

PRODUCT DATA SHEET

weberfix 686

(Formerly known as E.MIX STONE FIX 686)

Fast setting, highly flexible, high strength, low alkalinity, medium thickness, high compressive, strong polymerized stone adhesive for interior and exterior wet fixing complied with C2FTE class of EN 12004 and S1 class of EN 12002 (S2 class can be achieved by adding **webertec EVA**)

PRODUCT

weberfix 686 is a fast hardening, low alkalinity, deformable, highly flexible, high strength, polymerized, cementitious, water resistant, and single component white colour stone adhesive. It is designed simply to mix with water to give strong, non-slip, and highly workable adhesive mortar for stone fixing with setting time of 3 - 4 hours and can achieve 0.6 MPa adhesive strength in 6 hours. It is specially designed for medium thickness wet fixing with fast setting time. Ideal for installation of stones such as marble, granite, slate and reconstituted stone for wall and floor. Suitable substrates are concrete, cement plasters, gypsum boards, brickworks and ALC blockwalls. The product is highly flexible, extra flexibility (S2 class of EN 12002) can be achieved by adding **webertec EVA**.

Uses

- Fast setting cementitious stone fixing
- Tiling for stone in different sizes
- Interior and exterior wall and floor stone fixing on cement mortar or concrete
- Compatible with cementitious waterproofing material such as **weber waterproofing series**
- Tiling on old tiles

Features and Benefits

- Formulated to comply with European Norm, and Chinese Standard
- Lower alkalinity to reduce chances of efflorescence
- Fast setting : allow grouting in 4 - 6 hours
- High early strength : the stone can allow light traffic in 1 day
- White colour adhesive for white and light colour stones
- Highly flexible with long durability
- Extra adhesion under exterior weather condition, especially for exterior condition
- Single component : fixed mixing proportion, ensure the quality of work
- Thixotropic and easy-to-trowel, good workability
- Non-slip

TECHNICAL DATA

Colour	White
Component	Fast hardening cement, polymer additive, efflorescence reducing agent, chemical additives, non-reactive aggregate, graded sand
Max. aggregate size	2.0 mm
Water demand	Approx. 21 – 25% (5.2 – 6.3 L/25 KG bag)
Density	1.3 kg/L (dry) 1.4 kg/L (wet) for using 23% water demand
Pot life	Approx. 1 hour
Coverage	Approx. 1.2 kg/m ² /mm

Page 1 of 3



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Thickness and Theoretical Consumption

Tile size	Recommend notch size	Back buttering thickness	Total thickness	weberfix 686 consumption
(mm x mm x mm)	(mm x mm)	(mm)	(mm)	(kg/m ²)
200 x 200 x 7	6	1	3.5	4.2
300 x 300 x 10	6	2	4.5	5.4
600 x 300 x 10	6 – 8	2	6	7.2
600 x 600 x 15	8 – 10	2	6	7.2
1000 x 1000 x 20	10 – 12	2	6	7.2

Consumption (kg/m²) = Total thickness of **weberfix 686** (mm) x Coverage (kg/m²/mm)

PHYSICAL PROPERTIES

Adhesion to concrete	EN 1348, GB 24264 <ul style="list-style-type: none"> • Early adhesion strength (6 hours) • Early adhesion strength (24 hours) • Early adhesion strength (7 days) • Initial adhesion strength • Adhesion strength after heat ageing • Adhesion strength after water immersion • Adhesion strength after freeze-thaw cycles 	0.8 N/mm ² 1.3 N/mm ² 2.6 N/mm ² 2.1 N/mm ² 1.4 N/mm ² 1.2 N/mm ² 2.7 N/mm ²
Open time	EN 1346	30 minutes with ≥ 0.5 N/mm ² adhesive strength
Slip resistance	EN 1308	≤ 0.5 mm
Deformability	EN 12002	S1 deformable S2 deformability can be achieved by addition of webertec EVA
Compressive Strength	EN 196-1	20 N/mm ²
pH value	EN 12859	10 - 11
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

European Norm : EN 12004 : 2007 Class C2FTE, EN 12002 : 2002 Class S1 or S2 (if **webertec EVA** is added), EN 12859, EN 196-1
Chinese Standard : GB 24264-2009
American Standard : USEPA method 24

PROCEDURE

Substrate Preparations

Substrate must be free from grease, mould oil, rust, rusty metal, wood peels, paints, plastics, loose particles, contamination on any traces of foreign materials affecting the adhesion of **weberfix 686**.

Mixing and Installation

weberfix 686 can be applied at least 7 days after the application of render.

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

Mix a bag of dry-mixed powder (25 KG) with approx. 21 – 25% (5.2 – 6.3 L) of water by using an electrical mixer. Actual water demand should be adjusted in accordance with the site condition.

Stir the mixture thoroughly for 3 – 5 minutes to obtain a creamy paste without lumps. Let the mixture stand for 5 minutes for the additives to dissolve, and then mix again before use.

Apply **weberfix 686** by using a notched trowel directly onto substrate, over which tiling can be achieved within 30 minutes under normal temperature and humidity condition. Do not spread **weberfix 686** more than 1 m² before tiling. Unfavourable weather conditions such as strong sunshine, low humidity, high wind speed, or highly water-absorbed substrates can reduce the open time of tile adhesive.

When the surface of tile adhesive is dry, do not use water to wet the surface. It will form a very weak and non-adhesive layer.

It is recommended to use **weber tile grout** for grouting 4 hours after tiling.

Please refer to our method statement for procedures in details.

Curing

Natural air curing is enough for **weberfix 686**.

STORAGE AND PACKING

weberfix 686 is delivered in 25 kg bag. Storage life is 6 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.

* 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.