# Movinord



# marmoleum® Today, Tomorrow, Forever

Forbo is proud to own the Marmoleum brand. It's the icon of the linoleum flooring category. We have been creating Marmoleum floors for well over 110 years. In doing so we always make sure to preserve the rich heritage that created this well-known brand as well to ensure we also always look ahead so we can offer the best flooring solutions for today and into the future. Create a better environment. Choose Marmoleum flooring.

### Bulletin board

From the floor to the wall, Forbo Bulletin board is a linoleum surfacing material that's ideal for walls or vertical surfaces such as notice or pin-boards. It's also a functional aesthetic finish for walls, doors or cabinets. Bulletin board is also available in framed formats. Its bacteriostatic properties make it ideal for patient rooms and nurses' quarters.

### **Furniture Linoleum**

Where Marmoleum is praised for its sustainable profile and functional performance, Furniture Linoleum is heralded for its aesthetic and tactile qualities. This finely ground, high-quality linoleum is a designer's dream when it comes to creating matte, smooth, hand-warm finishes to tabletops, cabinets and other furniture. The decorative surface can be easily cleaned, and, like leather, develops a beautiful natural patina over time. Forbo Furniture Linoleum is available in a range of 24 four solid, uni colours ranging from coal black to a warm white and the whole spectrum of colours in between.

### **Marmoleum Sport**

This 3.2 and 4.0mm Marmoleum is specially created for indoor multi-sports facilities. Sport offers a genuine environmentally friendly alternative to any PVC or Rubber sports floor offer. When installed on official sprung-wood subfloor constructions, it complies with the requirements of the international indoor sports associations for indentation, bounce and slip characteristics. For multi-sport environments or school gyms, Marmoleum Sport can be installed with a recycled rubber shock absorbent underlay. Markers lines and appropriate finish requirements can be applied easily.



bulletin board furniture linoleum marmoleum sport



# Forbo presents the Next Generation of Marmoleum

Take a fascinating look into the world of colours and designs. Marmoleum was created to complement and enhance the architecture interiors of today's and tomorrow's buildings.

With this collection, Marmoleum takes a definitive step toward giving you the best properties for optimal floor performance in the real world. Healthy flooring solutions inspired by nature that live up to their performance promise.

Create a better environment.
Choose a Marmoleum floor.
Creating a new perspective.

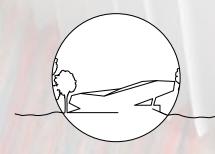
Forbo Marmoleum stands for versatility, sustainability and durability. It combines ecological and economic values that help bring modern and contemporary architecture to life.

Marmoleum is a natural floor, created from all natural ingredients. It is the most sustainable floor in the resilient flooring category.

All Marmoleum floors now include Topshield2, a double UV cured finish delivering floor performance in the real world, that result in the lowest cost of ownership over its life time.

The stereotype of traditional beige and grey marbled linoleum designs is in the past. Our new collections offer a wide choice in colour and design with rich, warm, refined and contemporary looks. Marmoleum has been transformed for the modern office and retail environments.

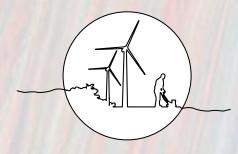
Welcome to the new world of linoleum and the next generation of Marmoleum.



# AUTHENTIC & VERSATILE

### The lowest cost of ownership

Linoleum has a 150-year heritage and is the first resilient flooring ever created. Whether architects are looking for a traditional or more modern design, they use Marmoleum for new projects and building renovations, including hospitals, schools, art galleries or museums, airports or designer shops. No matter the application, Marmoleum is versatile will either modestly support the area or stands out as a real eye catcher.



# SUSTAINABLE AND DURABLE

### The most sustainable resilient floor

Created from natural, renewable materials, one could say that as long as the sun shines and the rain falls we will be making Marmoleum. There are no additives in Marmoleum that make it look better. It is, in fact, green through and through. Combine this with long cleaning and maintenance intervals, and there is no doubt that Marmoleum is the most sustainable resilient floor, with the lowest cost of ownership.

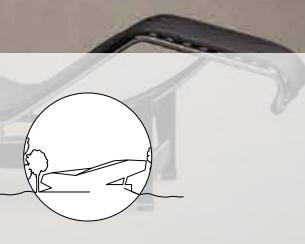


# DESIGN & COLOUR

### A new design direction

The breadth of our colour and design range is unrivalled. No other flooring collection offers you so many choices. And, with an inspiring new collection and new design direction, you'll see Marmoleum in a whole new light – including our marbled collection's astonishing new colour bank.





### Creating a dialogue with **Architecture and Design**

There probably has not been a flooring type that has become so interlinked with the architecture of the 20th century as Marmoleum. In the development of functional architecture, the past these chairs connected to Marmoleum flooring has been chosen for both aesthetical and functional reasons. That's because it has the characteristics of being an original material, much like wood or stone, and not the characteristics of an engineered or artificial floor. Marmoleum has a specific character of its own that created a number of evergreens in resilient flooring.

Rietveld, Le Corbusier, Jacobsen and Eames all have their connection to Marmoleum, from the origin of their first design classics to today's many remakes that have turned their designs into true furniture icons. In the traditional uni Walton floors. Today they do even better with our modern Marmoleum Concrete floors.







# DESIGNICONS & EVERGREENS



# Celebrating 150 years of Linoleum



# Frederick Walton discovered linoleum and patented its manufacturing process in 1863.

It's quite remarkable that a product, discovered in the days of gas lights and horse-drawn carriages, is still used in applications for which it was originally designed, such as flooring in health care and educational facilities.

Linoleum has found its way into an incredible large number of buildings all over the world. It was the dining hall flooring for the infamous Alcatraz prison in San Francisco, CA, as well as the elegant White House in Washington, DC. Not to be outdone, linoleum is also

installed in the Kremlin in Moscow, the German Reichstag and Buckingham Palace. Even Amsterdam's Anne Frank house (1938) featured linoleum, as did Sorbonne University and the institute of Madame Curie. Still today many public buildings world wide from the new opera house in Oslo or the latest tribal art museum from Jean Nouvel Marmoleum remains a classic that is loved by architects because of its authenticity and versatility.

One of the expressions of modernism in the arts, crafts and architecture was created through the German Bauhaus institute, which settled in Dessau in 1925. Bauhaus, for many, is the origin of modern architecture that spread from Europe to North America and all over the world. A Forbo Marmoleum classic - "Berlin red" - still can be seen in the restored Bauhaus.

image: Werner Huthmacher















# We take pride in creating Marmoleum

The craft of manufacturing linoleum has evolved over the last 150 years. Forbo has been driving this development by creating its Marmoleum brand.

