

# LEES CARPETS

## Maintenance Manual

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# Maintenance from the Start

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## Maintenance Recommendations for Lees Carpets

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Your floor covering choice is an investment. It should last for many years, looking as beautiful as the day it was installed. Lees Carpets guarantees and provides handsome, stain-resistant, economical carpets that will last a lifetime. But to keep your carpet looking beautiful, proper maintenance is a must. This document will provide you with the recommended procedures that, if followed, will keep your carpet looking beautifully clean for many years to come.

Carpet gets dirty from the first day it is installed, so you need to start maintaining the carpet from the beginning. The Antron Legacy fiber that Lees uses in our products allows dirt to fall down in the carpet easily (and vacuum up as easily) that Lees Carpets appear to stay cleaner longer than other products. They do get dirty. So begin your maintenance program immediately. Stay on top of the situation and you won't have to spend extra budget dollars on restoration cleanings.

**It takes more than magic to keep carpet clean. Machines and chemicals only assist in the process, but PEOPLE clean carpet!! And the quality of your maintenance program depends on the people who are doing the work. Lees has designed carpet that is easily maintained, but, if you don't maintain it, you can't expect it to stay clean.**

**WARNING! Do not use chlorinated cleaning solutions, quaternary solutions, petroleum distillates, solvent-based cleaners, or citrus cleaning solutions on any Lees Carpet.** Products with these types of ingredients can cause break-down of the face fiber or the backing systems of the carpet, causing irreparable damage that can only be fixed by complete replacement of the affected area.

## Carpet Life Cycle

The following was put together by Steve Spencer of State Farm. Steve is the facilities guru for State Farm in their corporate headquarters in Bloomington, Illinois. He investigated the life cycle of carpet from the standpoint of maintenance. His example is of the size of a typical regional center for State Farm, containing over 300,000 square feet of carpeted area. As shown in this example, proper care extends the life of the carpet and saves money in the long haul.

Carpet Replacement (cost per square yard); labor, materials, disposal, etc.	\$	35.00
Carpet Replacement Cost for 321,068 square feet	\$	1,248,597
<hr/>		
Six years of life (per year)	\$	208,099
Cleaning Cost at \$0.13 (per square foot per year)	\$	41,738
Annual Total Cost	\$	249,837
Annual Cost X 40 Years	\$	10,033,480
<hr/>		
Ten years of life (per year)	\$	124,859
Cleaning Cost at \$0.26 (per square foot per year)	\$	83,477
Annual Total Cost	\$	208,336
Annual Cost X 40 Years	\$	8,333,440
<hr/>		
<b>Annual Cost Savings</b>	<b>\$</b>	<b>41,501</b>
<b>Life Cycle Cost Savings</b>	<b>\$</b>	<b>1,700,040</b>

# Preventive Maintenance

In addition to walk-off areas, some other points to consider when choosing carpet for your facility:

- Color selection is critical in long-term appearance retention; i.e., light color cut pile is a poor choice in heavy traffic areas; darker loop pile will retain its appearance longer. Give consideration to the number of daily foot traffics and type of soil.
- Use walk-off mats outside the main entrance to limit the amount of soiling that is tracked into the restaurant. Fire codes cause doors to open to the outside. This causes a person to move in a back and forth motion upon a mat before entering, thus cleaning feet. If these mats are not also properly maintained, soiling can enter the building. We suggest that a double set of replacement mats be on hand for high traffic areas.
- Train maintenance personnel with this instruction guide. More maintenance guides can be obtained from Lees Technical Service at 1-800-443-2241.
- Train employees in the correct procedures to follow in the event of a spill (i.e., rinse with water, wipe the area with the DuraSafe Instant Spotting Kit, call the maintenance crew).
- Train all employees in the proper and safe use of all equipment and supplies prior to beginning work. Do not use your facility for "on the job training."

## Planning of Maintenance

1. By defining the traffic areas in your facility, you can determine a proper maintenance plan. Color code your floor plan to indicate high and medium areas. Based on the diagram on the following page, Lees recommends the following division of traffic areas:

**High Traffic** - Outside entrances, hallways, break rooms, cafeterias, corridors, elevator lobbies, stairways, main aisles, waiting areas, etc. and *ANY AREA ESSENTIAL TO THE PUBLIC IMAGE OF THE COMPANY.*

**Medium Traffic** - Secondary aisles, research areas, classrooms, atriums, etc.

**Low Traffic** - Offices, cubicles, storage rooms, executive areas, etc.

2. Establish frequencies of cleaning. Based on the traffic levels above, Lees recommends observing the following frequencies for vacuuming, spot cleaning, bonnet cleaning (interim cleaning), and hot water extraction (restorative cleaning):

