

# ARMORCLAD EPOXY COATING KIT APPLICATION INSTRUCTIONS

## VERSION A - PRE-TINTED

**READ INSTRUCTIONS CAREFULLY BEFORE MIXING AND APPLYING**

Issues with your order? Please contact ArmorPoxy for assistance: [www.armorpoxy.com](http://www.armorpoxy.com)

---

### **Table of Contents**

APPLICATION NOTES	2
EPOXY KIT CONTENTS	3
INSTALLATION CHART	3
BEFORE YOU START	4
PRODUCT APPLICATION STEPS	5
1. REMOVE FOREIGN SUBSTANCES	5
2. PRESSURE WASH AND ETCH	5
2a. Alternate Prep (Floor Grinding)	5
1. Step One	6
2. Step Two	6
3. TAPE PERIMETER	6
4. FLOOR REPAIRS	6
5. PRIMING	6
6. MIXING AND FIELD TINTING	7
6a. MIXING A & B EPOXY	8
7. PRODUCT APPLICATION	9
7a. Option 1 - Solid Color Application	9
7b. Option 2- Decorative Flecks (Flakes)	9-10
8. CLEAR COAT APPLICATION	10
1) ULTRAGLAZE TOPCOAT	10
2) 2-PART MILITARY GRADE TOPCOAT	10
9. CLEAN UP	11
10. RETURN TO SERVICE	11
11. MAINTENANCE	11
FREQUENTLY ASKED QUESTIONS	11-12
NO PREP PRIMER INSTRUCTIONS	13-14



## **APPLICATION NOTES**

ArmorPox's Armorclad Epoxy Coating Kit should be applied between 50-90°F and when relative humidity is 80% or less. If cooler, add portable electric (not kerosene) heaters to the area to keep air temperatures higher. Material should be stored in a dry area at temperatures between 50-90°F. Do not store in warm/hot areas prior to use, as cooler material has a longer working time. Material must be above 60°F for installation. Install in areas with proper ventilation. Wear safety glasses, protective clothing and rubber gloves for the duration of preparation and application of coatings.

Floors with high moisture levels (damp) must be either pre-treated or covered with special coatings. To test for moisture, use our convenient Moisture Test Kit (visit website for more information) or tape down a sheet of 4' x 4' clear plastic sheeting on all four sides with duct tape. Wait 24 hours. If moisture builds up under the plastic, or if the floor is noticeably darker/damp, the next step would be to use a Moisture Test Kit to determine the actual level of moisture coming up through the floor. Moisture levels in excess of 3.5 lbs/1000 sq ft/24 hours are excessive and may need additional moisture treatment prior to application. If your floor has a high moisture level, please contact ArmorPox for assistance.

**Tire staining is possible** due to the plasticizers in tires. While this is rare for the floor to get tire stains, it can happen. If you want to prevent tire staining ArmorPox carries upgraded topcoats that lower the chance of tire staining. Please contact our support team for best recommendations before you install the floor.

**ArmorClad epoxy kits are meant to be applied to bare concrete only.** Coverage can vary depending on floor condition. If your floor has pitting and irregularities you will not get as much coverage. Certain floors may require the use of optional primer to assure a thick, even coat. If floors have salt or corrosion damage, have been mechanically prepared by grinding or shot blasting, have been previously coated, are 'broom' finished, have patch materials on them, are porous, or in poor condition, you should strongly consider use of the optional primer. Please contact ArmorPox to purchase directly. **DO NOT USE PRIMERS THAT HAVE NOT BEEN APPROVED FOR USE** with this floor coating kit. Please note that some concrete may exhibit inconsistent absorption rates that could cause an uneven appearance or dullness. This problem is due to variations in the concrete when poured or uneven curing, and is not a product or warranty failure. These floors also would require primers.

If your floor has an uneven appearance, or water soaks in inconsistently, then it may need to be primed. Remember, any coating can only stick to what is under it, so if you do not remove an existing coating and it peels, so will the new coating. As noted above if you remove a prior coating we recommend the use of the optional primer.



