



# FLOORFLEX

## Two Part High Flex Wall and Floor Tile Adhesive

- Grey
- Internal & Covered External Use
- Australian Made

### DESCRIPTION

ABA Floorflex is a two component, rubber based wall and floor tile adhesive. It is especially formulated to fix tiles over timber (internal), fibre-cement sheets and concrete in internal and covered external applications where the substrates are subject to thermal and shrinkage movement. ABA Floorflex is ideal for fixing all types of tiles including ceramic, fully vitrified, porcelain, mosaics and non-moisture sensitive natural stone tiles.

ABA Floorflex is suitable for both internal and covered external use. For industrial and commercial applications use on the wall only. ABA Floorflex meets the Green Building Council of Australia Green Star IEQ-13 requirements for Ceramic Tile 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.

### FOR FIXING (TILE TYPES)

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

### TO (SUBSTRATES)

- Concrete, aerated concrete, cement renders
- Metal surfaces
- ARDEX liquid applied undertile waterproofing membranes (excluding shower recess floors)
- Medium density fibre-cement sheet, compressed
- Fibre-cement sheet, plasterboard
- Existing ceramic and vinyl tiles
- Internal sheet timber, particleboard and plywood
- Ceramic tile underlay

### 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/Screeds

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. Screeds must be at least 7 days old. 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

New renders and screeds should be finished with a wood float to the required surface regularity. Allow render to cure for 7 days prior to tiling.

### Plasterboard/Medium Density Fibre-Cement Sheet on Walls

Provided that these sheets are firmly and rigidly fixed to adequately support the tile bed, tiles can be fixed directly. Please ensure the surface is completely clean. Priming with ARDEX Multiprime is recommended over fibre-cement sheets, followed by taping of sheet joints with PVC ducting tape. 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)

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 sheets for external flooring applications should be carried out as per sheet manufacturer's recommendations and Australian Standard AS 3958.

### 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. Tiles between 100 and 350mm can only be fixed if floor deflection measured centrally between the floor joists is less than 1 in 360 and tiles greater than 350mm edge length can only be laid on floors with less deflection than 1 in 500. Please refer to ABA Technical Services for further details.

### 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.

### Autoclaved Aerated Concrete (AAC)

Remove loose particles from the surface. Apply two coats of ARDEX Multiprime and allow to dry.

### Internal Sheet Timber

Particleboard and plywood with the exception of unbonded timber such as laminated flooring or strip timber floors (e.g. cypress pine).

Timber floors must be structurally sound and free from abnormal deflection. The maximum load deflection must not exceed 1/360 of the span. Timber floors must have good underfloor ventilation and underfloor moisture levels must be stable during the life of the flooring system. Free water sources must not be allowed under timber floors as dimensional stability will be compromised.

If timber sheets are clean and free of contaminants, there is no need for sanding. If timber sheets are contaminated, these must



be sanded with 40 grit sand paper (or 24 grit if timber is coated/stained) to the original timber so as to achieve a suitable surface profile and to remove surface contaminants. Vacuum clean the surface prior to priming with ARDEX Optima, mixed 2 parts powder to 1 part liquid. Add the powder to the liquid whilst stirring with a mechanical mixer. Stir until both parts are homogeneously mixed. Pre-wet a 15mm nap (sponge) roller with the ARDEX Optima slurry before applying a thick coat of slurry over the timber substrate. Allow the slurry coat to dry fully before tiling over. For sheeted material e.g. particleboard flooring, tape joints with PVC ducting tape. Virgin strip timber floors must be fibre-cement sheeted prior to tiling.

### Existing Vinyl Tiles

This applies only to solid vinyl flooring which must be well bonded to the substrate, do not tile over thin vinyl flooring that has a foam backing. Remove wax, polish and any loose tiles. Clean with sugar soap and a scourer then rinse with warm water. Lightly sand the surface with a floor sanding machine and vacuum the dust.

### Existing Cork Tiles

Ensure tiles are well bonded to the substrate. Remove any surface coating by mechanical means. Prime the surface with ARDEX Multiprime.

### Metal Surfaces

Remove rust and mill scale mechanically and any oil or grease with a solvent cleaner. Galvanised metal should be cleaned using high pressure water and scrubbing with a stiff broom. Prime metal surfaces with an appropriate primer.

### Painted Surfaces

Thoroughly remove painted surfaces mechanically, do not use paint stripper or solvents. Allow surface to dry after cleaning.

### ARDEX Liquid Applied Undertile Waterproofing Membranes

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

### MIXING

The mixing ratio of ABA Floorflex is 1 part liquid to 2 parts powder by weight. Stir the ABA Floorflex liquid thoroughly and pour into a suitable clean plastic container. Add ABA Floorflex powder to the liquid whilst stirring with a mechanical mixer. Stir until both parts are homogeneously mixed. Allow the mixture to stand for 5 minutes and restir before use.

The pot life of the mixed mortar is approximately 2 hours at 23°C and 50% relative humidity, do not mix more material than can be used within that time. In temperatures above 23°C, pot life will be affected. To maintain consistency, do not add more than 5% extra liquid.

### FIXING TECHNIQUE

Before fixing ensure the substrate has been prepared and the tiles are free from dust. Tiles should be fixed in accordance with AS 3958. Rough and uneven surfaces can be smoothed with ABA Floorflex; the surface must be left to dry before the tile installation can take place.

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 notched trowel for walls and 10 x 10 x 10mm notched trowel for floor

tiling. ABA Floorflex can be applied at a bed thickness greater than 3mm or less than 10mm. A continuous (unbroken) 5mm layer of ABA Floorflex must be achieved over timber floors.

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 Floorflex has an open time of 45 minutes and an adjustment time of 3 hours. 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. Light foot traffic and grouting may be allowed after approximately 24 hours and full traffic after approximately 48 hours at 23°C and 50% relative humidity. Allow longer for dense tiles/substrates, humid climates and low temperatures.

### COVERAGE

A 20kg liquid and 40kg powder unit of ABA Floorflex is sufficient for approximately 26-29m<sup>2</sup> on walls using a 6 x 6 x 6mm notched trowel, 19-21m<sup>2</sup> 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 Floorflex powder is packed in polylined paper sacks – net weight 20kg. ABA Floorflex liquid is packed in a plastic pail – net weight 20kg.

### SHELF LIFE

ABA Floorflex 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:

- ABA Floorflex is not suitable for continuous immersion applications, such as swimming pools and water tanks. ARDEX provides other systems.
- Do not use ABA Floorflex on commercial floors subject to heavy loads e.g. shopping centres, public areas or for fixing tiles over external timber.
- For setting of moisture sensitive natural stones, please refer to products in the ARDEX Natural Stone System.



## SAFETY PRECAUTIONS

Irritating to respiratory system and skin. Risk of serious damage to eyes.

Do not breathe dust. 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. Use only in well ventilated areas. Avoid generation of airborne dust during mixing. If swallowed do not induce vomiting, give a glass of water and contact a doctor. For further safety data, consult the latest Material Safety Data Sheet.

## TECHNICAL DATA

Colour: Grey powder, white liquid  
Mixing Ratio: 1 part liquid : 2 parts powder

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

Open Time: approx 45 minutes  
Adjustment Time: approx 3 hours  
Grouting Time: 24 hours  
Pot life: 2 hours

### Mechanical Properties (AS 4992)

Tensile Adhesion Strength after:  
28 days dry: 1.0-1.5MPa  
Water Immersion: 0.5-1.0MPa  
Heat: 1.0-1.5MPa  
Freeze Thaw: 0.5-1.0MPa

## 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](mailto: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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