Making Marmoleum is an art, which is not learned at any trade or craft school. In fact, only a handful of people know how to make Marmoleum.

The process begins by growing flax. The flax plant - besides being a source for the textile and paper industry - is known for the production of linseed. When pressed, the linseed produces linseed oil, the basic ingredient for Marmoleum. The linseed oil is then mixed with tree rosin. When subjected to a certain temperature, the two ingredients create linoleum cement, a sponge like base for Marmoleum.

Adding wood flour, limestone and pigments create a granule mixture that passes through various production steps before ending up on a large conveyor belt that leads to an impressive calander press.

Here, in two separate production passes, the marbled, speckled, uni or striped designs are created as the mixture is pressed and infused into the jute fibre backing.

From the calander the Marmoleum sheet is transported to massive drying rooms. The material, often 18 kilometres in length, is left to dry before receiving a final, protective Topshield2 treatment and finish layer.

Determining the correct mixture of ingredients, allowing the right time for raw materials to settle, applying the correct temperature and pressure all skills Marmoleum Experts must master.

We are proud of our experts, as they take pride in creating every piece of Marmoleum.

■ Taking care of your floor
A selection of some of the 450 men and women that create
Marmoleum in our Assendelft (NL) and Kirkcaldy (GB/Scotland)



### Sustainable & Durable

With its 'all-natural ingredients', Marmoleum flooring is almost like creating a floor covering with nutrients. As a matter of fact, the process of making Marmoleum is not unlike to that supplements to enhance its green of preparing an oven-baked apple pie.

What makes Marmoleum special is that it is created entirely from raw materials obtained from their natural habitat right where they grow and renew, often in just 12 months time.

Jute and flax are annual crops that can be harvested just like wheat or corn. Extracting rosin is a continuous process, while wood flour, a waste material from the timber industry, is derived from European production forests. Limestone during production. This demonstrates is available in abundance.

With Marmoleum, it is the simple, natural ingredient combination that creates the product. Marmoleum has no additives to make it look better, no profile and no artificial ingredients to improve stability or flexibility. Marmoleum is what it is and nothing else.

All this makes Marmoleum a natural floor that, after a long 30-plus year life cycle, can start all over again. Marmoleum can be scrapped, since it's biodegrade. Alternatively, burning Marmoleum delivers a higher caloric value and creates thermal energy that outweighs the energy used the full life cycle circle from which nature benefits.



Linseed



# Optimal Life Cycle Assessment & Environmental Product Declarations

At Forbo we believe an open, honest and transparent approach to demonstrating a sustainable attitude is the only way to show the credits we attribute to our products and processes. Life Cycle Assessment (LCA) is a methodology we use to determine and measure the impact on the environment of any product during its creation, use and what remains when a product reaches its end of life by measuring a set number of impact categories.

**The Environmental Product** Declaration (EPD) is the outcome of the LCA, which is published in a 3rd party verified report on a particular product. The EPD for Marmoleum verifies our claims and gives transparent insights into our test results and measurements.

### **Environmental Stewardship**

Marmoleum is manufactured in a state-of-the-art environment where the traditional manufacturing process has been automated in efficient production lines that are run entirely on green energy. At Forbo, we actively steer our processes toward continuous improvement, maximizing the use of recycled content in our Marmoleum and working with green design principles whenever new designs or structures are developed.

### Marmoleum installation waste take- back schemes

In many of our markets we have now introduced a network to take make material from previous installations. The off-cuts and scraps are collected and returned to our factory. On a smaller scale, in our sampling, we take the same approach. This way, we can do our best to assure full-circle recycling even at points where our product reaches customers.

### Labels and Certification, recognition that goes a long way

Marmoleum is among the most rewarded and environmentally sound floor covering. We value all our labels, whether it's the internationally recognised Swan label, the Blue Angel certification, the North American Sequoia Seal or more specific labels like Nature Plus or the Austrian environmental label. Next to labels and certification, Marmoleum brings real benefits when measured against BRE or LEED certifications. Here, using a Marmoleum floor helps you in the overall rating of your building.















# Where detail matters: our LCA Target

Architects and designers today are much more aware that the buildings and interiors they create represent a value that should last for the next decades. Sustained durability is as much connected to the environment when considering energy use as it is in choosing the right materials.

Already during the construction of the building choices can be made that create a better environment. The individual product labels that are connected to sustainability already provide a guideline concerning the environmental profile of a product. In recent years these product profiles have been complemented by construction rating systems. Now a building can be constructed in such a way that it can be awarded an environmental certification. The LEED system promoted through the international Green Building Council is a good example of this practice. A building that is constructed with green materials and is operated through green operating systems create a value for the future.

With Marmoleum we contribute to creating value for the future built environment. But we also assure that we improve on our own performance. In our environmental policy we have set ourselves a target to achieve a 25% reduction in our environmental footprint by 2015. The projects that support our goal are monitored on a monthly basis, they are part of the development criteria of new collections, and they are supported by improvements in our operating systems. You can read about our progress in our annual Environmental Report.





# Topshield2, for floor performance in the real world

The reality of day-to-day life for a floor is that it encounters both use and abuse without being able to balance its performance with prescribed cleaning and maintenance regimes. That means cleaning and maintenance is not always carried out exactly 'on time' or in the way prescribed by the manufacturer. The real world requires fool proof solutions.

Forbo Marmoleum is known for its track record in heavy-traffic environments such as schools, health care, offices and public buildings. In these applications, everyday use is characterised by high demands on hygiene, resistance to wear and the need for easy cleaning and maintenance. Dirt and sand carried into the building, hand disinfectant spills and the reality of the pressure of the economy on cleaning and maintenance regimes mean that floors today have to endure and withstand use and abuse to an even higher degree than before.

Topshield2 has been designed to create a Marmoleum that meets the demands of everyday use, is even more resistant to dirt pick-up and less prone to wear with improved resistance to scratches and stains to create a floor that gives you lasting performance over time.

Topshield2 provides you with a floor that:

- Is naturally bacteriostatic
- Resistant to hand disinfectants
- Has overall improved stain resistance
- Is efficient, easy to clean and quick drying
- Soils less and picks up less dirt
- Scratches and traps dirt less
- Is easy to maintain

(See "Marmoleum in detail" in this brochure for more information on Topshield2 performance).





# Creating a new collection

For our main collections we rely on the expertise of our design team to evaluate Forbo's collections with leading architect practices and design agencies around the world. Some 150 architectural offices and designers always creates random, all-over provide input and evaluation on the colour, balance and structure of new designs. The interaction provides new insights and creates subtle nuances that are reflected in our collection and colour groups.

