



IPA SYSTEMS

DRYCON

Cementitious Crystalline Waterproofing Kit



IPA SYSTEMS

QUALITY PRODUCTS FOR THE CONCRETE /MASONRY REPAIR INDUSTRY

Description

Drycon is a prepackaged, chemically active cementitious composition designed to protect masonry or concrete from water induced chemical attack, and to stop the passage of water through the material. A two coat application of Drycon is suitable for most interior below grade waterproofing applications. Two coats of Drycon will withstand hydrostatic pressures up to 7 psi (16 ft. of water, 4.9 m), while three coats provide protection to 45 psi (103.8 ft, 31.6 m).

Where to Use

Drycon is used to prevent seepage of water through masonry/concrete under pressure.

Advantages

- ◆ Made in America
- ◆ Double waterproofing protection by chemically sealing the internal structure of the masonry or concrete as well as sealing the surface with a dense, watertight cement coating.
- ◆ Chemically interacts beneath the surface to neutralize salts that cause efflorescence.
- ◆ Comes in Gray or White

Coverage

Coverage is an estimate only, actual coverage will vary depending upon surface roughness and porosity. First coat coverage is usually less than 100 square feet (9.3 m²) per kit, while the second coat is greater. Average coverage for the two coat process is 100 square feet (9.3 m²) per kit per coat of **DRYCON**.

Packaging

Drycon is packaged in 50 lb. (22.7 kg) bags as a kit, and includes a plastic pint (0.5 L) container of IPA Systems' Ipanex complex alkaline earth silicate admixture.

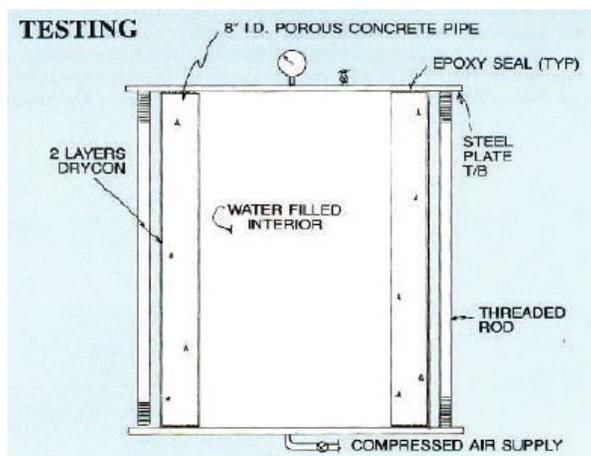
Technical Data

Drycon has been tested by using a modified hydrostatic test method ASTM C 497. Porous pipe was lightly sandblasted to remove dirt and contamination. The pipe wall thickness was 1.5 inches (3.8 cm). Pipe was thoroughly dampened immediately prior to application of the first Drycon layer. Drycon was brush applied to a thickness of 1/16 inch (1.6 mm). Material was mixed to slurry consistency and brushed firmly into the substrate. The second coat (White) was applied 1/16 inch (1.6mm) thick to pre-dampened pipe within 24 hours.

An epoxy gel sealant was applied to the bare ends of the coated pipe. This section was immediately set into the cell restraints and bolts tightened to firm pipe within. Assembly was allowed to cure for 72 hours at 65°F (18.3°C).

Water was introduced into the cell bottom and completely filled the pipe, so that water discharged from the top valve (vent). The air valve was then opened and increased to 10 psi (69.0 kPa) over one hour. Pressure was increased at the rate of 10 psi (69.0 kPa) per day thereafter.

Results: No leaks in **DRYCON** at 25 psi (172.4 kPa), seal failure in pressure cell. Additional ASTM C 497 testing indicates repairs to concrete pipe with no leakage to 30 psi (206.9 kPa) water pressure.



IPA SYSTEMS, INC

P.O. Box 26869- 2745 North Amber Street, Philadelphia, PA 19134

Tel: 800-523-3834, Fax: 215-425-6234, E-mail: info@ipasystems.com, Web Site: www.ipasystems.com



IPA SYSTEMS



IPA SYSTEMS

QUALITY PRODUCTS FOR THE CONCRETE /MASONRY REPAIR INDUSTRY

Surface Prep

Surface to be repaired must be cleaned of any film, scale, loose material, oils, grease and any other foreign material that will prohibit bond. Surface preparation may be accomplished by accepted water blast, mechanical or chemical methods. If acid washing is used, surface must be repeatedly flushed with water to remove all trace of acid. Test with litmus paper to confirm neutral or alkaline conditions. Thoroughly wet surface then allow free water to run off.

