

EmO Grout PE 15

High strength, jointing and multi-purpose repair compounds, Steel Anchoring Grout.

Uses

For fast and emergency reinstatement of concrete, masonry and brick work. EmO Grout PE 15 is ideally suited for the repair and re-profiling of precast concrete units, damaged arrises and treads. It can be used to infill hollows and holes in concrete floors, bedding and fixing curb stones, manhole sets, frames, brick slips, Ceramic tiles, slabs and coping stones. The products are especially useful where fast strength gain is important.

Advantages

- Fast development of strength, stronger than concrete in 2 hours.
- Excellent bond to a wide variety of substrates without primer
- High chemical and oil resistance
- Cures under damp or wet conditions and can be used down to 0^oc
- Low wastage
- Excellent durability – high compressive, flexural and tensile strengths ensure a long working life.
- Cost effective – high early strength gain promotes minimum downtime and early commissioning of plan
- Versatile – suitable for a wide range of loading situations including repetitive dynamic loads.

Description

Emo Grout PE 15 is a solvent free, fast setting, polyester grout. It is supplied as a three

component system consisting of base, hardener and specially graded aggregate. The components are supplied in the correct mix proportions designed for whole pack mixing on site.

Typical Properties

Pot life : 10 Min @ 23^oc

Compressive strength : 100N/mm² at 3 day

Flexural strength : 28N/mm² at 7 days

Tensile Strength : 14N/mm² at 7 days

Coefficient of thermal expansion

(ASTM C 531) : 30 x 10⁻⁶ per ^oc

Thermal conductivity : 1.0 watt/m/^oc

Young's Modulus of Elasticity : 16kN/mm²

Technical Support

ELMRR provides a comprehensive technical support service to specifiers, end users and contractors and is able to offer on-site technical assistance.

Properties

General

Shrinkage: The polyester resin used in EmO Grout PE 15 is formulated to reduce shrinkage to a minimum. Linear shrinkage will be

approximately 0.8%. no further shrinkage will occur after the material has cured.

Bond Strength: EmO Grout PE 15 forms a strong bond to most structural materials provided the surfaces are suitably prepared. The resulting bond between EmO Grout PE 15 and concrete will be stronger than the tensile strength of the concrete itself.

Chemical Resistance: fully cured EmO Grout PE 15 is unaffected by water, petrol, oil and most corrosive chemicals. However it is not recommended for use in contact with phenols, strong alkalis, oxidising agents and ketones.

Durability: EmO Grout PE 15 performs at temperatures as high as 60°C and down to sub-zero conditions.

Compressive Strength: EmO Grout PE 15 will develop strengths equivalent to mature concrete within a 2 to 6 hour period at temperature above 15°C.

Instructions for Use

Preparation

Substrate must be free from oil, grease, or any loosely adherent material. If the concrete surface is defective or has laitance, it must be cut back to a sound base. Bolt holes or fixing pockets must be blown clean of any dirt or debris.

Mixing

The entire contents of the hardener should be poured in to the base container and mixed until homogeneous. Place the mixed base and the hardener in to a forced action mixer making sure that the entire volume is poured in. add the aggregate and mix for 2 – 3 minutes or until uniform color is achieved.

Placing

Place the grout within the pot life of the material. After this time, unused material will have stiffened and should be discarded.

Continuous grout flow is essential. Sufficient grout must be available prior to starting and the time taken to pour a batch must be regulated to the time taken to prepare the next one.

Pouring should be from one side of the void to eliminate air entrapment. The hydrostatic head must be maintained at all times so that a continuous grout front is achieved.

Thoroughly compact the grout/mortar around any exposed reinforcement. thicker sections should be built up in layers. If sagging occurs during application, the EmO Grout PE 15 should be completely removed and reapplied at a reduced thickness.

Reinforcing Steel

Exposed steel reinforcement should be treated with one full coat of EmO Prime Zinc / EmO Seal EP. This should be allowed to dry before continuing.

High temperature working

Whilst the performance of EmO Grout PE 15 at elevated temperature is assured, application under such conditions can sometimes be difficult. It is therefore suggested that, for temperatures above 35°C, the following guidelines are used:

1. store unmixed materials in a cool environment, avoiding exposure to direct sunlight.
2. keep mixing and placing equipment cool, arranging shade protection if necessary. It is especially important to keep cool those surfaces of the equipment which will come in to contact with the material itself.
3. try to eliminate application in the middle of the day, and certainly avoid application in direct sunlight.

- ensure that there are sufficient operatives available to complete application with in the material's pot life

Limitations

EmO Grout PE 15 should not be exposed to water, frost or ice during application.

Estimating

Supply

EmO Grout PE 15 : 5 ltr Pack

EmO Seal EP/ ZINC : 5 ltr Pack

Equipment care

Clean all equipment promptly using **ELMRR Solvent No.1**. Cured material will have to be mechanically removed.

Health & Safety

Precautions

EmO Grout PE 15 should not be swallowed or allowed to come into contact with skin and eyes. Suitable protective gloves and goggles should be worn. Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately – do not induce vomiting.

Additional information

ELMRR manufactures a wide range of products specifically designed for the repair and refurbishment of damaged reinforced concrete. This includes hand-

placed and spray grade repair mortars, fluid micro-concretes, chemical resistant epoxy mortars and a comprehensive package of protective coatings. In addition, a wide range of complementary products is available. This includes joint sealants, waterproofing membranes, High quality precision grouts, anchoring and specialised flooring materials.

Product Manufactured By:

ELMRR Chemicals (New Rusayl Heights)

P.O.BOX 176, PC 124, Rusayl Industrial Area, Muscat, Sultanate of Oman
Tel: +968 24446914, Fax: +968 24446776

Email: sales@elmrr.com

www.elmrr.com