

MAINTENANCE GUIDE

EXCLUSIVE TO ALL BENTLEY PRODUCTS

Important note: This Maintenance Guide is written to include carpet made from both nylon and wool fiber. However, it is important to note that wool carpet is discussed in a separate section included within this guide. Please understand wool will be specifically included in instructions intended for wool. Otherwise, the instructions are for nylon carpet only. Some of the more aggressive techniques recommended as beneficial and necessary for nylon fiber, such as vacuuming with a beater bar and brush or pile lifting, can be damaging to wool.

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THE RAMIFICATION OF SPECIFICATIONS

The best maintenance program cannot overcome inappropriate choices in colors, patterns, carpet density, backing system, yarn style (cut pile or loop), staple, or BCF fibers and yarn type will all have a significant impact on the performance of the carpet.

The carpet choice should not be made purely on aesthetics but rather on a wide range of criteria like foot traffic, wheel traffic, density of occupancy, type of soil exposure, traffic frequency, and the overall intended use of the area. One of the most important considerations is how you intend to maintain the carpet once it is installed.

For instance, light-to-medium blue carpet will show soiling more than other colors. Solid-color carpet will show traffic lanes and spots more than pattern carpets. Cut-pile carpet in traffic lanes will crush and matte faster than loop carpets. Bulk continuous filament yarn will out perform staple yarn.

Planning should include providing appropriate protection of the new carpet immediately following installation, especially when carpet installation is part of a larger construction or renovation project where other construction trades may be working on top of the new carpet.

The most critical decision of the carpet maintenance program will be WHO will maintain the carpet. 99% of the life of the carpet comes after it is installed. Choosing an in-house person or a company with certified commercial carpet cleaning technicians is crucial. The best products and best installation will not perform as intended if maintained inappropriately.

The goals for any good floor-maintenance program should include the following.

1. Keep the floors looking as close to new as possible.
2. Design a cleaning program that is safe and the least disruptive to the occupancy.
3. Increase indoor air quality.
4. Extend the useful life of the carpet.
5. Be as "GREEN" as possible in the overall maintenance program (energy, water, noise and if possible chemical)

WHY IS REGULAR, PLANNED CARPET MAINTENANCE IMPORTANT?

People spend about 90% of their time indoors. According to the EPA, the air inside facilities are two to five times more polluted than the air outside the buildings. Companies want to provide a healthy and pleasant work environment for their employees. Healthful work environments have been shown to improve employee attitudes and a reduction in sick days, which increase productivity by approximately 10%.

Carpet acts like a filter and can actually reduce air born pollutants including volatile organic compounds compared to hard-surface floors, provided that they are maintained properly. On the other hand, poorly maintained carpet can harbor bacteria and mold, which can cause an increase in indoor air pollution, allergies, breathing issues, foul odors, and productivity reduction.

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A COMPREHENSIVE MAINTENANCE PLAN

A regular routine of carpet maintenance helps prevent soil buildup that can damage carpet fiber, which, in turn, can cause color loss and loss of resiliency. A well-planned maintenance routine can maximize a carpet installation's useful life and forestall the need for replacement because of premature wear or because the carpet "uglies out."

Routine maintenance involves a planned approach of methodical daily care such as vacuuming and spot cleaning, in addition to periodic interim and restorative cleaning performed as soiling becomes apparent.

Excessive soiling, stubborn spots or spills may require different methods or combination of methods. Please keep in mind that when maintenance is neglected or performed at irregular intervals, carpet can deteriorate to a level that will be difficult or impossible to restore to its original luster and beauty—no matter what cleaning methods are used.

Persistent, thorough maintenance and daily-care routines will keep carpet looking its best, as well as enable carpet fiber to perform as intended. This planned approach to maintenance needs to begin immediately following installation.

For instance, when installation is performed in conjunction with other construction projects, the carpet must be protected with a covering such as re-enforced craft paper that allows the carpet to breathe as adhesives continue to cure. Plastic sheeting should be avoided as a means of carpet protection. Trapping adhesive off-gassing underneath plastic sheeting can cause permanent discoloration of new carpeting.

Properly trained technicians armed with the proper tools are essential to correctly performing the five key elements of any successful maintenance program.

Those five elements involve:

OUTSIDE YOUR FACILITY

• Preventative Maintenance:

Capturing or containing the soil before it reaches the building by regularly sweeping the parking lot, parking garage, and sidewalks and at the building entryways by using an adequate system of barrier mats at entrances. An adequate barrier system includes mats installed both inside and outside the building, as well as strategically placing mats at funnel areas where traffic loads become more concentrated or at specific highly trafficked interior areas.

A system of appropriate "scrape, scrub, and wipe" mats will remove up to 10 times more soil than carpet mats alone.

With an appropriate walk-off system the first five feet will remove approximately 37% of the soil, 10 feet 52%, 15 feet 71%, 20 feet 86% and 30 feet almost 100% of the exterior soil.

Another consideration:

Areas of the country where ice melts are used. There are different types of ice melts some are more difficult to remove than others, and the volume and frequency of use will have a big impact.

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Asphalts parking lots and driveways coated with inexpensive sealers may “walk off” and discolor all flooring including the carpet. Once the damage is done, it is permanent.

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INSIDE YOUR FACILITY

• **Vacuuming/Pile Lifting:**

Regular vacuuming is the single most important part of a maintenance program. It can cost between \$500.00 and \$700.00 a pound to remove soil from carpet, once inside the facility. If the soil is removed before it becomes attached to the carpet fiber through proper vacuuming, then the cost to remove it per pound is greatly reduced. A proper vacuuming program can remove about 80% of this soil making it the most cost-effective soil removal process.

Vacuuming is designed to remove dry soil before it becomes attached to the fiber. Pile lifting will enhance routine vacuuming as well as cleaning effectiveness. It should be added as part of the overall maintenance program. The more aggressive pile lifter will help remove more stubborn, embedded soil, as well as working more effectively to lift and separate fiber so that routine vacuuming is more effective.

• **Spot and Spill Removal:**

Promptly addressing spills is the key to prevent the spill from getting into the carpet backing and causing stubborn spots that are far more difficult to clean. Quickly addressing spills helps minimize the chance of that spill becoming a stubborn stain.

• **Interim Cleaning:**

Several different methods can be utilized. If used regularly, interim cleaning can prolong the need for restorative cleaning.

• **Restorative Cleaning:**

Deep cleaning is designed to remove trapped soils. Hot water extraction is the most effective method and the only restorative method recommended by Bentley.

IDENTIFYING SPECIFIC MAINTENANCE NEEDS

Just as various areas of an office or building are subject to different uses, each type of area demands a different level of maintenance and care. Heavy-traffic areas and areas where traffic is more concentrated, such as entrances and corridors, require more frequent vacuuming and cleaning. Areas around vending machines or kitchen areas and desks need daily attention to spills and stains. Some areas may require different types of equipment for effective maintenance or cleaning.

A comprehensive maintenance program should have a color-coded diagram of the building's floor space and furniture layout plan indicating appropriate cleaning frequency rates for vacuuming, spot cleaning, pile lifting, and interim and restorative cleaning, based on the nature and concentration of traffic flow.

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MAINTENANCE TECHNIQUES

The ideal maintenance program is designed to help prevent soil from reaching the carpet and to remove soil before it causes damage. Once soil becomes compacted, vacuuming becomes less effective and more aggressive pile lifting becomes necessary.

When soiling is allowed to build-up and become compacted deep within the fiber, the abrasive combination of heavy foot traffic and compacted soil can scratch and damage the best, most durable fiber, causing color and fiber loss. Deeply compacted soil will affect cut-pile fiber twist levels and cause fiber ends to splay outward, losing resiliency and causing matting.

Once neglect results in color or fiber twist loss, full restoration becomes impossible.

To keep carpet clean and looking as nearly new as possible, this ideal maintenance program should use a combination of methods and frequencies tailored to a facility's specific needs. Those needs should be evaluated by a trained maintenance professional and based on the specific nature of soiling, traffic load, and traffic concentrations.

For instance, the first floor of a building will have maintenance needs that vary significantly from those on the fifth floor. A restaurant or a busy retail outlet will have an even greater variation of maintenance needs.

Remember, poor maintenance can cut short carpet life and adversely affect its long term performance. Failing to adhere to these guidelines in a regular routine that includes interim maintenance as well as restorative cleaning can cause irreparable damage that falls outside warranty coverage.

PREVENTATIVE MAINTENANCE

Maintaining carpet appearance means more than choosing the right cleaning method. Selecting a suitable carpet color, style and construction for the application with careful consideration of traffic load and performance expectations is the best possible start for an effective maintenance program that emphasizes prevention.

Concrete sidewalks, parking lots, and hard-surface floors do very little to remove soil from the bottoms of shoes or from the wheels of rolling traffic.

Barrier mats are essential in keeping as much soil and moisture as possible from ever entering the building.

Outside mats are designed to scrape dirt and debris off shoes while interior mats are designed to remove smaller soil particles as well as help absorb moisture.

Interior barrier mats should extend a minimum of six feet inside the entrance. A planned system of barrier mats, which also requires regular maintenance, is an essential part of any sound maintenance program.

Mats can also be effective in other interior areas including elevators, food station areas, and at stair thresholds. Barrier matting should be maintained the same way as interior carpet with severe traffic as illustrated by the frequency chart in this document. Rubber-backed mats should never be placed on carpet or other rubber floors.

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VACUUM ESSENTIALS

There is no substitute for slow, methodical vacuuming performed at the appropriate frequency with an approved vacuum cleaner, at the appropriate speed of 1.8 feet per second, four passes total for high traffic areas, two north and south, and two east and west. For moderate traffic, two passes at the same speed. This step is not a race to see how fast the area can be vacuumed. When writing a vacuum spec it's not enough to give frequencies of certain areas you must specify the type of vacuum cleaner to use and the rate of production.

Effective daily vacuuming can help reduce the need for more rigorous methods to keep the carpet's clean appearance. Vacuuming removes soil while lifting carpet fiber. In addition to removing soil, the vacuum's lifting action enhances resiliency and helps the vacuum work more effectively on subsequent vacuuming.

THE RIGHT EQUIPMENT

Vacuums with horizontal cylindrical brushes should be used and set so that brushes are always in full contact with the carpet surface. Twin-motor vacuums with independent motors for dedicated suction and brushing are preferred.

Vacuums with top-loading soil bags and HEPA filters to further contain dust are highly recommended.

Canister and backpack vacuums without motorized rotating brushes should be avoided, as well as riding sweepers with rotary brushes.

The Carpet and Rug Institute's Seal of Approval program grades a variety of maintenance equipment, including vacuum cleaners.

For a list of certified vacuums units, please visit:

<http://www.carpet-rug.org/commercial-customers/cleaning-and-maintenance/seal-of-approval-products/index.cfm>

Vacuum frequency should be determined by visual inspection and performed at least once daily.

Heavy-traffic areas such as lobbies, entryways, funnel areas, barrier mats, and areas in the direct path of weather influences may require more frequent vacuuming. Furthermore, such high use areas may require vacuuming more frequently than once a day. Keen attention to weather vulnerable areas will help prevent wet soil from being tracked throughout the building.

The proper technique for thorough vacuuming depends upon using slow, overlapping strokes and making sure that the entire carpet surface is covered. Strokes should be no longer than two to three feet in length to avoid unnecessary back strain for the operator.

PILE LIFTING

Pile lifting is an effective method for lifting crushed pile and loosening dry soil. Heavily trafficked cut-pile products need more frequent pile lifting than looped products. Pile lifting should always be used to precondition carpets for general cleaning. Pile lifting improves cleaning effectiveness. For best results, apply the pile-lifter machine against the lay of the pile.

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SPOT CLEANING

Daily removal of spots and spills helps maintain the carpet's appearance between scheduled cleaning. Immediate action against spots and spills also reduce the probability of a permanent stain. Spotting solutions should be selected as appropriate for the specific type of spot or spill.

Different chemistry should be selected for water-based and oil-based spills or spots. A different chemical will be necessary for solids, including gum. Always use spotting solutions sparingly. If the spill is wet, remove as much moisture as possible with dry, white towel or a hand-held extractor before applying any spotter. Try to remove the spot with water on a white towel or by using a hand-held extractor before using a spotting agent.

TREATING WATER-BASED SPOTS

Liquid spills should be blotted with a clean, white cloth to remove as much of the liquid as possible. If the spill is semi-solid or has hardened, gently scrape away with a spoon or spatula and then blot the spot with a damp white cloth. Always work from the edge of the spot towards the center. Never rub across a wet spill in a manner that causes the stain or contamination to be spread outward from the original area. If the spot remains, try **Grab Carpet Spotter** or go to the Carpet and Rug Institutes "Spot Solver" (<http://www.carpet-rug.org/commercial-customers/cleaning-and-maintenance/spot-solver.cfm>) for an excellent reference that should have an approach to help safely remove the spot.

Apply a minimal amount of the recommended solution. Use a soft-bristle brush and gently agitate the solution by hand. Rinse the affected area with water and allow the area to dry for about one hour and then vacuum. Prevent traffic on the freshly cleaned area until the carpet is completely dry.

Please remember to blot the spot. Do not brush the spot aggressively.

TREATING OIL-BASED SPOTS

When removing oily stains such as grease, tar, or asphalt, try **Grab Grease and Oil Remover**, always check for color fastness by testing in an inconspicuous area of the carpet. Apply **Grab Grease and Oil Remover** directly onto the spot. Again, do not rub across the spill, but wipe gently from the outer edge toward the center of the spot. Repeat the procedure until the spot has been removed. Rinse with water and allow the area to dry about one hour and then vacuum. Protect the freshly cleaned area until the carpet is completely dry.

Please note: A small, portable hand-held extractor can simplify the task of flushing residual solution from spots and spills.

SPOT REMOVAL GUIDE

Please refer to the Carpet and Rug Institutes "Spot Solver" to remedy a wide range of the most typical causes of carpet spotting. The Spot Solver can be found at <http://www.carpet-rug.org/residential-customers/cleaning-and-maintenance/spot-solver.cfm>.

If you have further questions, please call Bentley at 800.423.4709.

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INTERIM CLEANING

DRY EXTRACTION

Dry compound extraction, such as **Grab Dry** from **XL North**, is a safe, easy, and effective method for performing maintenance on a regular basis. The procedure uses a moist, powder-like compound that does not leave the carpet excessively wet, thus allowing immediate access and traffic once the procedure is complete. This cleaning method typically has the lowest production rate and is the most expensive method of carpet cleaning. Dry compound cleaning eliminates wicking and does well with oily spots and soils. It is considered the safest cleaning method.

The technique for dry compound extraction is as follows:

1. Thoroughly vacuum the carpet two passes at 1.8 feet per second at 2 to 3 feet in length.
2. If carpet is not heavily soiled proceed to step 4.
3. If needed, use a pre-spray like **Grab Carpet Spotter** and allow 10 minutes dwell time, spray evenly and heavy enough to stay damp for 20 minutes using a pump-up or electric sprayer. Do not over spray onto other surfaces, walls, or furniture.
4. Agitate carpet with counter rotating brush machine with the appropriate brush stiffness at 1.5 feet per-second in a V or W pattern. The soil load will determine the number of passes. Continue this step until you can visually see the soil separation from the fiber.
5. Spread the dry compound evenly on carpet making sure not to clump the product use one pound of product for every 150 square feet. Apply in a small area not to exceed 30' x 30' the dry compound must stay moist until it can be agitated into the carpet
6. Agitate the compound into the carpet at 1.5 feet per-second at 2 to 3 feet in length in a V or W pattern.
7. Allow compound to completely dry approximately 30 minutes to one hour.
8. Vacuum up the dry compound with two to three very slow passes, 1 foot per second make sure all visible compound is removed

Please note: This process can be even more effective when the carpet is first pile lifted and vacuumed prior to spreading low-moisture cleaning compound.

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LOW-MOISTURE CLEANING

ENCAPSULATION APPLICATION

The Encapsulation (or crystallizing) method of maintenance uses a liquid (like **Liquid Grab Green**) that breaks down and encapsulates sticky soils, then then dries to a crystal-like powder that is easily vacuumed away. Encapsulation cleaners should be applied and used as follows:

1. Thoroughly vacuum the carpet two passes at 1.8 feet per-second at 2 to 3 feet in length.
2. Spray evenly and heavy enough to stay wet for roughly 20 minutes using a pump-up or electric sprayer. Carpet must stay wet until the agitation process can be completed. Do not over-spray onto other surfaces, walls or furniture.
3. Agitate carpet with counter rotating brush machine with the appropriate brush stiffness at 1.5 feet per-second in a V or W pattern. The soil load will determine the number of passes. Continue this step until you can visually see the soil separation from the fiber.
4. Thoroughly vacuum the carpet two passes at 1.8 feet per-second at 2 to 3 feet in length.

FILMER APPLICATION

Filming encapsulates, like **ResisTech 5**, are technically cleaners but should be viewed also as a fiber treatment. Filmers do encapsulate soils but are not designed to completely release during the vacuuming process. Filmers release or "shed" over time from foot traffic and multiple vacuuming. The soils attach to the treatment on the fiber not the fiber itself, so when the coating separates through vacuuming or foot traffic it only removes a small amount of the treatment, leaving behind more material to which soil can cling, thus repeating the process. For the best results, this method should only be applied to clean carpet preferably after a hot water extraction method was used.

This method will keep the carpet the cleaner than any other cleaning method over a set period of time. And when used in conjunction with Hot water extraction and low moisture encapsulation cleaning, this method will be the most cost effective of all maintenance cleaning programs.

The application process is the same as encapsulation application.

Please note: Both applications can be performed using sprayers or can be applied as a foam.

BONNET CLEANING

Avoid bonnet cleaning. Using a bonnet or any other type machine that rotates in a motion parallel to the flooring surface to clean or dry carpet is not recommended and may void warranty coverage. Low-speed rotary cleaning methods must be approved by Bentley.

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HOT WATER EXTRACTION TRUCK-MOUNT/BOX EXTRACTORS

This method of cleaning has the ability to remove the most amount of soil (up to 95%), depending on the type of equipment and process used. This method can be slow and labor intensive, with more challenges compared to other methods.

1. Before starting this method of cleaning make sure the HVAC system stays on until the carpet is totally dry.
2. Check for any occupancies that may have a chemical sensitivity before using any carpet pre-spray.
3. Always vacuum and pile lift thoroughly before beginning any carpet cleaning method. This is especially important with hot water extraction in order to remove as much dry, loose soil as possible prior to adding water to the carpet.
4. Place wet floor signs at all transition points, from carpet to hard surface.
5. Pre-spray with a traffic lane cleaner such as **Grab Nylon Pre-Spray** or **ResisTech HWE** (a pH between 9.9 and 4.5). Spray heavy enough to keep carpet wet until the carpet can be extracted. Use a pump-up type or electric sprayer with no more than 60 psi (so pre-spray will not aerosolize). Do not over spray on any furniture, walls, or other floor surfaces.
6. Allow to penetrate for 10 minutes.
7. Agitate using a counter-rotating brush machine with the appropriate brushes at a 1.5 feet per second rate, use 2 to 3 foot long strokes in a V or W pattern continue this process until you can visually see the soil separate from the fiber.

All portable extractors should be plugged into a ground fault circuit interrupter. Extract using a carpet wand with straight forward and backward passes (NO V or W pattern) at a rate of 1.8 feet per second, overlap each stroke by 1 inch (use **Grab Crystallizing Acid Rinse** in fresh water tank when using high (9.0-9.9) pH cleaners). On restorative cleaning use multiple passes and finish with 1 dry pass. Continue to pull the wand toward you another 3 inches after releasing the spray trigger to insure all water removal.

Use air movers to help dry the carpet especially at transition points.

Self-contained water extraction equipment (walk behind, pull back, ride on)

This water extraction cleaning method has average-to-good soil removal somewhere between low moisture and hot water truck mount/box extractors. However, it has a much higher production rate compared to truck-mount or box extractors and about the same as low moisture encapsulate cleaning.

Steps for self-contained extraction equipment:

1. Before starting this method of cleaning, make sure the HVAC system stays on until the carpet is totally dry.
2. Check for any occupancies that may have a chemical sensitivity before using any carpet pre-spray

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3. Always vacuum and pile lift thoroughly before beginning any carpet-cleaning method. This is especially important with water extraction in order to remove as much dry, loose soil as possible prior to adding water to the carpet.
4. Place wet floor signs at all transition points from carpet to hard surface.
5. Pre-spray with a traffic lane cleaner Such as **Grab Nylon Pre-Spray** or **ResisTech HWE** with a pH between 9.9 and 4.5 (Spray heavy enough to keep carpet wet until the carpet can be extracted). Do not over spray on any furniture, walls or other floor surfaces.
6. Allow to penetrate for 10 minutes.

Extract

All portable extractors should be plugged into a ground fault circuit interrupter. Overlap each pass at least 3 to ½ inches depending on how soiled the carpet is.