## EPOXY KIT CONTENTS



\* PLEASE NOTE PRIMER IS OPTIONAL AND NOT INCLUDED UNLESS PURCHASED

\* 2-PART MILITARY GRADE TOPCOAT REPLACES ULTRAGLAZE TOPCOAT. THIS PRODUCT IS NOT FEATURED IN THE PICTURE ABOVE

INSTALLATION CHART			
	DAY 1	DAY 2	DAY 3
INSTALLATION TIMELINE	<b>PREP FLOOR</b> IF ACID ETCHED WAIT FOR FLOOR TO DRY OVERNIGHT	<b>1. OPTIONAL: PRIME</b> WAIT 6-8 HOURS FOR PRIMER TO DRY <b>2. COAT WITH EPOXY &amp; FLAKE</b> WAIT FOR FLOOR TO DRY OVERNIGHT	<b>TOPCOAT</b> WAIT FOR FLOOR TO DRY OVERNIGHT
DRY TIMES	FOOT TRAFFIC: 24 HOURS	LIGHT EQUIPMENT: 48 HOURS	VEHICLE TRAFFIC: 3-5 DAYS
APPLICATION TEMPERATURE	50-90°F	RELATIVE HUMIDITY	80% OR LESS



### BEFORE YOU START

- **SUPPLIES** You need to supply the following items: standard 9" roller frame, painting extension pole, and power drill as these items are not included in the kit. Other suggested items are measuring cups, roller tray (for the topcoat), a plastic or cloth drop cloth to mix on and xylene or similar cleaner and rags for cleaning hands or drips.
- **ETCH** ArmorPoxy's Etch is a mild, powdered citric-based cleaning agent. It is not dangerous, however it is best practice to always wear protective eyewear, rubber gloves, and keep skin covered when applying.
- **OLDER, STAINED, FIBER REINFORCED OR HIGHLY POLISHED CONCRETE** Concrete that has been in service for extended periods of time, particularly garage floors, becomes polished from the repeated traffic in the common areas. Also, impurities and chemicals from tires become trapped in the porous surface. The use of tire shine products like 'Armorall' also creates resistance to most coatings. These conditions may require additional treatment to create a strong bond for ArmorPoxy's coatings.
- **SURFACE PREP IS THE MOST CRITICAL STEP** to assure peak performance of the ArmorClad epoxy kit system. It is important to apply the product to a clean, well-prepared surface. The surface must be free of debris, loose or flaking concrete, dirt, oil, curing compounds, previous coatings, sealers, and loose paint. Even new concrete must be cleaned to remove dirt, dust, and salts that form as the concrete cures.

**DO NOT SKIP THE PREP STEP. IF FLOOR IS NOT PREPPED FAILURE OR UNEVEN OUTCOME CAN OCCUR.**

- **SAFETY** As with any chemicals, avoid contact with skin, avoid inhalation and wear protective clothing, rubber gloves and eye protection. Apply only in well-ventilated areas. Follow all local, state, and federal regulations that may apply to your region. See our website at [www.armorpoxy.com](http://www.armorpoxy.com) for Safety Data Sheet sheets.
- **CLEAN UP** Clean up with xylene (xylol) available at any paint or hardware store.
- **THINNING** ArmorPoxy may be thinned by adding up to 1/2 cup (4 oz) of xylene (xylol) per gallon of mixed materials
- **FIRST AID** For skin contact, wash thoroughly with soap and warm water. In case of contact with eyes, flush with warm water and immediately contact a physician or go to the emergency room of your local medical center or hospital. If swallowed, do not induce vomiting. Contact a physician and the poison control center.



## **PRODUCT APPLICATION STEPS**

### **1. REMOVE FOREIGN SUBSTANCES**

Remove foreign substances. Scrape off any surface debris such as putty, paint, oil or dirt so that the surface is smooth and even. Use running water from a hose with nozzle, or a pressure washer to flush the entire area to remove any loose dirt and debris from the surface. For oil stained areas, use an oil degreaser to help clean the area before proceeding.

**i** Hint. If you do not have a pressure washer, renting one at a local home center or paint/hardware store makes this job much easier, faster, and will get the floor cleaner.

### **2. PRESSURE WASH AND ETCH**

Add the ArmorPoxy Powdered Etch to 2 - 4 gallons of warm water in a pail and mix for approximately 30 seconds - 1 minute until powder is completely dissolved.

- 1lb of powdered etch concentrate requires 2 gallons of water
- 2lbs of powdered etch concentrate requires 4 gallons of water
- Note: Adding more water will dilute etch concentrate. For stronger etching solution, use less water

Wash the floor down first. While the floor is wet, spread the mixed etching solution over the area to be coated with the aid of a broom or mop and allow it to soak in for approximately 10 minutes. You may notice some slight foaming or bubbling which is normal.

