

CASEA Südanit 280 Alpha Hemihydrate Floor Screed Binder

CASEA Südanit 280 Alpha Hemihydrate Binder is a specially formulated calcium sulphate binder suitable for the production of top quality self levelling (flowing) floor screeds, simply by blending with a suitable sand and water on site. Südanit 280 Alpha Hemihydrate Binder complies with EN 13454-1:2004 and is CE marked.

- Smooth Laitance Free Finish
- Pumpable
- Under Floor Heating – Full Encapsulation
- Suitable For Underlayment In Wet Areas
- Reduced Drying Times
- CE Marked
- EN 13454-1: 2004
- 25kg bags and bulk bags
- UFH can be commissioned and runing during screed application at max. water temp (manifold) of 25 °C

Field Of Application

Südanit 280 Alpha Hemihydrate Screed is suitable for floors in homes, offices, public buildings and places exposed to similar loads. Südanit 280 Alpha Hemihydrate Screed may be applied as a levelling screed directly onto a load bearing floor, unbonded on a separating barrier (polythene), as a floating floor and is particularly suited in conjunction with underfloor heating or cavity floors. Südanit 280 Alpha Hemihydrate Screed should be covered with a floor finish such as tiles, linoleum, parquet, cork or carpet. If a cement based adhesive or smoothing compound is required the surface of the screed must first be sealed, using an appropriate acrylic primer/sealer.

Working Instructions

Light ventilation in the work area is necessary, however windows and openings must be closed sufficiently to avoid draughts during and after application. Indoor and floor temperature should exceed +10°C during and after application and for one week after that.

Substrate

Südanit 280 Alpha Hemihydrate Screed is designed for use as a bonded thick levelling screed on concrete, as a floating screed over thermal or acoustic insulation, or as an unbonded screed on top of a plastic membrane.

Preparation and Priming

The substrate should be clean, dry, free of dust, grease and other impurities that might prevent adhesion. If it is a large area the surface should be treated by mechanical

preparation by grinding or shot blasting. For bonded screeds, the substrate must be dry and should be primed with a suitable primer. If Südanit 280 Alpha Hemihydrate Screed is to be applied on plastic sheeting or as a floating floor, an edge insulation of 8mm minimum should be formed around the perimeter (walls, columns, etc.)

Mix Design

Sand should be of an approved quality and grading. Trials should always be carried out to optimise the mix design before work commences. The proportion of binder required is 475 – 600kg/m³. Sufficient sand is required to produce 1m³ of screed, with sufficient water added to produce a flow spread diameter of 230-260mm. A typical starting point mix design is 600kg Binder, 1200kg sand (dry weight) and 330L water per m³. All materials should be adequately mixed to ensure full dispersion of materials without lumps.

Application

Pumping is carried out in sections so that a wet edge is maintained. A wide steel tampering bar is used to assist the levelling process. When applied bonded the minimum thickness of Südanit 280 Alpha Hemihydrate Screed should be 20mm, over underfloor heating this should be a minimum of 25mm over the pipes (35mm over insulation board).

Storage

6 months under dry, protected conditions.

Disposal Considerations

13.1 Waste treatment methods: Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system. Uncleaned packaging: Recommendation: Disposal must be made according to official regulations. Recommended cleansing agents: Water, if necessary together with cleansing agents.

Safety

Classification according to Regulation (EC) No 1272/2008: **Hazard pictograms:** GHS05. **Signal word:** Danger. **Hazard-determining components of labelling:** Cement, portland, chemicals. All standard precautions for the handling of construction materials/chemicals must be taken. See CASEA Health and Safety Data Sheet for further detailed information.

Safety

Hazard Statements

H318 Causes serious eye damage.

Precautionary Statements

P102 Keep out of reach of children.


P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor.

Technical Information

Screed Specification EN 13813: 2002	
Maximum Thickness	90mm
Minimum Thickness	Bonded: 20mm Unbonded: 30mm Domestic: 35mm Commercial: 40mm Over Underfloor heating Pipes: 25mm (BS 8204-7)
Use (External Use)	No
Use (Internal Use)	Yes
Compressive Strength (28 days)	>25 N/mm ² >30 N/mm ² >40 N/mm ²
Flexural Strength (28 days)	> 5 N/mm ² > 6 N/mm ² > 7 N/mm ²
Bulk Density	approx. 1.3 kg/dm ³
Flow Rate	230 – 260mm (slump flow - Hägermann cone)
Light foot traffic	approx. 8 hours depending on drying conditions
Partial load-bearing capacity	approx. 36 h / 1.5 days dependent on thickness and drying conditions
Pot life	30 - 45 minutes depending on ambient conditions
Reaction To Fire	A1 Non-Combustible
Packaging	bags and bulk
Underfloor Heating Commissioning	UFH can be commissioned and running during floor screed application at max. water temperature (manifold) of 25°C

	CASEA GmbH Pontelstraße 3 99755 Ellrich Germany
06 CASEA-207 068 EN 13454-1: 2004, Calcium sulphate binder CAB 30 Calcium sulphate binder for use internally in buildings	
Reaction to fire	A1
pH value	≥ 7
Strength Class	30
Calcium sulphate content	≥ 85 %
Shrinkage and swelling	≤ 0.2 mm/m

*NPD = No Performance Determined

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