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PRODUCT DATA SHEET

# ARDEX A 38 MIX

## Pre-Blended Ultra Rapid Drying Cement for Internal & External Screeds

### Features

- Pre-blended with graded sand for convenience - just add water
- Ideal for screeding in locations where access is limited
- Walkable in 3 hours
- Receives ceramic and natural stone tiles directly after only 4 hours
- Install carpet, wood and vinyl floorcoverings after 48 hours
- Passes BRE Screed (ISCR) Testing after 6 hours
- After just one day, achieves the acceptable minimum compressive and tensile bending strengths attained by an ordinary cement screed after 28 days
- For bonded, unbonded and floating screeds
- Can be used with underfloor heating systems
- Conforms to EN 13813 CT-C40- F5



What is the  
Rapidry Plus Formula?

It is the ability to totally bind the water used for mixing within  
the mortar, ensuring rapid drying and hardening properties



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# ARDEX A 38 MIX

## Pre-Blended Ultra Rapid Drying Cement for Internal & External Screeds

### DESCRIPTION

ARDEX A 38 MIX is a blend incorporating ARDEX A 38 cement and graded sands, and has been specially formulated to produce ultra-rapid drying floor screeds for internal and external locations. With 'RAPIDRY PLUS FORMULA' Technology, an ARDEX A 38 MIX screed can be walked on just 3 hours after application and ceramic and natural stone tiles can be installed after just 4 hours irrespective of thickness, making it ideal for fast track tiling projects. Resilient floorcoverings such as carpet, vinyl and wood can be installed after 48 hours irrespective of thickness.

ARDEX A 38 MIX achieves rapid strengthening and will pass a BRE Screed (ISCR) Test after just 6 hours. After a day, it will also exceed the acceptable minimum compressive and tensile bending strengths attained by ordinary cement screeds after 28 days.

### USE

ARDEX A 38 MIX is used to produce bonded, unbonded and floating screeds for internal and external locations, including wet areas such as swimming pools. It can also be used for large repairs to existing cement/sand screeds. It is ideal for situations where early foot traffic and rapid hardening is required.

### THICKNESS

ARDEX A 38 MIX screeds should be applied to the following thicknesses as recommended by BS 8204-1 or BS 5385-3:  
Bonded screeds: 15mm - 40mm  
Unbonded screeds: 40mm+  
Floating screeds: 75mm+ or 65mm+ in lightly loaded/domestic locations.  
When used for screed repair, ARDEX A 38 MIX can be applied to the full thickness of the existing cement/sand screed.

### SUBSTRATE PREPARATION - SCREEDING

#### Bonded Screed

ARDEX A 38 MIX can be laid as a bonded screed by firstly applying an ARDEX A 38 MIX grouting slurry to a suitably prepared concrete base. The ARDEX A 38 MIX screed must then be placed and compacted on the base 'fresh in fresh' whilst the grouting slurry is still wet and workable.

To prepare the grouting slurry for dry concrete in internal locations, dilute ARDEX P 51 Primer & Bonding Agent with an equal volume of water. Then add ARDEX A 38 MIX powder with the diluted ARDEX P 51 to produce a grouting slurry of a creamy consistency.

For external locations, wet areas and damp concrete, prepare the grouting slurry as above

using ARDEX E 100 Additive for Bonding/ Slurry Grouts diluted with an equal volume of water.

**NOTE:** The concrete surface must be prepared using suitable mechanised equipment to expose the coarse aggregate and be free from all barriers to adhesion.

#### Unbonded Screed

For unbonded screeds, it is good practice to ensure the concrete slab surface is reasonably true and flat prior to applying a proprietary damp proof/slip membrane.

For uneven areas which require levelling or filling, consult the ARDEX A 46 datasheet for localised areas and the ARDITEX NA datasheet for larger areas.

#### Floating Screed

For floating screeds, place a suitable separating or damp proof membrane over the insulation before applying the screed mortar.