While the solution is soaking, scrub the floor with a bristle-type broom or scrub brush on a stick. Rinse the entire surface with plenty of fresh, clean water to remove all of the spent solution, and to remove emulsified oils and grease as well as any loose dirt or debris.

**i** Hint: Wet Down your driveway or planted areas with a hose first before rinsing out the etch solution. This helps to protect any minor etching from occurring to an area where you don't want etching to occur.

**i** Hint: Sweep off any puddles of water with a clean broom prior to beginning the installation. After removing the standing water the floor should be clean. If it does not appear to be clean or appears to be saturated with oils, then you must repeat the surface prep instructions above or use a commercial degreaser. A wire brush may be needed for extreme areas. Begin installation when the concrete surface is clean and dry to the touch and has 'whitened' back. This normally occurs overnight but can take longer based on temperature and humidity. Do not coat a damp or wet floor, as bubbling from evaporation could occur.

#### **2a. Alternate Prep (Floor Grinding)**

You can also prep your floor by using a 'diamond floor grinder', rented 'Diamabrush Tool', or concrete floor sander which are available at local tool rental stores. (Wood sanders will not work on concrete) This method also works very well to remove existing paints, coatings, and sealers. Make sure that you vacuum any grinded areas well, as grinding and sanding creates a lot of dust. Note that if you do mechanically prepare your floor, you should contact ArmorPoxy to purchase the optional epoxy primer.

#### **1. Step One**

Before cleaning and degreasing as noted in the instructions, these areas should be sanded and brushed to remove the impurities and to create a rougher surface to apply the ArmorPoxy. This sanding can be done with an electric sander/buffer with a medium abrasive pad, or it can be accomplished by hand sanding the areas with medium grit oxide type sandpaper. Please note that standard wood sandpaper or tools do not work properly on concrete. You can also re-etch these areas with acid etch at a higher concentration to achieve desired results.



**i** Hint: When sanding by hand, use a drywall sanding pad and extension pole to simplify the process.

## 2. Step Two

After sanding and brushing with a wire brush, rinse the areas involved to remove all dust and foreign materials. Then proceed with the cleaning and degreasing process described above.

**i** Hint: Test all stained, polished or sealed areas by dribbling water droplets on those areas. If it still beads up, repeat mechanical prep until water beading stops.

## 3. TAPE PERIMETER

Mask off the perimeter with standard masking tape or duct tape to any areas that you don't want to coat, such as perimeter edges and the area extending beyond where the garage door comes down. ArmorClad coating kit is not designed for continuous outdoor exposure and should be terminated at the inside of the garage door and not over the garage exposed apron.

## 4. FLOOR REPAIRS

No liquid coating will 'fix' a floor, so any cracks, divots, spalling, roughness, leveling or other repairs must be done prior to applying the coating. For more information see the online ArmorPox 'Help Center' for the Surface Prep Memo and/or Corroded Floor Bulletin. ArmorPox carries a variety of floor repair products, including Crack Repair Epoxy Putty and Epoxy Mortars. Small cracks may be fixed by using locally-purchased 'Sikaflex brand' caulk or a comparable product. **DO NOT use any silicone caulks or sealers.**

## 5. PRIMING

Priming of your floor will generally always give a better, thicker and more uniform result. While not required in most instances the wide variations of surface types, concrete mixes, concrete age/damage can affect the color and sheen and appearance of your project. Some surfaces if not primed may/can absorb epoxy inconsistently causing the epoxy to soak in at different rates, and causing differences in sheen and appearance. Priming with the Armorclad Primer greatly reduces the possibility that these problems could occur. Priming is strongly recommended or required for highly pigmented or light colors such as beige, white, red, yellow, and off white. If you are in doubt, there is no downside to priming other than the cost of the material, but since primer is much less expensive than epoxy it can end up saving money by not requiring an additional coat of epoxy which may be required under certain conditions. Floors that have been grinded, shot blasted, or were previously coated should always be primed with Armorclad Primer, please contact us for info, priming or technical assistance. **If you purchased the optional primer you would apply this as the first step.** The primer comes in 3 versions, a standard VOC which is a **1:1 mix (orange label)**, and a low VOC version which is a **4:1 mix (dark blue label)**, or our **No Prep Primer** (see pages 14 & 15 for instructions). Primer is packaged as primer and/or Armorpoxy II or ArmorUltra Primer which are the compatible primers for Armorclad. Mix the primer in a bucket at the proper ratio listed on the can based on which version you are using. Mix thoroughly with the included mixer, making sure that there is no unmixed material remaining in the container. Pour onto floor and roll out a nice even thin coat. It is normal to have some un-evenness or blotchiness for this step which will be corrected when the epoxy layer is applied. Allow the floor to dry for a minimum of 6-8 hours or wait overnight before moving onto the next step. **No other prep such as sanding or cleaning is needed to apply the epoxy layer.**

