Floor Care Guidelines for Forbo Sheet & Tile Linoleum
Marmoleum® and Walton

General Floor Care Guidelines

SAFETY FIRST
Wet floors may be slippery. Exercise caution when conducting wet cleaning procedures, especially in healthcare applications where protective footwear is worn. Always use proper signage and prohibit traffic until floors are thoroughly dry.

1. Color Selection
The color of a floor covering can play a significant role in the apparent cleanliness of the floor. Light colors tend to show dark colored soil, and dark colors tend to show light colored soil. Patterned or marbleized floor coverings generally have better soil concealing characteristics than plain floor coverings. In applications where regular floor care may not be possible, the color and pattern of the floor covering will influence how long the floor will retain an acceptable appearance level between cleaning procedures. In areas where there is a higher risk of staining, a color that will help to mask potential stains should be chosen.

2. Entrance Systems
Because the majority of dirt (as high as 80%) entering any building comes in on people’s footwear, it makes sense to incorporate an effective entrance system. A good entrance system will not totally prevent soil from entering a building, but it will substantially reduce soiling and make floor care easier. The entrance system can include specifically designed mat wells (such as Forbo’s Nuway), loose laid mats that can be cleaned and changed on a regular schedule (such as Forbo’s Coral), or a combination. An entrance system should extend far enough from the entrance so that the average person will take 4-10 steps while on the entrance system. It is also important that the entrance system be maintained correctly in order to ensure that it is fulfilling its function.

3. Petroleum and Anti-Oxidant Staining
Some rubber products, particularly dark colored ones like tires, casters, floor mats, and asphalt sealers that are commonly used in parking lots and walkways, contain chemicals that can permanently stain floor coverings. Although the discoloration is generally less marked with linoleum flooring than with vinyl flooring, precautions should always be taken in areas such as hospitals, supermarkets, or automobile showrooms where potential discoloration is a concern. For example, staining from tires can be prevented in an automobile showroom by placing a small mat under each tire. In hospitals or supermarkets, non-staining wheels should be specified for rolling equipment. All mats or rugs should also be non-staining.

4. Chemical Damage
All floor covering materials are subject to damage or staining from certain chemicals. For applications where damage or staining may be a concern, a flooring product that offers the best resistance to the specific chemicals involved should be selected. A stain resistant chart for commonly used chemicals is available for all Forbo flooring products. Chemical spills should always be cleaned as soon as possible in order to prevent or minimize damage to the floor covering. The application of a floor sealer and floor finish may be helpful in preventing permanent stains if the finish is removed before the stain has penetrated to the flooring material. The floor finish can then be replaced with additional coats of finish.

5. Spills
Spot clean spills as soon as possible. If necessary, rinse the area with clean cool water and allow the floor to dry thoroughly before permitting traffic. In addition to the possibility of damage or staining of the floor covering when spills occur, safety is also a concern. Make sure all floor care personnel are aware of the potential liability associated with spills, as well as the need for immediate attention.

6. Heel Marks
Black heel marks can be removed from linoleum using a fine nylon pad moistened with the selected polish. On vinyl flooring materials, use a clean white cloth with mineral spirits. Rinse thoroughly with a clean cloth and water. Allow to dry.

7. Cigarette Burns and Gum
A cigarette stubbed out on a linoleum floor only chars the surface, and the resulting mark can normally be removed by using fine steel wool. After cleaning, an application of floor finish will protect the repaired spot. On a vinyl floor covering, however, the heat of the cigarette will often melt the material and may leave a permanent mark on the floor. Gum can be removed with a smooth putty knife and mineral spirits.
8. Physical Damage
All resilient floor covering materials are susceptible to certain types of physical damage. Stationary objects such as furniture should have adequate floor protectors. If the pressure exerted by an object on the floor covering exceeds the floor covering's rated capacity, permanent indentations may occur.
Care must be taken when moving furniture or other heavy objects. Do not slide heavy objects across the floor. When moving heavy objects, protecting the floor covering with thin sheets of masonite or plywood may be required. Failure to use adequate precautions may result in scratches, cuts, or other severe damage to the floorcovering. Rolling equipment should have broad, flat wheels with rounded edges and without ridges. Wheel locks should be disengaged prior to moving equipment.

