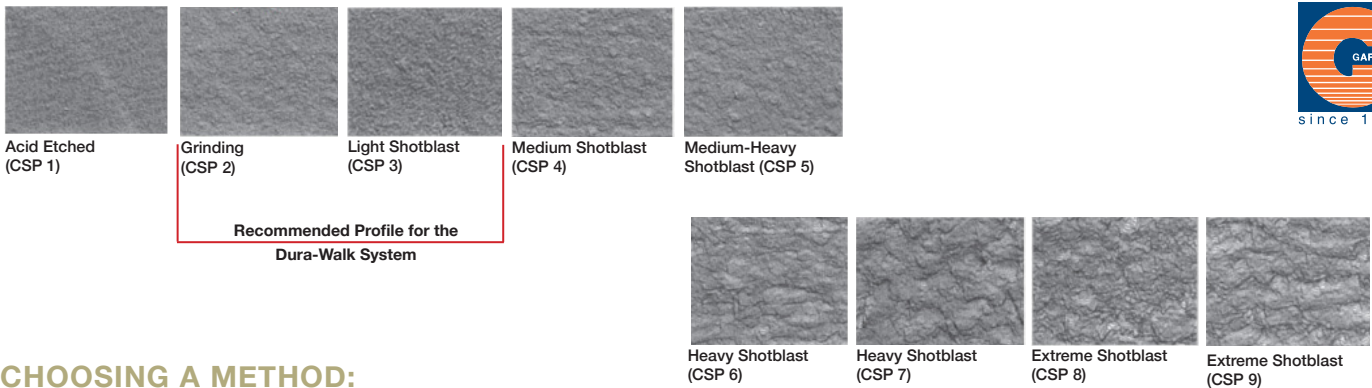


APPLICATION GUIDELINES

Concrete Surface Preparation Guide



CHOOSING A METHOD:

1. ASSESS THE SURFACE

Examine the surface and use the guide below to determine removal type.

2. DETERMINE THE PROFILE/END RESULT DESIRED

Use the surface profile guide above to help identify the needed end result.

3. IDENTIFY THE PROCESS

Based on the surface conditions and the desired end results, identify possible equipment/surface preparation methods.

NOTE: More than one preparation method may be needed to achieve the desired end result.

4. TEST TO CONFIRM

Perform a test patch to confirm selection

PREPARATION METHOD:



Shot blasting* is an environmentally friendly and cost-effective method for preparing concrete surfaces. This labor and time-saving process strips, cleans and profiles the surface simultaneously eliminating drying time and costly disposal procedures associated with other surface preparation methods. Shot blasting procedures excellent bonding characteristics, reducing coating failures and maximizing floor life.



Diamond grinders and polishers* use horizontally rotating disks to level, smooth or clean a concrete surface. Remove coatings or adhesive residues; smooth or flatten concrete slabs, including troublesome curled expansion joints. Remove surface imperfections. For decorative concrete applications, use the machines to polish concrete to a high shine or to restore old slabs for architectural finishes.



Use scarifiers* for repairing common slab problems: curled joints, high spots, uneven slabs, burned slabs due to over-troweling, trowel marks, and damage due to weather. They remove oil, contaminants, traffic lines, epoxy coatings or paint. They are suitable for smoothing uneven surfaces and trip hazards, or for cutting safety grooves in ramps, walkways and loading docks.



Scrapers are used to remove a wide range of floor covering, waterproofing membranes and thick coatings. Scrapers can remove rubber, epoxy, thin-set mortar, elastomeric coatings, adhesives and more.

* Always wear appropriate eye, ear and respirator protection for the application, as specified by OSHA regulations and equipment manufacturer. Never operate or maintain equipment before reading and understanding the instructions for operation and maintenance. Obey all safety sign and instructions while operating or maintaining equipment.

