



# E4E VBP ULTRA

## Technical Data Sheet

### Product description

A two component vapor barrier coating. Used as a primer and provides better adhesion. This system will control moisture vapor emission rates up to 25 lb. /24 hr. /1000 square feet all while providing excellent physical and chemical resistance. This coating meets LEED standards.

### Advantages

- Solvent-free, low VOC content 100% solids
- Superior water resistance
- Good chemical and physical resistance
- Easy to clean

### Uses

: Formulated as a high solids system for classrooms, laboratories, mechanical rooms, areas of light manufacturing, where cleanliness and easy maintenance are required.

Technical Properties		
Flammability	ASTM D-635	Self Extinguishing
Tensile Strength	ASTM D-638	5550 psi
Tensile Elongation %	ASTM D-638	20-30%
Compressive Strength	ASTM D-695	@24 hours 7500 @7 days 9800
Monolithic Surfacing	ASTM D-722	PASS
Impact Resistance	ASTM D-2794	PASS
Abrasion Resistance	ASTM D-4060	60 mg loss
Shore D Hardness	ASTM D-4366	80-90
Vapor Permeance @ 16 mils	ASTM E-96	0.71 g/(m <sup>2</sup> d) US Perm 0.06
MVER	ASTM F-186	18lb/4hr/1000 sq ft

Part A	
VOC's	Low
Color	Clear
Viscosity	1110-1300

Part B	
VOC's	Low
Color	Amber
Viscosity	650-850

Cure Time	
Working Time	20 min
Tack Free	3-5 hours
Recoat Time	5-10 hours
Full Cure	7 days
Foot Traffic	8 hours
Suggested Coats	1-2

**Surface Preparation:** Surface must be clean, sound and dry. Prior to coating a floor all trowel marks and surface imperfections must be removed to produce a smooth & uniform surface. Proper surface preparation is critical to ensure an adequate chemical bond to substrate. Substrate must be dry and free of all wax, grease, oils, fats, soil, contaminants, loose or foreign matter and laitance. Concrete should be cleaned and prepared using a shot blast machine or adequate grinding equipment to achieve a CSP-3 to CSP-4 profile as per ICRI guidelines. Compressive strength of concrete should be at least 3,500 psi (24 Mpa) @ 28 days and at least 215 psi (1.5 Mpa) in tension at time of product application.

**Mixing:** Supplied in factory proportioned quantities, greatly reducing the risk of applicator error during mixing. Step 1 - Mechanically premix PART A (resin) with an appropriate slow speed drill equipped with a Jiffy Mixer, for 1 minute. Step 2 - Slowly empty entire content of PART B into container holding PART A and continue to mix slowly for 3 minutes until uniform consistency in texture and color is achieved. Avoid unnecessary entrapment of air during mixing. Make sure to scrape walls and bottom of container with straight edged trowel at least once to ensure homogeneous mix. Make sure to empty ALL contents of PART B into PART A to avoid system weakening or incomplete curing. DO NOT MIX MORE MATERIAL THAN CAN BE APPLIED WITHIN WORKING TIME LIMITS.

**Application:** Should be applied at ambient and surface temperatures between 40- 95 °F and humidity below 80%. Applied with a rubber squeegee and back rolled with a 10mm lint free nap roller (on smooth surfaces) to remove squeegee lines and smooth out coating. Additional coats may be applied when surface is tack-free (roughly 12 hours). Do not exceed first 24 post-application hours for recoating. By exceeding this 24 hour recoat time limit, the entire surface must be lightly sanded to achieve desired profile for a proper mechanical bond. Clean up all dust and debris created by aforementioned sanding prior to applying subsequent coat.

**First aid:** In case of contact with skin, wash thoroughly with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse. Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation. Consult the material safety data sheet for further information.

**Clean-up/Storage:** Store in clean dry area. Do not freeze. Dispose in accordance with all state local and federal laws. Clean-up tools and equipment with xylene.

**Limitations** Prior to application, measure and confirm Substrate Moisture Content, Ambient and Surface temperatures and Dew Point. This coating cannot be used against hydrostatic pressure. Substrate Moisture: Moisture within substrate must be  $\leq 4\%$  by mass as measured by a type of concrete moisture meter on mechanically prepared surface. Do not add thinners or solvents to mix. Do not add water. Dispose of waste materials in accordance with government regulations. The use of safety glasses and protective gloves is required. In case of contact, flush areas with abundance of water for 20 minutes and seek medical assistance. Wash skin with soap and water. Use only in well-ventilated areas AVOID CONDENSATION. The substrate must be at least 3 °C above Dew Point to reduce risk of condensation. Condensation may lead to failure in adhesion. Avoid situations where substrate temperature is considerably lower than ambient temperature.

