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PRODUCT DATA SHEET

ARDEX X 325 PTB ARDEX X 325 PTB W

Flexible Rapid Set Pourable Thick Bed Floor Tile Adhesive



Features

- Apply 3-25mm thick in a single application
- Solid bed fix large format floor tiles without back-buttering
- Walk on and grout tiles after 3 hours
- Also ideal for patch repairs
- Ideal for almost all tile types including non-moisture-sensitive natural stone
- Suitable for internal and external areas, including swimming pools
- Suitable for use with underfloor heating



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ARDEX X 325 PTB

ARDEX X 325 PTB W

Flexible Rapid Set Pourable Thick Bed Floor Tile Adhesive

DESCRIPTION

ARDEX X 325 PTB and ARDEX X 325 PTB W are rapid-setting cement-based thick-bed pourable floor tile adhesives. They can be applied 3-25mm deep in a single application and tiles can be walked on and grouted after 3 hours.

The BS EN 12004 C2 F designation for ARDEX X 325 PTB and ARDEX X 325 PTB W classifies them both as an "Improved fast setting cementitious adhesive". The additional characteristics, determined in accordance with BS EN 12004, are a tensile adhesion strength of greater than 1 N/mm² adhesion value; greater than 1 N/mm² after water immersion; greater than 1 N/mm² after heat ageing; and greater than 1 N/mm² after freeze-thaw cycling.

NOTE: ARDEX X 325 PTB and ARDEX X 325 PTB W are suitable for depths up to 25mm. For depths over 10mm over larger areas, the use of an ARDEX Levelling and Smoothing Compound such as ARDITEX NA Rapid Setting Latex Levelling Compound is recommended.

USE

ARDEX X 325 PTB and ARDEX X 325 PTB W are mixed to a pourable consistency, making them ideal for fixing large format floor tiles. Solid bed fixing can be achieved without having to butter the backs of the tiles, however tiles with deep back profiles, slate for example, may still require back-buttering. ARDEX X 325 PTB and ARDEX X 325 PTB W are also recommended for installing tiles and slabs with irregular thicknesses.

ARDEX X 325 PTB and ARDEX X 325 PTB W are suitable for fixing almost all tiles types, including non-moisture-sensitive natural stone. For moisture-sensitive natural and agglomerated stone, the use of an ARDEX RAPIDRY FORMULA Technology tile adhesive such as ARDEX S 28 MICROTEC Flexible Rapid Set Semi-Pourable Floor Tile and Stone Adhesive or ARDEX X 32 Flexible Rapid Set Thick Bed Tile and Stone Adhesive is recommended.

ARDEX X 325 PTB and ARDEX X 325 PTB W are suitable for use in internal and external areas, including swimming pools and over underfloor heating.

ARDEX X 325 PTB and ARDEX X 325 PTB W adhere strongly to most construction materials. Please refer to the TILING BACKGROUNDS GUIDANCE NOTES section for full information.

SURFACE PREPARATION

Backgrounds and surfaces must be clean, firm and free of dust, dirt, oil, grease and other barriers to adhesion. They must have had adequate drying time, as given in the relevant part of BS 5385, and be correctly primed where required; please refer to the TILING BACKGROUNDS GUIDANCE NOTES section for further information.

Backgrounds must also be finished so that any gap under a 2m straight edge does not exceed 3mm (Surface Regularity 1). If the subfloor is not suitably flat, the use of an ARDEX Levelling and Smoothing Compound such as ARDITEX NA Rapid Setting Latex Levelling Compound is recommended.

ARDEX X 325 PTB and ARDEX X 325 PTB W can be applied to dry or moist surfaces but moisture-sensitive materials must be dry and remain dry after fixing. In wet areas such as bathrooms, wet rooms or shower areas, the use of ARDEX WPC Flexible Rapid Drying Waterproof Coating for Internal Wet Areas is recommended before tiling to create a waterproof layer and prevent water damage to moisture-sensitive backgrounds.

MIXING

The mix proportions by volume are approximately 4 parts ARDEX X 325 PTB or ARDEX X 325 PTB W powder to 1 part clean water. A 20kg bag of ARDEX X 325 PTB or ARDEX X 325 PTB W requires approximately 4 to 4.5 litres of clean water. **NOTE:** If applying the adhesive at 25mm thick or if fixing heavy stone/tiles, the minimum water content is recommended.

