

ProLevel Two

Flexible Two Part Floor Leveller



20kg & 4L



↓
2-15mm
↑
depth

⌚
2.5 hrs
set time

⌚
24 hrs
tile after

💧
1 bag : 1 bottle
mixing ratio

conforms to
CT C25 F5
EN 13813
classification

Product Selection Guide

Suitable surfaces & substrates:

✓ Concrete subfloors	✓ Terrazzo/granolithic ceramic tiles	✓ Radiant electrical underfloor heating system
✓ Tamped or pan floated concrete	✓ Anhydrite/calcium sulphate/gypsum based screeds	✓ Vinyl tiles
✓ Sand/cement screeds	✓ Plywood/tile backer board	✓ UltraFloor DPM IT
✓ Existing smoothing underlays	✓ Warm water underfloor heating	✓ Pre-smoothing prior to DPM or MVS



TECHNICAL DATASHEET

UltraTile ProLevel Two is a mid-strength smoothing underlayment. A two-component system consisting of a powdered blend of cements, graded fillers and additives, and a pre-gauged polymer liquid. Tiles can be applied to the internal subfloors in as little as 24 hours. Its fast set time (in good ambient conditions) enables light foot traffic in 2.5 hours.

SURFACE PREPARATION

Assessment: All subfloors should be protected from moisture from the subground by use of a base damp proof membrane (DPM) (please check older properties, which may not have a base DPM and consult UltraTile for advice). Assess moisture levels in accordance with BS 8203, to achieve a hygrometer reading of 75%RH or less. Where this is not attained a surface DPM should be used – the selection of which will be subject to the subfloor (please seek advice from UltraTile). Any surface laitance, adhesive residue, paints, weak smoothing underlays and any other materials which will hinder UltraTile ProLevel Two's bond with the subfloor should be mechanically removed. The subfloor should be clean, dry and sound. The area should also be dust free prior to any primer application.

PRIMING

All ratios are **water:primer**. Subfloors should always be primed. Primer should be allowed to dry prior to the application of UltraTile ProLevel Two. Drying times will be based on ambient conditions - bear in mind that cold or damp/humid conditions, or poor airflow, can extend drying time (please see UltraTile ProPrimer datasheet for further information).

Porous Substrates: The absorbency of floors/screeds can vary significantly, this is to be assessed by personnel on site. Apply a coat of primer diluted 3 parts water to 1 part primer. Allow to completely dry (usually 1-2 hours). Apply a second coat diluted 1 part water to 1 part primer and allow to completely dry before applying further materials. **Note:** on very absorbent substrates a third coat may be required diluted 1 part water to 1 part primer.

Non-porous Substrates: Including very dense substrates/subfloors. UltraTile ProPrimer should be applied neat, in a thin uniform coating and allowed to dry fully.

SUBFLOOR PREPARATION: WHICH SUBSTRATE?

Concrete Subfloors: Power floated concrete should be treated as non-porous. Mechanically abrade (shotblast or scarify) to remove surface hardeners and expose the cement/aggregate. Apply UltraTile ProPrimer neat in a thin uniform coating, allowing it to dry fully (usually 1-2 hours).

Tamped or Pan Fleated Concrete: Should be treated as porous, and any laitance or weak material should be mechanically removed to ensure a sound, dry and dust-free surface. Apply UltraTile ProPrimer diluted 3:1 with clean water and allow to dry fully (usually 1-2 hours).

Sand/Cement Screeds: These should be strong enough for an application of UltraTile ProLevel Two. Weak, friable or damaged screed should be uplifted and repaired. Apply UltraTile ProPrimer diluted 3:1 with clean water and allow to dry fully (usually 1-2 hours). Two-coat application may be required for very absorbent screeds.

Existing Smoothing Underlays: UltraTile ProLevel Two can be used over most intact cementitious cement underlays. Remove adhesive residues and treat as an absorbent floor. Apply UltraTile ProPrimer diluted 3:1 with clean water and allow to dry fully (1-2 hours). Apply a second coat diluted 1:1 with clean water allowing it to dry to a clear film (1-2 hours). **Note:** application is only suitable on subfloors that are in equivalent strength to UltraTile ProLevel Two.

Terrazzo/Granolithic Ceramic Tiles: These must be securely bonded, and any surface treatment should be mechanically removed. A good mechanical key should be ensured by abrading the surface using a Surface Texturing & Grinding (STG) machine (a diamond disc is recommended). These subfloors can be treated as low porosity and primed using UltraTile ProPrimer neat.

