

StoneCoat™ Epoxy Installation Instructions

By Concrete Made New

Included in the Kit

- Epoxy part “A” Resin (color)
- Epoxy part “B” hardener
- ½ Gallon Acrylic Sealer
- Part “A” Polyurethane Resin
- Part “B” Polyurethane hardener
- StoneCoat Chips 25 lbs.
- 1 Gallon Paint Mixing Tool
- 6 pairs of Safety Gloves
- 9” Roller frame
- 3 Roller covers
- 1.-12” Squeegee
- 3 Chip-Brushes
- Completed instructions Folder



Additional Supplies Needed:

*****Either a Diamabrush and Floor Machine (This “Coating Removal Tool” can be rented at Home Depot for less than \$100 a day) www.diamabrush.com Or a Diamond Grinder. See the included instructions for the coating removal Tool. (We will refer to diamond grinders as Diamabrush)**

These Items can be Purchased at Most Hardware Stores

- Extension pole or broom stick for the 9” Roller frame and Squeegee
- Hand Drill for the Paint Mixing Tool
- 2, 5-Gallon Empty Buckets
- Spike Shoes (Opt. but helpful but not necessary)
- 2 Dust masks
- 10 x 10 plastic drop cloth to mix on.
- Dawn detergent for degreasing concrete
- Xylene/Xylol to add to Epoxy / clean-up / adds increased Pot-life to epoxy

- White Acrylic Caulk with Silicone (if needed for cracks and control joints)
- 12-inch Floor scraper (removal of excess chips)

The following are needed only if acid etching

- Muriatic Acid (if not using the Diamabrush for etching the concrete)
- Respirator (optional)
- Stiff broom/brush for applying acid
- A plastic 2-gallon pump sprayer or plastic watering container
- Eye Protection

IMPORTANT BEFORE STARTING YOUR PROJECT----Review Instructions and watch our online video found on website.

RECOMMENDED TESTING OF CONCRETE

Testing for Sealers

Perform this simple test to determine if the concrete has been previously sealed. Pour ¼ cup of water onto the surface in various areas. If the water beads, a sealer is present and needs to be removed with a Diamabrush. The sealer must be removed for proper adhesion.

Testing for Moisture

An easy test is to apply a 24' by 24" sheet of plastic (Plastic Wrap or heavy-duty garbage bag) Tape down all the edges with duct tape and allow to sit for 24-48 hours. If water droplets appear on the inside of the plastic or if concrete appears wet (darker in color), the moisture in the concrete is high. Call Concrete Made New for support at 480-332-6349.

Temperature Conditions

The ideal temperature range when using StoneCoat Epoxy is 40F-90F (4C-32C). Warmer temperatures will speed up the curing process and cooler temperatures will give more working time and slow down the curing process. Preparation with Muriatic Acid should not be attempted below 35F. We do not recommend applying the epoxy where the relative humidity is above 85% maximum.

Inspecting the Concrete

Concrete can be very hard or sometimes very weak. Testing of concrete hardness can be done by pressing a regular screwdriver over the surface of the concrete. If the concrete can be removed, it is considered weak. In that case the concrete should be diamond ground to a sound concrete surface and an additional prime coat should be applied prior to coating. If the screwdriver does not mark the concrete, it is considered extremely hard. In that case, it will require extra etching, chemically or with a Diamabrush to provide better adhesion.

Saw Cuts, Control Joints and Holes

Do not fill in saw cuts and control joints as they are designed for concrete expansion. Deep holes should be repaired by using a concrete patch available at home improvement stores.

Application over Previously Coated Floors-Test for Proper Bonding

- StoneCoat Epoxy can be applied over an existing floor coating IF IT IS BONDED WELL TO THE CONCRETE. To determine if it is properly bonded use the following test:
- With a razor blade, cut a 2" long X through the coating to the concrete
- Apply a 6" piece of duct tape over the X and press firmly
- Completely remove the tape with one quick pull
- If more than 5% of the paint under the taped area is removed, the original coating is not properly bonded. It will need to be removed by a Diamabrush or a Diamond grinder.

DIAMABRUSH PREPARATION- (Recommended Method)

The most important part of your project is the preparation of the concrete. Although a traditional method is to acid etch the floor, we highly recommend that you follow our previous instruction on renting a Diamabrush and a floor machine to prepare the concrete.

BY FOLLOWING THE EASY STEPS BELOW, THE FLOOR WILL BE READY FOR EPOXY AFTER DRYING.

A

If the floor is properly bonded, degrease it with Dawn Detergent by squirting some on and mist it with water and scrub it with a broom and rinse well, leaving no residue.

