



ARDEX K10

Synthetic Resin Improved Levelling, Smoothing & Repairing Compound

Ideal For Ramping

Featheredge To 35mm

Resistant To Castor Wheels

Suitable For Heavy Traffic

Can Be Used As A Wear Surface

ARDEX Australia Pty Ltd
26 Prince William Drive
Seven Hills NSW 2147
Tel: (02) 9851 9199
Fax: (02) 9674 5621
Email: techinfo@ardexaustralia.com
Internet: www.ardex.com

ARDEX New Zealand Ltd
32 Lane St, Woolston
Christchurch, New Zealand
Tel: (03) 384 3029
Fax: (03) 384 9779
Email: techinfo@ardexaustralia.com
Internet: www.ardex.com

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Synthetic Resin Improved Levelling, Smoothing & Repairing Compound

DESCRIPTION

ARDEX K10 is a dark grey powder consisting of high synthetic resins and special cements as binders. When mixed with water, a dark grey, easy flowing mortar is produced, which sets within 1½ hours and hardens by hydration and drying at normal temperatures to a water resistant and virtually tension free mass. The mortar bonds strongly to most construction materials used in floor screeds i.e. sand/cement, concrete etc. The substrate must be primed for a successful installation. (see primer leaflet). When cured, the ARDEX K10 screed attains a high hardness and comprehensive strength as well as retaining a high degree of resilience and is therefore suitable for sub-floors where castor wheels are used where extreme hardness is required and as an underlayment for wear-resistant coatings. ARDEX K10 screeds have good abrasion resistance and are therefore suitable for use where the sub-floor has to be unavoidably left open for some time prior to the application of the floor covering. ARDEX K10 can be applied from a featheredge up to 35mm in a single application, as there is no significant shrinkage on drying i.e. the material is virtually tension-free.

USE

For levelling and adjusting tolerances between concrete slabs etc. For smoothing and repairing sand/cement and concrete sub-floors, stair treads etc., featheredge to 35mm prior to the application of floorcoverings, surface coatings etc. For internal use only.

HOW TO INSTALL ARDEX K10 SUB-FLOOR PREPARATION

Concrete floors must be solid, thoroughly clean and free of oil, wax, grease, asphalt, latex compounds, curing and sealing compounds and any other surface contaminant. Mechanically clean the floor to provide a roughened, clean, sound, solid and open porous matrix of the concrete, by using recommended preparation methods such as shot-blasting, scarifying, diamond grinding/shaving or other suitable method.

Acid etching is **not** an acceptable means of cleaning the sub-floor. Do **not** use solvents or sweeping compounds to clean the sub-floor. Sub-Floors must be dry (A.S. 1884 1985) and properly primed for a successful installation. Sub-Floor temperatures must be a minimum of 10°C and increasing for the installation of ARDEX products. For further information please refer to the ARDEX Substrate Preparation Brochure.

Power-trowelled (burnished) concrete and Hi-strength concrete greater than 35 MPa, refer to ARDEX sub-floor preparation brochure or contact ARDEX Technical Services.

Non-porous floors, such as terrazzo, ceramic and quarry tiles, and epoxy coatings; must be solid, well bonded and properly cleaned and primed with ARDEX 82 Ultra Prime. Steel decking should be rigid and treated with an anti-

corrosive two part epoxy zinc phosphate primer before priming with ARDEX 82 Ultra Prime (refer to Technical Bulletins for specific instructions).

For gypsum, asphalt and lightweight concrete contact ARDEX Technical Services for installation procedures.

NOTE: This product is intended for interior use over dry substrates only. Do not use in areas of constant water exposure nor in areas exposed to permanent or intermittent substrate moisture, as this may jeopardize the performance of the underlayment and the floor covering. This product is not a vapour barrier and will allow free passage of moisture. Follow the directive of the floor-covering manufacturer regarding the maximum allowable substrate moisture content and test the substrate prior to installing ARDEX K10.

NOTE: Refer to A.S. 1884-1985 Section 2.1.1.2 for allowable moisture content (max. moisture content 5.5% or 70% humidity) for sub-floors with high moisture content refer to ARDEX Moisture Barrier and ARDEX Green Slab Seal Technical Bulletins.

Test Area: Always install an adequate number of properly located test areas, to include the finish flooring, to determine the suitability of the product for its intended use. As floor coverings vary, always contact and rely upon the floor-covering manufacturer for specific directives, such as maximum allowable moisture content, adhesives selection and intended end use of the product.

PRIMING

Standard Absorbent Concrete: Prime with ARDEX 51 with water as per instructions on Primer container. Apply evenly with a soft pushbroom and allow to dry to a clear, thin film (min 3 hours; max 24 hrs) Do not apply underlayment before primer has dried thoroughly. Primer can also be applied the day before. Do not use paint rollers, mops or spray equipment.

