



The Chemical Company

EMACO® T300

Manhole Leveller

Description of Product

EMACO® T300 is cement based one component, polymer modified, pourable, fast setting levelling mortar.

Ministry of Public Works Pos. No: 04.613/3c


Fields of Application

- Manhole levelling,
- Repair of sewage and manhole walls,
- Repair of tracks and runway concrete pavements,
- Repair of concrete floorings under pedestrian or vehicular traffic,
- Fixing of the kurbstone and pavers.

Features and Benefits

- Fast setting and can be opened to service in 1 hour.
- Mixed with only water and can be poured into form easily.
- High compressive strength.
- High fluidity.
- Non - segregate, and doesn't bleed.
- Resistant to freeze-thaw cycle.

Technical Data

Product Chemistry	Mineral fillers and polymer modified cement	
Colour	Grey	MK
Compressive Strength (20°C) TS EN 196		
1 hour	>10 N/mm ²	
24 hour	>25 N/mm ²	
28 days	>50 N/mm ²	
Application Thickness	Min. 10 mm Max. 40 mm	
Application Temperature	+5°C - +30°C	
Pot Life (20°C)	7 minutes	
First Setting (20°C)	20 minutes	
Open Time to pedestrian traffic (20°C)	1 hour	
Fully Cured at 20°C	28 days	
Flow (EN 413-2)	> 17 cm (self levelling)	

Typical values are obtained from the test results of 4x4x16 mortar prism in 23°C and 50% relative humidity conditions. High temperatures shortens the curing and working time, lower temperatures extends the durations.

Application Procedure

Preparation of Substrate

The concrete surfaces must be sound, clean and dry. It shouldn't be weakened by over-troweling and lack of curing. The concrete should be free of frost, curing membranes, waterproofing treatments, oil stains, laitance, friable material and dust. The perimeters of repairs to concrete that involve concrete removal and subsequent materials replacement shall be saw cut perpendicular to the repair surface, corroded reinforcements should be cleaned and if needed replaced with new ones. The surfaces should be wetted before application. If there is a water leakage it must be drained or properly plugged.

Placing Additional Reinforcement

If the application thickness exceeds 4 cm, additional reinforcement should be placed. The concrete cover should be 10 mm at minimum.



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Mixing

Add enough water into a clean mixing bucket by using a proper water gauge. Add the powder into the bucket slowly and continuously. Mix the fresh mortar with a proper electrical mixer (300-600 rpm) for 3 - 4 minutes until having a homogenous consistency.

Mixing Ratios

EMACO® T300	1 kg powder	25 kg bag
Water Quantity	0,13-0,14 liter	3,20-3,60 liter
Mixed Density	~2,21 kg / liter	

Application Method

EMACO® T300 should be poured in to the form from single opening and continuously. For preventing air gaps in the form, avoid from casting the mortar from multiple openings. Application thickness should be between 1 - 4 cm. For higher thicknesses add aggregate No 1 into the powder in $\frac{1}{2}$ ratios by weight and mixed with water. Do not increase water ratio more than 10 %. The aggregates should be clean and dry. For placing the mortar, a steel hook should be use. Do not use vibrator. Do not remove the forms before 15 minutes (20°C). Open areas should be protected from the rain, wind, etc. aggressive whether conditions during the first 1 hours after finishing repair by using wet clothes, curing membranes etc.

Coverage

20 kg/m² for obtaining 1cm thick layer.

Watchpoints

- Repair mortar should be applied in 7 minutes in 20°C.
- Cement based materials' pot life and curing times vary depending on the relative humidity, substrate and environment temperature. Reaction gets slow in low temperatures and it causes to extension on pot life and working time. On the other hand high temperatures speed up the reaction, which results to short pot life and working time. For full curing of material, both the substrate and environment temperature shouldn't be under allowed application temperature.
- In case of additional aggregate in fresh mortar, do not increase water ratio more than 10 %.
- Do not use **EMACO® T300** as a screed or concrete topping.

Cleaning of Tools

After the application all tools should be cleaned with water. **EMACO® T300** can be cleaned with only mechanical abrasion after hardening.

Packaging

25 kg bag.

Storage

Store in original container in cool (+5°C - +25°C) and dry indoor conditions.

Shelf Life

12 months under proper storage conditions after production date.

Health and Safety Precautions

It is dangerous to get close to the store areas with fire. The store must be well ventilated.

Work clothes, protective gloves, glasses and mask defined in Labour Laws must be used during the application. Avoid from material to contact with skin and eyes. In case of contacting wash your skin with water and go to doctor immediately Don't bring any food and drink to the application area. Store the material away from the children.

For further information Material Safety Data Sheets should be read.

Disclaimer

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