



CI/SfB

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AUGUST 2006
PRODUCT DATA SHEET

PRIMING & PREPARATION

The products covered by this leaflet are

ARDEX P 51 Primer and Bonding Agent

ARDEX P 82 Water Dispersed Epoxy Primer

ARDEX R 3 E Solvent Free Epoxy Primer

ARDEX DGR Degreaser

ARDEX E 25 Mortar Admix

All these materials are designed for use with other
ARDEX products.



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ARDEX P 51

Primer and Bonding Agent

This product is used to prepare internal surfaces to receive cement-based levelling compounds, adhesives, screeds, as well as plaster-based materials, improving adhesion and inhibiting penetration of water in intermittently damp locations. It is used as a pore sealer on floor surfaces to prevent air bubbles rising through subsequently applied sub-floor smoothing and levelling compounds and to prolong their flow life and workability. Only for use as a primer on floors that are dry and have an effective damp proof membrane.

APPLICATION

Shake container well before use. Dilute if required. Apply the primer evenly, using a brush or broom, over the sound, clean and dust-free surface and leave to dry to a clear thin film.

Use ARDEX P 51 diluted 1:3 by volume with water for:

- priming sound and dry plaster surfaces prior to the application of ARDEX cement-based adhesives.
- priming and as a bonding agent on absorbent cement/sand screeds prior to applying ARDEX sub-floor smoothing compounds.
- a bonding agent on smooth concrete walls prior to applying plaster-based compounds.
- reducing dusting of internal cement screeds or on sub-floor smoothing compounds which may have to be unavoidably left exposed to foot traffic, etc., for a limited period.

Use ARDEX P 51 diluted 1:2 with water for:

- priming and as a bonding agent on power floated concrete prior to applying ARDEX sub-floor smoothing and levelling compounds.

Use ARDEX P 51 diluted 1:1 with water for:

- priming and sealing pores on rough concrete floors to prevent air bubbles rising through the sub-floor smoothing compounds.
- mixing with ARDEX A 35 powder as a slurry to bond an ARDEX A 35 cement and sand screed.
- priming traces of sound adhesive residues on absorbent sub-floors.

Use ARDEX P 51 undiluted for:

- priming clean floorboards prior to applying ARDEX-FLEX 7001 tile adhesive.

ARDEX P 51, diluted with an equal volume of water, may be used as a slurry on a concrete floor as a bonding agent for a cement/sand screed. The screed is laid before the slurry has dried.

COVERAGE

5kg ARDEX P 51 diluted with 3 volumes of water is sufficient for priming approximately 100m².

5kg ARDEX P 51 diluted with 2 volumes of water is sufficient for priming approximately 60m².

5kg ARDEX P 51 diluted with an equal volume of water is sufficient for priming approximately 35m².

5kg ARDEX P 51 undiluted is sufficient for priming approximately 5m².

NOTE: The above coverage figures will vary depending on the roughness and absorbency of the substrate.

PACKING AND STORAGE

Polyethylene containers of 25kg, 5kg and 1kg. Protect from frost and direct sunlight.

STORAGE LIFE

ARDEX P 51 has a storage life of not less than 12 months in the original unopened containers.

PRECAUTIONS

Aqueous synthetic based dispersion. Wash off from skin before drying takes place. Any material splashed into the eye, mouth or nose should be washed away immediately with clean water. Avoid ingestion. Non-toxic and small amounts are unlikely to cause more than temporary discomfort. If large amounts are swallowed, seek medical advice.

For the latest health and safety information on this product consult the current health and safety data sheet.

ARDEX P 82

Water Dispersed Epoxy Primer

ARDEX P 82 is a two-part water based synthetic dispersion primer and bonding agent. It is non-flammable and non-corrosive. ARDEX P 82 forms a priming/bonding layer on most substrates, particularly smooth or dense surfaces. For interior use only in intermittently damp locations. Use on floors that are dry and have an effective damp proof membrane, such as ARDEX DPM. ARDEX P 82 can be used as a primer and bonding agent prior to the application of the ARDEX range of cement-based products.

Use ARDEX P 82 on power floated concrete, pre-cast concrete, terrazzo, glazed ceramic and quarry tiles. ARDEX P 82 can also be used to prime hard flooring grade asphalt, rigid metal, hard and sound paint thickness coatings, ARDEX DPM, as well as traces of sound adhesive residues on dense impervious surfaces. Contact our Technical Services Department at Haverhill for further specific information. ARDEX P 82 is also suitable for priming wood and wood-based panels prior to fixing ceramic tiles on walls using ARDEX X 7 G Plus, ARDEX-FLEX 5000, 5001 and 6001 or on floors using ARDEX S 16 and ARDEX E 90 admix.

APPLICATION

Surfaces should be firm and free from dust, dirt and other barrier materials. Polish, wax, grease, etc., should be removed using ARDEX DGR degreaser. ARDEX P 82 consists of two liquid components - one red, one white - which are mixed in the ratio of 1:1 by weight or volume to produce a pink primer. The mixed primer has a working time of approximately 1 hour, AFTER WHICH TIME ANY UNUSED MIXED PRIMER MUST BE DISCARDED.

