

Developing a Planned Commercial Carpet Maintenance Program



HydraMaster
We've Got Your Back



Made in the USA

www.hydramaster.com | 800.426.1301 | 425.775.7272

Commercial Markets

(As Defined by Carpet Manufacturers)

- Office Buildings
- Retail
- Food Service
- Health Care
- Apartments, Rentals
- Education
- Transportation
- Hospitality



HydraMaster
We've Got Your Back



Made in the USA

www.hydramaster.com | 800.426.1301 | 425.775.7272

Commercial Carpet Cleaning versus Residential Carpet Cleaning

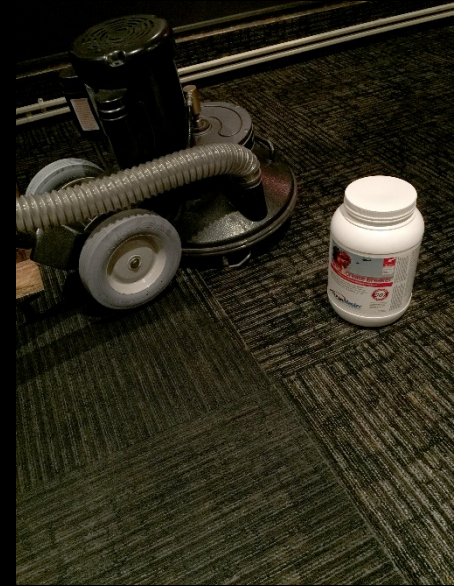
- Amount of traffic
- Amount and type of soiling
- Type of carpet
- Maintenance schedule



www.hydramaster.com | 800.426.1301 | 425.775.7272

Most Commercial Carpet Cleaning is Appearance Demand Carpet Cleaning

- Unacceptable appearance in a commercial facility will eventually force cleaning
- Carpet is designed to hide soiling. By the time it looks dirty, it is filthy.
- Most carpet is cleaned because the appearance has already reached an unacceptable level



HydraMaster
We've Got Your Back

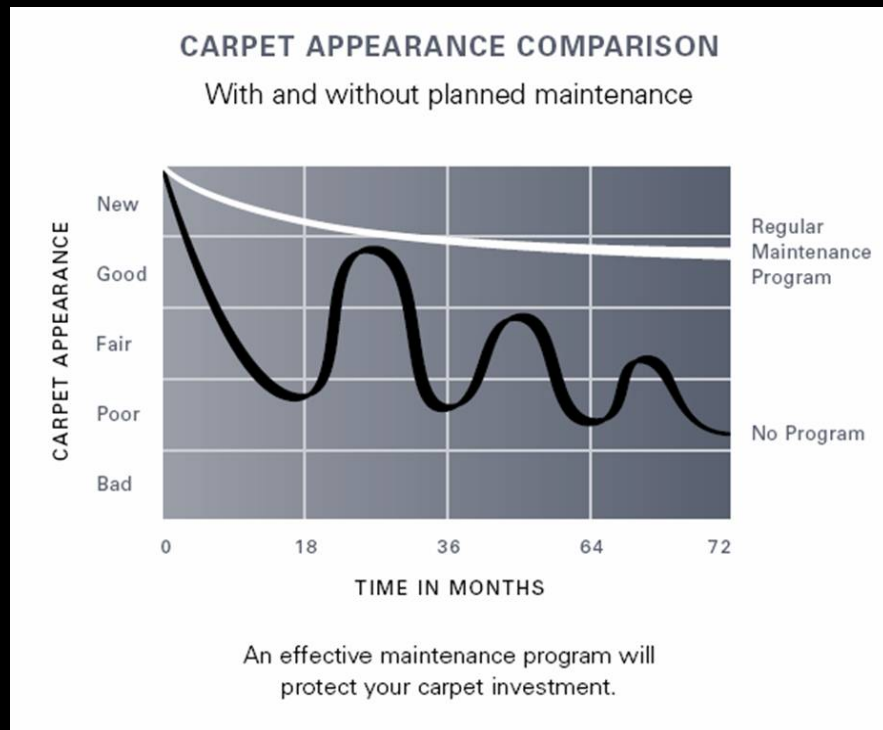


Made in the USA

www.hydramaster.com | 800.426.1301 | 425.775.7272

The Value of Planned Carpet Maintenance

Appearance Demand Cleaning versus Planned Maintenance



www.hydramaster.com | 800.426.1301 | 425.775.7272

The Value of Planned Carpet Maintenance

Benefits of Planned Carpet Maintenance

1. Asset Management
2. Appearance Management
3. Professional Image
4. A Healthier Indoor Environment
5. Reduce or Control "Ownership Costs"