**NOTE:** ARDEX A 38 MIX is suitable for direct application to concrete bases which are insufficiently dry (above 75% RH), direct to ground or ground supported without an effective damp proof membrane, as well as areas which are subject to rising damp. It is however recommended for projects installing resilient floor finishes such as carpet, vinyl, rubber & wood that the use of a damp proof membrane is incorporated as follows to protect the finish from moisture in the underlying substrate.

For unbonded and floating screeds, install a proprietary damp proof/slip membrane as recommended by BS 8204-1:2003+A1:2009 and BS 5385-3:2014 before laying the screed; for bonded screeds, it is recommended screeding is followed by an application of ARDEX DPM 1 C/ ARDEX DPM 1 C R after 3 hours. Should the concrete base be affected by residual construction moisture and is below 95%RH, ARDEX MVS 95 can be substituted for the ARDEX DPM and can be applied after 4 hours.

#### SUBSTRATE PREPARATION - SCREED REPAIRS

Repairs should be cut back vertically to sound screed material. The cut edges should then be treated with a bonding coat of ARDEX A 38 MIX powder mixed with ARDEX P 51 Primer & Bonding Agent (for dry, internal areas) or ARDEX E 100 Additive for Bonding/Slurry Grouts (for external or wet areas) diluted with an equal volume of water to form a bonding coat of creamy consistency. ARDEX A 38 MIX should be compacted into the bonding coat while it is still wet and workable, i.e. 'fresh in fresh'.

### WATER CONTENT

Add sufficient water to obtain a workable mix, up to a maximum of 1.75 litres per 25kg bag of ARDEX A 38 MIX. To achieve rapid drying and strength development, do not exceed the stated maximum.

### MIXING

Mix to a normal screed mortar consistency. When a sample of the mortar is squeezed in the hand, the sample should retain its shape and not crumble, and the hand should be left slightly moist. When a sample is compacted on the base, no film of water should form on the surface.

Mixing should be performed using a pan, trough or other forced action type. Normal 'free-fall' mixers are not suitable for mixing semi-dry screed mortars. Use clean equipment and do not use other cements, lime or screed additives etc., in the mix.

### APPLICATION

The working time of the mixed mortar is approximately 1 hour at 20°C, therefore mixing, placing, compaction and trowelling off must proceed without delay. The amount of mortar mixed and the area to be screeded should be limited so that trowelling off and finishing can be completed within this time.

Where a new bay is laid against a set and hardened screed, it is recommended that day work joints are vertical and treated with the grouting slurry as described under SUBSTRATE PREPARATION.

Apply ARDEX A 38 MIX at temperatures above 5°C.

#### Applications over underfloor heating systems:

When an ARDEX A 38 MIX screed has been laid on a hot water floor system, 3 days should be allowed to elapse before heating the water up to a temperature of 25°C; this should then be maintained for a further 3 days. The maximum floor temperature should then be used and maintained for a further 4 days. Throughout this time, draughts across the screed must be avoided. The floor should then be allowed to cool down to room temperature (above 15°C) before laying floorcoverings.

**NOTE:** ARDEX A 38 MIX screed can be thermally loaded up to 65°C (water temperature).

### DRYING TIME

ARDEX A 38 MIX can be walked on just 3 hours after application and ceramic and natural stone tiles installed after just 4 hours, irrespective of screed thickness. Resilient floorcoverings such as carpet, vinyl, rubber & wood can be installed after 2 days. The screed will be fully dry after 48 hours.

# ARDEX A 38 MIX

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### SURFACE FINISH

Before fixing ceramic tiles and quarry tiles, etc., the screed should be finished with a wood float. Prior to laying thin floorcoverings e.g. vinyl sheet, a very smooth surface may be obtained using any of the ARDEX levelling compounds which should be selected with the final floor finish in mind. Please see the relevant ARDEX datasheets for further information.