B

Wearing a Dust mask, familiarize yourself with the rented floor machine. This is a janitorial type rotating tool. If you lift up it goes to the right and if you push down, it goes to the left. Hold steady to remain still. (See instructions in booklet included with kit)

Take it slow, and move evenly over the floor, overlapping half of the width of the diamond brush. It's like mowing a lawn. When you are done. Do not blow out the dust. Sweep the dust up and dispose of it.

C.

Vacuum the floor or Rinse the surface with a water hose. Scrub with a stiff bristled broom in both directions while rinsing, to insure removal of all loosened material. Repeat this process. **ALLOW THE FLOOR TO DRY FULLY BEFORE COATING.** (A power blower can be used to dry the remaining water)

Once your floor is dry, rub your fingers on the concrete and then check your fingers for a film. If there is no film, you can proceed. If you find film, vacuum or rise again and scrub and let dry. Test for film again after the floor dries.

REMEMBER: YOU MUST REMOVE ALL CONTAMINANTS BEFORE COATING OR THE COATING WILL NOT BOND CORRECTLY. (IT WILL FEEL LIKE 120 GRIT SANDPAPER)

ACID PREPARATION (ALTERNATE METHOD)

This is an alternate method to prepare the concrete.

A

Sweep or power blow entire floor surface area.

B

Degrease the concrete with Dawn Detergent by squirting it directly (undiluted) onto the concrete, mist it with water, scrub it with a broom and rinse well. Believe it or not, this works well!

C

Wear nitrile gloves and protective eye wear when working with acid. It's important that you pour the acid into the water and not vice-versa. ALWAYS WEAR AN ORGANIC CARTRIDGE RESPIRATOR WHEN POURING ACID

In an empty 5-gallon bucket, mix 1 1/2 gallons water with 1/2-gallon muriatic acid.
(3:1 ratio. 3 parts water and 1-part Muriatic acid)

This should be enough for 250 SF

Pour this mixture into the optional pump sprayer or a garden watering can.

D

Etch a 10' x 10' section at a time, using the optional pump sprayer. Apply the acid evenly over the surface. **(ATTENTION: There will be foaming and if it does not foam, it indicates that there is a sealer on the floor that must be removed properly. If this happens you need to choose Preparation Option #1)**

Scrub the concrete surface with a stiff bristled broom. Move to the next 10' x 10' area. **NOTE: Do not allow the acid to dry onto the concrete. Mist the surface with water if it appears to be drying.**

E.

Rinse the surface with a water hose. Scrub with a stiff bristled broom in both directions while rinsing, to insure removal of all loosened material. Repeat this process.

ALLOW THE FLOOR TO DRY FULLY BEFORE COATING. (A power blower can be used to dry the remaining water)

Once your floor is dry, rub your fingers on the concrete and then check your fingers for a film. If there is no film, you can proceed. If you find film, rise again and scrub and let dry. Test for film again after the floor dries.

REMEMBER: YOU MUST REMOVE ALL CONTAMINANTS BEFORE COATING OR THE COATING WILL NOT BOND CORRECTLY. (IT WILL FEEL LIKE 120 GRIT SANDPAPER)

**CONGRATULATIONS ON COMPLETING THE MOST IMPORTANT
PART OF YOUR PROJECT!**

YOU ARE NOW READY to apply StoneCoat™ Epoxy

STEP 1

APPLYING THE STONECOAT EPOXY (see addendum #1)

A

Lay the plastic drop cloth near an area where painting is to be done. Attach the 1 Gallon mixing tool to a high-speed drill.

Attach the included Squeegee firmly onto a broomstick or extension-pole to be used in Part D. Have the spiked shoes ready. (these are optional). Also, a 3/8 inch-nap roller cover attached onto a pole ready to back roll the epoxy.

B

Over the drop cloth, open the polyurethane, Part A and B Cans. Stir each independently with the included paint mixing tool.

Pour Part B into Part A. Mix well for 3 minutes until it is **consistent**.

C

Divide the 225 SF (approx.) garage or other concrete slab, into two parts. One half is in the back, closest to the house. The other part is closest to the street. Starting in the 10 x 10 square in the back of the garage, (**See Addendum #1 on page 10**) pour about 1/2 of the mixed contents parallel to the back wall...approx. 1 foot from the wall” in a line on the floor. Using an included chip-brush, “cut in” or apply epoxy next to the walls or control joints around the perimeter of the slab. **Next**, using the included Squeegee attached to the pole, pull the epoxy towards you, pushing down firmly on the handle. Spread it evenly to cover ½ of the garage. **See Addendum #1 on page 10**

(NOTE: The epoxy will appear to be translucent when squeegeeing the epoxy but, after it is back-rolled the color will be more even. It will become even more consistent when it is back-rolled the 2nd time.)

