

USING YOUR WET GRANITE POLISHING PADS FOR POLISHING GRANITE AND CONCRETE

The pads you have contain diamonds embedded in the resin. Running them against abrasive surfaces such as granite and concrete will file down the resin and expose the diamonds. If you need to polish glass then you will need to expose the diamonds by running them on concrete or ceramic surfaces before using them on glass. These pads are hard for soft stones like marble, travertine, and other limestone so you can only use up to grit #400 wet for these soft stones. Then you can continue dry with higher grits to make the stone shine.



The pads work with a Velcro holder most having 5/8-11 standard thread. This will fit any standard polishers except the very old Makita polishers or certain metric polishers made for Europe. It will also fit high-speed grinders, but **DO NOT USE WITH FIXED SPEED HIGH SPEED GRINDERS**. Depending on size, 4" wet pads work best at 5000 rpm max. Get a heavy duty dimmer switch to use in-line with a grinder if you don't want to buy a variable speed one.

Mount a Velcro holder to your tool and then mount a pad to it. Shake the pad in two different directions to interlock the Velcro. If the pad becomes imbalance, stop and remount the pad properly before continuing. Use more water with lower grit and less and less to no water with higher grit. You can also use these pads completely dry, but you'll need to move the polisher around more quickly to dissipate heat. Grit #50 and #100 are for rough cutting and coarse grinding. If you need to remove lot of material such as filing down concrete to expose aggregates, then we recommend starting with a diamond grinding cup first. Grit #200 will remove big scratches; grit #400 will remove small scratches so if your surface is already smooth then you can start with grit #200. Since scratches are not visible when the surface is wet, a neat trick is to use color crayon pencils to mark those scratches and polish until those markings are gone. If you polish long enough, you will notice a difference in sound when a certain pad is done with an area. Constantly move the polisher around when polishing to avoid scoring a circular pattern into the stone especially with lower grits.

Granite and concrete are porous so to make them shine we recommend at least one round of densifier treatment after polishing with grit #800. Without densifier, the surface may not shine any better than #800 especially concrete. We sell a two-part densifier that can be used to fill visible and invisible pores to seal and strengthen the top surface. This densifier forms natural stones with granite and concrete giving them a permanent seal. After densifier treatment, continue polishing with higher grits.

After polishing with grit #1500, you will see the surface shines and reflects (without water), if not then densifier treatment is needed. Buffing pads are designed for final polishing and filling microscopic pores on the surface with their resin so select the dark or light buffing pad depending on the color of your surface. Start with a little bit of water and then buff it dry. You can also buff on a layer of beeswax occasionally.

Tips and Tricks:

Move the polisher around more quickly when you polish dry to dissipate heat. After polishing with grit #1500 you should see the surface reflect, otherwise it won't shine any further with higher grit.

DENSIFIER USER GUIDE (1 pint: 2"x8" or 3"x5")

- Content:**
1. One bag of granular crystal powder: **dissolve all this in water to make 1 pint of densifier.**
 2. One smaller bag of chalky powder: **use 1 teaspoon per gallon to cure from the top down.**

Prepare Densifier Dissolve the whole bag of densifier in the purest water you can find such as deionized water, or purified drinking water. Add about $\frac{3}{4}$ pint initially, dissolve all the crystals then top it off to 1 pint total volume. This solution is caustic so the best container for long term storage is a glass container in a warm place. If this solution gets on your skin, rinse off immediately and neutralize the affected area with lemon juice or vinegar. **Wear gloves and eye protection when working with this solution!**

Prepare Curing solution: Put 1 teaspoon in a gallon size container and fill up with cold tap water. Shake well and then let the excess powder settle for 10 minutes. Collect the clear solution into a spray bottle for use. Keep this in a cool place above freezing temperature.

Densifier treatment:

- After polishing with grit #400, one densifier treatment is recommended. Clean the surface then brush or spray on a layer of the curing solution (skip this step for marble and travertine). Once this dries there will be some residual white powder in the pores. Use a hair dryer or heat gun to blow dry it or let the slab sit in direct sunlight until it is hot to dry the stone pores completely. Then brush or spray on a layer of densifier. Once dry, spray another time if the surface is not yet smooth or fill low spots manually with a stick if you have to. When this is dry and coat the surface evenly, spray on some curing solution, when it dries spray some more on (repeat at least 5 times) and keep the surface moist for as long as possible. Multiple spraying is necessary because the curing agent dissolves very little in water. Then cover with a sheet of plastic to keep the surface moist overnight or longer. Spray more curing solution on to wet any parts that dry out. Three components are needed: densifier, cure, and water for the densification process to take place slowly over a day or two depending on the temperature. First tiny stone crystals are formed, then they grow bigger and bigger slowly until they fill those pores and can't be washed away. Once cured, it's no longer soapy when wet. Then continue polishing with higher grits.
- After you are done with #800, try polishing a small area with #1500, and then wipe it dry to examine the result. If the polished area does not shine and reflect then **stop, you need to treat the surface again.**

Tips and tricks:

- Avoid treating already smooth surface on prefabricated granite. Most of these surfaces especially from less expensive imported prefab have been treated with wax or acrylic wax so it will not soak densifier. Treatment may destroy some of the wax and make it worse. Treat only newly cut and polished area for these slabs. For scratches on prefab, you'll most likely need to remove the top layer for densifier to work.
- The main goal of treating with densifier is to soak the densifier and cure component into the stone so that they react within and form stone particles to fill the pores thus making the top surface much denser. This is why it is very important to make the stone bone dry before adding densifier solution because it has some viscosity.
- Densifier solution can also be used as a cleaner/sealer/protector so wipe a small amount on a dry surface occasionally and then wipe it off after 5 minutes with a damp rag.
- The curing powder can be used to fill tiny defects and then treated with densifier to become semi-transparent, but treatment will take a while and the treated areas need to be kept moist during the process.