



SyntheticX4 GOLD™



100% Solids Low Perms
Longer Pot Life Faster Cure
Lower Cost Best Warranty

Liquid applied floor treatment for dry and damp concrete.

SyntheticX4 **GOLD** is a unique blend of epoxy resins and curing agents for the treatment of dry and damp concrete floor slabs with high levels of vapor, alkali and relative humidity. Product may be applied to freshly poured concrete for mitigating moisture levels, as a stand alone moisture resistant floor coating or to reduce high moisture levels prior to moisture sensitive floor coverings, coatings and underlayment products.

SyntheticX4 **GOLD** 100% solids content is capable of restricting water vapor permeance (ASTM E96) of 0.09 perms, has excellent resistance to 14-pH (alkalinity) exposure and tolerant to relative humidity rates up to 100%RH (ASTM F2170) on properly prepared standard concrete, lightweight concrete and portland based terrazzo floors.

SyntheticX4 **GOLD** is easy to mix, requires no additional additives and may be spread over surfaces using a notched squeegee at various thickness for up to 30 minutes. The product is self-leveling and may be applied to surfaces in a single coat application and has virtually no odor.

ADVANTAGES/ BENEFITS

- Minimal downtime - cures in 6 hours
- Apply to freshly poured concrete after 5 days of cure or floors of any age
- One-coat application process for all floor slabs, grade levels and concrete mixes
- One product for the treatment of moisture vapor, alkalinity and relative humidity
- Tolerant to concrete 14pH exposure and maintains adhesion to damp substrates
- Capable of water vapor permeance (ASTM E96) - **WTP of 0.09 perm**
- Excellent chemical resistance and primer for epoxy coating systems
- Does not contain components to support microbial growth
- Directly compatible with other epoxy, urethane coatings and adhesives
- Self-leveling to smooth floor transitions, seal cracks and joints

TYPICAL APPLICATIONS

SyntheticX4 **GOLD** is suitable and approved for use under resilient, carpet, rubber, wood, ceramic tile, carpet tile, sheet vinyl, luxury vinyl tile, vinyl composition tile, epoxy coatings, urethane coatings, non-porous primers, floor patching and leveling products, decorative overlays and other moisture sensitive products.

FLOORING COMPATIBILITY

SyntheticX4 GOLD Surface: Product may be top coated with epoxy, urethane, terrazzo, carpet, polyurea and epoxy adhesives, urethane adhesives and other products designed to adhere to a non-porous surface.

Pours Substrate Requirements: SyntheticX4 **GOLD** surface is considered non-porous and waterproof. Floor products which require an absorbent substrate, may be coated with an approved non-porous primer and covered with an approved calcium aluminate based cement patching or underlayment compound. Consult our technical department for specific products.

Meets or Exceeds
ASTM F3010-13

LEED CONTRIBUTIONS (1 Point)

New Construction & Major Renovations, Ver 2.2

EQ Credit 4.2: Low-Emitting Materials: Coatings

LEED Schools for New Construction and Major Ren.

EQ Credit 4: Low-Emitting Materials

ZERO VOC's

COVERAGE - ASTM F2170/ ASTM F1869

Relative Humidity 100%/ 30 lbs.1 coat @ 200 ft / gallon

Coverage rates may vary based on concrete profile, cracks, slab imperfection and porosity. Product is resistant to 14pH when applied to a properly prepared substrate.

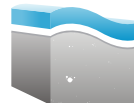
TECHNICAL DATA

Material Type: Two-component epoxy
Final Color: Clear Surface
Weight/ gallon: 9.5 lbs.
Packaging: 2 & 5 gallon kits
Pot Life: 45 minutes at 70 Degrees F
Dry Time: 6 hours (75F / 50% RH)
Finish/ Gloss: High Gloss Finish
Mix Ratio: 10:6 Part A:10 Part B:6
Thinning: Not required or recommended
Applicators: Notched squeegee and 3/8" lint free nap roller
VOC Content: 0 g/liter
Adhesion: Up to 1,000psi per ASTM D7234/ ASTM D4541
Substrates: Concrete floors, walls and portland based terrazzo

*All results subject
to final ASTM testing*

MANUFACTURING/ DISTRIBUTION

Synthetics International remains the exclusive distributor of its products worldwide. Contact our office directly for purchasing requirements.



