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PRODUCT DATA SHEET

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# ARDEX K 13

## Thin Flowing Sub-Floor Smoothing and Levelling Compound

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### Features

Apply feather edge to 5mm - free flowing mortar 1.5mm and above

Rapid hardening - walkable in 2 hours

Rapid drying - receives finishes within 24 hours

Strong bond - priming rarely required

Extended workability

Suitable for floors with underfloor heating

Can be applied by trowel or pump

Ideal for use with ARDEX floorcovering adhesives



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# ARDEX K 13

## Thin Flowing Sub-Floor Smoothing and Levelling Compound

### DESCRIPTION

ARDEX K 13 is specially designed to produce a smooth, flat surface when applied to hard, rigid sub-floors such as cement and sand screeds, concrete, etc., in a thin layer with priming rarely being required.

ARDEX K 13 contains high quality synthetic resins, special cements and selected fillers so that, when mixed with water, a fluid easily trowelled mortar with free-flowing properties is produced. The mixed mortar can be applied up to a maximum thickness of 5mm in one application but will still retain its free-flowing property at a thickness of only 1.5mm to provide good coverage and material economy. The applied ARDEX K 13 dries to a virtually tension-free layer and can receive floorcoverings such as vinyl, linoleum, carpet, etc., within 24 hours at 20°C.

Although priming is often not necessary, it may be necessary to prime very absorbent sub-floors with ARDEX P 51 primer as a pore sealer to maintain the flow life and prevent air bubbles rising through the applied ARDEX K 13 mortar. **NOTE:** All Gypsum based sub-floors must be primed with ARDEX P 51 primer, diluted 1:3 with water prior to applying ARDEX K 13.

With very smooth, dense and non-absorbent sub-floors it may be necessary to use ARDEX P 82 primer to ensure adequate adhesion of the subsequently applied ARDEX K 13. See Priming and Preparation leaflet for guidance. ARDEX K 13 can be applied by pump up to a thickness of 5mm and the long handled ARDEX smoothing trowel is an effective tool for spreading and smoothing the applied mortar.

### USE

ARDEX K 13 will level and smooth in a single application uneven internal sub-floors such as concrete, cement/sand screed, quarry tiles, etc., up to a maximum thickness of 5mm, prior to the installation of floorcoverings.

### SURFACE PREPARATION

**NOTE:** Not suitable for asphalt sub-floors.  
For internal use only.  
Direct to ground sub-floors must be protected from rising damp.

The surface must be hard, sound and free of dust, dirt and other barrier materials such as grease, paint, water-softenable adhesive residues or loosely adhered materials, etc.

Where hard, firmly adhered adhesive residues are present they should be of sufficient cohesive strength to support the applied smoothing compound, a trial application is recommended to assess suitability. Do not apply ARDEX K 13 over old residues that are softened by water.

**NOTE:** A minimum 3mm smoothing layer of ARDEX K 13 will be required if the new flooring adhesive is not compatible with the old adhesive residues. Use ARDEX DGR degreaser to remove polish, wax, grease, oil and similar contaminating substances.

### MIXING

To the required amount of clean water in a clean mixing container add the powder whilst stirring thoroughly until a lump free mortar is produced. Mixing proportions by volume are approximately:-  
3½ parts ARDEX K 13 powder into  
1 part clean water.  
Approximately 6 litres of water per 25kg 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 13 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 30 minutes of its 45 minutes working time. A 5mm layer of ARDEX K 13 will be walkable after approximately 2 hours at 20°C, this time is extended at lower and reduced at higher temperatures. This time is also reduced where thinner applications are applied to absorbent sub-floors. Apply at temperatures above 5°C.

### THICKNESS

ARDEX K 13 can be applied from a feather edge up to a maximum of 5mm in a single application. To utilise its free-flowing properties the minimum application thickness should be greater than 1.5mm. This minimum thickness should also be used on non-absorbent sub-floors where an absorbent layer is required by the floorcovering adhesive.

### DRYING AND HARDENING

A 5mm layer of ARDEX K 13 is walkable after 2 hours and ready to receive floorcoverings within 24 hours at 20°C.

Where the applied mortar is subjected to rapid drying conditions or where the installation of the floorcovering is delayed for longer than 48 hours, the surface should be covered to provide temporary protection against surface damage and contamination.

### COVERAGE

Approximately 1.7kg ARDEX K 13 powder/m<sup>2</sup>/mm, e.g. one 25kg bag will cover approximately 9.8m<sup>2</sup> at 1.5mm thickness.

### PACKAGING

ARDEX K 13 is packed in paper sacks incorporating a polyethylene liner - net weight 25kg.

### STORAGE AND SHELF LIFE

ARDEX K 13 contains a reducing agent to control the level of Chromium VI when mixed prior to use.

ARDEX K 13 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 K13 must not be used after the end of the declared storage period.

### PRECAUTIONS

ARDEX K 13 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.	1.2kg/litre
Weight of fresh mortar	approx.	2.1kg/litre
Working time at 20°C	approx.	45 minutes
Flow life at 20°C	approx.	30 minutes
Initial Set (Vicat)	approx.	45 minutes
Final Set (Vicat)	approx.	1 hour

### Compressive Strength

After 1 day	8.0 N/mm <sup>2</sup>
After 3 days	10.0 N/mm <sup>2</sup>
After 7 days	12.0 N/mm <sup>2</sup>
After 28 days	16.0 N/mm <sup>2</sup>

### Tensile Bending Strength

After 1 day	3.0 N/mm <sup>2</sup>
After 3 days	4.0 N/mm <sup>2</sup>
After 7 days	5.0 N/mm <sup>2</sup>
After 28 days	6.0 N/mm <sup>2</sup>

### Ball Pressure Hardness (Brinell)

After 1 day	25.0 N/mm <sup>2</sup>
After 3 days	35.0 N/mm <sup>2</sup>
After 7 days	45.0 N/mm <sup>2</sup>
After 28 days	55.0 N/mm <sup>2</sup>

Suitable for  
underfloor heating      Yes

**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.