



RETANOL[®] XTHINN



**FOR HIGH-STRENGTH THIN LAYER SCREEDS.
GUARANTEED.**

RETANOL® XTHINN

HIGH STRENGTH FOR THIN LAYER APPLICATIONS.

1. FUNCTION

Highly innovative screed product for making thin-layer, low-shrinkage and low-tension cement screed over underfloor heating type A (A1). Especially suitable for the renovation of areas with low construction heights and static requirements thanks to layer thickness reduction/mass reduction.

2. PRODUCT PROPERTIES

- Pipe coverings with heating screeds from 20 mm possible
- Works virtually regardless of temperature (not below +5 °C and not above +28 °C) and air humidity
- Ceramic tiles can be applied after 48 hours, all other coverings after 72 hours. If 42.5R cement is used.
- Long workable life despite short curing time
- Excellent application properties, also thanks to much easier and faster levelling especially when using large amounts of cement
- Insensitive to moisture, therefore also suitable for permanently wet areas
- Approx. 80 %–90 % of final strength after 3–4 days. Compressive strength of approx. 40 N/mm² and bending tensile strength of approx. 6 N/mm² are obtained after 48 hours. If 42.5R cement is used.

3. MIXING INSTRUCTIONS (MIXTURE IN STANDARD SCREED PUMP/MIXING VESSEL 250 L GROSS CAPACITY)

Heating screeds with 20 mm heating pipe covering	400 ml mixture	2.000 ml/m³
Cement CEM I or CEM II approved by PCT II	62.5 kg	312.5 kg/m³
Gravel sand 0–4 mm (grading curve range A/B, 0–4)	310 kg	1,560 kg/m³
Water-binder ratio: 0.40–0.55 Application temperature: +5 °C to +28 °C		
Requirements (quality test) Bending tensile strength after 28 days	> 6 N/mm²	
Hard enough to walk on after 24 hours. Able to bear loads after 48 hours.		

Bonded screeds from 25 mm layer thickness Floating screeds and screeds on separation layers from 35 mm film thickness	400 ml mixture	2.000 ml/m³
Cement CEM I or CEM II approved by PCT	62.5 kg	312.5 kg/m³
Gravel sand 0–8 mm (grading curve range A/B, 0–8)	310 kg	1,560 kg/m³
Water-binder ratio: 0.40–0.55 Application temperature: +5 °C to +28 °C		
Requirements (quality test) Bending tensile strength after 28 days	> 6 N/mm²	> 6 N/mm²
Hard enough to walk on after 24 hours. Able to bear loads after 48 hours.		

4. NOTES

- Special surface heating systems for low application heights are recommended for heated structures.
- Prior to use of Retanol® Xthinn each laying crew must be instructed by a PCT technician.
- The compressibility of the insulation layers must not exceed a total of 2 mm.
- It is recommended to use insulation materials especially developed for prefabricated screeds.
- The specifications and notes of the insulation material manufacturers must be observed. The maximum insulation thickness may not exceed 80 mm.
- Maximum area load 3 kN/m².
- Retanol® Xthinn is not suitable for applying screed coverings of 20 mm on installation pipes (insulated or uninsulated). The specifications of DIN 18560 are applicable in such cases.
- Thin layer screed systems influence the natural resonance behaviour of floating screeds.

IMPORTANT NOTE: CEMENT QUANTITIES BELOW 62.5 KG = 312.5 KG/M³ AND / OR DOSAGES BELOW 400 ML = 2,000 ML/M³ DO NOT LEAD TO ANY STRENGTH IMPROVEMENT COMPARED TO SCREEDS WITHOUT XTHINN

5. HEATING

The entire heating phase described below must take place over 24 hours for each temperature step without night setback. The individual flow temperatures must be set manually. System-controlled, automatic heating programmes must not be used.

Start 24 hours after completion of screed application, flow temperature: +25 °C
From 3rd day after completion of screed application, flow temperature: +35 °C
From 4th day after completion of screed application, flow temperature: +45 °C
From 5th day after completion of screed application, flow temperature: +55 °C
From 6th day after completion of screed application, flow temperature: +25 °C

If a maximum flow temperature of +55 °C cannot be reached, the maximum flow temperature obtainable by the heating system must be set from the 5th day after completion of the screed application.

The recommended maximum admissible surface temperature specified by the floor covering material and flooring manufacturers must be observed when laying the floor coverings.

All the information on this product given above is based on extensive practical experience and tests carried out by PCT Performance Chemicals GmbH. However, it is not possible to take all construction site conditions into account and to give suitable instructions for use in each case. It is therefore recommended to verify the applicability, appropriateness and practicability of this information and the intended measures by means of individual tests. PCT assumes warranty for the correctness of this product information and the described properties as well as for the effect of the product. PCT reserves the right to change the product specifications. If the site is or has been supervised by PCT (PCT Site Warranty) the user is under no obligation to check applicability and appropriateness.

