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Technical Datasheet
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Python FL

GET A GRIP!

PYTHON
ADHESIVES

PYTHON FL AN ULTRA – RAPID SETTING FLEXIBLE SELF LEVELLING FLOOR COMPOUND



Apply ceramic, porcelain and natural stone tiles after 45- 60 minutes



Apply impervious floor coverings after 90 minutes



Excellent flow and self-levelling properties making it suitable for a wide range of both commercial and domestic applications



Suitable for use with underfloor heating systems including encapsulating electric elements

CT 35 F10
EN 13813 Class

A GENUINE
FAST TRACK SOLUTION

2-15mm in
ONE APPLICATION

DESCRIPTION

Python FL is an ultra-rapid setting and drying, flexible self levelling floor compound. It has been specially formulated using advanced binder technology and selected additives to provide an underlayment which is ideal for when a genuine, fast-track solution is required.

At 20°C, Python FL is ready to receive ceramic, porcelain and natural stone tiles after 45 – 60 minutes and impervious floor coverings such as decorative vinyl, laminate and linoleum after 90 minutes. Python FL can be applied from depths of 2 – 15mm in one application and it is suitable for use on all common substrates including underfloor heating systems and timber substrates.

Python FL is ideal for encapsulating electric underfloor heating elements prior to the application of tiles and/or soft flooring. The product has excellent flow and self-levelling properties making it suitable for a wide range of both commercial and domestic applications.

PREPARATION

Before starting, all substrates must be clean, dry and strong enough to support the weight of the leveller and the final floor covering being applied. Remove all dust, dirt, oil, grease and other contaminants that may affect adhesion. Where traces of adhesive residue remain, these must be checked to ensure that they are not softened with water and that they are strong, sound and well adhered to the substrate in order to receive a levelling compound.

When installing moisture sensitive floor coverings, concrete or sand/cement screed should be confirmed dry by consistent moisture readings: <75% relative humidity (RH) or <0.5% residual moisture when tested in accordance with BS 8203. Where a structural damp proof membrane is not present or where rising damp and/or residual moisture gives moisture readings up to 98% RH, it is recommended to apply a liquid damp proof membrane such as a one coat DPM prior to the application of Python FL.

Surface laitance should be removed from concrete and sand/cement screed surfaces prior to the application of Python FL.

Most substrates should be primed prior to the application of Python FL. Priming will stabilise the substrate, minimise the risk of pinholes forming,

allow for the best flow properties and also prolong the working time of the product. For priming dilution rates please refer to Page 3 of this data sheet.

MIXING AND APPLICATION

Mix by adding powder to water, approximately 4.8 – 5.0 litres of water to 20kg of Python FL. We suggest starting with 4.8 litres of water which can then be increased to a maximum of 5.0 litres if necessary. Do not exceed 5.0 litres of water.

Exceeding 5.0 litres of water per 20kg unit will result in water bleed and therefore extended drying times and a weakened mix.

Mix ideally with an electric paddle until you obtain a smooth and lump free consistency. When mixed allow to stand for 2 minutes and stir again before application.

Please note - once mixed, Python FL remains workable in the bucket for 10 - 15 minutes. Due to the Ultra-Rapid setting properties of Python FL, it is important to apply the mixed product without delay.

Pour a small quantity onto the prepared surface and trowel down lightly to a depth between 2 and 15mm. The use of a spiked roller is recommended immediately in order to remove entrapped air and smooth out flow lines. If you wish to build to a greater depth of 15mm, allow to dry and prime between applications.

SETTING AND COVERING

Python FL will start to cure 30 minutes after application. The setting time will depend on site conditions/temperatures, it will be slowed by lower temperatures and accelerated by higher temperatures. If there is no air flow within site conditions, the drying time may be restricted. Python FL must be left to dry before applying the final decorative surface flooring. This is typically after 45 – 60 minutes for ceramic, porcelain and natural stone tiles and after 90 minutes for soft flooring such as vinyl. However, it can vary and can be faster depending on the choice of surface flooring.

The critical moisture content for the flooring in question must be observed. If in doubt, please call our Technical Helpline on 020 8778 9000, we will be happy to assist.

Substrates

- ◇ Sand/Cement Screed
- ◇ Concrete
- ◇ Plywood Overlay (6mm min)
- ◇ Electric Underfloor Heating
- ◇ Water/Wet System Underfloor Heating
- ◇ Tile Backer Boards
- ◇ Existing Ceramic, Porcelain and Natural Stone Tiles
- ◇ Plasterboard
- ◇ Existing Vinyl Tiles
- ◇ Fibre Cement Sheet
- ◇ Cement/Sand Render
- ◇ Concrete Brick/Block
- ◇ Flooring Grade Asphalt & Bitumen
- ◇ T & G Floorboards
- ◇ Floating Floors
- ◇ Green Screed
- ◇ Steel/Metal Surfaces
- ◇ Fibreglass

Suitable | Not suitable

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 PR diluted 3 parts water to 1 part PR and allow to dry. Very porous substrates may require more than one coat of PR.

