

MAINTENANCE GUIDELINES

PRODUCT CARE

Shaw Contract Group carpets are quality engineered to provide a long, useful life and enhance the indoor environment. Carpet offers many advantages over other flooring systems, such as reduced fatigue, sound absorption, and lower life cycle costs.

From the start, the carpet maintenance program should be considered part of the carpet buying decision. If proper maintenance is neglected, the carpet's appearance will suffer, shortening the carpet's useful life and raising long term costs.

A comprehensive carpet care program consists of four elements:

- Reduction in soil entering the building
- Removal of dry soil
- Removal of spots and spills
- Cleaning by high-performance hot water extraction

Please note that the information in this booklet pertains to most carpets made of synthetic or man-made fibres in commercial installations. Some procedures may not be suitable for wool or wool blend carpets or printed carpets. For these type carpets, please see the special appropriate maintenance guidelines.

These guidelines contain specific procedures for maintenance of printed carpet.

THE IMPORTANCE OF PLANNING

A successful maintenance program starts with the selection of carpet that meets specific performance requirements. Attributes include construction, backing, yarn, dye type and colour. Colour and pattern are major factors in the perception of a successful maintenance program. The visual degree of soiling is measured as colour contrast. The best soil hiding colours are usually medium to dark shades. These are best specified for known areas having severe traffic and soil.

Carpet maintenance must be established as a scheduled program, rather than being a random series of reactions to soiling conditions and infrequent cleaning. Virtually every complaint of poor appearance, rapid soiling and, many times, poor performance has been shown to be related to lack of planning and control of the maintenance program.

The most important consideration when planning a maintenance program is the budget. Like other expensive furnishings or equipment, carpet represents a substantial investment for any facility and requires adequate care to prolong its effective life. If the carpet maintenance budget is set unrealistically low, the carpet will need to be replaced prematurely.

Tailor the design of the program to the amount of traffic and type of soiling, which vary by area. Due to higher traffic levels, entrance lobbies, elevators, and hallways will need more care than offices. Food service areas and entrances will require more effort due to the more difficult soiling conditions. Consult the chart below for suggested maintenance frequencies by traffic levels.

Traffic Level	Vacuum	Spot Clean	Hot Water Extraction
Light	2-3 times/week	As needed	Annually
Medium	Daily	As needed	Twice yearly
Heavy	1+ times/day	As needed	Quarterly
Severe*	1+ times/day	As needed	Minimum monthly/as needed

Definitions:

- Light traffic – private offices and cubicles
- Medium traffic – shared offices, interior hallways and conference rooms
- Heavy traffic – entrances, elevators, main hallways, break rooms, mailrooms
- Severe* traffic – airports and entries to hospitals, theatres

WHAT CAN YOU EXPECT FROM YOUR CARPET IN THE REAL WORLD

Although Shaw Industries products are designed for specific applications and are tested to withstand the tremendous beating that carpet receives in some uses, there are some conditions where appearance change must be expected. Carpet and other flooring materials where the oily material from asphalt sealers is tracked into the building may become yellowed overtime. This material stains not only carpet but other flooring materials as well. It is virtually impossible to remove all of this material once it has penetrated the fibre of any carpet. Walk-off tiles (The Steppin Out Collection) and periodic cleaning can reduce this phenomenon. When sealing asphalt parking lots, specify a high quality sealer and ask the vendor for a warranty that this will not occur.

Areas where large amounts of sandy soil enter the building may become dull in appearance over time. This is due to abrasion of the fibre surface, reducing the reflection of light. This is minimised by frequent vacuuming.

REDUCTION OF SOILING

One of the critical aspects of maintenance is the use of walk-off tiles at building entrances. Mats are also one of the least understood and most neglected parts of the maintenance program. Walk-off tiles greatly reduce the amount of soil carried into a building by foot traffic. Other areas where walk-off tiles are beneficial are service entrances with direct contact to the outside, form the hard surface area in a kitchen to the carpeted dining area in a restaurant, or entrances from plant facilities into the offices. Various studios have shown that the cost of removing a pound of soil form a building ranges up to \$500 or more! Clearly, it is far cheaper to stop dirt at the door.