	<b>High Traffic</b>	<b>Medium Traffic</b>	<b>Low Traffic</b>
<b>Vacuuming</b>	Daily	Daily	2-3 Times Per Week
<b>Spot Cleaning</b>	Daily	2-3 Times Per Week	2-3 Times Per Week
<b>DuraSafe 4007 Encapsulator</b>	Weekly	1-2 Times Per Month	Monthly
<b>Pile Lifting</b>	Monthly	Quarterly	2 Times Per Year
<b>Bonnet Cleaning</b>	Monthly	Quarterly	2 Times Per Year
<b>Hot Water Extraction</b>	Quarterly	2 Times Per Year	2 Times Per Year

3. Look at these frequencies over time and monitor the progress. You may adjust the frequencies, if necessary.

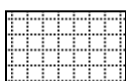
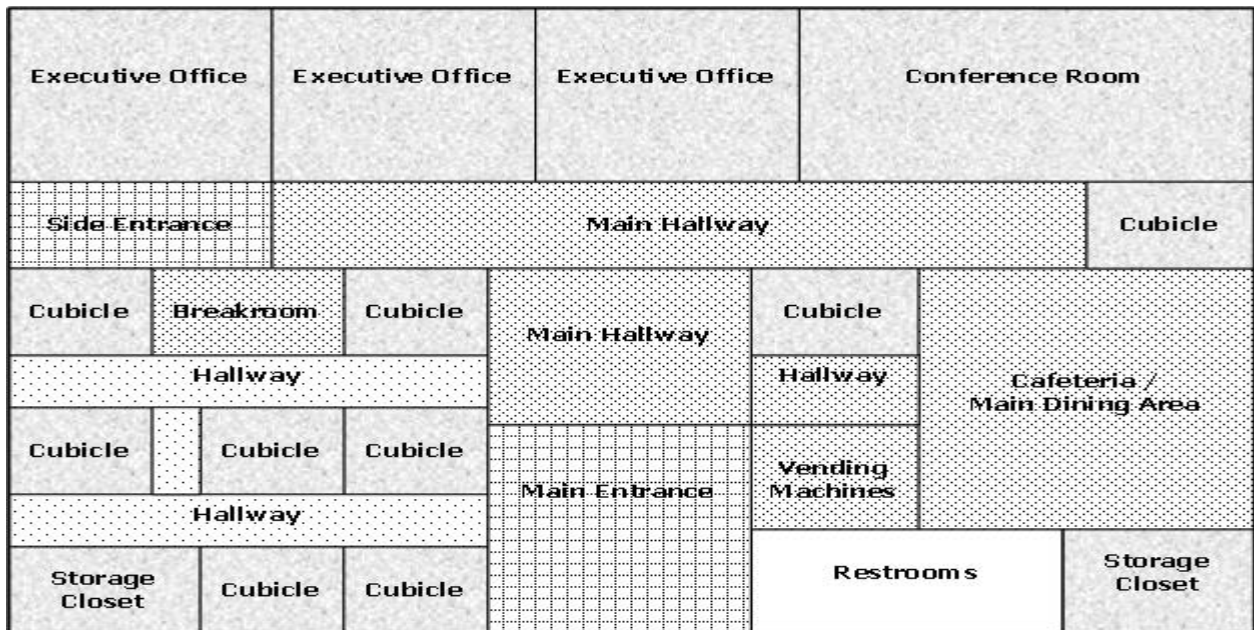
**IMPORTANT** – Try to keep the carpet uniform in appearance.

# The First Line of Defense – Walk-Off Systems

One of the best ways to protect any flooring finishes in your facility is to incorporate an appropriate entry system. Walk-off carpets or walk-off matting systems are specifically engineered to remove and capture debris and moisture before they can make it into the main areas of the building where they can cause accelerated, premature wear. Lees FirstStep and StepUp, available in carpet tile or six-foot roll goods, are each ideal for wall-to-wall installation in entry systems or for use as loose-laid mats over other flooring finishes.

While most facilities have different floor plans, Lees recommends installing a walk-off system, like FirstStep or StepUp at the front entry extending at least 6-feet into the building. This walk-off system can be glued directly to the substrate or made into a loose-lay mat and laid over existing flooring. Walk-off mat systems made of Lees FirstStep or StepUp will trap moisture and soiling before it can be tracked into the building. A walk-off mat will also reduce the potential of slip and fall accidents on hard surface flooring during wet weather.

