



---

# ARDEX Isoflex

## Two Part Flexible Adhesive for Wall and Floor Tiles

---

Highly flexible - achieves S2

Tile to a wide range of substrates, including direct to internal sheeted timber with priming

Easy to measure on site with 2:1 mixing ratio

Reduces impact and airborne noise transmission

Ideal for all tile types including ceramic, fully vitrified, porcelain and mosaics

Suitable for wall and floor tiling

For internal and covered external use



---

**ARDEX Australia Pty Ltd**  
20 Powers Road  
Seven Hills NSW 2147  
1300 788 780  
technicalservices@ardexaustralia.com  
[www.ardexaustralia.com](http://www.ardexaustralia.com)

**ARDEX New Zealand Ltd**  
15 Alfred Street  
Onehunga, Auckland, 1061  
0800 227 339  
info@ardexnz.com  
[www.ardex.co.nz](http://www.ardex.co.nz)

# ARDEX Isoflex

## Two Part Flexible Adhesive for Wall and Floor Tiles

### DESCRIPTION

ARDEX Isoflex is a two component, rubber based wall and floor tile adhesive. It is especially formulated to fix tiles over sheeted particleboard or plywood timber (internal), fibre-cement sheets and concrete (internal and covered external) where the substrates are subject to thermal and shrinkage movement.

ARDEX Isoflex is suitable for both internal and covered external use. For industrial and commercial applications use on the wall only.

### 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 (fully prepared)

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 plywood or particleboard

### 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 shall 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

Provided that these boards 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. 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

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.

### Existing Ceramic Tiles (Internal Dry Areas 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, 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 for tiles less than 350mm and must not exceed 1/500 of the span for tile greater than 350mm. 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 boards are clean and free of contaminants, there is no need for sanding. If timber boards 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 (ARDEX P9 or ARDEX P82 can also be used). 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. 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.

### 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 metal 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.

# ARDEX Isoflex

## Two Part Flexible Adhesive for Wall and Floor Tiles

### MIXING

The mixing ratio of ARDEX Isoflex is 1 part liquid to 2 parts powder by weight. Stir the ARDEX Isoflex liquid thoroughly and pour into a suitable clean plastic container. Add ARDEX Isoflex 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 and do not add any water.

### 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.

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. ARDEX Isoflex can be applied at a bed thickness greater than 3mm or less than 10mm. A continuous (unbroken) 5mm layer of ARDEX Isoflex must be achieved over timber floors by using a 15mm trowel (3mm bed 8mm notch combined).

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.

ARDEX Isoflex has an open time of 45 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. 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.

The tile joints should be grouted with the appropriate ARDEX grout.

### COVERAGE

A 20kg liquid and 40kg powder unit of ARDEX Isoflex 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 and 10-11.5m<sup>2</sup> using a Isoflex trowel. The coverage will vary depending on substrate condition, tile type and application technique.

### PACKAGING

ARDEX Isoflex powder is packed in polylined paper sacks – net weight 20kg. ARDEX Isoflex liquid is packed in a plastic pail – net weight 20kg.

### SHELF LIFE

ARDEX Isoflex 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 Isoflex is not suitable for continuous immersion applications, such as swimming pools and water tanks. ARDEX provides other systems.

Do not use ARDEX Isoflex 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 DATA

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](http://www.ardexaustralia.com)

### 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 (ISO 13007)

**Tensile Adhesion Strength after 28 Days Dry:** > 0.5MPa  
**Water Immersion:** > 0.5MPa  
**Heat:** > 0.5MPa  
**Freeze Thaw:** > 0.5MPa  
**Classification:** C1 E S2

# ARDEX Isoflex

## Two Part Flexible Adhesive for Wall and Floor Tiles

---

### **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; Email: [technicalservices@ardexaustralia.com](mailto: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 or 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 them.

© ARDEX Australia Ltd 2019.

All aforementioned products are the trademarks of ARDEX Australia Ltd, its licensors and affiliates.

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](http://www.ardexaustralia.com) for the latest technical data from ARDEX Australia Pty Ltd.