

CARPET CLEANING METHODS

Hot Water Extraction

This method is often call "Warm Water Extraction", "Hot Water Extraction" or "Steam Cleaning" and is the cleaning method nearly all carpet manufacturers and carpet fiber producers recommend. The process consists of applying a cleaning agent under pressure into the carpet pile and using an extractor to recover the solution and soil.

Research indicates that the hot water extraction system often provides the best capability for deep cleaning. The maintenance brochure published by the world's largest carpet manufacturer, recommends this method, because its own research indicates that it provides the best capability for cleaning.

This method is frequently called "steam" cleaning due to the fine spray of water used to force dirt out of the carpet which is sucked up by the vacuum slot immediately in front of the spray. No actual steam is used apart from steam that may escape incidentally from hot water. This process consists of spraying a solution of water and detergent into the carpet pile and recovering the water and soil with a powerful vacuum into a holding tank. This can be done from a portable, system brought into the home or office.



The equipment, temperatures may range from cold tap water to boiling hot water and even super heated water over 200 degrees F. With extremely high temperatures, there are dangers of scalding should a solution line break, and damage to the carpet fibers.



The typical cleaning method involves a preconditioning of the soiled surface with an alkaline (7 or above on the pH Scale) agent, followed by light agitation with a grooming brush and appropriate dwell time. Next, the surface is passed over several times with a cleaning tool to thoroughly rinse out the preconditioner and, using a solution to lower the pH of the fibers to a neutral state. Finally, the surface is dried sufficiently to avoid any possibility of saturation.



Absorbent Pad / Bonnet Carpet Cleaning

"Bonnet cleaning", also referred to as "absorbent pad" or "dry cleaning" is a minimum moisture carpet cleaning method. Bonnet cleaning essentially consists of a cotton, rayon and/or polypropylene pad and a rotary shampoo machine. Bonnet cleaning is idea for maintenance cleanings where the carpet shows light to moderate soiling and a low moisture quick drying method is preferred. Bonnet cleaning incorporates three procedures for cleaning carpet.

First, the carpet must be thoroughly vacuumed and then sprayed with a quality preconditioner and allowed ten to twenty minutes of dwell time to begin loosening soil. The first procedure involves spraying a detergent solution onto the carpet pile. The solution is applied in sufficient quantities to saturate the fibers. Using more solution may extend drying time but extra detergent may be necessary to attain the desired results. Alternatively, a solution may be applied to the pad allowing the pad to impart the cleaning solution to the carpet and the pick it up again with the dirt.



The second procedure used in the bonnet method involves the use of a pad attached to the rotary machine. The rotating pad is used to agitate and aid in suspension of soils. The bonnet pad absorbs these soils and are cleaned or replaced regularly.



Since the pad may not be totally effective in the complete extraction of soil, today's detergents are engineered to hold onto soils after they have dried. As a result, a third procedure may be necessary to extract the remaining soil. By thoroughly vacuuming the area, after the area is dry, much of the remaining soil can be removed.

Absorbent Compound

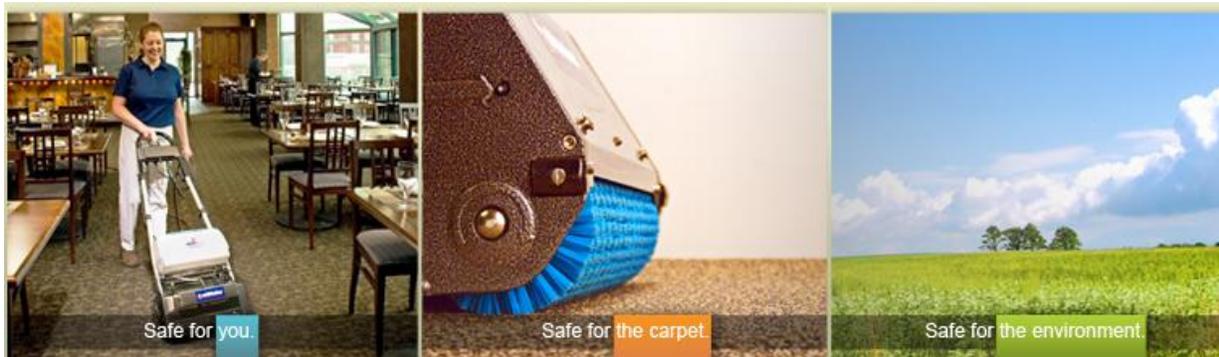
This method is often called "dry cleaning" since virtually no water is used.

