



IPA SYSTEMS

DRYCON SM/SMF

Spryable Waterproof Mortar



IPA SYSTEMS

QUALITY PRODUCTS FOR THE CONCRETE /MASONRY REPAIR INDUSTRY

Description

DRYCON SM and DRYCON SMF are prepackaged, Portland cement mortars supplied in kit form for application by conventional spray equipment. DRYCON SM/SMF technology is based on the DRYCON coating system which has been used successfully since the early 1970's, yet includes current technology to produce the highest quality mortar for spray application in thick sections. DRYCON SM/SMF may also be applied using manual methods. DRYCON SM/SMF is designed for negative side waterproofing and is also suitable for positive side applications. **DRYCON SMF** has the physical characteristics of **DRYCON SM** but includes specially designed nylon fibers. **DRYCON SMF** is a repair mortar for applications requiring additional tensile strength or where shrinkage crack control is warranted.

Where to Use

A structural repair mortar for above or below grade concrete and masonry structures. May be applied to horizontal, vertical or overhead surfaces. Repairs to water and wastewater treatment facilities, manholes, tunnels, utility vaults, elevator pits, marine structures, basement walls, dams, bridges, silos, commercial, industrial and parking structures.

Advantages

- ◆ Made in America
- ◆ No VOC's-inorganic water based system
- ◆ Traffic bearing within 24 hours
- ◆ Resistant to de-icing chemicals and freeze thaw resistant
- ◆ Exceptional workability
- ◆ **SM/SMF** provides outstanding protection to reinforcing steel
- ◆ Includes lightweight aggregate, well suited for overhead or vertical repairs

Coverage

Approximately 0.47 cubic feet per 50 pound kit (22.7 Kg)

Packaging

Drycon SM/SMF is packaged in 50 lb. (22.7 kg) pails, Shelf life: 1 year in unopened pails. Store dry at 40°-95°F (4°-35°C). Condition material to 65°-75°F before using.

Technical Data

Compressive Strength	(ASTM C 109)	1 Day 2,160 psi (14.9 MPa) 7 Days 4,360 psi (30.1 MPa) 28 Days 5,500 psi (37.9 MPa)
Slant Shear Bond Strength	(ASTM C 882)	28 Day 2,460 psi (17.0 MPa)
Splitting Tensile Strength	(ASTM C 496)	7 Day 345 psi (2.4 MPa) 28 Day 415 psi (2.9 MPa)
Flexural Strength	(ASTM C 78)	7 Day 650 psi (4.5 MPa) 28 Day 680 psi (4.7 MPa)
Flexural Strength	(ASTM C 348)	28 Day 785 psi (5.4 MPa) 56 Day 845 psi (5.8 MPa)
Length Change	(ASTM C 157)	0.00 % Change (Moist Cure)
Final Set	Vicat Needle	6 hours

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

Remove all loose material, scale, oils, greases or any other surface contamination. Seal all active water infiltration using “**OCTOPLUG PLUS**” or “**IPANEX R**” methods. Substrate should be saturated surface damp with no free water on the surface. In situations where substrate integrity is poor due to poor quality mortar or hydrogen sulfide environment, finish surface preparation with an application of “**DURIPAL**” liquid surface conditioner. Open thin cracks to 1 inch deep by 3/4 inch wide and undercut edges to provide mechanical key for **DRYCON-SM/SMF** mortar. This mortar is intended for use in static crack situations.

Application

Mixing ratio: **Drycon-SM/SMF** Powder – 50 pounds (22.7 Kg) Working Time: 45 Min. at 70°F (21°C)
Liquid Inorganic Admixture – 16 ounces (0.47L)
Potable Water – 4 quarts (3.8L) Maximum

Wear appropriate skin, respiratory and eye protection per MSDS instructions. Use mechanical mortar mixer or electric drill motor and mixing paddle. Pour 4 quarts (3.8L) potable water into mixing container. Shake 16 ounce (0.47L) container of liquid inorganic admixture included in kit until uniform. Pour liquid admixture into mixing container. Mix liquids in container. Slowly add contents of 50 pound (22.7 Kg) bag of **DRYCON SM/SMF** powder. Continue mixing until uniform in consistency. Let sit several minutes, then mix again for one minute.

Apply **DRYCON SM/SMF** Mortar using gloved hand, trowel or spray equipment (peristaltic or dual diaphragm pumps). When applying by spray, place up to one inch lifts at a time and then double back after several minutes to build thick sections. Spray directly into voids and properly prepared cracks. Follow spray application with flat or pool trowel to level surface. A heavy masons brush may also be used to provide a roughened texture.

Curing of **DRYCON SM/SMF** should be accomplished using the latest ACI Standards for cement based construction.

Limitations

- ◆ Minimum material, surface and ambient temperature must be 40°F (4.4°C) and rising
- ◆ Minimum application thickness is ½ inch (12.7mm)
- ◆ Do not apply to a frozen surface or allow material to freeze
- ◆ Surfaces may be damp, but free of surface water.

Clean-up

Clean up must be done immediately due to the high bonding characteristics of Octoskim. 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 get 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