

# MONOLITHIC MEMBRANE 6125<sup>®</sup> / MONOLITHIC MEMBRANE 6125<sup>®</sup> EV



## 1. Product Name

Monolithic Membrane 6125<sup>®</sup> and Monolithic Membrane 6125<sup>®</sup>EV (environmental grade).

## 2. Product Description

### Basic Use

Monolithic Membrane 6125 (MM6125<sup>®</sup>) is designed for use as a waterproofing and roofing membrane, typically on concrete structures in vertical and horizontal applications such as roof decks, parking decks, reflecting pools, plazas, mechanical room sub-floors, foundation walls, mud slabs, tunnels or planters. MM6125 is available in an environmental grade, MM6125<sup>®</sup>EV, for Garden Roof<sup>®</sup>/green roof and LEED credit opportunities.

### Limitations

- MM6125/MM6125EV is not intended as an exposed or traffic-bearing membrane.
- Do not install MM6125/MM6125EV over lightweight structural concrete without prior written approval from Hydrotech.
- Lightweight insulating concrete is not an acceptable substrate.
- For applications below 0°C, consult Hydrotech.

### Composition and Materials

MM6125EV is a hot-applied rubberized asphalt specially formulated from refined asphalts, synthetic rubber and inert clay filler. MM6125EV can be formulated with up to 25% post-consumer recycled content.

### Container/Weight/Coverage

MM6125/MM6125EV is packaged in cardboard cartons, with a single 40 lb. cake of membrane per carton. The

membrane is also available in metal 55 gallon drums weighing approximately 500 lbs. Each drum contains 8-10 cakes of membrane (approximately 50 lbs. each) which are double wrapped in low

## PHYSICAL PROPERTIES

Property	Requirement	Test Method
Flash Point	500° F (240° C)* <500° F (260° C)*, MM6125EV	CGSB 37.50-M89, ASTM D-92
Low Temperature Crack Bridging Capability	No cracking, adhesion loss, or splitting	CGSB 37.50-M89
Water Vapor Permeability	1.7 ng/Pa(s)m max (0.027 perm)	CGSB 37.50-M89 ASTM E-96, Procedure E
Water Resistance (5 days/50° C)	No delamination, blistering, emulsification, or deterioration	CGSB 37.50-M89
Water Absorption	Gain in weight 0.35 g max Loss in weight 0.18 g max	CGSB 37.50-M89
Elasticity/Ratio of Toughness to Peak Load	Min. toughness of 5.5 joules (48.67 in pound)/.04 (1.50)	CGSB 37.50-M89
Viscosity	2-15 seconds	CGSB 37.50-M89
Heat Stability	No change in viscosity, penetration, flow or low temperature flexibility	CGSB 37.50-M89
Low Temperature Flexibility (-25° C)	No delamination, adhesion loss, or cracking	CGSB 37.50-M89
Penetration	@ 77°F (25°C) max 110 @ 122°F (50°C) max 200	CGSB 37.50-M89 ASTM D-1191
Flow	@ 140°F (60°C) 3.0mm-max	CGSB 37.50-M89 ASTM D-1191
Softening Point	180°F (82°C)	ASTM D-36
Elongation	1000% min	ASTM D-1191
Resiliency	40% min	ASTM D-3407
Bond to Concrete (0°F, -18°C)	Pass	ASTM D-3408
Hydrostatic Pressure Resistance	100 psi (=231 foot head of water)	ASTM D-08.22, Draft 2
Acid Resistance	Pass – Nitric Acid Pass – Sulfuric Acid	ASTM D-896-84 Procedure 7.1 Note 8
Salt Water Resistance (20% sodium carbonate and calcium chloride)	No delamination, blistering, emulsification, or deterioration	ASTM D-896 similar
Fertilizer Resistance (undiluted 15/5/5 nitrogen /phosphorus/potash)	No delamination, blistering, emulsification, or deterioration	ASTM D-896 similar
Animal Waste Resistance	No deterioration	3 year exposure
Solids Content	100% – no solvents	
Shelf Life	10 years (sealed containers)	
Specific Gravity	1.25	

\* or alternatively not less than 77°F (25°C) above the manufacturer's maximum recommended application temperature.

density polyethylene.

