

Carpet Maintenance Procedures

PREVENTIVE MEASURES

After your new carpet is installed, there are several things you can do that will reduce the frequency of cleaning the entire carpet. Keep **clean** mats at all entrances to collect some of the soil that would otherwise be tracked on the carpet. Have the installer bind the edges of some of the larger remnants. These can be put down in heavily traveled areas and removed for easy cleaning. Transparent plastic mats and runners with grippers provide good protection at outside entrances and other areas that may get wet, but do not leave them on the carpet for long periods of time. They can cause excessive pile crushing and trap moisture in the carpet.

Mats and runners also reduce wear on the carpet. In addition, you can periodically rearrange room furnishings to redirect traffic and distribute the wear of a large area of carpet. If the carpet is not installed wall to wall, rotate it occasionally to minimize the appearance of traffic lanes.

Soil retardant materials applied to the carpet can be temporarily effective in slowing the rate of soiling but they cannot prevent soiling completely. Many shampoo formulations include these materials. Care should be taken to apply soil retardants as uniformly as possible, especially if they are sprayed on the carpet. Streaking from uneven soiling and subsequent uneven cleaning may result from non-uniform application. Do *not* apply soil retardants to soiled carpets and always follow the manufacturer's recommendations.

Stain repellents, properly applied, form a protective film around the fibers, effectively preventing spilled liquids from contacting or wetting the fibers. As with all surface treatments, they wear off and must be applied periodically. Observe the same applications as with soil retardants. Only soil retardants or repellents made by 3M Company or the fiber producer of your carpet should be used.

SOIL REMOVAL

Carpet is subjected to soiling materials other than those tracked in from outside areas. Airborne dust settles on it; all sorts of things are spilled on it and dropped on it; oil, greases, and other sticky materials from cooking, heating and smoking all end up on the carpet. Heavy, gritty particles work down deep into the carpet, right to the back. When the carpet is walked on, fibers are worn and cut by being crushed against the sharp edges of these particles. Lighter, dusty particles do not go into the carpet as deeply, but they tend to adhere to the fibers because of static electricity and sticky residues. What can you do to protect your carpet from all this?

Vacuum Frequently. Proper vacuuming is important for several reasons. It removes surface litter and soil which would be tracked onto other areas of the carpet. It reduces the amount of grit which penetrates the carpet causing wear and it helps fluff and restore the pile where it has been crushed and compacted by traffic. *A vacuum cleaner or attachment with a rotating brush or "beater bar" to agitate the pile is more effective than one that relies on suction only.* Machines without a beater bar are good for touchup cleaning but they usually do not "shake up" the pile enough for embedded dirt to be released.

The proper frequency of vacuuming depends upon the amount of traffic and soiling to which your carpet is exposed. Use this guide as a starting point for average conditions and then make adjustments if you find your needs to be different.

Residential

Light Traffic: Traffic Lanes twice weekly.
Entire area once each week.

Medium Traffic: Traffic Lanes daily.
Entire area twice weekly.

Commercial

Medium Traffic: Traffic Lanes daily.
Entire area twice weekly.

Heavy Traffic: Traffic Lanes two or more times daily.
Entire area every day.

Up to three passes of the machine is considered light cleaning; five to seven may be necessary for thorough cleaning. Follow the manufacturer's instructions on the care and operation of your vacuum cleaner and pay particular attention to the correct pile height adjustment for your carpet. Empty the dust bag frequently and do not be alarmed if you see some pile fibers in the bag. Shedding of fibers is a normal occurrence, particularly if the carpet is relatively new and a cut pile staple construction.

Clean Periodically. Despite the effectiveness of frequent vacuuming, there will be a gradual build up of grease and other sticky residues as a film on the fibers. This film will dull the luster and color of the carpet and increase the rate of soiling and matting of the fibers. As time passes, less dirt and dust can be removed because the film "glues" it to the fibers. Select and use a suitable method for removal of these materials before the carpet becomes heavily soiled. It is better for the carpet to put your effort into maintaining its appearance rather than restoring it.

As with vacuuming, the frequency of cleaning depends on the environmental factors of traffic and soiling. It is also, of course, dependent upon the level of appearance you wish to maintain. There is no right answer as to exactly when a carpet should be cleaned. It is a matter of individual choice. Clean it whenever it appears too soiled to your eyes. Carpet subjected to light soiling probably will not require cleaning more than once a year at most. Carpet in heavy soiling areas may need cleaning two or more times a year.

