



CI/SfB

(43) Yq2

APRIL 2010  
PRODUCT DATA SHEET

# ARDEX K 15 NEW

## Rapid Drying Self-Levelling Sub-Floor Smoothing Compound

### Features

- New formula resulting in improved yield and superior flow and levelling characteristics
- Rapid hardening - walk on after 2 hours
- Receives floorcoverings the next day, regardless of thickness
- Apply from feather edge up to 35mm thick
- Can be applied by trowel or pump
- Strong - high compressive strength
- Suitable for floors with underfloor heating
- Ideal for use with ARDEX flooring adhesives

### RAPIDRY



Binds the mix water within the mortar, speeding drying and hardening times irrespective of application thickness



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# ARDEX K 15 NEW

## Rapid Drying Self-Levelling Sub-Floor Smoothing Compound

### DESCRIPTION

ARDEX K 15 NEW is an advanced sub-floor smoothing compound. It is virtually tension free and is designed to rapidly level and smooth hard sub-floors prior to applying most types of floor finishes.

ARDEX K 15 NEW is a grey powder consisting of special cements and high quality synthetic resins. When mixed with water, a fluid, self-levelling mortar is produced which can be applied from a feather edge up to the required thickness in one operation. For thicknesses greater than 10mm, incorporate ARDEX Coarse Aggregate in the mixed mortar.

### USE

ARDEX K 15 NEW is especially useful where the installation time of the floor finish must be kept to a minimum. ARDEX K 15 NEW will level and smooth, internal sub-floors of concrete, cement/sand screeds, quarry tiles, etc., in a single application prior to the installation of floorcoverings. Applications include smoothing tamped, uneven, damaged or rained-on in-situ concrete sub-floors, adjusting tolerances or camber problems between floors, slabs or pre-cast concrete as well as smoothing old sub-floors and screeds in renovation projects.

Used in conjunction with the ARDEX Primer range, ARDEX K 15 NEW can be applied to old sub-floors, e.g. floor screeds and other hard and rigid bases. ARDEX K 15 NEW can normally be walked on after approximately 2 hours at 20°C and dries and hardens rapidly so that even thick applications are ready to receive floorcoverings the next day, (normally after 16 hours) at 20°C.

### SUBSTRATE PREPARATION

The surface must be hard, sound and free of dust, dirt and other barrier materials such as paint, lime coatings, plaster and adhesive residues etc. Use ARDEX DGR Degreaser to remove polish, wax, grease, oil and similar contaminating substances. Laitance should be mechanically removed from concrete surfaces. Direct to earth sub-floors must have an effective damp proof membrane. If the DPM is absent or damaged, or the substrate is damp, consult the ARDEX DPM, ARDEX DPM 1C or ARDEX DPM 1CR Data Sheets, or contact our Technical Services Department for further information.

### ALL SURFACES MUST BE PRIMED.

ARDEX P 51 Primer should be used on porous or rough surfaces, e.g. cement and sand screeds, scabbled concrete etc. See Priming and Preparation Leaflet for correct dilution rates. Where porous and absorbent sub-floors, e.g. cement and sand screeds, have traces of sound adhesive residues use ARDEX P 51 Primer diluted with an equal volume of water. Alternatively use ARDEX P 4 ready mixed primer.

ARDEX P 82 Primer and ARDEX P 4 Primer are both recommended for use on smooth, non-absorbent sub-floors, when ARDEX K 15 NEW is applied up to a depth of 10mm in thickness e.g. power floated concrete, smooth pre-cast concrete and sound terrazzo, ceramic or quarry tile flooring. ARDEX P 82 Primer should also be used on impervious sub-floors which have traces of sound adhesive residues. On porous sub-floors with traces of adhesive residues, use ARDEX P 51 Primer mixed 1:1 with water. Use ARDEX P 82 Primer on top of ARDEX DPM for applications up to 6mm in thickness.

In all cases where traces of adhesive residues are present these must be sound, well adhered and unaffected by water.

ARDEX R 3 E Primer blinded with ARDEX Fine Aggregate is recommended for smooth non absorbent sub-floors such as ceramic tiles when using ARDEX K 15 NEW for applications over 10mm thick. Consult the priming and preparation leaflet for further information.

### MIXING

Use 5<sup>1</sup>/<sub>4</sub> - 5<sup>1</sup>/<sub>2</sub> litres of water per 22kg bag. 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. The mixing proportions by volume are approximately: 3<sup>1</sup>/<sub>2</sub> parts ARDEX K 15 NEW powder into 1 part clean water. Use the minimum amount of water for thick applications or cold conditions.

The use of an ARDEX mixing paddle with a 10mm chuck slow speed (600 - 1,000 r.p.m.) electric drill makes light work of mixing. Mixed ARDEX K 15 NEW should be applied within 30 minutes at 20°C. This time is extended at lower temperatures and reduced at higher temperatures.

