Instructions for using Pond Shield

V16.11.20

*Note: Instructional supplements can be found here:
https://www.pondarmor.com/instructional-supplements

Minimum Surface Preparation Techniques for any Application

- Concrete – Grind any rough areas smooth. Acid etch with 1 part muriatic acid and 3 parts water, rinse and let dry
- Block or brick – Acid etch with 1 part muriatic acid and 3 parts water, rinse and let dry. Ensure that smooth brick has been abraded to feel like 80-grit or 60-grit sandpaper
- Polished stone – resurface the stone by means of grinding to give the stone a 60-grit sandpaper rough feel
- Painted surface – best results can be achieved by removing all of the old existing paint. Any remaining paint that will not come off needs to be sanded with 60-grit sandpaper
- Fiberglass – sand with 60-grit sandpaper and wipe clean. If possible, further clean the sanded surface with an automotive wax and grease remover
- Non treated metals – (steel, aluminum, iron, etc.) sand with 60-grit sandpaper, wipe clean and prime with a self-etching primer
- Treated metals – (galvanized metals) sand with 60-grit sandpaper, wipe clean and etch with full strength white vinegar, wipe clean and prime with self-etching primer
- Glazed tile and stone – remove all of the glaze surface, rough up with 60-grit sandpaper or grinder, wipe clean
- Non glazed tile – sand with 60-grit sandpaper, wipe clean
- Rock and stone – acid etch with 1 part muriatic acid and 3 parts water, rinse and let dry. Ensure that smooth rock has been abraded to feel like 60-grit sandpaper
- Plastics – (ABS and PVC) – sand with 60-grit sandpaper and wipe clean then prime with PVC primer 1-2 minutes prior to applying coating
- Wood – sand with 60-grit sandpaper and wipe clean. Ensure that the wood surface is in a solid structured state.
- Waterfalls – acid etch with 1 part muriatic acid and 3 parts water, rinse and dry. For brushing, use mixing instructions for rough surfaces

Mixing Procedures/Formulations

S T O P

Pay particular attention to the mixing and handling procedures. Failure to follow these instructions can result in the coating setting up prematurely and can get very hot when doing so.

Choose a mixing area that is level and stable. Each kit contains pre-measured amounts of Part A and Part B that are at the proper ratios. The ratio is always 2 parts of A to 1 part of B. Choose one of the recipes below. One if for single coat application (SMOOTH SURFACES) and one is for two coat applications (ROUGH SURFACES). Start by mixing the recipe below in order to gauge how much material can be safely mixed and applied within 20-30 minutes.

Outside temperature, humidity, the surface type, tools chosen for the job and your own skill set will determine how much more can be mixed at a time based on that recipe. If all goes well with the small recipe, feel free to double or triple the recipe as you see fit. Use measuring cups for accuracy.

SMOOTH SURFACE – Applied in 1 10mil thick coat		ROUGH SURFACE – Applied in 2 10mil thick coats
2 cups of Part A		2 cups of Part A
1 cup of Part B		1 cup of Part B
1/8 cup of alcohol (optional)		1/8 to 1/4 cup of alcohol (optional)

The use of alcohol to thin the coating is **optional** but does make the coating easier to roll or brush. The types of alcohol that can be used are: 90% or higher isopropyl rubbing alcohol, denatured alcohol, 180 proof vodka or 180 proof everclear.

Instructions
Cut out wet film thickness card along the OUTSIDE of the black border. The black line is 10mils thick. It is just the black line that you are using to measure with. You fold the gauge in half so it can easily stand upright in the coating.

This gauge is a quick way to judge how thick the coating should be applied. The rougher the surface is, the less accurate the gauge can become. A good rule of thumb is that the finished coating should be at least 3 pieces of paper thick.

Mixing

For best use, the coating should be at room temperature. Use a mix stick to mix either of the aforementioned recipes. If after the initial recipe has been mix and successfully applied, those recipes can be double or tripled depending on how the test mix went. Use a mixing wand on the end of a drill to mix amount larger than either of the aforementioned recipes. Mix in reverse and in slow speed to avoid pulling air into the mix.

DO NOT mix more than you can apply in 20-30 minutes.

NO ALCOHOL USED

1. Pour the premeasure Part A into a paper or plastic mix cup. Pour the premeasured Part B into the same cup and mix.
2. Mix until both components are thoroughly blended (usually about 2 minutes).
3. Scrape the bottom and sides of the mix cup and fold it into the mix
4. Pour the contents of the mix cup either into a large flat plastic paint pan or directly onto the surface to be coted.

YES ALCOHOL USED

1. Pour the premeasured Part B into a paper or plastic mix cup. Pour the premeasured alcohol into the same cup and mix.
2. Mix until both components are thoroughly blended.
3. Pour the premeasured Part A into the mix cup and mix until all is thoroughly blended (usually about 2 minutes).
4. Scrape the bottom and sides of the mix cup and fold it into the mix
5. Pour the contents of the mix cup either into a large flat plastic paint pan or directly onto the surface to be coted.

DO NOT leave the mixed material in the mix cup. It will prematurely cure and can get very hot

Application Process

For best results, the coating should be applied during a time of the day when it is coolest (early morning or very late afternoon). The finished thickness of the coating needs to be 10mils (10 thousandths of an inch) thick which is about the thickness of three sheets of paper (see gauge on previous page). It is important to keep this in mind because coating will only be as strong as it should be if it is applied to this minimum thickness.

The mixed coating should be poured into a large plastic paint pan or directly onto the surface of the project being coated. If pouring on the surface, pour slightly ahead in several puddles to work towards. A variety of tools can be used to move the coating around including a spreader or squeegee, a paint roller and brushes. Smaller width cloth rollers (3-4 inch wide) are best and a nice quality brush will work best. Avoid sponge rollers or brushes and avoid cheap chip brushes. 1/3 of the bristle length should be cut off to slightly stiffen the brush you choose. Acetone can be used to clean tools.

If applying multiple coats, it is best to apply both coats within 1 to 10 hours (the same day). After 10 hours, the previous coat will need to be sanded before a second coat is applied. Most people will apply two coats to the walls or other vertical surfaces and then apply a single 10mil thick coat on the floor and horizontal surfaces so they can walk their way out of the project.

Inspection and Touch up

You MUST inspect and qualify each and every square foot of surface area coated before any water is added to the unit. Inspect only ONE square foot at a time in a methodical manner and touch up any irregularities as needed. Look for dimples, protrusions, gaps, spots of bare substrate or any other blemishes. Bear in mind that sanding will be required if the amount of time between the initial application and the touch up phase has exceeded 10 hours. Use 60-grit sandpaper to scuff if needed. The finished coating should be a minimum of 10 mils thick and look solid with no substrate bleed through. Let the coating cure at least 24 hours before use.