Soil builds up most rapidly in traffic lanes, especially at entrances; these areas can be lightly cleaned several times before a thorough cleaning of the entire carpet is necessary. Keeping traffic lanes clean will also reduce the amount of soil tracked onto the rest of the carpet.

Selecting A Cleaning Method

The effectiveness of any cleaning method is dependent on many variables including time, temperature, chemical and mechanical actions. These factors can be balanced easily with the equipment available in a professional cleaner's plant where carpet can be thoroughly cleaned and rapidly dried. In many instances, however, permanently installed carpet must be cleaned "on location." This places limitations on cleaning efficiency. The fiber cannot be agitated as effectively without damage, and wetting must be limited since rapid drying is not possible. Overwetting can damage the carpet, cushion and the floor so it must be carefully avoided.

Many methods have been devised to meet the requirements of different "on location" situations. No one method is suitable for all cleaning requirements. It may even be necessary to use a combination of methods to properly clean some carpets.

WATER EXTRACTION ("STEAM") METHOD

The water extraction system consists of a machine equipped to spray a cleaning solution, usually heated, under pressure onto the carpet and then immediately remove most of the solution by vacuum extraction. This is accomplished by a combination spray extraction head coupled to a pump vacuum power unit by means of flexible hoses. A large variety of equipment of this type is available, ranging from small rental units to very powerful truck mounted machines.

Advantages: Water extraction is extremely versatile, permitting the use of a wide range of chemicals, and is suitable for cleaning most types of carpet. It does not cause pile distortion or flaring of cut pile constructions. The rinsing and extraction action of a properly designed machine results in thorough removal of soil and chemicals, minimizing resoiling problems.

Disadvantages: Water extraction machines are capable of injecting a large quantity of water under pressure into the carpet. Overwetting, resulting in "Browning" and dye bleeding may be a hazard with an unskilled operator.

CYLINDRICAL BRUSH DRY FOAM METHOD

Dry foam, generated from liquid shampoo mixtures, is worked into the carpet to suspend the soil and then extracted by vacuum from the same machine. Another variation utilizes hand-held, natural sponges instead of a machine.

Advantages: This method is fast, requires little specialized training, and allows a shorter drying time than the rotary brush shampoo method. It is well suited to use in areas that must be cleaned frequently but cannot be out of service very long. Resoiling problems are reduced as a result of the vacuum removal of much of the soil bearing detergent.

Disadvantages: The brushing action may damage some carpet styles, particularly cut pile types such as Saxony and Shag and cannot be recommended for these carpets. The variety of shampoo mixtures that can be utilized is limited. It may not be as effective as the rotary brush for some types of heavy soil.

ROTARY BRUSH – WET SHAMPOO METHOD

A liquid shampoo mixture is applied to the carpet and low suds are generated by agitating with a rotary brush. The shampoo and mechanical action loosen and suspend the soil. A separate wet pickup vacuum may be used to remove some of the dirty shampoo before drying. Soil trapped in the dried shampoo is then removed by the subsequent vacuuming in normal housekeeping. (**Note:** Brush speed should be less than 75 RPM for use on carpets. Some machines made primarily for buffing waxed floors may operate at higher speeds.)

Advantages: Strong mechanical agitation can be very effective for loosening soil in heavily soiled carpet. It is most effective on level loop “commercial” carpets.

Disadvantages: Some shampoos leave a sticky residue on the carpet which may cause rapid resoiling. The strong mechanical agitation can cause severe distortion of some types of carpet, particularly those of twisted, cut-pile construction such as saxony and cut/loop styles. We do not recommend the use of this method on these carpets unless it is absolutely necessary. Extended drying time is frequently necessary and the effectiveness of small rotary brush machines varies from good to ineffective.

ABSORBENT PAD SYSTEM METHOD

A solvent surfactant mixture is applied to the carpet face, usually by spraying. The solvent aids in loosening oily soil which then combines with the surfactant. Wiping the carpet with a moist absorbent pad picks up the surfactant and loosened soil. With oily soil removed, vacuuming can remove more of the dry soil.

Advantages: Safe for almost all dyes, cannot cause shrinkage, requires little skill or training, and, because there are no rotating brushes, causes less abrasive wear than dry cleaning machines. Good for traffic lanes because of rapid drying.

Disadvantages: Does not effectively remove deeply embedded soil and grit.

DRY POWDER COMPOUNDS METHOD

A powder or soft granulated carrier, saturated with solvents and other additives, is spread on the carpet and worked into the pile by hand or mechanical brushes. The solvents dissolve the soluble soil and it is absorbed by the carrier. Vacuuming then removes both the carrier and loosened particles of dirt.

