

All About Encapsulation Cleaning

Carpet

Encapsulation Cleaning: A low moisture, interim carpet cleaning method

Encapsulation cleaning is a relatively new interim carpet cleaning method that can offer superior results compared to other methods. Interim cleaning is one of the Carpet and Rug Institute's (CRI) Five Ingredients for Great Looking Carpets¹. The purpose of interim carpet cleaning is to clean the carpet with minimal water, chemicals, and labor. After interim cleaning comes restorative (deep cleaning), which is more labor intensive, costly, and has a lengthy carpet drying time. Other interim carpet cleaning methods include absorbent compound, bonnet, and dry foam shampoo.

Five Ingredients for Success



Soil Containment



Vacuuming



Spotting



Interim Cleaning



Restorative Cleaning

How Encapsulation Cleaning works

The chemistry behind encapsulation is its crystalline polymeric formulation. The encapsulation formula utilizes polymers that surround soils and dirt on carpet fibers. In addition, the detergents used to loosen soils are also encapsulated by the product. The encapsulated soil and detergents then crystallize and become brittle, making them easy to remove by simple vacuuming. Carpet is free of detergent residue, which helps prevent rapid re-soiling.



NOTE: Encapsulation Cleaning is NOT Bonnet Cleaning:

Sometimes encapsulation cleaning is lumped in with bonnet cleaning as the same method. Nothing could be further from the truth. Bonnet cleaning removes little soil from the carpet, but rather re-distributes the soil and pushes it down deeper into the carpet. See table I.

Encapsulation Carpet Cleaning: Cleaning Better and Faster

Table I. Comparing Encapsulation Cleaning to Bonnet Cleaning

	Encapsulation Cleaning	Bonnet Cleaning
Soil Removal	>50% actual soil removal	<5%, soil is re-distributed on the carpet
Detergent Residue	None, carpets are residue free	Significant, can contribute to rapid re-soil
Dry Time	1 hour	1 hour
Deodorization	Peroxide Deodorization	Fragrance Cover up

Benefits of Encapsulation Carpet Cleaning:

- Improved appearance between each deep cleaning cycle.
- No detergent residue means no rapid re-soiling of the carpet.
- Removes soils from the carpet, does not re-distribute soil.
- Natural Deodorization if encapsulation product is peroxide fortified.
- Dry time in about 1 hour.
- Reduced need for extraction cleaning.

What makes Encapsulation Interesting for Cleaning Professionals?

Low Moisture & Quick Return to Service

Encapsulation carpet cleaning is an interim, low-moisture carpet cleaning method that dries quickly. While encapsulation does not eliminate deep cleaning methods like hot water extraction, it can prolong the cycle for which deep cleaning of carpet is required. Odor eliminating chemicals, such as hydrogen peroxide, can also be designed into an encapsulation formula, leaving the carpet smelling fresh and clean.

Quick and Easy to Learn:

The training and equipment required for encapsulation cleaning is minimal. A maintenance employee would first pre-vacuum the carpet, apply the encapsulation product, and then agitate the surface (see equipment used on the next page). After allowing a dry time of 30-60 minutes, the encapsulated soil and detergents are removed by vacuuming. The steps below are what cleaners would do for encapsulation cleaning.

1. Pre-vacuum the carpet. This will help remove loose soils.
2. Apply the encapsulation product. Depending on the product specification, dilute the solution and spray a manageable area using a pump up sprayer.
3. Allow 2-5 minutes (depending on the product) for the solution to loosen soil.
4. Agitate the surface with the recommended equipment.
5. Allow 30-60 minutes (depending on the product) for the carpet to dry. An air mover can be used to speed up the drying process.
6. Vacuum carpet after drying, or return back to service and wait for the next vacuuming cycle.

Encapsulation Cleaning: Cleaning Better and Faster

Equipment Options: Minimal Investment in equipment needed for encapsulation cleaning

Encapsulation cleaning can often be performed with equipment that is readily available. The level of results that can be achieved will be elevated when using different types of equipment as indicated below:



Good results: A low speed floor machine equipped with a nylon brush or bonnet. For bonnets, use a striped bonnet that has mildly abrasive strips. Floor machines are so common, virtually anyone can start encapsulation cleaning.



Better Results: A counter rotating brush machine with nylon (non-grit) brushes. Example shown is the Minuteman Port-a-Scrub 14. The counter rotating brushes are able to get deeper into the carpet fiber to loosen and encapsulate the soils. These machines move effortlessly on carpet, even on plush carpeting.



Best Results: An orbital floor machine with a bonnet or carpet pad. Example shown is the Minuteman ROS-17 Orbital Floor Machine. The orbital floor machine operates at 80 rpm while simultaneously producing random orbital motion of 1725 micro orbit oscillations per minute. The agitation of the ROS-17 combined with Multi-Clean ECO2 Encapsulation Cleaner produces superior results on all types of carpet.

Cost Savings

Encapsulation cleaning is highly profitable because it has the ability to cover large surface areas quickly with minimal downtime. It requires less labor and produces visible results.

Multi-Clean offers an encapsulation product fortified with hydrogen peroxide called **ECO₂**.

Four gallons of diluted ECO₂ can cover up to 44,000 square feet of carpet!

ECO₂ bears the Carpet and Rug Institute's Seal of Approval.



For more information, visit our Carpet Care webpage: <http://multi-clean.com/products/carpet-care/>



How Encapsulation Cleaning Compares to Other Carpet Cleaning Methods

Method	Advantages	Disadvantages
Absorbent Compound	Little to no water is used, very short drying time.	Thorough vacuuming before and after cleaning is recommended, mechanical agitation from a brush must be thorough, the cleaning powder has the potential to reduce air quality, method tends to leave residue.
Bonnet	Low moisture, fast drying time, cost efficient, can contain soil repellent technology.	Very little soil removal. Leaves detergent residue that can promote re-soil. Redistribution of soil, which is then pushed deeper into the carpet.
Encapsulation	Low moisture, fast drying time, can contain odor eliminating peroxides, no residue, economical.	Does not remove as much soil as extraction.
Extraction	Effective Deep Cleaning Method	Extended dry time. Can leave some detergent residue.
Dry Foam Shampoo	Dated method compared to others.	Can leave a significant amount of residue, longer drying time.

Encapsulation cleaning offers superior interim cleaning performance while maintaining a low cost. Always consult your carpet manufacturer for warranty and cleaning procedures specific to your carpet.

¹ The Carpet and Rug Institute, www.carpet-rug.org