



PREP AND INSTALLATION INSTRUCTIONS FOR ARMORPOXY JOB ON A PALLET SYSTEM

www.armorpoxy.com email info@armorpoxy.com 908-810-9613

PLEASE READ INSTRUCTIONS FULLY BEFORE STARTING YOUR PROJECT.

PREP:

Prep is the most important part of the project. Poorly prepared floors will cause failures and void the Armorpoxy warranty.

Armorpoxy carries a complete line of floor repair items to repair corroded, cracked and damaged areas, and also carries crack fillers for filling of hairline and larger sized cracks. Contact us for our easy-to-read Surface Prep Bulletin which reviews the various methods and products needed (if any) for proper floor repairs prior to coating. Many 'home center' types of floor repair items contain silicones or are low grade and not compatible with epoxy coatings and are subject to failure or peeling.

NEW OR UNPAINTED/UNSEALED CONCRETE:

Note: Newly poured concrete must 'cure' first. Moisture in the floor may cause coating failure. New concrete normally has to cure generally at least 30 days. Test any concrete to be coated by taping a 4' x 4' sheet of clear plastic on the floor with duct tape. If moisture under the plastic sheet or floor dampness/darkening appears the next day, then do not coat yet. Older concrete with moisture issues can also create problems. If you have a continuing moisture problem then we recommend doing an inexpensive moisture test (we sell these test kits) and using either a standard primer or a moisture barrier primer. Call or email for details and technical advice.

The floor must be properly prepared to accept the coating by one of several methods:

- a. Sweep and/or power wash the floor to remove any dirt, dust and debris.
- b. **Sanding**-Sand the floor with a rotary type sander (similar to a buffer). This roughens up the floor. Vacuum well to remove any dust.
- c. **Acid Etching** -(make sure to wear proper protective gloves, goggles and clothing as acid can be irritating to skin and eyes) Use the included Armoretch etching solution by diluting the acid 4 parts water to 1 part muriatic in a large empty 5 gal pail. Power wash area first to remove any dirt and dust. While still wet, apply to floor with a stiff bristle broom or mop. Let stand 45 minutes or until it stops foaming (normal). Rinse well to neutralize the acid/water mixture. Let Dry for at least 24 hours or when visually dry, whichever is longer.
- d. **Surface Grinding**: You can rent a diamond head floor grinder or 'shot blaster' at local tool rental stores. These methods work well for removal of old paint and sealers and 'open up' the surface very well for adhesion. Make sure to vacuum very well to remove any remaining dust.

SEALED CONCRETE

Often when concrete is poured the contractors either add in or apply a clear sealer. This can create adhesion problems with a floor that is going to be painted or coated. To test to see if your floor has been sealed, dribble a few drops of water on it. If it does not 'bead up' and 'soaks in', then most likely it's not sealed. If it does bead up then you need to re-etch at a higher acid

concentration or grind the floor per above, and then test with water droplets again. If it still beads up then repeat as necessary. *Failure to do this could result in significant floor failures.*

PAINTED CONCRETE

Painted concrete ideally should be stripped prior to painting, and then etched per above once stripped. **ARMORPOXY CAN ONLY ADHERE TO WHAT IS UNDER IT, SO IF YOU EXISTING COATING IS COMING UP, THEN SO CAN THE ARMORPOXY!** Armorpoxy carries an excellent cement floor stripper that dissolves the paint and allows for easy, safe removal. See our website under the 'Strip and Clean' link of the 'Buy Now' portion of our website store.

If you are unable or unwilling to strip your floor, at the minimum it must be power washed, lightly sanded or etched with Armoretch acid per above. Let dry once etched and neutralized and then apply the coating.

Please note that floors that have some, but not all, of the paint removed, and have some paint remaining now have different 'porosity' areas since the painted areas will absorb less epoxy than the areas where the existing paint has worn off or been removed. This can lead to 'blotchiness' in surface appearance unless you apply 2 coats of epoxy or prime first with our Armorpoxy Primer (included in ArmorUltra kits, optional with Armorpoxy II kits).

