

General Application Advice

For Powerscreed screed accelerators

Handling Information

Using high effective accelerators from the Powerscreed line, enables screeds to be ready in a shorter time for the application of further layers.

Dosage

To obtain best results the accelerator should be added directly to the water before mixing with the other screed ingredients. The aggregates humidity has to be considered.

The optimal dosage is defined by preliminary testing with the specific aggregates and cements. The technical properties and workability of the screed mortar can be determined during these preliminary tests.

When changing the screed recipe the properties of the screed mortar should be tested again.

Screed Drying

The drying process is influenced by the thickness of the screed layer and the ambient moisture. Walls and floors that are not completely dry, high air humidity and dew point changes, lack of soil waterproofing, plaster and paint humidity could influence the drying process negatively. Even completely dried screeds absorb humidity. The absorbed humidity lengthens or shortens the desired residual moisture level.

Screeds can only dry completely if the temperature of the screed is at least +3 °C above the dew point of the surrounding air. To support the drying process a sufficient supply of fresh air, e.g. by opening a window, is recommended. Furthermore draughts have to be avoided. Covering the screed surface (with e.g. foils, planks etc.) extends the drying time.

CM-Measurement

The CM-Measurement serves to classify the screed humidity in order to identify the point where it is possible to apply further layers. Screeds with accelerators can also be measured with the CM-Measurement. For the CM-Measurement, the recommendations of the Federal Association for Screeds and Coverings (BEB) and the Central Association of the German Construction Industry (ZDB) must be taken into consideration.

For heated screeds the sampling for the CM-Measurement must be taken at designated measuring points. During sample preparation be careful not to lose considerable moisture. After that follow these steps:

- Sampling and sample preparation are carried out as quickly as possible.
- Sample preparation should not be carried out in direct sunlight or draught.
- Taking small amounts of samples should not be considered since the process of completely crushing the sample should only occur inside the CM-instrument, with the help of four spheres.

The limit values listed below for applying further layers of screeds must be followed:

	heated	unheated
Cement screed	1,8 CM-%*	2,0 CM-%

* Under ceramic and stone floors 2,0 CM-%

While testing the sample, proceed as follows:

- The sample must be taken over the whole screed thickness.
- The sample has to be crushed in a bowl, so that it is possible to achieve a fully crushed sample inside the CM-instrument, using four spheres.
- The test material is weighed out with a spoon (cement screed at young age 20 g, 50 g for cured materials).
- Fill the CM-instrument with the sample and spheres carefully. This process is easier if a funnel with bigger diameter is used.
- Hold the CM - instrument inclined and fill the glass ampoule with calcium carbide.
- After closing the CM- instrument, shake it vigorously until the display on the manometer rises.
- By doing back and forth plus circling movements the sample in the CM- instrument gets crushed with the help of the spheres. Please make sure that the manometer is not impinged. Duration: 2 minutes.
- 5 minutes after closing the CM- instrument, shake it for one more minute.
- 10 minutes after closing the CM- instrument, shake it again shortly (≈ 10 sec.) and read the value. Take the humidity value out of the calibration table and added it to the protocol.



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Storage

Screed accelerators must be stored in tightly closed packs, protected from frost and strong sun-

light. The shelf life is at least 12 months, unless specified otherwise.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

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