



INDOOR AIR QUALITY PROGRAM

BENEFITS OF INDOOR AIR QUALITY PROGRAMS:

Reduced chemical emissions

Fewer contaminants in the air

Healthier, safer indoor environment

CARPET AND RUG INSTITUTE'S INDOOR AIR QUALITY PROGRAM (ASTM-5116)

Purpose: To find ways to lower emissions and minimize the impact on indoor air quality. Manufacturers participate in a research program that tests for certain chemicals emitted from their carpet samples. The information these companies obtain helps them to develop products with lower emissions.

Procedure: A designated finished carpet sample is collected from the manufacturer's process. Air Quality Sciences, an independent laboratory, tests the sample for chemical emissions, using highly sophisticated dynamic environmental chamber technology. The test method is approved by the EPA Dialogue consensus and has been submitted to the American Society of Testing and Materials (ASTM) for inclusion as a standardized test.

Results: Criteria for the program are based on an emission factor measured in mg/m² as follows:

Total Volatile Organic Compounds.....	0.5
PC (4Phenylcyclohexen).....	0.05
Styrene.....	0.4
Formaldehyde.....	0.05

The carpet manufacturer is allowed to attach the indoor air quality green label to that product if the test result does not exceed the above stated emission levels. An identification number is assigned specifically to the manufacturer for each product that does not exceed the above emission requirements. The label can be used in product literature on sample backs.

If a product exceeds the above emission requirements, the manufacturer is asked to make process or formulation changes to reduce the emission. After the product is modified, the manufacturer resubmits it for additional testing. Products that do not meet the criteria are not allowed to carry the label until they meet the test program criteria.

All Mannington carpet products meet the requirements of the Carpet & Rug Institute's indoor air quality testing program (ASTM).



MANNINGTON CARPETS, INC.

MAINTENANCE PROGRAM

The purpose of maintenance is to sustain an even-looking, cared-for appearance over the life of the carpet. In fact, a consistent maintenance program will prolong the useful life of a good fabric.

Maintenance is most effective when it is an on-going, planned program. Management should articulate carpet appearance standards which will determine the type program and routines required to meet those standards.

The technique of carpet maintenance is to remove soil before it builds up and spreads. As with installation, proper technique makes a big difference. Commercial carpeting should have the attention of trained and instructed maintenance people. They should understand how carpet soils and must be equipped to actually remove soil from the pile. There is a temptation, in the name of expedience, to wash soil down into the pile out of sight. This should be avoided.

A principal advantage of carpet is that it "localizes" soil. This means that carpet will tend to catch and hold soils and spills where they occur. Since 80% of carpet soil is

tracked in on the soles of shoes, the soil "localizing" feature can be used to save time and money in the maintenance program. The alert manager will determine in advance where the most frequent soil removal or soil prevention activities should take place based on obvious traffic flow.

Recognize that, in general, less than 50% of a carpet installation is actually walked on. Traffic path concentration in the maintenance program, therefore, will enable you to sustain the appearance of 100% of the carpet by concentrating chemical/mechanical cleaning on less than one-half of it. Each situation will be different, so follow these principles to tailor an effective program to your unique facility and conditions.

Preventing soil from reaching the carpet is quite helpful. Therefore, track-off mats or carpet sections that can be removed for cleaning should be used at entrances from outside which receive the heaviest abuse.

In areas where castered chairs are used, protective chair pads should be placed over the carpet to reduce wear and protect from delamination.

EASY CARPET CARE

START WITH GOOD PERFORMANCE

Carpet performance is affected by:

1. **Specifications** ... Was the correct carpet specified in relation to the intended use of the carpet at its location?
2. **Color Selection** ... Was the proper color selected to meet traffic conditions, intensity of sunlight, etc?
3. **Installation** ... Was the quality of the installation satisfactory?
4. **Maintenance** ... Was a regular maintenance plan designed to serve the needs of the location?
5. **Patterned carpet vs. solid carpet** ... Multiple colors and patterns help to disguise heavy soiling and traffic lanes.
6. **Use of suitable chemicals and cleaning equipment.**

Achievement of good performance begins with clear specifications which meet the needs of the function to be performed and is completed with a maintenance plan to be put into effect upon installation. The omission of any one of these six items can seriously affect the lack of or the enhancement of the desired carpet performance.

YOU MUST HAVE A PLAN

The planning function in carpet maintenance is step number one. Facility managers and maintenance supervisors who understand this step can have clean looking carpet every day within a low budget.