APPLICATION

ARMORPOXY II

The labels for Armorpoxy II and ArmorUltra topcoat are color-coded. The first layer of epoxy will have Dark Blue (low VOC) or Orange Labels (standard VOC) and topcoat has red labels. **Never mix different colored labels with each other!!**. Keep each layer to the side or in a separate area to avoid mistakenly mixing epoxy and topcoat, as if this occurs, it will never harden and have to be removed by stripping.

Armorpoxy II is a two part 1:1 mix industrial grade epoxy (4:1 In low VOC formulation). It is self priming on cement and metal surfaces. On bare wood prime first with our standard one part Armorpoxy Wood Primer or a good quality oil-based wood primer. Do not leave in sunlight or allow containers to get warm or hot as this can shorten the working time when mixed. Use included mechanical mixer to assure proper and thorough mixing. **MAKE SURE TO MIX COMPLETELY MOVING THE MIXER ALONG THE SIDES AND BOTTOM, AS ANY UNMIXED MATERIAL MAY NOT HARDEN. MIX FOR 2-3 MINUTES AT SLOW/MEDIUM SPEED. DO NOT ENTRAIN AIR BUBBLES.** Once mixed it applies like a standard thick paint and no special skills are required for application.

Do not mix more than you can apply in a 45-60 minute time frame as once mixed, Armorpoxy II hardens and cannot be stored under any circumstances. Better to mix it up in smaller batches and apply. NOTE: you can mix as much or as little epoxy as you want, just make sure to hold the proper mix ratio (1:1 or 4:1 depending on which version you purchased). Armorpoxy II is normally applied with a medium nap, no lint roller. It can also be brushed and sprayed. Unmixed epoxy can be stored in its original containers.

If you are using 'decorative flecks' these are applied to the surface by 'throwing them gently up in the air, not downward" onto the wet epoxy. Throwing downward can lead to 'clumping' of the flecks. Use supplied spiked shoes to facilitate even application appearance.

If you are using one of our Aluminum Oxide non skid additives they also get broadcast onto the wet epoxy while wet.. Apply by hand by gently throwing small amounts onto the epoxy. Repeat as needed to achieve desired surface texture. Our Skid Tex brand non skid additive gets mixed into the epoxy layer per instructions on the container.

If you are using decorative flecks, they get broadcast onto the wet epoxy at this point. Broadcast evenly, throwing small amounts of flecks 'up and away' so they rain down evenly.

Allow to dry overnight before topcoating.

If you are applying the ArmorUltra Topcoat to your surface, the mix ratio is 2:1 for the Topcoat. Once again you can mix as much or as little topcoat as you need, just hold the 2:1 mix ratio. Topcoat goes on a bit thinner than the epoxy and hence you will get more coverage per

gallon. If you are going to use the Ultrawear non skid additive, it gets mixed into the topcoat at this point before applying to the floor. Mix parts A & B and Ultrawear at the rate of ½ can per gallon. Use a mechanical mixer hooked up to a drill to assure an even mix and proper suspension of the non skid additive. NOTE: CONTINUALLY MIX ULTRAWEAR IN THE BUCKET WHILE APPLYING SINCE IT IS 'HEAVY' AND CAN SINK OUT OF SUSPENSION AND LEAD TO AN UNEVEN FINISH IF YOU DON'T CONTINUALLY MIX. Pour small amounts of mixed topcoat into pan and apply with roller or brush.

ARMORULTRA

ArmorUltra is a 3 layer system of primer, epoxy and topcoat. The labels for Armorultra System are color-coded. The first layer of epoxy primer will have Dark Blue (low VOC) or Orange Labels (standard VOC), the epoxy layer will have gray labels, and topcoat has red labels. **Never mix different colored labels with each other!!**. Prep floor per prep instructions above. Since the mix ratios are different for some of the products, make sure to completely keep aside each 'layer' so you do not inadvertently mix the wrong ingredients (this happens more than you would think). Can labels are color-coded to avoid confusion.

