

# ARDEX K 220

## **Professional Commercial Floor Levelling and Smoothing Compound**

Quick drying, walkable after 2-3 hours

Easy to install – 2mm to 20mm in one application

Suitable for residential and commercial applications

Very low odour – ideal for enclosed environments

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### Levelling and Smoothing Compound

#### DESCRIPTION

ARDEX K 220 is a levelling and smoothing compound designed to level and smooth internal sub-floors prior to applying floor finishes.

#### **SUBSTRATES**

New and existing concrete, ARDEX A38, ARDEX A48, ARDEX K900BF.

Substrates with special requirements (Contact Ardex Technical Services or view relevant Technical Bulletin online) - Moisture vulnerable concrete, terrazzo, concrete subfloors with electric under floor heating, lightweight autoclave concrete.

#### SURFACE PREPARATION

Concrete floors must be solid, clean and free of wax, grease, asphalt, latex compounds, curing and sealing compounds and any other surface contaminant. Mechanically clean 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.

#### 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 bristle 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 220.

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

ARDEX floor levelling products react and harden quickly when mixed with water. Thorough mixing in the shortest possible time is essential to ensure a lump free mortar. Always mix the powder into the water. The most efficient method of mixing is by using an ARDEX mixing paddle and a heavy duty electric drill (650rpm). Normal mixing time of a 20kg bag is 2 to 3 minutes. Concrete mixers and hand mixing are not suitable methods of mixing. To 4.5 litres of water, add the ARDEX K 220 (20kg) whilst mixing thoroughly.

#### MANUAL INSTALLATION

Pour the mixed ARDEX K 220 onto the prepared subfloor and spread in place using the ARDEX stand-up spreader or ARDEX hand trowel. Use the ARDEX gauging tool with height adjustment to obtain an even thickness. Use the ARDEX smoother for smoothing, featheredging and touch up. Do not rework the ARDEX K 220 after 10 minutes. Wear football boots with rubber or nylon studs to avoid leaving marks in the liquid ARDEX K 220.

If required, additional layers of ARDEX K 220 can be applied once the previous layer has hardened sufficiently. Prime between layers.

#### **PUMPING INSTALLATION**

For ease and efficiency of application, ARDEX K 220 can be pumped with an ARDEX approved pump.

#### SPECIFIC APPLICATIONS

ARDEX K 220 is not designed as a suitable wear surface. ARDEX K 220 can be used over heated subfloors. For this application, use in conjunction with ARDEX E 25 resilient emulsion. Reduce the mixing water to 3.5 litres and add 1.6 litres of ARDEX E 25. Contact ARDEX Technical Services for detailed information on these types of applications. For areas subject to heavy traffic and heavy loads, such as supermarkets, extended times must be allowed before the floor is subjected to highly loaded trolleys.

#### THICKNESS

ARDEX K 220 can be applied from 2 – 20mm in one application without aggregate. For areas over 20mm to a maximum of 30mm, ARDEX K 220 must be mixed with a well washed and dried 2 – 5mm aggregate. Mix ARDEX K 220 with water first then add the aggregate.

#### **DRYING-HARDENING**

Drying time is dependent on jobsite temperature, humidity, installation thickness and floor covering type. (Based on 23°C and 50% RH.)

Walkable from 2-3 hours. Suitable for tiling once walkable.

Conventionally laid carpet, floating floors and direct stick applications such as vinyl flooring after 24 hours.

ARDEX K 220 can also be used under direct stick timber flooring at a minimum of 3mm with an approximate drying time of 72 hours

#### COVERAGE

Approximately 1.7kg powder/mm/m<sup>2</sup>. A 20kg bag will at 3mm thickness

#### **MIXING RATIO**

4.5L water/20kg powder will cover approximately 4m<sup>2</sup>

#### **TECHNICAL DATA**

Bulk Density of powder	1.2kg/L
Weight of fresh mortar	2.0kg/L
<b>Compressive Strength</b>	
After 1 day	17MPa
After 7 days	25MPa
After 28 days	30MPa
Tensile Bending Strength	
After 1 day	4MPa
After 7 days	8MPa
After 28 days	10MPa

#### PACKAGING

20kg bag

#### STORAGE

ARDEX K 220 has a shelf life of 12 months if stored in dry conditions in unopened packaging.

#### **HEALTH AND SAFETY**

ARDEX K 220 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 effected 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. Safety Data Sheets are available on request.

#### **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 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".

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