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PRODUCT DATA SHEET

ARDEX DPM 1 C

One Coat Damp Proof Membrane and a Residual Moisture Suppressant

Features

- Suitable for use on surfaces up to 98%RH
- Suppresses residual constructional moisture in all concrete slabs and cement/sand screeds
- Adheres to damp concrete and cement/sand screeds even at lower temperatures
- Apply ARDITEX, ARDITEX NA or ARDITEX RS PLUS to ARDEX DPM 1 C without priming
- Allows the early laying of all floorcoverings when used with ARDEX smoothing and levelling compounds
- Suitable for use on cement/sand screeds containing water based under floor heating systems
- Can be used where no damp proof membrane is present or is ineffective



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ARDEX DPM 1C

One Coat Damp Proof Membrane and a Residual Moisture Suppressant

DESCRIPTION

ARDEX DPM 1C is a one coat solvent free, low viscosity, two component flexibilised epoxy resin, supplied in pre-gauged units of 6kg, 10kg and 25kg. After hardening, the ARDEX DPM 1C produces a membrane which can accommodate hygrometer readings up to 98% with high inherent bond strength. ARDEX DPM 1C has excellent resistance to water, grease, oil, aqueous salt solution and dilute mineral and organic acids.

USE

ARDEX DPM 1C has been specifically developed to provide either a DPM, or to suppress residual moisture in concrete slabs and cement/sand screeds which are well compacted and sound, where readings of up to 98% RH are measured.

ARDEX DPM 1C can be applied to give a dry film thickness of 250 microns where all surface moisture readings are below 85% RH. ARDEX DPM 1C should be used at a dry film thickness of 350 microns where any surface moisture readings are between 85 and 98% RH.

Suitable for heated concrete and sand cement screeds. The surface temperature should not exceed 27°C in accordance with BS 8203 and BS 5325. See below

MOISTURE TESTING

Moisture testing should be undertaken in accordance with BS 8203.

SUBSTRATE PREPARATION

Prior to application the surface 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 and smoothing compounds not resistant to moisture must also be removed.

NOTE: We recommend that new concrete is lightly shot blasted. For rough, uneven or porous surfaces consult the ARDEX DPM 2 Coat System Data Sheet. Concrete curing agents, admixtures and surface Hardeners, and the residues of these products can impair adhesion and must be removed.

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 1C. These joints must be treated with a flexible impervious jointing system and be carried through to the floor finish before a damp proof membrane is applied. If cracks are present in the screed then these must be fully stitched and filled with the appropriate resin system before a damp proof membrane is applied.

APPLICATIONS OVER UNDERFLOOR HEATING

The cementitious levelling screed should have been laid in accordance with BS8204 Part 1. The underfloor heating system should have been commissioned in accordance with the manufacturer's instruction manual and in accordance with BS 8204 Part 1.

Once thermally cycled and commissioned the underfloor heating system should be turned off for 48 hours prior to, and 48 hours after, the installation of the ARDEX DPM 1C, smoothing compound and floor covering. The underfloor heating system should then be gradually recommissioned to avoid rapid thermal shock and temperature variation.

MIXING

In their original containers the resin and hardening agents are pre-gauged to the correct mixing ratio. The hardening agent (Component B) is added to the resin (Component A) and thoroughly mixed together with a spiral mixing paddle in a slow speed drill until a uniform colour and consistency is achieved. It is important that all the resin components have been mixed.

In order to reduce unmixed residues, pour a proportion of the mixed material into the Component B container. Mix for 30 seconds then reintroduce this material back into the main mix in container A and continue to mix.

The ARDEX DPM 1C is ready for immediate use and has a working time of 20 minutes at 20°C. This is reduced at higher temperatures and extended at lower temperatures. At higher temperatures it is recommended that the ARDEX DPM 1C is spread out immediately after mixing, as the reaction is exothermic and the heat generated in the container will reduce the working time. Apply at temperatures above 10°C.

APPLICATION

Apply an even coat of the mixed ARDEX DPM 1C with a suitable V shaped notched trowel. Whilst the ARDEX DPM 1C 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 1C.

Evenly spread one 10kg unit over one of the following approximate areas, dependant on film thickness required:

| Film Thickness | 6kg unit coverage (m ²) | 10kg unit coverage (m ²) | 25kg unit coverage (m ²) | % RH (Relative Humidity) |
|----------------|-------------------------------------|--------------------------------------|--------------------------------------|--------------------------|
| 250 microns | 15 | 25 | 62.5 | 85 |
| 300 microns | 12.6 | 21 | 52.5 | 92 |
| 350 microns | 10.8 | 18 | 45 | 98 |

The applied film thickness can be checked with an ARDEX wet film thickness gauge. It is essential that the applied ARDEX DPM 1C is a continuous film and free from pinholes, cavities or thin patches, otherwise an additional application will be necessary.

PACKAGING

6kg, 10kg and 25kg units of ARDEX DPM 1C are supplied in pre-gauged metal duo 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).

STORAGE

Store in dry conditions. ARDEX DPM 1C 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 1C cures.

SMOOTHING AND LEVELLING

Latex smoothing compounds (ARDITEX and ARDITEX NA).

Apply either ARDITEX or ARDITEX NA smoothing compounds to a minimum depth of 3mm, maximum 6mm to the tack dry ARDEX DPM 1C (typically after 8 hours at 20°C) hours and within 48 hours of the cured coat of ARDEX DPM 1C.

When applying ARDITEX RS PLUS on top of ARDEX DPM 1C, this must be applied once the ARDEX DPM 1C is tack dry (typically 8 hours at 20°C) and within 24 hours of the cured coat of ARDEX DPM 1C.

Water based levelling & smoothing compounds

ARDEX K 11, K 15 NEW.

Prime the cured ARDEX DPM 1C with ARDEX P 82 primer in accordance with the relevant datasheet, and allow to dry. Apply the required ARDEX levelling compound to a minimum of 3mm, maximum 6mm and allow to dry.

ARDEX K 80/SD-T B Base Mix or thicker applications of underlayments (>6mm thick).

Prime the cured ARDEX DPM 1C with ARDEX R3E epoxy primer, blind the surface with ARDEX Fine Aggregate and allow to cure. Vacuum off the excess fine aggregate to leave a 'sandpaper' finish. Apply the ARDEX K 80/SD-T B Base Mix or ARDEX levelling compounds in accordance with the relevant data sheets.

TECHNICAL DATA

| | |
|---------------------------|--------------------|
| Density at 20°C: | 1.54 |
| Working Time: | 20 minutes at 20°C |
| Over Coating if required: | 6-8 hours at 20°C |
| Walkability at 20°C: | after 6 hours |
| Colour: | Black |

PRECAUTIONS

ARDEX DPM 1C can be irritating to the eyes, respiratory system and skin, and may cause sensitisation by contact. Consult the relevant health and safety data sheets for full information. In case of accidents seek medical advice.

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.

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