Advantages: Since there is no water involved, dry powder cleaning is safe for almost all dyes. It cannot cause shrinkage and requires little operator training. It is good for brightening traffic lanes because the carpet dries very rapidly and it is especially effective for oily types of soil.

Disadvantages: It may be difficult to completely remove all the carrier from deep pile carpets and the abrasive action of rotating brushes may cause the tips of the tufts of cut pile carpets to “flare” excessively.

Do It Yourself Cleaning

If you decide to do your own carpet cleaning, always follow the machine manufacturer's directions. Remove as much furniture as possible from the area to be cleaned. If some items must be left on the carpet, place protective aluminum or plastic pads under furniture legs to prevent rusting or staining. Vacuum the carpet thoroughly to remove lint and grit. This will also help loosen and fluff the pile for more complete cleaning.

Carpet on stairs can be shampooed with a soft hand brush, a small rotary upholstery brush, or cleaned with a water extraction machine equipped with an upholstery or stair tool.

Selecting a Shampoo or Detergent. We have mentioned before that some shampoos can create problems. Unless you are experienced in carpet cleaning, try to select a shampoo that has an alkalinity lower than ph 9.5. Inexpensive paper for measuring ph is available from stores selling swimming pool, aquarium, or janitorial supplies.

Check the material for stickiness by allowing a small amount of the diluted solution to air dry in a shallow container. After the liquid has evaporated, inspect the dried residue. If this residue appears greasy or sticky when you wipe it with your finger, look for another detergent. It can also be tested by dipping a dark colored, smooth plastic or glass item into the solution and allowing the liquid to air dry. Then sprinkle a little talcum powder on the item and lightly tap off the excess. If the talc adheres more to the area coated with the detergent film than to the uncoated area, the shampoo may increase the rate of resoiling.

Be sure to follow instructions on how to dilute the shampoo. **More isn't necessarily better!** You should also pretest the shampoo you plan to use by applying a small amount to your carpet in an inconspicuous location and letting it remain there for at least five to ten minutes. If you observe any color change, try another shampoo or consult your professional carpet cleaner.

Professional Cleaning

Should you decide to have someone else come in to clean your carpet, select them with care.

Most professional carpet cleaners are conscientious businessmen whose livelihood depends upon quality work and satisfied customers. They will rarely give quotations on a job without an initial inspection to see what is involved. Frequently, they belong to one or more of the many cleaning trade associations in order to keep their knowledge of carpets, chemicals, methods and equipment up to date. Their work will be guaranteed and they will inform you ahead of time of any potential problems. They freely give references and it is wise and prudent to check them. The preceding description of the advantages and disadvantages of the various cleaning methods will assist you in making your selection of a professional cleaner.

Spot And Stain Removal

Carpet is a textile fabric and we all know that fabrics may be stained by materials spilled on them. A spill does not have to be a disaster... but it can be if you fail to give it prompt attention.

There are many instructions, much advice, and lots of products sold for the removal of spots from fabric. These are all necessary and helpful but the real “secret to success” is being prepared to clean up the spill quickly. **Prompt attention is the major factor in successful spot and stain removal**, particularly for spilled materials that are corrosive or contain strong coloring agents.

The following list includes many of the spills that may end up on your carpet. Naturally, we could not have included them all. If you spill something that is not listed, look for a similar material and follow those instructions.

Most spills can be removed if attended to promptly; some will respond slowly so be patient—and some will require removal by a professional cleaner. A few stains will be permanent, but even here, all is not lost. If you have saved some of the scraps left over when the carpet was installed, your professional cleaner may be able to replace the damaged area.

STAIN REMOVAL EQUIPMENT

Keep these materials readily available as your carpet “First-Aid Kit.”

Detergent - Diluted solution of mild hand-dishwashing detergent without oily skin conditioners.

Ammonia - Undiluted household ammonia (containing detergent).

Vinegar - Undiluted **white** vinegar.

Solvent - Dry cleaning solvent (spot remover).

Blotting Materials - White cloth, paper towels or tissues.

A medicine dropper or a plastic squeeze bottle of the type used for dispensing mustard, ketchup, or some brands of hair coloring are convenient means of application. If you store your solutions in these bottles, be sure to label them. Please keep them out of the reach of children!