The Marmoleum colour spectrum is unique and does not start from a purely white base. What's more, the manufacturing process, which subtly creates the structure of the design, patterns that never show any repeat to create the natural charm of any Marmoleum floor.

For this collection, the design focus was on a new direction, one that paid attention to non-marbled visuals. New designs in the collection resemble subtle concrete with fine colour nuances as well as an extension of a vintage stripe design that has been recreated to suit modern environments.



# Designing for future generations

### The importance of good design...

Forbo has always looked beyond tradition and convention when it comes to designing new Marmoleum collections.

In the past, when it came to paying tribute to the versatility of Marmoleum, we have teamed up with architects like Allessandro Mendini and colour specialist Peter Struijken. We have also invited Dutch designers for a special designer collection. This way, we always have balanced trend and tradition that focuses on new developments in architecture whilst keeping a keen eye on our design icons.

Forbo keeps a close eye on young and promising designers who we would like to introduce to Marmoleum as a floor covering material. For example, we currently run a project with the Eindhoven Design Academy. By challenging students, who have a fresh look at Marmoleum, we aim to provide a new platform for the next generation of our new Concrete collection.













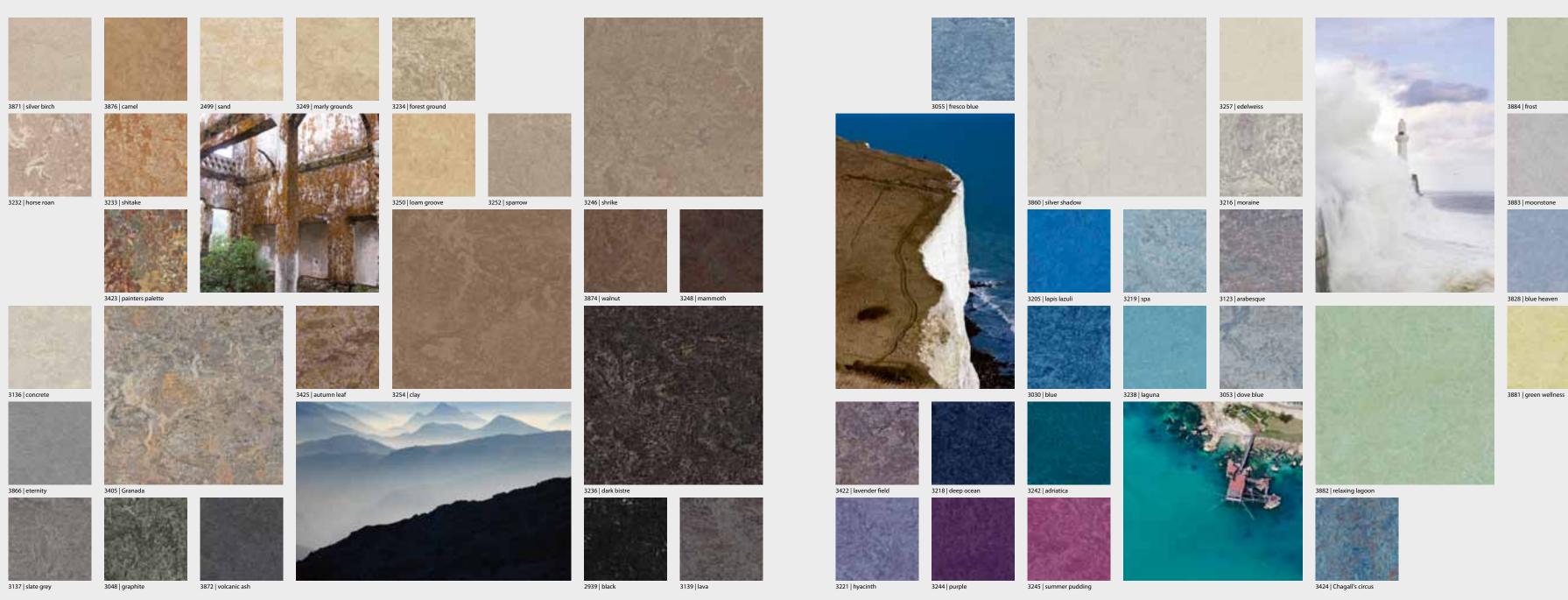
Be inspired ▶
A selection of the Design Academy Forbo Marmoleum Team is challenged with creating their "New Perspective on Marmoleum"



# the Marmoleum Marbled Collection

This time, the marbled collection is presented in a vast array of colours, combining stronger and subtler marbled patterns in one presentation. Marble designs combine anything from three to eight different colours that can vary in intensity and contrast. Sometimes they create bold, strong contrast resembling real marble, yet sometimes the colours are more subtle like fresco murals. The presentation is made in such a way that colour combinations are easy to make.

### marbled marbled



Real, Fresco & Vivace Collections Real, Fresco & Vivace Collections

# marbled marbled



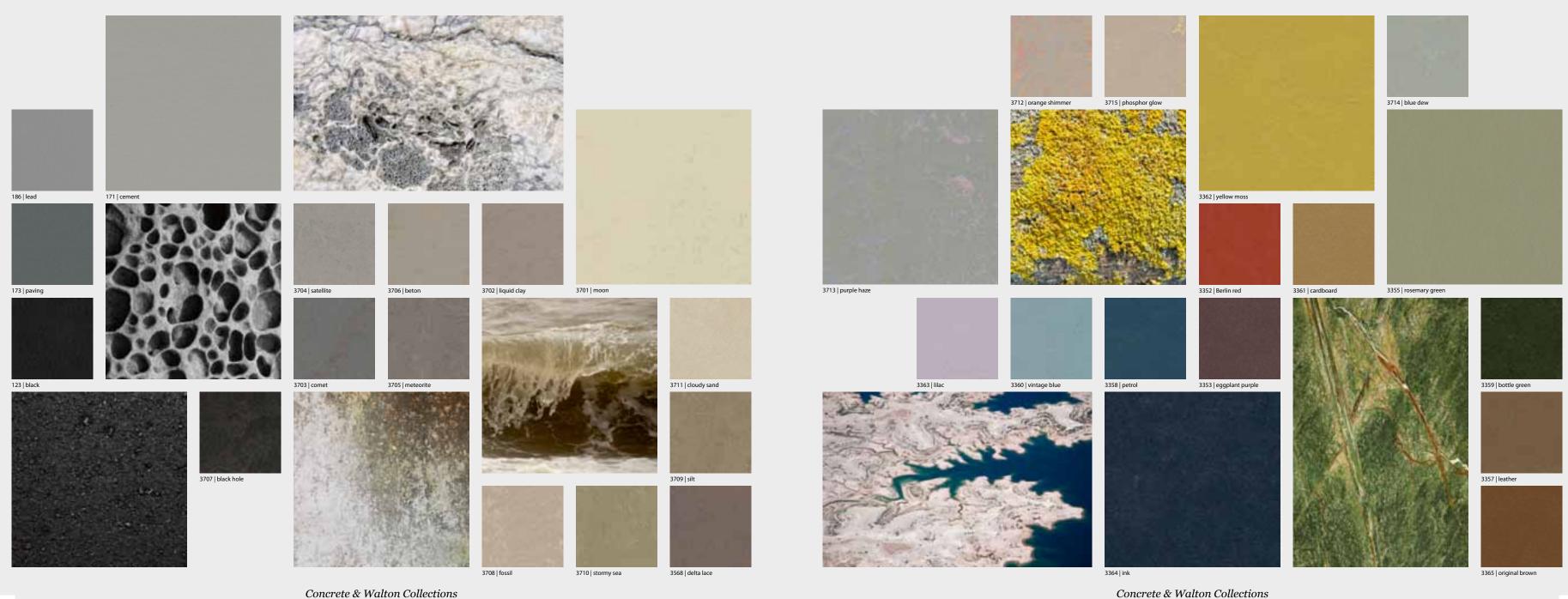
Real, Fresco & Vivace Collections Real, Fresco & Vivace Collections