Use a **Grab Crystallizing Acid Rinse** in fresh water tank when using high (9.0-9.9) pH pre-sprays. For best results do not add cleaning solution to fresh water tank.

Use air movers to help dry carpets especially at transition points from carpet to hard surfaces.

THE RIGHT CLEANING SOLUTIONS

Bentley recommends the **Grab** carpet-care system by **XL North** and also the **Resistech** Carpet Maintenance Treatment by **Antron**.

However, if you choose to use others here are some things to consider:

Some commercial carpet cleaning solutions are very harsh and can damage carpet fiber. Only use cleaning chemicals that meet the basic standards outlined here.

It's also important to evaluate each product prior to widespread use by applying in a small inconspicuous area prior to widespread to prevent the possibility of damage. Bentley carpet can be maintained using a number of widely recognized carpet cleaning agents that are readily available. However, cleaning solutions that have earned the Carpet & Rug Institute's Seal of Approval are preferred.

The Carpet and Rug Institute uses an independent testing laboratory to evaluate cleaning chemistry based on the following criteria:

- Overall cleaning effectiveness; this ensures that the product removes soil and spots better than plain water.
- Rate of re-soiling; this ensures that the product does not attract dirt to the cleaned areas faster than the rest of the carpet.
- Chemical pH; a more neutral pH ensures that carpet dyes and fibers are not adversely affected.
- Surface texture change; the product must leave the carpet pile minimally changed after repeated cleanings.
- Optical brighteners; none are allowed, as they can leave some patches of carpet lighter than the rest.
- Colorfastness; products must not be so aggressive that they cause a color change in the carpet.

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For a list of these certified cleaning solutions see the Carpet & Rug Institute's website at: http://www.carpet-rug.org/commercial-customers/cleaning-and-maintenance/seal-of-approval-products/cleaning-solutions-list.cfm?product_type=0&manuf_id=0

Avoid products with pH levels over 9.9 for nylon and a maximum of 8.5 for wool. Also, make sure that cleaning solutions for either nylon or wool are free of toxic or flammable solvents. Detergents designed for use in hot water extraction equipment should not contain an oil-based de-foamer and caution should be used with the amount of detergent added. Oil-based de-foamers have the potential to leave oily residues and adding too much detergent could leave excess detergent on the carpet. Both scenarios will lead to rapid re-soiling and create a need for more frequent cleanings. In addition, cleaning solutions containing optical brighteners should not be used. Optical brighteners can adversely affect the coloration of carpet and lead to premature aging or yellowing of the carpet. Cleaning solutions used for interim and/or restorative cleaning should be tested for sticky residues that may cause re-soiling. To test a solution, pour a small amount in a clean glass dish. Allow the solution to air dry completely (24 hours minimum). Break up any hard residue on the surface of the glass dish and examine it. If the residue can be characterized as dry powder, dry flakes, or dry crystals, the solution is acceptable. If the residue appears oily, greasy, sticky, or in waxy flakes, the solution is not acceptable since it would likely contribute to rapid re-soiling. Spotting solutions should be used as needed and should be flushed out with clean water once the spot has been treated.

MAINTENANCE EQUIPMENT

Using the right equipment is as important as using the right cleaning solution and the best techniques. These guidelines are intended to provide a proper framework for minimum basic maintenance designed to maximize a carpet investment. Equipment should be selected from those units tested and certified by the Carpet and Rug Institute's Seal of Approval program.

- Vacuums: Select a dual-motor, commercial-grade vacuum cleaner bearing the Carpet and Rug Institute's Seal of Approval/Green Label Certification program. Top-loading dust bag machines with HEPA filters are strongly recommended. Battery-powered vacuum cleaners are not recommended.
- Low-moisture applicator: Use only those units with counter-rotating brushes bearing the Carpet and Rug Institute's Seal of Approval.
- Hot water extractor: Truck-mounted extraction units generally provide optimal performance, but self-contained units are more mobile and can be highly effective in most commercial applications. Use only those units bearing the Carpet and Rug Institute's Seal of Approval.

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CARING FOR WOOL CARPET

Wool is a natural protein fiber obtained from sheep. It is sensitive to color change, yellowing, and degradation when exposed to direct sunlight and it has a narrow pH range for cleaning. Wool cleans best between a pH of 5 and 8.5. The cleaning chemistry must not contain bleaching agents or optical brighteners. Temperature in cleaning wool should never exceed 140 to 150 degrees and excessive agitation when used with high temperatures should be avoided. Wool can absorb up to 33% of its weight in moisture, so it is important not to over wet the carpet and to allow ample time for drying. Below are some guidelines that should be followed.

1. Use a cleaning solution with low alkalinity (pH of 8.5 or less). Alkaline cleaning solutions pH above 8.5 may contribute to browning of fibers.
2. Select a solution that leaves no sticky residue following drying.
3. Do not use cleaning products with added bleaches or dyes. Full-strength application of bleach or cleaners containing bleach will dissolve wool fibers. Weakened solution of bleach or cleaners containing bleach can release fiber dyes and discolor the wool carpet completely.
4. Regular vacuuming is crucial to prevent soil from penetrating to the base of the fibers. Wool has an inherent property that suspends soil near the top of the pile on the surface of the carpet face. Regular vacuuming will remove this surface soil and dirt, preventing it from working into the face and abrading/wearing the fibers.
5. Care should be used when vacuuming shag carpeting. A vacuum without a beater bar or rotary brush should be used for this style of carpet. This will prevent damage to carpet or vacuum. High-end vacuums have separately controlled brushes or beater bars. These should be off when vacuuming. Check vacuum bag frequently as loose fibers are long and tend to clog the vacuum when approaching full.
6. For spot cleaning, act quickly and blot it up with a clean cloth or paper towels. Then use a towel dampened with lukewarm water to remove the substance completely. You can replace water with a solution of three parts of water and one part white vinegar. This solution will not cause any damage to your carpet, but helps to dilute the stain. Blot the area continuously with a dry cloth and never leave any wet spots. Avoid rubbing or scrapping the carpet for stain removal. This can cause breaking down of the fibers.
7. Wool offers excellent encapsulation release properties, which makes it an ideal fiber for dry and low moisture cleaning. These encapsulation products, like **Grab Crystallizing Encap, (ADD) Grab Carpet Spotter, and Liquid Grab Green** from **XL North** can be used (see "Interim Cleaning, Encapsulation Method for details on process)sprayed onto the carpet surface, agitated, and then vacuumed to remove the cleaning product and the attached soil. Use caution with overly aggressive agitation. Damage to wool carpet is generally attributed to over wetting, too much agitation, and improper chemical selection.

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NEED MORE?

For more information about carpet maintenance, visit our website at www.bentleymills.com or www.xlnorth.com, or call 888.530.2259.

Bentley is also a Starnet Worldwide Commercial Flooring Partnership partner. We recommend the Starnet Maintenance Guidelines for further reference or assistance with a specific project. Visit www.starnetflooring.com for details.

Additional sites for reference:

1. Carpet and Rug Institute: www.carpet-rug.org
2. The Institute of Inspection, Cleaning, and Restoration Certification: www.iicrc.org

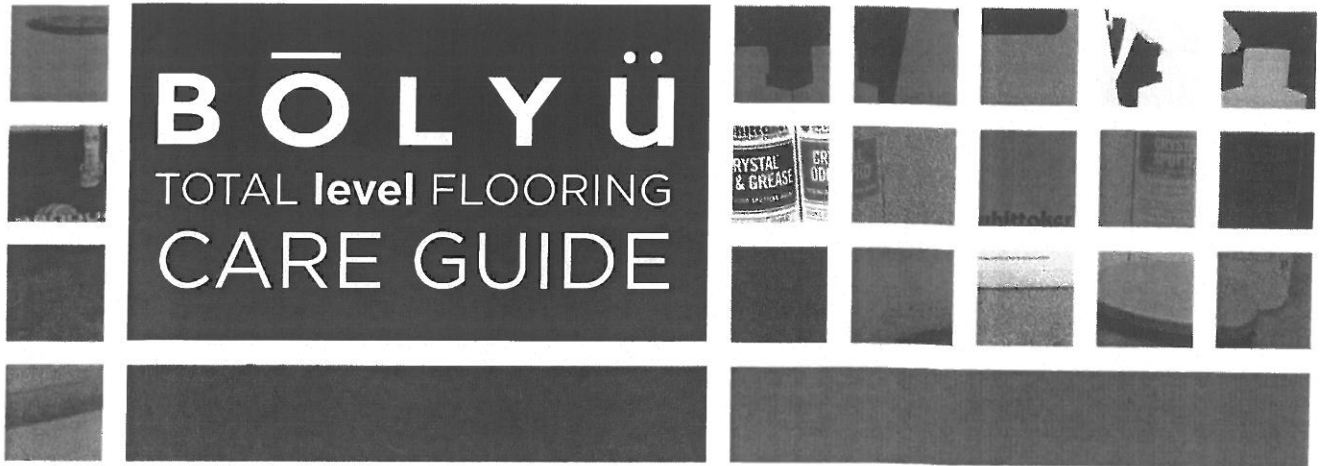
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Traffic, Soil Rating	Carpet Owner Site Maintenance		Professional Cleaning Restoration Service	
	Vacuuming	Spot Cleaning	Interim Maintenance	Restoration Maintenance
Light ▪ Private offices ▪ Cubicles ▪ 500 traffics or less daily	Twice or more each week	Perform when vacuuming as spots, spills occur	Once per year	Once per year; should include pile lifting
Moderate ▪ Secondary hallways ▪ Share offices ▪ Conference rooms ▪ Classrooms ▪ 500-1000 traffics daily	Once daily	Perform when vacuuming as spots, spills occur	Twice per year; should include pile lifting at least twice or more	Twice per year; should include pile lifting at least twice or more
Heavy ▪ Common entrances ▪ Elevators ▪ Elevators lobbies ▪ Main hallways ▪ Break rooms ▪ Mail rooms ▪ Patient rooms ▪ Waiting areas ▪ 100-2,500 traffics daily	At least once daily; some areas will require more.	Perform when vacuuming as spots, spills occur	Monthly; should include pile lifting	Four times annually; should include pile lifting
Severe ▪ Common entrances when snow and rain are factors ▪ Cafeterias and any food-service areas ▪ Heavy-traffic load funneled into concentrated areas ▪ 2,500 or more traffics daily	At least once daily; some areas will require more.	Perform when vacuuming as spots, spills occur	Weekly Should include weekly pile lifting. More frequent pile lifting may be needed to contain tracked soiling	Monthly Should include pile lifting
This grid is intended as a guideline that should apply as a general minimum in most commercial applications. There will be exceptions where frequencies will need to be adjusted by site needs.				

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PROACTIVE CLEANING FOR THE HEALTH OF THE **level** FLOORING AND END USER

Without regular removal, dirt and soil accumulates to grind and permanently damage fibers, so **level** flooring can “ugly out” before it’s time. **level** by its very nature, will mask soil, stains and abrasion to a certain degree, unlike hard flooring surfaces that readily reveal these symptoms

Proactive cleaning is preventive maintenance before the carpet looks dirty, instead of reactive cleaning after the carpet is visibly soiled.

indicating the need for immediate maintenance. It is for this reason **level** must be proactively maintained before soiling becomes noticeable to prolong the appearance and life of your **level**

flooring.

Proactive cleaning is preventive maintenance before **level** looks dirty, instead of reactive cleaning after **level** is visibly soiled. It is the foundation of Beaulieu Commercial Total Solution **level** Flooring Care Guide that proactive daily, interim and scheduled maintenance can reduce or eliminate the cost and time of reactive restoration required for extreme cases of badly soiled or damaged **level** while extending the life and appearance of **level** itself.

Reactive restoration involves water extraction with aggressive agitation followed by thorough rinsing and pile grooming. This procedure may need to be performed several times before any improvement is noticeable. Proactive cleaning provides the best possible **level** appearance day after day, extending replacement due to appearance.

Not only is the proactive nature of cleaning important, so is the overall environmental friendliness of the process. Beaulieu Commercial is committed to the environment. We only recommend cleaning systems that are environmentally friendly which is described as containing minimal to no VOC’s, biodegradable, non-toxic, non-flammable, non-hazardous and safe for the environment.

level can act as a filter that traps and keeps dust and dirt out of the air. This can be a significant health benefit since most people spend a great deal of their time indoors. When removing contaminants from **level**, it’s important to use equipment that will prevent re-circulation of dust back into the air.

This guide is organized by cleaning frequency (daily, interim, and scheduled). Depending on frequency and traffic, there are different techniques and tools recommended for best results in your particular facility. All chemicals used must have a pH level of less than nine. Do not use chemicals containing optical brighteners or deliminene (orange terpenes).

DAILY CLEANING

Daily cleaning is necessary for heavy, medium, and light traffic areas, and includes the following:

- Daily vacuuming of walk-off mats.
- Daily vacuuming of track-off, funnel, and main traffic lanes. In some instances, frequency may be greater.
- Immediate spot removal with emulsification and agitation, extraction, or blotting to guard against permanent staining.
- Recommended Spotters: R.E. Whittaker Co.(Crystal® Spotting Kit & Crystal® Spot Tool) or Windsor Ind. (Pro Spotting Kit)

Cleaning Walk-off Mats As Front Line level Flooring Protection

The first step toward clean **level** is preventing dirt from getting to the **level**. Since 80% of all soil is brought from outside on the bottom of shoes, Beaulieu Commercial strongly recommends walk-off mats at all entry ways and transition areas where soiling is likely. Mats trap or localize dirt, and the longer the mat, the more dirt trapped. Daily vacuuming and frequent cleaning of mats will optimize mat efficiency and provide front line protection to keep **level** flooring cleaner longer.

Recommended Vacuum: ProTeam (ProForce 1500XP) or Windsor Industries (Versamatic Plus)

Vacuuming Efficiently And Effectively

Vacuuming - removes 90% of dry soils that accelerate wear and fiber abrasion.

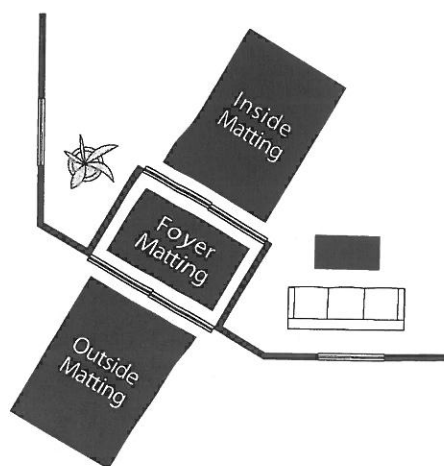
Vacuuming is a powerful method for preserving **level** life and appearance. The first step in vacuuming is selecting the equipment best suited to your requirements and preferences.

Two-motor Vacuum

In a two-motor vacuum, there is a separate motor for vacuuming and beater brush drive. Each motor is sized and configured to optimize the specific function. Operation is generally quieter and dirt pick-up more effective than single-motor vacuums. We recommend a two-motor vacuum for all traffic levels.

INTERIM CLEANING

Interim cleaning bridges the gap between routine vacuuming and restorative wet extraction. It is the most important component of the total maintenance program relating to **level's** appearance. This is due to two factors - 1) it reduces the oily soils that accumulate on **level** fibers and 2) it lifts and opens the **level** pile, which improves routine vacuuming's ability to remove dry soils. If oily soils are not minimized, then fibers become matted down and stuck together. If this is allowed to occur repeatedly,



then even restorative wet extraction becomes incapable of recovering an acceptable appearance, which leads to early **level** replacement. See Fig. 1 below.

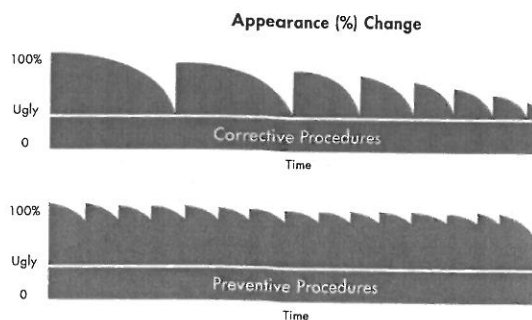


FIG 1

The recommended process for interim cleaning is low moisture encapsulation. It incorporates a cylindrical brush machine (Fig. 2) to agitate an encapsulating pre-spray chemical solution. The chemical solution dries (Fig. 3) and encapsulates the oily soils allowing a dry vacuum to recover these soils that had been stuck to the **level** fibers.

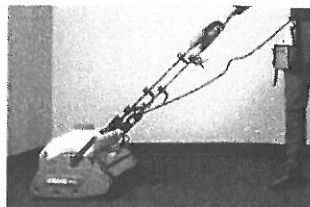


FIG 2

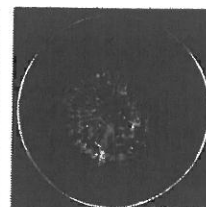


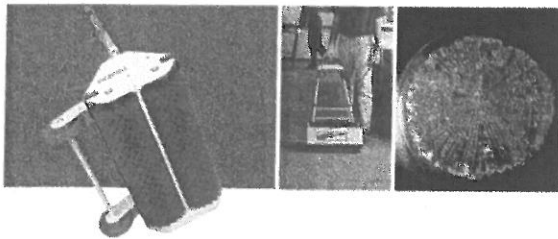
FIG 3

Recommended Low Moisture Encapsulation Method

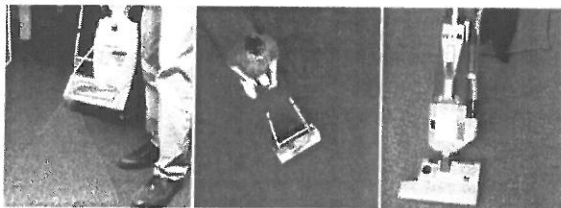
Step 1: Spray a diluted chemical solution onto **level** fibers.

Step 2: Agitate immediately or at same time as spraying, using the soft or medium stiffness brushes. Please avoid using the stiffest brushes.

Step 3: Vacuum, when **level** is completely dry or, at the next scheduled time. **level** is dry in as little as 30 minutes, allowing less disruption in areas during operating hours. Productivity rates for low moisture encapsulation range between 3,000-15,000 square feet per hour depending on equipment being used.



The Crystal Dry chemical action breaks down the sticky and oily residue that attracts soil on contact. The GLS machine works the Crystal Dry deep into the pile and loosens foreign solid materials, lifting the carpet pile at the same time. As the Crystal Dry chemicals dries, it encapsulates the soil in crystals that are then dry extracted by vacuum. The entire interim cleaning process is pictured below



Spraying

Scrubbing

Vacuuming

Other comments

Beaulieu Commercial recommends chemical pre-sprays, which have received The Seal of Approval of the Carpet & Rug Institute. Additionally, while not required we recommend that the pre-spray be Green Seal certified for reduced environmental impact. By using a cylindrical brush machine during regular interim cleaning there is no need to perform pile lifting as a separate operation with a separate piece of equipment.

Recommended Interim Equipment and Chemistry: R. E. Whittaker Co. (Smart Care® machines and Crystal® brand chemistry).

Recommended Equipment & Chemicals: R.E. Whittaker Company (GLS Crystal Dry, pictured on the left)

Recommended Vacuum: ProTeam (Proforce 1500XP) Windsor Industries (Versamatic Plus) or comparable two-motor vacuum

Beaulieu Commercial does not recommend the use any type of 'bonnet' or rotary shampoo cleaning method for Bolyu or Aqua **level** brands. **Use of the 'bonnet' method may void all warranties.**

SCHEDULED CLEANING

Scheduled periodic overall deep cleaning with hot water extraction cleans to the base of the fiber. It is our recommendation that on new **level** installations hot water extraction be performed only with clean, clear water and when necessary, a pH adjusted rinse (depending on pH of carpet fibers) for best long-term results.

DEEP RESTORATIVE CLEANING

The restorative cleaning process is capable of removing the highest amount of accumulated soil. Beaulieu Commercial and other major fiber producers recommend hot water extraction for the periodic deep cleaning maintenance process. Equipment is used to spray water under high pressure and usually at high temperature to loosen embedded soils and flush them out of **level** fibers with suction. The variety of equipment ranges from truck-mounted high-powered machines to portable machines that use a hose and wand or self-contained extractors.

The restorative cleaning process is performed by spraying a chemical solution onto **level** fibers and immediately removing with suction. Hot water extraction equipment is then used to rinse

level fibers of the soils and chemical solution. **level** fibers should dry in 2-12 hours depending on indoor environment and outdoor climate. It is recommended to operate HVAC system and utilize air movers when possible to speed drying process. Productivity rates range from 500 (hose & wand)-10,000 (large ride-on) square feet per hour depending on equipment used. Beaulieu Commercial recommends hot water extraction equipment, which has received The Seal of Approval of the Carpet & Rug Institute.

Recommended Extraction Equipment & Pre-Sprays: U.S. Products (Cobra Plus Series); Windsor Ind. (Commodore or Dominator series); and R. E. Whittaker Co. (Smart Care® machines for agitation & Crystal® Extract pre-spray).

level Tile Extraction Requirements

level flooring must only be extracted using 100 psi. max and not to exceed 100° at wand. Exceeding these limits may disrupt adhesive bond on perimeter of tiles.

