

ARDEX K 80 Industrial Levelling Compound

Ideal for creating wear surfaces for heavy duty applications

Easy to install – 5mm to 50mm thickness in one application

Quick drying - Walkable in 2 hours

Superior flow – Fast application

Flexible – Hand mix or pump application

Suitable for Residential, Commercial and Industrial applications

ARDEX Australia Pty Ltd 20 Powers Road Seven Hills NSW 2147 Ph: (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 Ph: (03) 373 6900 Fax: (03) 384 9779 Email: techinfo@ardexaustralia.com Internet: www.ardex.com

ARDEX K 80 Industrial Levelling Compound

DESCRIPTION

ARDEX K 80 is a rapid hardening, quick drying, self levelling compound designed to resurface indoor concrete floors. ARDEX K 80 produces a wear surface finish suitable for commercial and industrial areas including warehouse floors, parking garages and utility areas. ARDEX K 80 can be walked on after approximately 2 hours and coated after 24 hours and subjected to heavy traffic after 48 hours.

SUBSTRATES

ARDEX K 80 is designed for installation over dry internal concrete subfloors.

SURFACE PREPARATION

Concrete floors must be solid, clean and free of wax, grease, asphalt, latex compounds, curing and sealing compounds and any other surface contaminates. Mechanically prepare the floor using recommended preparation methods such as shotblasting, 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 $10^\circ\text{C}.$

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).

In the case of highly power trowelled or extremely dense non-porous concrete, do not use ARDEX P 82. These surfaces must be mechanically prepared to achieve a rough, porous surface and primed with ARDEX P 51.

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 litres of water to 20 kg of ARDEX K 80.

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 20 kg bag using an electric drill or paddle is 2 to 3 minutes.

To 4 litres of water, add ARDEX K 80 powder whilst mixing thoroughly. Do not over-water.

MANUAL INSTALLATION

Pour the mixed ARDEX K 80 onto the prepared subfloor. Wear football boots with rubber or nylon studs to avoid leaving unnecessary marks in the liquid ARDEX K 80. 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 80 after 10 minutes working time.

PUMPING INSTALLATION

For ease and efficiency of application ARDEX K 80 can be pumped using a suitable Automatic Mixing Pump. Follow the instructions as set by the pump manufacturer.

THICKNESS

ARDEX K 80 can be applied from 5mm to 50mm thickness in one application. For areas requiring a thickness over 10mm and up to 50mm, ARDEX K 80 can be mixed with a well washed and dried 2-5mm aggregate. Mix ARDEX K 80 with water first then add (1/3 to 1 part) by volume of aggregate whilst mixing. If the aggregate is wet, reduce the amount of mixing water to avoid over-watering. When using aggregate, a neat final coat of ARDEX K 80 may be required to achieve a smooth surface. Contact ARDEX Technical Services for further information.

COATINGS

The hardened ARDEX K 80 should be protected from wear, oil, salt, chemicals, abrasives and water, by applying a suitable wear protection system. ARDEX WPM 163 Polyurethane sealer can be used for light to medium foot traffic areas. Other systems including epoxy coatings or flooring paints can also be used for heavy traffic areas. Contact ARDEX Technical Services for further information.

COVERAGE

Approximately 1.65 kg powder/mm/m²

A 20 kg bag will cover approximately $2.4m^2$ at 5mm thickness.

TECHNICAL DATA

Powder bulk density:	1.3 kg/litre
Mixed mortar density:	2.0 kg/litre
Compressive Strength	
After 1 day	approx 14 MPa
After 7 days	approx 20 MPa
After 28 days	approx 32 MPa
Tensile Bending Strength	
After 1 day	approx 3.8 MPa
After 7 days	approx 5.8 MPa
After 28 days	approx 9.0 MPa
Ball Pressure Hardness	
After 1 day	approx 60 MPa
After 7 days	approx 65 MPa
After 28 days	approx 90 MPa

STORAGE

ARDEX K 80 has a shelf life of approx 12 months if stored in dry conditions in the original unopened packaging.

HEALTH AND SAFETY

ARDEX K 80 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 products are generally warranted for 10 years when installed to relevant Australian Standards and applicable ARDEX specification, technical data sheet and instruction for application and use. While we assure customers the high standard and quality of our products and services, we accept no liability for any loss or damage which arises from particular site conditions, poor handling and storage or installation by unqualified and unskilled applicators.

DISCLAIMER

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent 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 are 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.

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ARDEX Australia Pty Ltd

www.ardex.com

Technical Services Toll Free: 1800 224 070

New South Wales	Ph (02) 9851 9100	Fax (02) 9838 7970
Queensland	Ph (07) 3817 6000	Fax (07) 3881 3188
Victoria/Tasmania	Ph (03) 9308 9255	Fax (03) 9308 9332
South Australia	Ph (08) 8468 2511	Fax (08) 8345 3207
Western Australia	Ph (08) 9256 8600	Fax (08) 9455 1227

ARDEX New Zealand Ltd

Technical Services Toll Free: 0800 227 339

Christchurch	Ph (03) 373 6900	Fax (03) 384 9779
Auckland	Ph (09) 580 0005	Fax (09) 579 9963
Wellington	Ph (04) 568 5949	Fax (04) 568 6376

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