STD VOC **ORANGE LABEL** - 1:1 MIX RATIO

LOW VOC **BLUE LABEL**: 4:1 MIX RATIO



**i** Hint: Allow to cure a minimum of 6-8 hours OR wait overnight for floor to dry To test for dryness put your thumb to the ground. If you can see your thumb imprint then the floor needs more time to dry.

**i** Hint: If you wait beyond 48 hours after applying the primer coat then we STRONGLY suggest doing some light prep before moving onto the next step of applying the epoxy. In order to re prep the floor you can lightly sand it with a sanding pole, vacuum, sweep, and then use denatured alcohol and a microfiber mop to clean off any residual dust that is left behind.

## 6. MIXING

ArmorPoxy's ArmorClad Epoxy is a two component, pre-tinted 100% solids-type industrial grade epoxy resin. It requires thorough mixing of the Part 'A' and Part 'B' components at the proper 2:1 mix ratio for the material to properly harden. Mixing MUST be done by using and attaching the metal mixing tool provided in the kit to a power drill on medium to high speed for 2-3 minutes.

**The Mix ratio is 2 Parts A to 1 Part B and the kit is pre-measured.**

- 3 Gallon Kits contain 2 Gallons of Part A and 1 Gallon of Part B
- 1.5 Gallon Kits contain 1 Gallon of Part A and ½ Gallon of Part B

If you purchased a 3-gallon kit, we do not recommend mixing all of the 2 gallons of Part A and 1 gallon of Part B together at the same time since, when this much is mixed together, it starts an exothermic (heating) reaction, which can cause pre-hardening in the bucket before application. **Generally mixing half of the Part A and half of the Part B is recommended at the maximum.** Remember you can always mix less, but should not mix more than 1.5 gallons at a time (1 Gallon A and ½ Gallon B). Always hold the 2:1 mix ratio for any quantities mixed.

**REQUIRED:** If you purchased more than 1 kit (for example a 600 SF Master kit and a 300 SF Add on Kit) you MUST mix the A (COLORED) portions together FIRST to assure color even-ness. The reason for this is the 100% solids epoxy formulations cannot hold color tolerances between batches like interior latex-type paints so if you don't do this, color variations could occur and **this is not covered under our warranty.** It is ok to expose the A to the air, as hardening does not occur until the part B hardener is added. Keep lid on any unused Part A prior to mixing to keep it fresh, and dust out of it.

**i** Hint: If you desire to 'cut in' corners, or paint along the walls this should be done before coating your floor. You can mix up smaller quantities of the epoxy by simply pouring out what you want into smaller measuring containers and holding the 2:1 mix ratio (2 Parts of A with 1 Part of B).

**i** Hint: If possible, if you are applying during warmer months, keep the ArmorClad materials inside in a cool environment the night before.

**i** Hint: ArmorPoxy ArmorClad kits come packaged in a mixing pail with two short-filled inner jugs

(1 x 2 gallon Part A + 1 x 1 gallon Part B). Please note that the inner jugs are not filled to the top on purpose, however they do contain the correct amount of epoxy. This packaging allows for safe shipment of the materials. We do not recommend mixing all 2 gallons of Part A with the 1 Gallon of Part B at the same time as it will pre harden, and this is not covered under warranty. Please keep in mind the **working time once mixed is approximately 15-25 minutes.**

### 6a. MIXING A & B EPOXY

Rotate and shake the Part A Jug so the colored pigment that has settled at the bottom of the jug is spread evenly in the Part A jug. Next, pour into the mixing bucket the amount of Part A you plan to use and mix with a metal mixer to continue combining the pigment so you have a consistent color.