Recommended Hot Water Extraction Methods

Hot water extraction is disruptive and should only be performed after every 3-6 interim cleaning cycles.

Step 1: Spray a diluted chemical solution onto **level** fibers.

Step 2 (optional): Agitate with a cylindrical brush machine to carry chemical solution into the fibers. This step pre-loosens the soils and permits maximum contact between chemical and soils. It

Recommended Extraction Equipment & Pre-Sprays: U.S. Products (Cobra Plus Series); Windsor Ind. (Commodore or Dominator series); and R. E. Whittaker Co. (Smart Care® machines for agitation & Crystal® Extract pre-spray).

also opens and lifts **level** fibers to promote better extraction function.

Step 3: Allow a dwell time of at least 10 minutes to provide time for emulsification of oily soils prior to extraction.

Step 4: Operate hot water extractor to loosen embedded soils and flush them out of **level** fibers. It is our recommendation that on new **level** installations hot water extraction be performed only with clean, clear water and when necessary, a pH adjusted rinse (depending on pH of **level** fibers) for best long-term results. You can cut dry time in half by making extra dry passes with the extractor and directing an air mover onto wet carpet.

Do not over wet **level**. Over wetting **level** causes wick back, which will allow spots to reappear. **level** must also be 100% dry before foot traffic commences to prevent rapid re-soiling.

When To Use Defoamers

If foaming occurs, put a small amount of defoamer into the recovery tank of the extractor. Spraying defoamer onto the inner wall of the recovery tank can give faster contact with foam as it enters the tank.

Warning: Never put defoamer into the solution tank. This can clog the spray jets. Also, defoamer residue on the carpet will cause rapid resoiling.



SPOT REMOVAL – 7 RULES FOR BEST RESULTS

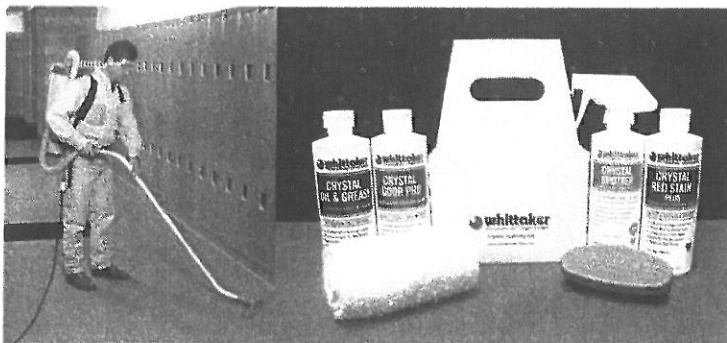
Spot removal can be one of the most confusing and frustrating aspects of **level** care. Improperly treated or ignored spots can destroy expensive **level**. The following seven rules can help simplify the challenge.

Seven Rules of Spot Removal:

1. The faster you get to a spot the better for removal. At the minimum, spot removal must be a daily routine.
2. Know the fiber make-up of your **level**. Most commercial **level** uses solution-dyed polyester fibers. IICRC certified professional cleaners have simple tests that can determine fiber type for you.
3. Know and recognize the common spots in your facility. Keep a spotting kit on hand with a general purpose spotter and specialty spotters for spots specific to your area of responsibility. Offices, for example, often have coffee or copier toner spots. Hospitals commonly have blood or betadine spots. You can expect coffee, tea, and red food dye spots in retail or hospitality facilities. Nursing homes commonly have urine stains. Gum stains are common in public facilities.
4. Many spots are concentrated areas of general soil tracked into an area. A general purpose water-based spotter will remove these.
5. Greasy spots and tar are best removed by an oil or solvent-based spotter.
6. Protein or fatty soils such as vomit, feces, or blood can be effectively removed with an enzyme-based spotter.
7. When applying a spotter, never rub the spotted area. Always carefully blot the spot with a cloth. To help prevent resoiling, use a spotting water extractor to thoroughly clean the spotted area after blotting.

Recommended Spotting Kits: R.E. Whittaker Co. (Crystal Dry Spotter & Carpet Roamer)

Recommended Spotting Kits: Windsor Industries (Pro Spotting Kit & Presto spotting extractor)



YOUR MAP TO TOTAL SOLUTION CARPET CARE

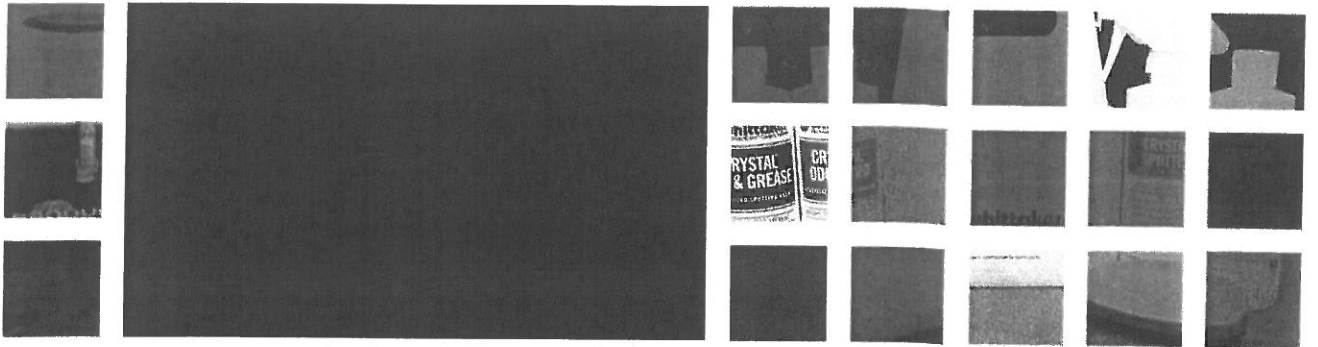
There are many ways to clean commercial **level**. To determine the best for your requirements, you should map out the types of traffic in your facility's areas. Using a copy of your building's floor plan, categorize and label traffic areas as heavy, medium, or light.

AMOUNT OF TRAFFIC	TRAFFIC	VACUUM FREQUENCIES	INTERIM CLEANING FREQUENCIES	DEEP CLEANING FREQUENCIES
Light	Office area with 1 worker	2-3 Times per week	Two to Four times a Year	Every 12-18 months
Moderate	Up to 500	Daily	Quarterly	1-2 times per year
Heavy	500-1000	Daily	Every Other Month	2-4 times per year
Extra Heavy	1000-2000	Daily	Monthly	4-6 times per year
Extremely Heavy	Over 2000	Twice Daily	Weekly to Monthly	6-12 times per year

*The term "traffics" means each time one person walks in the area. The same person walking in the same area 20 times a day equals 20 traffics.

Note: Spotting maintenance should be performed on a daily basis.

You are now on your way to total solution **level** care provided by your partner in business, Beaulieu Commercial, in an effort to increase your return on investment of your floor coverings. For additional technical information pertaining to installation, adhesives, maintenance, specifications and warranties please see our website at bolyu.com or feel free to contact technical services at 800 451 1250.



P.O. Box 1447 • 1996 Highway 225 South • Chatsworth, GA 30705 • 800 451 1250

Lifetime Commercial Limited Warranty

Modular Carpet

This warranty begins when the carpet product is installed by Masland authorized installation professionals in accordance with Masland Contract's current installation specifications, including the use of Masland Contract adhesives and sealers, if applicable. Providing care recommendations are followed, the warranty continues for the useful life from the date of the original installation. The warranty is further defined as the period the carpet is owned and maintained by the original end-use purchaser. The basis of any warranty related claim is the original Masland Contract invoice or the original Masland Contract dealer invoice. If these specifications and procedures are not followed, a standard two-year warranty against manufacturing defects will be in effect as well as any further protection offered by the fiber producer. *Installation specifications and carpet care recommendations can be obtained from your dealer or Masland Contract Information Center at 1.888.633.4770, or on the Masland Contract web site at www.maslandcontract.com.*

TUFT BIND
Masland Contract warrants that its high performance modular carpet will provide tuft bind strengths consistent with accepted industry standards for these products. Any failure to perform with respect to acceptable tuft bind will be independently evaluated and the product replaced by Masland Contract if a product defect is responsible for substandard performance. Specific product and performance criteria may be noted and registered as part of this specific warranty.

EDGE RAVEL
Masland Contract warrants that under normal use, Masland Contract high performance modular carpets will not edge ravel.

BACKING DELAMINATION
Masland Contract warrants that, under normal use, the backing will not delaminate. Masland Modular Carpet will not shrink or stretch under normal conditions during the lifetime of the product. This also warrants against cupping, doming, curling or dishing of the Modular Carpet.

SMOKE TEST
Masland Contract warrants that its high performance Modular Carpet will generate less than the generally accepted maximum rating of 450 specific optical density for smoke in the flaming mode, when tested in accordance with ASTM Test Method E-662 (NFPA 258). See the specific test report for each high performance product.

STATIC BUILDUP
Masland Contract warrants that its high performance Modular Carpet prevent static buildup in excess of 3.5 KV when tested using AATCC Test Method 134 at 70 degrees F at 20% R.H.

FIRE RESISTANCE
Masland Contract warrants that its high performance Modular Carpet is appropriately classified under all applicable fire codes for the specified enduses as tested under Test Method ASTM E-648. See the specific test report for each high performance product.

NOTIFICATION OF CLAIMS AGAINST WARRANTY
All claims under this warranty must be submitted, in writing, to Masland Contract, P. O. Box 11467, Mobile, AL 36671.

OBIGATIONS OF WARRANTOR

Masland Contract will, within ten working days of receipt of claim, designate a representative to inspect the standard performance and evaluate the warranty claim.

EXCLUSIONS

Any portion of the Masland Contract high performance Modular Carpet not performing as stated will be repaired to conform to the warranty. If repair is not commercially practical, Masland Contract may, at its option, replace the affected carpet or refund the proportional purchase price for the affected area. Masland Contract will pay the costs of the carpet, reasonable freight, and labor. Thereafter, Masland Contract will pay only the costs of the carpet and reasonable freight. Costs incurred for the moving of equipment, furnishings, partitions, and the like, that were installed over the Masland Contract standard performance product will be at the consumer's expense. Carpet installed on stairs or in areas subject to abnormal foot-traffic use (i.e., golf spikes, other spiked footwear, ski boots, and the like) is excluded. This warranty does not cover burns, cuts, fading, matting, pills, pulls, odor, soiling, staining, tears or damage due to improper installation or due to improper cleaning agents or methods. Incidental and consequential damages are not the responsibility of Masland Contract, and, to the extent permitted by law, are hereby excluded as to both property damage and personal injury. Replacement carpet will come only from current running line standard performance products comparable to the warranted product.

SUPPLEMENTARY LEGAL RIGHTS

This lifetime warranty gives you specific legal rights and is in lieu of all other express or implied warranties. In certain states, you may also have implied warranty rights, including an implied warranty of merchantability or fitness for a particular purpose. In any event of a problem with warranty, service or performance, your rights under both the express and implied warranties may be enforceable in an appropriate court of law. These warranties apply only in the United States and Canada.

Masland

Contract

Protect and Preserve

Thank you for choosing a Masland Carpet for your fine interior space. Carpet is a textile material and it will receive more abuse and use than any other finish in a building. In order to keep Masland Carpet products performing to their potential, you must design and implement a comprehensive maintenance plan.

Developing A Plan

To develop a proper plan, you should define the type of traffic patterns the carpet will receive.

WALK OFF AREAS- This area is normally at the entrance of the building or at a hard-surface transition where walk-off mats are found. Masland does recommend the use of walk off mats and suggests that they are regularly maintained and changed as needed. You must pay close attention to these areas as soil and other contaminants are easily transferred from the mats onto the carpet. This is likely to be the area that cleaning is required most often.

FUNNEL AREAS- These areas will receive a higher concentration of traffic and soil. Funnel areas occur where two or more traffic lanes merge together to form one concentrated lane. These areas occur in corridor intersections, doorways, and around elevators. These areas, like the WALK-OFF AREAS require more stringent maintenance procedures. Funnel areas can be subjected to significant pivoting traffic that will grind soil deep into the carpet fibers.

MAIN TRAFFIC AREAS- Large spaces that receive heavy foot traffic that is more dispersed than funnel areas.

HIGH SPILL/STAIN AREAS- Immediate attention must be given to spills as they occur. Many spills can result in permanent damage if they are not addressed immediately. These include but are not limited to: Coffee, soft drinks, red wine, mustard, oil, and fruit drinks. These areas require daily maintenance.

LOW TRAFFIC AREAS- These areas are the lowest volume of traffic and soil load such as upper floors and individual offices. These areas would have only 500 traffics per day or less and will not require as much maintenance as the four other areas.

WALK OFF MATS

- The 1st line of defense for your carpet is a walk off mat. Masland suggests a minimum of 5 feet of walk off mats be placed at every building entrance. Studies have shown that 12 feet of mat is optimal if the area will bear it. These mats need to be vacuumed at the very least, once a day. Mats should also be placed at any kitchen area transition. Regularly vacuum and clean the walk off mats as they will receive a high soil load very quickly.

VACUUMING

- The most important maintenance procedure is the removal of dry soil by vacuuming. Appropriate vacuuming is 4 slow passes back and forth in the same area. Use a dual motor upright vacuum where the brushes and suction are driven by separate motors. For best results, change vacuum bags before they become two-thirds full. Masland does not recommend vacuums with beater bars.
- **All vacuums** must be approved under the Carpet and Rug Institute's Indoor Air Quality Vacuum Cleaner Program. A comprehensive list of approved products can be found at www.carpet-rug.org. These vacuums have been performance tested and have met indoor air quality standards to help ensure that your carpet is clean and your indoor environment remains healthy.

SPOT CLEANING

- Spills and spots must be attended to with immediacy. Spills that are allowed to dry are much more difficult to remove. All spot cleaners used on Masland products must be approved by the CRI Seal of Approval Program. These products are listed at www.carpet-rug.org.
- For Synthetic fibers, cleaners should have a pH range of 5.5 to 10.0. Do not use cleaning chemicals outside of this range as damage to the fiber could result. This requirement is for all chemicals (spot cleaners, pre-sprays, and in-tank) used on Masland products. Never rub spots or spills, use a blotting action only.
- For specific Spot cleaning instructions, please refer to the Masland Spot and Spill Removal Guideline at the end of this document.

INTERIM CLEANING

- This type of cleaning is a fast high volume process that is used in between restorative cleanings. Masland suggests methods such as **Low Moisture Extraction**, a cleaning system that uses encapsulants that dry to a crystalline state and can be removed by vacuuming. **Low Moisture Compound Cleaning** is a cleaning technique that applies highly absorbent material onto the carpet face and is then agitated into the carpet and allowed to dry. The cleaning compound and soiling debris are then removed by thorough vacuuming. **Dry Foam** cleaning is conducted by a machine applying a foaming chemical onto the upper surface of the carpet and then removing the chemical and soil contaminants that were captured by the foam. All of these systems dry very quickly and cause less intrusion in an interior space than Restorative cleaning.

RESTORATIVE CLEANING

- Hot Water Extraction is the preferred method of cleaning by Masland. This method is proven to be the most effective means of removing entrapped soil and other residues. This method does require effort and will take some time to dry. Use air movement systems and the HVAC system to aid in drying time. Masland does require that all systems used on Masland Carpet be approved under the Carpet and Rug Institutes Seal of Approval Program. Masland also prefers that all equipment be at least a Silver Level cleaning system. Carpet should only be cleaned by trained technicians. IICRC Certified technicians are preferred.
- Never mix "In-Tank" solutions at greater the recommended concentrations. The most effective cleaning method by hot water extraction employs a pre-spray chemistry coupled with agitation. Always thoroughly rinse any detergents from the carpet with water only as to impede accelerated soiling. If detergent residue or build up exists, clean the carpet with hot water only.
- The use of a pile lifter will help to remove embedded soil and sandy particulate. It will also help to erect the pile fiber and renew the appearance of the carpet. Use of a pile lifter in funnel areas, walk off areas, and around elevators will enhance the appearance of the carpet.

DO NOT USE BONNET/ROTARY SYSTEMS ON MASLAND CARPET. USE OF THIS TYPE SYSTEM WILL VOID ALL MASLAND WARRANTIES.

Follow all guidelines set forth by the Institute of Inspection Cleaning and Restoration (IICRC) *S100 Standard and Reference Guide for Professional Carpet Cleaning*. This is available at www.iicrc.org

FREQUENCY OF MAINTENANCE

The table below is a guideline for the frequency of cleaning established by the IICRC. This is a very good guide for a maintenance schedule. However, each building and traffic patterns are different and modifications to the table may need to be implemented.

Traffic Soil Rating	Carpet owner/Maintainer		Professional Carpet Cleaner/Restorer	
	Vacuuming	Spot Cleaning	Interim Maintenance (between restorative cleanings)	Restorative Cleanings
Light <500 Foot Traffics per day	1 to 2 per week	Daily or as soon as noticed	1 to 3 times annually	1 to 2 times annually
Medium 500-1000 foot traffics per day	Daily in traffic areas, overall 3 to 4 X per week	Daily or as soon as noticed	3 to 6 tomes annually	2 to 4 times annually
Heavy 1000-2500 foot traffics per day	Daily in traffic areas, overall 4 to 7 X per week	Daily in traffic areas, overall 4 to 7 X per week	6 to 12 times annually	3 to 6 times annually
Very Heavy >2500 foot traffics per day	1 to 2 X daily in traffic areas. Overall 7 X per week	1 to 2 X daily in traffic areas. Overall 7 X per week	12 to 52 times annually	6 to 12 times annually

HARD SURFACE TRANSITIONS

Areas where carpet meets a hard surface are sometimes more susceptible to accelerated soiling and can become difficult to clean. This area would be similar to a walk off area and will normally require weekly attention. This is even more important in areas of transitions to kitchens or bathrooms. Well placed walk off mats will help to minimize the affect of soiling that comes in these transitional areas.

Maintenance personnel should never use hard surface cleaners on carpet. It should also be noted that buffers or rotary cleaners should never be allowed to spin on or even come in contact with the carpet. High pH cleaners used for hard surface are very likely to harm the carpet.

SPOT CLEANING GUIDE

A. WATER SOLUBLE STAINS:

First, blot thoroughly with a white cotton cloth or paper towels. Next, apply a solution of ½ teaspoon (no more) of liquid dishwasher detergent to one quart of water. A spray bottle works well. Repeat until stain is removed.

B. WATER SOLUBLE STAINS WITH ODOR:

Same as A, but treat with white vinegar before using detergent.

C. WATER SOLUBLE STAINS WITH HEAVY COLOR:

Same as A, but treat with household ammonia before using detergent.

D. GREASE: Blot as much as possible with white cloth or paper towels. Apply a volatile solvent such as Perchloroethane (dry cleaning fluid), or lighter fluid (naptha) to a white cotton cloth. CAUTION: Do not apply the solvent directly to the carpet pile as permanent damage WILL result. Use rubber gloves and provide adequate ventilation.

E. WAXES and GUMS: Freeze the stain with ice or a commercially available product in an aerosol can. Shatter with a blunt object and vacuum immediately. Repeat until spot is removed.

F. MEDICAL STAINS: Commercial preparations are available. A 5% Sodium Thiosulphate solution (from a photography store) may also be used. For stains more than a few hours old, this solution should be heated.

G. RUST: Most can be removed with a 10% solution of oxalic acid. More stubborn stains will require professional cleaning as restricted chemicals may be needed. Use of oxalic acid is not recommended for solution dyed products as damage may

result. Certain household cleaners contain oxalic acid and should be used with caution.

Masland

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Alcoholic Beverage	A	Grease (auto)	D
Asphalt	D	Grease (food)	A
Beer	A	Ink (ball-point)	D
Betadine	F	Ink (washable)	A
Berries	A	Lipstick	D
Blood (wet)	A	Milk	A
Blood (dry)	C	Mustard	A
Butter	A	Nail PolishNail Polish Remover	
Chewing Gum	E	Paint Latex (wet)	A
Chocolate	C	Paint Latex (dry)	D
Coffee	B	Paint (oil)	D
Cola Drinks	A	Rust	G
Cosmetics	A	Tea	A
Crayon Markers	D	Urine	B
Excrement	A	Vomit	B
Food Dyes	A	Wax	E
Furniture Polish	A,D	Wine	C

MODULAR
LIFETIME LIMITED WARRANTY

Modular styles with nylon face fiber are covered by a non-prorated Lifetime Limited Warranty issued by Tandus Centiva against excessive surface wear, edge ravel, zippering, resiliency loss of backing, and delamination of the secondary backing from the primary backing containing the face fiber. Lifetime is defined as the period of time during which the product is owned and maintained by the original end-use purchaser in the original indoor installation location. Tandus Centiva Modular products must be installed in accordance with the appropriate Modular Installation & Floor Preparation Instructions and must be maintained in accordance with Tandus Centiva care and maintenance guidelines. The use of Tandus Centiva primers and adhesives or approved alternatives is required. Failure to conform to these requirements will result in loss of limited warranty coverage.

