

CHEMFIT LIQMEMBRANE 600

Elastic, One Part Polyurethane, Highly Crack Bridging Seamless Liquid Membrane – For Concrete, Brickwork, Asbestos Cement & Roof Tiles

PRODUCT DESCRIPTION

ChemFit LiqMembrane 600 is a ready-to-use, elastic, one part polyurethane, highly crack bridging seamless liquid membrane. This moisture-curing, single-component formulation is designed for seamless waterproofing of exterior and interior substrates. It cures to form a highly elastic, durable, and fully bonded rubber-like membrane that provides excellent resistance to standing water, UV exposure, and temperature extremes.

PRIMARY APPLICATIONS

ChemFit LiqMembrane 600 is recommended for use in conditions such as:

- Waterproofing of concrete roofs, brickwork, and asbestos cement sheets
- Application over existing roof tiles and metal roofing
- Seamless waterproofing for balconies, terraces, and exterior walls

KEY FEATURES AND BENEFITS

- **One component** – Ready to use; no on-site mixing required
- **Highly elastic** – Excellent crack bridging capability for dynamic substrate movement
- **Seamless** – Forms a joint-free, continuous membrane eliminating weak points
- **Good adhesion** – Bonds strongly to concrete, brickwork, asbestos cement, and roof tiles
- **Weather resistant** – Resists standing water, UV degradation, and temperature extremes
- **Easy to apply** – Brush, roller, or airless spray application
- **Available in 7 kg and 21 kg containers** – Suitable for small repairs to large projects

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Viscous liquid
Color	Grey / Black / White (as specified)
Basis	One component polyurethane (moisture curing)
Density	1.3 – 1.5 kg/L
Solids content	~98%
Pot life (exposed to air)	1 – 2 hours
Tack-free time (at 25°C)	3 – 6 hours
Full cure	7 days
Application temperature	+5°C to +35°C
Service temperature	-30°C to +90°C

MECHANICAL PROPERTIES

Property	Value
Tensile strength	> 2.0 N/mm ²
Elongation at break	> 500%
Shore A hardness	35 – 60
Adhesion to concrete	> 1.5 N/mm ²
Crack bridging capacity	> 2.0 mm
Water absorption	< 1%

PACKAGING AND STORAGE

Packaging:

- 7 kg container
- 21 kg container

Storage:

- Store in original sealed containers at +10°C to +30°C
- Protect from direct sunlight, moisture, and freezing
- Store in dry conditions
- Keep containers tightly closed when not in use

Shelf life: 12 months from date of manufacture when stored properly

DOSAGE AND COVERAGE RATES

Consumption: Approximately 1.2 – 1.5 kg/m² per coat (for ~1.0 mm dry film thickness)

Typical coverage per container (2-coat system):

Container	Coverage (approx.)
7 kg	4 – 6 m ²
21 kg	14 – 18 m ²

NOTE: Coverage is approximate; varies with substrate porosity, surface profile, and application method. A minimum total dry film thickness of 1.0 – 1.5 mm is recommended for waterproofing applications.

APPLICATION GUIDELINES

Surface Preparation:

- Substrate must be clean, dry, sound, and free from dust, oil, grease, laitance, curing compounds, loose particles, and any contaminants
- Mechanically abrade smooth surfaces to achieve profile
- Fill large voids, cracks, and defects with suitable repair mortar
- Apply compatible polyurethane primer on porous substrates

Mixing:

- Stir thoroughly before use
- Do not thin or dilute
- Use entire container once opened; product cures by moisture

Application:

- Apply first coat by brush, roller, or airless spray at 1.2 – 1.5 kg/m²
- Allow first coat to dry until tack-free (minimum 3-6 hours at 25°C)
- Apply second coat crosswise to the first coat for complete coverage
- For heavy traffic or ponding water areas, apply third coat

Curing:

- Protect from rain, dew, and mechanical damage for minimum 24 hours
- Light foot traffic after 24 hours
- Full water resistance after 7 days
- Do not apply below +5°C or if relative humidity exceeds 85%
- Do not apply if rain expected within 24 hours

HEALTH AND SAFETY

Polyurethane resin may cause skin and eye sensitisation and irritation. If eye contact occurs, rinse with water for 15 minutes and seek medical attention. For skin contact, wash immediately with soap and water; remove contaminated clothing. If swallowed, seek medical attention immediately – do not induce vomiting. Use gloves (nitrile), safety glasses, and protective clothing during handling. Ensure adequate ventilation – use respiratory protection with organic vapour cartridges if ventilation is poor. Refer to the Safety Data Sheet for detailed information.

CLEANG OF TOOLS

Clean all brushes, rollers, mixing equipment, and spillages with xylene, acetone, or polyurethane thinner immediately after use. Dried material requires mechanical removal. Dispose of cleaning materials in accordance with local regulations.

APPROVALS AND STANDARDS

ChemFit LiqMembrane 600 conforms to the following standards:

- **ASTM C836** – Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane
- **ASTM D412** – Tensile strength and elongation testing
- **ASTM D2240** – Shore hardness testing
- **ASTM D570** – Water absorption testing
- **EN 14891** – Liquid applied waterproofing membranes (crack bridging classification)
- **ISO 9001** – Quality management system certified
- One part, elastic, highly crack bridging seamless liquid membrane
- Suitable for concrete, brickwork, asbestos cement, and roof tiles

LEGAL NOTES

All technical data provided in this Product Data Sheet is based on laboratory testing under controlled conditions. Actual field performance may vary due to differences in substrates, application methods, site conditions, and environmental factors. ChemFit makes no warranty of merchantability or fitness for a particular purpose. Users shall conduct their own trials to validate product suitability for the intended application. ChemFit reserves the right to modify product specifications without prior notice. For the most current documentation, request the latest Product Data Sheet and Safety Data Sheet from ChemFit.

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