Fast setting cementitious self-leveling floor compound

PRODUCT

weberfloor 514 SL is an underlay cementitious base single component product, used internally for leveling and smoothing irregular surfaces at thicknesses up to 15mm, it can reach 30 mm at punctual areas on new or existing substrates in order to receive different types of flooring covering. It has good abrasion resistance and provides a fast setting tough surface that will accept light traffic in less than 12hours with an excellent resistance to light loads and traffic.

SCOPE OF USE

weberfloor 514 SL is used for internal application and specially designed to be applied as self-leveling prior the laying of resilient floors such as PVC, Vinyl, rubber, carpets as well as wood flooring, ceramics, or natural stones. It can be used in many areas such as:

- · Hotels, theaters, hospitals
- · Schools, offices
- · Airports halls.

weberfloor 514 SL can be used also for levelling existing concrete pavements, terrazzo, or natural stone after a good surface preparation and priming. It could be applied over light weight screed.

weberfloor 514 SL could be used for floor heating system according to special instructions respecting the start-up heating procedure.

ADVANTAGES

- · Highly fluid and easily workable.
- · Good self levelling capacity.
- Fast setting ready for foot traffic in less than 12h (depending on thickness and site conditions)
- · Smooth finishing.
- · Good bond with reduced shrinkage.
- · Low VOC.

CHARACTERISTICS	
Form	Grey Powder
Grain size	< 1 mm
Powder density	1.2 ± 0.05
Shelf healing properties	Good up to approx. 30 min
	(depending on temperature,
	substrate & site conditions)
Pot life	around 30 min
Application temperature	from +5°C to +35°C
range	
Shrinkage at 28 days - IBN	<0.5 mm/m
German guideline: 1993	
Flexural strength at 28	6 MPa
days EN 13813:2003	



Compressive strength at	25 MPa ± 10%
28 days EN 13813:2003	
VOC and formaldehyde	None (<10µg/I)
Content ISO/FDIS	
11890-2/GC-MS	

*Results obtained at 20.5% for UAE, 20% for KSA and 17% for Lebanon under lab. condition at 22°C \pm 1.

*Properties listed above are only based on controlled laboratory samples and tests: Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

APPLICABLE STANDARDS

EN 13813 CT, EN 12808, EN 12706:1999

INSTRUCTIONS FOR USE SUBSTRATE PREPARATION

- Concrete substrate should be at least 3 months old and structurally stable. (residual moisture <4%)
- $\boldsymbol{\cdot}$ Concrete must be crack free. Thus, any crack must be repaired prior to application.
- 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 reaching a sound rough concrete. This can be achieved primarily by shot-blasting otherwise by medium scarifying or grinding.

- The prepared surface must have an average "surface tensile adhesion strength" greater than 1MPa. Moreover, it should have CSP (concrete surface profile) of 3 to 5.
- Then, the substrate must be vacuumed, and primed with **weberfloor 4716**. Weber does not warrant any defect due to concrete substrate movement.

PRIMER APPLICATION

- weberfloor 4716 must be brushed into the substrate using a soft brush. Primer's Puddles should be avoided.
- weberfloor 4716 must be applied on one or two coats depending on the substrate.
- For dry and porous substrate, dilute first coat of **weberfloor 4716** with water at the ratio 1:5. Allow to dry to a clear film before applying the second layer with a dilution 1:3.

For dense concrete, apply one coat of weberfloor 4716 diluted at the ratio of 1:3 $\,$

Kindly refer to the primer data sheet for more details

• weberfloor 514 SL should be applied as soon as the colour of the primed surface change from white to clear. For thicknesses higher than 10mm, it is recommended to fix soft strips as a separation between the walls (or columns) and the self-leveling before proceeding with the application.

PRODUCT PREPARATION

weberfloor 514 SL is to be mixed in full bag batches. Do not mix partial bags. 25 Kg bag of **weberfloor 514 SL** is to be mixed with 5 – 5.125 liters (between 4 to 4.5 ltr for Lebanon) of clean and cool water. Measure and add the proper amount of water for each bag into a mixing container. Using a paddle type mixer on a slow speed drill, place the paddle in the mixing water and start the drill. Slowly add the **weberfloor 514 SL** powder. Mix for a minimum of 2 minutes until lumps free mixture. Scrape the sides of the mixing container and remix for 1 minute. The mixed material should be lumps free Make sure that the mixed material has a temperature not exceeding 30C (use ice if necessary to cool down water).

It is recommended to fix soft strips as a separation between the walls (or columns) and the self-leveling before proceeding with the application at thicknesses greater than 10 mm.

Note: Do not add more water to a mix which has already begun to set.

PRODUCT APPLICATION

Limit the work areas into manageable sections of approximately 20 m2 . Reduce the width of the work area when applying in warmer temperatures. Pour the mixed material onto the prepared surface, then immediately spread it with a large metal trowel. Moreover ,the spiked roller could be also used to eliminate and burst the air bubbles and pinholes and to homogenize the product mixture to aid in leveling and smoothing the surface. Do not walk in the wet material unless wearing spiked shoes or boots. Always keep a wet edge of material to pour fresh material into. Protect the material from wind when installing. Allow longer cure time of the material before walking on if the temperature is below

weberfloor 514 SL can be covered (vinyl, carpet, tiles...) after 3 days from the application.

PRECAUTIONS

It is preferable to subdivide the total area of application in smaller ones not exceeding 20 m² each in order to facilitate the application of floor 514 SL. A soft frame should be fixed so when they finish the first section, you should remove the soft frame and apply the other section without leaving any joint between the 2 sections. All existing movement/expansion joints in the base should be maintained and continued through the weberfloor 514 SL

- In case of corridors, it is recommend it to fix control joints on each 15 linear meters and in each connection between corridor and room. The joints should be sealed with weber jointseal PU
- In hot and humid weather, it is preferable to apply the product early morning or late afternoon.
- outside the recommended temperature range (higher than 35 deg.), please refer to the technical department for more details about the thickness and the method of application
- Avoid work under heavy windy condition in which case the product may dry fast and cracks might appear. It is preferable to cover the working area with plastic sheets as soon as the surface is walkable
- All the opening (windows , doors...) should be closed in order to reduce the effect of wind during the application and while the applied area still fresh. Any applied materials should be protected from sun light.
- The surface is suitable for light foot traffic after 24 hours. However, avoid dragging heavy objects on it in order to avoid damaging the finished surface.
- · After usage, clean tools with water.
- Depending on thickness, moisture content of self levelling and substrate, and the moisture sensitivity of the covering, wait 3 days minimum before covering the floor with carpeting, tiles, etc.
- For additional information, please consult our Technical Data Sheet or contact one of our Sales Engineers.



CLEANING

Tools and equipment should be cleaned with water immediately after use.

CONSUMPTION AND COVERAGE

1.7 kg/m²/mm thickness.

STORAGE

One year after manufacturing date in its original packing non open and in dry cool area.

SAFETY PRECAUTIONS

The product contains very fine powders which, when mixed with water, release alkalis that could be harmful to the skin. It is preferable to do the application a well ventilated area, to wear protective gear for hands, eyes and respiratory system and to avoid dust inhaling. Splashes on the skin should be washed away by cleaning with soap and water. In case of contact with eyes, wash thoroughly with clean water. If swallowed, do not induce vomiting. In both cases seek medical attention. The product is non-flammable.

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.

NOTE

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