



JUNE 2019 PRODUCT DATA SHEET

# **ARDEX WPM 200**

# Solvent Free Epoxide Liquid Waterproof Membrane

#### **Features**

- Ideal for under raised access floors, in plant rooms and wet areas
- Provides a water and water vapour barrier
- Suitable for BS 8102 Type A waterproof barriers
- Chemically resistant
- Excellent adhesion, can be applied to a wide variety of substrates including concrete, masonry and steel
- Can be sand blinded to act as a multipurpose primer
- For use on vertical and horizontal applications
- FeRFA Class 2 resin floor coating that, with a sand scatter, gives a reduced slip wearing surface



Telephone: +44 (0)1440 714939
Fax: +44 (0)1440 716640
Email: technical\_admin@ardex.co.uk
ARDEX online: www.ardex.co.uk

## **ARDEX WPM 200**

### Solvent Free Epoxide Liquid Waterproof Membrane

#### USE

ARDEX WPM 200 has been specifically developed to provide a water and water vapour barrier, or priming layer to concrete, screeded, rendered or masonry surfaces, steel and other vertical as well as horizontal hard surfaces.

ARDEX WPM 200 is ideal for use in plant rooms, under raised access floors, ground floor slabs, workshops, marine protection, sewage processing areas, swimming pool surrounds and shower areas. It can be used as a FeRFA Class 2 resin floor finish or sand scatter finished as a reduced slip wearing surface. A sand scattered prepared layer of WPM 200 can also be used as a waterproof key for tiling or rendering.

#### **DESCRIPTION**

ARDEX WPM 200 is a solvent free, low viscosity, two component, polymer modified epoxy liquid waterproof membrane. ARDEX WPM 200 is suitable for Type A waterproof barrier protection structures as per BS 8102. After hardening ARDEX WPM 200 produces a membrane with high inherent strength and excellent bond to appropriate substrates, including very damp concrete and screeds. ARDEX WPM 200 accommodates hygrometer readings up to 98% RH and has excellent resistance to water, grease, oil, aqueous salt solution, and spillages of a range of dilute mineral and organic acids and organic liquids and solutions.

#### 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 renders, 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.

The prepared substrate should be as smooth as practical. ARDEX A 46 or ARDEX A 125 can be used to fill holes and pre-smooth features and rough areas, prior to the application of ARDEX WPM 200. For the pre-smoothing of larger areas ARDEX K 301 or ARDITEX NA should be considered.

Use ARDEX DGR Degreaser to remove polish, wax, grease, oil and similar contaminating substances, followed by thorough mechanical preparation. Steel should be suitably mechanically prepared back to bright steel e.g. S A  $2\frac{1}{2}$ . In wet locations the steel must be protected with a suitable anticorrosion primer.

Where doubt exists or the compatibility is unknown, a trial adhesion test with ARDEX WPM 200 should be carried out before work commences.

ARDEX WPM 200 must not be used over a subfloor containing underfloor heating.

#### **MOVEMENT JOINTS**

Any joints or cracks in the substrate subject to movement, such as structural movement joints, must not be bridge with ARDEX WPM 200. These joints must be treated with a flexible impervious jointing system and be carried through construction joints to the surface finish. Corners and wall/floor connections should incorporate WPM 200 Reinforcing Tape (see ARDEX WPM 200 detail schematics for more guidance). For further design guidance refer to BS 8102 and BS 8215.

#### **MIXING**

The individual components of ARDEX WPM 200 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 allow for easier waste disposal.

**NOTE:** Once mixed, ARDEX WPM 200 will generate heat and lose working time if it is left in the mixing container or otherwise kept in bulk.

Therefore, ARDEX WPM 200 should be poured directly into a roller tray 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. If applying to a floor using a trowel ARDEX WPM 200 can be poured directly onto the floor. Do not use below 5°C. Do not add thinners or solvents.

#### **APPLICATION**

ARDEX WPM 200 is a 2 coat system, the second coat can normally be applied after 8-24 hours depending upon site conditions. It is recommended that the 2nd coat be applied at right angles to first.

For floors, apply an even coat of the mixed ARDEX WPM 200 by means of an appropriate notch trowel such as a 1.5mm x 5mm V shaped notched trowel. Whilst the ARDEX WPM 200 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 WPM 200.

Alternatively for floor or wall application use a brush or short/medium pile roller. Ensuring that the thickness of application is not less than 200 microns per coat, this can be checked using a wet film thickness gauge. Coverage of  $4m^2/kg$  should not be exceeded.