Moisture and pH testing requirements and limitations are defined in the Tandus Centiva Modular Installation & Floor Preparation Instructions for each Modular product. Product or installation failure due to moisture or pH levels in excess of the limits set forth in these instructions is specifically excluded from limited warranty coverage.

Chair pads are not required, but are recommended for optimum textural performance. Absent the use of chair pads, more intensive maintenance will be required for areas in direct contact with chair caster traffic, and some degree of appearance change is to be expected.

Soiling visibility is affected by colors and patterns. Information on optimizing your selection can be found at www.tandus-centiva.com. **Appearance retention is not covered by this limited warranty.**

Excessive surface wear means more than fifteen percent (15%) loss of pile fiber weight measured before and after use.

Resiliency loss means more than ten percent (10%) loss of backing resiliency calculated using average thickness measurements of the backing of the carpet before and after use. Since resiliency recovery is not immediate and may be influenced by temperature and other conditions, thickness must be measured only after a 72-hour conditioning period.

Modular products also carry a Lifetime Limited Warranty against excessive static electricity only when installed and maintained in accordance with Tandus Centiva approved procedures. Excessive static electricity means more than 3.0 kilovolts at a relative humidity of 20% and a room temperature of 70 degrees Fahrenheit.

If these products fail to perform as described in this limited warranty, the affected area will be repaired to meet the applicable Tandus Centiva limited warranty provisions. If repair is not commercially practical or possible, Tandus Centiva may, at its sole discretion, replace the affected area or refund the original Tandus Centiva invoice cost for the affected area. If repair or replacement is required, Tandus Centiva reserves the right to utilize an independent qualified labor provider or Tandus Centiva Field Technical personnel. Replacement will be made with a product of comparable cost from the current Tandus Centiva running line of products.

This limited warranty does not cover pile shading, pile crushing, tears, burns, cuts, pilling, matting, damage due to improper installation, improper use, improper maintenance, installation over irregular surfaces, point loads in excess of 150 pounds per square inch or any other damage not expressly covered above and is subject to the applicable Tandus Centiva product tolerances, which are available upon request. **This limited warranty does not cover damage resulting from improper installation or maintenance.** Liability of Tandus Centiva is limited to the actual repair or replacement of the affected area and does not cover incidental or consequential damages. Tandus Centiva is not responsible for any expenses incurred for removal of furniture, partitioning, temporary walls or other fixtures on or around the affected area of the carpet.

All Tandus Centiva Limited Warranty and Maintenance Information can be accessed at www.tandus-centiva.com or by dialing 800-248-2878.

THE BUYER AND/OR END USER IS SOLELY RESPONSIBLE FOR THE SUITABILITY OF THE MERCHANDISE SELECTED FOR A PARTICULAR APPLICATION. TANDUS CENTIVA SHALL NOT BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY PRODUCTS DAMAGED AS A RESULT OF FORCE MAJEURE, INCLUDING BUT NOT LIMITED TO FIRE, FLOOD, OR OTHER CATASTROPHE, ACTS OF GOD, OR ANY CAUSE BEYOND THE CONTROL OF TANDUS CENTIVA.

ALL IMPLIED WARRANTIES WHICH MAY ARISE BY LAW, IMPLICATION OF LAW OR APPLICATION OF COURSE OF DEALING OR USAGE OF TRADE INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED AND EXCLUDED. ANY ORAL STATEMENTS ABOUT THE MERCHANDISE DESCRIBED HEREIN ARE NOT WARRANTIES, SHOULD NOT BE RELIED UPON BY THE BUYER, DO NOT FORM ANY PART OF THE BASIS OF THE BARGAIN, AND ARE NOT PART OF THIS OR ANY OTHER LIMITED WARRANTY. NO AGENT, DISTRIBUTOR OR REPRESENTATIVE OF TANDUS CENTIVA, EXCEPT AN OFFICER OF TANDUS CENTIVA, SHALL HAVE AUTHORITY TO AGREE TO ANY TERM, CONDITION OR PROVISION INCONSISTENT HERewith OR NOT CONTAINED HEREIN.

Invoice No.	3310846	Company Installed	Flooring Systems, Inc.
Product(s)	Maelstrom - ethos Modular	Color	33201
Project Name	Webster IBS	Total Square Yards	26.67
Project Address	8274 Big Bend Blvd., St. Louis, MO 63119		
Specific Areas Surfaced	Throughout		
Date Installation Began	June 28, 2017	Date Installation Completed	June 28, 2017


Authorized Signature

Sworn to and subscribed before me,
This 5th day of July 2017



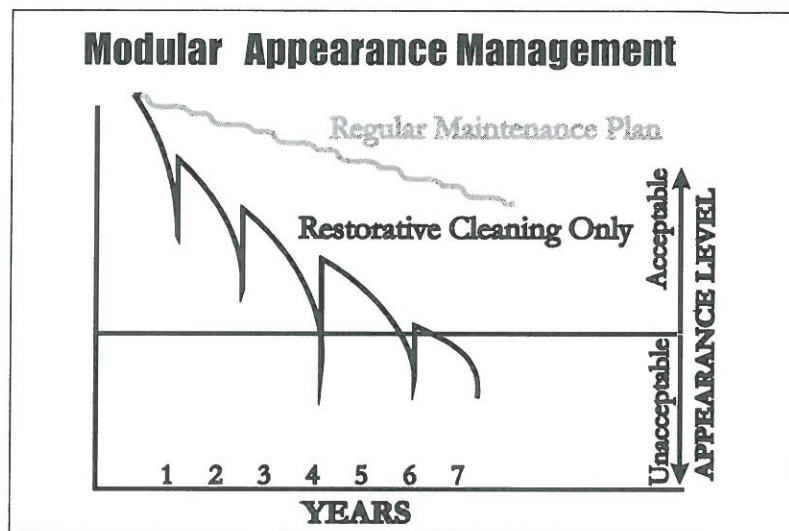

SHERRI BENNETT
NOTARY PUBLIC, WEBSTER COUNTY
MY COMMISSION EXPIRES JUNE 01, 2025

MODULAR MAINTENANCE CARE PROCEDURES

The following CARE recommendations should be implemented prior to, or immediately after the installation of Tandus Modular products.

Use and traffic patterns in a facility can vary greatly; therefore, a planned maintenance program must be designed in each facility. In addition to this initial planning, the maintenance program must be reviewed on a regular basis to adjust for changing traffic and use patterns. All modular installations require a properly designed and implemented maintenance system to maximize appearance retention.

Some areas may require a yearly cleaning, while other areas may require cleaning on a weekly basis. The ultimate goal is to maintain a high appearance level in all areas at all times and thus extend the life cycle of the modular carpet. This objective is obtained by eliminating the soiled/cleaned, soiled/cleaned cycle as expressed in the illustration below.



A total maintenance package must be initiated to supplement cleaning in order to assure customer satisfaction of the product. Deep or Restorative Cleaning typically occurs as a result of the failure to maintain any Textile floor covering selection. In essence, the better the maintenance plan, the reduced need for deep cleaning and the longer the lifecycle for modular installations. Following are recommendations for a complete maintenance package. Keep in mind, that frequencies may vary depending upon the diligence of the maintenance program and the inclusion of these essential support tools.

Developing the Plan:

This CARE maintenance program is based on both Low Moisture Primary Maintenance and Hot Water Extraction methods using minimal cleaning agents. Product construction, color selection,

entry mats, daily vacuuming, spot removal, regular cleaning, and product repair are all integral considerations of this CARE program.

Implementing a strategic plan is an essential step in developing and maintaining a successful CARE program. Maintenance is a process of soil removal designed to retain carpet appearance. Soiling is a cumulative process that can easily be controlled by vacuuming and soil localization. A facility diagram assists the plan by identifying areas of soiling before they become excessively soiled.

An effective plan includes color-coding a floor plan identifying areas of extreme, heavy, medium and light traffic areas; spot prone areas, and other areas that may require additional maintenance and cleaning attention. The color-coded diagram of the facility will assist in scheduling where to clean and how often.

The facility diagram also can be useful in selecting the cleaning method and proper equipment to perform the required tasks in each area. For example, entry areas may require daily vacuuming, weekly pile lifting, and monthly cleaning; whereas, break areas may require a hand-held, spot removal extractor for frequent spot removal. Additionally, the plan can be useful in identifying where to place entry mats.

Each maintenance staff member should be provided with a copy of the plan. The floor plan also may be used to identify newly developed tasks that occur during the course of the business day.

Preventive Maintenance:

Preventive maintenance is the most cost-effective maintenance activity that takes place. These activities include any active or passive activity designed to eliminate soil before it reaches the modular carpet. It may include careful selection of drinks in soda machines that do not contain dyes, which can permanently stain the nylon face yarns and it may include the strategic placement of additional trash receptacles.

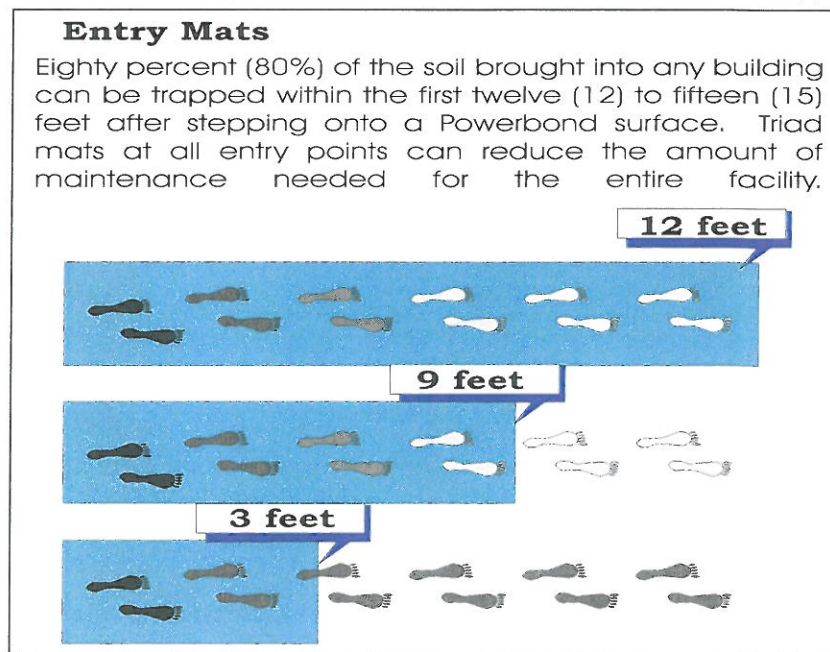
One of the most important, yet most often overlooked, preventive maintenance method is the use of transition/entrance matting systems. Up to 90% of the soil load is caused by soil tracked in from outside areas. Entrance matting is an essential part of the CARE maintenance program. The proper use of matting systems can reduce a significant amount of tracked-in soil. Matting systems should be used at all facility entrances and transition points adjoining hard surface flooring.

All matting must be kept clean to make sure they do not become a source of soil. Ideally, a duplicate set of free lay mats should be provided for all areas. Matting systems should be thoroughly vacuumed or changed weekly to ensure a clean mat is in use at all times. Entrance mats should provide at least eight to twelve footfalls of coverage.

Tandus has developed and recommends the Triad® matting system which utilizes a three-tier soil removal process to reduce soil tracked into a facility.

- Tier ONE Exterior Triad® mats- Placed at outside entrances as the initial protection from tracked-in soil. The scraping action of this mat removes excess soil and moisture from foot traffic
- Tier TWO Foyer Triad® Mats- Placed in the vestibule of an entryway. This mat features a brushing action to remove soil and moisture. Foyer mats also may be used as exterior mats.
- Tier THREE Interior Triad® mats- Placed in interior areas adjacent to entryways and other areas exposed to heavy walk-in traffic. This mat offers unique aesthetic appeal, while completing the three-tier soil removal process.

Cleaning: Triad mats are cleaned using the maintenance procedures detailed in this publication includes daily vacuuming and weekly cleaning. Once these mats become filled with soil they then become an additional source for soil. Make sure the mat is dry prior to use.



Daily Maintenance:

Daily maintenance activities include vacuuming and spot removal. These activities are critical for the success of the maintenance plan. Without an adequate plan for these activities, facility appearance will quickly deteriorate to an unacceptable level and the aesthetic value of the modular carpet will be substantially shortened.

Effective, well-functioning equipment is required for successful daily maintenance. The size and type of equipment will be determined by the requirements of the job. As an example, a wide area vacuum cleaner may be necessary for facilities with large, open areas that must be cleaned on a daily basis. A modular office may require smaller vacuum cleaners in order to clean in tight spaces.

A note on equipment care: Like any tool, keeping cleaning equipment in top working order enhances cleaning results, lowers carpet maintenance costs by extending equipment life and limits staff downtime due to equipment failure. Follow equipment manufacturer recommendations for equipment care. For vacuum cleaners, replace nylon brushes at the first sign of wear. Empty vacuum bags when they become one third to one half full to improve soil removal results. Use only original equipment manufacturer parts for consistent performance results.

Vacuum cleaners should remove adequate soil without introducing substantial particles into the air and without damaging pile yarn. It is impossible to evaluate vacuum cleaner performance based on equipment specifications alone.

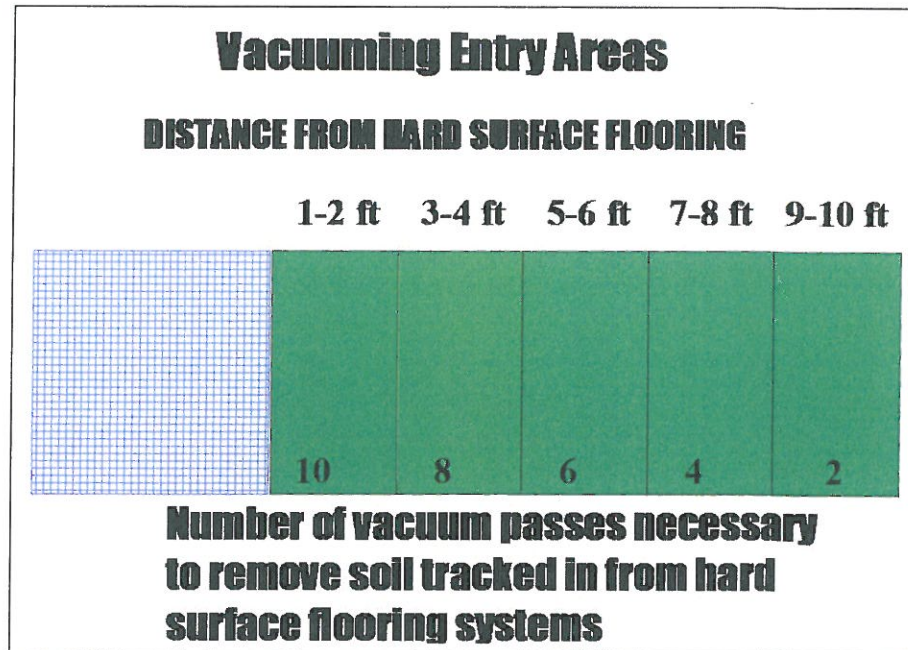
Vacuuming :

Vacuuming is the single, most important maintenance activity for modular carpet, so proper vacuuming and vacuum cleaner selection is given a high priority in the CARE maintenance program. Approximately 74%-86% of the soil deposited into carpet is dry particulate soil and may be easily removed with proper vacuuming. Dry soil can abrade and permanently damage pile yarn. Effective dry soil removal can be managed through a continuing planned maintenance program. While vacuuming alone WILL NOT keep textile floor coverings completely clean, vacuuming will remove dry (insoluble) soil that cannot be removed through regular wet extraction cleaning.

Vacuuming must play a significant part in a planned maintenance program. Cubicle spaces, Track-off areas, heavy traffic areas and entry mats should be maintained at least once **daily** using an approved vacuum. For improved indoor air quality, the vacuum should offer high efficiency filtration and should be Carpet & Rug Institute Vacuum – Green Label, Seal Of Approval Certified (www.carpet-rug.org).

A note on backpack vacuums: Backpack vacuums may be used in conjunction with an upright vacuum. These units may be used for daily vacuuming, as they have shown to provide even greater dry soil removal than upright units when used on structured backed product, such as modular tiles.

- Entry areas and areas adjoining hard surface flooring materials should receive a larger share of maintenance emphasis than other heavily trafficked areas within the facility. If an adequate job of entry maintenance is performed, dry soil can be limited to the first 12-15 feet after stepping onto the modular tiles. If dry soil can be restricted to these areas, interior maintenance can be redirected to remove surface litter only, rather than spending an inordinate amount of time in trying to remove embedded dry soil. This translates to vacuuming less square footage on a daily basis, thus reducing labor costs. It will not be necessary to vacuum every square foot each day, if entries can be maintained properly.



Spot Removal:

Spot Removal should take place on a daily basis. Each facility should plan to purchase a spot removal extractor. One of the most effective maintenance tools to be introduced in the past few years is the spot removal extractor. These 1-2 gallon portable extractors are lightweight and are available for quick removal of spot and spills. Spot removal, if performed on a daily basis, can be performed with minimal effort.



As an all-purpose spotter, Tandus recommends SYON-5 for the majority of the spills encountered on a daily basis. SYON-5 should be applied directly to the spill and agitated slightly. Extract the solution after 5-6 minutes of dwell time using fresh hot water only. Spills should be addressed as soon as they occur. The sooner removal can be attempted, the higher the probability of complete spill removal. SYON-5 can be purchased from your local Tandus Account Executive.

The following products will be helpful in removing many spots and spills:

SYON-5

Product patented and distributed by Tandus.
May be used as the first solution for all spills.
Especially effective on Water Soluble food and beverage spills.
Dilution ratio is: Undiluted; up to 1 part: 10 parts of hot tap water.

Hot Water Rinse	Used to rinse detergent residues to limit re-soil potential. Use only cold water on blood spills to prevent setting the stain. Hot water should be utilized in every other situation.
Crystal Clear or iCapsol Encapsulator	Good for water-based spills. May be used instead of SYON-5 if no fragrance is desired and no deodorization is needed.
SAF T SOLV	Bane-Clene product (800.428.9512) Non-Flammable, volatile, dry solvent. Can be used on many oil-based spills, as well as ink, gum and other solvent soluble contaminants.
Acetone	Breaks down adhesives, seam sealer etc. Use 'Caution' and follow label directions for proper use.
Spray n' Go	Chemspec product (800.428.9512) An oxidizing bleach. Works on many permanent stains by removing color from the staining agent. <u>Never use Clorox or any chlorinated bleach that will remove color from the nylon face yarn.</u> Simply dilute Spray n' Go; apply to the area and leave. Solution weakens after a few hours so do not premix more than is needed for immediate use.
Acid Rinse	Use white vinegar or a commercially available extraction rinse solution. This removes some yellowing and neutralizes many high pH detergent residues to limit re-soil propensity.

Common Cleaning Suggestions:

There are no standard frequencies that can be suggested for all facilities. Periodic cleaning is dependent upon soiling levels, traffic levels, and the quality of daily maintenance. Due to this fact, some areas may require cleaning on a weekly basis, while other areas only may require cleaning on a yearly basis.

Proper planning will help identify those areas that require more frequent cleaning. The objective should be to limit soiling to smaller areas, before they spread, rather than cleaning the entire facility. It is less costly to clean a 90 square foot entry area on a weekly basis, rather than clean a 2000 square foot outer office quarterly. This should be accomplished by trial and error, with continuous monitoring. The following are areas that are the first to become heavily soiled. These areas are where the bulk of interior soil originates.

- Entry areas – any outside entry. Asphalt sealer, dry from sidewalks, grass clippings, oily soil. These soils accumulate in entries and slowly spread deeper with the building.
- Areas adjoining hard floors- also called transition areas, these areas occur as a result of the failure to properly maintain hard floors. Even hard floors that are superbly maintained allow

finishes to be tracked to the modular tiles. Restrooms, kitchen and break areas, and tile common areas all contribute to soiling. Cleaning these areas before the traffic pattern begins to spread will lighten the maintenance load.

- Break areas- the majority of spills can be found in these areas. Spills transfer to the soles of shoes and spread throughout the facility. Shoes require about 8 steps to be adequately cleaned. This translates to about 18 linear feet.
- Soda Machines and coffee makers- areas next to refreshment areas should be monitored frequently for spills and should be cleaned semi-monthly (every other week), and before spots/ spills becomes apparent.
- Around the desks of the “neatness challenged”- Cleaning staff usually can identify the offices of those employees who seem to have difficulty in reducing spills in their areas. These areas may require more frequent inspection and more frequent spot cleaning.
- Areas of concentrated traffic- these are areas where traffic funnels to a concentrated area.
- Elevators- modular tile allows for easy removal, cleaning and replacement, as needed, if elevators cannot be maintained frequently
- Stairs- because of increased force exertion, soil from shoes is deposited more quickly and more deeply than in other areas.

