

CI/SfB (43) Pr3

MARCH 2024 (SUPERSEDES OCTOBER 2023) PRODUCT DATA SHEET

## **ARDITEX NA**

The Original Yellow Bag®

# Ultra Rapid Setting Latex Subfloor Levelling and Smoothing Compound - No Ammonia

#### **Features**

- Install floorcoverings after 4 hours and ceramic tiles in as little as 3 hours
- · Can be used with confidence over old adhesive residues including bitumen
- Excellent adhesion without priming to almost all substrates, including flooring grade plywood, ARDEX Damp Proof Membranes and even ceramic tiles
- Unaffected by moisture, can be used under an ARDEX Damp Proof Membrane and direct to damp concrete
- Feather edge to 12mm in one application
- Apply up to 30mm incorporating ARDEX Coarse Aggregate
- · Suitable for use on floors with underfloor heating



ARDITEX NA tested in accordance with IMO FTP Code procedures is in compliance with the Merchant Shipping (Marine Equipment) regulations 2016, S.I 2016/1025, and the Marine Equipment Directive 2014/90/EU, and approved for use as a primary deck covering. USCG Approval No(s): 164.106/1121/WCL MER 0334, 164.106/2812/ERO MED 0334. See side of bag for date of manufacture/batch no.





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### **ARDITEX NA**

# **Ultra Rapid Setting Latex Subfloor Levelling and Smoothing Compound - No Ammonia**

#### DESCRIPTION

ARDITEX NA is a self-smoothing, protein free, latex levelling compound with improved flow and excellent adhesion, flexibility and moisture resistance. These unique properties ensure that ARDITEX NA can be used with confidence over almost all subfloors without priming, including ceramic tiles, bitumen and flooring grade plywood. Resilient floorcoverings can be installed after just 4 hours and ceramic tiles in as little as 3 hours.

#### USE

To level uneven internal subfloors to provide a smooth surface. ARDITEX NA can be applied on all common subfloors such as concrete and cement/ sand screeds, prepared terrazzo, flooring grade asphalt, quarry tiles, internal steel floors, ARDEX Damp Proof Membranes, porcelain tiles, flooring grade plywood etc. It is ideal for use where low odour products are required.

ARDITEX NA can also be used to encapsulate undertile heating cables/mats onto concrete/screed/tile backing boards, prior to fixing ceramic floor tiles.

ARDITEX NA can be laid from a feather edge up to at least 12mm in a single application or up to 30mm incorporating ARDEX Coarse Aggregate.

NOTE: ARDITEX NA should not be used on top of

rubber, linoleum, cork or moisture sensitive

SURFACE PREPARATION

floorcoverings.

The surface of the subfloor must be 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.

On absorbent surfaces, it may be necessary to damp down the surface with water before applying the mixed ARDITEX NA, 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 NA 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 NA. If the subfloor is damp e.g. below a subsequent ARDEX DPM, apply the smoothing layer following damping down with water.

Where moisture sensitive floorcoverings 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 or ARDEX DPM 1 C R is applied on top of the hardened ARDITEX NA.

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.

NOTE: ARDITEX NA is moisture tolerant and can be applied directly to damp subfloors providing they are free of surface water. When used below an ARDEX Damp Proof Membrane, ARDITEX NA will act as a pre-smoothing layer to ensure greater coverage and uniform application of the DPM. A final application of ARDITEX NA, 3mm to 6mm, may then be applied direct to the ARDEX Damp Proof Membrane within 48 hours without priming. If this time scale is exceeded, prime with ARDEX P 82. ARDITEX NA can also be used prior to applying ARDEX RAPIDLAY MEMBRANE and ARDEX IndorTec Flexbone uncoupling mattings. 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 NA 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 NA 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 thick-ness of ARDITEX NA. ARDITEX NA can then be applied from 3 to 12mm 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 NA can be used to pre-level the area before installing an ARDEX Damp Proof Membrane.

Prior to levelling wooden floors, screw down and firmly fix all loose boards. Where timber floors are sufficiently rigid but are uneven or worn, or where there is differential movement between floor boards, the technique is to pre-level the timber with ARDITEX NA and allow to dry prior to screw fixing minimum 6mm SP 101 thick flooring grade plywood to receive resilient flooring, or the appropriate thickness tile backing board to receive ceramic tiles or natural stone, to provide a sound and stable base for the new flooring. In all cases, subfloor ventilation must be adequate to prevent deterioration and moisture movement.

Alternatively, for flooring grade plywood which is free from barriers to adhesion, conditioned to the ambient moisture content and rigidly fixed, ARDITEX NA may be applied as a smoothing layer up to a maximum thickness of 6mm. Allow to thoroughly dry prior to fitting the final floorcovering with a suitable water-based adhesive. Can be used for smoothing tongue and groove floorboards, timber floors in conservatories, and other domestic locations. Also suitable for light commercial applications when used at a thickness of 6-8 mm. Overlay with plywood in areas prior to laying flooring where higher dynamic and static loading is expected. Where a very thin skim of smoothing compound is required, consult the ARDEX FEATHER FINISH datasheet.

When smoothing terrazzo flooring the surface is normally degreased using a suitable degreaser. If following the cleaning operation the surface still does not wet out, contact ARDEX Technical Support Team for further information.

ARDITEX NA may be applied directly as a nominal 2mm smoothing layer onto clean, well adhered thermoplastic and vinyl flooring which is a minimum of 2mm thick, in light duty applications such as domestic locations as a base for a further application of resilient flooring, this is providing that the surface of the existing tiles has been suitably prepared. For example, by scrubbing/degreasing and stripped of any wax, grease, dirt, or other barriers to adhesion, prior to the application of the ARDITEX NA.

