# Emer-Proof® Tilebond Flex



Technical Data Sheet

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

### Uses

Emer-Proof Tilebond 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. It is fast setting, meaning you can commence grouting 16-24 hours @ 20°C after completion of tiling.

## Advantages

- Complies with ISO/AS13007.1:2013 Class C2S1
- Internal / external on wall and floor surfaces
- Used for fixing low porosity tiles
- Fast setting

## Description

Emer-Proof Tilebond 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. Emer-Proof Tilebond 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
<b>Bulk Density:</b>	1.18 +/- 0.05
Open Time:	Approx 20 minutes @ 20°C
Drying Time @ 20°C:	Approx 16 hours
Pot-life:	45 minutes @20°C

## Standards Compliance

Emer-Proof Tilebond Flex has been tested in accordance with ISO/AS13007.1:2013 and passes its requirements.

## **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 Emer-Proof Tilebond Flex directly to porous concrete surfaces, it is recommended that all porous surfaces be primed with Emer-Proof Primer Porous (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.

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

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  $20^{\circ}$ C prior to commencing tiling.

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## 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 joins 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 not wider than 10mm. The movement joints must be filled with a flexible sealant like Emer-Seal PU40.

#### Mixing

The mixing ratio of Emer-Proof Tilebond Flex is 20 kg of powder to 6 litres of water.

Pour 6 litres of clean water into a drum and then gradually add the Emer-Proof Tilebond 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 in accordance with Parchem's instructions, 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  $6mm \times 6mm$  square notched trowel for tiles up to  $150mm \times 150mm$ . For larger tiles than  $150mm \times 150mm$  use a  $10mm \times 10mm$  square notched trowel.

Emer-Proof Tilebond Flex should be applied into the substrate at a rate of 1m<sup>2</sup> 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.

Emer-Proof Tilebond Flex can be directly adhered to Emer-Proof Aqua Barrier Undertile, Emer-Proof Aqua Barrier Advanced and Emer-Proof Aqua Barrier Quick Dry.

NOTE: If applying Emer-Proof Tilebond Flex over Emer-Proof 750, ensure the Emer-Proof 750 has been sand blinded and installed as per the current Emer-Proof 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.

## Grouting application

Grouting applications can commence 6 - 8 hours after the completion of tiling.

#### Limitations

Do not apply Emer-Proof Tilebond Flex in temperatures above 40°C and below 5°C.

Emer-Proof Tilebond Flex cannot be used for fixing tiles directly onto timber floors or timber framed decks.

Emer-Proof Tilebond 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. Contact Parchem for more information.



# Emer-Proof® Tilebond Flex

## Supply

Emer-Proof Tilebond Flex: 20 kg bag

Material Code: FC007001-20KG

## Coverage

A 20 kg bag of Emer-Proof Tilebond Flex will cover approximately 7 to 9m<sup>2</sup> using a 10 mm notched trowel.

## Storage

Emer-Proof Tilebond Flex has a shelf life of 12 months from date of manufacture if kept in a dry store in the original, unopened bags. Refer to the Use by Date indicated on the packaging.

#### Important notice

A Safety Data Sheet (SDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. 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.



