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# ARDEX E 90

(ARDION 90)

## Admix for Cement-based Tile Adhesives

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Improves adhesion and imparts flexibility

For internal and external tiling

Provides a water repellent mortar – when tiling in showers, swimming pools

Allows direct fixing over existing tiles – no mechanical grinding of the glaze required

Low VOC content – meets Green Building Council of Australia Green Star IEQ-13 requirements

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# ARDEX E 90 (ARDION 90)

## Admix for Cement-based Tile Adhesives

### DESCRIPTION

ARDEX E 90 is a special synthetic dispersion for use in conjunction with ARDEX cement-based adhesives, such as ARDEX S16, ARDEX STS 8.

The addition of ARDEX E 90 admix produces a mortar that is elastic, has high adhesion and water repellent properties (refer to adhesive packaging for information on when to use ARDEX E 90).

ARDEX E 90 mixed with cement-based adhesives extends the use of the adhesive to situations where movement is anticipated e.g. external tiling, over fibre cement sheets/plasterboard, when tiling over heated subfloors.

The ARDEX E 90 mortar can be used in both internal and external tiling applications.

ARDEX E 90 meets the Green Building Council of Australia Green Star IEQ-13 requirements for Multipurpose Construction Adhesives when tested in accordance with SCAQMD Method 304-91 Determination of Volatile Organic Compounds (VOC) in Various Materials as referenced by South Coast Air Quality Management Division (SCAQMD) Rule 1168.

N.B. Not suitable for use as a primer.

### WHEN TO USE

The improved mortar is especially effective in the following situations:-

#### ARDEX E 90/ARDEX S16 or ARDEX STS 8

- For fixing of ceramic tiles onto fibre cement sheet, compressed fibre cement sheet and plasterboard.
- For fixing over existing tiles in areas that will not be in contact with water, tiles can be directly fixed without mechanical grinding the glaze. In all other situations the tiles must be mechanically roughened to remove 80% of the glaze.
- When tiling with ARDEX STS externally, to accommodate movement and help inhibit the formation of lime bloom and efflorescence.
- For tiling over heated concrete.
- For improved protection of moisture sensitive substrates e.g. when fixing tiles in bathrooms, showers and kitchens. N.B. This treatment cannot be used to replace a conventional waterproofing membrane.

#### ARDEX E 90/ARDEX STS 8 White

- For fixing tiles in swimming pools.

When fixing dense tiles to dense substrates in humid/cold weather, the final set may be extended.

### SUBSTRATE PREPARATION

Refer to instructions on the adhesive packaging.

### MIXING

#### With ARDEX S16 or S16W (20kg)

3 litres ARDEX E 90 diluted with 3 litres of water.

#### With ARDEX STS 8 (20kg)

3.6 litres of ARDEX E 90 diluted with up to 5 litres of water.

When diluting ARDEX E 90 use clean water.

Add the powder to the diluted ARDEX E 90 whilst stirring thoroughly until an easily worked mortar is obtained.

### FIXING TECHNIQUE

The mixed mortar is applied in the same way as the normal ARDEX adhesive mortar when fixing ceramic tiles, mosaics, etc. For further information refer to the instructions on the packaging of the relevant adhesive.

### PRECAUTIONS

A water-based polymer dispersion. Wash off skin before drying takes place. Any material splashed into the eye, mouth or nose should be washed away immediately with clean water. Avoid ingestion. If swallowed contact a doctor or hospital.

For further material safety data, consult the latest Material Safety Data Sheet.

### TECHNICAL DATA

The table below gives a comparison of values obtained using ARDEX STS 8 with and without ARDEX E 90 mortar admix. These tests are conducted in accordance with AS 4992.2.

	with ARDEX E 90	without ARDEX E 90
Tensile adhesion 28 days	≥ 1.50 N/mm <sup>2</sup>	≥ 1.0 N/mm <sup>2</sup>
Tensile adhesion after water immersion	≥ 1.50 N/mm <sup>2</sup>	≥ 1.0 N/mm <sup>2</sup>
Transverse deformation	> 5 mm	<2.5 mm

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