



OILBUSTER SYSTEM™

For Slab Reclamation

Oil & Flooring Don't Mix:

How To Treat Oil-Contaminated Concrete

In the post-recession construction market, rehabilitation and renovation have become more common than expansion and new construction on undeveloped land. In fact, the US Green Building Council's (USGBC's) current LEED Certification Program specifically encourages the rehabilitation and/or development of existing buildings and Brownfields, i.e., land that had previously been used for commercial or industrial purposes and may contain low levels of hazardous waste or pollution.

However, there is a problem that has grown in tandem with this construction trend: flooring installation complications or failures due to concrete contamination.

Bond Breakers

In facilities which previously housed warehouses, manufacturing facilities, production plants, and mechanical maintenance areas, it is common to find oil, grease and other hydrocarbon contaminants within the concrete slab. Like oil and water, oil and flooring don't mix: hydrocarbons will often act as a bond breaker for flooring adhesives and coatings.



When these types of facilities are not properly tested and treated for concrete contaminants prior to flooring

installation, these contaminants could cause massive flooring failures, construction delays, safety issues, and loss of building use.

"I think my concrete may be contaminated. How do I know for sure?"

If you're planning on renovating or rehabilitating a concrete slab that may have been used for industrial or heavy commercial purposes in the past, it is essential to know what is in your concrete before proceeding with any type of flooring installation.



Forensic Testing

The preferred method of discovery is forensic testing. This typically involves using a concrete core drill attachment to remove "short cores" (3" in diameter, 2" in depth) from several locations of the concrete in question, especially in areas where concrete appears visibly stained or contamination is anticipated.

Once removed, the concrete cores are sent to an independent laboratory to conduct a battery of tests. Standard contaminate testing protocols call for an Infrared Spectroscopy to identify organic compounds; Ion Chromatography to identify any water-soluble salts or silicates; and an X-ray Diffraction/Energy Dispersive X-Ray Analysis to determine the mineralogical and chemical constituents of the uppermost part of the slab. Once results and analysis have been received from the testing laboratory, all interested parties will have a thorough understanding of exactly what contaminants



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are within the slab, what their concentration levels are, and how to best proceed with treating the concrete.

“My test results show I have oil in my slab. Now what?”

If the concrete core test results reveal the unfortunate truth that your concrete is contaminated with hydrocarbons, the slab will need to be treated in order to prevent flooring failures. While this may be inconvenient, *it isn't a death sentence*: the concrete can be treated without being removed. Using the AC•Tech Oil Buster™ System, the concrete can be cleaned, sealed and ready to receive floor covering within days.



Two Steps: Cleaned, Sealed, & Ready To Finish

The Oil Buster System™ is an economical two-step system. First, the concrete must be mechanically prepared via shotblasting. This will create a uniformly porous substrate that will allow the cleaner to penetrate deep into the concrete.

Next, the **Oil Buster System™ Detergent (OBS-D)**, a biodegradable cleaner, is sprayed onto the prepared concrete with cold water. Once the OBS-D has turned clear, usually within an hour, the concrete is cleaned with a high-pressure, high-temperature pressure washer and a floor spinner attachment.



This allows the OBS-D to reach hydrocarbons deep within the concrete, bind with them, and “float” them to the surface for removal. Most floor spinners have vacuum attachments so that wastewater can be vacuumed up and contained for disposal in accordance with federal, state and local hazardous material regulations. This cleaning process may need to be repeated several times, depending on the level of contamination.

Prior to proceeding, any remaining water must be vacuumed up so that no puddles remain on the concrete surface.



Zero Volatile Organic Compounds (VOCs)

Immediately following the cleaning, the **Oil Buster System™ Coating (OBS-C)** is applied. The OBS-C is a dense, zero VOC, two-part epoxy coating which effectively seals any remaining hydrocarbons within



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the concrete and prevents them from causing bonding issues and flooring failures.



The OBS-C is mixed, spread via a notched squeegee, and back-rolled to ensure even, consistent coverage. After 15 minutes, the OBS-C receives a silica sand broadcast to prevent possible amine blush and delamination of subsequent coatings.

Once the Oil Buster System™ has fully cured, a self-leveling underlayment, patch or feather finish can be installed directly to the cured system. At this point, flooring installation can proceed as normal without worry of oil-related failure.

New Life For Old Concrete

With the **AC•Tech Oil Buster™ System**, savvy construction professionals have learned to avoid what at first may have looked like a death sentence for an old concrete floor. Not only can the sentence be commuted and complete demolition avoided, total restoration

can be accomplished in a mere few days, followed immediately by new flooring installation.

Rock Solid Warranty: 10-Year Materials & Labor

Backed by a 10-year materials and labor warranty, the Oil Buster System™ offers a long-term solution to oil and hydrocarbon contamination in concrete.

It's A Family Affair

Graham Capobianco is the fifth and latest generation of a family of floor covering experts and is no stranger to the myriad of potential failures which await every flooring installation.

Graham has spent 7+ years in flooring sales. During the last 4 years, he has developed special expertise working with concrete moisture control, contamination, oil remediation, and epoxy flooring products.



Graham has helped customers and clients overcome situations that would otherwise make normal flooring installation impossible. Graham currently works within the technical department of AC•Tech.



To learn more about the Oil Buster System™, please consult the Oil Buster System™ Technical Data Sheet available on our website.



AC•Tech, Allied Construction Technologies Inc. is headquartered in Norfolk Virginia. We actively collaborate with AB-Polymerchemie (Germany) and Chowgule Construction Technologies (India) to develop, manufacture, and support specialty coatings for construction, industrial, commercial, residential, and infrastructure markets in the US and around the world.