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PRODUCT DATA SHEET

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# ARDEX K 301

## Fast Setting Resurfacing and Levelling Compound for Concrete

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### Features

- Suitable for internal and external applications onto concrete and cement/sand screeds
- For smoothing and resurfacing paths, drives, parking areas, courtyards, etc.
- Cost effective solution for smoothing rough or impact damaged concrete
- Fast setting - walkable after 2-3 hours
- Rapid hardening - can withstand light vehicular traffic after 48 hours
- Easy to mix and apply – pumpable
- Apply from 2mm to 20mm thick in a single application
- Ideal for levelling floors prior to the application of an ARDEX DPM
- Can be painted or used with suitable resin coatings



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# ARDEX K 301

## Fast Setting Resurfacing and Levelling Compound for Concrete

### DESCRIPTION

ARDEX K301 is a Fast Setting Resurfacing and Levelling Compound for Concrete. ARDEX K301 is a grey powder consisting of special cements, graded aggregates and high quality synthetic resins. When mixed with water, a fluid mortar is produced which sets after approximately 1 hour and can normally be walked on after 2-3 hours at 20°C. ARDEX K301 can be applied from 2mm to 20mm in a single application. The set and hardened ARDEX K301 is usually ready to receive light rubber wheeled traffic after 48 hours at 20°C.

### USE

ARDEX K301 will smooth and level concrete surfaces such as balconies, patios, domestic driveways, garages, walkways and other concrete surfaces exposed to normal foot and rubber wheeled traffic. ARDEX K301 can also be used for filling holes and resurfacing damaged floors, such as concrete or cement/sand screeds, as well as pre-smoothing concrete floors prior to the application of a suitable damp proof membrane, such as ARDEX DPM 1 C/1 CR.

**NOTE:** ARDEX K301 is not recommended for heavy duty industrial floors, public highways or traffic with solid or metal wheels. ARDEX K301 is suitable for permanently wet areas and may be used in swimming pools where it can be tiled onto directly. ARDEX K301 is not recommended for areas of intensive abrasive use in wet areas. Do not apply ARDEX K301 over asphalt or tarmac surfaces. The hardened ARDEX K301 should be protected from spillages and materials which damage concrete surfaces. If required, the dried ARDEX K301 can be painted.

### SURFACE PREPARATION/PRIMING

All concrete surfaces should be mature i.e. at least 6 weeks old. The concrete surface must be hard, sound, thoroughly cleaned, free of all oil, grease, curing compounds and other barriers to adhesion. The substrate can be dry or moist.

Use ARDEX DGR degreaser to remove oil, grease or similar contaminants and rinse well prior to mechanical preparation. All surfaces must be prepared as necessary to ensure good adhesion. The prepared surface must have the appearance of clean sound concrete with some exposed aggregate in the surface. There must be no traces of any dirt, previous treatments or surface contamination.

Sufficient and thorough mechanical preparation is essential for commercial areas, especially those intended for exposure to regular or intensive rubber wheeled traffic, or heavy loading. Vacuum clean the prepared surface to remove all dust and debris, and ideally wash the surface using high pressure water jet equipment. All cracks in new and old concrete can be repaired to inhibit cracking in the ARDEX K301 with ARDEX EP 2000 (refer to the ARDEX EP 2000 datasheet).

Any structural or live joints, or cracks in the substrate must be carried through the ARDEX K301 to the surface. Internal concrete and absorbent surfaces should be primed with ARDEX P51 primer diluted 1:7 with clean water, and applied with a brush or broom.

Any puddles or surface water should be removed with a broom so that excess water is not incorporated in the mortar during application.

External areas, and those exposed to damp, should be primed with ARDEX P4 ready mixed, rapid drying multi-purpose primer, roller applied directly from the bucket and allowed to dry.

In all areas subjected to regular rubber wheeled traffic or heavy loading, and on dense surfaces, ARDEX R3 E Solvent Free Epoxy Primer should be used to prime, sand blinding the surface with ARDEX Fine Aggregate while still wet. The surface should be allowed to cure and excess sand removed before applying ARDEX K301.

### MIXING

In a clean mixing container add the powder to the required amount of clean water whilst stirring thoroughly until a lump free mortar is produced. The mix proportions by volume are approximately:- 5 parts ARDEX K301 powder to 1 part clean water.

