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APRIL 2005 PRODUCT DATA SHEET

## ARDEX X 7 G PLUS Grey Flexible Adhesive with Built-In Admix for Floor and Wall Tiling

### Features

Exceptionally high yield - independent testing at Ceram Research has confirmed ARDEX X7G Plus achieves approximately 20% more coverage per kg compared to traditional tile adhesives



Ideal for all tile types including fully vitrified, porcelain and mosaics

Ideal for swimming pools and wet areas

Major savings over a traditional cement-based adhesive and admix

Suitable for wall and floor tiling

Excellent slump resistance and application properties

For internal and external applications

Latest adhesives technology



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# ARDEX X7G PLUS

## Grey Flexible Floor and Wall Adhesive with Built-In Admix

#### DESCRIPTION

ARDEX X 7 G Plus is a high yield, grey, cement-based floor and wall tile adhesive, specifically formulated to have a high yield per bag along with enhanced properties of adhesion and flexibility ideal for fixing fully vitrified or porcelain tiles (internal areas only) and other tiles with low porosity as well as glass and porcelain mosaics without the need of an admixture.

The BS EN 12004 C2 TE designation for ARDEX X 7 G Plus classifies the adhesive as an "improved cementitious adhesive with additional characteristics, reduced slip and extended open time" The additional characteristics for ARDEX X7G Plus determined in accordance with BS EN 12004 are a tensile adhesion strength of greater than 1 N/mm<sup>2</sup> as an initial adhesion value, greater than 1 N/mm<sup>2</sup> after water immersion, greater than 1 N/mm<sup>2</sup> after heat aging and greater than 1 N/mm<sup>2</sup> after freeze thaw cycling making this product suitable for 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. ARDEX X 7 G Plus adheres strongly to most construction materials such as concrete, cement and sand renders and screeds, heated sub-floors, brickwork and blockwork, gypsum plaster, annydrite screeds, plasterboard and existing ceramic tiled surfaces.

NOTE: For fixing fully vitrified or porcelain tiles in external locations including facades, balconies, terraces and similar locations use ARDEX-FLEX 5000, 5001, 6001 or \$38 as appropriate. When fixing natural stones, please refer to the ARDEX Natural Stone Range

#### 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 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

The surface being adhered to must be clean, firm, free of dust, dirt, oil, grease and other barrier materials as well as being strong enough to support the weight of the tiles being fixed. Ensure that the background has adequate drying time, as given in the relevant part of BS 5385, prior to fixing the tiles. ARDEX X 7 G Plus can be applied to dry or moist surfaces but moisture sensitive materials must be dry and remain dry after fixing.

#### MIXING

ARDEX X 7 G Plus powder is added to clean water in a clean container whilst stirring and mixed thoroughly to give a slump free easily worked mortar. The mix proportions by volume are approximately: 13/4 parts ARDEX X7G Plus powder : 1 part water.

A 18kg bag of ARDEX X 7G Plus requires approximately 7.5 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 5 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 tilling to walls in dry internal locations the adhesive contact should be at

feast 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 notoned 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.

ARDEX X 7 G Plus is 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 10 minutes and tiles can then 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 ARDEX X 7 G Plus is normally hard enough after 8 hours at 20°C depending on the porosity of the tile and the background. When grouting floor tiles the ARDEX X7G Plus is normally hard enough after 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 ARDEX or ARDEX-FLEX grout mortar.

#### COVERAGE

A 18kg bag of ARDEX X7G Plus will yield approximately 18 litres of mortar, equivalent to approximately 6m<sup>2</sup> solid 3mm bed of adhesive. Approximately 1kg powder/m²/mm.

#### PRIMERS

ARDEX P 51

The primer to use on plaster before fixing with ARDEX X 7 G Plus adhesive, diluted 1:3 with water.

#### ARDEX P 82

Non-flammable, water dispersed epoxy primer for priming internal, smooth impervious surfaces including existing ceramic tiling, internal asonalt, terrazzo, sound and well adhered paint coatings and old adhesive residues, prior to the use of ARDEX X7G Plus.

#### 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 ARDEX P 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/m<sup>2</sup>.

#### Wood-based sheets and boards

For fixing to these backgrounds, consult the ARDEX-FLEX 7001 Timber System data sheet for floors and the ARDEX D 20 ready mixed wall tile adhesive data sheet for walls.

#### Painted surfaces

A trial area should be carried out by priming the sound paint coating with ARDEX P 82 primer prior to fixing the tiles in ARDEX X7G Plus.

#### ARDEX WPC

Can be used to protect moisture sensitive backgrounds in wet locations, prior to fixing tiles.

#### Calcium Sulfate based screeds i.e. Anhydrite

Ensure they have been laid and prepared in accordance with the manufacturers recommendations. Generally they require sanding and have a moisture content of 0.5% or less. Prime with ARDEX P 51, diluted with 3 parts of water.

#### Existing glazed ceramic tiling

Ensure existing tilling is well adhered and can support the new tile bed. Thorough cleaning and rinsing off. essential. Prime tires with ARDEX P82. Internal dry areas only

#### 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 boor or worn off, proceed as for smooth asonalt.

#### Asphalt smooth

Priming with ARDEX P 82 recommended. Internal dry areas

#### Underfloor heating

ARDEX X 7 G Plus is suitable for fixing ceramic tiles to concrete or cement and sand screeds with underfloor heating.

#### PACKAGING

ARDEX X 7 G Plus is packed in paper sacks incorporating a polyethylene liner - net weight 18kg.

#### STORAGE AND SHELF LIFE

ARDEX X 7 G Plus contains a reducing agent to control the level of Chromium VI when mixed prior to use.

ARDEX X 7 G Plus 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. Use of the product after the end of the declared storage period may increase the risk of allergic reaction.

#### PRECAUTIONS

ARDEX X 7 G Plus 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

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

#### TECHNICAL DATA

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Weight of fresh mortar	approx.	1.4kg/litre
Working time (20°C)	approx.	5 hours
Adjusting time (20°C)	approx,	20 minutes

#### **PROPERTIES TESTED TO BS EN 12004**

Extended Open Time:	More than 0.5 N/mm <sup>2</sup> adhesion achieved after not less than 30 minutes	
Slump Resistance:	Slip - less than 0.5mm	

#### Tensile Adhesion Strength

Tenane Runcation occursor	
(28 days dry)	1.0-2.0 N/mm <sup>2</sup>
(28 days wet)	1.0-2.0 N/mm <sup>2</sup>
(After Freeze Thaw)	1.0-1.5 N/mm²



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 kability for any loss or parriage which may arise as a result thereof