

# Carpet Tiles: Care and Maintenance Manual

## **Introduction**

## **Maintenance**

By implementing a routine carpet maintenance program, you preserve and maintain your floorcovering and extend the life of your carpet investment. Routine care means a longer lasting product, but it is important to implement a maintenance program from the very beginning. An effective maintenance program is carefully planned and executed on schedule.

## **Comprehensive Maintenance Plan**

An effective maintenance program consists of five key elements:

- Preventative Maintenance – containing the soil entering the building using walk-off mats at entrances. This includes outside matting, inside matting and mats at certain other high traffic interior areas.
- Vacuuming - regular vacuuming is the single most important part of a maintenance program. Vacuuming is designed to remove dry soil matter.
- Spot and Spill Removal – quick response to spills is the key. The faster spills are dealt with the less chance they will leave a stain.
- Interim Cleaning – several different methods can be used. Regularly scheduled interim cleaning can prolong the need for restorative cleaning.
- Restorative Cleaning – deep cleaning designed to remove trapped soils. Hot water extraction is the most effective method and the only restorative method recommended by Welspun.

## **Identifying Your Specific Maintenance Needs**

Just as various areas of your office or building are subject to different uses, each area demands a different level of maintenance and care. Heavily trafficked areas such as entrances and corridors require more frequent vacuuming and cleaning. Areas around vending machines and desks need daily attention to spills and stains. Also, certain areas may require different types of equipment to be used. A comprehensive maintenance program should have a chart or diagram of the building's floor space outlining proper cleaning frequency rates, methods and equipment. This well-designed maintenance plan will add years of useful life to your carpet investment.

<b>Traffic</b>	<b>Carpet Owner/Maintainer</b>		<b>Professional Carpet cleaner/restorer</b>	
	<b>Vacuuming</b>	<b>Spot Cleaning</b>	<b>Interim maintenance</b>	<b>Restorative cleaning</b>
<b>Light &lt;500 foot traffic per day</b>	1 to 2 times per week	Daily or as soon as spots are noticed	1 to 3 times annually	1 to 2 times annually
<b>Medium 500-1000 foot traffic per day</b>	Daily in traffic areas. Overall 3 to 4 times per week	Daily or as soon as spots are noticed	3 to 6 times annually	2 to 4 times annually
<b>Heavy 1001-2500 foot traffic per day</b>	Daily in traffic areas. Overall 4 to 7 times per week	Daily or as soon as spots are noticed	6 to 12 times annually	3 to 6 times annually
<b>Very heavy &gt;2500 foot traffic per day</b>	1 to 2 times daily in traffic areas. Overall 7 times per week	Daily or as soon as spots are noticed	12 to 52 times annually	6 to 24 times annually

### **Maintenance Techniques**

The ideal maintenance program is designed to help prevent soil from reaching the carpet and to remove soil before it causes damage. To keep your carpet clean and looking like new, this ideal maintenance program uses a combination of methods. These methods are tailored to your facility's needs. Cleaning frequencies are based on the specific needs of trafficked areas in your facility.

### **PREVENTATIVE MAINTENANCE**

Maintaining your carpet's appearance means more than choosing the right cleaning method. Choosing the right products up front contributes greatly to the overall performance of your floorcovering. Using walk-off mats helps keep soil from entering the building.

Outside mats are designed to scrape dirt and debris off shoes while interior mats are designed to remove smaller soil particles and help absorb moisture. Interior walk-off mats should extend a minimum of six feet inside the entrance. Mats can also be effective in other interior areas, including elevators, around water coolers and food station areas, and at stair thresholds.

### **VACUUM CLEANING**

A good vacuuming program is essential to the success of your carpet maintenance efforts. Effective daily vacuuming reduces fibre abrasion and wear. In addition to removing soil, vacuum cleaning also helps to lift and restore pile, particularly for cut pile carpet. Proper equipment and technique are critical to the success of a vacuuming program.

Twin motor machines with independent motors for suction and brushing are preferred for this task. High usage areas should be vacuumed daily to prevent the unsightly build-up of dry soil – dirt, dust and

grit. In most cases upright vacuum cleaners are advised. Use of an upright twin motor vacuum cleaner agitates pile, removes dry soil age & enhances carpet appearance. Canister, backpack type machines without brushes, and riding sweepers with rotary brushes are generally not recommended, but their use will not void the product warranty.

The Carpet and Rug Institute has a Seal of Approval program that grades various maintenance equipment, including vacuum cleaners. For a list of these certified vacuum cleaners see the CRI website at [www.carpet-rug.org](http://www.carpet-rug.org).

The frequency of vacuuming is determined by visual inspection but should be done daily. Heavy traffic areas such as lobbies, entryways and barrier mats, particularly those exposed to various weather conditions, may require more frequent vacuuming. The procedure for thorough vacuuming is using slow overlapping strokes, making sure that the entire carpet surface is covered. Strokes should be no longer than 2-3 feet in length to avoid constant bending.

