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PRODUCT DATA SHEET

# ARDITEX CL PLUS+

## Fibre Reinforced Moisture Tolerant Levelling and Smoothing Compound

### Features

- Install floorcoverings after as little as 8 hours
- Outstanding flow and application properties
- Can be used over old adhesive residues including bitumen
- No priming required on most floors, including bitumen adhesive residues, ARDEX Damp Proof Membranes and ceramic tiles
- Moisture tolerant, can be used under an ARDEX Damp Proof Membrane and direct to damp concrete
- Feather edge to 10mm in one application
- Apply up to 30mm incorporating ARDEX Coarse Aggregate
- Suitable for use on floors with underfloor heating



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OHS 628374

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# ARDITEX CL PLUS+

## Fibre Reinforced Moisture Tolerant Levelling and Smoothing Compound

### DESCRIPTION

ARDITEX CL PLUS+ is a fibre reinforced levelling and smoothing compound with outstanding flow, adhesion, and moisture resistant properties. ARDITEX CL PLUS+ is walkable in as little as 2 hours and most floorcoverings can be installed after as little as 8 hours.

### USE

For levelling and smoothing most common internal subfloors such as concrete, cement/sand and gypsum (anhydrite) screeds, flooring grade plywood, ceramic tiles, bitumen and flooring grade asphalt. ARDITEX CL PLUS+ can be laid from a feathered edge up to 10mm in a single application or up to 30mm by incorporating ARDEX Coarse Aggregate. NOTE: ARDITEX CL PLUS+ should not be used on top of rubber, linoleum, cork or moisture sensitive floorcoverings.

### SURFACE PREPARATION

The surface of the subfloor must be clean, sound and free from dust, plaster droppings, grease, paint, polish and any water-softenable or loosely adhered materials. Any remaining adhesive residues should be checked to ensure that they are not water softenable and that they are hard, sound and have sufficient cohesive strength to receive a levelling compound.

### PRIMING

On absorbent surfaces, it may be necessary to damp down the surface with water before applying the mixed ARDITEX CL PLUS+, ensuring there is no standing water, to help reduce suction and pinholes. If mixes with a high aggregate content require smoothing or if a subsequent layer is required to the standard mix, the dried ARDITEX CL PLUS+ will usually require damping down or priming. Priming should be carried out with ARDEX P 51 diluted 1:3 with water. The ARDEX P 51 must be applied by broom or brush and not with a roller and allowed to dry prior to applying the ARDITEX CL PLUS+.

### MOISTURE CONTENT

Where moisture sensitive floor coverings are to be installed, the floor must be dry with less than 75% Relative Humidity (RH) when tested in accordance with BS 8203 and protected by an effective structural damp proof membrane prior to installing the final floorcovering.

Where rising damp or residual construction moisture is present in concrete or cement/sand screeds and moisture readings are up to 98% RH, or in the absence of a functioning structural damp proof membrane, it is recommended that a suitable surface damp proof membrane such as ARDEX DPM 1 C/ ARDEX DPM 1 C R is applied. For residual moisture conditions, up to 95% RH, please see ARDEX MVS 95 below.

ARDITEX CL PLUS+ is moisture tolerant and can be applied directly to damp subfloors, if required, providing they are free of surface water.

If the subfloor is damp, apply the smoothing layer following damping down with water prior to applying an ARDEX Moisture Control System (ARDEX DPM 1 C/ ARDEX DPM 1 C R or ARDEX MVS 95)

When used below ARDEX MVS 95 or ARDEX DPM 1 C/R, the ARDITEX CL PLUS+ will act as a pre-smoothing layer to ensure greater coverage and uniform application of the Moisture Control System.

The installation depth below an ARDEX Moisture Control System must not exceed 6mm. A final application of ARDITEX CL PLUS+, 3mm to 6mm, may then be applied direct to the ARDEX DPM 1 C within 48 hours and ARDEX DPM 1 C R within 16 hours, without priming. If this time scale is exceeded, prime with ARDEX P 82.

