weber euroflor Design

Rapid hardening tension relieved self-leveling design floor, with a layer thicknessfrom 2-50mm

Flooring

Leb	Egypt	Jordan	UAE	Qatar	Kuwait	KSA	Oman
-	-	-	23kg	-	-	-	-

PRODUCT

weber euroflor Design is a rapid hardening self-leveling, dimensionally stable, eco green system, carefully produced based on environmentally friendly binder, to bring out an incomparable esthetically pleasing surface design floor. **weber euroflor Design** can be used internally and externally, for leveling differences in thicknesses from 2-50mm, on new or existing substrates.

SCOPE OF USE

weber euroflor Design flooring mortar is highly flowable, harden without stress creating a seamless low shrinkage hygienic, easy to clean surface and suitable:

- For Internal and external applications (standard precautions to be taken for hot weather application, please refer to our technical department for advice).
- As a decorative covering of concrete and screed, applicable in layer thicknesses up to 50mm.*
- As an overlayement for: Concrete, cement, heated and non-heated floor, dry screed and adhered tiles coverings (Please contact the technical department).

**For large areas, a layer thickness of approx. 3-5mm is recommended.*

ADVANTAGES

- Unlimited colors and designs
- UV stable suitable for outside
- Very low shrinkage
- Low carbon foot print
- Eco-Binder technology
- Environmentally friendly
- Dimensionally stable
- High abrasion resistance
- High surface tensile strength
- Mineral based, single component
- Very low emission, meets EMICODE EC1^{PLUS}
- Resistance against salt water and chemicals
- Can be exposed to a temperature of -40-500°C
- Water vapor permeable

CHARACTERISTICS	
Bulk density	Approx. 1.2kg/lit
Color	Unlimited colors
Fresh mortar density	Approx. 2.0kg/lit
Strength class	CT-C35-F10 according to DIN EN 13813
Abrasion resistance	High at 28 days
Compressive strength	> 35Mpa at 28 days
Flexural strength EN 13813:2003	Approx. 10.0N/mm^2

Application temperature	Min. +15°C, max. +40°C
Application thickness	2–50mm
Walkable/ready for sealer	After 3 hours (when cured at 20°C)
Fully loadable	7 days
Mixing ratio	4.2–4.4lit water per 3kg powder
Workability time	Approx. 30 min (at 20°C) Approx. 15 min (at 40°C)
Consumption	Approx. 1.8kg/m² at 1mm layer thickness
VOC emission	Very low emission EC1^{plus}

TEST RESULTS		
Shear adhesion strength, standard conditions	BS EN 12004-2	8Mpa
Shear adhesion strength, thermal shock conditions	BS EN 12004-2	4Mpa
Shear adhesion strength, water immersion conditions	BS EN 12004-2	4Mpa
Sag in vertical	BS EN 12004-2	Nil
VOC	USEPA 24 Method	<5g/lit

INSTRUCTIONS FOR USE

SUBSTRATE PREPARATION

The substrate must be structurally stable, crack-free, permanently vibration-free and having a sufficient surface tensile strength. All surfaces should be clean, dry, and free from grease, laitance, oil, dust, paint, and any other substance that may prevent or reduce adhesion. Remove all weak, loose, smooth, or broken pieces of concrete until it reaches a sound rough concrete. This resultcan be achieved primarily by shot-blasting, otherwise by grinding. Depending on substrate conditions, any crack or deep ruptures must be repaired prior to **weber euroflor Design** application using **weberfloor epopatch** (up to 3mm) and **weberfloor epolevel** (3-10mm), freshly scattered with sand, to increase the bonding and create a strong mechanical key. Substrate moisture content should be at least 4%, additionally the surface tensile strength should be at least 1N/mm² for light and medium traffic floor, 1.5N/mm² for industrial floor (depending on the substrate application thickness, these figures could be achieved after approx. 28 days). To avoid long waiting time for the substrate to dry and to be ready to accept **weber euroflor Design**, a rapid drying screed solution, such as **weberfloor rapid**, could be applied, allowing to apply **weber euroflor Design** layer, after 4 days. The edge joint must be prepared with a suitable expansion strip. Thereby attention must be paid to avoid material flowing below or behind the expansion strip, moreover, expansion joints must be adopted. After finishing the whole application steps, all joints have to be filled with a permanently elastic compound.
To enhance the strength and flexibility of the surface and to protect it against structural movement and concrete shrinkage cracks, it is recommended to use **weberfloor anti-crack** as a crack suppression membrane layer. This will prevent stress load transfer to the final overlay. If the substrate is tiled, it is important to ensure that all tiles are free of cracks. Any loose tiles should be removed and replaced before applying **weberfloor anti-crack**.
After 24 hours from the application of the crack suppression membrane, the substrate must be vacuumed and primed with **weber euroflor prime**, using a soft brush or a roller.
Priming the surface will adjust the substrate absorbency and avoid the rising of air bubbles during the subsequent layers.
Apply **weber euroflor prime** in 2 coats, with water dilution at the ratio (1:1).
Allow the first primer coat to dry to a clear film before applying the second layer following the same dilution ratio. **weber euroflor Design** should be applied as soon the color of the primed surface change from white to clear.

