



ARDEX K 15 MICROTEC®

Self-Levelling and Self-Smoothing Cement

Ardurapid technology with Microfibre reinforcement

Feather edge to any thickness in one application

Formulated with high flow technology for ultra-thin applications

Can be applied by trowel or pump

Ideal for use with ARDEX floor adhesives

Low VOC content and user friendly



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ARDEX K 15MICROTEC®

Self-Levelling and Self-Smoothing Cement

DESCRIPTION

ARDEX K 15MICROTEC® is a special cement blend. When mixed with water, it becomes a liquid compound which when spread above 2 – 3mm produces a smooth flat surface.

ARDEX K 15MICROTEC® hardens quickly and achieves high early strength. It will not shrink or spall, even when applied in thick layers. Formulated with high flow properties, ARDEX K 15MICROTEC® remains fluid even for applications requiring 3mm or less to provide a durable, flat, smooth floor finish.

ARDEX K 15MICROTEC® is walkable after 2 hours and most floor coverings can be installed 16 hours later at 20°C.

SUBSTRATES

New and existing concrete, ARDEX A38, ARDEX A48, ARDEX K 900 BF.

Substrates with special requirements (Contact ARDEX Technical Services or view relevant Technical Bulletin online) - Moisture vulnerable concrete, compressed fibre cement flooring, terrazzo, quarry and ceramic tiles, concrete subfloors with electric under floor heating, existing epoxy coatings, lightweight autoclave concrete, aluminium and steel decking, primer treated metal, tongue and groove wooden subfloors, patching timber under underlay sheets

SURFACE 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 method of cleaning the sub-floor. Do not use solvents or sweeping compounds to clean the sub-floor. Sub-Floors must be dry as per current Australian Standard AS1884 and properly primed for a successful installation. Direct to earth subfloors must have an effective damp-proof membrane, or use ARDEX MOISTURE BARRIER system. Sub-Floor temperatures must be a minimum of 10°C and increasing for the installation of ARDEX products. For further information contact ARDEX technical services

For power-trowelled (burnished) concrete and hi-strength concrete greater than 35MPa, contact ARDEX technical services for further information on surface preparation.

Non-porous floor, such as terrazzo, ceramic and quarry tiles, and epoxy coatings; must be solid, well bonded and properly cleaned and primed with ARDEX P 82. Steel decking should be rigid and treated with an anti-corrosive two part epoxy zinc phosphate primer before priming with ARDEX P 82.

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 K 15MICROTEC®.

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 15MICROTEC®.

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

4.5 – 5.0 litres of water to 20kg of ARDEX K 15MICROTEC®.

IMPORTANT: When used in conjunction with ARDEX P 82, mix 1 litre of ARDEX E 25 with 4.5 litres of water per 20kg bag of ARDEX K 15MICROTEC®.

For high stress areas, mix 1.6 litres of ARDEX E 25 with 4.0 litres of water per 20kg bag of ARDEX K 15MICROTEC®.

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 is 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.

Normal mixing time of a 20kg bag using an electric drill or paddle is 2 to 3 minutes.

To 4.5 – 5.0 litres of water, add ARDEX K 15MICROTEC® powder whilst mixing thoroughly. Do not over-water. Or 1 part water to 3.5 parts of ARDEX K 15MICROTEC® powder by volume.

MANUAL INSTALLATION

Pour the mixed ARDEX K 15MICROTEC® onto the prepared subfloor. Wear football boots with rubber or nylon studs to avoid leaving unnecessary marks in the liquid ARDEX K 15MICROTEC®. 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 15MICROTEC® after 5 minutes.

ARDEX K 15MICROTEC® can be walked on 2 to 3 hours after installation and can be covered with most floor coverings the next day, regardless of thickness (depending on ambient temperatures).

PUMPING INSTALLATION

For ease and efficiency of application ARDEX K 15MICROTEC® 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

On dense sub-floors such as cermatics, terrazzo, smooth dense concrete etc., an ARDEX K 15MICROTEC® mortar layer of 2 – 3mm layer thickness is required.

ARDEX K 15MICROTEC® can be installed from featheredge to any thickness in one operation. However, for large areas with a thickness over 10mm we recommend to mix ARDEX K 15MICROTEC® with a well washed and dried fine gravel 2 - 5mm.

Mix ARDEX K 15MICROTEC® with water first and then add the aggregate while still mixing.

To install additional layers of ARDEX K 15micro, allow the first layer to dry 12-16 hours at 23°C. Prime the surface with 1 part ARDEX 51 mixed with 2 parts water, following priming instructions. Allow the primer to dry thoroughly (min 3 hours, max 24 hours) then install an additional layer of neat ARDEX K 15MICROTEC®.

NOTE: ARDEX K 15MICROTEC® is a cement-based material.

Remember that you are installing a very thin cementitious topping which will instantly adopt the temperature of the sub floor. Do not install below 10°C surface temperature. Never mix with cement or additives. DO NOT OVERWATER.

COVERAGE

Approximately 1.5kg powder/mm/m²

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

TECHNICAL DATA

Powder bulk density	approx. 1.3kg/L
Fresh mortar weight	approx. 2.0kg/L
Walkability	approx. 2 – 3 hours after application
Ready to receive floor coverings	16 – hours after application at 23°C

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

Ball Pressure Hardness:

After 1 day	approx. 40MPa
After 3 days	approx. 50MPa
After 7 days	approx. 55MPa
After 28 days	approx. 60MPa

STORAGE

ARDEX K 15MICROTEC® has a shelf life of approx. 12 months if stored in dry conditions in the original unopened packaging.

HEALTH AND SAFETY

ARDEX K 15MICROTEC® 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: technicalservices@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 or 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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