### APPLICATION

Pour the mixed ARDEX K 15 NEW onto the prepared sub-floor. The mixed mortar will flow out and self-level above 1.5mm during the first 15 minutes of its 30 minutes working time. Use a suitable steel trowel to obtain the required thickness; a long handled ARDEX gauging tool with height adjustment for thickness will simplify this operation. A long handled ARDEX smoothing trowel or spiked roller can be used for finishing off. A steel finishing float can be used for feather edging and touch up work. (See the ARDEX tool catalogue for details). Apply at temperatures above 5°C.

**NOTE:** It is recommended that the floorcovering is applied within 48 hours to avoid contamination of the floor, if not, the surface should be covered until the floorcovering is laid.

### THICKNESS

ARDEX K 15 NEW should be applied at thicknesses greater than 1.5mm to benefit from its self-levelling properties. **NOTE:** Non-absorbent sub-floors, e.g. surface damp proof membranes, must be levelled with at least 1.5mm of the smoothing compound.

When applying ARDEX K 15 NEW at thicknesses of over 10mm, incorporate up to an equal volume of 3mm ARDEX Coarse Aggregate. For thicknesses exceeding 20mm up to 35mm, up to an equal volume of 3-8mm clean, dry, fines free, graded gravel may be used.

Mix the ARDEX K 15 NEW as above and add the aggregate without further addition of water.

**For thicknesses greater than 7mm it may be more convenient to use ARDEX K15-HB which has aggregate incorporated. A smoothing layer of ARDEX K15 NEW may be required on top of the ARDEX K15-HB prior to applying the floorcovering depending upon the finish achieved and the floorcovering being installed.**

### SPECIFIC APPLICATIONS

When applying ARDEX K 15 NEW either over flooring grade asphalt, or over sub-floors with traces of sound, hard, non-water softenable adhesive residues, ARDEX E 25 Mortar Admix must be incorporated in the ARDEX K 15 NEW. Consult our Technical Services Department for advice on dilution and incorporation of the ARDEX E 25 Mortar Admix. When applying over traces of non-water softenable adhesive residues, do not exceed 5mm application thickness.

**NOTE:** For levelling timber and asphalt please consult the ARDEX FA 20 MICROTREC Fibre Reinforced, Rapid Drying, Floor Levelling and Smoothing Compound Data Sheet.

Where large sub-floors require levelling with ARDEX K 15 NEW, it may be advantageous to use a pump to mix and then place the ARDEX K 15 NEW mortar. Consult our Technical Services Department for advice on this type of application.

### COVERAGE

Approximately 1.4kg of ARDEX K 15 NEW per m<sup>2</sup> per mm thick. e.g. One 22kg bag will give enough material to cover approx 5.25m<sup>2</sup> at 3mm thick.

**NOTE:** The coverage figure is based on a flat level surface. Additional material should be allowed for where the surface is rough or uneven.

### PACKAGING

ARDEX K 15 NEW is packed in paper sacks incorporating a polyethylene liner - net weight 22kg.

### PRECAUTIONS

ARDEX K 15 NEW is considered non-hazardous in normal usage. The presence of cement in the product gives an alkaline mortar which may cause some local irritation if prolonged contact with the skin takes place. Care should be taken to avoid inhalation or ingestion of dust and prevent contact with the eyes.

For further information, consult the relevant Safety data sheet.

### TYPICAL TECHNICAL DATA

|                        |                     |
|------------------------|---------------------|
| Bulk density of powder | approx. 1.1kg/litre |
| Weight of fresh mortar | approx. 1.8kg/litre |
| Working time at 20°C   | approx. 30 minutes  |
| Flow life at 20°C      | approx. 15 minutes  |
| Initial Set (Vicat)    | approx. 30 minutes  |
| Final Set (Vicat)      | approx. 2 hours     |

### Compressive Strength (EN196)

|               |                      |
|---------------|----------------------|
| After 1 day   | 19 N/mm <sup>2</sup> |
| After 3 days  | 22 N/mm <sup>2</sup> |
| After 7 days  | 28 N/mm <sup>2</sup> |
| After 28 days | 35 N/mm <sup>2</sup> |

### Tensile Bending Strength (EN196)

|               |                       |
|---------------|-----------------------|
| After 1 day   | 4.5 N/mm <sup>2</sup> |
| After 3 days  | 5.8 N/mm <sup>2</sup> |
| After 7 days  | 6.0 N/mm <sup>2</sup> |
| After 28 days | 9.0 N/mm <sup>2</sup> |

Suitable for underfloor heating Yes

### STORAGE AND SHELF LIFE

ARDEX K 15 NEW must be stored in unopened packaging, clear of the ground, in cool dry conditions and be protected from excessive draught. If stored correctly, as detailed above, the shelf life of this product is 12 months from the date shown on the packaging.

**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**