POLYASPARTIC COATING KIT APPLICATION INSTRUCTIONS

READ INSTRUCTIONS CAREFULLY BEFORE MIXING AND APPLYING

Issues with your order? Please contact ArmorPoxy for assistance: www.armorpoxy.com

🛑***WARNING: ArmorPoxy Polyaspartic is an extremely fast drying coating. Please read directions carefully for proper application.***

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Scan for Installation Video

WARNING: ArmorPoxy Polyaspartic is an extremely fast drying coating. Please read directions carefully for proper application.

APPLICATION NOTES

ArmorPoxy's Polyaspartic 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. Install in areas with proper ventilation. Wear safety glasses, protective clothing and rubber gloves for the duration of preparation and application of ArmorPoxy.

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 (see website/Buy Now Link to order or call), 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 ArmorPoxy for assistance.

ArmorPoxy Polyaspartic Coating is meant to be applied to bare surfaces only. Coverage can vary depending on floor condition. If your floor has pitting and irregularities, coatings will yield less coverage. If your floor is porous, coatings will also yield less coverage. Please be mindful of this when installing and consult with an ArmorPoxy Sales representative if you feel you have a floor that matches the above descriptions.

POLYASPARTIC KIT CONTENTS



**Some kits will come with a tint pack to mix in with Polyaspartic base coat*

INSTALLATION CHART / PHYSICAL PROPERTIES

	DAY 1	DAY 2
INSTALLATION TIMELINE	Prep Floor If acid etched, wait for floor to dry **overnight**	1. Polyaspartic Colored Basecoat & Flake **WAIT 6-10 HOURS** 2. Apply Clear Polyaspartic Topcoat with Non-Skid Additive **Wait 12-24 hours for foot traffic or 48-72 hours for vehicle traffic.**

-**Working Time:** 15 - 20 mins
-**Application Temperature:** 45 - 90 °F
-**Recoat:** Maximum 12 hours at 85 °F
-**Shelf Life:** 12 months

-**Mixing Ratio:** 1:1
-**Humidity:** 75% or less
-**Recoat:** Maximum 24 hours at 72 °F
-**Recommended Thickness:** 5-10 Mils per coat

Drying Times / Cure Schedule

-**Tack Free:** 4-6 Hours -**Foot Traffic:** 12-24 hours - **Vehicle Traffic:** 48 hours+

*The coating can dry quicker than the standard cure schedule in warmer temperature climates or if exposed to the sun.

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BEFORE YOU START

- **SUPPLIES**: painting extension pole, and power drill as these items are not included in the kit. Other suggested items are measuring cups, garbage bags, a plastic or cloth drop cloth to mix on and xylene or similar cleaner and rags or paper towels 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, become 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 ArmorPoxy's Polyaspartic kit. 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.
- **DIAMOND GRINDING** is recommended for optimal surface preparation and best results.

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 for Safety Data Sheet sheets.
- **CLEAN UP** Clean up with xylene (xylol) available at any paint or hardware store.
- **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.

ℹ️ 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.

- 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

1. 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.

2. 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.

ℹ️ 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.

ℹ️ 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.

You can begin installation of coatings when the concrete surface is clean and dry to the touch (typically 24 hours) 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 moisture evaporation could occur.

2a. Alternate Prep (Floor Grinding) **Diamond grinding is recommended for optimal surface preparation and best results.*

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. 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 mechanically prepare your floor, you will open up the pores of the concrete and create a more profiled surface. While this will create a much stronger bond of the coating to the concrete, it may also yield less coverage of materials.

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.

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 ArmorPoxy 'Help Center' for the Surface Prep Memo and/or Corroded Floor Bulletin. ArmorPoxy carries a variety of floor repair products, including Crack Repair Epoxy Putty and Epoxy Mortars. DO NOT use any silicone caulks or sealers.

5. MIXING

ℹ️ **Hint: Working time is very short. You will have 15-20 minutes to roll out the coating before it starts curing. Please work diligently when applying the polyaspartic!**

ArmorPoxy's Polyaspartic Coating is a two component, pre-tinted (if colored basecoat), 80% solids-type industrial grade polyaspartic. It requires thorough mixing of the Part 'A' and Part 'B' components at the proper 1:1 mix ratio for the material to properly harden. Mixing can be done by using and attaching the metal mixing tool provided in the kit to a power drill.

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

- **Each layer is 2 Gallons: 1 Gallon of Part A and 1 Gallon of Part B**

We do not recommend mixing all of the material at once as this will start 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. **Always hold the 1:1 mix ratio for any quantities mixed.**

- ℹ️ 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 polyaspartic by simply pouring out what you want into smaller measuring containers and holding the 1:1 mix ratio (1 Part of A with 1 Part of B).
- ℹ️ Hint: If possible, if you are applying during warmer months, keep the Polyaspartic materials inside in a cool environment the night before. If outside, keep the Polyaspartic buckets in shade.
- Please keep in mind the **working time once mixed is approximately 15-20 minutes. You will need to work FAST to coat the floor properly.**

5a. FIELD TINTING

Some kits may come with a TINT PACK to make the base color. If your kit comes with a tint pack **the part A of the Polyaspartic must be tinted as the first step.** Pour the entire contents of the Part A into the Mixing Bucket, then pour in the entire contents of the tint. Make sure to get all of the tint out of the tint container for mixing into the Part A using the mixing stick. Mix the clear Part A and tint thoroughly to assure color evenness and to move the mixer or mixing stick along sides and bottom to assure no unmixed color. **If you have multiple pails for the base coat with tint packs it's recommended to mix ALL of the tints and Part A's together to ensure color consistency. NOTE THAT CERTAIN COLORS MAY BE SHIPPED PRE-TINTED, SO IF YOUR ORDER IS PRE TINTED YOU CAN SKIP THIS TINTING STEP AND PROCEED.**

5b. MIXING A & B POLYASPARTIC

When applying the colored basecoat, 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 1 part 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.

