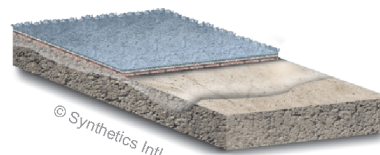




Synthetic10-S™



Synthetic10 is a concrete vapor treatment for newly poured concrete.

Synthetic10 is an environmentally friendly premixed solution of high quality resins used for treating concrete substrates for flooring products. The product is designed to penetrate concrete damp concrete surfaces and embed resins with water resistance properties, coupled with a fast dry time and reduce moisture vapor transmission rate (MVTR).

This easy to use contractor applied product is spray applied to the concrete surface as a replacement for traditional curing and sealing compounds. This allows the 36% solids product to freely penetrate, improve the concrete surface properties and eliminates the need to shot blast, sand or grind the surface. Treated surfaces are dry within 4 hours and remain resistant to water absorption during construction to prevent concrete re-saturation.

Final surfaces are directly compatible with flooring adhesives, primers and is durable as a stand alone floor finish.

ADVANTAGES & BENEFITS

- Versatile range of use on New Concrete Slabs
- Cures, Seals and Vapor Proofs Concrete
- Prevents Water Absorption of slabs during construction
- Laboratory Performance Tests to Ensure High Quality
- Directly Compatible with most Flooring Systems
- No concrete reactions or free lime limitations for performance
- Low Odor, Fast drying for quick in service use
- Easy to apply, spray on application
- Non-Yellowing, UV-Resistant and Durable for Outdoor Environments
- Excellent Penetration and Water-Alkali Resistance
- Meets ASTM C309 Curing
- Meets ASTM C1315 Curing/ Sealing

GREEN ATTRIBUTES

- Zero Hazardous Air Pollutants (HAP's)
- Ultra Low VOC content, 99 g/liter
- Contributes to LEED EQ Credit 4.1 Low-Emitting Sealant
- Reduces Indoor Air Pollution, Low in Odor
- Non-Corrosive, Non-Toxic and No Harmful Components
- No Formaldehyde, Formaldehyde Precursors and Zero- Carcinogens

Synthetic10 is easy to clean up, washes off equipment with water (prior to hardening) and is shipped by common carrier as a non-hazardous material. The product has a shelf life of 12 months and requires no special chemical containment during long periods of storage.

LABORATORY TESTING

ASTM E96 Water Vapor Transmission Rate - WRT

	<u>Synthetic10</u>	<u>Control</u>
Grains/ ft ² / hour	1.0	3.4
Grams/h.m ²	0.7	2.4

ASTM E96 Water Vapor Permeance - WVP

	<u>Synthetic10</u>	<u>Control</u>
Perm (inch-pound)	2.4	8.2
Grams/Pa.s.m ² x 10 ⁸	13.6	47.1
Nanograms/ Pa.s.m ²	136.3	470.5

ASTM D4541 Pull-off Concrete Adhesion

Core#1 - 100% concrete cohesive failure
Core#2 - 100% concrete cohesive failure
Core#3 - 100% concrete cohesive failure

ASTM D1308 Alkali Resistance - 30 DAY EXPOSURE

Alkali of 14pH - 100% Resistant to exposure

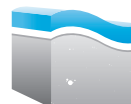
EPA Method 24 Volatile Organic Compound (VOC)

VOC Content: 99 g/liter (or less)

Indoor Air Quality Contributions

LEED New Construction & Major Renovations, Ver 2.2
EQ Credit 4.2: Low-Emitting Materials: Coatings

Laboratory testing available upon request.



Synthetics Intl.
Concrete Moisture Specialists

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NEW CONCRETE DESIGN

To compliment the use of Synthetic10, the following is recommended:

- Water cement ratio of 0.40 to 0.45
- Under slab vapor barrier meeting ASTM E1745 Class A
- Pour the concrete directly on the vapor barrier (outlined in ACI 360R)
- Do not burnish the concrete surface during the finishing process
- Apply Synthetic10 with Synthetics International's technical supervision

CONCRETE PREPARATION

Allow freshly poured concrete to cure for a minimum of 3-8 hours. The surface must be strong enough to resist scratching with a concrete nail and will not mar by walking workmen. Do not apply to burnished concrete or surfaces which have cured to a light gray color. The surface shall be free of oil, dust, foot prints, debris, curing, sealing, chemical hardeners and other potential contaminants. If the concrete cures beyond the application period and/or becomes contaminated, a light mechanical cleaning will be required to expose a clean absorbent surface. Use a high volume blower to remove surface sand and/or rinse the surface with clean water to remove debris.