www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

The Value of Planned Carpet Maintenance

1. Asset Management

- Carpet is a major investment. Any commercial facility wants the maximum value out of an investment.
- You can pay for proper maintenance now... or you can pay for premature carpet replacement or lost image later.
- The carpet will have a longer useful life, present a more prestigious image, and support a more aesthetically pleasant workplace.



www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

1. Asset Management

Why did the facility purchase the carpet they did?

- Color
- Style
- Pattern
- Insulation
- Aesthetics
- Safety
- Acoustics
- Image
- “Concealability” – hides soiling

**How does
maintenance (or
lack thereof)
effect this?**

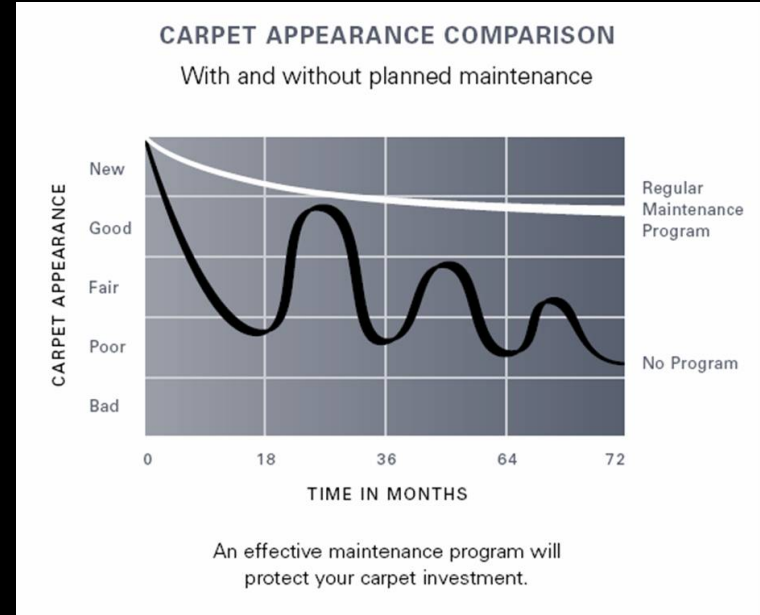


www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

2. Appearance Management

- Provide a continuous high level of appearance
- The carpet can look good all the time
- The carpet never reaches that unacceptable appearance point



The Benefits of Planned Carpet Maintenance

3. Professional Image

- Décor = high quality image
- A clean and refreshed carpet enhances reputation of company



The Benefits of Planned Carpet Maintenance

4. **A Healthier Indoor Environment**

- EPA sponsored studies in 1991 and 1994 on the interaction of carpet cleaning and indoor environmental quality confirm a cleaner carpet is a healthier carpet
- Government mandates against carpet in Sweden and subsequent tests show replacing carpet with hard surfaces reduces indoor environmental quality because carpet was acting as a filter



Photo: Courtesy of the Carpet & Rug Institute



www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

4. A Healthier Indoor Environment

"Effective cleaning is the process of extracting and removing unwanted matter to the optimum extent to reduce exposure to unwanted matter.

Most people clean carpets when they look dirty. Rarely does anyone recognize that their carpet needs to be cleaned for health protection.

Yet every time pollutants are extracted from the carpeting; the quality of the indoor environment is enhanced by reducing exposures.

