



## **ARMORGARAGE ULTRA APPLICATION INSTRUCTIONS**

Application of the Ultra System is easy and straight forward. Wash floor, power wash is preferred. Mix etch solution in 3:1 water to acid ratio. Disperse mixed etch solution evenly over wet floor. One gallon of mixed etch solution will cover 400 sq ft of floor. Do not mix more than 1 gallon of etch at a time. Scrub in with stiff bristle shop broom. Let stand for 5 minutes, do not allow etch to dry, then thoroughly rinse off with fresh water. Then repeat the above for the next section until floor is has been completely etched. You should work your way so that you are rinsing each section onto a non etched section, you do not want to rinse water over an already etched section, this may result in over etching. It is important to rinse off all the acid solution completely. Floor should be clean of ALL dirt, oil and grease stains. If not repeat steps above or use alternate methods to remove any dirt or stains. Use additional Muriatic Acid as a second wash for new floors or if floor is very dirty to boost the strength of the supplied etch solution.

Epoxy will not adhere properly to dirt, oil, grease and other stained parts of the floor. Refer to [www.armorgarage.com/howtoepyoflv.html](http://www.armorgarage.com/howtoepyoflv.html) to see image of properly cleaned floor. Floor should have the feel of an Emry Board when you rub your hand over it and water should not bead up when sprinkled on floor. Reetch if water beads up. For floors with a previous coating on it, if the coating does not have that slight grainy feeling to it after etching, reetch a second time. You can add 32 ozs of muriatic acid per gallon of Acid Safe solution provided in the kit for a stronger solution to achieve the desired result. As an alternate to etching previously coated floors you can use a floor buffing machine with a black pad to scuff up the floor. If previous coating is peeling or flaking it is best to remove completely by grinding or chemical means. Bonding Primer should be ordered in lieu of standard Primer when coating over a previous coating. Let Bonding Primer cure for a full 24 Hrs before applying epoxy.

Once the etching has been completed sprinkle the TSP powder evenly over the wet floor, brush in and then rinse thoroughly. This will neutralize any residue that may be left on the floor from etching.

Let floor dry MINIMUM of 24 hrs or until floor is completely dry(48hrs is best). Failure to thoroughly clean, rinse etching and or not letting floor dry

completely can result in improper curing and bonding of the epoxy which is not covered. It can take 48Hrs or more for the floor to dry depending on temperature and humidity. Minimum slab temperature for proper Epoxy curing is 60 degrees at all times.

**Primer:** You will have as part of your order epoxy color coded labels stated as PRIMER in that is mixed in 1:1 ratio. Mix each can separately then thoroughly mix the combined Part A & Part B for 3 minutes on medium speed. Mix only 1 gallon of combined Part A & B at a time. If more than one person is rolling you may mix 1 gallon per person rolling and then split it into separate pails. Apply this to the floor first after it has dried from the cleaning and etching process. Do not confuse or intermix with the Ultra epoxy which is a 2:1 mix ratio. Let this first coat dry to the touch (about 4-6 hrs) then apply Ultra epoxy per instructions below.

Once mixed pour into roller pan and roller on an even thin coat as you would conventional paint. If you ordered the instant crack repair kit you would fill the cracks in right before priming, no need to wait for the compound to harden. If you ordered one of the other crack repair or patch kits you apply them prior to etching and let them cure overnight. Due to new VOC rules from the EPA the following states will receive a 4:1 ratio Low VOC primer labeled ARM-015X. With 2 gallon set you can pour small can into gallon can and mix. With 5 Gallon set, mix 1 gallon at a time. States are: IL, NJ, MD, VA, NY, CA, RI, KY, MA, ME, NH, VT, CT, OH.