Color Fading/Yellowing:

Some cleaning agents may affect dyes causing a gradual loss of color over an extended period. Optical brighteners should NEVER be used on any Tandus product. Optical brighteners can cause permanent yellowing or discoloration, and the use of any cleaning solution containing optical brighteners will adversely affect warranty coverage.

Loss of Color in small areas:

Color loss in limited areas typically may be attributed to bleaching or oxidizing agents used in facility. Some bleaching agents may be latent intruders, such as acne medications, that require several months, with heat and moisture to be activated. Others may affect dyes immediately. Typically, these color changes are permanent and cannot be reversed.

Rotary Shampooing/Bonnet Cleaning:

Is never to be used on Tandus products. As an alternative, PLEASE implement a dual cylindrical brush agitation machine. There are a few Tandus Approved machines: Windsor Industries “iCapsol Mini”; XL North/ Grab Carpet Cleaning System’s “XLerator”, Carpet Cleaner America’s “Dri-Star & Renovator” and North American Cleaning Equipment “Duplex Hydrowasher”.

The rotary action does not allow for sufficient cooling from the friction and potential yarn abrasion and permanent pile fiber distortion typically results.

Periodic Cleaning:

Tandus products provide end- users with a high performance, easily maintainable flooring options. An organized, fully implemented maintenance plan will ensure many years of

performance from Tandus products and will reduce product lifecycle costs to make them one of the most affordable flooring options available.

For enhanced performance of your new installation, Tandus has evaluated most methods of periodic cleaning, and has selected the optimum cleaning systems. Based on numerous scientific evaluations involving field and laboratory investigations, Tandus suggests the use of both Low Moisture and Hot Water Extraction systems for the maintenance of all of our products.

While there is no standardized cleaning frequency for all facilities, Tandus recommends regularly scheduled primary maintenance cleaning, before the flooring appears soiled. Some areas will require daily attention, while limited-use areas only may require a yearly extraction. Ultimately, localized use, soiling conditions, the quality of daily maintenance and appearance retention inspections will determine the frequency of primary maintenance cleaning.

The following should be considered when cleaning any Tandus products:

1. Operate heating, ventilation, and air-conditioning (HVAC) system during, and for at least 24 hours following, periodic cleaning with Hot Water Extraction.
2. Utilize air movers, in conjunction with HVAC operation, to expedite drying.
3. Limit traffic on damp modular tiles to limit soil tracking and soil wicking.
4. NEVER use any cleaning product that contains optical brighteners or bleaching agents.
5. Select cleaning products with a pH range of 4 - 9.
6. Select cleaning products that do not leave oily or sticky residues. Evaluate residue by diluting and pouring the solution into a pie plate. Place the pie plate in direct sunlight and allow evaporation. Evaluate residue for oily or sticky consistency.
7. Always keep Material Safety Data Sheets (MSDS) available during cleaning.
8. Always read and comply with label instructions of the detergent formulator.

Following is the recommended periodic cleaning procedure for the maintenance for our products:

- Vacuum the area to be cleaned, taking the required time and effort to remove as much dry particulate (insoluble soil) as possible. Hot Water Extraction (HWE) is performed to remove water-soluble soil, which cannot easily be removed with daily vacuuming. Surfactants, used in the cleaning process, attempt to emulsify these non-water soluble particulates, thus increasing cleaning efficacy.
- Following thorough vacuuming, apply a slightly alkaline prespray surfactant or SYON-5 directly to the pile fiber. Most surfactants require 8-10 minutes of dwell time to enable emulsification and saponification of the contaminants.
- Agitate the area with a pile brush or cylindrical brush agitation, such as the iCapsol Mini/ ProCaps by Windsor/ Prochem OR the XLerator (XL North). NEVER USE A ROTARY BONNET or ROTARY BRUSH for mechanical agitation. Cylindrical agitation will assist the surfactant solution in lifting soil from the pile fiber and pile lifting of the face yarn.

- Extract the surfactant solution and attached soil particles using an extractor with fresh water only. Do not use a detergent solution in the rinse tank. The use of an Extraction Rinse/ Acidic Rinse is suggested.
- After thoroughly rinsing, continue to extract the area using “dry” strokes (no water injection) until suitable moisture removal is attained. Under no circumstance should any textile flooring product be allowed to remain wet for more than 8 hours.

Other considerations:

Soiling that reoccurs more than 24 hours following cleaning often may be attributed to detergent residues that were not adequately rinsed. Evaluate detergency by pouring water onto pile fiber and briskly agitating with a spotting brush. Look for foaming or other signs of detergent residue. If detergent is present, continue to extract these areas until detergent is thoroughly rinsed. In severe situations, an acid rinse may be applied as a pre-spray or added to the extractor rinse tank to neutralize detergent residues. In severe situations, or in areas of Salt and Ice Melt Compound utilization, an acidic, extraction rinse may be applied as a pre-spray and added to the extractor rinse tank to neutralize high pH residues.

Some primary cleaning methods, such as the Windsor iCapsol System; Racine Industries HOST System, the milliCare System and carpet Cleaner America have been proven effective in maintaining desired appearance levels and improving the quality of overall aesthetic value of all Tandus products. These methods may be used to extend the time between wet extractions.

For additional information, please visit: www.tandus.com/maintenance or www.carpet-rug.org.



Rubber & Vinyl Wall Base

Maintenance Instructions

Routine Cleaning

Johnsonite Rubber and Vinyl Wall Base are maintained with regular wiping with a soft, wet cloth. A mild soap may be added to the water. Coarse scrubbing media or harsh cleaning chemicals may damage the surface of the wall base.

For further questions please contact Johnsonite Customer Service or Technical Services Department at 1-800-899-8916.



Technical Services Department
16910 Munn Road, Chagrin Falls, Ohio 44023
(800) 899-8916 ext 297 Fax (440) 543-8920

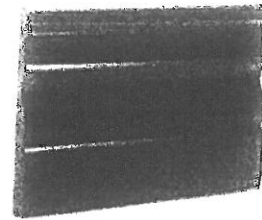
www.Johnsonite.com
E-mail: info@Johnsonite.com

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Johnsonite

Millwork® Resilient Wall Base

Installation and Maintenance Instructions



Introduction

Johnsonite Millwork Resilient Wall Base replicates the look of a finely routed wood crown molding, but is manufactured with the most advanced technology and from the highest quality resilient materials to assure dimensional stability, precision fit, and uniform height and gauge. Johnsonite's unique finish resists scuffing, gouging, will not fade, discolor, or crack with age and is easy to maintain.

The highest quality of materials and workmanship are employed in the manufacture of Johnsonite Millwork Resilient Wall Base products and careful inspection is made before shipment. However, a quality installation is the responsibility of the installer and we recommend that all materials be checked for satisfactory color match before you begin installation.

Johnsonite cannot accept any responsibility for loss or damage that may result from the use of this information, due to the possibility of variations of processing or working conditions and/or workmanship outside our control. Users are advised to confirm the suitability of this product by performing their own tests.

Handling and Storage

1. Johnsonite Millwork Resilient Wall Base and adhesives must be site conditioned at room temperature for 24 hours prior to, during, and after the installation. **Room temperature must be between 65° and 75° F (18° and 22° C).**
2. Care must be taken not to pull the wall base excessively when removing it from the carton or unrolling the coils. **The wall base will not shrink, but it will relax to its original length, if stretched.**

Surface Preparations

1. Floors and walls must be clean, dry, free of dust, all paints, wallpaper, and all other foreign matter, which may affect adhesive bonding.
2. **Do not install Johnsonite Millwork Resilient Wall Base over vinyl wall coverings or epoxy painted surfaces using acrylic latex water-based adhesives. (Note: Some high solids containing latex paints formulations may impede the adhesive drying process similar to epoxy paint.)**
3. **Never install Johnsonite Millwork Resilient Wall Base on surfaces that will be exposed to drastic temperature changes or moisture.**
4. **Equipment/Materials Requirements:**
 - Standard or Sliding Compound Miter Saw, Radial Arm Saw, or Table Saw equipped with a Carbide or Diamond tip blade with 80 teeth or greater
 - Approved Johnsonite Adhesive 1/8" square-notched trowel for acrylic adhesive
 - Brush or roller for contact bond adhesive
 - Utility knife
 - Straight edge
 - Tape measure
 - Carpenter's square and protractor
 - Hand roller

Millwork Wall Base Installation

1. Cut the Millwork Resilient Wall Base to the required lengths using a Standard or Sliding Compound Miter Saw, Radial Arm Saw, or Table Saw equipped with a Carbide or Diamond tip blade with 80 teeth or greater.

Note: When butting wall base seams together, it may be necessary to square cut the factory edge if butt ends do not align.

2. For installations on **porous wall surfaces**, spread Apply Johnsonite #960 Resilient Wall Base adhesive to the ribbed surface (back) of the wall base with an 1/8" square-notched trowel. **The adhesive should cover 80% of the back surface.** Leave a 1/4" (6.35mm) uncovered space at the top of the wall base to prevent the adhesive from oozing onto the wall above the base when installed.
3. For installations on **non-porous wall surfaces** (i.e.: metal, epoxy paint, ceramics, etc.) apply Johnsonite #945 Contact Bond adhesive to both the wall surface and the back of the wall base. Allow adhesive to thoroughly dry to the touch. The adhesive will turn from "white to clear" when dry. Carefully position the wall base on the wall surface.

Note: Once contact is made to the wall surface, the wall base cannot be moved.

4. Position wall base on wall surface and roll with hand roller. **Always roll back to starting point to prevent stretching the wall base.**
5. Clean-up: Remove wet adhesive with a water dampened cloth. If adhesive has dried, use a cloth dampened with mineral spirits.

Optional Quarter Round and Shoe Moulding Installation

1. The 1/2" quarter round (QTR-A) and 1-1/2" shoe moulding (SHU-A) are provided with a pressure sensitive adhesive backing for ease of installation.
2. After the Millwork Wall Base has been installed, wipe down the surface of the wall base using denatured alcohol on a clean white rag to remove any contaminants. Place the quarter round or shoe moulding profile on the floor with the adhesive backing facing the wall base.
3. Remove the release paper from the adhesive backing and press the moulding firmly against the face of the wall base. (Do not adhere the moulding to the floor) Roll with a 2" hand roller to ensure proper adhesion.

Millwork Wall Base Corner Installation

Johnsonite Millwork Resilient Wall Base Inside and Outside Corners are fabricated utilizing the same equipment and techniques required for traditional wood molding or baseboard profiles.

Outside Corners:

1. Position a sufficient length of wall base on the wall so that it tightly abuts the previously installed section and extends past the corner.
2. Using a scribe or pencil, mark the wall corner bend location along the top edge of the wall base.
3. Set the saw blade angle to the required miter angle for the corner using a protractor.
4. Place the wall base section against the saw fence or miter guide so the wall base is laying flat on the machine table with the contoured (show) surface facing up and perpendicular to the saw blade.
5. Align the mark on the top edge of the wall base with the saw blade and cut the wall base to the proper miter angle. Repeat the above procedure for the other side of the corner.

6. Place the two mitered sections of wall base on the corner and check for proper fit. Trim, if necessary, to obtain a tight fit at the corner.
7. Apply the adhesive to the ribbed back of one section of the wall base corner, position the section in place, and roll with a hand roller to ensure proper adhesion to the wall surface.
8. Repeat procedure #7 for the opposite side of the corner. Attention should be given to a tight and even fit to the corner.

Note: To obtain a tighter and more secure fit between the two mitered sections at the corner, glue the two mitered areas together with contact bond adhesive.

Inside Corners:

1. Set the saw blade angle to the required miter angle for the corner using a protractor.
2. Place the wall base section against the saw fence or miter guide so the wall base is laying flat on the machine table with the contoured (show) surface facing up and perpendicular to the saw blade.
3. Cut the wall base to the proper miter angle. Repeat the above procedure for the other side of the corner.
4. Place the two mitered sections of wall base on the inside corner and check for proper fit. Trim, if necessary, to obtain a tight fit at the corner.
5. Apply the adhesive to the ribbed back of one section of the wall base corner, position the section in place, and roll with a hand roller to ensure proper adhesion to the wall surface.
6. Repeat procedure #5 for the opposite side of the corner. Attention should be given to a tight and even fit to the corner. (Note: To obtain a tighter and more secure fit between the two mitered sections at the corner, glue the two mitered areas together with contact bond adhesive.)

Maintenance

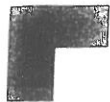
Johnsonite Millwork Resilient Wall Base is maintained with regular wiping with a soft, wet cloth. A mild soap may be added to the water. An acrylic wax may be applied to increase the gloss level when desired. Coarse scrubbing media or harsh cleaning chemicals may damage the surface of the wall base.

Johnsonite[®]

Technical Services Department
16910 Munn Road, Chagrin Falls, Ohio 44023
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HOMOGENEOUS TILE AND SHEET

iQ™ Maintenance Instructions

Johnsonite

A Tarkett Company

iQ Granit™, iQ Natural, and iQ Optima®

Introduction

Johnsonite's iQ flooring solutions are produced with high quality raw materials, unique manufacturing processes, and innovative surface treatments. This innovative technology produces a glass hard surface that requires only dry buffing to restore the original appearance and requires no polish and no finish for life.

The following guidelines are recommended for the proper care and maintenance of the floor.

Post Installation / Initial Cleaning

Job site conditions will cause grit and dirt to accumulate. Initial cleaning must not be performed until 72 hours after installation. However, it is necessary the floor be swept and protected until maintenance begins.

1. Thoroughly sweep or vacuum the flooring to remove all loose dirt and grit.
2. Prepare a cleaning solution using one of the recommended pH neutral cleaners identified on the reference chart below.
3. The dilution ratio depends on light to heavy soil conditions. Follow the manufactures label instructions.
4. Apply the cleaning solution with a nylon or rayon mop.
5. Let the cleaning solution dwell for 5 to 15 minutes (dwell time is based on soil conditions of the floor). **IMPORTANT** – Do not allow the solution to dry.
6. Scrub the flooring using a single disc rotary machine (175 – 350 RPM) equipped with a red pad.
7. Remove the cleaning solution using a wet vacuum or a mop.
8. Rinse the floor thoroughly with clean water.
9. Allow the flooring to dry completely.

NOTE: The cleaning process may need to be repeated on heavily soiled floors.

Preventive Care

1. An effective barrier matting system should be installed at all entrances to reduce cleaning costs and extend the life of the floor.
2. Protect the flooring from damage by using good quality protective feet and casters for chairs, tables, and other furniture using products designed for resilient floors. Caster or wheel damage can be avoided with the use of chair pads.
3. Do not use steel wool, strong solvents (Lestoil, Top Job, etc. and similar products), gasoline, turpentine, and acetone.
4. Sweeping compounds or mops treated with petroleum solvents, silicone compounds or loose abrasives can damage the flooring.
5. Coatings such as shellac, lacquer, varnish, and paste wax or those containing aromatic solvents are not recommended.
6. Some disinfectants and insecticide sprays contain oil or solvents which may settle on the floor in sufficient quantity to discolor, cause slipperiness, and harm the floor covering.

Routine / Daily Cleaning

It is very important to clean the flooring at a frequency consistent with the amount and type of traffic and soil conditions. Daily cleaning is recommended.

1. Thoroughly sweep or vacuum the flooring to remove all loose dirt and grit.
2. Prepare a cleaning solution using one of the recommended pH neutral cleaners identified on the reference chart below.
3. The dilution ratio depends on light to heavy soil conditions. Follow the manufactures label instructions.
4. Damp mop the cleaning solution onto the floor with a nylon or rayon mop. In place of damp mopping, when the space or area will allow, utilizing an auto scrubber equipped with a red pad will ease and expedite the daily routine. Check the manufacturers label instructions for proper use.
5. Allow the flooring to dry completely.
6. Remove minor stains and scuffs in conjunction with the damp mopping. Use a white or red pad if required.

Periodic / Deep Cleaning

When Routine / Daily Cleaning no longer provides adequate results, a more aggressive deep cleaning is required to thoroughly clean the floor.

1. Thoroughly sweep or vacuum the flooring to remove all loose dirt and grit.
2. Prepare a cleaning solution using one of the recommended pH neutral cleaners identified on the reference chart below.
3. The dilution ratio depends on light to heavy soil conditions. Follow the manufactures label instructions.
4. Apply the cleaning solution with a nylon or rayon mop.
5. Let the cleaning solution dwell for 5 to 15 minutes (dwell time is based on soil conditions of the floor). **IMPORTANT** – Do not allow the solution to dry.
6. Scrub the flooring using a single disc rotary machine (175 – 350 RPM) equipped with a red pad.
7. Remove the cleaning solution using a wet vacuum or a mop.
8. Rinse the floor thoroughly with clean water.
9. Allow the flooring to dry completely.

NOTE: The cleaning process may need to be repeated on heavily soiled floors.

Dry Buffing: For customers who prefer to dry buff the flooring.

1. Thoroughly clean the floor prior to beginning the buffing procedure.
2. Buff the floor using a single disc, high speed, rotary machine (maximum 1500 RPM) equipped with a white pad.
3. Frequency of buffing will be determined by the amount and type of traffic.

NOTE: To avoid damage, care must be taken when dry buffing.

Flooring may be maintained by following a conventional floor finish maintenance system if desired. Conventional floor finish maintenance systems require periodic stripping of the floor finish. The use of floor finish and stripper to maintain Johnsonite iQ Vinyl Tile and Sheet flooring is optional and is not required.



Maintenance Product Reference Chart

NOTE: Always follow the manufactures label for proper mixing ratios and use

	Initial Cleaning	Daily Cleaning	Deep Cleaning
Buckeye www.buckeyeinternational.com 1-800-321-2583	Buckeye Blue	Buckeye Blue	Buckeye Blue
	Straight Up	Straight Up	Straight Up
Certified Green Products	Tenacity	True 7	Tenacity
Diversey www.diversey.com 1-800-558-2332	Profi	Profi	Profi
	Prominence	Prominence	Prominence
Certified Green Products	Stride	Stride	Stride
Spartan Chemical www.spartanchemical.com 1-800-537-8990	TriBase	TriBase	TriBase
Certified Green Products	Green Solutions Industrial Cleaner	Green Solutions All Purpose Cleaner	Green Solutions Industrial Cleaner
XL North www.xlnorth.com 1-888-530-2259	XL APC All Purpose Cleaner	XL APC All Purpose Cleaner	XL APC All Purpose Cleaner

Visit www.johnsonite.com for the most current installation and maintenance instructions.
Contact Johnsonite at (800)-899-8916 ext. 9297 with any questions.



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limited warranty

product warranty: nora systems, Inc. ("nora"), warrants its nora®, norament®, and noraplan® rubber flooring, norament® rubber stairtreads, (except for the safety grit strip), accessories and adhesives, ("products") to be free of defects in material or workmanship, for one year from the date of purchase from nora. In addition, nora warrants against excessive wear of the listed products as set forth below, and nora warrants the conductivity of its Electro Static Dissipative, ("ESD") flooring system (flooring and adhesive) as set forth below.

EXCEPT FOR THE LIMITED WARRANTIES SET FORTH HEREIN, nora EXTENDS NO OTHER WARRANTIES OR GUARANTEES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR EXACT MATCHING OF SHADE, COLOR OR MOTTLING. nora HEREBY DISCLAIMS ANY OTHER WARRANTY OR GUARANTEE UNLESS EXPRESSLY AUTHORIZED AND ENDORSED IN WRITING AS SET FORTH BELOW.

No agent, employee or representative of nora is authorized to make any warranty or guarantee concerning the products. Any alteration, amendment or waiver of this Limited Warranty must be in writing and signed by an officer of nora.

excessive wear warranty: nora warrants the following products will not wear in excess of the following measurements which shall be prorated from the date of purchase:

norament® products	<.0025" wear per year
noraplan® products	<.0035" wear per year
norament® stairtreads	<.0025" wear per year

conductivity warranty: nora warrants the following ESD flooring system products, installed with nora's conductive adhesive (acrylic or PU), when tested according to the test procedures of ESD S7.1-94 and ASTM-F-150 under >30% relative humidity at room temperature will measure between:

norament® grano ed	10 ⁶ - <10 ⁹ OHMS
noraplan® environcare™ ed / mega ed	10 ⁶ - <10 ⁹ OHMS

Warranty for other conditions supplied upon request.

notice of claims: To make a claim under any warranty the buyer or end user must provide written notice to nora at 9 Northeastern Blvd., Salem, NH 03079, within thirty (30) days of discovery of any alleged defect of the product. nora must be given the opportunity to inspect and examine the product.

limitation of liability: nora shall not be directly or indirectly liable for any losses, claims or damages regarding any products that have not been installed and maintained according to nora's installation and maintenance guides, that were damaged by a third party, that were installed over an improper subsurface or improperly prepared subfloor, that were improperly repaired, or that were affected by any other mechanical influences including stilettos. Office chairs/furniture wheels shall be type W according to EN 12529. Excluded from this warranty - "fading or discoloration from prolonged, excessive

exposure to sunlight or heat". nora shall not be liable for any losses, claims, or damages in excess of the cost of the products invoiced by nora. nora shall not be liable for any incidental, consequential, enhanced or punitive damages. nora reserves the right to replace at no cost that portion of the products that are alleged to be defective but excluding all costs of transportation and installation. nora's maximum liability whether in tort, contract, or otherwise shall be the cost of the products invoiced by nora.

