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PRODUCT DATA SHEET

ARDEX P 51

Concentrated Water-Based Primer and Bonding Agent

Features

- Multipurpose - Suitable for a wide range of applications
- Easy to use, dilute as appropriate for the application
- For floors, walls and ceilings, including dense and porous surfaces
- Ideal for sealing and priming gypsum based plasters and screeds
- Minimises air bubbles rising through levelling compounds and porous surfaces
- Low odour and solvent free
- Cost effective, up to 160m²/5kg unit



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EMS 565427

OHS 628374

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ARDEX P 51

Concentrated Water-Based Primer and Bonding Agent

DESCRIPTION

A concentrated, blue, synthetic, water-based, solvent-free multi-purpose primer with a wide range of applications which, after drying, helps to inhibit the penetration of water from subsequently applied materials.

USE

This product is used to prepare dry internal floors, walls and ceilings to receive cement-based mortars (levelling compounds, tile adhesives, screeds) as well as plaster based materials, improving adhesion as a bonding agent and retarding the wetting of the substrate by the applied materials.

Effective pore sealer on absorbent subfloors inhibiting air bubbles rising through subsequently applied subfloor smoothing and levelling compounds, thus extending their flow life and workability.

ARDEX P 51 can be used to prime and seal the surfaces of cement or gypsum plaster based materials such as wall plaster, floors of cement based or prepared anhydrite and alpha hemihydrate pumped screeds before applying cement-based products such as levelling compounds and tile adhesives.

ARDEX P 51 can be used as a bonding agent to improve adhesion to dense and smooth concrete subfloors and dense cement based screeds before using repair mortars or cement-based tile adhesives.

Suitable for priming rigidly supported and conditioned plywood subfloors before fixing ceramic tiling with appropriate cement-based tile adhesives.

ARDEX P 51 can be used as a temporary protective coating over cement-based smoothing compounds and repair mortars where these have to be walked on before the flooring is applied and as a temporary dust-proofing treatment on screeds.

SUBSTRATE PREPARATION

Substrates must be dry, protected by a functioning DPM, firm and free from dust, water soluble materials, excess adhesive residues and other barriers to adhesion. Surface contamination such as residues of polish, wax, grease, curing agents etc. should be removed using a suitable degreaser prior to suitable mechanised preparation. ARDEX P 51 is not recommended for use on metal and mastic asphalt, excess adhesive residues, ARDEX DPM, polyurethane and epoxy coatings. Consult the ARDEX P 82 Water Dispersed Epoxy Primer and ARDEX R 3 E General Purpose Epoxy Primer datasheets for guidance.

APPLICATION

Shake the container well before use and dilute when required by putting the ARDEX P 51 into a clean container and mix with the required quantity of water as specified in the selected mixing ratio. Ensure that the ambient temperature and the temperature of the surface being primed are above 5°C.

If ARDEX P 51 is used where moisture sensitive materials are to be subsequently applied, the substrate must be dry, i.e. with flooring materials the screed should have a RH reading not greater than 75% and, where direct to ground, protected by an effective damp proof membrane.

Apply the priming coat evenly with a soft broom or brush, over the sound, clean and dust-free surface and leave to dry thoroughly to a clear, thin blue film before beginning any subsequent work.

For external concrete applications prior to the application of ARDEX K 301, prime with ARDEX P 51 Primer diluted 1:7 with clean water with a brush or broom.

USE IN BONDING COATS FOR SCREEDS

ARDEX P 51 is also excellent for improving adhesion of bonded ARDEX A 35/A 38 Cement and Sand Screed.

Best results are obtained by mixing ARDEX P 51 Primer 1:1 with water and then mixing this with a mix of 1 part ARDEX A 35 Cement with 1 part Screeding Sand to produce the required bonding slurry/grout consistency. May also be used to produce a bonding slurry/grout for ordinary cement and sand screeds, simply use ordinary Portland Cement in place of ARDEX A 35 Cement.

NOTE: Always apply screed fresh in fresh into Bonding Coat.

COVERAGE TABLE

MIXING RATIO Parts ARDEX P 51 to water	DILUTION	APPROX COVERAGE per 5kg unit of ARDEX P 51
Undiluted on timber floors	None	25m ²
1 part P 51:½ part water	1:½	25m ²
1 part P 51:1 part water	1:1	33m ²
1 part P 51:2 parts water	1:2	60m ²
1 part P 51:3 parts water	1:3	100m ²
1 part P 51:5 parts water	1:5	160m ²

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

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The following table on the use of priming coats also explains the treatment of substrates on which filling, smoothing and levelling work is to be done.

<i>Substrate</i>	<i>Dilution</i>
Smooth and non-porous substrates, e.g. prefabricated concrete floors, dense cement screeds, improved calcium sulfate screeds, terrazzo, sandstone, ceramic tile and slab type finishes. (Dependent of the information from the gypsum screed manufacturer, a suitably sand blinded coat of an epoxy primer such as ARDEX R 3 E Moisture Tolerant Epoxy Primer, may be required). Existing substrates with residues of adhered mortars and adhesive residues to receive smoothing compounds and cement based adhesives.	1 part ARDEX P 51 with ½ part water.
Rough concrete subfloors and ceilings.	1 part ARDEX P 51 with 1 part water.
Power Float Concrete.	1 part ARDEX P 51 with 2 parts water.
Porous or highly absorbent cement screeds to receive smoothing compounds and repair mortars.	1 part ARDEX P 51 with 5 parts water.
Absorbent and smooth calcium sulfate screeds and pumped calcium sulfate screeds	1 part ARDEX P 51 with 3 parts water.
Mixing with ARDEX A 35 cement and sand to produce a bonding grout/coat when applying a bonded ARDEX A 35 cement and sand screed and as a bonding grout for OPC screeds.	1 part ARDEX P 51 with 1 part water.
Smooth concrete walls and ceilings to receive gypsum plaster	1 part ARDEX P 51 with 3 parts water.
To reduce dusting of internal cement screeds or on subfloor smoothing compounds which may have to be unavoidably left exposed to foot traffic, etc., for a limited period.	1 part ARDEX P 51 with 3 parts water.
*Prepared gypsum plastered walls to receive cement-based tile adhesives.	1 part ARDEX P 51 with 3 parts water.
Wood based sheets and boards e.g. to receive smoothing compounds such as ARDEX K 40 FLOW or bedding tiles with cement-based tile adhesives such as ARDEX X 7001.	Undiluted
External concrete pathways and garages (foot traffic) to receive ARDEX K 301	1 part ARDEX P 51 with 7 parts water.

*Brush down plaster with a stiff brush to remove any weakly adhered surface residues to expose a cohesively strong mattsurface.

N.B. When using ARDEX P 51 on existing substrates, ensure that the residues of levelling compounds, adhesives, etc. are water resistant, sufficiently strong to support anticipated loads and traffic and well adhered to the substrate. Allow priming coats to dry. Always completely remove adhesive residues that are water soluble or softened by water. Where adhesive residues are present on polyurethane, epoxy resin and bitumen based substrates ARDEX P 82 must be used as an adhesive bridge.

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PRECAUTIONS

Aqueous synthetic polymer based dispersion. Wash off from skin before drying takes place. Any material slashed 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. This information is available from the website: **www.ardex.co.uk** or by contacting the office in Haverhill.

STORAGE AND SHELF LIFE

ARDEX P 51 must be stored in unopened packaging, clear of the ground; in cool, dry conditions and protected from excessive draught. If stored correctly, the shelf life of this product is 12 months from the date shown on the packaging.

TECHNICAL ADVICE HELPLINE

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ARDEX online
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 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.
