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DECEMBER 2022  
(SUPERSEDES MARCH 2018)  
PRODUCT DATA SHEET

# ARDEX FA 20

## Rapid Drying, Floor Levelling and Smoothing Compound for Timber Floors

### Features

- Ideal for timber floors
- Rapid hardening - walkable in just 2 hours
- Rapid drying – receives floorcoverings the next day
- Microtec Fibre reinforced - crack free finish
- Highly versatile - apply from 3mm - 10mm neat or 10mm - 20mm with addition of suitable aggregate
- Suitable for use with underfloor heating systems
- High yield - Approx 5m<sup>2</sup> at 3mm thickness



ARDEX FA 20 tested in accordance with IMO FTP Code procedures is in compliance with the Merchant Shipping (Marine Equipment) regulations 2016, S.I 2016/1025, and the Marine Equipment Directive 2014/90/EU, and approved for use as a primary deck covering. USCG Approval No(s): 164.106/1121/WCL MER 0321, 164.106/2812/ERO MED 0321. See side of bag for date of manufacture/batch no.



### RAPID DRY



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



Reg No. FM 01207

EMS 565427

OHS 628374

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# ARDEX FA 20

## Rapid Drying, Floor Levelling and Smoothing Compound for Timber Floors

### DESCRIPTION

ARDEX FA 20 is an advanced fibre reinforced smoothing and levelling compound, featuring MICROTEC technology that is designed to rapidly smooth and level new and existing substrates prior to applying a floor finish. ARDEX FA 20 can be applied to timber floors, flooring grade asphalt and existing substrates with adhesive residues. ARDEX FA 20 can normally be walked on after approximately 2 hours at 20°C.

### USE

ARDEX FA 20 will level and smooth, in a single application, all uneven, dry, internal subfloors including concrete, cement/sand screeds, anhydrite screeds flooring grade asphalt, timber and non-moisture resistant chipboard; along with ceramic/porcelain tiled floors and well adhered non water soluble adhesive residues.

### SURFACE PREPARATION

The surface must be hard, sound and free of dust, dirt and other barrier materials such as paint, lime coatings, plaster and excessive adhesive residues, etc. Use a suitable degreaser to remove polish, wax, grease, oil and similar contaminating substances. Laitance should be removed from concrete surfaces. Contact our Technical Services Department for further information.

### DAMP PROOF MEMBRANES

Direct to earth subfloors must have an effective damp proof membrane, if the DPM is absent or damaged, or the substrate still has residual construction moisture within it, then consult the ARDEX DPM 1 C, ARDEX DPM 1 C R or ARDEX MVS 95 datasheet for the most appropriate product. Alternatively, contact our Technical Services Department for further information.

### PRIMING

Although priming is often not necessary on concrete and cement/sand screeds, it may be necessary to prime very absorbent subfloors with ARDEX P 51 Primer as a pore sealer to maintain the flow life and prevent air bubbles rising through the applied ARDEX FA 20 mortar. **NOTE:** All gypsum-based subfloors must be dry and primed with ARDEX P 51 Primer at 1:3. Please refer to the ARDEX P 51 datasheet prior to applying ARDEX FA 20. ARDEX FA 20 can be used on flooring grade asphalt if resilient or if textile floorcoverings are to be laid, and the asphalt is sufficiently hard and sound. **NOTE:** Do not exceed a maximum of 10mm thickness onto flooring grade asphalt.

Flooring grade asphalt must be cleaned, degreased and primed with ARDEX P 82 Primer, prior to applying ARDEX FA 20.

When using ARDEX FA 20 on existing substrates, care must be taken to ensure that adhesive residues are not water soluble and sufficiently load-bearing for future loads, and that they adhere well to the substrate. Residues from water soluble filling compounds and adhesives must be completely removed. For residues of adhesives based on polyurethane, epoxy resin or bitumen, use ARDEX P 82 Water Dispersed Epoxy Primer as an adhesive bridge. Unglazed ceramic tile coverings should be thoroughly cleaned.

For glazed tiles or ceramic tiles with a similar, non-porous, smooth surface, mechanical preparation is necessary. Alternatively, prime with ARDEX P 82 Water Dispersed Epoxy Primer, or ARDEX P 4 Ready Mixed Primer. Unglazed ceramic tiles do not require priming but must be thoroughly cleaned prior to applying ARDEX FA 20.

### WOODEN SUBSTRATES

Ensure that new or existing floor boards are dry, i.e. conditioned to the environment in which they will be used and are rigidly fixed, ventilated beneath and free from barriers to adhesion.

