Document No. RS.TDS.v2.0

Technical Datasheet

Date: 01/02/19

Python RS

PYTHON RS FLEXIBLE RAPID SETTING FLOOR & WALL TILE ADHESIVE

	Rapid setting capability allows for light foot traffic and grouting after 3 hours	S1 FLEXIBLE
	Developed for fixing to timber substrates	EN 12002 Class
*	Can be used internally and externally	WALK IN AND GROUT
	Suitable for use with underfloor heating systems	AFTER 3 HOURS
	Ideal for areas subject to prolonged or permanent wet conditions such as wet rooms and swimming pools	3-12mm BED
	Suitable for natural stones, ceramic and porcelain	IHICKNESS

DESCRIPTION

Python RS is a polymer modified, flexible rapid setting cement based floor and wall tile adhesive with increased adhesion and non-slip properties.

Python RS has been specially formulated for fixing a large variety of tiles including ceramic, porcelain and natural stone tiles to substrates subject to limited movement and/or vibration such as plywood overlay and underfloor heating systems as well as for fixing to solid substrates such as concrete and sand/cement screed. Its rapid setting capability allows for light foot traffic and grouting after 3 hours.

Python RS is ideal for areas subject to prolonged or permanent wet conditions such as swimming pools. RS can be used internally and externally and it is unaffected by frost after setting.

NOTE:

Python RS 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 01772 456831, 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 4.4 - 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 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 RS 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 or permanent 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 3 hours. If you are tiling an area of limited movement or underfloor heating, you must use a flexible grout such as Python CS.

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



Tiles

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

Suitable | Not suitable

Substrates

- Sand/Cement Screed
- Concrete
- Plywood Overlay (12mm min)
- Electric Underfloor Heating
- Tile Backer Boards
- Existing Ceramic, Porcelain and Natural Stone Tiles
- Flooring Grade Asphalt & Bitumen*
- Anhydrite Screeds
- Plaster
- Plasterboard
- ♦ Fibre Cement Sheet
- Cement/Sand Render
- Concrete Brick/Block
- T & G Floorboards
- Floating Floors
- Existing Vinyl Tiles
- Steel/Metal Surfaces
- Fibreglass
- Green Screed

Suitable | Not suitable *Prime with Python PR

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.

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.

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 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. The combined weight of the tile, tile adhesive and grout should not exceed $32 \text{kg}/\text{m}^2$.

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), exterior grade, screwed (not nailed) to substrate at 6 inch/150mm centres. Ensure there is sufficient ventilation beneath the 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 should be embedded into a self-levelling compound such as Python LR 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 must 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.

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.

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.

Python Adhesives preferred tile adhesive for use on anhydrite/ gypsum screeds is Python AF. Python AF is a gypsum based tile adhesive which is 100% compatible with anhydrite/gypsum screeds. When using Python AF, the residual moisture content of the screed must be less than 1%. 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 become touch dry. Tiling can then commence with Python AF.

Python ST is also suitable for use on Anhydrite/Gypsum screeds providing the residual moisture content of the screed is below 0.5%. Alternatively, the relative humidity must be 75% or below. When using Python ST onto Anhydrite/Gypsum screed, the surface of the screed needs priming with 2 coats of Python PR. The first coat of Python PR must be diluted 3 parts water to 1 part Python PR. Apply the first diluted coat and allow to become touch dry before applying a second coat of neat Python PR.

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.

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.

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

Please ensure that appropriate PPE is used when preparing, mixing and applying products. Always wash hands before consuming food and make sure that materials are kept safely out of reach of children and animals. Please dispose of packaging and waste appropriately.

A full Material Safety Data Sheet relating to this product is available from pythonadhesives.co.uk

QUALITY ASSURANCE

All products are manufactured in a plant whose quality management system is certified as being in conformity with BE EN ISO 9001. Python products are guaranteed against defective materials and manufacture and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept responsibility arising from the application or use of our products because we have no direct or continuous control over where and how our products are used. All Python products are sold subject to our terms and conditions of sales, copies of which may be obtained upon request.

Technical Data		
Classification	EN12004 Class C2FT S1	
Bed Thickness	3mm – 20mm	
Coverage	4.5kg / m ² at 3mm bed thickness	
Grout After*	4 hours	
Storage	This product must be stored in unopened bags, clear of the ground in dry conditions. Avoid frost. Ideal storage temperatures are between 5° C and 25° C	
Shelf Life	Under the above storage conditions this product has a shelf life of 12 months.	
Pot Life*	60 Minutes at 20°C	
Set Time	2.5 Hours at 20°C	
Application Temperatures	5°C to 25°C	
Colours	Grey and White	
Pack sizes	20kg bags	
Note	All work must be carried out in accordance with British Standard Code of Practice for floor and wall tiling BS5385	

*Depending on temperatures, substrate and site conditions.