ARDEX P 82 primer must be applied in a THIN even coat using a foam or short pile paint roller, paint brush, or squeegee, taking care to prevent the formation of puddles. On smooth impervious substrates application by squeegee will quickly and effectively give a very thin film. Leave the coating of ARDEX P 82 to dry to a clear, tacky film - usually 3 to 6 hours with a paint roller or brush application, 1 to 3 hours with a squeegee, depending on substrate, temperature and ventilation. If in doubt leave overnight. Once dried, the primed surface is ready for overlaying however, if left for more than 4 days, a repeat application of the ARDEX P 82 primer will be necessary.

Mixing and application tools should be cleaned with water immediately after use before the primer dries. Wash off from skin before drying takes place. Avoid prolonged contact with the skin.

COVERAGE

5 to 10 square metres per kg of mixed primer depending on the surface to be primed and the method of application, i.e. 10 to 20 square metres per 2kg unit and 30 to 60 square metres per 6kg unit.

PACKING AND STORAGE

6kg unit consisting of 3kg of each component in plastic containers, or a 2kg unit consisting of 1kg plastic containers of each component. Store in a cool dry place. Protect from frost.

STORAGE LIFE

ARDEX P 82 has a storage life of not less than 12 months in the original unopened containers.

PRECAUTIONS

Contains epoxide resin and Isophorone Diamine. Irritating to eyes and skin. May cause sensitisation by skin contact. Avoid contact with the eyes. Wear suitable gloves and eye/face protection. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. After contact with the skin, wash off immediately with plenty of soap and water, then apply moisturising cream. Keep out of the reach of children.

For the latest health and safety information on this product, consult the current health and safety data sheet.

ARDEX R 3 E

Solvent Free Epoxy Primer

ARDEX R 3 E Solvent Free Epoxy Primer is a two component solvent free epoxy resin for use with ARDEX polyurethane screeds, self-smoothing epoxy floor coatings and ARDEX cement/sand screeds. Blind with ARDEX Fine Aggregate and use as a primer prior to application of the ARDEX SD-T Industrial Floor System, or other appropriate ARDEX cement-based products. Where surfaces are very porous, more than one coat of primer may be required to achieve the desired bonding efficiency.

For applications on new concrete or where the relative humidity (RH) of the substrate is in excess of 75%, ARDEX DPM should be used. If the substrate is particularly smooth, the surface of the ARDEX R 3 E Solvent Free Epoxy Primer should be seeded with ARDEX Fine Aggregate immediately after application to give a mechanical key to facilitate installation of resin screeds and toppings.

SUBSTRATE PREPARATION

The concrete or screed substrate must be hard, sound and free of dust and other barrier materials such as paint, lime coatings, plaster, curing agents, laitance, adhesive residues etc., that will inhibit adhesion to the substrate.

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

Contaminated concrete surfaces should be mechanically prepared, either by scabbling, grinding or contained shot blasting equipment or similar, and be vacuumed clean prior to applying ARDEX R 3 E Solvent Free Epoxy Primer. Overwatered or otherwise weak concrete surfaces must also be suitably prepared down to sound, solid concrete by mechanical methods. Dust and other debris should be removed using vacuum equipment. ARDEX R 3 E Solvent Free Epoxy Primer can be used over dense surfaces and keyed to lay ARDEX Smoothing Compounds above 6mm.

NOTE: Any joints or cracks in the concrete base where differential movement is anticipated e.g. movement joints, should be brought through to the finished surface and suitably sealed. New concrete slabs must be allowed to cure for at least 14 days.

MIXING

The individual components of the ARDEX R 3 E Solvent Free Epoxy Primer 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.

ARDEX DGR

Degreaser

This is a liquid which is highly effective in removing grease, wax, etc., reducing these contaminants to a water dispersible consistency. It is used for cleaning surfaces that are contaminated with wax, grease, oil, etc., prior to mechanical preparation. May be used on damp surfaces and is also useful for cleaning paint brushes, machinery etc.

APPLICATION

Scrape off excess deposits of wax, oil or any other contaminating or loosely bonded materials and apply ARDEX DGR using a brush, squeegee or soft broom. Leave for 3 to 4 minutes, when even old coats of wax, grease, oil, etc., will be dissolved, and wipe up with a damp cloth or mop, rinsing frequently with clean water until the surface is clean. If contamination is severe, a second application may be required and in such cases it is not necessary to wait for the surface to dry before the second treatment is applied. When the surface to be treated is only lightly contaminated with dirt, etc., ARDEX DGR may be diluted with 5 to 10 volumes of water and left to work for 10 minutes, wiping off with a damp cloth as before.

APPLICATION

Once mixed, the material should be spread over the floor as self-heating in the container will reduce working time. Apply using a brush or short/medium pile roller. One or more coats may be needed to ensure that a uniform coating is achieved and to compensate for differences in surface porosity. All movement joints in the sub-floor must be carried through the topping and properly sealed. Construction joints and cracks not subject to movement may be overlaid but should the floor move in any way, these defects will reflect through the system. Isolation joints will need to be allowed for in areas where high thermal movement is anticipated, e.g. around ovens and freezers.