Existing tongue and groove floor boards of traditional construction should be screwed or ring nailed down to the joists to provide a rigidly fixed, flat and adequately braced surface. Any existing floor polish, wax, old

adhesive, etc., should be removed, e.g. by sanding to expose a clean surface prior to smoothing. Plywood and flooring grade non moisture resistant chipboard should have the backs and edges sealed e.g. with polyurethane varnish and be at least 18mm thick and screwed or ring nailed down to the joists at 300mm centres or less.

The board surface should be clean and free of barriers to adhesion e.g. fire retardants, impregnated wax etc. Some chipboard floor systems require the joints to be glued together and guidance from the manufacturer should be sought.

All timber based subfloors should be primed with ARDEX P 82 or undiluted ARDEX P 51 Primer.

Due to the superior properties of ARDEX FA 20 it may also be used for smoothing and levelling rigid timber floors prior to applying ceramic tiles. When fixing ceramic tiles onto timber floorboards, they must be primed as above and it is also recommended that a 4mm x 4mm fibre glass mesh is mechanically fixed to the substrate prior to applying the ARDEX FA 20.

**NOTE:** For fixing tiles to timber floors, refer to the ARDEX X 7001, ARDEX 27 W or ARDEX S 28 W data sheets.

Floating timber floors are not recommended as bases for rigid floor finishes such as ceramic tiles.

### MIXING

Use up to 5.5 litres of water per 20kg bag. Add the powder to the required amount of, clean water in a clean mixing container whilst stirring thoroughly until a lump free mortar is produced. The use of an ARDEX mixing paddle with a 10mm chuck slow speed (600-1000 rpm) electric drill makes light work of mixing. The mixed ARDEX FA 20 should be applied within 30 minutes at 20°C. This time is extended at lower temperatures and reduced at higher temperatures.

### APPLICATION

Pour the mixed ARDEX FA 20 onto the prepared subfloor to the required thickness in one operation. ARDEX FA 20 mortar can be applied and smoothed with a finishing float or a steel trowel. To achieve optimum benefit from the fibre reinforcement, it is advisable, when dealing with substrates such as floorboards, chipboard, dry screeds, etc. to apply the compound at right angles to the continuous joints.

### APPLICATIONS OVER UNDERFLOOR HEATING

The screed/concrete subfloor should have been laid in accordance with BS 8204 Part 1. The underfloor heating system should have been commissioned in accordance with the manufacturer's instructions and in accordance with BS 8204 Part 1. Once thermally cycled and commissioned the underfloor heating system should be turned down to 15°C before the installation of the ARDEX FA 20 smoothing compound and final floor covering. The underfloor heating system should then be gradually re-commissioned to avoid rapid thermal shock and temperature variation.

### THICKNESS

The standard mix is suitable for applications from 3mm to 10mm.

For thicknesses between 10-20mm on to cement/sand screeds or concrete, add up to a third by volume of ARDEX COARSE AGGREGATE.

Mixes with aggregate may require a subsequent smoothing layer of ARDEX FA 20. If an additional smoothing layer of ARDEX FA 20 is required, this should be applied as soon as the floor becomes walkable. If the surface of the ARDEX FA 20 has dried, then it must be primed with ARDEX P 51 Primer diluted 1:3 with water.

### DRYING AND HARDENING

ARDEX FA 20 dries and cures rapidly. Levelling layers up to 10mm are ready to receive floorcoverings after 24 hours at 20°C. For thicker layers the drying time is 2 days.

ARDEX FA 20 cannot be used externally, or in areas which are permanently wet.

### COVERAGE

Approximately 1.4kg of ARDEX FA 20 powder/m<sup>2</sup>/mm, e.g. one bag will cover approximately 5m<sup>2</sup> at 3mm thickness.

**NOTE:** The coverage figure above is based on a flat level surface, additional material should be allowed for where the surface is rough or uneven.

### PACKAGING

ARDEX FA 20 is packed in paper sacks incorporating a polyethylene liner – net weight 20kg.

### STORAGE AND SHELF LIFE

ARDEX FA 20 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 6 months from the date shown on the packaging.

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

### TECHNICAL DATA

Bulk density:	approximately 1.2kg/litre
Fresh weight of mortar:	approximately 1.8kg/litre
Pot life (20°C):	approximately 30 minutes
Walkability (20°C):	after approximately 2 hours

### COMPRESSIVE STRENGTH

after 28 days	approximately 25 N/mm <sup>2</sup>
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### FLEXURAL TENSILE STRENGTH

after 28 days	approximately 7 N/mm <sup>2</sup>
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### SUITABLE FOR WHEELCHAIR USE

Yes

### SUITABLE FOR USE WITH UNDERFLOOR HEATING SYSTEMS

Yes

**NOTE:** If smoothing timber floors incorporating underfloor or undertile heating systems prior to installing ceramic or natural stone tiles, consult the ARDEX Technical Department for advice.

### EMICODE:

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**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](http://www.ardex.co.uk)