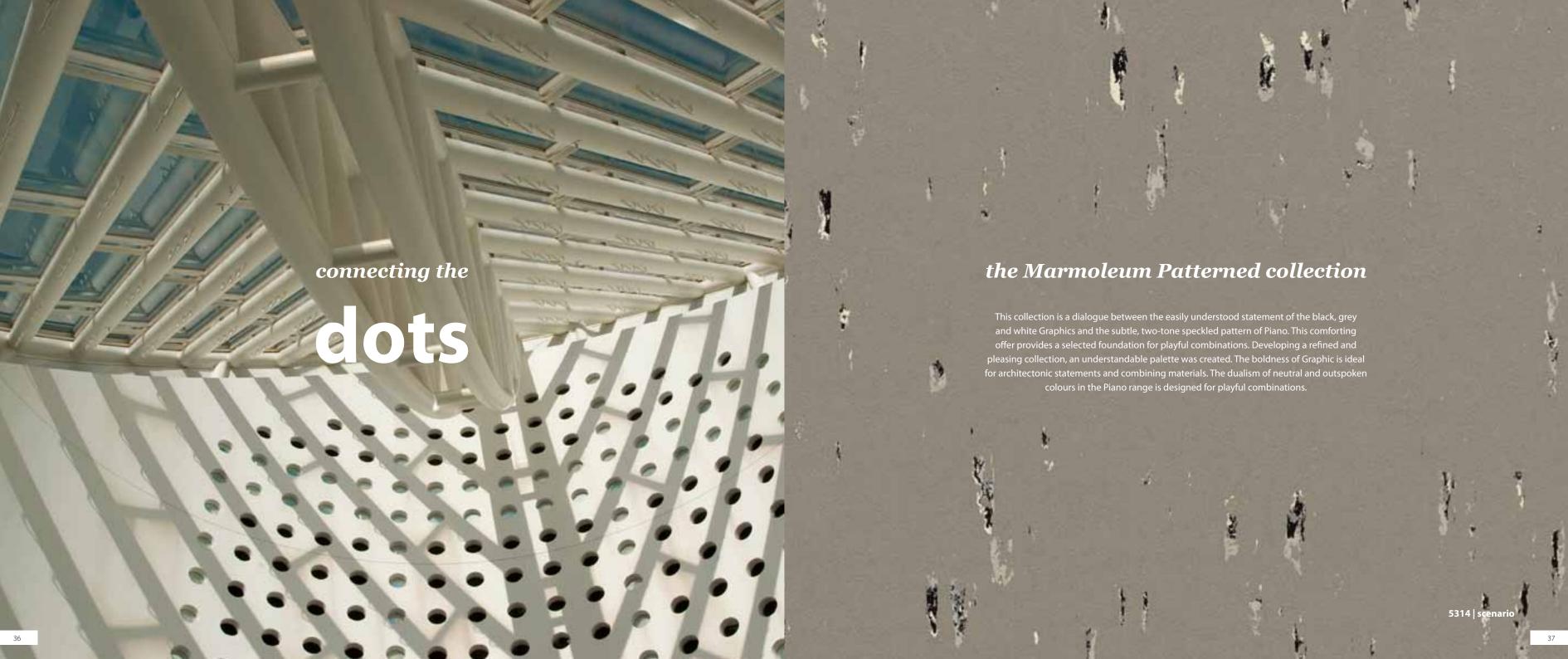
# the Marmoleum Solid Collection

The secret spirit of this collection lies in colour nuances and subtleness. With reference to classic, original linoleum, a conceptual range of (almost) uni colours has been created. One could say this collection reflects traces of the past and present in many different ways such as traces of history in the rich colour palette inspired by heritage as well as future traces that reveal the art behind the modern process of making Marmoleum. Finally, there are twists and traces of colour and design to be found in the very subtle colour veins that characterise this collection. The Solid collection offers a wide range of neutral and outspoken choices for complementing the modern environments of today.

