



vs. Traditional Swimming Pool Finishes

Warranty

The ecoFINISH[®] aquaBRIGHT[™] and polyFIBRO[®] Pool Finishes warranty is unique to the pool coating industry. Other pool finish warranties generally require the pool owner to maintain perfect water chemistry and be able to provide proof of that perfectly maintained water over the life of the finish, or the warranty is null and void. Cementitious finishes will deteriorate from even mildly poor water chemistry, so it is crucial to maintain a balanced pH.

Our Limited Warranty includes the following: Chemical Resistance, Chalking Resistance, Surface Mildew Growth Inhibition, Crack Resistance, Spall and Delamination Resistance, Organic Stain Resistance.
(Please see www.ecofinishcoatings.com/warranty for the full warranty)

pH Neutral Surface

Simply put, unlike plaster or other cementitious surfaces, aquaBRIGHT[™] and polyFIBRO[®] pool finishes are inert and do not react with the water chemistry. Any chemicals added to the water in a pool finished with ecoFINISH[®] pool coatings adjust the chemistry of the water – and only the water.

A 1991 scientific research report published by the School of Building Construction at the University of Florida stated, “The deterioration of marcite (plaster) has been found to be chemically related and due primarily to leaching of calcium hydroxide (portlandite) from localized areas of pool plaster. Acidic pool water (pH less than 7.0) can wreak havoc on marcite and pool plumbing, resulting in etching and staining. Proposed solutions to control the damage aggressive water can produce include (1) paying careful attention to water chemistry to avoid unbalanced water conditions and (2) providing a chemically inert barrier between the pool water and the marcite surface.”

In 1991 there was no such barrier solution...now, there's ecoFINISH coatings aquaBRIGHT[™] and polyFIBRO[®] for aquatic features.

Use Less Chemicals

Since there is no chemical reaction between the water and the cementitious surfaces causing a constant shift in pH, a pool coated with ecoFINISH[®] pool coatings will use less chemicals. Commercial pool owners have reported up to a 40% savings in annual chemical consumption for the same pool after being finished with our high performance pool finishes.

Easy Chemistry

The target chemical balance for a pool finished in aquaBRIGHT[™] or polyFIBRO[®] is basically the same as a vinyl liner pool. Pool owners will find it very easy to maintain the proper pH and chlorine levels, as the major cause of pH drift has been eliminated. Even the job of adding chemicals is easier, since there is now no reason to pre-dilute the acid by mixing with water prior to pouring into the pool.

Chemical Resistant

aquaBRIGHT[™] and polyFIBRO[®] are manufactured from resin in the same base polymer family as the jugs used for storing pool chemicals. They are both approved for installation in swimming pools and spas heated up to 104° F (40° C), and are resistant to blistering, chalking, peeling, cracking, and other signs of deterioration in normal use.

Scale Resistance

Scale build-up on a pool's surface is usually attributed to two factors: free calcium suspended in the water that attaches itself to the pool finish, and/or calcium leaching down onto the pool finish from water or rock features above the waterline. Water chemistry again plays a critical role in scaling due to free calcium, as a high pH will cause the free calcium to become chemically attracted to the cementitious finish. Regardless of the method of build-up, once deposited onto a cementitious finish the scale becomes chemically and physically bonded with the surface. Since the scale and the finish are both calcium-based, they join and become one. Removal of the scale is only accomplished by acid washing the pool to chemically burn the calcium from the surface; this also removes some of the finish as well. Care must be taken not to over expose the finish to the acid, or too much of the finish will be removed leaving a rough, gritty-feeling surface.

The aquaBRIGHT™ and polyFIBRO® surfaces are neither chemically attractive to calcium, nor do they present a porous physical surface onto which calcium can adhere. Calcium that may have leached down onto the surface from a water feature is not well-adhered, and can either be picked off, or removed using a “stain eraser” on the end of a brush handle when using a proper sequestering agent.

Chip, Flake, Peel, and Chalk Resistant

aquaBRIGHT™ and polyFIBRO® are manufactured using a polymeric resin that is engineered to withstand exterior exposure for many years without any breakdown in chemical structure. Unlike vinyl and fiberglass materials, the base polymer family has been used for decades to provide outstanding performance in exterior applications where the other materials eventually show signs of degradation. ecoFINISH® pool coatings remain a soft, flexible material throughout its life; they are extremely resistant to chipping, flaking and peeling and should remain a single cohesive polymeric layer that remains well bonded to the pool surface when installed according to the guidelines of our patented installation system.