Alternatively, for readings up to 95% RH and where a functioning structural damp proof membrane already exists, ARDEX MVS 95 can be used to suppress residual construction moisture.

A final application of ARDITEX CL PLUS+, 3mm to 10mm, may then be applied direct to the ARDEX MVS 95 within a 24-hour period if the applied ARDEX MVS 95 has not become contaminated with site debris or foot traffic. If contamination occurs it should be removed and a subsequent application of ARDEX MVS 95 applied. If this time scale is exceeded, apply a further coat of ARDEX MVS 95. ARDITEX CL PLUS+ can also be used prior to applying ARDEX RAPIDLAY MEMBRANE and ARDEX IndorTec Flexbone uncoupling matting. For further information, please consult the relevant datasheets or contact the ARDEX Technical Support Team.

If subfloors are impervious, e.g. flooring grade asphalt, or have adhesive residues that will be affected by subsequently applied adhesives, an overall application of ARDITEX CL PLUS+ at least 3mm thick and no greater than 6mm thick will be required. This is to ensure uniform drying of the new adhesive and to prevent interaction either with the old adhesive residues or with the asphalt subfloor. ARDITEX CL PLUS+ can be applied to ceramic tiles up to 10mm thick.

When smoothing over pitch adhesive residues, where woodblocks have been removed, the residues must be checked to ensure that they are sufficiently hard and well adhered, in order to support the required thickness of ARDITEX CL PLUS+. ARDITEX CL PLUS+ can then be applied from 3 to 10mm neat or from 8mm to 30mm with the inclusion of up to an equal volume of ARDEX Coarse Aggregate.

NOTE: Where the pitch adhesive may have functioned as the damp proofing of the floor, as long as the residues are thin, hard and non-water soluble, ARDITEX CL PLUS+ can be used to pre-level the area before installing an ARDEX Damp Proof Membrane.

For use over flooring grade plywood (domestic applications only) which is free from barriers to adhesion including any moisture protective coatings, conditioned to the ambient moisture content, rigidly fixed prior to priming using undiluted ARDEX P 51 (See Technical datasheet).

Following priming the ARDITEX CL PLUS+ may be applied as a smoothing layer up to a maximum thickness of 6mm. Where a very thin skim of smoothing compound is required, consult the ARDEX FEATHER FINISH datasheet.

### CALCIUM SULPHATE SCREEDS

Cementitious materials should not be in direct contact with calcium sulphate based materials, due to the risk of reaction which can lead to the loss of bond and in extreme cases expansion. Hence, a priming barrier layer must always be used to separate the two material types.

The surface of all new calcium sulphate screeds must be prepared using appropriate, mechanised surface preparation equipment, so that all laitance or weak, friable residues are removed from the surface of the screed prior to applying the recommended ARDEX products. Then completely remove any dust and fines by the use of brushing combined with effective industrial vacuum extraction equipment.

The mechanical preparation is required to a suitable depth that exposes aggregate and a sound hard surface ready to receive treatment. For dry screeds (<75%RH) – prime with sand blinded ARDEX R 3 E prior, or ARDEX P 51 diluted 1:3 with water. ARDITEX CL PLUS+ can then be applied between 3mm and 6mm.

For damp Calcium Sulphate Screeds (75-90% RH) without underfloor heating, that are at least 28 days old, apply ARDEX DPM 1 C at 350 microns, followed by ARDITEX CL PLUS+ applied between 3mm and up to 6mm. Please refer to the ARDEX R 3 E, DPM 1 C and P 51 product datasheets for further information, and check the screed manufacturers recommendations before commencing works.

### Installation onto Glazed Tiles

A functioning DPM must be present within the floor assembly. All tiles should be fully degreased prior to application of the ARDITEX CL PLUS+. The ARDITEX CL PLUS+ can then be applied at a maximum of 6mm if resilient flooring is to be used as the final floor finish. If the ARDITEX CL PLUS+ is to be applied in excess of 6mm then the surface of the glazed tiles should be ground and cleaned prior to application of the ARDITEX CL PLUS+.

