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PRODUCT DATA SHEET

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# ARDEX E 100

## Additive to Improve Screeding, Rendering and Repair Mortars

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### Features

Use with ARDEX repair and finishing compounds, ordinary Portland cement/sand screeds and renders

To improve mortars based on Portland cement, masonry cement and cement/lime mixes

Improves adhesion of bonding slurries, grouts and spatterdash coats

Allows bonded screeds to be applied as thin as 15mm thick rather than the 25mm minimum required for unmodified screeds

Improves the elasticity, compressive and tensile strengths of the modified mortar

For internal and external use



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# ARDEX E 100

## Additive to Improve Screeding, Rendering and Repair Mortars

### DESCRIPTION

ARDEX E 100 is an acrylic-based dispersion for use in screeding and rendering mortars in internal and external locations. The addition of ARDEX E 100 admixture improves the compressive and tensile strengths, elasticity and bond strength of the modified mortar. The workability and plastic properties of the mortar are improved without increasing the water:cement ratio. Crack formation in mortars on drying out is significantly reduced.

### USE

ARDEX E 100 can be used in mortars based on ordinary Portland cement, masonry cement, cement/lime and in bonding grouts or slurry coats for the adhesion of bonded screeds and renders to cementitious backgrounds, as well as in ARDEX B 12 Rendering and Finishing Compound.

ARDEX E 100 is used as an additive:-

To improve workability without increasing water content of mortars.

To improve adhesion of bonding slurries, grouts and spatterdash coats.

To increase compressive and tensile bending strength of the hardened mortars.

To improve the elasticity and reduce crack formation in mortars.

To reduce surface dusting of screeds and renders whilst increasing their abrasion resistance.

To enable the minimum thickness of the modified bonded floor screed to be reduced to 15mm from the recommended 25mm minimum thickness for unmodified screed mortar.

### PREPARATION

Ensure that all substrates are free of dust, loosely adhered materials, lime bloom/efflorescence, surface curing agents and mould oil/release agents. Any required mechanical preparation of the background surface should be carried out as described in the relevant British Standard Code of Practice.

Note the requirements for the drying of concrete backgrounds prior to the application of finishes to ensure that most of the concrete drying shrinkage has occurred.

### MIXING

For application of a bonding slurry for screeds and renders dilute the ARDEX E 100 with an equal volume of water and use the diluted ARDEX E 100 to produce a bonding slurry by adding the cement/sand or cement whilst stirring until a lump free, creamy bonding slurry of a brushable consistency is obtained (see table below).

For application in cement and sand mortar for screeding and rendering the cement and sand should be mixed together and the required amount of ARDEX E 100 added (see table below) with the necessary additional water, to achieve the required mortar consistency.

For application with ARDEX B 12 dilute the ARDEX E 100 with three parts water and use the diluted ARDEX E 100 to mix with the ARDEX B 12 powder to obtain the required mortar consistency. Follow the ARDEX B 12 data sheet for application advice.

### APPLICATION

Apply the bonding slurry with a stiff broom or similar, to the substrate, spreading it out evenly with adequate coverage. The render or screed mortar should be applied into the bonding slurry whilst it is still fresh, moist and workable. On smooth vertical surfaces such as dense concrete, incorporate sand by equal weight with the cement and apply a slightly stiffer coat. Key the coat with a comb and allow to set and dry to form a bonding layer for the subsequently applied render mortar.

When the cement and sand mortar is modified with the addition of ARDEX E 100, this should be applied in the normal way onto a prepared substrate with the bonding slurry/grout.

### TECHNICAL DATA

#### Adhesion to Background

Cement slurries improved with ARDEX E 100 applied onto a clean, laitance free concrete surface will have a tensile adhesion strength in excess of 2.5N/mm<sup>2</sup> after 28 days.

#### ADDITION RATES

See table below.

For ARDEX B 12 dilute ARDEX E 100 with 3 volumes of water and use the dilution to produce the required consistency.

#### PACKAGING

ARDEX E 100 is packed in polyethylene containers net weight 5kg.

#### STORAGE AND SHELF LIFE

ARDEX E 100 has a storage life of not less than 12 months in unopened containers. Protect from frost and direct sunlight.

#### PRECAUTIONS

Aqueous synthetic based dispersion. Wash off from skin before drying takes place.

Any material splashed into the eye, mouth or nose should be washed away immediately with clean water. Avoid ingestion.

Non-toxic and small amounts are unlikely to cause more than temporary discomfort. If large amounts are swallowed a doctor or hospital must be contacted at once.

For further information, consult the relevant health and safety data sheet.

**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.

MORTAR TYPE	SAND / AGGREGATE GRADING	CEMENT : SAND AND AGGREGATE BY WEIGHT	DILUTION OR ADDITION RATE OF ARDEX E 100
Bonding Coat for Renders	BS EN 13139 : 2002 PD 6682-3 : 2003 Annex B1	1:1 or cement only	1:1
Mortars for Renders from 5mm to 16mm thick	BS EN 13139 : 2002 PD 6682-3 : 2003 Annex B1	1:3 to 1:4 <sup>1/2</sup>	3kg ARDEX E 100 per 25kg OPC
Cement Grout/Bonding Slurry for Screeds		Cement only	1:1
Mortars for Screeds	BS 8204-1 : 2002 Table B2	1:4 to 1:5	3kg ARDEX E 100 per 25kg OPC

### NOTES:

- 1). The mix used for external rendering should be designed and selected from Tables 1 and 2 of BS 5262, Code of Practice for External Renderings.
- 2). The sands used in screeds, BS 8204-1, should neither have more than 10% passing 150µm sieve, nor more than 3% passing 75µm sieve.