|  |  |
| --- | --- |
| **From** | ARDEX Australia (AAu-NSW) |
| **Issue date** | Monday, 31st July 2017 |
| **Subject** | ARDEX A 45 – Rapid Hardening & Drying Internal Repair Mortar |

**SCOPE**

The [ARDEX A 45](http://www.ardexaustralia.com/products/repair-mortars/ardex-a-45?highlight=YTo2OntpOjA7czo1OiJhcmRleCI7aToxO3M6MToiYSI7aToyO2k6NDU7aTozO3M6NzoiYXJkZXggYSI7aTo0O3M6MTA6ImFyZGV4IGEgNDUiO2k6NTtzOjQ6ImEgNDUiO30=) 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 1 ½ 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.

**SUBSTRATES**

Concrete

**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 P 82](http://www.ardexaustralia.com/products/primers-bonding-agents-additives/ardex-p-82?highlight=YTo2OntpOjA7czo1OiJhcmRleCI7aToxO3M6MToicCI7aToyO2k6ODI7aTozO3M6NzoiYXJkZXggcCI7aTo0O3M6MTA6ImFyZGV4IHAgODIiO2k6NTtzOjQ6InAgODIiO30=) 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

**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.

**Coverage:** Approx. 1.6 kg ARDEX A 45 powder/m²/ mm. A 20kg bag of ARDEX A 45 will cover approximately 12m² at 1mm thickness.

**TECHNICAL DATA**

The ARDEX A 45 can be applied at a minimum of 2mm to a maximum thickness of 30mm.

Once cured, the ARDEX A 45 will achieve a compressive strength of 40 MPa at 28 days, a Tensile bending strength of 10.0 MPa at 28 days and a Ball Pressure Hardness of 50 MPa at 28 days.

Disclaimer: The recommendation selected is based upon questions answered on the ARDEX Australia website. This recommendation is designed as a general application for your described situation and should not be considered site specific documentation for general distribution. Always consult the latest relevant ARDEX Technical Bulletins and information on the product packaging and/or product data sheets (available on the ARDEX Website). It is the responsibility of the user to ensure that this document is current and most up to date. Australian and other relevant standards should be followed during installation. If you have any further questions or would like further clarification please contact the ARDEX Technical Services Hotline on 1800 224 070 (9am to 5pm Monday to Friday).