

# MONOLITHIC MEMBRANE 7800



## Tech Data

### Product Name

Monolithic Membrane 7800

### Product Description

#### Basic Use

Monolithic Membrane 7800 (MM7800®) is intended for use as a waterproofing membrane on concrete structures in exterior, below-grade vertical applications such as foundation walls and tunnels. It can also see limited use in conjunction with Hydrotech's Monolithic Membrane 6125®. Please consult Hydrotech's Technical Services Department.

#### Limitations

MM7800 is not intended to be used as an exposed or traffic bearing membrane. Do not install MM7800 over lightweight concrete without prior written approval from Hydrotech. MM7800 may be applied in temperatures as low as 0° F. However, for applications below 40° F, the material may become somewhat more difficult to work with. Keeping the material warm, until just prior to use, will aid workability of the material.

#### Composition and Materials

MM7800 is a single component rubberized asphalt which dries to form a tough, flexible, highly elastomeric, waterproof coating. MM7800 is fully compliant with all current V.O.C. regulations.

#### Types

MM7800 is available in three application grades: Trowel, Brush (or Roller), Spray. The Brush and Spray grades require mechanical mixing prior to application.

#### Container and Weight

MM7800 is packaged in both 5 gallon pails and 55 gallon drums. Each pail weighs approximately 45 pounds and each drum weighs approximately 475 pounds.

The weight of the installed membrane is approximately 0.35 pounds per square foot for the standard assembly and approximately 0.53 pounds for the fabric reinforced assembly.

#### Coverage

For the standard assembly, Monolithic Membrane 7800 (trowel grade) is typically applied to a wet film thickness of 60 mils at a rate of approximately 5 gallons per 100 square feet. Required application rates for the brush and spray grades will be slightly higher because they contain a lower percentage of solids than the trowel grade.

MM7800 is to be installed as a fabric reinforced assembly for the following applications:

- Over extremely rough concrete surfaces
- Retrofit applications
- Over concrete block (CMU) walls
- Or as otherwise directed by Hydrotech

This type of application consists of a coat of membrane at 3 gallons per 100 square feet (approximately 48 mils), a reinforcing fabric embedded into it followed by a second coat of membrane applied at 3 gallons per 100 square feet.

#### Applicable Standards

Meets or exceeds the performance requirements of ASTM D-4586 Type I (Trowel Grade) and ASTM D-4479 Type I (Brush/Spray Grades).

### 3. Technical Data

Typical physical properties of MM7800 are shown in Table 1 below.

TABLE 1

#### PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Color	Black	
Elongation	700%	ASTM D-412
Tensile Strength	400 PSI	ASTM D-412
Hardness	55	ASTM D-2240 Shore A
Permeance	.25 metric perms	ASTM E-96
Solids Content	Trowel: 65% Brush: 60% Spray: 50%	
Shelf Life	Indefinite in sealed containers	
Pot Life (upon opening)	2-7 days, depending on ambient conditions	
Dry Time	Initial drying: 12 hours Fully dried/cured: 60 hours	
Environmental Resistance	Excellent resistance to moisture, extreme temperatures	
Chemical Resistance	Excellent resistance to acids, alkalis and salts in soil	

## 4. Installation

### Surface Preparation

All concrete surfaces must be clean, dry, free of voids, protrusions, loose material, laitance, dust, oil, grease and unapproved curing compounds or form release agents. Hydrotech recommends a concrete cure/dry time of 28 days minimum prior to the application of the membrane.

Retrofit/rehab applications require the total removal of the existing waterproofing down to clean, bare concrete.

Joints in concrete block substrates should be struck flush with the block surface, not tooled or raked.

Any exposed metal surfaces shall be free of paint, oil, rust or any other contaminant.

Wood substrates should be composed of pressure treated or marine grade materials. Creosote treated wood is not acceptable.

### Priming

MM7800® is a self-priming material and, therefore, a separate primer is not typically needed on new concrete surfaces. For retrofit applications where an existing membrane has been removed or for extremely porous surfaces, it is recommended that an asphalt primer (meeting ASTM D-41) be utilized at a rate of 1/2 to 3/4 gallons per 100 square feet. Allow primer to dry thoroughly before applying membrane.

### Application

Construction joints, control joints and all cracks greater than 1/16 inch shall be treated with a coat of MM7800 extending 6 inches beyond either side of the joint or crack, into which is centered a 6 inch strip of Flex Flash F reinforcing and top coated with a second coat of MM7800. All flashing and detailing work should be completed prior to the application of the membrane in the field.

MM7800 may be brushed or rolled, troweled or spray applied to the concrete surface.

The trowel grade is most suitable for vertical and detailing applications. A hand-held trowel or paddle is typically used to apply the material to the specified thickness.

The brush/roller grade is most suitable for horizontal applications due to its lower solids content. It is not recommended for use on vertical surfaces due to the difficulty in building up the proper thickness and the potential for excessive sag of the material. The brush/roller grade may be brushed, rolled, or squeegee applied to the substrate. A medium nap roller mop works best for roller applications.

For spray applications, typically only used in vertical installations, Hydrotech recommends using the Graco GH3640 sprayer or similar unit as manufactured by Binks, Aermite or other supplier of spray and pump equipment. A 3/4-inch hose, 150 feet long maximum, should be used along with a heavy duty gun and wand containing a .032-.041 spray tip. When applying the spray grade, it is recommended that several coats be applied to build up the total thickness, allowing set up time between coats to prevent excessive sagging of the material. Adjacent and/or adjoining surfaces should be masked off to protect from possible overspray.

