

BONEdry

Penetrating Permanent Concrete Sealer

Bone Dry Pro Admix TDS



Description

Bone Dry Pro Admix is a colloidal nano-silica, VOC Free, porosity reducing admix for hydrostatic pressure (PRAH) which eliminates the path of moisture vapor transmission (MVRA). Bone Dry Pro Admix protects all types of finished flooring, roofing, resinous materials, and stained concrete from moisture vapor transmission and bonding related issues and eliminates the need for costly and time-consuming onsite moisture testing. Bone Dry Pro Admix does not contain silicates or alkalis and is compatible with both normal and lightweight concrete.

Standards and Performance

ASTM C494	Admix Type	Type S
CRD C48-92	Permiability (ft ³ /sec.)/(ft ² /(ft head/ft))	2.9 x E-12
ASTM D5084	Permeability	2.3 x E-9 cm/s
ASTM C39	Compressive Strength	.5 to 1% increase at 28 days
ASTM C78	Flexural Strength	0.5-1% increase at 28 days
ASTM C138	Unit Weight, Yield and Air Content	No Change
ASTM C143	Slump	0.5" Increase
ASTM C1293	Length Change Due to ASR	63% improvement
ASTM C157	Length Change	6% Improvement of control (-0.031)
ASTM C231	Air Content	0.2% Increase
ASTM C403	Time of Setting	Initial -5 min decrease Final- No Change
ASTM C666	Resistance To Freezing and Thawing	0.8% Improvement
ASTM C1556	Chloride Diffusion	Greater Than 60% Reduction
ASTM G109	Chloride Penetration	30% Reduction, No Failure at 12 Months

Field Qualification Testing

AASHTO T 358 Surface resistivity testing may be completed on 4"x8" cylindrical samples as an alternative to having a Bone Dry Products Representative on site to determine the presence of the Bone Dry Pro Admix in the concrete. If Bone Dry Products determines an issue has occurred with the Bone Dry Pro Admix, Bone Dry Products will apply the Bone Dry Pro Sealer at no additional cost to the owner and with no change to the lifetime warranty. Use of the Bone Dry Pro Admix and Bone Dry Pro Sealer eliminates the need to test for concrete moisture using standard testing methods ASTM F2170 – 19 and ASTM F1869 - 16a.

Product Details

Odor:	Odorless
Appearance:	Translucent brown
Boiling point:	212°F
Ph:	10-12
Flash Point:	non-flammable
Weight:	10.76 Lbs. per gal (1.29 Kg per L)
Shelf Life:	1 year
Stability:	Stable under normal conditions DO NOT FREEZE
VOC:	0

Dispensing Instructions

Bone Dry Pro Admix is applied at a dosage of 8-10 fl. oz per 100lbs cwt. (520-650ml per 100kg cwt). Apply Bone Dry Pro Admix separately from other admix products. When mixing at the plant, Bone Dry Pro Admix is to be added with the tail water. When mixing on site add Bone Dry Pro Admix to the batch and allow the mix to blend a minimum of 7 minutes prior to pouring.

Dispensing Restrictions

- Concrete mix must contain a water to cement ratio of between .31-.53.
- Admix ratio is 8-10 fl. oz per 100lbs cwt. (520-650ml per 100kg cwt) with a dosage range of +/- 3%
- When dispensing the Admix at the plant, apply the admix with the tail water. Apply the product after rinsing the hopper and drum blades with water removing excess cement. Add the admix using a metered pump with a wand to apply the product over the blades and directly onto the concrete batch.
- When Dispensing the Admix on site, apply the Admix to the batch and allow the batch to blend for 7 minutes.
- Shrinkage reducing admixtures, crystalline growth admixtures, and retarding admixtures containing Beta-naphthalene sulfonate are prohibited from being used alongside Bone Dry Pro Admix.

Concrete and Vapor Barrier Requirements

- Poured Concrete must be a minimum of 3" thick. For slabs less than 3" thick contact Bone Dry Products regarding the Bone Dry Pro Sealer.
- Concrete slabs on decks **do not** require a vapor retarder.
- Concrete slabs placed on the ground must receive a vapor retarder conforming to ASTM E1745-17.
- The vapor retarder must be installed below and directly in contact with the concrete slab and following ASTM E 1643-11, ACI 302.2R-06 and ASTM F 710-17 guidelines.
- Granular blotter layers are prohibited from being used during the concrete pour.

Curing

Bone Dry Pro Admix is compatible and works alongside all curing compounds. It's recommended to cure concrete slabs using ACI 302.2R-06 curing methods or using dissipating curing compounds. Permanent cure and seal products are not recommended to be used when installing adhered flooring systems over the concrete slab.

Adhesives

Apply adhesives as per adhesive's specifications for a non-porous substrate. Bone Dry Products warrants the bond of the manufacturer's specified adhesive being applied to the concrete substrate. Concrete substrates must be prepped in accordance to the adhesive manufacturer's requirements prior to application of the manufacturer's adhesive. **Contact Bone Dry Products** to receive approval for the manufacturer's specified adhesive being used on a Bone Dry Products warranted project.

Resinous Coating Systems

Bone Dry Pro admix is compatible with all resinous coatings. Concrete slab must be mechanically profiled to a CSP 3 prior to applying resinous coating systems.

Warranty Information

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

Contact

Bone Dry Products

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