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

GET A GRIP!
PYTHON
ADHESIVES

PYTHON ST A STANDARD SET FLEXIBLE TILE ADHESIVE

- Suitable for use with large variety of tiles including ceramic, porcelain and natural stone tiles
- Excellent workability and non-slip properties, ideal for fixing large format tiles
- Internal and External use
- Ideal in showers, wet rooms, swimming pools and areas subject to prolonged wet conditions
- Unaffected by frost after setting

C2TE S1
EN 12004 Class

EXTENDED POT LIFE
2 Hours

3-20mm BED THICKNESS

DESCRIPTION

Python ST is a single part, standard setting, flexible adhesive for wall and floor tiles. It is specially formulated with extended workability, enhanced adhesion and flexibility, making it ideal for areas where slight movement or vibration can occur. Classified as S1 in accordance with EN12004 it has the high level of deformation for greater tolerance to movement. Python ST is a polymer modified adhesive which provides enhanced performance and high bond strength including installations subject to moisture. It has extended set properties for contractors who prefer a longer pot life. It is able to take light foot traffic within 18 hours of installation depending upon temperature and substrate.

NB: Porous natural stone tiles need to be checked for compatibility to avoid staining.

PREPARATION

All wall and floor substrates must be clean, dry, firm and stable, free of dust, dirt, oil and grease. Substrates should be strong enough to support the weight of the adhesive and tiles being fixed (see below for loadings).

For plasterboard and plaster finishes that have been painted and are showing a weak or flaky surface finish then mechanical sanders or hand sanding blocks are generally used to remove the film. However for the likes of floor screed surface contamination, adhesive residues and weak surface laitance or even smooth dense floors such as power floated concrete, these will require a more heavy duty scarifying using specialist flooring equipment to remove the surface of the substrate to ensure the substrate is sound, stable and has a rough open texture. To encourage best adhesion to the substrate it is advisable that prior to applying adhesive that substrates are primed (please see priming section below).

Remember - sanding or mechanical abrasion of any surface will leave powder deposits which require thorough removal by suitable vacuum equipment to provide a clean dust free surface. Failing to remove fine powder deposits and weak surfaces is a common reason for de-bonding of tile adhesive and primer from the substrate. Using a wet sponge to clean down a wall or floor of dust deposits only serves to spread it around, it is therefore advisable to vacuum thoroughly prior to use of wet sponge.

MIXING & APPLICATION

Once the substrate has been prepared, continue with the tiling installation. Python ST should be added slowly to clean water in a suitable clean mixing tub and mixed thoroughly using a drill/mixer and paddle to give a slump free, easily worked mortar consistency. Once mixed the mortar is immediately ready for use and has a pot life of approximately 2 hours at 20˚C. Mix only sufficient material to be used within the pot life of the product. Do not remix or rewet/ dilute product which has aged and is starting to thicken or set.

Mixing Ratio: 20kg unit requires 5.2L - 5.5L of water.

Apply the adhesive to the required thickness (limits 3mm – 20mm) in areas up to 1m^2 at a time. For internal walls use a notched trowel to the following notch dimensions to provide solid rib lines:

- Mosaic tiles: 3mm x 3mm at 6mm centres
- General wall tiles: 5mm x 5mm at 10mm centres
- General floor tiles: 8mm x 8mm at 16 mm centres

For floors and external applications we advise to use the solid bed method. This involves applying a uniform bed of adhesive to the floor and “buttering” the back of the tile with the same adhesive. When the tiles are bedded with a twisting action, pressing firmly down it ensures 100% contact is made with both the floor and the tile.

When fitting tiles leave spaces between each of the tiles to allow for grouting (approx: walls 1mm – 3mm and floors 2mm – 12mm). Before the tile adhesive sets clean off the excess adhesive from the face of the tile and grout joints with a clean damp cloth or sponge.

WALL TILING & LOADINGS

Wall types vary considerably but all have the same basic need to be structurally sound, strong, smooth and level. It is essential that the wall to be tiled has sufficient inherent strength to hold the proposed tile and the adhesive being used. The following chart lists maximum national standard loadings for a variety of wall substrates.

GROUTING

LOADINGS	
Gypsum plaster	20kg/m²
Skimmed plasterboard (gypsum)	32kg/m²
Plywood (exterior grade)	30kg/m²
Gypsum fibre boards	40kg/m²
Cement tile backer boards	40kg/m²
Glass reinforced cement sheets	50kg/m²

Leave the installed tiles for a minimum period for at least 18 hours to set hard before grouting and/or walking on the tile. This time may be extended on impervious/non-porous substrates. It is also dependent on temperatures and conditions. Always check and ensure that adhesive has set hard before grouting.

PRIMING

Leave the installed tiles for a minimum period for at least 18 hours to set hard before grouting and/or walking on the tile. This time may be extended on impervious/non-porous substrates. It is also dependent on temperatures and conditions. Always check and ensure that adhesive has set hard before grouting.

CLEANING

Tools should be thoroughly cleaned with water to remove excess material immediately after use and before adhesive sets.

POINTS OF NOTE

The curing period for cement based tile adhesives will be affected by extremes in temperature. High temperature site conditions will increase the speed of cure therefore reducing the pot life and set times. Low temperatures will reduce the speed of cure extending the pot life and set times. It is therefore good practice to consider site conditions and storage of materials as essential factors in planning tiling installations.

All Python adhesives are manufactured to meet the performance requirements of BS EN 12004 and the relevant classifications.

Python would always advise that tiling installers follow the guidelines for tiling as laid down in BS EN5385. It is essential that expansion joints are built into the design of the tiling installation in order to prevent tension build up. This is a common occurrence which can result in tiles de-bonding.

Please note that this product uses natural aggregates and other materials that may marginally vary in colour. This does not affect the consistency or characteristics of the product.

Tiles

- **Ceramics**
- **Porcelain**
- **Glass**
- **Mosaics**
- **Marble**
- **Travertine**
- **Granite**
- **Limestone**
- **Terracotta**
- **Quarry**
- **Slate**
- **Quartz**
- **Brick slips**
- **Resin backed**

Suitable | **Not suitable**

Substrates

- **Sand/Cement Screed**
- **Concrete**
- **Plywood Overlay (15mm min)**
- **Tile Backer Boards**
- **Cement faced fibre boards**
- **Anhydrite/calcium sulphate/gypsum based screeds**
- **Tile on Tile***
- **Firm and stable Plaster**
- **Cement/Sand Render**
- **Concrete Brick/Block**
- **Floating Floors**
- **Hard Vinyl Tiles**
- **Flooring grade asphalt**

Suitable | **Not suitable**

*Existing ceramic, porcelain and natural stone tiles (overlay) known as "Tile on Tile"

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 C2TE 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.