

PRODUCT DATA SHEET

weber set 393

(Formerly known as E.MIX TILE FIX 393)

High Compressive Strength and Extra-High Shear Strength Deformable polymerized tile adhesive for interior and exterior tile fixing complied with C2TE class of EN 12004 and S1 class of EN 12002

PRODUCT

weber set 393 is a superior two component cementitious tile adhesive formulated with supreme working characteristics with high strength but deformable and flexible. The high compressive strength characteristic allows heavy loading and traffic on top, and its extra-high shear strength is ideal for fixing for large and heavy stone or tile. Its specially engineered polymer prevents water infiltration greatly, which provides excellent weather protection in exterior tile fixing. Also, the deformable nature can endure vibration and deformation from the substrate. It is installation of different kinds of tiles and stones to deformable substrate such as metal plate, gypsum board and wooden substrate.

Uses

- Internal and External tiling
- Floor tiling subject to heavy stress
- Tiling on under-floor heating system
- Fixing for large sized tiles and stone
- Tiling on vibration substrate, such as metal plate
- Tiling on old tiles
- Tiling on gypsum board, cement board, dry wall, gypsum support and anhydrite support as long as the substrate is recommended primed with **weberprim moisture sealer** for wall or **weberfloor primer** for floor
- Tiling on cementitious waterproofing material such as **weberdry waterproofing** series

Features and Benefits

- High Compressive Strength, allow heavy loading and traffic on top
- Extra-high Shear Strength, ideal for fixing large and heavy stone or tile
- Extra adhesion under exterior weather condition, specially for exterior condition
- S1 class deformability which allows tiling on substrate subject to vibration
- Extreme-low water infiltration rate, perfect for exterior tile fixing
- Formulated to comply with European Norm, Chinese Standard and American Standard
- Extended open time of 30 minutes
- Non-slip
- Thixotropic and easy to trowel, good workability
- Shrinkage compensated: reduce the shrinkage cracks
- Can be upgraded to S2 class deformation by extra gauging liquid



TECHNICAL DATA

Colour	Grey or White	
Component	Portland cement, polymer emulsion, non-reactive aggregate, graded sand and other chemical additives	
Max. aggregate size	0.5 mm	
Liquid demand	7 L emulsion / 25 KG bag (extra gauging liquid is needed to achieve S2 class)	
Density	Grey: 1.2 kg/L (dry) Grey: 1.3 kg/L (wet)	White: 1.2 kg/L (dry) White: 1.3 kg/L (wet)
Pot life	Approx. 3 hours	
Coverage	Grey : Approx. 1.56 kg/m ² /mm Approx. 20.5m ² /mm/set	White : Approx. 1.56 kg/m ² /mm

Thickness and Theoretical Consumption

Tile size (mm x mm x mm)	Recommend notch size (mm)	Back buttering thickness (mm)	Total thickness (mm)	weberset 393 consumption (kg/m ²)
45 x 45 x 6	6	Nil	2.5	2.9
95 x 45 x 6	6	Nil	2.5	2.9
100 x 100 x 7	6	Nil	2.5	2.9
200 x 200 x 7	6	1	3.5	4.0
300 x 300 x 10	6	2	4.5	5.2
600 x 300 x 10	6 - 8	2	6	6.9
600 x 600 x 15	8 - 10	2	6	6.9
1000 x 1000 x 20	10 -12	2	6	6.9

Consumption (kg/m²) = Total thickness of **weberset 393** (mm) x Coverage (kg/m²/mm)

PHYSICAL PROPERTIES

Adhesion to concrete	EN 1348 Initial adhesion strength Adhesion strength after heat aging Adhesion strength after water immersion Adhesion strength after freeze-thaw cycles	≥ 3.4 N/mm ² 3.7 N/mm ² 1.0 N/mm ² 2.2 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 (Can be upgraded to S2 by gauging liquid)
Compressive strength	ANSI A118.4	35.3 N/mm ²

Shear strength	BS EN12003 · 7 days	3.4 N/mm ²
Water impermeability pressure	GB/T 23445	≥ 1.5 N/mm ²
Total 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 C2TE, EN 12002 : 2002 Class S1, EN12003 : 2008 (Can be upgraded to S2 by gauging liquid)
 Chinese Standard : JC/T 547 : 2004 Class C2TE S1, GB/T 23445-2009
 American Standard : ANSI A118.4, 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 **weberset 393**.

Mixing and Installation

weberset 393 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 mix powder (25 kg) with 7L emulsion liquid by using an electrical mixer. If needed, Extra drum of gauging liquid is added to achieve S2 deformability. Slight add water (<1L) to fine tune the workability.

Stir the mixture thoroughly for 5 – 7 minutes to obtain a creamy paste without lumps. Then let the mixture stand for 10 minutes for the additives to dissolve, and then mix again before use.

Apply **weberset 393** by using a notched trowel directly onto substrate, over which tiling can be achieved within 30 minutes under normal temperature and humidity condition. Unfavourable weather conditions such as strong sunshine, low humidity, high wind speed, or highly water-absorbed substrates reduce the open time of tile adhesive.

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

It is recommended to use **webergROUT** for grouting 1 day after tiling

Details of the procedure please refers to our Method Statement.

Curing

Natural air curing for **weberset 393** is enough.

STORAGE AND PACKING

weberset 393 is delivered in a package of 25 kg powder bag with 7 L emulsion drum. 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.