

Teknogrout Rapid

Very Fast Setting Non-shrink Flowable Grout



CE TS EN 1504 – 3, R4

Public Pos. No: 04.613/3C

Product Description It is a cement based, single component, non-shrink, high strength, flowable grout with fast strength.

Areas of Usage

- It used in elevating manhole covers and manholes,
- In the installation of curb and paving stones,
- To fix poles,
- Repair of concrete floors exposed to vehicle and pedestrian traffic.

Features and Benefits

- Thanks to its fluid feature, it provides ease of application.
- It gains fast strength. It can be opened to traffic after 1 hour.
- The area of utilization is wide because it does not shrink.
- It does not decompose and cause water formation.
- Strength and abrasion resistance are high.
- Since it has very high adherence, it works monolithic with old concrete.
- It is resistant to various chemicals, oils and acids.
- It is not affected by moisture because it does not contain metal.
- It is resistant to freezing and thawing.

Application Instructions

Surface Quality: The surfaces must be clean, smooth, solid, free from any antiadhesive substance such as dust, oil, dirt, rust, mold oil, detergent and waste. If there is crack, hollow on the floor or wall to be applied, it should be repaired with appropriate TEKNOREP repair mortars. TEKNOGROUT RAPID should be applied 3-4 days later.

Surface Preparation: Cement slurry and weakened parts should be removed, and there should be no materials such as oil dirt and rust on the surface. Absorbent surfaces must be pre-wetted, but there should be no water droplets or drops.

Mixing: 3.0 - 4.0 lt clean, clear water received from normal ambient temperature into a clean container which is free from all kinds of materials which prevent adhesion. TEKNOGROUT RAPID in 25 kg bag as powder is poured into a container filled with water. The product is mixed with a low speed mixer until a homogeneous mixture without lumps is obtained. Mixing time must be minimum 1 min, the mortar obtained at the end of the process is quickly placed. After the material has entered the reaction, it should not be mixed again with water. The prepared mixture should be placed in 2.5 minutes depending on the air temperature and the amount of water. TEKNOGROUT RAPID should be poured from one side in order to fill under the gaps surrounded by four sides and covered. So it discharges air and prevents gap formation. It can be pushed from one side with a long piece of iron during casting to speed up flow.

The thickness of the casting should be 10-60 mm as a layer thickness at a time. It is advisable to carry out a preliminary test if small diameter anchors are to be used.

For applications thicker than 60 mm, it is possible to add aggregates of 5-12 mm in diameter at the rate of 30% of the material.

Aggregate addition is done in two ways;

- The aggregate is added into the prepared mortar. This process is continued until a homogenous mixture is obtained.
- Aggregate is poured or spread on the floor to be applied. The mixture is then poured onto the prepared TEKNOGROUT RAPID. The self-leveling mortar also allows the possibility of wrapping around the aggregate to obtain a high-strength concrete.

Application Notes / Restrictions

- In cement based products, reaction times are affected by ambient and ground temperatures. Reaction times are shortened in a hot environment, and extend in a cold environment.
- Hot mixture water should be used in cold conditions.
- In hot environments, cold mixing water should be used.
- During the application of the product, work clothes suitable for occupational health and safety rules should be worn and appropriate glasses and masks should be used.
- The prepared mixture should be placed in 5 minutes depending on the air temperature and the amount of water.
- It must be protected after application against adverse weather conditions such as direct sunlight, high air temperature (above +35 °C), rain and frost. TEKNOGROUT RAPID should be cleaned thoroughly with water and detergent before it is fully cured and hardened.

Technical Data

General Information	
Appearance	Grey
Shelf Life	12 months in unopened package in dry environment
Package	25 kg kraft bag
Grain Size	D _{max} : 3 mm
Application Information	
Temperature of Application Floor	(+5°C) - (+35°C)
Mixture Ratio	3 - 4 lt water / 25 kg powder
Application Thickness	10 mm - 40 mm
Workability Time	Max. 2,5 min
Setting Starting	~5 min.
Mortar Density	2,30 ±0,1 kg/lt
Performance Information	
Pressure Resistance	1 hour: > 16 N/mm ² 24 hours: > 35 N/mm ² 28 days: > 65 N/mm ²

Consumption Table

TeknogROUT Rapid	Mixture Density (gr / lt)	10 mm/ 1m ² Powder Consumption (kg)	Mixture Water Amount (lt)
25 kg kraft bag	~2,30	~21	3-4

Technical data are approximate values obtained from the laboratory study of Tekno Construction Chemicals for finished products obtained at +20°C air temperature and 50% relative air humidity and valid for its performance after 28 days.