A high-performance carpet cleaning process focuses on nine steps using a wet, high temperature, high flow, high extraction system"

- Dr. Michael Berry

**Characteristics of High-Performance Carpet Cleaning;
Journal of Cleaning, Restoration & Inspection 2017**



Equipped with
HydraMaster
Truckmounted Cleaning Equipment



HydraMaster
We've Got Your Back



Made in the USA

www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

4. A Healthier Indoor Environment



Carpet Cleaning Effectiveness Analysis

Substances in Carpet	Mitigation guidance	Vacuuming Effect	HW Extraction Effect
Soils	Walk-off mat and frequent vacuuming	High	High
Atmospheric Dusts	Vacuuming Cleaning and Ventilation	Moderate to High	High
Toxic PM	Walk-off mat and frequent vacuuming	Moderate to High	High
Fibers	Containment	High	High
VOC	Ventilation	N/A	N/A
Chemical/Pesticide	Activity management	Low	High
Allergens			
Pollen	Walk-off mat and frequent vacuuming	High	High
Fungi	Dry, walk-off mat and frequent vacuuming	High	High
Mycotoxin	Dry, walk-off mat and frequent vacuuming	Moderate to High	High
Mite	Dry, frequent vacuuming	Moderate to High	Moderate to High
Cockroach	Dry, frequent vacuuming	Moderate to High	Moderate to High
Cat and Dog	Activity management	Moderate	Moderate to High
Infectious Agents			
Bacteria	Frequent cleaning	Low to Moderate	Moderate to High
Endotoxin	Frequent cleaning	Moderate to High	High
Viruses	Frequent cleaning	Low	High

Table 1



The Benefits of Planned Carpet Maintenance

4. A Healthier Indoor Environment

The value of heat in the cleaning process should also be reinforced at this point.

- Most understand that the use of heat accelerates most chemical reactions resulting in deeper cleaning and often reduced drying times.
- But the use of heat in the role of the removal and treatment of unwanted substances, including biological germs and viruses has been scientifically measured and demonstrated in studies (conducted between 1991 and 2014) sponsored by
 - Division of the United States Environmental Protection Agency
 - Research Triangle Institute
 - Air Quality Sciences
 - Airmid Health Group
 - Others



www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

4. A Healthier Indoor Environment

The value of heat in the cleaning process should also be reinforced at this point

- **Measured reductions in biological contaminants can be clearly demonstrated in carpets, textiles, upholstery, and hard surface floors after the use of high performance truckmounted cleaning equipment** that can maintain temperatures across the surfaces being cleaned of 160°+ F.



www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

4. A Healthier Indoor Environment The Effects of Cleaning on COVID-19

“The virus has a lipid envelope that is not protective, rendering it susceptible to inactivation by detergents”

“As a general rule (with educated limitations), the higher the cleaning temperature the better.”

Dr. Eugene Cole



www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

4. A Healthier Indoor Environment

Effects on Cleaning Procedures

- Changes in Frequency Recommendations?

Traffic Level	Vacuum	Spot Clean	Hot Water Extraction
Light	2-3 times weekly	as needed	annually
Moderate	daily	as needed	twice annually
Heavy	1+ times daily	as needed	quarterly
Extra Heavy	1+ times daily	as needed	minimum monthly/as needed

Light traffic: private offices and cubicles

Moderate traffic: shared offices, interior hallways and conference rooms

Heavy traffic: entrances, elevators, main hallways, break rooms, work/copy rooms and mailrooms

Extra Heavy traffic: airports & entries to hospitals, malls & theaters *extra heavy traffic and soiling require frequent attention

shaw hospitality group™

www.shawhospitalitygroup.com 888.448.7878

© 2013 Shaw Industries, Inc. a Berkshire Hathaway Company 



Recommended Cleaning Intervals for Carpet

Environment	Normal	Special Condition	Cleaning Frequency
Day care	1 wk	Epidemic	daily
Nursing homes	1 mo	High humidity	1 wk
Restaurants	1 mo	Dusty homes	1 wk
Schools	3-6 mo	Dusty outside	1-2 mo
Family residence	6-12 mo	Children & pets	3-6 mo
Office building	6-12 mo	Ground level	3-6 mo

Table 2

THE JOURNAL OF CLEANING, RESTORATION AND INSPECTION

WINTER 2017



HydraMaster
We've Got Your Back



Made in the USA

www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

4. A Healthier Indoor Environment

Benefits of Deep Cleaning

- 1) Extraction and removal of unwanted matter
- 2) The sanitizing effect (decontamination) of hot cleaning solution
- 3) Restoring confidence in the safety and healthfulness of their facility
- 4) Reassurance to employees, customers, vendors, and all stake holders



