

CASEA RADDIPLUS T - Thermal Anhydrite Floor Screed Binder

CASEA RADDIPLUS T - Thermal Anhydrite Binder is a specially formulated thermal 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 or ready-mix plant. RADDIPLUS T complies with EN 13454-1 and is CE marked.

- Pumpable – High Flowability
- Early Trafficking
- Very Low Shrinkage
- Reduced Drying Times
- CE Marked
- EN 13454-1

Field Of Application

RADDIPLUS T Screed is suitable for floors in homes, offices, public buildings and places exposed to similar loads. RADDIPLUS T 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. RADDIPLUS T 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. Contact SMET for advice on which to use.

Working Instructions

Light ventilation in the work area is necessary, but 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

RADDIPLUS T 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 RADDIPLUS

T Screed is to be applied on plastic sheeting or as a floating floor, edge insulation of minimum 8mm 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 optimize the mix design before work commences. The proportion of binder required is 540 – 600 kg/m³. Sufficient sand is required to produce 1m³ of screed, with sufficient water added to produce a flow spread diameter of 220-240 mm. A typical starting point mix design is 600 kg Binder, 1200 kg Sand (dry weight) and 330 L of 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 RADDIPLUS T Screed should be 20 mm, over underfloor heating this should be a minimum of 25 mm over the pipes (35 mm 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. Safety, health and environmental regulations/legislation specific for the substance or mixture. Labelling according to Regulation (EC) No 1272/2008. The product is classified and labelled according to the CLP regulation. 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 Safety Datasheet 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/flexural strength of binder	Class CAB 40, F7 EN 13454
Spread diameter vs. Hagerman cone	22 – 24 cm
Open time as screed	30 - 45 mins, depending on ambient conditions
Light foot traffic	Approx. 24 hours depending on site conditions
Partial Loading	Approx. 4 days depending on site conditions
UFH Commissioning	After approx. 4 days
Reaction To Fire	A1, Non-Combustible
pH-value	pH > 9
Bulk density	Approx. 1.2 kg/dm ³
Packaging	Big bags and bulk

	CASEA GmbH Pontelstraße 3 99755 Ellrich Germany
06 CASEA-04 16911 202 EN 13454 -1: 2004 Calcium sulphate binder CAB 40 For use internally in buildings	
Reaction to fire	A1
pH value	≥ 7
Strength Class	40
Calcium sulphate content	≥ 85 %
Shrinkage and swelling	≤ 0.2 mm/m

*NPD Properties not determined as they are not relevant (No Performance Determined)

