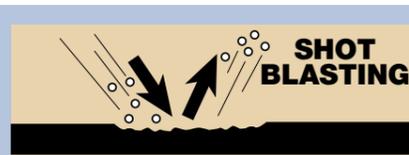


CONCRETE FLOOR PREPARATION GUIDE



Blastrac Shotblasters



SHOT BLASTING

Shot Blasting is a one-step surface preparation technique that removes, cleans and profiles the surface in a single application. It can effectively remove laitance, paint, old coatings, dirt and other contaminants that are in or on concrete. This process will prepare new concrete or steel for coating applications and will enhance and improve the bond for any type of coating system. Shot Blasting is a dust-free method of surface abrasion in which thousands of steel shot particles are propelled at the surface removing the top layer and contaminants and bounce back into the system to be re-cycled. The steel shot profiles the surface, while contaminants are removed by the dust collection recovery system. Fine (5280-300) Shot is recommended for most coatings preparation. Profile CSP 3 to 7. SURFACE DAMAGE RISK - LOW.

What a Shot Blaster can do



Prepmaster High Production Grinders



GRINDING

Diamond Grinders use horizontally rotating discs to level, smooth or clean the top surface of a concrete slab. Some Grinders come with a multi-accessory disc that can be loaded with long lasting Dyma-Serts™, Strip-Serts™, grinding stones or star wheels to level rough surfaces, remove sealers, paints, mastics or glues from concrete slabs. Primarily designed to work the top surface of a floor over large areas, grinders can also be used effectively to level uneven joints or high spots of 1-3mm. Grinders provide contractors a smoother finish than scarifiers or scabblers. Profile CSP-2. SURFACE DAMAGE RISK - LOW

What a Grinder can do



Edco Floor Grinders



What a Scabber can do

Scabblers use compressed air to hammer piston-mounted bits onto the concrete surface. They tend to roughen the concrete surface more than grinding or scarifying. A Chip-Deck Scabber can remove up to 6mm of concrete surface in a single pass. A typical removal rate for a machine with a 12 inch working width is 20 to 25 square metres per hour at 3 to 6 mm depth. Profile CSP 8-9. SURFACE DAMAGE RISK - VERY HIGH.



Edco Air Powered Scabber

PREPARATION METHOD SELECTION CHART

- STEP 1) To use this chart, determine the duty and application expected of the floor from Table 1. Then select the typical coating that will suit the application.
- STEP 2) Determine the surface profile required for this coating and the machine that delivers the best result from Table 2.
- STEP 3) Table 3 indicates the range of profile attainable by the various surface preparation methods.

TABLE 1

DUTY	TRAFFIC	APPLICATIONS	TYPICAL COATING TYPES
Light	Pedestrian only	Office, wet areas	Sealers, seamless, thin roll-on or spray coatings
Medium	Pedestrian, cars, soft wheel trolleys	Laboratories, Showrooms	Seamless, Roll-on, spray, Self-levelling epoxies
Heavy	Forklifts, pallet trucks, hard wheel	Warehouse, Bakeries, Abattoirs	Roll-on, Self-levelling, trowel-on epoxy screeds

TABLE 2

**** Good *** Satisfactory ** Poor * Not Recommended

COATING TYPE	PROFILE	ACID ETCH	DIAMOND GRIND	SHOTBLAST	SCARIFIER
Sealer	CSP-1 Very light	***	****	**	*
Seamless	CSP-2~3 Light	**	****	***	*
Roll-on /spray Epoxies	CSP-2~3Light	**	****	****	**
Self-levelling	CSP-3~5 Medium	*	****	****	***
Trowel-on epoxy screeds	CSP-3~5 Medium	*	***	****	***
Cement screeds	CSP-3~9 Heavy	*	***	****	****

TABLE 3

	CSP-1	CSP-2	CSP-3	CSP-4	CSP-5	CSP-6	CSP-7	CSP-8	CSP-9
Acid Etch	Green	Green							
Diamond Grind		Green	Green						
Shotblast			Green						
Scarifier						Green	Green	Green	Green

WHAT IS LAITANCE?

Laitance is the weak, milky layer of cement and sand fines that rise to the surface especially with over-wet concrete and mixes with bleed water, usually as a result of premature finishing or over trowelling.

WHY REMOVE LAITANCE?

The life of a coating on a concrete floor is dependant on proper adhesion to the concrete. If a coating is applied directly to the laitance layer (which is inherently weak) floor traffic from trolleys, forklifts or other machinery will cause disbonding of the coating.

