

RETANOL® XTREME PRO 1 (additive)

GERMAN TECHNOLOGY FOR SCREEDS

Retanol® Xtreme is a technically advanced cementitious levelling screed that offers an extremely quick drying, very high early strength and low shrinkage alternative to conventional sand and cement floor screeds whilst maintaining all of the benefits of a semi-dry screed such as stepping at thresholds to accommodate different floor finish thickness or laying to ramps, falls and cross falls.

Supplied by PCT Chemie UK Ltd as a proprietary screed additive that is mixed with Ordinary Portland Cement, graded aggregates and water to produce a semi-dry screed mortar. It requires no PP fibres.

Standard Retanol® Xtreme is suitable for all residential, commercial and industrial applications, whilst Heavy Duty Retanol® Xtreme can be utilised as a wearing screed, a structural screed and even in lieu of concrete. Both mix designs can be utilised in bonded, unbonded and floating screed installations.

Due to the advanced mix design, Retanol® Xtreme dries evenly throughout the screed thickness so requires no curing under polythene and no PP Fibres to reduce shrinkage cracking, lifting and curling that often occur with 'dry from the top down' traditional screeds during the curing and drying process.

TECHNICAL PROFILE

DENSITY (approx.)

2,000 - 2,100 kg/m³

BRE TEST CATEGORY

BS 8204-1

Category A

COMPRESSIVE STRENGTH (28 DAYS)

BS EN 13892-2

RETANOL® XTREME

Standard: 40-50 N/mm²

Heavy Duty: 50-60 N/mm²

COMPRESSIVE STRENGTH (72 HOURS)

RETANOL® XTREME

Standard: 30-40 N/mm²

Heavy Duty: 40-50 N/mm²

SPEED OF CURE (BETWEEN 5 °C AND 28 °C)

Working time: 2 hours

Foot traffic: 24 hours

Fully loadable: 5 to 7 days

Curing under Polythene: 0 days

Drying time to receive Floor Finishes (BS8203)

Tiles: 48 hours

Other Floor Finishes: 72 hours

Residual Moisture Content

For any kind of flooring, the final floor finish should not be installed until the screed upon which it is to be laid has dried optimally.

A CM Test offers the most accurate way of assessing the moisture content in floor screeds as it measures the moisture throughout the whole depth of screed, not just at the very top surface. Other testing equipment should be used for guidance purposes only as they are less precise and can be misleading.

The installation of a damp proof membrane is NEVER required with a floating Retanol Xtreme Screed, or with a bonded Retanol Xtreme Screed where the concrete substrate has been treated with a DPM or has been tested and found to be completely dry, thus negating the need for a DPM.

Retanol® Xtreme Screed delivers significant programme savings and offers the following guaranteed benefits:

- Drying time of 48 hours for tile finishes, and 72 hours for all other floor finishes
- Obtainable minimum compressive strength of 40 - 60 N/mm²
- Obtainable minimum flexural strength of 6 -8 N/mm²
- 80-90% of final screed strength achieved within the first 3 to 4 days
- Bonded screeds from 15mm and un-bonded/ floating screeds from 35mm
- Very low tension so shrinkage cracks are minimal even avoided completely
- No curing under polythene required
- No fibres required
- Long workable life (90 to 120 minutes) despite its short curing time
- Foot traffic after 24 hours, site traffic after 48 hours, and fully loadable after 5 to 7 days
- Excellent thermal conductivity ($\lambda = 2.35$ [W/m²K]) with underfloor heating due to self-compaction and reduced air pores
- Underfloor heating can be commissioned 24 hours after installation
- Insensitive to moisture so suitable for permanently wet areas
- The only screed recognised under European law as having NO negative impact on human health, Retanol Xtreme is both BREEAM and TÜV Rheinland Certified
- Retanol® Xtreme is ideally suited where a high performance, low maintenance screed is required such as in Hospitals, Schools, Airports, Shopping Centres etc.
- Suitable for internal and external use

MODEL SPECIFICATION

SYSTEM

Retanol® Xtreme Pro 1
(Standard and Heavy Duty)

BONDED

From a minimum thickness of 25 mm (or 15mm when the screed is bonded with PCT's ZE Bonding Agent), Standard or Heavy Duty Retanol® Xtreme can be installed on an uncontaminated, shot blasted or scabbled and vacuum cleaned concrete substrate bonded with a cement/SBR slurry/grout.

UNBONDED

From a minimum thickness of 35 mm, Standard or Heavy Duty Retanol® Xtreme can be installed on a sound and clean slip membrane.

FLOATING

From a minimum thickness of 35 mm, Standard or Heavy Duty Retanol® Xtreme can be installed on a sound and appropriate insulation board.

Preparatory work and application to be carried out in strict accordance with manufacturer's instructions. Contact PCT Chemie UK Ltd for further information.

INSTALLATION SERVICE

The installation can be carried out by any competent screed contractor. Obtain details of our approved UK Retanol® installers by contacting PCT Chemie UK Ltd or visiting our website www.pct-chemie.co.uk.

IMPORTANT INFORMATION

PCT's Retanol® products offer a comprehensive basic guarantee and are sold subject to our standard terms and conditions. Our basic warranty excludes mechanical damage, structural movement, damage caused by lifting floors, water ingress or other contamination, substrate DPM failure and failure of the finished floor.