# COMMERCIAL FLOOR CARE GUIDE











# **IMPORTANT:**

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## **Foreword**

With a market share of over 65%, Forbo is one of the largest floor covering manufacturers in the world and is the global leader in linoleum. Our linoleum production facilities have been in continuous operation since the 1860's. This experience, combined with a commitment to continual research and technology advancement, is responsible for the evolution of the highest quality flooring products in today's market.

Forbo's motto, "creating better environments" was formed out of our company's environmental engagement and leadership which is the overriding objective at the core of our organization. Our goal is to provide the desired aesthetic appearance while maximizing the long term performance of the floor with a reduced usage of chemicals, enhance the indoor air quality and decrease human health impacts by providing the most environmentally friendly products possible. The rigorously controlled manufacturing process is only one part of Marmoleum's unequalled environmental profile. Proper installation and floor care is what allows the maximum benefits of the product to come through. With our innovative Topshield2™ finish, combined with improved approaches to interior maintenance, we can achieve that goal at the lowest possible cost in the industry today. "Committed to The Health of One" is the next step in sustainability. As our floors are part of the indoor environment in which people live, meet and work, it is our mission to design and offer products that contribute in a positive way to the health and comfort of the individual. In our urban environments, 80 − 90% of our time is spent indoors. Floors are the basis of our indoor environment. Through our flooring solutions, it is our ambition to make a positive contribution to the health and well-being of the environment. That is why for Forbo, our commitment to sustainability is a commitment to the health of one person, one building, one planet – for today as well as future generations.

The finest floor coverings will not look good or perform well if it is not properly installed and cared for. The vast majority of all complaints in the flooring industry are installation, substrate or floor care related. The first step to a successful installation is choosing the right floor covering for any particular application. No single floor covering product is right for every application. If there is any doubt as to the suitability of a product for a particular application, always check with the manufacturer for recommendations.

With today's technology, flooring products, substrate preparation products, adhesives, installation techniques, floor care equipment and chemicals change at a rapid pace. It is the responsibility of the installer or floor care technician to ensure that flooring products are installed and cared for in strict accordance with the manufacturer's recommendations.

This guide is one of the many technical support services provided by Forbo Flooring Systems. Do not install or perform floor care procedures on any Forbo product until you are fully educated and familiar with the installation and floor care recommendations. Always ensure that all site requirements, as outlined in the Jobsite Conditions section of the Forbo Installation Guide, have been met. The procedures and recommendations described in this guide have been carefully developed to offer the best opportunity for a proper and successful outcome with Forbo products. Following these guidelines will offer the end-user the full value of the product. Any deviation from these guidelines may result in a flooring failure. Failure to follow these guidelines does not affect the manufacturer's limited warranty, but it does increase the risk of a flooring failure.

Thank you for choosing Forbo Flooring products and giving us the opportunity to help you create better environments for all.

For additional information, contact Forbo's Product Support & Education Services at 1-800-842-7839 or www.forboflooringNA.com.

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# **Forbo's Certification Courses**

#### **Professionalism and Attitude**

"Professionalism" is not merely possessing mechanical skills and knowledge, it is also an attitude. Having the right attitude and conducting oneself in a professional manner at all times is essential to gaining the respect of all those you come into contact with. Above all else, taking pride in your work is the key to successful installations.

Take the time to review the manufacturer's guidelines. If you ever have any doubts, do not proceed with the installation before contacting Forbo's Product Support & Education Services. The liability and warranty of the installation rests solely with the installer, flooring contractor and/or any other companies involved on the project. The warranty from the manufacturer covers only the product, and is in no way contingent upon installation or floor care practices.

#### **Education**

The flooring industry is continually changing. In order to remain successful, those working in the industry must also change, and education is the key to this change.

The Forbo Installation Training Program is industry benchmark for installation training. In addition to being dedicated to offering resilient flooring installers the most comprehensive and professional installation training courses in the industry, Forbo Flooring Systems also offers an array of other educational opportunities such as product presentations, supplier training seminars and dealer installation clinics for our products.

Forbo offers four (4) different types of installation certification courses: Forbo Modular Technician, Forbo Sheet Technician, Forbo 360 Master Mechanic and Forbo Residential Technician. Each course is focused on product education as well as the most efficient installation techniques. In order to qualify for certification, the installer must successfully and satisfactorily complete all the installation tasks, have a thorough knowledge of the information presented throughout the course, and most importantly, demonstrate a professional attitude. The courses are graded on the Pass/Fail system. Attending a course does not ensure certification.

Forbo offers one (1) floor care certification course that offers two (2) different types of floor care certifications: Forbo Floor Care Technician and Forbo Floor Care Advisor. In order to qualify for a certificate, the attendee must have a thorough knowledge of the information presented throughout the course and, most importantly, demonstrate a professional attitude. Floor Care Technicians must also successfully and satisfactorily complete the tasks covered throughout the course. Attending a course does not ensure certification.

Upon successful completion of the course, the attendee will receive a certificate suitable for framing and a laminated wallet card to carry. Qualified attendees are maintained in a database utilized for referrals throughout North America.

#### **Forbo Floor Care Course**

The Forbo Floor Care Course offers two (2) certifications. A Floor Care Technician is a professional contract cleaner who has attended and successfully completed the Forbo Floor Care Training Course. They have a full understanding of Forbo's cleaning

★ Floor Care Technician ★



processes and are capable to utilize the guidelines to satisfy the needs of Forbo customers. They are willing to be recommended by Forbo to customers in need of a proper floor care demonstration, hands-on training for a facility staff, contract cleaning or the restoration of a floor. A Floor Care Advisor is a representative or employee from a manufacturer or distributor of floor care chemicals or floor care equipment who has attended and successfully completed the Forbo Floor Care Training Course. They are willing to be recommended by Forbo to customers in need of a comprehensive education for choosing the proper floor care chemistry or equipment as well as direction on recommended care procedures or frequency, specific to the customers' facility, resources and needs. The course is comprised of the following topics and techniques:

Forbo Product Knowledge Floor Care Chemicals 101 Equipment & Tools Chemical Damage Resilient Floor Care Procedures Textile Floor Care Procedures Repairs Professionalism

#### **Forbo Modular Technician Course**

The Forbo Modular Technician Course is intended for experienced resilient tile installers who want to improve their level of knowledge and skill on Forbo modular products: Marmoleum Tile, Colorex, Allura, and Flotex Tile. The course is comprised of the following topics and techniques:

Substrate Evaluation & Preparation Jobsite Conditions Forbo Modular Product Knowledge Tools Fitting Techniques Adhesive Requirements Layout Installation Techniques Professionalism



#### **Forbo Sheet Technician Course**

The Forbo Sheet Technician Course is intended for experienced resilient flooring installers with a minimum of 4 years resilient installation who want to improve their level of knowledge and skill on Forbo sheet products: Marmoleum, Eternal, Flotex and Coral. The course is comprised of the following topics and techniques:

Substrate Evaluation & PreparationAdhesive RequirementsJobsite ConditionsInsets and DesignForbo Sheet Product KnowledgeInstallation Techniques

Tools Heat Welding & Accent Heat Welding

Net Fit Seams Professionalism

Fitting Techniques (Direct & Pattern Scribing)



#### **Forbo 360 Master Mechanic Course**

The Forbo 360 Master Mechanic Course is tailored for the installer who has already achieved the Modular and Sheet Technician certifications and wants to reach the highest certification level in the industry. This intensive and rewarding course is comprised of the following advanced installation topics and techniques:

Accent heat welding Floor Care

Specialty tools Heat Welding Flash Coved Seams & Corners

Flash Coving Professionalism

Vertical installations



TECHNICIAN

#### **Forbo Residential Technician Course**

The Forbo Residential Technician Course is tailored specifically for the challenges an installer faces in a residential setting. It is intended for experienced resilient installers who want to improve their level of knowledge and skill on Forbo products: Marmoleum, Eternal, Allura, and Flotex. The course is comprised of the following topics and techniques:

Conduct in the Residential Workplace Fitting Techniques (Direct & Pattern Scribing)

Substrate Evaluation & Preparation Net Fit Seams

Jobsite Conditions Adhesive Requirements
Forbo Product Knowledge Insets, Design & Borders

Installation Techniques (Sheet & Tile) Professionalism

## **Forbo Training Centers**

The Forbo certification courses are only offered at the following Forbo Training Centers:

Hazleton, Pennsylvania

Dallas, Texas

Reno, Nevada

Toronto, Ontario

Delta, British Columbia

#### Registration & Accommodations

Each course has a limited number of attendees and the courses are filled by invitation only.

Forbo provides hotel accommodations, breakfasts and lunches, as well as transportation to and from the hotel and Forbo Training Centers. Each attendee is responsible for his/her own dinner and travel expenses, including travel to the hotel from the airport. If you are a professional and desire to enhance your skills and knowledge, contact Forbo's Product Support & Education Services.



# The Impact of Buildings & Our Environment

Buildings are one of the largest users of energy and resources. Statistics collected by the US Green Building Council (USGBC) indicate that buildings in US represent:

- 40% of the country's primary energy use
- · 38% of all CO2 emission
- 72% of electricity consumption
- 14% of potable water consumption
- · 40% of all raw materials extracted globally for building construction

Statics from The Ashkin Group, commercial buildings, schools and universities annually produce:

- 6 billion pounds of cleaning and coating chemicals.
- 4.5 billion pounds of paper (25 50 million trees)
- 35 billion plastic trash liners
- 35,000 pounds of equipment (40 dump truck loads)

The environmental impact of cleaning products resulting from the extraction of raw materials, their manufacture into finished goods, their transportation, storage, use and ultimate disposal is enormous. The impact of many of these products on building occupants and cleaning personnel health is also sizable. Building occupants spend substantial time within buildings. They can be exposed to chemicals and other substances resulting from the cleaning process for many hours each day. The same can be said for cleaning personnel who are in daily contact with cleaning chemicals. Creating a healthy environment by extracting the contaminants that normally enter buildings can greatly enhance worker productivity, performance and work quality as well as their sense of wellbeing.

At one time, cleaning for appearances may have been enough. No more. Building owners and managers are much more aware of the effect facilities have on health, safety and the environment, which in turn can have considerable financial impact.

#### Consider these facts:

- 1 of every 3 buildings has poor indoor environmental quality affecting the health of occupants, according to the World Health Organization (WHO).
- Contaminants are typically at a minimum 2 to 5 times worse indoors than outdoors, according to the U.S. EPA.
- Asthma has increased in young children by 160% since 1980, becoming the leading cause of disease-related absenteeism and accounting for more than 14 million lost days in school.
- Poor indoor air quality costs the U.S. economy \$60 billion of lost worker productivity every year, states the EPA.
- Indoor air pollution is one of the top five public health risks.

Building owners and managers are also becoming more aware of both the lifecycle cost of their buildings and the impact their ongoing operations have on the environment.

- 75% of a buildings lifetime costs are generated by alterations, energy and operations.
- Buildings consume 40% of all energy, use 72% of all electricity and add 38% to atmospheric emissions.
- Cleaning and maintaining commercial buildings requires 6 billion pounds of chemicals, 4.5 billion pounds of paper and 35 billion plastic trash liners.

This guide does not suggest that current cleaning procedures are in anyway inadequate or have created a condition placing building occupants, cleaning personnel or the environment at risk. Rather, it shows you how to go beyond traditional procedures to reduce the impact cleaning practices have on building occupants while at the same time maintaining or improving the health, comfort and appearance of a building.