# ARDITEX CL PLUS+

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### MIXING

The mix ratio is one 20kg bag of ARDITEX CL PLUS+ powder to 4.8kg of ARDITEX CL PLUS+ latex. The latex should be shaken and poured into a clean mixing container. The powder is then added gradually with continuous stirring. The use of an ARDEX mixing paddle with a 10mm chuck electric drill makes this light work. For smaller quantities, 3 volumes of powder should be stirred into 1 volume of latex.

### APPLICATION

The mixed material is poured onto the prepared floor surface and spread with a trowel or Pin Leveller to the required thickness in one operation. Apply at floor temperatures above 5°C. The use of a spiked roller will improve the surface and performance of the applied mortar whilst still wet.

### PUMPING

ARDITEX CL PLUS+ is pumpable using the appropriate pumping equipment. For more information consult the ARDEX Technical Support Team.

### APPLICATIONS OVER UNDERFLOORHEATING

The cement/sand screed, concrete or calcium sulphate subfloor should be installed in accordance with BS 8204 Part 1. The under floor heating system should be commissioned in accordance with the manufacturer's instructions and in accordance with the guidance given in BS 8204 Part 1.

Once thermally cycled and commissioned, the underfloor heating should be turned down to 15°C before the application of the ARDITEX CL PLUS+ and the final resilient floor covering. After 48 hours the under floor heating system should be gradually re-commissioned, in accordance with BS 8204 Part 1 and BS 8203 to avoid rapid thermal change and local variations in temperature.

### THICKNESS

The standard mix is suitable for applications from a feather edge up to 10mm, however for thicknesses above 10mm the incorporation of up to an equal volume of ARDEX Coarse Aggregate will prove economic.

### CLEANING OF EQUIPMENT

All tools and mixing containers should be washed and cleaned in water immediately after use before the material sets.

### DRYING AND HARDENING

At normal temperatures the working time is approximately 20 minutes. ARDITEX CL PLUS+ can be walked on approximately 2 hours after application, and thin applications are ready to receive most floor coverings after as little as 8 hours at 20°C. The setting, hardening and drying times will be extended at lower temperatures, shortened at higher temperatures and also high humidity.

### COVERAGE

A unit of ARDITEX CL PLUS+ will cover approximately 4.1m<sup>2</sup> at 3mm thick. The coverage figure is based on a flat level surface, and additional material should be allowed for where the surface is rough or uneven.

### PACKAGING

ARDITEX CL PLUS+ powder is packed in paper sacks incorporating a polyethylene liner - net weight 20kg. ARDITEX CL PLUS+ latex is in polyethylene containers - net weight 4.8kg.

### PRECAUTIONS

ARDITEX CL PLUS+ contains more than 3% Portland cement and, therefore, in line with current legislation, is classified as irritating to eyes and skin. For this reason the following precautions should be observed: - Avoid contact with skin and eyes; in case of contact with the eyes, rinse immediately with plenty of water and seek medical advice; wear suitable gloves and keep the product out of the reach of children. Avoid the generation of airborne dust during mixing. For further information, consult the relevant health and safety datasheet.

### STORAGE AND SHELF LIFE

ARDITEX CL PLUS+ powder has a storage life of not less than 12 months if stored in dry conditions. ARDITEX CL PLUS+ latex has a storage life of 6 months in a sealed container if stored in frost-free conditions, out of direct sunlight.

### TECHNICAL DATA

Bulk density of powder approx. 1.9kg/litre

### Compressive Strength

After 28 days Greater than 16 N/mm<sup>2</sup>

### Flexural Strength

After 28 days greater than 7 N/mm<sup>2</sup>

### ARDITEX CL PLUS+

Cementitious screed material for use internally in buildings

EN 13813: CT-C16-F7.

**NOTE:** For the latest technical or health and safety information on this product, consult the current technical or health and safety data sheet online at [www.ardex.co.uk](http://www.ardex.co.uk)

**NOTE:** The information supplied in our literature or given by our employees is based upon extensive experience and, together with that supplied by our agents or distributors, is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however, as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations.

**TECHNICAL ADVICE HELPLINE**  
**01440 714939**  
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