ℹ️ 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 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.

ℹ️ Hint: When mixing the colored Part A and Part B together you may 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 polyaspartic 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 **15-20 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 material onto the floor. Once the material 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 material 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 (1:1).

ℹ️ High Temperatures will **shorten** the amount of working time
ℹ️ Do not mix in direct sunlight. Keep mixed and unmixed material in the shade
ℹ️ Store Material indoors the night before you plan to coat. This will help to extend working times when applying.
ℹ️ 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.
ℹ️ 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.

6. PRODUCT APPLICATION

ArmorPoxy's Polyaspartic coating may be installed as **a solid color** or **with decorative flakes** to provide an attractive, terrazzo-like finish. The polyaspartic clear topcoat provides additional significant durability and shine.

6a. 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 ¼"- ⅜" non-shedding roller cover on a 9" or 18" 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 material 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.

ℹ️ Do not leave mixed material in the bucket or in the sun for extended periods of time.
🛑 **Do not use a roller pan for the polyaspartic 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 paper or plastic cup 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.

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

Apply the polyaspartic 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.

6b. 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 Polyaspartic 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.

   ℹ️ You can use the **Spike Shoes** supplied to walk on the polyaspartic while wet to broadcast the fleck chips!
   ℹ️ Separate the mixed flecks into four equal parts and use ¼ 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 polyaspartic 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.

ℹ️ 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 coating.

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.

   ℹ️ 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 4-10 hours**, 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.

7. TOPCOAT APPLICATION

ℹ️ **Working time is very short. You will have 15-20 minutes to roll out the coating before it cures. Please work diligently when applying the polyaspartic!**

The Polyaspartic topcoat is applied after the colored polyaspartic basecoat is fully dry enough to walk on (**the recommended recoat window is 6-10 hours**), but can be sooner depending on temperature or humidity conditions. **Follow the instructions in Section 5 for mixing. Reminder, to mix the Polyaspartic Part A and Part B 1:1 ratio**! For enhanced safety, we recommend using the included anti-slip aggregate Armorgrip (the small white bag). It should be added (mixed in) to the polyaspartic to reduce the risk of slipping on finished floors that may be exposed to wet, or oily/greasy conditions. **Use both packets of non slip for the 2 gallon clear polyaspartic topcoat.** Slowly pour the contents of the non-skid into the topcoat and mix well to thoroughly suspend in the mixture. Pour the clear Polyaspartic on the floor in small beads and use the roller to roll it out evenly.

ℹ️ The aggregate can settle while mixed in the polyaspartic, so periodic stirring to re-suspend the nonskid is required during the application process to assure uniform application of the anti-slip aggregate.

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 polyaspartic application.

8. CLEAN UP

ArmorPoxy polyaspartic 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 polyaspartic is still wet. Sticky resin on hands can be removed with mineral spirits or xylene. Fully cured ArmorPoxy 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.

9. RETURN TO SERVICE

ArmorPoxy Polyaspartic Kit should cure for at least 12-24 hours before opening the area to foot traffic. Wait for a minimum of 3 days before driving across and parking a car on it. Extreme temperatures and humidity levels can dramatically impact curing times.

Coverage: When applied to a smooth/dry surface, coverage is approximately 400-500 sq.ft per 2 gallon kit. Coverage calculated @ 5-7 mils thickness.

10. MAINTENANCE

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

FREQUENTLY ASKED QUESTIONS

Can I use this outdoors?

- Yes, the Polyaspartic Coating kit is UV stable. This is perfect solution for a balcony, deck, patio, walkway, and more use cases. The surface can be slippery when wet barefoot so we **do not recommend this around a pool** unless you add aluminum oxide for extra non-slip protection.

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

- 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 ArmorPoxy?

- Yes. Pre-existing coatings need to be mechanically removed prior to use of the Polyaspartic Coating kit. The Polyaspartic 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 ArmorPoxy for recommendations on what to do next. Any previous coating remaining must be sanded or roughed up for proper adhesion.

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 ArmorPoxy Polyaspartic 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 ArmorPoxy immediately for next steps before applying new coatings.

Can I apply multiple coats of ArmorPoxy Polyaspartic 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 ArmorPoxy Polyaspartic coating can adhere to.

Do I really need to add the anti-slip aggregate to the Polyaspartic with the Topcoat?

- 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 coating.

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

- We recommend waiting 12-24 hours. 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 2 days before being brought back onto the floor.

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