Clearly, we have an opportunity to do better. We need to take a leadership role to protect the health of building occupants and cleaning personnel as well as reduce the overall impact on our environment.

# **Reducing Building Impacts & Costs**

Smart building owners and managers in organizations from across all sectors and industries are taking action to reduce the negative impacts of their facilities. Forbo Flooring Systems is dedicated to help develop cleaning programs that go far beyond appearances. By improving a building's environmental quality and sustainability with a cost neutral or cost reduction impact on operations through our floor care programs, facilities can provide a clean and safe work environment, increase employee productivity and satisfaction, and enhance the value and integrity of buildings while reflecting organizational mission and values. This can minimize the environmental, health and safety impact of your buildings on employees, tenants, occupants, customers, visitors and cleaning staff.

Implementation of new procedures, equipment and cleaning supplies, was found to decrease the levels of airborne dust inside the building by 52%. Total volatile organic chemical (VOC) concentrations decreased by 49%, total bacteria decreased by 40%, and fungi colony-forming units decreased by 61%.

Choosing environmentally preferable chemicals to care for your facility provides:

- A clear perspective on the need for green cleaning and green cleaning concepts.
- A review of market influences and individual responsibilities along with stewardship principles.
- Cleaning strategies, procedures and guidelines backed by the most up-to-date training support tools.
- Environmentally preferable janitorial guidelines for chemicals, paper and liners, and tools and equipment.
- A pathway to earn credits toward certification under the LEED™ for Existing Buildings Green Building Rating System™ (LEED-EB™) from the U.S. Green Building Council (USGBC).

A key part of operating facilities in an environmentally responsible way will help your organization achieve the benefits of operating a healthy environment by:

- · Improving employee and occupant health.
- · Improving worker/employee productivity.
- Reducing worker's compensation claims for custodial staff.
- Sustaining or improving organizational reputation and brand equity among employees, customers and the surrounding community.

#### **LEED Certification**

LEED stands for Leadership in Energy and Environmental Design and is the industry standard used to determine just how "green" a building is. LEED certification aims to improve occupant well-being, environmental performance and economic returns of buildings using established and innovative practices, standards and technologies. Forbo's floor care recommendations provide you the potential to earn as much as one-third of the points needed for certification.

Under LEED v2009, a building could earn one point by complying with IEQ Credit 3.1: Green Cleaning – High Performance Cleaning Program. Under LEED v4, the cleaning personnel still have to carry out their green cleaning program, but points are no longer assessed. The point is now a part of the prerequisite, which also includes additional chemical products. Green cleaning programs should now support less toxic laundry and warewashing chemicals. The prerequisite also discusses the appropriate selection and use of disinfectants; meaning to use product only when needed while following the manufacturers' usage instructions and strictly adhering to recommended dwell times. Using certain chemicals, like disinfectants where they are unnecessary can harmfully impact human health and the environment. The Forbo floor care guidelines will aid in choosing the right chemical for the application.

#### **Stewardship Principles**

Managing a building is a huge responsibility. As an asset it can be worth tens of millions of dollars and some historical buildings are irreplaceable. The materials of construction, energy and other products used in building operations have an enormous environmental impact. The impact of cleaning chemicals and processes makes an indelible impact on the lives of the people who work, visit and live in the building. Thus, Stewardship is about "care" for a building far beyond the basic operations. Here are the 10 Stewardship Principles for Green Cleaning:

- 1. Commit to people, education and communications.
- 2. Clean to protect health and the environment first, and appearance second.
- 3. Clean and maintain the building as a whole, not just as separate components.
- 4. Schedule routine maintenance.
- 5. Plan for accidents.
- 6. Minimize human exposure to harmful contaminants and cleaning residues.
- 7. Minimize chemical, particle and moisture residue when cleaning.
- 8. Ensure worker and building occupancy safety at all times.
- 9. Minimize the amount of pollutants entering the building, while maximizing the amount of pollutants extracted.
- 10. Dispose of cleaning waste in environmentally safe ways.

# **Developing a Strategy**

Presidential Executive Order 13101, Section 201 defines "environmentally preferable" products as "products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service." This definition of environmental preferability is consistent with the growing U.S. and international trend in this area, and as such, is an excellent conceptual definition of the term. More information on Presidential Executive Order 13101 can be found at http://www.ofee.gov/eo/13101.htm.

There are two critical elements in the definition of environmental preferability. The first is that it defines the issue as a comparison. It does not suggest that some are "bad" and others are "good." It does not describe the issue as black and white. Rather, it is a comparison in an effort towards the continual reduction of impact resulting from both products and services such as those provided by cleaning contractors or custodial staff. The second critical element is that the definition of "environmentally preferable" includes human health along with environmental impact.

Thus, the concept of environmental preferability is not intended to suggest that traditional products are "bad" or have put our cleaning personnel, building occupants and visitors or the environment at risk of harm or injury. Rather, the concept of environmental preferability is simply a decision-making strategy that takes advantage of the opportunities to reduce impact and perform tasks better. Considering the billions of pounds of chemicals (e.g., cleaner and floor coatings), paper (e.g., toilet tissue and hand towels) and plastic (e.g., trash can liners) used by the commercial cleaning industry to clean and maintain buildings, there exists an enormous opportunity to reduce the negative impacts of cleaning and have a positive influence on health and the environment.

For a guide to Forbo's "Cost of Ownership", visit www.floorcostcomparison.com.

#### **Develop a Purchasing Strategy**

Historically, the decision-making matrix for product selection was primarily limited to cost and performance. While health, safety and environmental concerns have always existed, they often play too little or no role in the decision-making matrix. The traditional assumption has been that all products meet the minimum requirements, and thus are acceptable. Furthermore, many procurement personnel have the perception that all products used for specific tasks are essentially the same. Therefore, no additional consideration regarding health and environmental attributes was necessary.

While the traditional decision-making model may be adequate, it fails to recognize the advances that have been made in many product categories. For example, the paper industry has developed processes for using high levels of post-consumer content in paper products, a resource that was unavailable 20 years ago.

Furthermore, purchasing was often done independent of other facility issues, such as construction materials, flooring materials, HVAC issues, geographical location, occupant make-up, cleaning personnel, facility mission, etc. This limited focus resulted in a "one-size-fits-all" product solution which would only be the appropriate decision if all facilities, occupants, cleaning personnel, etc., were the same. Environmentally preferable purchasing expands the decision-making model and takes advantage of new technologies to reduce health and environmental impacts that may have far-reaching financial implications.

#### **Cleaning Personnel Responsibility**

The role that cleaning workers play in a cleaning program compared to are the day-to-day responsibilities for keeping facilities clean, removing trash, restocking restroom supplies, etc. Cleaning personnel are part of a Stewardship Team, not a group of individuals responsible for cleaning the building. The importance of their role in maintaining a healthy indoor environment should be elevated in stature throughout the facility. The result is improved communications, which in turn means there are fewer problems that can be solved more quickly and with less aggressive or toxic materials.

# **Customizing Your Floor Care Program**

Forbo Flooring products are engineered to provide outstanding value in service and to look good over many years of use. However, in order to realize the maximum value of the floor over the long term, they must be properly installed and cared for. In the same way that a car needs gas, oil and regular servicing to run smoothly, a floor covering needs a regular servicing program to offer the ultimate performance.

When developing a customized floor care program, one issue that should be considered is accommodating people within a building or space that may have special needs. This includes the need to identify the most vulnerable population and the method for designing programs to create the healthiest environment.

The floor care guidelines that follow are intended to serve as a general guide and were developed with a focus on striking a balance between appearance and cost. The frequency and specific type of procedures required will vary depending on the application, type and volume of traffic, equipment and personnel resources available and the desired appearance of the floor. By defining the traffic areas in a facility, a better determination can be made regarding an appropriate floor care plan. Single foot traffic is defined as "a pedestrian walking across a measured section of flooring, one time." Traffic areas can be defined as:

- <u>High Traffic Areas</u> (800,000 2,000,000 traffics): Outside entrances, hallways, break rooms, cafeterias, corridors, elevator lobbies, stairways, main aisles, waiting areas, etc. and ANY AREA CONSIDERED ESSENTIAL TO THE PUBLIC IMAGE OF THE COMPANY.
- Medium Traffic Areas (400,000 800,000 traffics): Secondary aisles, research areas, conference rooms, classrooms, atriums, etc.
- <u>Light Traffic Areas</u> (400,000 traffics or less): Offices, cubicles, storage rooms, executive areas, etc.

Each of the following sections have recommended floor care chemicals that have been tested for compatibility with Forbo products. This list is provided to offer the best opportunity to care for your flooring and meet the needs of your facility. If you prefer to use a manufacturer's floor care chemicals that are not listed, be sure to use a corresponding cross-referenced product. For additional information on a product or for your local supplier, refer to the Contacts section of this guide.

**IMPORTANT:** Forbo Flooring Systems does not warrant or guarantee the performance of other manufacturers' products mentioned in this guide. For specific information regarding Forbo's warranty, visit www.forboflooringNA.com or contact Forbo's Product Support & Education Services.

## **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.

#### **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 floorcoverings.

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.

## **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. An entrance system should extend far enough from the entrance so that the average person will take four to ten (4 - 10) steps while on the entrance system. Ten (10) feet of an entrance system removes up to 70% of the walked-in soil and moisture. Twenty (20) feet of an entrance system removes up to 90% of the walked-in soil and moisture.

It is also important that the entrance system be maintained correctly in order to ensure that it is fulfilling its function. A good entrance system will not totally prevent soil from entering a building, but it will substantially reduce soiling and moisture from being tracked throughout the building at the point of entry. A quality entrance system will also make floor care easier. Forbo offers two entrance system options – Coral® and Nuway®. Regardless of the type of entrance system in place, they should be cleaned and cared for on a regular basis.

## **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 or discolor floor coverings. Although the discoloration is generally less noticeable 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.

#### **Chemical Damage**

All floorcovering 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. Contact Forbo's Product Support & Education Services for additional information.

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 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 restored with additional coats of finish.

#### **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.

#### **Heel Marks**

Black heel marks can be removed using a fine nylon pad moistened with a neutral pH detergent. Rinse thoroughly with a clean cloth and water. Allow to dry thoroughly before allowing traffic.

## **General Floor Care Guidelines**

#### **Minor Surface Burns**

Minor surface burns on Marmoleum® only char the surface, and the resulting mark can normally be removed by lightly rubbing the area with a fine grade steel wool (00 or 000 grade). After cleaning, the application of spray buff, mop on restorer or floor finish will protect the repaired spot. On a vinyl and textile floorcoverings, however, the heat of the cigarette will often melt the material and may leave a permanent mark on the floor.

**NOTE:** This is a repair to the flooring and by following the process above, it can change the surface of the material. Repairs are a fix, not a replacement of material and it needs to be viewed as just that. Contact Forbo's Product Support & Education Services for more information prior to doing any repairs.

#### Gum

Gum can be removed with a smooth, plastic putty knife and Forbo Adhesive Remover.

#### **Physical Damage**

All flooring materials are susceptible to physical damage. For example, concrete is one of the most durable flooring surfaces and it too can be scratched or cracked. For any flooring, these marks or scratches will become more visible as they start to hold soil. The soil can be removed from these marks, however soil will continue to collect in these areas, diminishing the overall appearance of the floor. The most common causes of physical damage are movable or rolling furniture that has insufficient or no furniture protectors and sliding heavy furniture or objects across the floor.

