



**Dudick inc.**

Corporate Offices  
1818 Miller Parkway  
Streetsboro, OH 44241  
330-562-1970  
330-562-7638 FAX  
www.dudick.com

**MEMBRANE 510/510R**  
**Low VOC**  
**Flexibilized, Urethane Membrane**  
**20-125 mils**

**GREEN BUILDING FEATURES**

Contributes towards satisfying Credit 4.2 under LEED

Contains recycled post industrial crushed glass  
Contains rapidly renewable materials

**Meets California South Coast Air Quality Management district Standards**

**In compliance with California Department of Public Health CDPH/EHLB/Standard Method Version 1.1, 2010, Emission testing method for CA Specification 01350**

**RECOMMENDED APPLICATIONS**

Bridges Surface Cracks in Concrete  
Flexible System  
Flooring Underlayment  
Mechanical Room Floors  
Waterproofing Membrane

**PHYSICAL PROPERTIES**

Tensile Strength ASTM D412	2,000-2,500 PSI
Tensile Elongation ASTM D412	100-150%
Tensile Bond Strength ASTM D7234	Cohesive failure of concrete
VOC ASTM D2369 Method E	<5 g/l

**SPECIFICATIONS**

**Membrane 510** shall be a 20 mil urethane membrane as manufactured by Dudick, Inc. and applied in accordance with the manufacturer's recommended practices.

**Membrane 510R** shall be an urethane membrane 125 mil fiberglass reinforced membrane as manufactured by Dudick, Inc. and applied in accordance with the manufacturer's recommended practices.

**THE MEMBRANE 510/510R SYSTEM**

**Primer 67LV** shall be 3-4 mils thick, high solids epoxy cured with an amine hardener as manufactured by Dudick Inc.

**Membrane 510** uses flexibilized urethane resin and silica fillers to produce a self-leveling slurry.

**Membrane 510R** uses flexibilized urethane resin and silica fillers to produce a self-leveling basecoat, 1 oz. fiberglass strand mat, a 20 mil urethane intermediate coat with broadcast and a 15-20 mils urethane topcoat.

**ESTIMATING QUANTITIES AND ORDER BILL OF MATERIAL**

<b>APPROXIMATE SQUARE FEET PER GALLON</b>	
<b>CONCRETE</b>	
Primer 67LV	150-200 ft <sup>2</sup> / gallon
<b>MEMBRANE 510</b>	
Basecoat	80 ft <sup>2</sup> @ 20 mils
<b>MEMBRANE 510R</b>	
Basecoat	80 ft <sup>2</sup> @ 20 mils
Reinforcement	Area + 10%
Intermediate Coat	80 ft <sup>2</sup> @ 20 mils
Broadcast	1 lb./ ft <sup>2</sup>
Topcoat	80-125 ft <sup>2</sup> / gallon @ 15-20 mils
S-10 Solvent	500 ft. <sup>2</sup>

\*\*Quantities shown are for estimating purposes only. Actual field usage may vary.

## APPLICATION INSTRUCTIONS

### SURFACE PREPARATION

**Concrete:** Concrete must be prepared mechanically to remove surface laitance. Oils, grease or other contaminants must be removed prior to surface preparation. Concrete must be free of curing compounds and form release agents. Surface texture should be similar to 40-60-grit sandpaper or the visual standard, CSP-5 from the International Concrete Repair Institute **with exposed pea gravel**. The prepared surface should have a nominal tensile strength of 250 PSI per ASTM D7234.

All concrete substrates must be checked for moisture prior to product application using the Plastic Sheet Test, ASTM D4263.

Additional surface preparation will be required if a 40-60 grit texture **with exposed pea gravel** is not achieved and the surface laitance not completely removed after a single application of acid or with the first mechanical preparation procedure.

Abrasive blasting removes laitance, exposing honeycombs or voids beneath the surface which must be filled with **Scratch Coat** prior to application of Membrane 510R. (Refer to separate specified data sheet for additional information).