There is a big difference between cleaning carpet and maintaining carpet. Cleaning is the removal of apparent soil. In the minds of many commercial carpet owners, cleaning takes place imprecisely "as needed". But soiling is a cumulative process which, if allowed to go too far, cannot easily be reversed. Maintenance, on the other hand, is a planned ongoing process of soil removal designed to retain carpet appearance at a good level every day; i.e., no obvious soil buildup.

DEVELOPING A MAINTENANCE PLAN

The time carpet is being specified is the time a maintenance plan should be developed. The plan should include vacuuming, spot removal, and cleaning. Unless in-house expertise is available, outside professional assistance is recommended. Many independent consultants, carpet manufacturers, carpet cleaning franchisers, or equipment suppliers have experts on their staffs who can produce a maintenance plan to keep the appearance of the carpet at a continued high level. Each facility must have its own unique maintenance plan. This plan can be implemented either by in-house personnel or outside cleaning contractors. Provisions should be made to include the cost of the maintenance plan in the budget. The goal of a maintenance plan is to keep the carpet at a high acceptance level and not have its useful life shortened by excessive soil, or improper maintenance procedures.

The following are some areas to consider in developing a maintenance plan.

PLAN A MAINTENANCE SCHEDULE

Identify the soil localizing areas (wipe-off regions, congested channels, and principal passage routes) on a floor plan. These areas are where vacuuming and periodic cleaning should be concentrated. Observation of these areas will determine the frequency of vacuuming and cleaning. Implement the plan as soon as the carpet is installed, even if the building is not yet ready for occupancy. After the building is occupied, schedule monthly inspections and adjust cleaning frequencies as needed.

IDENTIFY KEY TRAFFIC AREAS

High traffic areas such as wipe-off regions, congested channels and principal passage routes will require more frequent vacuuming than moderate or low traffic areas. By keeping these areas clean, less maintenance will be needed in other parts of the building.

MINIMIZE SOIL

Removing soil from shoe soles at entrances will reduce soil accumulation on carpet in the interior of the building. Scraper type mats at building

entrances will scrape off larger particles of soil. Carpet faced mats used at both sides of the entrance will wipe soil from shoes. Several inserts of the carpet can be made for use at the entrances. Vacuum mats daily and clean weekly. Walk-off mats will further reduce soiling at severe internal wipe-off regions (freight elevators, lobbies, factory entrances, and entrances from kitchens to restaurant dining areas, etc.). These mats should be vacuumed daily and cleaned on a regular basis.

VACUUMING

Aggressively vacuum heavy traffic regions and congested channels daily with a **two-motor vacuum**. Even if soil is not visible. Severe soiling locations may require vacuuming two or more times daily. During periods of construction, remodeling, inclement weather, etc., more frequent vacuuming will be necessary.

Areas of moderate traffic will require less vacuuming. Time and effort should be invested where soil is localizing, seen or unseen.

Working with the maintenance expert, a schedule can be developed to determine the frequency with which areas can be vacuumed and the methods to use to maintain the levels of cleanliness desired. If in-house personnel are to be utilized, steps should be taken to see that they receive proper training in the use of equipment and supplies. If an outside firm is used, reliability and expertise should be substantiated.

The correct preventative maintenance plan will increase the useful life of the carpet.

REMOVE SPILLS AND SPOTS PROMPTLY

Food, beverage, and many other spills, if unattended, will retain soil. If "sticky," the spilled substances will cling to shoes and be tracked elsewhere. Removal of many spills and spots can be facilitated by proper spotting techniques. Allowing spots to remain on carpet for an extended period of time will only make removal more difficult. Prompt removal is essential and cannot be overemphasized. (See section on spot and stain removal procedures.)

