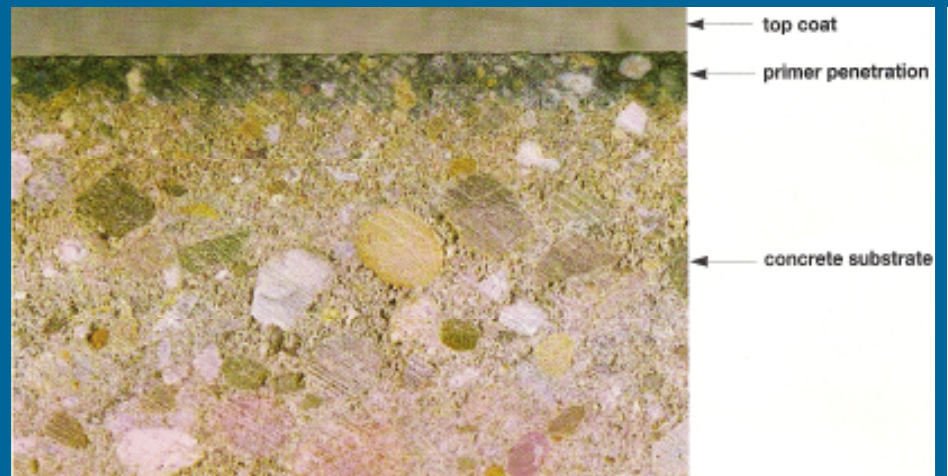


# BDC VAPOR SEAL PRIMER

**B.D. Classic Enterprises introduces a new epoxy primer that is revolutionizing the industrial coatings industry. One of the most common problems in applying an epoxy floor system occurs when substrates are subject to condensing humidity, are damp, or are even completely saturated with water. The new BDC Vapor Seal Primer combats these problems by being moisture accepting enough to even cure underwater.**

**According to ASTM E96—Moisture Vapor Transmission: Vapor Reduction testing, the BDC Vapor Seal Primer will reduce the hydrostatic pressure of a floor with moisture vapor transmissions (WVT) of 11.63-lbs / 24 hours - 1000ft<sup>2</sup> to an incredible .84-lbs / 24 hours - 1000ft<sup>2</sup> . (Test done using the Wet Cup Method)**

*Photo displays the Vapor Seal Primer's penetration into a wet substrate. Primer is then followed with the BDC 3300 top coat for extra protection.*



**The product's low viscosity and slow cure time allow it to penetrate deeper into the concrete than a normal primer. This extra penetration provides a higher degree of adhesion to the substrate. ASTM D4541 (Elcometer Pull-Off Adhesion) testing with Vapor Seal applied onto a concrete substrata showed that the concrete cohesively**

**broke before Vapor Seal's adhesion did. The Pull-Off Adhesion was at an average of 553 psi before the actual concrete broke off.**

**With BDC Vapor Seal it is even possible to apply a coating on one-week old concrete that is free of any cement laitance. This means a customer can be on their floor up to three weeks quicker than with a normal epoxy floor system\*.**



*a) Testing apparatus for pull off strength  
c) Pull off strength results over wet concrete with BDC Vapor Seal*



\* 28days are generally required for concrete to be dry enough for coatings application

In general, BD Classic Enterprises recommends BDC Vapor Seal to be used between 10°C to 32°C (50°F to 90°F). The surface should be diamond grinded, shot-blasted, or acid-washed before product is applied. If acid washing, make sure floor is completely neutralized before product application. BDC Vapor Seal can be applied by a roller or squeegee.

The typical physical properties of the BDC Vapor Seal System are shown below in TABLE I.

<i>Table 1</i>	<i>Typical Properties of the BDC Vapor Seal System</i>			
<i>Hardener</i>	BDC Vapor Seal			
<i>Mix Ratio, By Volume</i>	2 parts resin / 1 part hardener			
<i>Test Temperature / Relative Humidity</i>	41°F / 80%	59°F / 60%	73°F / 50%	95°F / 35%
<i>Mixed Viscosity, cP</i>	<4000	2,800	1,350	500
<i>Gel Time (100g mass), minutes</i>	699	393	139	56
<i>Tack-free Time, hours</i>	>24	8	5.5	2.5
<i>Dry Through Time, hours</i>	>24	10.5	7	3.5
<i>Visual Appearance</i>	Uncured	Semi-gloss	Glossy	Glossy
<i>Mechanical Properties</i>				
<i>Pencil Hardness</i>	2H			
<i>Persoz Hardness, seconds</i>	200			
<i>Cross-cut Adhesion</i>	5A			
<i>Impact Resistance (D/R), in lb.</i>	30 / 2			