

Liquid Membrane 7000



A SIKA COMPANY

GENERAL DESCRIPTION

Liquid Membrane 7000 (LM7000) is a two-component liquid waterproofing membrane. Engineered with advanced asphalt extended aromatic polyurethane technology, LM7000 forms a durable membrane that adheres effectively to various substrates. This product is available in two grades, vertical and horizontal, to meet application needs. ANSI/NSF-61 approval ensures its suitability for contact with potable water.

BASIC USE

LM7000 is formulated for use as a UV stable, tough, flexible, and continuous elastomeric waterproofing membrane. LM7000 is designed to withstand constant exposure to full water immersion conditions, including potable water containment and liner applications.



LIMITATIONS

- On substrates likely to exhibit outgassing apply, during falling ambient and substrate temperature. If applied during rising temperature, pin holing may occur.
- Do not apply when substrate is in direct sunlight.
- This product is available only in the color black. Can be exposed to direct sunlight. Initially after application, it is shiny black then after a few months it will turn dull after being exposed to direct sunlight.
- Precautions should be taken to prevent vapors and/or odors from entering the building/structure including, but not limited to turning off and sealing air intake vents, and through-wall air conditioners, and other means of vapor/odor ingress during application and curing.
- Any repairs required to achieve a level surface must be performed prior to the application of the primer and membrane. Surface irregularities may show through the cured system.

APPLICATION

- Surfaces must be dry, clean and free of foreign matter. Do not apply to substrate surfaces where moisture vapor transmission will occur during application and cure. This condition should be checked using ASTM D4263 (Polyethylene Sheet method).
- Relative humidity must be no more than 95% and substrate temperatures must be at least 5°F (3°C) above measured dew point temperatures. Minimum ambient and substrate temperature during application and curing of material are 41°F (5°C); maximum are 95°F (35°C). Surface temperatures must be no higher than 110°F (43°C).
- New concrete must be cured a minimum of 28 days prior to application. Substrate must be dry prior to application. Do not apply to a frosted, wet or damp surface. Allow sufficient time for the substrate to dry after rain or inclement weather, as there is potential for bonding problems.
- Do not thin, dilute, or batch down the material. Do not mix LM7000 by hand; mechanically mix only with proper equipment refer to TDS for more information.
- HydroSeal 1K Epoxy Primer or Sikadur®-22 Lo-Mod FS must be used. Allow primer to cure completely before applying LM7000. Refer to HydroSeal 1K Epoxy Primer or Sikadur®-22 Lo-Mod FS Product Data Sheet for specific primer recommendations.
- Cured LM7000 may be placed in service within 24 hours for non-aggressive and non potable water service. Other LM7000 service applications, including immersion in potable water applications, may require a cure time of 96 or more hours. *Contact American Hydrotech's Technical Service Department for more information on applications with potable water exposure.*
- If LM7000 is used as split slab waterproofing membrane or buried membrane, cover the final coat of LM7000 with an approved drainage mat or protection board.
- Refer to LM7000 Technical Data Sheet for further application information and details.

PACKAGING/SIZES/COVERAGE

LM7000 is packaged in 4.5 gal. (Part A+B) or 1 gal. (Part A+B). LM7000 is applied in two coats at a rate of 26 sqft/gal for each coat, 60 mil wet film thickness (total of 13 sqft/gal for both coats, 120 mil). Always store in a cool and dry location. Do not store in direct sunlight or in temperatures below 60°F (15°C) or above 95°F (35°C). Approximate shelf life is 12 months when left sealed in original and undamaged packaging. Do not store materials outdoors when exposed to sunlight and moisture for prolonged periods. Containers that have been opened must be used as soon as possible.

PRECAUTIONS

Surface may be slippery when wet. For further information and advice regarding transportation, handling, storage and disposal of chemical products, refer to current Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read current Safety Data Sheets before using any products. This product contains isocyanates, asphalt, and solvents.

LEED INFORMATION

	Credit 4	Credit 5
Recycled Content (% by weight)		
Manufacture Location		
Extraction/Harvesting Location		
VOC Content (g/L)		

TECHNICAL DATA

PROPERTY	TEST METHOD	RESULTS
SOLID CONTENT BY MASS	ASTM D-236	95 ± 2%
SOLID CONTENT BY VOLUME	ASTM D-2697	89 ± 2%
VOLATILE ORGANIC COMPOUND (VOC) CONTENT	See Product Safety Data Sheet	
ELONGATION AT BREAK	ASTM D-412 75°F (24°C) 50% R.H.	450% ± 50%
SERVICE TEMPERATURE	-60 - 220°F	
WATER VAPOR TRANSMISSION	ASTM E-96, Procedure B - Wet Cup 75°F (24°C) 50% R.H.	0.03 Perms
CHEMICAL RESISTANCE	Resistance to aqueous chemicals and waste water. Please see chemical resistance chart.	
RESISTANCE TO WEATHERING	ASTM D-822 75°F (24°C) 50% R.H.	Done for > 5000 hrs
BEHAVIOR AFTER ARTIFICIAL WEATHERING		
Weathering	ASTM D-822	Done for > 5000 hrs
Tensile Strength	ASTM D-412	1000 ± 50 psi, 5.86 ± 0.3 Mpa
Tear Strength	ASTM D-624, Die C	180 ± 50 psi
Hardness	ASTM D-2240	60 ± 5 Shore A
Adhesion to Concrete (dry) Elcometer		350 psi
Abrasion Resistance - Weight Loss	ASTM D-4060	1.2 mg loss
Deflection Temperature	ASTM D-648	pass
Elastomeric Waterproofing	ASTM C-836, ASTM C-957	exceeds
Extension to Break	ASTM D-2859	450 ± 100
Liner Performance Crack Bridging		10 cycles @ - 15°F > 1/8"; After heat aging > 1/4"
Liner Weight (60 mil wet film thickness)		30 lbs / 100 sq.ft
Mullen Burst Strength	ASTM D-751	50 mil 155 psi
Recovery from 100% Extension		after 5 minutes 98%, after 24 hours 100%
Softening Point, Ring & Ball	ASTM D-36	> 400°F
Deflection Temperature	ASTM D-648	-60°F

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