You may also want to consider installing a walk-off product in other high traffic areas of the building. In this type of situation, you can in effect *create* the area to be cleaned daily by installing a different carpet product. This does not even need to be a walk-off carpet, but can be a coordinating carpet. Lees offers many collections containing various carpet styles that are designed to accent one another when installed in different areas of a building. In areas which receive especially high traffic and soiling, maintenance personnel will have no question as to which areas need to receive special attention. They only need to look at the type of carpet installed. Lees has provided a sample floor plan below to demonstrate. In this example, you may choose to install a walk-off system in the entrance areas, one style of carpet in the High Traffic Areas (main hallways, dining areas), a second style in Medium Traffic Areas (secondary hallways), and a third style in Low Traffic Areas (cubicles, offices, storage areas, conference room).



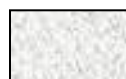
Walk-Off Carpet (High Traffic)



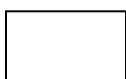
Other High Traffic Areas



Medium Traffic Areas

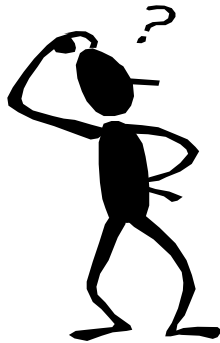


Low Traffic Areas



No Carpet

# Maintenance Procedures



Proper carpet maintenance shouldn't be confusing. Just follow these five easy steps for beautifully clean carpet:

## **ROUTINE MAINTENANCE**

*Step One – VACUUMING & PILE LIFTING*

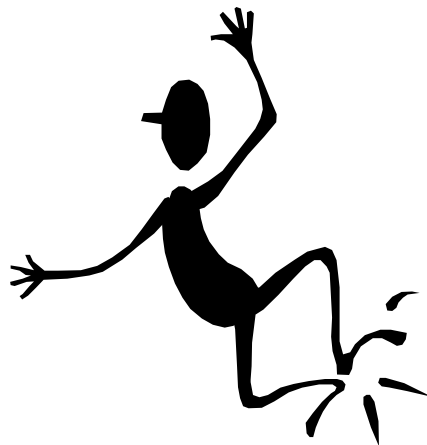
*Step Two – DAILY SPOT REMOVAL*

*Step Three – LEES DURASAFE 4007 ENCAPSULATOR*

## **DEEP CLEANING**

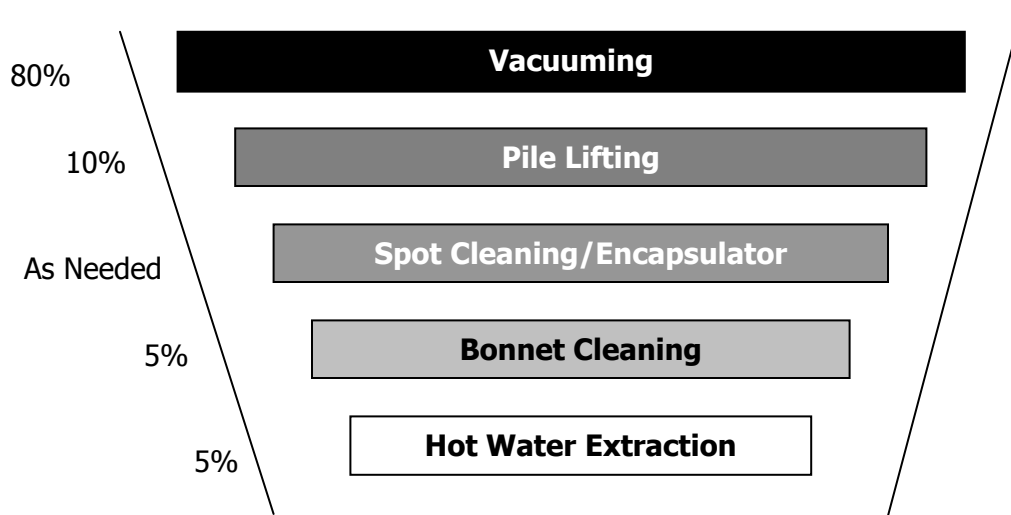
*Step Four – BONNETING*

*Step Five – HOT WATER EXTRACTION*



# Lees Recommended Maintenance Program

## FUNNEL CLEANING – CLEAN WHERE THE DIRT IS!



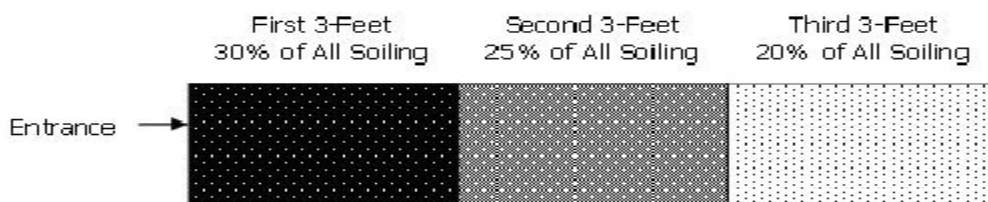
Most maintenance programs employ only a small amount of vacuuming, while spending more time on bonnet cleaning and hot water extractions. Unfortunately, bonnet cleaning and hot water extraction are the most expensive maintenance methods. They require more man-hours and more expensive equipment and chemicals than vacuuming. Vacuuming requires fewer man hours and NO chemicals. (However, periodic use of the DuraSafe 4007 Encapsulator will enhance the vacuuming process.) Done effectively, **vacuuming can remove 85% of the soil in the building.** This leaves more time for the maintenance crew to focus on effective spot cleaning, resulting in less chemical usage and less time wasted.

## The Proctor and Gamble Carpet Soiling Study

To properly plan for carpet maintenance, it is important to know the types of soils one is trying to remove. The following Proctor and Gamble Study lists typical soils found in carpet:

- \* 79% - Insoluble soils, sand, quartz, clay, carbon
- 10% - Petroleum, oils, grease, tar, animal and vegetable oil
- \* 6% - Sugar, starch, salts
- 5% - Moisture, unknown residues

It is important to note that 85%\* of soil is dry and can be removed through routine vacuuming. In fact, most soiling will occur within the first 9 feet from the entrance to the building. Vacuuming any entrance areas at least once, preferably twice, daily will help to reduce to the level of soil that is tracked into other areas.



# Step One: Vacuuming

***Vacuuming is the most effective way to remove soil. 85% of all dirt comes up with vacuuming!*** Apply your main vacuuming efforts where the most soiling occurs. Design your vacuuming program to follow the traffic patterns of the room. As a rule, make at least eight passes on all major traffic areas for as far as they extend into the building.

## Equipment

Use a dual motor or twin fan upright vacuum with a beater bar or double row of brushes with high suction. The bar or brush should be about 1/8" below the vacuum cleaner casing to ensure proper abrasive agitation.

## Frequency

Vacuum all High and Medium Traffic Areas daily. Vacuum the Low Traffic Areas 2-3 times per week.

## Procedure

1. Make at least 10 vacuum passes on the area of carpet two footsteps (three-feet) in from the entrance. Make at least eight passes on the area of the next two footsteps. Make eight passes with the vacuum cleaner for other high traffic areas. Make six to four passes with the vacuum cleaner for medium and low traffic areas. This is called the "10-8-6 Formula." Soiling studies have shown it to be a very effective way to remove and control tracked-in soil.
2. **Vacuum with slow, deliberate passes, forward and backward.** Slow movement allows time for air to circulate through the carpet and extract the soil. At least four passes (forward and backward) on the same area is required to effectively extract loose dirt.
3. Most problem areas in the carpet are discovered during vacuuming. Keep a pair of scissors in a holster off the vacuum to clip snags. Hang a clip board off the vacuum for notes pertaining to areas of concern. Define the type of repair needed and act accordingly.

# Pile Lifting

A pile lifter is a "vacuum on steroids." Pile lifting breaks up packed down dirt and removes 10% more dirt than vacuuming. That means that 95% of the soil in carpet is removed by vacuuming and pile lifting – and without the use of chemicals or wet cleaning methods!

## Equipment

Use a pile lifter that has sufficient suction to lift the pile and enhance the vacuuming process. Use high efficiency filter media.

## Frequency

Pile lift High and Medium Traffic Areas monthly. Pile lift Low Traffic Areas every other month.

## Procedure

1. Pile lift slowly and deliberately so the pile is lifted to an erect position. Test the speed of machine travel based on carpet pile and density.
2. Inspect all equipment daily to ensure proper effectiveness. You must fix or replace equipment in disrepair immediately.

