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Aurora Epoxy Installation Guide

Step by Step Instructions

- A. Materials and Tools:
- 1. Black Primer Epoxy
- a. Coverage will be 150 to 200 square feet per gallon.
- b. Can also be purchased in White.
- c. Primer is available in 3- gallon and 15-gallon kits.
- 2. Clear Industrial Epoxy
- a. Coverage will be 60 to 75 square feet per gallon.

- b. Available in 1 gallon, 4-gallon, 20- gallon, and 220-gallon kits.
- 3. Aurora Dust Concetrate-16-ounce containers
- a. Coverage Will color 4-6 gallons of Industrial Epoxy.
- b. 4 gallons of Industrial Epoxy is optimal for effects.
- 4. Optional Sealers Listed in order of performance.
- a. High Performance Urethane
- 1. Coverage will be 300 to 600 square feet per gallon.
- b. Polyaspartic
- 1. Coverage will be 200 to 300 square feet per gallon.
- c. Acrylic Urethane (Miracle Glaze)
- 1. Coverage will be 150 to 300 square feet per gallon.
- d. Solvent Based Acrylic (Super Vinyl Supreme)
- 1. Coverage will be 150 to 300 square feet per gallon.
- e. Floor Wax
- 1. Coverage will be 400 to 800 square feet per gallon.

- B. Tools
- 1. Roller Frames
- 2. Roller Covers (3/8 medium nap, Lint free with solvent resistance cores)
- 3. Gauged Squeegee
- 4. Extension handles (to use with roller frames and squeegee)
- 5. Floor sanding tool pole sander/hand held orbital floor buffing machine.
- 6. Sanding paper or screens for floor machine(120-150 grit and 200-250 grit)
- 7. Air compressor or leaf blower
- 8. Plastic sheet or drop cloth
- 9. Spiked shoes
- 10. Roller grid
- 11. Painters tape or masking tape
- 12. Mixing sticks and/or drill mixer
- 13. 3-4 empty clean 5-gallon buckets

C. Properly Prepare Your Surface:

1. The very best surface preparation would be abrasive blasted (blast track or sand blast)

2. Second choice, but just as effective, is surface grinding.

3. Third choice can also provide an adequate surface profile, depending on the condition of your concrete, would be acid washing and neutralizing.

4. The ultimate goal of all of the procedures listed above is to remove concrete laitance and surface contaminants. This provides you with a surface that will readily absorb its new coating.

Improper prep is the #1 reason for job failure.

D. Deciding on Batch Size:

1. How many people do you have?

a. Do not bite off more than you can handle.

1. If you have less than 2 people or if you are too cautious, you can start with a 2-gallon batch and then increase as your comfort level improves.

b. If you have 2 or more people you can usually start with a 4-gallon kit.

E. Let's Get Started:

1. First you should address masking areas that you do not wish to coat.

a. Vertical wall surface can be protected by placing a strip of 2-inch masking 1/8 inch above the surface of the floor. Why 1/8 inch above? This will keep the tape from becoming immersed in the thick flooring epoxy because if the epoxy turns hard you will not be able to get the tape out.

2. Do not be concerned about pushing a wave of epoxy up onto the tape because once the epoxy slides back down the vertical it will be possible to pull the tape tomorrow.

3. If you're still worried about splatters add a strip of paper.

F. Priming:

1. Spread plastic sheeting or drop cloth on a space approximately 4 ' by 4' (an ounce of prevention)

2. Place the primer epoxy resin and cure along one edge.

3. Mixing pails and stir device as well as roller frames and covers and handles along the edge as well.

4. Take a 5 gallon pail and pour in 2 gallons of the primer resin then add 1 gallon of cure and mix well.

5. Place the roller grid inside the pail with the mixture.

6. Place roller handle into roller frame and install cover. Now after dipping the cover in the primer roll same out on floor. Coverage should be 150-200 square feet per gallon. (Black primer)

7. Allow 4-9 hours to dry. (Optimum curing and/or drying temperature is 75-85 °F.)

G. Next Day Floor Prep and Material Application:

1. Lightly sand primer with 80 or 120 grit sand paper.

2. Tack wipe floor with xylene or alcohol to remove dust. (Tack wipe-rag dipped in solvent then rung out then wipe floor and repeat until complete.

