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# ARDEX DPM

# ARDEX Ultra-Shield Technology

Suppresses residual constructional moisture in cement/sand screeds and concrete floors

Can accommodate Hygrometer readings up to 100% RH

Guarantees the early laying of all floor coverings

Easy to apply and fast curing

Provides a bonding agent for ARDEX A35 rapid drying screeds

Can be used in conjunction with ARDEX Industrial and Commercial Systems





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# ARDEX DPM

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#### DESCRIPTION

ARDEX DPM is a solvent free, low viscosity, two component epoxy resin. After hardening the ARDEX DPM produces a membrane with high inherent strength and excellent bond strength to appropriate substrates including very damp concrete and screeds. ARDEX DPM accommodates hygrometer readings up to 100% RH.

ARDEX DPM has excellent resistance to water, grease, oil, aqueous salt solution, dilute mineral and organic acids and organic liquids and solutions.

ARDEX DPM is supplied in two colors, red for the first coat and green for the second coat, as a visual aid to application, thickness and coverage.

#### AREAS OF APPLICATIONS

ARDEX DPM has been specifically developed to suppress residual moisture in concrete and cement/sand screened sub-floors and provides a surface damp proof membrane where a DPM is not present in the floor or it is not effective.

ARDEX DPM allows for the early installation of moisture sensitive floor coverings/coatings in fast track building operations.

#### SUBSTRATE PREPARATION

The surface to be coated must be hard, sound and free of dust, laitance, dirt and other barrier materials such as paint, lime coatings, plaster and adhesive residues. Any existing screeds or levelling/smoothing compounds not resistant to moisture must also be removed.

Concrete curing agents, admixtures and surface hardeners and the residues of these products can impair adhesion. Where doubt exists or the compatibility is unknown a trial adhesion test with the ARDEX DPM should be carried out before work commences. Please consult our Technical Services Department. Any incompatible curing agents, admixtures, surface hardeners or other surface contamination should be removed by scrabbling, grinding, shot blasting or hot compressed air, as appropriate.

Use ARDEX DGR degreaser to remove polish, wax, grease, oil and similar contaminating substances, followed by thorough mechanical preparation.

**NOTE:** ARDEX DPM must not be used over a sub-floor containing under floor heating.

# MOVEMENT JOINTS

Any joints or cracks in the floor subject to movement, such as structural movement joints, must not be bridged with the ARDEX DPM System. These joints must be treated with a flexible impervious jointing system and be carried through to the floor finish.

## MIXING

The individual components of the ARDEX DPM should be thoroughly stirred before being mixed together. The entire contents of the hardener container (component B) should be poured into the resin container (component A) and the two materials mixed thoroughly for at least 3 minutes

Using a heavy duty slow speed drill and spiral paddle. Some of the mixed components should be reintroduced back into the hardener container in order to activate any residue and then poured back into the larger mixing vessel and re-mixed for 30 seconds. Mixing in this way will ensure product consistency and that any resin that remains in the containers after application will cure to provide for easier waste disposal.

NOTE: Once mixed, the ARDEX DPM will generate heat and lose working time if it is left in the mixing container or otherwise kept in bulk, therefore the ARDEX DPM should be poured directly onto the floor

and distributed without delay to the prepared surface using a brush or short/medium pile roller. Ensure that the entire surface is coated and that 'ponding' of the material does not occur.

#### INSTALLATION

Apply an even coat of the mixed ARDEX DPM by means of an appropriate notch trowel such as a 1.5mm x 5mm V shaped notched trowel. Whilst the ARDEX DPM is still wet, the serration ridges should be flattened out with a long handled short pile paint roller, initially pre-wetted with the mixed ARDEX DPM.

The thickness of application should not be less than 200 microns per coat, this can be checked using the ARDEX wet film thickness gauge.

Coverage of 4m2/kg should not be exceeded.

NOTE: For applications on Heated Screed Systems, consult the ARDEX Technical Services. It is essential that the applied ARDEX DPM is continuous and free from pinholes or cavities, otherwise an additional application will be necessary. Allow to cure between coats. The second coat can usually be applied approximately 8 hours after the first one.