Calcium Sulphate/Anhydrite/Hemihydrate Screeds: See relevant manufacturer's technical datasheet. A barrier primer application is required. If moisture is above 75%RH we do not recommend using a surface DPM. These screeds often incorporate warm water underfloor heating systems

which can be used, along with dehumidifiers, to speed up the drying process. Screed manufacturers normally suggest this can be conducted after 7 days minimum curing. Mechanically remove any laitance or weak material to leave a clean, dry and dust-free surface. We recommend an STG machine with suitable mesh grinding disc of 60-100 grade grit. Apply UltraTile ProPrimer diluted 3:1 with clean water and allow to fully dry overnight. Apply a second coat diluted 1:1 with clean water allowing it to dry to a clear film (usually 1-2 hours).

Plywood/Tile Backer Board: Plywood must be of flooring grade and mechanically fixed to a sound strong base. UltraTile ProLevel Two is only recommended for use with plywood of 15mm thickness and greater. Tile backer boards of 6mm thickness. Plywood must be sealed on the underside and along all edges to ensure moisture absorption from beneath is kept minimal. For thinner flooring grade plywood subfloors contact UltraTile's technical department. Plywood and tile backer board absorbency differs depending on the nature of the surface. Normally a diluted coat of UltraTile ProPrimer (3 :1 with clean water) is recommended. For dense surfaces of very low absorbency apply UltraTile ProPrimer neat in a thin uniform coating. Allow primer coats to fully dry.

Warm Water Underfloor Heating (UFH): Systems must have been fully commissioned and brought up to their maximum temperature, and ideally switched off 48 hours before application. In the absence of other heat sources, the UFH may be set to 'cutback' position to achieve an air temperature of 15°C. Any expansion or movement joints must be carried through to the floor covering surface.

Radiant Electrical Underfloor Heating System: UltraTile ProLevel Two can also be used over electrical UFH systems where the cables are fixed to a sound strong mechanical fixed cement faced backer board. Apply UltraTile ProPrimer diluted 3:1 with clean water and allow to dry fully (usually 1-2 hours). It may also be used where electrical UFH is used over cementitious or calcium sulphate subfloors. Priming should be as per the substrate. In all cases UltraTile ProLevel Two must be applied at a thickness of 5mm above the cables for resilient, textile and timber applications and a minimum of 3mm for application of stone, ceramic or porcelain products.

Vinyl Tiles: Not all vinyl tile flooring is suitable to be levelled/tiled over. Cushioned or flexible vinyl tiles should not be overlaid and must be removed along with the adhesive residue. Hard vinyl tiles should be lightly abraded and then primed with UltraTile ProPrimer neat.

UltraFloor DPM IT: Applications should be carried out within 36 hours of DPM application (see DPM IT datasheet). The DPM must then be primed with UltraTile ProPrimer neat in a thin uniform coating, allowing it to dry fully (usually 1-2 hours).

Pre-smoothing prior to DPM or MVS: UltraTile ProLevel Two can be used to on cementitious subfloors with residual moisture >75%RH to pre-smooth prior to applying an UltraFloor epoxy DPM. Prepare the subfloor to leave a lightly textured dust free surface. Either prime with UltraTile ProPrimer diluted 3:1 with clean water and allow to fully dry or lightly dampen with clean water, allowing the surface to matt off. This will reduce pinholing. **Note:** pre-smoothing of subfloors where there is an absence of a base DPM can be carried out provided there is no risk of hydrostatic pressure, and all previous materials have been removed to leave the cementitious base. If in any doubt always apply the DPM directly to the original subfloor.

For any other scenarios please call UltraTile Technical Services for advice.

MIXING & APPLICATION

Shake the pre-gauged bottle of liquid prior to opening. Pour the entire contents of the liquid into an oversized bucket (20 litres or more capacity). Gradually add the powder whilst continually mixing using an electric drill fitted with a power whisk, suitable for use with cement materials. After completely adding the powder, continue mixing for a further 2 minutes, keeping the whisk below the surface of the product to minimise air entrainment, until a lump free creamy material is attained. UltraTile ProLevel Two should only be mixed as single units. Do not add further liquid or water. Pour onto the floor and spread with a smooth edge steel trowel. UltraTile ProLevel Two

TECHNICAL DATASHEET

has exceptional flow characteristics, a spiked roller may be used to further improve the finish particularly between adjacent units of product. Only spike roll whilst the product is still in its fluid state (immediately due to the limited workability and rapid setting nature).

