- Rapid strength development

## TECHNICAL INFORMATION

The information below has been determined under laboratory conditions of 23 ° C and 50% relative humidity.

Property	Result
Product composition & Colour	Mineral fillers, fibre & polymer reinforced cement, Gray
Compressive Strength (TS EN 12190)	1. Day : > 30 N/mm <sup>2</sup>
	7. Days : > 50 N/mm <sup>2</sup>
	28. Days : > 60 N/mm <sup>2</sup>
Flexural Strength (TS EN 196)	28. Days : > 8,0 N/mm <sup>2</sup>
Adhesion to Concrete (TS EN 1542)	28. Days : > 2,0 N/mm <sup>2</sup>
Modulus of Elasticity (28 days)	>20 KN/mm <sup>2</sup>
Application Thickness	10mm – 40 mm
Application Temperature Range	5 - 30°C
Service Temperature	(-20°C) – (+400°C)
Working time at +20 °C	45 Minutes
Walk on Time at +20 °C	24 Hours Later
Full cure at +20 °C	28 Days

## PACKAGING

CreteRep C 650 is available in 25 kg paper sacks.

## SHELF LIFE

Shelf life is 1 year when stored in unopened original packaging, in a cool and dry environment, protected from frost. Opened packages should be stored tightly closed and used within 1 week after opening.

## APPLICATION INSTRUCTIONS

**Preparation of Machine and Foundation:** Loose and damaged areas in the concrete should be cleaned before the machine is placed, and the surfaces on which grout will be applied should be roughened. Any foreign matter that may affect the performance such as oil, grease and dust on the bolt and base surface should be cleaned. Air vents must be pre-drilled into the base plate. After the machine is placed and its position and scales are adjusted, its position should not be changed. If the adjustment wedges (simler) are to be removed later, they should be lightly oiled so that the grout does not stick. After the placement and adjustment works of the machine are completed, the foundation concrete should be saturated with water 6 hours before the grout pouring.

**Preparation of the Molds:** The molds must be made of materials that will not absorb the water of the grout mortar and will not leak, and must be mounted to withstand the forces it will encounter during the process. A 5 cm casting gap should be left between the edge of the base plate and the mold on the side where the grout mortar will be poured. In order to give the pressure to allow the grout mortar to spread, the mold should be kept high on the casting side, depending on the situation. In order to fill the bottom of very large sized slabs, it may be necessary to take measures such as making a pressure height of up to 1.5 m or using equipment such as pumps and pipes, pouring the first batch with a mortar containing 5% more water than normal and making the surface of the foundation concrete slippery. The edges of the molds must remain free of gaps to prevent leakage and pressure loss. If there are other machines operating around the machine to be filled, the vibration on the surface of a container of water placed on the base plate should be observed to determine to what extent the vibrations from the environment are transmitted. If necessary, the working machines should not be operated for at least 10 -12 hours at + 20°C until the grout mortar is set. The prepared grout mortar should be poured on the surface without interruption, with a minimum thickness of 10 mm in one layer, from only one side of the mold. In large areas, 4-5 cm thickness should not be exceeded. But thicker depending on grout casting details. Applications can be made in 2 or 3 layers, or aggregate can be added into the grout mortar for casting in one layer. The aggregate to be used should be chosen as crushed stone No-1 with a diameter of 5-16 mm and should be washed and cleaned before the application. Two-sided casting should be avoided so that air is not trapped in the mold. In order to ensure that all the cavities in the mold are filled, a steel wire with a hooked end should be placed, and a vibrator should not be used. Molds should not be taken before 18-24 hours after application. Large surfaces open to the atmosphere, especially hot, dry and windy environments, should be protected against rapid evaporation for 24-48 hours with flossing cloth, water or curing agents. If it is desired to break the exposed edges, after the setting has started and the mortar has hardened, the mold frangible. Adjustment wedges should not be taken before 2 days. After the machine is put into operation, the looseness of the nuts and bolts should be checked and tightened if necessary.

**Preparation of Mortar:** Appropriate amount of water is poured into a clean mixing bowl. While adding CreteGrout C 650 slowly, it is mixed with a 400-600 rpm mixer. The mixture is mixed for about 3-4 minutes until it is completely homogeneous and lump-free and rested for 3 minutes. Then it is mixed for 1 minute again to make it ready for application.

## DOSAGE

In order to obtain 1 cm thickness, approximately 19 kg / m<sup>2</sup> powder should be used.

## MIXING RATES

<b>CreteRep C 650</b>	For 1 Kg powder	For a 25 Kg Bag
Water Required For Mixing	Max. 0,16 lt	Max. 4,00 lt
Mixed Density	2,25 kg/L	

## PRECAUTIONS / LIMITATIONS

In every case, consult the Material Safety Data Sheet before use.

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