

CI/SfB (43) Pr3

FEBRUARY 2023 (SUPERSEDES OCTOBER 2015) PRODUCT DATA SHEET

## ARDEX A35 MIX

# Pre-Blended Ultra Rapid Drying Cement for Internal 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 24 hours
- Install carpet, wood and vinyl floorcoverings after 24 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





What is the Rapidry Formula?

Binds the mix water within the mortar, speeding drying and hardening times irrespective of application thickness



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### **ARDEX A35 MIX**

# Pre-Blended Ultra Rapid Drying Cement for Internal Screeds

#### DESCRIPTION

ARDEX A 35 MIX is a blend incorporating ARDEX A 35 cement and graded sand, which has been specially formulated to produce ultra-rapid drying floor screeds for internal locations. With 'RAPIDRY FORMULA' Technology, ARDEX A 35 MIX can be walked on just 3 hours after application and ceramic and natural stone tiles can be installed after just 24 hours irrespective of thickness. Resilient floorcoverings such as carpet, vinyl and wood can be installed after 24 hours.

ARDEX A 35 MIX achieves rapid strength 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 35 MIX is used to produce bonded, unbonded and floating screeds for internal locations. 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 35 MIX should be applied to the following thicknesses:

Bonded screeds: 15mm - 40mm

Unbonded screeds: 40mm+

Floating screeds: 75mm+ or 65mm+ in lightly loaded/domestic locations.

When used for screed repairs, ARDEX A 35 MIX can be applied to the full thickness of the existing cement/sand screed.

### SUBSTRATE PREPARATION - SCREEDING Bonded Screed

ARDEX A 35 MIX can be laid as a bonded screed by firstly applying an ARDEX A 35 MIX grouting slurry to a suitably prepared concrete base. The ARDEX A 35 MIX 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, dilute ARDEX P 51 Concentrated Water Based Primer & Bonding Agent with an equal volume of water. Then add ARDEX A 35 MIX Powder with the diluted ARDEX P 51 to produce a grouting slurry of a creamy consistency.

**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 that 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: Where the concrete base is insufficiently dry (above 75% RH), direct to ground or ground supported without an effective damp proof membrane, or if the area is subject to rising damp, ARDEX A 35 MIX must be laid over an effective damp proof membrane. 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. For bonded screeds, firstly apply ARDEX DPM 1 C/ARDEX DPM 1 C R and allow to cure, and then apply ARDEX R 3 E Moisture Tolerant Epoxy Primer; fully sand blind whilst wet and allow to cure, sweep and vacuum clean before finally applying the ARDEX A 35 MIX bonding slurry. Alternatively, ARDEX A 38 MIX Pre-Blended Ultra Rapid Drying Cement for Internal & External Screeds may be applied direct to damp concrete using ARDEX E 100 Additive for Bonding/Slurry Grouts for the bonding slurry; for further technical informa-tion, please refer to the ARDEX A 38 MIX datasheet or contact Technical Services.

### SUBSTRATE PREPARATION - SCREED REPAIRS

Repairs to dry internal screeds should be cut back vertically to sound screed material. The cut edges should then be treated with a bonding coat of ARDEX A 35 MIX powder mixed with ARDEX P 51 diluted with an equal volume of water, which is mixed to form a bonding coat of creamy consistency.

ARDEX A 35 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 2 litres per 25kg bag of ARDEX A 35 MIX. To achieve rapid drying and strength development, do not exceed the stated maximum water content.

#### 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 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 35 MIX at temperatures above 5°C.

#### Application over underfloor heating systems:

When ARDEX A 35 MIX has been laid on a hot water floor system, 3 days should be allowed to elapse before heating the water up to a flow temperature of  $25^{\circ}\text{C}$ ; 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  $15^{\circ}\text{C}$ ) before laying floorcoverings.

**NOTE:** ARDEX A 35 MIX screeds can be thermally loaded up to 65°C (water temperature).

### ARDEX A35 MIX

# Pre-Blended Ultra Rapid Drying Cement for Internal Screeds

#### **DRYING TIME**

ARDEX A 35 MIX can be walked on just 3 hours after application and ceramic and natural stone tiles installed after just 24 hours, irrespective of screed thickness. Resilient floorcoverings can be installed after 24 hours, or 4 hours for carpet, vinyl and rubber when smoothed with ARDEX A 55 Ultra Rapid Drying Self Smoothing Compound. The screed will be fully dry after 24 hours.

#### SURFACE FINISH

Before fixing ceramic tiles and quarry tiles, 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 the screed surface 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 35 MIX per m<sup>2</sup> per millimetre of screed thickness i.e. approximately 0.5m<sup>2</sup> at 25mm thick or 0.9m<sup>2</sup> at 15mm thick per bag.

#### **PACKAGING**

ARDEX A 35 MIX is packed in paper sacks incorporating a polyethylene liner – net weight 25kg.

#### STORAGE AND SHELF LIFE

ARDEX A 35 MIX contains a reducing agent to control the level of Chromium VI when mixed prior to use. ARDEX A 35 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 data on this product, consult the current technical or health and safety data sheet online at **www.ardex.co.uk** 

#### TECHNICAL DATA

Weight of fresh mortar approx. 2kg/litre
Working time at 20°C approx. 60 minutes
Walkability at 20°C approx. 3 hours

#### COMPRESSIVE STRENGTH (DIN 1164)

After 1 day 25.0 N/mm<sup>2</sup>
After 3 days 32.0 N/mm<sup>2</sup>
After 28 days 40.0 N/mm<sup>2</sup>

#### TENSILE BENDING STRENGTH (DIN 1164)

After 1 day 5.0 N/mm²
After 3 days 6.0 N/mm²
After 28 days 7.0 N/mm²

#### 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 35 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 35 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 ≤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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000024/CPR/2013 EN 13813:2002 CT-C35-F6

ARDEX A 35 MIX

ARDEX A 35 MIX
Cementitious screed material for use internally in buildings

Reaction to fire: Class A1<sub>n</sub>
Release of corrosive substances: See MSDS
Compressive strength: C35
Flexural strength: F6

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 01440 714939

ARDEX online www.ardex.co.uk