

## Go Green!

Go Green! The natural process to polish your marble. In an earlier article, "Crystallization of Marble - The bad, the worse, and the ugly", I described the adverse effects of marble being polished incorrectly. In this article, the correct and ecological choice of polishing marble is explained

Polishing of stone is to attain a high shine by use of fine abrasives. Most craftsmen will use diamond abrasives to resurface an area and make it scratch-free and to remove etch marks.

To acquire a true polished or honed surface, the imperfections must be grinded or sanded to the level of the damage. Depending on the depth of damage reflects on how many steps will be needed for the repair.

Below are all the steps listed for a full natural stone restoration. Most jobs usually require the last two steps of honing and polishing. Only an experienced specialist could recognize the proper order needed to achieve the desired finish.

### Step1:

Grinding: A very aggressive process using metal-bonded and diamond grits to remove deep scratches and lippage. Performed by using a heavily weighted floor machine with water, this process is typically dust free. The goal is to flatten the floor.

### Step2:

Honing: Similar to grinding, but not as aggressive. The grits and materials are not as coarse as those used when grinding. Honing will remove minor to moderate scratches and etch marks.

### Step 3:

Polishing: Completed after the honing phase. A series of higher diamond grits are used. Diamond grit compounds in a powder or paste form may also be used to simulate higher grits. Using natural fiber pads or polyester pads and a floor machine, a final powdered abrasive mixed with water produces a slurry. This slurry is worked into the stone to produce a high shine.

Most natural polishing powders contain the active ingredient oxalic acid. Oxalic acid, also known as potassium oxalate, is an organic acid that is naturally occurring in many readily available plants. Hence, the term "natural polish".

Amongst oxalic acid, other natural ingredients may be mixed in the polishing powder. These ingredients may or may not include aluminum oxide, pulverized flake shellac, and organic resins. Depending on the content of calcite within a stone, a professional stone specialist can determine how to modify these ingredients to produce optimal results.

The difference between crystallization and the natural process is the resulting compound is not changed into something other than calcite. Using the natural and ecological process to polish marble and other calcite based stones, a natural finish allows the stone to breathe and not suffocate. The stone is allowed to extract moisture from the air when it becomes dry, and also push excess moisture when it becomes to wet. Stone professionals using the natural process extends the life of your marble and other calcite based stones such as travertine and limestone. A long lasting beautiful and easy to maintain polished floor is the end result. To have your stone evaluated, please contact us by e-mail, [glenn@asrhawaii.com](mailto:glenn@asrhawaii.com); or call us at (808) 954-6482.