Prime floor w/ the Ultra floor primer. Note the primer is a 4:1 mix ratio, so you mix 4 parts of A with one part of B. Mix thoroughly with a mechanical mixer and apply with a medium nap roller or brush. Armorpoxy II may also be used as a primer for this step. Note the mix ratio if using Armorpoxy II is 50/50 while the mix ratio for ArmorUltra primer is 4:1. Allow to cure at least 8 hours, and preferably overnight.

Mix up the ArmorUltra High build epoxy. The mix ratio is 2:1. Use mechanical mixer. Mix for 2-3 minutes. MAKE SURE TO MIX COMPLETELY MOVING THE MIXER ALONG THE SIDES AND BOTTOM, AS ANY UNMIXED MATERIAL MAY NOT HARDEN. MIX FOR 2-3 MINUTES AT SLOW/MEDIUM SPEED. DO NOT ENTRAIN AIR. NOTE: Ultra is a 100% solids (no solvents) fast curing product so only mix up as much as you can apply in about ½ hour. Keep containers cool and out of sunlight. Once mixed, pour the epoxy onto the floor left to right in a 'bead'. Then apply the epoxy by squeegeeing it out onto the surface with a notched squeegee which we carry or by using a roller. Use of the roller only will give a thinner build. The 'V' notches allow the product to flow through the squeegee and allow a higher build of the product. Immediately after applying the epoxy, you, or a helper, should 'backroll' the surface with a roller wetted with the epoxy to eliminate any lines from the squeegee notches. Backrolling is a 'shuffleboard' motion and downward pressure should not be applied, just back and forth to assure a smooth, even finish. Use of supplied spiked shoes makes this step easy and fast. NOTE: IF YOU FIND THAT THE EPOXY IS A BIT THICK, OR STARTS TO THICKEN UP, IT IS OK TO ADD SOME XYLENE (XYLOL) AT THE RATE OF ½ CUP PER GALLON.

If you are using 'decorative flecks' these are applied to the surface by 'throwing them gently up in the air, not downward' onto the wet epoxy. Use supplied spiked shoes to facilitate even application appearance.

If you are using one of our Aluminum Oxide or sand, non skid additives they also get broadcast onto the wet epoxy mid layer while wet. Apply by hand by gently throwing small amounts onto the epoxy. Repeat as needed to achieve desired surface texture. If you purchased our Skid-Tex non skid additive, this material gets mixed INTO the mid layer of epoxy per the instructions on the container.

If you are applying the ArmorUltra Topcoat to your surface, the mix ratio is 2:1 for the Topcoat. Once again you can mix as much or as little topcoat as you need, just hold the 2:1 mix ratio. Topcoat goes on a bit thinner than the epoxy and hence you will get better coverage per gallon. If you are going to use the Ultrawear non skid additive, it gets mixed into the topcoat at this point before applying. Mix parts A & B and Ultrawear at the rate of ½ can per gallon. Use a mechanical mixer hooked up to a drill to assure an even mix and proper suspension of the non skid additive. NOTE: CONTINUALLY MIX ULTRAWEAR IN THE BUCKET WHILE APPLYING SINCE IT IS 'HEAVY' AND CAN SINK OUT OF SUSPENSION. Pour small amounts of mixed topcoat into pan and apply with roller or brush.

Allow to dry overnight for light foot traffic. Heavy vehicle traffic and usage should be avoided for 5-7 days or until fully cured. Temperature and humidity also affect curing.

Cleanup with xylene (xylo).

DISCLAIMER:

FLOOR TESTING:

No two floors are alike and variations in surface texture, porosity, and concrete type can all affect the final results. Armorpoxy Products are designed to be used as recommended but results may vary based on field conditions, and may require particular products or additional coats or products to achieve desired results. For this reason, liquid samples are available at nominal cost for advance testing to assure that your purchase yields a satisfactory result based on your expectations.

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