



Pond Armor

Instructions for SMOOTH Surfaces

***NOTE** - Use these instructions if you plan to apply the coating onto a **smooth surface only**, use a **squeegee** and **plan to apply the coating in one single coat**. It is suggested that first time users follow the Rough Surface instructions.

Basic Surface Preparation Techniques For Any Application

- **Concrete** – 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** – if possible remove all of the existing paint, otherwise sand with 60-grit sandpaper and scrape edges to remove any loose paint. Try to minimize the original painted surface as much as possible
- **Fiberglass** – sand with 60-grit sandpaper and wipe clean. If possible, further clean the sanded surface with a wax and grease remover such as those found at an automotive paint and body shop
- **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
- **Glazed tile and stone** – remove all of the glaze surface, sand 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, see mixing instructions for rough surfaces

Mixing Procedures/Formulations

STOP! These instructions are for smooth surfaces only or if you plan to use a squeegee to apply the coating – If the surface is not smooth or you plan to use a paint roller or a paint brush, you must use the Rough Surface instructions. Regardless of kit size, only mix an amount that you can successfully apply within 30 minutes. Choose a mixing area that is level and stable. Each kit is packaged pre-measured (use measuring cups to portion materials out). There are 2 parts in the part A and 1 part in the part B. You only need to measure out 2 parts of part A and one part of part B if you are mixing less than one full kit. When doing so use measuring cups for accuracy. See formulas below (use denatured alcohol or 99% isopropyl alcohol only):

1 full 1.5 quart kit

Up to 60 square feet - 1 coat

One can of part A

One can of part B

¼ cup of alcohol

1 full 1.5 Gallon Kit

Up to 240 square feet - 1 coat

One can of part A

One can of part B

1 cup of alcohol

1 full 3 Gallon Kit

Up to 480 square feet - 1 coat

One can of part A

One can of part B

2 cups of alcohol

If less than one full 1.5 quart kit is being mixed, a paint stick may be used for mixing otherwise use a mixer on a drill. After measuring out each component, mix the measured alcohol with the measured part B until thoroughly blended. Slowly pour the measured part A into the part B/alcohol mixture. Mix for 2 minutes or less slowly and in reverse to avoid incorporating air into the mix. Use a paint stick to scrape the sides and bottom of the mix container, folding the scraped material into the mix. **DO NOT** use a mixing stick to mix with unless you are mixing less than a 1.5 quart kit. **WARNING** – not following the mixing instructions can cause the premature catalyzing of the material which in turn can produce temperatures hot enough to cause burns.

Application Process

Remove the mixture from the container it was mixed in and either pour it into a large plastic paint pan or directly onto the surface it will be applied to. Pond Shield can usually be applied to a smooth surface in one coat using the formulas above. First use a plastic Bondo spreader (these can be found at most auto parts stores) or a stiff rubber squeegee. Pull the coating out to roughly the square footage that the mixed kit should cover. After the coating has been pulled out, use a short nap paint roller to smooth the surface out. At this time the coating should be measured for proper thickness (use the gauge supplied to do so – the black line on the gauge is 10 mils thick - you must cut the excess plastic off of the gauge). The coating should be as thick as the black line on the gauge. Only apply the coating for as long as the coating is workable. It is likely that the surface will have a variety of missed areas after the initial application. This is normal and will be corrected during the inspection and touch up phase.

Inspection and Touch up

Inspection is the key to a perfect waterproof job. You must inspect and qualify each square foot of surface area 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 at this time. Look for dimples, protrusions, gaps, spots of bare concrete or anything else that you are unsure of. Bear in mind that sanding will be required if the amount of time between the initial application and the touch up phase has exceeded 12 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.



Pond Armor

Instructions for ROUGH Surfaces

Use these instructions if you plan to apply the coating onto a **rough surface or smooth surface** if using either of the following tools, a **paint roller or brush** and **apply the coating in two thin coats**. First time users might find it easier to use these instructions.

Basic Surface Preparation Techniques For Any Application

- **Concrete** – 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** – if possible remove all of the existing paint, otherwise sand with 60-grit sandpaper and scrape edges to remove any loose paint. Try to minimize the original painted surface as much as possible
- **Fiberglass** – sand with 60-grit sandpaper and wipe clean. If possible, further clean the sanded surface with a wax and grease remover such as those found at an automotive paint and body shop
- **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
- **Glazed tile and stone** – remove all of the glaze surface, sand 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, see mixing instructions for rough surfaces

Mixing Procedures/Formulations

Regardless of kit size, only mix an amount of material that you can successfully apply within 30 minutes. Choose a mixing area that is level and stable. Each kit is packaged pre-measured (use measuring cups to portion materials out). There are 2 parts in the part A and 1 part in the part B. In the case of rough concrete, you will be mixing HALF of a total kit at per coat as described below. The only difference between each coat will be the amount of denatured alcohol used for thinning the mixture for each coat. It is recommended that you start with the smallest recipe regardless of kit size purchased. See below (use denatured alcohol or 99% isopropyl alcohol only):

1 half of a 1.5 quart Kit Up to 60 square feet each coat

2 cups of part A
1 cup of part B
¼ cup of alcohol - 1st coat
1/8 cup of alcohol - 2nd coat

1 half of a 1.5 Gallon Kit Up to 240 square feet each coat

8 cups of part A
4 cups of part B
1 cup of alcohol - 1st coat
½ cup of alcohol - 2nd coat

1 half of a 3 Gallon Kit Up to 480 square feet each coat

16 cups of part A
8 cups of part B
2 cups of alcohol - 1st coat
1 cup alcohol - 2nd coat

If less than one full 1.5 quart kit is being mixed, a paint stick may be used for mixing otherwise use a mixer on a drill. After measuring out each component, mix the measured alcohol with the measured part B until thoroughly blended. Slowly pour the measured part A into the part B/alcohol mixture. Mix for 2 minutes or less slowly and in reverse to avoid incorporating air into the mix. Use a paint stick to scrape the sides and bottom of the mix container, folding the scraped material into the mix. **DO NOT** use a mixing stick to mix with unless you are mixing less than a 1.5 quart kit. **WARNING** – not following the mixing instructions can cause the premature catalyzing of the material which in turn can produce temperatures hot enough to cause burns.

Application Process

Remove the mixture from the container it was mixed in and either pour it into a large plastic paint pan or directly onto the surface it will be applied to. Pond Shield needs to be applied to a rough surface (or waterfall) in two, thinner coats. Use a short nap roller (or brush for waterfalls) to apply the first coat as early in the day as possible. Bear in mind that the first coat mixture will be thinned more than usual and may look thin and semi transparent. This is normal. At this time the coating should be measured for proper thickness (use the gauge supplied to do so – the black line on the gauge is 10 mils thick - you must cut the excess plastic off of the gauge). Each thin coat should measure out at ½ of the thickness of the black line on the gauge. The second coat should be applied later in the same day when the initial coating has tacked up (tacky enough to touch the coating and not remove it or leave no residual coating on your finger - usually 2-3 hours). The mixture of the second coat is thinned less and will not appear semi-transparent. If the second coat is applied 12 hours or more after the first coat, sanding will be necessary between coats. It is likely that the surface will have a variety of missed areas after the initial application. This is normal and will be corrected during the inspection and touch up phase.

Inspection and Touch up

Inspection is the key to a perfect waterproof job. You must inspect and qualify each single square foot of surface area 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 at this time. Look for dimples, protrusions, gaps, spots of bare concrete or anything else that you are unsure of. Bear in mind that sanding will be required if the amount of time between the initial application and the touch up phase has exceeded 12 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.