REMOVAL OF DRY SOIL

Vacuuming is the **most significant element** in the maintenance of carpet and the overall appearance of the facility. Research has shown that 85% of the soil tracked into a building is dry, and the other 15% is oily. Vacuums are designed to remove the dry soil. Walking on soiled carpet permits the soil particles to work their way down into the pile where they are difficult to remove. Frequent vacuuming removes soil particles from the surface before this happens. Heavily trafficked areas, such as entrance and major corridors, should be vacuumed at least once a day. Areas with less traffic, such as offices, should be vacuumed every other day depending upon conditions.

Vacuum cleaner recommendations:

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- 1) Vacuums should have certification in “The Carpet and Rug Institute Vacuum Cleaning Indoor Air Quality Program”. Vacuums specifically designed for commercial installations offer characteristics which help meet the demands of a good maintenance program.
- 2) For carpet tile and carpets that are **glued directly to the floor without cushion**, a vacuum with a rotating cylindrical brush, rather than a beater bar, should be used to agitate the pile and loosen the soil. Beater bars can damage the pile of direct glued carpet if the machine height adjustment is set to low. This can also damage the vacuum.
- 3) Vacuums with either a beater bar or rotating brush can be used for carpet installed over pad, or with attached cushion backings. These vacuums are also recommended for double stick installations where the carpet is glued to the pad.
- 4) Bags that fill from the top are preferred over those that fill from the bottom. Replaceable paper bags or liners for cloth bags are better filters than cloth bags are alone, because they can trap more of the small particles that cloth bags allow to pass back into the air. Many vacuums can also be used with **micro-filtration or high efficiency bags**, which capture even smaller particles that tend to be related to allergy complaints and which also reduce the need for dusting. Check bags and replace when ½ to 2/3 full to avoid a decrease in efficiency. When changing bags, also check the belt and replace if loose or worn.
- 5) A good vacuum is vital to prolonging the life of your carpet. A cheap vacuum can remove surface dirt but may not effectively remove the hidden particles embedded in the pile. This can also lead to rapid appearance loss and complaints of poor product performance. A hundred dollars saved on the price of a vacuum can easily cost thousands of dollars in reduced useful life of the carpet.

PILE LIFTING

Between cleanings, regular use of a pile lifter can remove deeply embedded dry sand and soil, help stand up the pile and renew the appearance of the carpet in high traffic areas such as traffic funnel zones, elevators and lobbies. A pile lifter is an upright, two motor vacuum with a large adjustable, motor driven brush, a high suction vacuum motor, and a sand trap. Using a pile lifter in traffic lanes just prior to cleaning removes the deeply embedded soil and open up the pile so the hot water extraction can be more effective. **Follow the pile lifting with a thorough vacuuming.**

SPOT AND SPILL REMOVAL

All maintenance procedures mentioned thus far have been planned; spot and stain removal is the reaction to an unplanned incident. Therefore, it is desirable to have the needed materials handy by planning ahead of time. The professional cleaning companies have spot removal kits in convenient carrying cases that contain all the necessary materials. For assistance with specific stain removal procedures, contact Shaw Contract Group on 1800 556 302.

GENERAL INSTRUCTIONS

Spot removal products that have been tested and certified in the Carpet and Rug Institute (CRI) Seal of Approval Program for cleaning products are recommended for specific spots. Additional spot removal procedures are listed below if professional and CRI certified products are not available:

- Scoop up any solids gently with a spoon or dull knife. Absorb wet spills as quickly as possible by blotting with white paper or cloth towels.