In this method, dry absorbent compound (containing small amounts of water, detergent, and solvent,) are sprinkled over carpet or worked into the carpet with a machine. This purpose of this cleaner is to attract and absorb soil. Mechanical agitation from a brush works the cleaner through the carpet. This method is recommended when an extremely low moisture, quick drying method is desired to clean light to moderate soiling.



The products we offer contain an absorbent carrier, water, detergent, and solvent. The principal is that the liquids dissolve the soil and this soil/detergent/solvent mixture is absorbed into the carrier and is then vacuumed up. They are often used with a detergent prespray in heavily soiled areas.

The absorbent cleaner most commonly is organic, but may also be polymers. The compound absorbs the dislodged soil and is then vacuumed away. Carpet must be thoroughly vacuumed before and after cleaning.



Very thorough vacuuming will be used to ensure that most of the carrier comes out of the carpet. This cleaning method has the advantage of no drying time for interim maintenance, since little water is used. This makes it excellent maintenance cleaning system.

Low Moisture Encapsulation

Low Moisture Encapsulation offers a green virtually residue free carpet cleaning method. While all carpet cleaning chemicals incorporate detergents which are, by design, sticky so they can attract dirt to remove soils. Our low moisture encapsulate has crystalline polymers which eliminate the sticky residue.

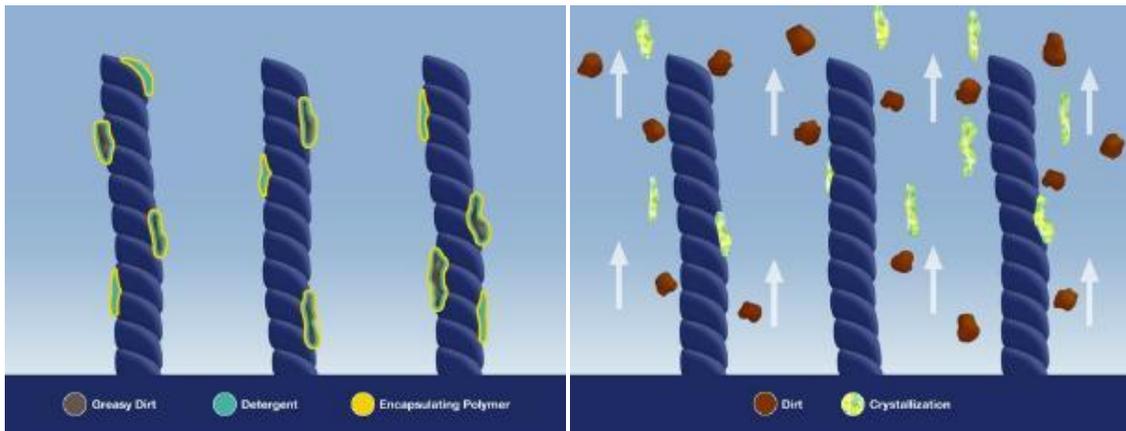
Even when using a fiber rinse as part of extraction cleaning, some detergent residue may be left on the carpet, and many fiber rinses themselves are sticky. Any new soil coming into contact with the carpet, such as dirt from shoes in normal foot traffic, will be attracted to the sticky detergent residue left on the carpet. This is referred to as "rapid resoiling", the result of cleaned carpet getting dirty faster than carpet with no residue. Vacuuming removes loose soil, but will not remove dirt attached to sticky residue.



Encapsulating cleaning chemicals have crystalline polymers in addition to detergents. After the detergents have attracted and surrounded the greasy soil, the polymers

"encapsulate" both the detergent and soil. As this encapsulated soil dries, it crystallizes into a dry (not sticky) residue. For years, this technology has been used in low moisture cleaning methods where the residue is purposely left in the carpet and is vacuumed away. Many carpet cleaners consider the term "encapsulation" to be synonymous with the low moisture cleaning method. But encapsulation is actually a process triggered by the proper formulation of polymers, having application in any type of carpet cleaning detergent. We can therefore use encapsulating technology with any of the cleaning methods we offer.

Encapsulation has another significant advantage in all cleaning methods. Leaving crystallizing polymer residue in the carpet prevents spots from wicking back. The polymer encapsulates the wicking spot, creating a crystalline residue as it dries. This is just as effective in hot water extraction cleaning as it is with brush and bonnet.



Dirt does not stick to crystalline residue left behind on carpet cleaned with encapsulating cleaning chemicals.

Our encapsulating products are formulated with the proper balance of carpet cleaning detergents that get carpets clean in the first place, and crystalline polymers that effectively encapsulate and crystallize embedded spots, greasy soils and detergent residues.



IICRC
Institute of Inspection Cleaning
and Restoration Certification