For the standard assembly, MM7800 should be applied in one or two coats at a finished rate of 4 gallons per 100 square feet to achieve a thickness of approximately 78 mils.

For the fabric reinforced assembly, apply one coat of MM7800 at a rate of 3 gallons per 100 square feet (approximately 48 mils) to the concrete surface. Embed a layer of Flex Flash F or Flex Flash F-Vertical into the membrane, making sure all edges are overlapped at least 3 inches. Smooth the fabric into the membrane and eliminate any wrinkles. After the first coat has had a chance to set, a second coat of membrane is then applied at a rate of 3 gallons per 100 square feet, fully encapsulating the fabric reinforcing. The total thickness of the membrane should be approximately 96 mils or 6 gallons per 100 square feet.

Allow the membrane to dry/cure prior to the installation of an approved protection board (Dow STYROFOAM® Insulation Boards, Hydroflex 30). The protection course can be spot attached with additional membrane.

### Precautions

Do not use near open flame. Avoid breathing solvent vapors and prolonged contact with skin. Do not take internally. If swallowed, do not induce vomiting. Contact a physician immediately.

Keep out of reach of children. Keep container covered when not in use. Do not thin. Dispose of in accordance with local, state and federal requirements. User must read container labels 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

MM7800 is competitively priced. Contact your local representative or Hydrotech directly.

## 6. Guarantees

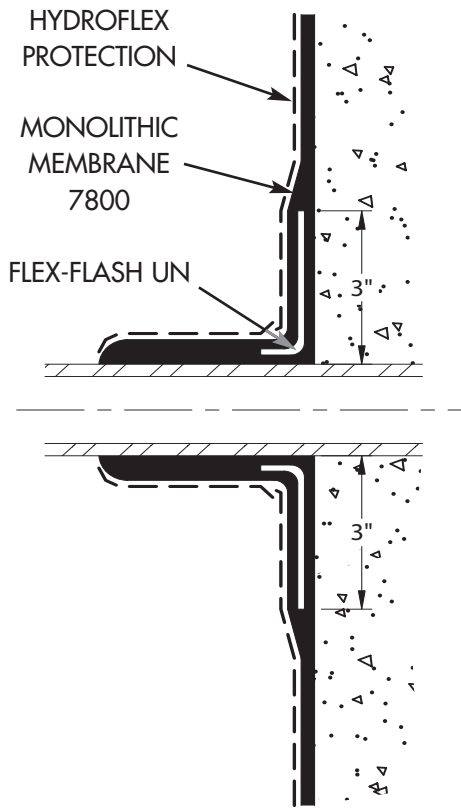
Contact American Hydrotech, Inc. for specific warranty information.

## 7. Maintenance

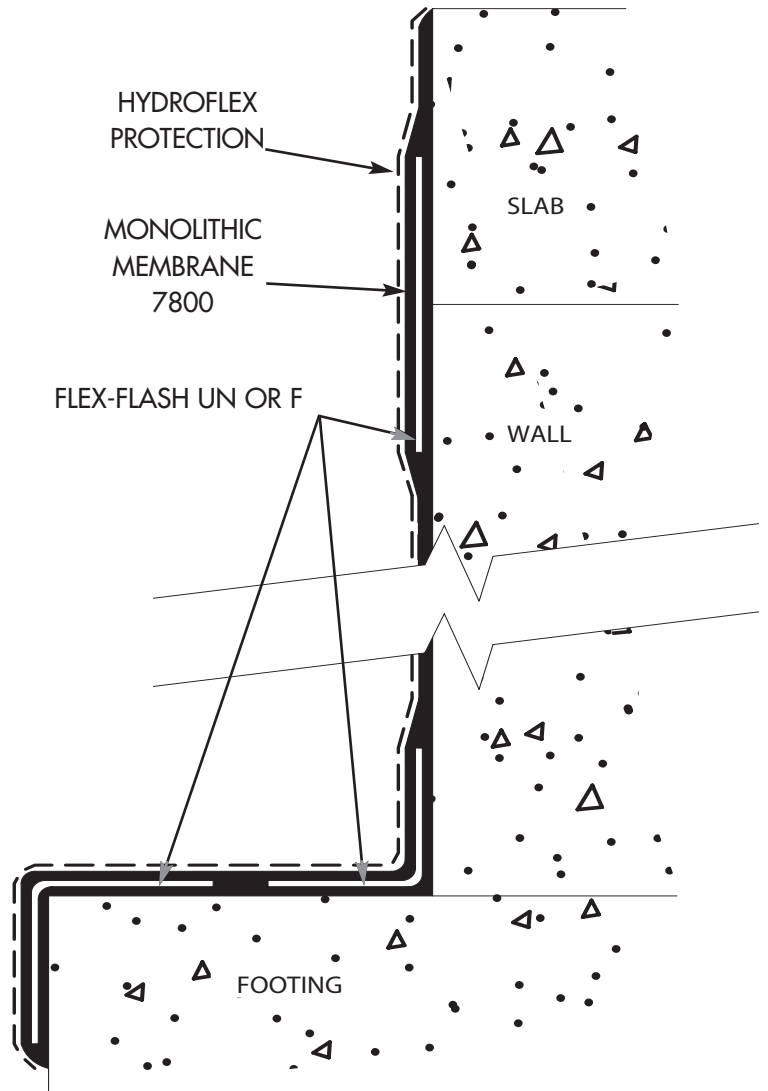
None required. Damaged material is easily repaired by the removal of the damaged material and coating with new MM7800.

## 8. Technical Service

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



TYPICAL PIPE



TYPICAL REINFORCEMENT



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