Gaco™

Product Data Sheet:

GacoFlex LM-60
June 2019
Supersedes 05/12

GACOFLEX® LM-60
LIQUID APPLIED POLYURETHANE ELASTOMERIC MEMBRANE

DESCRIPTION

GacoFlex LM-60 is a 100% solids liquid applied two component coating that cures into a water resistant polyurethane elastomeric membrane.

LM-60H is designed for application on horizontal and low slope surfaces, at the rate of at least four gallons per 100 ft² (15.14 L / 9.3 m²), to yield a 1/16" (1.6 mm) thick membrane. LM-60V is designed for the same application rate and yield on vertical surfaces.

RECOMMENDED USES

Intended primarily for use as a high build waterproofing membrane over concrete, metal and plywood.

GacoFlex LM-60 has NSF ANSI Standard 61 approval to line potable water storage tanks 10,000 gallons and over, including when GacoFlex E-5320 is used as a primer.

For non-potable water facilities where pH is less than 6.5 an acid resistant version of LM-60 is available for use.

TYPICAL PROPERTIES

PROPERTY	VALUE
Color	Black
Consistency	LM-60H & LM-60V are thixotropic. LM-60H ranges between 25,000 to 40,000 centipoises at 75 °F (24 °C). LM-60V ranges between 100,000 to 160,000 centipoises at 75 °F (24 °C).
Weatherability	GacoFlex LM-60 has excellent durability up to 180ºF (82ºC). LM-60 must be top coated or have roofing granules applied for exterior exposure, LM-60 will crack and become brittle in exterior applications if not protected.
Chemical Resistance	Excellent resistance to water immersion, good salt and alkali resistance. Excellent hydrolytic stability up to 150 °F (66 °C). LM-60AR version has good acid resistance (refer to the LM-60AR PDS for more information).

APPLIED PRODUCT DATA

PROPERTY	ASTM	VALUE
TENSILE	**D412** Strength: Elongation: Permanent Set at Break:	240 ± 10 psi (1.65 ± .07 MPa) 300% ± 20 10% max
HARDNESS	**C836** Shore A Using type 00 hardness gauge	77 Shore A min. @ 70 °F (21 °C)
ADHESION	**C836** Peel Strength	11 lbf/inch (average)
TEAR RESISTANCE	**D624** Die C lb/inch min.	30 (5.4 kg(f) / cm)
WATER ABSORPTION	**D471**, 21 day R.T.	1% max.
WATER VAPOR PERMEABILITY	**E96** Procedure BW 100% R.H. Difference	0.012 perm inches
LOW TEMPERATURE BRITTLENESS	**D746**	Pass @ -50 °F (-45 °C)

PACKAGED PRODUCT DATA

PROPERTY	VALUE
PACKAGE	Four gallon (15.14 l) kit; 3¾ gallons (14.19 l) Polyol (Part A) in 5 gallon (18.92 l) container, plus one quart (.95 l) Iso (Part B) supplied separately.
COVERAGE	Mil ft² per Gallon:1600 (39.2 m^2 / l /.02 mm) Applied Coverage: 4 Gals./100 ft² (15.14 l / 9.3 m²) to yield 1/16" (1.6 mm) thickness.
SOLIDS	100% volume
V.O.C.	N/A
TOXICITY	GacoFlex LM-60 Part B is an isocyanate prepolymer. When mixed with the polyol side (Part A) use adequate ventilation, avoid breathing vapors or spray mist and prolonged or repeated contact with skin. When spraying use a particulate matter mask, an approved organic matter cartridge respirator or fresh air mask. LM-60 is certified by the National Sanitation Foundation to conform to the requirements of NSF Standard 61 - Drinking Water System Components - Health Effects for tanks 10,000 gallons and over without the use of GacoFlex E-5320 primer, and tanks 30,000 gallons and over when GacoFlex E-5320 is used as a primer.
FLASH POINT	ASTM D56 (Closed up) Above 200 °F (93 °C)
ADHESION	Excellent adhesion to clean, dry, plywood and concrete. Primers may be required for other surfaces. See below for specific primer.
STORAGE STABILITY	One year at 50 – 80 °F (10 to 27 °C)
THINNER	GacoFlex T-5111 or T-5112. Normally not required, but may be thinned up to 10% by volume if necessary. GacoFlex LM-60 can be thinned when used in conjunction with potable water projects. Thinning more than 10% will exceed VOC requirements.

APPLICATION

PROPERTY	VALUE	
PRIMER	Metals Plywood Galvanized Steel Concrete	GacoFlex E-5320 GacoFlex E-5691 GacoFlex E-5320 GacoFlex E-5691
MIXING INSTRUCTIONS	Stir the polyol side (Part A) to suspend any settled pigment. Completely empty the iso (Part B) container into the polyol side (Part A) and power mix for five minutes, scraping the pail side several times. Use a power mixer that will thoroughly agitate the mix (electric or compressed air powered). A Jiffy Mixer PS21 has been found to work well with LM-60H or LM-60V. Combine fifteen volumes of polyol (Part A) with one volume of iso (Part B) for quantities less than four gallons. Power mixing is mandatory for quantities over two gallons. Extreme care is required to mix in materials on the side and bottom of the mixing container.	
POT LIFE	One hour at 70 to 80 °F (21 to 27 °C). Can be extended to three hours by thinning with T-5112 (up to 10%).	
APPLICATION	For non-potable water applications, prime concrete surfaces with E-5691. Use a 5/16" x 5/16" V notched trowel or notched squeegee for application to 60 mil (1.52 mm) thickness. LM-60H is self-leveling on horizontal surfaces. LM-60V must be flat troweled to a smooth finish since it will not self-level at a normal application. Contact Gaco Western for spray application information and for more information on potable water applications. Refer to specification for protection course or covering requirements. Use caution when backfilling or covering to avoid damage to the polyurethane membrane. ***WARNING*** – LM-60 in direct contact with aged or new SBS and EPDM sheet membranes could cause their swelling and deterioration through time due to the strong solvency of the process oil in LM-60.	

For specific Safety and Health information please refer to Safety Data Sheet (SDS).