

## Patching Gel Coated Poly Stone®

Countertops are among the most used and abused surfaces in any home or business, and over time, scratches, chips and nicks will mar the surface regardless of its composition. However, with the right tools and procedures, repairs can be made quickly and easily that will bring it back to its original finish and appearance. The following describes the steps necessary to repair a gel coated Polystone® spray granite countertop. Please read all of these instructions before proceeding.

### Step 1- Required Materials and Tools List

1. Color matched Poly Stone® filler
2. Clear ISO NPG gel coat
3. MEKP Catalyst
4. Two small mixing sticks (Popsicle stick or tongue depressor) one of the sticks needs to have a small point on one end.
5. Mixing cups
6. A hand held drill or Dremel® with a drill or router bit attached
7. Heat gun, hair dryer or heat lamp
8. Sandpaper (320 & 600 grit)
9. Masking tape
10. Buffer and buffing compound
11. Sifting screen (pasta strainer\*)

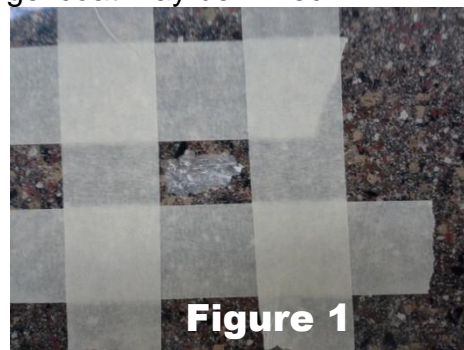
*\*Sifting screen may be necessary depending on the size of the repair being made and whether or not the color contains large chip or flake. To determine if the color being repaired needs sifting, contact ACS International's Technical Service Department, Color Laboratory or your ACS International Sales Representative.*

### Step 2-Surface Preparation

Using a drill or Dremel®, clean the damaged area to remove any imperfections and/or foreign material. Most Polystone® countertops only have 20-50 mils of colored granules so it is not usually necessary to drill very deep into the top.

Next, use the drill or Dremel® to create slanted and irregular sides on the edge of the hole. This is a very important step as it ensures the repair appears less conspicuous. Blow away any excess dust or particulate that may have been generated from the drilling process. Be sure the repair area is free from dust, oil and any other foreign substances as failure to do so may

result in poor adhesion between the patch and the countertop. Use the masking tape to mask off the area around the void. This will keep the patch mixture in the repair area and reduce accidental scratching (*see figure 1.*) Once the area preparation is complete, the Polystone® granules and gel coat may be mixed.





### Step 3-Mixing and Applying the Patch Matrix

The ratio of gel coat to filler will vary depending on what Poly Stone® category the color being repaired belongs to. See the table below to determine the correct mixing ratio or contact the technical department at ACS International.

### Mixing Ratios for all Poly Stone Products

	Gel Coat %	Color Matched Filler	Catalyst
All Colors with Product Codes beginning in PS, PSS, PSLC	77.00%	23.00%	1-2% of the gel coat by weight
Platinum Flake PFS2000 Series	77.00%	23.00%	1-2% of the gel coat by weight
Platinum Flake PFS4000 Series	95.00%	5.00%	1-2% of the gel coat by weight
Platinum Flake PFS8000 Series	90.00%	10.00%	1-2% of the gel coat by weight

Mix the gel coat and Poly Stone® together before adding catalyst. Follow the gel coat manufacturer's recommendations for catalyst levels (most recommend using 1–2% of the gel coat by weight.)

Add the catalyst to the gel coat/filler blend and mix well. Make sure the matrix is thoroughly mixed before applying to the repair area.

Using the pointed end of the stick, drip a small amount of matrix into the repair area, filling the void to just below the surface as a top layer of gel coat will still need to be applied (see figure 2.)

Note: If the original surface is a sanded finish without a clear layer of gel coat, then the patch may be filled to above

the surface level of the repair area and you may skip to step 5.

After the patch material has been applied, remove any tape **before** curing the matrix. Using the heat gun, heat the patch as well as the area surrounding the patch. This enables the patched area to obtain similar high exothermic temperatures that the original matrix did, thus creating a superior bond and a better color match. Take care not to overheat the area surrounding the patch as this will cause discoloration (see figure 4.)

Once the patch is completely cured, the area may require additional sanding to remove any excess material. Use the 320 grit sandpaper to remove any rough surfaces or material protruding above the gel coat line. Clean the area and replace masking tape.



### Step 4-Mixing and Applying Clear Gel Coat

Following the gel coat manufacturer's recommendations for catalyst levels, (most recommend using 1–2% of the gel coat by weight,) add the catalyst to clear gel coat and mix well. Using the mixing stick, dab a little of the gel coat over the entire patch and onto the surface surrounding the patch (see figure 3).

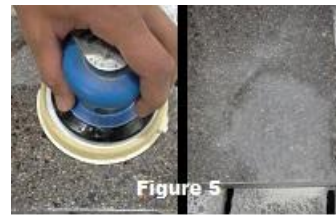
Once gel coat is applied, remove any tape on the top **before** the gel coat cures and use the heat gun to heat the gel coat.



***This is important as the mass of the gel coat is minimal and may not cure properly if left to cure at room temperature (see figure 4.)***

### Step 5-Final Finishing

Once the gel coat has fully cured\*\* over the patch, begin sanding using the 320 grit sandpaper, and gradually work towards the 600 grit. Be sure to apply level, even pressure (see figure 5.) If sanding by hand, the use of a sanding block is recommended. After the patch is sanded flush with the surrounding area, apply buffing compound and buff out any remaining scratches to bring the patch to the same finish as the surrounding area.



The patch is now complete and should blend into the surrounding area (see figure 6). If you have further questions regarding Polystone® repairs, please contact the technical department at ACS International or your ACS International Sales Representative.

