EMACO® R500L

Formerly sold as Barrafill® L

QUICK SETTING REPROFILING AND ANCHORING MORTAR

Description of Product

EMACO® R500L is a ready-to-use powder which when mixed with water will yield a stiff, easily workable reprofiling or anchoring mortar. Due to its content of redispersable synthetic resins and organic polymers, the mortar adheres exceedingly well to substrates. Moreover, the resin component improves the water retention capacity considerably, thus minimising the risk of cracking. After hardening, EMACO® R500L is highly impermeable, weatherproof and resistant to frost attack. It contains no chlorides or other salts that might cause corrosion or blooming.

Fields of Application

EMACO® R500L may be used for all concrete repairs, highways, bridges, sewage systems, curbs, pilings, etc. for the restoration of damaged edges and corners, and for filling honey combs, cracks, pinholes, etc.

Another use for EMACO® R500L is the levelling of uneven surfaces prior to the application of MASTERSEAL® 333 or 324 when the levelling and coating has to be carried out on the same day

For levelling large uneven surfaces, use EMACO® R500L with the normal setting time. Because the synthetic resin content is relatively low, prime with EMACO® R500L slurry.

Features and Benefits

- Quick setting reprofiling and anchoring mortar for:
  concrete repairs
  architectural concrete
  pre-cast fabricated elements
  fixing of steel ties, brackets, drain frames, dowels, etc.
- Ready-to-use (just add water).
- Quick and easy to apply.
- Economical.
- High early strength.
- Excellent bonding.

Technical Data/Typical Properties

Compressive Strength (1 day) (28 days)	 15N/mm² 40N/mm²
Flexural Strength (1day) (28 days)	 7N/mm² 11N/mm²
Supply forms	Powder
Colour	Grey
Plastic Density	1700 kg m^{-3}
Resistance to extreme temperatures	down to - 50°C
Substrate temperature for application	not below +5°C

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Application Procedure

Preparation of Substrate
The substrate (concrete, mortar, rock, brick) must be sound, absorbent and clean. Loose particles, rust, grease, cement laitance, dust and other contaminants must be removed. Before applying EMACO® R500L mortar, be sure to pre-wet the substrate thoroughly to saturate the pores completely with water.

Mixing
Pour water into a suitable pail, bucket, etc., and add the EMACO® R500L powder (until a lump-free, stable compound is obtained. Mixing ratio: about 1 part of water to 4.5 parts of EMACO® R500L (by volume). Mixing is usually done by hand. For edges and corners it is advisable to smooth the repaired patch with a piece of wood or hard foam as soon as the EMACO® R500L begins to set. Fill large volumes layer by layer, waiting with each succeeding layer until the preceding one has hardened. Protect EMACO® R500L repairs against over-rapid evaporation with a curing compound or by covering with wet cloths.
Do not mix EMACO® R500L with additional cement, sand or gravel.

For vertical applications or overhead work, prepare dry mixes (ratio 1:4) in order to prevent sagging.

To obtain extra-strong bonding, the substrate can be primed with a slurry of EMACO® R500L and water (ratio 1:1) before applying EMACO® R500L; wet-on-wet application is essential in this case.

Pot Life
EMACO® R500L setting begins after 10-15 minutes (at 20°C substrate and ambient temperature) and ends after a further 25-30 minutes.

Setting time is shorter at higher temperatures.

The working period depends very much on the ambient temperature and on the amount of mixing water added. Therefore the times given above should be regarded as a guideline. The lower the temperature the longer the setting time; the less water added, the shorter the setting time.

Coverage
Approximately 1.7kg of mixed EMACO® R500L gives 1 litre of product.

Packaging

EMACO® R500L is available in 25 kg containers.

Storage

EMACO® R500L should be stored at ambient temperatures in manufacturer's sealed containers.

Shelf Life
12 months if stored according to manufacturer's instructions in sealed containers.

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EMACO® R500L Feb MBT UK Version 2

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.

Solvent Based Products
Use in well ventilated areas; avoid inhaling. Suitable respiratory equipment may be needed, eg when spraying. Can cause skin, eye irritation. Wear protective eye shields and gloves during use. Do not smoke or allow sparks or naked lights when stored or in 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.

Resin Products
Can cause irritation, dermatitis or allergic reaction. Use protective equipment particularly for skin and eyes. Use only in well ventilated areas.

Spillage
Chemical products can cause damage; clean spillage immediately.

Disclaimer
The information given here is true, represents our best knowledge and is based not only on laboratory work, but also on field experience.

However, because of numerous factors affecting results we offer this information without any guarantee and no patent liability is assumed.

All products should be used in accordance with the Manufacturer's instructions. No responsibility can be taken by the manufacturer where conditions of use are beyond our control.

It is the responsibility of the user to obtain the most up-to-date datasheet which supersedes all previous literature.

For additional information or questions, contact your local Feb MBT representative.

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