



## Commercial Grade Waterproofing Membrane

## ArmorMembrane 363 Water-based

## **Description**

The ArmorMembrane363 Water-Based Elastomeric Emulsion Exterior Below-Grade Waterproofing Membranes are tested and proven membranes that can be applied over almost any clean, dry, sound substrate.

## Features/Benefits

- Creates a seamless membrane
- Effectively coats rough and porous surfaces
- · Safe, non-flammable and low order
- Seals around fasteners

#### **Uses**

ArmorMembrane 363 W.B. membrane is ideal for new construction waterproofing of below-grade commercial walls of poured concrete. In addition, it can be used in horizontal applications such as parking garages, bridge decks, and plaza decking as well as retaining wall applications.

#### **Leeds Data**

ArmorMembrane 363 Water-based membrane is considered a GREEN product and can be used toward LEEDS building credits.

## **Equipment**

For maximum output of the product, Mar-flex recommends the use of airless spray equipment. A pressure of 3000 psi is required to spray the membrane.

Note: If purchasing in a 5-Gallon Bucket the use of a brush, trowel or roller is recommended.

#### Coverage

Depending on porosity and roughness of surface, coverage rate for spray application should 3.2 - 4 gallons per 100 ft². Final application millage should be as follows depending on the depth of the walls: On a 10' wall application, final application coat should be at a 100-mil wet membrane thickness. This will result in a minimum of an 80-mil dry thickness. On a 20' wall application, final application coat should be at a 120-mil wet membrane thickness. This will result in a minimum of a 100-mil dry thickness. On a 30' wall application, final application coat should be at a 140-mil wet membrane thickness. This will result in a minimum of a 120-mil dry thickness. The wet mil thickness can be determined by using a standard wet mil gauge.

### **General Requirements**

Avoid application when inclement weather is present or imminent. Do not apply the ArmorMembrane 363 W.B. membrane when the air temperature is below 20° F. Ensure that footings are exposed and free of any debris, loose material, wet/damp or frozen areas. Sweep the tops of

footers to clear away debris and dry footings/walls. Walls must be set before applying the ArmorMembrane 363 W.B. membrane. 363 can be applied to "Green" concrete that is dry to the touch. Should not be applied to frozen concrete. Make sure that all existing pipe, conduit or any other penetration through the wall are properly sealed on the outside with water plug, hydraulic cement or similar product. If penetrations are to be added after the spray application, it is still the applicators responsibility to ensure these areas are sealed. If this responsibility is passed onto the builder, inform the builder they are responsible and inform them of the proper procedure to seal these areas.

## **Required Prep Work**

Remove below grade wall ties inside the basement and out. Patch all outside below grade wall ties with the Mar-flex ArmorMastic200 or similar. Poured concrete walls must be free of voids and honeycombs. Any such areas, if present, should be covered with the Mar-flex Mastic or similar mastic. All brick ledges must be properly capped and sealed

## **Application Information**

When spraying ArmorMembrane 363 W.B., the final recommended spray temperature of the material should be 100°F - 140°F. <u>CAUTION: Prolonged heat can deteriorate water-based products inside the spray tank.</u> NOTE: When transporting water-based material from site to site or when idol on a job-site, the heat exchanger must remain off and there should be no other type of heat source to the tanks. When using the 5-Gallon Buckets, if a thinner consistency is required, a bucket band heater can be used to warm the material.

## Spray Installation / Vertical

Membrane application should be done a section of the wall at a time. Use multiple, uniform passes, alternating from horizontal to vertical. As work progresses check for thin spots and voids in the spray application. Re-spray any areas as necessary to obtain the required mil thickness. Determine the wet mil thickness by using a standard wet mil gauge. Application should be made to all below-grade basement walls. This includes any wall that would be considered a common wall to habitable/storage areas.

## **Horizontal Prep/Application**

Horizontal surface should be dry and swept free of any loose debris and/or dust. Apply the ArmorMembrane 363 by spraying, brushing or rolling to the surface at a minimum of a 100 mil dry thickness. Allow to cure for approximately 3-4 hours. Membrane will not be fully cured which allows for adhesion of the "C" Drain 400 roll. Unroll "C" Drain placing gray side down. Unroll the next section placing the roll directly up against the end of the preceding roll. Join roll ends by peeling back the fabric and removing





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4" of core. NOTE: All core joints must be covered by fabric overlay. Place end panels so that cores abut, then glue, tape or nail fabric overlap. Make cuts for any drains to allow water to be drained. Allow 24 hour set time before traffic is allowed. After completing installation of the "C" Drain 400 allow for a minimum of 24 hours set time and then pour desired thickness of concrete over the "C" Drain. Note: It is recommended to use 12" GeoDrain Tile to remove the water that is drained through the "C" Drain 400.