Pour 2 parts from Part A and 1 part of part B into a larger container or bucket that can hold at least the total amount you are mixing. We STRONGLY recommend mixing up no more than HALF of the contents of each A and B bucket, and then applying to the floor, and then repeating to avoid pre-hardening and having to rush through the project.

**i** Hint: Our packaging always is pre-measured at the proper mix ratio, but we do not recommend that you mix up all of the ArmorPoxy at a time.

**Mix the two components together for 2 to 3 minutes on medium to high speed with the drill attachment, but not any longer.** Move the mechanical mixer up and down and along the sides of the bucket through the contents while spinning the container so that you get ALL of the material mixed, not just the material at the bottom of the pail. Make sure to run the mixer along the sides of the pail too. Be careful to not mix at too high of a speed, which could cause bubbles to form.

**i** Hint: When mixing the Part A and Part B together you will notice 'veins' appear. These veins should dissipate once mixing is complete. Be sure to scrape the sides and bottom of the containers to assure that all the material is properly mixed. Improperly mixed resins will not harden properly or show color variations when applied. If in doubt, mix a little longer. All Armorpoxy products are tested prior to shipping for hardening. Improper hardening is not covered under the warranty as the only thing that can cause this is improper mixing or very high floor moisture levels.

After the components are measured and mixed together you have approximately 25 MINUTES of working time to apply at 70°F. Working times are shorter the warmer it is, and longer if it's cooler. Work diligently and get the mixed epoxy onto the floor. Once the epoxy is on the floor, you'll have more working time than when it's in the bucket due to the floor's temperature. Once the epoxy is out of the bucket and on the floor, work quickly to avoid premature hardening and product failure. Premature hardening is not covered under warranty. You can mix as much or as little of the material as you like, as long as you hold the mix ratio (2:1).

**i** Hint: High Temperatures will shorten the amount of working time

**i** Hint: Do not mix in direct sunlight. Keep mixed and unmixed material in the shade

**i** Hint: Higher ambient temperatures can cause hardening prematurely. Getting the mixed material onto the floor quickly will also help to slow down the curing process and extend working times.

**i** Hint: Armorpoxy's ArmorClad is a 100% solids resin and is a 'thick' coating. If you find that it is too thick to apply due to temperature or other conditions, you can thin it a bit by adding up to 1/2 cup of xylene (also known as xylol) to each gallon. Thinning will enhance workability and working time. Do not over-thin.

**i** Hint: You must mix thoroughly. Make sure to move the mixer up & down throughout the mixture. Make sure to mix along the sides and bottom. After completing mechanical mixing, use mixing sticks supplied to assure no residual un-mixed product remains on sides or bottom. Unmixed material will not harden and could result in needing repairs after application.

## 7. PRODUCT APPLICATION

**ArmorPoxy may be installed as a solid color or with decorative flakes** to provide an attractive, terrazzo-like finish. The clear coat (if used) provides additional significant durability and shine.

### 7a. Option 1 - Solid Color Application

Use the small disposable paint brush to coat edges, corners, and any hard to reach areas. Larger areas should be coated using supplied squeegee and/or a 1/4" non-shedding roller cover on a 9" roller frame along with a sturdy extension pole. If you use the squeegee, then you must 'backroll' with the roller to smooth out any squeegee lines. Pour the ArmorPoxy epoxy onto the floor in a left-to-right pattern in a 'bead', then roll or squeegee out. Applying the mixed material onto the floor directly allows longer working times. The squeegee is also helpful to get the material along the edges of your floor.





**i** Hint: Do not leave mixed material in the bucket or in the sun for extended periods of time.

**i** Hint: Do not use a roller pan for the epoxy step. Pour the mixed materials directly to the floor as the floor is always cooler than the air and it will extend working times.

Before mixing larger mixed amounts of materials, you may wish to mix small quantities of A & B in a coffee-type can or measuring bucket and use a brush for corners, edges, etc. Larger areas should be done with the roller or squeegee, whichever you find easier to use.

**i** Hint: The squeegee is helpful for edges and for spreading out the epoxy, but a roller should be used to make it even and smooth out the epoxy, since no floor is perfectly level.

Apply the epoxy evenly and consistently to the entire area being coated. Be careful to cover all areas and do not leave light streaks or heavily-coated areas. Apply smoothly and evenly. Upon completion the surface should look uniform in color without streaks or heavy accumulations.

