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PRODUCT DATA SHEET

# ARDEX K 11

## Rapid Hardening Levelling and Smoothing Compound

### Features

- Rapid hardening - walkable in 2<sup>1</sup>/<sub>2</sub> hours regardless of thickness
- Free flowing mortar 1.5mm – 10mm
- Receives floorcoverings the next day
- Suitable for floors with underfloor heating
- Excellent surface finish even in thinner layers
- Suitable for use over traces of adhesive residues
- Ideal for use with all ARDEX flooring adhesives
- Can be applied by trowel or pump
- Low odour and high yield



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# ARDEX K 11

## Rapid Hardening Levelling and Smoothing Compound

### DESCRIPTION

ARDEX K 11 is a free flowing rapid hardening levelling and smoothing compound designed for levelling and smoothing a wide range of sub-floor types including cement/sand screeds, gypsum screeds and concrete.

The mixed mortar can be applied up to a maximum thickness of 10mm a single application but will retain its free-flowing properties at thicknesses of only 2mm to provide excellent coverage and material economy.

### USE

ARDEX K 11 will level and smooth in a single application uneven internal sub-floors prior to the installation of floorcoverings.

ARDEX K 11 dries to a virtually tension-free layer and can receive floorcoverings such as vinyl, linoleum, carpet, etc., after 16 hours under good conditions at 20°C, when applied up to 3mm thick.

### SURFACE PREPARATION

The surface must be hard, sound and free of dust, dirt and other barrier materials such as grease, paint, adhesive residues or loosely adhered materials, etc. In all cases where traces of adhesive residues are present these must be sound, well adhered and unaffected by water.

**NOTE:** For internal use only.

Direct to earth sub-floors must have an effective damp proof membrane. If the DPM is absent or damaged or the substrate is damp, please consult the ARDEX DPM 1 C datasheet or contact the ARDEX Technical Services Department for further information.

### PRIMING

#### **ALL SURFACES MUST BE PRIMED.**

It is necessary to thoroughly prime concrete, cement/sand screeds and gypsum sub-floors with ARDEX P 51 Primer and Bonding Agent. As a pore sealer ARDEX P 51 will maintain the flow life and prevent air bubbles rising through the applied ARDEX K 11 mortar.

ARDEX P 82 Primer and ARDEX P 4 Primer are both recommended for use on very smooth, dense and non-absorbent sub-floors. e.g. ARDEX DPM's and smooth powerfloated concrete. Use ARDEX DGR degreaser to remove polish, wax, grease, oil and similar contaminating substances prior to use.

It is necessary to use all ARDEX Primers strictly in accordance with the relevant product data sheet, to ensure adequate adhesion of the subsequently applied ARDEX K 11.

### MIXING

Add the powder to the required amount of clean water in a clean mixing container whilst stirring thoroughly until a lump free mortar is produced.

Mixing proportions by volume are approximately:- 3½ parts ARDEX K 11 powder to 1 part clean water. Use 4.5 litres of water per 22kg bag. The use of an ARDEX mixing paddle with a 10mm chuck, variable speed electric drill makes light work of mixing.

### APPLICATION

Pour the mixed ARDEX K 11 mortar onto the prepared sub-floor and use a steel finishing trowel or float to spread the mortar and finish off. The mixed mortar will flow out and self-smooth within the first 15 minutes of its 30 minute working time.

Apply at temperatures above 5°C. It is important to protect the freshly applied material from direct sunlight or through draughts as this may cause premature drying of the material which will adversely affect the ARDEX K 11.

ARDEX K 11 can be applied by pump up to a thickness of 10mm. Consult the ARDEX Technical Service Department for further information.

**NOTE:** Do not use ARDEX K 11 on asphalt sub-floors - consult the ARDITEX NA or ARDEX FA 20 data sheet for advice.

### APPLICATIONS OVER UNDERFLOOR HEATING

The cementitious levelling compound should have been laid in accordance with BS 8204 Part 1. The underfloor heating system should have been commissioned in accordance with the manufacturer's instruction manual and in accordance with BS 8204 Part 1.

Once thermally cycled and commissioned the underfloor heating system should be turned down to 15° degrees centigrade before the installation of the ARDEX K 11, smoothing compound and final floor covering.

The underfloor heating system should then be gradually recommissioned to avoid rapid thermal shock and temperature variation.

### THICKNESS

ARDEX K 11 can be applied from 1.5mm up to a maximum of 10mm in a single application. To utilise its free-flowing properties the minimum application thickness should be greater than 2mm.

A minimum thickness of 3mm should be used on a non-absorbent sub-floor where an absorbent layer is required by the flooring adhesive.

**NOTE:** ARDEX K 11 is not designed for thick applications. Where the required application thickness exceeds 10mm consult the ARDEX K 15-HB datasheet or contact the ARDEX Technical Service Department.

### DRYING AND HARDENING

A 3mm layer of ARDEX K 11 is walkable after 2½ hours will be sufficiently dry after 16 hours under good conditions, at 20°C, to receive floorcoverings. This time is extended at lower and reduced at higher temperatures.

A 5mm layer of ARDEX K 11 is also walkable after 2½ hours and ready to receive floorcoverings after 24 hours under similar conditions.

For thicknesses between 5 and 10mm, the product will be walkable in 2½ hours, but allow 48 hours to dry, before applying the final floorcovering. Where the installation of the floorcovering will be delayed for longer than 48 hours, the surface should be covered to provide temporary protection against surface damage and contamination.

Should the applied ARDEX K 11 require any subsequent levelling or smoothing work allow the ARDEX K 11 to completely dry, typically 24 hours for up to 5mm application thickness, prior to priming with ARDEX P 51 primer diluted 1:3 with water. Once the ARDEX P 51 primer has dried to a clear thin film the surface may be smoothed using ARDEX K 11 up to 5mm.

### COVERAGE

ARDEX K 11 will cover approximately 7m<sup>2</sup> at 2mm thick.

### PACKAGING

ARDEX K 11 is packed in paper sacks incorporating a polyethylene liner - net weight 22kg.

### PRECAUTIONS

ARDEX K 11 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.

ARDEX K 11 - Cementitious Screed Material for use Internally in Buildings EN 13813: CT-C30-F7.

### STORAGE AND SHELF LIFE

12 months of the date shown on the packaging.

ARDEX K 11 contains a reducing agent to control the level of Chromium VI when mixed prior to use. ARDEX K 11 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 K 11 must not be used after the end of the declared storage period.

### TECHNICAL DATA

Bulk density of powder approx.	1.2kg/litre
Weight of fresh mortar approx.	1.9kg/litre
Working time at 20°C approx.	30 minutes

### Compressive Strength

After 1 day	7.0 N/mm <sup>2</sup>
After 7 days	27.0 N/mm <sup>2</sup>
After 28 days	30.0 N/mm <sup>2</sup>

### Tensile Bending Strength

After 1 day	2.0 N/mm <sup>2</sup>
After 7 days	5.0 N/mm <sup>2</sup>
After 28 days	8.0 N/mm <sup>2</sup>

**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**  
**01440 714939**

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