## **SPOT CLEANING**

Daily removal of spots and spills helps maintain the carpet's appearance between scheduled cleanings. Immediate action against spots and spills also reduces the probability of a permanent stain. It is important to use solutions that are appropriate for the specific type of spot or spill – water-based, oil-based, or solids, including gum. Use spotting solutions sparingly and always try to remove the spot with water only before using a spotting solution. If available, using a portable extractor will significantly improve the ability to remove spots.

### **Treating Water-Based Spots**

For liquid spills, start by blotting up as much of the liquid as possible with a clean white cloth. If the spill is semi-solid or has hardened, gently scrape it with a spoon or spatula, and then blot the spot with a damp sponge. Always work from the edge of the spot towards the center. Never rub across a wet spill in a manner that causes the stain or contamination to be spread from the original area.

If spot remains after using water, use a general purpose spot cleaner. Apply a minimal amount of solution and use a hand brush to gently agitate the solution. Rinse with water and allow the area to dry about 1 hour before vacuuming. Repeat the application if necessary. Protect the freshly cleaned area until the carpet is completely dry. Do not brush aggressively on the spot.

### **Treating Oil-Based Spots**

When removing oily stains such as paint, grease, tar, or asphalt, it will be necessary to use a cleaner specifically designed for these types of spots. Always check for colorfastness by applying your cleaning solution to an inconspicuous area of the carpet. Spray or pour the cleaning solution onto a white cloth and press it onto the carpet. Check the cloth for any evidence of dye transfer. If color transfer is evident, do not use the solution. If colorfastness is not a problem, apply your solution sparingly to a clean white cloth and press the cloth onto the spot.

Again, do not rub across the stain, but wipe gently from the outer edge toward the center of the spot. Repeat the procedure until the spot has been removed. Rinse with water and allow the area to dry about 1 hour before vacuuming. Protect the freshly cleaned area until the carpet is completely dry.

NOTE: IF AVAILABLE, A SMALL PORTABLE EXTRACTOR MAKES THE TASK OF FLUSHING SPOTS AND REMOVING EXCESS MOISTURE MUCH EASIER. IF STAIN CANNOT BE REMOVED, PLEASE CONTACT A WELSPUN CONSULTANT.

### **DRY EXTRACTION**

The low moisture dry extraction method is a safe, easy, and effective method for handling maintenance on a regular basis. The procedure uses a moist compound (powder) that does not leave the carpet wet and allows for immediate access and traffic once the procedure is complete.

Follow this process for dry extraction: Thoroughly vacuum the carpet. Spread extraction compound on the carpet and then agitate using a low moisture applicator with counter rotating brushes to gently brush the moist compound into the fiber, dislodging and dispersing accumulated soil. Allow 30 minutes for drying before thoroughly vacuuming compound and soil from the carpet.

### **CRYSTALLIZING APPLICATION (ENCAPSULATION)**

The crystallizing method of maintenance is a low moisture procedure similar in some respects to the dry extraction method but instead of using the powder, a liquid encapsulation solution is used. This process is designed to encapsulate the soil as the solution dries, forming small crystals that can easily be vacuumed out of the carpet. Benefits include immediate access to the area without the necessity of extended drying time.

Follow this procedure for crystallizing application: Thoroughly vacuum the carpet. Apply the encapsulation solution using an electric sprayer or a simple pump-up garden type sprayer. Agitate the carpet pile using a low moisture applicator with counter rotating brushes to gently brush the solution into the fiber, dislodging and dispersing accumulated soil. Allow time for the solution to dry. Drying time will vary according to several factors, including humidity, air flow and air temperature, but it's typically 30 - 60 minutes. Finish with vacuuming.

### **BONNET CLEANING**

NOTE: USE OF A BONNET OR ANY OTHER TYPE OF ROTARY MACHINE FOR CLEANING OR DRYING IS NOT RECOMMENDED AND MAY VOID ALL WARRANTIES.

### **HOT WATER EXTRACTION**

As like with all other maintenance methods, always prepare the carpet by vacuuming.

Hot water extraction is an effective method for removing heavy soil and residue from carpeting. Start by applying a detergent pre-spray appropriate for carpet with an electric or pump type sprayer. The application should cover the entire carpeted surface, not just the traffic lanes. Agitate the pre-spray with a dual brush counter-rotating low moisture applicator. Allow 10 minutes of dwell time. Using only clean water in the extractor, thoroughly rinse the carpet. For heavily soiled high-traffic areas the procedure can be repeated until the extracted water is relatively clear. The hot water extraction method injects

water into the carpet. The injected water suspends the soil and contaminants in the solution for easy removal by the built-in vacuum system.