## 7b. Option 2- Decorative Flecks (Flakes)

When installing fleck chips, the mixed materials is applied in the same fashion for the solid color application, however, it is done in segments as noted below.

1. Apply the ArmorPoxy solid color evenly with complete coverage to an area that you can easily reach across to toss and disperse the decorative chips, usually a width of about 2-3 feet.

**i** Hint: You can use the **Spike Shoes** supplied to walk on the epoxy while wet to broadcast the fleck chips!

**i** Hint: Separate the mixed flecks into four equal parts and use  $\frac{1}{4}$  for each quarter of your area to be coated. This way you won't run out by over-applying too early in the project.

2. After applying the epoxy to the segment, apply the decorative chips by carefully sprinkling them from a height of approximately three feet and allowing them to randomly 'rain down' onto the wet surface. Do not 'throw' them down, it is better to scatter them in small quantities using an underhand toss, allowing the flecks to 'rain down'. Be careful to not over-apply the amount of chips in any one area. The chips should be applied so that the surface is uniform in the amount, and random in color.

**i** Hint: Don't worry if some of the chips get onto the unpainted part, or if you don't leave an overlap edge for the next section. You can just paint over any stray chips and they will become ingrained in the epoxy.

3. Continue this process until the area is completed with a uniform appearance. Make sure to note how many chips you have for the project and apportion them properly so you don't run short at the end of the project.

**i** Hint: You can practice applying the chips by sprinkling onto a clear plastic sheet, then gather them up to use on the floor.

4. Let dry for 16-24 hours (normally overnight is adequate), then sweep or vacuum up any loose flecks, or flecks that may have fallen onto each other. Please note that when applying this product in very cool temperatures it may take longer for the coating to dry. If this happens, do not worry. Refrain from the next step until the product is fully hardened.



## 8. CLEAR COAT APPLICATION

### 1) ULTRAGLAZE TOPCOAT

The clear protective topcoat (Ultraglaze) is applied after the ArmorClad epoxy is fully dry enough to walk on (normally overnight, but can be sooner depending on temperature or humidity conditions). Open the can, mix well, and apply. For enhanced safety, we recommend using the included anti-slip aggregate Armorgrip (the small white bag). It should be added (mixed in) to the clear coat to reduce the risk of slipping on finished floors that may be exposed to wet, or oily/greasy conditions. Use 1 package per gallon. Slowly pour the contents of the non-skid into the topcoat and mix well to thoroughly suspend in the mixture.

**i** Hint: The aggregate will settle while mixed in the ultraglaze, so periodic stirring to re-suspend the nonskid is required during the application process to assure uniform application of the anti-slip aggregate.

**i** Hint: Ultraglaze topcoat will go on 'milky white' but clear up shortly to a high gloss shine.

**i** Hint: The topcoat should be applied with a roller only from a roller tray. Do not use a squeegee at all for this application

**Please note that if you notice any uneven or problem areas with your application, do not apply the topcoat until you have rectified those issues. Normally topcoat will not 'fix' issues with the epoxy application.**

### 2) 2-PART MILITARY GRADE TOPCOAT

If you have purchased the optional Commercial / Military Topcoat Upgrade, this is a 2 part product that gets mixed at a **2:1 mix ratio**. Mix parts A and B in a similar fashion as the epoxy step, pour in the Ultrawear additive at the rate of ½ can per gallon of mixed topcoat. **STIR AND MIX WELL** to fully suspend the Ultrawear as this additive is a bit 'heavy' and can fall out of suspension, leading to an uneven result. Pour mixed topcoat and additive into roller pan in small quantity and roll onto floor. Repeat mixing to re-suspend the Ultrawear, pour more into the pan and repeat until covered. **THE TOPCOAT SHOULD BE APPLIED WITH A ROLLER ONLY. DO NOT USE A SQUEEGEE AT ALL FOR THIS APPLICATION**

## 9. CLEAN UP

AarmorClad epoxy can be cleaned off hands and other surfaces with xylene (xylol) or similar solvent cleaners before the material begins to harden. Warm soap and water may also be used if the epoxy is still wet. Sticky resin on hands can be removed with mineral spirits or xylene. Fully cured ArmorPoxxy can only be removed with industrial paint strippers available from us, or through mechanical methods such as grinding or sanding. Any leftover mixed materials, paint brushes and roller covers will harden once the material cures and should be disposed of according to your local regulations.

