

(Previously known as Emer-Proof Tilebond Flex)

Rubber modified, flexible, white, cement based ceramic tile adhesive for use with Nitoproof liquid applied membrane systems

Uses

Nitotile Flex can be used both internally and externally on walls and floors. It can be used to bond a variety of different tiles to a variety of different substrates. Fast setting, grouting can commence 16 to 24 hours @ 20°C after completion of tiling.

Advantages

- Internal / external on wall and floor surfaces
- Used for fixing low porosity tiles
- Fast setting

Standards Compliance

Nitotile Flex meets the performance requirement of AS13007.1:2013

Description

Nitotile Flex is a premium grade, rubber modified, flexible white cement based tile adhesive. It is designed for bonding all types of ceramic, stone and mosaic tiles with the exception of moisture sensitive stone like marble, onto a variety of substrates like concrete, render, rendered brickwork, block work, Gyprock, plasterboard and fibre cement surfaces. Nitotile Flex can be used to fix tiles over most water based waterproofing membranes. However it is advisable to contact the manufacturer prior to commencing.

Properties

Appearance:	White powder
Bulk Density:	1.18 +/- 0.05
Open Time:	Approx 20 minutes @ 20°C
Pot-life:	45 to 55 minutes @ 20°C
Drying Time - grouting :	Approx 16 to 24 hours @ 20°C
Drying Time - light foot traffic :	Approx 18 to 24 hours @ 20°C
Ready for wet area service:	2 to 3 days @ 20°C
VOC content:	2.3g / litre

Application Instructions

Preparation

All concrete slabs must be allowed to cure for at least 7 days and have a wood float finish. All rendered surfaces must be allowed to cure for at least 24 hours prior to commencing tiling.

The maximum variation in the plane of the concrete must not exceed 5mm in 3 metres for floors and 4mm in 2 metres for walls.

Steel Trowelled or smooth dense concrete should be mechanically abraded.

Ensure all surfaces are sound, dry and free from excessive movement, paint, oil, grease, wax, curing compounds, release agents and any other loose materials.

When using Nitotile Flex directly to porous concrete surfaces, it is recommended that all porous surfaces be primed with Nitoprime 120 (applied at 6 - 8m² per litre) to ensure a sound bond of the adhesive to the substrate.

Fibre cement sheet when used as an underlay or wall / floor material must be a minimum of 6mm in thickness. For heavy duty commercial applications it should be a minimum of 9mm thick and all should be fixed in accordance with the manufacturer's instructions and the relevant standards.

Compressed fibre-cement sheets when used as a floor substrate must be 15mm thick, and when used a wall substrate must be 9mm thick and must be installed in accordance with the manufacturer's instructions and the relevant standards.

Gypsum – plasterboard sheets when used as a wall substrate must be a minimum of 10 mm thick, and installed in accordance with the manufacturer's instructions and the relevant standards.

When applying the primer onto a floor surface it is recommended to firstly pour some primer in a section then spread the primer using a brush or roller. Then continue this method of application until the entire area is primed. Note: this method of application ensures a thorough coat of the primer on the surface.

Allow the primer to dry for approximately 30 – 40 minutes at 20°C prior to commencing tiling.

Expansion / Movement joints

Expansion / movement joints must be provided to allow for movement between adjacent building components in accordance with AS4992.1-2003. They should be as follows:

- Over existing joints in the substrate
- Where two different substrates meet eg. timber and concrete
- Around fixed elements in the floor e.g columns
- At internal vertical corners
- Around the perimeter of the floor
- In internal floors where any dimension exceeds 9m or 6m if subjected to sunlight
- In external floors where any dimension exceeds 4.5 m
- On wall surfaces at storey heights horizontally and approximately 3 – 4.5m apart vertically. Ideally they should be located over movement joints in the structural background and at structural material changes eg the horizontal joint at the bottom of floor slabs, vertical joints at internal vertical corners, and at junctions with columns.

Movements joints should go right through the tile adhesive bed to the background and kept free from dirt and adhesive droppings. Movement joints must not be less than 6mm and

Fosroc® Nitotile® Flex

not wider than 10mm. The movement joints must be filled with a flexible sealant such as **Nitoseal PU400**.

Mixing

The mixing ratio of **Nitotile Flex** is **20kg** of powder to **6 litres** of water.

Pour clean water into a drum and then gradually add the **Nitotile Flex** while mixing continuously until a smooth lump free mix is obtained. Always add powder to liquid.

Allow the mix to stand for 5 minutes, re-stir and then apply the adhesive onto the substrate.

Application

All tiling should be carried out in accordance with AS3958.1:2007 - A Guide to Tiling

Once the surface has been appropriately prepared, then apply the adhesive onto the substrate using a notched trowel.

For floor tiling use a 10mm x 10mm square notched trowel for tiles up to 300mm x 300mm. For tiles 300mm x 300mm and larger, use a 12mm x 12mm square notched trowel. For mosaic tiles use a 6mm x 6mm square notched trowel.

For wall tiling use a 6mm x 6mm square notched trowel for tiles up to 150mm x 150mm. For larger tiles than 150mm x 150mm use a 10mm x 10mm square notched trowel.

Nitotile Flex should be applied into the substrate at a rate of 1m² at a time. Application rates greater than this can result in the adhesive skinning. Once the adhesive skins, do not lay tiles into it, but remove it and apply fresh adhesive.

When placing the tiles into the adhesive, press them in by sliding the tile back and forth at least 20mm across the trowel lines. Ensure no voids occur and full coverage of adhesive is under the tiles.

For tiles 300mm x 300mm or larger, or tiles with lugs, grooves or uneven backing, it may be required to butter the back of the tile with the adhesive in addition to trowelling the adhesive onto the substrate. Apply a 1mm coating across the whole back of the tile.

The final bed thickness of the adhesive should be at least 2mm for wall tiling and 3mm for floor tiling.

Once the tiling is completed do not disturb the tiled surface for at least 16 - 24 hours at 20°C.

Nitotile Flex can be directly adhered to **Nitoproof 310**, **Nitoproof 410** and **Nitoproof 810**.

Important notice

A Safety Data Sheet (SDS) is available from the Fosroc website. Read the SDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

NOTE: If applying **Nitotile Flex** over **Nitoproof 750**, ensure the **Nitoproof 750** has been sand blinded and installed as per the current **Nitoproof 750** Technical Data Sheet.

Cleaning

Excess adhesive from the face of the tiles can be cleaned up with damp cloth while the adhesive is still wet.

Adhesive that has oozed out into the grout joint must be raked out with a knife / spatula etc.

Tools and other equipment can be cleaned up using water while the adhesive is still wet.

Grout application

Grouting applications can commence 16 to 24 hours after the completion of tiling.

Limitations

Do not apply **Nitotile Flex** in temperatures above 40°C and below 5°C.

Nitotile Flex cannot be used for fixing tiles directly onto timber floors or timber framed decks.

Nitotile Flex cannot be used for fixing tiles in permanently immersed situations like swimming pools, spas etc and permanently damp concrete slabs like those present around the pool surrounds.

Exterior framed decks require increased rigidity and support. Double framing and/or a sand cement screed may be required.

Supply

Nitotile Flex 20kg bag: FC000618-20kg

Nitoprime 120 15 litre: FC000601-15L

Coverage

A 20 kg bag of **Nitotile Flex** will cover approximately 7 to 9m² using a 10 mm notched trowel.

Storage

Nitotile Flex has a shelf life of 24 months from date of manufacture if kept in a dry store in the original, unopened bags. Do not use if there are lumps in the product. If stored in high temperature and high humidity locations the shelf life may be reduced