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PRODUCT DATA SHEET

# ARDEX K 15-HB

## High Build, Rapid Drying Sub-Floor Smoothing Compound

### Features

- Apply from 5mm to 35mm in one operation
- Rapid hardening - walkable in approximately 2 hours, even with thick applications
- Rapid drying - dry within 24 hours, even with thick applications
- Ceramic floor tiles can be fixed after 4 hours
- Can be hand mixed or pump applied
- Strong - high compressive strength

### RAPIDRY



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



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# ARDEX K 15-HB

## High Build, Rapid Drying Sub-Floor Smoothing Compound

### DESCRIPTION

ARDEX K15-HB is an advanced and versatile high build levelling compound designed for applications from 5mm up to a maximum of 35mm. It is virtually tension free and is designed to rapidly level uneven, hard sub-floors. Used in conjunction with either ARDEX P 82, ARDEX P 51 or ARDEX P 4 primers, ARDEX K15-HB can be applied to old sub-floors, e.g. concrete and other hard and rigid bases. ARDEX K15-HB is a grey powder consisting of special cements, graded aggregates and high quality synthetic resins. When mixed with water, a fluid, pumpable mortar is produced which can be applied to the required thickness in one operation. For thicknesses greater than 20mm it is possible to incorporate larger aggregate in the mixed mortar, thus giving significant cost savings for greater application thicknesses.

When applied at 20°C ARDEX K15-HB can normally be walked on after approximately 2 hours. The applied product dries and hardens rapidly so that even thick applications are ready to receive resilient floor finishes such as PVC within 24 hours. Ceramic floor tiles can be installed on top of ARDEX K15-HB as soon as the surface of the ARDEX K15-HB has attained sufficient strength and hardness, typically 4 hours after application at 20°C.

### USE

ARDEX K15-HB will level internal sub-floors of concrete, cement/sand, etc.

Applications include levelling 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 pre-levelling old sub-floors and screeds in renovation projects. ARDEX K15-HB is especially useful where the installation time of the floor finish must be kept to a minimum.

### 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 to remove polish, wax, grease, oil and similar contaminating substances. Laitance must be removed from concrete surfaces. Direct to earth sub-floors must have an effective damp proof membrane. If the sub-floor has a missing or ineffective DPM, consult the ARDEX DPM or ARDEX DPM 1 C datasheet for advice or contact our Technical Services Department for further information.

### ALL SURFACES MUST BE PRIMED.

ARDEX P 82 or ARDEX P 4 primer is recommended for use on smooth, non-absorbent sub-floors, e.g. power floated concrete, smooth pre-cast concrete. 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. Do not use ARDEX K15-HB on top of asphalt, consult the ARDITEX NA or ARDEX FA 20 data sheets.

### MIXING AND PLACING

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. The mixing proportions are: 4 to 4 1/4 litres of water per 25kg bag. Use the minimum amount of water for thick applications or cold conditions.

Apply at temperatures above 5°C. 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. Mixed ARDEX K15-HB should be applied within 30 minutes at 20°C. This time is extended at lower and reduced at higher temperatures.

**NOTE:** ARDEX K15-HB may be pumped using suitable floor screed mixer pump units. For advice on pumping, including suitable equipment and techniques, please contact our Technical Services Department.

### APPLICATION

Pump or pour the mixed ARDEX K15-HB onto the prepared sub-floor. The mixed mortar will flow and be workable for the first 15 minutes of its 30 minute working time. Use a suitable spreader 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 can be used for finishing off.

See the ARDEX tool catalogue for details.

**NOTE:** Depending upon the thickness of application, the addition of aggregate, finish achieved and intended use, a final smoothing layer may be required e.g. for the application of thin, resilient floorcoverings onto thin layers of ARDEX K15-HB or where extra aggregate has been incorporated. This is unlikely to be necessary where coverings such as carpet, ceramic and natural stone tiles, wood blocks etc are being installed. Prior to applying the smoothing layer of ARDEX K 15 NEW, the surface of the ARDEX K15-HB should be treated as a porous and absorbent sub-floor.

### THICKNESS

ARDEX K15-HB should be applied at thicknesses greater than 7mm to benefit from its levelling properties. Where surface finish is not critical, for example when used as a base mix or below tiling, ARDEX K15-HB may be applied down to a minimum of 5mm in thickness. When applying ARDEX K15-HB at thicknesses of over 20mm, aggregate may be incorporated. When applying ARDEX K15-HB to dense, impervious surfaces e.g. quarry tiles, primed with ARDEX P 82 or ARDEX P 4 primer, the thickness should not exceed 10mm in depth. Contact the ARDEX Technical Services Department for further information.

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

### COVERAGE

Approximately 1.8kg ARDEX K15-HB powder/m<sup>2</sup>/mm. e.g. one bag will cover approximately 2.7m<sup>2</sup> at 5mm thickness.

**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 K15-HB is packed in paper sacks incorporating a polyethylene liner - net weight 25kg.

### STORAGE AND SHELF LIFE

ARDEX K15-HB 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.

### PRECAUTIONS

ARDEX K15-HB 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 health and safety data sheet.

### TYPICAL TECHNICAL DATA

Weight of fresh mortar	approx.	2.13kg/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 (DIN 1164)

After 1 day	19.0 N/mm <sup>2</sup>
After 7 days	27.0 N/mm <sup>2</sup>
After 28 days	35.0 N/mm <sup>2</sup>

### Tensile Bending Strength (DIN 1164)

After 1 day	4.5 N/mm <sup>2</sup>
After 7 days	6.0 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**  
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