Clean for health, not just for appearance



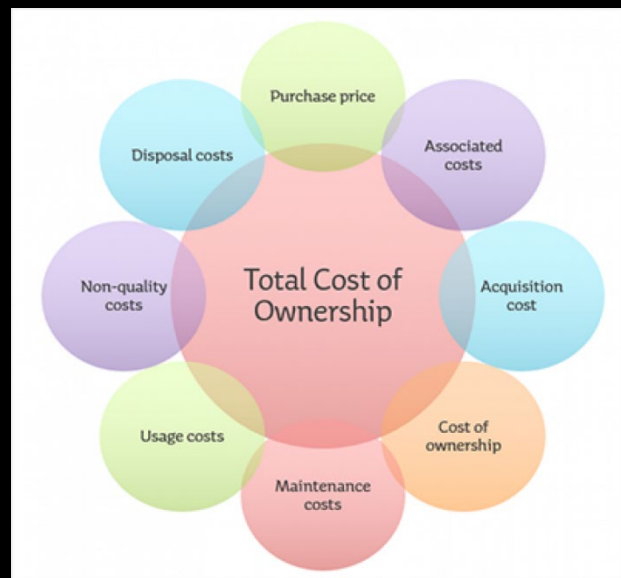
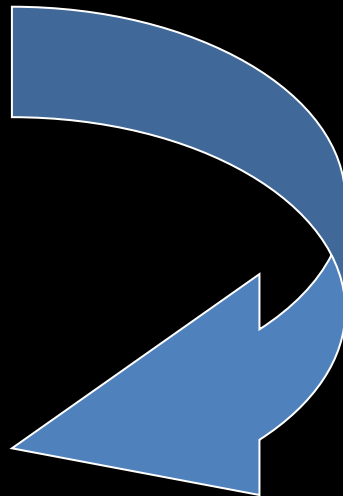
www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

5. Reduce or Control Carpet “Ownership” Costs

What are carpet “ownership” costs?

- Floor prep costs
- Downtime
- Installation
- Cost of carpet
- Maintenance
- Downtime
- Tear Up
- Floor prep costs



The Benefits of Planned Carpet Maintenance

5. Reduce or Control Carpet “Ownership” Costs - Scenario 1

10,000 square foot installation

Floor prep costs	\$ 1,000.00
Downtime	\$ 10,000.00
Installation	\$ 13,200.00
Cost of carpet	\$ 49,500.00
Maintenance	\$ 10,000.00
Downtime	\$ 10,000.00
Tear Up	\$ 2,500.00
Floor prep costs	\$ 1,000.00



The Benefits of Planned Carpet Maintenance

5. Reduce or Control Carpet “Ownership” Costs - Scenario 1

10,000 square foot installation

Total Ownership Cost **\$97,200.00**

Divided by estimated life 5

Ownership Cost Per Year **\$19,440.00**



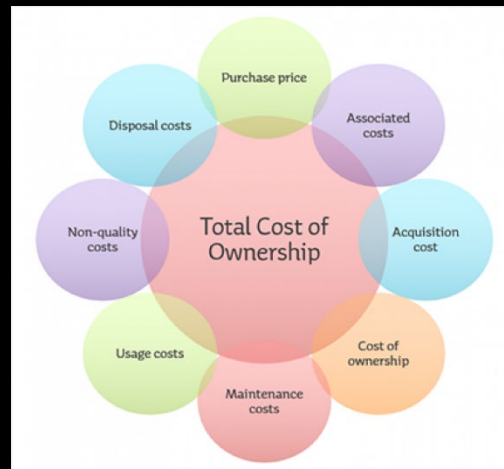
www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

5. Reduce or Control Carpet “Ownership” Costs - Scenario 2

10,000 square foot installation

Floor prep costs	\$ 1,000.00
Downtime	\$ 10,000.00
Installation	\$ 13,200.00
Cost of carpet	\$ 49,500.00
Maintenance	\$ 30,000.00 X 3
Downtime	\$ 10,000.00
Tear Up	\$ 2,500.00
Floor prep costs	\$ 1,000.00