When installing moisture sensitive floor coverings, the concrete should be confirmed dry by consistent moisture readings: <75% relative humidity (RH) or <0.5% residual moisture when tested in accordance with BS 8203. Where a structural damp proof membrane is not present or where rising damp and/or residual moisture gives moisture readings up to 98% RH, it is recommended to apply Python PR + Grip prior to installing the finished flooring. Once PR + Grip has been applied and cured, apply one coat of Prime + Grip and allow to dry prior to the application of FL.

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 PR diluted 3 parts water to 1 part PR and allow to dry. Very porous substrates may require more than one coat of PR.

When installing moisture sensitive floor coverings, the sand/cement should be confirmed dry by consistent moisture readings: <75% relative humidity (RH) or <0.5% residual moisture when tested in accordance with BS 8203. Where a structural damp proof membrane is not present or where rising damp and/or residual moisture gives moisture readings up to 98% RH, it is recommended to apply Python PR + Grip prior to installing the finished flooring. Once PR + Grip has been applied and cured, apply one coat of Prime + Grip prior to the application of self levelling compound or tile adhesive

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 Prime+ Grip and allow to dry before applying FL. Alternatively, prime the surface with one coat of PR Slurry Mix. The Slurry Mix consists of 1 part water to 1 part PR mixed with approximately 30% by weight of cement based tile adhesive or levelling compound to form a brush on slurry. Allow the Slurry Mix to dry before applying FL.

Plywood Overlay: Prior to applying FL, ensure that new or existing boards are dry, i.e. conditioned to the environment in which they will be used. Plywood must be 6mm (minimum), exterior 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 leveller, adhesive and the final floor covering being applied. Make sure the surface is dry and free of any contaminants, loose dust or dirt. The top surface of the plywood does not require priming prior to applying FL providing the surface is free from all contaminants.

Underfloor Heating Systems: When applying FL onto existing underfloor heating you must switch the heating off 48 hours prior to application to allow the substrate to cool sufficiently. Once the self levelling and the flooring installation has been completed allow 1 week for full cure of FL 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 or applying soft flooring on to a new electric element underfloor heating system, Python Adhesives strongly recommend embedding the electric underfloor heating mat/element into a self levelling compound such as FL in order to protect the heating element and to leave a perfect surface on which to apply the flooring finish. 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 or applying a soft flooring finish. 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 applying the flooring finish to allow the substrate to cool sufficiently. Alternatively in cold conditions, reduce the temperature of the screed to below 15°C.

Once the self levelling and the flooring installation has been completed allow 1 week for full cure of FL 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. The residual moisture content of the screed must be less than 0.5%. Alternatively the relative humidity must be 75% 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/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 in order to remove the laitance from the surface of the screed.

For details on self levelling anhydrite/gypsum screeds with FL, please contact the Technical Helpline on 020 8778 9000.

Tile Backer Board: Ensure the surface is dry and free of any contaminants, loose dust or dirt. Prime the surface with one coat of PR diluted 3 parts water to 1 part 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 and 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 Prime+ Grip and allow to dry before applying FL. Alternatively, prime the surface with one coat of PR Slurry Mix. The Slurry Mix consists of 1 part water to 1 part PR mixed with approximately 30% by weight of cement based tile adhesive or levelling compound to form a brush on slurry. Allow the Slurry Mix to dry before applying FL.

Power Floated Concrete: Ensure the surface has been allowed 7 days to cure. Ensure new concrete is confirmed dry via consistent moisture readings across the whole surface. Concrete screeds must have a reading of less than 75% relative humidity (RH) before work can commence. 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 PR diluted 3 parts water to 1 part PR.

HEALTH AND SAFETY

Python FL contains cement. 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	
Screed classification	CT-C35-F10 to BS EN 13813; 2002
Working time @ 20°C	10 – 15 minutes
Time to foot traffic @ 20°C	30 minutes
Application thickness	2 – 15 mm
Compressive strength N/mm² (BS EN 13892-2)	1 day > 20.0 7 day > 30.0 28 day > 35.0
Flexural strength 4.0 N/mm² (BS EN 13892-2)	1 day > 4.0 7 day > 7.0 28 day > 10.0
Coverage	20kg will cover 4.2m ² at 3mm thickness
Flow properties using 30mm x 50mm flow ring	135 – 150 mm
Minimum application temperature	5°C
Shelf life	Stored correctly this product has a shelf life of 6 months
Colour	Beige
Pack size	20kg
Note	All work must be carried out in accordance with British Standard Code of Practice.



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EN 12004:2007 + A1:2012 | Improved fast setting cement based adhesive with reduced slip

Transverse Deformation	N/A
Bond Strength, as:	
• early tensile adhesion strength	>0.5 N/mm ²
• initial tensile adhesion strength	>1.0 N/mm ²
Durability, for	
• tensile adhesion strength after heat ageing	>1.0 N/mm ²
• tensile adhesion strength after water immersion	>1.0 N/mm ²
• tensile adhesion strength after freeze/thaw cycles	>1.0 N/mm ²