

EMACO[®] T420

Cementitious Large Area Repair Mortar

Description of Product

EMACO[®] T420 is a simple to use, single pack cementitious mortar designed to provide hard wearing, durable repairs and overlays to internal and external, pedestrian and vehicular trafficked areas.

A high strength pre-packed screeding/overlay system with extended work time to allow easy placing.

Application depth, 25mm to 200mm

Fields of Application

Recommended for:

- Floor maintenance repairs
- Driveway and pavement repairs
- Installation subjected to a wide range of temperature and humidity conditions
- Repairs to parking garage decks and ramps, roadways and other areas subjected to frequent traffic
- Floor overlays
- Patching holes in floor surfaces
- Raising and levelling manholes and drains

Features and Benefits

- Extended working time for finishing as a plain topping or for application as a topping to receive dry shake hardeners.
- High ultimate strength development
- Shrinkage compensation to minimise the effects of drying shrinkage
- Appearance similar to plain concrete
- Increased abrasion resistance - up to 2 times that of plain concrete
- Resistance to freeze/thaw cycles and de-icing salts
- Chloride free
- A packaged ready-to-use product requiring only the addition of potable water for mixing.

Typical Properties /Technical Data

	EMACO[®] T420
Supply form	Grey powder
Granulometry	max. 8mm
Layer thickness	25 - 200 mm
Water addition per bag	2.5 –2.7 litres
Plastic Density	2200 Kgm ⁻³
Application temperature of substrate (min)	+7°C
Expansion to ASTM C 157	+0.001 to +0.01%
Compressive strength 28 days	60N/mm ²
Flexural strength 7 days	8.7N/mm ²
Bond strength to concrete after 14 days	1.5N/mm ²
Air content	4 - 6%

Application Procedure

Substrate Quality

Substrates to be treated must be completely clean, structurally sound and mechanically keyed. All substrate coatings, defective renders, foreign matter, formwork treatments and other contaminants that may affect the bond adversely should be removed.

Preparation of Substrate

The edges of the repair area shall be cut square to a minimum depth of 25mm.

Remove all damaged concrete back to a sound base and expose the full circumference of any reinforcement steel. Ultra high pressure water methods are preferred. If percussion tools are used, ensure that the cutting edges are maintained in a sharp condition.

Remove all loose rust and scale from the reinforcement by use of a needle gun or by abrasive blasting; wire brushing is not recommended.

Apply two coats of EMACO NANOCRETE AP primer to any exposed steel.

Thoroughly pre soak the substrate with clean water. Remove any standing water prior to the application of the materials.



The Chemical Company

Priming

To obtain optimum adhesion, scrub in a thin bond coat of EMACO® T420 mortar just ahead of the repair mortar application as it proceeds. Apply no more bond coat than can be covered with EMACO® T420, before the bond coat dries out.

Mixing

Mix in a clean drum, using a suitable mixing paddle in a slow speed drill (400-600 rpm). For larger amounts a forced action mixer such as a Mixal or Creteangle may be used.

Place 2.5 litres of clean potable water into a suitable mixing drum, add the powder to the water as you mix and continue mixing for 3-5 minutes, to achieve a homogeneous and lump free mortar.

Pot life

EMACO® T420 has a working time of approximately 60 minutes at +20°C.

Application

Place the EMACO® T420 onto the prepared and primed repair zone and bring flush with the finished substrate. Use a wooden float to achieve the desired surface texture, or a stiff broom for increased slip resistance.

Coverage

EMACO® T420 yields 12.5 litres per 25 kg bag. Approximately 0.5 m² per 25 kg bag at 25mm depth. One cubic metre requires approximately 80 x 25kg of powder.

Curing/After Treatment

Proper curing is essential and should be applied within 30 minutes of the completion of the repair. Suitable methods include the use of polythene sheeting, wet hessian or MASTERKURE® 181 curing compound.

Packaging

EMACO® T420 is supplied in 25 kg bags.

Storage

EMACO® T420 should be stored under cover, clear of the ground and stacked not more than 6 bags high. Protect the materials from all sources of moisture and frost

Shelf Life

Rotate the stock in order not to exceed the shelf life of 12 months for bags.

Health and Safety

*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs,

(which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Powder Products

Should be handled to minimise dust formation; use light mask if excessive dust unavoidable. Cement powders when wet or moistened can cause burns to skin and eyes which should be protected during use.

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Spillage

Chemical products can cause damage; clean spillage immediately.

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