

## ARDEX X56

## **Highly Flexible Tile Adhesive**

Highly flexible - achieve S2 classification

Fast setting - grout after 4 hours

Suitable for early age concrete - tile sooner over concrete (after 7 days) and screeds/renders (after 16 hours)

High yield - 15kg covers 12 - 14m<sup>2</sup> on walls, and 8 - 10m<sup>2</sup> on floors

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

## **ARDEX Australia Pty Ltd**

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# ARDEX X 56 Highly Flexible Tile Adhesive

#### **DESCRIPTION**

ARDEX X56 is a fast setting, polymer modified highly flexible adhesive. This flexibility makes the adhesive suitable for tiling directly to sheet timber and concrete substrates subject to thermal/shrinkage movement without the addition of additives. ARDEX X56 is ideal for quick turnaround applications owing to its fast drying formulation and compatibility with early age concrete and renders/screeds.

ARDEX X 56 is suitable for internal and external, commercial and residential wall and floor applications. It can also be used in shower recess areas with correct falls to drainage.

#### FOR FIXING (TILE TYPES)

Ceramic tiles, natural stone (excluding moisture sensitive stone), fully vitrified tiles, glass mosaics, porcelain.

#### TO (SUBSTRATES)

Medium density fibre-cement sheets, compressed fibre-cement sheets (floors only), plasterboard Concrete, renders, screeds, autoclaved aerated concrete Internal sheet timber

ARDEX liquid applied undertile waterproofing membranes Existing vinyl and ceramic tiles Metal surfaces

James Hardie® Scyon Secura sheets (contact ARDEX Technical Services for further specific system details)

#### SUBSTRATE PREPARATION

In general, the surface being adhered to must be clean, dry, 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 that the background's required drying time, as given in the relevant part of AS 3958, is allowed to elapse prior to fixing the tiles (unless indicated otherwise in the section below). Prime porous substrates with ARDEX Multiprime.

#### Concrete

This includes precast, in-situ and wood floated concrete. Allow new concrete to cure for at least seven days prior to tiling. Any surface laitance, concrete sealers, curing compounds and other barrier materials shall be removed from the surface prior to 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 35 MPa 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 profile. Screeds should be pitched to drains where required. Allow at least 16 hours to cure prior to tiling.

### **Autoclaved Aerated Concrete (AAC)**

Remove loose particles from surface and apply two coats of ARDEX Multiprime before tiling.

Plasterboard/Medium Density Fibre-Cement Sheet Tiles can be fixed directly provided these wall boards are fixed in accordance with manufacturer's instructions. Priming is recommended for fibre-cement sheets but is not usually necessary for plasterboard except when jointing compound is used.

### **Timber Floors (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 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 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. Priming can be completed with ARDEX Optima or ARDEX P9. 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 for at least 40 minutes 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.

#### 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

#### **Existing Ceramic Tiles**

The old tiles must be firm and stable. Roughen the surface by mechanical means and clean off contamination and dust before tiling. Ensure that at least 80% of the glaze is removed.

#### **Existing Vinvl 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 foam backing. Clean the existing vinyl with a neutral stripping solution to remove any wax and dirt. Rinse with clean water and allow to dry. Lightly sand the surface with a floor sanding machine and vacuum the

#### **Metal Surfaces**

Remove rust and mill scale mechanically and oil/grease with methylated spirits. Galvanized metal should be cleaned using high pressure water and scrubbing with a stiff broom. Prime metal surfaces with an appropriate epoxy type metal primer, before the use of P9 or P82.

#### MIXING

ARDEX X 56 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 2 minutes. Restir the mixture thoroughly and the adhesive is ready for use. A 15kg bag of ARDEX X56 requires approximately 6.75 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 45 minutes 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 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 for walls and 10 x 10 x 10mm notched for floor tiling. 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 so that the back of the tile is completely covered by the mortar. Tiles with ribbed or keyed back profiles should also be buttered so that the voids are filled. ARDEX X56 has an open time of 30 minutes and an adjustment time of 30-45 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.

#### **MOVEMENT JOINTS**

Movement joints must be in accordance with AS 3958 and substrate manufacturer's recommendation

#### **GROUTING**

Typically the tile bed is hard enough for grouting after approximately 4 hours at 23°C at 50% RH. Allow longer for dense tiles/substrates, humid climates and low

15kg of ARDEX X56 is sufficient for approximately 12m<sup>2</sup> to 14m<sup>2</sup> on walls, using a 6 x 6 x 6mm notched trowel and  $8m^2$  to  $10m^2$  on floors using a  $10 \times 10 \times 10$ 10mm notched trowel. Coverage will vary depending on substrate condition and tile type.

#### **PACKAGING**

ARDEX X56 is packed in polylined paper sacks - net weight 15kg.

#### **SHELF LIFE**

ARDEX X56 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:

For external tiling ensure there is no ponding water. Not suitable for use in or around swimming pools. For commercial floors which are subject to heavy loads, ARDEX provides other systems.

#### SAFETY PRECAUTIONS

This product is considered non-hazardous in normal usage. The presence of cement in the product gives an alkaline mortar which may cause some irritation if prolonged contact with skin takes place. 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 keep the product out of the reach of children. Avoid generation of airborne dust during mixing. If swallowed do not induce vomiting, give a glass of water and contact a doctor.

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

#### **TECHNICAL DATA**

Colour: Light Grev

Mixing Ratio: Approx 6.75L water/15kg

Application Properties at 23°C and 50% RH Open Time: 30 minutes Adjustment Time: 30-45 minutes **Grouting Time:** 4 hours Pot Life: 45 minutes **Underfloor Heating:** Yes

## Mechanical Properties (ISO 13007) Tensile Adhesion Strength after

28 days dry: > 0.5 MPa Water Immersion: > 0.5 MPa Heat: > 0.5 MPa Freeze Thaw: > 0.5 MPa Classification: C1 E S2

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This data sheet was issued in April 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.