Non-Absorbent substrates, Ceramic Tile and Terrazzo should be properly cleaned and if required professionally stripped. After drying prime with ARDEX 82 ULTRA PRIME. Apply with a short-nap or sponge paint roller, leaving a thin coat of primer no heavier than a thin coat of paint, to a thin pink transparent film. Do not leave any bare spots. Brush off puddles and excess primer. Allow to dry to a thin, slightly tacky film (min 3 hours, max 24 hours).

Non-Porous concrete, sealed, burnished, hi-strength, off-form, and greater than 35MPa refer to ARDEX Technical Services.

Wooden Floors: Use ARDEX K15 Self Levelling Underlayment Concrete as described in our Technical Bulletin "Installation of ARDEX K15 Over Wooden Floors" or ARDITEX Latex self smoothing underlayment.

Latex Compounds, asphalt, gypsum and other generally weak sub-floor will not perform as an adequate sub-floor and must be removed.

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MANUAL INSTALLATION

Mix 1 x 20 kg bag of ARDEX K10 with 4.5 litres of water. Put the full measure of water in the drum first, then add half the 20kg bag in first while mixing thoroughly with the ARDEX mixing paddle and electric drill (heavy duty - 650 rpm). Then slowly add the remainder of the materials while still mixing with the drill and paddle. **DO NOT OVERWATER:** a yellowish skim while mixing indicates overwatering. Total mixing time is approximately 2 – 3 minutes to obtain a lump free mixture.

APPLICATION

Pour the mixed material onto the floor; grind in with a steel trowel and spread the ARDEX K10 mortar evenly over the surface to the required thickness, for thicknesses over 10mm, It is preferable as well as economical to incorporate in the mortar an equal volume of 3mm to 8mm to dry aggregate. The addition of aggregate will diminish the workability of the product and may make it necessary to install a finish layer. Allow the first layer to dry 12 – 16 hours at 20°C. Prime the surface with ARDEX 51 mixed 1:2 with water, following priming instructions. Allow the primer to dry thoroughly (min 3 hours, max. 24 hours) and install the finish layer. Apply only at sub-floor temperatures above 10 °C.

NOTE: ARDEX K10 is a cement-based material. Observe the basic rules of concrete work. Do not install below 10°C surface temperature. Install quickly if substrate is warm and follow hot weather precautions. Never mix with cement or additives. **DO NOT OVERWATER.**

To extend the pot life in summer, store ARDEX K10 in a shady and cool place. For mixing use cool water only. If necessary cool the water with a block of ice (not party ice). On days with high temperatures the mortar will set and harden fast.

DRYING-HARDENING

ARDEX K10 sets by hydration within 1½ hours at 20°C., and can be walked on after this time. Thin layers are usually ready to receive floorcoverings in 4 to 6 hours.

HIGH STRESS AREAS

The use of ARDEX K10 mixed with ARDEX 25 as follows:

1.5 litres of ARDEX 25 plus
3.5 litres of water per
20 kg ARDEX K10

For use where the ARDEX K10 is to be left as a wear surface, for short periods when laying over underfloor heating, heavy traffic or high point loading such as pallet jacks and castor wheels or as an underlayment for parquet or rubber flooring.

THICKNESS OF INSTALLATION

On dense sub-floors such as ceramic, terrazzo, smooth dense concrete etc., ARDEX K10 minimum mortar layer of 1.5mm layer thickness is required.

COVERAGE

Approximately 1.5 kg ARDEX K10 powder per square metre of a thickness of 1mm i.e. 12m² at 1mm thickness per 20kg bag.

PACKAGING AND STORAGE

Three-ply paper bags with polyethylene liner containing 20kg net ARDEX K10 has a shelf life of approximately 12 months if stored in dry conditions i.e. off concrete floor, bag sealed from direct air, and out of direct sunlight.

TECHNICAL DATA

Bulk density of powder	1.4kg/litre
Weight of fresh mortar	1.8kg/litre
Initial set (Vicat) DIN 1164	approx. ½hr
Final set (Vicat) DIN 1164	approx. 1½ hrs

Compressive Strength (DIN 1164):

After 1 days	18.6 MPa
After 3 days	22.6 MPa
After 28 days	35.3 MPa

Tensile Bending Strength (DIN 1164):

After 1 days	4.9 MPa
After 3 days	5.9 MPa
After 28 days	10.3 MPa

Ball Pressure Hardness (Brinell):

After 1 days	54.4 MPa
After 3 days	66.2 MPa
After 7 days	71.1 MPa
After 28 days	78.0 MPa

NOTE: The information contained herein is to the best of our knowledge true and accurate. No warranty is implied or given as to its completeness or accuracy in describing the performance or suitability of the product application. Users are asked to check that the literature in their possession is the latest issue.

ARDEX products are manufactured in Australia.

ARDEX AUSTRALIA Pty Ltd.
– ABN 82 000 550 005



Materials are also manufactured in Austria, Denmark, United Kingdom, France, Germany, Singapore, Spain, USA and represented throughout the world.

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