

Using SR2000™, the Heavy Duty Hitter

Concrete Surface and SR2000 by Billy Willis



I wanted briefly educate you on when and why you would consider using a heavier photoresist material. I will also, touch on depth, blasting pressures, paint fill, photomask removal and offer you free samples for you to try.

The focus of this article will be mainly about the concrete paver brick. Though, there are many different types of unpolished and irregular surfaces that I could mention, I will stick with the two that I seem to get asked about most often. They are the concrete paver brick and the traditional clay brick. These bricks are most commonly used in projects such as donor walls and walkways.

You should first know the difference between the two; I'll begin with the traditional clay brick though there are different densities in clay brick, in comparison to concrete brick, the clay brick is made of sand and clay. I won't go into the science of it all but; I will say that the clay brick does engrave much quicker than concrete in general because of its combination of matter. The cost of clay brick is a bit more expensive to purchase and can be personalized for any project.

Sandcarving several bricks can be labor intensive. Consider the time and labor it will take to move several heavy bricks, before bidding on and/or accepting a brick project.

Using SR3000 Photoresist Film as an Option

If your project is a traditional paver brick and requires a light to medium etch in depth and the option to paint fill, then I would recommend using SR3000 Self Stick film in the 5 mil. SR3000 has industry-leading durability that can not be found in a self stick film. You can trust it for its versatility with depth, fine details, and on flat or curved surfaces and most irregular surfaces. You will be thrilled with the results however, keep in mind when using SR3000 you will need to apply extra adhesive.



SR3000™ was used on this brick.

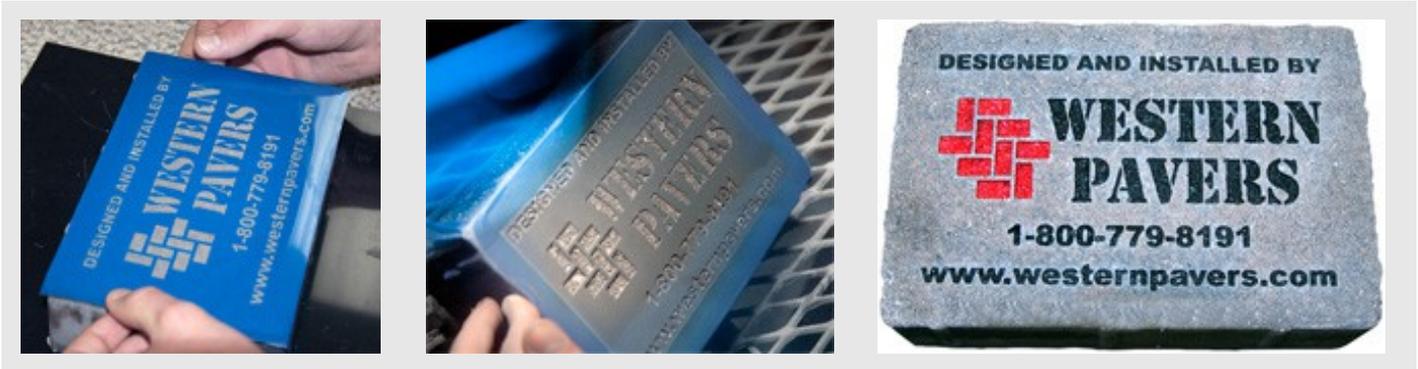
Concrete by nature is a hard and what we call extreme surface. Concrete bricks are made with an aggregate mixture and can contain large pebbles through out. The quality of the mixture will vary and depend on the manufacturer. If you are bidding on a concrete brick job, I recommend you use builders' grade concrete mix, which contains smaller pebbles in the mixture and is easier to carve while sandblasting.

As I continue, I'll cover the material and sandblasting pressures.

Blasting on concrete can be a challenge but with the right material and tools, you can knock your project right out! Here are some examples of a concrete brick sample project that were done by one of our customers Martin Laser.

SR2000™ 6mil was used to blast this brick project. Read More about what he had to say...

"I was very impressed with how the mask held up after hitting it so long to achieve the depth we wanted, still allowing the sharp detail of corners and edges in the text and design. What I notice about the Problast photomask that differed from other masks we've used from other manufacturers is that; it hugged and held onto the paver very well, not blowing out or coming off to cause error in the job."



Using SR2000 Photoresist Film

If your need is for a deep carve and your artwork is bold with thick lines in nature and some moderate detail; I would recommend, the "Heavy Duty Hitter" SR2000 6mil, photoresist film for its ease of use and extreme durability.

The beauty of the SR2000 photoresist film is its durability to withstand high blasting pressures, its versatility and flexibility to apply it to any extreme or unpolished surface. The ease of use is also a plus and there's also an extra option to paint fill your project all with the one stencil.

Never used this film before? No worries, it's easy to use! [Check out our online video.](#)

Try a sample of the material for yourself! Call 800-729-9478 and speak to one of our sales representatives today!

Blasting Abrasive and Pressures

The blasting pressures will vary depending on each project however, if its depth you are after and you are doing multiple pieces; I have provided a guide for starters.

1. You may want to blast a sample piece if you feel it's necessary.

2. Changing your abrasive to a coarser grit will help facilitate the blasting process but may not be completely necessary. This depends on the nature of the projects solid condition. If the stone or concrete is more porous, then using a 150 grit aluminum oxide will do just fine. You can also use 150 grit silicon carbide as your blasting abrasive. When using a 150 grit abrasive the recommended blasting pressure is 40 – 45 psi.

3. If you have a multiple piece project and a much harder and larger surface to work with, I would recommend changing your abrasive to at least 120 - 100 grit this will speed up the engraving process. When using 100 grit abrasive the recommended blasting pressure is up to 60psi when using 6mil. (When using a thicker mil such as; SR2000 9Mil photoresist material 80+psi can be used)

Here is the difference between the two:

Aluminum oxide: a sand-like material coarse in nature and is used as a general blasting media for engraving granite, marble and other stone products that require deep, heavy engraving. Brown aluminum is the ideal multipurpose and economic blasting material. Proper precautions need to be taken when exposed to finer particulate.

Silicon carbide: is preferred for flat lapping of materials such as glass, crystal, metals and ceramics. It is commonly used for blasting metals, because it leaves behind a polishing effect. SC cuts very quickly, faster than AO in pressure blast applications, because it has a sharper structure. It does not, however, recycle as well as AO. SC's advantages include its reflective properties, polishing ability of metals, and speed of etch on glass. Proper precautions need to be taken when exposed to finer particulate.

Another thing to keep in mind when using a coarser abrasive is that the coarser the grit, the more apparent a texture will be and in this case, the texture will not make a difference because that is the nature concrete. Regardless of which abrasive you choose to use, either of the two will work, it all depends on your personal preference. Most importantly, they will both provide you the same result in the end.

Note: When quoting a project for a large production run, consider Problast Photomask, Inc. to produce you stencils for you.

Paint Fill

Part of the versatility of SR2000 photoresist film is that you are able to paint fill with the same stencil you have been sandblasting with since the beginning of this process. There is no need to remove and re-apply a new stencil.

Paint fill is easy and takes little time to do. If you are going to paint fill, we recommend using a Lithichrome paint.

Lithichrome paint weathers well in various climates and is a durable paint for outdoor use. Not recommended for surfaces other than stone.

With your airline hose, simply blow out the excess dust from the engraved image area and spray your paint. Allow the paint to dry and then remove your stencil. The results are rewarding.