



CI/SfB

(43)Y

Yt3

JUNE 2005  
BUILDING DIVISION  
PRODUCT DATA SHEET

# ARDEX-FLEX 7001 and 7001 W Timber System

## Grey or White Flexible Rapid Hardening and Drying Floor Tile Adhesive for Timber Floors

### Features

Ideal for fixing floor tiles to wood-based sheets and boards

Rapidry Formula technology chemically binds all the mix water, reducing the risk of mix water affecting wooden substrates

Rapid hardening and drying - can be trafficked and grouted 2 hours after fixing

Use with all tile types including fully vitrified and porcelain

Mix consistency facilitates solid bedding

ARDEX-FLEX 7001 W white is ideal for fixing light and translucent marbles and limestones

Excellent adhesion and easy to work

Built-in admix



### **RAPIDRY**

What is the Rapidry Formula?



It is the ability of the mortar to totally bind the water used for mixing, reducing the risk of mix water affecting wooden substrates.



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](mailto:technical.services@ardex.co.uk)  
ARDEX online: [www.ardex.co.uk](http://www.ardex.co.uk)

# ARDEX-FLEX 7001 and 7001 W Timber System

## Grey or White Flexible Rapid Hardening and Drying Floor Tile Adhesive for Timber Floors

### DESCRIPTION

The BS EN 12004 C2 FE designation for ARDEX-FLEX 7001 and ARDEX-FLEX 7001 W classifies the adhesive as an "improved fast setting cementitious adhesive with additional characteristics and extended open time". ARDEX-FLEX 7001 is a grey or white, rapid hardening and drying, flexible cement-based floor tile adhesive specifically designed for fixing floor tiles to wood-based sheets and boards. ARDEX-FLEX 7001 has a built-in admix requiring only the addition of water to provide an adhesive with flexibility which is also suitable for fixing fully vitrified tiles, porcelain and natural stones and will allow grouting to commence after only 2 hours.

ARDEX-FLEX 7001 is recommended for internal use only.

The mixed mortar has a pourable consistency enabling solid bedding of tiles without the need to butter the back profile.

### SURFACE PREPARATION

Prior to tiling, ensure that new or existing 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 tiling.

Where suspended sub-floors of undulating tongue and groove floor boards need to be stiffened by overlaying with plywood or flooring grade chipboard, the tongue and groove floor should be pre-smoothed with ARDITEX before overlaying.

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.

Existing suspended timber sub-floors of plywood or chipboard should be adequately constructed to provide a rigid base for the ceramic floor tiling.

The timber should be at equilibrium moisture content, i.e. the state of dryness it will attain in normal service conditions, at the time it is covered.

In all cases, the timber surface to be tiled should be stable and adequately strong and suitably rigid to withstand the imposed loads without deflection. Extra noggins may be required between the joists to stiffen the floor as advised in BS 5385-3:1989 clause 14.4. Ceramic floor tiles should not be used on timber based boards in wet areas, or external locations.

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

### PRIMING

The prepared board surface must be primed with ARDEX P 51 primer. The primer should be applied undiluted by brush in one coat only and allowed to dry, at least 1 hour at 20°C.

### MIXING

ARDEX-FLEX 7001 powder is added to clean water in a clean container whilst stirring and mixed thoroughly to give a fluid, easily worked mortar. The use of an ARDEX mixing paddle with a 10mm chuck, variable speed electric drill makes light work of mixing.

The mixing proportions by volume are: Approximately 3½ parts ARDEX-FLEX 7001 to 1 part water. A 22kg bag of ARDEX-FLEX 7001 requires approximately 5 litres of water.

The mortar is immediately ready for use and has a pot life of approximately 1 hour at 20°C.

ARDEX-FLEX 7001 should be applied at temperatures above 5°C.

### FIXING TECHNIQUE

The mixed mortar is applied onto the prepared sub-floor and combed through with the appropriate notched trowel to give straight ribs of mortar. The workability of the ARDEX-FLEX 7001 allows the floor tiles to be fixed in a single operation so that no voids are left beneath the tiles.

ARDEX-FLEX 7001 and ARDEX-FLEX 7001 W are classified as having an extended open time of not less than 30 minutes when measured in accordance with BS EN 12004. For optimum performance under typical UK site conditions tiles should be fixed within 15 minutes.

The area covered by the ribbed mortar bed should be limited so that tiles can be bedded within the open time. When the mixed mortar begins to stiffen the mortar must be discarded, do not add more water. In general, use the following square notch patterns:

5mm x 5mm for flat backed tiles, 8mm x 8mm for general floor tiling or 10mm x 10mm for keyed extruded tiles.

The size of notched trowel can be altered depending on the bed thickness required and the profile on the back of the tile, but solid bedding should always be achieved and checked for, as advised in BS 5385-3 and BS 8000 : Section 11.1.

The adhesive bed thickness achieved using the above notched trowels should be between 1mm and 4mm. The newly laid tiles can be adjusted for up to 15 minutes after fixing.

### GROUTING

Tiles fixed with ARDEX-FLEX 7001 can be grouted after 2 hours at 20°C with either the ARDEX-FLEX grouts or the appropriate ARDEX grouts incorporating ARDEX E 101 admix. Higher temperatures will shorten and lower temperatures will lengthen the time taken before grouting may commence.

### COVERAGE

A 22kg bag of ARDEX-FLEX 7001 will yield approximately 15.5 litres of mortar, equivalent to approximately 5.25m<sup>2</sup> of a solid 3mm bed of adhesive. Approximately 1.4kg of ARDEX-FLEX 7001 powder/m<sup>2</sup>/mm of bed thickness.

### STORAGE AND SHELF LIFE

ARDEX-FLEX 7001 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 12 months from the date shown on the packaging.

### PACKAGING

ARDEX-FLEX 7001 is packed in paper sacks incorporating a polyethylene liner - net weight 22kg (White or Grey) or 11kg (Grey only).

### PRECAUTIONS

ARDEX-FLEX 7001 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 health and safety data sheet.

### TECHNICAL DATA

Bulk density of powder: approximately 1.3kg/ltr  
Weight of fresh mortar: approximately 1.7kg/ltr  
Working time (20°C): approximately 1 hour  
Fixing time: approximately 15 minutes  
Adjusting time: approximately 15 minutes

### Compressive Strength

After 3 hours	approximately	5 N/mm <sup>2</sup>
After 6 hours	approximately	8 N/mm <sup>2</sup>
After 1 day	approximately	10 N/mm <sup>2</sup>
After 28 days	approximately	19 N/mm <sup>2</sup>

### Tensile Bending Strength

After 3 hours	approximately	1.5 N/mm <sup>2</sup>
After 6 hours	approximately	2 N/mm <sup>2</sup>
After 1 day	approximately	3 N/mm <sup>2</sup>
After 28 days	approximately	6 N/mm <sup>2</sup>

### Early Tensile Adhesion Strength Development (DIN 18156-M)

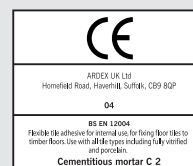
After 3 hours	approximately	0.7 N/mm <sup>2</sup>
After 6 hours	approximately	0.9 N/mm <sup>2</sup>
After 1 day	approximately	1.2 N/mm <sup>2</sup>

### PROPERTIES TESTED TO THE REQUIREMENTS OF BS EN 12004

<b>Tensile Adhesion Strength</b>	Greater than 1 N/mm <sup>2</sup> under all test conditions
----------------------------------	--

### Extended Open Time

More than 0.5 N/mm<sup>2</sup> adhesion achieved after not less than 30 minutes



**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.