



WB ECO PRIME

Technical Data Sheet

Product description

: WB ECO PRIME is a 2-component, low odor, 38% solids water-borne epoxy primer and sealer for use over concrete, wood, and a variety of other substrates. WB ECO PRIME has a 1 hour pot-life and penetrates well into porous substrates at all recommended application temperatures allowing for subsequent layers to be applied in a few hours. May be applied via roller, brush or HVLP sprayer.

Advantages

- Concrete, CMU & Light Weight Concrete
- Wood (APA Exterior or Marine rated)
- Inert to High pH levels
- Easy to Apply
- 1 hour Pot-Life
- Fast Cure – typically 3 hours at 72°F
- Solids colors possible with addition of COLOR PACKS
- Soap & Water Clean-up while wet
- Low Odor & VOC's – Available in all regions

Uses

- Industrial and wheeled traffic / fork lift traffic require a minimum of an ICRI CSP 3 profile is required for mechanical preparation (See Substrate Preparation)
- For water immersion conditions, a minimum of an ICRI CSP 3 profile is required for mechanical preparation
- Wood substrates, including new, require sanding or grinding surface preparation
- NOT U.V Stable - Clear material not suitable for exterior use. Will chalk and discolor with U.V. exposure
- Fisheyes are a result of surface contamination

Cure Time

Working Time	45 minutes @ 72°F / 50% RH
Tack Free	60 to 90 minutes @ 72°F / 50% RH
Recoat Time	3 to 24 hours @ 72°F / 50% RH
Foot Traffic	10 hours @ 72°F / 50% RH
Heavy Traffic	24 to 36 hours @ 72°F / 50% RH
Full Cure	7 days @ 72°F / 50% RH

Application Data

Application Temp.	72°F / 50% Relative Humidity
Mix Ratio	1 Part A to 4 Parts B
Packing	1.25 gallon kit
Pot Life	60 minutes @ 72°F / 50% RH
Shelf Life	1 year in original, unopened containers
Solids Coverage / US GAL	229 sq ft @ 7 mills WFT (2.66 DFT) 160 sq ft @ 10 mills WFT (3.8 DFT)

Technical Properties

Tensile Strength, psi (MPa)	ASTM D2370	4000 psi (40 MPa)
Flexibility	ASTM D522	1/8" – Passes highest rating
VOC's-Volatile Organic Compounds	ASTM D3960	49 g/L (Clear)
Viscosity – Mixed	ASTM 2196	72 cP (Clear)
Solids Content		38% (Clear)
Adhesion to Damp Concrete	ASTM D4541	Concrete Fails
Impact Resistance -Tested on concrete block	ASTM D3134 ASTM D2794	Pass. 160 in-lbs. No delamination or chipping

Surface Preparation: Achieve a CSP 2 to 6 (Concrete Surface Profile in accordance with ICRI Guideline 310.2R2013, as published by the International Concrete Repair Institute) yielding a surface texture similar to 80 grit sand paper or more course in order to maintain long term adhesion to the substrate.

NOTE: Should verification of proper adhesion be desired or when applying WB ECO PRIME over an existing coating, follow ASTM D 4541 using an Elcometer to determine a direct tensile pull -off strength greater than 250 psi (1.7 MPa) to pass the test. It is highly recommended that a 10 foot by 10 foot test area be applied of the entire desired coating system and allowed to cure for no less than 1 month prior to performing an in-situ direct tensile bond test to determine adhesion strength values.

Recommended preparation methods below:

- Steel Shot Blast (Shot size S-230 to S-330 grit recommended): Ideal preparation method for weak concrete surfaces and high build coating systems greater than 20 mils (entire system thickness). Uniformly profile and clean concrete substrates overlapping each pass until white, clean concrete exists. Use magnetic broom to remove excess shot, sweep to remove large debris and vacuum to remove fine dust. Avoid stationary blasting as micro-cracking the concrete surface may potentially cause future coating delamination. Use a vacuumized edge grinder with a diamond cup wheel to prepare hard to reach areas, against transitions, etc.

