

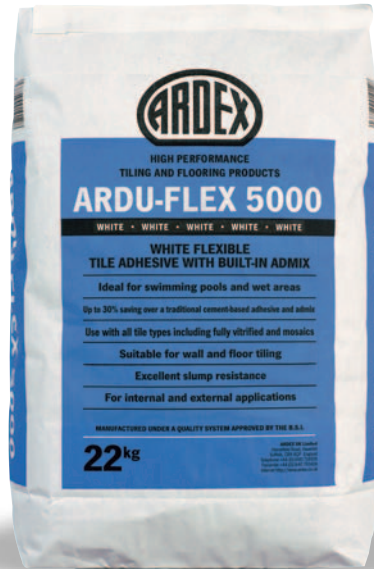


**HIGH PERFORMANCE
TILING AND FLOORING PRODUCTS**

CI/SfB

Yt3

**NOVEMBER 2001
BUILDING DIVISION
PRODUCT DATA SHEET**



ARDU-FLEX 5000

WHITE FLEXIBLE ADHESIVE WITH BUILT-IN ADMIX FOR FLOOR AND WALL TILING

Features

- Ideal for swimming pools and wet areas
- Major savings over a traditional cement-based adhesive and admix
- Use with all tile types including fully vitrified, porcelain and mosaics
 - Suitable for wall and floor tiling
 - Excellent slump resistance
- For internal and external applications
 - Available in 22kg and 11kg bags

ARDU-FLEX 5000

WHITE FLEXIBLE ADHESIVE WITH BUILT-IN ADMIX FOR FLOOR AND WALL TILING

DESCRIPTION

Ardu-Flex 5000 is a white cement-based tile adhesive, specifically formulated to have enhanced properties of adhesion and flexibility for fixing fully vitrified tiles and other tiles with low porosity as well as glass and porcelain mosaics without the need of an admixture. It is suitable for fixing all types of ceramic tiles and mosaics in internal and external situations, including swimming pools. The mixed mortar has a slump free consistency with high initial grab enabling heavy wall tiles to be fixed thus reducing or dispensing with the need for battens and spacers. Ardu-Flex 5000 adheres strongly to most construction materials such as concrete, cement and sand renders and screeds, heated sub-floors, brickwork and blockwork, gypsum plaster, plasterboard and existing ceramic tiled surfaces.

Ardu-Flex 5000 conforms to the requirements of BS 5980 : 1980 as a Type 1 Class AA adhesive.

SURFACE PREPARATION

The backgrounds to receive the ceramic tiles should be mature, stable and be installed in accordance with the relevant parts of BS 5385 and the tiles fixed as advised in this Code of Practice and BS 8000 : Part 11 Workmanship on Building Sites. Backgrounds to receive ceramic tiles should be finished to Surface Regularity 1, i.e. so any gap under a 2m straight edge does not exceed 3mm.

Below are guidance notes on backgrounds to be tiled.

MIXING

Ardu-Flex 5000 powder is added to water in a clean container whilst stirring and mixed thoroughly to give a soft, slump-free easily worked mortar. The mix proportions by volume are:

Approximately:

2¾ parts Ardu-Flex 5000 powder : 1 part water.

A 22kg bag of Ardu-Flex 5000 requires approximately 7 to 7½ litres of water.

The consistency of the adhesive can be adjusted to suit site conditions and the materials being fixed. The mortar should be applied at temperatures above 5°C.

The pot life of the mixed mortar is approximately 1½ hours at 20°C.

FIXING TECHNIQUE

The mixed mortar is applied to the prepared surface with a trowel and then combed through with a suitably sized notched trowel in straight ribs to give a ribbed mortar bed. The tiles should be fixed within the open time of the applied adhesive and pressed into place with a twisting and sliding action to achieve the required contact. For tiling to walls in dry internal locations the adhesive contact should be at least with 50% of the back of the tile. When tiling to floors and all external situations, or in wet areas such as showers and swimming pools, solid bed fixing should be achieved. To achieve a solid bed usually requires the tiles to be buttered immediately prior to placing into the ribbed bed so no voids are left beneath the tiles. The size of notched trowel chosen depends on the tile size, the surface being tiled, the profile on the back of the tile and the degree of coverage required.

The applied mortar has an open time of up to 15 minutes and tiles can be adjusted for up to 20 minutes at 20°C.