#### Resin based flooring

1 Apply an even continuous coat of mixed ARDEX DPM as per application instructions and allow to cure, usually 8 hours at 23°C.

2 Apply a second coat of ARDEX DPM as above, but at right angles to the first coat and allow to cure, usually 8 hours at 23°C.

3 For epoxy or PU coating, directly apply the coating on cured ARDEX DPM. For PU screed, prior to the application of PU screed, please blind with 600 micron dry silica sand or ARDEX Sand on the uncured ARDEX DPM 2<sup>nd</sup> coating and allow to cure.

# Self-levelling Underlayment (ARDEX Underlayments)

1 Apply an even continuous coat of mixed ARDEX DPM as per application instructions and allow to cure, usually 8 hours at 23°C.

2 Apply a second coat of ARDEX DPM as above, but at right angles to the first coat, blind with 600 micron dry silica sand or ARDEX Sand and allow to cure, usually 8 hours at 23°C.

**NOTE:** Apply sufficient sand to give a key free from resin.

3 Apply the required ARDEX levelling/smoothing Compound in the normal method and thickness.

### Installing a Bonded Rapid Dry Screed when a Damp Proof Membrane is missing or ineffective

1 Mechanically prepare the concrete slab to expose a clean, sound surface.

2 Apply an even continuous coat of mixed ARDEX DPM as per application instructions

and allow to cure, usually 8 hours at 23°C.

3 Apply a second coat of ARDEX DPM or as above, but

3 Apply a second coat of ARDEX DPM or as above, but at right angles to the first coat and allow to cure.

4 Apply a third coat of ARDEX DPM or ARDEX R3E and whilst still tacky, blind with 600 micron dry silica sand or ARDEX Fine Aggregate and allow to cure.

**NOTE:** Apply sufficient sand to give a key free from resin.

Remove excess sand by vacuum cleaner when cured. 5 Apply a bonded ARDEX A 35 rapid setting, hardening and drying screed (consult the product data sheet).

# COVERAGE

Approximately 4m2/kg e.g. one 9kg unit will cover approximately 36m2 per coat at 200 microns.

#### PACKAGING

ARDEX DPM is supplied in double sets of two containers. The hardener (component B) is in the small container and the resin (component A) is in the large container with room to mix in the hardener (component B) - net weight 9+9kg.

#### STORAGE AND SHELF LIFE

Store in dry conditions. ARDEX DPM has a storage life of not less than 12 months in the original unopened containers.

#### **CLEANING TOOLS**

All tools should be cleaned before the ARDEX DPM

# TECHNICAL DATA

Mixing ratio: Component A: Component B

2:1 by weight.

Density at 23°C: 1.18

Working Time: 20 minutes at 23°C 8 hours at 23°C Walk ability at 23°C after 6-8 hours

# **PRECAUTIONS**

The hardener which contains 4,4' - isopropylidenediphenol and amines classified as corrosive and the epoxy resin which contains biphenyl A/F-epichlorhydrin, can be irritating to the eyes and skin, and may cause sensitization by contact. They are considered harmful in contact with the skin and if swallowed. During mixing and application the following precautions should be observed: ensure adequate ventilation and avoid contact of the material with the eyes, nasal passages, mouth and unprotected skin. Avoid contact with the hands by wearing protective gloves and by using a suitable barrier cream. In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents).

Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to epoxide materials. Always wear gloves and eyelface protection as necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice. Consult the relevant health and safety data sheets for full information.

The technical details, recommendations and other information contained in this datasheet are given in good faith and represents the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable National or Local Standard, our instructions & recommendations, and only for the uses they are intended. Regional specific recommendations, standards, codes of practice, building regulations or industry guidelines may affect specific installation recommendations. Our Company policy is one of continuous Research & Development; we therefore reserve the right to update this information at any time without prior notice. We 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. The supply of our products and services is also subject to certain terms, warranties & exclusions; and these details will be made available to you on request. You should make yourself familiar with them.