



**Dudick inc.**

Corporate Offices  
1818 Miller Parkway  
Streetsboro, OH  
44241  
330-562-1970  
330-562-7638 FAX

## VAPOR-STOP

**Semi-Self Leveling, Seeded  
Moisture Vapor Reduction  
Coating for Vertical and  
Horizontal Applications,  
Low Odor**

### FEATURES

**Contributes toward satisfying credit for low emitting material under LEED 4.1**

**Meets California Department of Public Health CDPH/EHLB Standard Method Version 1.2 2017 Compliance Certificates Available Upon Request**

Water/Vapor Proofing  
Fast Setting  
VOC Compliant  
Reduces water from 10 lbs./1000 ft<sup>2</sup> to ≤ 3lbs  
Allows for over coating with epoxies & other Polymers  
Non-porous  
Bonds to concrete pH 7-14  
Semi-Self leveling

**COLORS:** Medium Grey  
Consult Dudick Inc. for additional colors.

### PHYSICAL PROPERTIES

Coefficient of Thermal Expansion ASTM C-531	2.2 x 10 <sup>-5</sup>
Comprehensive Strength ASTM C-579	6,800 PSI
Modulus of Elasticity ASTM C-580	2.2 x 10 <sup>11</sup> PSI
Tensile Strength ASTM C-307	1,050 PSI
Flexural Strength ASTM C-580	2,600 PSI
Taber Abrasion ASTM D-4060	70 mg
Tensile Bond Strength ASTM D-7234	Cohesive Strength of Concrete*
Density	125 lbs. / ft <sup>3</sup>

\*Scored sample

### SPECIFICATIONS

**Vapor-Stop** shall be a minimum 60 mil thick polyurethane moisture control system. Vapor-Stop shall be seeded with a light to medium broadcast using a 20-40 mesh silica sand to promote greater adhesion to other Dudick Inc. flooring systems.

**The Vapor-Stop System can only be applied to concrete or a previous layer of Vapor-Stop. It will not bond to epoxy or other polymer systems.**

### THE VAPOR-STOP SYSTEM

**Vapor-Stop:** An aggregate filled system that develops cure strength approximately 2 times that of the concrete base to which it is applied. The monolithic topping exhibits excellent physical and mechanical strength as well as moisture vapor reduction.

### \*VAPOR-STOP PACKAGING

Component A	8 lbs. 12 oz
Component B	8 lbs.
Aggregate	12 lbs. 12 oz

\*Pre-measured units -Do Not Breakdown

### \*\*ESTIMATING QUANTITIES AND ORDER BILL OF MATERIAL

APPROXIMATE SQUARE FEET PER UNIT	
VAPOR-STOP	
<b>Vapor-Stop</b>	50-70 ft <sup>2</sup> @ 60 mils, horizontal applications
	150-200 ft <sup>2</sup> @ 10-15 mils, vertical applications
***20/40 Mesh Sand	¼ - ½ lbs./ ft <sup>2</sup>

\*\*Quantities shown are for estimating purposes only. Actual field usage may vary depending upon skill of the applicator.

\*\*\*This will provide slight texture for horizontal applications. Please consult Dudick for more information.

## APPLICATION INSTRUCTIONS

### SURFACE PREPARATION

**Concrete:** Concrete must be prepared mechanically to remove surface laitance. Oils, grease or other contaminant must be removed prior to surface preparation. Concrete must free of curing compounds and form release agents. Surface texture should be similar to 60-80 grit sandpaper or the visual standard, CSP-3 from the International Concrete Repair Institute. The prepared surface should have a minimum tensile strength of 250 PSI per ASTM D-4541.

Additional surface preparation will be required if a 60-80 grit texture is not achieved and the surface laitance not completely removed with the first mechanical preparation procedure.

### APPLICATION SPECIFICATIONS

Temperature of concrete substrate must be between 41°F and 90°F.

Atmospheric relative humidity must not exceed 90%

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

Application of **Vapor-Stop** in direct sunlight may lead to blistering, pinholes, or wrinkling due to out-gassing of air in the concrete and high substrate temperatures. Shading or evening application may be required. Consult a Dudick representative.

POT LIFE AND CURE TIME			
Temp	Pot Life	Work Time	Cure Time
50°F	35 minutes	25 minutes	12+ hours
70°F	25 minutes	15 minutes	7-9 hours
90°F	<10 minutes	<6 minutes	4-6 hours

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

**Recoat Time:** Depending on temperature **Vapor-Stop** must be cured for **24 hours** before being over coated with a product other than **Vapor Stop**. **Vapor Stop** on vertical applications must be cured a minimum **3 hours** before another **10-15 mil** coat of **Vapor Stop** is applied. Material must be abraded prior to recoating with **Vapor-Stop** if it has set longer than **48 hours**.

## INSTALLATION

### SPECIFICATIONS MIXING

### EQUIPMENT

When deciding on mixing equipment, keep in mind that Vapor-Stop has a 15-minute working time at 70°F.

A 10-15 gallon rotating drum container can be used. It is portable and easy to clean. The stationary mixing paddle provides both radial and axial action, scraping both the side and bottom of the container a mortar mixer can be used as long as it contains blades for uniform mixing.

### VAPOR-STOP INSTALLATION

**Mixing Sequence:** **Component A** should be thoroughly mixed to re-disperse any pigments or fillers that may have settled prior to adding **Component B**. Add the pre-measured **Component A** to the mixer followed by the addition of the pre-measured **Component B** and mix for one minute. Slowly add the aggregate and continue mixing until all of the aggregate has been totally wetted. **DO NOT REDUCE AGGREGATE. MIX FULL UNITS.**

### APPLICATION

**Horizontal:** Pour the mixed material and spread evenly to a minimum 60 mil thickness. After spreading the material; roll with a spike roller to level and de-aerate. Using 40-60 mesh silica; spread a light to medium broadcast. Allow to cure 24 hours before topcoating.

**Timing of batches is important so as to avoid cold joints in the floor.**

**Vertical:** Roller apply at 10-15 mils (100-150 ft<sup>2</sup> per gallon). Three coats @ 10-15 mils per coat is recommended. Can be re-coated after 2-3 hours at normal temperatures; longer at cooler temperature. **When applying multiple coats, exceeding 15 mils per coat can cause blisters, cracking and sagging.**

### CLEANING

Use **S-10 Cleaning Solvent, MEK or Acetone** to clean tools and equipment.

### SHIPPING

Refer to Material Safety Data Sheets.



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### 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 may 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, **Vapor-Stop** components will have a six-month shelf life. 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.** **Vapor-Stop** toppings 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 **Vapor-Stop** toppings 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:

- 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, flush the skin with flowing water. **Vapor-Stop** liquid can be removed with **S-10 Cleaning Solvent, Acetone, 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.
- Exposure to resins and hardeners through direct skin contact and/or inhalation may cause severe dermatitis reactions in some people.

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

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