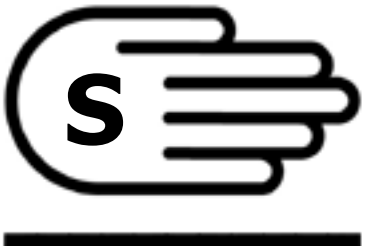

Pond Armor

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 on the reverse side.

Minimum 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, 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

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. 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. Start by mixing the smallest 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 small recipe. If all went well with the small test batch, feel free to double or triple the recipe as you see fit. Use measuring cups for accuracy. Use 90% or higher isopropyl alcohol only to thin the material.

START WITH THIS RECIPE	**Up to 60 sqf - 1 coat 10 mils**	**Up to 240 sqft - 1 coat 10 mils**	**Up to 480 sqft - 1 coat 10 mils**
Up to 30 sqft - 1 coat 10 mils	4 cups of part A	16 cups of part A	32 cups of part A
2 cups of part A	2 cups of part B	8 cups of part B	16 cups of part B
1 cup of part B	1/4 cup of alcohol	1 cup of alcohol	2 cups of alcohol
1/8 cup of alcohol			

When mixing, use a paint stick to mix the smallest recipe only. For any other sized recipe, use a mixing wand on a drill at slow speed and in reverse to avoid incorporating air into the mix. 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. Be sure to scrape the sides and bottom of the mix container and fold that material into the mix before mixing is complete. Mix for a maximum of 2 minutes. Use a paint stick to scrape the sides and bottom of the mix container, folding the scraped material into the mix.

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

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 a minimum of 10 mils. 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 material off of the gauge with scissors 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 and every 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 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.

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

STOP! These instructions are for rough surfaces only or if you plan to use a roller or brush to apply the coating – If the surface is not rough or you plan to use a squeegee to apply the coating, you must use the Smooth Surface instructions. 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. Start by mixing the smallest 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 small recipe. If all went well with the small test batch, feel free to double or triple the recipe as you see fit. Use measuring cups for accuracy. Use Use 90% or higher isopropyl alcohol only to thin the material.

START WITH THIS RECIPE
Up to 60 sqft - 5 mils per coat
2 cups of part A
1 cup of part B
1/4 cup of alcohol (1st coat)
1/8 cup of alcohol (2nd coat)

Up to 120 sqf - 5 mils per coat
4 cups of part A
2 cups of part B
1/2 cup of alcohol (1st coat)
1/4 cup of alcohol (2nd coat)

Up to 480 sqft - 5 mils per coat
16 cups of part A
8 cups of part B
2 cups of alcohol (1st coat)
1 cup of alcohol (2nd coat)

When mixing, use a paint stick to mix the smallest recipe only. For any other sized recipe, use a mixing wand on a drill at slow speed and in reverse to avoid incorporating air into the mix. 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. Be sure to scrape the sides and bottom of the mix container and fold that material into the mix before mixing is complete. Mix for a maximum of 2 minutes. Use a paint stick to scrape the sides and bottom of the mix container, folding the scraped material into the mix.

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

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 a minimum of 10 mils. 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. Using these instructions, Pond Shield is applied in two coats about 1.5 hours apart. **NOTE:** if a second coat is applied after more than 10 hours, the first coat will have to be sanded with 60-grit sandpaper before application. It is best to apply both coats the same day. **NOTE:** The first coat can not be walked on the same day. Because the floor surface is a horizontal surface, the coating can be applied in one coat using the second coat recipe. This will allow the person applying the coating to coat and walk out at the same time. The recipes above dictate the amount of alcohol needed for each coat.

Inspection and Touch up

Inspection is the key to a perfect waterproof job. You must inspect and qualify each and every 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 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.