HydraMaster
We've Got Your Back



Made in the USA

www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

5. Reduce or Control Carpet “Ownership” Costs - Scenario 2

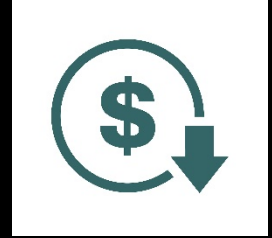
10,000 square foot installation

Total Ownership Cost \$ 117,200.00

Divided by estimated life 7

Ownership Cost Per Year \$ 16,745.00

A SAVINGS of almost \$2700 per year



www.hydramaster.com | 800.426.1301 | 425.775.7272

The Benefits of Planned Carpet Maintenance

Pre-inspection

- Construction of the carpet has a major impact on cleaning and spotting.
- Most cleaning related problems can be prevented by an accurate assessment, scope, pre-inspection, and explanation of the job to and for the carpet owner
- Non-trafficked areas still need to be cleaned due to:
 - Bio-pollutants
 - Airborne soils
 - Volatile organic compounds
 - Contaminant build-up



HydraMaster
We've Got Your Back



Made in the USA

www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program



www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

Components of a Planned Maintenance Program:

- 1. Soil Control/Prevention**
- 2. Daily/Periodic Maintenance**
- 3. Appearance Management/Interim Cleaning**
- 4. Restorative “Deep” Cleaning**



www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

Analyzing Building Use and Floor Plan

To set up a Planned Commercial Maintenance Program several aspects need to be taken into consideration.

- 1. The type of building involved, single or multistory, size of building. This will determine to a large extent the type of carpet cleaning equipment that will be used.**



www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

Analyzing Building Use and Floor Plan

2. The type of commercial activity involved needs to be considered. This will determine the length of time between cleanings, how much time is allowed to complete the cleaning, whether or not the building or area can be shut down during the cleaning process. The type, and amount of traffic has a bearing on the cleaning schedule.



HydraMaster
We've Got Your Back



Made in the USA

www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

Analyzing Building Use and Floor Plan

3. The exterior of the building is an important area for planned maintenance. A lot of soils are tracked in or carried in with air currents. Proper cleaning of parking lots and entrance aprons to buildings, entrance mats both exterior and interior should be planned.



Developing A Planned Maintenance Program

Analyzing Building Use and Floor Plan

4. A floor plan of each level of the building needs to be considered and areas assigned a category for proper cleaning schedules to be determined.

Note on a facility map the primary areas of concern:

- ✓ Track-off areas
- ✓ Funnel areas
- ✓ Main traffic areas
- ✓ Spot prone areas



Potential Sources for Floor Plan: Evacuation Plan, Blueprints

HydraMaster
We've Got Your Back



Made in the USA

www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

Analyzing Building Use and Floor Plan

5. The type of floor covering needs to be determined. Where they are located in relation to each other and in the building has to be taken into consideration. A tile floor preceding carpet will require the carpet to be vacuumed and cleaned more frequently, due to soils being tracked off of the tile floors. A square footage of each area needs to be known.



www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

Analyzing Building Use and Floor Plan

- The type of floor covering needs to be determined.
 - Hard surface:
 - Concrete
 - Vinyl
 - VCT/VLP
 - Wood
 - Tile
 - Stone
 - Carpet:
 - Type of carpet, type of construction, type of fibers, style, dye methods, manufacturers cleaning recommendations, type of installation.



Recommended Cleaning Frequencies

Soil and Traffic Level	Vacuum	Spot Removal	Appearance Maintenance Cleaning	Restorative Cleaning
Light Private offices, cubicles	2+ times per week	As needed	2-4 times per year	1 times per year
Medium Interior hallways, shared offices, conference rooms	3+ times per week	As needed	4 times per year	2 times per year
Heavy General entrances, lobbies, main hallways	1+ times per day	As needed	4-6 times per year	2-4 times per year
Severe Severe climate general entrances, food service	1+ times per day	As needed	N.A.	12+ times per year



www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

Assign Area Designations

Each area of the building needs to be assigned a category based upon the amount of traffic it receives or type of area it is. Then a maintenance program can be established based upon each area.

