

TechnoFlex® PLM 650I

Two component, highly elastic Liquid-applied Polyurethane waterproofing membrane.

Description:

TechnoFlex®PLM 650 I is a two component, solvent free, liquid applied Polyurethane based waterproofing membranes.

It cures upon reaction of its two components and the resulting membrane is high performance seamless elastomeric waterproofing.

TechnoFlex®PLM 650 I is specially formulated for easy roller application of all permanently flexible, tough, high build, long-life waterproof barriers. TechnoFlex®PLM 650 I system maintain their watertight integrity and prevent the passage of liquid under dynamic, static, continuous, or intermittent hydrostatic pressure.

Typical applications include

TechnoFlex®PLM 650 I is designed to waterproof most applications within the building and construction industry including-

- Shower recess and wet areas (floor & upturns)
- Decks, balconies, terraces and podiums
- Retaining walls
- Planters and landscaped areas
- Water retaining structures, fountains & swimming pools
- Roofs Decks , Terraces, balconies
- Roofs, terraces and terrace gardens.
- Tunnels.
- Collecting tanks.
- Underground water tanks.
- Car park decks.

Features and Benefits

- Fully bonded system-water cannot track beneath the membrane
- Creates a seamless, tough & flexible elastomeric membrane when fully cured.
- Excellent chemical resistance
- Resistant to standing water
- Ideal for applications in both new and old substrates.
- Excellent adhesion to various substrates with suitable primer
- Excellent resistance to water and carbon dioxide permeability
- High water vapour permeability
- Excellent workability

Method of Application

Surface preparation

Ensure the substrate is structurally sound, free of surface laitance, oils, grease, dirt, moss, lichen, and loose material. The surface should be smooth and free from sharp projections and loose debris, and any material which would hinder adhesion. Brush down and clean off, leaving a sound substrate providing adequate bond for the applied slurry.

Preparation is usually carried out using mechanical tools such as scrabbles for floors and bush hammers for vertical surfaces. Static cracks greater in width than 1mm must be chased out, dampened down and repaired with a dry pack consistency of TechnoCem™ RM. Prior to priming use TechnoCem™ RM to achieve a smooth and level surface by filling holes and irregularities.

Priming

Apply a coat of TechnoSeal® PrimePlus for sealing pin holes and better bonding of TechnoFlex®PLM 650 I.

Mixing

TechnoFlex®PLM 650 I is supplied in two pre- weighed packs (Base (A), Hardener (B)), ready for onsite mixing. Mixing should be carried out using a heavy duty, slow speed drill fitted with mixing paddle. The contents of base (part A) should be thoroughly stirred to disperse any possible settlement. The entire contents of the hardener can should be stirred and added to the base container. Mix thoroughly for 2-3 minutes taking extra care to avoid air entrapment. Mix until a homogeneous mixture is attained. Improper mixing may result in product failure. Once mixed, the material must be used within its pot life

Application

TechnoFlex®PLM 650 I can be applied by brush, roller or airless spray. Subsequent layers could be done only after the first layer has been cured tack free (min 16 hours). In below ground structures, wet areas and roofs, the application thickness should not be less than 1.2mm. All liquid application should be in at least two coats. It should be ensured that the material is not applied at excessive film thickness in single layer. Excessive film thickness may create bubbles. A layer of fiberglass mesh should be embedded between the two TechnoFlex®PLM 650 I coats over pipe culverts, floor drains, corner joints and floor / wall junctions.

The final wet coat of TechnoFlex®PLM 650 I shall be spread with sufficient clean silica and before applying tile adhesives. Tiling or finished floor installations should be carried out as soon as possible after full cure of membrane is established.

Typical Properties

Color	Black, Grey, White and Customized
Service temperature range	- 10°C to +80°C
Tack free time @ 25°C	< 5 hours
Mixed gravity	1.5 +/- 0.1
Solids content (%)	98
Technical Properties of applied Product from membrane cured for 28 days	
Elongation (%) (ASTM D 412)	> 600 %
Tear Resistance	30 N/mm
Tack Free Time @ 25° C	12 hours
Final Curing time at 25°C	2 days at 1.07mm thickness

Health and Safety instructions

The product contains isocyanate, as well as volatile and inflammable solvents. Do not smoke during the application process and work in a well-ventilated environment away from bare flame. Do not forget that solvents are heavier than air and therefore they accumulate on the floor. Proper work clothes, protective gloves, goggles and mask pursuant to the occupational health rules should be used during the application process. Components should not contact the skin and eyes due to the irritating effects of the non-cured product.

Wash with plenty of water and soap in case of contact. Immediately consult a doctor in case of swallowing.

For detailed information, please see the Safety Information Form (MSDS) or get in contact with our technical departments.

Keep out of reach of children.

Please contact with Sterling Technotrade's technical service department for further information and support.

Product only for professional use.

Additional information

Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd -The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

*Separate datasheet are available on these products.

DISCLAIMER: The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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Please note that this datasheet supersedes all previous versions.

Puncture Resistance (ASTM E 154)	> 170 N
Surface Hardness, Shore A (ASTM D2240)	75 to 85
Crack bridging (ASTM C836)	No cracking, splitting pinholes or any other type of failure was observe at 3.5mm
Tensile Strength	> 6 N/mm2
Adhesion to Primed Concrete (ASTM D903)	> 2N/mm2
Resistance to water pressure (DIN EN 1928)	No leak
Chemical resistance	Unaffected by mild acids, alkalis and water borne salts. Does not biodegrade.
Flash Point	56°C
*All values are subject to 5-10 % tolerance.	

Coverage

Approx. 1.5kg/sqmt corresponds to dry film thickness of 1mm.

Packing

20 Kg Part A + 20 Kg Part B Pack, 200 kg container.
Storage

TechnoFlex®PLM 650 I has a shelf life of 12months if unopened containers stored in cool dry place.

Cleanup Information

Clean tools and equipment with TechnoPur® Eco Cleaner immediately after use. Dried material can only be removed with industrial type solvents or mechanically.

Cautions / Limitations

- TechnoFlex®PLM 650 I should not be applied on surfaces with a risk of rising dampness.
- Do not apply the product with imminent rain forecast.
- Don't mix more material than can be used within the pot life of mixture.
- Incorrect assessment treatment of cracks may lead to a reduced service life and reflective cracking
- TechnoFlex®PLM 650 I is not designed to be exposed in external applications unless it is covered with UV resistance coating. TechnoFlex®PLM 650 I should be protected from UV light not more than 14 days after application. This can normally be achieved by use of a protective screed/board.
- Apply only when substrate and ambient temperature exceeds +5°C. During application, the surface temperature must be +3°C above dew point.

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