Chip Floor Process

Take pictures of the area being coated before starting and include any area where repairs are needed.

Prep floor

1. If there is an existing coating or paint it will need to be removed using a large grinder with PCD's or Diamonds before Shotblasting.
2. Hand grind edges the width of the blade making sure to get as close to the wall as possible. 2.1.(At this time also grind vertical surfaces and steps if applicable.)
   2.2.Use an Orbital tool to get into corners and under spaces the hand grinder won't reach.
3. Shot Blast floor to CSP 3. (Reference CSP Deck or online pictures to confirm CSP level).
   3.1. Always Shotblast so the main viewpoint is looking across the lines.
   3.2. In a garage this would be parallel to the overhead door.
4. Vacuum area fully to see cracks and pits that need repair.
5. Repair larger cracks and pits with Cyclospartic Crack Repair.
   5.1. Write down Lot numbers for warranty info.
   5.2. Using Crack Chase blade open large cracks by running the blade in the crack to create a "V".
   5.3. For large pits cut small gouges on edges with chase blade for adequate adhesion.
   5.4. Vacuum pits and cracks to remove dust and debris.
   5.5. For large deep cracks silica sand can be used to fill partially where filler would soak in down the crack.
      5.5.1. Make sure the top portion of the crack is open so the repair product can get adequate adhesion to the top edges.
   5.6. Mix Cyclospartic Crack Repair in amounts that can be applied quickly to avoid setting up in container.
   5.7. Overfill pits and cracks with Cyclospartic Crack Repair.
      5.7.1. Mix in silica sand if necessary to keep the product from running. (Maximum ration of 1:1)
      5.7.2. Sprinkle small amounts of silica sand onto the repair after the pit or crack has been filled.
   5.8. Once Cyclospartic Crack Repair has cured hard (usually 10-30 minutes) grind to level of concrete using the hand grinder or large grinder for bigger areas.
6. Starting with edges vacuum using black extension wand. (Always use both Vacuum motors)
   6.1. Pay attention to edges, corners, control joints and areas around garage door tracks.
   6.2. Next use vacuum head to clean entire floor: take your time to avoid missing any areas.
7. Tape off any areas if needed.
8. Repair smaller hairline cracks and pits using GF Patch putty.
   8.1. GF Patch is meant only for hairline cracks and small pits.
      8.1.1. Add a few drops of tint to color the GF Patch the same color as the basecoat.
      8.1.2. *Caution*- *Adding too much tint will affect adhesion and curing. *
      8.1.3. Be sure to push fast patch into crack with putty knife to remove voids caused by air.
      8.1.4. Remove excess product from the floor leaving only the repair area filled.
      8.1.5. Look over previously filled pits and cracks and touch up with GF Patch as needed.
9. Take pictures of repair work for warranty info.

Base Coat

Prepare supplies for Base coating.

1. *Make sure you have the correct product (Basecoat A and Basecoat B)*
   1.1. *Write down Lot numbers for warranty info.*
2. Premix each bucket of product with separate mix wand referencing the product Tech Data Sheets for time.
3. Mark mixing buckets for mixing smaller and larger mix amounts based on the floor area being coated.
4. Acetone (for mixing in base coat and cleaning any spills and tools).
5. Tint (if using clear Basecoat).
6. Rags.
7. Chip in 5-gallon buckets for broadcasting.
   7.1.(Blend all chip from boxes into 5-gallon buckets to avoid possible chip color variances being seen).
8. 18" roller attached to the roller handle (Having an extra roller ready is good practice).
9. 1/8" notched squeegee.
10. Cut in brushes.
11. Clean Spikes (Remove residue of chip or coating on the spikes that can contaminate the floor.)

Make a plan for coating the area.

1. Where to start and how to work your way out.
2. Double check to make sure all tools and install crew members are ready before mixing product.

Apply Base coat and Chip.

Before Base coating ensure the Dewpoint is not a factor.

1. If coating verticals or steps work on these first.
   1.1. Mix a batch that can be worked out quickly.
   1.2. Amounts less than 24oz at a time will help avoid product waste.
2. Apply Chip to the vertical using a taping knife or throwing it against the surface.
3. Carefully vacuum excess chip and wipe up excessive basecoat on floor before coating the floor.
4. Mix a batch that can be worked out within a maximum of 20 minutes.
   4.1. Floor, Air, Material temp and Humidity all affect time of workability.
5. Pour ribbon on floor along the walls and cut in 3 to 4 inches from the wall with a brush as far as you think you can get with squeegee and rolling before having to broadcast chip. (15 minutes from mixing)
6. Using 1/8 notch squeegee spread product where the floor has been cut in.
7. Using 18" roller M&W basecoat to remove lines and puddles making it smooth.
   7.1. ***Make sure to clean any excess product out of saw joints with chip brush.***
8. Throw chip onto base coated area within 15 minutes of mixing.
   8.1. Throw chip high in the air so it falls flat.
9. Mix more product as needed being careful to match tint amounts to previous batch.
10. Continue to cut in, squeegee and roller making sure to throw chip within 15 minutes of mixing.
11. Check entire floor for inconsistent chip coverage (look for shiny spots and basecoat)
    11.1. Look from many different directions and throw more chip on any shiny spots.
12. *If tape was applied to the floor tape immediately after base coating and chip broadcast to avoid bleeding through or under tape.*

Scraping and Vacuuming

The amount of time for the basecoat to cure enough for scraping will vary depending on the basecoat blend used, air temperature, floor temperature, product temperature and Humidity at time of application.