Add the ARDEX X 325 PTB or ARDEX X 325 PTB W powder to the water in a clean container whilst stirring and mixing thoroughly until a lump-free mortar is achieved. Allow the mixed adhesive to stand for 2 minutes before mixing again for 30 seconds.

The use of an ARDEX mixing paddle or other cage-type mixing paddle with a 10mm chuck, variable-speed electric drill makes light work of mixing.

The pot life of the mixed mortar is approximately 30 minutes at 20°C. This time will be extended in lower temperatures and shortened at higher temperatures.

APPLICATION

Apply at temperatures above 5°C.

ARDEX X 325 PTB and ARDEX X 325 PTB W can be applied to bed thicknesses 3-25mm deep in a single application.

NOTE: If preferred, ARDEX X 325 PTB and ARDEX X 325 PTB W can be applied in two layers, with the first being a pre-smoothing layer that is allowed to harden before the second layer is applied as a ribbed mortar bed. The total depth should not exceed 25mm.

The mixed adhesive is applied to the prepared surface with a trowel and then combed through with a suitably sized square-toothed notched trowel in straight ribs to give a ribbed mortar bed. Due to its pourable consistency, the ribs will have slightly rounded profiles.

TILE FIXING

The tiles should be fixed within the open time of the applied adhesive and pressed into place with a twisting and sliding action ensuring solid bed fixing is achieved.

ARDEX X 325 PTB and ARDEX X 325 PTB W have an open time of up to 20 minutes and tiles can be adjusted for up to 10 minutes at 20°C with freshly mixed material. These times are dependent on site conditions and will be extended in lower temperatures and shortened at higher temperatures.

GROUTING

Grouting can proceed once the tile bed has hardened sufficiently so that the tiles will not be dislodged, after approximately 3 hours at 20°C. This time is dependent on site conditions and will be extended in lower temperatures and shortened at higher temperatures.

Grout the joints with the appropriate ARDEX-FLEX Flexible Tile Grout: ARDEX-FLEX FS for joints up to 4mm wide or ARDEX-FLEX FL for joints 3-15mm wide. Alternatively, for areas where superior resistance to chemicals, high standards of hygiene or a reduced maintenance regime is required, ARDEX EG 8 PLUS Epoxide Tile Grout and Adhesive can be used.

COVERAGE

Material requirement is approximately 1.4kg powder per m² per mm bed thickness. A 20kg bag of ARDEX X 325 PTB or ARDEX X 325 PTB W will yield approximately 14.4 litres of mortar, equivalent to 4.8m² at 3mm bed thickness.

PRIMERS

ARDEX P 51

Blue, concentrated water-based primer for use on absorbent backgrounds in internal, dry locations. Dilute as instructed on the ARDEX P 51 technical datasheet.

ARDEX P 4

White, ready-mixed, rapid drying primer for use on absorbent and non-absorbent backgrounds in internal, external and wet (not submerged) locations. Particularly ideal for tile-on-tile applications.

ARDEX P 82

Pink, non-flammable, water-based synthetic primer for use on smooth, impervious surfaces, including asphalt and sound and well adhered paint coatings, in internal, dry locations.

TILING BACKGROUNDS

GUIDANCE NOTES

Concrete

New concrete should be allowed to shrink for at least 6 weeks, but preferably 12 weeks, before tiling. It should be mechanically cleaned, with mould oil, curing agents and laitance removed to reveal the aggregate.

ARDEX X 325 PTB

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Sand/Cement Screeds

Wood float finish and prevent rapid drying of the surface for 7 days. Sand/cement screeds should be allowed to shrink for at least 3 weeks before tiling.

NOTE: Tiles can be fixed after just 4 hours with an ARDEX A 38 Screed, or after 24 hours with a bonded ARDEX A 29 Screed.