TRAFFIC CLASSIFICATION AND MAINTENANCE SCHEDULE

L-Light-Under 400 foot traffics per day
M-Medium - 401 - 799 foot traffics per day
H-Heavy - 800 + foot traffics per day

<u>Carpeted Areas Educational</u>	Traffic Rating	<u>Commercial</u>	Traffic Rating	<u>Carpeted Areas Recreational</u>	Traffic Rating	<u>Multi-Residential</u>	Traffic Rating
1. <i>Schools & Colleges</i>		1. <i>Banks</i>		1. <i>Recreational Areas</i>		1. <i>Apartments Hotels/Motels</i>	
a. Administration	L-M	a. Executive	L-M	a. Club House	H	a. Lobby/Public Places	H
b. Classroom	H	b. Lobby	H	b. Locker Room	H	b. Corridor	H
c. Dormitory	H	c. Teller Windows	H	c. Swimming	H	c. Rooms	L-H
d. Corridors	H	d. Corridors	H	d. Recreational Vehicles	H		
e. Cafeteria	H	2. <i>Retail Establishment</i>		e. Boats	H	<u>Religious</u>	
f. Libraries	L-M	a. Aisle	H	2. <i>Theaters & Stadiums (indoor)</i>	H	1. <i>Churches/Temples</i>	
2. <i>Museum & Art Gallery</i>		b. Check-out	H	3. <i>Convention Centers</i>		a. Worship	L-M
a. Display Room	H	c. Sales Counter	H	a. Auditorium	H	b. Meeting Room	H
b. Executive	L-H	d. Smaller Boutiques, etc.	H	b. Corridor	H	c. Lobby	H
c. Lobby	H	e. Window & Display Area	H	c. Lobby	H		
<u>Medical</u>		3. <i>Office Buildings</i>		<u>Transportation</u>			
1. <i>Health Care</i>		a. Executive	L-M	1. <i>Terminals</i>			
a. Executive	L-H	b. Clerical	H	a. Corridor	H		
b. Patient Room	H	c. Corridor	L-M	b. Administration	H		
c. Lounge	H	d. Cafeteria	L-M	c. Ticket Counter	L-M		
d. Nurses Station	H	4. <i>Supermarkets</i>	H				
e. Corridor	H	5. <i>Food Services</i>	H				
f. Lobby	H						

METHOD AND FREQUENCY CRITERA

Traffic (foot traffic/day)	Vacuum	Pile Lifting	Professional Spotting	Interim Cleaning	Protective Spray	Corrective Cleaning
Light (less than 400)	Daily	Quarterly	Daily	3 - 6 Months	Flurochemicals	As Required (12-18 Month
Medium (401-799)	Daily	Each 2 months	Daily	2 - 3 Months	12 Months	As Required (6-12 Months
Heavy (800+)	Daily	Monthly	Daily	Monthly	6 - 12 Months	Quarterly

*Elevators, food service areas, ground floor entrances require a higher frequency.

CARPET SOIL

A. Psychology (soil versus dirt)

B. Definition: Soil is anything foreign to the construction of the carpet.

Generally, most carpet soil is acid in nature. Carpet acts as a sink or filter that traps particle soils, gasses and animal or human dander (skin cells).

C. Classes:

1. **Insoluble** (particle) - sand, quartz, feldspar, limestone, gypsum, clay, carbon
2. **Water soluble** - sugar, starch, salt
3. **Dry solvent soluble** - oils, grease, etc.

CARPET SOIL SUMMARY*

TYPE	COMPOSITION	SOURCE	SOIL SAMPLE %
(Particle) Insoluble	clay, sand, quartz, feldspar, gypsum carbon	tracked	55%
	Animal fiber	people, pets, fabrics	12%
	Vegetable matter and fiber	tracked from lawn, newspapers, magazines, etc., fabrics, interior plants	12%
Sub Total			79%
Water - soluble	sugar, starch, salt fluidic	foodstuffs, body fluids	6%
Dry Solvent - soluble	asphalt, tar, grease, cooking oils, body oils	tracked, cooking, animal bodies	10%
Moisture		humidity in the air	3%
Unidentifiable			2%
Sub Total			21%
TOTAL			100%

* Analysis of carpet soiling from samples representing a cross-section from throughout the United States - Courtesy of Proctor and Gamble Laboratories.

CHEMISTRY OF CLEANING

Mixture - Two components placed together, but not subject to chemical reaction.

Compound - Combination of chemicals in which a new substance is formed through chemical reaction.

Solvent - A substance that will dissolve another substance.

Solution - A liquid mixture in which one component is dissolved in another, but separates again upon drying (salt dissolved in water creates a saline solution).

Emulsion - A mixture in which a substance (oil) is broken down (usually due to detergent action) into fine parts, and uniformly dispersed throughout the carrier (water).

Suspension - A mixture in which components are not dissolved but remain suspended and evenly dispersed due to the electrical forces associated with the detergents present.

Molecule - The smallest unit into which a substance can be divided while maintaining its original characteristics.