9. Disinfectants, Sanitizers, Sterilants
Quaternary ammonium compounds are commonly used in hospital disinfection programs. Generally, when mixed and used properly, they will have little or no effect on the physical properties of most floorcoverings. Phenolic disinfectants are very caustic and pose a greater risk of damage to floorcoverings or other surfaces that they come into contact with. Potential damage includes discoloration or damage of the flooring surface, and leaving a slippery residue that may cause a hazardous condition. Where protective footwear is used, the chance of slipping is increased. If phenolic disinfectants are used, the floorcovering should be thoroughly rinsed with clean water after each application. After rinsing, the floor should be wet vacuumed. Following this recommendation will reduce the risk of slipperiness and damage to the floorcovering. Forbo’s warranty does not cover damage caused by phenolic disinfectants.

10. Proper Use of Floor Care Chemicals
The improper use of high pH cleaners and strippers may damage resilient flooring products. Frequent treatment or inadequate rinsing may cause cracking, shrinking, and/or discoloration. Linoleum flooring should NEVER be cleaned or stripped with high pH chemicals because permanent damage may occur. Abrasive powders or cleansers should not be used on Forbo floorcoverings.

11. Floor Care Equipment
Keep all equipment clean and in good repair. Wash and rinse mops, pads, applicators, and brushes after each use. Use a dedicated mop for each procedure, i.e. one only used for cleaning, one only used for rinsing, and another only used for finish application.

12. Cleaning Machine Pads
The Color Codes indicating grades of pads will vary depending on the manufacturer, and also according to the type of machine that is used, i.e. standard, high speed or ultra high speed.

<table>
<thead>
<tr>
<th>For example:</th>
<th>3M</th>
<th>Johnson/Diversey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine grade, for dry burnishing non-buffable polishes</td>
<td>White</td>
<td>Mint</td>
</tr>
<tr>
<td>For medium grade, spray cleaning</td>
<td>Red</td>
<td>Mint</td>
</tr>
<tr>
<td>For heavy duty cleaning</td>
<td>Blue</td>
<td>Purple</td>
</tr>
<tr>
<td>Course grade, for stripping</td>
<td>Blue</td>
<td>Purple</td>
</tr>
<tr>
<td>High speed burnishing</td>
<td>Check with product manufacturer</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: The use of a black stripping pad is not recommended with Forbo floor coverings. Misuse can cause damage to the flooring material. A black stripping pad can be used on an existing non-cushioned floor covering to remove the finish for application of another resilient floor covering.
Linoleum is made from natural raw materials consisting of linseed oil, wood flour, rosin binders, dry pigments, mixed and calendared onto either a natural jute backing (sheet products) or a polyester backing (tile products). The Forbo Marmoleum® and linoleum product range includes: Marmoleum® sheet, Marmoleum® decibel sheet, Marmoleum® Composition Sheet (MCS), Walton sheet, Marmoleum® Dual Tile and Marmoleum® Composition Tile (MCT).

Forbo Marmoleum® and linoleum products feature Topshield™ finish. Topshield™ is an innovative factory finish that eliminates the need for initial finish application and reduces the use of chemicals, while enabling lower cleaning costs and better long term appearance retention than any other resilient flooring. Topshield™ consists of a strong, durable primer along with a top layer that provides a highly effective shield against soiling. The cross-linked primer ensures smoothness and durability.

Forbo Marmoleum® and linoleum products with Topshield™ are OCCUPANCY READY following installation. No additional finish is required. When cleaning these products, do not remove the existing Topshield™ finish. If desired at a later time, the top layer can be cost-effectively renovated to renew the visual appearance of the product.

NOTE: Wait at least 5 days after installation before conducting wet cleaning procedures.

INITIAL CLEANING
For new installations exposed to normal construction soil and traffic.
1. Remove all surface soil, debris, sand and grit by sweeping, vacuuming or dust mopping.
2. Scrub the floor with a neutral pH detergent/cleaner, such as Johnson Wax Professional Stride, mixed according to label directions. Apply the cleaning solution with a mop and bucket; allow the solution to remain on the floor, then scrub with a rotary electric scrubber or automatic scrubber with a non-abrasive red scrubbing pad.
3. Do NOT over-saturate the floor.
4. If not using an automatic scrubber, pick up the scrubbing solution with a wet vacuum (preferred) or a squeegee and a mop.
5. Rinse the entire floor surface with a clean mop using clean, cool water and allow the floor to dry thoroughly before allowing traffic.
6. Although no additional finish is required, one to three coats of additional finish may be applied if desired.
7. If desired, spray buff with a spray buff solution, such as Johnson Wax Professional Snapback, then dry buff with a white pad, followed by dustmopping.

