



CI/SfB

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PRODUCT DATA SHEET

ARDEX K 71



Rapid Drying Industrial Topping & Wearing Surface

Features

STRONG - Withstands heavy wheeled traffic and has excellent abrasion resistance.

DURABLE - Produces wearing surfaces in industrial and commercial areas.

USER FRIENDLY - ARDEX K 71 can be installed from 3mm - 30mm neat, or up to 50mm with aggregates or ARDEX SD-T Base Mix over existing concrete surfaces.

VERSATILE - Can receive a range of surface finishes including suitable resin coatings, tiles, resilient flooring, and natural stone. Can be hand mixed, or pump applied.

RAPIDRY FORMULA - Walkable from 2 hours, receives coatings from just 24 hours.



What is the Rapidry Formula?

It is the ability of the mortar to totally bind the water used for mixing.



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ARDEX K 71

Rapid Drying Industrial Topping & Wearing Surface

DESCRIPTION

ARDEX K 71 is a cement-based compound for resurfacing concrete floors to create a hard, smooth, flat wearing surface, or base for coatings. It incorporates the unique ARDEX 'Rapidry Formula' which chemically binds the mixing water, allowing it to dry rapidly while developing high strength. Mixed with water, ARDEX K 71 is a fluid self-levelling mortar which can be applied by pump, or hand trowel at an application thickness from 3-30mm neat, or up to 50mm incorporating aggregate, or applied on top of ARDEX SD-T Rapid Drying Industrial Base Mix.

SUBSTRATE PREPARATION

Ensure the concrete surface is structurally sound, clean, and free from contaminants that could impair adhesion. The concrete must have a minimum surface tensile strength of 0.8 N/mm² (1.5 N/mm² for heavy-duty applications or resin coatings) as per BS 8204-3. Before mechanical preparation, remove polish, wax, grease, oil, or similar substances with a suitable degreaser. Contact our Technical Support Team for advice. Mechanically prepare the concrete by scabbling, grinding, or shot blasting to expose the aggregate, then vacuum thoroughly before priming.

PRIMING

Prime all surfaces using ARDEX R 3 E or ARDEX R 5 E epoxy primer, applied as a sand-blinded coat using ARDEX Fine Aggregate (1-1.5 mm). Weak concrete surfaces must be mechanically prepared down to solid concrete. Direct to earth subfloors must contain an effective damp proof membrane. If the DPM is absent or damaged, or the substrate is damp, consult the ARDEX DPM 1 C, ARDEX DPM 1 C R datasheet for further information.

When applying ARDEX K 71 over a previously aggregated ARDEX K 71 base, remove surface contamination and prime with ARDEX P 51 diluted 1:3 (primer:water), applied with a broom as per the priming section on the data sheet. Allow the primer to dry before applying the final ARDEX K 71 layer at a minimum of 5mm thick.

When Applying ARDEX K 71 over ARDEX SD-T Base, remove surface contamination and prime with ARDEX P 51 diluted 1:2 (primer:water), applied with a broom as per the priming section on the data sheet. Allow the primer to dry before applying the final ARDEX K 71 layer at a minimum of 5mm thick.

ARDEX P 51 Primer can be used diluted 1:2 onto dry concrete or 1:3 on dry cement and sand screeds if resilient/ceramic finishes are to be applied.

For light industrial use, e.g. foot traffic and occasional rubber wheeled traffic applications. ARDEX P 51 can be applied at 1:2 onto the prepared, dry concrete substrate.

Note: Any joints or cracks in the concrete base where differential movement is anticipated e.g. movement joints, should be brought through to the finished surface. ARDEX K 71 should not be used in external or areas subject to wetting.

MIXING

For each 25kg bag, mix with up to 4.5L clean water until lump-free, using a mixing paddle and electric drill between 600 – 1000 rpm. Do not use more than 4.5 litres per bag.

APPLICATION OF ARDEX K 71

Pour the mixed ARDEX K 71 compound onto the prepared subfloor. The mixed mortar will flow out and self-level during the first 10 minutes of its 25 minutes working time at 20°C. Use an ARDEX Pin Leveller with height adjustment for thicker applications. A spiked roller can be used for finishing off depending on the finish required. Apply at a temperature of 5°C or above. Note that lower temperatures will extend the working time and higher temperatures will shorten the working time. For large areas or thick applications, pumping ARDEX K 71 is recommended.

Note: Suitable floor screed mixer pump units can be used to pump ARDEX K 71. Contact our Technical Support Team for advice on pumping equipment and techniques.

