

Teknogrout 350

Normal Setting, Non-shrink Flowable Grout



(TS EN 1504 - 3, R4

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Product Description

It is a cement based, one component, non-shrink, self-levelling, flowable, mortar with high adherence and strength.

Areas of Usage

- · Indoor and outdoor applications,
- To fix steel columns and poles,
- Under all kinds of industrial machine bearings,
- In engineering structures such as metro, highways, dams,
- For repair of sections where reinforced concrete curtains are joined to the beam, in strengthening projects,
- To combine prefabricated elements.

Features and Benefits

- It is an easy to use material, made ready just by adding water.
- It does not shrink, it shows high fluidity.
- No decomposition and water formation.
- It can be pumped or poured.
- It does not contain solvent, asbestos.
- It is resistant to freezing and thawing.
- Application thickness is 10-75 mm
- It sticks well to concrete, doesn't contain chlorine.

Application Instructions

Surface Quality: Concrete and metal surfaces must be clean, smooth, solid, free from cement slurry and weakened parts, any antiadhesive substance such as dust, oil, ice, dirt, rust, mold oil, detergent and waste. Pull off strength of concrete must be above 1 MPa.

All molds must have sufficient strength, TEKNOIL mold oil must be applied and must be insulated to prevent leaks. Insulation can be made by using TEKNOPOLIDERZ 1K under, around and at the junction points of the mold. Whether the mold is leakproof can be controlled by pre-wetting water. During grouting, a suitable feed hopper / funnel should be made on one side of the mold in order to maintain a constant grouting height of 150 - 200 mm.

Surface Preparation: High pressure water should be prepared by cleaning with suitable mechanical surface preparation techniques such as jetting, roughening, sandblasting. Absorbent surfaces must be pre-wetted, but there should be no water accumulations.

Mixing: 25 kg of powder material is poured onto 3.0 - 4.0 lt of water. These rates given can vary depending on the weather temperature. The mortar is mixed with a 400 - 600 rpm mixer until a homogeneous and a consistency without lumps is obtained for about 3 min. After 2 min. of rest, the material is ready to be used again for 30 seconds.

The prepared mixture should be placed in 20-25 min. depending on the air temperature and the amount of water. TEKNOGROUT 350 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 gaps. 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 10-75 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 75 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. When a homogenous mixture is obtained, this process is continued for 3-5 minutes.
- Aggregate is poured or spread on the floor to be applied. The mixture is then poured onto the
 prepared TEKNOGROUT 350. The self-leveling mortar also allows the possibility of wrapping
 around the aggregate to obtain a high-strength concrete.

Application Notes / Restrictions

- For outdoor applications, the first 3 hours of sunshine should be protected from rain and frost.
- 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 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.
- Do not use for patch repair work
- Do not use a vibrator
- Do not apply in cases with frost risk
- Perform casting or pumping only from one direction
- For best results, it is recommended that the material be conditioned between +15°C and +25°C before use.
- It must be protected after application against adverse weather conditions such as direct sunlight, high air temperature (above +35 °C), rain and frost.
- Immediately after application, before hardened, the equipment should be cleaned with water.
 After the product is hardened, it should be cleaned by mechanical methods.

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		
Application Temperature	(+5°C) - (+35°C)	
Mixture Ratio	3,0 - 4,0 lt water/25 kg powder	
Workability Time	Minimum 20 min.	
Mortar Density	2,3 ±0,1 kg/lt	
Time to put into Service	~24 hours	
Application Thickness	At least 10 mm / Maximum 75 mm	
Performance Information		
Flexural Strength (28 days)	≥ 9.0 N/mm²	
Pressure Resistance (28 days)	≥ 60,0 N/mm² (TS EN 196-1)	
Adhesion Strength (28 days) (TS EN 1542)	≥2.0 N/mm²	
Capillary Water Absorption (28 days) (TS EN 13057)	$\leq 0.5 \text{ kg/(m}^2.\text{h}^{0.5})$	



Consumption Table

Teknogrout 350	Mixture Density	Powder consumption per	Mixture Water Amount
	(gr / lt)	1 liter mortar (kg)	(It)
25 kg kraft bag	2,3±0,1	~2,00	3,0 – 4,0

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.