Next, using the roller frame, pole and 3/8-inch non-shed roller cover, back roll perpendicular to squeegee application, roll the epoxy until even and consistent. If you don't use spike shoes, make sure you only squeegee those areas to give you enough room to back roll without walking into the wet epoxy. Repeat for the other half of the garage.

D

After the second section is squeegeed and rolled, go back to the first section and roll it again. (About 5 minutes after the first back roll) Then repeat for the other section.

Proceed to step 2 only after the epoxy is rolled out satisfactorily.

Step 2

VINYL CHIP APPLICATION

- **LIGHT OR MEDIUM**

A Light Broadcast of chips requires a bit of practice. Before starting your project, practice tossing a few chips into the air by flipping your fingers up into the air and let the chips fall (flutter) evenly. Stop throwing the chips when you are pleased with the result. **REMEMBER:** You cannot remove the chips once thrown into the epoxy.

- **FULL STONECOAT**

Apply a full or StoneCoat Floor by throwing the flakes into the wet coating. Broadcast evenly and completely until there is no wet paint showing. Take your time to broadcast, don't use too many chips all at once. Walk with the spiked shoes applying the chips until the floor is evenly covered.

**ALLOW THE EPOXY TO DRY FOR 12-24 HOURS
BEFORE APPLYING THE SEALER**

Step 3

CHIP REMOVAL AND ACRYLIC SANDING SEALER

A

Remove the excess chips by using a 12-inch floor scraper. Lightly scrape the **excess** chips from your new floor. Starting in the back corner, move the scraper left to right (horizontally) over the entire floor. Sweep or use a blower to collect the excess chips into a corner and put back into the bucket. Repeat this process but this time scrape top to bottom (vertically) and then collect the chips again. Clean out the excess chips

in the control joints with a stir stick. The goal is to remove all of the chips that have fallen onto the floor at odd angles.

B

Open the container of sanding sealer (labeled step 3) and add 2.5 cups of water. Mix thoroughly with the mixing tool. Pour it into a 5-gallon pail.

Go to the farthest corner of the garage from the roll-up door. and on your hands and knees, (use knee pads if desired) use a 2" brush and apply the sanding sealer to the outside edges and the control joints in a 10 by 10 section. Do not allow it to puddle. In low areas.

Next, using a 3/8 inch-nap roller and frame fitted with an extension handle, roll the section with the acrylic sealer.

Make sure all the chips are covered with sealer. Go over the section in a left to right direction in the shape of a Z and then in a top to bottom direction, in the shape of a W. Continue this process until the garage is all sealed. Back roll to eliminate roller marks

Allow the acrylic sealer to dry 3 hours before proceeding

right (horizontally) over the entire floor. Repeat this process but this time scrape top to bottom (vertically). Sweep the floor and collect all of the chips with a broom, blower or vacuum.

Step 4

WATERBORNE POLYURETHANE COATING

Keep the garage well ventilated. The Polyurethane must be used within 2 hours. The polyurethane will not be squeegeed on to the floor. It will be applied with a 5-gallon pail, roller frame, cover and chip brush.

A

After drying, to ensure a smooth finish, scrape or sand the floor before applying the polyurethane. Using a 12" scraper, lightly scrape the floor to remove any rough edges or chips. Blow these small particles from the garage.

B

Over the drop cloth, open the polyurethane, Part A and B Cans. Stir each independently with the included paint mixing tool.

Pour Part B into Part A. Mix well for 3 minutes until it is **consistent**.

C

Pour the mixed polyurethane into a 5-gallon pail. Using a 2-inch chip brush cut in a line of Polyurethane, around the border of the area to be covered and paint it into seams and corners. Do not allow it to puddle in the expansion joints or control joints

D

Go to the corner farthest of the garage roll-up door. Using a 3/8 inch-nap roller fitted with an extension pole, roll a 10-by-10-foot section with topcoat polyurethane. And go over the section in a left to right direction in the shape of a Z and then in a top to bottom direction in the shape of a W. Continue covering the floor section by section. Finish the entire floor, allow it to dry 12 to 24 hours (longer in humid or cold weather) It will appear white at the beginning and as it dries it will become crystal clear.