THICKNESS

Apply neat ARDEX K 71 at a thickness between 3-30mm. For 10-30mm, an equal volume of 3mm ARDEX COARSE AGGREGATE can be incorporated. For 30-50mm, an equal volume of dry 8-10mm pea shingle aggregate should be incorporated. Aggregate mixes require a minimum 5mm smoothing coat of neat ARDEX K 71 after priming with ARDEX P 51 diluted 1:3 applied by brush/broom.

Where large sub-floors require levelling and/or thick applications are required, it is recommended to pump ARDEX SD-T B Rapid Drying Industrial Base Mix, which can

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be applied from 6mm-50mm in depth. The 'Rapidry Formula' technology of the ARDEX SD-T B base mix means that within only hours of its application a minimum 5mm thickness of ARDEX K 71 can be applied. If ceramic or natural stone tiles are to be fixed the minimum depth of ARDEX SDTB should be 10mm see separate ARDEX SD-TB data sheet for details.

Note: ARDEX K71/SDT-B 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.

WEARING SURFACES

Protect the ARDEX K 71 surface from spillages like oil, salts, and water by applying a suitable sealer or resin coating which also eases maintenance and enhances appearance. As resin flooring system performance varies, conduct a trial to assess compatibility with ARDEX K 71 before commencing work. Always consult the coating manufacturer for specific instructions and guidelines. Under good drying conditions (20°C, ≤65% RH), coatings can be applied after 24 hours at 20mm and after 48 hours at 50mm. Ceramic floor tiles can be laid when walkable regardless of thickness. Lower temperatures will extend the working time and higher temperatures will shorten the working time.

When using ARDEX K 71 in areas where visual appearance is important, please note that variations in mixing, application methods, and site conditions can affect the final aesthetic finish. We recommend carrying out a trial area first to ensure the desired appearance can be achieved.

SPECIFIC CONDITIONS AND ABRASION RESISTANCE

ARDEX K 71 is suitable for severe high abrasion and heavy wheeled traffic, found in very heavy duty industrial workshops, warehouses, etc. ARDEX K 71 is intended for forklift traffic and similar use. Excessive service use, such as dragging of heavy metal equipment or loaded pallet trucks with protruding nails can cause gouging and surface damage. It's recommended to seal ARDEX K 71 for ease of cleaning and to give it some protection from staining if necessary.

COVERAGE

Approximately 1.78kg of neat ARDEX K 71 powder is needed per square metre per millimetre of thickness. i.e. A 25kg bag covers approximately 4.7m² at 3mm. For aggregated mixes, a 25kg bag mixed with equal volume of ARDEX COARSE AGGREGATE covers approximately 2.39m² at 10mm or 0.95m² at 25mm thickness. With pea shingle, the coverage is approximately 0.75m² at 30mm or 0.45m² at 50mm. Allow for extra mortar on rough or uneven surfaces.

PACKAGING

ARDEX K 71 is packed in reinforced paper packaging incorporating a polyethylene line - net weight 25kg.

STORAGE AND SHELF LIFE

ARDEX K 71 must be stored in unopened packaging, and clear of the ground in cool, dry conditions and be protected from excessive draught. If stored correctly, as detailed above, the shelf life is 12 months from the date shown on the packaging. NOTE: For the latest technical or health and safety data on this product, consult the current technical or health and safety datasheet online at www.ardex.co.uk

ARDEX GROUP WARRANTY

ARDEX Group supplies products under a range of brands into the UK and Ireland markets. This Warranty applies to BAL, ARDEX, Gutjahr, Wakol, Loba, Wedi or Knopp products whether used individually or in combination, provided they are used in accordance with the relevant product datasheets and the warranty terms and conditions are available on the website. This Warranty applies only to products purchased and used in the UK and Ireland directly from one of the brands or a brand authorised stockist.

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TECHNICAL DATA ARDEX K 71

Working time at 20°C approximately 25 minutes

Compressive Strength

1 day 10 N/mm²

28 days 30 N/mm²

Flexural Strength in accordance with EN 196

1 day 3.0 N/mm²

28 days 7.0 N/mm²

Wear Resistance

The wear resistance of ARDEX K 71, when measured in accordance with BS 8204, was rated as at least ARO.5.

Resistance to chair castors Yes

Suitable for underfloor heating Yes

Bulk density approx. 1.4kg/litre

Fire Rating (EN 13813) A1

Weight of fresh mortar approx. 2.1kg/litre

Walkability at 20°C after approx. 2 hours

Ready to receive floorings and coatings under good conditions at 20°C:

Up to 10mm after 12 hours

Up to 20mm after 24 hours

20 - 50mm after 48 hours

Note: It is important that, where application thickness varies, the time allowed for curing and drying allows for the maximum thickness of application.

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.