## **Optional Board Application**

It is recommended that one of the following boards/rolls be applied after the application of the ArmorMembrane 363 W.B. when performing vertical applications. Shockwave 1″ or 2″, or the Geo-Mat™ Plus Drainage Roll, or the "C" Drain 150 should be installed immediately after spraying each section of the wall with the ArmorMembrane 363 membrane. After building the membrane up to the required mil thickness, place the recommended drainage board/roll against the sprayed wall. Press firmly onto wall. The "C" Drain 400 is recommended for horizontal applications. Note: Please see the individual instruction sheet for the proper way to install the board or roll that you are using.

## **Backfilling/Drainage**

Backfilling should begin no sooner than 24 hours after the installation of the ArmorMembrane 363 W.B. Below-Grade Waterproofing System, but must be backfilled within 15 days. #57 Gravel or equivalent must be no less than 6" to 2' high at the base of the foundation and 1' in depth away from the foundation walls. Adequate interior and exterior foundation drainage at the base of the foundation walls or across any floors must be properly installed and working. Gutters and downspouts must be installed and functioning properly. Adequate drainage in landscaping beds adjacent to the foundation must be installed. Final grade must not extend above the waterproofing system and must slope away from the foundation at a minimum of 1/2" per foot for the first 12' from the structure. Note: On vertical wall applications, Mar-flex recommends the installation of the GeoDrain 12" at the footer and at every 10' lift. This finishes the job and allows relief of hydrostatic pressure and helps assure water does not infiltrate through belowgrade walls.

## **Shipping Water-Based Product**

When shipping emulsion based products during the winter months, there is always a risk of the material freezing while in transport. Plan accordingly; product is freeze/thaw sensitive.

#### **Storage of Water-Based Product**

ArmorMembrane 363 W.B., like all asphalt emulsions, must be kept from freezing. It is best to store product containers

off the floor at an ambient temperature at 40°F and above. Opened drums should be tightly sealed before storage to prevent a skim-coat from developing on the surface of the liquid. Internal heat sources cannot be used in bulk storage tanks. It is not necessary to have bulk storage tanks insulated.

## **Packaging**

ArmorMembrane 363 W.B. Waterproofing Membrane is available in 5-Gallon Buckets, 55-Gallon Drums & 330 gallon Totes.

#### **Shelf Life**

When stored at temperatures between 40° -  $100^{\circ}$  F shelf life is 6 months in the original, unopened container. Product is freeze/thaw sensitive.

## **Limited Warranty**

Mar-flex Waterproofing & Building Products warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any Marflex materials prove to contain manufacturing defects that substantially affect their performance, Mar-flex will, at its option, replace the materials or refund its purchase price. This limited warranty is the only warranty extended by Marflex with respect to its materials. There are no other warranties, including the implied warranties or merchantability and fitness for a particular purpose. Marflex specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever. The dollar value of Mar-flex's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the Mar-flex material in question.

HEALTH AND SAFETY INFORMATION IS GIVEN IN THE SAFETY DATA SHEET AND THE PRODUCT DATA SHEET AVAILABLE FOR THIS PRODUCT. THESE SHOULD BE READ AND UNDERSTOOD BEFORE USING THIS PRODUCT.

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ArmorMembrane 363 Water Base Specifications		
Property	Method	Results
Color		Black
Total Solids		60-70
Application Method		Spray, Brush, Rolle
Application Range		20º to 130ºF
Elongation @ 70°F	(ASTM D-412 Die C)	1672% min.
Crack Bridging Ability	(ASTM C-836)	10 cycles; no failure
Resistance to Hydrostatic Head Pressure	(ASTM D 5385)	6 PSI (13.9 feet of head pressure)No Water Infiltration
Total Cure Time		24 hrs.
Weight/Gallon		7.6 lbs.
Coverage Rate		4-5 gal./100 ft <sup>2</sup>
Tensile Strength	(ASTM C-719)	48 psi min.
Water Vapor Permeance	(ASTM E-96)	0.35 perm (grains/sq.ft/h)
Mold Growth/Bacterial Attack		No Degradation
Membrane/Vertical		80 mil dry thickness
Membrane/Horizontal		100 mil dry thicknes
Adhesion to Concrete	(ASTM C-794)	No Adhesion Loss