The existing installation must be dry and protected by a functioning DPM. A minimum of 1.5mm of ARDITEX NA must be applied to act as an absorbent layer for the subsequent vinyl adhesive. Do not exceed 3mm thickness of ARDITEX NA in this application.

**NOTE 1:** Some older vinyl tiles and mastics may contain asbestos, if concerned – please refer to HSE guidance note a23 for more information.

**NOTE2:** For heterogeneous vinyl or LVT please contact ARDEX Technical Support Team.

NOTE 3: Soft floorings such as cushion vinyl are not suitable to receive ARDITEX NA and must be removed.

NOTE 4: Whilst we can guarantee the bond of ARDITEX NA to the vinyl tile we do not know how well the tile is adhered to the substrate, so careful checking to ensure the bond of the tile to the substrate is essential, with any loose tiles being removed and the gap infilled with ARDITEX NA

#### 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.

### ARDITEX NA

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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 NA 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 NA 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.

#### ENCAPSULATING LOW PROFILE WATERFED HEATING SYSTEMS

The floor must be constructed in accordance with Part L of the building regulations and should be fully load bearing with deflection no greater than 1/360 (1/720 for natural stone).

Where insulation is used then this must be installed onto a level floor and achieve the same deflection values. For more information please contact the insulation manufacturer. The base must be levelled to SR1 or better prior to installation of any underfloor heating system.

Over castellated systems it is important to ensure that the carrier panels remain seated on a level, loadbearing surface and no lifting is taking place. Once fully secured and pipes are pressurized, the ARDITEX NA can be installed to the height recommended by the heating manufacturer.

Calcium sulfate boards carrying underfloor heating pipework should be installed securely and should be free from movement. A perimeter movement joint should be installed around the system. If bonding the boards down to the floor first is required, then both sides will require priming with ARDEX P 51 (1:3) prior to using tile adhesive. Otherwise only the surface to receive the levelling/smoothing compound will require priming with ARDEX P 51 at 1:3 with clean water.

The substrate should be solid, and any undulations/ highpoints removed and levelled correctly. Ensure that pipes are fully engaged into the grooves with no movement. Installing directly onto metallic surfaces (often aluminium plates) is not recommended.

For tiling and flooring it is recommended to cover the board with ARDITEX NA to a height of 6 to 10 mm above the pipes. A bonded uncoupling system for tiles can be utilised and adhered to the levelling system where lateral movement is likely to be excessive. Movement Joints must be installed in line with industry standards.

Heating systems must be commissioned correctly and in accordance with the Industry Standards and the manufacturers recommendations.

The choice of flooring must be selected based on the suitability for use in both the environment and the service duties – Please contact the manufacturer

#### MIXING

The mix ratio is one 20kg bag of ARDITEX NA powder to 4.95kg of ARDITEX NA 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 ARDEX 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 NA is pumpable using the appropriate pumping equipment. For more information consult the ARDEX Technical Support Team.

#### THICKNESS

The standard mix is suitable for applications from a feather edge up to 12mm, however for thicknesses above 8mm 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 NA can be walked on approximately 2 hours after application, depending on thickness and site conditions. A 3mm layer of ARDITEX NA is typically suitable to receive ceramic tiles in as little as 3 hours and most other floorcoverings after 4 hours under good conditions. The setting, hardening and drying times will be extended at lower temperatures and shortened at higher temperatures. Thicker applications will require a longer time to dry, however even at thicknesses up to 10mm, floorcoverings can be installed after 24 hours.

#### COVERAGE

A unit of ARDITEX NA will cover approximately  $5\text{m}^2$  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. **NOTE:**The excellent flow and wet edge time of ARDITEX NA means that, in practice, thinner applications are possible which can dramatically improve coverage.

#### **PACKAGING**

ARDITEX NA powder is packed in paper sacks incorporating a polyethylene liner - net weight 20kg. ARDITEX NA latex is in polyethylene containers - net weight 4.95kg.

#### STORAGE AND SHELF LIFE

ARDITEX NA powder has a storage life of not less than 12 months if stored in dry conditions.

ARDITEX NA latex has a storage life of 9 months in a sealed container if stored in frost-free conditions, out of direct sunlight.

#### TECHNICAL DATA

Bulk density of powder approx. 1.3 kg/litre Initial Set (Vicat) approx. 1 hour Final Set (Vicat) approx.  $1^{1}/2 \text{ hours}$ 

#### Compressive Strength

After 28 days approx. 16 N/mm<sup>2</sup>

#### Flexural Strength

After 28 days approx. 5.5 N/mm<sup>2</sup>

#### Indentation Resistance

24 Hours 15N/mm<sup>2</sup> 7 days 25N/mm<sup>2</sup>

Typically floorcoverings range between 0.5 - 6N/mm<sup>2</sup> **NOTE:** 1N/mm<sup>2</sup> is the equivalent to approximately 100 Tonnes/m<sup>2</sup>

#### Approximate application

Thickness **Approximate Coverage** 2mm  $7m^2$ 3<sub>mm</sub> 5m<sup>2</sup>5<sub>mm</sub> 3m<sup>2</sup>8mm\* with ARDEX Aggregate 3<sub>m<sup>2</sup></sub> 10mm\* with ARDEX Aggregate  $2.3m^{2}$ \*For application thicknesses 8mm and above ARDEX Coarse aggregate will improve coverage, see mixing instructions.

ARDITEX NA – Cementitious screed material for use internally in buildings

EN 13813: CT-C12-F4.

**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** 

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 up date 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 ARDEX online www.ardex.co.uk