

# DEX-O-TEX<sup>®</sup>

## Product Description Sheet

# VaporControl™ Primer 200-E

## Negative Side Moisture Vapor Suppression System

### 1. PRODUCT DESCRIPTION

#### A. COMPOSITION

VaporControl™ Primer 200-E is a uniquely-modified fluid-applied epoxy moisture mitigation system. It is designed to be used as an above or below grade vapor retarder that is placed on the negative side (between the concrete slab and the impervious coating or surfacing) of a properly prepared concrete substrate. As a vapor emission suppression system VaporControl™ Primer 200-E will withstand moisture vapor emission rates (MVER) of 10lbs./1000sq.ft./24hrs. in accordance with ASTM F1869, or 84% relative humidity in the substrate when tested in accordance with ASTM F2170 in situ method. VaporControl™ Primer 200-E is recommended for use under impervious non-breathing flooring systems that cannot withstand moisture vapor emission levels or rh rates above the floor covering manufacturer's recommended moisture levels.

VaporControl™ Primer 200-E is ideal for use under the vast majority of non-breathing flooring systems, including epoxies, urethanes, rubber, carpet, vinyl and wood, vinyl tiles, vinyl sheet goods, laminate flooring and other impervious flooring systems.

As a general rule, most flooring manufacturers, rubber backed carpet, tile, vinyl, wood or resinous, do not recommend installing their products on concrete slab surfaces having MVER levels in excess of 3.0 lbs. of moisture emission over a 1,000 square foot area during a 24 hour time period as measured by an anhydrous Calcium Chloride Test Procedure tested in accordance with ASTM F1869 or a in situ relative humidity over 75% when tested in accordance with ASTM F2170.

VaporControl™ Primer 200-E is applied in a single application of 7 mils (0.18 mm) to provide an MVER barrier. If vinyl, tile, rubber, wood, carpet or other manufacturer flooring that requires the use of an adhesive for application of the final flooring, a polymerized cementitious intermediate coat is applied to provide a proper substrate for the finished flooring system. Dex-O-Tex resinous flooring systems may be applied directly to the VaporControl™ Primer 200-E System. Consult Crossfield for recommendations regarding potential intermediate coating products for non-Dex-O-Tex products.

VaporControl™ Primer 200-E is 100% solids and does not contain any hydrocarbon solvents and meets all EPA, CARB and AQMD VOC regulations requirements. VaporControl™ Primer 200-E has no significant odor during installation and complies with USGBC standards to contribute to LEED certification...

#### B. TYPICAL USES

VaporControl™ Primer 200-E is placed directly on properly prepared, strong and durable concrete substrates conforming to ACI 301. The day after placement at 75°F (23°C) (usually 12 hours), the intended impervious non-breathing, moisture sensitive flooring or cementitious intermediate system can be placed.

**CAUTION:** Concrete must be a minimum of 10 days old at time of application. Contact Crossfield for recommendations if fully cured concrete displays a moisture emissivity greater than 10lbs./1000sq.ft./24hrs. per ASTM F1869 or 84% rh in accordance with ASTM F2170.

### C. ADVANTAGES AND LIMITATIONS

#### ADVANTAGES:

1. Reduces or eliminates the negative effects of moisture vapor emissions.
2. Excellent adhesion to damp concrete.
3. Convenient 2:1 by volume mix ratio.
4. High compressive, flexural and tensile strengths.
5. Installed only by professional Factory Trained Dex-O-Tex Contractors.

#### LIMITATIONS:

1. Minimum ambient and surface temperatures of 45°F (7°C) required during installation.
2. If sub-surface cracks, Dex-O-Tex VaporControl Primer 200-E may reflect those cracks.
3. VaporControl Primer 200-E is not a substitute for a functioning vapor barrier placed beneath the concrete slab.
4. Prior to placement of third party flooring systems on top of VaporControl Primer 200-E, verify compatibility of the adhesive to be used.
5. VaporControl Primer 200-E is a topical treatment, therefore it is not a remedy for ASR (Alkali Silica Reaction) contributed failure.
6. VaporControl Primer 200-E is applicable to mitigate Moisture vapor transmission (MVT) up to 10.0 lbs./1000sq.ft./per 24 hour period per ASTM F1869, or in situ rh readings up to 84% per ASTM F2170. Consult Crossfield Products Corp. for MVER or rh readings over these limits.
7. VaporControl Primer 200-E may be used in lieu of standard primers for Dex-O-Tex systems at an additional cost.

### 2. TYPICAL PHYSICAL PROPERTIES at 75°F (24°C)

- |                                                         |                                                                                                                                                                |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A. Adhesion ASTM D4541.....                             | >450 psi<br>(100% failure in concrete exposed to Moisture Vapor Emission Rate (MVER) at 10 lbs./1000 sq.ft./24 hr. per ASTM F1869 or rh of 84% per ASTM F2170) |
| B. Compressive Strength ASTM D695.....                  | 13,000 psi                                                                                                                                                     |
| C. Tensile Strength ASTM D638.....                      | 10,000 psi                                                                                                                                                     |
| D. Tensile Elongation ASTM D638.....                    | 2.6%                                                                                                                                                           |
| E. Microbial Resistance ASTM G21.....                   | Passes Rating 1                                                                                                                                                |
| F. Alkali Resistance ASTM D1308.....                    | Resistant                                                                                                                                                      |
| G. Moisture Vapor Emissivity ASTM E96.....              | 0.158 Perms                                                                                                                                                    |
| H. Shore D Hardness ASTM D2240.....                     | 78                                                                                                                                                             |
| I. Thin Film Set Time ASTM D5895 (hrs. at 77 Degrees F) |                                                                                                                                                                |
| Stage 1 (Set to touch).....                             | 3 hrs.                                                                                                                                                         |
| Stage 2 (tack free).....                                | 5 hrs.                                                                                                                                                         |
| Stage 3 (dry hard).....                                 | 6 hrs.                                                                                                                                                         |
| Stage 4 (through cure).....                             | 10 hrs.                                                                                                                                                        |