To reduce the chance of damage and to increase the overall appearance of the flooring, precautionary measures should be put in place. Newly installed floors must be protected from construction soil, traffic and damage. Floor protectors should be installed on all movable furniture. Rolling equipment should have broad, flat wheels with rounded edges and without ridges. Wheel locks should be disengaged prior to moving equipment. When moving heavy stationary objects, protecting the floor covering with sheets of Masonite or plywood is recommended. Failure to use adequate precautions may result in scratches, cuts or other severe damage to the floorcovering. For stationary objects, permanent indentations may occur if the pressure exerted by the object on the floor covering exceeds the floor covering's rated capacity.

For additional information on floor protection or to find a local supplier, contact Forbo's Product Support & Education Services and refer to the Contacts section of this guide.

#### Disinfectants

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 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.

#### **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. Marmoleum® 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. **CAUTION!!** Follow the recommendations for each Forbo product on the following pages. Damage is not covered under Forbo's warranty.

#### **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. **CAUTION!!** Follow the recommendations for each Forbo product on the following pages. Damage is not covered under Forbo's warranty.

# Marmoleum® with Topshield2™

The Forbo Marmoleum® with Topshield2™ product range includes: Marmoleum® sheet (including Marmoleum® Striato Textura), Marmoleum® Decibel sheet, Marmoleum® Composition Sheet (MCS), Walton sheet, Marmoleum® Modular (including Marmoleum® Modular Striato Textura) and Marmoleum® Composition Tile (MCT).

Forbo Marmoleum® products are made from natural ingredients including linseed oil, rosin binders, wood flour, limestone and dry pigments which are mixed and then calendared onto a natural jute backing. Marmoleum® features Topshield2™ Forbo's high performance factory applied finish. Its double layer UV cured technology delivers extraordinary performance and clear and vibrant colors that remain over time. Marmoleum® with Topshield2™ requires no initial maintenance or polymer application. This means that at the time of installation, cleaning with a neutral pH cleaning solution is all that is necessary. The surface can be repaired or refreshed in cases of accidents or after years of intensive use.

IMPORTANT! Before starting any cleaning procedures on any Forbo products, contact Forbo's Product Support & Education Services for additional information, recommendations or to schedule a site visit. The best results may not be achieved if the chemical and equipment types recommended below are not used. The size of the equipment recommended may also vary based on the size of the space or application type.

**NOTE:** Forbo Flooring Systems does not warrant or guarantee the performance of other manufacturers' products mentioned in this guide. For specific information regarding Forbo's warranty, visit www.forboflooringNA.com or contact Forbo's Product Support & Education Services.

#### **INITIAL CLEANING**

Cleaning performed for new installations exposed to normal construction soil and traffic. It is necessary to protect newly installed floors from construction soil, traffic and damage until they are ready for initial cleaning. In order to allow the adhesive to dry and cure properly, wait a minimum of five days following the installation before conducting initial cleaning or other wet cleaning procedures. For installations over non-porous substrates, additional time may be necessary because the adhesive may take longer to dry and cure.

IMPORTANT!! Forbo does not recommend or require the application of finish to Marmoleum®. However, some clients request finish application on newly installed floors. To ensure proper adhesion of the finish to the Topshield2™ surface, contact Forbo's Product Support & Education Services PRIOR to any finish application.

- Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- 3. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas or for flooring with embossment. If not using an automatic scrubber, pick up the scrubbing solution with a wet vacuum (preferred) or a squeegee and a mop.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a 3M™ Red Buffer Pad #5100 or equivalent. If using an automatic scrubber, it is recommended to double scrub the floor. NOTE: For heavier soil loads or to remove adhesive residue, use a 3M™ TopLine Autoscrubber Pad #5000 or equivalent.
   5. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber
- Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. NOTE: For flooring with embossment, it is easier to recover the solution by running the equipment perpendicular to the embossment.
- 6. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 7. Allow the floor to dry thoroughly before allowing traffic.

#### **ROUTINE CLEANING**

Cleaning performed a minimum of once a day, depending on the application, type of traffic and hours of operation.

- 1. Stains or spills should be wiped or mopped up immediately with a damp mop using a neutral pH cleaning solution. Rinse the affected area with clean, cool water. Be sure to allow the floor to dry thoroughly before allowing traffic. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products. Remove all surface soil, debris, sand and grit by sweeping, vacuuming or dust mopping.
- 2. Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop and bucket or an automatic scrubber with a 3M™ Red Buffer Pad #5100 or equivalent.
- 3. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- 4. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas or for flooring with embossment.
- 5. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a 3M™ Red Buffer Pad #5100 or equivalent. If using an automatic scrubber, it is recommended to double scrub the floor. NOTE: For heavier soil loads, a 3M™ TopLine Autoscrubber Pad #5000 or equivalent may be used.
- 6. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. **NOTE:** For flooring with embossment, it is easier to recover the solution by running the equipment perpendicular to the embossment.
- 7. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 8. Allow the floor to dry thoroughly before allowing traffic.

# Marmoleum® with Topshield2™

#### **INTERIM CLEANING**

Cleaning performed as needed, depending on the application, type of traffic and hours of operation. The following processes should be followed when the routine cleaning is not removing the soil from the floor.

- Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. For light soiling, mix a neutral pH solution according to the label directions. The pH of the neutral cleaner in solution must be between 6.0 8.0 pH. For medium or heavy soiling, mix 2 oz. of a general purpose cleaner per gallon of water. The pH of the general purpose cleaner in solution must be between 8.0 10.4 pH. Refer to the list at the end of this section for recommended products.
- 3. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas or for flooring with embossment.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using either a 3M™ Red Buffer Pad #5100 or equivalent for light soiling or a 3M™ TopLine Autoscrubber Pad #5000 or equivalent for medium or heavy soiling.
- 5. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. **NOTE:** For flooring with embossment, it is easier to recover the solution by running the equipment perpendicular to the embossment.
- 6. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 7. Allow the floor to dry thoroughly before allowing traffic.
- 8. One of the following procedures must be performed:
  - a. Spray buff the floor using a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent and a 3M™ Red Buffer Pad #5100 or equivalent, followed by dust mopping.
  - b. Apply a mop-on restorer according to the label directions. Burnish the floor using a burnisher such as Tennant/Nobles BR-2000-DC or equivalent with a 3M™ Eraser Pad #3600 or equivalent, followed by dust mopping.
  - c. Burnish / Dry buff the floor using a burnisher such as Tennant/Nobles BR-2000-DC or equivalent with a 3M™ Eraser Pad #3600 or equivalent, followed by dust mopping.
- 9. If the floor requires restoration cleaning procedures, contact Forbo's Product Support & Education Services.

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.

**CAUTION:** Marmoleum® with Topshield2™ can be damaged by traditional wet stripping methods. If the above floor care recommendations are followed, wet stripping will NOT be necessary. If wet stripping methods are or have been used on the floor, contact Forbo's Product Support & Education Services for additional information.

Forbo Marmoleum® should be cared for by a staff trained to understand the following:

- A regular floor care program, as described above, should be followed closely.
- Forbo Marmoleum® with Topshield2™ is OCCUPANCY READY following installation.
- The removal of Topshield2<sup>™</sup> is NOT recommended.
- If finish is applied, Topsheild2™ is no longer the wear surface and the properties it provides to Marmoleum® will be compromised.
- If applying a third party polymer to Marmoleum®, follow the manufacturer's recommended guidelines.
- It is the responsibility of the chemical manufacturer to provide a resolution for any issues that may arise when using their product on Forbo Marmoleum® and linoleum products.

#### RECOMMENDED FLOOR CARE PRODUCTS

The following list of recommended floor care chemicals have been tested for compatibility with Forbo products. This list is provided to offer the best opportunity to care for your flooring and meet the needs of your facility. If you prefer to use a manufacturer's floor care chemicals that are not listed, be sure to use a corresponding cross-referenced product. For additional information on a product or for your local supplier, refer to the Contacts section of this guide.

<u>Neutral pH Cleaners:</u>
Forbo Neutral pH Cleaner
3M™ Neutral Cleaner 3H
Pro-Link Level 7
Spartan Damp Mop
Diversey Stride
Ecolab® QC 34 High
Performance Neutral
Floor Cleaner

Nautual all Classava

Spray Buffs:
Forbo Spray Buff
3M™Top Line Pre-Burnish
Conditioner
Pro-Link Enhance
Spartan Spray Buff
Ecolab® Easy Glow Daily Floor
Maintainer
Ecolab® Diluted Quik Fill PourPak

330 Floor Restorer

Mop on Restorers:
Forbo Mop on Restorer
3M™Top Line Pre-Burnish
Conditioner
Pro-Link Optimum Response
Spartan SunSwept
Diversey Revive
Ecolab® QC 33 Floor Finish
Restorer

<b>General Purpose Cleaners:</b>
Forbo Heavy Duty Cleaner
3M™ General Purpose
Cleaner/Concentrate 8H
Pro-Link Synthetic Floor HD
Cleaner
Spartan Industrial Pathmaker
Diversey Profi
Diversey GP Forward
Ecolab® QC 35 MAXX Dual
Action Floor Cleaner

# Marmoleum® Ohmex with Topshield2™

Forbo Marmoleum® Ohmex is made from natural ingredients including linseed oil, rosin binders, wood flour, limestone, dry pigments and a conductive additive which are mixed and then calendared onto a natural jute backing. Marmoleum® Ohmex features Topshield2™ Forbo's high performance factory applied finish. Its double layer UV cured technology delivers extraordinary performance and clear and vibrant colors that remain over time. Marmoleum® Ohmex with Topshield2™ requires no initial maintenance or polymer application. This means that at the time of installation, cleaning with a neutral pH cleaning solution is all that is necessary. The surface can be repaired or refreshed in cases of accidents or after years of intensive use.

The following guidelines are for ESD Control applications. It is NOT recommended to apply spray buff, mop on restorer or finish to Marmoleum® Ohmex, as it can affect the ESD properties of the flooring.

IMPORTANT! Before starting any cleaning procedures on any Forbo products, contact Forbo's Product Support & Education Services for additional information, recommendations or to schedule a site visit. The best results may not be achieved if the chemical and equipment types recommended below are not used. The size of the equipment recommended may also vary based on the size of the space or application type.

**NOTE:** In order to allow the adhesive to dry and cure properly, wait a minimum of five days following the installation before conducting initial cleaning or other wet cleaning procedures. For installations over non-porous substrates, additional time may be necessary because the adhesive may take longer to dry and cure.

#### **INITIAL CLEANING**

Cleaning performed for new installations exposed to normal construction soil and traffic. It is necessary to protect newly installed floors from construction soil, traffic and damage until they are ready for initial cleaning. In order to allow the adhesive to dry and cure properly, wait a minimum of five days following the installation before conducting initial cleaning or other wet cleaning procedures. For installations over non-porous substrates, additional time may be necessary because the adhesive may take longer to dry and cure.

- Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- 3. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a 3M™ Red Buffer Pad #5100 or equivalent. If using an automatic scrubber, it is recommended to double scrub the floor. NOTE: For heavier soil loads or to remove adhesive residue, use a 3M™ TopLine Autoscrubber Pad #5000 or equivalent.
- Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/ Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 7. Allow the floor to dry thoroughly before allowing traffic.
- 8. If desired, a satin gloss may be obtained by burnishing using a 3M™ Eraser Pad #3600 or equivalent, followed by dust mopping. It is NOT recommended to apply spray buff, mop on restorer or finish to Marmoleum® Ohmex.

#### **ROUTINE CLEANING**

Cleaning performed a minimum of once a day, depending on the application, type of traffic and hours of operation.

