

Patching Terra Bella™

Every once in a while, fabricators find it necessary to patch an area in their work. Reasons vary from flaws in the gel coat, air entrapment in the matrix or sometimes a foreign object appearing in the mix. In order to patch **Terra Bella™** engineered granite, it's important to remember what it is—and what it is not.

First, Terra Bella is not marble and therefore can not and should not be patched like cultured marble. Many fabricators have said that when patching marble the marble matrix is simply mixed with gel coat and applied to void. This does not work with products like Terra Bella or any granite behind gel coat.

IMPORTANT: Before gathering supplies for a patch, decide if the area can be repaired with gel coat only. Often, if the area is small enough, it is not necessary to use the matrix color (i.e. Blue Mosaic). If this is the case, it is only necessary to complete steps 1, 2, 7, and 8.

Step 1

First, the following supplies are needed in preparing a patch:

- Proper safety glasses and dust mask
- Gloves
- A drill such as a Dremel with bit
- Mixing cups and small stir sticks such as craft or pop sickle sticks
- Resin
- Gel coat
- Initiator
- Appropriate Terra Bella matrix color (dry) if necessary
- Masking tape
- Sanding and buffing equipment

Step 2

Now that all the materials are gathered, the area to be repaired can be drilled out. **NOTE:** When drilling, make sure to bevel the edges of the patch area. This makes for a smoother transition between patch and existing gel coat. If the

edge isn't beveled, a line might be visible around the patch area. Figure one shows several different sizes of patch area in Blue Mosaic Terra Bella.

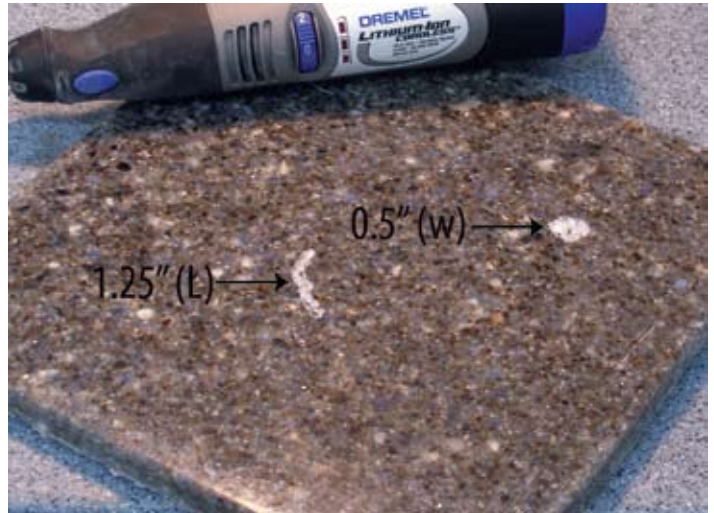


Figure One: Different sized area's that have been drilled and cleared of all debris.

Step 3

Once that area is clear of debris, it is time to prepare the matrix. Since most Terra Bella colors have very large aggregate in the matrix, it is necessary to sift the smaller sized matrix from the larger pieces—unless the patch size is very large and deep. In this case the matrix could be left in original state.



Figure Two: Example of sifted Blue Mosaic Terra Bella. For most patches, smaller particles (right) are used.

To sift the matrix, a screen of any kind can be used making sure the aperture of openings is around 1.7 mm (Figure Two). Many kitchen strainers have openings close to this size. The large rocks may be hand separated, but this takes more time. Ultimately, the idea is to remove any rock that might stick above the surface of the gel coat line.



Figure Three: Filling the void carefully and avoiding spilling material on surrounding area.

Step 4 The next step is to mix some sifted matrix with resin and initiator. Before adding initiator, mix the resin and dry matrix. The idea is to have a thicker mix, but not so thick that it traps air or doesn't move around easily. Often, a tablespoon is more than enough material to complete a patch.

NOTE: Take one of the small stir sticks and break it length wise. This allows for a finer point and more accurate movement of mixture. See Figure Three.

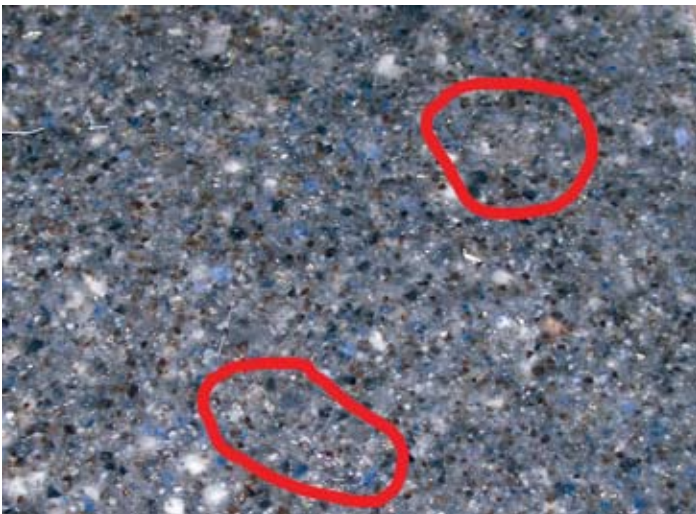


Figure Five: Fully cleaned area of two patches before gel coat.