### APPLICATION SPECIFICATIONS

Substrate temperature of concrete must be between 50°F and 110°F.

Relative humidity must not exceed 75%.

Substrate temperature must be 5°F above the Dew Point.

### PRIMING

#### PRIMER 67LV MIX RATIO (BY VOLUME)

Primer 67 LV	Component A	73 fl.oz.
Primer 67LV	Component B	55 fl.oz.

The pot life of the mixed **Primer 67LV** will depend on the temperature. To prevent material waste and avoid

damage to equipment, do not mix more material than can be used according to the following table:

#### PRIMER 67LV POT LIFE

TEMPERATURE	PRIMER 67LV POT LIFE
50°F	90 min.
75°F	60 min.
90°F	30 min.

Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period.

### PRIMING

**Concrete:** Mix the pre-measured units of **Primer 67LV Component A with Component B**. Prime all concrete surfaces to be coated with **Primer 67LV** at 3-4 mils WFT. Do not allow the primer to puddle. **Membrane 510/510R basecoat should be applied only after the Primer 67LV has cured a minimum 24 hours.**

**Important** - With all epoxies after priming and before each additional coat, examine the surface for amine blush (oily film). If present, remove by washing with warm water and detergent.

### MEMBRANE 510

#### BASECOAT

Add the full contents of **Component B** to **Component A** and mix thoroughly. **Do not break down units.**

**Do not use partial or opened containers. Once a container is opened, it must be used. Any leftover material must be disposed.**

Apply 20 mils WFT using a serrated squeegee or gauge rake. Immediately roll with a spiked roller to deaerate and help level.

### MEMBRANE 510R

#### BASECOAT

**Do not use partial or opened containers. Once a container is opened, it must be used. Any leftover material must be disposed.**



**Dudick inc.**

Corporate Offices  
1818 Miller Parkway  
Streetsboro, OH 44241  
330-562-1970  
330-562-7638 FAX  
www.dudick.com

**MEMBRANE 510/510R**  
**Low VOC**  
**Flexibilized, Urethane Membrane**  
**20-125 mils**

Add the full contents of **Component B** to **Component A** and mix thoroughly. **Do not break down units.**

Apply 20 mils WFT using a serrated squeegee or gauge rake. Immediately roll with a spiked roller to deaerate and help level. Immediately press fiberglass strand mat into uncured basecoat. Lap all edges by 1-inch. Use a roller lightly saturated with **Membrane 510R** basecoat liquid, roll vigorously until mat has lost its white color.

Allow basecoat to cure overnight. Examine the fiberglass for any bubbles or blisters. If present, these must be repaired prior to the topcoat application.

**INTERMEDIATE COAT**

Add the full contents of Component B to Component A and mix thoroughly. Do not break down units.

Apply 20 mils WFT using a serrated squeegee or gauge rake. Immediately roll with a spiked roller to deaerate and help level. Immediately broadcast with clean and dry Dudick #4 aggregate to excess and allow to cure overnight.

**TOPCOAT**

Add the full contents of Component B to Component A and mix thoroughly.

Apply 10-20 mils WFT, depending on desired surface texture, using a serrated squeegee or gauge rake. Immediately roll with a 3/8" nap solvent resistant roller and back roll to smooth topcoat finish.

**NOTE:**

All substrate defects such as bugholes, divots, etc. shall be filled smooth with surrounding substrate surface with the specified Dudick Scratch-Coat prior to the application of Membrane 510R.

**Membrane 510/510R Cure Cycle:**

TEMPERATURE	Maximum Recoat Time	CURE TIME
50°F	120 hrs.	96 hrs.
75°F	72 hrs.	24 hrs.
90°F	48 hrs.	16 hrs.

If these recoat times are exceeded, consult a Dudick representative. Sanding or abrasive blasting may be required before the next coat. Recoat times are dramatically reduced when the coating is exposed to direct sunlight.

