

PRODUCT DATA SHEET

weberep polymer modified mortar

(Formerly known as E.MIX POLYMER MODIFIED MORTAR)

General purpose polymer modified cementitious mortar for patching, rendering and spalling in interior and exterior conditions.

PRODUCT

weberep polymer modified mortar is a high quality polymer modified cement-based mortar for patching and repairing of concrete. It has enhanced adhesion strength and compressive strength. The **weberep polymer modified mortar** can be applied 40 mm thick in one layer for vertical locations and 30 mm for overhead locations.

Uses

- Patch repair of concrete
- Repair of spalling
- Reinstatement of large areas of concrete
- General rendering

Features and Benefits

- Formulated to comply with Hong Kong Standard and British Standard
- Can be applied up to 40 mm in one layer
- Can be applied by trowel or gloved hand
- Single component : fixed mixing proportion, ensure the quality of work
- Shrinkage compensated : reduce the chance of shrinkage cracks
- High compression strength, high adhesive strength
- Durable: can be used in traffic area
- No chloride content

TECHNICAL DATA

Colour	Grey
Component	Portland cement, non-reactive aggregate, graded sand, polymer powder and other chemical additives
Max. aggregate size	4.5 mm
Water demand	Approx. 15 – 17% (6 – 6.8 L/40 KG bag)
Density	1.6 kg/L (dry) 2.0 kg/L (wet) for 16% water demand
Pot life	Approx. 1 hour



Thickness	15 – 40 mm
Coverage	Approx. 1.75 kg/m ² /mm (approx 23 L yield per 40 kg bag)
Theoretical consumption	Approx. 26 kg/m ² for thickness of 15 mm Approx. 1.5 m ² /40 kg bag for thickness of 15 mm

PHYSICAL PROPERTIES

TM1	Compressive strength	7 days 28 days	34 N/mm ² 43 N/mm ²
TM2	Flexural strength	7 days 28 days	6.9 N/mm ² 9.3 N/mm ²
TM3	Tensile strength	7 days 28 days	2.9 N/mm ² 4.2 N/mm ²
TM4	Elastic modulus	28 days	16.9 kN/mm ²
TM5	Bond strength	7 days 28 days	2.2 N/mm ² 3.3 N/mm ²
TM6	Shrinkage	Coutinho ring	No cracks observed
TM7	Figg air permeability		800 seconds
	Initial Surface Absorption Test (ISAT)	BS 1881: Part 5	<0.003 ml/m ² /sec (120 minutes)

Unless specified, all technical data are average values and refer to 28 days curing time.

Above physical data are taken on laboratory tests. In situ material performance may vary according to environmental & workmanship conditions beyond manufacturer control.

Complied Standards

Hong Kong Standard : HKHA MTS(2002/2004 Spec. Part D, Cl. 2.1.1 – 2.1.7), TM1 – TM 7
British Standard : TM 1 – TM 5 is based on BS 6319

PROCEDURE

Substrate Preparations

Concrete substrates must be clean, structurally sound, free from contamination, loose particles, grease, lacquer, plastics or traces of foreign materials, and protrusions such as wood peels, nails, excess mortar or any joints with tolerance that cannot be covered by the thickness of render.

The edges of the repair area should be saw cut with a minimum depth of 10 mm, and the minimum depth of repair area should be 10 mm from the concrete surface. For better adhesion, repair area with depth of 15 mm is recommended.

Smooth surface should be scratched to form a rough surface for mechanical key.

Honey combing must be hacked off to expose the sound concrete.

Reinforcement should be cleaned and rust should be completely removed.

Mixing and Installation

Before application, dampen the concrete surface with clean water and allow excess water to drain away. Prepare the bond coat slurry by mixing **webertec bond coat** or **webertec EVA** with Ordinary Portland Cement (OPC) at a ratio of 1:1 (by weight). Stir the mixture thoroughly by using an electrical mixer until a wet and sticky slurry coat is obtained.

Bond coat slurry can be applied by brushing on the concrete surface. Subsequent installation of mortar should be applied on wet and sticky slurry coat.

For steel reinforcement, a layer of bond coat slurry can be applied by brushing on the exposed steel surface. Allow it to dry before the next installation. A new coat of bond coat slurry should be applied again before subsequent installation of mortar.

Mix a bag of dry-mixed powder (40 KG) with approx. 15 – 17% (6 – 6.8 L) by using an electrical mixer for 3 – 7 minutes.

Apply the **weberep polymer modified mortar** while bond coat slurry is still wet and sticky.

If the slurry coat dries, it must be thoroughly re-applied.

The mixture of **weberep polymer modified mortar** must be used within 1 hour.

For application on all surfaces, **weberep polymer modified mortar** must be well-compacted to the primed substrate by trowelling or gloved hand. Exposed reinforcement should be completely encapsulated by the mortar.

Finish the surface with steel, plastic or wood float, or by a damp sponge to achieve the required surface texture. The completed surface should not be overworked.

Please refer to our method statement for procedures in details.

Curing

Water mists is preferred but not always necessary for interior application. However, water mist is required under the extreme hot or dry weather condition.

STORAGE AND PACKING

weberep polymer modified mortar is delivered in 40 kg bag. Storage life is 12 months if the product is kept in a dry place.

HEALTH AND SAFETY

Recommend to wear NIOSH approved or equivalent particulate face mask when mixing the material.

Material contains cement, which may produce an allergic effect.

Keep out of reach of children

Material may cause irritation to eyes and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical assistance. After contact with skin, wash immediately with plenty of soap and water.

CLEANING & DISPOSAL OF WASTE

Cured material can be removed mechanically, if uncured, material can be removed with water. Dispose of waste in accordance with legislation.

* Note: The information and physical data in this catalogue is given to the best of our knowledge under standard testing method and controlled environment. The results may vary with different weather / site conditions, workmanship or substrates. This is beyond our control that we shall not be liable for any faults or consequences arising or associated with this. We suggest comprehensive tests to be conducted before final application. Unless specified, all technical data are average values with curing time of 28 days. We reserve the right to update or amend the contents in the light of new findings during the course of research and development.