Accelerated QUV Testing / Fade Resistant

In addition to using only exterior grade colored pigments, aquaBRIGHT™ and polyFIBRO® are formulated to provide outstanding U.V. protection and color stability. Real world pool environment testing ranging from the frozen north to very hot desert climates has shown our pool finishes to be fade resistant. Additionally, outstanding results from long duration QUV Accelerated Weathering Testing confirms the ability of aquaBRIGHT™ and polyFIBRO® to withstand the affects of exposure to U.V. sunlight. We are confident that an ecoFINISH® pool coating applied to a pool's surface should look vibrant and colorful for many years to come.

Soft and Easy on the Feet

aquaBRIGHT™ and polyFIBRO® were intentionally engineered to be a soft feeling material. The surface can best be described as an “orange peel” texture, which provides a pleasant feel for a swimmer's feet. Cementitious finishes such as plaster and quartz may begin as smooth finishes, but will degrade over time into rough finishes that can be very abrasive on feet. Pebble finishes, even polished stone versions, are never really easy on the feet due to their bumpy surface.

Slip Resistant Installation Techniques Available

All currently used pool surfaces are naturally slip resistant, with the exception of fiberglass, which tends to feel very slippery, especially on sloped depth transitions. aquaBRIGHT™ and polyFIBRO® pool finishes, with their orange peel surface, are inherently slip resistant as normally applied for pool surfaces. On step treads, bench tops, and beach entries the finishes can be applied in such a way to increase that slip resistance to very safe levels. Following an application at a San Diego water park facility, the finish was tested by a San Diego Health, Safety, and Environmental Engineering facility to determine if the slip resistance (coefficient of friction) met their standard. Utilizing specialized equipment, our coatings were tested in a specific wet condition, where the minimum acceptable slip resistance is equal to that of a wet concrete surface. aquaBRIGHT™ and Polyfibro was measured to be two full points (on their standard scale) over the minimum standard, and was deemed to be very safe for their patrons.

HIGH PERFORMANCE COATINGS

Outstanding Adhesion

Cementitious pool finishes do not provide an impermeable, waterproof surface and for all the unbalanced water chemistry reasons previously discussed, may degrade not only on its surface, but also on its interior. Over time, delamination within a plaster surface can begin to form so that instead of one thick layer – as it was originally applied – the layer has split into two layers: one on top of the other. Water begins to fill this layer and forms “hollow spots”. These may be seen as bulges in the pool’s surface as they begin; left unrepaired they will eventually break-out the top layer of plaster, leaving a distinct area of missing plaster on the pool surface. Pebble finishes have a much lower risk of this type of delamination, but are still susceptible to poor water chemistry degradation as the pebbles are adhered to the surface in a cementitious mortar matrix. aquaBRIGHT™ and polyFIBRO® are predominately impermeable, waterproof surfaces and can provide the barrier required to protect the cementitious base material from degradation due to poor water chemistry. The bond strength of ecoFINISH® coatings to an existing plaster finish has been tested at over 800 psi using ATSM International standard adhesions tests ASTM D7234 ASTM D4541. When the surface finally did release, a cone-shaped plug of plaster an inch thick popped out with the ecoFINISH® pool coating still attached.

New Finish Start Up

With a new aquaBRIGHT™ or polyFIBRO® finish, there is literally nothing to do except “Balance and Swim”. Just fill the pool, balance the water chemistry, and swim in crystal clear water. Pools and spas may even be heated immediately after filling. All other cementitious pool finishes require some type of startup process and wait-to-heat time period. These range from continuous brushing and backwashing to clear the suspended plaster chalk from the water, to “hot starts” requiring acid washing and chemical additives to expose aggregates and create the desired appearance of the finishes. These start up processes are absolutely critical to the final appearance and longevity of the cementitious finish, and may take a week or more to complete. If they are done improperly or neglected even to a slight degree, the finish will be affected. Regardless of who performs the start up, this will determine the appearance and longevity of the surface (mottling, bleaching, over/under exposed) ... and the pool owner is still unable to use their completed pool for over a week.

Repairable

Damage happens. Whether it occurs from natural or human causes, damage to a pool’s surface can happen. These imperfections can range from minor craze cracking, chipping, and abrasions, to delamination, gouges, and structural cracks. Due to the difficulty of repairing a cementitious pool finish, these conditions usually remain unrepaired until it’s time for a complete remodel or resurfacing. aquaBRIGHT™ and polyFIBRO® applied over cementitious or fiberglass surfaces will assist with hiding minor imperfections that may develop in the base surfaces. However, if a pool finished with an ecoFINISH® coating were ever to need repairs, they can easily be accomplished. Minor cosmetic damage is repaired by reheating and melting the material to heal gouges and cuts, and to restore the glossy finish. Major repairs to the pool’s underlying shell would only require the aquaBRIGHT™ or polyFIBRO® finish to be cut back approximately two inches around the damaged area being repaired. Following the structural repair, the ecoFINISH® pool coating surface is reapplied over the repaired area and blended with the surrounding finish utilizing ecoFINISH® equipment.