A 25kg bag requires 5¼ litres of water.

If gradient levelling has to be carried out, the water content must be reduced. To pump the mortar, use continuous pumps with a capacity of 20-40 litres of mortar per minute.

Do not use excess water as this will reduce the strength of the set and hardened mortar.

The use of an ARDEX mixing paddle with a 10mm chuck slow speed (600 - 1000 r.p.m.) electric drill makes light work of mixing.

ARDEX K301 mortar should be applied within 30 minutes at 20°C. This time is extended at lower and reduced at higher temperatures.

### APPLICATION

Pour the mixed ARDEX K301 onto the prepared and primed substrate. The mixed mortar will flow out and self-smooth during the first 10 minutes of its 30 minute working time. Spread the mortar using a steel trowel or float. For larger areas its recommended to use a gauging tool with thickness height adjustment to spread the mortar. A long handled ARDEX smoothing trowel can be used to simplify the finishing operation.

The applied ARDEX K301 surface can be left with a trowelled finish. Alternatively, to create a more non-slip finish, the water content should be reduced and then 'broom finished' once the initial set has occurred (approximately 40 minutes under normal conditions). Once set, The freshly applied ARDEX K301 should be protected from adverse climatic conditions e.g. rapid drying rain, frost, etc., until hardened. Apply at temperatures above 5°C.

If a second layer of ARDEX K301 is required, this should be applied after the first layer has fully hardened. The first layer should be machine sanded (paper 16 to 36), cleaned and primed with ARDEX P51 primer diluted 1:1 with water for dry indoor use, and diluted 1:7 with water for external use or damp interior areas. The dilution rate of 1:7 should not be exceeded for external applications

### THICKNESS

ARDEX K301 can be applied neat from 2mm to 20mm thick.

**NOTE:** The thickness of combined layers should not exceed 20mm.

### COVERAGE

Approximately 1.6kg ARDEX K301 powder/m<sup>2</sup>/mm, i.e. approximately 3.0m<sup>2</sup> at 5mm thickness per 25kg bag.

### PACKAGING

ARDEX K301 is packed in paper sacks incorporating a polyethylene liner - net weight 25kg.

### STORAGE AND SHELF LIFE

ARDEX K301 contains a reducing agent to control the level of Chromium VI when mixed prior to use.

ARDEX K301 must be stored in unopened packaging, clear of the ground in cool dry conditions and protected from excessive draught. If stored correctly, as detailed above, and used within 12 months of the date shown on the packaging, the activity of the reducing agent (added to control the level of soluble Chromium VI) will be maintained and this product will contain, when mixed with water, no more than 0.0002% (2ppm) soluble Chromium VI of the total dry weight of the cement content of this product. ARDEX K301 must not be used after the end of the declared storage period.

### PRECAUTIONS

ARDEX K301 contains more than 20% Portland cement and, therefore, in line with current legislation, is classified as irritating to eyes and skin. For this reason the following precautions should be observed:-

- Avoid contact with skin and eyes
- In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice
- Wear suitable gloves and keep the product out of the reach of children.
- Avoid generation of airborne dust during mixing.

For further information consult the relevant health and safety data sheet.

### TECHNICAL DATA

Bulk density of powder approx. 1.37kg/litre  
Weight of fresh mortar approx. 1.94kg/litre  
Initial Set (Vicat) approx. 40 minutes  
Final Set (Vicat) approx. 2 hours

### Compressive Strength

After 7 days 20.0 N/mm<sup>2</sup>  
After 28 days 28.0 N/mm<sup>2</sup>

### Tensile Bending Strength

After 28 days 6.5 N/mm<sup>2</sup>

### Overcoat time for industrial coatings

#### Thickness of ARDEX K301 Time

Up to 5mm 2 days  
Up to 10mm 5 days  
Up to 20mm 7 days

**NOTE:** The information supplied in our literature or given by our employees is based upon extensive experience and, together with that supplied by our agents or distributors, is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however, as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

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

### TECHNICAL ADVICE HELPLINE:

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ARDEX online: [www.ardex.co.uk](http://www.ardex.co.uk)