LIGHT REMOVAL	DESIRED RESULT	DESIRED PROFILE							PROCESS	
		SP 2	SP3	SP4	SP5	SP6	SP7	SP8		SP9
BARE CONCRETE										
Prepare to apply thin film coating	Smooth, minimum profile, open pores of slab	•	•							Shot Blast+Grind OR Grind
Light dirt removal (1/32" or less)	Clean surface, open pores	•	•							Shot Blast+Grind OR Grind
Level uneven surface (1/16" or less)	Smooth surface	•	•							Grind
LIGHTLY COATED CONCRETE (Thin film 0-5 mils)										
Urethane removal	Remove coating, open pores of slab, ready for new coating	•	•							Shot Blast+Grind OR Grind
Epoxy removal	Remove coating, open pores of slab, ready for new coating	•	•							Grind
THIN LAYER OF CARPET GLUE OR TILE ADHESIVE										
Sticky residue	Remove, leave smooth surface, ready for thin coating	•	•	•						Scrape+Shot Blast
Brittle residue	Remove, leave smooth surface, ready for thin coating	•	•	•						Scrape+Shot Blast+Grind OR Scrape+Grind
Brittle residue	Remove from floor, leave smooth, ready for new tile/carpet									Scrape
UNEVEN CONCRETE										
Correct an uneven surface (1/8" or less deviation)	Level floor to smooth	•	•	•						Grind
DIRTY CONCRETE										
Light grease, oil mixed with dirt (1/32" to 1/16")	Remove contaminated layer, open pores for coating	•	•	•	•	•				Scrape OR Scarify, THEN Shot Blast OR Grind
Medium grease, oil mixed with dirt (1/16" to 1/8")	Remove contaminated layer, open pores for coating	•	•	•	•	•				Scrape OR Scarify+Shot Blast OR Grind
COATED CONCRETE (Medium layer 5-25 mils)										
Urethane	Remove coating, leave smooth surface for new thin to medium coating	•	•	•	•	•				Shot Blast OR Scarify, THEN GRIND
Epoxy	Remove coating, leave smooth surface for new thin to medium coating	•	•	•	•	•				Scrape OR Scarify OR Shot Blast OR Grind
TILE REMOVAL										
VCT on concrete or wood	Remove tile and adhesive, make concrete or wood floor bare	Existing slab or floor								Scrape
Sheet vinyl on concrete or wood	Remove vinyl and adhesive, make concrete or wood floor bare	Existing slab or floor								Scrape
Commercial carpet	Remove carpet and glue, make floor bare	Existing slab								Scrape
Ceramic tile or quarry tile	Remove tile and adhesive, make floor bare	•	•	•	•					Scrape+Scarify+Grind OR Scrape+Grind

HEAVY REMOVAL	DESIRED RESULT	DESIRED PROFILE								PROCESS
		SP 2	SP3	SP4	SP5	SP6	SP7	SP8	SP9	
BAD CONCRETE SURFACE										
Spalled areas	Remove spalled areas and weak concrete, make ready for underlay-ment or topping					•	•	•	•	Scarify+Shot Blast OR Shot Blast
Thick layer of laitance (1/8" to 1/4")	Remove weak layer of laitance, make ready for topping					•	•	•	•	Scarify+Shot Blast OR Shot Blast
Contaminated surface (1/8" to 1/4")	Remove contaminated concrete surface					•	•	•	•	Scarify+Shot Blast OR Shot Blast
TRAFFIC MARKINGS AND LINE STRIPES										
Paint - on concrete	Remove painted lines, leave surface ready for thin coatings	•	•	•						Scarify OR Shot Blast OR Grind
Paint - on concrete	Remove painted lines, leave surface ready for thick coatings				•	•	•	•	•	Scarify+Shot Blast OR Shot Blast
Thermal plastic - on concrete	Remove thermal plastic, leave surface ready for new line					•	•	•	•	Scarify
HEAVY CARPET ADHESIVE REMOVAL										
Adhesive removal	Remove carpet adhesive, make floor bare	•	•	•						Scrape OR Scarify
POLISH										
Polish uncoated smooth surface	Smooth to polished, high gloss surface									Grind (multiple steps)