## 10. RETURN TO SERVICE

AarmorClad epoxy coating kit should cure for at least 24 hours before opening the area to foot traffic. Wait 4-5 days before driving across and parking a car on it. Extreme temperatures and humidity levels can dramatically impact curing times. If the floor is not 'rock hard' after 72 hours @ 75°F., then do not drive on it and call for assistance.

**We recommend waiting overnight between coats of primer (optional), epoxy, and topcoats.**



Coverage: When applied to a smooth/dry surface, coverage is approximately 600 sq.ft per 3 gallon kit or 300 sq.ft. per 1.5 gallon kit. Coverage calculated @ 8.3 mils thickness. This is equivalent to 4 layers of standard floor paint. Topcoating adds an additional layer of protection and thickness.

## 11. MAINTENANCE

ArmorPox products are easy to maintain through periodic mopping with a non-bleach household detergent solution and rinsing with clear water. Clear topcoat should be re-applied based on usage, salt/winter exposure, and wear, as part of a regular maintenance program. Armorpoxy sells topcoat alone, please contact us for information.

## FREQUENTLY ASKED QUESTIONS

**My concrete is relatively new, do I still need to clean the floor before applying ArmorPox?**

- Yes, construction dust, drywall paste, and paint splatters can affect the bond. Lime, which is an ingredient of concrete, floats to the top while it cures and must be treated. Scrape foreign substances from the floor and then clean the floor with the etching solution. This is a mandatory step. Skipping the prep step can cause failures.

**My floor is newly-poured, how long do I have to wait?**

- Normally a slab needs 30 days to cure. It can be less or more depending on conditions. Perform a moisture test as indicated in the above instructions.

**Do I have to remove old coatings or paint before I apply ArmorPox?**

- Yes. Pre-existing coatings need to be mechanically removed prior to use of the ArmorClad epoxy kit. The ArmorClad epoxy kit may form a bond on these surfaces (if left untreated) that is stronger than the bond of the old coating on the concrete. This could cause the old coating to pull away from the concrete, leaving an uncoated area. Leaving old coatings untreated can cause flooring failure due to entrapment of moisture. If you are unable to remove the old coating then please contact ArmorPox for recommendations on what to do next. Any previous coating remaining must be sanded or roughed up for proper adhesion. In addition, previously coated floors should be primed with the optional ArmorPox Epoxy Primer to even out porosity and to assure an even finish. Contact ArmorPox to purchase. **Failure to adhere to this can cause coating failure.**

**I have stains on my concrete caused by the tires of my car. Do these areas have to receive special treatment before coating?**

- Tires contain chemicals that leach into the concrete over time. Residual 'tire shine' from car washes also resists coatings. If too many of these substances are trapped in the concrete, then the ArmorClad epoxy kit will not adhere to them and it won't stick. These dark areas should be sanded with a rough sanding pad, scrubbed with a wire brush, and then etched using the supplied Powdered Etch Concentrate. Make sure to rinse and wash the floor thoroughly before coating with new materials.

**I may have a clear sealer on my floor. How can I determine if I need extra surface prep?**

- The easiest way to determine this is to sprinkle water on the questionable areas of your floor. If the water beads, you have a foreign substance that must be removed. Sanding or etching can be used to rectify this problem. Also diluted muriatic acid has been shown to help as well. Test again with water to assure proper sealant removal. Repeat as necessary until no water beading occurs.

**I think I may have a moisture problem, how do I determine that?**

- To test for moisture before you coat, use duct tape to tape down a sheet of 4' x 4' clear plastic. Tape down all 4 sides completely. Wait 24 hours. Check for moisture buildup under the plastic. If moisture builds up then moisture is present in the floor. Contact ArmorPox immediately for next steps before applying new coatings.



**Can I apply multiple coats of ArmorPoxy over a period of time?**

- Yes, no special surface prep is required if the additional coats are applied within 3-5 days. If a longer period goes by, then the area should be sanded lightly to create a rougher surface to which the ArmorClad epoxy kit can adhere to.

**Do I really need to add the anti-slip aggregate to the glaze coat?**

- Any coated surface, especially a high quality smooth surface, can be slippery when wet or when exposed to oils and grease. As a safety feature, we highly recommend that the anti-slip aggregate be added to the final coat.

