



GARAGE FORCE

REMOVAL OF CONTAMINATION AND OILS

Contamination of the concrete can cause premature failure of the coating system, usually in the form of delamination. Contamination can happen during the placement process but is normally introduced to the concrete from other sources during regular use. Examples of such contamination are fats, oils, dirt from boots, building materials, spillage, or residue from cooking. Other sources of contamination may be present on aged concrete surfaces. Dust, dirt, grease, oil, chalk, chemicals, etc. are examples of the contamination that must not be forced deeper into the concrete or spread over a larger area during removal. A single approach or combination of different cleaning methods may be utilized to remove the contamination. Floor cleaners with degreaser can help to break the contamination down enough to be flushed away with water or a pressure washer. Short term cleaning programs using I.E.E.C (Industrial Enviro Eco-Clean) can gradually eliminate excessive grease and grime in floors. Grinding or shot blasting can remove the top layer of the concrete which will in turn take the contamination with it and leave the floor clean and acceptable for coating. However, the surface can be in such severe condition that the affected area may have to be removed and replaced with new concrete. The simple test of pouring water on the surface, known as the “water break test” can quickly show if a floor is contaminated.

‘WATER BREAK TEST’ FOR DETECTING CONTAMINATION ON CONCRETE

A thin layer of clean water needs to be applied over the surface to be tested. A sprayer/sprinkler/hose can be used to apply the water. Apply the water to the concrete until it forms a thin layer on the surface with no breaks present in the layer. Any beading (similar to rain drops on a polished car) or breaks in the water film indicate contamination is present. This contamination should be removed via cleaning, grinding or abrasive blasting.

DEGREASING

A **citrus based cleaner/degreaser** can be used to remove areas of light to medium areas of contamination. **Simple Green or Citrus based cleaners** can be applied full strength or diluted with water to chemically break down oils, grease, and chemical spills during the cleaning/prepping process. Repeated applications may be required to achieve an acceptable finish suitable for coating. Allowing the cleaner to soak in for extended periods of time (30-60 minutes) can reduce the amount of scrubbing needed to clean the floor. Always remember to flush with adequate amounts of clean water to remove any residue that may be on the surface. The concrete should be allowed to dry thoroughly as most coatings are developed to be applied to dry substrates. This drying process can be expedited using a large propane torch or using an appropriate shop-vac to suck it up.

Cleaners are usually applied to contaminated areas immediately upon arrival to the jobsite. This will allow adequate time to clean the floor, scrub thoroughly, flush with clean water, and allow the floor to dry before coating.

It will always be best to refer to the “water break test” during the flushing of the cleaned surface. If you notice that water is beading up and not absorbing into the concrete, another application of the cleaner may be necessary to completely remove the contamination. Basically, if water cannot absorb into the concrete, then neither will a coating system.

CLEANING PROGRAMS

Industrial Cleaners should be used for floors that are scheduled to be coated and require extra attention due to long term misuse and heavy saturations of oil and grease. These could be locations such as mechanic shops, commercial kitchens, or processing plants. A one-time cleaning with a strong degreaser may not be sufficient to remove all the contamination. A cleaning program utilizing an industrial cleaner as a daily floor treatment for weeks or even months leading up to the installation of a floor coating will ensure that all contamination has been removed and the coating will adhere properly.