- Stains or spills should be wiped or mopped up immediately with a damp mop using a neutral pH cleaning solution. Rinse the
  affected area with clean, cool water. Be sure to allow the floor to dry thoroughly before allowing traffic. The pH of the cleaner
  in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- 2. Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent
- 3. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products
- 4. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas.
- 5. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a 3M™ Red Buffer Pad #5100 or equivalent. If using an automatic scrubber, it is recommended to double scrub the floor. **NOTE:** For heavier soil loads, a 3M™ TopLine Autoscrubber Pad #5000 or equivalent may be used.
- 6. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- Allow the floor to dry thoroughly before allowing traffic.

# Marmoleum® Ohmex with Topshield2™

#### **INTERIM CLEANING**

Cleaning performed as needed, depending on the application, type of traffic and hours of operation. The following processes should be followed when the routine cleaning is not removing the soil from the floor.

- 1. Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. For light soiling, mix a neutral pH solution according to the label directions. The pH of the neutral cleaner in solution must be between 6.0 8.0 pH. For medium or heavy soiling, mix 2 oz. of a general purpose cleaner per gallon of water. The pH of the general purpose cleaner in solution must be between 8.0 10.4 pH. Refer to the list at the end of this section for recommended products.
- 3. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using either a 3M™ Red Buffer Pad #5100 or equivalent for light soiling or a 3M™ TopLine Autoscrubber Pad #5000 or equivalent for medium or heavy soiling.
- 5. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 6. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 7. Allow the floor to dry thoroughly before allowing traffic.
- 8. If desired, one of the following procedures can be performed to obtain a satin gloss:
  - a. Dry buff the floor using a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent and a 3M™ Red Buffer Pad #5100 or equivalent, followed by dust mopping.
  - b. Burnish / Dry buff the floor using a burnisher such as Tennant/Nobles BR-2000-DC or equivalent with a 3M™ Eraser Pad #3600 or equivalent, followed by dust mopping.
  - c. IMPORTANT!! It is NOT recommended to apply spray buff, mop on restorer or finish to Marmoleum® Ohmex.

**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.

**CAUTION:** Marmoleum® with Topshield2™ can be damaged by traditional wet stripping methods. If the above floor care recommendations are followed, wet stripping will NOT be necessary. If wet stripping methods are or have been used on the floor, contact Forbo's Product Support & Education Services for additional information.

Forbo Marmoleum® should be cared for by a staff trained to understand the following:

- A regular floor care program, as described above, should be followed closely.
- Forbo Marmoleum® with Topshield2™ is OCCUPANCY READY following installation.
- The removal of Topshield2<sup>™</sup> is NOT recommended.
- If finish is applied, Topsheild2™ is no longer the wear surface and the properties it provides to Marmoleum® will be compromised.
- If applying a third party polymer to Marmoleum®, follow the manufacturer's recommended guidelines.
- It is the responsibility of the chemical manufacturer to provide a resolution for any issues that may arise when using their
  product on Forbo Marmoleum® and linoleum products.

#### RECOMMENDED FLOOR CARE PRODUCTS

The following list of recommended floor care chemicals have been tested for compatibility with Forbo products. This list is provided to offer the best opportunity to care for your flooring and meet the needs of your facility. If you prefer to use a manufacturer's floor care chemicals that are not listed, be sure to use a corresponding cross-referenced product. For additional information on a product or for your local supplier, refer to the Contacts section of this guide.

#### **Neutral pH Cleaners:**

Forbo Neutral pH Cleaner

3M™ Neutral Cleaner 3H

Pro-Link Level 7

Spartan Damp Mop

Diversey Stride

Ecolab® QC 34 High Perormance Neutral Floor Cleaner

## **General Purpose Cleaners:**

Forbo Heavy Duty Cleaner

3M™ General Purpose Cleaner/Concentrate 8H

Pro-Link Synthetic Floor HD Cleaner

Spartan Industrial Pathmaker

Diversey Profi

Diversey GP Forward

Ecolab® QC 35 MAXX Dual Action Floor Cleaner

# **Marmoleum® Sport**

The Forbo Marmoleum® Sport has been designed based on color patterns commonly applied in sports halls. The colors can be combined to add accented shapes in the floor and they are dirt concealing.

Forbo Marmoleum® and linoleum products are a homogeneous floor covering made from natural ingredients including linseed oil, rosin binders, wood flour, limestone and dry pigments which are mixed and then calendared onto a natural jute backing.

IMPORTANT! Before starting any cleaning procedures on any Forbo products, contact Forbo's Product Support & Education Services for additional information, recommendations or to schedule a site visit. The best results may not be achieved if the chemical and equipment types recommended below are not used. The size of the equipment recommended may also vary based on the size of the space or application type.

**NOTE:** Forbo Flooring Systems does not warrant or guarantee the performance of other manufacturers' products mentioned in this guide. For specific information regarding Forbo's warranty, visit www.forboflooringNA.com or contact Forbo's Product Support & Education Services.

#### **INITIAL CLEANING**

Cleaning performed for new installations exposed to normal construction soil and traffic. It is necessary to protect newly installed floors from construction soil, traffic and damage until they are ready for initial cleaning. In order to allow the adhesive to dry and cure properly, wait a minimum of five days following the installation before conducting initial cleaning or other wet cleaning procedures. For installations over nonporous substrates, additional time may be necessary because the adhesive may take longer to dry and cure.

- 1. Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. Mix a neutral pH cleaning solution of Pro-Link Level 7 according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH.
- 3. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a 3M™ TopLine Autoscrubber Pad #5000 or equivalent. If using an automatic scrubber, it is recommended to double scrub the floor.
- 5. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 6. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 7. Allow the floor to dry thoroughly.
- 8. If required, sport lines can be painted on the floor. Contact Forbo's Product Support and Education Services for additional information. If sport lines are painted, be sure to follow the paint manufacturer's recommendations for curing time of the paint before moving onto the next step.
- 9. Apply 2 3 coats of Pro-Link Synthetic Sports Finish according to the label directions.
- 10. Allow the floor to dry thoroughly before allowing traffic.

#### **ROUTINE CLEANING**

Cleaning performed a minimum of once a day, depending on the application, type of traffic and hours of operation.

- 1. Stains or spills should be wiped or mopped up immediately with a damp mop using a neutral pH cleaning solution of Pro-Link Level 7 mixed according to the label directions. Rinse the affected area with clean, cool water. Be sure to allow the floor to dry thoroughly before allowing traffic. The pH of the cleaner in solution must be between 6.0 8.0 pH.Remove all surface soil, debris, sand and grit by sweeping, vacuuming or dust mopping.
- 2. Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 3. Mix a neutral pH cleaning solution of Pro-Link Level 7 according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH.
- 4. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes
- 5. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a 3M™ Red Buffer Pad #5100 or equivalent. If using an automatic scrubber, it is recommended to double scrub the floor. **NOTE:** For heavier soil loads, a 3M™ TopLine Autoscrubber Pad #5000 or equivalent may be used.

# **Marmoleum® Sport**

- 6. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 7. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 8. Allow the floor to dry thoroughly before allowing traffic.

#### **RESTORATION CLEANING**

Cleaning performed as needed, depending on the application, type of traffic and hours of operation. The following processes should be followed when the routine cleaning is not removing the soil from the floor.

- 1. Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. Mix a general purpose cleaning solution using ProLink Synthetic Sports Stripper at a dilution rate of 16 oz. per 1 gallon of water. The pH of the cleaner in solution must be between 8.0 10.4 pH.
- 3. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 10 minutes.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a 3M™ Blue cleaner Pad #5300 or equivalent. If using an automatic scrubber, it is recommended to double scrub the floor. The use of black or brown pads is NOT recommended.
- 5. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 6. Be sure that all the finish has been removed. If not, please repeat steps 3 5.
- 7. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 8. Allow the floor to dry thoroughly.
- 9. Apply 2 3 coats of Pro-Link Synthetic Sports Finish according to the label directions.
- 10. Allow the floor to dry thoroughly before allowing traffic.

**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.

**CAUTION:** Marmoleum® Sport can be damaged by traditional wet stripping methods and should NEVER be subjected to traditional, aggressive wet stripping. These floors should be cared for by a staff trained to understand the floor care program, as described above, and it should be followed closely. Contact Forbo's Product Support & Education Services with any additional questions.

# **Allura & Eternal**

The Forbo Allura product range includes: Allura and Allura Flex.

Forbo Allura products are comprised of a vinyl wear layer with a high performance PUR topcoat which provides color clarity. A calendared wear layer provides clear image, superior strength and durability. The thick glass interlayer ensures dimensional stability, flexibility, tension releases and strength with a thick solid backing for comfort, balance and support of the wear layer. Allura Flex also has a mechanical foam back layer contributes to its acoustical properties.

The Forbo Eternal product range includes: Eternal Classic & Marble, Eternal Wood, and Eternal Decibel.

Forbo Eternal products are a heterogeneous compact sheet vinyl that have lacquered finish wear layer that is transparent, allowing for easy cleaning and provides a natural appearance to the floorcovering. This finish ensures a maximal wear resistance and maintains the design of the floor. A non-woven, fully impregnated, glass fleece layer functions as the backbone of the floor, ensuring dimensional stability. Adding to stability and the high quality standard of Eternal is the optimized calendared backing, a firm but flexible and embossed layer to allow easy installation. The backing layer, which is a substantial part of the construction, contains up to 50% recycled content and is 100% phthalate free.

IMPORTANT! Before starting any cleaning procedures on any Forbo products, contact Forbo's Product Support & Education Services for additional information, recommendations or to schedule a site visit. The best results may not be achieved if the chemical and equipment types recommended below are not used. The size of the equipment recommended may also vary based on the size of the space or application type.

**NOTE:** Forbo Flooring Systems does not warrant or guarantee the performance of other manufacturers' products mentioned in this guide. For specific information regarding Forbo's warranty, visit www.forboflooringNA.com or contact Forbo's Product Support & Education Services.

#### **INITIAL CLEANING**

Cleaning performed for new installations exposed to normal construction soil and traffic. It is necessary to protect newly installed floors from construction soil, traffic and damage until they are ready for initial cleaning. In order to allow the adhesive to dry and cure properly, wait a minimum of five days following the installation before conducting initial cleaning or other wet cleaning procedures. For installations over non-porous substrates, additional time may be necessary because the adhesive may take longer to dry and cure.

- 1. Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- 3. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas or for flooring with embossment.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a 3M™ Red Buffer Pad #5100 or equivalent. If using an automatic scrubber, it is recommended to double scrub the floor. NOTE: For heavier soil loads or to remove adhesive residue, use a 3M™ TopLine Autoscrubber Pad #5000 or equivalent.
- 5. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. **NOTE:** For flooring with embossment, it is easier to recover the solution by running the equipment perpendicular to the embossment.
- 6. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 7. Allow the floor to dry thoroughly before allowing traffic.

#### **ROUTINE CLEANING**

Cleaning performed a minimum of once a day, depending on the application, type of traffic and hours of operation.

- 1. Stains or spills should be wiped or mopped up immediately with a damp mop using a neutral pH cleaning solution. Rinse the affected area with clean, cool water. Be sure to allow the floor to dry thoroughly before allowing traffic. The pH of the cleaner in solution must be between 6 8 pH. Refer to the list at the end of this section for recommended products.
- 2. Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 3. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- 4. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas or for flooring with embossment.
- 5. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a 3M™ Red Buffer Pad #5100 or equivalent. If using an automatic scrubber, it is recommended to double scrub the floor. **NOTE:** For heavier soil loads, a 3M™ TopLine Autoscrubber Pad #5000 or equivalent may be used.