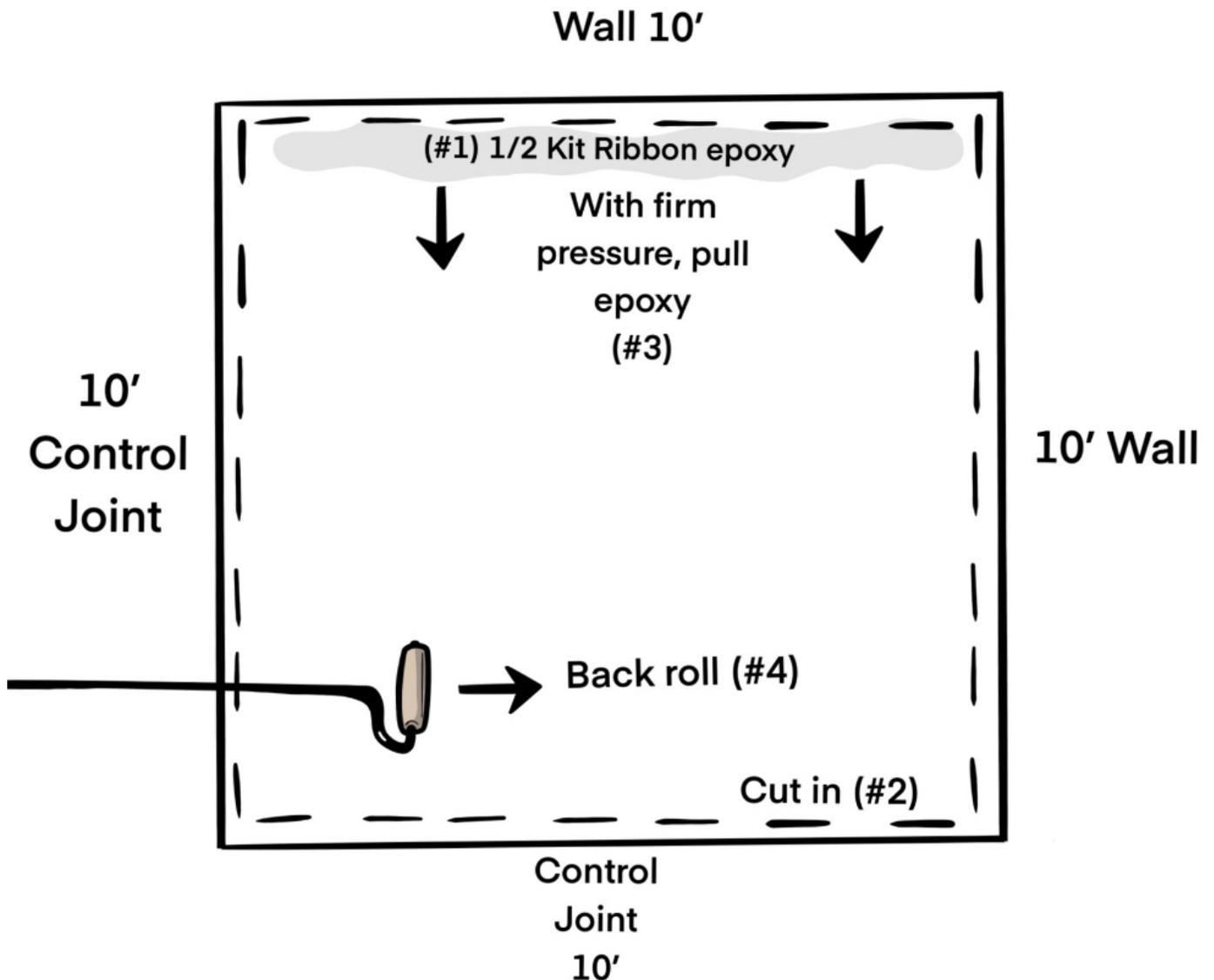
Allow the Polyurethane to dry 12 hours before walking on it. And 5-6 days for vehicles.

NOTE: Do not lower the garage door to the ground until it is totally dried. Usually overnight. For security, prop the door off the ground with a 3-inch nail or stir stick. It's best to put the door support in a control joint.

For maintaining your new floor see our website
<https://concretemadenew.com>

ENJOY YOUR NEW
Thank you for choosing Concrete Made New

Addendum #1
How to Squeegee and Back roll Epoxy
On a Typical Concrete Slab



- 1 Pour ribbon of epoxy with half of the mixed epoxy to cover 100 sq ft.
- 2 Paint around the perimeter dipping from the puddle of epoxy on the ground.
- 3 With pressure down, pull firmly towards you. (the epoxy will appear translucent.
- 4 Back roll 2 times five minutes apart. Back rolling will even out color inconsistencies.
- 5 When pleased with the consistency, throw chips to rejection.