

# **Specifications**

## **Bone Dry Pro Penetrating Sealer**



### **Description**

Bone Dry Pro penetrating concrete sealer is a permanent, low VOC, cost effective solution to protecting finished surfaces and roofing systems from concrete moisture related issues. Our Pro sealer is a spray on product and can be applied at the time of the concrete pour, to new and existing concrete surfaces, and can be applied underneath or over the surface of any cement based concrete patch. Once applied, Bone Dry Pro penetrates and solidifies to fill the pores below the surface of the concrete slab. This barrier beneath the concrete substrate protects finished surfaces from concrete moisture related issues. Call Bone Dry Products about our 20-year replacement warranty which protects finished surfaces from concrete moisture related issues.

## **Moisture and PH Protection**

Bone Dry Pro protects finished surfaces and adhesives from concrete slabs containing relative humidity (RH) readings reaching 100% as well as calcium chloride readings reaching 25 lbs. Bone Dry Pro also neutralizes high PH in concrete slabs.

## **Roofing System Protection**

Bone Dry Pro protects roofing systems from numerous potential concrete moisture related issues. These concrete moisture issues can include saturating insulation and cover boards, causing adhered systems to delaminate, or increasing the risk of corrosion to metal components. Applying Bone Dry Pro eliminates these concerns by creating a barrier beneath the surface of the concrete.

## **ASTM Standards**

### **Curing Standards**

Bone Dry Pro sealer complies with the following concrete curing standards (All results exceed those of a 7 day water cure):

ASTM C156 - 17 Standard Test Method for Water Loss

**ASTM C39 / C39M - 18** Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

#### **ASTM C1202 - 19**

Standard Test Method for Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration

#### ASTM C309 - 19

Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete

#### **Concrete Moisture Standards**

Bone Dry Pro sealer protects and warrants finishes utilizing the following ASTM standard testing methods to determine limitations for their products:

#### ASTM D1653 - 13

Standard Test Methods for Water Vapor Transmission of Organic Coating Films

#### ASTM E96 / E96M - 16

Standard Test Methods for Water Vapor Transmission of Materials
ASTM F2170 - 19

Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes

#### ASTM F1869 - 16a

Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride

## **Surface Preparation for Existing Concrete**

## **Newly Cured Concrete Slabs**

Bone Dry Pro can be applied to newly cured concrete with no wait time. All construction material and debris (dust, paint, drywall mud, etc.) must first be scraped or broom swept from the surface of the slab. If a slab has received a burnished finish, **Bone Dry's Etch-a**-

**Crete** must be applied or the surface must be mechanically profiled to open the pores of the slab. If major leveling and skim coating is taking place, it must be completed using a cement based product and be completed prior to applying the Pro sealer. If minor patching and skim coating is taking place, it can be completed after the sealer is applied. Gyp-Crete must be skim coated with a cement based product prior to being used with this sealer.

## **Remodeled Concrete Surfaces**

Bone Dry Pro sealer must be applied to a clean, porous concrete surface to penetrate and react to create a strong barrier. Existing concrete surfaces with prior surface coatings must be mechanically profiled with a diamond grinding or shot blasting machine to achieve a clean, porous surface. If major leveling and skim coating is taking place, it must be completed using a cement based product with minimum 4,000 psi at 28 days and be completed prior to applying the Pro sealer. If minor patching and skim coating is taking place, it can be completed after the sealer is applied. Gyp-Crete must be skim coated with a Portland cement based product prior to being used with this sealer. Concrete slabs with known moisture related issues and slabs over 20 years of age must receive a skim coat of cement based concrete prior to applying the Bone Dry Pro

sealer. Contact Bone Dry Products for exceptions to this requirement.

#### **Cracks and Trenches**

Any existing cracks (**expansion joints not included**) with visible gaps must be filled and floated over with cement based patch. Trenches must be floated over the saw cuts 4 inches onto the existing concrete.

## **Equipment and Protection**

## **Protecting Finished Surfaces**

Any finished surfaces such as cabinetry, glass, finished metal surfaces, and finished painted areas must be masked off with plastic up to 2 feet from the concrete to prevent over spray from causing discoloration. Painted areas affected by over spray can be repainted to address the discoloration. If product dries on a finished surface, use a razor blade to lightly scrape the product off the surface and soft scrub to remove the remainder of the product from the finished surface. This method is not guaranteed to return the finished surface to like new condition.

## **Equipment for Application**

Bone Dry Pro Sealer can be applied using a pump or battery powered sprayer with a wide fan tip. Round up and Chapin sprayers are recommended.

### **Applying to Existing Concrete**

In 1,000 to 2,000 thousand sqft sections, apply one coat of sealer so that the slab receives a wet to light cloudy appearance. Let the first coat absorb for **no more than** 10 minutes. Apply a second coat to the section while the first coat is still wet. Only apply a second coat to areas where the sealer has penetrated and the texture of the concrete has become apparent. After a second coat has been applied allow a minimum of 6 hours for the product to dry. Letting the product dry overnight is preferred. Once dry, the slab may have a cloudy appearance or darkened appearance. If a thick white pool gathers and dries in low spots remove the loose dried product by lightly scraping the concrete.

## **Applying at the Concrete Pour**

### **Option 1: Application for Burnished Finishes**

If the slab needs to receive a burnished finish the Bone Dry Pro sealer must be applied during the finishing process. Allow the concrete to harden until the slab can be walked on with only minor indentations in the surface. Spray one coat of Bone Dry Pro sealer liberally in front of the finishing trowels. Concrete can receive a finish trowel immediately after the sealer is applied. Once the sealer is applied continue to finish trowel as needed to achieve desired finish. A curing compound is not required after Bone Dry Pro sealer is applied. If installing finished surfaces less than 14 days after pour contact bone dry for approval.

#### **Option 2: Apply After the final trowel**

Do not use a cure and seal on the slab. Do not burnish the concrete. Slab must be porous enough at the surface after the finish trowel is completed to absorb the sealer. After the final trowel has taken place, allow the slab to dry until it can be walked on without indenting the surface. Apply Sealer in 1,000-2,000 square foot sections. Allow sealer to absorb for 5-8 minutes. After 5-8 minutes apply a second coat in the areas that penetrated into the slab. A curing compound is not required after Bone Dry Pro sealer is applied. If installing finished surfaces less than 14 days after pour contact bone dry for approval.

### Spread

For broom trowel and mechanically profiled surfaces the spread for Pro sealer is 220-300 square feet per gallon. For burnished surfaces where there the slab's pores are opened with **Etch-a-Crete** the spread for Pro sealer is 280-360 square feet per gallon.

### **Adhesives**

## **Approved Adhesives**

Bone Dry Products warrants the bond of the manufacturer's specified adhesive applied to the sealed concrete substrate and therefore must provide approval for the adhesives being applied to the slab. **Contact Bone Dry Products** to receive approval for the manufacturer's specified adhesive being used on a Bone Dry Products warranted project.

### **Adhesive Application**

Remove any construction dust, particles pushed to the surface, and loose product dried on the surface. Low spots where product puddles and dries can be scraped off the surface if loose. Adhesives applied directly to the sealed concrete surface must be applied as per specifications for a non-porous substrate.

### Contact

#### **Bone Dry Products**

9009 58<sup>th</sup> PI Kenosha, WI 53144 262-694-9748

Email: info@bonedryproducts.com

## **Warranty Information**

Please **Contact Bone Dry Products** for details on our project specific 20 year commercial warranty which includes material and labor to replace the adhesive and finished surfaces if there is a concrete moisture related issue.