# **Allura & Eternal**

- 6. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. **NOTE:** For flooring with embossment, it is easier to recover the solution by running the equipment perpendicular to the embossment.
- 7. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 8. Allow the floor to dry thoroughly before allowing traffic.

#### **INTERIM CLEANING**

Cleaning performed as needed, depending on the application, type of traffic and hours of operation. The following processes should be followed when the routine cleaning is not removing the soil from the floor.

- Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. For light soiling, mix a neutral pH solution according to the label directions. The pH of the neutral cleaner in solution must be between 6.0 8.0 pH. For medium or heavy soiling, mix 2 oz. of a general purpose cleaner per gallon of water. The pH of the general purpose cleaner in solution must be between 8.0 10.4 pH. Refer to the list at the end of this section for recommended products.
- 3. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas or for flooring with embossment.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using either a 3M™ Red Buffer Pad #5100 or equivalent for light soiling or a 3M™ TopLine Autoscrubber Pad #5000 or equivalent for medium or heavy soiling.
- 5. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. **NOTE:** For flooring with embossment, it is easier to recover the solution by running the equipment perpendicular to the embossment.
- 6. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 7. Allow the floor to dry thoroughly before allowing traffic.
- 8. One of the following procedures must be performed:
  - a. Spray buff the floor using a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent and a 3M™ Red Buffer Pad #5100 or equivalent, followed by dust mopping.
  - b. Apply a mop-on restorer according to the label directions. Burnish the floor using a burnisher such as Tennant/Nobles BR-2000-DC or equivalent with a 3M™ Eraser Pad #3600 or equivalent, followed by dust mopping.
  - c. Burnish / Dry buff the floor using a burnisher such as Tennant/Nobles BR-2000-DC or equivalent with a 3M™ Eraser Pad #3600 or equivalent, followed by dust mopping.
- 9. If the floor requires restoration cleaning procedures, contact Forbo's Product Support & Education Services.

**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.

#### RECOMMENDED FLOOR CARE PRODUCTS

The following list of recommended floor care chemicals have been tested for compatibility with Forbo products. This list is provided to offer the best opportunity to care for your flooring and meet the needs of your facility. If you prefer to use a manufacturer's floor care chemicals that are not listed, be sure to use a corresponding cross-referenced product. For additional information on a product or for your local supplier, refer to the Contacts section of this guide.

<u>Neutral pri Cleaners:</u>
Forbo Neutral pH Cleane
3M™ Neutral Cleaner 3H
Pro-Link Level 7
Spartan Damp Mop
Diversey Stride
Ecolab® QC 34 High
Performance Neutral
Floor Cleaner

Noutral nH Claanars

# Spray Buffs: Forbo Spray Buff 3M™ Top Line Pre-Burnish Conditioner Pro-Link Enhance Spartan Spray Buff Ecolab® Easy Glow Daily Floor Maintainer Ecolab® Diluted Quik Fill

PourPak330 Floor Restorer

<u> </u>	<u> Mop on Restorers:</u>
F	orbo Mop on Restorer
3	BM™Top Line Pre-Burnish
(	Conditioner
F	Pro-Link Optimum Response
S	Spartan SunSwept
	Diversey Revive
E	Ecolab® QC 33 Floor Finish
F	Restorer

<b>General Purpose Cleaners:</b>
Forbo Heavy Duty Cleaner
3M™ General PurposeCleaner/
Concentrate 8H
Pro-Link Synthetic Floor HD
Cleaner
Spartan Industrial Pathmaker
Diversey Profi
Diversey GP Forward
Ecolab® QC 35 MAXX Dual
Action Floor Cleaner

# **Eternal Step Products**

The Forbo Eternal Step product range includes: Eternal Step, Eternal Step SR, Eternal Step Aqua and Eternal Step Wood. Forbo Eternal products are a heterogeneous sheet vinyl that have lacquered finish wear layer that is transparent. This finish ensures a maximal wear resistance and maintains the design of the floor. Each Eternal Step product has a scratch resistant PUR wear layer. The PVC wear layer also contains aluminum oxide and carborundum chips for durable slip resistance. A non-woven, fully impregnated, glass fleece layer functions as the backbone of the floor, providing flexibility and ensuring dimensional stability. Adding to stability and the high quality standard of Eternal is the optimized compact calendared backing, which is a substantial part of the construction and contains 60% recycled content.

The wear layer of Eternal Step and Eternal Step SR contains colorfast pigments, transparent PVC chips and carborundum granules. The carborundum chips are most prevalent in Eternal Step SR, providing a greater degree of slip resistance than other vinyl flooring. The wear layer of Eternal Step Aqua and Eternal Step Wood both contain transparent anti-slip crystals. The unique embossed shape of Eternal Step Aqua was designed for wet room applications or barefoot areas.

IMPORTANT! Before starting any cleaning procedures on any Forbo products, contact Forbo's Product Support & Education Services for additional information, recommendations or to schedule a site visit. The best results may not be achieved if the chemical and equipment types recommended below are not used. The size of the equipment recommended may also vary based on the size of the space or application type.

**NOTE:** Forbo Flooring Systems does not warrant or guarantee the performance of other manufacturers' products mentioned in this guide. For specific information regarding Forbo's warranty, visit www.forboflooringNA.com or contact Forbo's Product Support & Education Services.

#### **INITIAL CLEANING**

Cleaning performed for new installations exposed to normal construction soil and traffic. It is necessary to protect newly installed floors from construction soil, traffic and damage until they are ready for initial cleaning. In order to allow the adhesive to dry and cure properly, wait a minimum of five days following the installation before conducting initial cleaning or other wet cleaning procedures. For installations over non-porous substrates, additional time may be necessary because the adhesive may take longer to dry and cure. **NOTE:** Because of the abrasive qualities of the Eternal Step products, continuous filament microfiber mops and soft bristled brushes will provide the best results. Traditional mops and floor pads will have a very short life and are not recommended.

- 1. Remove all surface soil, debris, sand and grit by sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a continuous filament microfiber mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 – 10 minutes. Additional dwell time may be necessary for heavily soiled areas.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a soft bristled brush. If using an automatic scrubber, it is recommended to double scrub the floor.
- 5. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- Rinse the entire floor surface with a clean continuous filament microfiber mop using clean, cool water. Pick up rinse water
  with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles
  Speed Scrub 300 or equivalent.
- 7. Allow the floor to dry thoroughly before allowing traffic.

#### **ROUTINE CLEANING**

Cleaning performed a minimum of once a day, depending on the application, type of traffic and hours of operation.

- 1. Stains or spills should be wiped or mopped up immediately with a damp mop using a neutral pH cleaning solution. Rinse the affected area with clean, cool water. Be sure to allow the floor to dry thoroughly before allowing traffic. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products
- Remove all surface soil, debris, sand and grit by sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 3. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- 4. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a continuous filament microfiber mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas.
- 5. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a soft bristled brush. If using an automatic scrubber, it is recommended to double scrub the floor.
- 6. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.

# **Eternal Step Products**

- 7. Rinse the entire floor surface with a clean continuous filament microfiber mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 8. Allow the floor to dry thoroughly before allowing traffic.

#### **INTERIM CLEANING**

Cleaning performed as needed, depending on the application, type of traffic and hours of operation. The following processes should be followed when the routine cleaning is not removing the soil from the floor.

- 1. Remove all surface soil, debris, sand and grit by sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. Mix 2 oz. of a general purpose per gallon of water. The pH of the cleaner in solution must be between 8.0 10.4 pH. Refer to the list at the end of this section for recommended products. **NOTE:** If there are hard water or mineral deposits present, mix a hydrogen peroxide cleaning solution according to the label directions. The pH of the cleaner in solution must be between 4.0 7.0 pH. Refer to the list at the end of this section for recommended products.
- 3. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a continuous filament microfiber mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a soft bristled brush. If using an automatic scrubber, it is recommended to double scrub the floor.
- 5. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 6. Use snail fans or air movers for the final drying of the floor surface. When possible, allow a minimum of three hours drying time after the last extraction before traffic is allowed on the floor surface again.

**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.

#### **RECOMMENDED FLOOR CARE PRODUCTS**

The following list of recommended floor care chemicals have been tested for compatibility with Forbo products. This list is provided to offer the best opportunity to care for your flooring and meet the needs of your facility. If you prefer to use a manufacturer's floor care chemicals that are not listed, be sure to use a corresponding cross-referenced product. For additional information on a product or for your local supplier, refer to the Contacts section of this guide.

#### **Neutral pH Cleaners:**

Forbo Neutral pH Cleaner

3M™ Neutral Cleaner 3H

Pro-Link Level 7

Spartan Damp Mop

Diversey Stride

Ecolab® QC 34 High

Performance Neutral Floor Cleaner

#### **Hydrogen Peroxide Cleaners:**

Pro-Link TransOxy
Spartan Clean by Peroxy
3M™ Peroxide Cleaner 34L
Diversey Alpha HP
Ecolab® QC 54 Peroxide Multi Surface
Cleaner

#### **General Purpose Cleaners:**

Forbo Heavy Duty Cleaner

3M™ General PurposeCleaner/Concentrate

8H

Pro-Link Synthetic Floor HD Cleaner

Spartan Industrial Pathmaker

Diversey Profi

Diversey GP Forward

Ecolab® QC 35 MAXX Dual Action Floor

Cleaner

# Colorex® SD/EC

The Forbo Colorex® product range includes: Colorex® SD (Static Dissipative), Colorex® EC (Electrostatic Conductive) and Colorex® Plus. Forbo Colorex® SD/EC is comprised of conductive coated chips, which are pressed and formed into a solid homogeneous vinyl block, stable in size and dimension, and then sliced to assure a highly flexible tile of dense construction. Colorex® SD/EC is dimensionally stable and extremely hard wearing.

Colorex® Plus is a loose lay floor system with Colorex® on the surface. This ensures all the benefits of Colorex® like high density, easy repair and stain resistance, but also combines the benefits of a heavy duty loose lay tile.

The following guidelines are for ESD Control applications. It is NOT recommended to apply spray buff, mop on restorer or finish to Colorex® SD/EC when used for ESD applications, as it can affect the ESD properties of the flooring. For non-ESD Control applications, follow the Floor Care Guidelines for Forbo Allura & Eternal.

IMPORTANT! Before starting any cleaning procedures on any Forbo products, contact Forbo's Product Support & Education Services for additional information, recommendations or to schedule a site visit. The best results may not be achieved if the chemical and equipment types recommended below are not used. The size of the equipment recommended may also vary based on the size of the space or application type.

**NOTE:** Forbo Flooring Systems does not warrant or guarantee the performance of other manufacturers' products mentioned in this guide. For specific information regarding Forbo's warranty, visit www.forboflooringNA.com or contact Forbo's Product Support & Education Services.

#### **INITIAL CLEANING**

Cleaning performed for new installations exposed to normal construction soil and traffic. It is necessary to protect newly installed floors from construction soil, traffic and damage until they are ready for initial cleaning. In order to allow the adhesive to dry and cure properly, wait a minimum of five days following the installation before conducting initial cleaning or other wet cleaning procedures. For installations over non-porous substrates, additional time may be necessary because the adhesive may take longer to dry and cure.

- Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- 3. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a 3M™ Red Buffer Pad #5100 or equivalent. If using an automatic scrubber, it is recommended to double scrub the floor. **NOTE:** For heavier soil loads or to remove adhesive residue, use a 3M™ TopLine Autoscrubber Pad #5000 or equivalent.
- 5. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 6. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 7. Allow the floor to dry thoroughly before allowing traffic.
- 8. If desired, a satin gloss may be obtained by burnishing using a 3M™ Eraser Pad #3600 or equivalent, followed by dust mopping. It is NOT recommended to apply spray buff, mop on restorer or finish to ColoRex® SD/EC when used for ESD applications.

#### **ROUTINE CLEANING**

Cleaning performed a minimum of once a day, depending on the application, type of traffic and hours of operation.

- 1. Stains or spills should be wiped or mopped up immediately with a damp mop using a neutral pH cleaning solution. Rinse the affected area with clean, cool water. Be sure to allow the floor to dry thoroughly before allowing traffic. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- 2. Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 –
   8.0 pH. Refer to the list at the end of this section for recommended products.
- 4. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas.
- 5. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using a 3M™ Red Buffer Pad #5100 or equivalent. If using an automatic scrubber, it is recommended to double scrub the floor. **NOTE:** For heavier soil loads, a 3M™ TopLine Autoscrubber Pad #5000 or equivalent may be used.

# Colorex® SD/EC

- 6. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 7. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 8. Allow the floor to dry thoroughly before allowing traffic.

#### **INTERIM CLEANING**

Cleaning performed as needed, depending on the application, type of traffic and hours of operation. The following processes should be followed when the routine cleaning is not removing the soil from the floor.

- 1. Remove all surface soil, debris, sand and grit by dust mopping the floor with 3M™ Easy Trap, sweeping or vacuuming with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 2. 10. For light soiling, mix a neutral pH solution according to the label directions. The pH of the neutral cleaner in solution must be between 6.0 8.0 pH. For medium or heavy soiling, mix 2 oz. of a general purpose cleaner per gallon of water. The pH of the general purpose cleaner in solution must be between 8.0 10.4 pH. Refer to the list at the end of this section for recommended products.
- 3. Apply the solution to the floor. Do NOT flood the floor. The solution can be applied with either a mop or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent. Allow the solution to dwell on the floor for 5 10 minutes. Additional dwell time may be necessary for heavily soiled areas.
- 4. Scrub the floor with either a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent using either a 3M™ Red Buffer Pad #5100 or equivalent for light soiling or a 3M™ TopLine Autoscrubber Pad #5000 or equivalent for medium or heavy soiling.
- 5. Pick up the scrubbing solution with a wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 6. Rinse the entire floor surface with a clean mop using clean, cool water. Pick up rinse water with wet vacuum such as Tennant/Nobles V-WD-15S or equivalent or an automatic scrubber such as Tennant T300, Nobles Speed Scrub 300 or equivalent.
- 7. Allow the floor to dry thoroughly before allowing traffic.
- 8. If desired, one of the following procedures can be performed to obtain a satin gloss:
  - a. Dry buff the floor using a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent and a 3M™ Red Buffer Pad #5100 or equivalent, followed by dust mopping.
  - b. Burnish / Dry buff the floor using a burnisher such as Tennant/Nobles BR-2000-DC or equivalent with a 3M™ Eraser Pad #3600 or equivalent, followed by dust mopping.
  - c. **IMPORTANT!!** It is NOT recommended to apply spray buff, mop on restorer or finish to ColoRex® SD/EC when used for ESD applications, as it will interfere with the properties of the flooring.

**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.

#### **RECOMMENDED FLOOR CARE PRODUCTS**

The following list of recommended floor care chemicals have been tested for compatibility with Forbo products. This list is provided to offer the best opportunity to care for your flooring and meet the needs of your facility. If you prefer to use a manufacturer's floor care chemicals that are not listed, be sure to use a corresponding cross-referenced product. For additional information on a product or for your local supplier, refer to the Contacts section of this guide.

#### **Neutral pH Cleaners:**

Forbo Neutral pH Cleaner

3M™ Neutral Cleaner 3H

Pro-Link Level 7

Spartan Damp Mop

Diversey Stride

Ecolab® QC 34 High

Performance Neutral Floor Cleaner

#### **General Purpose Cleaners:**

Forbo Heavy Duty Cleaner

3M™ General PurposeCleaner/Concentrate 8H

Pro-Link Synthetic Floor HD Cleaner

Spartan Industrial Pathmaker

Diversey Profi

Diversey GP Forward

Ecolab® QC 35 MAXX Dual Action Floor Cleaner

# **Flotex®**

The Forbo Flotex® product range includes: Flotex® Linear, Flotex® Color, Flotex® Naturals, Flotex® Vision, Flotex® Seagrass and Flotex® Triad. Flotex® Linear and Flotex® Color are available in both sheet and tile formats. Flotex® Naturals and Flotex® Vision are available in sheet. Flotex® Seagrass and Flotex® Triad are available in plank format only.

Flotex® high performance carpet has a unique construction that allows it to release soil like no other carpet can. Unlike the looped and twisted fibers of a conventional carpet pile that traps soil particles, Flotex® has a 100% 6.6 nylon type wear layer comprised of smooth, straight fibers that allow for easy soil release of soil, making the care of Flotex® easy. Most spills can be cleaned with clean water. The intermediate fiberglass layer provides dimensional stability. Flotex® sheet has a recycled closed cell vinyl cushioned backing and Flotex® tile and plank has a recycled vinyl cushioned backing.

IMPORTANT! Before starting any cleaning procedures on any Forbo products, contact Forbo's Product Support & Education Services for additional information, recommendations or to schedule a site visit. The best results may not be achieved if the chemical and equipment types recommended below are not used. The size of the equipment recommended may also vary based on the size of the space or application type.

**NOTE:** Forbo Flooring Systems does not warrant or guarantee the performance of other manufacturers' products mentioned in this guide. For specific information regarding Forbo's warranty, visit www.forboflooringNA.com or contact Forbo's Product Support & Education Services.

#### **INITIAL CLEANING**

Cleaning performed for new installations exposed to normal construction soil and traffic. It is necessary to protect newly installed floors from construction soil, traffic and damage until they are ready for initial cleaning. In order to allow the adhesive to dry and cure properly, wait a minimum of five days following the installation before conducting initial cleaning or other wet cleaning procedures. For installations over non-porous substrates, additional time may be necessary because the adhesive may take longer to dry and cure.

- 1. Remove all surface soil, debris, sand and grit by vacuuming using a dual motor upright vacuum with a rotating brush, such as Tennant/Nobles V-DMU-14 or equivalent. The brush should be approximately 1/8" below the vacuum cleaner casing to ensure proper agitation. Make several passes with the vacuum cleaner to ensure that all loose dirt is removed. Vacuum action should be fast forward and slow backward. NOTE: Flotex® requires regular care to keep it clean and prevent the accumulation of dirt and soil. Proper cleaning, such as daily vacuuming and routine hot water extraction, can reduce contamination to virtually non-existent levels. Identify sources of soiling and react to spills immediately, before they dry.
- 2. Spot clean if necessary by using the "Scrape, Scrub and Rinse" procedures.

#### "SCRAPE, SCRUB, AND RINSE" SPOTTING PROCEDURE

- 1. Scrape up spills using a spatula or blunt edged scraper and wipe excess soil onto a cloth.
- 2. Apply a liberal amount of clean water to the spot.
- 3. Using a spatula, scrape the water and the remains of the spill into a paper towel or cloth. Keep scraping with the spatula until the spill is completely removed.
- 4. If the spill or stain is not completely removed, apply a general purpose spotter cleaner to a white cotton cloth and rub it into the spot. Do not be afraid to use aggressive scrubbing to remove set-in spills. A soft wire brush can be used to remove scuff marks or other set in spills. Refer to the list at the end of this section for recommended products. **NOTE:** Be certain not to leave any detergent residue when cleaning. Any chemicals applied to the flooring must be removed. No more than 1 oz. per gallon should be used. The most common problem when caring for Flotex® is the over use of cleaning chemicals. The buildup of chemicals and cleaners will de-luster the Flotex® fibers and leave a dull appearance. Chemical buildup also attracts dirt faster and speeds soiling.
- 5. Using a spatula, scrape the water, any cleaner and the remains of the spill into a paper towel or cloth. Keep scraping with the spatula until the spill or stain is completely removed.
- 6. Rinse the area thoroughly with clean water to ensure that any cleaning solution is completely removed.
- 7. A spotter machine, such as Tennant/Nobles EX-SPOT-2 or equivalent, may be used to perform rinsing throughout the spot cleaning process.
- 8. Allow a minimum of three hours drying time before traffic is allowed on the floor surface again. If traffic is allowed on the floor before it has completely dried, the fibers are more susceptible to attract soil, requiring additional cleaning procedures in these areas to achieve the desired result.

#### **INTERIM CLEANING**

Cleaning performed as needed, depending on the application, type of traffic and hours of operation.

1. Remove all surface soil, debris, sand and grit by vacuuming using a dual motor upright vacuum with a rotating brush, such as Tennant/Nobles V-DMU-14 or equivalent. The brush should be approximately 1/8" below the vacuum cleaner casing to ensure proper agitation. Make several passes with the vacuum cleaner to ensure that all loose dirt is removed. Vacuum action should be fast forward and slow backward. NOTE: Flotex® requires regular care to keep it clean and prevent the accumulation of dirt and soil. Proper cleaning, such as daily vacuuming and routine hot water extraction, can reduce contamination to virtually non-existent levels. Identify sources of soiling and react to spills immediately, before they dry.

## **Flotex®**

- 2. Spot clean if necessary by using the "Scrape, Scrub and Rinse" procedures.
- 3. Use a self-contained portable extraction machine, such as Tennant E5, Nobles Speed EX or equivalent, preferably with counter-rotating brushes. The machine should be filled with the hottest water available at the facility, not to exceed 140° F (60° C)
- 4. Extract thoroughly, using clean water only. Set the machine to the proper height to ensure maximum agitation and contact with the fibers.
- 5. Follow each wet pass with a minimum of two dry passes.
- 6. Use snail fans or air movers for the final drying of the floor surface.
- 7. Allow a minimum of three hours drying time before traffic is allowed on the floor surface again. If traffic is allowed on the floor before it has completely dried, the fibers are more susceptible to attract soil, requiring additional cleaning procedures in these areas to achieve the desired result.

#### RESTORATION CLEANING

Cleaning performed as needed, depending on the application, type of traffic and hours of operation. The following processes should be followed when the interim cleaning is not removing the soil from the floor.

- 1. Remove all surface soil, debris, sand and grit by vacuuming using a dual motor upright vacuum with a rotating brush, such as Tennant/Nobles V-DMU-14 or equivalent. The brush should be approximately 1/8" below the vacuum cleaner casing to ensure proper agitation. Make several passes with the vacuum cleaner to ensure that all loose dirt is removed. Vacuum action should be fast forward and slow backward. NOTE: Flotex® requires regular care to keep it clean and prevent the accumulation of dirt and soil. Proper cleaning, such as daily vacuuming and routine hot water extraction, can reduce contamination to virtually non-existent levels. Identify sources of soiling and react to spills immediately, before they dry.
- 2. Spot clean if necessary by using the "Scrape, Scrub and Rinse" procedures.
- 3. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products. **NOTE:** If there are hard water or mineral deposits present, mix a hydrogen peroxide cleaning solution according to the label directions. The pH of the cleaner in solution must be between 4.0 7.0 pH. Refer to the list at the end of this section for recommended products.
- 4. Apply the solution to the floor. The solution can be applied with a pump up sprayer. Allow the solution to dwell on the floor for 5 10 minutes.
- 5. IMPORTANT!! Before scrubbing the floor, the entire surface of the floor must be completely WET. If the floor is dry, the friction between the nylon fibers of Flotex and the brush can cause the machine to become uncontrollable.