A. SOAPS (true)

1. Composition

2. Saponification (convert fat into soap)

3. Soap molecule components:

- Hydrophobic end (water fearing)
- Hydrophilic end (water loving)

B. SYNTHETIC DETERGENTS (example, preconditioner)

1. Surfactants (surface active agent)

- Composition (petroleum derivatives plus alkalinity)
- Wetting (reducing surface tension)
- Defloculation (separation of soil from the fiber surface)

2. Alkaline Builders (boosts pH)

Determine the alkalinity or acidity of a solution using pHHydrion (litmus) paper (colored with the indicator dye).

- pHHydrion values - The relative acidity or alkalinity of a water-based solution. pH and chemical reactivity (based on concentration) are different.
- Softening water - Sequesters hardness, cleans more efficiently.
- Saponification of fats - Conversion to simple soap.
- Emulsification - Dispersion of oils (fats) in water.
- Sequestration - Suspension of fine particle soil by detergent molecules.

3. Dry Solvent Additives

- Emulsification
- Oxidized oils

C. REQUIRED CHEMICALS:

1. Traffic Lane Preconditioner or

Restoration Prespray (contains surfactant, alkaline builder, dry solvent additive). Most are anionic.

2. Rinse Detergent (hot water extraction system only)

3. Material Safety Data Sheets (MSDS)

Must be present on all vehicles with chemicals, and readily available to anyone needing that information.

Note: For commercial cleaning always use chemicals specifically designed for commercial carpet.

FIVE PRINCIPLES OF CLEANING

A. DRY VACUUMING in three areas (for particle soil removal **before wet** cleaning)

1. Overall
2. In entries (major particle soil buildup)
3. Along edges

Note: Vacuum bags must be emptied before collected soil reduces airflow and efficiency.

B. SOIL SUSPENSION (four fundamentals of soil suspension)

1. **Chemical action**
 - a. Surfactant
 - b. Alkaline builders
 - c. Dry solvent additive
2. **Agitation**
 - a. Jet (water pressure)
 - b. Hand (brush and elbow action)
 - c. Mechanical (brushes)
3. **Temperature** - for every 18°F (6°C) increase above 118°F (48°C) in water temperature, molecular activity doubles.
4. **Time** - (chemical reaction time)

Note: If one fundamental of soil suspension decreases, others must increase to maintain cleaning quality.

C. SOIL EXTRACTION or "rinsing"

1. Absorption
2. Wet Vacuuming
3. Rinsing

D. FINISHING (grooming, nap-setting) eliminates matting and crushing; distributes protectors uniformly; produces better appearance especially for cut pile constructions.

E. DRYING - most overwetting is caused by operator error or equipment problems.

1. **Structural Equipment** (circulation and dehumidification)
2. **Dry Stroking**
3. **Ventilation** (windows, doors)
4. **Exhausting** (exhaust fans in bath or kitchen)
5. **Equipment Considerations**
 - a. Wiring
 - b. Plumbing
 - c. Filters
 - d. Hoses (especially cuffs)
 - e. Wand
6. **Auxiliary Equipment**
 - a. Carpet dryer(s)
 - b. Dehumidifier

Note: Avoid battery operated extractors.

VACUUMING GUIDELINES

Entries, Lobbies, Ground Floor Corridors, Cafeterias and Lounges are good examples of heavy traffic areas. In these areas, two-motor vacuums (one motor for the vacuum and one for the brush) and/or wide commercial vacuums should be used. They are more effective in removing the heavy gritty soil.

In low to moderate traffic areas, such as above ground hallways, offices, conference rooms, etc. upright vacuums or the new back pack vacuums work well.

Vacuuming routines:

There are essentially four types of vacuuming.

1. Full wall-to-wall
2. Traffic lanes vacuuming
3. Spot vacuuming (picking up only what you see)
4. Detail vacuuming (vacuuming the corners, base board and other out of the way areas)

In heavy traffic areas, always do full vacuuming daily. Aggressive vacuuming in these areas will result in a cleaner building in all areas.

In moderate traffic areas, alternate between traffic lane vacuuming and full vacuuming in all areas. For example, in an office building, traffic lane vacuum four times a week and full vacuum all areas once a week. In an airport or medical facility, you may choose to full vacuum every other day and traffic lane vacuum every day. Another option is to alternate spot and full vacuuming.