**I have some cracks in my floor. Should I fill these in before applying the ArmorPoxy?**

- Filling the cracks may yield a smoother, more aesthetically pleasing floor since any liquid coating will not fill in cracks 100%. If you have cracks, our Epoxy Crack Filler kit works very well for hairline and smaller cracks. Urethane or epoxy caulks may also be used. Another idea is to hide the cracks with the decorative chips. Do not use silicone-type caulks or fillers, as they will resist the epoxy.

**How long should I wait between coats and when can I use my garage after final application?**

- We recommend waiting overnight between coats. Once the final coat is applied you can put your belongings back on the floor the following day when the floor is cured enough to walk on. Vehicular traffic and heavy equipment/storage units should wait 4-5 days before being brought back onto the floor.

SOLD BY ARMORPOXY, INC, 888-755-7361

[www.armorpoxy.com](http://www.armorpoxy.com)

[SUPPORT@ARMORPOXY.COM](mailto:SUPPORT@ARMORPOXY.COM)



## **NO PREP PRIMER INSTRUCTIONS**

### **SURFACE PREPARATION PREPARATION**

Protect all surfaces not designated for coating application. Do not apply to surfaces that are frozen, dirty, or have standing water, grease, oil or other contaminants. Intended surfaces must be clean, dry and absorbent. Confirm surface absorbency with a light water spray - intended surface should wet uniformly. If the surface does not wet uniformly, use a recommended cleaner, auto scrubber, power washer or other process to remove surface contaminants. Surface must be clean and dry prior to application.

### **NEW CONCRETE**

Remove all dust, debris, and other contaminants from the surface. **We recommend concrete to cure for 30 days before application.** If concrete is less than 30 days old contact ArmorPoxy for recommendations on specialized solutions.

### **EXISTING CONCRETE**

Intended surface must be clean, dry and structurally sound. Remove any and all contaminants including bond breakers, surface grease and oil, dust and construction debris. For larger surface areas, use an auto scrubber with an appropriate cleaner. Surface must be dry prior to application of Armorpoxy products.

### **SURFACE & AIR TEMPERATURE**

45 - 105F (7 - 40C)

### **EQUIPMENT**

For horizontal substrates, use an acetone-proof pump sprayer with a cone tip. For vertical/upright substrates, use an HVLP spray gun.

### **STORAGE & HANDLING**

Store in a cool, dry place <80F. Always seal the container after dispensing. Published shelf life assumes upright storage of factory-sealed containers in a dry place <80F.

### **PRE-APPLICATION**

Before use, read Preparation, Hazard and Precautionary Statements. ALWAYS TEST using the equipment and procedures prior to starting the job.

### **TYPICAL COVERAGE RATES (SQUARE/FEET)**



Smooth Concrete 500-600 | Concrete Block 200-250 | Broom Finish 250-300 | Concrete Pavers 250-300 Diamond Grind 150-250 | Concrete Slab 250-300 **Coverage rates will vary based on substrate porosity and application method**

### **HORIZONTAL SURFACES**

Ensure surface is free of any dust, debris and other contaminants. Solvent wipe with Acetone prior to application of No Prep Primer. If solvent wipe pad appears black/very dirty after wipe, surface is not clean and must be cleaned with an auto-scrubber and an appropriate cleaner/degreaser. Once surface is clean and dry, No Prep Primer application may begin. Use an acetone proof pump sprayer, ex. Swissmex or Chapin, with a cone tip. Keep the spray tip 18 inches off the ground and apply the product slowly in a circular motion, similar to how a stain is sprayed on concrete. On broom finished, troweled, ground or non-polished concrete, spray at least two coats wet on wet, 3-4 mils WFT each. Apply with a 50% overlap, keeping a wet edge while applying. Observe how the concrete absorbs the first coat for at least 5 minutes. If the surface still looks the same as before the No Prep Primer application and not wet/saturated, additional coats are required in the dry, non-enhanced areas. Concrete must be saturated for No Prep Primer to work properly.

### **APPLICATION**

Once concrete is saturated, wait at least 15 minutes for No Prep Primer to become tacky. Once tacky, No Prep Primer may be over coated with non-water based coatings like ArmorPox Epoxy. Do not apply over coat until No Prep Primer is tacky. Failure to wait until tacky will result in fish eyes, over coat shrinking away from coating perimeter, and poor finish of top coat. Once No Prep Primer is tacky, you have 90 minutes to apply over coat. If overcoat window is missed, screen floor and reapply No Prep Primer.