GROUTING

Grouting can proceed once the tile bed has hardened sufficiently so that the tiles will not be dislodged. When grouting wall tiles the Ardu-Flex 5000 is normally hard enough after 4 to 8 hours at 20°C depending on the porosity of the tile and the background. When grouting floor tiles the Ardu-Flex 5000 is normally hard enough after 8 to 24 hours at 20°C to accept foot traffic depending on the porosity of the tile and the background. Higher temperatures will shorten and lower temperatures will lengthen these times.

The tile joints should be grouted with the appropriate Ardurit, Ardu-Flex or Ardipox grout mortar.

COVERAGE

A 22kg bag of Ardu-Flex 5000 will yield approximately 18 litres of mortar, equivalent to approximately 6m² solid 3mm bed of adhesive.

PRIMERS

ARDION 51

The primer to use on plaster before fixing with Ardu-Flex 5000 adhesive, diluted 1 : 3 with water.

ARDION 82

Non-flammable, water-based synthetic primer for priming smooth impervious surfaces including existing ceramic tiling, internal asphalt, terrazzo, sound and well adhered paint coatings and old adhesive residues, prior to the use of Ardu-Flex 5000.

GUIDANCE NOTES ON BACKGROUNDS TO BE TILED

Concrete

Allow at least 6 weeks drying time prior to fixing new tiles onto new concrete. Mechanically clean concrete and ensure mould oil and curing agents are removed.

Cement/sand render and screed

Wood float finish and prevent rapid drying of the surface for 3 days (renders) or 7 days (screeds). Allow render to air dry for at least 2 weeks prior to tiling or at least 3 weeks for screeds prior to tiling.

Gypsum Plaster

Do not use in wet or damp conditions. Gypsum plaster must be dry and at least 4 weeks old prior to tiling. Wire brush plaster to remove dust. Use Ardion 51 primer. Tile weight should not exceed 20kg/m².

Plasterboard

Ensure boards are rigidly braced and adequately supported. Fix directly to the paper facing. Do not skim with plaster. Tile weight should not exceed 32kg/m².

Wood-based boards

For fixing to these backgrounds, consult the Ardu-Flex 7001 Timber System data sheet for floors and the Ardicol D20 data sheet for walls.

Painted surfaces

A trial area should be carried out by priming the sound paint coating with Ardion 82 primer prior to fixing the tiles in Ardu-Flex 5000.

Ardex Waterproof Coating (WPC) can be used to protect moisture sensitive backgrounds in wet locations, prior to fixing tiles.

Brickwork

Allow new walls to dry for at least 6 weeks prior to direct fixing or rendering.

Concrete blockwork

New walls should be built with dry blocks. Allow 6 weeks drying time prior to direct fixing or rendering.

Asphalt sanded

With well adhered sand key no primer is required. Internal areas only. If sand key is poor or worn off, proceed as for smooth asphalt.

Asphalt smooth

Priming with Ardion 82 recommended. Internal dry areas.

Underfloor heating

Ardu-Flex 5000 is suitable for fixing ceramic tiles to concrete or cement and sand screeds with underfloor heating.

Existing unglazed ceramic tiling

Ensure existing tiling is well adhered and can support the new tile bed. Thorough cleaning and rinsing off essential. Internal dry areas only.

Existing glazed ceramic tiling

Ensure existing tiling is well adhered and can support the new tile bed. Thorough cleaning and rinsing off essential. Prime tiles with Ardion 82. Internal dry areas only.

PACKAGING

Ardu-Flex 5000 is packed in paper sacks incorporating a polyethylene liner - net weight 22kg or 11kg.

STORAGE

Ardu-Flex 5000 has a storage life of not less than 12 months if stored in dry conditions.

PRECAUTIONS

Ardu-Flex 5000 contains more than 20% portland cement and, therefore, in line with current legislation, is 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 the reach of children. Avoid generation of airborne dust during mixing.

TECHNICAL DATA

Weight of fresh mortar	approx 1.6kg/litre
Working time (20°C)	approx 1½ hours
Fixing time (20°C)	approx 15 minutes
Adjusting time (20°C)	approx 20 minutes

Tensile Adhesion Strength

(28 days dry)	1.0-2.0 N/mm ²
(28 days wet)	1.0-2.0 N/mm ²
(After Freeze-Thaw)	1.0-1.5 N/mm ²

ARDEX materials are also manufactured in Australia, Austria, Denmark, Germany, Spain, U.S.A., and represented throughout the World.

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.



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