- Diamond Grind: This method is only recommended for thin-mil coatings (<30 mils of total system DFT) or grind & seal applications. Use 16 to 70 grit metal bond diamonds with an appropriate industrial, weighted head planetary floor grinder to thoroughly profile and remove the substrates surface until uniformly dull. Ideal preparation method for garage floor coatings, retail, residential, many commercial seamless and decorative system applications without constant wheel traffic and total system thickness of less than 30 mils

- Scarify: Ideal preparation method for weak concrete surfaces, previously coated floors, adhesive residues or high build coating systems greater than 125 mils (entire system thickness). Sweep to remove large debris and vacuum to remove fine dust. Scarify to uniformly remove the concrete surface until white. Thoroughly vacuum all dust / debris

- Silicate Contaminate Removal: Green Clean buffered etching compound may be used ONLY as follows:

- Remediation method for removing densifiers/silicates after one of the above mentioned mechanical preparation methods

*Key in all termination points using a diamond cutting blade prior to any above preparation method Sanding & Priming Wooden Substrates – Wood substrates must yield the correct deflection criteria of L / 360 per ASTM C 627 (i.e. Deflection from 300 lbs. concentrated load standard test method). Sand wooden substrates using an appropriate wood floor sander to clean as well as remove existing sealers, paints, wax, etc. until the wood surface is thoroughly clean and absorbent. Vacuum the entire surface, paying close attention to voids, knots and seams between boards to remove all sanding dust and debris. Skim coat the joint seams as well as any holes to seal off voids that could potentially leak. Once cured, sand all patching relatively flush to the surrounding surface, vacuum the entire floor thoroughly then wipe the substrate with a clean microfiber mop to loosen any remaining dust prior to priming with WB ECO PRIME. *DO NOT INSTALL over oil contaminated, dry-rotten, insect damaged or unsound substrates.

Mixing: Mix each component separately for 2 minutes to redistribute the components prior to combining. Volume Mix Ratio:

CLEAR - 1 Part A to 4 Parts B

PIGMENTED – 1 Part A to 4 Parts B plus 5% by volume of WB ECO PRIME

Mix combined components of E4E WB ECO PRIME for 1 to 2 minutes using a low speed (≤ 450 RPM) $\frac{1}{2}$ " drill using a paint mixing paddle in a plastic 5 gallon pail. DO NOT MIX MORE MATERIAL THAN CAN BE USED IN 1 HOUR. If combined mixture is allowed to sit for more than 20 minutes, stir using drill with mixing paddle slowly for 30 to 45 seconds prior to continuing use

Application Temp. Substrate temperature and materials must be maintained between 55°F (12.8°C) to 100°F (37.8°C) with less than 80% Ambient Humidity for 24 hours prior to and 24 hours after installation. Do not install coatings when the Dew point is within 5° of the temperature. Delamination and/or breakdown due to the following causes are examples of substrate contamination:

- AAR (Alkaline Aggregate Reaction)
- ACR (Alkali-Carbonate Reaction)
- ASR (Alkali-Silica Reaction)
- Near Surface ASR (may occur in certain environments which have been topically treated with Sodium Silicates or Potassium Metasilicates)
- Substrate contamination (i.e. Oils, Solvents, PERT, PCB's, Silicone, etc.)

Application

: HORIZONTAL (i.e. Floors) - Once mixed, pour out E4E WB ECO PRIME in a straight bead onto the area to be coated. Either dip and roll with a 3/8" nap paint roller attached to an extension pole or spread the primer with a flat rubber blade squeegee then back roll with a 3/8" nap paint roller and evenly cover the area.

NOTE: Do NOT Mix more Epoxy FW38 than can be mixed, placed, finished and tied into with the next batches within a 45 minute window at 72°F and 50% Humidity. Higher temperatures will reduce this time frame.

VERTICAL - WB ECO PRIME may be applied vertically via sprayer (air or airless), brush or roller (close nap).

NOTE: Individuals sensitive to epoxy should not be present while spray applying this product to avoid a potentially serious allergic reaction. When spray applying, use of a self-contained respiratory equipment (TC 19C NIOSH/MESA) is required of all personnel in the area to avoid inhaling atomized spray and fumes. In all cases, observe OSHA / NIOSH regulations for respirator use (29 CFR 1910.134) whenever a respirator is used. Spray equipment must be equipped with properly working vapor traps and air supply must be dry. In poorly ventilated enclosed areas, a fresh air supplied mask should be worn.

APPLICATION OF SUBSEQUENT LAYERS:

Allow WB ECO PRIME to hard set before proceeding with subsequent layers.

Limitations • Industrial and wheeled traffic / fork lift traffic require a minimum of an ICRI CSP 3 profile is required for mechanical preparation (See Substrate Preparation)

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Important Notice: DO NOT let this product get below 32° F. Product will freeze.

