



ARDEX A 45

Rapid Hardening and Drying Internal Repair Mortar

User friendly – Low VOC content

Rapid hardening and drying – Receives substrate finishes after 90 minutes

Slump free – Ideal for vertical and horizontal repairs

Rapid repair of internal concrete, sub-floors and concrete stairs

Fills holes and cracks in various substrates like renders and screeds

Ardurapid technology

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ARDEX A 45

Rapid Hardening and Drying Internal Repair Mortar

PRODUCT DESCRIPTION

ARDEX A 45 is a rapid hardening, rapid drying, slump-free mortar for internal repairs. It is ideal for repairing and resurfacing concrete stair treads and risers, concrete subfloors and sand/cement screeds. ARDEX A 45 is suitable for filling and patching cracks in walls, ceilings, masonry window and door frames, and can be used to form ramps from feather edge to any thickness. Mixed mortar sets after 15 minutes and can be trafficked after 90 minutes at 20°C.

SURFACE PREPARATION

ARDEX A 45 can be applied directly to dry or green substrates provided they are set and hardened and the surface is sound, free of dust, grease, oil and other surface contamination. Worn or trafficked surfaces should be abraded with a diamond grinder or scarifier to remove any contamination and to roughen concrete to expose a clean porous surface to ensure good adhesion. Priming is not generally required for these types of surfaces, unless they are extremely porous, in which case prime with ARDEX P 51. Smooth, impervious surfaces such as non-absorbent concrete, sealed concrete, ceramic tile or terrazzo should be primed with ARDEX P 82. Direct to earth subfloors must have an effective damp-proof membrane, or use ARDEX MOISTURE BARRIER. Subfloor temperatures must be a minimum of 10°C. For further information, contact ARDEX technical services.

MIXING RATIO

4.5 – 4.7 litres of water to 20kg of A 45 powder, or;
1 volume of water to 3 1/4 volume of A 45 powder.

MIXING

ARDEX repair products react and harden quickly when mixed with water. Thorough mixing in the shortest possible time is essential to ensure a lump free, slump resistant mortar. Always mix the powder into the water. The most efficient method of mixing is by using an ARDEX mixing paddle and a heavy duty electric drill (650 rpm). To 4.5 litres of water, measured with the ARDEX water gauging bucket, add the ARDEX A 45 (20kg) whilst mixing thoroughly. Do not overwater. The mixed mortar has a working time of 10 – 15 minutes at 20°C. This time will be extended in cooler temperatures, and reduced at higher temperatures.

THICKNESS

ARDEX A 45 can be applied from featheredge to any thickness in one application. For thicknesses over 5mm, but not exceeding 30mm, ARDEX A 45 mortar can be bulked out with 1/3 volume of sharp sand (0 – 5mm grading), or up to equal volume of 3mm single sided aggregate. For localised thicknesses exceeding 20mm, eg. filling deep holes and cracks, incorporate up to an equal volume of 10mm single sized aggregate in the ARDEX A 45 mortar. Mix ARDEX A 45 with water first then add the aggregate to mixed mortar whilst mixing.

INSTALLATION

For repairs, apply the mortar with a trowel to holes, cracks and damaged areas, ensuring that the mortar “wets” the surface by trowelling in firmly, leaving the repair proud. After approximately 15 minutes, trim off excess and finish off with a wet trowel, sponge, or sponge float to obtain a smooth surface. As soon as the ARDEX A 45 repair has hardened, the surface of the floor can be levelled with an ARDEX levelling cement. ARDEX A 45 can receive floor coverings if used as a smoothing coat.

For resurfacing and smoothing, apply the mixed mortar with a trowel taking into account the working time. The material may be finished with a wet trowel after approximately 15 minutes to provide a finish suitable for direct application of floor coverings. High aggregate content mixes may require a second application of neat ARDEX A 45.

COVERAGE

Approximately 1.6kg powder/mm/m². A 20kg bag will cover approximately 12.5m² at 1mm thickness.

TECHNICAL DATA

Bulk density of powder 1.4kg/L (approx)

Density of fresh mortar 1.9kg/L (approx)

Compressive strength:

After 1 day 25 MPa (approx)

After 3 days 35 MPa (approx)

After 28 days 40 MPa (approx)

Flexural strength:

After 1 day 5 MPa (approx)

After 3 days 8 MPa (approx)

After 28 days 10 MPa (approx)

STORAGE

ARDEX A45 has a shelf life of 12 months if stored in dry conditions in unopened packaging.

PACKAGING

ARDEX A45 is available in 20kg bag and 4.5kg plastic pail.

HEALTH AND SAFETY

ARDEX A45 contains Portland cement and Quartz sand. Avoid generation of dust. Do not inhale dust. Avoid contact with eyes and skin. Wear suitable protective gloves and safety glasses. In case of contact with eyes, rinse opened eye for several minutes under running water. In case of contact with skin, rinse effected areas thoroughly with running water. If dust is inhaled, remove to fresh air, ensure breathing passages are clear, and rinse mouth with running water. If symptoms persist, seek medical advice.

GUARANTEE

ARDEX products are generally warranted for 10 years when installed to the relevant Australian Standards and applicable ARDEX specification, technical data sheet and instruction for application and use. While we assure customers the high standard and quality of our products and services, we accept no liability for any loss or damage which arises from particular site conditions, poor handling and storage, or installation by unqualified and unskilled applicators.

DISCLAIMER

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standard, our instructions and recommendations and only for the uses they are intended. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them. © ARDEX Australia Pty Ltd 2011. All aforementioned products are the trade marks of ARDEX Australia Pty Ltd, its licensors and affiliates.

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April 2011