REMOVAL PROCEDURES

The *very first action* in the event of any spill is to remove the excess materials as quickly as possible. Solids consisting of large pieces may be picked up or swept up. Dusty solids are best removed by vacuuming with a “beater bar” machine. Very thick liquids or gelatinous substances should be scooped up with a spoon having smooth edges. Move the spoon from the outside toward the center of the spill to avoid spreading the material. The area should then be blotted by pressing white tissues or towels against the carpet to remove the excess liquid.

Spills of thin, watery liquids should be immediately absorbed by blotting with white tissues or towels. Change these frequently as they become saturated. After most of the excess liquid has been removed, press a fresh absorbent pad firmly against the carpet with your foot for a minute or two to squeeze any remaining material into the pad. Never scrape or scrub the carpet.

After this immediate treatment, refer to “Chart A” which follows, and find the stain if it is listed or one similar to it. Stains are listed alphabetically for your convenience. Following each stain designation, you will find a letter that refers to the removal procedure recommended for the remainder of the spot. Turn to “Table I” and you will find the materials to use and the sequence to follow listed under each letter heading.

Pretest your carpet by dampening a small spot in an inconspicuous location with the solution you plan to use. Blot the damp area with the white towel or tissue and look for any color absorbed onto the tissue or any color change on the carpet. If either of these is noticed, consult your professional carpet cleaner before trying to remove the spot.

Apply the solution sparingly in the order given in the procedures, using a clean cloth or a “squeeze” bottle. Do not over wet! Avoid contact of cleaning chemicals with skin or clothing. Begin application around the outside of the spot, working toward the center. When blotting is specified, press a clean white cloth firmly against the carpet at the center of the spot. Turning up a fresh area of cloth each time, continue the blotting action, moving toward the outside of the spot. If wiping of the carpet surface is unavoidable, do it gently and wipe from the outside of the spot toward the center. You may also gently tap a hard or crusty spot with the smooth edge of a spoon to help break it up, but do not scrape or scrub the spot.

The last step shown in most procedures is to rinse and blot the cleaned area. Do this by applying a small amount of plain water and then blotting thoroughly. This may be repeated once. After the last rinse, place a thick pad ($\frac{1}{2}$ ”) of clean white towels or tissue over the wet area and press down firmly with a heavy weight for about two hours.

Remove the towels and examine the bottom layer for staining. If some stain is still evident on both the carpet and the towels, allow the area to dry until only slightly damp and repeat the removal procedures. If some stain remained on the carpet, but none was absorbed by the towels, repeating the treatment probably will not remove any more of the stain. Call a carpet cleaner if your treatment was not effective or if you have any doubt about how to remove the stain.

Spot cleaning with water solutions may leave the pile of some types of carpets in a crushed state. If this occurs, gently lift the tufts with your fingertips after removing the weighted towels and again after the area has thoroughly dried.

Summary of Stain Removal

1. Prepare a stain removal “Kit”.
2. Pretest the solutions on your carpet.
3. Treat spills immediately. Minutes count!
 - A. Remove excess of spilled material.
 - B. Select stain treatment procedure from Chart A.
 - C. Follow the selected procedure as given in Table I.

Stain Removal - Chart A

SPOT OR STAIN	PROCEDURE	SPOT OR STAIN	PROCEDURE
Asphalt	A	Ink - Marking Pen	A
Beer	D	Ink - Permanent	E
Berries	D	Ink - Printer's Mimeo	A
Blood	B	Lacquer	C
Butter	A	Lard	A
Candy (Sugar)	D	Linseed Oil	A
Carbon Black	A	Machine Oil	A
Catsup	B	Mascara	A
Cement, Model	K	Mayonnaise	B
Chewing Gum	G	Mercurochrome	E
Charcoal	A	Merthiolate	E
Cheese	B	Milk	B
Chocolate	B	Mimeo Correction Fluid	C
Coffee	D	Mixed Drinks	D
Cooking Oil	A	Nail Polish	S
Cough Syrup	E	Paint - Latex	A
Crayon	A	Paint - Oil Base	A, P
Creme De Menthe	F	Rubber Cement	A
Dye - Green, Blue, Black	F	Rust	P
Dye - Red	E	Shellac	I
Earth	B	Shoe Polish - Liquid	A, P
Egg	B	Shoe Polish - Paste	A
Excrement	B	Shortening	A
Fish Slime	B	Soft Drinks	D
Food Color	P	Solder - Liquid	P
Foundation Make-Up	A	Soy Sauce	B
Fruit Juices	D	Starch	B
Furniture Polish	A	Tar	A
Furniture Polish with Stain	H, P	Tea	D
Gravy	A	Tooth Paste	B
Hair Oil	A	Typewriter Ribbon	A
Hair Spray	A	Urine	J
Hand Lotion	A	Varnish	C
Household Cement	K	Vaseline	A
Ice Cream	B	Wax - Candle	G
Ink - Ball Point	A	Wax - Paste	A
Ink - Fountain Pen	F	White Glue	B
Ink - India	A	Wine	D

NOTE: Procedure "P" signifies that the stain will definitely require professional removal. Other stains may require professional attention for more complete removal after "first aid" treatment, depending upon the particular circumstances of the accident.