In low traffic areas, which in most facilities constitute more than 80% of the carpet, the use of back packs is growing in popularity as a result of their greater productivity. In these areas, full vacuuming once a week and spot vacuuming on the other days is usually adequate. These areas will also require detail vacuuming around the edges of the room, around the furniture and equipment. The back pack may work well for this purpose.

Pile lifting:

A pile lifter is a heavy duty commercial vacuum with large rotating bristle rollers. If the carpet fiber has been crushed due to extremely heavy foot or rolling traffic, regular vacuuming may not be sufficient to restore the fiber to an acceptable condition. Pile lifting is designed to lift the fiber to an upright position and should be used regularly as a part of the total maintenance plan where extra heavy traffic is anticipated.

CARPET CLEANING METHODS

It is not hard to understand that the needs of a large institutional facility, with a limited and relatively untrained cleaning staff, will differ from a restoration contractor that is involved in very complex and highly technical problems. Another important point to consider is that no carpet cleaning method is capable of cleaning a carpet by itself. **"There must be an operator"**. The skill level of the operator is just as important to the outcome of a job as the method used, if not more so.

The chemistry and an explanation of methods of carpet cleaning are not complete without emphasizing the importance of how pH values of products and/or problem situations work. A minor change in pH values can and does cause additional problems that can be avoided by good training and education.

Avoid the following:

1. pH levels above 10
2. Optical brighteners
3. Detergents that dry sticky. (To test, put concentrate in dish, allow to dry two days. If crystal or wax occurs, it is okay; if it is sticky, do not use.)

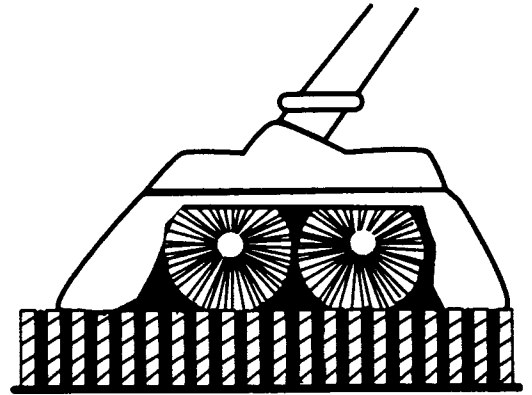
Good carpet cleaning will depend on operator training, good equipment and the use of proper chemicals. Generally, hot water extraction or steam cleaning is a preferred system for overall deep cleaning of carpet. In installations where short drying times are needed or in high humidity areas, dry powder systems are desirable, but should be followed by a regularly scheduled restoration cleaning method such as hot water extraction.

INTERIM METHODS

METHODS OF CLEANING

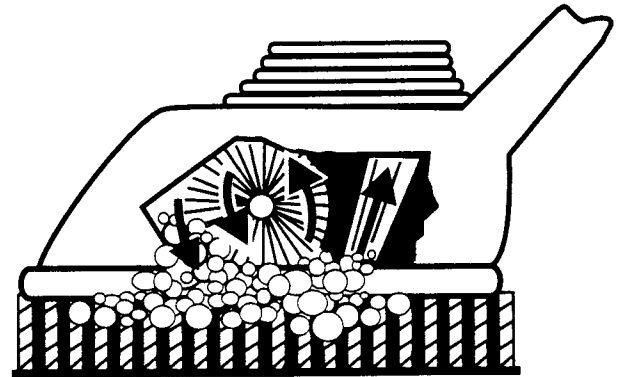
A. ABSORBENT COMPOUND METHOD

1. Components - Carrier, minimal dry solvents, neutral detergent, moisture.
2. Application procedures - Powder applied onto carpet; worked in with counter rotating, reel (or rotary) type brush action.
3. Theory of function - Detergent emulsifies oily soil and defloculates particles; suspended soil is attracted to absorbent carrier; excess carrier with attracted soil is vacuum extracted.
4. Classification by carrier - Cellulose (Host[®], DriWay[®]), urethane (Capture[®])



B. DRY FOAM METHOD

1. Chemical components - Foaming surfactant, alkaline builder.
2. Application techniques - Machine generates foam and applies it on carpet in front of brush; detergent worked in with reel-type brush action; suspended soil wet vacuumed from carpet.
3. Theory of function - Detergent defloculates and emulsifies soil; dries to crystal; vacuumed from carpet along with attached soil. Use high filter efficiency bags.