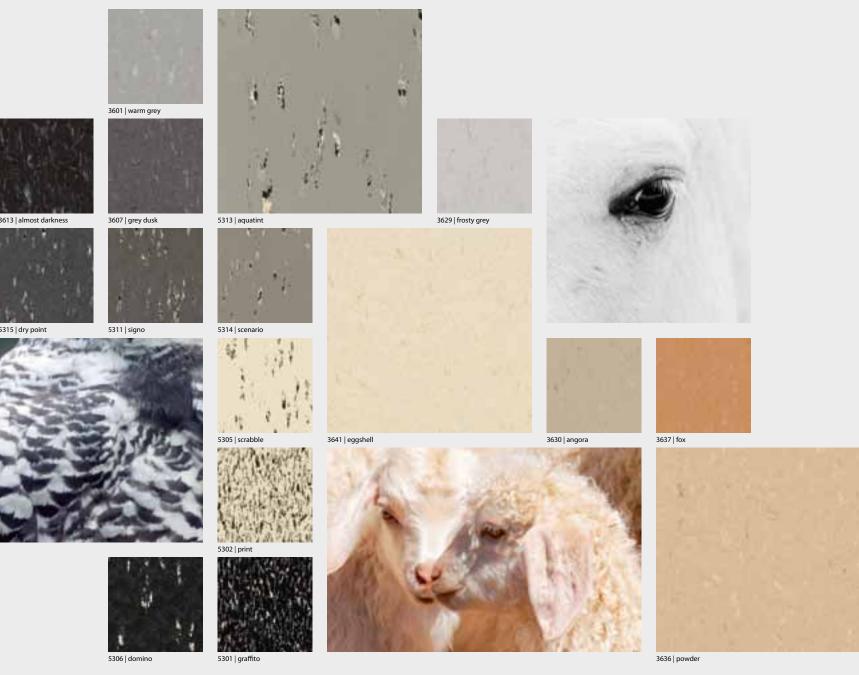
# solid



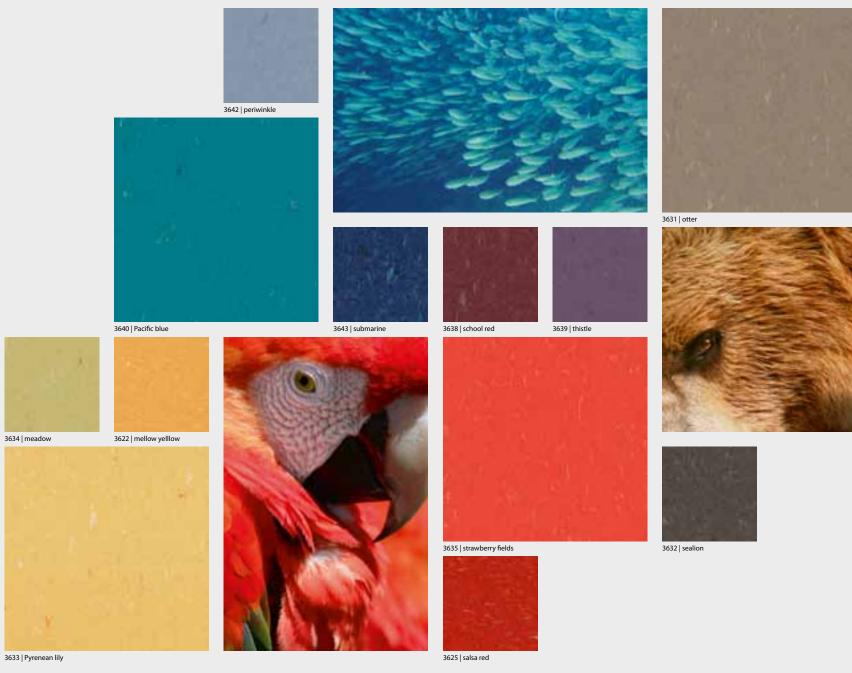
Concrete & Wallon Collections



# patterned



# patterned



3634 | meadow

Graphic & Piano Collections

# the Marmoleum Linear collection

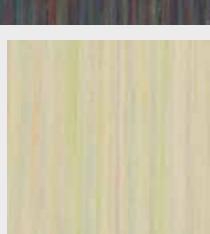
Celebrating the rich heritage of linoleum, a search through our archives lead to a re-discovery of the historic, 1950s linear pattern. Out of this structure, which we refined and brought up to the colour spectrum of the 21st century, we introduced Striato in 2009. The successful, worldwide revival of this design motivated us to enrich the palette into a mature range of 18 items. The directional linear pattern is the natural outcome of making linoleum in one of its initial stages of creation. By playing with colour and exploring the boundaries of a 150-year old process, we created new designs and colour combinations. Taking these possibilities to their furthest, a special statement is made with three colourful eye catchers. For the remainder, nature itself was an inspiration for an extended range of warm and inviting colours.

### linear linear



5227 | water colour

5228 | hidden colours















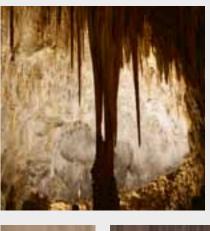


5225 | compressed time













5223 | Grand Canyon

Striato Collections Striato Collections

3576 | sliding glacier

# Applications world wide

The new designs, as well as the refinement of the traditional designs that now come in a vast array of colours, mean Marmoleum has long since been set free from its institutional image. Flooring installations in museums of both contemporary and modern art, today's brands and chains of retail shops, trendy hotels and leisure centres or modern open office spaces are proof that Marmoleum is a modern, versatile floor covering, whilst reminding us of our architectural heritage.

The following pages provide inspiration on the colours and structures of the new Marmoleum collection in various market environments.





# Segment HEALTHCARE

# Creating a better healing environment

Traditionally, Marmoleum is applied in both health and care facilities worldwide. Because Marmoleum is naturally bacteriostatic, it helps prevent the growth of bacteria on floors, thus it has always been considered the preferred health care floor solution. Topshield2, a protective layer applied

to Marmoleum, adds to bacteria prevention effectiveness. Not only do care providers want environments that are hygienic, they also want environments with aesthetics that aid the healing process. The use of comforting colour schemes and creating designs that convey a sense of well being are among the important attributes of a Marmoleum floor.

These kinds of environments are not limited to public hospitals or private clinics, however. Just as important are care facilities for the aged and assisted living environments. These places should be a home away from home that provide comfort and safety. That's why the entire Health Care portfolio of Forbo Marmoleum is designed to safely accommodate walking aids and wheelchairs and other equipment.

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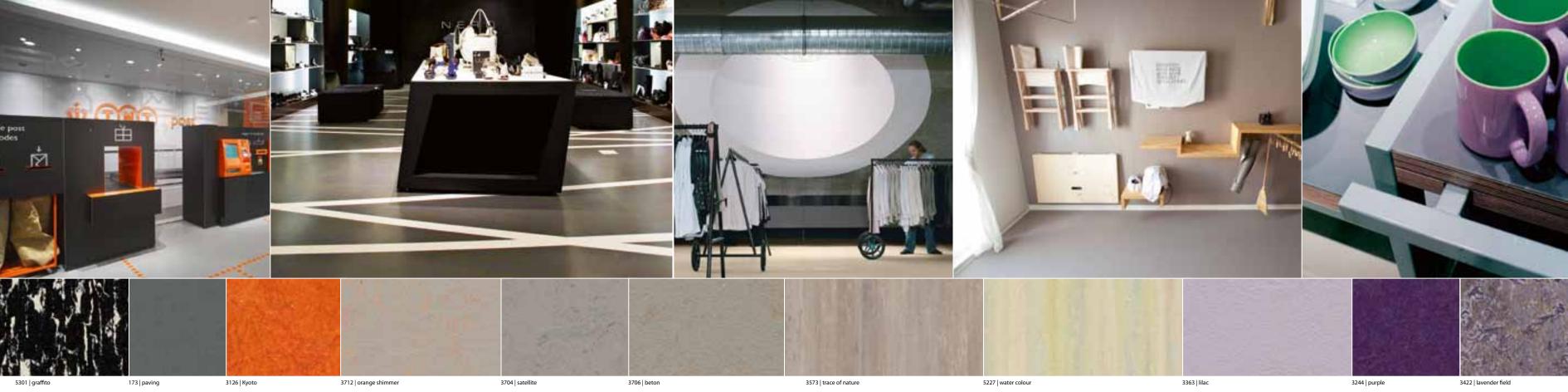


