



CI/SfB

(43)

Yq

JANUARY 2011
PRODUCT DATA SHEET

ARDEX FA 20

Rapid Drying, Floor Levelling and Smoothing Compound for Timber Floors

Features

- Ideal for timber floors and substrates with adhesive residues
- 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 5m² at 3mm thickness



RAPID DRY



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



Reg No. FM 1207

ARDEX UK LIMITED
Homefield Road, Haverhill, Suffolk CB9 8QP UK.
Telephone: +44 (0)1440 714939
Fax: +44 (0)1440 716640
Technical Services Fax: +44 (0)1440 716663
Email: technical.services@ardex.co.uk
ARDEX online: www.ardex.co.uk

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 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

To level internal sub-floors to provide a smooth surface, ARDEX FA 20 can be applied on all common sub-floors such as concrete, cement/sand screeds, flooring grade asphalt, timber and chipboard, quarry tiles, existing sub-floors with sound adhesive residues, etc.

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 ARDEX DGR degreaser to remove polish, wax, grease, oil and similar contaminating substances. Laitance should be removed from concrete surfaces. Direct to earth sub-floors must have an effective damp proof membrane, such as ARDEX DPM. Contact our Technical Services Department for further information.

PRIMING

Although priming is often not necessary on concrete and cement sand screeds and tiles, it may be necessary to prime very absorbent sub-floors 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 sub-floors must be primed with ARDEX P 51 primer, diluted 1:3 with water prior to applying ARDEX FA 20.

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, surface grinding is necessary. Alternatively, prime with ARDEX P82 Water Dispersed Epoxy Primer, or ARDEX P4 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 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 sub-floors 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 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 data sheet.

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

POURED ASPHALT SCREEDS

ARDEX FA 20 can be used on flooring grade asphalt if resilient or textile floorcoverings are to be laid and the asphalt is sufficiently hard and sound.

MIXING

To the required amount of clean water in a clean mixing container add the powder whilst stirring thoroughly until a lump free mortar is produced. The mixing proportions by volume are approximately: 3 parts ARDEX FA 20 powder into 1 part clean water. 5.2 to 5.5 litres of water per 20kg bag. Use the minimum amount of water for thick applications or cold conditions.

The use of an ARDEX mixing paddle with a 10mm chuck slow speed (600 – 1000 RPM) electric drill makes light work of mixing. Mixed ARDEX FA 20 should be applied within 30 minutes at 20°C. This time is extended at lower and reduced at higher temperatures.

APPLICATION

Pour the mixed ARDEX FA 20 onto the prepared sub-floor to the required thickness in one operation. ARDEX FA 20 mortar can be applied and smoothed with a finishing float or levelling 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.

THICKNESS

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

For thicknesses between 10-20mm sand must be added to the mixed ARDEX FA 20 mortar. The sand to be used should be a good quality screeding sand with a grain size distribution from 0 to 4mm. The sand can be added up to a maximum of a third of the mortar volume (approximately 4.7 litres of sand per 20kg bag of ARDEX FA 20).

NOTE: Do not exceed a maximum of 10mm thickness onto flooring grade asphalt or timber floors.

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 at 18 to 20°C overnight. 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 ARDEX FA 20 powder/m²/mm, e.g. one bag will cover approximately 5m² at 3mm thickness.

NOTE: The coverage figure 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.

PRECAUTIONS

ARDEX FA 20 is considered non-hazardous in normal usage. The presence of cement in the product gives an alkaline mortar which may cause some local irritation if prolonged contact with the skin takes place. Care should be taken to avoid inhalation or ingestion of dust and prevent contact with the eyes.

For further information, consult the relevant Safety data sheet.

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 1 day –	approximately 16 N/mm ²
after 7 days –	approximately 23 N/mm ²
after 28 days –	approximately 30 N/mm ²
Flexural tensile strength:	
after 1 day –	approximately 4.5 N/mm ²
after 7 days –	approximately 7.0 N/mm ²
after 28 days –	approximately 9.5 N/mm ²
Ball pressure hardness (Brinell):	
after 1 day –	approximately 30 N/mm ²
after 7 days –	approximately 35 N/mm ²
after 28 days –	approximately 40 N/mm ²
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: EC 1

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