- Always blot, never scrub or rub abrasively, because it may create a fuzzy area. When blotting, work from the outer edge in toward the centre of the spot to avoid spreading the spill and enlarging the problem.
- Thorough removal of both stain material and the detergent residue is critical to prevent re-soiling. Water extraction is the best way to accomplish this. Many cleaning equipment manufacturers offer small extraction machines specially designed for spot cleaning. These are small, lightweight and highly portable. They do an excellent job of rinsing after spot cleaning. They are also an excellent way to deal with body fluids on the carpet.
- Place several layers of white towels on the spot to draw out any remaining moisture. Weight them down with a heavy object that will not transfer colour, such as a plastic jug of water.

REMOVAL PROCEDURES

- A. WATER SOLUABLE STAINS – absorb as much as possible with white towels. Blot the affected area with more towels dampened with cool water until no more colour transfers to the towels. If any of the stain remains, use a detergent solution of ½ teaspoon (no more) of **clear** liquid hand washing detergent (do not use those containing lanolin or hand lotions) to 600ml of water in a clean spray bottle. You may also use a general purpose spot cleaner with a pH less than 10.

For printed carpets, do not use cleaning agents with a pH higher than 8. Spray lightly onto the spot and blot repeatedly with white towels. **Rinse thoroughly** by spraying with clean water, and then blot or extract. Do not use too much detergent, because the residue will contribute to rapid re-soiling.

- a) Either: Apply a white vinegar solution (one part vinegar to one part water) to a white towel and blot or spray onto spot. Continue as in “A” or use a slightly acidic spotter made for coffee, tea and other tannin stains rather than detergent.
- b) Either: Apply a solution of household ammonia (one tablespoon to one cup of water) to a white towel and blot or spray onto spot. Continue as in “A” or use an alkaline spotter made for removing blood and protein stains rather than detergent. **Do not use on printed styles.**

- B. GREASE – blot as much as possible with white towels. Apply a solvent designated for grease removal to a towel and blot. **Use sparingly and do not pour or spray directly** on the carpet pile, as damage to the backing or adhesive underneath may result. Use the towels to transport the solvent to the carpet. Repeat until no more colour transfers to the towel. Protective gloves should be worn because the solvent will quickly remove oils from the skin and may result in irritation. Provide adequate ventilation and **do not use flammable solvents!** Rinse thoroughly by spraying with clean water, and blot or extract. If needed, continue with procedures in “A”.

- C. FREEZE areas with chewing gum and candle wax with ice or a commercially available product in an aerosol can. Shatter with a blunt object, and vacuum before the chips soften. Follow up with solvent as in “B”.

- D. Several commercial preparations are available to remove medical stains such as Betadine, but they should be used with caution. A 5% sodium thiosulphate solution

(from a photography store) may be used. For stains that are more than a few hours old, this solution should be warmed. Another effective treatment, which can be used on solution dyed carpet, is Strepene (Sodium Hydrosulphate). For further assistance consult a professional cleaner.

- E. RUST can be removed in most cases with a 10% solution of oxalic acid. Stubborn cases require 5% hydrofluoric acid which is difficult to obtain and dangerous to use. **Both should be used with caution by a trained professional.**

F. SPECIAL PROCEDURES FOR SOLUTION DYED (PIGMENTED) CARPETS ONLY

WARNING

Only carpets which are 100% solution dyed are resistant to bleaching. Do not use this procedure unless you are absolutely sure the carpet is solution dyed – carpet dyed by other methods will be damaged. **Do not use this procedure on printed carpets. Carpets with blends of solution dyed and conventionally dyed fibres will be damaged by bleach.** If in doubt, contact Shaw Contract Group on 1800 556 302 for specific fibre content of your carpet.

For solution dyed carpets with stains such as food dyes, fruit drink stains and coffee not removed by A a), use a solution of **one part chlorine bleach to five parts water. Do not exceed this concentration – never use full strength bleach.** Professional cleaners have products that may be more effective.

Wearing rubber gloves and eye protection apply the bleach to a white towel and blot it on the stain. Do not pour the bleach directly onto the carpet. Allow 15 minutes for the treatment to work.

