

1000 - FLEXILASTIC

CRACK ISOLATION AND SOUND REDUCTION MEMBRANE

■ PRODUCT DESCRIPTION

Flexilastic is a 1 mm (40 mils) thick reinforced peel and stick sheet membrane system designed specifically for use under thin-set applications of ceramic and porcelain tile, and natural stone.

■ BASIC USES

As a Crack Isolation Membrane: For use under all ceramic tile and stone installations where isolation from existing or future stress, shrinkage in-plane cracks up to 10 mm (3/8") in thickness is required. Suitable substrates include interior or exterior surfaces of concrete, concrete block and masonry, cement mortar beds, cement backer units, existing surfaces of ceramic tile or terrazzo, and, in interior areas only, OSB, leveling compounds, exterior grade plywood, existing VCT or non-cushion resilient floors, and radiant heated floors.

As a Sound Control Membrane: Adds to STC and IIC ratings when used in conjunction with engineered sound control floor/ drop ceiling systems.

■ COMPOSITION AND MATERIALS

Flexilastic consists of a strong fabric reinforcement layer laminated to a rubber sheet membrane. A high tack surface on the bottom of the membrane provides superior adhesion to recommended substrates, while the top fabric layer provides an excellent bonding surface for latex Portland cement mortars. Flexilastic is VOC free and is environmentally safe; therefore it is ideal for use in confined areas. Flexilastic will not rot or decay, and will maintain its flexibility properties over the life of the tile or stone installation.

■ FEATURES

- For both Interior and Exterior applications.
- For both Commercial and Residential use.
- Bridges in-plane movement cracks up to 10 mm (3/8") in thickness.
- Exceptional bond strengths.
- Tile or Stone may be applied immediately after installation
- VOC free.
- Rated as suitable for Extra Heavy service on concrete substrates per ASTM C627-70

■ LIMITATIONS

- Flexilastic is not intended for use as a waterproof membrane, or for use as an exposed traffic surface.
- Not recommended for use as a roofing membrane over occupied areas, or on unstable surfaces.
- Do not cover existing control or expansion joints - refer to appropriate detail for installation over these joints in current editions of TTMAC or TCNA Ceramic Tile Installation Handbooks.
- Not for use over structural movement cracks, or to cover cracks greater than 10 mm (3/8").
- Not recommended under negative hydrostatic conditions, where moisture vapor transmission exceeds 1,36 kg / 92,9 m² (3 lbs./1000 ft²) per 24 hours when using the calcium chloride test kit.

- Use only on surfaces which are maintained above 7°C (45°F), and below 49°C (120°F) during application.
- Primer must be allowed to dry to a tack prior to installing membrane.
- Not recommended for vertical applications in excess of 2.4 m (8') in height.
- Store Flexilastic Membrane in dry conditions, between temperatures of 10°C - 32°C (50°F - 90°F).
- Do not expose stored material to direct sunlight.

■ LEED Points

LEED Points	Contribution
MR Credit 4, Recycled Content*	Up to 2 points
MR Credit 5, Regional Materials*	Up to 2 points
IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants	1 point
IEQ Credit 4.3, Low-Emitting Materials – Flooring Systems	1 point

* Using Flexilastic 1000 may contribute to LEED certification of projects as indicated above.

■ TECHNICAL DATA

Exceeds ANSI A118.12 requirements

Typical Physical Properties

Thickness:	1 mm (40 mils)
Colour:	White top, Black adhesive bottom
Elongation:	500% (rubber adhesive only), per ASTM D412
Maximum Crack Width Capacity:	3/8" (10 mm) in plane
Maximum Movement Capacity:	3/8" (10 mm) in plane
Sound Transmission Class:	STC 55*, per ASTM E90
Impact Insulation Class:	IIC 67*, per ASTM E492
Shelf Life:	1 year when stored in a dry area in original shipping container at between 4°C and 35°C (40°F and 95°F)

* In conjunction with engineered floor / drop ceiling sound control systems

Service Temperature: -29°C (-20°F) to 82°C (180°F)

Application Temperature: 7°C (45°F) to 49° C (120°F)

Package Size / Coverage

Membrane: 914 mm x 15.25 m (36" x 50') roll

Roll Weight 19.6 kg. (43 lb)

Flexilastic 4000 Primer: 3.78 L (1 US gallon) & 18.9 L (5 US gallon)

Primer Interior 7.4-9.8 m²/L (300-400 ft² per US gallon)

Flexilastic 4001 Concentrated Primer: 18.9 L (5US gallon)

Primer Exterior 3.7-4.9 m²/L (150-200 ft² per US gallon)



■ PREPARATORY WORK

All surfaces must be clean, even, dry and free of grease, oil, loose paint, curing compounds or sealers, protuberances that may puncture membrane, or other foreign matter. Existing concrete surfaces which have been shot blasted, ground or sanded to remove contaminants must be thoroughly cleaned of dust, loose concrete, etc. prior to applying primer and membrane. Surfaces should be maintained at a temperature between 10°C (45°F) and 32°C (90°F) when applying membrane. New concrete surfaces must be fully cured, dry, finished to a wood float or light broom finish, and be true to within 6 mm (1/4") in 3 m (10').

