

ARDEX X51

Super Coverage Flexible Rubber Modified Tile Adhesive

Suitable for use over green screed

Improved workability

Suitable for a range of tile types including ceramic, fully vitrified and porcelain

Flexible, achieves S1 classification

Suitable for wall and floor tiling

For internal and external use

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



ARDEX Rubber Recycling
ARDEX continually aim to employ best environmental practices, utilising recycled rubber in place of sand for manufacturing
a range of products is one of the ways ARDEX achieve this. By doing so, ARDEX not only contributes to the recycling of
approximately 250,000 used tyres per year, but also saves approximately 3500 tonnes of Australia's sand per year. For more
information on ARDEX Australia's 'Commitment to Rubber Recycling' visit www.ardex.com

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Super Coverage Flexible Rubber Modified Tile Adhesive

DESCRIPTION

ARDEX X51 is an economical rubber modified adhesive for fixing ceramic tiles in internal and external (with satisfactory falls) situations. It can be used over render, plasterboard, fibre-cement sheet and concrete in situations where minimal movement is anticipated. When mixed with water, a flexible mortar that meets the S1 tile adhesive classification is produced. ARDEX X51 is ideal for fixing ceramic, fully vitrified, porcelain, non-moisture sensitive natural stone tiles and mosaics. ARDEX X51 can be used in residential and commercial applications with satisfactory falls.

FOR FIXING (TILE TYPES)

Fully vitrified and ceramic tiles, porcelain, natural stones (excluding moisture sensitive) and mosaics.

TO (SUBSTRATES)

Concrete, renders, screeds Compressed fibre cement sheets Medium density fibre-cement sheet Plasterboard on walls ARDEX liquid applied undertile waterproofing membranes

SUBSTRATE PREPARATION

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, as given in the relevant part of AS 3958, is allowed to elapse prior to fixing the tiles. Prime porous substrates with ARDEX Multiprime.

Concrete

This includes precast, in-situ and wood floated concrete. As concrete exhibits drying shrinkage, allow to cure for at least 4 weeks prior to tiling. Any surface laitance, concrete sealers, curing compounds, and other materials should be removed from the surface prior to tiling. Steel trowel finished concrete should be roughened mechanically to remove laitance and provide a good key for tiling. The surface should be true and level and pitched to drains where required. The concrete should have adequate surface profile (e.g. broom finish) to provide a mechanical key. Smooth surfaces and/or dense concrete greater than 35MPa must be mechanically roughened prior to tiling.

Cement Render/Screeds

New renders and screeds should be finished with a wood float to the required surface regularity. Screeds should be pitched to drains where required. Allow at least 16 hours to cure prior to tiling.

Plasterboard/Medium Density Fibre-Cement Sheet on Walls

Tiles can be fixed directly provided that these boards are firmly and rigidly fixed in accordance with the manufacturer's instructions to adequately support the tile bed. Ensure the surface is completely clean. Priming with ARDEX Multiprime is recommended for fibre-cement sheets. Priming is not usually necessary for plasterboard except when a jointing compound is used, the compound should then be primed with ARDEX Multiprime.

Compressed Fibre-Cement Sheet (Floors)

For both internal and external applications, tiling over compressed fibre-cement must be carried out as per sheet manufacturer's recommendations and Australian Standard AS 3958.

ARDEX Liquid Applied Undertile Waterproofing Membranes

ARDEX undertile waterproofing must be applied according to instructions and thoroughly dry prior to tiling.

MIXING

ARDEX X51 powder is added to clean water in a clean container whilst stirring vigorously and mixed thoroughly to give a lump free easily worked mortar of a thick creamy consistency. Allow to stand for 3 minutes.

Restir the mixture thoroughly and the adhesive is ready for use. A 15kg bag of ARDEX X51 requires approximately 6.75 litres of water.

The consistency of the adhesive can be adjusted to suit site conditions and size, weight and type of tiles to be fixed. Do not apply at temperatures below 5° C. The pot life of the mixed mortar is approximately 1.5 hours at 23°C and 50% relative humidity.

FIXING TECHNIQUE

Before fixing ensure the substrate has been prepared and the tiles are free from contaminants. Tiles should be fixed in accordance with AS 3958.

Substrate surface, type and size of the tiles will determine the selection of the trowel. As a general guide use a $6 \times 6 \times 6$ mm notched trowel for walls and $10 \times 10 \times 10$ mm notched trowel for floor tiling. ARDEX X51 can be applied at a bed thickness greater than 1.5mm or less than 6mm.