MIXING

Read all technical data prior to use. Synthetic10 requires agitation before use. Slowly flip the bucket over and allow to settle for 1 minute. Carefully holding the bucket in each hand shake the unit for 10 seconds. If a mixing paddle and low speed (400rpm) drill are available, mix each bucket for 1 minute to form a consist mixture. Mixed product will be a milky white color with a viscosity of less than 200cps. Dispose of product that forms a gel while unit has been opened.

PRODUCT APPLICATION

- In hot weather: Pre-dampen the concrete using an airless sprayer with clean water to cool the surface and promote concrete absorption
- Splash a cup of water on concrete surface and verify absorbency
- Use an electric powered sprayer to promote even, consistent coverage
- A 3/8inch lint free roller may be used to remove product that puddles
- Perform all slab cutting after product has cured for 1 hour
- Spread evenly over the entire surface following specified spread rates
- Typical curing times @ 80°F Degrees:

Foot Traffic: 1 hour Wheel Traffic: 24 hrs. Full Protection: 7 days

SPREAD RATES

Reduction to 5 lbs.1 coat @ 250 - 350 ft²/gallon

Reduction to 3 lbs.2 coats @ 350 - 400 ft²/gallon

Coverage rates may vary based on concrete profile and porosity. Product is laboratory tested to remain resistant to 14pH alkali for all spread rates.

CRACK & JOINT TREATMENT

Seal all cracks and joints with Synthetic10 during the initial application. Cracks may be resealed with Synthetic10 prior to flooring being installed, for greater moisture resistance. All surfaces that require cement patching products will require the use of a non-porous primer before the cement patching product is applied over Synthetic10. Please consult our technical department for approved products.

CEMENT PATCHING

Apply non-porous primer over all cracks, joints and slab imperfections and allow to cure. Apply cement patching products at a minimum required thickness for proper water based adhesive transfer. Allow patching products to cure for a minimum of 24 hours, no exceptions. Do not use gypsum patching products over and/or over product.

MOISTURE TESTING

Apply vapor test kits directly on the Synthetic10 surface as required by flooring system. Use a clean towel to remove dust or debris. Do not grind or sand the surface. Forward all test results to our technical department for warranty registration.

PREPARATION FOR FLOOR COVERINGS

Remove all paint, dry wall debris and foot prints before installing floor coverings using a 3M "green" pad.

VOLATILE ORGANIC COMPOUND - (VOC'S)

Product complies with VOC restrictions in all regions.

Actual VOC = Less than 99g/ liter

LIMITATIONS

The minimum concrete surface temperature should be 45°F (7.2°C) during installation and 24 hours after application. Do not apply if rain, snow or dew point is expected during or after 24 hours of application.

DISTRIBUTION

Synthetics International manufactures and remains the exclusive distributor of its products worldwide. Product is shipped as non-hazardous and available throughout the US and Canada by a network of certified, trained applicators. Contact our technical department for additional information.

CLEANING/ SHELF LIFE

Clean equipment and over spray with water while the product is still wet. Dried product requires mechanical abrasion for removal. Factory sealed units have a 12 month shelf life. Store in a cool dry place.

LIMITED WARRANTY

Synthetics International warrants its products for the lifetime of the originally installed flooring system or fifteen (15) years. Installation instructions and recommendations must be strictly followed in accordance with the terms and conditions of the limited warranty certificate. If product fails due to concrete originated moisture, Synthetics International shall provide the labor and materials to replace the failed and/or defective Synthetics International product and/or damaged flooring system with the same or a comparable product(s) at manufactures discretion. The sole and exclusive remedy due to a breach of this warranty shall be expressly limited to the repair of the defective areas due to the failure of Synthetics International products, and shall expressly exclude consequential damages including, but not limited to damages to the structure or to the contents of structures.



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