Table I

Use these procedures only after as much of the material as possible has been removed by blotting or scooping up the excess.

Procedure A

1. Apply solvent
2. Blot
3. Detergent
4. Blot
5. Water
6. Blot

Procedure B

1. Detergent
2. Blot
3. Ammonia
4. Blot
5. Detergent
6. Blot
7. Water
8. Blot

Procedure C

1. Apply solvent
2. Detergent
3. Blot
4. Water
5. Blot

Procedure D

1. Detergent
2. Blot
3. Vinegar
4. Detergent
5. Blot
6. Water
7. Blot

Procedure E

1. Detergent
2. Blot
3. Ammonia
4. Blot
5. Vinegar
6. Blot
7. Detergent
8. Blot
9. Water
10. Blot

Procedure F

1. Detergent
2. Blot
3. Vinegar
4. Blot
5. Ammonia
6. Blot
7. Water
8. Blot

Special Procedures

Procedure G

Chewing Gum/Candle Wax

1. Freeze w/ ice cube
2. Shatter w/ blunt object
3. Vacuum out chips
4. Apply solvent
5. Wait several minutes
6. Blot

Procedure H

Furniture Polish With Stain

1. Apply solvent
2. Wait several minutes
3. Blot
4. Detergent
5. Blot
6. Water

Procedure I

Shellac

1. Denatured Alcohol
2. Blot
3. Repeat if necessary

NOTE: Pretest as for other solutions

Procedure J -1

Urine - Fresh

1. Blot
2. Water
3. Blot
4. Ammonia
5. Blot
6. Detergent
7. Water
8. Blot

Procedure J-2

Urine - Dry

1. Detergent
2. Blot
3. Vinegar
4. Blot
5. Ammonia
6. Blot
7. Blot
8. Water
9. Blot

Procedure K

Nail Polish/Model Cement

1. Polish Remover (non-oily)
2. Blot
3. Repeat

Table II - Modified Removal Procedures

Procedure A	Procedure B	Procedure C
1. Apply solvent	1. Detergent	1. Apply solvent
2. POG	2. Blot	2. POG
3. Blot	3. Enzyme Digester	3. Blot
4. Apply Solvent	4. Soak	4. Apply solvent
5. Detergent	5. Ammonia	5. Blot
6. Blot	6. Blot	6. Detergent
7. Ammonia - Blot	7. Detergent	7. Blot
8. Detergent	8. Blot	8. Water
9. Blot	9. Water	9. Blot
10. Water - Blot	10. Blot	

Procedure D	Procedure E	Procedure F
1. Detergent	1. Detergent	1. Detergent
2. Blot	2. Blot	2. Blot
3. Acetic Acid	3. Ammonia	3. Acetic Acid
4. Blot	4. Blot	4. Blot
5. Rust Remover	5. Acetic Acid	5. Ammonia
6. Blot	6. Blot	6. Blot
7. Detergent	7. Detergent	7. Water
8. Blot	8. Blot	8. Blot
9. Water	9. Water	
10. Blot	10. Blot	

NOTES:

1. The special procedures shown in Table I may be used for maintenance spotting without modification. Please note however, that special freezing gases are available for use in Procedure G as a substitute for ice.
2. Rust remover should be applied to rust spots without dilution. Blot it immediately then apply the usual detergent and water rinses.
3. The use of the rust remover in Procedure D is optional. Tests have shown that its use may be effective for some beverage stains.
4. Use the solvent and POG sparingly as some damage to foam cushion materials may occur.

Corrective Measures

PILE CRUSHING

The pile of all carpets will become crushed and compacted with use, most noticeably in traffic lanes. Vacuuming and cleaning help to minimize and partially restore crushed pile. Frequent "grooming" with a suitable brush, comb or carpet rake can be particularly effective in reducing the effects of crushing.