Typical cure time is about 1 – 2 hours. Floor, Air, Material temp and Humidity all affect cure time.

1. When you think the floor may be ready, carefully brush off loose chips with your hand in a small area.
2. Using your thumb or finger with light down pressure check to see if the chip will spin easily in the basecoat.
   - *2.1. Chip should not spin easily.*
   - *2.2. You shouldn't get any basecoat on your thumb or finger.*
   - *2.3. When it only spins about a 1/4 turn you can begin scraping.*
     - *2.3.1. Floor, Air, Material temp and Dewpoint all affect cure time.*
3. When the basecoat is ready, use a leaf blower to blow excess chips that didn't bond to the basecoat into corner or another area for collection.
4. Using a dustpan or other item pick up the leftover chip and either box back up or dispose of the excess.
5. Using a metal scraper carefully scrape the floor area using no pressure except the weight of the scraper always keeping the handle of the scraper about waist high.
6. Scrape from one end to of the room to the other end. Then repeat the process from side to side.
   - 6.1. The second scrape should be crossways to the first.
   - 6.2. Additional scraping directions can be done to meet customers request for a smoother floor.
   - 6.3. If verticals have been coated be sure to scrape these lightly to remove sharp edges using large scraper or a putty knife.
   - 6.4. If the floor has control joints run a scraper, putty knife or flat screwdriver through them to make them nice and clean looking and remove any excess chip.
7. After scraping is completed use a leaf blower to blow scraped chip into corner or another area for collection and collect.
8. Using a dustpan or other item pick up the chip and dispose of it.
9. Starting with edges of the room vacuum using black extension wand to remove loose chip.
   - 9.1. Pay attention to edges, corners, control joints and areas around garage door tracks.
   - 9.2. Next use vacuum head with squeegee to clean entire floor: take your time to avoid missing any areas.
10. Visually inspect the floor for areas where the basecoat isn't covered with chip or that need repair and address these before moving forward.

Topcoat

Prepare Supplies for Top coating.

1. *Make sure you have the correct product (Topcoat A and Topcoat B)*
   1.1. Write down Lot numbers for warranty info.
2. Premix each bucket of product with separate mix wand referencing the product Tech Data Sheets for time.
3. Mark mixing buckets for mixing smaller and larger mix amounts based on the floor area being coated.
4. Rags for coating and cleanup.
5. 18" roller (Having an extra roller ready is good practice).
6. Flat 24" squeegee.
7. Cut in brushes.
8. Clean Spikes (Remove residue of chip or coating on the spikes that can contaminate the floor.)

Make a plan for coating the area.

1. Where to start and how to work your way out.
2. Double check to make sure all tools and install crew members are ready before mixing product.

Apply Topcoat

Before coating ensure the Dewpoint is not a factor.

1. If coating verticals or steps work on these first.
   1.1. Mixing smaller amounts will at a time will help avoid product waste.
   1.2. Product in the bucket will setup faster so move quickly.
   1.3. Apply with a brush or roller for larger areas.
      1.3.1. Be careful not to apply excessive amounts that will cause product run to the floor and puddle.
2. Mix a batch.
   2.1. Mix Ratio is 1:1 – 1 part Topcoat A and 1 part Topcoat B
   2.2. Only mix what you can apply in approximately 30 minutes or less.
   2.3. Start with smaller batches until comfortable with larger amounts.
3. Pour ribbon of product on floor and cut in 3 to 4 inches from wall using a brush.
4. Using the 24" flat Squeegee spread out topcoat by starting along the walls and creating a "U" shape.
5. Move the product from wall to wall moving from the back of the area to your exit point.
6. Using one of the ribbons/puddles on the floor saturate the lightly roller with product.
7. M&W across the squeegee lines to even out product and remove any squeegee lines and puddles.
8. Make sure look for dry spots, puddles, or inconsistencies as you progress and address them.
9. Back roll/cross roll opposite of M&W roller lines within 20-30 minutes.
   9.1. ***Make sure to lift roller off floor at any stop point to avoid leaving marks.***
   9.2. Warmer temperatures may require back roll/cross roll sooner to remove lines.
10. Mix more product as needed and continue the process.
    10.1. Make sure to leave a small ribbon at least 2" wide at any point between mixes.
    10.2. **If more product is needed *always* pour new product into the product already on floor**.
11. Make sure to clean any product out of saw joints with chip brush.
12. Continue to M&W and back roll until complete.
13. Take Pictures of completed floor.
14. Once the job is complete clean up tools and check for any spills that need to be cleaned.