### 3. OVERVIEW OF INSTALLATION STEPS

- A. Prepare surface by removal of laitance, grease and foreign matter. Prepare concrete in accordance with SSPC SP13/NACE No 6.
- B. Apply Dex-O-Tex VaporControl™ Primer 200-E to the substrate with a 3/32" notched squeegee. Roll the resinous material immediately with a 3/8" nap roller. Coverage rate is

## Product Description Sheet

### Negative Side Moisture Vapor Suppression System

approximately 225sq.ft. (20.9m<sup>2</sup>) per gallon depending on the porosity of the substrate.

- C. Allow to cure for a minimum of 6 hours prior to placement of Dex-O-Tex Systems, do not exceed recommended critical cure periods.

#### 4. PRODUCT AVAILABILITY

Crossfield Products Corp. maintains offices and factories at addresses listed below. Factory Trained Contractors are established in all major trading areas in the United States, Canada and various European, Latin American and Far East nations.

#### 5. SPECIFICATION ASSISTANCE

Consult Crossfield Products Corp. for specification assistance, detailing, etc. This consultation is highly recommended prior to specification.

#### 6. CHEMICAL RESISTANCE

See Crossfield Products Corps., Chemical Resistance Guidelines for chemical resistance of a product or system, as well as the types of test performed:

- ASTM C868 Standard Test Method for Chemical Resistance of Protective Lining.
- ASTM C267 Standard Test Method for Chemical Resistance of Mortars, Grouts, and Monolithic Surfacing and Polymer Concretes.
- ASTM D1308 Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes
- Crossfield Products Corp. Proprietary Testing

**Note:** Chemical resistance is a functional test, usually limited to changes in weight or thickness measured in loss or gain and does not evaluate subject aesthetic issues. To determine aesthetic issues, Crossfield recommends testing the products or system in accordance with intended end use.

#### 8. TESTING

The technical data contained herein is the result of tests made in Crossfield's laboratories or in independent laboratories using small scale equipment, following generally accepted trade practices. Although this information is believed to be true and accurate, the use of different equipment for testing under dissimilar conditions or the testing of samples produced under dissimilar conditions may develop substantially different results.

#### LIMITED WARRANTY

NO WARRANTY SHALL BE EFFECTIVE UNTIL THE TERMS AND CONDITIONS OF SALE SET FORTH IN CROSSFIELD PRODUCTS CORP. INVOICE ARE MET.

Crossfield Products Corp. warrants to the purchaser of its products that such products are free from manufacturing defect. Crossfield does not warrant or guarantee the workmanship performed by any person or firm installing its products. Crossfield's obligation under this warranty is limited solely to the original purchaser and solely to the remedy of replacement in kind of any product which Crossfield sold which may prove defective in manufacture within one year from date of installation, provided said product was stored correctly and installed within the product's shelf life, by the original purchaser and which Crossfield examination shall disclose to Crossfield's satisfaction to be thus defective.

IN NO EVENT SHALL CROSSFIELD PRODUCTS CORP. BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. THIS WARRANTY IS EXPRESSLY GIVEN IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE AND ALL OTHER OBLIGATIONS OR LIABILITIES ON CROSSFIELD'S PART, AND WE NEITHER ASSUME NOR AUTHORIZE ANY PERSON OR PERSONS TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF A CROSSFIELD PRODUCT. THIS WARRANTY SHALL NOT APPLY TO ANY OF CROSSFIELD'S PRODUCTS, WHICH HAVE BEEN SUBJECT TO ADULTERATION, ALTERATION, ABUSE OR MISUSE. CROSSFIELD PRODUCTS CORP. MAKES NO WARRANTY WHATSOEVER IN RESPECT TO ACCESSORIES, PARTS OR MATERIALS NOT SUPPLIED BY CROSSFIELD PRODUCTS CORP., WHICH ARE USED IN CONNECTION WITH ITS PRODUCTS. THE TERM "ORIGINAL PURCHASER" IN THIS WARRANTY MEANS THAT PERSON, CORPORATION OR ENTITY TO WHOM CROSSFIELD PRODUCTS CORP. SOLD ITS PRODUCT OR PRODUCTS. ANY ACTION TO ENFORCE ANY WARRANTY OR FOR BREACH OF CONTRACT OR ARISING OUT OF ANY CLAIM AGAINST CROSSFIELD PRODUCTS CORP. SHALL BE COMMENCED AND MAINTAINED ONLY IN A COURT OF COMPETENT JURISDICTION IN THE CONTINENTAL UNITED STATES OF AMERICA. THE PURCHASER ACCEPTS THESE TERMS AND CONDITIONS, AND HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.

CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



#### DEX-O-TEX PRODUCT LINE Crossfield Products Corp.

West Coast Office  
3000 E. Harcourt Street  
Rancho Dominguez, CA  
90221  
310-886-9100  
310-886-9119 fax

East Coast Office  
140 Valley Road  
Roselle Park, NJ  
07204  
908-245-2800  
908-245-0659 fax

[www.dexotex.com](http://www.dexotex.com)