



Salba Sauce – Technical Guide

Version 1.1

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1 Introduction

1.1 Friction

The dictionary definition of friction is – the force that resists relative motion between two bodies in contact¹. For skateboarders, friction is the enemy, it is the thing that slows you down and stops you when trying grinds and slides. For concrete, sources of friction exist at both the macroscopic level, things you can see, and at the microscopic level, things you can't see with the naked eye.

1.2 Concrete

Concrete has a long history of human use and is one of the most prevalent materials in the built environment. It is a porous material made by mixing cement, sand, gravel and water. The mixture is then allowed time to cure which produces its final solid form.

At the microscopic scale it looks similar to a sponge with lots of small holes, craters and jagged edges on the surface. These features on the surface create the friction which prevents your board and trucks from sliding when trying tricks. (see Figure 1). Although concrete is thought of as a strong material, it is much softer than the metal of a skateboard truck. The pressure of a person landing in a grind is huge because the all the force is transferred to the small surface area of contact between the truck and the ledge. This can cause you to dig in and stop and also cause damage to the ledge.

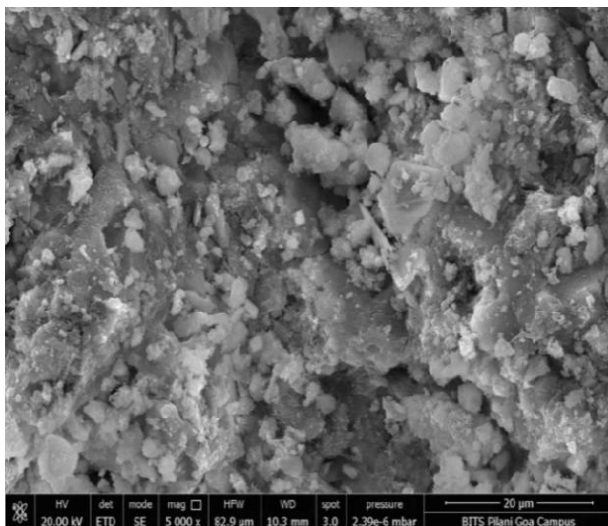


Figure 1: Microscopy image of normal concrete²

¹ <https://www.merriam-webster.com/dictionary/friction>

² Tejas Doshi et al 2021 IOP Conf. Ser.: Earth Environ. Sci. 822 012019

1.3 Smoothing Concrete

Smooth concrete is key to having an obstacle that can be skated easily. A rub brick (Figure 2) is a tool used to manually smooth concrete in the construction industry. They are typically made from silicon carbide – a very hard substance which gradually grinds down concrete through abrasion. An angle grinder with an appropriate disc can also be used to smooth concrete. When preparing an obstacle these tools reduce the macroscopic imperfections which lead to friction.

It is worth spending your time to get the concrete as smooth as possible before applying Salba Sauce. It's important to focus on smoothing the areas where the trucks contact the obstacle (see Figure 3). Table 1 on the next page shows how effective the rub brick can be at removing defects from concrete.

Not all obstacles will require preparation with a rub brick. For example, areas that have been smoothed by repeated grinding over time, or more modern, well-formed concrete surfaces.

Note: Do not modify another person's property without their explicit permission.



**Figure 2: Marshalltown M840 Concrete Rub Brick
6 x 3 Inches**



**Figure 3: The point of contact between the truck
and a ledge, circled green**

Table 1: Rub brick vs defects in concrete

Before being treated with a rub brick	
	
<i>Figure 4: Concrete defect, top view, before</i>	<i>Figure 5: Concrete defect, side view, before</i>
After being treated with a rub brick	
	
<i>Figure 6: Concrete defect, top view, after</i>	<i>Figure 7: Concrete defect, side view, after</i>



2 Salba Sauce

Salba Sauce is a polymer coating which reduces friction at both the macroscopic and microscopic level in several ways:

1. It creates a hard, durable, smooth surface
2. It fills in the invisible holes and craters
3. It soaks into the concrete creating a stronger concrete-polymer composite material

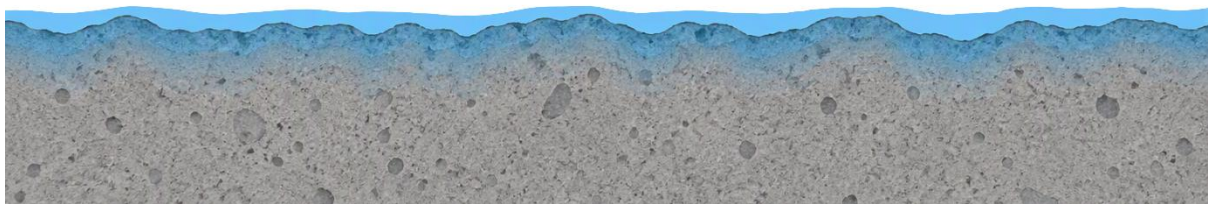


Figure 8: Diagram of Salba Sauce applied to concrete. The coating is coloured blue for illustrative purposes only.

2.1 The Benefits

- Easy to use, tried and tested – it works
- Grind and slide faster and longer than before
- Less likely for your board to stick and throw you off mid trick
- Slick ledges get worn down slower and are less prone to chipping
- Less maintenance, you can use less wax and less often
- Create a new skate spot and breathe new life into old spots
- Increase your confidence to learn new tricks



3 Instructions For Use

- **Smooth** – ensure the concrete is as smooth as possible before use (see section 1.2)
- **Spray** – multiple thin coats are better than one thick coat
- **Wait** – the longer the better
- **Skate** – Have fun and learn new tricks

One can of Salba Sauce will create approximately 5.5 meters of skateable surface – this will vary depending on the porosity of the concrete

3.1 Drying Time

On hot sunny days, it can be skated after 15 minutes to 1 hour. However, the longer it is left the better. Ideally apply it several hours before you skate it. Or apply it at the end of the session and leave it overnight. Please note that drying time is highly dependent on the coating thickness and weather conditions.

3.2 Do's & Don'ts

Table 2: Recommendations

Do 	Don't 
Spend time preparing the spot before use. Using a rub brick for this is highly recommended.	Spoil the session e.g use it on an obstacle when other people are using it.
For grinds, focus preparation and application where the trucks contact the ledge (Figure 3). Or, where the nose and tail contact for slides.	Put it in on too thick. Multiple light coats are better than one thick one. Thicker coats take longer to dry.
Use when the obstacle is dry and the weather forecast is good.	Use where it is not needed e.g. metal coping, rails, angle iron, heavily waxed obstacles.
Clean up any dust created. Inform other people in the area that the obstacle is drying if needed.	Use too much wax on top of the Salba Sauce. If the obstacle has been smoothed properly, you will only need a little bit of wax.
Top up the spot with a light coating every now and then to keep it slick.	Use it illegally or irresponsibly.