## ARDEX WPM 200

### Solvent Free Epoxide Liquid Waterproof Membrane

Coverage rates will be reduced by rough, porous substrates; pre-smoothing is recommended to aid application and improve yield. It is essential that the applied ARDEX WPM 200 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 3) Apply a second coat of ARDEX WPM 200 as above, but

#### **INSTALLING SUBSEQUENT FINISHES** Latex Underlayment (ARDITEX NA)

- 1) Apply an even continuous coat of mixed ARDEX WPM 200 as per application instructions and allow to cure, usually 8 hours at 20°C.
- 2) Apply a second coat of ARDEX WPM 200 as above, but at right angles to the first coat and allow to cure, usually 8 hours at 20°C.
- 3) Apply ARDITEX NA smoothing compound to a minimum depth of 3mm, maximum 6mm to the cured ARDEX WPM 200, and allow to dry. Ensure ARDITEX NA is applied within 48 hours otherwise apply ARDEX P 82 Primer to the ARDEX WPM 200.

**NOTE:** If the sub-floor is not sufficiently smooth, pre-levelling can be undertaken with ARDITEX NA.

#### Self-levelling Underlayment (ARDEX Water-based Underlayments)

- 1) Apply an even continuous coat of mixed ARDEX WPM 200 as per application instructions and allow to cure, usually 8 hours at 20°C.
- 2) Apply a second coat of ARDEX WPM 200, but at right angles to the first coat and allow to cure, usually 8 hours at 20°C.
- 3) Prime the cured ARDEX WPM 200 with ARDEX P 82 Primer (consult Priming and Preparation data sheet) and allow to dry.
- 4) Apply the required ARDEX Levelling/Smoothing Compound to a minimum depth of 3mm, maximum 6mm, and allow to dry.

#### Installing a Bonded ARDEX Screed

- 1) Mechanically prepare the concrete slab to expose a clean, sound surface.
- 2) Apply an even continuous coat of mixed ARDEX WPM 200 as per application instructions and allow to cure, usually 8 hours at 20°C.
- 3) Apply a second coat of ARDEX WPM 200 as above, but at right angles to the first coat. Whilst still tacky, blind with 600 micron 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
- 4) Apply ARDEX A 18 Screed Bonding Cement as a bonding agent. Overlay wet in wet with a screed made with ARDEX A 38 Ultra Rapid Drying cement or ARDEX A29 Rapid Drying Cement (consult the product data sheets for full detail and minimum thicknesses).

#### Tiling and Rendering

- 1) Mechanically prepare the substrate to expose a clean, sound surface.
- 2) Apply an even continuous coat of mixed ARDEX WPM 200 as per application instructions and allow to cure, usually 8 hours at 20°C.
- at right angles to the first coat. 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.
- 4) Tile using an ARDEX cement-based tile adhesive suitable for the tiling application and tile size.

NOTE: ARDEX WPM 200 is not suitable for use in contact with potable water.

#### **COVERAGE**

Approximately 4.8m<sup>2</sup>/ltr (4m<sup>2</sup>/kg) e.g. when mixed a 5 litre unit will cover approximately 24m<sup>2</sup> per coat at 200 microns, and a 20 litre unit will cover approximately 96m<sup>2</sup> per coat at 200 microns.

#### **PACKAGING**

ARDEX WPM 200 is supplied in pre-gauged metal 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 AND SHELF LIFE

Store in dry conditions. ARDEX WPM 200 has a storage life of not less than 12 months in the original unopened containers.

#### **CLEANING TOOLS**

All tools should be cleaned using ARDEX Tool Cleaner before the ARDEX WPM 200 cures.

#### **PRECAUTIONS**

The hardener which contains 4,4' - isopropylidenediphenol and amines is classified as corrosive and the epoxy resin which contains bisphenol A/F-epichlorhydrin, can be irritating to the eyes and skin, and may cause sensitisation 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 eye/face protection as necessary. Observe personal hygiene,

# **ARDEX WPM 200**

### Solvent Free Epoxide Liquid Waterproof Membrane

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.

**TECHNICAL DATA** 

Mixing ratio: Component A: Component B

4.5:1 by weight.

**Density at 20°C:** 1.18

Working Time: 20 minutes at 20°C

**NOTE:** Both the working time and viscosity will decrease at higher temperatures, and increase at lower temperatures.

Over Coating: min 8 hours, max 24 hours at 20°C

Walkability at 20°C: 6-8 hours

Moisture vapour transmission rate: EN ISO 7783-1 1.6 g/m²/24hr

Reverse hydrostatic pressure test: Withstands 4.3 bar

(65 psi) for 14 days

ASTM C1306-05a

Tested in accordance with BS 476: Part 7: 1997: Fire tests on building materials and structures achieves class 1.

#### Chemical resistance

Reagent	Concentration %
Ammonia Solution	35
Beer	100
Hydrochloric Acid	25
Hydrogen Peroxide	20 vol
Diesel	100
Milk	100
Nitric Acid	30
Oleic Acid	100
Orange Juice	100
Petrol	100
Phosphoric Acid	10
Red Wine	100
Salt	Saturated
Sea Water	100
Sodium Hydroxide	50
Sodium Hypochlorite	15
Sugar	Saturated
Sulphuric Acid	10
Swimming Pool Water	100
Xylene	100
White Spirit	100

**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

ARDEX online: www.ardex.co.uk