## Step Two: Daily Spot Removal

*Use a small, hand-held extractor for spot cleaning. Rinse and extract all cleaning products, leaving no residue. Then spray a fine mist of DuraSafe 4007 over the affected area.*

### Important Considerations

- **“Water is our main cleaning agent.” WATER WILL REMOVE MOST SPILLS FROM LEES CARPET.** Your Lees Carpet has the Duracolor dye system, which is a unique chemistry that results in a product that will not accept stains that normally destroy most other commercial carpets. This patented technology is built into the carpet fiber, so even after a one-million foot traffic count, Duracolor's stain resistant properties are still hard at work. Duracolor offers permanent resistance to 96% of all common spills.
- **OVER-USE OF CHEMICALS WILL CAUSE THE CARPET TO RE-SOIL MORE QUICKLY. Use chemicals for spot cleaning only after you try to remove the spot with water.** Also, be sure to rinse the chemical completely from the carpet. Rinse the spot with water until no suds come back out of the carpet, then spray the area with DuraSafe 4007 Encapsulator.
- **DURASAFE 4007 ENCAPSULATOR SHOULD BE USED AFTER ALL SPOT CLEANING PROCEDURES.** DuraSafe 4007 is an encapsulator that will cling to the dirt, break it up under traffic, and allow it to be vacuumed up during the next daily vacuuming.
- **WARNING! Do not use chlorinated cleaning solutions, quaternary solutions, petroleum distillates, solvent-based cleaners, or citrus cleaning solutions on any Lees Carpet.**

### Equipment

**DuraSafe 4007, 2007, 5007, and/or 6007** – Based on the type of spot.

**Hoover Steam Vac or Small Extraction Machine** – To extract the spot cleaner and the spill.

**Clean Terry Cloth Towels/Paper Towels** – To extract remaining moisture from the carpet.

**Spotting Brush with Full Length Handle** – To work in the DuraSafe 4007 Encapsulator after the spot removal procedure.

### Unidentified Spots

1. Blot or vacuum up any liquid or solid so that it will not soak in. Do not rub or push down on the spot. Always blot gently. Move in a circular motion from the outside of the spot toward the inside and with an upward motion. Keep blotting until you cease to get transfer.
2. Add water to the spot. (Hot spills should be removed with water the same temperature.) Do not soak the stain. Add just enough to get a transfer of the spot. Repeat the process as long as you get a transfer of the spot.
3. Spray a small amount of **DuraSafe 4007** directly on the spot. Use care to wet the spot, but not saturate the carpet.
4. Gently massage the spotter into the soiled area in four directions using a spotting brush. Always work from the outer edge towards the center of the spot.
5. Allow the cleaner to dry, then vacuum the area thoroughly after drying to remove crystals and any remaining encapsulated soil.
6. If DuraSafe 4007 does not work, apply **DuraSafe 2007** in the same manner.
7. After the spot is completely removed and all cleaner is rinsed from the carpet, spray a small amount of **DuraSafe 4007** to the affected area, brush the spotter in four directions, and allow to dry.

## Identified Spots

1. Clean spots daily with DuraSafe Cleaning Products. The best time to identify spots is during regular vacuuming.
2. Blot up the liquid spill with an absorbent cotton cloth. Dampen the cloth with water only. Rub lightly from the outer edges of the spot to the center. The spot should be visible on cloth.
3. Use cold water first. Use hot water second. If the spill was hot (such as coffee or tea), it may require hot water to remove.
4. Consult the chart below for specific spots.

### WARNING!

**Do not use chlorinated cleaning solutions, quaternary solutions, petroleum distillates, solvent-based cleaners, or citrus cleaning solutions.**

Spots	Procedure
Beverages (Fruit Juice), Catsup, Chalk, Honey, Jelly, Kool-Aid®, Liquor, Maple Syrup, Milk, Milk Shakes, Soft Drinks	Wet the spot using cold water. Extract and repeat until the spot is removed. Heat the water if necessary. Do not exceed 160° F. If the spot remains, use the procedure below.
Butter, Candy, Canned Fruit, Chocolate, Gravy, Ice Cream, Margarine, Peanut Butter, Salad Dressing (Ranch, Blue Cheese), Soy Sauce, Tomato Paste, Wine	Spray a small amount of <b>DuraSafe 4007</b> directly on the spot. Use care to wet the spot, but not saturate the carpet. Gently massage the spotter into the soiled area in four directions using a clean, dry cloth. Blot any residual moisture from the area. Rinse the area thoroughly with water to all cleaner and soil. After the spot is completely removed and all cleaner is rinsed from the carpet, spray a small amount of <b>DuraSafe 4007</b> to the affected area, brush in four directions, and allow to dry.
Hand Lotion, Ink, Lipstick, Mayonnaise, Oil-Based Salad Dressings, Paint, Glue, Gum	Spray a small amount of <b>DuraSafe 2007</b> directly on the spot. Use care to wet the spot, but not saturate the carpet. Gently massage the spotter into the soiled area in four directions using a clean, dry cloth. Blot any residual moisture from the area. Rinse the area thoroughly with water to remove all cleaner and soil. After the spot is completely removed and all cleaner is rinsed from the carpet, spray a small amount of <b>DuraSafe 4007</b> to the affected area, brush in four directions, allow to dry.
Coffee, Tea, Red Wine, Yellowing	For these spots, the recommended spotter is <b>DuraSafe 5007</b> . Wet the spot with cold water. Apply DuraSafe 5007 to the area with a clean cloth. Gently blot the area to remove the spot. Extract and flush with clear water. Repeat until the spot is removed. After the spot is completely removed and all cleaner is rinsed from the carpet, spray a small amount of <b>DuraSafe 4007</b> to the affected area, brush in four directions, allow to dry.
Blood, Urine	For blood and urine spots, we recommend <b>DuraSafe 6007</b> . Wet the spot using cold water. Apply DuraSafe 6007 to the area with a clean cloth. Gently blot the area to remove the spot.. Extract and flush with clear water. Repeat until the spot is removed. After the spot is completely removed and all cleaner is rinsed from the carpet, spray a small amount of <b>DuraSafe 4007</b> to the affected area, brush in four directions, allow to dry.