DENTS

Dents result from allowing furniture or other heavy objects to remain in one position for a long time. Occasionally shifting the location of furniture slightly will help prevent permanent dents. After the furniture is moved, brush the dented area with your fingertips or a grooming tool to loosen and stand-up the mashed tufts.

If, after several days, the dent is still noticeable, hold a steam iron several inches above the carpet and allow the steam to flow down on the dented area. DO NOT let the iron touch the carpet or let the pile yarn become saturated with water. After steaming, again brush the tufts with your fingertips to make the crushed tufts blend with those around the dented area.

SPROUTS

Sprouts are yarn tufts that stick up higher than they should, particularly in cut pile constructions. Any sprouts that may appear after the carpet is installed may be removed simply by gently standing them erect and clipping off the excess length with scissors or fingernail clippers. DO NOT use a knife as the force required to cut the tuft may pull it from the carpet.

SNAGS

Snags occur most frequently in loop pile constructions when tufts are caught by protruding shoe nails, rough vacuum attachments or other objects and pulled out of the carpet. Snags need prompt attention. NEVER PULL THEM. As with sprouts, they should be carefully clipped off. The removal of one or two tufts usually will not be noticeable. If a long "run" has occurred, consult your dealer, installer, or professional cleaner promptly. It is frequently possible for the yarn to be retufted or glued back into place.

BURNS

The dark color resulting from burned fibers can be removed only by cutting it off. The charred tips may be cut off with curved fingernail scissors if the burn was shallow. Otherwise, it may be necessary to have the burned spot replaced by your dealer or cleaner or by purchasing a do-it-yourself repair kit.

SHEDDING

It is normal for some loose fibers to be present in new cut pile carpets, particularly those made from staple fiber. Usually, their number is quite small compared to the total fiber content of the carpet and is of no consequence. Regular vacuuming will remove these loose fibers without harming the carpet.

FUZZING

Fuzzing is most noticeable in older loop pile carpets. It is the appearance above the pile of loose fibers which are still bound at one end. Fuzzing is caused by fiber breakage, surface wear and the cutting of filaments by embedded grit. Some of this can be avoided by keeping as much grit out of the carpet as possible, but if it does occur, the protruding fibers should be carefully clipped off. Consult your professional carpet cleaner if the damage is extensive.

PILLING

Pills are small balls of entangled fibers and lint that sometimes appear on the surface of the pile after extensive use. They may be safely clipped off. If a large area of carpet is involved, consult your dealer or cleaner for expert assistance.

SHADING

The apparent shading of color from light to dark that is characteristic of dense cut pile carpets such as saxonies and plushes is caused by the way light reflects from their surface. The tips of carpet tufts reflect less light than the sides. When the tufts lean over so more tips are seen than sides, that area appears darker than one where the tufts are leaning in the opposite direction. The result is a rich and luxurious shading that adds much to the beauty of these carpets. If you wish a more uniform effect, make the final vacuuming or cleaning stroke in the same direction as you progress across the carpet.

STATIC

The static electricity generated by some carpets is aggravated by low humidity. That is why it is most bothersome in colder weather when the relative humidity is low. The use of a humidifier offers several advantages. By reducing the buildup of static, it will reduce annoying shocks and help keep the carpet cleaner, since static attracts dust. Higher humidity also makes a room feel warmer, a fact that is especially important now that we are keeping buildings at lower temperatures to conserve energy.

There are many anti-static treatments available for carpets that were made without permanent anti-static properties. Their effectiveness is temporary so they have to be applied periodically. Before using these treatments, seek reliable advice or test the specific product. Some can cause the carpet to soil very readily. For the same reason, never use fabric softeners made for home laundry as they may leave sticky residues that will cause rapid soiling.

Special Notes for Commercial Maintenance

To what extent should your custodial staff be involved in carpet maintenance? It ranges from complete coverage to the bare essentials of vacuuming and spot removal, depending upon the amount of carpet to be maintained.

The scope of carpet maintenance can be classified in progressive steps:

1. Vacuuming and Grooming
2. Spot Removal
3. Traffic Lane Cleaning
4. Surface Cleaning
5. Deep or Restorative Cleaning

You make the “in-house” aspect as far past the second step as you feel economical. Special emphasis should be placed upon the soiling and wear prevention measures described earlier.

A quick comparison of equipment and labor costs versus bids for professional care will aid you in making the best decision. Regardless of what this decision is, delegate carpet maintenance duties to only one or two of your more reliable employees. Have these people trained for their job. Brief instruction and training classes are available through equipment dealers and trade associations. The operator is the key factor in the effectiveness of any equipment you may purchase.

