



## Encapsulation: A practical tool for commercial carpet care

What do you mean,

Related Information
<a href="#">Is it for you?</a> <a href="#">Benefits of a good encapsulation system</a> <a href="#">Ratios of soils</a>

*By Rick Gelinis*

**From the November 2003 edition of Cleanfax magazine. For a free introductory subscription, [click here](#).**

**Commercial carpets present many challenges – this method may be what you are looking for.**

It's a familiar story of commercial carpet cleaning:

You do a fantastic job and are told the carpets have never looked better.

You go home satisfied with a job well done.

The next morning you receive the disturbing "morning after" phone call: "Something's wrong. The carpet looks worse than before you cleaned it!"

What happened? Didn't you do a good job?



**Commercial carpet is just *not the same* as residential**

Commercial carpet is not the same as a carpet installed in a residential setting.

Those handsome 75-ounce plush nylon carpets installed over 8-pound pads clean very differently with hot water extraction than a typical commercial carpet in a flat, glue-down construction.

With the residential carpet, there's plenty of airflow.

With commercial carpet, there's essentially no airflow, so hot water extraction can become more challenging.

Commercial carpets are often loop construction. The densely-packed loops can trap a tremendous amount of dry soil.

A considerable amount of commercial carpeting is olefin and olefin can be difficult to clean.

There are a number of reasons why commercial carpet can present a set of conditions that could frighten even the most savvy residential carpet cleaners.

### **The road to *encapsulation***

I started Pioneer Maintenance in St. Petersburg, FL in 1982, and spent the past 21 years in the commercial cleaning industry.

During the past two decades my company tried every method of carpet cleaning. I kept investigating different methods in my search to find a system that could produce consistently good results.

I continued my search because I found each of the methods in our industry fell short in some area at one time or another.

My efforts finally paid off.

We presently maintain thousands of square feet of commercial carpet every day, with a system that overcomes the common commercial carpet problems and produces the kind of results we expect.

The system? Encapsulation cleaning. (See "Benefits of a good encapsulation system" in the sidebar.)

It's a low-moisture method that traps soil particles in suspension, drying to a crystal and then vacuuming soils away.

We can now service commercial carpeting and not have to worry about what the carpet will look like the next morning, the next week, or even the next month.

Our carpets are staying cleaner longer than they ever have before. Our clients are happier. Our system is simpler and our techs love it. And we're able to offer a fair price and still maintain a decent profit. (See "Is it for you?" in the sidebar.)

### **Is this the end of other cleaning methods?**

At this point I need to stop and clarify there are situations requiring using various cleaning systems.

Encapsulation is an ideal method for the majority of commercial applications. Yet encapsulation also has its limits.

We don't recommend it for grease impacted carpets. We find it works especially well for maintaining what makes up 99 percent of commercial carpet. Encapsulation aptly handles the "grayed-out" dingy commercial carpet with abundant drink spills – that's where it excels.

### **It's coming out of the closet...**

Encapsulation is not just a solution that has worked well for our company.

Major companies throughout the country have begun recommending and using encapsulation for their commercial carpeting. .

A number of the largest commercial carpet manufacturers in the country are recommending and/or using various forms of encapsulation cleaning to maintain their commercial floor coverings.

In the past year or so there has also been a rapid influx of encapsulation cleaning products produced by several leading manufacturers of carpet cleaning products. It's clear the industry is quickly becoming aware of encapsulation.

Why the insurgence of interest in encapsulation? Simply, encapsulation successfully addresses many of the problems commonly associated with commercial carpet care.



### **How encapsulation works**

This system is built on new technology.

The better encapsulation products we're now seeing are built with new crystallizing polymers. Whereas some of the old style

carpet shampoos may have employed an acrylic copolymer, the new products utilize new polymer technology that forms a distinct

crystal.

Some of the new products also contain fluorochemicals.

Defining types of soil to contend with in commercial carpet settings helps understand the principle of encapsulation. While it's true there are a plethora of contaminants a carpet can be exposed to, on the most basic cleaning level we can narrow it down to just two types of soil: Dry soil and sticky soil.

Most dry soil in a commercial setting can be readily removed by routine dry vacuuming.

It's the oily and sticky soils that attract and hold dry soil to the surface. The result is a dull, gray and ugly appearance.

The encapsulation process does a wonderful job of counteracting the sticky soils. The key to effective carpet cleaning is to remove the sticky soils. The encapsulation chemistry surrounds soil particles in the carpet and forms a crystal that can't attract other soil.

The encapsulated soil particles release from the carpet fiber and are extracted with normal vacuuming. And since there's no dirt attracting residue left behind, the carpet is able to stay clean longer.

### **Agitation + crystallization = encapsulation**

There are two recommendations I make when it comes to encapsulation carpet care.

First, the equipment: We've all learned we clean with TACT – temperature, agitation, chemical and time. The encapsulation method utilizes all of these cleaning elements. With encapsulation it's vitally important to recognize the agitation component of the cleaning pie. It is imperative the scrubbing equipment you choose can scrub deeply.

Next, the chemistry: Good crystallizing chemistry is important. With encapsulation it's critical the detergent forms a true crystal as it dries.

The level of crystallization that occurs will directly affect a detergent's ability to hold soil. Crystallization is a primary part of what should be accomplished with a good encapsulator.

As the carpet is scrubbed the soil is released from the fiber and is now suspended in the detergent. As the detergent dries it forms a crystal that breaks away from the fiber.

The crystals contain the encapsulated soil particles. These soil-laden crystals can then be extracted from the carpet with vacuuming.

It's important to make certain the product you choose will form a true crystal. An encapsulant's ability to crystallize can easily be tested by simply drying a few drops of the product in a dish overnight. The next day you should see a very distinct, brittle crystal.

The cost of this method is low. You generally spend less than .05 cents per square foot in cleaning commercial carpet. Eight ounces of solution mixed with one gallon of water will cover approximately 300 square feet, depending on conditions.

### **Encapsulation cleaning steps**

The first step is achieving the best possible pre-vacuuming.

Remember that we want to remove the 79 percent of dry soils first. (See "Ratios of soils" in the sidebar.)

As the carpet is thoroughly scrubbed the encapsulator is applied and worked evenly through the carpet fiber. It's helpful to use the detergent's foaming ability as an indicator of how much solution is being applied to the carpet.

You simply want to whiten the surface of the carpet; a heavy foam is *not* desirable. Vacuuming can be performed at the next scheduled vacuuming. No rinsing is required. Rinsing actually defeats the purpose of the encapsulation technology.

Encapsulation is a simple, cost-effective way to maintain commercial carpeting. The encapsulation method, when performed correctly, can produce extremely pleasing results.

It's a win-win situation!

Carpets look exceptionally good on a day-in and day-out basis. Recurring spots and wicking problems are essentially eliminated.

Large areas of carpet can be serviced quickly.

Since it's a low moisture system, carpets are put back into service promptly. And there are no more haunting "morning after" phone calls.

Clients are happy, funds are deposited, referrals are generated, and business is good!



*Rick Gelinas has been operating a successful commercial carpet cleaning business in St Petersburg, FL since March 1982. Rick currently heads up a group of companies identified as the Carpet Care Group.*

*These companies include a carpet cleaning company, Kleenstep; a supply company, Excellent-Supply.com; and an encapsulation detergent company, Releasit.*

**From the November 2003 edition of Cleanfax magazine. For a free introductory subscription, [click here](#).**

All Content Copyright 2004  
National Trade Publications Inc.

[Click Here](#) for details on our [Privacy Policy](#)

This site best viewed with: [NETSCAPE 4.7](#) or [Internet Explorer](#) .