

# **ARDEX A38**

### **Rapid Set Engineered Screed Cement**

Dimensionally stable

For internal and external use

Working time up to 60 minutes

AS 1884 Resilient Flooring Standard Compliant

Ready to receive resilient and textile floor coverings and parquet after 2 days

Fast track – Ready to receive tiles, natural stone and terrazzo tiles after 8 hours

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# **ARDEX A38**

### **Rapid Set Engineered Screed Cement**

#### **DESCRIPTION**

ARDEX A 38 is a rapid set engineered screed cement that has been designed for all types of floor coverings and is especially effective when installing moisture sensitive coverings.

#### AREAS OF APPLICATION

ARDEX A 38 can be used for internal and external applications under various floor coverings. The screed can be used as a:

- Bonded screed
- Un-bonded screed (on a slipsheet or insulating layer)
- Heated screed

#### For the installation of:

- Tiles
- Terrazzo
- Parquet
- Natural Stones
- Resilient and textile floor coverings
- ARDEX Waterproofing Membranes

#### SURFACE PREPARATION

Concrete floors must be solid, thoroughly clean and free of oil, wax, grease, asphalt, latex compounds, curing and sealing compounds and any other surface contaminant. Mechanically clean the floor to provide a roughened, clean, sound, solid and open porous matrix of the concrete, by using recommended preparation methods such as shot-blasting, scarifying, diamond grinding/shaving or other suitable method.

Acid etching is not an acceptable method of cleaning the sub-floor. Do not use solvents or sweeping compounds to clean the sub-floor. Sub-Floors must be dry as per current Australian Standard AS1884 and properly primed for a successful installation. Direct to earth subfloors must have an effective damp-proof membrane, or use ARDEX MOISTURE BARRIER system.

#### **MIXING INSTRUCTIONS**

Using horizontal forced action mixers or screed pumps, mix 20kg ARDEX A 38 with 100kg ARDEX Gravel Mix 0-4mm; gradually add 9.5-11 litres of clean water (mixing water may vary depending on the moisture content of the ARDEX Gravel Mix). Mixing time is 2 minutes.

It is important not to overfill the mixer above the recommended volume. Ideally, the mixing drum should only be filled up to ¾ of the volume. Overfilling of the drum will result in poor mixing.

The total amount of mixing water to be used must not exceed 11 litres per bag of ARDEX A 38. Do not add any

additives such as compound oils etc and do not mix with other cements. The working time of the ARDEX A 38 is approximately 60 minutes depending on site conditions. Mixing, application, levelling and smoothing must succeed each other within 10 minutes. The areas should only be of such a size that they can be completed within this working time. Higher temperatures shorten, whilst lower temperatures lengthen working and hardening times.

#### **APPLICATION**

For bonded screeds and to ensure maximum bond to the prepared substrate, a slurry mix must be produced. ARDEX A 38 and ARDEX Gravel Mix are mixed in a 1:1 ratio. Separately, ARDEX P 51 and water are mixed in a 1:1 ratio. The mixed powder and mixed liquid are then combined in equal proportions (1:1 ratio) to produce a thin slurry which will require regular agitation.

Whilst the slurry mix is wet, install the ARDEX A 38 screed to the primed substrate - wet on wet. Do not install the ARDEX A 38 screed on to a dry substrate. The fast drying properties of the screed need to be observed. If in doubt install a test area.

For application over floor heating systems, contact ARDEX Technical Services for more information.

#### **THICKNESS**

The nominal screed thickness for unbonded ARDEX A 38 mix is 40mm (minimum). For a bonded screed thickness must be at 15mm (minimum).

ARDEX A38 can be installed to any thickness in 50mm increments to ensure proper compaction. For additional screed layers, the slurry mix and wet on wet process must be strictly followed between layers.

#### **BAY SIZES**

ARDEX A 38 screed is laid in bays/panels of maximum  $40\text{m}^2$  each with the longest side not more than 8m. The ratio of length to width shall not exceed 2. Each bay can be separated by a narrow gap (~2mm) with adjacent bays able to be joined the next day with epoxy to create larger panels up to  $100\text{m}^2$  in area.

Changes in direction, protrusions, bay divisions and where the topping screed butts against perimeter walls, are to be bounded by movement joints filled with compressible foam strip (e.g. Abelflex) and flexible sealant (e.g. ARDEX RA 040 Polyurethane).

#### **FLOOR COVERINGS**

ARDEX A 38 is foot trafficable and ready to receive tiles after 8 hours. ARDEX smoothing cements should be applied after 24 hours. Since the final strength has not been achieved after this time, placement of heavy loads such as pallets with tiles and heavy machines should be avoided. The surface can be ready to receive resilient and textile floor coverings and parquet after 2 days.

## **ARDEX A38**

### **Rapid Set Engineered Screed Cement**

#### **TECHNICAL DATA**

| CHARACTERISTICS             | TEST<br>METHOD | VALUE                                   |
|-----------------------------|----------------|---|
| Bulk density                |                | approx. 1kg/L                           |
| Fresh mortar density        |                | approx. 2kg/L                           |
| Material requirement        |                | approx. 3.1kg<br>of powder/m² @<br>10mm |
| Working time                |                | approx. 60mins                          |
| Walkability                 |                | approx. 8hrs                            |
| Compressive<br>Strength     | ISO 13007.4    | After 1 day -<br>approx. 20 MPa         |
|                             |                | After 3 days -<br>approx. 30 MPa        |
|                             |                | After 28 days -<br>approx. 35 MPa       |
| Tensile Bending<br>Strength | ISO 13007.4    | After 1 day -<br>approx. 4.0 MPa        |
|                             |                | After 3 days -<br>approx. 4.5 MPa       |
|                             |                | After 28 days -<br>approx. 5.0 MPa      |
| Suited for floor heating    |                | Yes                                     |

#### **COVERAGE**

A 20kg bag of ARDEX A 38 mixed with 100kg of ARDEX Gravel Mix will cover approximately 6.5m<sup>2</sup> per 10mm of thickness.

#### **SHELF LIFE**

ARDEX A 38 has a shelf life of 12 months if stored in dry conditions in the original unopened packaging, at 23°C and 50% relative humidity.

#### **LIMITATIONS**

Do not install ARDEX A 38 if the ambient temperature and or substrate temperature is below 5°C or above 35°C. ARDEX A 38 should not be directly bonded to any ARDEX Waterproofing Membranes. Ensure areas can be completed within the advised working timeframe.

#### **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. May damage fertility. May damage the unborn child. 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. 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. At times updates can occur to data. For additional information and to ensure you have the most current technical and safety information, please consult the latest Safety Data Sheet (SDS) and Technical Data Sheet found on the product page at www.ardexaustralia.com.

#### **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 20 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) 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**

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