

PRODUCT DATA SHEET

weberfloor 860

(Formerly known as E.MIX FLOWTOP 860)

Heavy duty, rapid hardening, self-levelling cementitious flooring system for industrial use

PRODUCT

weberfloor 860 is a machine or hand applied self-levelling floor surfacing system formulated from special cement, aggregates, supplementary binders and chemical additives. **weberfloor 860** is designed as a smooth overlayment for the use on concrete floor. Express setting time enables short waiting period. Under normal conditions, access onto the floor is available after 2 – 3 hours, light traffic available after 24 hours and full load after 7 days (for a 10 mm layer), provided that the substrate is suitably dry. It is supplied as a pre-blended, dry powder designed for application at thickness between 6 – 15 mm in one operation. Normal application thickness is 6 – 10 mm. **weberfloor 860** does not contain casein or other protein bearing additives, making it particularly suitable for the use in hospitals, food preparation areas and storage areas. In high chemical attack areas, epoxy or resin coatings can be applied to the surface to offer chemical resistance.

Uses

- Car parks, warehouse, workshops, electronic and computer factories
- Hospitals, schools, sports stadium and theatres, etc.
- Smooth hard wearing screed

Features and Benefits

High-quality product

- Formulated to comply with European Norm, British Standard and Chinese Standard
- Extra durability : resistant to forklift and vehicle traffic
- Rapid hardening : available for foot traffic after 2 hours and light traffic after 1 day
- Excellent abrasion resistance
- Very low shrinkage and fibre reinforcement to prevent cracking
- High compressive strength
- Water resistance : can be exposed to water spillage without damage
- Chemical resistance : similar to dense concrete

Easy application

- Single component : fixed mixing proportion, ensure the quality of work
- Suitable for both hand and machine applications
- Fast application : up to 300 m² per hour
- Can apply paint and epoxy coating directly

Environmental friendly

- Low pH and less aggressive to floor finishing
- Casein free: environmental friendly

Should be applied on primed floor (with **weberfloor primer**)

TECHNICAL DATA

Colour (after curing)	Grey
Component	Portland cement, fast setting cement, non-reactive aggregate, graded sand and other chemical additives
Max. aggregate size	0.5 mm
Water demand	Approx. 20 – 22% (5 – 5.5 L/25 KG bag)
Density	1.3 kg/L (dry) 2.0 kg/L (wet) for 21% water demand
pH value	Approx. 11
Thickness	6 – 15 mm
Time for foot traffic	2 hours
Time for finishing coat	24 hours
Coverage	Approx. 1.7 kg/m ² /mm
Theoretical consumption	Approx. 10.2 kg/m ² for thickness of 6 mm Approx. 2.5 m ² / 25 kg bag for thickness of 6 mm

PHYSICAL PROPERTIES

Adhesion to concrete	EN 13892-8, BS 8204	≥ 2 N/mm ²
Compressive strength	EN 13892-2, JC/T 985	1 day: > 16 N/mm ² 3 days: > 20 N/mm ² 7 days: > 25 N/mm ² 28 days: > 35 N/mm ²
Flexural strength	EN 13892-2, JC/T 985	> 9 N/mm ²
Abrasion resistance	Rolling Wheel Abrasion: EN13892-5 (In-house) 2000 N and 10,000 cycles	RWA 20
Slip resistance	BS 8204 : Part 2 Normal condition After thermal aging	SRV (wet) ≥ 40 (min) SRV (wet) ≥ 40 (min)
Flow ring test	EN 13813	> 130 mm
Free shrinkage	EN 13454-2 ASTM C 531 Air-cured	0.03 – 0.05% 0.03 – 0.05%
pH value	EN 12859	10 - 11

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 Standard

British Standard : BS 8204 : 2002
European Norm : EN 13813 : 2002, EN 12859
Chinese Standard : JC/T 985 : 2017 Class CT : C40F10

PROCEDURE

Substrate Preparations

The concrete substrate must be hard, sound and free from surface contamination.

All dust and contaminants should be vacuum-cleaned prior to installation.

Contraction joints, construction joints and cracks in the substrate which may be subject to movement after installation of **weberfloor 860** must be maintained as joints in the new surface.

Mixing and Installation

Substrate should be firstly primed by brushing diluted **weberfloor primer**. For the first coat, **weberfloor primer** diluted with clean water at a ratio of 1:5 should be applied. Allow the first coat to become tacky and dry before applying the second coat. For the second coat, **weberfloor primer** diluted with clean water at a ratio of 1:3 should be applied. Wait for the second coat to become tacky and dry before applying **weberfloor 860**.

Hand application: Mix a bag of dry mix powder (25 kg) with 20 – 22% (5 – 5.5 L) water by using an electric mixer for 3 – 4 minutes.

Apply **weberfloor 860** on primed substrate and under working condition over 10°C. For continuous application, adequate mixing of material is necessary. **weberfloor 860** can be finished by using a trowel or a steel spatula.

Machine application: Adjust the flow rate of the machine until a smooth and homogenous mixture is obtained without segregation. A flow ring with volume of 35 cm³ can be applied to check the spreading of the mixture, whose diameter should be equal or greater than 130 mm.

weberfloor 860 is pumped onto the surface through the discharge hose, which is moved across the substrate surface at a constant pace for screed with uniform thickness. The required thickness must be achieved in one operation. The best performance can be achieved when pouring and levelling is in a continuous process.

The freshly applied material can be gently trowelled with a steel spatula to dissipate lines left by the hose. The semi-hardened material may be formed easily or cut for any necessary adjustments.

weberfloor 860 must be applied to substrates under working condition +10°C.

Finishings such as epoxy coating, vinyl sheets and carpet can be applied 24 hours after curing.

Please refer to our method statement for procedures in details.

Curing

The relative humidity of the surrounding air should be below 70%. Light ventilation during and after laying is recommended, but dehumidifiers should not be used for the first 2 days. Curing membranes are not required.

STORAGE AND PACKING

weberfloor 860 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.