The recommended technique: Operate the floor wand or self-contained extractor by engaging the solution valve or button and pulling or pushing the equipment for approximately three to five feet (or at a comfortable distance). Release the solution valve before reaching the end of your pass to assure that you vacuum up all of the solution. Cover the same area two or three times both with solution and without solution (suction only) to remove as much soil and moisture from the carpet as possible. Overlap each stroke approximately two inches on the area already cleaned and proceed as described above. Make several additional passes with the solution valve off to remove as much moisture from the area as possible. It is important not to over wet the carpet and to remove as much moisture as possible to expedite drying. Make sure HVAC system is on and use drying fans (air movers) on wet areas during and after cleaning to allow the carpet to dry completely.

Complete the procedure with a thorough vacuuming.

NOTE: ALTHOUGH IT IS RECOMMENDED THAT WATER TEMPERATURE RANGE BETWEEN 110° - 130°F, USING WATER WITH TEMPERATURES ABOVE THAT RANGE, TYPICAL WITH TRUCKMOUNT EXTRACTION, WILL NOT DAMAGE OUR PRODUCTS. LIKewise, COLD WATER CAN BE USED, BUT ONLY WITH A DETERGENT DESIGNED FOR COLD WATER USE.

NOTE: DRYING TIMES WILL VARY BASED ON INTERNAL AND EXTERNAL ENVIRONMENTAL CONDITIONS. PLAN ON A MINIMUM OF 3 HOURS UNDER NORMAL CONDITIONS. DO NOT ALLOW FOOT TRAFFIC ON THE CARPET UNTIL IT IS DRY. ALLOWING FOOT TRAFFIC BEFORE CARPET IS DRY CAN CAUSE FIBER DAMAGE AND RAPID RE-SOILING.

### **Cleaning Solutions**

Some commercial carpet cleaning solutions are very harsh and can damage the carpet fiber. It is important to select solutions that meet the basic standards outlined here and to evaluate each product before using it.

Welspun brand carpets can be maintained using a number of widely recognized and readily available carpet cleaning agents. Always follow the manufacturer's recommended guidelines for using any cleaning solution. Avoid products with pH levels over 9.5 and products that contain toxic or flammable solvents. Do not use oil-based defoamers of any kind. Detergents designed for use in hot water extraction equipment should not contain an oil-based defoamer and caution should be used with the amount of detergent added. Oil-based defoamers have the potential to leave oily residues and adding too much detergent could leave excess detergent on the carpet. Both scenarios will lead to rapid re-soiling and the need for more frequent cleanings. In addition, cleaning solutions containing optical brighteners should not be used. Optical brighteners can adversely affect the coloration of carpet and lead to premature aging or yellowing of the carpet.

Cleaning solutions used for interim and/or restorative cleaning should be tested for sticky residues that may cause re-soiling. To test a solution, pour a small amount in a clean glass dish. Allow the solution to air dry completely (24 hours minimum). Break up any hard residue on the surface of the glass dish and examine it. If the residue can be characterized as dry powder, dry flakes or dry crystals, the solution is

acceptable. If the residue appears oily, greasy, sticky, or in waxy flakes, the solution is not acceptable since it would likely contribute to rapid re-soiling.

Spotting solutions should be used as needed and should be flushed out with clean water after the spot has been treated.

### **Maintenance Equipment Criteria**

#### **VACUUM (FOR TWIN MOTOR UPRIGHTS)**

Power : 8 amp

Filtration: Down to 0.3 microns or lower

Vacuum:

- 60" water lift-motor or better @ 90+ cfm Brush
- Toothed belt drive preferred
- Brush speed 2,500 - 5000 rpm
- Brush diameter 2" - 3½"
- Brush height adjustment essential; self-adjusting design preferred

Working Width: 15" - 30"

Dust Bag Capacity : 300 - 400 cubic inches

NOTE: VACUUM CLEANER SHOULD HAVE THE CARPET AND RUG INSTITUTE'S SEAL OF APPROVAL THROUGH THEIR SEAL OF APPROVAL/GREEN LABEL CERTIFICATION PROGRAM. TOP-LOADING DUST BAG MACHINES WITH HEPA FILTERS ARE STRONGLY RECOMMENDED. WALK-BEHIND OR RIDING FLOOR SWEEPERS ARE NOT RECOMMENDED.

#### **LOW MOISTURE APPLICATOR**

Power : 2-8 amp

Width : 12 " - 22"

Brushes (2): 10 " - 20 " Counter-rotating

Brush speed: 400 - 500 rpm

#### **HOT WATER EXTRACTOR**

Power: 10 - 15 amp

Fluid Delivery: Minimum of ½ gallons/minute - 100 psi

Tanks : 8-20 gallon solution and 8-20 gallon recovery

Vacuum: 100 " - 140 " water lift at around 90-100 cfm

Vacuum Shoe: Minimum of 11 " - 18 " wide for wands and portable extractors

Wheels : Non-marking 4 " - 10 " diameter

Water Temp: Minimum of 120°F

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