DRYCON must be applied while surface is still damp. Failure to prepare surface will prevent successful development of material physical characteristics and will negate guarantee.

DRYCON must not be applied to surfaces from which water is seeping. Cracks, voids, sizable holes, and localized points of leakage must be sealed prior to treatment with **DRYCON**. Do not attempt to bridge cracks in excess of 1/16th inch width. Consult sales engineer or product application guide for other **DRYCON** system product recommendations and suggested repair procedures.

Application

1. Open **DRYCON** kit. Thoroughly shake enclosed plastic bottle until solid matter has liquefied and emulsion is uniform. Mix contents of plastic bottle with 5 1/2 quarts (5.2 L) clean water for each 50 lb. (22.7 kg) Kit. Rinse bottle with mixing water to remove all of the additive.
2. Slowly mix the powdered materials into the water and additive solution. Mix thoroughly to achieve a creamy slurry consistency.
3. Apply slurry within one hour of mixing.
4. Saturate surface with water immediately prior to application of **DRYCON** and allow excess water to run off. This is extremely important: **DRYCON** will not give desired result unless masonry surface is saturated with water.
5. Apply **DRYCON** by brush working material into surface pores. If the **DRYCON** seems too thick for efficient application, add a small amount of water (up to 1/2 quart (0.5 L) per kit) to the mix.
6. Material may alternatively be spray applied (using peristaltic or dual diaphragm pumps), but must be worked into pores with a brush. Spraying tends to bridge pores and hairline cracks. **DRYCON** must be worked into the surface for proper result. Apply **DRYCON** at 1/16" (1.6 mm) thickness per coat.
7. **DRYCON** treatment is normally a two-coat process. Second coat may be applied as soon as first coat has set, (usually about 1 1/2 hours). When unusually great hydrostatic pressures are anticipated, a third coat may be necessary. Two coats will prevent seepage up to 7 psi (16 ft. of water, 4.9 m). Three coats provide protection to 45 psi (103.8 ft. of water, 31.6 m).

Curing:

Curing of **DRYCON** is not necessary in closed underground structures such as manholes and vaults unless strong drafts exist. **DRYCON** must be cured if exposed to strong sunlight, hot or windy conditions. Water mist periodically applied under draped poly or wet burlap will usually provide the best curing conditions.

Limitations

- ◆ Minimum material, surface and ambient temperature must be 40°F (4.4°C) and rising
- ◆ Do not apply to frozen substrates.
- ◆ Will not bridge cracks greater than 1/16" inch (1.6mm).
- ◆ Material cannot be installed on surfaces that are actively seeping water. Contact IPA's Technical department if water seepage is present.

IPA SYSTEMS, INC

P.O. Box 26869- 2745 North Amber Street, Philadelphia, PA 19134

Tel: 800-523-3834, Fax: 215-425-6234, E-mail: info@ipasystems.com, Web Site: www.ipasystems.com



IPA SYSTEMS



IPA SYSTEMS

QUALITY PRODUCTS FOR THE CONCRETE /MASONRY REPAIR INDUSTRY

Clean-up

Cleanup must be done immediately due to the high bonding characteristics of **DRYCON**. Clean equipment with water.

Caution

FOR INDUSTRIAL USE ONLY:

Freshly mixed cement, mortar, grout, or concrete may cause minor skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly with water. If any of the cementitious material gets into the eyes, rinse immediately and repeatedly with water. If irritation persists, obtain medical assistance.

Warranty

This product is warranted and guaranteed to be of good quality. Manufacturer, as its sole and exclusive liability hereunder, will replace material if proved defective. This warranty and guarantee are expressly in lieu of all others, express or implied, including any implied warranty of merchantability or fitness for a particular purpose and may not be extended by representatives or any persons, written sales information, or drawing in any manner whatsoever. While the manufacturer recommends uses for the product based on tests believed reliable, no warranties, express or implied, or guarantee can be given as to particular methods of use or application, nor can performance be warranted, expressly or impliedly, or guaranteed under special conditions. Distributors, salesperson or company representatives are not authorized to extend or vary any warranties or guarantees beyond those outlined herein nor may the manufacturer's or seller's limitation of liability be waived or altered in any manner whatsoever.

IPA SYSTEMS, INC

P.O. Box 26869- 2745 North Amber Street, Philadelphia, PA 19134

Tel: 800-523-3834, Fax: 215-425-6234, E-mail: info@ipasystems.com, Web Site: www.ipasystems.com