Apply a latex modified scratch coat consisting of Flextile 57 Scratch Coat Mortar mixed with Flextile 43 or 44 Latex Additive to existing concrete surfaces where abrasion cannot produce a porous enough surface, to uneven surfaces, and to all smoothtroweled concrete surfaces prior to applying Flexilastic membrane.

Interior plywood surfaces should be designed for maximum deflection of L/360 of span. This normally requires a 16 mm (5/8") layer of exteriorgrade plywood over 25 mm (1") boards or 16 mm (5/8") plywood when on joists 40 cm (16") O/C. Plywood sheets should be fastened with screw type nails and glued where possible. Leave a 3 mm (1/8") gap between top sheets of plywood and next to all vertical surfaces to allow for expansion. Refer to current editions of TTMAC 09 30 00 Tile Installation Manual, or TCNA Handbook for Ceramic Tile Installation for information regarding placement of expansion or control joints, or for further substrate acceptability information.

■ APPLICATION - PRIMING

Interior Priming – DO NOT DILUTE PRIMER. Prime surfaces using Flextile 4000 primer AT FULL STRENGTH for most floor applications. Roll or brush primer onto surface at an approximate rate of 9 m²/L (360 ft²/gal). On vertical surfaces, and on porous or otherwise weathered horizontal surfaces apply two primer coats. Allow primer to dry completely prior to installing Flexilastic membrane (cured primer should be tacky, but well bonded to the substrate). Exterior Priming – Use same application techniques as for Interior but use 4001 Primer.

■ APPLICATION - MEMBRANE

Treating Individual Cracks: Once primer has dried, cut Flexilastic to desired lengths, approximately 600 mm (24") longer than the crack. Remove approximately 100 mm (4") of backing paper and adhere to substrate 300 mm (12") in front of where the crack begins, and press firmly into place. Continue removing backing paper while pressing Flexilastic membrane into place. It is important to ensure that the membrane is smoothed out as it is adhered to the primed substrate, in order to avoid air pockets or creases in the applied membrane. Ensure that entire crack, plus an additional 300 mm (12") at each end, is covered. Should additional sections of membrane be required to cover individual cracks, butt joints together (do not overlap). Treat all stress and shrinkage cracks present in the substrate in the manner as described above.

Treating Entire Substrates: Once primer has dried, roll out membrane to cover the full length of the substrate. Lay out on substrate first, WITHOUT REMOVING BACKING PAPER. Pull one end of membrane length back over the other half, and carefully cut the backing paper at the half way point. Start removing the backing paper from the upper section and roll back onto primed substrate, ensuring that it is smoothed out as it is applied. Repeat the procedure for the other half of the membrane length, and for subsequent lengths required to cover the entire substrate. Ensure that air pockets and creases are smoothed out as the membrane is applied.

To ensure a positive bond between applied membrane sheet and primer, roll a 34,0 kg or 45,3 kg (75 lb or 100 lb) standup roller over the installed membrane.

Treating Vertical Surfaces: Once primer has dried, apply membrane in the same manner as for floor applications, beginning at the top of the wall surface.

NOTE: Any air pockets present in the completed membrane application should be punctured, and then pressed flat. Ensure that complete coverage of membrane to primed surface is achieved, in order to ensure maximum performance of Flexilastic membrane.

As a Sound Reduction Membrane: Apply in the same manner as for crack isolation on entire surface, with the exception that all seams between sheets are to be overlapped. Consult with Flextile Ltd. for required accessory products, and for further installation recommendations and sound reduction properties.

■ CURING AND TILE INSTALLATION

Tile or stone may be installed immediately after application of Flexilastic Crack Isolation and Sound Reduction Membrane. Install tile or stone with appropriate Flextile Latex Modified Mortar (ANSI A118.4). Recommended bond coat mortars include Flextile 50, 52, 56SR, 58, 61, 62 one-component latex mortars, or Flextile 51, 53/43 or 51, 53/44 or 58XT two-component latex mortar systems.

■ SAFETY

Refer to Flextile Safety Data Sheet for detailed health and safety information.

■ AVAILABILITY

Flexilastic Sheet Membrane is available from Flextile Ltd. and listed distributors in 914 mm x 15.25 m (36" x 50') rolls. 4000 Primer are available in 3.78 L (1 USG) and 18.9 L (5 USG) containers.

■ WARRANTY

Flextile warrants that this product is of merchantable quality and is suitable for the purpose for which it is intended. Flextile's liability under this warranty shall be limited to replacement of its product found to be defective or, at its option, a refund of the purchase price. Extended project warranties are available for Flexilastic. Contact Flextile Ltd. or its distributors.

■ MAINTENANCE

No maintenance is required except where damages result from unforeseen circumstances. Repair procedures shall be directed by Flextile or its distributors.

■ TECHNICAL SERVICES

Flextile maintains a well-equipped laboratory able to test its products in conjunction with the products with which they are used. Technical assistance for use of Flextile products is available upon request.

■ RELATED REFERENCES

Current editions of TTMAC 09 30 00 & TCNA Ceramic Tile Installation Manuals.



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