Synthetics Intl.
Concrete Moisture Specialists

866.646.0356 | www.SyntheticsIntl.com

CONCRETE PREPARATION

Newly poured concrete must cure for 5 days and be structurally sound, clean, free of dust, grease, oil, existing coatings, paint marks, carbonated layers and other potential contaminants. The concrete surface must be shot blast to a CSP#3 profile. Profile or grind concrete near wall base, edges and around columns to open the surface for adhesion. Clean joints and cracks using a chasing blade to remove any debris or previous filler products. Acid etching, sanding discs or grinding surfaces are not acceptable preparation methods. Vacuum the entire surface with an industrial (0.30 micron) unit to remove all surface debris. Do not use clean sweep agents. Floor blowers are not recommended due to possible contamination that falls during the drying process.

High volume floor fans, air movers and ventilation is recommended prior to, during and after application.

CONTAMINATES

Additional testing is recommended on floors that have failed and substrate is unknown. Concrete testing and analyzing for various contaminants such as sulfurous salts, alkali aggregate reaction, alkali silica reaction and any other deleterious compounds that may act as a bond breaker. Contact our technical department for assistance.

MIXING

Read all mixing data prior to use. Do not mix partial units. Pre-mix Part A component until a homogenous (1 minute) mixture is obtained using a low speed drill and jiffy style mixing paddle.

While mixing Part A, slowly pour the entire contents of Part B unit into the center of the Part A unit. Continue mixing batch for 3 minutes, scraping sides of the unit and bottom during mixing. Product is now ready for use.

PRODUCT APPLICATION

Optimum application range is 50 to 95 degrees F and 5 degrees F above dew point.

- Follow all mixing instructions and always verify room temperature/ humidity
- Apply product in accordance with moisture test results and site conditions
- Verify floor surfaces are clean and vacuumed
- Pour product directly on concrete and drag using proper notch applicator
- Spread evenly over the entire surface following specified spread rates
- Use fans to increase air movement after application. Do not disturb product that is soft to the touch or damp to the touch. Allow product to harden prior to covering. Typical cure time at 75 °F / 50%RH - 6 hours (65 °F / 50%RH - 7 hours)

CRACK & JOINT TREATMENT

SyntheticX4 **GOLD** may be used to seal properly prepared and cleaned cracks and joints with less than 1/8" thickness. Larger cracks may be sealed using a fast setting two-component flexible treatment prior to or after the SyntheticX4 **GOLD** application.

CEMENT PATCHING/ LEVELING

Always apply patching products over the SyntheticX4 **GOLD** product.

Allow SyntheticX4 **GOLD** to cure a minimum of 6 hours (75°F) - 7 hours (65°F) or until no soft spots are detected. Immediately apply products to the SyntheticX4 surface that are designed to adhere to non-porous surfaces.

The SyntheticX4 **GOLD** surface is considered non-porous and waterproof. Floor products which require an absorbent substrate, may be coated with an approved non-porous primer and covered with an approved calcium aluminate or portland based cement patching or underlayment compound. Gypsum based products are not recommended by flooring manufactures. A non-porous primer must be used to secure patching and underlayment products. Follow flooring manufactures recommendations for product thickness. Always allow products to properly cure prior to applying flooring adhesives or products.

LIMITATIONS

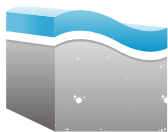
Do not apply if rain, snow or dew point is expected prior to, during and 24 hours after application. All concrete substrates require mechanical preparation to provide a clean, profiled and textured substrate for proper product penetration. Water test substrates for absorption prior to application. A thorough examination of all areas treated with SyntheticX4 **GOLD** is recommended prior to product application. If necessary, imperfections such as pinholes and inadequate coat thickness can be re-coated with a second application of the SyntheticX4.

CLEAN UP

In all cases, consult the Material Safety Data Sheet before use. Clean equipment, drips and over-sprays with acetone while product is still wet. Dried product may require mechanical abrasion for removal.

LIMITED WARRANTY

Synthetic International warrants its products shall be in accordance with published specifications and covenants that, in the event any of its products fail to meet published specifications or published performance standards (meeting all technical requirements), Synthetic International shall only replace those products proven defective. Synthetic International shall not be responsible for consequential damages due to the breach of its warranties. Notwithstanding the foregoing, Synthetic International hereunder shall not exceed the cost of the defective product originally purchased. Please refer to the limited 15 year warranty certificate for specific terms, conditions and requirements. Warranty is only valid when product is applied by an approved Synthetic International installer in accordance with technical requirements. Synthetic International and its technical data sheet makes no other warranties, expressed or implied, and makes no warranty as to the merchantability or fitness for a particular purpose.



Synthetic Intl.
Concrete Moisture Specialists



Toll Free: 866.646.0356

www.SyntheticIntl.com

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