



## **METHODS OF KEY AREA CLEANING**

### **CARPET BONNETS OR SPIN PADS**

Bonnet or Pad cleaning features the use of a standard speed single disk rotary floor machines (usually 175 rpm). A pad driver is attached to the floor machine at the clutch plate to hold and drive the bonnet or spin pad. Either a yam bonnet or a synthetic carpet cleaning pad is treated with cleaning solution and placed underneath the driver pad on the floor machine.

Bonnets are thick, mop-like products that are blended of cotton and synthetic yarn and designed to both clean and absorb cleaning solution on the carpet. Synthetic pads are thinner disks and similar to the buffing pads used in hard floor maintenance. Pads are made of white, non-woven, polyester fiber and are designed to clean and absorb without abrasion.

Chemical cleaning solutions formulated for the bonnet cleaning operation generally have two major requirements: the cleaning solution should be low suds or suds-less and it should contain a high proportion of carpet cleaning solvents and a lower amount of detergents. The solvents remove greasy soil and detergents clean the fibers. A pH range of 7 to 9 is recommended for the cleaning chemical.

The cleaning solution may be spray misted directly on the carpet area to be cleaned or applied through a shampoo tank that is attached to the handle of the machine and is dispensed through a "flow-through" type assembly on the machine. An aerosol product may also be used to apply cleaner from a specially mounted applicator on the floor machine.

Soil is loosened from the carpet through the chemical and mechanical action of the process and is absorbed into the bonnet or pad. The process wipes up attached soil and grease off the top portion of the carpet. Bonnets and pads need to be fumed over or exchanged for clean ones periodically as they become soiled. Later the soil is cleaned out of the bonnet or pad by rinsing or washing it thoroughly. No vacuuming is required after a bonnet buffing cleaning procedure has been performed.

Drying time is affected if the cleaning operator uses the spray-type method vs. the tank flow-through method. The spray-type method has virtually no drying time, the tank flow method requires approximately 30 minutes to one hour dry time on the carpet.

### **DRY COMPOUND CLEANING**

Dry Compound cleaning is sometimes mistakenly called "powder cleaning" which was an old version of the process. Dry compound cleaning now utilizes various organic or synthetic particle formulations that contain cleaning solution within the particle. The compound is applied to the carpet in various ways. Some methods shake the moist particle compound out of a package, others employ manual or mechanical tools which apply the material uniformly. Some methods require a liquid pre-spray applied directly to the carpet before a dry powder application takes place.

A machine with drum-type rotating (or frequently counter rotating) brushes is used to agitate the particle cleaner into the carpet fiber. The saturated particles act like small sponges and soil is attracted to and held by them. Later as the dirt laden compound dries, it is vacuumed out of the carpet. The "drying time"

between agitation with the brush machine and vacuuming the remaining compound is approximately 20 minutes.

### **Dry Foam Cleaning**

Another method of Key-area cleaning is a dry-foam cleaning. In this process carpet shampoo solution is generated into a cleaning foam. This dry foam is massaged into the carpet using a brush attached to the foam machine. After the foam has been brushed into the carpet it is removed into a vacuum shoe. Some dry foam machines are fitted with a vacuum so that the foam generation, brushing and vacuum pick-up are accomplished during one pass of the machine. Other machines require a separate vacuum pick-up, after the dry foam machine has completed the cleaning process.

The shampoo used in the dry foam machines breaks down greasy soils and absorbs some sandy soil that is removed through the vacuum process.

### **EXTRACTION CLEANING**

Most carpet fiber manufacturers and carpet mills recommend periodic, thorough cleaning of carpets performed by well-trained and experienced carpet cleaning personnel. Hot water extraction is the method of deep rinse cleaning the entire carpet. Hot water extraction has also been called "steam cleaning" but actual live steam (gas created at water's boiling point) is not employed in the cleaning process. Hot water extraction is a deep cleaning process that removes embedded soils that have been carried or blown into the carpet

A hot water extraction machine has a pump which dispenses water, under pressure, through spray nozzles into the carpet. The spray is an emulsion of heated water, solvents and detergents that are designed to dissolve greasy soils. The spray rolls sand and dirt into an attached vacuum shoe that sucks the dirty solution back into a holding tank on the extraction machine. Generally the cleaning process is aided by an attached scrub brush that is located between the spray nozzles and the vacuum shoe on the cleaning head of the extractor. The brush scrubs greasy, attached soils from the carpet fiber.

The removed soil is held in the tank until it may be disposed of later in a sanitary drain, toilet or proper waste facility. Solutions should not be dumped onto the ground outside, in storm sewers or in the streets .

In hot water extraction cleaning it is important to use detergents that are not too strong (or too alkaline). They may damage the carpet. A pH of 10 is preferred to many carpets (see the section about pH). With fine wool carpets an acid pH detergent or an acid rinse following the cleaning process is recommended. Care must be taken with wool carpet not to over-wet the fiber and cause shrinkage. If there is any question about the proper cleaning solution contact the manufacturer of the carpet.

### **WHEN CARPET IS EXTRACTED USING THE HOT WATER EXTRACTION METHOD REMEMBER THE FOLLOWING TIPS :**

1. Vacuum the area to be extracted thoroughly, before you use the extraction equipment. A cleaning solution will only carry a certain amount of soil. Don't use the valuable solution, time and equipment of the hot water extraction process to remove loose soil that could have been removed by vacuuming. Use the extraction process to clean deep, embedded soil.
2. Apply a traffic lane pre-spotter on heavily soiled areas prior to extraction. Wait the recommended time before beginning the cleaning process.
3. Avoid over wetting the carpet. Prolonged dampness may promote growth of mildew and bacteria in the carpet or cause the carpet to delaminate from its two backings.

4. Dry the carpets as quickly as possible. Speed drying is aided by using carpet drying fans to move air across the carpet.