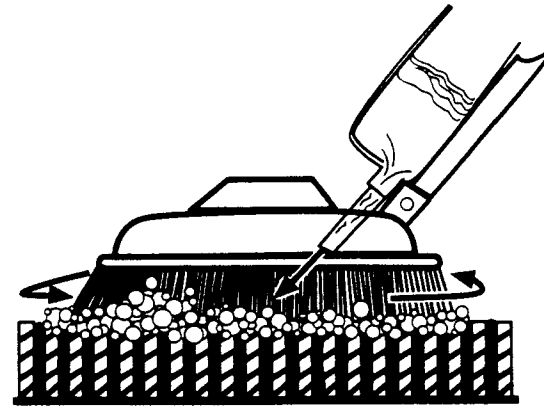


Note of disclaimer: Mannington does not recognize any claims or warranties where damaged carpet is the result of an ongoing maintenance program that employs the Bonnet Method as a total cleaning system.

RESTORATIVE METHODS

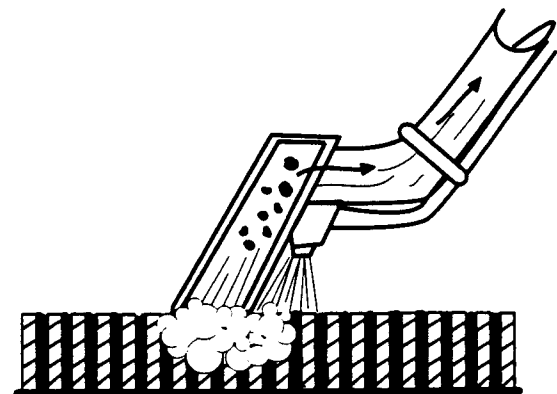
D. SHAMPOO (ROTARY) METHOD

1. Chemical components - Foaming surfactant alkaline builder, dry solvent additive.
2. Application techniques - From the chemical holding tank, chemical is fed onto a showerfeed, nylon-bristled, rotary brush head. Shampoo is created by agitation between brush head and carpet pile.
3. Theory of function - defloculation occurs followed by wet vacuuming; embrittling agents cause shampoo to dry to a crystal; after drying, remaining powdered residue is dry vacuumed from carpet.



E. HOT WATER EXTRACTION

1. Chemistry - Surfactant, alkaline builder (dry solvent if preconditioned).
2. Application techniques - Hot chemical is injected into the carpet, soil is suspended, vacuum provides extraction of suspended soil and excess water.
3. Theory of function - Rapid defloculation occurs due to temperature of water; soil is suspended "instantly", wet vacuum system extracts soil.



Note: Overwetting the carpet can damage both fiber and backing systems. Operators must be properly trained to disperse and recover the correct amount of water when using these methods.

SPOT AND STAIN REMOVAL

(Generally, spots add substance to fabrics;
stains add or change color.)

A. IDENTIFICATION of spots and stains

1. **Senses** - sight, touch, smell
2. **Relative location**
3. **Ask!** - warn customer that all stains cannot be removed
4. **Analyze components** of spots and stains
5. **Use professional products**

B. METHODS OF REMOVAL

1. **Lubrication and suspension**
2. **Protein digestion** - enzymes (blood, egg, milk)

3. **Chemical change** (for color-added stains) - Stains that are lighter than the carpet are the most difficult to remove.
 - a. Acid-tannin spots, rust
 - b. Reducing agent or "stripper" (removes oxygen from dyes)
 - c. Oxidizing bleach (adds oxygen chemical burning of dyes)

C. EQUIPMENT

1. **Equipment**
 - a. Flip-top bottles or trigger sprayer
 - b. Tamping brush (to work agents in)
 - c. Towels
 - d. Cotton Swabs
 - e. Spatula
 - f. pH test kit

STATE OF THE ART SPOTTING CHEMISTRY SAFE-EASY

All stains except gum and rust.

1. **Apply broad spectrum spotter, agitate**
2. **Rinse**

If all the stain is not removed, repeat steps above.

* Some stains may not be 100% removable.

If stain remains:

1. **Apply oxidizing powder following manufacturer instructions. (Use mixed products within 15 minutes)**
2. **Agitate and leave**
3. **Check in 2-4 hours**
4. **Thoroughly rinse after all applications**

If all the stain is not removed, repeat all of the above.

