

CI/SfB (43) Yq

JANUARY 2024 (SUPERSEDES January 2023) PRODUCT DATA SHEET

ARDEX K15

Rapid Drying Heavy Duty Self-Levelling Smoothing Compound

Features

- EC1 COW emission
- Receives floorcoverings in as little as 4 hours
- Rapid hardening walk on after 2 hours
- Can be hand mixed or pump applied.
- Apply from 1.5mm up to 35mm thick
- Strong high compressive strength
- Ideal for LVT installations
- Suitable for floors with Underfloor Heating



What is the Rapidry Formula?

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



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ARDEX K15

Rapid Drying Heavy Duty Self-Levelling Smoothing Compound

DESCRIPTION

ARDEX K 15 is an advanced, pumpable, Rapid Drying, Heavy Duty Self-Levelling Smoothing Compound. Due to the unique rapid drying properties, ARDEX K 15 can receive floorcoverings in as little as 4 hours.

USE

ARDEX K 15 will level and smooth, in a single application, most known uneven internal sub-floors including concrete, cement/sand screeds, porcelain, ceramic, quarry tiles and anhydrite screeds etc. 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.

SURFACE PREPARATION

The surface must be hard, sound, 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 damp proof membrane is absent or damaged, or the substrate is damp, please consult the ARDEX DPM 1 C or ARDEX DPM 1 C R datasheets. For residual construction moisture, consider the use of ARDEX MVS 95. Contact the ARDEX Technical Support Team for further information.

PRIMING ALL SURFACES REQUIRE PRIMING.

It is necessary to thoroughly prime concrete, cement/sand screeds and Anhydrite based sub-floors with ARDEX P 51 Concentrated Water-Based Primer and Bonding Agent. Consult the ARDEX P 51 data sheet for dilution ratios. As a pore sealer, ARDEX P 51 will maintain the flow life and prevent air bubbles rising through the applied ARDEX K 15 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 damp proof membranes and smooth power-floated concrete. Use a suitable 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 15. If ARDEX MVS 95 has been used there is no requirement to prime this surface prior to applying ARDEX K 15.

MIXING

Use 5.25 – 5.5 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. 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 should be applied within 30 minutes at 20°C. This time is extended at lower temperatures and reduced at higher temperatures.

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

APPLICATION

Pour the mixed ARDEX K 15 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 or ARDEX Pin Leveller to obtain the required thickness. A steel finishing float can be used for feather edging and touch up work. Apply at temperatures above 5°C. **NOTE**: It is recommended that the floorcovering is applied within 48 hours to avoid surface crazing and contamination of the floor. Any longer than 48 hours, the surface should be covered until the floorcovering is laid.

APPLICATIONS OVER UNDERFLOOR HEATING

Heated screeds must be laid in accordance with BS 8204 Part 1 and BS EN 1264. The underfloor heating system should have been commissioned in accordance with the manufacturer's instruction manual and BS 8204 Part 1 and BS EN 1264 Part 4. Once commissioned, and thermally cycled, the underfloor heating system should be turned down to room temperature, but not below 15°C., before the installation of ARDEX K 15 and the floor covering. The underfloor heating system should then be gradually brought up to normal operating temperature to avoid rapid thermal shock and wide temperature variations.

THICKNESS

ARDEX K 15 can be applied from 1.5mm up to 35mm thick. ARDEX K 15 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 3mm of the smoothing compound up to a maximum of 6mm thick.

When applying ARDEX K 15 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 as above and add the aggregate without the 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 K 15 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.

NOTE: When smoothing over flooring grade asphalt, or over sub-floors with traces of sound, hard, nonwater softenable adhesive residues, use ARDITEX NA or ARDEX FA 20.

DRYING AND HARDENING

Receives floorcoverings in as little as 4 hours when a high performance adhesive is used. Rapid hardening can be walked on after 2 hours.

COVERAGE

Approximately 1.4kg of ARDEX K 15 per m² per mm thick. e.g. One 22kg bag will give enough material to cover approx 5.25m² 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 is packed in paper sacks incorporating a polyethylene liner - net weight 22kg.

NOTE: For the latest technical or health and safety information on this product, consult the current technical or health and safety datasheet online at www.ardex.co.uk

STORAGE AND SHELF LIFE

ARDEX K 15 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.

TECHNICAL DATA

Bulk density of powder
Weight of fresh mortar
Working time at 20°C
Flow life at 20°C
Initial Set (Vicat)
Final Set (Vicat)

Approx. 1.1kg/litre
approx. 1.8kg/litre
approx. 30 minutes
approx. 30 minutes
approx. 2 hours

Compressive Strength (EN196)

 After 1 day
 19 N/mm²

 After 3 days
 22 N/mm²

 After 7 days
 28 N/mm²

 After 28 days
 35 N/mm²

Tensile Bending Strength (EN196)

After 1 day 4.5 N/mm²
After 3 days 5.8 N/mm²
After 7 days 6.0 N/mm²
After 28 days 9.0 N/mm²

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.

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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