Application of **Membrane 510/510R** in direct sunlight may lead to blistering, pinholes, or wrinkling due to outgassing of air in the concrete and high substrate temperatures. Double priming, shading, or evening application may be required. Consult a Dudick representative.

**CLEANING**

Use **S-10 Cleaning Solvent** to clean tools and equipment.

**SHIPPING**

Refer to Material Safety Data Sheets.

**STORAGE**

**Warning:** All Dudick products classified by DOT with either white, yellow or red labels must not be

mixed or stored together as an explosive reaction can occur.

Store all products in a cool, dry area away from open flames, sparks or other hazards.

When stored in their original, unopened containers at 50°F-75°F, **Primer 67LV and Membrane 510/510R** components will have a six-month shelf life. **Containers of Membrane 510/510R that have been opened must be discarded if not used.** Storage in direct sunlight or excessive heat will reduce working time and shelf life.

## SAFETY

**M.S.D.S: Material Safety Data Sheets must always be read before using products.** **Membrane 510R** systems are intended for application by experienced, professional personnel. Dudick, Inc. can supply supervision to help determine that the surface has been properly prepared, the ingredients correctly mixed, and the materials properly and safely applied.

If **Membrane 510/510R** materials are to be applied by your own personnel or by a third party contractor, please be sure that they are aware of the following safety precautions:

- Exposure to resins and hardeners through direct skin contact and/or inhalation may cause severe dermatitis reactions in some people. Cleanliness of the skin and clothing is critical and must be of paramount concern.
- Fumes are flammable and heavier than air. Proper ventilation should be maintained to minimize breathing of concentrated fumes.
- Suitable respirators should be used during application.
- Safety glasses, gloves, and suitable protective clothing must be worn at all times during application.
- If contact with hardeners occurs, remove any clothing involved and flush the skin with

flowing water. Discard the clothing. Do not attempt to wash and reuse it. **Membrane 510R** liquid can be removed with **S-10 Cleaning Solvent**, MEK, or lacquer thinner.

- Keep open flames and sparks away from the area where materials are being mixed and applied.
- If a rash occurs, remove the individual from the work area and seek a physician's care for dermatitis.
- In case of eye contact, flush with water for at least 15 minutes and consult a physician.
- If swallowed, do not induce vomiting; call a physician immediately.

**NOTE:** Dudick, Inc. ("Dudick") warrants all goods of its manufacture to be as represented in its catalogs and that the manufacture of its products by its employees or sub-contractors shall be performed in a workmanlike manner. Dudick's sole obligation under this warranty shall be to replace any material which its examination shall disclose to be defective. Dudick makes no warranty concerning the suitability of its product for application to any surface, it being understood that the goods have been selected and the application ordered by the Purchaser. DUDICK, INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT THE GOODS SHALL BE MERCHANTABLE OR THAT THE GOODS ARE FIT FOR ANY PARTICULAR PURPOSE. THE WARRANTY OF REPAIR OR REPLACEMENT SET FORTH HEREIN IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES ARISING BY LAW OR OTHERWISE; AND DUDICK INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWN TIME, DAMAGES TO PROPERTY OF THE PURCHASER OR OTHER PERSONS, OR DAMAGES FOR WHICH THE PURCHASER MAY BE LIABLE TO OTHER PERSONS, WHETHER OR NOT OCCASIONED BY DUDICK'S NEGLIGENCE.



**Dudick inc.**

Corporate Offices  
1818 Miller Parkway  
Streetsboro, OH 44241  
330-562-1970  
330-562-7638 FAX  
[www.dudick.com](http://www.dudick.com)

**MEMBRANE 510/510R**  
**Low VOC**  
**Flexibilized, Urethane Membrane**  
**20-125 mils**

This warranty shall not be extended, altered or varied except by written instrument signed by Dudick and Purchaser.

07/12/18