

# EMACO® 'T' 420

Formerly known as Masterpatch 20

## Cementitious Traffic Area Repair Systems

### Description of Product

EMACO® 'T' 420 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.

**Minimum thickness 25 mm.**  
**Maximum thickness 200 mm.**

### Fields of Application

Recommended for:

- Floor maintenance repairs
- Driveway and pavement repairs
- Repairs to beams, columns, walls and post-tensioned or prestressed members
- 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

EMACO® T420 provides:

- 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
- No chloride added
- A packaged ready-to-use product requiring only the addition of potable water for mixing.

### Product Selector Chart

	13 - 25mm deep repairs	25 - 200mm deep repairs	Surface repairs <0.6m x 0.6m	Moderate to large repairs > 0.6m x 0.6m	Extended work time - ease of replacement	External use (freeze thaw resistance)	Internal use	Suitability to receive dry shake floor hardener	Curing required
<b>EMACO® T420</b>	NR	E	E	E	E	VG	E	E	YES

E = Excellent VG = Very Good P = Poor NR = Not Recommended

## Technical Data/Typical Properties

	<b>EMACO® T420</b>
Supply form	Grey powder
Granulometry	max. 8mm
Layer thickness	25 - 200 mm
Water addition per bag	2.3 litres
Plastic Density	2200 Kgm <sup>-3</sup>
Application temperature of substrate (min)	+7°C
Expansion	+0.001 to +0.01%
Compressive strength 28 days	60N/mm <sup>2</sup>
Flexural strength 7 days	8.7N/mm <sup>2</sup>
Bond strength to concrete after 14 days	1.5N/mm <sup>2</sup>
Air content	4 - 6%

### Application Procedure

#### Preparation of Substrate

To obtain 'permanent-type' repairs, square cut edges and chip to sound and clean concrete. Leave concrete rough, then blow clean of dust and debris.

#### **Saturate properly prepared substrate, then blow off**

#### Priming

For floor and slab surfaces scrub in a thin bond coat of EMACO® T420 mortar just ahead of the topping application as it proceeds. Apply no more bond coat than can be covered with EMACO® T420 before bond coat sets up.

#### Mixing

For each bag (25 kg) of EMACO® T420 pour up to 2.3 litres of clean water (depending on desired consistency) into a suitable pail. Whilst stirring, preferably mechanically, add the powder and continue to mix for at least 3 - 4 minutes until the mortar is homogeneous and lump free.

#### Pot life

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

#### Application

For floor slab and pavement repairs, mix, place, screed, float and finish the mortar to the desired surface texture. For vertical surfaces where forms will retain the mortar, place behind the forms and thoroughly consolidate the mortar.

### Coverage

Per m<sup>2</sup> and 25 mm thickness, approximately 53 kg of EMACO® T420 is required. (0.012 m<sup>3</sup> per bag).

### Curing/After Treatment

Proper curing is essential.

#### MASTERKURE® 181

Apply curing compound as soon as possible without marring the finished surface. Use MASTERKURE® in accordance with label directions.

### Curing/After Treatment

Proper curing is essential.

Apply MASTERKURE® 181 as soon as possible without marring the finished surface. Use MASTERKURE® in accordance with label directions.

### Packaging

EMACO® T' 420 is supplied in 25 kg packs.

### Storage

Store in cool, dry conditions at ambient temperatures in sealed containers.

### Shelf Life

12 months if stored according to manufacturer's instruction