



Polishing Powders

In this training video we're going to cover the polishing process using Modern Stone Technologies, Jazz. There are a few different levels of shine that can be achieved using Modern Stone Technologies products and processes. Anything from a satin finish all the way to a high gloss "mirror" like reflection can all be considered polishing the stone. It is the job of the contractor to determine which level of polish the customer is looking for and then take the appropriate steps required to achieve that finish. For satin finishes or light polishing, you can use high-grit honing powders, resin bond diamonds or the Evolution Pads. But if the goal is to achieve the highest level of reflection you will need to use Modern Stone Technologies Jazz Polishing Powder.

Jazz is a mildly acidic polishing powder designed to be used on calcium carbonate based stones such as Limestone, marble and travertine. Depending on the current condition of the floors, polishing the surface of the natural stone can be done with multiple steps or with a one step top polishing process. A lot of times a customer will just be looking to spruce up an existing polished floor. In this case, or the case of a newly installed floor, a one-step top polish can be done to achieve this finish. In this video we'll be working on marble, a metamorphic rock composed of calcium carbonate minerals, using Jazz polishing powder. This floor was left at a 1500 grit finish prior to the polishing step. For softer stones such as travertine or limestone, go to your polishing step after the 800 grit. For marble surfaces polish after the 1500 grit, and for granite bring the stone all the way up to the 3500 grit or buff diamond which can vary between 8500 and 11000 grit. It is important to know that this product will not work on granite and will have less effect on stone with milder amounts of calcium such as white carerra and green serpentine.

Here's a list of equipment needed for the polishing process: A floor machine with a water tank, capable of running at least 135 pounds, a portable extractor or truck mount or similar extractor such as a Shop-Vac or any dry/wet vacuum, a stand-up grout brush or similar agitation brush to remove the slurry from grout lines when needed, a hog's hair buffing pad and finally Modern Stone Technologies Jazz polishing powder. For honing and polishing powders always use a hog's hair buffing pad. A hog's pad is slightly more aggressive than a white pad, but less aggressive than a green or brown pad. This pad has synthetic fiber sin it that help create friction. That friction creates heat which in turn helps with the polishing process.

To create the slurry apply approximately one cup of polishing powder to the floor. Release small amounts of water with the floor machine around the pile of polishing powder until a slurry at the consistency of a melted milkshake has been created. Once the slurry has been created spread the pile over the area that is to be polished. When working with polishing powders keep the areas small and manageable. Remember, this polishing powder is acid based so if they are allowed to dry or are used too hot they can cause etching in the floor. Luckily this etching can be easily taken out simply by going over the areas with the polishing compound. The process of using polishing powders is very similar to using honing powders, diamonds and the Evolution Pads. Take slow, consistent passes over the area to ensure a nice even finish. One of the differences from polishing powders to honing powders or diamonds is that instead of working over the entire area with each pass, work in rows. In other words, do all of the passes on the first row before moving down to the next row. Another difference with the polishing powder is that we'll only do 2-3 passes instead of the 4-6 recommended for honing powders and diamonds. Each stone is going to react differently to the polishing process so it is a good habit to check the area with a squeegee after the first 2 passes. The desired level has been reached; move on to the next row. If it appears to be less than the desired result, so 1 or 2 more passes. Once the result has been reached, move down to the next row. It is very important to add water to the first row that we started on. Again, this product will etch the floor if allowed to dry. So by applying water to the completed rows we'll prevent those areas from drying so that we can safely move on to the next section, extracting the entire area once it has been completed. Determine the speed of the machine by watching the slurry lines created by the floor machine and slurry. The perfect speed will be identified by have approximately a 1-2 inch gap between each line. If the slurry line are too close together it is an indication that the machine is moving too slow wasting valuable time and potentially burning the floor and if they're further apart it is an indication that the machine is moving too fast which can result in an uneven finish. While working the slurry, ensure that the compound does not dry by continually adding small amounts of water as you go.

As you know, drying the slurry can result in etching the surface while adding too much water will make the product ineffective. The most effective to control the slurry is by using the floor machine. A squeegee can also be used to move the slurry, but will require more effort as well as allow the areas to dry that are not being worked on. By moving the floor machine in a counter clockwise motion, the slurry will be collected in a centralized area. Once the pile is in a centralized area it can be moved from right to left by cutting through the right side of the pile or left to right by cutting through the left side of the pile. The slurry can also be move up and down by cutting through the top and bottom of the pile. This technique is a little difficult at first, but will result in a much more effective process. Notice what happens when moving the machine in a clock wise motion; instead of collecting the slurry in the middle it is being pushed out to the side making it impossible to control. Learning how to maneuver the machine in order to move the slurry to the area that is being polished is going to be the most effective way to complete these projects. Once the passes have been completed over the entire area it is time to extract. For this demonstration we'll use a Shop-Vac and a 5-gallon bucket for the rinsing and extraction process. Start by extracting all of the slurry from the completed surface. Once the polishing powder has been extracted, use a bucket of water to rinse the floor properly. Use a deck brush or a grout brush to agitate the slurry out of the grout line and to spread the water to ensure a thorough rinse. Once you have thoroughly agitated and rinsed the area, use the Shop-Vac to extract the rinse water.

Once the floors have dried, they should have a "mirror-like" reflection and should almost look wet to the touch. The stones will have noticeable enhanced appearance; by polishing the surface we have brought out the colors and beauty that was already naturally present in the stone. Also notice how detailed the clarity in the reflection is on the marble surface. This concludes the polishing process training video. Thank you for watching and we'll see you in the next video.