If the spot returns, either the cleaner was not fully rinsed from the carpet and it caused rapid resoiling, or the spot at the yarn base was bigger than the surface spot. Either condition can be corrected easily by thoroughly rinsing the area with warm water, then applying a fine spray of DuraSafe 4007 to the affected area.

## Step Three – Lees DuraSafe 4007 Encapsulator

DuraSafe 4007 is an encapsulator that will cling to the dirt, break it up under traffic, and allow it to be vacuumed up during the next daily vacuuming. An “encapsulator” is a recent development in carpet chemistry that surrounds both the dirt and the carpet fiber, creating a smooth non-stick surface on the dirt and fiber to discourage a dirt-fiber bond.

Lees DuraSafe 4007 Encapsulator simplifies dirt removal. It also makes dirt and other carpet contaminants larger so a vacuum and vacuum filter will work better. It encases contaminants and whatever else is in the carpet such as dirt, mites and allergens, then it dries to a brittle polymer that breaks up and is easily vacuumed away. It assists in cleaning for health by reducing respirable particles that cause many health problems.

DuraSafe 4007 is a multi-purpose chemical. It is used after spot cleaning to limit re-soiling. It is used as a bonnet cleaning pre-spray (discussed later in this manual). And, finally, it can be applied to the entire carpeted surface weekly or monthly to promote easier soil removal and more effective vacuuming. If DuraSafe 4007 is sprayed onto the floor surface once per week to once per month (depending on traffic level), it will help to keep the carpet cleaner between bonnet cleaning and extractions, and can even help to prolong the amount of time needed between these deep cleaning procedures – saving you time and money.

**NOTE:** The only encapsulator Lees recommends is DuraSafe 4007. Other encapsulators that contain fluorochemicals are not recommended. Some of these chemical treatments, such as Scotchguard® and Teflon™ can leave a residue that actually detracts from the appearance and performance of Lees Carpet, rather than enhancing it.

### Frequencies

- Once per week in high traffic areas
- Once per month in medium traffic areas

### Procedure

1. After the standard vacuuming procedure, spray a light mist of DuraSafe 4007 over the entire carpeted area.
2. DuraSafe 4007 dries quickly, usually within 5-10 minutes, but the carpet will be wet briefly. Plan this procedure for a time when traffic is at its lightest.
3. After a brief drying period, carpet is ready for normal use.

# Deep Cleaning – Bonneting and Hot Water Extraction

Lees recommended deep cleaning methods are bonnet cleaning and hot water extraction. It's not a matter of one method or the other, but using both together to achieve the desired results. Bonneting cleans the top of the carpet and extraction cleans the bottom. Used together, they are very effective.

The table below is simply a recommendation based on average traffic levels and soiling. You may adjust these frequencies based on the carpet's appearance in your facility. You may also extend the time between extractions if the encapsulator application and thorough vacuuming routines are maintained.

