



MC-Floor TurboCem (formerly: Powerscreed RS Binder)

rapid-set cement for producing dimensionally stable screeds for early overlay.

Product Properties

- Ternary speciality binder
- Long open time
- Hardens fast and virtually free of deformation
- Practically shrink-free
- Fast accessibility
- Rapid coverability / coatability

Areas of Application

- Formulation of earth-moist screeds up to grade CT-C50-F7 to EN 13813
- For the installation of quickly coverable screeds
- For the production of stress-free-setting and dimensionally stable screeds.
- Suitable for underfloor heating screeds
- Suitable for wet rooms
- Suitable for indoor and outdoor use

Application Instructions

Substrate preparation for compound screeds

The substrate must be resilient, dry, clean, frost-free and free of dirt, oil, release agent, paints, coatings or other adhesion-reducing substances. As a bond coat, a mixture of MC-Estrifan Additive KD 961 and water (1:3) is mixed with MC-Floor TurboCem to a slurry-like consistency and brushed into the matt-damp substrate. The screed is then installed fresh-in-fresh on the matt-damp bond coat.

Application Method

MC-Floor TurboCem should be mixed with 0/8 screed sand to create a screed mortar compliant with EN 13813. When adjusting the application consistency, do not exceed a w/c value of 0.45. Make due allowance for the moisture content of the sand! The screed mortar can be prepared and applied with commercially available screed mixers or screed mixer/feed pumps. If there is any stoppage in the work, the mixers, pumps and hoses must be thoroughly cleaned immediately. The screed can be compacted and precision-levelled using standard techniques. The screed should be worked and installed in line with all relevant codes and standards as last amended.

Screed Drying

During drying, the screed must be protected from direct sunlight and draught air. The drying process is influenced by the screed thickness and the ambient conditions. Low temperatures decelerate, high temperatures accelerate the hardening process.

Underfloor Heating Screeds

For heated screeds, the existing underfloor heating can be heated to 20 °C before and during screed installation. The actual room heating function should not be initiated until at least 3 – 4 days after screed installation. In so doing, the feed temperature should be gradually ramped up at a maximum rate of 5 °C per day. After holding the maximum temperature for one day, it must be gradually lowered again by 10 °C per day to the initial temperature.

Further Information

Before any covering or coating, perform a CM measurement to check the residual moisture level. The maximum permissible residual moisture for the respective surface coverings must be observed.

For screed formulations with a mixing ratio of 1:4.3, ceramic coverings and special coating systems from MC-Bauchemie can be applied after just 24 hours.



Technical Properties of MC-Floor TurboCem

Characteristic	Unit	Value		Comments
Quality grade		C35-F5	C50-F7	Preliminary trial required
Mixing ratio		1 : 5	1 : 4.3	Binding agent : Sand 0/8
Example formulation*	kg	60	70	MC-Floor TurboCem
	kg	300	300	Sand 0/8
	l	max. 27	max. 32	Water; make due allowance for the moisture content of the sand! (W/C max. 0.45)
Consumption	kg / m ² / cm	approx. 3	approx. 3.5	Related to MC-Floor TurboCem
Application time	Minutes	> 60	> 45	at 20 °C & 50 % rel. humidity
Accessible after	Hours	16	12	at 20 °C & 50 % rel. humidity
Coverable at < 2 CM% after	Days	7 – 10	3	at 10 °C & 80 % rel. humidity
Compressive strength				
After 3d	N/mm ²	> 20	> 30	
After 28d	N/mm ²	> 35	> 50	
Flexural strength				
Layer thickness	mm	from 25		For a screed aggregate of 0/8
Application conditions	°C	≥ + 5 – ≤ + 30		Air and substrate temperatures
	%	≤ 85		Relative humidity
	K	3		Above dew point

* The formulations indicated refer to a 200 litre screed mixer. These should be regarded as suggestions and are based on laboratory investigations and empirical values. Unfavourable aggregate sieve lines may result in a reduction in the strength values. We therefore recommend preliminary trials be performed in accordance with EN 13813. The drying times indicated relate to cement screeds of approx. 50 mm in thickness. Thicker cross sections and unfavourable ambient conditions may extend drying times. Once the screed pump has been completely filled and closed, mix for at least 60 seconds more.

Product Features of MC-Floor TurboCem

Self-monitoring	EN ISO 9001
Colour	Grey
Form	Powder
Storage	Keep free from frost! Shelf life 6 months if stored dry in original containers.
Packaging	20 kg bag
Equipment cleaning agent	Water
Disposal	In the interest of the environment, please ensure the containers are empty and residue-free prior to appropriate disposal.

Note: The information on this technical data sheet is based on our experience and correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, the specific application and especially to local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to such a review, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets and information leaflets are only binding on us if they are confirmed by us in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed.

Issue 06/20. This data sheet has been technically revised. Previous versions are now duly superseded and may no longer be applied. Any further technically revised edition supersedes this version, rendering it null and void.