



POWERSTIK

Flexible Non Slump Wall and Floor Tile Adhesive

- White
- Internal/External Use
- Australian Made

DESCRIPTION

ABA Powerstik is a white polymer fortified cement-based wall and floor tile adhesive that has been specially formulated with mastic type properties. ABA Powerstik has an extended open time, is non slump and flexible. Mix with water to achieve a mortar suitable for internal and external use in residential and light commercial applications.

ABA Powerstik meets the Green Building Council of Australia Green Star IEQ-13 requirements for Ceramic Tile Adhesives.

FOR FIXING (TILE TYPES)

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

TO (SUBSTRATES)

- Concrete, renders, screeds
- Fibre-cement sheet and plasterboard on walls
- Compressed fibre-cement sheet on floors
- ARDEX liquid applied undertile waterproofing membranes
- Existing ceramic tiles (internal dry areas)
- Ceramic Tile Underlay (CTU) such as Prima Ceramic Tile Underlay over engineered timber

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 prepared 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 7 days to cure prior to tiling.

Plasterboard/Medium Density Fibre-Cement Sheet (Walls Only)

Tiles can be fixed directly provided these boards are firmly and rigidly fixed in accordance with manufacturer's instructions to adequately support the tile bed. Priming is recommended for fibre-cement sheet but is not usually necessary for plasterboard except when jointing compound is used.

Compressed Fibre-Cement Sheet (Floors)

Internal Applications These sheets must be fixed strictly in accordance with manufacturer's instructions and be deemed suitable for the application by the manufacturer.

Tiling over compressed fibre-cement sheet for external flooring applications should 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.

Existing Ceramic Tiles (Internal Only)

These include sound, clean, glazed and unglazed tiles. Existing tiles must be firm and stable. Roughen the surface by mechanical means, clean off contamination and dust before tiling. Ensure that at least 80% of the glaze is removed. Tiling over existing tiles is not recommended in immersed applications.

Ceramic Tile Underlay (CTU)

Should be fixed as per the CTU manufacturer's instructions. The CTU must be a minimum of 6mm and made specifically for this purpose. Tiles under 100mm edge length cannot be fixed using this method. Please refer to ABA Technical Services for further details.

MIXING

ABA Powerstik powder is added to clean water in a large clean container whilst stirring vigorously with a paddle mixer. Mix thoroughly to give a lump free easily worked mortar of a thick creamy consistency. Mix for at least 2 minutes allow to stand for 5 minutes, and mix a second time for 2 minutes. A 20kg bag of ABA Powerstik requires approximately 6 - 6.5 litres of water. Do not add additional water.

The consistency of the adhesive can be slightly 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 3 hours at 23°C and 50% relative humidity

FIXING TECHNIQUE

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

Substrate surface, type and size of the tiles will determine the selection of the trowel. As a general guide use a 6 x 6 x 6mm notch trowel for walls and 10 x 10 x 10mm notch trowel for floor tiling. ABA Powerstik can be applied at a bed thickness greater than 3mm or less than 10mm.

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 joints, before the adhesive sets. ABA Powerstik has an open time of 30 minutes and an adjustment time of 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

20kg of ABA Powerstik is sufficient for approximately 8m² on walls, using a 6 x 6 x 6mm notched trowel and 6m² on floors using a 10 x 10 x 10mm notched trowel. The coverage will vary depending on substrate condition, tile type and application technique.

PACKAGING

ABA Powerstik is packed in polylined paper sacks – net weight 20kg.

SHELF LIFE

ABA Powerstik 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.

Pay attention to the following:

- Do not use ABA Powerstik in continuous immersion applications e.g. swimming pools, tanks, etc. ARDEX provides other systems.
- Do not use over metal or similar substrates.
- ABA Powerstik is not suitable for use directly over timber floors or fibre cement sheeted non engineered timber floors.
- ABA Powerstik should not be used on floors with a deflection greater than the joist span divided by 500. Joist span must comply with AS 1684.
- ABA Powerstik should not be used over substrates subject to shrinkage and other movement e.g. timber, ARDEX provides other systems.
- For setting of moisture sensitive natural stones, please refer to products in the ARDEX Natural Stone System.
- Dimensional instability in natural stone ranges is often difficult to detect visually and may require thermal and moisture stability testing to ensure that adhesive recommendations can be warranted. Contact your tile supplier for further information or ABA technical services for information and testing.

TECHNICAL DATA

Colour:	White Powder
Mixing Ratio:	1 vol water:3 vol powder, approximately 6-6.5 litres water per 20kg powder

Application Properties at 23°C and 50% RH

Open Time:	30 minutes
Adjustment Time:	20 minutes
Grouting Time:	24 hours
Pot life:	3 hours
Sagging:	None
Underfloor Heating:	Yes

Mechanical Properties (AS 4992)

Tensile adhesion strength after:	
28 days dry:	1.0 – 1.5 MPa
Water Immersion:	1.0 – 1.5 MPa
Heat:	1.0 – 1.5 MPa
Freeze Thaw:	1.0 – 1.5 MPa

SAFETY PRECAUTIONS

Irritating to respiratory system and skin. Risk of serious damage to eyes. Do not breathe dust. Avoid contact with skin and eyes. Wear suitable protective clothing. Use only in well ventilated areas. Refer to Material Safety Data Sheet.

PRODUCT GUARANTEE



Ardex Australia Pty Ltd (“we” or “us”) guarantees this product (also referred to as “our goods”) is free from manufacturing defects and will perform to any applicable specification published by us for 15 years from the date of application of the product if such application occurs within this product’s specified shelf life. 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 the cost of such replacement or repair, 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 our published instructions or any act or circumstance beyond our control, including shade variations and efflorescence and faulty workmanship on the part of any installer or applicator of the product. If you wish to make a claim under this guarantee you must notify us (address: 7/20 Powers Road Seven Hills NSW 2147; phone: 1800224070; email: techinfo@ardexaustralia.com), identify the product and provide evidence of your purchase and the subsequent application 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 and to undertake any inspections and tests necessary to establish your rights under this guarantee. 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”.

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