



New

ARDEX K 12

Levelling and Smoothing Compound

Super smooth – requires no sanding

Versatile – apply 1.5mm to 35mm in one application

Rapid hardening – walkable from 2 hours

Superior flow – fast application

Flexible – hand mix or pump application

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ARDEX K 12^{New}

Levelling and Smoothing Compound

DESCRIPTION

ARDEX K 12^{new} is an advanced cement and polymer based levelling and smoothing compound. ARDEX K 12^{new} is formulated for experienced commercial contractors to smooth and level large commercial and retail areas. Once dry it is suitable for the application of vinyl, carpet and tile floor finishes. Unlike normal hydration levellers, ARDEX K 12^{new} will harden and dry at temperatures down to 10°C.

SUBSTRATES

ARDEX K 12^{new} is designed for levelling and smoothing on internal dry concrete slabs.

SURFACE PREPARATION

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

Acid etching is not an acceptable method of cleaning the subfloor. Do not use solvents or sweeping compounds.

Subfloors must be dry (AS 1884) and properly primed for successful installation. Subfloor temperatures must be a minimum of 10°C. For further information, contact ARDEX technical services.

PRIMING

Use ARDEX P 51 over standard concrete floors prior to the installation of ARDEX levelling compounds. Mix 1 part ARDEX P 51 with 2 parts water and apply evenly using a push broom. Do not use paint rollers, mops, or spray equipment. Do not leave any bare spots. Brush off all puddles of excess primer. Allow to dry to a thin, clear film (min. 3 hours, max. 24 hours). Very absorbent concrete may require two applications of primer to avoid pinholes and bubbling in the levelling compound. In such cases, make the initial coat 1 part ARDEX P 51 diluted with 3 parts water. Allow to dry and install a second coat of 1 part ARDEX P 51 diluted with 1 part water. Allow to dry to a thin, clear film (min. 3 hours, max. 24 hours).

Use ARDEX P 82 for non-porous substrates. Mix part A (red) with part B (white) and apply with a short-nap or sponge paint roller, leaving a thin transparent pink coat of primer no heavier than a coat of paint. Do not leave any bare spots. Roll off any areas of excess primer. Allow to dry to a thin, slightly tacky film (min. 3 hours, max. 24 hours). ARDEX P 82 must be applied in a thin layer within 1 hour of mixing. Refer to the Mixing Ratio section for adjustment of mix design when using ARDEX P 82 under ARDEX K 12^{new}.

Note: Low subfloor temperatures and/or high ambient humidity require longer drying time for ARDEX primers. Do not install levelling compounds until primers have dried thoroughly.

MIXING RATIO

4.8 litres of water to 20kg of ARDEX K 12^{new}.

IMPORTANT: When used in conjunction with ARDEX P 82 and for high stress areas, mix 1 litre of ARDEX E 25 with 4.8 litres of water per 20kg bag of ARDEX K 12^{new}.

MIXING

ARDEX Floor levelling products react and harden very quickly when mixed with water. Thorough mixing in the shortest time is essential to ensure the powder and water are evenly dispersed throughout the mix to obtain a lump-free mortar. Always mix the powder into the water. Concrete mixers and hand mixing are not suitable methods.

The most efficient method of mixing is by using an ARDEX mixing paddle and a heavy-duty electric drill (650 rpm). Normal mixing time of a 20kg bag using an electric drill or paddle is 2 to 3 minutes.

To 4.8 litres of water, add ARDEX K 12^{new} powder whilst mixing thoroughly. Do not over-water. Or 1 part water to 3.5 parts of ARDEX K 12^{new} powder by volume.

MANUAL INSTALLATION

Pour the mixed ARDEX K 12^{new} onto the prepared subfloor. Wear football boots with rubber or nylon studs to avoid leaving unnecessary marks in the liquid ARDEX K 12^{new}. Spread into place using the ARDEX gauging rake with height adjustment to obtain an even thickness. Use the ARDEX stand-up spreader for smoothing and where necessary the ARDEX hand trowel. Do not rework ARDEX K 12^{new} after 5 minutes.

PUMPING INSTALLATION

For ease and efficiency of application ARDEX K 12new can be pumped using a suitable Automatic Mixing Pump. Follow the instructions as set by the pump manufacturer.

Contact ARDEX technical services for further information.

THICKNESS

ARDEX K 12new can be applied from 1.5mm to 35mm thickness in one application.

For areas requiring a thickness over 35mm, ARDEX K 12new can be mixed with a well washed and dried 2 – 5mm aggregate. Mix ARDEX K 12new with water (4.5L) first then add the aggregate (up to an equal weight of the powder) whilst mixing.

COVERAGE

Approximately 1.7kg powder/mm/m²

A 20kg bag will cover approximately 4m² at 3mm thickness.

HARDENING-DRYING

ARDEX K 12new when applied in a 3mm layer will harden after approximately 2 – 3 hours at 23°C, and can be walked on after this time.

ARDEX K 12new when applied up to a 5mm layer is usually ready for floor coverings in 18 hours. Always comply with the floor covering manufacturer's moisture instructions.

Hardening and drying times will be extended when applied in cool ambient temperatures or onto cold substrates. Thicker layers will also extend drying times.

TECHNICAL DATA

Powder bulk density	1.3kg/L
Mixed mortar density	2.0kg/L
Initial set	approx. 45 min
Final set	approx. 90 min

Compressive Strength

After 1 day	approx. 15MPa
After 3 days	approx. 20MPa
After 7 days	approx. 25MPa
After 28 days	approx. 30MPa

Tensile Bending Strength

After 1 day	approx. 5MPa
After 3 days	approx. 6MPa
After 7 days	approx. 7MPa
After 28 days	approx. 10MPa

STORAGE

ARDEX K 12new has a shelf life of 12 months if stored in dry conditions in unopened packaging.

HEALTH AND SAFETY

ARDEX K 12new contains Portland cement and Quartz sand. Avoid generation of dust. Do not inhale dust. Avoid contact with eyes or skin. Wear suitable protective gloves and safety glasses. In case of contact with eyes, rinse opened eye for several minutes under running water. In case of contact with skin, rinse affected areas thoroughly with running water. If dust is inhaled, remove to fresh air, ensure breathing passages are clear and rinse mouth with running water. If symptoms persist, seek medical advice.

GUARANTEE

ARDEX Australia Pty Ltd ("we" or "us") guarantees this product ("our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 10 years from the date of purchase. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or compensation, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX Australia Pty Ltd, 20 Powers Road Seven Hills NSW 2147; Toll Free: 1800 224 070; Email: techinfo@ardexaustralia.com) and provide evidence of your purchase of the product within 30 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a "consumer" under the Australian Consumer Law and to that extent you need to be aware that: "Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss of damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure".

DISCLAIMER

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standard, our instructions and recommendations and only for the uses they are intended. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program.

Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations.

The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.

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