Document No. FS.TDS.v1.0	
Technical Datasheet	
Date: 01/11/18	
Python FS	



## **PYTHON FS A POLYMER MODIFIED, FLEXIBLE, CEMENT BASED FLOOR AND WALL TILE ADHESIVE**



Standard setting formula with extended open time



**Excellent workability and non-slip properties** 



Ideal in showers, wet rooms & areas subject to prolonged wet conditions



Suitable for commercial and heavy traffic environments



Improved slip resistance - ideal when fixing large format tiles



Internal and External use

# C2 TE EN 12004 Class

EXTENDED POT LIFE 3-4 HOURS



#### **DESCRIPTION**

Python FS is a polymer modified, cement based wall and floor tile adhesive with increased adhesion and non-slip properties. Formulated to give an extended pot life of approximately 3-4 hours, Python FS is ideal where longer working times are required.

Python FS has been specially formulated for fixing a large variety of tiles including ceramic, porcelain and natural stone tiles to solid substrates such as sand/cement screed, concrete, brick/block and plaster.

Python FS is suitable for use in areas subject to prolonged wet conditions such as showers and wet rooms. Python FS is suitable for use internally and externally and is unaffected by frost after setting.

**NOTE:** Python FS 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 or alternatively, please contact our technical department 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 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 4.4-4.6 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 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 substrate as a thin floated coat at a uniform thickness of 3 - 6mm and then rib / comb out using a suitable notched trowel. Where substrate conditions do not allow thin bed fixing, Python FS 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.

**NB**: When fixing tiles externally or in areas subject to prolonged wet conditions, you must ensure that you achieve 100% adhesive coverage between tile and substrate.

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 24 hours.

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

### **Tiles**

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

Suitable | Not suitable

### **Substrates**

- Sand/Cement Screed
- Concrete
- Tile Backer Boards
- Existing Ceramic, Porcelain and Natural Stone Tiles\*
- Plaster
- Plasterboard
- Fibre Cement Sheet
- Sheet Cement/Sand Render
- Concrete Brick/Block
- Plywood Overlay
- **♦ Electric Underfloor Heating**
- ♦ Water/Wet System Underfloor Heating
- Existing Vinyl Tiles
- ♦ Flooring Grade Asphalt & Bitumen\*
- ♦ T & G Floorboards
- **♦ Floating Floors**
- **♦** Green Screed
- ♦ Anhydrite Screeds
- **♦ Steel/Metal Surfaces**
- **♦ Fibreglass**

Suitable | Not suitable

\*Prime with PR

## **SUBSTRATE PREPARATION GUIDE**

Concrete: New concrete must be allowed a minimum of 6 weeks drying time. As an approximate guide for drying times, allow 1 day per mm up to an overall depth of 50mm and 2 days per mm for anything above 50mm. Remove any laitance from the surface mechanically and ensure that mould oil, curing agents and any other contaminants are removed. Remove all dust and dirt ideally by vacuum. Prime the surface with Python PR diluted 3 parts water to 1 part Python PR and allow to dry. Very porous substrates will require more than one coat.

Sand/Cement Screed: New sand/cement screed must be left for a minimum of 4 weeks to dry sufficiently. Remove any laitance from the surface mechanically and ensure that mould oil, curing agents and any other contaminants are removed. Remove all dust and dirt ideally by vacuum. Prime the surface with Python PR diluted 3 parts water to 1 part Python PR and allow to dry. Very porous substrates will require more than one coat.

Existing Ceramic, Porcelain & Natural Stone Tiles: Ensure the surface is dry and free of any contaminants, loose dust or dirt. Existing tiles that have 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.

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 2 coats of Python PR, both coats diluted 3 parts water to 1 part Python PR. Allow the first coat to become touch dry before applying the second coat. The combined weight of the tile, tile adhesive and grout should not exceed  $20 \text{kg} \, / \, \text{m}^2$ .

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. The combined weight of the tile, tile adhesive and grout should not exceed 32kg / m².

Concrete Blocks: Ensure surface is dry and free of contaminants, loose dust and dirt. Prime the surface with one coat of Python PR diluted 3 parts water to 1 part Python PR and allow to dry.

Tile Backer Board: 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. Alternatively refer to the board manufacturers priming instructions.

Power Floated Concrete: Ensure the surface has been allowed 7 days to cure. Power floated concrete can leave a loose top layer and/or laitance once it has cured. Remove the loose top layer and any laitance from the surface mechanically or by acid etching and remove all dust and particles ideally by vacuum. Once all laitance has been removed, prime the surface with one coat of Python PR diluted 3 parts water to 1 part Python PR.

## **HEALTH AND SAFETY**

Python FS Adhesive contains cement. Contact with moisture or gauging water sets off an alkaline reaction which may cause skin irritation and/or caustic burns to mucous membranes (e.g. eyes). Irritant to respiratory system. Risk of serious damage to eyes, therefore avoid contact with eyes and prolonged contact with skin. Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Wear suitable gloves (e.g. cotton gloves soaked in nitrile) and eye/face protection. If swallowed, seek medical advice immediately and show this container or label. Keep out of reach of children. Low in chromates.

For further information refer to the Material Safety Data Sheet.

The information contained on this spec sheet is given voluntarily and in good faith. It is to the best of our knowledge true and accurate; however it may contain information which is inappropriate under certain conditions of use. The company cannot accept responsibility for any loss or damage due to inappropriate use or the possibility of variations of working conditions and of workmanship outside our control.

Technical Data	
Standard Conformity	Conforms to BS EN 12004 C2 TE
Bed Thickness	3mm – 12mm
Coverage	20kg will cover approximately 5–6 m <sup>2</sup> at 3mm bed application
Open Time/Working Time	3 - 4 hours at 20°C
Before Grouting	Approximately 24 hours depending on temperature and substrate.
	The set time will be increased by lower temperatures and reduced at higher temperatures.
	*Tiling onto an impervious substrate with a non-porous tile will increase set time.
Storage	Store unopened, clear of the ground in cool, dry conditions
Shelf life	Stored correctly this product has a shelf life of 6 months
Colours	Grey and White
Pack sizes	20kg
Note	All work must be carried out in accordance with British Standard Code of Practice for floor and wall tiling BS5385.



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EN 12004:2007 + A1:2012   Improved standard setting cement based adhesive with reduced slip and extended open time			
Transverse Deformation	N/A		
Bond Strength, as			
early tensile adhesion strength	>1.0 N/mm²		
initial tensile adhesion strength	>1.0 N/mm²		
Durability, for			
tensile adhesion strength after heat ageing	>0.5 N/mm²		
tensile adhesion strength after water immersion	>0.5 N/mm²		
tensile adhesion strength after freeze/thaw cycles	>0.5 N/mm²		