POOL WATER

Swimming Pools New and Old

Flexcrete Waterproofing Bond Coat

What is a bond coat?

There are many types of bond coating solutions and materials on the market today. They cover both liquid membrane type to cementitious overlays. These bond coat materials are designed to improve adhesion of the finish coat and provide more uniform drying and hydration of the final finish.

What makes Flexcrete different?

FLEXCRETE IS A COMPLETE SYSTEM

Flexcrete manufactures 3 site specific products to waterproof virtually any type of concrete, masonry, gunite, shotcrete or stone substrate. These products are:

- Flexcrete liquid polymer admixture
- · Flexcrete white or gray dry goods
- FX-180 stabilizes, densifies and provides chemical resistance to the substrate before and after Flexcrete application.

FLEXCRETE products:

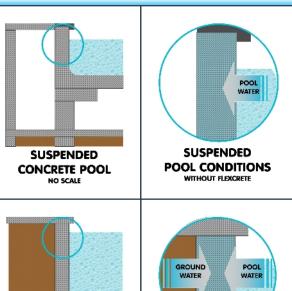
- Stabilizes the substrate
- Creates superior adhesion both mechanically and chemically
- · Allows for substrate movement
- Diminishes chemical attack
- Stops efflorescence
- Waterproofs both in negative and positive side applications
- Superior chemical resistance
- No VOC'S/Environmentally Safe

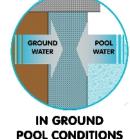
Note: See Technical Data Sheet FC4-2014 for ASTM test data and technical information regarding the Flexcrete Liquid and dry mix. See FX-180 Technical Data Sheet FX4-2014 for ASTM test data and technical information.

FLEXCRETE IS WATERPROOF

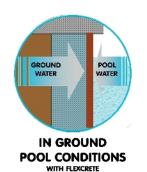
Flexcrete's specifically graded aggregates, cements, and proprietary additives in conjunction with Flexcrete's advanced polymer technology and proprietary mixing technology provides a superior waterproof bond coat for all types of pool finishes. Used on high profile pool projects, tanks, reservoirs as the primary waterproofing system. A waterproof bond coat provides uniform curing on the pool plaster by eliminating water suction of the plaster on the bonded surface.

FLEXCRETE SYSTEM WATERPROOFS POOLS IN AND ABOVE THE GROUND





WITHOUT FLEXCRETE



SUSPENDED

POOL CONDITIONS

WITH FLEXCRETE

FLEXCRETE IS SUPERIOR ADHESION

Flexcrete's advanced chemical engineering in aqueous polymer dispersions, provides superior adhesion to virtually any surface, making Flexcrete the preferred link between substrates. The polymer formulation in combination with sand/cement will:

Increase flexibility

IN GROUND

CONCRETE POOL

NO SCALE

- Increase tensile strength
- Increase impact resistance
- Increase abrasion resistance
- Increase acid resistance
- Increase alkali resistance

IN POOLS FLEXCRETE IS SIMPLE AND EASY TO APPLY:





BRUSH

SPRAY

ROLLER







FLEXCRETE SITE SPECIFIC SWIMMING POOL TECHNICAL DATA Waterproof Bond Coat Page I of 4

NEW POOL APPLICATIONS

NEW POOL APPLICATION GUIDELINES:

SURFACE AREAS TO TREAT

This should include the entire interior of the pool including the top of the wall (if possible) and the tile area to eliminate efflorescence at the tile line.

SURFACE PREPARATION

- I. Clean all surfaces from any type of debris or laitenance (surface particulates) by pressure washing if possible. Specifically if there is rebound left over from shotcrete or gunite type of applications. Vacuum clean all remaining water and residuals from surface. The substrate should be completely sound and free of debris.
- 2. Once clean and dry, apply FX-180 with finely misted spray application using a garden type sprayer, to the concrete substrate at approximately 150 to 200 square feet per gallon. Allow to cure overnight.

MIXING FLEXCRETE

- I. In a clean dry pail add I gallon of Flexcrete liquid. (Note: If the liquid can be kept cool or iced down it will improve workability, pot life and ease of application without the use of chemical retarders.) Liquid quantity is adjusted to the desired viscosity.
- 2. Using a dual bladed mixer as shown slowly add the Flexcrete dry powder (or other mixes) to the liquid while mixing the material. The drill should operate at variable speeds so that proper shear and blending takes place.
- 3. Mix material until a creamy, homogeneous, pancake batter type consistency is achieved. This usually takes 3-5 minutes of continuous mixing.
- 4. Allow material to set or dwell for a period of 5 minutes to allow the powders to completely wet out. Material will thicken and a slight amount of liquid may be added to return to a creamy consistency. Remix material and it is now ready for application.