PRODUCT PREPARATION

UNPIGMENTED MORTAR
At high ambient temperature, it is always recommended to use cold water or ice if necessary. For small areas, it is advisable to mix 1 bag using a Collomix machine. However, in case of larger areas, it is advisable to mix 4 bags using a Portamix machine (2300W). In both cases, the mixing machines should be cleaned prior to the mixture process. In case of 1 bag mixture add first 4.2-4.4lit of clean cool water per 23kg powder material into the mixing container. In case of 4 bags mixture, add first 16.8-17.6lit of clean cool water. Adjust the Portamix speed to 1, pour gradually and slowly the first 2 bags while mixing from 2-3 minutes. Thereafter, stop the mixer then scrap all sides using a long trowel. Adjust the Portamix to speed 2, pour gradually the third bag then stop again the mixer, scrap all sides, mix for 20 seconds, thereafter, pour the fourth bag gradually. Stop again the mixer, scrap all side, adjust the speed mixer to speed 3, afterwards keep mixing for 2 minutes. Stop the mixer and leave the material to set for 1 minute and to allow the chemicals dissolution. Finally, mix again at speed 3 for one more minute. For applications with a hand-held mixer the Collomix mixing paddle DLX 152 HF is recommended. By using the respective mixing paddle, a proper thread adapter has to be used if necessary. For mixing of lesser quantities in smaller containers, the mixing paddle DLX 90 S for drilling machines is recommended. The material has to be mixed intensely for 2 minutes at less than 500 rpm, left to set for around one minute, then mixed again for one more minute Single mixing batches must be mixed fast and uniform. The material has to be poured out seamlessly within the mentioned workability time. With manual processing an aeration time of up to few minutes (depending on site conditions) has to be maintained between the end of the mixing time and application of the material. This minimizes the rising of air bubbles within the poured material. After mixing, apply **weber euroflor Design** onto the primed surface and distribute it with a gauging tool and smoothing blade. In order to avoid processing marks on the fresh surface, use a surface scraper to smoothen the surface. For optimal leveling of the fresh mortar and to maintain the flatness tolerances according to DIN 18202, it is recommended to use a layer thickness of approximately 3–5mm for larger areas. For areas > 50m²: it is recommended to use Mega Hippo self-levelling compound mixer by Portamix. For areas > 300m²: it is

recommended to use Continuous mixing pump duo-mix 2000 by M-Tec or comparable mixing system. The freshly applied **weber euroflor Design**, must be well protected from too quick drying caused by wind and solar radiation, frost, and rain for the first 24 hours. Do not cover the finished surface.

UNPIGMENTED MORTAR

weber euroflor Design can be pigmented with liquid or powder pigments as needed. The respective pigment dosage is added to the mixing water based on costumer requirement and selected design. After selecting the right pigment type and dosage, it must be mixed intensively for at least 1 minute and left for around one hour to get soaked in the water before mixing with **weber euroflor Design**.

Prior to application of the mortar, the coloring and the desired visual appearance should be checked on a separate test area. It is recommended to use Weber pigments however, for other pigments and preparations, no certain appearance or quality can be guaranteed. The usage of each pigment and the suitability for the desired finish, has to be clarified with Weber technical team in advance. In the case of single-colored floors, all further steps are carried out as described in the unpigmented section. An aeration time of up to 5 minutes has to be maintained between the end of the mixing time and application of the material (depending on site conditions). By using liquid pigment, the quantity of water can be reduced by the same quantity of liquid pigment added to ensure a uniform color distribution. For a cloudier finish (not possible with all pigments), use the standard amount of water as stated. Prior to application of the mortar, the coloring and the desired visual appearance should be checked on a separate test area. (The water amount has to be adjusted accordingly). For floors with two or more colors, conventional tools (screed rake, a spiked roller, etc.) should not be used due to the possible influence on the design concept. The fresh mortar has to be distributed with a suitable trowel or a surface scraper. **weber euroflor Design** provides wide selections of colors and patterns that require skilled labor, and the selection of the color will be based on the clients' choice; therefore, it is recommended to follow the recommendation and instruction from Weber technical team.

**The freshly applied material should be protected from any kind of water precipitation (dew drops, water Condensation, air condition, sweating,etc...)*

OUTDOOR APPLICATION

For outdoor application, the following precautions should be restrictedly taken into consideration:

- It is recommended to work during evening time.
- The application area should be shaded.
- After surface preparation, the application area should be protected from any kind of dust and heavy wind (during application and for the first 24 hours).
- The temperature of the freshly mixed material should be in the range of 20-30°C. (use cold water or ice if necessary).
- The freshly applied material should be protected from any kind of water precipitation (dew drops, water condensation, rain, etc.).
- Application area should be divided into manageable parts.

APPLICABLE STANDARDS

EN 13813:2003; EN 13892-8:2002; EN 13872.

PROTECTION

weber euroflor Design must be sealed with **weber euroflor seal** which can be applied after initial hardness and acceptance of light foot traffic normally between 4-6 hours (Please refer to technical data sheet of **weber euroflor seal** for more information).

In case it is not possible to apply the sealer on the next day due to site conditions,a temporary floor covering must be laid down on top of **weber euroflor Design** to keep your design flooring safe from any damage.

TOOLS AND CLEANING

Hand-held mixer or mixing device, stirrer, trowel, pin leveler, surface scraper spiked roller and spiked shoes. All equipment should be washed with clean water and dried before and after application.

PACKAGING AND SHELF-LIFE

23kg paper bag.

Original packing is storable for 12 months in dry and controlled temperate areas (10–35°C).

Important Notes

**If a uniform color is desired, it is necessary to work on designated sections with the same batch (see label). In addition, changing working techniques and water mixing ratio during the application, will also have an impact on the final design and light color shades on the surface can occur.*

****weber euroflor Design** *is a mineral based product, hence colors are not fully conformed to the RAL-Map, and therefore, they should only be seen as estimated classifications.*

DISCLAIMER

While the company guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of their application are beyond its control. It is recommended to verify with the company that the product is suitable for the intended use, and that this Data Sheet version is the latest one. The company may modify it without prior notice. Technical characteristics are listed for guidance only. For more information, please contact the company's office in your location.

SAINT-GOBAIN