

PRODUCT DATA SHEET

weberep patchbond 40

(Formerly known as E.MIX PATCHBOND 40)

High strength, medium weight, class 40 polymer modified cementitious mortar for patching and repairing of concrete.

PRODUCT

weberep patchbond 40 is a high quality class 40 polymer modified cement-based mortar for patching and repairing of concrete. It is medium weight mortar with enhanced adhesion strength and compressive strength. **weberep patchbond 40** 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 honey comb
- Repair of spalling
- Reinstatement of large areas of concrete

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
- Medium weight, high compression strength, high adhesive strength
- Durable: can be used in traffic area
- No chloride content
- Pre-mixed and ready-to-use : requires only addition of water

TECHNICAL DATA

Colour	Grey
Component	Portland cement, non-reactive aggregate, reinforcement fibre, graded sand, polymer powder and other chemical additives
Max. aggregate size	2.0 mm
Water demand	For gloved hand application: Approx. 16% (4 L/25 KG bag) For trowelling mode: Approx. 20% (5 L/25 KG bag)
Density	1.1 kg/L (dry) 1.8 kg/L (wet) for 18% water demand
Pot life	Approx. 1 hour
Thickness	10 – 40 mm
Coverage	Approx. 1.53 kg/m ² /mm (approx. 16 L yield per 25KG bag)
Theoretical consumption	Approx. 23 kg/m ² for thickness of 15 mm Approx. 1.1 m ² / 25 kg bag for thickness of 15 mm

PHYSICAL PROPERTIES

TM1	Compressive strength	28 days	> 40 N/mm ²
TM2	Tensile strength	7 days 28 days	> 2.0 N/mm ² > 3.0 N/mm ²
TM3	Elastic modulus		15 – 25 kN/mm ²
TM4	Bond strength	7 days	> 2.0 N/mm ²
TM5	Shrinkage	Coutinho ring	No cracks observed
TM6	Figg air permeability		> 500 seconds

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)
British Standard : TM 1 – TM 5 is based on BS 6319

PROCEDURE

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.

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 (25 KG) with appropriate amount of water (depending on the application mode) by using an electrical mixer for 3 – 5 minutes. For gloved hand application, add approx. 16% (4L) of water; for trowelling mode, add approx. 20% (5L) of water.

Apply **weberep patchbond 40** while the bond coat slurry is still wet and sticky.

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

The mixture of **weberep patchbond 40** in the pot must be used within 1 hour.

For application on all surfaces, **weberep patchbond 40** 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 patchbond 40 is delivered in 25 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.

Please refer to Material Safety Data Sheet (MSDS) for health, safety and handling of the product.

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.