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July 2019 PRODUCT DATA SHEET

ARDEX A 70 GYPFLO Quick Drying Flowable Calcium

Sulphate Screed

Features

- Walkable in as little as 6 hours
- Ready to receive floorcoverings in as little as 14 days
- Pre-blended for consistency and convenience just add water
- Pump or hand apply ideal for areas with restricted access
- Excellent flow properties
- Low shrinkage minimises cracking and curling
- High early and final strength development (CA-C40-F7)
- Can be used with underfloor heating systems

bsi Quality Management Systems CERTIFIED	ISO 14001 Environmental Management CERTIFIED	ISO 45001 Occupational Health and Safety Management CERTIFIED	ARDEX UK LIMITED Homefield Road, Haverhill, Suffolk CB9 8QP UK. Telephone: +44 (0)1440 714939 Fax: +44 (0)1440 716640 Email: technical_admin@ardex.co.uk
Reg No. FM 01207	EMS 565427	OHS 628374	ARDEX online: www.ardex.co.uk

ARDEX A 70 GYPFLO

Quick Drying Flowable Calcium Sulphate Screed

DESCRIPTION

ARDEX A 70 GYPFLO is a quick drying Calcium Sulphate screed that is specially formulated to receive floorcoverings in as little as 14 days – twice as fast as standard Calcium Sulphate screeds. ARDEX A 70 GYPFLO is pre-blended and only requires the addition of water.

USE

ARDEX A 70 is used to produce unbonded and floating screeds for internal locations. It can also be used for repairs to existing calcium sulphate screeds. It is ideal for situations where early foot traffic and rapid hardening is required. ARDEX A 70 is suitable for use over underfloor heating systems. ARDEX A 70 must only be used on floors with a functioning damp proof system. ARDEX A 70 is not suitable for use in locations with prolonged exposure to moisture.

THICKNESS

Floating screeds:	<i>Min. Thickness</i> 35mm domestic 45mm commercial
Unbonded screeds:	30mm domestic 40mm commercial

Note: The minimum thickness of cover over underfloor heating elements (e.g. Pipes) is 25mm.

SUBSTRATE PREPARATION

Floating Screeds

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

Unbonded Screeds

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

MIXING

A 25kg bag of ARDEX X 70 requires up to 5 litres of water. The actual water dosage must be checked, using the flow ring test (target 280-320mm flow) and adjusted where necessary. Use clean potable mixing water only, and add the powder to the water. Do not add additional water.

ARDEX A 70 can be hand mixed using a mixer drill or alternatively, machine mixed and pumped.

The working time of the mixed screed mortar is up to approximately 2 hours at 20°C, when kept suitably agitated. This time will be extended in lower temperatures and shortened at higher temperatures.

The fresh mortar must be placed and finished in full before the end of the working time.

APPLICATION

Apply at substrate temperatures above 5°C. Do not allow the product to freeze.

Mix and place ARDEX A 70 in one layer to meet the defined levels and thickness.

Use a standard flowable screed tamping bar to move and level the ARDEX A 70. Work across the full area in two directions, with the first pass being a deep one and the second pass being a shallower finishing pass.

DRYING TIME

ARDEX A 70 will typically be walkable in as little as 6 hours at 20°C. Note that lower temperatures will slow the rate of hardening and higher temperatures will accelerate it.

ARDEX A 70 is dry enough to receive floor coverings when a moisture content of $\leq 2\%$ is measured. At 20°C and under good drying conditions this is typically after 14 days.

Application over under floor heating systems: When the ARDEX A 70 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 20°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.

Once hardened, ARDEX A 70 will need sanding to remove any loose materials before receiving further treatment. It is recommended that the surface be sanded 48 hours after hardening and inside 7 days.

SURFACE FINISH

Calcium Sulphate screeds cannot receive cementitious adhesives or levelling compounds directly, and will need priming first. To do so, mechanically prepare the surface to remove all laitance, loose debris and dust to a suitable depth to expose a sound hard surface.

Priming Options:

Epoxy: Apply ARDEX R 3 E Moisture Tolerant Epoxy Primer and immediately 'blind' with ARDEX Fine Aggregate. Remove any excess ARDEX R 3 E/aggregate once cured.

Water-based: Apply ARDEX P 51 diluted 1:3 with water in a continuous coat and allow it to dry thoroughly before overlaying.

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For subsequent smoothing, we recommend the ARDEX range of latex or water-based levelling and smoothing compounds.

REPAIRS TO CALCIUM SULPHATE SCREEDS

To use ARDEX A 70 to repair damaged calcium sulphate screeds, refer to the surface finish notes above with regards to surface preparation and priming.

To bond adjacent repairs when cutting out sections. We recommend preparing clean sound saw cut vertical edges and applying ARDEX R 3 E to the vertical edges and whilst still fresh infilling with ARDEX A 70.

COVERAGE

A 25kg bag of ARDEX A 70 will cover approximately $0.4m^2$ at 35mm thickness.

PACKAGING

ARDEX A 70 is packed in paper sacks incorporating a polyethylene liner – net weight 25kg.

STORAGE AND SHELF LIFE

ARDEX A 70 must be stored in unopened packaging, clear of the ground in cool dry conditions and be protected from excessive draught. If stored correctly, as detailed above, the shelf life of this product is up to 12 months from the date shown on the packaging.

NOTE

For the latest technical or health and safety data on this product, consult the current technical or health and safety datasheet online at www.ardex.co.uk

TECHNICAL DATA

Density of fresh mortar Working time at 20°C Walkability at 20°C Partially loadable approx. 2.15kg/litre approx. Up to 2 hours approx. 6 hours approx. after 24 hours

Strength Properties:

Compressive strength (28 days):ca.40 N/mm²Flexural strength (28 days):F7 ca.7 N/mm²Tensile adhesion strength:>1.5 N/mm²

Thermal Properties:

Thermal conductivity: Thermal expansion: Thermal load ability: $\lambda z = 1.2 \text{ W/mK}$ 0.01 mm/mK < 55°C

Wet mortar reaction: Shrinkage and swelling:

Alkaline ≤ 0.2 mm/m

SOUNDNESS (BRE SCREED TEST)

Annex D and E of BS 8204-1 contains advice on the use of the In-Situ Crushing Resistance (ISCR) Test on bonded, unbonded and floating screeds. The installed ARDEX A 70 can normally be tested after 36 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 70 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.

The following British Standard Codes of Practice can be referred to for advice on screeding:

BS 8204: Part 7

Screeds, bases and in situ floorings

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).

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 update 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