H. If you decided on a 4-gallon Kit:

1. Spread plastic sheeting or drop cloth on a space approximately 4' by 4'.

2. Place resin and cure along one side. Place remaining tools around plastic. Mixing pails, stir device, roller frames. Handles, covers, gauged squeegee, air blower, spiked shoes, cords, pails, and Aurora dust.

3. Open a three gallon pail of resin and give it a quick stir then open on of the one-gallon cans of cure and pour the resin and cure into one of your 5-gallon mixing pails. Mix for 2 minutes then dump the 16-ounce container of Aurora in and mix 2 more minutes.

4. Start coating floor from the farthest point away from your point of entry (usually along a wall). Pour at least ½ of the pail of material out in a ribbon approximately 8 inches wide

5. Take your gauged squeegee, and while standing directly in front of the material, place the squeegee in the middle of your ribbon then push until product goes up on tape then pull the squeegee straight out until you are out of product. Medium speed not creeping. Once you are out of the product lift the squeegee and repeat in the same spot. Now move over to the next space. Overlap should be about 4 inches or less. Repeat until entire line is spread out.

6. As soon as the person who is running the squeegee is 3 or 4 feet along, your helper should start back rolling. Product should be dumped out of bucket as soon as humanly possible because of the laws of mass reaction.

7. Back rolling- you should first dip the dry roller cover into the bucket then role the roller on a bare spot on the floor then start back rolling the product. Roller speed should be quick but be careful not to throw specks on your wall.

8. Repeat steps until bucket is empty. Total time from mix to empty bucket should be 10 minutes or less.

9. Repeat steps 3,4,5,6,7,8.

10. Once you have either spread your first but definitely after your second pail you will need to somehow disturb the surface of the Aurora.

(Why do you need to disturb the surface? See note at the end of this section)

11. Disturbing the surface of the Aurora can be accomplished by any of the following methods:

a. You can walk out on the surface with spiked shoes on and by either bending over or crouching down and then with a trowel reach out and trowel the surface ever so slightly. The only downside to this method is that it creates a somewhat mechanical pattern.

b. You can walk out onto the floor with spiked shoes and a squeegee or magic trowel and use one of these to slightly disturb the surface.

c. You also could walk out onto the floor with spikes shoes and use a stick or just about anything that will disturb the surface.

d. Now we come to the method that we primarily use and that is the leaf blower or compressor driven air. You simply walk out onto the material with spiked shoes and use the air to make ripples on the surface and that's all there is to it.

Reason for disturbing the surface is that once you spread the epoxy with Aurora over the floor the Aurora which is primarily a very finely ground pigment will start to settle or migrate downward so what we are doing is stirring the pigment back up to the top so that before the Aurora can resettle again the epoxy will have started its curing process and lock the pigment in striated layers of color. These layers of color are what are responsible in allowing you to sand out objects.

- 12. Repeat steps until entire surface is covered then just stand back and let the epoxy do its thing.
- I. To Seal or not to seal:
- a. Why should I put a sealer on?
- 1. Your first assumption is that epoxies are hard.
- a. Yes, they are but a great many coatings are more scratch resistant.
- b. In order of hardness here are a few:
- 1. Floor Wax (a soft sealer can be easily stripped and reapplied)
- 2. Solvent based acrylic (Super Vinyl Supreme)-Epoxy is equal to
- 3. Acrylic Urethane (Miracle Glaze)
- 4. Polyaspartic

- 5. High performance urethane
- 6. Aliphatic moisture cured urethane The choice is yours!