

PRODUCT DATA SHEET

weberep rapifast CS

(Formerly known as E.MIX RAPIFAST CS)

Rapid hardening high strength waterproofing floor screed

PRODUCT

weberep rapifast CS is a fast hardening floor screed. It is formulated to provide high early strength and final strength with low shrinkage. The application thickness can reach 100 mm. **weberep rapifast CS** is made from fast hardening cement, anti-shrinkage agent and waterproofing additives, which will develop high compressive strength within few hours, and allow bearing loading with minimum down time. The product is flowable that enhances the application speed of large area screeding. **weberep rapifast CS** is waterproofing, which is suitable for using in kitchen and bathroom renovations.

Uses

- Kitchen and bathroom renovations
- Fast hardening floor screed and concrete repair
- Large area floor screed installation
- Waterproofing screed application

Features and Benefits

- Formulated to comply with Hong Kong Standard and British Standard
- Waterproofing screeding
- Rapid hardening : screed hardened in 1 hour, reduce disturbance to users
- Single component : fixed mixing proportion, ensure the quality of work
- Shrinkage compensated : reduce the chance of shrinkage cracks for thick layer and large area floor screeding
- High fluidity : enhance large area screeding application speed
- Monolithic bond adhesion and compatible to parent concrete
- Self-compacted : avoid honeycombing and voids
- Durable : can be used in interior and exterior areas.
- Pourable and highly workable
- Non-toxic : environmentally friendly
- No chloride content

TECHNICAL DATA

Colour	Grey, similar to concrete
Component	Portland cement, fast setting cement, reinforcement fibre, non-reactive aggregate, graded sand, polymer powder and other chemical additives
Max. aggregate size	4.5 mm
Water demand	Approx. 11 – 15% (2.7 – 3.7 L/25 KG bag)
Density	2.1 kg/L (wet) for 13% water demand

Pot life	Approx. 10 – 15 minutes, depending on the temperature and humidity
Initial setting time	Approx. 30 minutes, depending on the temperature and humidity
Thickness	6 – 100 mm
Coverage	Approx. 1.8 kg/m ² /mm
Extra Aggregate	For thickness > 25 mm, max. 50% of 5 – 10 mm aggregate can be added

PHYSICAL PROPERTIES

Compressive strength	BS 6319 Part 2 - 2 hours - 1 day - 7 days - 28 days	6.0 N/mm ² 20.0 N/mm ² 30.0 N/mm ² > 40.0 N/mm ²
Adhesive strength	HKHA MTS(2002/2004) Spec. Part D, Cl. 2.1.14)	> 1.0 N/mm ²
Shrinkage	Coutinho ring, HKHA MTS(2006/2008) Spec. Pt D, Cl. 2.1.6	No cracks observed
Waterproofing	Initial surface absorption test (ISAT 120 minutes)	< 0.015 ml/m ² /sec
Moisture content	Residual moisture after 24 hours	< 2%
VOC content	USEPA method 24	< 10 g/L

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(2006/2008) Spec. Part D, Cl. 2.1.6 Cl. 2.1.14
British Standard : BS 6319 Part 2 and Part 4, BS 1881 Part 5
US Standard : USEPA method 24

PROCEDURE

Substrate Preparations

Concrete substrates must be clean and structurally sound, free from contamination, loose particles, dirt, grease, oil, sealers, curing compounds and laitance, etc.

Any exposed reinforcement should be cleaned and free of rust or corrosion.

Before application, dampen the concrete surface with clean water and allow excess water to drain away.

To patch irregular cracks and holes, it is highly recommended to cut the repairing area into regular shape.

Priming

Before application, dampen the concrete surface with clean water and allow excess water to drain away.

Prepare the bond coat slurry by mixing **webertec EVA** or **webertec bond coat** 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.

Mixing and Installation

weberep rapifast CS is formulated for easy and simple mixing and application, using conventional concreting or plastering techniques.

Fast application is essential for installation of **weberep rapifast CS**. It is a fast setting mortar, and preferable to be mixed adjacent to the repair area.

Mix a bag of dry-mixed powder (25 KG) with approx. 11 – 15% (2.7 – 3.7 L) of water by using an electrical mixer for 3 – 5 minutes.

Mix thoroughly until the material is homogeneous and in the desired workability, **weberep rapifast CS** can be installed.

If necessary, add maximal 50% aggregate and mix completely.

Apply **weberep rapifast CS** on the slurry coat while the slurry coat is still wet and sticky.

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

Mix an appropriate amount of material, which can be applied within 15 minutes.

weberep rapifast CS can be applied in one layer with maximum thickness of 100 mm.

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

When the material starts to set, do not re-mix or re-temper, as this will weaken the desired strength of the product.

Finishing such as tiling work, self-levelling screed or coating can be applied after 1 day.

Please refer to our method statement for procedures in details.

Curing

weberep rapifast CS can be cured with wet hessian, polyethylene or spray-on curing compound.

STORAGE AND PACKING

weberep rapifast CS is delivered in 25 kg bag. Storage life is 9 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.