This limited warranty and the installation and maintenance guides are subject to change. Please contact nora for the latest versions. For additional information regarding usage in recommended applications, please refer to www.nora.com/us or call 1-800-332-NORA. Warranty periods commence on the date of purchase of the product by the buyer or end user, whichever is first

governing law; venue: The rights and obligations of the parties hereto and the interpretation, construction and effect of any provision hereof or any contract formed pursuant hereto shall be governed by and construed in accordance with the laws of the state of New Hampshire, without reference to its conflict of law rules.

Supersedes all previous information. Effective March 2012.
Printed in U.S.A.

		excessive wear warranty		conductivity warranty
		5 years	10 years	10 years
nora® wall base/sanitary base	commercial traffic	X		
norament® grano/ingresso/serra/s trada	extra heavy traffic		X	
norament® grano ed	commercial traffic		X	X
norament® luxor	extra heavy traffic		X	
norament® round & hammered	commercial traffic		X	
norament® stairtread	heavy traffic		X	
norament® 920	special application		X	
norament® 920 stairtread	special application		X	
norament® 992/992 grano	special application	X		
noraplan® degree/eco/environcare™/environcare™ acoustic/sentica/ sentica acoustic/ uni/unita	commercial traffic	X		
noraplan® environcare™ ed/ sentica ed	commercial traffic	X		X

nora systems, Inc.

9 Northeastern Blvd.

Salem, NH 03079

Toll free: 800-332-NORA

Phone: (603) 894-1021

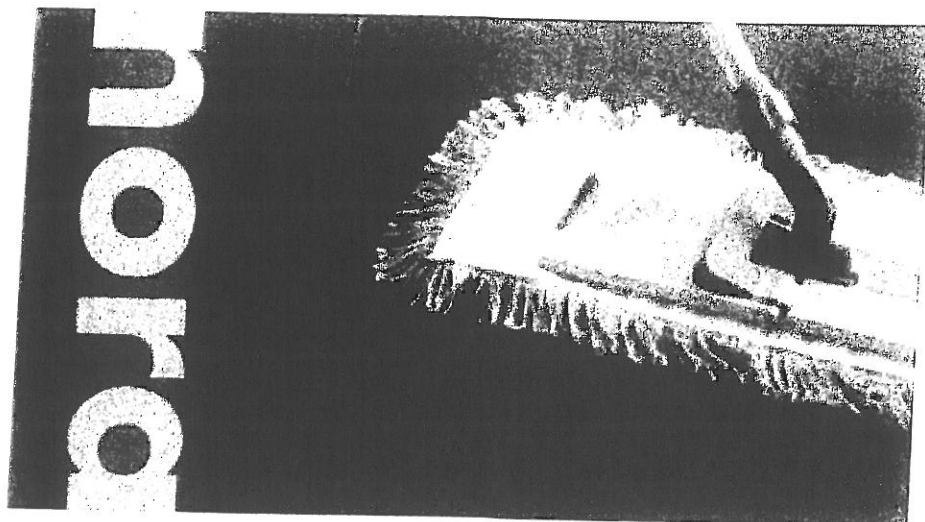
Fax: (603) 894-6615

E-mail: info-us@nora.com

www.nora.com/us

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Maintenance

Cleaning and maintaining nora rubber flooring.

Your nora rubber flooring requires no finishing, waxing or sealing. All nora floor covers a nonporous and dirt-repellant surface—eliminating the need to use unfriendly, harsh chemicals. Understanding how to properly clean and maintain your new rubber floor, even by us, will help you keep it looking attractive for years to come. Follow the tips below and download the guides for your application.

Quick Maintenance Tips

1. Always use "wet floor" signs and/or caution tape when performing any wet cleaning.
2. Refer to MSDS for proper personnel protection requirements before using cleaning products.
3. Do not flood the floor.
4. The floor will be slippery when wet or contaminated with foreign materials. Prior to cleaning, remove foreign materials to maintain the slip-resistant properties of the flooring.
5. Never use grit brushes, black or brown cleaning pads.
6. Use a red cleaning pad for all nora mat and nora plan surfaces.
7. Make sure to maintain a good walk-off area in the entrance of the facility, in addition to mopping.
8. If required, dry buff nora floor coverings with a white cleaning pad or carpet cot.
9. Do not allow any metal furniture or trash cans to be in contact with the wet floor.

[Maintenance Guides](#)[Education \(390K PDF\)](#)



Vintage Installation and Maintenance Information

This Installation and Warranty Card is for all Vintage Product lines.

General Installation Instructions for all products

Ensure the site environmental conditions are suitable for installation and take record. This includes: Relative Humidity, Subfloor or Concrete Moisture Reading, condition of product to be laid, sources of water or humidity extremes. Do not continue, if any of the conditions in these directions and warranties are not met and/or according to the NWFA instructions.

Ensure all other trade activities are completed as they may impact the quality of the installed flooring. Wood flooring is one of the last products to be installed at a construction site. Window, door, dry walling and painting and HVAC activation (on for >7 days) must be completed and dry before installation begins. This is to avoid humidity extremes and damages that void the warranty.

Acclimatize the product according to the product directions (many Vintage products are designed to install and perform better without acclimatization). See more information below.

Ensure the subfloor is perfectly level (1/8" per 8'). Level high spots and fill low spots as required. Ensure the subfloor is firmly anchored ensuring no movement, flex or squeaking.

Ensure the subfloor is less than 12% MC and record readings, subfloor must be within 4% of the actual floor being installed.

Thoroughly sweep and vacuum the area the flooring is to be installed.

Prepare installation along longest straightest wall first using long pieces for starting row and across (perpendicular to) floor joist.

Open and select products from multiple boxes to ensure an appropriate mix of lengths, wood character and color.

Inspect each piece before installation. Do not install any defective piece or piece that has a color, character or grain etc. that may not suit the look of the floor and may be displeasing to the consumer. These pieces can be cut and used for starters, installed in a less conspicuous location (E.g. Closet, under Cabinets etc.) or discarded. If you choose not to install these pieces please note they are not covered by Vintage's warranty.

Preparation of Plywood & Concrete Subfloor

Vintage Hardwood Flooring recommends that all Vintage Hardwood Flooring be installed with a minimum of 5/8" (15.8750 mm) A.P.A. approved, C.S.P./D.F.P. stamped plywood, or 3/4" O.S.B. Underlay grade PS2-92 rated, or concrete slab. The use of particleboard as a subfloor will automatically void the warranty. Consult your Authorized Vintage Dealer for recommendations on your specific subfloor application. Any failure of Vintage Hardwood Flooring relating to improper subfloors, or subfloor preparation is not the responsibility of Vintage Hardwood Flooring, and will not be covered under warranty. Sweep and vacuum subfloor. Ensure that old carpets, oils, foreign particles, protruding nails, carpet glues, etc., are removed prior to installation. For wood subfloors, make sure they are level, clean, dry and securely fastened. Repair and/or replace any section that is rotted or damaged. Always follow local building codes.

Do not install Vintage's Pioneered Solid hardwood flooring over concrete unless an acceptable plywood subfloor and vapor barrier is firmly anchored over sleepers and a dehumidifier is in place to continuously remove excess humidity from the room.

Moisture Content
Acceptable subfloors & ground levels installations for Vintage Product

Pioneered Solid	Plywood, OSB	At or above ground level only	Nail
Crafted Engineered	Plywood, OSB or Concrete	At, above or below ground level	Nail, glue or float
Solid Sawn	Plywood, OSB or Concrete	At, above or below ground level	Nail, glue or float
Northern Solid Sawn	Plywood, OSB or Concrete	At, above or below ground level	Nail, glue or float
U-LOC	Plywood, OSB or Concrete	At, above or below ground level	Float

Plywood: The maximum moisture content (MC) for plywood should never exceed 12%
Concrete: The maximum moisture content for concrete should never exceed 12%
The difference between the flooring and the subfloor should never exceed 4%

Tools & Accessories - For all types of Installations

Table saw, miter saw, measuring tape, nail set, hammer, tapping block, nail gun (manual or pneumatic), square, chalk line, putty fill, broom, dustpan and Vintage Cleaning Kits. Always consult the dealer you purchased your flooring from for appropriate installation tools.

Tools & Accessories - Nail Down

15 lb felt or equivalent, nail gun or staple gun (manual or pneumatic), square, chalk line, putty fill, broom, dustpan and Vintage Cleaning Kits. See Chart #4 for nail gun & cleat recommendations.

Tools & Accessories - Glue Down

Trowel, cleaning solvent and moisture cured glue - See Chart #5 for recommendations.

NOTE: It is extremely important that you use the proper trowel to ensure maximum coverage and produce a good bond between subfloor and flooring. You may also require a 100-150 pound roller.

Tool & Accessories - Floating Floors

Vintage T & G glue, Vintage's Premium Underpad, mineral solvents (for cleaning glue), and shims.

** All flooring strips should be installed perpendicular (right angle), to the floor joists. In some applications, installing parallel to floor joist may be required for aesthetic reasons. Consult your dealer, installer, and developer for their recommendations and building code requirements.

Installation - Expansion Gap allowances

Pioneered 3/4"	Leave 3/4" around entire room
Crafted 9/16"	For Nail & glue down leave 1/2". Floating leave 5/8" around entire room
Solid Sawn 3/4"	Leave 3/4" around entire room
Northern Solid Sawn 3/4"	Leave 3/4" around entire room
U-LOC 5/8"	For rooms up to 26' x 52' - Leave 1/2" (13 mm)
	For rooms up to 33' x 66' - Leave 5/8" (16 mm)
	For rooms up to 39' x 79' - Leave 3/4" (19 mm)

For floating floors a 3/4" expansion gap must be left up against all vertical obstructions

(Chart #1)

Material Acclimatization

Pioneered:

Open boxes fully (never just the ends) and allow the wood to acclimate to the ambient temperature of the room. The wood must be given 48-72 hours at approx. 23° C (72°F) and a relative humidity of 40% before installation. Special note: In some instances you may not be able to acclimate flooring.

When the relative humidity is too high or too low (above 50 % and below 40 % RH), acclimating may not be suitable. Always consult your hardwood flooring dealer or installer for their recommendations. Expansion and contraction caused by acclimating is not covered under this warranty.

Crafted, Solid Sawn, Northern Solid Sawn & U-LOC: Do not acclimate. Flooring must be installed immediately upon opening the boxes.

Hardwood flooring should be one of the last items installed when renovating your home. For new construction, the heating system must be operating for at least one week (7 days) at normal residential temperatures (approx. 70°F / 22°C) prior to installation.

Additional Allowance Recommendations

This will cover waste, defects or personal preference of boards. It is the installer's and owner's responsibility that all pieces be inspected, and graded prior to installation. If any piece does not meet installer/owner's personal standard, do not install these pieces. If you choose not to install pieces because of appearance, length of piece, or your personal visual standards, this will not be considered part of the 5% defect allowance. It is also recommended to have additional materials kept in case of future repairs.

2 1/4" - 4 3/8" widths	5% additional
5" - 10" widths	8% additional

(Chart #2)

Important Notes

FOR ALL INSTALLATIONS - ALWAYS WORK FROM 5-6 DIFFERENT BOXES AT ONE TIME

The installer is the final grader. Installer/homeowner will take full responsibility for all flooring that is installed, even if the primary owner of the residence is absent at the time of installation. If you are unsure of any requirements, please consult a Vintage dealer prior to installation. Although Vintage Hardwood Flooring takes every precaution to ensure that Vintage's Hardwood Flooring is graded and shipped to industry standards, we suggest you inspect each piece of Vintage Hardwood Flooring before installation. Boards that you may not like the look of, or contain a mark that you think will affect the look of the floor should be used as cut pieces for your start/end pieces. You may also use these pieces in less conspicuous areas such as in closets or under couches and sofa's etc.

Nailed Down Application

See Chart #4 for nail gun and cleat recommendations

Step #1 – Mark your starting line using a chalk line, draw a guide line out from the starting wall by measuring out the width of one board plus (see Chart #1). This line is where your first strip of flooring is going, and also allows for the expansion gap. It is very important for the starting line to be straight and square (see Fig. #1).

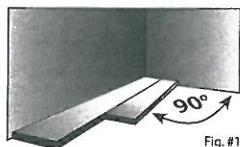


Fig. #1

Step #2 – Install the strips

Face nail or glue using a moisture cured adhesive (best practice) on the first row of strips with the grooved side facing the wall; put the nails as close to the wall as possible. This way, the quarter round will cover the nail heads. You may have to face nail for the first few rows before there is enough room to use the nail/staple gun. It must be nailed/stapled down or glued by hand rather than with the hardwood floor-nailing machine because of the vertical wall obstruction. When clearance allows, start using the hardwood floor nail/staple gun. Nails/staples should be spaced a minimum 2'-3" (57 – 76 mm) from both ends of the boards, and for all other nails/staples, see Chart #3. Measure and cut the strip to the required length to finish the first row. The remaining section should be used to start the second row, in order to minimize cut waste. The strip selection for completing the first row must be long enough to yield a remaining section of adequate length. Leave the required expansion gap (Chart #1) between the wall and the end of each strip in each row. The subsequent rows must be installed in the same manner. Don't be afraid to waste a few strips in order to adjust and test the nailing machine. See Hardwood Floor Nailing Tips. When you reach the last few rows, you may not be able to complete these rows with the nail/staple gun, due to vertical obstructions. Toe nail, face nail, or glue the last remaining rows.

NOTE: You may have to rip the last strips along the wall in order for them to fit properly. Don't forget to leave the minimum space for expansion (Chart #1).

Step #3 – Finally

Install the transition pieces, baseboards and/or quarter round moldings. Following the initial installation, vacuum thoroughly and clean the floor with your Vintage Hardwood Cleaning Kit. For detailed installation guidelines for your specific installation, contact your Authorized Vintage Hardwood Flooring Dealer.

Installing over a crawl space: You may install over a crawl space providing care has been taken to cover all areas of exposed earth with a 6 mm C.G.S.B polyethylene. You must also ensure that sufficient cross ventilation exists so that no moisture will accumulate and be absorbed in the wood flooring. Follow local building codes.

Wood Displacement (Dimples on Surface)

Hardwood Flooring, dense smooth woods in particular, may show dimpling on the surface from the displacement of wood by the fastener. Vintage Flooring should not dimple providing installation is adhered to. Therefore, dimpling is not covered under Vintage's warranty. It is the responsibility of the installer to monitor and take immediate action if dimpling occurs. (i.e. adjusting air pressure, using smaller cleats, adjust/repair nail driver pin, adjust nailer shoe angle etc).

	Nailing Pattern/Schedule	
	Ends of the boards	Along the board
Pioneered (all widths)	2'-3"	6'-8"
Crafted (all widths)	2'-3"	4'-6"
Solid Sawn (3 1/4"-4")	2'-3"	6'-8"
Solid Sawn (5"-10")	2'-3"	4'-6"
Northern Solid Sawn (3 1/4")	2'-3"	6'-8"
Northern Solid Sawn (4 3/8"-5")	2'-3"	4'-6"

(Chart #3)

Hardwood flooring Nail Gun & Fastener Recommendations

Pioneered Solid	16 gauge or 18 gauge 1 3/4" - 2" cleats
Crafted Engineered	Bostitch EHF1838K staple gun using 18 gauge 1 1/2" staples
Solid Sawn	18 gauge 1 3/4" - 2" cleats
Northern Solid Sawn	16 gauge or 18 gauge 1 3/4" - 2" cleats

Recommendation based on the approved subfloors. Anything outside of this guideline, contact a Vintage dealer.

(Chart #4)

Hardwood Floor Tips

Here are a few tips to make your job easier, should you decide to use a hardwood floor nailer or staple gun.

1. Prevent any scratches and indentations on the surface of the board by keeping the nailer plate (base) clean, free from nicks and scratches at all times. Also by putting down the nailer/stapler on the plywood or on a piece of cardboard, not directly on the prefinished floor.
2. Make sure the nailer/stapler base is squared and sits well on the edge of the strip to ensure the nails /staples are secured into the nailing channel at the proper angle to prevent dimpling and damaging the edges of the strips.
3. Verify regularly the hardwood floor nailer/stapler is in working condition to prevent damages to the strips.
4. Start the second row and subsequent rows with a strip of at least 6" (150 mm) longer or shorter than the strip used in the previous row. This will eliminate unsightly step effects. The remainder of the floor should follow this rule to ensure an aesthetically pleasing floor.

*Pneumatic nailer. Air pressure should be adjusted adequately for each species of hardwood floor being installed and checked regularly (always try it before using) so that the cleats are seated properly in the nailing channel to avoid dimpling. *Great attention to detail during fabrication on the part of the Vintage Hardwood Flooring team ensures exceptional QUALITY in the finished product. Longevity of hardwood floors is directly related to proper installation and lifetime commitment to appropriate care and maintenance.

Glue Down Installation Instructions

Step #1 – Mark your starting line Vintage Flooring recommends that your Vintage Hardwood Flooring be installed parallel to the longest, straightest wall in the room. Start by measuring out from the wall 10 boards wide. Example: for 3.25" Solid Sawn flooring, 10 x 3.25" = 32.50", plus the expansion gap of 3/4" which totals 33.25" from the wall. See Chart #1 for expansion gap widths for all products. Using a chalk line draw a guideline parallel to the wall based on the above measurements. This will eliminate any ripping of material at the end of the job for the last row. Using the straightest pieces of 1"x 2"x 8' length of wood and 2-inch concrete nails or screws, fasten the strips to the concrete. Your first row of starter boards will butt against this, so make sure that the strips are in line with the chalk line because this will determine how straight your floor will be.

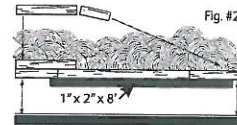


Fig. #2

Note: If you are cutting a piece that has not been set aside for cutting, make sure it is long enough to yield your next row's starting piece. Leave the expansion gap (See Chart #1) between the wall and the end of each strip in each row. See Fig #2.

Step #2 – Spread the adhesive

NOTE: Vintage Hardwood Flooring: only recommends installations when a moisture-cured polymer glue is used. Follow directions of glue manufacturer. Do not use latex/water based glues. Apply the recommended adhesive with a trowel according to the manufacturer's installation instructions (found on adhesive pail) for the specific adhesive that is being used.

SPECIAL NOTE: Open time and installation on adhesives vary from manufacturer to manufacturer so read instructions carefully before starting. Open time can also be affected greatly depending on the temperature and humidity. See Chart #5 for Adhesive recommendations.

Step #3 – Install the strips

You should inspect each piece of Vintage Hardwood Flooring before installation. Boards that you may not like the look of, or with a flaw that you think will affect the look of the floor, should be used as the cut pieces for your start and/or end pieces. You may also choose to put these pieces in less conspicuous areas such as closets or under couches, etc. Start your first piece with the tongue facing the area that will be completed last. Line up the tongue of the boards against the holding strip, and then press the board into the adhesive. Working from left to right, lay the next board and continue working towards the right, until you reach the wall and require a cut piece. Choose one of the pieces set aside for cutting and cut the desired length. **NOTE:** If you are cutting a piece that has not been set aside for cutting, make sure it is long enough to yield your next row's starting piece. Leave the expansion gap between the wall and the end of each strip in each row. Start the second row with a strip of at least 6" (150 mm) longer or shorter than the strip used in the first row. This will eliminate unsightly step effects. The remainder of the floor should follow this rule to ensure an aesthetically clean looking floor. Minimize adhesive from getting into the tongue or groove; otherwise, the strips of the flooring may not fit tightly. If adhesive gets on the finished side of the strips, clean immediately with appropriate cleaning products - see adhesive manufacturer's recommendations.

Flooring may require slight tapping in order to ensure a tight fit. You may use 3M's blue tape (if required), to hold pieces together until glue bond has developed. If a roller is required to obtain maximum adhesion, wrap a foam sheet around it to minimize any damage to the surface of the floor. When you get to the end of the wall, you may require a pry bar to get the pieces tight. Use shims where required until the glue has dried.

Step #4 – Installation of Accessories & Cleaning

After the floor has dried, you may install the baseboards and quarter rounds. Make sure that the nails penetrate the wall and not the floor. **NOTE:** Always keep left over pieces for future use. Flooring may become damaged and require replacing several pieces. It's a good idea to have the same production dates put aside. Use a vacuum to pick up any dust and loose fibers. Using your Vintage Cleaning Kit, available at all Authorized Vintage Dealers or visit us at www.vintageflooring.com and follow instructions and clean the whole floor.