FLEXCRETE WATERPROOFING APPLICATION

- I. On a clean sound substrate apply potable water to the concrete substrate allowing the moisture to penetrate but not pond. This is considered a saturated surface dry (SSD) condition.
- 2. By brush, roller, trowel or spray apply the first coat of Flexcrete waterproofing in one direction. Fill all bug holes, honeycomb, pits, voids and surface discrepancies. Allow material to cure overnight.
- 3. Using the same techniques and methodology, mix Flexcrete for second coat application.
- 4. Apply the second coat perpendicular or in the opposite direction of the first. Assure that no pinholes exist by second coating the first application. Final application should be broomed or brushed creating a mechanical face for bonding the finish coat or application.

CURE TIME

As a waterproof bond coat Flexcrete can be water tested after 7 days of cure time.

CLEAN UP

All equipment, tools and brushes can be cleaned with water prior to drying. Once cured it is hard, if not impossible to remove.









FLEXCRETE SITE SPECIFIC SWIMMING POOL TECHNICAL DATA New Swimming Pool Application Page 2 of 4

EXISTING POOL APPLICATIONS

EXISTING POOL APPLICATION GUIDELINES:

SURFACE AREAS TO TREAT

This should include the entire interior of the pool including the top of the wall (if possible) and the tile area to eliminate efflorescence at the tile line. If the tile is bonded and sound Flexcrete will adhere to existing glazed tile surfaces in the event that the tile is to be covered.

SURFACE PREPARATION

- I. Sound all surface to assure complete substrate adhesion. Remove any spalls or delaminating materials.
- 2. Apply ETCHEX to existing surface as provided from container with plastic bug or garden type sprayer. Allow to dwell on surface for 10 minutes.
- 3. Apply GELTECH mixed I-I with water by spray, scrubbing with acid brush. This neutralizes the ETCHEX and emulsifies all dirt, oils and greases.
- 4. Clean all surfaces from any type of debris or laitenance by pressure washing. Vacuum clean all remaining water and residuals from surface. The substrate should be completely sound and free of debris.
- 5. Fill in all holes, spalls, and delaminated areas with Flexcrete liquid mixed to provide a thicker version of the material to fill voids. Brush the area with the mixed material scrubbing the surface and then fill and profile to match existing surface plane.
- 6. Once clean and dry, apply FX-180 with finely misted spray application using a garden type sprayer, to the concrete substrate at approximately 150 to 200 square feet per gallon. Allow to cure overnight.

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FLEXCRETE SITE SPECIFIC SWIMMING POOL TECHNICAL DATA Existing Swimming Pool Application Page 3 of 4

Superior Technology...Superior Performance....



Flexcrete Liquid & FX-180 The Technology Workhorse

As a complete system FLEXCRETE offers the contractor, pool builder and remodeler a truly versatile performance package. From surface preparation, to waterproofing, to bond coating, Flexcrete has it all under one roof.

- Our surface preparation materials are the safest on the planet and provide superior performance compared to conventional technology.
- Our FLEXCRETE waterproofing bond coat system has superior flexibility and adhesion, eliminating delamination when applied and finished in accordance with site specific guidelines.
- Our FX-180 product strengthens, stabilizes and unifies concrete prior to FLEXCRETE application, improving adhesion and reducing surface absorption. When applied to new concrete surfaces FX-180 will stop shrink cracking. When applied to cement based pool finishes upon completion of the finish, it will increase acid resistance, staining resistance, alkali resistance and impact from freeze thaw cycles.
- Our FLEXCRETE powders are mixed and blended under stringent conditions and quality control to assure the finest aggregates and materials are utilized to maintain a lifetime of performance.
- Our sales team is serious about providing long term high performance products to increase durability and life expectancy while maintaining simplistic and accurate technical and site specific information to our customers.

Flexcrete Comparison

	FLEXCRETE SYSTEM	Standard plaster/Overlays	Standard Overlays w/Flexcrete System
PRONE TO CRACKING	• /	YES Plaster overlays are not flexible and are prone to cracking in the presence of movement	NO because the Flexcrete liquid imparts flexible qualities to the mix.
WATERPROOF	YES Above & below grade as well as negative & positive sides	· ·	Yes when used with the Flexcrete System.
MUST CURE UNDER WATER	NO All products are self curing	YES The plaster will crack and shrink if not cured under water.	NO Materials become self curing when Flexcrete products are used.
POROUS -SUSCEPTIBLE TO DISCOLORATION	The materials are 100% UV stable and not affected.	YES The cement paste or binder is porous.	Not when FX-180 and Flexcrete liquid are used.
SENSITIVE TO POOL CHEMICALS	NO when treated with FX-180	Yes when the pH is beyond 7.0 - 7.6 in either direction it can cause discoloration, pitting and etching.	No when treated with FX-180
REQUIRES daily brushing for 3-4 weeks after application	NO when treated with FX-180	YES A tedious and laborious process.	No when treated with FX-180
CAN BE TILED OVER	YES Flexcrete provides the proper substrate for all surfacing.	NO	Yes when Flexcrete products are used.
NSF Approved for potable water	YES with Flexcrete dry mix	NO	NO



FLEXCRETE SITE SPECIFIC SWIMMING POOL TECHNICAL DATA

System Analysis Page 4 of 4