  Scrub the entire area using a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent with a flagged-bristle brush such as Malish nylon carpet shampoo brush #812915 or equivalent.
- 6. Use a self-contained portable extraction machine, such as Tennant E5, Nobles Speed EX or equivalent, preferably with counter-rotating cylindrical brushes. The machine should be filled with the hottest water available at the facility, not to exceed 140° F (60° C).
- 7. Extract thoroughly, using clean water only. Set the machine to the proper height to ensure maximum agitation and contact with the fibers.
- 8. Follow each wet pass with a minimum of two dry passes.
- 9. Use snail fans or air movers for the final drying of the floor surface.
- 10. Allow a minimum of three hours drying time before traffic is allowed on the floor surface again. If traffic is allowed on the floor before it has completely dried, the fibers are more susceptible to attract soil, requiring additional cleaning procedures in these areas to achieve the desired result.

**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.

## RECOMMENDED FLOOR CARE PRODUCTS

The following list of recommended floor care chemicals have been tested for compatibility with Forbo products. This list is provided to offer the best opportunity to care for your flooring and meet the needs of your facility. If you prefer to use a manufacturer's floor care chemicals that are not listed, be sure to use a corresponding cross-referenced product. For additional information on a product or for your local supplier, refer to the Contacts section of this guide.

#### **Neutral pH Cleaners:**

Forbo Neutral pH Cleaner

3M™ Neutral Cleaner 3H

Pro-Link Level 7

Spartan Damp Mop

Diversey Stride

Ecolab® QC 34 High Performance Neutral Floor Cleaner

#### **Hydrogen Peroxide Cleaners:**

Pro-Link TransOxy

Spartan Clean by Peroxy

3M™ Peroxide Cleaner 34L

Diversey Alpha HP

Ecolab® Revitalize Carpet Upholstery PreSpray Cleaner



The Forbo Coral® product range includes: Coral® Brush Pure / Blend, Coral® Classic, Coral® Duo and Coral® Grip.

Coral® Entrance Systems offer an exceptionally versatile range of "clean-off" entrance system products, each performing a specific cleaning function. Each Coral® range has been designed for all types of entrances. Coral® Brush Pure / Blend simultaneously absorbs moisture and removes dry soiling. Coral® Classic has the capacity to absorb almost 50% of the foot borne moisture along with special scraping monofilament yarns which actively scrape dirt off the soles of shoes. Coral® Duo retains 10% more dirt in the first few meters than any other textile entrance flooring system, combining Coral® Brush and Coral® Classic in design.

Coral® Grip is a versatile non-woven mat with granulated PVC chips helps to create a slip resistant surface. Due to the composition of Coral® Grip, the following procedures will not work on this product. Surface soil and debris can be removed using a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent. If the material is installed into a recessed well or outside, it is recommended that periodically it is power-washed or hosed off to remove any dirt that may be trapped inside.

IMPORTANT! Before starting any cleaning procedures on any Forbo products, contact Forbo's Product Support & Education Services for additional information, recommended below are not used. The size of the equipment recommended may also vary based on the size of the space or application type.

**NOTE:** Forbo Flooring Systems does not warrant or guarantee the performance of other manufacturers' products mentioned in this guide. For specific information regarding Forbo's warranty, visit www.forboflooringNA.com or contact Forbo's Product Support & Education Services.

#### **INITIAL CLEANING**

Cleaning performed for new installations exposed to normal construction soil and traffic. It is necessary to protect newly installed floors from construction soil, traffic and damage until they are ready for initial cleaning. In order to allow the adhesive to dry and cure properly, wait a minimum of five days following the installation before conducting initial cleaning or other wet cleaning procedures. For installations over non-porous substrates, additional time may be necessary because the adhesive may take longer to dry and cure.

- 1. Remove all surface soil, debris, sand and grit by vacuuming using a dual motor upright vacuum with a rotating brush, such as Tennant/Nobles V-DMU-14 or equivalent. The brush should be approximately 1/8" below the vacuum cleaner casing to ensure proper agitation. Make several passes with the vacuum cleaner to ensure that all loose dirt is removed. Vacuum action should be fast forward and slow backward. NOTE: Coral® requires regular care to keep it clean and prevent the accumulation of dirt and soil. Proper cleaning, such as daily vacuuming and routine hot water extraction, can reduce contamination to virtually non-existent levels. Identify sources of soiling and react to spills immediately, before they dry.
- 2. Spot clean if necessary by using the "Scrape, Scrub and Rinse" procedures.

## **"SCRAPE, SCRUB, AND RINSE" SPOTTING PROCEDURE**

- 1. Scrape up spills using a spatula or blunt edged scraper and wipe excess soil onto a cloth.
- 2. Apply a liberal amount of clean water to the spot.
- 3. Using a spatula, scrape the water and the remains of the spill into a paper towel or cloth. Keep scraping with the spatula until the spill is completely removed.
- 4. If the spill or stain is not completely removed, apply a general purpose spotter cleaner to a white cotton cloth and rub it into the spot. Do not be afraid to use aggressive scrubbing to remove set-in spills. A soft wire brush can be used to remove scuff marks or other set in spills. Refer to the list at the end of this section for recommended products. **NOTE:** Be certain not to leave any detergent residue when cleaning. Any chemicals applied to the flooring must be removed. No more than 1 oz. per gallon should be used. The most common problem when caring for Flotex® is the over use of cleaning chemicals. The buildup of chemicals and cleaners will de-luster the Flotex® fibers and leave a dull appearance. Chemical buildup also attracts dirt faster and speeds soiling.
- 5. Using a spatula, scrape the water, any cleaner and the remains of the spill into a paper towel or cloth. Keep scraping with the spatula until the spill or stain is completely removed.
- 6. Rinse the area thoroughly with clean water to ensure that any cleaning solution is completely removed.
- 7. A spotter machine, such as Tennant/Nobles EX-SPOT-2 or equivalent, may be used to perform rinsing throughout the spot cleaning process.
- 8. Allow a minimum of three hours drying time before traffic is allowed on the floor surface again. If traffic is allowed on the floor before it has completely dried, the fibers are more susceptible to attract soil, requiring additional cleaning procedures in these areas to achieve the desired result.

#### **INTERIM CLEANING**

Cleaning performed as needed, depending on the application, type of traffic and hours of operation.

1. Remove all surface soil, debris, sand and grit by vacuuming using a dual motor upright vacuum with a rotating brush, such as Tennant/Nobles V-DMU-14 or equivalent. The brush should be approximately 1/8" below the vacuum cleaner casing to ensure proper agitation. Make several passes with the vacuum cleaner to ensure that all loose dirt is removed. Vacuum action should be fast forward and slow backward. NOTE: Coral® requires regular care to keep it clean and prevent the accumulation of dirt and soil. Proper cleaning, such as daily vacuuming and routine hot water extraction, can reduce contamination to virtually non-existent levels. Identify sources of soiling and react to spills immediately, before they dry.

## Coral<sup>®</sup>

- 2. Spot clean if necessary by using the "Scrape, Scrub and Rinse" procedures.
- 3. Use a self-contained portable extraction machine, such as Tennant E5, Nobles Speed EX or equivalent, preferably with counter-rotating brushes. The machine should be filled with the hottest water available at the facility, not to exceed 140° F (60° C).
- 4. Extract thoroughly, using clean water only. Set the machine to the proper height to ensure maximum agitation and contact with the fibers.
- 5. Follow each wet pass with a minimum of two dry passes.
- 6. Use snail fans or air movers for the final drying of the floor surface.
- 7. Allow a minimum of three hours drying time before traffic is allowed on the floor surface again. If traffic is allowed on the floor before it has completely dried, the fibers are more susceptible to attract soil, requiring additional cleaning procedures in these areas to achieve the desired result.

#### RESTORATION CLEANING

Cleaning performed as needed, depending on the application, type of traffic and hours of operation. The following processes should be followed when the interim cleaning is not removing the soil from the floor.

- 1. Remove all surface soil, debris, sand and grit by vacuuming using a dual motor upright vacuum with a rotating brush, such as Tennant/Nobles V-DMU-14 or equivalent. The brush should be approximately 1/8" below the vacuum cleaner casing to ensure proper agitation. Make several passes with the vacuum cleaner to ensure that all loose dirt is removed. Vacuum action should be fast forward and slow backward. NOTE: Coral® requires regular care to keep it clean and prevent the accumulation of dirt and soil. Proper cleaning, such as daily vacuuming and routine hot water extraction, can reduce contamination to virtually non-existent levels. Identify sources of soiling and react to spills immediately, before they dry.
- 2. Spot clean if necessary by using the "Scrape, Scrub and Rinse" procedures.
- 3. Mix a hydrogen peroxide cleaning solution according to the label directions. The pH of the cleaner in solution must be between 4.0 7.0 pH. Refer to the list at the end of this section for recommended products. **NOTE:** If there are hard water or mineral deposits present, mix a hydrogen peroxide cleaning solution according to the label directions. The pH of the cleaner in solution must be between 4.0 7.0 pH. Refer to the list at the end of this section for recommended products.
- 4. Apply the solution to the floor. The solution can be applied with a pump up sprayer. Allow the solution to dwell on the floor for 5 10 minutes.
- 5. IMPORTANT!! Before scrubbing the floor, the entire surface of the floor must be completely WET. If the floor is dry, the friction between the nylon fibers of Flotex and the brush can cause the machine to become uncontrollable.

  Scrub the entire area using a low speed rotary machine such as Tennant/Nobles FM-17-SS or equivalent with a flagged-bristle brush such as Malish nylon carpet shampoo brush #812915 or equivalent.
- Use a self-contained portable extraction machine, such as Tennant E5, Nobles Speed EX or equivalent, preferably with counter-rotating cylindrical brushes. The machine should be filled with the hottest water available at the facility, not to exceed 140° F (60° C).
- 7. Extract thoroughly, using clean water only. Set the machine to the proper height to ensure maximum agitation and contact with the fibers.
- 8. Follow each wet pass with a minimum of two dry passes.
- 9. Use snail fans or air movers for the final drying of the floor surface.
- 10. Allow a minimum of three hours drying time before traffic is allowed on the floor surface again. If traffic is allowed on the floor before it has completely dried, the fibers are more susceptible to attract soil, requiring additional cleaning procedures in these areas to achieve the desired result.

#### RECOMMENDED FLOOR CARE PRODUCTS

The following list of recommended floor care chemicals have been tested for compatibility with Forbo products. This list is provided to offer the best opportunity to care for your flooring and meet the needs of your facility. If you prefer to use a manufacturer's floor care chemicals that are not listed, be sure to use a corresponding cross-referenced product. For additional information on a product or for your local supplier, refer to the Contacts section of this guide.

#### **Neutral pH Cleaners:**

Forbo Neutral pH Cleaner

3M™ Neutral Cleaner 3H

Pro-Link Level 7

Spartan Damp Mop

Diversey Stride

Ecolab® QC 34 High Performance Neutral Floor Cleaner

#### **Hydrogen Peroxide Cleaners:**

Pro-Link TransOxy
Spartan Clean by Peroxy
3M™ Peroxide Cleaner 34L
Diversey Alpha HP
Ecolab® Revitalize Carpet Upholstery PreSpray Cleaner

# **Nuway**®

The Forbo Nuway® product range includes: Nuway® Tuftiquard, Nuway® Tuftiquard HD, and Nuway® Grid.

