



SURE FLEX SF5004 (Two Part)



Description and Classification

Sure Flex 5004 (Two Part) is classified as a Normal Setting High Performance (C2) Deformable Adhesive (S1) with Slip Resistance (T) and Extended Open Time (E). This category meets and exceeds the requirements for the following properties.

Characteristics	Compressive Strength	Test Method
Tensile Adhesion Strength	≥ 1.0 N/mm ²	Refer all to AS 4992.2 (INT)
Tensile Adhesion Strength after water immersion	≥ 1.0 N/mm ²	
Tensile Adhesion Strength after heat aging	≥ 1.0 N/mm ²	
Tensile Adhesion Strength after freeze thaw cycle	≥ 1.0 N/mm ²	
Open Time Tensile Strength	≥ 0.5 N/mm ² after not less than 30 minutes	
Deformable Adhesive	≥ 0.5 mm < 5mm	
Slip	≥ 0.5 mm	

Where to Use

Sure Flex 5004 (Two Part) is suitable for interior or exterior bonding of most types of ceramic wall and floor tiles including monocottura, porcelain tiles, slate, quarry tiles, terracotta and natural stone bonded to concrete, cementitious screeds, brick work, block work, cement sheet and more difficult surfaces like solid timber or polystyrene sheet. Individual soft wood or hardwood flooring boards should be covered in a compressed cement sheet set down at the required distances set down by the manufacturer prior to the Sure Flex SF 5004 application. The adhesive is deformable and will tolerate minor movement under high stress. Sure Flex 5004 is suitable for underfloor heating tile installations where thick or thin bed fixing is required, or when intermittent immersion in water is proposed such as swimming pools or wet area construction.

Recommendations

Sure Flex 5004 should **not** be used where:-

- Where high deformations may be encountered
- Where continuous immersion in water may be encountered.

Characteristics

Sure Flex 5004 is an off white or grey powder composed of graded silica sand cement and synthetic resins and property enhancing additives and fillers. When mixed with Sure Flex L5 Liquid the following features are obtained.

- Two component flexible adhesive
- Easily workable
- Non slip characteristics
- Bonding of a range of common tile types and substrates including timber
- Low shrinkage
- Open time approximately 30 minutes
- Pot life approximately 6 hours

Substrate Preparation

The substrate must be sound, clean, free from loose coatings, grease, oil or wax and water free, as a damp or wet substrate will affect the set time or bond or both. Cement or concrete substrates must be well cured and at least 7 days old prior to tiles being laid to ensure that differential shrinkage can be taken up between the adhesive and the substrate. Very porous or soft substrates like cement sand screeds or renders should be primed with Sure Prime 307. Surfaces exposed to sunlight should be protected to cool if hot prior to tiling.

Mixing the Adhesive

Mix the Sure Flex 5004 powder with a mechanical stirrer by adding the powder to the Sure Flex L5 liquid until a smooth lump free paste is obtained. Sure Flex 5004 is designed so the ratio of powder to liquid is 2:1 or 20kg of powder to 10kg of Sure Flex L5 liquid. Mixed at this ratio, the correct consistency and characteristics of the adhesive is ensured. Mixed this way the pot life is approximately 6 hours. If the combined component adhesive has stiffened past a reasonably usable consistency it should not be diluted with water, but may only be revitalised with the addition of Sure Flex L5 Liquid.

Application

Sure Flex 5004 is applied to the substrate using a notched trowel. To achieve optimum results spread a layer of Sure Flex 5004 on the substrate with the flat side of the trowel then immediately after apply the desired thickness using a suitable and appropriate notch trowel with correct depth of notch for the type and size of tile being laid. For complete coverage of the tile, it is recommended that a layer of adhesive be applied to the back of the tile with the flat side of the trowel.

Installing Tiles

Clean tiles should be fitted under a firm pressure to ensure good coverage and contact by the adhesive. Tiles should not be laid over areas of adhesive that has "skinned over" on the surface. Areas that have skinned over should only be refreshed by reworking with a notched trowel. Re-wetting of the surface of the adhesive will degrade the bond and is not recommended.

Newly tiled areas must be protected from rain, frost and water for at least 36 to 48 hours.

Grouting

Floor joints may be grouted after 24 hours, wall joints after 6 - 8 hours.

Traffic

Light foot traffic can be accepted after 24 hours at median temperatures. Cold temperatures of 8 - 10 degrees will require 48 hours before exposure to any heavy traffic.

Coverage

Coverage will depend on the substrate conditions and applicators technique. As a guide the use of a 6mm notched trowel for walls and a 10mm notched trowel for floors will provide approximately 25m² and 16m² respectively for 25 kg of Sure Flex 5004 combined with 20 kg of Sure Flex L5 Liquid.

Cleaning

Tools and surfaces should be cleaned with water or a damp cloth before the adhesive sets.

Storage

Sure Flex 5004 can be stored 12 months in the original packaging in a normal indoor environment. Sure Flex L5 Liquid can be stored in sealed original containers for 24 months in a normal indoor environment.

Health & Safety

Sure Flex 5004 contains cement and silica sand. Both of these components are now classified as hazardous according to the criteria of Worksafe Australia. Continuous or extended contact with this product may cause irritation as well as respiratory issues such as bronchitis or silicosis.

Use a dust mask and goggles when mixing the powder and gloves when using the adhesive. For further information consult the safety data sheet.

Warning

The technical and use details and recommendations in this data sheet are to the best of our current knowledge and experience, and must in every case be taken as merely indicative and are to be confirmed beforehand by the consumer for the intended application.

The user alone shall be fully responsible for the consequence of any misuse. If the intended use is in doubt, consult Sure Level Pty Ltd.

Guarantee

Sure Flex SF5004 is guaranteed by the manufacturer for a period of 7 years provided the application is in accordance with the manufacturers direction as per data sheet and the Australian Standards for tiling practice. The product use is beyond the manufacturers control and liability is restricted to the replacement material if proven defective. Sure Level Pty Ltd is not responsible for loss or damage in the incorrect use of the material

Fire

Sure Flex 5004 is non flammable

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