NOTE: Because of the unique Topshield™ surface, additional floor finish is not necessary. The application of additional finish will however, increase the thickness of the wear surface, which may improve resistance to some stains, as well as provide additional gloss if desired. Consideration for applying additional finish, either alone or in combination with Johnson Wax Professional LinoBase Sealer, should be given if: (1) Additional gloss is desired, or (2) Exposure to unknown chemicals is a concern.

DAILY CLEANING
1-3 times per day, depending on the application, type of traffic, and hours of operation.
1. Clean the entire flooring surface with a treated dust mop.
2. Stains or spills should be wiped or mopped up immediately with a damp mop using a neutral pH detergent, such as Johnson Wax Professional Stride. Be sure to allow the floor to dry thoroughly before allowing traffic.

REGULAR CLEANING
Approximately every 3-7 days, depending on the application, type of traffic, and hours of operation.
1. Clean the entire flooring surface with a treated dust mop.
2. Damp-mop the floor with a neutral cleaner, such as Johnson Wax Professional Stride, and rinse the entire floor surface with a clean mop using clean, cool water. Allow the floor to dry thoroughly before allowing traffic.

OR
Use the Johnson Diversey PACE Cleaning System with microfiber pads (JDI Healthy High Performance Cleaning System).
PERIODIC CLEANING
As needed, depending on the application, type of traffic, and hours of operation.
1. Clean the entire flooring surface with a treated dust mop.
2. Top scrub the floor with a neutral pH detergent/cleaner, such as Johnson Wax Professional Stride, mixed according to label directions. Apply the cleaning solution with a mop and bucket; allow the solution to remain on the floor, then scrub with a rotary electric scrubber or automatic scrubber with a non-abrasive red scrubbing pad.
3. Do NOT over-saturate the floor.
4. If not using an automatic scrubber, pick up the scrubbing solution with a wet vacuum (preferred) or a squeegee and a mop.
5. Rinse the entire floor surface with a clean mop using clean, cool water & allow the floor to dry thoroughly.
6. Spray buff with a spray buff solution, such as Johnson Wax Professional Snapback, then dry buff with a white pad followed by dustmopping.

NOTE: Weather, traffic, and geographical location will influence the required frequency of this procedure. For example, in areas where there are large amounts of snow and chemicals used in the winter months it will likely be necessary to perform this procedure more frequently. In dry climates, or where there is less dirt traffic, it may not be necessary to perform this procedure as frequently.

RENOVATION
As needed if the flooring has been damaged or when periodic cleaning procedures no longer produce the desired result.
1. Clean the entire flooring surface with a treated dust mop.
2. Heavy Scrub the floor using a stripper solution such as Johnson Wax Professional LinoSafe Stripper, mixed according to label directions. Apply the stripping solution with a mop and bucket and, following label directions, allow the solution to remain on the floor, then scrub with a rotary electric scrubber or automatic scrubber with a green or blue scrubbing pad. The use of brown or black stripping pads is not recommended.
3. Do NOT over-saturate the floor.
4. If not using an automatic scrubber, pick up the scrubbing solution with a wet vacuum (preferred) or a squeegee and a mop.
5. Rinse the entire floor surface with a clean mop using clean, cool water & allow the floor to dry thoroughly.
6. Apply 2-3 thin coats of Johnson Wax Professional Carefree Matte finish or, for a higher gloss, Johnson Wax Professional Carefree finish.

CAUTION: The Topshield™ factory coating can be damaged by traditional wet stripping methods. The caustic nature of many traditional strippers will cause a color change in Marmoleum® and linoleum, normally yellowing or browning, particularly on lighter colors. Also, as the stripping solution sits in contact with the linoleum, the linoleum absorbs the stripping solution, causing it to expand and become softer. In this softened state, further damage to linoleum can easily occur with the use of heavy duty stripping pads normally used for traditional wet stripping.

Forbo Marmoleum® and linoleum flooring should never be subjected to traditional, aggressive wet stripping. These floors should be cared for by a staff trained to understand the following:
• Forbo Marmoleum® and linoleum flooring with Topshield™ is OCCUPANCY READY following installation. Removal of the factory finish, recommended by some manufacturers, is not necessary or recommended for Forbo linoleum flooring products.
• A regular floor care program, as described above, should be followed closely. If there are any questions, Forbo representatives are available to conduct a floor care review prior to the initial cleaning.
• A well-trained staff using an effective program of regular care will virtually eliminate the need for stripping, and is the recommended approach to Marmoleum® and linoleum floor care.

Forbo's Floor Care Guide contains additional information about floor care and is available for download at www.forboflooringna.com. For a hard copy, or for additional information, contact Forbo Technical Services at +800 842 7839.