

# ACID STAIN

## WB 501



### APPLICATION INSTRUCTIONS: ACID STAIN WB 501

#### GENERAL

APF Acid Stain WB 501 is an acidic coloring solution that chemically reacts with concrete and other cementitious substrates to create translucent and variegated color effects. This system is sealed with low-odor, high-performance waterborne epoxy and polyurethane coatings, giving it exceptional durability.

The coloration becomes a permanent part of the substrate and cannot crack or peel. Acid Stain WB 501 gives a unique look that cannot be achieved with conventional polymer and pigment type stains. The material reacts individually with each substrate depending on its available cement content, age and porosity. Considerable variations in color and tone normally result from the use of Acid Stain WB 501, and many special color effects can be achieved using different methods of application.

#### MOISTURE VAPOR EMISSION TESTING

All interior concrete floors are subject to possible moisture vapor emission and/or excessive alkalinity that could ultimately cause coating failure. Prior to application, calcium chloride moisture testing should be conducted according to ASTM 1869-04.

#### SURFACE PREPARATION

Concrete surfaces must be clean and free from any contaminants that will prevent the stain from reacting with the concrete. If the concrete has been power troweled it should be diamond ground or etched to a CSP 1-2. Properly prepared concrete will have the texture of 120-150 grit sand paper.

#### APPLICATION OF STAIN

Since the material is corrosive, all adjacent areas must be protected from incidental contact. Protective gloves and eyewear should be worn. The acid stain may be applied "as is" or reduced with up to four parts water depending upon the depth of color and overall desired effect. The most common dilution is 1-1. Use a wide mouth plastic container for stain reduction.

For application to small areas, pour stain into a plastic dishpan and apply with an 8-12 inch bristle brush. Apply the stain liberally, rotating brush with a circular motion and keeping it in contact with the surface. Work the material until the fizzing stops. Do not spread the material to a new area after fizzing has stopped. Apply more material and work back into the area previously completed. Keep a wet edge. Avoid dripping.

For larger areas, a plastic Hudson-type sprayer should be used. Apply the material to the floor to achieve full wetting, just short of puddles. Remember that more volume of liquid left on the surface creates more depth of color. Material may be left alone after spraying for more variegated tones or lightly scrubbed with a stiff bristled broom to even out the material for a more uniform look.

Allow the stain to dry thoroughly. Dry time depends upon conditions, but is usually 2-5 hours. After surface has dried, scrub a small area with a black pad and water to determine the depth of color. If more color is desired, repeat the stain application one or two more times. A point will be reached where no fizzing will occur and no additional color can be deposited. Allow to dry thoroughly.

#### RINSING & NEUTRALIZING

Remove the residue from the floor by scrubbing with water using a stiff bristled broom or floor machine with a soft brush. Remove the water/residue mixture with an acid-resistant wet vacuum. Neutralize the floor by scrubbing with APF Super Base Neutralizer – 8 oz. to 4 gallons of water. Apply with a plastic sprinkling can. Rinse again with water and allow to dry.

#### APPLICATION OF PRIMER

The primer for this system is Epoxy 200 clear. Apply one coat using a 3/8"-1/2" nap roller. Once the material is mixed, it should be applied at 250-300 sq. ft. per gallon. Special care should be taken to avoid leaving any puddles, as they may remain permanently cloudy. The curing time between coats will be 2-6 hours, depending upon conditions. Do not apply this coating if the relative humidity is higher than 80% or the temperature is below 50 degrees F.

#### APPLICATION OF FINISH COAT

The primer for this system is Polyurethane 501. Apply one coat using a 3/8"-1/2" nap roller. Once the material is mixed, it should be applied at 250-300 sq. ft. per gallon. Special care should be taken to avoid leaving any puddles, as they may remain permanently cloudy. Do not apply this coating if the relative humidity is higher than 80% or the temperature is below 50 degrees F. Allow coating to cure for 48 hours prior to returning to foot traffic and seven days for vehicular traffic.