

Metallic Floor Process

This flooring solution is not flawless.

Minor imperfections are a common occurrence due to the nature of the materials, environmental conditions, and other variables. The flooring installation involves a fluid application process. After the color scheme and ratios are confirmed by the owner, the installer should be given creative freedom to apply the materials as seen fit to ensure an appealing finish.

****Not to be applied at temperature below 60°F****

Not recommended for heavily damaged floors or previously coated floors.

****Take pictures of area being coated before starting. Make sure to include any areas repairs are needed. ****

Floor Preparation

1. Hand grind edges. *Do not leave tooling lines as these will show through coating if not repaired.*
2. Grind with Planetary floor grinder. **(DO NOT SHOTBLAST)**
3. Using a large floor grinder begin with Metal Bond Diamonds 12-30 grit to open the pores of the concrete. Assuming 30 grit is adequate for first cut. Using a large floor grinder move on to a 60-80 grit.
4. Metal Bond Diamond to remove any grind marks and smooth the floor. Take precautions to not leave tooling lines or Swirl Marks during this step.
5. Finishing with up to a 120 grit Metal Bond Diamond is an option if you want a nice smooth finish, but this isn't necessary. (Using anything higher than 120 Grit Diamonds will void warranty). For high end home you can also apply a grout coat over the second grind and then run over with a 120 grit Metal Bond Diamonds. This will fill in any pin holes etc.
6. Vacuum area fully to see cracks and pits that need repair.
7. Repair larger cracks and pits with Cyclospartic Crack Repair.
 - 7.1. It is recommended that Cyclospartic Crack Repair liquid is used to avoid repairs showing.
 - 7.2. Using Crack Chase blade open large cracks.
 - 7.3. For large pits cut small gouges on edges with chase blade for adhesion.
 - 7.4. Vacuum pits and cracks to remove dust and debris.
 - 7.5. Large deep cracks can be partially filled with silica sand where filler would soak in.
 - 7.6. Mix Cyclospartic Crack Repair liquid in amounts that can be applied quickly.
 - 7.7. Slightly overfill pits and cracks with Cyclospartic Crack Repair.
 - 7.8. Mix in silica sand if necessary to keep from running.
 - 7.9. After filling sprinkle small amounts of silica sand into the filler to help it swell above the floor.
 - 7.10. Once Cyclospartic Crack Repair has cured grind to level of concrete.
 - 7.11. Any areas filled that are not level with the concrete will need to be refilled.

8. Vacuum entire floor starting with edges using black extension wand.
 - 8.1. Pay attention to corners and areas around garage door tracks.
 - 8.2. Next use vacuum head: take your time and make sure not to miss any areas.
9. Tape or mask off any areas if needed.
10. Repair smaller cracks and pits. It is recommended that Cyclospartic Crack Repair liquid is used to fill all areas to avoid repairs showing.
 - 10.1. GF Patch (hairline cracks and small pits).
 - 10.2. Use a few drops of tint to color GF Patch the same as the basecoat.
 - 10.3. Be sure to push fast patch into crack with putty knife.
 - 10.4. Clean any excess product from the floor.
 - 10.5. Look over previously filled cracks and pits and touch up with fast patch if needed.
8. Take pictures of repair work for warranty info.

Base Coat **Prep supplies**

1. **Make sure you have the correct product. (Basecoat A and Basecoat B)**
2. Premix each bucket of product separately with separate mix wands
3. Buckets for mixing.
4. Acetone (for mixing in base coat and cleaning any spills)
5. Tint
6. Rags
7. 18" roller (Having an extra roller ready is good practice)
8. 1/8" notched squeegee.
9. Chip brushes
10. Clean Spikes

Apply Base coat

1. Standard Basecoat color is Black. Basecoat color choice will affect the final appearance.
 - 1.1. *Always create a sample with the basecoat color for approval.*
2. Mix a batch (96oz max)
 - 2.1. Mix a batch that can be worked out within a maximum of 20 minutes.
 - 2.2. *Floor, Air, Material temp and Dewpoint all affect time of workability.*
3. Pour a ribbon on the floor and cut in 3 to 4 inches from the wall with a brush as far as you think you can get with squeegee and roller with the batch.
4. Using 1/8-inch notched squeegee spread product where the floor has been cut in.
5. Using 18" roller M&W basecoat to remove lines and puddles making it smooth.
6. ***Make sure to clean any product out of saw joints with a brush.***
7. ***Mix more product as needed being careful to match tint amounts to previous batch.***
8. Continue to cut in, squeegee, and roller until floor is completely coated.
9. Remove tape immediately after cutting in with basecoat.
10. After the basecoat is down you should clean up tools and buckets and get ready for Metallic coat.