Category 1: Severe Traffic Areas

Category 2: Heavy Traffic Areas

Category 3: Medium Traffic Areas

Category 4: Light Traffic Areas

Consider the Profile of the Area:

Understand the use and importance of the area - high profile vs. low profile. Areas that customers go, VIP offices, conference rooms, etc..



www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

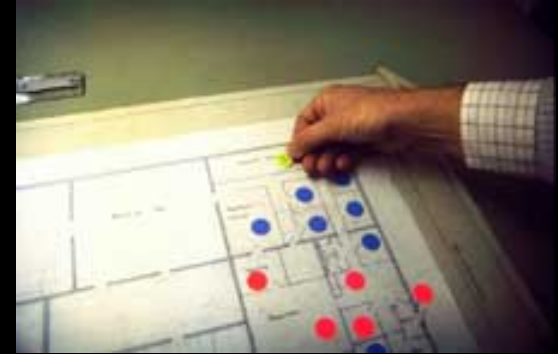
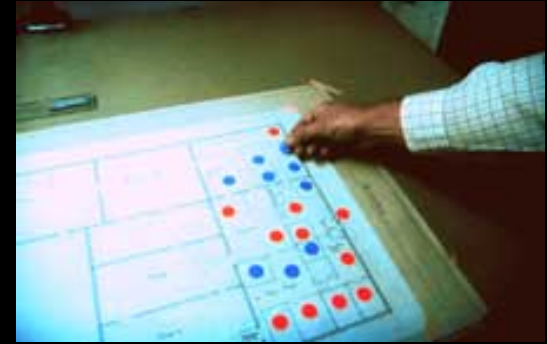
Prepare and Use Drawings

Category 1: Severe Traffic Areas

Category 2: Heavy Traffic Areas

Category 3: Medium Traffic Areas

Category 4: Light Traffic Areas

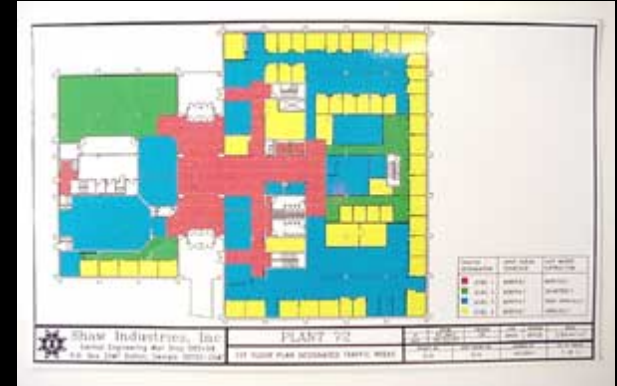


www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

Putting The Plan On Paper

- Computer Assisted Planning
 - Word processing program (Microsoft Word) to customize procedures
 - Graphics program for color coding map



Developing A Planned Maintenance Program

Category 1: Severe Traffic Areas:

Examples: Airports, Entries to Hospitals, Malls & Theaters

Cleaning schedule:

1. Vacuuming: All areas need to be vacuumed with a commercial grade vacuum cleaner on a daily basis. Vacuums which use HEPA filters are recommended.
2. Spot Cleaning: All areas need to be spot cleaned as needed by a trained professional using proper techniques to insure the use of proper chemicals, agitation, and rinsing. Standard procedures do not require pre-spotting, rather the carpet should be cleaned normally then spots cleaned after, if residue remains.
3. Interim Maintenance Cleaning: Carpet needs to be cleaned on a weekly basis using a low moisture encapsulation cleaning system.
4. Restorative Cleaning: This should be performed on a monthly basis to remove any residues from Interim Maintenance Cleaning procedures, to remove deeply imbedded soil, refresh the texture of the carpet and for overall Indoor Air Quality. This should be done utilizing a Hot Water Extraction truck mounted equipment or a High performance portable machine.

Yellow equals variables that could change from proposal to proposal



www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

Category 2: Heavy Traffic Areas:

Examples: entrances, showrooms, lobbies, corridors, stairs, hallways, retail sales floors, executive offices, clerical office areas, food service areas, elevators, channeled traffic flow areas, break rooms, mail rooms

Cleaning schedule:

1. **Vacuuming:** All areas need to be vacuumed with a commercial grade vacuum cleaner on a daily basis.
2. **Spot Cleaning:** All areas need to be spot cleaned as needed by a trained professional using proper techniques to insure the use of proper chemicals, agitation, and rinsing. Standard procedures do not require prespotting, rather the carpet should be cleaned normally then spots cleaned after, if residue remains.
3. **Interim Maintenance Cleaning:** Carpet needs to be cleaned on a weekly basis using a low moisture encapsulation carpet cleaning system
4. **Restorative Cleaning:** This should be performed on a quarterly basis to remove any residues from Interim Maintenance Cleaning procedures, to remove deeply imbedded soil, refresh the texture of the carpet and for overall Indoor Air Quality. This should be done utilizing a Hot Water Extraction truck mounted equipment or a high performance portable machine.