As the void is filled, it's important not over fill the area. The mixture should be **below** the gel coat line as a top layer of gel coat will need to be added. The more care given in filling, the better the patch will appear. Figure Five represents the patched area's after proper filling.

Step 5 Apply heat to hasten the cure time. Simple heat lamps such as in Figure Six illustrate such methods. Do not overheat the surface or existing gel coat may burn and discolor.

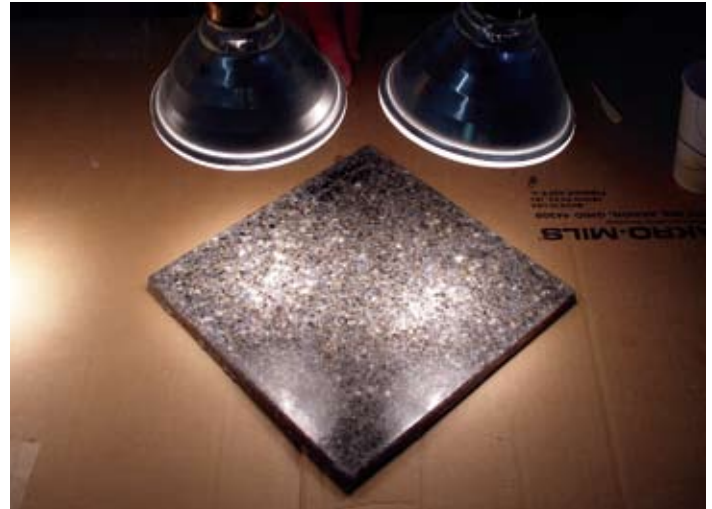


Figure Six: Heat applied to part.

Step 6 When cure is complete, it may be necessary to lightly sand away excess material that is discovered after cure. Using a fine grit sand paper, such as 240 grit, lightly sand the patch area if the surface feels rough (Figure Seven). The more scratches left behind, the more sanding



Figure Seven: Sand away excess material that is above or even with gel coat.

will be needed with finer grits to remove scratches.

Step 7

Next, catalyze and apply the gel coat. A little goes a long way. Dab a little gel coat on the end of a stir stick and apply over the patch and slightly on to the surrounding gel coat of the part. Remember, the more that is applied, the more sanding that will be needed. When appropriate amount of gel coat is applied, place part under heat source again. This is important as the mass of the gel coat is minimal and often need's help to gel. See Figure Eight for gel coat application.



Figure Eight: Apply minimal amount of gel coat over patch, slightly over lapping existing gel coat.

Step 8

Once the gel coat has fully cured over patch, begin sanding with a 400 grit sand paper, gradually working towards a finer grit. may occur. It is important to keep the sand paper level and apply equal pressure. If sanding by hand, a sanding block is highly recommended. Figure Nine show's the finished part with no visible patches. Buff if necessary.

In summary, the ability to patch a natural stone product is one of the advantages Terra Bella has over natural stone. The versatility of an engineered product, yet the natural looking appeal of stone. For more information on the Terra Bella line, please visit the ACS web site at www.acstone.com. For trouble shooting ideas, please review the Terra Bella manual.

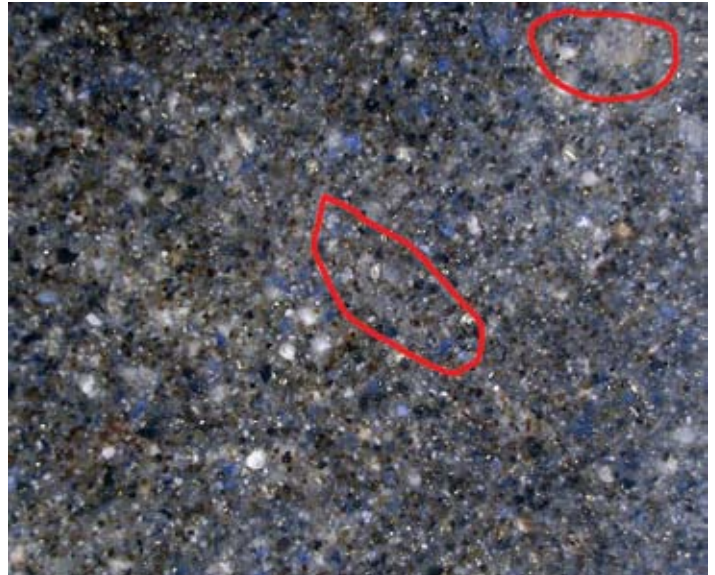


Figure Nine: Finished part showing patches from Figure Five.