### **EPOXY-Apply epoxy between 8-20 hrs of primer application.**

It is important that you mix the epoxy properly. This is not like store bought epoxy please see note below, this is pure Military Grade epoxy and has different curing characteristics than water based and other low quality epoxies. Stir each can of the epoxy (part A & part B) separately with paint stir sticks for 2-3 minutes. Once you have stirred each can of the epoxy thoroughly. Mix 1 pigment jar per 2 gallon set of Part A. Be sure to scrape out all the pigment from the jar to maintain proper and uniform color. The epoxy then gets mixed together at a 2 parts "A" to 1 part "B" ratio. If you have multiple sets of epoxy mix the part "A's" of each set to blend the pigments, this assures an even color. Scrape out measuring containers into mixing bucket. Mix the combined Part A & Part B for 2-3 minutes with the supplied mixer on medium speed. Be sure to move the wand up & down and all around the sides. This will ensure that all the liquids get properly combined. Epoxy should be uniform in color and have no streaks in it. If mixing in larger batches and transferring to smaller working pails, mix the epoxy a second time in the working pail. Failure to mix properly will result in uncured tacky spots which is not covered under the warranty. Use calibrated containers for accurate mixing.

It is important to be accurate in your measurements, Otherwise a proper cure may not occur. NOTE: DO NOT MIX ALL THE EPOXY AT ONCE, THIS WILL CAUSE THE CURING PROCESS TO SPEED UP AND THE EPOXY TO PREMATURELY HARDEN. PREMATURE HARDENING IS NOT COVERED BY THE WARRANTY.

Mix epoxy in multiple batches. More batches are better than less batches, we recommend approx 3 batches per three gallon set. Or approx 1 gallon per each person rolling. Pour the mixed epoxy in a bead right onto the floor, do not leave in bucket and do not use a roller pan(do not pour in puddle). Use the notched squeegee to spread the epoxy out evenly, then roller over to smoothen and to spread epoxy out further at the edges with the supplied 1/4" nap rollers. Be sure not to mix more than you can apply in 30-40 minutes as the Ultra will start to cure after 40 minutes. There is no need to rush if you follow the guidelines above, you should be able to apply each batch in 15-20 minutes which gives plenty of safety margin.

As you mix each new batch it will reactivate the epoxy on the rollers, squeegee and mixer so no need to worry about epoxy hardening on those items.

Let the epoxy cure overnight (epoxy should be dry and hard to the touch) then apply topcoat. Coverage rate should be approx 525 550 sq ft/3 gallons of mixed epoxy.

**TOPCOAT Apply Topcoat between 8-20 hours after epoxy.**

Two part pigmented(unless using flakes) with a 2:1 ratio of Part A to Part B.

Topcoat will be a 2:1 Mix Ratio. The Label on the front of can will say "Topcoat".

Mix product in cans for 1-2 minutes. Mix Part A & Part B in same fashion as epoxy.

Use a roller pan to roll out the topcoat out onto the epoxy like conventional paint. Coverage is 550sf per 1.5 gallons. Be sure to cover all the epoxy, working in a systemized pattern will ensure full coverage. If a non skid surface is desired, mix the non skid additive into the can while mixing.

1 full unit of nonskid per 1.5 gal will result in a standard grip floor, if less grip is desired use 1/2-3/4 pack. For extra grip such as at entrance ways or loading docks use 1.5 units per 1.5 gallon. Stir very frequently to avoid blotches in the topcoat as the nonskid tends to settle to the bottom. Let dry approximately 6-8 hrs for foot traffic, 48-72 hrs for light vehicle traffic and 3-4 days for forklift traffic.

You now have the finest and most durable epoxy floor finish available. Care and maintenance is simple, just water and mild soap will clean up your floor. In most cases a simple wipe down with a damp mop, rag or towel is sufficient to clean your floor. Your Topcoat is the best in the industry and is designed to resist abrasion and wear. Your floor should stay looking new for many years. At some point should the floor start to

look its age you can simply roll on another layer of topcoat which will bring the floor right back to new. Should you have any questions before, during or after please feel free to contact us at anytime. For after hours support use [support@armorgarage.com](mailto:support@armorgarage.com).