****You have a maximum re-coat window of 12 hours. Base coat should be tack free with no product color or film coming up when lightly pressed into. Make sure to apply Metallic coat within that window. If you miss that window, sand the base coat, vacuum, and solvent wipe. This will prepare the base coat for the Metallic coat. ****

Metallic Coat (50-75 sq/ft per gallon)

It may be beneficial to “Wet Out” the Metallic pigment into the A side of the coating before application to help reduce Comets. This can be done in advance of the Metallic application opening one side of the Epoxy Coating and slowly mixing in the powder. Once a uniform appearance is achieved seal the product and let sit until application time. The longer the time allowed and number of mixes done before application will reduce comets more. When the coating is going to applied premix everything like normal then mix the A and B sides like normal.

Prep Supplies

- 1. Make sure you have the correct product. (Self-Leveling Epoxy)**
2. Metallic Pigment – one 4oz container per 1 gallon -or- one 12oz container per 3-gallon kit)
3. Mix each bucket of product separately with separate mix wand
 1. Buckets for mixing
 2. Rags
 3. 18” roller (9” can be used for small rooms)
 4. 1/4” notched squeegee
 5. Chip brushes
 6. Clean Spikes

Apply Metallic Coat

The Epoxy used for this system is a self leveling coating that can move under walls or into other unwanted areas. It is always best to take precautions to avoid this using tape, caulk or other methods you see fit.

1. Tape off any areas as needed
2. Mix a batch (typically a full 3 gallon kit)
3. Pour ribbon of product on floor and cut in using a brush or small roller making sure to leave the edges thick enough.
4. Squeegee out SLE with 1/4” notched squeegee
5. Using an 18” roller M&W to even out product
6. Swirl texture into the SLE using an 18”, 9” or other smaller rollers to produce movement.
- 7. Make sure to clean any product out of saw joints with chip brush**
8. Continue to M&W and swirl texture until complete

****Allow coating to cure for a minimum of 20 hours. At colder temperatures this may be longer. Once the floor will not dent or mark by pressing down with a fingernail, test the floor by applying pressure with a spike shoe in your hand. Next check to make sure spikes will not leave marks on the floor with additional pressure until you can stand on the floor in spikes without leaving marks.****

It is recommended to sand the entire floor area using a floor buffer and 80 grit sanding discs or screens to remove any high spots or bubbles. This will also create better adhesion of the topcoat and reduce the orange peel affect. If this step is taken make sure to vacuum and Acetone wipe the area to clean before top coating.

Cyclo1 Topcoat (500-600 sq/ft per gallon)

- **Garage Force does not recommend any form of a high gloss topcoat on Metallic systems.**
- Before top coating check to make sure spikes will not leave marks on the floor.
- Use a minimum of one bag Abrasion Resistance additive per gallon Cyclo1.
 - This creates a Satin Sheen floor.
 - Up to 2 bags Abrasion Resistance additive per gallon can be used.

Prep Supplies

1. Make sure you have the correct product (Cyclo1)
 - 1.1. *Write down batch numbers for warranty info*
2. Stabilizer shot (One shot per bag of Cyclo1).
 1. Abrasion Resistance additive
 2. Rags
 3. Roller
 4. Roller tray
 5. Chip brushes
 6. Clean Spikes

Apply Topcoat

1. Mix product to be used with stabilizer shot.
2. Add the amount of Abrasion Resistance additive to achieve the required finish.
3. Pour product into roller pan tray
4. Using a roller apply material with an M&W pattern in a 4'x5' area.
 - 4.1. The coating must be applied at 500 to 600 sq ft per gallon
 - 4.2. Continue to work the product until roller lines disappear then move to the next area.
5. Within 10 minutes of initial application go back and cross roll the completed section.
 - 5.1. Overlap half the roller each time across the floor.
 - 5.2. Can do multiple back rolls if need to achieve a smooth finish.
6. Continue this process until the entire area is completed
7. Clean up tools and area.