Nuway® engineered entrance flooring is used outside doorways and immediately inside heavily trafficked entrance areas to scrape off the worst of soil tracked in on the soles of shoes or wheeled vehicles. These rigid engineered mats, constructed of profiles, scrapers and insert materials, are made to the customer's individual specifications.

IMPORTANT! Before starting any cleaning procedures on any Forbo products, contact Forbo's Product Support & Education Services for additional information, recommendations or to schedule a site visit. The best results may not be achieved if the chemical and equipment types recommended below are not used. The size of the equipment recommended may also vary based on the size of the space or application type.

**NOTE:** Forbo Flooring Systems does not warrant or guarantee the performance of other manufacturers' products mentioned in this guide. For specific information regarding Forbo's warranty, visit www.forboflooringNA.com or contact Forbo's Product Support & Education Services.

#### **INITIAL/ROUTINE CLEANING**

Cleaning performed for new installations exposed to normal construction soil and traffic. It is necessary to protect newly installed floors from construction soil, traffic and damage until they are ready for initial cleaning. It is essential to remove dry soiling at least once a day. The most effective method is to use vacuum cleaners that incorporate a mechanically driven rotating brush or suction-only machines with a rotating brush attachment.

- 1. Use a stiff brush to loosen and remove dry particles and fine soiling from the surface of the product.
- 2. Vacuum using a dual motor upright vacuum with a rotating brush, such as Tennant/Nobles V-DMU-14 or equivalent. Make several passes with the vacuum cleaner to ensure that all loose dirt is removed. Vacuum action should be fast forward and slow backward. **NOTE:** It is important to make sure that the vacuum head has sufficient depth to penetrate the different surfaces in order to remove soil from the wiper strips and the aluminum/PVC components.
- 3. If vacuuming doesn't effectively remove the dry soiling, check for these causes:
  - · Worn brushes or the wrong brush height it is essential that the brush makes contact with the pile of the entry flooring.
  - Brush not rotating properly a loose drive belt will weaken the power of the brushing.
  - Blocked or obstructed airways affecting suction power.
  - Dust bag/collector in need of emptying.
- 4. For dry spills, brush into a receptacle or vacuum to remove. For small wet spills, use a clean cloth or other absorbent material to soak up as much of the spill as possible. For large wet spills, use a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent to remove the spill. **NOTE:** It is important to ensure surface moisture is removed from the products' surface to avoid premature soiling.
- 5. For chewing gum removal, ideally remove before it becomes hardened and compacted into the matting surface. Proprietary gum removal gels are readily available to assist removal. The Nuway® components are able to withstand regular gum removal without affecting performance or structural integrity. **NOTE:** In removing chewing gum, the area affected will appear cleaner than the surrounding matting. Care should be taken not to damage the surface by using excessive force when removing chewing gum.

#### **INTERIM / RESTORATION CLEANING**

Cleaning performed as needed, depending on the application, type of traffic and hours of operation. The following processes should be followed when the routine cleaning is not removing the soil from the floor.

- 1. Dry extraction or solution brush extraction may be used. Dry extraction uses a moist compound that is impregnated with cleaning chemicals which can be applied using a stiff brush or mechanically driven applicator with counter rotating brushes. The compound should be left to absorb the soil for a short period and then removed by vacuuming. Before beginning the extraction process, use a stiff brush to loosen and remove dry particles and fine soiling from the surface of the product and then use a vacuum to collect and remove loose soiling.
- 2. Solution brush extraction uses machines with counter rotating brushes which introduce a cleaning solution to the product surface and returns the soiled solution straight to the machine. **NOTE:** It is important to ensure surface moisture is extracted from the products' surface to avoid premature soiling.
- 3. Periodically lift up the Nuway® matting modules to allow thorough cleaning. This also allows for inspection of the mat well to check on the condition as well as facilitating reversal of modules if appropriate. **NOTE:** During the winter months, remove the foot grills and clean the frames and mat wells once per week. During other seasons, cleaning once per month should be sufficient. Each time the frames and pans are cleaned, make sure there is no residue or debris remaining under the grills. This will avoid warping of the foot grills because of an uneven substrate and prevent long term problems. Never use chemicals containing chlorinated hydrocarbons and bleaching/oxidizing agents on Nuway® grills.
- 4. Vacuum the mat surface to remove soil prior to lifting up modules using a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent. Use a large screwdriver to carefully lift individual matting modules from the mat well.
- 5. Clean out soil filtrated to the base of the mat well and frame. Depending on the degree of soiling, clean the matting using the above methods or, in excessive soil situations, hot water extraction or jet wash methods may be more appropriate. **NOTE:** It is important that the modules are fully dry before replacing.

## **Bulletin Board**

Bulletin Board is a homogeneous tackable surface material made primarily of natural materials consisting of linseed oil, cork, rosin binders and dry pigments mixed and calendared onto a natural jute backing. The color extends throughout the thickness of the material.

Bulletin Board is ready for immediate use. Any adhesive residue MUST be removed immediately, as dried adhesive is difficult to remove without damaging the material.

IMPORTANT! Before starting any cleaning procedures on any Forbo products, contact Forbo's Product Support & Education Services for additional information, recommendations or to schedule a site visit. The best results may not be achieved if the chemical and equipment types recommended below are not used.

**NOTE:** Forbo Flooring Systems does not warrant or guarantee the performance of other manufacturers' products mentioned in this guide. For specific information regarding Forbo's warranty, visit www.forboflooringNA.com or contact Forbo's Product Support & Education Services.

#### **CARE RECOMMENDATIONS**

Residual adhesive from installation must be removed before the adhesive has dried. Dried adhesive residue cannot be removed from Bulletin Board without potentially damaging the material. If there is residue on the product, contact Forb's Product Support & Education Services before starting any cleaning procedures.

- 1. Remove all surface soil, debris, sand and grit by dusting with 3M™ Easy Trap.
- 2. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- 3. Apply the solution with a soft bristled brush.
- 4. Gently scrub the area to loosen and remove any soil. Move the brush in circular motions, working the debris out of the surface of the material. **NOTE:** If Bulletin Board is scrubbed to harshly or with abrasives, it can mar the surface of the material, removing some of the color.
- Rinse the entire surface with a clean cloth using clean, cool water. Change the water often to ensure it remains clean and clear.
- Recover the rinse water with a wet/dry vacuum such as Tennant/Nobles V-WD-15S or equivalent.
- 7. Dry the surface thoroughly with an absorbent cloth so it can be examined to ensure proper cleaning.
- 8. Allow the surface to dry thoroughly before use.

**CAUTION:** Bulletin Board can be damaged by abrasive or caustic chemicals or procedures. If the above recommendations are followed, no additional chemicals or procedures will be required. If such chemicals or procedures are or have been used, contact Forbo's Product Support & Education Services for additional information.

#### RECOMMENDED FLOOR CARE PRODUCTS

The following list of recommended floor care chemicals have been tested for compatibility with Forbo products. This list is provided to offer the best opportunity to care for your flooring and meet the needs of your facility. If you prefer to use a manufacturer's floor care chemicals that are not listed, be sure to use a corresponding cross-referenced product. For additional information on a product or for your local supplier, refer to the Contacts section of this guide.

#### **Neutral pH Cleaners:**

Forbo Neutral pH Cleaner

3M™ Neutral Cleaner 3H

Pro-Link Level 7

Spartan Damp Mop

Diversey Stride

Ecolab® QC 34 High Performance Neutral Floor Cleaner

# Marmoleum® Wall Products

The Forbo Marmoleum® Wall product range includes: Marmoleum® & Walton sheet and Marmoleum® Wall Panels.

The Forbo Marmoleum® features Topshield2™, a waterborne UV cured double layer factory coating. This finish has been designed to meet the demands of everyday use and is even more resistant to dirt absorption, less prone to wear and has improved resistance to scratches and stains, and thus demonstrating lasting performance over time.

There are a few key points to remember when caring for these products:

- Stains should be removed as quickly as possible to eliminate permanent damage
- Excess soiling materials such as chewing gum, nail polish, lipstick, asphalt, crayon, ink, marker, paint, lacquer, enamel, tar or foodstuffs should be removed or carefully scraped off the flat side of a plastic scraper prior to any other cleaning attempts below.
- For tough soiling materials, Forbo Adhesive Remover can be used.

IMPORTANT! Before starting any cleaning procedures on any Forbo products, contact Forbo's Product Support & Education Services for additional information, recommendations or to schedule a site visit. The best results may not be achieved if the chemical and equipment types recommended below are not used.

**NOTE:** Forbo Flooring Systems does not warrant or guarantee the performance of other manufacturers' products mentioned in this guide. For specific information regarding Forbo's warranty, visit www.forboflooringNA.com or contact Forbo's Product Support & Education Services.

#### **USING FORBO ADHESIVE REMOVER**

- 1. Always test in a hidden area first.
- 2. Apply Forbo Adhesive Remover using a soft bristled brush, cloth or sponge.
- 3. Allow the product to penetrate for 3-5 minutes (longer in cold temperatures).
- 4. Agitate the area with the brush, cloth or sponge. Some soiling loads may require extra contact time or repeat applications.
- 5. Rinse thoroughly with water.
- 6. Allow the spot to dry completely.

#### **CARE RECOMMENDATIONS**

- 1. Remove all surface soil, debris, sand and grit by dusting with 3M™ Easy Trap.
- 2. Mix a neutral pH cleaning solution according to the label directions. The pH of the cleaner in solution must be between 6.0 8.0 pH. Refer to the list at the end of this section for recommended products.
- 3. Apply the solution with a microfiber cloth or sponge.
- 4. Wipe the area to loosen and remove any soil. **NOTE:** For heavy soil loads or difficult to remove soil deposits, the use of a soft bristled brush is recommended.
- 5. Rinse the area thoroughly with clean, cool water. Change the water often to ensure it remains clean and clear.
- 6. Dry the area thoroughly with an absorbent cloth so it can be examined to ensure proper cleaning.

**CAUTION:** Forbo Marmoleum® Wall products can be damaged by abrasive or caustic chemicals or procedures. If the above recommendations are followed, no additional chemicals or procedures will be required. If such chemicals or procedures are or have been used, contact Forbo's Product Support & Education Services for additional information.

#### RECOMMENDED CARE PRODUCTS

The following list of recommended floor care chemicals have been tested for compatibility with Forbo products. This list is provided to offer the best opportunity to care for your flooring and meet the needs of your facility. If you prefer to use a manufacturer's floor care chemicals that are not listed, be sure to use a corresponding cross-referenced product. For additional information on a product or for your local supplier, refer to the Contacts section of this guide.

#### **Neutral pH Cleaners:**

Forbo Neutral pH Cleaner

3M™ Neutral Cleaner 3H

Pro-Link Level 7

Spartan Damp Mop

Diversey Stride

Ecolab® QC 34 High Performance Neutral Floor Cleaner

#### **Spot Cleaner:**

Forbo Adhesive Remover

# **Contacts**

Contacts Forbo Flooring Systems 1-800-842-7839 www.forboflooringNA.com

FlexiFelt 1-866-554-7687 www.FlexiFelt.com

3M<sup>™</sup> 1-800-852-9722 www.3m.com/building

Tennant Company 1-800-553-8033 www.tennantco.com

Spartan 1-800-537-8990 www.spartanchemical.com

Diversey 1-800-558-2332 www.diversey.com

Pro-Link 1-800-745-4657 www.prolinkhq.com

EcoLab 1-800-352-5326 www.ecolab.com



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