

## Südanit 280 Alpha Hemihydrate Screed

Our Südanit 280 Alpha Hemihydrate Screed is a pumpable, high-quality screed material based on calcium sulphate. It's supplied using a pre-blended compound and is factory produced on site by our mobile screed factories under our ISO 9001: 2015 Quality Management System. Made with a special blend of CE marked aggregates, it meets the performance criteria of EN 13813: 2002. It's designed for application at thicknesses of between 20 and 90 mm. Südanit 280 Alpha Hemihydrate Binder complies with EN 13454-1: 2004 and is CE marked.

- Smooth Laitance Free Finish
- Pumpable
- Rapid Set
- Under Floor Heating – Full Encapsulation
- Suitable For Underlayment In Domestic Wet Areas
- Reduced Drying Times
- CE EN 13813: 2002

### 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. Please refer to our Aftercare TDS for further detailed information.

### 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 +5C 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 must 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. The surface strength of the substrate has to be at least 0.5 N/mm<sup>2</sup>. Dry and very porous substrates must be primed twice. If Südanit 280 Alpha Hemihydrate Screed is to be applied unbonded or as a floating floor screed construction, an edge insulation of minimum 8mm should be formed around the perimeter (walls, columns, etc).

### Mixing

Südanit 280 Alpha Hemihydrate Screed is produced to CE EN 13813: 2002 performance requirements by our on-site mobile screed factories.

### 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).

### Disposal Considerations

Binder: 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

See CASEA Health and Safety Data Sheet for further detailed information. Binder classification according to Regulation (EC) No 1272/2008: **GHS05**. Signal word: **Danger**. All standard precautions for the handling of construction materials/chemicals must be taken.

### 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.

## Südanit 280 Alpha Hemihydrate Screed

### 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
Strength Classes Available	CA-C16-F4 CA-C20-F4 CA-C25-F5 CA-C30-F6
Tensile Adhesion	> 1.0 N/mm <sup>2</sup>
Shrinkage (28 days)	< 0.1 %
Flow Rate	230 – 260mm
Hardening Time (before foot traffic)	5 – 6 hours (under ambient conditions)
Drying Time	Final Covering: 2 – 6 weeks dependent on thickness and site drying conditions
Recommend water content	14 – 16%
Pot life	Maximum 30 - 45 minutes depending on ambient conditions
Reaction To Fire	A1 Non Combustible
Thermal Conductivity	1.6 W/mK (EN 12664)   2.6 W/mK (ISO 22007-1)
Wet Density	Ca. 2,088 kg/m <sup>3</sup> (2.1 kg/mm/m <sup>2</sup> )
Dry Density	Ca. 1,800 kg/m <sup>3</sup> (1.8 kg/mm/m <sup>2</sup> )
pH Value	> 7
Underfloor Heating Commissioning	UFH can be commissioned and running during floor screed application at max. water temperature (manifold) of 25°C

