

Floor Care – Marmoleum® Floor Care System for Hospitals

a report by

Forbo Flooring

Introduction

The Marmoleum® Floor Care System

Marmoleum® and Artoleum® can be simply and efficiently cared for. Cleaning and maintenance can be performed by a few simple actions. If consequently applied, the Marmoleum floor care system will keep the costs of floor cleaning and maintenance very low.

Advantages

The excellent floor care performance of Marmoleum and Artoleum is founded in the properties of the highly qualified ETC finish. This satin gloss finish comprises a protective base coat and a strong, durable top coat. The matt ETC finish emphasises the structure and colours of Marmoleum and Artoleum, protects the surface during transport and installation and provides the perfect base for an efficient and easy floor care system.

Simple Cleaning

Dust wiping and removal of stains is sufficient for normal cleaning. This makes cleaning an easy-to-perform action, hardly interfering with the normal use of the floor.

Simple Maintenance

Normal maintenance of the ETC finish is simple and efficient. Only one maintenance product is necessary to keep the ETC finish of Marmoleum in a perfect condition for a very long time.

Simple Refurbishment

In heavy use situations, periodic use of simple, additional cleaning and maintenance actions will restore the top coat and bring the ETC finish back to its original optimal performance.

Simple Removal and Renovation

An advantage of ETC finish is that it can be renovated easily and is safe, for instance, if the ETC finish has been seriously damaged.

Figure 1



Technical Background

Philosophy

The Marmoleum floor care system is based on the two essential steps of floor care:

- Cleaning – remove dirt by dry or damp cleaning.
- Maintenance – keep the surface closed and smooth by regular maintenance or refurbishment.

The Marmoleum floor care system offers two different methods, depending on available tools. The Spray method is for mechanical floor care, when a rotary (or one-disc) machine is available.

The Monel method is an option for when floor care is to be performed manually. This method is also known as the ‘soap film’ method.

In every situation the descriptions of the methods should be simple, consistent and clear. In this article, technical details of these two methods as well as explanations and definitions are given, in order to familiarise the reader with the background and application of these methods.

Basic Considerations

Standardised terminology is used for the description

of the methods. These terms will be recognised on product labels and in brochures as well. The standardised terms are listed and explained in *Box 1*.

Box 1: Definitions**Activities**

After installation	treatment to attain a factory fresh finish after installation or renovation.
Allow floor to dry	-
Apply	action to uniformly spread applicable maintenance product.
Cleaning	removal of loose or sticking dirt and other unwanted materials from floor.
Dry buff	dry buffing of floor with rotary machine and buffing pad.
Full spray	method for application of a new finish by means of a rotary machine and a buffing pad or by a polish applicator.
Maintenance	treatment to attain a factory fresh finish.
Pick up dirty water	absorbing used liquids with wiper and mop or water vacuum.
Refurbishment	treatment, applied if cleaning and maintenance is not sufficient to attain a factory fresh finish.
Removal and renovation	treatment to remove the present finish and enclosed dirt and to reapply a new finish.
Rinse	removal of residual cleaning products with clean water and mop.
Scrub	wet cleaning with cleaning product and scrubbing brush.
Soak	process in which effectiveness of applied floor care product is reached for local removal of spots.
Spot removal	local removal of spots.
Spray clean	treatment to maintain and clean a floor locally by using a spray product and a rotary machine.
Wipe	dry dust-binding removal of dirt.

Floor Care Products

Maintenance product	product used for application of a protective film on the surface (e.g. Spray or Monel).
Neutral detergent	product meant for removal of dirt and spots, which has a pH value of about 7 (e.g. cleaner).
Polymer	product used for renovation, to achieve a surface having the properties of the original factory finish (e.g. polymer).
Soap film product	liquid product used for cleaning and maintenance by a soap film method (e.g. Monel).
Spray product	liquid product used for both cleaning and maintenance by the spray method (e.g. Spray).
Top remover	product used to soak, in a physical way, the build-up of maintenance product (and the enclosed dirt) and/or the damaged top of the ETC coating (e.g. top remover). The soaked material can be removed by simple mechanical treatment.