By removing the laitance layer, coatings can firmly adhere to the concrete substrate giving longer service life.



CHISEL SCRAPING

Chisel Scalers are air-powered hand tools that use a rapid hammering action to increase production on jobs that would ordinarily require manual scrapers. Various accessories are available for Chisel Scalers, enabling contractors to easily remove tile, grout, ice, fiberglass, concrete, asphalt, roofing shingles or hardened deposits. Minimum air is needed to operate these tools - only 6-8 CFM at 80 PSI - or 12-15 CFM at 90 PSI. For larger projects, engine powered ride-on scrapers are used for high productivity and rapid removal of tiles, wood parquet carpets and glues. Electric chisel scrapers also available.

What a Chisel Scaler can do



Blastrac Deckabrator Power Scraper



SCARIFYING

Scarifying machines impact a cutting wheel to the concrete or steel surface. Tungsten or hardened steel flails strike the surface leaving a clean, roughened or textured surface. Scarifiers are also referred to as planers, milling machines, rotary cutters or simply surface-preparation machines. Scarifiers allow you to control the depth of cut more precisely than with scabblers. These versatile machines have various styles of interchangeable cutter assemblies that can be used for cleaning, grinding and light or heavy milling. Production rates range from 35 to 150 square metres per hour (dependent on machine size and horsepower). CSP 6-9. SURFACE DAMAGE RISK - MEDIUM/HIGH

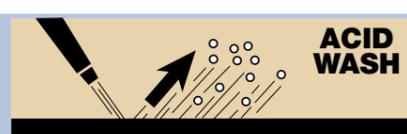
What a Scarifier can do



Edco Scarifier



Sawtec Vacuum Shrouded Grinders



ACID WASH

Acid etching of concrete floors is mainly used for light duty applications as the weakly bonded laitance layer is not totally removed. Acid etching does not remove surface contaminants, which must be removed before the acid etching process. Diluted acid is applied to the concrete floor which reacts with concrete surface. The resultant surface must be thoroughly high pressure washed at approx. 3000PSI to etch the surface and remove the acid solution. Vacuum and allow to properly dry for at least 48 hours. Ensure acid is totally neutralized before applying coating. Acid washing is not considered suitable if concrete has any oil, grease or curing agents. Not suitable for vertical or overhead surfaces. It may be the preferred method for food preparation areas. Profile CSP-1.



Sawtec Crackchasers



CONCRETE SURFACE PREPARATION

SURFACE PROFILE GUIDE



PHONE FLOOREX HELPLINE: 1800 356 673



CSP 1 (acid etched)



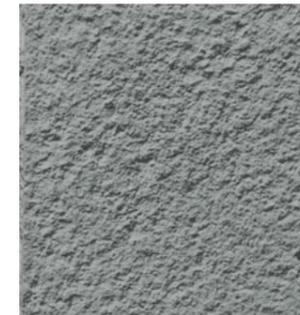
CSP 2 (grinding)



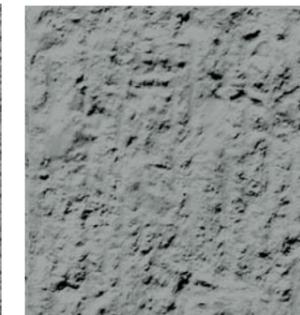
CSP 3 (light shotblast)



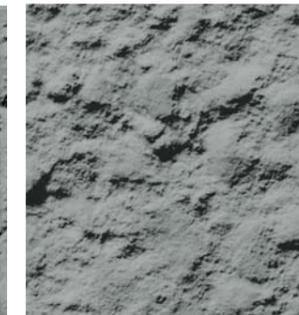
CSP 4 (light scarification)



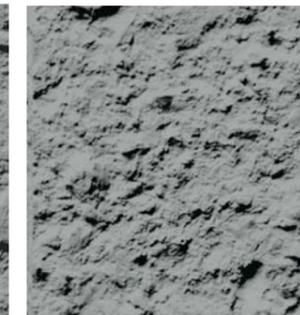
CSP 5 (medium shotblast)



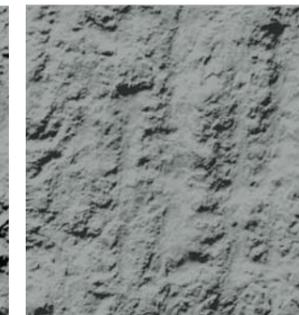
CSP 6 (medium scarification)



CSP 7 (heavy abrasive blast)



CSP 8 (scabbled)



CSP 9 (heavy scarification)