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## PREPARING CONCRETE SURFACES FOR TENNIS COURT COATINGS



The first step in preparing your concrete pad for tennis court coating is to create the proper surface texture. Hopefully your concrete contractor left you with a nice medium broom finish. If that's the case you can skip down four paragraphs to the instructions on acid etch your concrete. Otherwise read on. This is so important we have stressed it in another article titled, "[The Proper Concrete Texture For Tennis Court Coatings](#)", in the hope it won't be missed by our clients surfacing over concrete.

Every year we get dozens of calls from do-it-yourselfers ready to purchase tennis court paint for their new concrete slabs. One of the very first questions we ask is: did your contractor finish your concrete with a broom, leaving some texture on the surface, or is it finished it smooth? Sadly, at least 80% of them report they have a smooth finish. "Smooth" may be the right finish for a warehouse floor, but it is precisely the wrong finish for a slab you plan to apply coatings of any kind, except maybe some type of liquid stain.

Without a good texture to grab onto, tennis court coatings will begin to blister and peel away from the concrete very soon after they are applied. The surface will continue to be a maintenance nightmare until it completely peels off or you remove it. If your slab hasn't been poured, make it very clear to your contractor a light to medium broom finish must be present over the entire slab when it is finished. If he only provides this texture over 90% of the slab you may very well have problems with the 10% he missed.

If your slab was finished smooth you will have to create the needed texture. There are three methods for creating texture on a hardened concrete slab. The one we will discuss in detail is aggressive acid etching, since it is the easiest and least expensive for the do-it-yourselfer.

Even if you have a nicely textured broom finish, acid etching should always be part of the preparation of concrete for sport coatings, or for that matter any paint. Normal acid etching burns a micro fine top layer of the surface away, leaving fresh concrete, free of silt and dust on which the coatings can be applied. The ratio of water to acid for this type of etching is typically 3 or 4 parts water to 1 part acid (phosphoric or muriatic). In this process the acid/water etching solution is spread over the entire slab with a push broom and allowed to stand for 10 minutes, keeping the surface wet until rinsing thoroughly with a garden hose. After the acid/water solution has been rinsed away, it is a good practice to sprinkle baking soda over the wet surface, mixing it with the surface water by spreading it around with a push broom and then rinse thoroughly again. This will neutralize any acid residue you may have missed. Acid residue will stain your finished coatings

wherever it is present so you don't want to leave any behind. A typical tennis court slab will require 6 to 8 gallons of acid and 4 to 6 large boxes of baking soda.

Aggressive acid etching to achieve a textured surface is very similar with three very important variations. First, the water to acid ratio is 1 to 1. The second variation is to allow the acid solution to stand on the court for 30 minutes as opposed to 10, keeping it wet by misting it as needed. These two steps will cause more of the surface to burn away, creating a surface profile as coarse as 40 grit sand-paper. The final variation is to pressure wash the entire surface, with a fan tip nozzle, after rinsing the acid residue away. A fine layer of sludge will be present in the pores of the surface after an aggressive etching. The only way to remove it, leaving the required texture, is to pressure wash it away. We still recommend neutralizing the surface with baking soda after pressure washing.

The other two methods for creating the proper surface texture are shot-blasting and surface grinding with scarifying diamond impregnated teeth. These pieces of equipment are fairly expensive to rent and often not available at many equipment rental stores. If you decide on either of these methods the same objective applies. You must achieve a surface profile at least as rough as 40 grit sand-paper for the tennis court coatings to adhere properly.

Once the proper texture has been achieved you are ready to apply EnviroBond Concrete Adhesion Promoter. EnviroBond is a clear-drying latex polymer that soaks into the concrete surface, improving the adhesion of the other coating products applied for the finished court surface. EnviroBond should be rolled on in one thin, even layer, using a ½ inch nap paint roller cover. It should be applied to dry concrete one hour before applying the first coat of EnviroFill, EnviroCoat or EnviroCushion. You should only apply EnviroBond on areas you plan to coat that day with a first coat. There is no time limit on applying successive coats but you must apply the first coat the same day you apply EnviroBond. EnviroBond will begin to turn hard and slick after 12 hours, losing much of its adhesion promoting properties. Left exposed for too long it will actually become an anti-bonding agent.

You are now ready to apply the remainder of the Environmental Sport Coating system. Two coats of EnviroCoat Textured Tennis Court Color would typically be applied over the EnviroBond. Please call us if you have any questions: (404) 915-8352.