

ECMAREP 504

Rapid Setting, Water leak plugging Mortar

Description

ECMAREP 504 is supplied as a ready-to-use blend of dry powders which requires only the addition of clean water at the site to produce a highly consistent, rapid-setting mortar which is easy to apply in many difficult conditions. The material is based on a blend of cement, graded aggregates, special fillers, and chemical additives which control the rate of set and minimize the risk of thermal cracking.

Uses

For the rapid temporary patching and plugging of concrete segments, concrete and brick tunnel linings, sewage systems, below-ground access chambers, pipes, basements, foundations, and mines.

Advantages

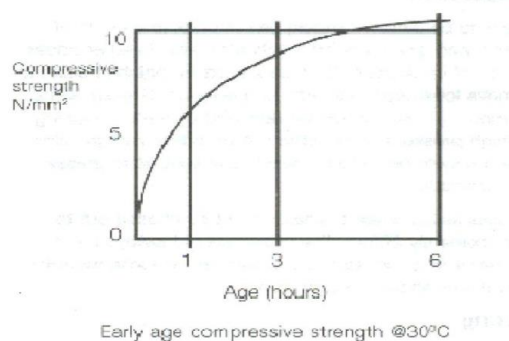
- Emergency water-stopping capability
- Excellent bond strength to the substrate
- Low exothermal minimizes thermal cracking
- Contains no chloride admixtures
- Ready-to-use, Easy Application
- Gain High Early Strength

Technical Specification

Appearance	Grey
Physical State	Powder
Water: Powder (Volumetric)	1:4
Initial Setting at 30 °C W/P=0.20	1 Minute
Final Setting Time 30 °C W/P=0.20	2-3 Minutes
24 Hrs Compressive Strength	>10 N/mm ²
28 Days Compressive Strength	>24 N/mm ²

Heat Generation Characteristic

High heat output (exothermic) leads to undesirably high shrinkage and consequent thermal cracking. The curves below show the low heat output which minimizes the risk of shrinkage and thermal cracking and gains high early age of Strength.



Application Instruction

Surface Preparation: Areas to be patched should be cut back to a depth of 15 mm and given a good mechanical key. Feather edges must not be allowed. The surface should be brushed clean to remove loose material, dust, and laitance. Grease, slime, or mold growth should be removed by steam cleaning or high-pressure water jetting. A proprietary degreasing agent should be used for the removal of light oil or grease contamination. To seal leaks, crack openings must be chased out to approximately 20 mm. The chase should always be undercut to avoid leaving a V-section. All loose material and debris should be removed.

Mixing: ECMAREP 504 should be added to clean water in the following Proportions: One-part clean Water: 4 parts ECMAREP 504 (measured by volume). For a small batch Take 0.50 kg ECMAREP 504 and take approx. 100-120 ml clean water (depending upon site temperature condition) and mix to a stiff consistency in a suitable container using a trowel or gloved hand. Due to the rapid set characteristics of the product, only prepare a quantity of mortar that can be placed within the prescribed set time.

Application: Trowel applies or hand-knead the mixed mortar in place, ensuring maximum contact with the substrate before the material sets. If being used to plug running water, ECMAREP 504 should be used and held in place until the initial set is reached.

Packaging

ECMAREP 504 is supplied in a 25 KG moisture-resistant HDPE Bag.

Shelf Life

6 months in original unopened sealed condition.

Storage & Handling

The material should be stored in a Cool and Dry shade. Please Bags handle carefully during transport.

Safety Precautions

Wear all PPEs at the time of application like Safety boots, Safety goggles, Hand Gloves, and masks, and avoid direct contact with Skin and Eyes. Any direct skin contamination with the hardeners should be washed off immediately with soap and water.

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