Tools

Buffing pad	machine-disc, made of synthetic fleece, intended to polish a surface.
Dust cloth	impregnated disposable cloth for dust-binding removal of loose dirt.
Dust mop	flat plate with handle for application of dust cloth.
Mop	tool consisting of cotton or synthetic strings and a handle for moistening and/or drying actions on floors.
Rotary machine (one-disc machine)	machine with motor-driven disc, intended for mechanical treatment of (or floors).
Scrubbing brush	brush consisting of synthetic or natural fibres and a long handle for manual scrubbing purposes.
Scrub pad	machine disc made of synthetic fleece, intended to scrub a surface.
Wiper or water vacuum	device for manual or mechanical removal of water from floors.

The purpose of the use of standardised terms is to provide unambiguous and consistent advice to our customers.

The described methods are based on the use of Marmoleum floor care products. Marmoleum floor care products are developed and tested as a system. Required frequencies for each action are dependent on floor use and individual demands.

Situational circumstances can lead to additional, specific floor care advices. However, these are a modification and do not fall within the scope of this basic system.

Mixed use of different systems or products can lead to unwanted results. When the use of other floor care products is chosen, be sure that these also form a compatible system.

In the definition list, a general description of our floor care products may help in finding comparable commercial products. Note: do not use strong alkaline products (pH value >9), as these may damage the Marmoleum/Artoleum surface.

Activities

Both the Spray method and the Monel method are subdivided into activities, which are described in standardised terms in *Table 1*.

The Spray Method

Mechanical Marmoleum Floor Care, Using a Rotary Machine

For most flooring situations, the Spray method is recommended, being the most economical method, as it combines both cleaning and maintenance in one efficient action.

Regular use of Spray and a rotary machine will keep the ETC finish in optimum condition, inhibits the adhesion of dirt and prolongs the life of the floor. Also, the original satin gloss of the Marmoleum will be retained, making minor distortions less visible. Due to the small amount of water used, the Spray method provides a dry environment, enhancing the natural hygienic properties of Marmoleum. When

using the Spray method, floors can be kept in use while the floor care work is being carried out.

Basic actions, tools and products are presented in *Table 2*.

The Monel Method

Manual Marmoleum Floor Care, Using Basic Floor Care Tools

For Marmoleum floor care the Monel method is an option when a rotary machine is not available or not practical. Cleaning and maintenance can be carried out using simple methods and tools. The Marmoleum floor surface is protected by manual application of a Monel film. This film absorbs wet dirt, which will be removed by the next maintenance action. With consistent and regular use of the Monel method, the original satin gloss is retained. This contributes to the natural appearance of the floor and makes minor distortions less visible (see *Table 3*).

Prevention and Further Help

Entrance Mats

As cleaning is the most laborious part of the floor care process, it is important to prevent dirt from getting onto a floor. Shoes walk in most of the dirt; a good entrance mat will absorb a significant part of this dirt.

An entrance mat should have an adequate length of at least four steps (approximately two metres) or longer. Furthermore, the entrance mat will perform at its best when it is regularly cleaned. An entrance mat that performs well can reduce cleaning and maintenance costs significantly.

Stains

Basically there are three kinds of stains: those sticking on the finish, those migrating through the finish or aggressive ones, which can affect the material.

Worsening circumstances for every stain are temperature, time and/or pH value.

Table 1: Actions

Action	Frequency	Purpose
Initial treatment	Once, after installation	What to do when a Marmoleum/Artoleum floor is installed
Cleaning	Frequently	Remove dust and stains
Maintenance	Regular	Maintain the properties of the ETC finish
Refurbishment	Occasionally	Repair scratches and supply wear losses
Removal and renovation	'Accidentally', or even never	Remove and reapply the ETC top finish

Although a stain removal method is determined by the nature of the stain, there are general rules:

- Remove stains as soon as discovered
- Try out removal on a sample piece or on a hidden place.
- Many stains are safely removable by dry towel or water, detergent, white spirit or spirits (in that order).
- If all solutions fail, scrub or use top remover locally and reapply polymer.

Do not use alkaline products for stain removal. Solvents, such as acetone, may damage the ETC finish slightly, but will not harm the Marmoleum. Last but not least, not all stains are removable, especially not the migrating or aggressive ones. Care

is better than cure (see Table 4).

Cost Comparison

There are many questions about the costs of Marmoleum floor care methods. A cost calculation model is available that enables cost comparison of both flooring and floor care methods. Target groups who might use this model are internal specialists, such as account managers, and technical services.

The model is based on activities as defined in the Marmoleum floor care system and is based on a defined labour time per activity, as is generally agreed and accepted by facility services.