The weight of the installed membrane is approximately 1.17 pounds per square foot for the 180 mils thick standard assembly. For the fabric reinforced assembly the weight of the installed membrane is approximately 1.4 pounds per square foot.

The fabric reinforced assembly for waterproofing/roofing applications is required for the following conditions:

- Over extremely rough substrates
- Retrofit applications
- Over wood plank and plywood substrates
- Over gypsum board secured to metal deck substrates
- Over concrete block units
- Or, as otherwise directed by Hydrotech

This type of installation consists of a coat of membrane at a minimum thickness of 90 mils, a reinforcing fabric (Flex Flash F) embedded into it followed by a second coat of membrane applied at a minimum thickness of 125 mils.

#### Applicable Standards

Meets or exceeds the performance requirements of The Canadian General Standards Board, CGSB-37.50-M89 and applicable ASTM Test Methods.

### 3. Technical Data

Typical physical properties of Monolithic Membrane 6125® and Monolithic Membrane 6125®EV are shown in Table 1 (on first page).

### 4. Installation

#### Surface Preparation

All concrete surfaces must be clean, dry, free of voids, projections, loose material, laitance, dust, oil, unapproved curing compounds or other contaminants. Hydrotech recommends structural weight concrete to cure/dry 28 days, minimum 14 days, prior to the application of the membrane. Concrete must have a wood-float or wood troweled finish. All exposed metal shall be free of paint, oil, rust and contaminants.

#### Priming

Hydrotech's Surface Conditioner should be spray applied to concrete at a rate of approximately 300 to 600 square feet per gallon. Allow surface conditioner to dry thoroughly before membrane is to be applied. Other substrates such as wood and metal do not need to be primed.

#### Application

Use a double-jacketed, oil-bath or air jacketed melter with mechanical agitation specifically designed for preparation of hot-applied, rubberized asphalt materials. Melter must be capable of maintaining the membrane temperature between 350°F and 400°F (177°C-204°C). Construction joints, control joints and all cracks greater than 1/16" shall be treated with a 125 mil coat of MM6125®/MM6125®EV. All flashing and detail work should be completed prior to the application of the membrane. MM6125/MM6125EV may be squeegee applied on to horizontal surfaces and hand troweled or roller applied on to vertical surfaces.

For the standard assembly MM6125/MM6125EV should be applied at 180 mils (3/16", 4.8mm), minimum 125 mils (1/8", 3.2mm) in a continuous, monolithic coating.

For the fabric reinforced assembly MM6125/MM6125EV is initially applied to the substrate at a minimum thickness of 90 mils. The fabric reinforcing (Flex Flash F) is embedded into the membrane while it is still warm and tacky. A second coat of MM6125/MM6125EV is then applied at a minimum thickness of 125 mils, fully encapsulating the fabric reinforcing within the membrane.

If a leak test is to be conducted, it may be carried out electronically or by flood testing. For flood testing, submerge the membrane in a minimum depth of 2" of ponding water for 48 hours after the membrane and protection layer are installed.

Complete MM6125/MM6125EV specifications and guideline details are available upon request.

#### Precautions

Use in well ventilated area. In areas with limited ventilation, wear a positive pressure air supplied niosh/MSMA approved respirator. Avoid skin and eye contact. User must read container label and Material Safety Data Sheets for health and safety precautions prior to use.

### 5. Availability and Costs

#### Availability

Through American Hydrotech, Inc. Sales Representatives worldwide.

#### Costs

MM6125/MM6125EV is competitively priced. Contact your local American Hydrotech, Inc. representative or Hydrotech directly at:

American Hydrotech, Inc.  
303 East Ohio Street  
Chicago, IL 60611-3387  
Phone 312.337.4998  
Fax 312.661.0731

### 6. Guarantees

Contact American Hydrotech, Inc. for specific warranty information.

### 7. Maintenance

None required. Damaged Monolithic Membrane 6125/6125EV is easily repaired by removal of the damaged material and coating with new Monolithic Membrane 6125/6125EV.

#### Technical Service

Technical support is provided by a trained network of sales representatives and a Technical Services Department.



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