ANOTHER CAUTION

Follow with a thorough rinsing or extract with a wet vac or extraction machine to remove excess bleach. Bleach remaining in the carpet can degrade the fibre over time. Full strength bleach can degrade the fibre and damage some backings. Do not track to other areas where there may be conventionally dyed carpet.

RECOMMENDED PROCEDURES BY STAIN TYPE

*Pro – Consult a Professional Cleaner.

STAIN	REMOVAL PROCEDURE	STAIN	REMOVAL PROCEDURE
Adhesive: Carpet	B, A, *Pro	Grease Auto	B
		Grease Food	A
Alcoholic Beverages	A	Ink Ballpoint	B
		Ink Permanent	B, F, *Pro
		Ink Washable	A
Asphalt	Asphalt B, *Pro	Ink Permanent	B, F, *Pro
Beer	A	Lipstick	B
Betadine	D, *Pro	Milk	A
Blood-wet	A	Mustard	A, F, *Pro
Blood-dry	A-b		
Butter	B	Nail Polish	Polish remover
Chewing gum	C	Paint Latex, wet	A
Chocolate	A-b	Paint Latex, dry	B
Coffee	A-a, F, *Pro	Rust	E, *Pro
Cola drinks	A	Tea	A-a, F, *Pro
Cosmetics	B, A, F, *Pro	Toner: Copier	Vacuum, A
Crayon	B	Unknown	B, A, *Pro
Deicer, salt	Vacuum, A	Urine	A-a
Excrement	A	Vomit	A-a
Food Dyes	A, F, *Pro	Wax	C
Furniture Polish	A, B	Wine	A-b

CLEANING

Even with thorough vacuuming, cleaning is necessary to remove the 15% of soil that is the oily type material, as well as that which the vacuum cannot remove. To maintain an acceptable appearance, the carpet **must** be cleaned periodically to prevent it from becoming so dirty that it can no longer be cleaned satisfactorily. The frequency of cleaning must be adjusted to the rate at which soil accumulates; therefore, heavily trafficked areas typically require more frequent cleaning, as do the areas with less traffic but more soil.

When the colour of the carpet begins to look dull, it is time to clean the carpet. The traffic lanes will show this first. If the carpet is cleaned before it becomes excessively soiled, the cleaning will be more successful and a much easier task. This is especially important in places where oily soil is prevalent, such as the areas near streets or asphalt parking lots, and those around cooking or dining facilities. Oil tends to oxidize slowly, forming a sticky material similar to varnish, which becomes nearly impossible to remove as it ages.

The cleaning system:

A number of cleaning systems are available; their effectiveness varies widely. When choosing the cleaning system, the important considerations are:

- It must clean effectively
- It must not damage the texture of the carpet
- It must not leave excessive residues of cleaning materials

Shaw Contract Group's recommendations are based on significant laboratory work and many years of experience in the field. **Shaw recommends only the high performance hot water extraction system, which research indicates provides the best capability for cleaning.** This system is commonly referred to as "Steam Cleaning" although no steam is actually generated. The process consists of applying a cleaning agent onto the pile, and using water in the extractor to recover the used solution and soil. This can be done from a truck mounted unit outside the facility with only the wand and hose brought inside; or, where a truck mounted unit cannot reach, by a portable self contained system brought into the facility.

Cleaning products that have been tested and certified in the Carpet and Rug Institute (CRI) Seal of Approval Program for Cleaning Products are recommended. Contact Shaw Contract Group on 1800 556 302 for additional assistance.

The hot water extraction method using high performance equipment should be the primary scheduled method to clean carpets. Necessary interim cleaning systems are successful when used to supplement the extraction program. These interim cleaning processes help enhance the carpet's appearance between deep cleaning.

Self contained, walk behind machines are another type of hot water extraction equipment commonly used. They apply the cleaning solution at a rate that is balanced with the recovery capability of the machine. This type of machine is often employed where cleaning is done in house by maintenance staff. Since these machines cannot equal the performance of high performance wand type extractors, their use should be scheduled as an interim frequency supplemented by periodic high performance cleaning.

