Carpet Cleaning Methods

There are 5 basic cleaning methods outlined in the IICRC S100 Carpet Cleaning Standard. Which method the cleaner will select is determined by a number of factors. It is up to the cleaner to evaluate the cleaning job and determine which method would be appropriate

Some of the factors to consider in selecting which method to use are:

- Type of Carpet Fiber content, construction, and design
- Soil Conditions Type and amount of soil present
- Reason for Cleaning What are the client's expectations?
- Time Available When is the carpet expected to ready for service?

Site Conditions – Any specific challenges due to where the carpet is located?

There are several things that should be considered in evaluating cleaning methods. Some of the most common characteristics that affect the performance of a cleaning method are:



- Soil Removal
- Appearance
- Dry Time
- Cost Effectiveness
- Residue/Re-soil
- Ease of Use
- Safety
- Versatility

You be the Judge!

The Five methods described in the S100 Cleaning Standard are:

- 1. Absorbent Compound (Powder Cleaning)
- 2. Absorbent Pad (Bonnet Cleaning)
- 3. Dry Foam Shampoo
- 4. Traditional Rotary Shampoo
- 5. Hot Water Extraction (Steam Cleaning)

Using the following chart – Go through the web pages and the following pages in this manual and review the advantages and disadvantages of each method. Place your "evaluation numbers" on the chart and see how each stacks up. Remember, we are not looking for a winner or loser, but rather a way to decide which method should be used under which circumstances.

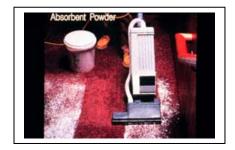
Methods Comparison	Powder	Bonnet	Dry Foam	Shampoo	Steam
Soil Removal					
Appearance					
Dry Time					
Cost Effective					
Residue					
Easy					
Safety					
Versatility					
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Totals-

The 5 Methods are:

• **Absorbent Compound (dry powder)** – This method involves the application of an absorbent, sponge-like material, which has been moistened, with a specially formulated mixture of water, detergents and a small amount of solvent. The cleaner is brushed and agitated into and through the carpet pile so that it can emulsify and absorb the soil, grease and spots. When the brushing is complete, the cleaner is vacuumed from the carpet along with the soil it has absorbed. It is important, for best results, to vacuum when the cleaner is dry. Since the dry extraction method employs a controlled amount of moisture, it is particularly well suited to rapid drying and speedy return of the carpet to service. The method is widely used for planned periodic maintenance cleaning and for overall professional cleaning.

There are several different suppliers of dry extraction cleaning compounds (both organic and inorganic based) and related equipment systems. Thorough pre- and post-vacuuming is essential to proper cleaning and soil removal. Use of heavyduty, or industrial-type, power brush vacuum or power pile lifter is effective in maximizing the removal of absorbent cleaning compound and entrained soil. Dry extraction cleaning compounds also work well on spots that wick up after prior wet cleaning or spotting treatments.



• **Bonnet** – This method relies on an absorbent pad, or "bonnet". The rotating bonnet or pad absorbs soils and stains from the upper surface of the pile as it is rotated over the surface of the carpet. Either the carpet has previously been sprayed with a pre spray or the bonnet has ween wet out and is damp. The bonnet should be removed and cleaned often during the process.

Do not use a dry or unlubricated bonnet. It is imperative that properly designed bonnet pads be used, to assure carpet texture retention during cleaning. With proper equipment, appropriate pads and solution lubrication, this method can generally be safe and effective. There are several variations of bonnet cleaning; involving carbonated cleaned solutions, "electrostatic" cleaning. "spray brightening", and more. When well-trained, professional or certified cleaning technicians do bonnet cleaning, it can be a safe and effective cleaning method for properly constructed carpet.



Be careful not to "heel-in" the rotating bonnet when attempting to remove spots or stains while cleaning. There is a possibility you might damage the carpet. Also use a clean disk bonnet each time you change colors of carpet while cleaning. Always perform a colorfastness (dye bleeding) test with your actual cleaning solution before you begin cleaning.

• Shampoo – The Shampoo method uses a high-foaming detergent, usually fed by a shower feed through a rotating drive block and brush. The rotary brush massages the cleaning solution into the upper part of the carpet pile, where the shampoo emulsifies oils, greasy soils and stains. A proper shampoo formulation dries preferably to a brittle, flaky or non-greasy residue. Subsequent, regular vacuuming helps to control additional soiling, while improving the pile appearance. The rotary brush-shampoo method is preferred for loop, cut-and-loop, or dense cut-pile carpets. When used by a trained professional, it is a fast, efficient and effective cleaning method for most types of carpet. This is particularly true in contract (commercial) carpet cleaning applications. Shampoo brushes must be properly "broken-in" or preconditioned prior to use; if in doubt, ask your supplier.

Avoid over-wetting or use of excess shampoo, and do not "heel-in" the rotating brush on soiled or stained areas. Less dense or poorly made carpets might experience some pile distortion or texture change after any cleaning with mechanical action, including shampooing. Pretest your cleaning solution **before** proceeding.



• Hot Water Extraction (Steam Cleaning) - This method involves the simultaneous injection of wet cleaning solution into the carpet, with extraction (wet vacuuming) of the detergent plus soils, dirt, oils and stains. The cleaning solution may be room temperature, warm, or specially heated to hotter temperatures. Manipulating the cleaning tool does mechanical agitation; some systems use a powered brush or rotating devices. There are two "techniques" of wet extraction cleaning: one that uses detergent-rinse, with or without a prespray and the other that uses a plain water or specialty rinse following prespray, agitation, and dwell time. Immediate maximum extraction improves cleaning effectiveness, controls moisture and speeds drying time. Avoid overwetting carpet, especially in traffic lanes where soiling and staining are more severe. Prespray stained areas and traffic lanes, during setup, to boost

cleaning effectiveness during overall cleaning. If potential color bleeding problems are suspected, pretest for possible dye bleeding with the cleaning solution(s) you intend to use. Do this before every cleaning job, and then do not or more of the following steps:

- 1. Use immediate maximum extraction:
- 2. Limit moisture and speed drying with fans, blowers or air movers;
- 3. Reduce the pH (alkalinity) of the cleaning solution; use an acid (sour) rinse, or
- 4. Use an alternative cleaning method such as dry foam or dry extraction.



"Steam" cleaning is a popular, but inappropriate, term, to describe this cleaning method, since no steam is used. Hot water extraction, wet extraction, or injection-extraction (U.K.) are better descriptions.

Regardless of how your evaluation came out, remember, technicians clean carpets, not machines. The best method can do a poor job if not used properly!