Special

- Gum** -
1. Use good quality citric solvent; inject under gum with carpet injection needle.
 2. In 3 or 4 minutes, when gum bubbles; pick up with paper towel.
 3. Rinse

- Rust** -
1. Use professional rust remover. Avoid products over 3% hydrofluoric acid.
 2. Rinse

Note: Hydrofluoric acid should only be used by a professional cleaner.

URINE DECONTAMINATION

1. **Isolate** major contamination.
 - a. Moisture sensor
 - b. High intensity light
 - c. Black (UV) light
 - d. Disengage and observe backing, tackless, etc., as practical
2. **Spot clean excess** urine contaminate from face yarns.
3. Disengage installation and **flush backing**, if practical. (Direct Glue)
4. **Remove contaminated pad**, if practical or needed. Otherwise, saturate, extract and dry. (Double Glue Installation)
5. **Clean and disinfect subfloor**, if practical
6. **Replace pad** with comparable type, if contaminated pad was removed (Double Glue Installation).
7. **Saturate backing with EPA-registered disinfectant.**
8. **Re-engage carpet and extract face** (pull disinfectant through all construction components).
9. **Reinstall and clean** entire room to remove tracked contamination.
10. Dry and inspect; repeat step # 7 (topical saturation) followed by blotti

All Direct Glue and Double Glue installation should be evaluated for the practical need disengaging the material from the subfloor for total decontamination of excess urine.

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STREAKING

A. TYPES AND CAUSES

1. **Clean or dirty streak** - non-uniform cleaning.
2. **Blockage** streak - jet or vac.
3. **Detergent residue** "shadow" - failure to extract all pre-existing detergent residues within the carpet.
4. **Installation** streak - separations in the floor or pad; or continuous air movement under doors or draperies (similar to filter soiling).
5. **Preconditioning** streaks (triangle, block, shadow) - failure to uniformly apply preconditioners.
6. **Wicking** streak (acrylics) - residual soil particles below primary backing that inevitably are suspended at the point where cleaning stops, and which wick up to the tips of the yarns during drying. Particularly apparent on today's lighter colors.

B. PREVENTION

While all streaking cannot be avoided, some preventive steps can be taken:

1. **Precondition** uniformly and carefully. Use larger spray jets (.06 or larger), apply chemical, don't allow preconditioner to dry completely.
2. **Clean** carefully. Use block stroking and vary patterns when there is sufficient soil to justify double stroking.
3. **Correct wicking** streaks with light shampoo.

ABRAIDING, FADING AND WEAR

Often, “preconditioning the customer” can be more important than “preconditioning the carpet.” Used carpet is just that, used carpet. So let’s be practical and concede that our customers are able to understand the facts of carpet life.

We find a simple three-point explanation of these “facts” is really appreciated by our customers. We call it the “**abrading, fading, wear briefing**.” It is our attempt to educate the customer that those entry, pivot and high traffic areas will never look like brand new again because of:

1. **Abrading** - diffusion of light due to exposure of abrasive soil to “plastic-like” fiber surfaces, creating scratches and pits that dull the fiber’s appearance and causes change in light reflection. For example, if we took a clear piece of plastic and abraded it with sandpaper, no matter how clean it was, the surface would always look dull and somewhat dingy.
2. **Fading** - results from two conditions:
 - a. Light, whether incandescent, fluorescent, or especially, direct sunlight, has an effect on dyes after a period of prolonged exposure.
 - b. Soil, which is slightly acid, tends to yellow fibers after prolonged exposure.
3. **Wear** - simply a reduction in pile (fiber) density in traffic areas, as compared to other areas along walls or under furniture.

Because of these three very real physical changes in the fiber itself, it is impossible for even the most professional cleaner to “make it new again”. Fortunately, customer expectations become more realistic when educated about **abrading, fading, and wear**.

Properly maintained carpet consists of a well planned daily routine for general cleaning and spot removal. This, combined with a periodic scheduled deep cleaning system, will result in an overall cost savings in daily upkeep and extend carpet life, while maintaining the overall beauty of the material.

If you have any special requirements or questions regarding developing a good maintenance program for your individual needs, feel free to call Mannington’s Technical Services Department for guidance at 1-800-241-2262.