www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

Category 3: Medium Traffic Areas

Examples: some hallways, shared offices, conference rooms

Cleaning schedule:

1. **Vacuuming:** All areas need to be vacuumed with a commercial grade vacuum cleaner on a daily basis.
2. **Spot Cleaning:** All areas need to be spot cleaned as needed by a trained professional using proper techniques to insure the use of proper chemicals, agitation, and rinsing. Standard procedures do not require prespotting, rather the carpet should be cleaned normally then spots cleaned after, if residue remains.
3. **Interim Maintenance Cleaning:** Carpet needs to be cleaned on a monthly basis using a low moisture encapsulation carpet cleaning system.
4. **Restorative Cleaning:** This should be performed every six months to remove any residues from Interim Maintenance Cleaning procedures, to remove deeply imbedded soil, refresh the texture of the carpet and for overall Indoor Air Quality. This should be done utilizing a Hot Water Extraction truck mounted equipment or a High performance portable machine.



www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

Category 4: Light Traffic Areas:

Examples: Private Offices & Cubicles

Cleaning schedule:

1. **Vacuuming:** All areas need to be vacuumed with a commercial grade vacuum cleaner on a weekly basis.
2. **Spot Cleaning:** All areas need to be spot cleaned as needed by a trained professional using proper techniques to insure the use of proper chemicals, agitation, and rinsing. Standard procedures do not require pre-spotting, rather the carpet should be cleaned normally then spots cleaned after, if residue remains.
3. **Interim Maintenance Cleaning:** Carpet needs to be cleaned on an as needed basis using a low moisture encapsulation carpet cleaning system.
4. **Restorative Cleaning:** This should be performed every six months to remove any residues from Interim Maintenance Cleaning procedures, to remove deeply imbedded soil, refresh the texture of the carpet and for overall Indoor Air Quality. This should be done utilizing Hot Water Extraction truck mounted equipment or a High performance portable machine.



www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

- **The Facility Manager's Role In A Successful Program**
 - Specification of the right carpet for the environment it is installed in
 - Maintenance of Entry Walkways, Sidewalks
 - Use of walk off mats/grids
 - Periodic cleaning/servicing of the air handling system
 - Building design/usage considerations
 - Thorough vacuuming with commercial vacuum at the recommended frequency
 - Spot & Spill removal on an as-needed basis



www.hydramaster.com | 800.426.1301 | 425.775.7272

Developing A Planned Maintenance Program

- **The Cleaning Contractor's Role In A Successful Program**

- Emergency stain removal
- Low moisture carpet cleaning on an interim basis to maintain appearance at recommended frequencies
- Restorative deep cleaning utilizing hot water extraction process that employs high flow, high vacuum, high temperature for a healthier environment and investment extension
- Accelerated drying processes when deep cleaning is employed



www.hydramaster.com | 800.426.1301 | 425.775.7272

Each Customized Program Should Include:

- Color Coded Map
- Written Procedures Plan
- Daily, Weekly, Monthly, Quarterly, Annual Procedures
- Follow-Up On Every Job
- Emergency Response Plan
- Water Damage and Intrusion Plan
- Certificate of clean and healthy
- Itemized pricing and bid sheet
- Post deep cleaning re-assurance quote for air or surface treatment with EPA N list approved disinfectant /sanitizer or gas phase treatment



www.hydramaster.com | 800.426.1301 | 425.775.7272

A few thoughts on hard surface cleaning

Biological contamination – cleaning for health

- Studies have shown that biological contamination can spread throughout a facility on a hard surface floor.
- The mop and bucket and/or auto-scrubbers typically used to clean these types of floors have not demonstrated a high level of effectiveness at removing or inactivating this biological contamination
- Restorative deep cleaning on a periodic basis will effectively deal with this contamination
- Ask for your no-obligation quote

Tile



Stone



Concrete



Hybrid



Luxury Vinyl Plank



HydraMaster
We've Got Your Back



Made in the USA

www.hydramaster.com | 800.426.1301 | 425.775.7272