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# ARDEX A 45

## Rapid Hardening & Drying Internal Repair Mortar

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Rapid Hardening & Drying – Receives Finishes after 1½ Hours

Slump Free – Ideal for Vertical & Horizontal Repairs

Rapid Repair of Internal Concrete Sub-Floors  
and Concrete Stairs

Fills Holes and Cracks in Renders, Screeds, etc.

Rapidry Formula

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# ARDEX A 45

## Rapid Hardening & Drying Internal Repair Mortar Rapid Dry Formula

### WHAT IS THE RAPIDRY FORMULA?

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

### DESCRIPTION

ARDEX A 45 is a rapid setting and drying, slump-free mortar for internal repairs. The mortar dries and hardens rapidly to give a repair of exceptional strength and hardness. The mixed mortar sets after ¼ hour and can be trafficked after 1½ Hours at 20°C.

### USE

ARDEX A 45 is ideal for repairing and refacing internal concrete stair treads and risers, cement/sand screed concrete floors etc., – filling and patching cracks etc., in walls ceilings, soffits etc., – making good around door and window frames, round pipework etc., – forming ramps from feather edge to normal screed thicknesses – forming coves etc., prior to applying insitu resin floorings. A suitable covering/coating is required if used as a wearing surface.

### PREPARATION

ARDEX A 45 can be applied to dry or moist screeds providing they are set and hardened and the surface is sound and free of dust, grease, oil and other surface contamination. Worn or trafficked surfaces should be abraded (diamond grinder or scarified) to remove contamination and roughen concrete to expose a clean porous surface to ensure good adhesion. Very dense, smooth impervious surfaces should be primed with ARDEX 82 Primer. Priming is not usually necessary on porous surfaces such as concrete, cement/sand, brickwork etc., unless the surface is extremely porous. Direct to earth sub-floors must have an effective damp-proof membrane.

**Power-trowelled (burnished) concrete and Hi-strength concrete greater than 35 MPa**, refer to ARDEX sub-floor preparation brochure or contact ARDEX Technical Services.

### MIXING

The ARDEX A 45 powder is added to the required amount of water in a clean mixing container and mixed thoroughly to obtain a lump-free and slump-resistant mortar. The mix proportions are:

20kg ARDEX A 45 powder to approx.  
4.5 litres of water  
i.e. approximately 3 parts powder to  
1 part water by volume

Avoid using too much water. The mixed mortar has a working time of 10 to 15 minutes at 20°C, this time being extended at lower, and reduced at higher temperatures. For thicknesses over 5mm, but not exceeding 30mm, the ARDEX A 45 mortar can be bulked out with 1/3 volume of

sharp sand (0-5mm grading), or up to an equal volume of 3mm single sized aggregate/chippings. For localised thicknesses exceeding 20mm, e.g. filling deep holes and cracks, incorporate up to an equal volume of 10mm single sized coarse aggregate (BS 882 – table 4) in the ARDEX A 45 mortar.

### APPLICATION

**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 about 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 repair has hardened, the surface of the floor, stair tread etc., can be levelled, if necessary with ARDEX sub-floor levelling cement.

**Smoothing and Refacing:** Apply the mixed mortar with a trowel to the required thickness taking into account the short working time. The material may be finished with a wet trowel after 15 – 20 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.

Apply at temperatures above 10°C.

**Coverage:** Approx. 1.6 kg ARDEX A 45 powder/m<sup>2</sup>/mm. A 20kg bag of ARDEX A 45 will cover approximately 12m<sup>2</sup> at 1mm thickness.

**Packaging:** ARDEX A 45 is packed in paper sacks incorporating a polythene liner – net weight 20kg bags and 5kg pail.

**Storage:** ARDEX A 45 has a storage life of not less than 12 months if stored in dry conditions.

### PRECAUTIONS

ARDEX A 45 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.

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## TECHNICAL DATA

Bulk density of powder	approx. 1.4kg/litre
Weight of fresh mortar	approx 1.9kg/litre
Initial Set (Vicat) DIN1164	approx. 15 minutes at 20°C
Final Set (Vicat) DIN 1164	approx. 60 minutes at 20°C

### Compressive Strength (DIN 1164):

After 1 day	25.0 MPa (N/mm <sup>2</sup> )
After 3 days	35.0 MPa (N/mm <sup>2</sup> )
After 28 days	40.0 MPa (N/mm <sup>2</sup> )

### Tensile Bending Strength (DIN 1164):

After 1 day	5.0 MPa (N/mm <sup>2</sup> )
After 3 days	8.0 MPa (N/mm <sup>2</sup> )
After 28 days	10.0 MPa (N/mm <sup>2</sup> )

### Ball Pressure Hardness (Brinell):

After 1 day	40.0 MPa (N/mm <sup>2</sup> )
After 3 days	45.0 MPa (N/mm <sup>2</sup> )
After 28 days	50.0 MPa (N/mm <sup>2</sup> )

**NOTE:** The information contained herein is to the best of our knowledge true and accurate. No warranty is implied or given as to its completeness or accuracy in describing the performance or suitability of the product application. Users are asked to check that the literature in their possession is the latest issue.

ARDEX products are manufactured in Australia.

ARDEX AUSTRALIA Pty Ltd.  
– ABN 82 000 550 005



Materials are also manufactured in Austria, Denmark, United Kingdom, France, Germany, Singapore, Spain, USA and represented throughout the world.

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