

# ***Shotblast vs. Grinding***

Concrete Surface Profile (CSP) is the term used when judging the degree to which the concrete is prepped. All coatings require a minimum of CSP 2, and a CSP 3 is preferred. When used in high foot traffic and vehicle traffic a CSP 3 is needed to achieve proper adhesion. For heavy moisture issues a CSP 5 is required for use with moisture mitigation product. While CSP 2 is the minimum required, it is not what we use as the standard for what we do. Garage Force has never been about doing the bare minimum or just “good enough”. We are about excellence and providing the best and longest lasting floors available.

## **Grinding**

According to the International Concrete Repair Institute (ICRI) a floor grinder can only achieve a maximum of CSP 2. While this may be acceptable in limited foot traffic applications this is not the recommended way to prep. Remember CSP 2 is the maximum for a grinder and not the automatic. Just because you used a grinder does not mean the floor is prepped to CSP 2.

ICRI states, “Grinding is not recommended for the following applications: Preparation for coating or sealing unless followed by acid etching, shot blasting, high-pressure water-blasting;”

Obviously we want to avoid introducing water to our floor as this would only create more issues. That leaves shotblasting as the only suitable method.

Grinding is never intended to be a primary prep method. It is primarily used for coatings removal and areas where a shot blaster absolutely can or should not be used i.e. around a pool.

## **Shotblasting**

Shot Blasting removes any loose contamination (including laitance) from the surface and exposes sound, tightly adhered underlying concrete/aggregate.

According to ICRI a shotblaster achieves a CSP 2-9. This means that CSP 2 is the minimum achieved and you are more easily able to reach higher CSP levels. This is critical for proper adhesion of coatings.

This can be done with different size and amount of shot, shot mixture, and travel speed. The size of the shot you use will have a definite effect on the profile or texture of the concrete. For example, if you are looking to create a concrete profile with a lower CSP, use a smaller sized shot. However, if you are looking to create a concrete profile with a higher CSP you’ll want a larger sized shot or mixture of shot so you can create a more aggressive and textured profile.

The Garage Force standard is shotblast everything possible, grind only when absolutely necessary. Remember prepping your surface is not about getting it done as quickly as possible but about achieving the best prep possible to provide the longest lasting floor coatings on the market