Water Slide Finish

Although aquaBRIGHT™ and polyFIBRO® in its standard application have a naturally slip resistant property which can be enhanced to provide outstanding slip resistance for steps, it can also be applied to concrete and fiberglass waterslides to create a slippery slide surface. Now waterslides can receive a finish that matches the interior of the pool. Normally, cement water slides require an acrylic sealer or paint to be applied to create the slippery surface which typically only lasts from one to two years. Fiberglass slides exposed to the sun begin to chalk and become less slippery. Our pool coating finishes will retain their color and appearance for many years, and if it were to become less glossy and slippery from all the sliding wear, it can easily be re-glossed or even have additional material added without the need to remove the existing aquaBRIGHT™ and polyFIBRO®.

Use Above the Waterline

Unlike cementitious pool finishes, aquaBRIGHT™ and polyFIBRO® may be used on areas above the waterline and remain resistant to cracking or fading. ecoFINISH® pool coatings are suitable for always wet, sometimes wet, and never wet applications on the pool surfaces and its features. Pool tile can now be eliminated by applying the aquaBRIGHT™ or polyFIBRO® finish up to the coping. Vanishing edges and the backside of vanishing edges can now be finished with our pool coatings to provide a matching finish throughout. Exposed bond beams that are never wet are also candidates for a matching aquaBRIGHT™ or polyFIBRO® surface.

Choice of Colors

aquaBRIGHT™ comes in thirteen different colors ranging from commercial pool white tones to very dark blues and blacks while polyFIBRO® comes in a variety of eight colors. All aquaBRIGHT™, polyFIBRO®, and Commercial Colors finishes are a blend of different colors that create speckled finishes in variations of white, brown, blue or grey/black tones that resemble a granite surface when applied.

Custom Colors

Cementitious pool finishes may be varied with dyes to change the entire surface color of the pool, in only one color. Pebble finishes can utilize different naturally occurring colors of pebbles to create subtle, more subdued shade variations of the pool finish. With ecoFINISH's custom color service you can now have aquaBRIGHT™ or polyFIBRO® made to your order in virtually any color you desire. Just as with interior design choices where material pattern colors are intentionally highlighted throughout a room, now pool designers can choose to accentuate a color or colors in the design scheme for the entire pool, its features, and the surrounding hardscape. Custom colors are available as custom blends with a specifically varied shade/tone, or all the way to wild, solid colors found in water parks and kid's splash pads. Colors may be matched from a physical sample, a color swatch, or RAL color code provided by the customer.

Eco-Friendly Finish

ecoFINISH® Pool Coatings have many attributes that make them Green, Eco-Friendly products:

1. They requires less energy resources to manufacture as compared to cementitious materials.
2. They require less energy resources to transport than cementitious materials. A typical pool requires around 100 lbs of aquaBRIGHT™ or polyFIBRO® material to be shipped, not tonnage as with cementitious finishes.
3. Both requires far less energy resources to install the finish.
4. They will outlast the cementitious finishes and will therefore reduce/eliminate the energy expenditure to remove the old finish, manufacture new material, and install a replacement cementitious finish several times over the life of the pool.
5. They require fewer chemicals over the life of the pool to maintain balanced water chemistry, thereby requiring fewer chemicals to be manufactured and reducing the chemical exposure of the customer's backyard.
6. Although ecoFINISH® does not incorporate recycled materials into the aquaBRIGHT™ and polyFIBRO® products due to strict manufacturing purity requirements, the aquaBRIGHT™ and polyFIBRO® materials are considered recyclable should they ever be physically removed from the pool.
7. Stored properly, ecoFINISH® pool coating powders have an indefinite useful lifetime, and should never require disposing to a landfill.
8. There is no end-of-job leftover waste to be disposed in landfills, as is with every cementitious finish which can be as much as hundreds of pounds.

Stain Resistant ecoFINISH[®] Powder Coatings

aquaBRIGHT™, polyFIBRO®, Commercial Colors, and aquaticLIFE - material is manufactured and processed into a fine powder that is applied by the ecoFINISH® thermal process. As the powder particles pass through the flame, they are heated and softened so that when they strike the pool's surface they immediately adhere and flatten out onto the existing pool surface. As the application process continues, the particles melt, flatten-out, and join other melted particles, flowing together to form a complete layer. There are no pores for algae, calcium, rust, or other staining agents to grab or embed into. Most discoloration that would normally be a permanent stain in a plaster pool should easily brush off the ecoFINISH® pool coating.