The tiles must be pressed firmly into the freshly combed mortar bed to ensure good contact with the mortar. Slide the tile at right angles to the notch pattern to ensure 100% coverage on the back of the tile. Tiles with ribbed or keyed back profiles should also be buttered to ensure complete coverage. Lift a tile from time to time to check that there are no voids beneath the tile. Do not spot fix. Any surplus adhesive must be removed from the surface of the tile and ioints, before the adhesive sets.

ARDEX X51 has an open time of 15-20 minutes and an adjustment time of 15-20 minutes. Please be aware of site conditions when considering these times and only spread enough adhesive so that the tiles can be fixed while the mortar is still wet. All tools should be cleaned with water immediately after use.

MOVEMENT JOINTS

Movement joints must be in accordance with Australian Standard AS 3958.

GROUTING

Grouting can proceed once the tile bed has hardened sufficiently so that tiles will not be dislodged. Grouting and traffic may be allowed after approximately 24 hours at 23°C and 50% relative humidity. Allow longer for dense

tiles/substrates, humid climates and low temperatures. The tile joints should be grouted with the appropriate ARDEX grout.

COVERAGE

15 kg of ARDEX X51 is sufficient for approximately $14 m^2$ on walls, using a 6 x 6 x 6mm notched trowel and $9 m^2$ on floors using a $10 \times 10 \times 10 mm$ notched trowel. The coverage will vary depending on substrate condition, tile type and application technique.

PACKAGING

ARDEX X51 is packed in polylined paper sacks – net weight 15kg.

SHELF LIFE

ARDEX X51 has a shelf life of 12 months when stored in the original unopened packaging, in a dry place at 23°C and 50% relative humidity.

Pay attention to the following:

ARDEX X 51 is suitable for only minimal movement. When setting tiles on substrates where movement is anticipated, we recommend the use of ARDEX X 56, ARDEX X 77 or ARDEX ABAFLEX.

For setting of moisture sensitive natural stones, please refer to products in the ARDEX Natural Stone System.

ARDEX X51 is not suitable for use over timber floors or fibre cement sheeted timber floors.

Do not use ARDEX X51 in continuous immersion applications e.g. swimming pools, tanks, etc. ARDEX provides other systems.

External tiling and shower recess floors must have adequate falls for drainage.

SAFETY PRECAUTIONS

This product may cause irritation and an allergic reaction to the skin. It may cause serious eye injury and irritation to the respiratory system. In case of contact with the eyes rinse with running water until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Wear protective gloves, clothing, eye and face protection. Avoid inhaling dust/fumes/gas/mist/vapours/spray. Ensure adequate ventilation during mixing and application. Store locked up. Check with your local Council regarding the disposal of contents, dispose of packaging thoughtfully and recycle where possible. Keep out of the reach of children. Call the Poisons Information Centre on 131 126 (AUS) and 0800 764 766 (NZ) or call a doctor if you feel unwell. Additional information is in the Safety Data Sheet (SDS) at www.ardexaustralia.com

TECHNICAL DATA

Colour: Off White Powder
Mixing Ratio: Approx 6.75L water
per 15kg powder

Application Properties at 23°C and 50% RH
Open Time: 15-20 minutes
Adjustment Time: 10-15 minutes
Grouting Time: 24 hours
Pot Life: 1.5 hours
Underfloor Heating: Yes

Mechanical Properties (ISO 13007) Tensile Adhesion Strength after

 28 days dry:
 >1.0 MPa

 Water Immersion:
 >1.0 MPa

 Heat:
 >1.0 MPa

 Freeze Thaw:
 >1.0 MPa

 Transverse Deformation:
 >2.5 mm

 Mixing Time:
 8 minutes

 Coverage:
 14m² (walls)

 9m² (floors)

 Classification:
 C1 TE S1

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GUARANTEE

ARDEX Australia Pty Ltd ("we" or "us") guarantees this product ("our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 10 years from the date of purchase. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or compensation, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX Australia Pty Ltd, 20 Powers Road Seven Hills NSW 2147; Toll Free: 1800 224 070: Fmail: technicalservices@ ardexaustralia com) and provide evidence of your purchase of the product within 30 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a "consumer" under the Australian Consumer Law and to that extent you need to be aware that: "Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss of damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure".

DISCLAIMER

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standards, Our instructions and recommendations are only for the uses they are intended. Users are advised to confirm that this product is suitable for their application and conforms with the specifications of the system. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with

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This datasheet was issued in October 2019 and is valid for 3 years, in some instances a newer version may be published. Always refer to www.ardexaustralia.com for the latest technical data from ARDEX Australia Pty Ltd.