PHYSICAL PROPERTIES

Working time 20 mins at 20°C

Walkability 6-8 hours at 20°C

ARDEX R 3 E Solvent Free Epoxy Primer should be allowed to cure prior to the installation of the final floor finish, typically 24 hours at 20°C.

COVERAGE

Approximately 24m² per 6kg unit.

PACKAGING

6kg units of ARDEX R 3 E Solvent Free Epoxy Primer 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 AND SHELF LIFE

Store in dry conditions. ARDEX R 3 E Solvent Free Epoxy Primer has a storage life of not less than 6 months in the original unopened containers.

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, if necessary, 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, 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.

For the latest health and safety information on this product consult the current health and safety data sheet.

COVERAGE

36 to 45 square metres per 4.5 litres (undiluted).

PACKAGING AND STORAGE

4.5 litre containers. Store in a dry place out of direct sunlight.

STORAGE LIFE

ARDEX DGR has a storage life of not less than 12 months in the original unopened containers.

PRECAUTIONS

Contains solvents - harmful - flammable. Keep away from sources of ignition - no smoking. Avoid inhalation of solvent vapours. Use only in well ventilated areas.

Prolonged and concentrated exposure can cause narcosis and irritation of the mucous membranes, respiratory system, eyes and skin. Contact with the skin must be avoided by the use of gloves, barrier creams, etc. Any material splashed into the eye, mouth or nose must be washed out with copious amounts of water without delay. This material must not be ingested and in the event of an accident seek medical advice.

For the latest health and safety information on this product consult the current health and safety data sheet.

ARDEX E 25

Mortar Admix

The addition of ARDEX E 25 Mortar Admix to ARDEX sub-floor smoothing compounds is recommended: where high abrasion or point load resistance is required; where used as a temporary wearing surface; where a floor paint or paint thickness coating is to be subsequently applied as a finish (check compatibility, suitability, and carry out a trial application before proceeding) or where the floor has underfloor heating. In the latter case the heating must be turned off for 48 hours before screeding, left off for a further 48 hours afterwards and gradually brought up to temperature.

APPLICATION

The ARDEX compound is mixed in the usual way, except that ARDEX E 25, diluted 1 part by volume with 5 parts by volume of water, is used in lieu of the clean water. The ARDEX E 25 additive produces an underlayment with a higher tensile strength and greater elasticity.

For ARDEX K 15 or ARDEX Z 8 use 6 to 6¹/₄ litres of diluted ARDEX E 25 (1:5 water) per 22kg bag.

When levelling hard internal asphalt sub-floors see note below, the Recommended Primers section, or contact our Technical Services Department at Haverhill.

MATERIAL REQUIREMENT

As an admix, a 5kg container of ARDEX E 25, diluted with 5 volumes of water, is sufficient for approximately:
5 x 22kg ARDEX Z 8 or ARDEX K 15.

PACKING AND STORAGE

Polyethylene containers of 5kg (4.5 litres). Protect from frost and direct sunlight.

STORAGE LIFE

ARDEX E 25 has a storage life of not less than 12 months in the original unopened containers.

PRECAUTIONS

Aqueous synthetic based dispersion. Wash off from skin before drying takes place.

Any material splashed into the eye, mouth or nose should be washed away immediately with clean water. Avoid ingestion. Non-toxic and small amounts are unlikely to cause more than temporary discomfort. If large amounts are swallowed, seek medical advice.

For the latest health and safety information on this product, consult the current health and safety data sheet.

Recommended Primers

Substrates must be dry, firm and free of dust and other barrier materials. Apply primers evenly and allow to dry to a clear thin film.

SUBSTRATE

Wood and wood based materials

Concrete slabs

Power floated concrete

Precast concrete

Traces of sound adhesive residues

Terrazzo

Ceramic and quarry tiles

Rigid metal (bright metal or sound paint finish)

Paint coatings (sound)

*Asphalt (flooring grade)

Porous cement/sand screeds

Porous cement/sand renders

Plaster

PRIMER

ARDEX P 82/ARDEX P 51

ARDEX P 82/ARDEX P 51/ARDEX R 3 E

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ARDEX P 82/ARDEX P 51

ARDEX P 82/ARDEX R 3 E

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ARDEX P 51/ARDEX R 3 E

ARDEX P 51

ARDEX P 51

***NOTE: Asphalt sub-floors:** *Flooring grade, sanded asphalt surfaces in internal locations are usually suitable for direct application of ARDEX X 7 and ARDEX S 16 cement-based adhesives, incorporating ARDEX E 90 mortar admix. When tiling on smooth hot-laid asphalt, prime with ARDEX P 82. For fixing tiles to external applications please contact our Technical Services Department at Haverhill.*

Hard internal asphalt sub-floors, primed with ARDEX P 82, may be levelled and smoothed with ARDEX K 15, incorporating ARDEX E 25 Mortar Admix, diluted 1 part: 2¹/₂ parts water.

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.