CI/SfB

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BUILDING DIVISION
PRODUCT DATA SHEET

ARDEX AM 100

Rapid Hardening One Coat Tiling Render

Features

Ideal for fast track wall tiling

Rapid hardening - tiles can be fixed after only 2 hours

Apply 2-20mm in a single application

Easy to use

Cement-based - for internal and external applications

Water and weather resistant

Reg No. FM 1207

ARDEX UK LIMITED
Homefield Road, Haverhill, Suffolk CB9 8QP UK.
Telephone: +44 (0)1440 714939
Fax: +44 (0)1440 716660
Technical Services Fax: +44 (0)1440 716640
Email: technical.services@ardex.co.uk
ARDEX online: www.ardex.co.uk

ARDEX AM 100

Rapid Hardening One Coat Tiling Render

DESCRIPTION
ARDEX AM 100 is a specially formulated pre-blended cement/sand render, requiring only the addition of water to produce a slump free mortar which, 2 hours after application at 20°C, is ready to receive wall tiling.

ARDEX AM 100 is a grey powder consisting of special cements, polymers and selected fillers. ARDEX AM 100 can be applied from 2mm up to 20mm in thickness in one application. The mixed mortar can be used in situations where the normal drying time of conventional cement/sand renders cannot be accommodated.

Suitable for internal and external use on suitably prepared backgrounds of in-situ concrete walls, brickwork or blockwork. ARDEX AM 100 can also be used for rendering concrete walls in swimming pools.

SURFACE PREPARATION
The surface to be rendered can be dry or moist but should be mature, stable and free of barriers to adhesion. In-situ concrete walls, brickwork and concrete blockwork should be at least 6 weeks old to allow for initial drying shrinkage to occur.

Any paint or gypsum plaster or other barriers to adhesion should be thoroughly removed to expose a clean, sound background. Settlement cracks can be filled with the rendering mortar, however, there is no guarantee that cracks of this kind caused by structural movement can be eliminated. Small cracks should be cut out and enlarged so that better contact of the material is obtained. Metal components must be given adequate corrosion protection.

If rendering to dense surfaces such as old glazed bricks, ceramic tiles, timber framed constructions or where old paint finishes cannot be removed, the use of anchored reinforcement, mechanically fixed to the background, should be installed.

The anchored reinforcement should be secured in accordance with the guidelines given in BS 5262 : 1991 : Clause 38.7 and BS 5385 : Part 2 : 1991 : Clause 19.2.
NOTE: The substrate must be prepared whether internal or external, so as to guarantee the adhesion of the render mortar when applied.

MIXING
To the required amount of clean water in a clean mixing container, add the powder whilst stirring thoroughly until a slump free mortar is produced. The mix proportions are:

25kg ARDEX AM 100 into 5 litres of clean water. i.e. 3 1/2 parts powder to 1 part volume water.

The use of an ARDEX mixing paddle with a 10mm chuck, variable speed electric drill makes light work of mixing. The mixed mortar has a working time of approximately 30 minutes at 20°C. This time will be extended at lower and shortened at higher temperatures. For larger quantities a forced action mixer can be used. Do not apply ARDEX AM 100 at temperatures below 5°C.

APPLICATION
ARDEX AM 100 should be applied by initially applying a thin skim coat/bonding layer of 1 to 2mm to the prepared wall surface prior to applying the ARDEX AM 100 mixed mortar to the required thickness, fresh in fresh.

Depending on the porosity of the background being rendered, further treatment such as wood floating can be carried out between 40 minutes and 1 hour after application at 20°C. At this temperature the rapid setting and hardening process will allow the tiles to be fixed in the appropriate ARDEX adhesive 2 hours after the initial application.

If required, ARDEX WPC can be applied to the ARDEX AM 100 render after 2 hours at 20°C, prior to tiling. Please refer to the technical literature on ARDEX WPC for further information.
NOTE: When tiling, the rendering should be finished to SR1 so that any gap under a 2m straight edge does not exceed 3mm in accordance with BS 5385.

COVERAGE
Approximately 1.3kg of ARDEX AM 100 powder/m^2/mm.
i.e. one 25kg bag will cover approximately 3.2m^2 at 6mm thick.

PACKAGING
ARDEX AM 100 is packed in paper sacks incorporating a polyethylene liner – net weight 25kg.

STORAGE AND SHELF LIFE
ARDEX AM 100 contains a reducing agent to control the level of Chromium VI when mixed prior to use. ARDEX AM 100 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. ARDEX AM 100 must not be used after the end of the declared storage period.

PRECAUTIONS
ARDEX AM 100 contains more than 20% Portland cement and is therefore classified as irritating to eyes and skin. For this reason the following precautions should be observed:- Avoid contact with skin and eyes; in case of contact with the eyes, rinse immediately with plenty of water and seek medical advice; wear suitable gloves and keep the product out of reach of children. Avoid generation of airborne dust during mixing.

For further information, consult the relevant health and safety data sheet.

TECHNICAL DATA

Bulk density:	approximately 1.5kg/litre
Weight of fresh mortar:	approximately 1.6kg/litre
Application time: (20°C)	approximately 30 minutes
Ready to receive wall tiling: (20°C)	after approximately 2 hours
Compressive Strength:	
After 1 day	approximately 4 N/mm^2
After 7 days	approximately 7 N/mm^2
After 28 days	approximately 11 N/mm^2
Tensile Bending Strength:	
After 1 day	approximately 1.5 N/mm^2
After 7 days	approximately 2 N/mm^2
After 28 days	approximately 3 N/mm^2
pH value:	Fresh mortar containing cement, approximately 12