DEEP CLEANING FREQUENCIES						
	High Traffic		Medium Traffic		Low Traffic	
	Bonnet	Extract	Bonnet	Extract	Bonnet	Extract
January		X	X			
February	X					
March	X			X		X
April		X	X			
May	X					
June	X				X	
July		X	X			
August	X					
September	X					X
October		X	X			
November	X					
December	X			X	X	

## Step Four: Bonneting

*Bonnet cleaning is an interim method that can be used between restorative cleanings. It is a low-moisture surface cleaning process. It is not a substitute for the thorough deep cleaning process of a restorative cleaning (i.e., hot water extraction).*

### Equipment

**Bonnet Machine** – Use a low-speed bonnet machine.

**100% Terry-Cloth Cotton Bonnets** – Be sure to have enough bonnets available. The bonnets must be turned or changed whenever they show signs of soiling.

**DuraSafe 4007 Bonnet Cleaning Concentrate** – This chemical should be diluted before use, then pre-sprayed onto the carpet.

**Airless Sprayer** – The airless sprayer is used for pre-spraying the chemical application.

**Vacuum** – For removing the dried chemical and soil.

**NOTE:** Do not soak bonnets in chemicals.

## Procedure

1. Thoroughly vacuum all areas to be bonneted.
2. Hold spray nozzle 12 to 18 inches from the carpet and apply **DuraSafe 4007** to the entire area to be cleaned. Wet but do not saturate.
3. Allow five minutes of dwell time.

**NOTE: Lees does not recommend the use of chemicals in the bonnet shower tank.**

4. Bonnet using a clean, dry terry-cloth cotton bonnet. When two-thirds of the bonnet shows signs of soil, either reverse or change the bonnet. Proper cleaning requires at least one bonnet for every 250 square feet cleaned.
5. Bonnet clean the entire flooring surface, then allow time for drying (1/2 – 1 hour).
6. Dry vacuum to remove crystals and encapsulated soil.

## Step Five: Hot Water Extraction

### Equipment

**Portable Extraction Machine** – The machine should have a wand. The extraction machine should be able to heat the water to between 150° and 180° at the spray nozzle.

**DuraSafe 3007 Hot Water Extraction Cleaning Concentrate Prespray** – This chemical should be diluted before use, then pre-sprayed onto the carpet.

**Airless Sprayer** – Used for pre-spraying chemical application.

**Snail Fans or Air Movers** – Use the fans to speed the drying of the carpet.

### Procedure

1. Thoroughly vacuum all traffic areas, then pre-spray DuraSafe 3007 using an airless sprayer. Allow at least five minutes dwell time.

**NOTE: THE SECRET TO CHEMICALS IS NOT HOW MUCH, BUT HOW LONG!** Dwelling time, not amount used of chemical is what's important to be effective. A couple ounces dwelling 5-10 minutes will be much more effective than jetting down ten times as much chemical and immediately extracting.

2. Heavily soiled areas may require scrubbing with a nylon brush, an Americlean Carpet Scrubber, or a rotary machine to break up soil deposits prior to hot water extraction.
3. Extract thoroughly, using water only. **Do not put any chemicals into the extractor tank.**
4. Perform a clear-water rinse following the deep cleaning extraction.
5. **Follow each wet pass with a minimum of three dry passes.** Delay the last dry pass to allow final wicking. Run this last pass perpendicular to the other passes.
6. **Enhance drying time by following the extraction with a dry terry cloth bonnet procedure.** A dry bonnet procedure eliminates wick-back, gives the carpet a uniform look by eliminating extractor lines, and improves the drying process.
7. Use snail fans or air movers for the final drying of the carpet. Allow three hours drying time after the last extraction before traffic is allowed on the carpet again.

# Special Maintenance Issues

## Restoration of Heavily Soiled Carpet

### Equipment

**Vacuum** - Use a dual motor or twin fan upright with a beater bar or double row of brushes with high suction.

**Pile Lifter** - Use a pile lifter that has sufficient suction to lift the pile and enhance the vacuuming process.

**Extraction Machine** – Use a portable extraction machine with a wand. The extraction machine should be able to heat the water to between 150° and 180° at the spray nozzle.

**Bonnet Machine** – Use a low-speed bonnet machine with 100% terry-cloth cotton bonnets.

### Procedure

1. Vacuum the area, using 20 to 30 passes on the same area to effectively extract loose dirt.
2. Pile lift the area slowly and deliberately so that the pile is lifted to an erect position. After pile-lifting, vacuum the area again with a minimum of four passes.
3. Apply DuraSafe 3007 Hot Water Extraction Concentrate in proper dilution levels by pre-spraying with an airless sprayer. Allow five minutes dwell time.
4. Heavily soiled areas may require scrubbing with a nylon brush, a wire pad on a rotary machine, or an Americlean Carpet Scrubber to break up soil deposits prior to hot water extraction. You may also bonnet using a wire pad bonnet. This is an aggressive pad and should be used primarily on level loop carpets. Agitate the carpet with the pad; this works the chemicals into the carpet.
5. Using a hot water extraction machine, extract the area thoroughly with clear water. **Do not put any chemicals into the rinse or "solution" tank of the extractor.**
6. Follow the extraction with a clear water rinse. Extract the cleaning products from the carpet, leaving no residue in the carpet. Follow each wet pass with at least three dry passes.
7. Enhance drying time by using a dry terry cloth bonnet procedure. Bonnet the carpet thoroughly with the dry bonnet until transfer of soil no longer occurs. This finish bonneting will reduce the rate of re-soiling.