Moisture Cured Adhesive Recommendations

For all glue down installations of Crafted, Solid Sawn or Northern Solid Sawn Dural, AF2130 or equivalent Urethane based or polymer adhesives are acceptable. Vintage does not warranty the adhesive, check manufacturers warranty information.

Floating Floor Installation Instructions

Sweep and vacuum the subfloor before laying any material. Make sure that any high points in the subfloor are removed, cleaned and sanded and any low points are filled with leveling compound.

Vintage's Premium Underpad Installation

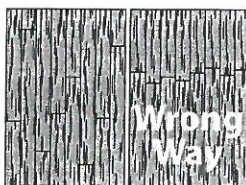
For installations of Vintage Crafted, Solid Sawn, Northern Solid Sawn or U-LOC

Step #1 - After the subfloor has been cleaned, roll out Vintage's premium acoustic underpad. Unroll the underpad with the film coated (shiny side) facing down against the subfloor. Cut the underlayment about 2" longer than the room length. Butt the edge of the first sheet, (the edge without the over lapping film), along wall and trim to fit adjacent walls. Bring the edge of the adjoining sheet to the first sheet so that the edges of the foam meet and the overlapping film underlies the second sheet. Secure the edges of the foam together with tape strips. Repeat this procedure until the entire room is covered; Vintage recommends running 2" of underlay up the sides of the walls. This excess will be covered by the baseboards. It will prevent excess moisture from the concrete migrating to the floor.

Crafted Solid Sawn & Northern Solid Sawn Products

Step #2 - Laying the wood floor

Using the longest pieces available, lay the first row against the longest and straightest wall. Carefully apply glue into top of groove along the whole length of the piece, using Vintage's T & G glue (available at your Authorized Vintage Dealer) specially designed for Vintage's hardwood flooring. Lay the first piece with the grooved edge against the wall. If the wall is not square, use wedges/shims between the flooring strips and the wall to achieve the desired expansion gap. Start the second row with a strip of at least 6" (150mm) longer or shorter than the strip used in the first row. This will eliminate unsightly step effects. The remainder of the floor should follow this rule to ensure an aesthetically pleasing floor. Clean any glue that gets on the finished side of the flooring before the glue dries. Flooring pieces may require slight tapping in order to ensure a tightfit. You may use 3M's blue tape, if required, to hold pieces together until glue bond has fully developed. Rip the strips for the last row to the required width, not forgetting to allow for expansion. Use a crowbar to ensure tight fitting boards, use shims to hold in place until glue has dried. Remove the shims 24 hours after installation.



U-LOC Installation

Step #2 Laying the wood flooring

Insert the tongue at the side of the board into the groove at 45 (degrees) angle. Use both hands to apply equal pressure to the board. Line up the far left side of the board to be positioned with the end of the previous board installed. Lightly press the board down to lock in place. Never force boards and remove debris that could get in the way of the locking system. For aesthetical reasons, on starting the next row, always make sure to stagger the end joints by at least 6" (15.24 cm). Try to use cut piece from previous row to start new row. Vintage's U-LOC flooring uses a drop loc end joint. Simply drop one end over the adjacent end and they fall into place. Proceed with the subsequent boards in similar manner to complete the row. All joints shall have a tight fit. Leave an appropriate gap between the wall and the flooring for expansion.

To lay the last row, boards must be at least 1 1/2" wide to attach properly, don't forget the expansion gap. Moldings shall be fastened to the adjacent wall by nail or screw, not the floor, overlapping the expansion gap allowance. If the molding is attached to the floor, the floor will be pinched and will not expand and contract as it is made to perform.

General Care & Maintenance for all Vintage Hardwood Floors



Vacuum and sweep your floor as often as required to eliminate dust and debris from your floor. This may have to be done on a daily basis; depending on the amount of traffic in your home. Use Vintage's Maintenance Kit as needed to remove grime.

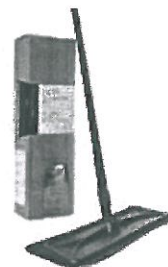


Never clean your hardwood floor with water or use a cleaner that is mixed with water. Do not use vinegar, bleach, household cleaners or any oil based detergent on your hardwood flooring. These can also leave a greasy and/or cloudy film or damage the finish.

Keep floor mats at all entranceways to keep dirt and moisture from being tracked on your floor. Place walk off mats at all exterior entrances. This will capture much of the harmful dirt before it ever reaches the hardwood floor. Shake out, wash and vacuum mats and rugs frequently.

To avoid water marks, never let spills of any type remain on the surface of the floor. Wipe up spills immediately. Rotate area rugs occasionally to minimize discoloration from sunlight.

Use adequate floor protection (felt pads) under all furniture and chair legs, in order to ease their movements and to prevent scratches and dents. Replace as required or regularly.



When moving heavy furniture or appliances, put a large heavy blanket underneath them to avoid scratches and dents.

Do not wear high heels on your hardwood floor. Spiked shoes exert approximately 1000 pounds per square inch. Old, unprotected tips will dent any hardwood floor.

Try to maintain an average humidity level of 45% in order to minimize the expansion and contraction in your floor. Use a hygrometer to help monitor humidity levels through out the home. Available on Vintage's website or dealer.



Minimize surface scratches by keeping your pets nails trimmed.

Heavy Gauge or Deep Scratch Repair:

Vacuum and clean the floor with Vintage Floor Cleaner and let the floor dry. If you have removed the finish and stain and are seeing the unfinished wood, use color matched pen & fill stick to color the unfinished wood fibers (if the floor is natural no stain is required.) Stay within the line and try not to color on the unaffected area. Vintage has color touch up kits to match all standard colors offered. Let dry.



Care and Maintenance for UV Urethane Oil finish floors

Vintage Flooring recommends the Loba care and maintenance products to be used on any Vintage UV oiled flooring. Loba and Vintage have tested with these products on all Vintage UV Oil hardwood flooring.

Regular dirt and dust removal for residential:

Vacuum and sweep your floors as often as required to eliminate dust and debris from your floor.

Light traffic for residential use: 3-7 days. Use the Vintage Hardwood Cleaning kit that has been specially formulated to eliminate streaking and residue. Never clean your hardwood with a steam mop, wet mop or use vinegar or bleach.

Note: Before using any Oil product, prepare a sample or test area to determine compatibility, appearance and desired results.



UV Oil Maintenance care for residential:

Minor, superficial scratches as well as dull areas on the surface can be sealed and protected and in some cases can be completely removed by applying Loba Aqua Oil.

1. Vacuum and clean the floor with Vintage Hardwood Floor Cleaner and let the floor dry.
2. Apply a thin film of Loba Aqua Oil with a rag or a mop on the affected area or over the entire floor. The product will dry quickly and the floor can be walked on carefully. Resume normal use after 12 hours. Loba Aqua Oil can be used as frequently as desired. The product will form a sacrificial layer which will wear off with regular use. Therefore it is recommended to reapply the product regularly, or as required. If you notice any portion of the floor that is starting to fade and is showing signs of wear, this is an indicator that you should be applying a coat of the Loba Aqua Oil.

For complete recoating of the UV Urethane please contact an authorized Loba dealer for professional care.

Contact a Vintage dealer for Commercial cleaning instructions

Vintage Hardwood Flooring

409 Evans Ave.
Toronto, ON Canada M8Z 1K8
416-521-6100 or 1-877-256-0231
vintageflooring.com





Vintage Installation and Maintenance Information

This Installation and Warranty Card is for all Vintage Product lines.

General Installation Instructions for all products



3/4" (19 mm) Solid

- For all Smooth, Wire Brushed and Etched Pioneered floors
- Product Specifications: 3/4" (19 mm) Solid
- Grades Available: Estate, Select-V & Heritage
- Widths Available: 2 1/4" (57 mm), 3" (76 mm), 3 1/4" (83 mm), 4 1/4" (108 mm)
- Lengths: Random lengths 10" - 84" (254-2134 mm), Averages: 32" - 38" (813-965 mm) depending on grade
- Installation: Nail - At or above ground
- Radiant Heat: No, can use Crafted, Solid Sawn, Northern Solid Sawn or U-LOC



9/16" (13.7 mm) Engineered

- For all Smooth, Wire Brushed and Etched Crafted floors
- Product Specifications: 9/16" (13.7 mm) Engineered
- Grades Available: Estate, Select-V
- Widths Available: 3 1/2" (89 mm), 5" (127 mm)
- Lengths: Random lengths 14" - 72" (356-1829 mm), Average: 32" (813 mm)
- Installation: Nail, glue or float - At, above or below ground level
- Radiant Heat: Yes * Check species list



3/4" (19 mm) Solid Sawn

- For all Smooth, Hand Scraped, Wire Brushed and Etched Solid Sawn floors
- Product Specifications: 3/4" (19 mm)
- Grades Available: Estate, Select-V, Character
- Width Available: 3 1/4" (83 mm), 4" (100 mm), 5" (127 mm), 7" (180 mm), 10" (250 mm)
- Lengths: Random lengths 16" - 84" (406-2134 mm), Averages: 38" - 48" (965-1219 mm) depending on species and grade
- Installation: Nail, glue or float - At, above or below ground level
- Radiant Heat: Yes * Check species list



3/4" (19 mm)
Northern Solid Sawn

- For all Smooth, Wire Brushed and Etched Northern Solid Sawn floors
- Product Specification: 3/4" (19 mm)
- Grades Available: Estate, Select-V, Character
- Widths Available: 3 1/4" (84 mm), 4 3/8" (112 mm), 5" (127 mm)
- Lengths: Random lengths 15" - 84" (381 - 2134 mm), Averages 32" - 42" (813 - 1066 mm) depending on species and grade.
- Installation: Nail, glue or float - At, above or below ground level
- Radiant Heat: Yes * Check species list



7/16" (11 mm) U-LOC

- For all Smooth U-LOC floors
- Product Specifications: 7/16" (11 mm) Click
- Grades Available: Estate, Select-V
- Widths Available: 4 1/4" (109 mm)
- Lengths: Fixed lengths 46.14" (1172 mm), 32.36" (822 mm), 28.8" (732 mm), 23.07" (586 mm), 17.32" (440 mm), 13.77" (350 mm)
- Installation: Float - At, above or below ground level
- Radiant Heat: Yes * Check species list

For more details or technical specifications, please contact a Vintage Dealer or our Website.

Vintage Wear Warranties		
Residential Wear Warranty	Pearl & Semi Gloss 25-Year	UV Urethane Oil 10-Year
Commercial Wear Warranty	3-Year	1-Year

Congratulations on purchasing one of the highest quality prefinished hardwood floors. Your premium Vintage Hardwood Floor will provide you with a lifetime of memorable moments. Products may be manufactured in one of Vintage's worldwide manufacturing facilities, but all are prefinished in Canada. Contact a Vintage Dealer for more information.

Warranty Program takes effect: February 2014 replacing all previous versions.

Warranties

Lifetime Structural Warranty for Residential Installations

Vintage Hardwood Flooring has strict processing controls and every piece is put through a rigorous quality control system. Vintage warranties all the product collections to the original owner of a non-commercial floor in its original manufactured condition to be free from: delamination, milling defects and grading for the lifetime of the floor. This warranty excludes the standard defect allowance of 5% for widths below 4" and 8% for 4 1/4" and over. The relative humidity in the residence must be targeted at 45% and the maximum ranges in the specific product warranty never exceeded. Radiant heat warranty is limited as specified in the radiant heat section. The warranty does not cover the normal movement and reactions of wood to humidity and damages as listed in the exclusion list. To fulfill this warranty, the owner must ensure the pre-installation, installation, maintenance and care guidelines are complied with. Vintage Hardwood Flooring's liability for this warranty is limited solely to the defect amount in excess of the standards above and is for the flooring material only.

Residential Wear Warranty: 25-Year for Pearl & Semi gloss finished floors

This warranty guarantees to the original purchaser that the standard Vintage Semi-gloss and Pearl finishes will not wear through or peel for 25 years from the date of purchase. Oil and Custom gloss finishes are not covered by this warranty. The product must be in its original purchased condition. The wear warranty is applicable to non-structural defects only. Checks, lines or peeling that appear on the surface of knots, checks, cracks, holes, color variation and other related natural character allowed for in the grades are not covered under this warranty. The floor must be installed and maintained in accordance to Vintage's installation and maintenance guidelines. See warranty exclusions for other limitations.

3 Year Finish Wear through Warranty for Commercial Installations (Special Ordered as "Commercial Finish")

This warranty guarantees to the original commercial purchaser that the standard Vintage Semi-gloss and Pearl finish will not wear through or peel for 3 years from the date of purchase in a commercial environment. Heavy traffic environments, including exterior main access ways are excluded. Oil and Custom gloss finishes are not covered by this warranty. The product must be in its original purchased condition. The wear warranty is applicable to non-structural defects only. Checks, lines or peeling that appear on the surface of knots, checks, cracks, holes, color variation and other related natural character allowed for in the grades are not covered under this warranty. The floor must be installed in accordance to Vintage's installation guidelines.

The floor must be regularly maintained in accordance with Vintage Hardwood Floorings guideline to validate this Warranty. The sole remedy pursuant to this warranty shall be limited to the repair, refinishing or replacement of the floor at the discretion of Vintage Hardwood Flooring to correct the issue. Any attempt to modify, repair or replace products prior to authorization of Vintage Hardwood Flooring will void this warranty. See warranty exclusions for other limitations.

10 Year Limited Residential Wear Warranty - UV Urethane Oil finish (Not an Oxidative Oil) (1-Year Commercial)

Vintage warranties to the original purchaser that it's UV Urethane Oil will not wear through the finish in normal residential use within 10 years from the purchase date. The thin finish of UV Oil must be carefully maintained, including regular care and maintenance that cleans and protects the floor. Failure to care and maintain the floor for any period, as described in the Vintage care instructions, can lead to failure of the floor and will void the warranty. Wear warranty excludes items listed under exclusions. Vintage recommends refreshing the floor as soon as wear or dulling is observed to provide a protective coat to avoid or correct minor damages. Refreshing may cause variances in the finish if any residue is missed by cleaning or due to varying amounts of refresher applied. Vintage does not warranty gloss variation or contamination resulting from the refresher application. Vintage's thin UV Urethane Oil coat will wear through in heavy traffic areas or where sources of grit or damage are higher. Therefore place mats/rugs in such areas to protect the finish (i.e. Entrance ways, fridges, sink area, etc.). In the event the raw wood is exposed due to damage or excessive wear, it is essential to carefully clean and refresh the area to avoid the "wash-out" and discoloration of the underlying stain. Repairs to damage and excessive traffic/wear are not covered by the warranty. Consult a professional when recoating or extensive repairs are required.

Humidity Control (Gapping, Cupping and Splits)

Relative Humidity is the ratio of the actual amount of water vapor contained in the air at a given temperature to the maximum amount of water vapor that the air at a given temperature can hold, expressed as a percent. In other words, relative humidity is the absolute humidity divided by the absolute humidity at saturation of air at the same temperature.

Wood is a hygroscopic material. Always containing water, it constantly exchanges water vapor with the air, picking it up when atmospheric relative humidity is high, and giving it off when relative humidity is low. Since wood swells as it adsorbs water, and shrinks as it releases water, both its moisture content and its dimensions are controlled by the relative humidity of the surrounding air. Wood moisture content is equal to the weight of water contained in the wood divided by the oven dry weight of the wood, expressed as a percent.

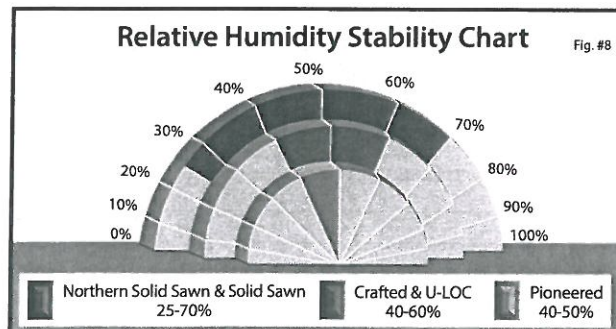
Inside homes however, where the relative humidity (RH) of outdoor air drawn inside is drastically altered by heating it and cooling it without humidification or dehumidification. Wide seasonal swings in relative humidity in wood moisture content and dimension changes occur. Since warm air can hold more water vapor than cold air, the relative humidity of air with a certain absolute humidity can be changed by simply changing its temperature. If in winter, for example, outside air at 20°F (-6°C) and 65% RH is drawn inside and warmed to 70°F (20°C) without humidification, its relative humidity drops to about 10%. In summer, outside air at 70°F (20°C) and 60% RH that flows into a basement at 60°F (15°C) will end up at 82% RH. In order to minimize this movement, the relative humidity must be maintained according to product specifications for Pioneer solid anything higher and the flooring will start to cup, anything lower and the floor will start to gap and may check and split in winter months.

Special Note for Crafted, Solid Sawn, Northern Solid Sawn and U-LOC

Although these products are more stable, they can still react to changes in relative humidity according to the season. Minor cupping, crowing, face distortions, etc., is considered normal when near the limits of the stability warranty and is not covered under this warranty. Raising or lowering your humidity level towards the middle of the warranty range will resolve this issue.

Vintage's Crafted, Solid Sawn, Northern Solid Sawn, & U-LOC Hardwood Flooring will perform extremely well with high humidity. However, if the humidity drops below warranted levels the face lamella will start to contract. The construction of these products is such that the core material will minimize the face lamella's contraction. If the humidity drops below warranted levels the core will continue to do its job and minimize the contraction again. However, there comes a point where the face lamella is under so much stress, and the core is not allowing the face to move (minimize cupping) that the face lamella has no other choice but to relieve its pressure by stress cracking. Stress cracking is NOT covered under this warranty.

Vintage manufactures and stores solid wood flooring in a controlled environment. It is important to check and document both the ambient humidity and the moisture of the subfloors in the rooms before installation. Humidity outside the allowed range or subfloors more than 2% difference in moisture on 3 1/4" and wider floors (4% difference on 3" and narrower) will cause the floors to expand/shrink and cup. Wet subfloors and high humidity environments can cause gapping and create splits as the wood dries and returns to a normal humidity levels. Un-insulated heat ducts or radiant heat also cause extreme drying leading to gapping and splitting. Gapping, Cupping and splits resulting from moisture & humidity excesses are not covered under Vintage's Warranty. Generally, wood flooring should not be installed over crawl spaces. If necessary, ensure the crawl space has a 6 mil CGSB polyethylene over all exposed earth and that sufficient cross ventilation exists in order that no moisture accumulation occurs. Follow local building codes.



Radiant Heat Instructions & Warranty

New Concrete that is less than 60 days Old – Radiant heat must be turned on and left on for a period of 45 days prior to installation of the Vintage flooring material. Turning the radiant heat on will allow the moisture that is in the concrete to evaporate from the concrete. If the concrete is not dried and the floor is installed, the moisture that is in the concrete will migrate into the wood floor. Perform a calcium chloride or polyfilm test to determine moisture content of the concrete. The Radiant heat must be turned off for at least 48 hours prior to installing any flooring for a conditioning period. Older Concrete – Heating and/or cooling concrete must be done slowly. Vintage flooring requires that the radiant heat be turned on for a minimum of 72 hours prior to installing Vintage flooring material. Vintage flooring also requires that the radiant heat system be turned off for at least 48 hours prior to installing any flooring. Turning the heating system off allows for the concrete to properly condition.

Note: Not conditioning the concrete will void all Vintage Warranties.

Maximum Tube Temperature out of boiler: 129°F (54°C)

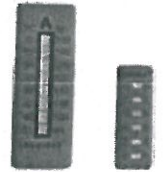
Maximum Concrete Temperature: 81°F (27°C) (Below hardwood flooring)

****IMPORTANT**** when using any radiant heat system other than the in slab system referred to above, you must confirm with your heating contractor that the Maximum Temperature of the surface of the subfloor (below the hardwood flooring) CANNOT EXCEED 81°F (27°C).

The humidity level in the home MUST be maintained ABOVE the listed levels in order to validate the warranty*.

- Pioneer Hardwood Flooring 40%
- *Engineered Crafted Hardwood Flooring 40%
- *Solid Sawn Hardwood Flooring 25%
- *Northern Solid Sawn Flooring 25%
- *U-LOC Hardwood Flooring 40%

A common problem that happens is that the floor will cup and/or crack when the radiant heat is "cranked up" by individuals that are cold. Cranking the heat above the maximum temperature recommended by Vintage will void the warranty. In order to confirm that the floor maximum temperature is not exceeded Vintage will require "thermal sensor stickers" to be applied in strategic areas of the floor and heating system. Thermal sensor stickers are strips of tape with crystals that change to black at a specific temperature. If the heat on the substrate below the hardwood flooring exceeds 81°F (27°C), or the tube temperature out of the boiler exceeds 129°F (54°C) these crystals will turn black. Once they turn black you cannot reverse the color change. Vintage flooring will require 1 thermal tape to be placed on the main tube coming out from the heating unit in the home. Vintage flooring will also require a thermal sensor tape on the subfloor placed within 6" of the wall and the sensor must be placed over the heat tube. Thermal sensors will be mandatory in order for Vintage to warranty radiant installations. If using radiant heat systems other than concrete slab, 3 sensors must be placed in various locations on the floor.



