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Python AF



PYTHON AF A GYPSUM BASED, FLEXIBLE, RAPID SETTING FLOOR & WALL TILE ADHESIVE



Suitable for use with a large variety of tiles such as ceramic, porcelain and natural stone



Can be used over underfloor heating systems



Rapid setting capability allows for light foot traffic and grouting after 3 hours



Can be applied to anhydrite/calcium sulphate screeds with 85% Relative Humidity (RH) or less



Suitable for use in internal locations only where dry conditions exist

C2 FT S1 flexible

Walk in and grout after 4 hours

100% compatible with Anhydrite Screeds

DESCRIPTION

Python AF is a gypsum based, polymer modified, flexible rapid setting floor and wall tile adhesive. Python AF has been specially formulated for fixing a large variety of tiles such as ceramic, porcelain and natural stone to anhydrite/calcium sulphate screeds and gypsum based substrates such as gypsum plaster and plasterboard.

Python AF is a flexible adhesive and is suitable for use over underfloor heating systems. Its rapid setting capability allows for light foot traffic and grouting after 3 hours.

Python AF can be applied to anhydrite/calcium sulphate screeds with 85% Relative Humidity (RH) or less. Unlike cement based adhesives, Python AF is 100% compatible with anhydrite/calcium sulphate screeds. Python AF is suitable for use in internal locations only where dry conditions exist.

NB: It is not suitable for use in wet areas such as showers, wet rooms and swimming pools. Python AF cannot be used on cement based substrates such as sand/cement screeds, concrete or cement coated/based tile backer boards.

NB: Python AF is suitable for use with natural stone tiles but suitability with very porous and sensitive natural stone tiles must be tested prior to use. Confirmation of suitability should be sought from the supplier of the natural stone tiles.

If you are unsure with any of our instructions please call our Technical Helpline on 020 8778 9000, we will be happy to assist.

PREPARATION

Before starting, all substrates must be clean, dry and strong enough to support the weight of the tiles, tile adhesive and grout. Remove all dust, dirt, oil, grease and other contaminants that may affect adhesion.

MIXING & APPLICATION

Only mix small quantities at a time until you have become accustomed to the fast setting nature of the product. Always mix powder to water and mix to a smooth and lump free consistency. As a guide for powder to water ratio, 20kg of powder requires approximately 4.8-5.2 litres of water. Never add water after initial mixing, as this will impair the strength of the adhesive. Product that has started to set must be discarded.

NB: When fixing large format tiles, natural stone tiles and tiles that have deep studs on the back, you must skim the back of the tile with a thin 1 – 2mm layer of adhesive, this is referred to as back buttering. This will significantly improve the bond strength.

On a flat, even substrate where dry conditions exist, apply adhesive to the substrate as a thin floated coat at a uniform thickness of 3mm – 6mm and then rib / comb out using a suitable notched trowel. Where substrate conditions do not allow thin bed fixing, Python AF can be applied to a maximum bed thickness of 12mm. Ensuring the adhesive is still moist, bed tiles into adhesive using a twisting action ensuring full coverage of adhesive between tile and substrate. Regular checks should be made to make sure that there are no voids in the adhesive bed.

Clean surplus adhesive from the tiles and joints as soon as possible as set adhesive will prove very difficult to remove later.

Clean tools after use with water.

GROUTING

Do not start grouting until the adhesive has set. This time can vary depending on temperature and site conditions. Impervious surfaces may extend the set time. In ideal conditions grouting can begin after 3 hours. If you are tiling an area of limited movement or underfloor heating, you must use a flexible such as Python CS.

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Tiles

- Ceramics
- Porcelain
- Marble
- Travertine
- Limestone
- Slate
- Granite
- Terracotta
- Mosaics
- Quarry
- ♦ Quartz
- Composite

Suitable | Not suitable

Substrates

- Concrete
- Plywood Overlay (12mm min)
- Electric Underfloor Heating
- Water/Wet System
 Underfloor Heating
- Flooring Grade Asphalt & Bitumen*
- Anhydrite Screeds
- Plaster
- Plasterboard
- Existing Vinyl Tiles*

- > Tile Backer Boards
- **♦ Sand/Cement Screed**
- Existing Ceramic, Porcelain and Natural Stone Tiles
- **♦ Fibre Cement Sheet**
- **♦ Cement/Sand Render**
- **♦** Concrete Brick/Block
- Steel/Metal Surfaces
- **→ T & G Floorboards**
- Floating Floors
- ♦ Fibreglass
- ♦ Green Screen

Suitable | Not suitable *Prime with Python PR

SUBSTRATE PREPARATION GUIDE

Flooring Grade Asphalt/Bitumen: Ensure that the flooring grade asphalt/bitumen is in good condition and that there are no signs of debonding and/or hollowness. Make sure the surface is dry and free of any contaminants, loose dust or dirt. Prime the surface with one coat of Python PR and allow to dry.

Gypsum Plaster: New plaster must be allowed to dry for a minimum of 4 weeks. Ensure the surface is dry and free of any contaminants, loose dust or dirt. If the plaster has a polished/shiny surface, brush with a stiff bristle brush to abrade/roughen the surface prior to application. Prime the surface with PR, diluted 3 parts water to 1 part Python PR. The combined weight of the tile, tile adhesive and grout should not exceed 20kg /m2.