## Heavily Shampooed Carpet (Heavy Chemical Residue)

### Equipment

**Extraction Machine** – Use a portable extraction machine with a wand. The extraction machine should be able to heat the water to between 150° and 180° at the spray nozzle.

**Bonnet Machine** – Use a low-speed bonnet machine with 100% terry-cloth cotton bonnets.

**WATER** – Be sure to have a large amount of water for this procedure. Every 2' x 2' area of carpet may require a full five-gallon bucket of water to break up the chemical residue.

### Procedure

**NOTE:** This procedure requires two maintenance personnel: one to wet the carpet and another to extract.

1. One member of the maintenance crew should wet the carpet thoroughly using only water. The amount of water needed will depend on the level of chemical residue in the carpet.
2. Scrub areas with heavy residue with a wire pad bonnet. This is an aggressive pad that will break up chemical deposits prior to hot water extraction.
3. Using a hot water extraction machine, extract the area thoroughly. With the extraction pass, do not add any water or chemicals to the carpet. Simply extract the sudsy residue produced in the first two steps.

4. The first three steps of this procedure may need to be repeated three or four separate times to fully remove all chemical residue from the carpet. Repeat the above procedures until no suds are created when the carpet is wetted and agitated.
5. Follow the final extraction with a clear water rinse.
6. Follow each wet pass with a minimum of three dry passes.
7. Enhance drying time by using a dry terry cloth bonnet procedure. Bonnet the carpet thoroughly with the dry bonnet to help reduce the rate of re-soiling.

## Rotation of Carpet Tile

**NOTE:** Before removal of the carpet tiles, be sure that the carpet is clean and dry. Lees recommends that any maintenance procedures be carried out the night before removal.

1. Using a floor plan of the space or spaces where you would like to rotate carpet tile, color code the high, medium, and low traffic areas.
2. Count the number of tiles you are rotating in each area. For example, if you are rotating 40 carpet tiles in the high traffic area, you will need to remove 40 tiles from the medium traffic area and 40 tiles from the low traffic area.
3. Remove the desired carpet from the high traffic area, keeping the carpet tile stacked back to back so that no transfer of adhesive will occur to the yarn side of the tiles.
4. Move the carpet tiles from the high traffic area to the low traffic area. Do not remove the low traffic carpet tiles as yet.
5. Remove the carpet tiles from the medium traffic area and stack them as in step 3.
6. Install the carpet tiles from the medium traffic area into the empty spaces left in the high traffic area.
7. Remove the carpet tiles from the low traffic area and stack them as in step 3.
8. Install the carpet tiles from the low traffic area into the empty spaces left in the medium traffic area.
9. Install the carpet tiles from the high traffic area into the empty spaces left in the low traffic area.

## Some Final Words...

The SINGLE BIGGEST MISTAKE people make in cleaning our carpet is the excessive use of the wrong chemicals. Too much chemical left in the carpet causing re-soiling; the use of high pH cleaners masks the Duracolor system. Use cleaners with a pH not lower than 5.0, nor greater than 8.0. **WARNING! Do not use chlorinated cleaning solutions, quaternary solutions, petroleum distillates, or citrus cleaning solutions.**

**THE PURPOSE OF CHEMICALS IS TO ATTRACT DIRT. Use chemicals when needed, but remove all chemicals with a clear water rinse** (with the exception of the DuraSafe 4007 Encapsulator). Chemical left in the carpet will cause rapid re-soiling. Use chemicals sparingly and remember that whatever you put in the carpet must be removed. The only exception to this rule is the DuraSafe 4007 Encapsulator. Weekly/monthly use of the 4007 will help the carpet come clean more easily during spot cleaning and help your daily vacuuming remove more of the set-in soil in the carpet.

The key to great looking carpet is using the right combination of methods and the right chemicals in the right manner. The right procedures coupled with the right people doing the work is all you will ever need to maintain the carpet and, as a result, extend your investment and keep your customers coming back time after time.