Screed/Concrete



Sustainable screed mortar / dry concrete

CT-C25-F4 acc. EN 13813 / DIN 18560 C25/30 acc. DIN EN 206 XC4, XF1, XA1 acc. DIN EN 206

- with secondary raw materials (SR) as an active contribution to the conservation of natural aggregate resources
- universal use
- very low emissions EC 1 PLUS



APPLICATIONS

- for producing slender concrete components and foundations
- for the manufacture of statically relevant components
- for producing screed constructions according to DIN 18560
- for foundations, door and window lintels
- as a composite screed, floating screed or heated screed
- as flooring for basements, garages, workshops, stables
- for producing chimney heads and garden walls
- for external and interior use

PROPERTIES

- weather and frost resistant after hardening
- easy to mix
- good workability

COMPOSITION

- high-quality binders according to DIN EN 197-1
- Mineral aggregates according to DIN EN 13139 / DIN EN 12620
- additives for regulating and improving workability and product properties

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SUBSTRATE		
Properties/tests	 The subsurface must be dry, load-bearing, clean, frost-free and suitable for the application of mortar. Concrete substrates for composite screeds must be at least 6 months old. The requirements of DIN 18560 and DIN EN 13813 are to be observed. 	
Pretreatment	 For bonded screeds, carefully clean the substrate. Remove leftover mortar, loose concrete and other types of contamination using suitable measures. Coarse flaws in the substrate must be levelled with mortars suitable for this. Non-absorbent substrates are to be pre-treated with a suitable epoxy-resin primer and sprinkled with coarse silica sand (grain size 0.35 – 1.5 mm). Critical substrates or those sensitive to moisture are to be pre-treated with a suitable epoxy-resin primer, as previously described, to protect against moisture entering or for hardening purposes. When producing screeds on insulation or a separating layer, the normal requirements and regulations must be observed. Edge insulation strips on walls and other rising components must be installed professionally according to DIN 18560. Expansion, movement, building separation or connection joints already present in the subsurface must be applied in the same arrangement throughout the entire cross-section of the system. 	

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PROCESSING	
Temperature	■ Do not process or allow to dry out at air, material or substrate temperatures below +5°C, or if there is a risk of exposure to night frost, or at temperatures above +30°C, or in direct sunlight, or on heated up surfaces, and/or in windy conditions.
Mixing / Preparation / Processing	 When mixing manually, first place the quantity of water specified in the technical data in a clean container and then sprinkle in dry mortar. Use clean tap water. use a suitable agitator to mix the material until smooth and free of lumps. Leave to rest for a moment and then mix again, adding more water, if required, to achieve the right consistency for applying. Do not mix with other products and/or other substances.
Processing	 Application as a screed mortar: When processing as a composite screed, firstly brush on quick-mix H4 bonding bridge onto the prewet, still matt damp concrete surface. Apply the screed mortar into the bonding bridge directly afterwards "wet-in-wet" in the required layer thickness. For screeds on a separating layer or insulation, apply fresh mortar evenly in the required layer thickness. For the subsequent laying of ceramic tiles, rub the surface of the screed (do not smooth). The minimum layer thickness for bonded screeds is 30 mm, for screeds on insulation or a separating layer it is 35 mm. Application as concrete: Use concrete immediately after mixing. Compact intensely to improve the homogeneity of the concrete, e.g. by poking or banging the formwork.
Drying / Hardening	 Protect the fresh mortar from drying out too quickly and from unfavourable weather conditions such as frost, draughts, direct sunlight and direct exposure to driving rain if necessary by hanging with foil. Concrete elements or surfaces produced are to be kept damp for at least 7 days and protected from rapidly drying out and unfavourable weather conditions such as frost, draughts, direct sunlight and driving rain. The drying and hardening process will be slowed down by low temperatures and/or high air humidity and accelerated by high temperatures and/or low air humidity.
Subsequent coating / Suitability for coating	 ■ Ready for ceramic coverings with residual moistures ≤ 2 CM % in case of unheated, or ≤ 1.8 CM % in case of heated screed designs. ■ For all other coverings, the CM residual moisture content defined in the technical regulations or alternatively the specifications issued by the respective covering manufacturer apply.
Cleaning the tools	■ Clean all tools and equipment with water immediately after use.
Notes	 The following regulations and standards apply to the execution: DIN 18560 "Screeds in construction"; DIN ATV 18353 "Screed work"; EN 13813 "Screed mortar". When laying tiles on heated screeds, DIN EN 1264-4 applies. When using as a heated screed, the screed is heated up at the earliest 14 days after installation of the screed. Function heating and any necessary heating in preparation for laying is done according to the specialist information "Interface coordination for heated flooring constructions", issued by the Bundesverband Flächenheizungen e.V. (Federal association for surface heating) (BVF).

QUANTITY REQUIRED / YIELD

- consumption: approx. 20 kg/m² per 10 cm layer thickness
- yield: app. 12.5 l fresh mortar per 25 kg/sack

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TECHNICAL DATA				
Compressive strength (class)	C25/30 according to DIN EN 206			
Compressive strength	C25 according to DIN EN 13 813 and DIN 18 560			
Flexural strength	F4 according to DIN EN 13813 and DIN 18560			
Exposure classes	XC4, XF1, XA1			
Moisture class	W0, WF			
Grain	0 – 8 mm			
Water requirement	approx. 2,3 l per 25 kg/sack			
Consistency class	F1 / F2			

All data are average values that were determined under laboratory conditions according to relevant test standards and application tests. Deviations are possible under practical conditions.

PACKAGING

■ 25 kg/sack

STORAGE

- Store sacks appropriately and in dry conditions on pallets.
- Low-chromate for at least 12 months from date of manufacture if stored dry and properly in original sealed package.

SAFETY AND DISPOSAL INSTRUCTIONS

OATETT AND DISTORAL INSTITUTIONS		
Safety	 This product produces an alkaline reaction when it comes into contact with moisture/water. Therefore ensure that skin and eyes are protected. If it should come into contact with the skin or eyes, rinse them thoroughly with water. See a doctor immediately if it comes into contact with the eyes. Follow further instructions in the safety data sheet. 	
GISCODE	■ ZP1 (products containing cement, low-chromate)	
Disposal	 Dispose of the material in accordance with the official regulations. Completely empty and recycle the packaging. Dispose of hardened product in accordance with the local regulations. Do not allow to enter the sewer system. Dispose of the hardened product in the same way as concrete waste and slurries. Waste code according to the Ordinance on the European Waste Catalogue depending on the origin: 17 01 01 (concrete) or 10 13 14 (concretewaste and concrete slurries). 	

GENERAL INFORMATION

This information sheet provides only general recommendations. Should you have any queries relating to a specific application, please contact our technical sales advisor or call our hotline: +49 541 601-601. Since natural raw materials are used, the values and properties described may vary somewhat. All of the details given are based on our current knowledge and experience and on the assumption that the materials are professionally applied and used for their normal purpose. All of the details are non-binding and do not release users from their duty to undertake their own tests to ensure suitability for the intended application. Due to the effects of different weather, processing and construction site conditions, no guarantee can be given for the general validity of all details. We reserve the right to make changes as a result of further development of the product and applications engineering. The general rules for construction engineering, the valid standards and guidelines, and the technical working guidelines must be observed. The publication of this technical data sheet renders all previous editions of this data sheet void. Please obtain the latest information from our website.