# Segment EDUCATION

### Creating playful, colourful designs

Today's schools and educational facilities are multi-disciplinary buildings major design element that can that house a large variety of spaces for learning along with social and cultural activities and sports. Marmoleum is the ideal floor solution that fits in the traditional classroom and hallways, and also has functional solutions for restaurant areas, atriums and sports halls.

Colour, in addition to interior form, space, light and texture, is also a be used to create an inspirational learning environment. The rich palette of the Marmoleum Marbled and Patterned collections have a range of complementing colours that fit all stages of development for children whether they are playing or learning.



# Segment RETAIL

### Creating good design

Marmoleum has long been set free of its matched with outstanding durability, institutional image. Flooring installations make Marmoleum the perfect floor for today's brands and chains of retail shops are proof that Marmoleum, with its new collections, helps create exceptional shopping experiences.

Vast colour and design choices, for stores looking to enhance brand identity. And, thanks to its resilience, Marmoleum can easily handle hightraffic areas in department stores.



# Segment OFFICES

### Creating inviting office spaces

Modern office environments bear no resemblance to the large, institutional buildings that housed civil servants and administrative employees behind milky glass doors in small workspaces behind conventional desks. Light and colour have entered the workspace, creating aesthetically creative and pleasing surroundings with excellent acoustic qualities.

The new ranges of the Marmoleum Solid designs create serene, stylish environments that fit the modern office space. Traditional classics can be mixed with modern accents and contemporary colours for light and pleasant working environments.

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# Segment LEISURE & HOSPITALITY

### Creating a sustainable alternative

The choices offered in the different designs of the Marmoleum collection create modern functional environments collection, form an ideal base for in the world of leisure and hospitality. Theatres, cinemas, hotels and restaurants all have their different environments and character. The dual functionality of a Marmoleum floor is the perfect solution.

Marmoleum colours and structures, with references to wood and stone, which are available in the new creating warm, natural environments in which floors act as a neutral element and a solid base for the interior.



# Marmoleum in Detail

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### **Welding options**

There are matching welding cords for every Marmoleum design. A particular feature is the patented multi colour welding cord from Forbo. This welding cord creates invisible seams. The solid, single-coloured cords can be used to hide seams, as decorative accents or as functional elements such as part of a routing program.

Generated by storing daylight, our glow-in-the-dark welding cords create a photo-luminescent effect for hours at night. GloWeld meets DIN 67510 safety requirements.



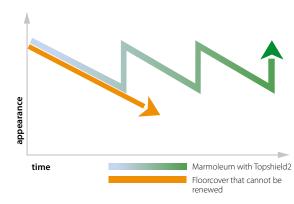
# Marmoleum with Topshield2, the ready to use floor

# Double UV-Light-cross link 1 2 3





# Floor performance in the real world







### **Double protection**

Topshield2 is a strong, double-layer water-based acrylic dispersion that has been developed for Forbo Marmoleum. It is a unique finish that comes with a strong, flexible UV cured primer that binds with the Marmoleum and levels the product surface. The primer is followed by a strong, tough finish layer, which also receives a UV curing treatment. The second layer has been developed with improved resistance against stains (particularly for chemicals, health care hand gels and alcohol), as well as scratching and scuff marks from rubber soled shoe and sneakers.

### Topshield2 & healthcare

In modern health care facilities, floor performance literally provides the basis for a hygienic and clean environment. Daily floor cleaning should be executed in an easy and efficient way. The use of chemicals and disinfectants should not leave any traces on the floor, and when they occur, should be able to be removed with ease. Marmoleum with Topshield2 is naturally bacteriostatic and has been designed to meet the high demands of modern health care. This also includes facilitating the transport of heavy loads, such as hospital beds, and accommodating hospital staff in carrying out day-to-day

work. Marmoleum is a floor that retains its character and beauty over time.

A simple cleaning regime guarantees a floor that maintains its vibrant colours and delivers lasting hygiene where you need it.

# Marmoleum with Topshield2 is ideally suited for any health care facility:

- Naturally bacteriostatic
- Resistant against hand disinfectants
- Overall improved stain resistance
- Efficient and easy dry cleaning
- Simple maintenance

### **Topshield2 and education**

With the exception of the summer holidays, the floors in any school have to withstand the seasonal weather.
Sand, dirt, rain, sleet and snow all leave their traces in building entrances and hallways, whilst in the classroom, shoe scuffing and the constant chair and table movement also abuse the floor. Marmoleum with Topshield2 has been designed to meet the daily challenges of floor life in education environments.

Our tests, confirmed by third party proof,\* have demonstrated improved performance against scuffing and is less susceptible to soiling and dirt pick-up. And, as a "ready-to-use" floor, it does not require initial maintenance or a polymer application. Marmoleum with Topshield2 also has lasting vibrant colours as the new finish brings out the depth and clarity of the floor design.

# Marmoleum with Topshield2 is the floor for any education environment:

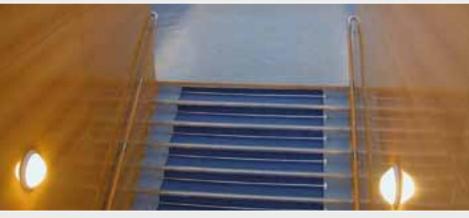
- · Less soiling and dirt pick-up
- Fewer scratches and less dirt is trapped on the floor
- No staining from ink, felt-tip pens or chemicals
- Easy to clean
- \*) Marmoleum with Topshield2 is independently tested against other resilient materials such as vinyl, rubber and other linoleum floors. by WFK (Germany) and Sohit (Netherlands). In all cases, Topshield2 performs 'significantly better' when it came to non-soiling, cleaning and stain resistance.