The calculation requires a number of customer

Table 2: The Spray Method

Basic actions	
After installation (once)	
• Clean with neutral detergent and mop	50ml neutral detergent/10 litres water
• Pick up dirty water with wiper and mop or water vacuum	
• Rinse with clean water and (damp) mop	
• Allow floor to dry	
• Dry buff with rotary machine and buffing pad	
• Full spray with spray product, rotary machine and buffing pad	Spray product: water 1: 1
Cleaning (frequent)	
• Wipe with dust mop and dust cloth	
• Remove spots with neutral detergent and (damp) mop	50ml neutral detergent/10 litres water
Maintenance (regular)	
• Spray clean with rotary machine and buffing pad,	
• Use spray product where necessary	Spray product: water 1: 1
Refurbishment (occasional)	
• Scrub with neutral detergent, rotary machine and scrub pad	50ml neutral detergent/10 litres water
• Pick up dirty water with wiper and mop or water vacuum	
• Rinse with clean water and mop	
• Allow floor to dry	
• Dry buff with rotary machine and buffing pad	
• Full spray with spray product, rotary machine and buffing pad	Spray product: water 1: 1
Removal and renovation (incidental)	
• Apply adequate solution of top remover	Top remover: water 1: 1
• Soak for 10 minutes	
• Scrub with rotary machine and scrub pad	
• Pick up dirty water with wiper and mop or water vacuum	
• Rinse with clean water and mop	
• Apply polymer with finish applicator	Polymer (pure)
• Allow floor to dry	
• Dry buff with rotary machine and buffing pad	
• Full spray with spray product , rotary machine and buffing pad	Spray product: water 1: 1
Tools	Products
• Mop	• Neutral detergent
• Rotary machine	• Spray product
• Buffing pad	• Top remover
• Dust mop and dust cloth	• Polymer
• Scrub pad	
• Wiper or water vacuum	
• Polish applicator	

Table 3: The Monel Method

After installation (once)	
• Clean with neutral detergent and mop	50ml neutral detergent/10 litres water*
• Pick up dirty water with wiper and mop or water vacuum	
• Rinse with clean water and mop	
• Apply maintenance film using soap film product solution and mop	0.5 litres soap film product/10 litres water
• Allow floor to dry	
Cleaning (frequent)	
• Wipe with dust mop and dust cloth	
• Remove spots with neutral detergent and (damp) mop	50ml neutral detergent/10 litres water*
Maintenance (regular)	
• Wipe with dust mop and dust cloth	
• Clean with neutral detergent and mop	50ml neutral detergent/10 litres water*
• Apply maintenance film using soap film product solution and mop	0.5 litres soap film product/10 litres water
• Allow floor to dry	
Refurbishment (occasional)	
• Scrub with neutral detergent and scrubbing brush	50ml neutral detergent/10 litres water*
• Pick up dirty water with wiper and mop or water vacuum	
• Rinse with clean water and mop	
• Apply maintenance film using soap film product solution and mop	0.5 litres soap film product/10 litres water
• Allow floor to dry	
Removal and renovation (incidental)	
• Apply adequate solution of top remover	Top remover: water 1: 1
• Soak for 10 minutes	
• Scrub with a long-handled scrubbing brush	
• Pick up dirty water with wiper and mop or wet vacuum	
• Rinse with clean water and mop	
• Apply polymer with finish applicator	Polymer (pure)
• Allow floor to dry	
• Apply maintenance film using soap film product solution and mop	0.5 litres soap film product/10 litres water
• Allow floor to dry	
Tools	Products
• Mop	• Soap film product
• Dust mop and dust cloth	• Neutral detergent
• Wiper or water vacuum	• Top remover
• Scrubbing brush	• Polymer
• Polish applicator	

Table 4: Tips for Stain Removal

Source	Try to remove with
Bitumen, tar, (candle-) grease, butter, shoe polish	White spirit
Alkaline products	Water, diluted acetic acid
Ballpoint ink, grass	Spirits (ethanol)
Iodine	Spirits, sodium bisulphite 5%
Blood, pigmented stains	Hydrogen peroxide 3%, bleach (use gloves)
Rust, red wine	Lemon juice

choices: floor covering, product price and lifetime, floor care method, frequency, flooring area and labour hour rate. After these choices are made for different methods or floorings, a relative cost comparison can be made. ■

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