Crack Resistant

ecoFINISH® pool coatings are an incredibly strong, yet very flexible polymeric materials. They remain flexible, although to a lesser degree at very cold temperatures. This was tested in Ontario, Canada, with temperatures reaching 40° below zero. Result of the test showed no detrimental effects to the aquaBRIGHT™ finish applied to two steel pool wall panels that were bolted together. No cracking was observed, even over the joined seam of the panels.

During installation, small craze cracks in an existing pool finish will be covered by the aquaBRIGHT™ or polyFIBRO® finishes. Larger cracks, including structural cracking are repaired by industry accepted methods such as epoxy injection, hydraulic cement, and/or staples, and then coated over during the normal ecoFINISH® pool coating finishes installation. Due to the flexibility of the finish, minor cracks which may continue to form should remain hidden below as the aquaBRIGHT™ and polyFIBRO® stretches over the top. Cracks that do appear through any ecoFINISH® pool coating represent potentially serious structural issues, and may require that major repairs be completed on the pool. However, it will be much easier to repair and match the aquaBRIGHT™ or polyFIBRO® finish following the repairs than with other finishes.

Color Uniformity

The aquaBRIGHT™ and polyFIBRO® installation process yields a very uniform color and pattern over the entire interior surface of the pool. The final appearance of the finish following installation is how it will look for many years to come. Even the darkest colors of ecoFINISH® pool coatings will not mottle. Unlike cementitious materials with dyes added during mixing prior to installation, aquaBRIGHT™ and polyFIBRO® pigments are encapsulated in the polymer resin during the manufacturing process, and therefore are protected from the pool chemistry. Dyes that give plaster and other cementitious finishes their color are continuously exposed to pool water chemistry on and below the surface, and the result can be a non-uniform color change that appears as patches or blotches of bleached-out color. This is called mottling, and usually occurs over time, but may also become apparent almost immediately following the new finish start-up process. Mottling is generally more prevalent and easier to distinguish with darker dyed finishes.



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BENEFITS	aquaBRIGHT SMOOTH • DURABLE • ENDURING	polyFIBRO [®] high performance coatings for fiberglass pools	Marcite (Plaster) in white or dyed colors AND Quartz (exposed aggregate)	Pebble and Glass Bead	Paint	Fiberglass Pools	Vinyl Liner
Warranty	10 Years		Varies 0 - 5 Years	5 Years	No coverage for fading, chalking, staining	No coverage for "normal" cracks, fading, blistering	No coverage for fading, chalking, staining
pH Neutral Surface	Yes		Constant pH balancing	Constantly balancing pH	Yes	Yes	Yes
Use Less Chemicals	Up to 40% less than plaster		No	No	Somewhat	Yes	Yes
Easy Chemistry	Easy balance maintenance		Difficult to hold balance	Better than plaster	Perfect alkalinity required	Yes	Yes
Chemical Resistant	Extremely		No	No	Somewhat	Yes	No - can cause bleaching
Stain Resistant	Extremely		No	Somewhat	No	Somewhat	No
Color Uniformity	No color mottling		Very susceptible to mottling	Can show color variations	Variations over time	Yes	Bleaches/fades over time
Chip/Flake/Peel/Chalk/Blister Resistant	Extremely Resistant		Yes	No	No	Cobalt blister issues and chalking over time	Can chalk from UV
Fade Resistant	Yes		No	Yes	No	Somewhat	No
Soft and Easy on the Feet	Yes		Yes - but changes over time	No	Yes - slippery	Yes - slippery	Yes
Slip Resistant	Yes		Yes	Yes	No	No	No
Outstanding Adhesion	Yes		May delaminate over time	Lower risk of delamination	May delaminate over time	Yes	N/A
Start-Up Required	No. "Balance and Swim"		Yes - critical to outcome	Yes - critical to outcome	3 - 5 day cure time without rain	No	No
Repairable	Easily blend repaired area		Patching difficult to match	Patching difficult to match	Repaint every 2 - 4 years	Difficult to match colors	No - replacement required
Water Slide Friendly	Yes - can be applied smooth		No	No	Until chalking/wear begins	Yes	No
Use Above Waterline	Yes		No	No	Will fade differently above/below waterline	Yes	Will fade differently above/below waterline
Custom Colors	Yes - match swatch or code		Color dyes or Quartz media	Can vary media colors/dyes	No	No	No
Eco-Friendly Finish	Yes		No	No	No	Yes	Yes

* Limited manufacturer's warranty. Installation and Defects caused by improper installation is solely the responsibility of the Installer and is not included in the ecoFINISH Limited Manufacturer warranty.