### **Coral entrance floors**

The amount of maintenance needed for a floor is determined by the amount of dirt carried into the building. Simple measures you can take, besides regular sweeping, is the installation of Forbo Coral entrance flooring. A good entrance floor stops 90% of all dirt and moisture carried into the building. This prevention measure can be applied in any building and at every entrance.

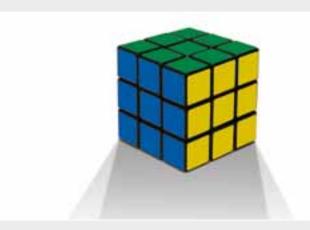
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# Enhanced Marmoleum performance products









Alongside our standard collection ranges, we offer a variety of Marmoleum floor coverings for special functions or applications.

### Marmoleum Decibel – superior sound reduction and additional comfort

Marmoleum Decibel has been developed for the growing higher acoustic quality requirements of resilient flooring and performs to an impressive impact sound reduction of 17dB. Marmoleum decibel is a 2.5mm Marmoleum laminated onto a 1mm sound insulating polyolefin sheet. The collection has 25 colours and features both Marbled and Solid designs.

# Marmoleum Acoustic – sound reduction and enhanced comfort

Marmoleum acoustic reduces impact sound by 14dB. It is a twin-layer sheet of 2.0mm Marmoleum on a 2.0mm Corkment backing. The product installs in one operation, reducing installation costs. There are six marbled colours available in the Acoustic range.

### Corkment - reducing impact sound

Corkment, applied to the back of Marmoleum Acoustic, is also available as an individual underlay. After installation, any Marmoleum sheet or tile product can be placed on top, resulting in an impact sound reduction of 14dB.

# Marmoleum Ohmex – improved electrical conductivity

Although a Marmoleum floor is already naturally anti-static and does not build up any charge, we have developed Marmoleum Ohmex, which meets higher requirements for electrical conductivity to 1 x 108  $\Omega$ . This ensures personal safety and protects equipment that is sensitive to static electricity.

### Aquajet, a personal touch

Aquajet technology allows us to cut the most detailed and beautiful design inlays into your floor. There are standard designs available, however, you can have your own logo, or virtually any other design, created in your floor.

# System Solutions – turn-key answers

We have developed a range of total system solutions for specific flooring situation and needs. From subfloor preparation to finishing, all is covered.

System solution save time and effort, and bring consistency, quality and accountability. They are ready made and proven flooring installations and include Acoustic, High Tolerance, Static Control, Sustainable and rapid System Solutions.

The result is added value, increased safety and easier installation; a durable, state of the art solution for your floor covering needs. For more information, please request a copy of our System Solutions brochure.









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### Service Products, for easier installation and use













### **Training**

In all of our markets we offer training modules for floor installers. They are held worldwide in our own training facilities. Forbo certified installers guarantee professional floor installations and lasting floor performance. Ask your Forbo representative about a training installation in your market.

### Tools

Forbo offers a range of tools and installation aids that allow you to install Marmoleum correctly and easily. Forbo also promotes a range of ergonomic tools so you can properly install floors from a standing position, avoiding strains in you knees and back. For information, consult our accessories brochure at , or ask your Forbo representative.

### Installation

Forbo installation products include levelling compound, primers, moisture insulation products and adhesives to ensure perfect installation. For installation on wooden floors, or quick installations where no proper floor preparation is possible, Forbo has developed the Forbo Quick-Fit system. It's a clever combination of insulation underlayment and an MDF selfadhesive, ultra-light panel system that creates a perfect surface for installation.

### **Drying room film**

Marmoleum is created by an accelerated drying process under which the oxidation of the material reaches the desired product properties and specifications. This process leaves a surface film on the material causing a slight decolouration of the colour which is sometimes visible, particularly on lighter colours. This effect is a natural harmless occurrence linked to the use of linseed and rosin. The somewhat yellow surface film disappears within 24 hours when the linoleum is exposed to normal daylight. When the floor is covered by a rug, or a cabinet the surface film comes back, and again, will disappear when the covered area is exposed to day light.

### **Skirting**

Our collection of matching Marmoleum skirtings provides a finishing touch to any installation. Above all, skirtings provide a practical, hygienic solution for floor cleaning and maintenance right up to the edge of the wall. A full offer roll-length and pre-fixed click systems is available in our accessories brochure.

### Coving

When floors require ultra hygienic and watertight floor to wall installation, the Forbo range of pre-shaped Marmoleum coving strips are an ideal solution. The Marmoleum S coving is an elegant solution that leaves no dirt traps since the floor-to-wall connection evolves through a smooth gradient. Marmoleum creating a contrast to the next step coving solutions are also available for pre-shaped, outside and inside corners in colours that match your Marmoleum floor. For more information, see our accessories brochure.

### Stair nosing and other Finishing accessories

Marmoleum stair installations most often are created by adding so called "stair nose" strips. Forbo offers stair noses in various colours and dimensions. Stair noses prolong the life of the floor covering, provide visual security by (both up and down) and can be used as a decorative element.

For more information on skirting, coving and finishing accessories, can be found at www.forbo-flooring.com.

### ForbOnline, personalised ordering at the click of a mouse

ForbOnline is the e-business service portal for all Forbo trade clients. With ForbOnline you can order Forbo floor covering and service products at the click of a mouse. Trade clients can check stock availability and orders can be placed 24/7. As a registered customer, you can also view your sales history and track and trace the delivery of your order.

For more information on ForbOnline, please contact our customer service department.