If a problem occurs and Vintage is required to inspect a potential claim, Vintage will require that these thermal sensors are removed for verification of temperature. If these sensors are not available to Vintage in accordance with our installation guidelines, the claim will be denied. It is extremely important that the sensors be placed in an area where it can be extracted by Vintage for temperature verification. Vintage requires that the installer draw a diagram on the placement of the sensors in the main heat floor area. This diagram must be submitted to the homeowner and Vintage Flooring for record keeping.

The Radiant Heat Compliance form must be completed and signed to validate radiant heat warranty. A copy must be submitted to Vintage Flooring with the purchase order when ordering a floor. It is the responsibility of the dealer to provide this completed form when ordering material. In signing this compliance form it is agreed that the homeowner will not exceed the maximum temperature as per the above mentioned Vintage guidelines. It is also agreed that the thermal sensor strips will be installed in accordance with these guidelines. The homeowner will also keep a record of the placement of these sensor strips so that they know where the location is, and will make them available for extraction in the unlikely event of a claim.

Installation on radiant heat system

Species		Vintage products	
Hickory	No	Pioneer	No
Rift & Quarter Sawn Brazilian Cherry	No	Crafted	Yes**
Maple	Yes*	Solid Sawn	Yes**
Tigerwood	Yes*	Northern Solid Sawn	Yes**
Red Oak	Yes	U-LOC	Yes**
White Oak	Yes*	**check Species list	

Effective February, 2014

* Indicates species that are more susceptible to movement and special attention must be taken to adhere to maximum temperatures.

For more detailed information about the Radiant heat warranty, please contact a Vintage dealer.

Warranty Exclusions

The following are excluded from all Vintage warranties

Any damage or failures, but not limited, to the following are not covered by Vintage's warranty.

The finish wear surface must be easily noticeable and cover at least 15% of the total floor area for a claim to be considered.

Damage or structure failure relating to installation and interior conditions that do not comply with Vintage's installation requirements.

Damage due to improper care or failure to comply with Vintage's maintenance and care instructions.

Structural Defects natural in the wood where the finish cracks, contains voids, or color variation that appear on the surface of a knot, check, split, hole or similar naturally occurring wood character in the grade.

Natural expansion, contraction and tensions caused by woods reaction to humidity variations.

Wood displacement due to nailing, stapling or installation (i.e. Dimpling & Nail pops)

Gloss changes due to wear or use, including variation in replacement boards.

Damage due to water, spills, steaming, excessive cleaner, wet mopping, moisture, sink /dishwasher / pet bowl / planter spills that will cause distortion of the wood and blistering and peeling of the finish.

Dents, scratches, high heel marks, pet damage, chemical & adhesive damage. Use of tape except 3M blue tape.

Natural discoloration of the finish, aging, fading or darkening of the wood and excessive exposure to sunlight, including uneven discoloration under rugs & furniture.

Natural color and character marks in the wood as allowed in the grade (Samples do not show all possible character marks allowed in the entire floor).

Environmental extremes of heat, dryness or humidity that exceed the product specified humidity range.

Construction damage, in particular on textured surfaces, can contaminate the naturally occurring or intended undulations in the surfaces (i.e. Drywall dust).

In all cases, any warranty, remedy, or repair must first be approved by Vintage Hardwood Flooring.

Action taken prior to Vintage's approval will void the warranty claim.

The corrective action to remedy any warranty issue is the exclusive right of Vintage Hardwood Flooring.

This Warranty only applies to defects in excess of the 5% on boards under 4" and 8% on boards 4 1/4" or over.

Vintage's liability under this warranty is limited to the replacement or repair, of any portion of the floor, solely at Vintage's discretion, and only up to the total purchase price of the floor (excluding installation). Vintage will not be liable for other costs, including labor, installation, moving, or accommodation costs.

The warranty is only to the original purchaser and cannot be transferred.

Any defect or warranty claim must be submitted in writing to Vintage Hardwood Flooring within 6 months of the occurrence of the issue giving rise to the claim.

Filing a Claim

To file a claim, contact your authorized Vintage Hardwood Flooring Dealer or Builder where you made your purchase. They will assess and complete a claim form if warranted, that will require the details of original purchase, payment confirmation, installation, environment conditions and details of the issue.

Vintage at its discretion reserves the right to: be provided detailed pictures of the floor, access for inspection, and/or removal of samples for analysis.

Warranty Registration Card

(This card must be completed and returned within 30 days of purchase date)

Please Print

Name _____

Address _____

City _____ Postal/Zip _____

Prov/State _____ Date of Purchase _____

Country _____

Name and Address where purchased: _____

Product purchased:

☐ Estate ☐ Select-V ☐ Character ☐ Heritage

Size _____ Color _____

Reason for purchasing Vintage _____

What room did you install Vintage in:

☐ Bedroom ☐ Den ☐ Family Room ☐ Hallway
☐ Kitchen ☐ Living Room ☐ Bathroom ☐ Basement

Number of residents in your home:

Adults _____ Children _____

Dog _____ Cat _____

Type of Residence:

☐ Single ☐ Condominium ☐ Townhouse ☐ Cottage ☐ Rental

Age of Residence:

☐ 5 years or less ☐ 5-10 years ☐ 10-15 years ☐ 15-20 years ☐ 20 plus

We thank for purchasing Vintage Hardwood Flooring. Take the time and fill in any comments that you may have. The only way to improve is to hear from you, our valued purchaser.

Thank you

Comments _____

Registration can be completed online at www.vintageflooring.com

Internal use only
Vintage Hardwood Flooring
409 Evans Avenue, Toronto, Ontario, Canada, M8Z 1K8
416-252-4182 or 1-877-256-0231

Date received _____ Control # _____

BOLYU

Warranty

NEXTERA™

Nexterra Warranty

This limited lifetime* warranty applies only to purchasers of BOLYU Contract (BOLYU) products for indoor commercial installations. This limited warranty is valid only if signed below by BOLYU's authorized Representative, the Owner, and by the Flooring Contractor. Provided the carpet has been installed and maintained in the specified commercial location in strict accordance with BOLYU's instructions, procedures and the Owner meets its obligation hereunder, including the use of BOLYU recommended Nexterra pressure sensitive adhesives, BOLYU (subject to the following limitations and remedies) warrants to the designated Owner the following:

I. Items Under Warranty

1. **WEAR**- BOLYU warrants that Nexterra will not wear more than 10% of its surface pile weight from abrasive wear for the lifetime* of the carpet. By abrasive wear is meant fiber loss from the carpet through normal abrasion, not crushing or flattening of the carpet pile in any area, nor due to abnormal usage of the carpet.
2. **STATIC PROTECTION**- BOLYU warrants that Nexterra will not give static discharges in excess of 3.5 KV for the lifetime* of the carpet when tested in accordance with the AATCC Test Method #134-1979.
3. **TUFT BIND** - BOLYU warrants that Nexterra will not lose tuft bind integrity for the lifetime* of the carpet when tested in accordance with test method ASTM D-1335-67.
4. **EDGE RAVEL** - BOLYU warrants that Nexterra will not edge ravel along seams for the lifetime* of the carpet.
5. **ZIPPERING** - BOLYU warrants that Nexterra will not zipper or develop continuous pile runners for the lifetime* of the carpet. This portion of the warranty protects against zippering regardless of the average tuft bind properties, under dry or wet conditions as it might be during cleaning.
6. **PILLING AND FUZZING** - BOLYU warrants that Nexterra will not exhibit pilling or fuzzing for the lifetime* of the carpet.
7. **DELAMINATION** - BOLYU warrants that Nexterra will not delaminate for the lifetime* of the carpet. Chair pads are not required, but are recommended for optimum textural performance.
8. **DIMENSIONAL STABILITY** - BOLYU warrants that Nexterra will maintain its dimensional stability and will not dome or curl for the lifetime* of the carpet when installed per our recommendations.

*Lifetime defined as long as the carpet remains installed in the original location and is owned by the original purchaser.

II. Limitations - This warranty does not include:

1. Disfigurement or damage caused by abnormal use or any damage to the carpet not arising out of a defect to the carpet. For example, the warranty does not cover tears, burns, cuts, installation on stairs or

damage resulting from improper cleaning methods, or damage in transit.

2. Abuse by any athletic equipment such as roller skates, ski boots, or golf shoes.
3. Differential fading due to light exposure, shading, pile crush, dye lot differences, and soiling.
4. Any condition that would have had a visible defect upon inspection prior to installation.
5. Any condition resulting from other than ordinary wear, or from any use for which the product was not designed.

III. Obligations of Owner

1. The Owner must submit notice of all claims under this limited warranty to BOLYU within the specified warranty period.
2. Claims must be submitted in writing and delivered to:
BOLYU Contract Carpets
Attention: Product Services Group
P.O. Box 1447
Chatsworth, Georgia 30705
3. All areas in which carpet is to be replaced under the terms of this limited warranty must be cleared of all equipment, furnishings, partitions, and the like that have been installed over carpet subsequent to the original carpet installation, at the owners expense.

IV. Warranty Remedies

1. After receipt of proper written notice of claim, BOLYU will designate a representative to inspect that carpet with the Owners representative and BOLYU will meet all warranty obligations.
2. Subject to any monetary adjustment as may be agreed to upon in writing by BOLYU, and subject to the above warranty limitations and Owner obligation. BOLYU shall repair or, in its sole discretion, replace any designated carpet sold by it containing a defect covered by the above Nexterra limited warranty, at no expense to the owner.
3. Any replacement will be made with a comparable product selected by BOLYU from the then-current BOLYU running line. However, BOLYU's obligation shall not include the reimbursing of any indirect costs or consequential damages, however, incurred. By way of example, and not limitation, damages arising from interruption of use of the spaces affected, nor expenses in removing furniture from the affected area be included in our obligation.
4. The remedies provided in connection with the Nexterra warranty are expressly in lieu of any other remedies provided under any other expressed or implied warranty, INCLUDING ANY WARRANTY BY MODEL OR SAMPLE AND ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, and of any other obligation on the part of BOLYU.

V. Mediation/Arbitration

1. If a dispute arises out of or relates to this limited warranty, or the breach thereof, and if said dispute cannot be settled through direct discussions, the parties agree to first endeavor to settle the dispute in an amicable manner by mediation administered by the American Arbitration Association under its Commercial Mediation Rules, before resorting to arbitration. Thereafter, any unresolved controversy or claim

arising out of or relating to this limited warranty, or breach thereof, shall be settled by arbitration administered by the American Arbitration Association in accordance with its Commercial Arbitration Rules, and judgment upon the Award rendered by the arbitrator(s) may be entered in any court have jurisdiction thereof.

2. Neither party nor the arbitrators may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both parties.

3. Arbitrators shall be appointed as provided by the American Arbitration Association Commercial Arbitration Rules.

4. In rendering the award, the arbitrator shall determine the rights and obligations of the parties according to the substantive and procedural laws of Georgia.

VI. BOLYU hereby issues its Nexterra warranty to the Owner named below. This limited warranty is only valid when this form is properly executed by the Flooring Contractor, the Owner and BOLYU Contract Carpets.

Owner Name: _____

Address: _____

Place of Installation

Name: _____

Address: _____

Style Name: _____

Style #: _____

Square Yards: _____

BOLYU Invoice Numbers (Attach Invoice Copies)

Invoice # : _____ Date: _____

Invoice # : _____ Date: _____

Invoice # : _____ Date: _____

Invoice # : _____ Date: _____

Invoice # : _____ Date: _____

Invoice # : _____ Date: _____

Dealer Name: _____

Address: _____

Date Installation Completed: _____

The undersigned dealer hereby certifies that the above carpet was installed in strict accordance with BOLYU's written installation instructions and procedures. In consideration of BOLYU's extending the foregoing limited warranty knowing that BOLYU and the Owner will rely hereupon, the undersigned hereby agrees to hold BOLYU and the Owner, jointly and severally, harmless from any damage or liability, including reasonable legal fees, arising out of or in connection with the installation of the carpet in the event it was not completed in accordance with this certification.

Dealer

Authorized Signature: _____

Date: _____

Name and Title: _____

Owner

Authorized Signature: _____

Date: _____

Name and Title: _____

BOLYU

Authorized Signature: _____

Date: _____

Name and Title: _____

Date Issued: _____

Warranty #: _____

BOLYU Contract

PO Box 1447
1996 Highway 225 South
Chatsworth, GA 30705
800.451.1250
www.cambridgecarpets.com

Warranty

AVALAR®SD

AVALAR®RE

The warranties below are only applicable to Beaulieu Commercial products manufactured with 100% AVALAR®SD or AVALAR®RE nylon for indoor use. Installation in a *traffic* environment unsuitable for carpet or failure to sustain a routine carpet maintenance program (as recommended by Beaulieu Commercial) will void these warranties.

AVALAR®SD & AVALAR®SDX Lifetime* Stain Removal Limited Warranty

Beaulieu Commercial warrants for the useful life of the carpet made exclusively with AVALAR®SD & AVALAR®RE solution-dyed nylon, when installed and maintained as recommended by Beaulieu Commercial, will resist permanent stains caused by spills of all substances, subject to the following limitations. This warranty specifically excludes general soiling, discoloration, appearance change due to pile distortion, and exposure to substances or contaminants that degrade or destroy nylon yarn or the color of the carpet. Also, this warranty specifically excludes carpet that has been surface-treated with materials not recommended or approved by Beaulieu Commercial, or which has been subjected to abnormal use or conditions or to cleaning agents or maintenance methods not recommended or approved by Beaulieu Commercial.

THIS IS NOT A CLEANING CONTRACT. In order to make a claim under this warranty, the owner must have attempted to remove the stain within 24 hours after occurrence of the spill, **USING ONLY THOSE CLEANING AGENTS AND PROCEDURES RECOMMENDED BY Beaulieu Commercial**, and must notify Beaulieu immediately if stain removal is not successful. The original purchaser must also identify the type of stain and the method used to clean it. For approved cleaning agents and removal procedures, maintenance recommendations and other conditions of this warranty, refer to Beaulieu Commercial's "Total Solution Carpet Care Guide". If additional information or assistance is required, or in order to notify Beaulieu Commercial of an unsuccessful attempt to remove a stain, call 1-800-451-1250. Claims under this guarantee must be submitted in writing to Beaulieu Commercial c/o Product Services Group, P.O. Box 1447, Chatsworth, GA 30705.

In addition, the owner must furnish to Beaulieu Commercial the **ORIGINAL PROOF OF PURCHASE** and non-returnable samples of the carpet for testing, and must permit a Beaulieu Commercial Representative access to the installed carpet in order to attempt to remove the stain. If, in testing and analysis performed by Beaulieu Commercial, and subject to the other limitations set forth herein, the tested carpet or the cleaned area is found to have a rating of less than 4 under the AATCC Gray Scale for Evaluating Change in Color, Beaulieu Commercial will pay for the attempted removal of the stain by the Beaulieu Representative, or replace the original carpet in the affected area, up to 100 times the size of the stain, free of charge, including installation. No charges for floor preparation or for movement or replacement of equipment, furnishings, partitions, etc., will be allowed. At Beaulieu's option, we will refund to the owner the

original purchase price of the carpet in the affected area, up to 100 times the size of the stain. If the stain is removed using Beaulieu Commercial's recommended procedures, all stain removal costs will be the responsibility of the owner.

AVALAR®SD & AVALAR®RE Lifetime* Carpet Static Limited Warranty

Beaulieu Commercial warrants, for the useful life of the carpet, products made with AVALAR®SD or AVALAR®RE nylon, when installed and maintained as recommended by Beaulieu Commercial, will be shock proof to human beings, subject to the following limitations:

If human comfort is affected by shock, the owner must notify the carpet manufacturer and permit Beaulieu Commercial to test the carpet. If, in testing by Beaulieu and subject to the other limitations contained herein, the carpet generates static above 3.5 kv (the threshold of normal human sensitivity is 3.5 kv), when tested in accordance with AATCC test method 134 at 20% relative humidity and 70°F, Beaulieu Commercial will replace the original carpet in the affected room or area, free of charge, including installation, except that no charges for moving or replacing equipment, furnishings, partitions, etc., will be allowed.

AVALAR®SD & AVALAR®RE Colorfast Carpet Limited Warranty

Beaulieu Commercial warrants that products manufactured with 100% AVALAR®SD & AVALAR®RE nylon, when installed and maintained as recommended by Beaulieu Commercial, **FOR INDOOR USE ONLY** and subject to the other limitations set forth herein, will be colorfast against exposure to light and atmospheric contaminants as specified below:

Colorfastness to Light:

Beaulieu Commercial warrants, for the useful life of the carpet from the date of the original installation, products made with AVALAR®SD & AVALAR®RE will not display or evidence a significant change in color due to exposure to light.

In order to make a claim under this warranty, the owner must notify Beaulieu Commercial and furnish non-returnable samples of the carpet for testing. If, in testing by Beaulieu and subject to the other limitations set forth herein, (1) the carpet is found to have a rating of 3 or less under the Gray Scale for Evaluating Change in Color, AND (2) such rating is determined to be the result of exposure to light for a period of time not to exceed 200 Xenon Fadeometer hours of such exposure, when tested in accordance with the AATCC 16E test method, Beaulieu Commercial will replace the original carpet in the affected room or area, free of charge, including installation, except that no charges for moving or replacing equipment, furnishings, partitions, etc., will be allowed.

Colorfastness to Atmospheric Contaminants:

Beaulieu Commercial warrants, for the useful life of the carpet, products made with AVALAR®SD & AVALAR®RE will not display or evidence a significant change in color due to exposure to atmospheric contaminants (Ozone or Oxides of Nitrogen).

In order to make a claim under this warranty, the owner must notify Beaulieu Commercial and furnish non-returnable samples of the carpet for testing. If, in testing by Beaulieu and subject to the other limitations set forth herein, (1) the carpet is found to have a rating of 3 or less under the Gray Scale for Evaluating Change in Color, AND (2) such a rating is determined to be the result of Ozone exposure for a period of time not to exceed 8 cycles, when tested in accordance

with the AATCC 129 test method, or Oxides of Nitrogen exposure for a period of time not to exceed 8 cycles, when tested in accordance with the AATCC 164 test method, Beaulieu Commercial will replace the original carpet in the affected room or area, free of charge, including installation, except that no charges for moving or replacing equipment, furnishings, partitions, etc., will be allowed.

Colorfastness to Light:

Beaulieu Commercial warrants, for the useful life of the carpet from the date of the original installation, products made with AVALAR®SD & AVALAR®RE will not display or evidence a significant change in color due to exposure to light.

In order to make a claim under this warranty, the owner must notify Beaulieu Commercial and furnish non-returnable samples of the carpet for testing. If, in testing by Beaulieu and subject to the other limitations set forth herein, (1) the carpet is found to have a rating of 3 or less under the Gray Scale for Evaluating Change in Color, AND (2) such rating is determined to be the result of exposure to light for a period of time not to exceed 200 Xenon Fadeometer hours of such exposure, when tested in accordance with the AATCC 16E test method, Beaulieu Commercial will replace the original carpet in the affected room or area, free of charge, including installation, except that no charges for moving or replacing equipment, furnishings, partitions, etc., will be allowed.

Colorfastness to Atmospheric Contaminants:

Beaulieu Commercial warrants, for the useful life of the carpet, products made with AVALAR®SD & AVALAR®RE will not display or evidence a significant change in color due to exposure to atmospheric contaminants (Ozone or Oxides of Nitrogen).

In order to make a claim under this warranty, the owner must notify Beaulieu Commercial and furnish non-returnable samples of the carpet for testing. If, in testing by Beaulieu and subject to the other limitations set forth herein, (1) the carpet is found to have a rating of 3 or less under the Gray Scale for Evaluating Change in Color, AND (2) such a rating is determined to be the result of Ozone exposure for a period of time not to exceed 8 cycles, when tested in accordance with the AATCC 129 test method, or Oxides of Nitrogen exposure for a period of time not to exceed 8 cycles, when tested in accordance with the AATCC 164 test method, Beaulieu Commercial will replace the original carpet in the affected room or area, free of charge, including installation, except that no charges for moving or replacing equipment, furnishings, partitions, etc., will be allowed.

These warranties state the entire liability of Beaulieu Commercial with respect to the product warranted, except for any warranties of merchantability or fitness for a particular use, which are hereby limited to the duration of the applicable express warranty. In particular, these warranties do not cover incidental or consequential damages of any kind, nature or description, which may be claimed as a result of carpet failure or carpet replacement. (Note: Some states prohibit limitations on the duration of implied warranty, as well as the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. These warranties give you specific legal rights, and you may also have other rights, which may vary from state to state.)

*Lifetime defined as long as the carpet remains installed in the original location and is owned by the original purchaser.