Low moisture encapsulation systems are also interim cleaning processes that enable the carpet's appearance to be improved and returned to service in a short amount of time. The cleaning agent is agitated into the carpet's pile with a mechanical brush, allowed to dry and vacuumed to remove the encapsulated soil from the carpet. In conjunction with scheduled hot water extraction cleanings, the low moisture systems can help maintain a satisfactory appearance.

SHAW DOES NOT RECOMMEND

"Bonnet Systems" - The name for these systems is derived from the rotating bonnet of terry cloth or other absorbent material used to agitate the pile to pick up soil. A detergent solution is sprayed onto the pile and it then worked with the bonnet attached to a rotary floor polisher. It is, at best, a temporary appearance enhancement, because it only absorbs at the surface and does no real extraction of deep soil. **Shaw Contract Group does not advocate this system.** It is not a substitute for hot water extraction.

It has very limited capability for soil removal and often leaves most of the detergent in the pile. The spinning bonnet may distort the pile of cut pile carpets and leave distinct swirl marks. **Shaw's experience has been that more customer soiling complaints result from this system than all other causes combined.**

The bonnet system may damage the edges of some carpets.

Water recycling machines - Shaw Industries does not recommend any portable cleaning machine, which continuously recycles the cleaning solution. A growing body of experience is showing that although the large particles are filtered out, the soluble materials, including detergents and soluble contaminants, are distributed over the whole

area. With repeated cleanings, these materials become more concentrated and begin to cause rapid re-soiling.

BASIC GUIDELINES FOR IN-HOUSE MAINTENANCE

If you choose to maintain your carpet using in-house personnel, here are some guidelines to follow. For a good reference describing carpet cleaning and the hot water extraction method specifically, read the Carpet Cleaning Standard AS3733, available from Shaw Contract Group on 1800 556 302.

1. Before hot water extraction, thoroughly vacuum the area to be cleaned to remove as much dry soil as possible. Use a pile lifter, if necessary, in high traffic areas.
2. Remove spots and stains using the procedures above or a commercially available spot removal kit. Pre-treat the heavily soiled areas and traffic lanes with traffic lane cleaner and wait the recommended time before cleaning. Give the cleaner time to do its job before beginning extraction. Although it is not advisable to minimize the use of solvents, many traffic-lane cleaners do contain some solvents to help remove the stubborn oily dirt often found in traffic lanes. Treat a small area and extract the liquid before the traffic lane cleaner dries.
3. On most commercial carpets, **use a detergent with a pH less than 10, preferably near 9, and with a minimum of non-sticky residue. For printed carpets, use a detergent solution that has a pH between 6 and 8.**

Your detergent selection is important. It is even more important to remove all the detergent you put into the carpet. A detergent's ability to bind to particles of soil and oil is what makes cleaning happen. However, the detergent residue continues to attract and hold soil even after drying. Increasing the amount of detergent beyond the recommended level does not increase cleaning performance but makes the complete removal of detergent more difficult. **Excessive detergent residue is the most common cause of accelerated re-soiling complaints.** To stop this, use ½ amount of detergent recommended by detergent manufacturer unless carpets are excessively soiled. Shaw Contract **does not recommend the use of cleaning agents with optical brighteners.**

4. Avoid over wetting the carpet. Prolonged dampness may cause discoloration, promote growth of mildew and bacteria in the carpet, or cause separation of the backing. This can be controlled by a combination of proper equipment use and operator training.
5. Do not use any silicone based anti-soil treatments on carpet produced by Shaw. The only anti-soil products approved for use as needed are formulated with DuPont Teflon®.
6. Reduce drying time by using several fans or air movers to move air across the carpet, in combination with a dehumidifier or air conditioner to pull moisture out of the air. Carpet should be completely dry within 12 hours or less.