CURING & DRYING

All curing and drying times are based on good site conditions, air temperature of 20°C, air humidity of maximum 75% and good ventilation. Cold, humid or damp sites, or those with poor airflow, will prolong curing and drying times, so make adequate allowances for such. Avoid strong drafts and direct sunlight during curing which can 'force dry' the product and result in excess tension and cracking. UltraTile ProLevel Two is ready to receive light foot traffic after 2.5 hours. Once this leveller has been installed it must be ensured that it is fully dry before continuing the tiling process, to include priming and adhesive applications.

TECHNICAL DATA	
Classification:	CT-C25-F5
Depth:	2-15mm
Working time at 20°C:	*20-30 Minutes
Walk on hardness time at 20°C:	*2.5 Hours (3mm application)
Commence the tiling process:	24 Hours (2-15mm application) (*Depending on substrate porosity, nature of flooring and notes in Curing & Drying above.)
Compressive Strength (N/mm ²):	28 Days: 25.0 (to BS EN 13892-2)
Flexural Strength (N/mm ²):	28 Day: 5 (to BS EN 13892-2)

COVERAGE		
Applied Thickness	Coverage Per Unit (approx.)	Consumption Per 10m ² Area
2mm	6.0m ²	1.7 bags
5mm	2.4m ²	4.2 bags
10mm	1.2m ²	8.4 bags
30mm	0.52m ²	19.2 bags + 8.1 x 10kg units aggregate

CLEANING

Tools should be thoroughly cleaned with water to remove excess material immediately after use and before adhesive sets.

POINTS OF NOTE

All UltraTile levellers are manufactured to meet the performance requirements of BS EN 13813 and the relevant classifications.

References to BS EN13813:2002 confirms the minimum compressive and flexural strengths that the product will attain when tested to the standard. All figures stated are based on tests carried out under quality controlled environments using UltraTile ProLevel Two with the correct water ratios. Actual results attained will be subject to site conditions and allowances should be made accordingly.

Please note that this product uses natural aggregates and other materials that may marginally vary in colour. This does not affect the consistency or characteristics of the product.

STORAGE

This product must be stored in unopened bags, clear of the ground in dry conditions. Avoid frost. Ideal storage temperatures are between 5°C and 25°C.

SHELF LIFE

Under the above storage conditions this product has a shelf life of 8 months. High temperatures and high humidity will lead to a reduced shelf life.

SITE CONDITIONS

The drying characteristics of cementitious levellers are directly influenced by ambient air and floor temperatures. Cement within the leveller cures through a process of hydration using moisture. Extreme site conditions can affect this process i.e. below 5°C and above 30°C.

Ideal ambient air and floor temperatures for application are between 10°C and 22°C. These temperatures should be maintained throughout application and curing periods. Outside of these temperatures consideration should be given to the following guidelines for good practice. Floor temperatures will be slower to respond to ambient air temperature so should be considered in advance.

High humidity and low temperature prolongs evaporation of moisture from the freshly applied leveller and therefore extends drying times. This may ultimately delay installation of floor coverings. In such conditions planned heating (not gas heating) may be required before, during and after application of the product in order to promote ideal site conditions. Heat should be directed into the air not direct to the floor creating hot spots. Good ventilation without direct drafts will also assist removal of moisture in the air from the building. Failure to adopt such practices in such adverse site conditions may result in damp patches, slow drying and potential surface bleed within the curing leveller.

Low humidity and high temperature conditions will speed up drying by fast removal of moisture from freshly applied leveller. Such conditions may cause rapid loss of moisture, required for the curing process, leading to irregular structure and strength build up. Such tensions within the drying leveller could leave hairline surface defects. Under such conditions, levellers should be protected from direct sunlight and drafts across its surface. Good air flow within the build without causing drafts is essential to reduce high temperature build up.

HEALTH & SAFETY

Please ensure that appropriate PPE is used when preparing, mixing and applying products. Always wash hands before consuming food and make sure that materials are kept safely out of reach of children and animals. Please dispose of packaging and waste appropriately. A full Material Safety Data Sheet relating to this product is available from ultratileadhesives.co.uk.

QUALITY ASSURANCE

All products are manufactured in a plant whose quality management system is certified / registered as being in conformity with BS EN ISO 9001, ISO 14001 and ISO 45001. UltraTile products are guaranteed against defective materials and manufacture and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept responsibility arising from the application or use of our products because we have no direct or continuous control over where and how our products are used. All UltraTile products are sold subject to our terms and conditions of sales, copies of which may be obtained upon request.