Gypsum Plasterboard: Ensure the surface is dry and free of any contaminants, loose dust or dirt. Prime the surface with one coat of Python PR diluted 3 parts water to 1 part Python PR and allow to dry. The combined weight of the tile, tile adhesive and grout should not exceed 32kg /m2.

Plywood Overlay: Prior to tiling, ensure that new or existing boards are dry, i.e. conditioned to the environment in which they will be used. Plywood must be 12mm (minimum), flooring grade, screwed (not nailed) to substrate at 6 inch/150mm centres. Ensure there is sufficient ventilation beneath substrate and that the plywood has been fitted competently and will take the weight of the tiles, tile adhesive and grout. Ensure the surface is dry and free of any contaminants, loose dust or dirt. Existing and/or lightly contaminated plywood requires priming with Python PR diluted 3 parts water to 1 part Python PR. New, uncontaminated plywood does not require priming prior to tiling.

Underfloor Heating Systems: When tiling onto existing underfloor heating you must switch the heating off 48 hours prior to tiling to allow the substrate to cool sufficiently. When tiling has been completed allow 1 week for full cure of tile adhesive and grout before switching the heating on. When doing so, start with a low temperature and gradually increase the temperature on a daily basis by no more than 2°C per day.

When tiling on to a new electric element underfloor heating system, the electric underfloor heating mat/element must be embedded into

a self-levelling compound in order to protect the heating element and to leave a perfect surface on which to apply tiles. Again, allow one week for full cure before switching the heating on, start with a low temperature and gradually increase the temperature on a daily basis by no more than 2°C per day.

Underfloor Heated Screeds should be commissioned prior to tiling. Turn on the heating system at a low temperature and heat the screed gradually by no more than 5°C per day until a maximum temperature of 25°C is achieved. Maintain this temperature for 3 days and then switch the heating off 48 hours prior to tiling to allow the substrate to cool sufficiently. Alternatively, in cold conditions, reduce the temperature of the screed to below 15°C prior to tiling. When tiling has been completed allow 1 week for full cure of tile adhesive and grout before switching the heating on. When doing so, start with a low temperature and gradually increase the temperature on a daily basis by no more than 2°C per day.

Anhydrite/Gypsum Screed: Anhydrite/Gypsum screeds must be confirmed dry via consistent moisture readings across the whole floor. As an approximate guide for drying times, allow 1 day per mm up to an overall depth of 40mm and 2 days per mm for anything above 40mm. The drying of anhydrite/gypsum screeds can be assisted by commissioning the underfloor heating system, for further information, please contact our Technical Helpline. All anhydrite/gypsum screeds must be mechanically sanded/abraded prior to tiling in order to remove the laitance from the surface of the screed.

When using Python AF, the residual moisture content of the screed must be less than 1.0%. Alternatively, the relative humidity must be 85% or below. Once these levels have been reached and the surface is free of any contaminants, loose dust or dirt, prime the surface with one coat of Python PR diluted 3 parts water to 1 part Python PR and allow to dry.

Existing Vinyl Tiles/Sheet Vinyl: Make sure the existing vinyl tiles/ sheet vinyl is firm, stable and well adhered to the substrate to which the vinyl was originally applied to. Ensure the surface is dry and free of any contaminants, loose dust or dirt. Existing vinyl that has been previously treated with sealer must be sufficiently cleaned in order to remove any surface treatments. Prime the surface with one coat of Python PR and allow to dry.

Technical Data	
Water Addition	4.8 – 5.2 litres of water to 20kg AF
Coverage	20kg will cover 5 – 6m² at 3mm thin bed application
Pot Life at 20°C:	Approximately 45 - 60 minutes
Grout After:	3 hours
Application Temperature:	+5°C to +30°C
Colours:	Off White
Pack Sizes:	20kg

Anhydrite/Gypsum Screeds

Preparation

- Anhydrite screeds often dry with laitance on the surface, the laitance is a weak layer that is often shiny
 in appearance and looks like a hard crust. The laitance must be removed before tiling commences by
 mechanically sanding and/or abrading the surface of the screed using a floor sander with a 50's 60's
 grit sandpaper.
- Once the laitance has been removed, the screed should be vacuumed to remove all loose dust, dirt and contaminants.

Moisture Testing & Drying of the Screed:

- Anhydrite screeds must be confirmed dry via consistent moisture readings across the whole floor. When
 using AF adhesive, the residual moisture content of the screed must be less than 1% or alternatively the
 relative humidity must be 85% or below. As an approximate guide for drying times, allow 1 day per mm
 up to an overall depth of 40mm and 2 days per mm for anything above 40mm.
- The drying of anhydrite screed can be assisted and accelerated once the screed is 7 days old by commissioning the underfloor heating system. Commission the system by turning on the heating at a low temperature and then gradually increase the temperature by no more than 5°C per day until a maximum temperature of 25°C on the thermostat is achieved. Maintain this temperature for a minimum of 3 days and then switch the heating off 48 hours prior to tiling to allow the substrate to cool sufficiently. Alternatively in cold conditions, reduce the temperature of the screed to below 15°C prior to tiling.
- The drying of anhydrite screeds can also be accelerated with the use of dehumidifiers.

Priming

• When using AF adhesive, prime the surface of the screed with one coat of PR diluted 3 parts water to 1 part Python PR and allow to dry. Alternatively prime the surface with one coat of PR+ and allow to dry.