

# Outdoor Grind & Polish

## with Color Juice application

This restoration process on outdoor concrete will produce a look very similar to interior diamond polished floors. Most times on outdoor projects the final sheen would be lower than a typical interior diamond polished surface, but the process, as well as the equipment used, would be in many parts similar on both settings.

### The process

**Grinding** – This operation will level the high spots on the slab removing the top layer of sealants, cement, color dye, paint, epoxy, stains and dirt previously penetrated into the surface. As we say in the trade, will “cut” the surface to prepare the concrete for color dye or stain application and sealer application. The grinding is done with specifically designed planetary floor grinders. These grinders are electric or propane powered walk-behind machines on which are mounted diamond encrusted metallic buttons, called “**metal bond diamond buttons**”. Most grinding is performed with 30 grit buttons. The grinding is often a very slow process and can easily take days even for smaller size projects. After the concrete is grinded, the grinding marks (swirl marks) will be removed with 70 and 120 grit diamond buttons. The grinding process will expose the stone aggregate contained just below the surface. Sometimes also exposes defects contained into the slab, so a certain amount of repair work is normally needed on most outdoor concrete slabs.

**Staining** – Once the surface is prepared and cleaned, a color stain can be added to create a completely customized look. Although other products are available on the market, our coloring system of choice is Ameripolish Color Juice. The formulation of these high quality stains and pigments, in conjunction with highly skilled craftsmanship, will produce extremely beautiful and durable results. Most often we prepare on-site mock-ups and samples to properly preview the final look. Color Juice stains are UV stable and will not fade or yellow with time.



**Sealer** – Our sealer of choice is Ameripolish X Link WB (water based, VOC compliant penetrating sealer). This penetrating product will plug the concrete pores rather than making a thick plastic film over the concrete, like other sealers do. As the manufacturer explains, the sealer will create “**a window of opportunity that allows cleaning of spills**”. In certain situations, when the concrete is ground to a very smooth finish, this sealer would allow high-speed burnishing. This operation increases the sheen and strength of the sealer.



### ***Diamond tooling*** –

The quality of the diamond tools (metal bond buttons, resin and ceramic bond pads, brazed pads, buffing pads) and of the grinding/polishing machines is very important. Our Superabrasive diamond tooling and equipment is engineered to perform at the highest levels in many type of situations, from commercial to residential, indoor and outdoor settings. Our Ermator Dust Control units are OSHA compliant and abate the majority of the airborne dust, making the work environment safe for the crew and for anyone on the premises.

***Personnel*** – Some operations during a grinding and polishing project are repetitive and slow. Many phases, though, are critical and should be performed only by trained personnel. Each project will offer a generous dose of unforeseen and challenges, no matter how straightforward it seems to be initially. Our crew is highly trained and able to make decisions on the spot whenever necessary.

***Score Lines*** – One of the biggest advantages of this restoration process is that allows for repair of cracked concrete better than any other restoration system. In old concrete cracks are often acting as control joints. By incorporating the cracks repair into a beautiful score lines design we allow the functionality to remain, while properly addressing the aesthetical side.

***Maintenance*** – Our Outdoor Grind&Polish concrete is beautiful and very durable. Periodic re-application of X Link WB sealer is recommended in most situations to maintain the concrete protected and keep it performing at best. This operation is very cost effective, quick and simple. The resealed concrete can be open to traffic in as little as 1 hour. The reseat operation should be performed more often in high traffic settings or when pressure washing is performed multiple times a year.

***Expansion joints*** – Old outdoor concrete slabs often have wooden expansion joints embedded in it. Most times the wood boards, often 2x4 lumber, are in bad conditions and need to be removed. The voids left are then backfilled with concrete or other engineered cement products. Sometimes the layout and design of the wooden control joints makes more difficult achieving good aesthetical results, and can affect the final look.