Anhydrite/Gypsum/Calcium-Sulphate Screeds

Anhydrite screeds should be laid and prepared in accordance with the manufacturer's instructions. They must be dry, with a moisture reading of 75% RH or lower when measured with a hygrometer meter, or 0.5% or less when measured using the carbide method. The surface must then be abraded with suitable mechanised equipment to remove laitance, loose debris and dust, and to reveal the aggregate underneath. Before tiling, the screed should be primed with ARDEX P 51 Primer diluted 1:3 with water and applied in a single, continuous coat using a brush or broom; or, depending on the information from the screed manufacturer, a suitably sand blinded coat of ARDEX R 3 E Epoxy Primer may be required.

Underfloor Heating

Concrete, sand/cement screeds or anhydrite screeds containing underfloor heating should be fully commissioned before tiling. Refer to the manufacturer's recommendations for detailed guidance.

Plywood and Other Wood-Based Sheets and Boards

BS 5385-3 advises that timber is not an ideal base for tiling. If they must be used, they should provide a dimensionally stable and rigid background. The backs and edges should be treated against the ingress of atmospheric moisture that could result in movement and warping. Tiles should not be installed on boards in wet areas or external locations. Wood-based sheets and boards should not be used in wet or damp conditions where they will be subjected to changes in atmospheric humidity.

New and existing boards must be dry and conditioned to the environment they will be used in, rigidly fixed, ventilated and free from barriers to adhesion, e.g. wax/waterproof layers. Before tiling, the boards should be primed with undiluted ARDEX P 51 Primer applied with a brush or broom. It should then be tiled using an ARDEX RAPIDRY FORMULA tile adhesive such as ARDEX MICROTEC X 7001, ARDEX MICROTEC S 27 or ARDEX MICROTEC S 28.

Adhesive Residues

Adhesive residues such as bitumen should be smoothed before tiling with ARDITEX NA Levelling Compound applied direct without priming.

Asphalt Sanded

Internal, dry areas only. No priming is required if the sand key is well adhered. If the sand key is poor or worn off, see ASPHALT SMOOTH.

Asphalt Smooth

Internal, dry areas only. Smooth asphalt should be primed with ARDEX P 82 Primer before tiling.

Painted Surfaces

ARDEX's advice is always to remove the painted finish to reveal a sound substrate without barriers to adhesion. Where the contractor deems the painted finish as sound, it should be primed with ARDEX P 82 Primer before tiling commences. A trial application is recommended first. Internal, dry areas only.

Steel

Steel should be abraded to provide a shiny surface and primed with ARDEX P 82 Primer before tiling. Alternatively, where uncoupling matting is being installed first, ARDEX AF 200 PLUS Matting Adhesive can be applied direct to the abraded steel without priming.

Unsubmerged Wet Areas

Before tiling any commercial or domestic bathroom or shower, or any other wet area subject to frequent water contact, BS 5385 recommends the installation of a proprietary tanking membrane, to provide a waterproof layer and protect underlying moisture-sensitive substrates from water damage. ARDEX WPC can be used to waterproof these areas and allows tiling to commence in just 90 minutes.

Swimming Pools

Before tiling any commercial or domestic swimming pool, or any other submerged location, the structure should be watertight. ARDEX S 7 PLUS can be used to waterproof these areas prior to tiling, and resists water pressures up to 5 Bar.

PACKAGING

ARDEX X 325 PTB and ARDEX X 325 PTB W are available in a 20kg pack size, packed in paper sacks incorporating a polyethylene liner.

STORAGE AND SHELF LIFE

ARDEX X 325 PTB and ARDEX X 325 PTB W must be stored in unopened packaging, clear of the ground in cool, dry conditions and protected from excessive draught. If stored correctly, the shelf life is 12 months from the date of the packaging.

NOTE: Install tiles in accordance with the relevant parts of BS 5385 and BS 8000: Part 11 Workmanship on Building Sites.

NOTE: For the latest technical or health and safety data on this product, consult the current technical or health and safety datasheet online at www.ardex.co.uk

TECHNICAL DATA

Weight of fresh mortar:	approximately 1.7kg/litre
Working time (20°C):	approximately 30 minutes
Fixing time (20°C):	approximately 20 minutes
Adjusting time (20°C):	approximately 10 minutes
Tensile adhesion strength:	greater than 1N/mm ² after 28 days, water immersion, heat ageing & freeze-thaw

PROPERTIES TESTED TO BS EN 12004

Open time:	approximately 20 minutes
Tensile adhesion strength:	at least 0.5N/mm ² after 6 hours.

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