

CI/SfB (43) Yq2

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PRODUCT DATA SHEET

J-EMIC

# **ARDEX A46**

## **Multi-Purpose Repair Mortar**

#### **Features**

- Class R2 Polymer Modified Cementitious Repair Mortar
- Ideal for the rapid repair of damaged concrete
- Sets within 30 minutes
- Slump free ideal for vertical and overhead repairs
- High Build apply from 2mm to 50mm thick
- For internal and external use
- Easy to smooth and float
- Shrinkage compensated, and crack free



What is the Rapidry Plus Formula?

It is the ability to totally bind the water used for mixing within the mortar, ensuring rapid drying and hardening properties



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## **ARDEX A46**

### Multi-Purpose Repair Mortar

#### **DESCRIPTION**

ARDEX A 46 is a rapid repair, slump free mortar which is ideal for external and internal repairs. The polymer modified mortar sets and hardens rapidly to give a repair of high performance, strength and hardness.

#### **USE**

ARDEX A 46 is ideal for the rapid repair and refacing of concrete surfaces. ARDEX A 46 should only be used for the non-structural repair of concrete.

ARDEX A 46 can be used for:

- Filling cracks, gaps and holes
- Repairing and refacing of concrete stairtreads and risers
- Damaged brickwork (not lightweight concrete)
- · Damaged wall renders
- Making good on wall chases
- Filling and patching cracks in walls and floors
- Making good around pipework, door and window frames
- Forming ramps from 2mm to 30mm in thickness
- · Forming coves for floors
- · Repair soffits, beams and lintels

ARDEX A 46 may also be used as a wearing surface in lightly trafficked areas.

**NOTE:** When using aggregate filled mortars apply a neat layer of the ARDEX A 46 mortar to act as a bonding coat applied fresh in fresh.

#### **PREPARATION**

ARDEX A 46 can be applied to dry or damp concrete, render, screeds and similar cement based surfaces providing they are hard and the surface is sound and free of dust, grease, oil and other barriers to adhesion. Priming is not usually necessary on concrete, cement/sand, renders and screeds, brickwork etc., unless the surface is extremely porous.

On absorbent substrates, the mortar must be initially applied firmly as a thin layer, (scratch coat) to achieve good adhesion before applying the mortar to the required thickness, fresh in fresh.

Worn or trafficked surfaces should be mechanically prepared to remove contamination and expose a clean and uncontaminated surface to ensure good adhesion.

#### MIXING

ARDEX A 46 powder is added to the required amount of clean water in a clean mixing container and mixed thoroughly to obtain a slump free mortar. The mix proportions are:-Approximately 3 parts powder to 1 part water by volume. 5kg ARDEX A 46 powder to 1.2-1.4 litres of water.

11kg ARDEX A 46 powder to 2.7-3 litres of water. Avoid using too much water.

The mixed mortar has a working time of 15 to 20 minutes at 20°C, this time being extended at lower, and reduced at higher temperatures.

#### **APPLICATION**

ARDEX A 46 can be applied from 2mm to 30mm in thickness.

For localised small repairs up to 50mm thick. ARDEX A 46 Mortar can be bulked out with  $\frac{1}{3}$  volume of sharp sand (0-5mm grading), or up to an equal volume of ARDEX Coarse aggregate or 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 in the ARDEX A 46 mortar. ARDEX A 46 is moisture tolerant and frost resistant. Ideal for patch repairs prior to the application of a suitable ARDEX Damp Proof Membrane. For further information please contact ARDEX Technical Services Department.

Apply ARDEX A 46 above 5°C.

#### **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 10 minutes, at 20°C, or when sufficiently firm trim off excess and finish with a wet trowel, sponge or sponge float to obtain a smooth surface.

This smoothing operation needs to be completed within 15 minutes of application. As soon as the ARDEX A 46 repair has hardened, the surface of the floor, or wall surface, stair tread etc., can be levelled, if necessary, with the appropriate ARDEX Levelling and Smoothing Compound.

#### **SMOOTHING AND REFACING**

Apply the mixed mortar with a trowel to the required thickness, taking into account the working time. The material may be finished with a wet trowel after 10 to 15 minutes, at 20°C, to provide a finish suitable for direct application of tiles or stone. The finished surface must be protected against direct sunlight and draughts, which could lead to the rapid drying of the surface.

Further applications of levelling compounds and moisture tolerant finishes, such as ceramic tiles can be applied in as little as 4 hours in good conditions. (20°C).

#### **COVERAGE**

Approximately 4m<sup>2</sup> at 2mm thick per 11kg bag or 1.8m<sup>2</sup> at 2mm thick per 5kg bag. 1.4kg powder/m<sup>2</sup>/mm.

An 11kg bag of ARDEX A 46 will produce approximately 8 litres of mortar.

A 5kg bag of ARDEX A 46 will produce approximately 3.6 litres of mortar.

#### STORAGE AND SHELF LIFE

ARDEX A 46 must be stored in unopened packaging, clear of the ground in cool, dry conditions, and protected from excessive drafts. ARDEX A 46 must not be used after the end of the declared storage period. If stored correctly, as detailed above, use within 6 months of the date shown on the packaging.

#### **PACKAGING**

ARDEX A 46 is packed in paper sacks incorporating a polyethylene liner - net weight 5 kg and 11 kg.

**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** 

#### TECHNICAL DATA

Bulk density of powder approx. 1.3kg/litre
Weight of fresh mortar approx. 1.8kg/litre
Working Time approx. 15 minutes

#### Compressive Strength

After 1 day 10.0
N/mm²
After 7 days 15.0
N/mm²
After 28 days 20.0
N/mm²

#### Tensile Bending Strength

After 1 day

 $\begin{array}{lll} \mbox{After 7 days} & 4.0 \ \mbox{N/mm}^2 \\ \mbox{After 28 days} & 6.0 \ \mbox{N/mm}^2 \\ \mbox{Freeze thaw and salt resistant} & \mbox{Yes} \\ \mbox{Suitable for underfloor heating} & \mbox{Yes} \\ \mbox{Chloride ion content} & \leq 0.05\% \\ \mbox{Adhesive bond} & \geq 0.8 \ \mbox{N/mm}^2 \end{array}$ 

2.0 N/mm<sup>2</sup>

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 01440 714939 ARDEX online www.ardex.co.uk