SM 485

Quick drying self-levelling cement floor screed for thicknesses from 3 to 30 mm, for interiors

Interior

Sack

By hand

By machine

Metal trowel

Composition

SM 485 is a dry premix consisting of special hydraulic binders with rapid hydration and setting, with selected sands and special additives to improve workability and favour its self-levelling properties.

Supply

- Special sacks with protection against damp of 25 kg approx.

Use

SM 485 is used for interiors to level uneven cement-based substrates or old ceramic floors, with a thickness of application of between 3 and 30 mm, when rapid drying time is necessary to allow the floor covering to be laid quickly. Floor coverings can be laid only after the product has thoroughly dried. The drying time depends on the thickness, the water content of the mix and the thermo-hygrometric conditions and may vary from a few days to some weeks. It is advisable to measure the actual moisture using a carbide hygrometer, before laying the floor covering.

Substrate preparation

The floor surface must be free from dust, dirt etc. Any traces of grease, oil and wax etc. must be removed beforehand, along with any crumbling or loose parts. Highly absorbent substrates must be treated beforehand using our AG 15 primer, diluted with water at a ratio of 1:8. Anhydrite screeds, on the other hand, must be treated with PRIMER DG 74.

Mixing

Pour and at the same time mix a 25 kg sack of SM 485 in about 5 litres of clean water and mix with a mechanical stirrer at slow speed, until you obtain a smooth and uniform mix. Larger quantities of SM 485 can be mixed in ordinary mortar mixers. SM 485 can also be applied with a pump. Do not attempt to restore decreased workability by adding further water to the mix. Wait 2 minutes before application and then stir the mix. SM485 spreads easily with one coat with a thickness of between 3 and 30 mm using a metal trowel or a scraper. Due to its excellent self-levelling qualities, SM 485 does not leave any imperfections. Since the product dries quickly, wooden and ceramic floors, etc. can be laid shortly after application (from 1 to 3 days depending on the thickness and temperature). All the same, the flooring should be laid only after making sure the substrate is dry, by using a calcium carbide hygrometer.

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Warnings

- Do not use for exteriors.
- Do not use on damp substrates or surfaces affected by rising damp.
- On heated substrates allow at least one day with the heating off before applying.
- Use the product at temperatures between +5°C and +30°C.
- Do not add water to the mix during setting and do not exceed the recommended dosage.
- Do not apply directly on anhydrite substrates. Treat beforehand with PRIMER DG 74.
- SM 485 cannot be used as a floating screed, but should always be bonded to a fixed and stable underlay.
- Do not lay floors (parquets, resilient floors etc.) until you have checked that the humidity is below 2% as measured with a carbonate hygrometer. For the application of wooden coverings on screeds laid on underfloor heating systems the residual humidity must be ≤ 1.7 %, in compliance with the UNI 11371 standard.
- The residual humidity must be measured with a carbonate hygrometer when it is assumed that the screed humidity content is lower than 3%. For the measurement introduce a 50 gr sample in the vessel together with a calcium carbide vial. The reading must be made on the scale corresponding to 50 grams, or with the conversion chart supplied with the instrument, 20 minutes after the start of the test.
- For a workmanlike tile ceramic flooring on any cement-based screed applied with the "glue" method, the maximum residual humidity must be equal to 4% approx..
- For applications on old ceramic flooring, clean and scarify the substrate and remove any residues before applying the AG 15 primer diluted in water 1:8.

SM 485 must only be used in its original state, without the addition of other materials.

Storage

Store in a dry place for no longer than 12 months. Setting may slow down after the product has been stored for some time, however without the final performance being affected.

Quality

SM 485 is subjected to careful and constant testing in our laboratories. The raw materials used are carefully selected and checked.

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Technical Data

Specific weight of the powder	approx. 1250 kg/m³
Grading	< 2 mm
Mixing water	approx. 19%
Yield	approx. 1.7 kg/m² per mm in thickness
Setting time at +20°C	approx. 1.5 hours
Can be walked on after (at +20°C)	approx. 3 hours
Workability time at 20°C	approx. 30 minutes
Density of the hardened product	approx. 2000 kg/m³
Adhesion on cement-based substrates	> approx. 1.5 N/mm²
Flexural strength after 24 hours	approx. 3 N/mm²
Flexural strength after 7 days	approx. 6 N/mm²
Flexural strength after 28 days	approx. 9 N/mm²
Compressive strength after 24 hours	approx. 12 N/mm²
Compressive strength after 7 days	approx. 19 N/mm²
Compressive strength after 28 days	approx. 28 N/mm²
Thermal conductivity coefficient (EN 12524)	λ = 1.35 W/m k tabulated value
Complies with the EN 13813 standard	CT-C25-F7

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The above information refers to laboratory testing; it is possible that in practical applications on site it may differ according to the conditions in which the material is applied. In any case the user should verify that the product is suitable for the intended application, taking all responsibility for its use. Fassa reserves the right to make technical modifications without notice.