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# ARDEX E 70

## Bonding Agent

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Liquid polymer additive that greatly improves shear and tensile bond strength

Improves water resistance

Accommodates thermal movement

Non-toxic and non-flammable formula



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## Bonding Agent

### DESCRIPTION

ARDEX E 70 is a bonding agent designed to improve shear and tensile bond strength of sand/cement screeds and renders. ARDEX E 70 mixed with screeds and renders can be used for internal and external, commercial and residential applications on both floor and wall.

### TO (SUBSTRATES)

Concrete, renders, screeds  
Brickwork, blockwork  
Waterproofing membranes

### SUBSTRATE PREPARATION

In general, the surface being adhered to must be clean, firm and free of dust, dirt, oil, grease, curing compounds, release agents and other barrier materials, as well as being strong enough to support the weight of the tiles being fixed.

Ensure surfaces are dry before tiling, with no residue or permanent damp. Ensure that the substrate's required drying time, is allowed to elapse prior to fixing the tiles.

Note: If the substrate is subject to rising damp, treat with ARDEX WPM 300, the apply a slurry coat of ARDEX E 70/cement before applying a screed or render.

For specific instruction refer to the relevant ARDEX product packaging.

### MIXING

The mixing ratio of ARDEX E 70 is dependent on the application and product.

- Slurry coat, mix 3:2 cement : ARDEX E 70 by volume.
- Dilution for render or screed, prepare a 1:3 ARDEX E 70 to water dilution by volume.
- Renders mix 27 litres of diluted ARDEX E 70 with 40kg of Portland cement and 120kg of clean sand.
- Screeds mix 21 litres of diluted ARDEX E 70 with 40kg of Portland cement and 120kg of clean sand.

Note: The admixture requirement will vary if the sand used is not dry. A different dilution ratio might be necessary to achieve working and performance properties. Please contact ARDEX technical services for advice.

### FIXING TECHNIQUE

#### Render Coat

First apply a slurry coat using a roller, brush or a flat trowel, to a maximum thickness of 2mm. While the slurry coat is still wet, apply the render over it. Apply the ARDEX E 70 mortar with a wood float trowel. Ensure firm pressure on the trowel to work the render into good contact with the surface. Recommended thickness of the render coat is 10mm. Renders are applied in the normal manner up to 13mm thick and allowed to take their initial set. Renders in excess of 13mm should be applied in two coat operation.

#### Screed

First apply the slurry coat using a roller,

brush or a flat trowel, to a maximum thickness of 2mm. While the slurry coat is still wet, apply the screed mix. Use a straight edge trowel or timber batten to level the screed. Recommended minimum thickness of screed is 15mm. Achieve falls to waste in shower recesses to a minimum 1:60, internal wet areas (e.g. bathrooms) to a minimum of 1:80 and external areas to a minimum of 1:100. Screeds should be left with a wood float finish to create a key for tiling/waterproofing. For a thickness greater than 40mm, a reinforcing mesh is required. When reinforcing the screed with galvanized mesh, apply the first layer of screed, lay the mesh and apply the second layer of the screed. Do not lay the mesh directly onto the substrate.

All tools should be cleaned with water immediately after use.

### DRYING TIME

Allow approximately 24 hours for the ARDEX E 70 mortar to dry at 23°C and 50% relative humidity.

Substrate and climatic conditions will affect drying times, allow longer for lower temperatures or high relative humidity. Allow at least 7 days for cement renders and screeds to dry prior to tiling.

### COVERAGE

20L of ARDEX E 70 is sufficient for

- approximately 100m<sup>2</sup> as a slurry coat
- 20m<sup>2</sup> as a screed at a bed thickness of 15mm
- 9m<sup>2</sup> as a self supporting screed at 40mm
- 30m<sup>2</sup> as a render at a bed thickness of 10mm.

The coverage will vary depending on substrate condition and application technique.

### PACKAGING

ARDEX E 70 is packed in plastic pails - net volume 20L.

### SHELF LIFE

ARDEX E 70 has a shelf life of not less than 12 months when stored in the original unopened packaging, in a dry place at 23°C and 50% relative humidity. Protect from frost.

Pay attention to the following:

ARDEX E 70 should be used undiluted for heated concrete slabs.

In exterior conditions, it is essential to provide protection from all extremes of climate during the entire fixing and grouting operation, and for a substantial period afterwards.

### SAFETY PRECAUTIONS

ARDEX E 70 is non-toxic. Avoid contact with skin and eyes; in case of contact with the eyes, rinse immediately with plenty of water and seek medical advice; wear suitable gloves and eye protection and keep the product out of the reach of children.

Avoid generation of airborne dust during mixing. If swallowed do not induce vomiting, give a glass of water to rinse mouth then as much water as the patient can drink and seek medical advice.

For further material safety data, consult the latest MSDS.

### TECHNICAL DATA

Color: White liquid  
Specific Gravity: Approx 1.01g/ml  
PH: 9-11  
Underfloor Heating: Yes

### Mechanical and Application Properties at 23°C and 50%RH

#### Slurry Coat

Mixing Ratio:  
10L undiluted ARDEX E 70 / 20kg cement  
Compressive strength  
after 28 days dry: Approx 25MPa  
Flexural strength  
after 28 days dry: Approx 5MPa

#### Render

Mixing Ratio:  
27L undiluted ARDEX E 70 / 40kg cement / 120kg sand  
Compressive strength  
after 28 days dry: Approx 10MPa  
Flexural strength  
after 28 days dry: Approx 5MPa

#### Screed

Mixing Ratio:  
21L undiluted ARDEX E 70 / 40kg cement / 120kg sand  
Compressive strength  
after 28 days dry: Approx 35MPa  
Flexural strength  
after 28 days dry: Approx 5-7MPa

Pot life: 1 hour

Note: These are typical values based on Portland cement and dry washed sand.

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.

Regional specific recommendations, standards, codes of practice, building regulations or industry guidelines may affect specific installation recommendations.