THE CONCURE GROUP
PERMANENT CONCRETE SOLUTIONS

DERMASHIELD

WATER BASED SEALER

Technical Data Sheet

DESCRIPTION

DermaShield is a water based, pre-mixed liquid designed to penetrate deep into the concrete slab. DermaShield is designed to stop hydrostatic pressure and reduce vapor permeability to protect surface applied coatings and adhesives from the effects of capillary moisture and vapor pressure. The organic and inorganic composition of DermaShield penetrates to become an integral part of the concrete slab leaving no surface film or residue.
DermaShield permanently forms an internal capillary break preventing positive, negative and horizontal moisture intrusion. DermaShield also forms an internal membrane film further sealing the capillary system from moisture migration and water vapor emissions to provide maximum protection.
DermaShield is a white, low viscosity liquid that requires no special handling or equipment.

ADVANTAGES

- Low Odor/Solvent Free/VOC Compliant
- Fast drying
- Deep penetration
- Improved bonding
- Fast installation of floor covering
- Water clean up
- Can be used above and below grade concrete
- Stops concrete from dusting
- Controls high PH
- Improves surface strength
- Can take foot traffic once dry same day

APPLICATIONS

DermaShield is applied to fresh/ green or existing concrete for waterproofing, vapor emission reduction, sealing and weatherproofing substrates.
DermaShield protects floor coverings such as resilient, epoxy, carpet, rubber tile, wood, laminate, cement toppings and other sheet materials from disbonding failure due to concrete slab moisture.

TECHNICAL

Appearance: Milky white to off-white
Odor: Slight Characteristic
Flammability: Non-Flammable
Viscosity: 200 cps
VOC: 5 grams/L
Weight per gallon: 8 pounds 15 ounces
Tensile strength: 435 psi Control block
ASTM D7234 490 psi @300 sq.ft. block
Permeability: 9.4# Control
ASTM F1869 2.3# @300 sq.ft./gallon
Absorption: 11.3% Control mortar
ASTM C413 B 4.2%@300 sq.ft./gallon
Re-Coat Time: 20 to 30 Minutes
Minimum Dry Time: 36 Hours for Mat Test
Foot Traffic: Approximately 6 hours
MVER Reduction CaCl2
1 coat: 11.9# to 1.51# in 1 day
2 coats: 17.91# to 2.49# in 2 days

ASTM	METHOD	RESULTS
F1869	Calcium Chloride @ 300 sq.ft./gal	3.53 pounds/1000 ft2/24 hrs.
C413 B	Absorption	4.2 Percent @300 sq.ft./gallon
D7234	Coatings Adhesion to Concrete	490 psi @300 sq.ft./gal
E96	Vapor Permeability	2.16 Perms

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LIMITATIONS

Do not allow DermaShield to freeze in shipment or storage. Do not apply DermaShield if air or substrate temperature is below 50OF or above 95 OF. Applications must be protected if rain or freezing temperatures are expected within 24 hours after application. Concrete substrate must be clean, sound and free of all foreign matter. Green concrete must be properly finished as instructed. Aged concrete must be properly prepared. Do not apply to concrete with standing water on the surface. Do not allow water to pool on the application for the first 24 hours. Do not sand or grind concrete after DermaShield application.

PACKAGING

55 Gallon Drums
275 Gallon Totes
5 Gallon Pails

SITE TESTING

ASTM F1869 testing of Aged Concrete is conducted prior to floor preparation or DermaShield application.
Please call for technical assistance if moisture vapor emissions are greater than 25 pounds.

PREPERATION

Aged Concrete must be shot blasted using a 330 shot. Curing agents or any other foreign matter must be removed. Sand or small aggregates must be visible (ICRI surface profile CSP 3 – 5).
Grinding with a diamond grinder can be used. Diamond blades should be #20 diamonds. Thoroughly vacuum surface after preparation.

CRACKS AND JOINTS

All cracks, joints and saw cuts should be opened with a crack chaser and vacuum cleaned. Then, apply MVE² Water Based Epoxy System.

EXPANSION JOINTS

Consult with the architect or general contractor for design and instruction.

MIXING AND APPLICATION

Mix DermaShield with a 250 to 400 RPM drill and mixing paddle before using. Do not add anything to thin or entrain air during mixing. A two-coat concrete surface application of DermaShield is recommended using a low-pressure sprayer.

Fresh/Green Concrete:
DermaShield is applied to Green Concrete as soon as the concrete can be walked upon without damage and surface water is not visible. Approximately 6 to 12 hours in typical conditions. Initial application rate is 300 to 400 square feet per gallon. Do not pond DermaShield or oversaturate the fresh concrete surface.
After sweeping or vacuuming the concrete surface, a second DermaShield
application is applied at 300 to 400 square feet per gallon after 7 days for optimum performance. Constantly broom any puddles until DermaShield is absorbed into the slab.

Aged Concrete:
A two coat DermaShield application is recommended to properly prepared Aged Concrete. The initial application rate is approximately 300 square feet per gallon. Absorption rates vary depending on the porosity of the concrete. Evenly distribute DermaShield with a broom to remove excess material and puddles.
The first application should be damp and absorbed in 20 to 30 minutes. After the first coat has been absorbed, but not dry, a second application is applied at a rate of 300 to 400 square feet per gallon. Constantly broom any puddles of DermaShield.

SUBSEQUENT TESTING

Aged concrete applications of DermaShield must dry at least 36 hours after application before mat testing. Cool, damp, high humidity conditions may extend time before initiating moisture testing.
Fresh / Green concrete applications of DermaShield must dry at least 36 hours after the second application (7 Days) before mat testing. Cool, damp, high humidity conditions may extend time before initiating moisture testing.
Test area must be acclimated to conditions intended for installation and use at least 24 hours prior to conducting ASTM F710-11, Section X2.3 Mat Testing for moisture. Do not sand or grind area.
Ensure the mat testing remains in place and undisturbed for 72 hours for proper evaluation.
ASTM F1869 Calcium Chloride testing and ASTM F2659 Electronic Moisture Meter testing are found to be inaccurate at this stage.

LIMITED WARRANTIES

Extended Warranties are available. Written extended warranties are available on a per job basis. Please call for information.

DISCLAIMER:

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to substitution due to supply change shortages without prior notice. Please contact The Concure Group to confirm most up to date product information.