**MANNINGTON**
COMMERCIAL**PRODUCT SPECIFICATIONS**A DIVISION OF MANNINGTON CARPETS, INC.
P.O. BOX 12281
CALHOUN, GEORGIA USA 30703-7004
706-629-7301
FAX 706-629-2171

STYLE:	STRATEGIES / Modular
CONSTRUCTION:	Accutuft
FACE FIBER:	100 % DuPont Antron Legacy Type 6,6 BCF Nylon with Dura Tech Soil-Resistant Technology and Permanent Static Control
DYE METHOD:	Yarn Dyed
PLY/YARN SIZE:	1245 / 2 , 1235 / 2
GAUGE:	5/64
STITCHES PER INCH:	10.67
TUFT DENSITY:	136.57
PILE THICKNESS:	.122 inches
TUFTED YARN WEIGHT:	28 ounces per square yard
TOTAL WEIGHT:	153 ounces per square yard
PRIMARY BACKING:	100% Non -Woven Synthetic
PRIMARY PRECOAT:	100% Vinyl Non-Aqueous Closed Cell Polymer
SECONDARY BACKING:	Macro-Tec Reinforced Vinyl Composite Closed Cell Polymer
WEAR WARRANTY:	15 Year Limited Wear Warranty
BACKING WARRANTY:	Lifetime Limited Warranty
METHENAMINE PILL TEST (ASTM-D-2859):	PASSES
FLOORING RADIANT PANEL TEST (ASTM-E-648):	CLASS I (DIRECT GLUE)
N.B.S. SMOKE CHAMBER TEST (ASTM-E-662):	<450 (FLAMMING MODE)
DIMENSIONAL STABILITY AACHEN TEST:	PASSES
ELECTROSTATIC PROPENSITY TEST (AATCC 134):	< 3.0 KV
AVERAGE DENSITY:	8262
WEIGHT DENSITY:	231,344
STANDARD SIZE:	18" X 18"
CRI INDOOR AIR QUALITY CONTROL CATEGORY & REGISTRATIC N NUMBER:	17X & 85827616

RELEASEABLE ADHESIVE:	MANNINGTON'S MT-711
CRI IAQ TESTING CERTIFICATION:	PSA-970522
BOND WARRANTY:	15 Year Limited Warranty When Used With Strategies / Modular Carpet Tile

**specifications are subject to nominal manufacturing variances

**specifications are subject to change without notice when shortages occur or when technological advances provide improved product performance

strat5m / kp81497

Independent Textile Testing Service, Inc.

TEST REPORT # 963896

P.O.Box 1948

1503 Murray Ave.

Dalton, Georgia 30722-1948 • Phone 706-278-3013 • Fax 706-272-7057

TEST REPORT

Customer: Mannington Carpets, Inc.

June 12, 1996

Subject: Sample(s) of carpet submitted for testing by the Customer and identified below:

Sample Identification: Style: Strategies
Color: ZENI
Lot : 04926
Secondary Backing: Macrotec
P.O. 21311
RE: PC391-5.0

TEST METHOD CONDUCTED ASTM D-1335 Tuft Bind of Pile Floor Coverings
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TEST RESULTS:	SIDE	CENTER	SIDE
1) 17.6	6) 11.0	11) 16.7	
2) 12.0	7) 17.9	12) 14.1	
3) 12.1	8) 17.0	13) 16.4	
4) 16.8	9) 16.1	14) 12.0	
5) 19.5	10) 17.5	15) 16.9	
AVG: 15.6	AVG: 15.9	AVG: 15.2	

TOTAL TUFT BIND AVERAGE = 15.6 lbs. / 249.6 ozs.


AUTHORIZED SIGNATURE

Our letters and reports are for the exclusive use of the customer to whom they are addressed, and their communication to any others or the use of the name of Independent Textile Testing Service, Inc., must receive our prior written approval. Our letters and reports apply only to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar products. The reports and letters and the name of the Independent Textile Testing Service, Inc., are not to be used under any circumstances in advertising to the general public.



DuPont Flooring Systems

PROJECT

CONTRACT [REDACTED]
MEDICAL/DENTAL CLINIC

FLOORING SUBCONTRACTOR

DuPont Flooring Systems Project # 2423
8828 Complex Drive San Diego, CA 92123
(858)292-2575 (858) 292-2559fax
Contact for warranty repairs: Rico Santangelo

GENERAL CONTRACTOR:

RESILIENT FLOORING :

Armstrong Stonetex: Vinyl Tile
Armstrong Medintech: SheetVinyl
Roppe: Wall Base

CARPET:

Mannington Carpet: Strategies

8828 Complex Drive San Diego, CA 92123 (858) 292-2575