The minimum in equipment consists of suitable brushes, combs or rakes for grooming before and after vacuuming; a vacuum cleaner with a beater bar; and a spot removal kit. Larger industrial vacuums are available for big open areas. A “pile lifter” machine may also be considered for large areas having heavy traffic or soiling. Refer to the section describing cleaning equipment to familiarize yourself with the various machines. Then consult with several professional cleaners and/or equipment suppliers in order to select the particular brand or model you need.

Spot removal kits are available from professional cleaners and distributors of janitorial supplies. Again, it is important to restrict spot removal training to one or two individuals. Prompt attention to spills is the single most important factor in successful stain prevention and removal. Establish “spot patrols” and make the building occupants aware of whom to call in the event of a spill. Review the preceding section on “Spot and Stain Removal” and the following section for detailed procedures. Small portable water extraction cleaners are very helpful in removing spills and spots, particularly in medical institutions.

SPOT AND STAIN REMOVAL – CUSTODIAL STAFF PROCEDURES

The directions given in the earlier section on spot and stain removal are also applicable to commercial installations. Frequently however, your custodial maintenance staff has access to industrial or professional cleaning materials that may make spot cleaning more effective. Modified procedures making use of these materials are given in Table II. In order to take advantage of these possibilities, we suggest that the basic supplies for a spot removal kit consist of the following:

- Acetic Acid - 7-10%
- Rust Remover - 3% HFL Solution
- Enzyme Digester
- Ammonia - 7% Solution
- Detergent - Neutral
- Solvent - Volatile Dry
- POG (Paint, Oil, Grease Remover Liquid, Non-Oily)
- Blotting Material - White Fabric or Paper Towels
- Water
- Spatula
- Spotting Brush
- Solution Bottles and Applicators

The important differences between this list and the list for residential use is the addition of the rust remover, the enzyme digester for use on protein materials and the spotting brush. The acid used in the rust remover is a strong acid and should be handled carefully. Avoid any contact of this solution with hands, clothing or glass items. Avoid contact of all other spot removal chemicals with skin or clothing.

Follow the manufacturers directions for use of enzyme materials. They usually need to be in contact with the material to be removed for some time (5-15 minutes) to be effective. Too much heat or mixing with other chemicals can destroy the enzyme activity. A spotting brush should be used only with a vertical “tamping” motion to thoroughly work cleaning solutions into the pile before blotting. Do not use it to scrub the spot. A water extraction cleaning machine or a wet pick-up vacuum are also effective aids in spot removal.

General Information

INDOOR AIR QUALITY

Sometimes it seems almost everything causes pollution. Even carpet has been mentioned. You may have seen stories about the possible health effects of new carpet and you may wonder whether there is any truth to those stories. The purpose of this section is to give you the answers. We can summarize those answers for you in three sentences:

Indoor air pollution is a serious issue. Many experts think it is more serious than outdoor air pollution.

Carpets are a part of this issue, but a very small part.

The carpet industry is working hard to make carpets even safer than they are now, and there are simple things you can do to help improve the quality of your indoor air.

INDOOR AIR QUALITY CONCERNS

Because we spend approximately 90 percent of our time indoors, we must do everything possible to improve the air we breathe. Environmental tobacco smoke, radon, etc. are serious long-term problems. In the short-term, renovating and redecorating may be of concern because of emissions from paints, paint strippers, varnishes, wood finishes, caulking, adhesives, etc. Even new carpet gives off emissions for a few days.

Both the U.S. Environmental Protection Agency (EPA) and the Consumer Product Safety Commission (CPSC) have looked at carpet in recent years. Both have decided that no regulations specific to carpet are needed. However, both agencies are actively collecting more information on carpet to make sure that it remains safe. The carpet industry is cooperating with these investigations and also has initiated a program of its own to achieve further improvements toward the reduction of emissions from new carpet.

Questions You May Have About Carpet

BASIC QUESTIONS

Does carpet contribute to indoor air pollution?

Carpet is no exception - new carpet can be a low-level contributor. As with most other indoor products, ventilation and maintenance are the keys to reduce its contribution to indoor air pollution.

Is the pollution caused by new carpet substantial?

No. Its emissions level will drop significantly within the first 24 hours of installation and dissipate to an undetectable level within days.

Does new carpet contain formaldehyde?

No. Not anymore. Formaldehyde was taken out of the manufacturing process over a decade ago, even though the quantities were so minute they were unlikely to do anyone any harm.

Can carpet hurt a person's health?