**NOTE:** Screeds are not designed as wearing surfaces, and should be given adequate protection once dry against damage, wear and contamination during subsequent building operations. Protective coverings will also minimise any curling and lipping at joints in unbonded screeds.

### COVERAGE

Material requirement is approximately 1.85kg of ARDEX A 38 MIX per m<sup>2</sup> per millimetre of screed thickness i.e. approximately 0.5m<sup>2</sup> at 25mm thick or 0.8m<sup>2</sup> at 15mm thick per bag.

### PACKAGING

ARDEX A 38 MIX is packed in paper sacks incorporating a polyethylene liner – net weight 25kg.

### STORAGE AND SHELF LIFE

ARDEX A 38 MIX contains a reducing agent to control the level of Chromium VI when mixed prior to use. ARDEX A 38 MIX must be stored in unopened packaging, clear of the ground in cool dry conditions and protected from excessive draught.

If stored correctly, as detailed above, and used within 12 months of the date shown on the packaging, the activity of the reducing agent (added to control the level of soluble Chromium VI) will be maintained and this product will contain, when mixed with water, no more than 0.0002% (2ppm) soluble Chromium VI of the total dry weight of the cement content of this product. Use of the product after the end of the declared storage period may increase the risk of allergic reaction.

**NOTE:** For the latest technical or health and safety information on this product, consult the current technical or health and safety data sheet online at [www.ardex.co.uk](http://www.ardex.co.uk)

### TECHNICAL DATA

Weight of fresh mortar approx. 2.2kg/litre  
Working time at 20°C approx. 1 hour  
Walkability at 20°C approx. 3 hours

### COMPRESSIVE STRENGTH (DIN 1164)

After 1 day 25.0 N/mm<sup>2</sup>  
After 7 days 35.0 N/mm<sup>2</sup>  
After 28 days 40.0 N/mm<sup>2</sup>

### TENSILE BENDING STRENGTH (DIN 1164)

After 1 day 4 N/mm<sup>2</sup>  
After 3 days 4.5 N/mm<sup>2</sup>  
After 28 days 5.5 N/mm<sup>2</sup>

### SOUNDNESS (BRE SCREED TEST)

Annex D and E of BS 8204-1 contains advice on the use of the in situ crushing resistance test on bonded, unbonded and floating screeds. The installed ARDEX A 38 MIX can normally be tested after 6 hours using the BRE screed tester if required. The depth of an indentation of a correctly mixed and compacted screed should comply with the requirements of the floor finish and category of use.

### MOISTURE TESTING

Should the moisture need to be determined, the specific properties and composition of an ARDEX A 38 MIX screed mean that the moisture content cannot be determined with electric conductivity or hygrometer methods and instead the Speedy Moisture Tester (Carbide Method) must be used.

The DIN standard for testing cementitious floor screeds (DIN 18121-2) is to use the CM (Carbide Method) when laying moisture sensitive floorcoverings and a reading of  $\leq 2\%$  needs to be achieved. Please consult ARDEX Technical Services for further advice.

### British Standards Codes of Practice

BS 8204: Part 1.

In-situ Floorings – Bases and Screeds

BS 5385: Part 3. Appendix C.  
Ceramic Floor Tiling and Mosaics

BS 8000: Part 9.

Code of Practice for cement/sand floor screeds and concrete floor toppings (Workmanship on building sites).

	
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000069/CPR/2013 EN 13813:2002 CT-C40-F5	
ARDEX A 38 MIX Cementitious screed material for use internally and externally	
Reaction to fire:	Class A2 <sub>fl</sub>
Release of corrosive substances:	See MSDS
Compressive strength:	C40
Flexural strength:	F5

**NOTE:** The information supplied in our literature or given by our employees is based upon extensive experience and, together with that supplied by our agents or distributors, is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to up date this information at any time without prior notice. We also guarantee the consistent high quality of our products; however, as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations.

**TECHNICAL ADVICE HELPLINE**  
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**ARDEX online**  
[www.ardex.co.uk](http://www.ardex.co.uk)