

## Cement Based Waterproof Coating for Concrete

### 1. Description:

USP™ - 100 ULTRA SEAL is a portland cement based waterproof coating for concrete and masonry substrates. Its physical characteristics are similar to concrete and when applied properly USP™ - 100 ULTRA SEAL will fill and seal voids, cracks and pores, literally becoming an integral part of the wall. USP™ - 100 ULTRA SEAL will withstand heavy climatic environments, standing water, wind driven rain and hydrostatic pressure yet is a micro porous breathable coating. It is also resistant to fungus and mildew growth. USP™ - 100 ULTRA SEAL is a barrier coating and will provide protection against salt spray (chlorides) and acid rain.

### 2. Uses:

USP™ - 100 ULTRA SEAL is applied to above and below grade interior and exterior concrete, precast concrete, stucco, brick or block surfaces. It can be used on any structurally sound concrete or masonry surfaces: vertical, overhead and light traffic bearing horizontal surfaces such as bridges, tunnels, water tanks, foundations, reservoirs, water treatment plants, basements, parapets or building walls. USP™ - 100 ULTRA SEAL can be applied to the positive or negative side waterproofing.

### 3. Surface Preparation:

All surfaces must be clean, free of oil and dirt and be structurally sound. All surface defects must be repaired to prevent “telegraphing”. Allow proper cure time for all patching prior to application.

### 4. Mixing:

USP™ - 100 ULTRA SEAL should be mixed thoroughly, mechanically with a slow speed motor with mixing blade, until all ingredients are uniform. Be careful not to add too much air into the mixture. Blend 3 parts water with 1 part USP™ 600 A/P Bond Enhancer in a container to

make up mixing liquid. 2 gallons of mixing liquid will be required for 50 pounds of USP™ - 100 ULTRA SEAL. 2 gallons of mixing liquid consists of 2 quarts of USP™ 600 A/P Bond Enhancer blended with 6 quarts of water. To increase bonding, tensile or flexural strength reduce dilution of USP™ 600 A/P Bond Enhancer to 1:2, 1:1, or 2:1 dilution ratio for optimal performance. Pour one half of mixing liquid into clean container and begin mixing at slow speed. Add USP™ - 100 ULTRA SEAL and mixing liquid as needed to the mix until a uniform heavy batter consistency is achieved. Stop mixing and allow mixture to thicken for 10 minutes. Remix and add more mixing liquid if necessary to maintain consistency. Pot life is 40 to 60 minutes depending on ambient temperature.

### 5. Color/Packaging:

USP™ - 100 ULTRA SEAL comes in gray or white. Available in five-gallon containers.

### 6. Application:

When applying USP™ - 100 ULTRA SEAL, clean surface of any dirt, mortar spills, paint, efflorescence, or curing compounds. Dampen substrate before application. USP™ - 100 ULTRA SEAL may be brushed, rolled or sprayed. Use sufficient amounts to fill voids and cracks. A cement masonry hand brush or tampico bristle push broom should be used when applying USP™ - 100 ULTRA SEAL. When using brush, strokes should be vertical or horizontal; however, they should be duplicated in order to achieve uniform texture. Allow 12-24 hours between coats of USP™ - 100 ULTRA SEAL. Spraying USP™ - 100 ULTRA SEAL is recommended for large applications with heavy duty spray equipment capable of spraying mastics or cement coatings.

**7. Coverage:**

Approximate coverage rates are given for estimating purposes only. A field test should be done in order to establish actual coverage rates. Apply USP™ - 100 ULTRA SEAL base coats at 2 pounds per square yard. Thickness of two coats should be approximately 1/16” to 1/8”. For high hydrostatic pressure applications over 15 PSI, the base coat should be brushed on at 3 pounds per square yard on the positive side.

**8. Limitations:**

Do not apply USP™ - 100 ULTRA SEAL to previously painted surfaces unless virtually all of the existing paint has been removed. Do not apply when rain is expected within 8 hours. Do not apply to non-porous surfaces such as but not limited to metal, glass, etc. This product is not for use on vehicular traffic bearing surfaces and should not be applied over frost or frozen surfaces. Normal application shall be limited to a temperature range between 45 degrees F and 90 degrees F.

**9. Cleaning Instructions:**

Clean up all equipment with water after use. Any spills or splatters should be washed down with water before mix dries.

**10. Safety Health and Environmental Recommendations:**

Provide proper ventilation. Avoid coating contact with skin and eyes. Use protective goggles and clothing. In case of eye contact, flood eyes with water and call a physician immediately. Wash hands thoroughly with soap and water after handling. Do not take internally. If ingested, call a physician immediately. Read the Material and Safety Data Sheet for USP™ - 100 ULTRA SEAL prior to handling or application as supplied by ULTRA SYSTEM PRODUCTS, (305) 591-8300, Fax (305) 591-8568, email: info@ultrasystemproducts.com.

**11. Warranty:**

ULTRA SYSTEM PRODUCTS (USP™) warrants its USP™ - 100 ULTRA SEAL to be free of defects in materials, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, USP™ makes no other warranty, expressed or implied, including warranties of merchantability and fitness for a particular purpose with respect for USP™. USP™'s sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of USP™ - 100 ULTRA SEAL proved to be defective and USP™ shall not be liable for any loss or damage.

**Technical Data**

TEST	REFERENCE	RESULTS
Compression Strength	ASTM C109	7 days: 4700 psi 28 days: 5200 psi
Tensile Strength	ASTM C190	7 days: 325 psi 28 days: 420 psi
Flexural Strength	ASTM C348	7 days: 375 psi 28 days: 960 psi
Water Absorption	ASTM C67	24 Hours 4.5%
Fungus Growth Resistance (21 days)	Federal Test TT-P-29B	Resistant No Growth
Salt Spray	ASTM B-117	No effect after 300 hours