Carpet is a safe product and has not posed any health problems for millions of satisfied customers. Although it is highly unlikely you will experience any side effects from your new carpet, a few individuals have reported allergy or flu-like symptoms after new carpet has been installed. A number of these reports were investigated by the CPSC. After a thorough examination, the CPSC concluded that it "could not establish a cause and effect relationship between the carpet and health effects experienced."

What can I do to reduce my exposure to carpet emissions?

While carpet can give off very small amounts of emissions at the time of installation, there are things you can do to minimize your exposure. Before carpet is installed, ask your dealer or the person responsible for the installation to follow the installation guidelines (CRI 105) established by The Carpet and Rug Institute (CRI). They provide the installer with guidelines of what to do before, during, and after installation regarding environmental requirements. Also, ask your dealer for a Carpet Owner's Manual to help you understand these procedures and the continued maintenance of your carpet.

Regarding indoor air quality, is carpet with natural fibers better than synthetic?

No. There is no difference between carpet made with natural or synthetic fiber. All types of carpet have very low emission levels.

What is the carpet industry doing to make new carpet safer?

Carpet is being tested for emission levels, and quality assurance programs initiated by the include ways which will improve indoor air quality. Although carpet emissions are low, carpet manufacturers are continuing to search for raw materials and methods which will reduce emissions even further.

INSTALLING NEW CARPET

Will removal of old carpet and cushion (pad) affect indoor air quality?

Yes. Far more people are bothered by dust from old carpet and cushion being removed than from the emissions from new carpet being installed. You may wish to vacuum the old carpet thoroughly before it is removed to further reduce the dust level. Be sure to open doors and windows to provide plenty of fresh air ventilation during the process. If you are sensitive to dust particles, you may wish to leave the area while these items are being removed.

Will my new carpet have an odor when it is installed?

You may notice a distinct odor given off during the installation of new carpet. The odor in new carpet usually comes from 4-phenylcyclohexene (4-PC). Although this is a long chemical name, its function is simple. 4-PC is a by-product of the binder (latex) used to hold the fibers together so they do not shed. It can be detected at very low levels (one half part per billion). Some people may find the odor pleasant while others may find it unpleasant. Some may not even notice it. If it is noticeable, be assured that the odor will dissipate within days and is not harmful.

If I notice an odor, how can it be alleviated?

As with most odors, the key to its elimination is increasing the amount of fresh air ventilation throughout the area. Make sure to follow all of the suggestions in this section. Normally there is no need to leave the premises while new carpet is being installed if the suggested ventilation guidelines are followed. However, those who are unusually sensitive or who typically have allergic reactions might wish to be absent during installation.

CARPET MAINTENANCE

Will cleaning agents contaminate my carpet?

Cleaning agents are safe when used as directed. To avoid lingering contamination be sure that all cleaning agents are completely removed from the carpet after each use. Otherwise a residue could remain.

What about stain resist treatments?

Manufacturer applied stain resist treatments, which have been on the market for a number of years, have given no cause for alarm. Chemicals used for this process must receive government approval before use.

Do carpet freshener and deodorants add emissions?

Like other household products, these items add emissions. However, these products are regulated and the contents are labeled on the container. Be sure to vacuum thoroughly after each use to reduce any residue.

Do dust mites affect indoor air quality?

Yes. Dust mites may be found in sofas, stuffed chairs, bedding, and carpet. They are minuscule insects which feed on food and the scales of human skin. It is important to keep areas around beds, sofas, and chairs thoroughly vacuumed to minimize the accumulation of dust mites and other biological contaminants.

Does vacuuming add to indoor air pollution?

Not with the use of effective equipment. It is essential that vacuum cleaners have strong suction and collection bags that are able to trap very fine particles to minimize the redistribution of dust.

SPECIAL CONSIDERATIONS

Are people with allergies affected by carpet?

Not by carpet itself. Allergic reactions may be the most common health concern attributed to indoor air quality, but they are most often connected with biological pollutants such as animal dander, dust, and pollen. Therefore, it is important to thoroughly vacuum and maintain your carpet after it is installed to keep it as clean as possible.

Will carpet affect my children?

No. However, since children do spend a lot of time on the floor, you should vacuum often and thoroughly, especially if you have an asthmatic or allergic child. As for the emissions from new carpet, it makes sense to keep babies and children who might be sensitive off the carpet for a few days.

Should I be concerned about the dyes used to color my carpet?

No. These chemicals are tested to meet a variety of requirements before they can be used as a dye in your carpet.