# Collection overview

	Type	Design number	Colour name	Thickness 2.0mm	Thickness 2.5mm	Thickness 3.2mm	Thickness 4.0mm	Decibel 17dB - 3.5mm	Acoustic 14dB - 4mm	Ohmex	Available in tile	Authentic guanran- teed until 2020	Welding rod uni	Welding rod multi colour	LRV value	NCS code
	Real	2499	sand		•								•	•	56%	1510-Y20R
	Real	2621	dove grey	•	•			•			•		•	•	36%	3005-G50Y
	Real	2629	eiger		•						•		•	•	19%	6005-G80Y
	Real	2707	barley		•			•			•		•	•	49%	1515-Y30R
	Real	2713	calico	•	•						•	•	•	•	53%	2010-Y20R
	Real	2767	rust		•						•		•	•	19%	4040-Y50R
	Real	2939	black	•	•						•	•	•	•	5%	9000-N
	Real	3030	blue	•	•			•			•	•	•	•	12%	5030-R90B
	Real	3032	mist grey	•	•	•			•	•		•	•	•	42%	3005-G80Y
	Real	3038	Caribbean	•	•	•		_	•	•		•	•	•	55%	1515-Y20R
	Real Real	3048 3053	graphite	•	•	•		•	•	•	•	•	•	•	14% 27%	7502-Y 4005-B80G
	Real	3055	dove blue	•	•	•	•	•	•	•	•	•	•	•	23%	4005-B80G 4020-B
	Real	3075	fresco blue shell	•	•			•	•	•	•	•	•	•	44%	2020-Y20R
	Real	3077	tan pink	•	•	_		_	_		_		•	•	47%	2020-Y30R
	Real	3120	rosato	_	•			•			•		•	•	51%	2010-Y20R
	Real	3123	arabesque	•	•						_	•	•	•	23%	5000-N
	Real	3125	golden sunset	•	•			•			•	_	•	•	38%	1070-Y20R
	Real	3126	Kyoto	•	•			•			•		•	•	18%	2570-Y60R
	Real	3127	Bleeckerstreet	•	•			•			•	•	•	•	9%	2570-R
	Real	3131	scarlet		•								•	•	13%	1580-Y90R
	Real	3136	concrete	•	•							•	•	•	47%	3005-G80Y
	Real	3137	slate grey		•								•	•	16%	6502-Y
	Real	3139	lava	•	•				•			•	•	•	9%	8000-N
	Real	3141	Himalaya	•	•								•	•	40%	3020-Y10R
75	Real	3146	serene grey	•	•	•						•	•	•	27%	4502-Y
Marbled	Real	3173	Van Gogh	•	•							•	•	•	46%	2030-Y20R
	Real	3174	Sahara	•	•							•	•	•	29%	3040-Y30R
ع ا	Real	3203	henna	•	•			•				•	•	•	11%	5040-Y80R
<u> </u>	Real	3205	lapis lazuli		•								•	•	12%	4050-R90B
<u> </u>	Real	3216	moraine		•						•		•	•	34%	4005-G80Y
<b>■</b>	Real Real	3218 3219	deep ocean		•						•		•	•	6%	7020-R80B 3020-B30G
	Real	3219	spa hyacinth	•	•			•			•		•	•	32% 17%	4030-R70B
	Real	3224	chartreuse	•	•			•			•		•	•	38%	2050-G60Y
	Real	3225	dandelion	_	•								•	•	46%	2050-Y10R
	Real	3226	marigold		•						•		•	•	31%	2060-Y30Y
	Real	3232	horse roan		•						•		•	•	40%	3010-Y20R
	Real	3233	shitake	•	•			İ			•	•	•	•	23%	4020-Y30R
	Real	3234	forest ground	•	•						•	•	•	•	33%	4010-Y10R
	Real	3236	dark bistre	•	•						•		•	•	7%	8502-Y
	Real	3238	laguna	•	•			•					•	•	30%	2040-B10G
	Real	3239	olive green		•								•	•	19%	5030-G90Y
	Real	3240	willow	•	•								•	•	28%	4020-G50Y
	Real	3241	orange sorbet		•								•	•	31%	1060-Y50R
	Real	3242	adriatica	•	•								•	•	9%	5540-B10G
	Real	3243	stucco rosso		•								•	•	23%	2050-Y70R
	Real	3244	purple	•	•						-		•	•	8%	7020-R50B
	Real Real	3245	summer pudding		•			•					•	•	12%	4040-R30B
		3246 3247	shrike		•			•			-		•	•	21% 23%	6005-Y20R 4050-G50Y
	Real Real	3247	green mammoth		•			•					•	•	7%	4050-G50Y 8005-Y80R
	Real	3249	marly grounds	•	•			_					•	•	40%	3010-Y
	Real	3250	loam groove	•	•			1			<del>                                     </del>		•	•	38%	3020-Y10R
	Real	3251	lemon zest	_	•								•	•	52%	1050-Y10R
	Real	3252	sparrow	•	•			1					•	•	29%	4010-Y10R
	Real	3254	clay	•	•			1					•	•	17%	6010-Y30R
	Real	3255	pine forest		•			İ					•	•	17%	6020-G50Y
				l.							1	1		-		

	Туре	Design number	Colour name	Thickness 2.0mm	Thickness 2.5mm	Thickness 3.2mm	Thickness 4.0mm	Decibel 17dB - 3.5mm	Acoustic 14dB - 4mm	Ohmex	Available in tile	Authentic guanran- teed until 2020	Welding rod uni	Welding rod multi colour	LRV value	NCS code
	Real	3257	edelweiss		•			1					•	•	58%	2005-G80Y
	Fresco	3825	African desert	•	•	•						•	•		26%	2050-Y50R
	Fresco	3828	blue heaven	•	•							•	•		34%	3020-B10G
	Fresco	3846	natural corn	•	•							•	•		56%	1030-Y10R
	Fresco	3847	golden saffron	•	•							•	•		41%	2040-Y30R
	Fresco	3858	Barbados	•	•							•	•		65%	1510-Y10R
	Fresco	3860	silver shadow	•	•							•	•		48%	2005-G70Y
	Fresco	3861 3866	Arabian pearl	•	•	•							•		50% 21%	2010-Y20R 5502-G
	Fresco Fresco	3870	eternity rod copper	•	•	_							•		18%	3050-Y60R
	Fresco	3871	red copper silver birch	•	•								•		41%	3010-Y10R
	Fresco	3872	volcanic ash	•	•			•					•		10%	7500-N
_	Fresco	3874	walnut	•	•			•					•		11%	7010-Y50R
	Fresco	3876	camel		•								•		29%	4020-Y30R
<u> </u>	Fresco	3881	green wellness	•	•								•		51%	2020-G90Y
	Fresco	3882	relaing lagoon	•	•								•		39%	3020-G10Y
	Fresco	3883	moonstone		•								•		45%	2502-G
Marbled	Fresco	3884	frost		•								•		45%	3010-G40Y
<b>S</b>	Fresco	3885	spring buds		•								•		46%	2040-G60Y
	Fresco	3886	mother of pearl		•								•		55%	2010-Y10R
	Vivace	3403	Asian tiger		•								•	•	29%	3040-Y30R
	Vivace	3405	Granada		•								•	•	28%	5005-Y20R
	Vivace	3407	donkey island		•								•	•	36%	3010-Y30R
	Vivace	3411	sunny day		•								•	•	45%	2030-Y20R
	Vivace	3413	green melody		•								•	•	34%	3030-G60Y
	Vivace	3416	fiery fantasy		•								•	•	15%	3060-Y90R
	Vivace Vivace	3420 3421	surprising storm oyster mountain		•								•	•	31% 17%	4502-Y 6502-Y
	Vivace	3422	lavender field		•								•	•	14%	6005-R50B
	Vivace	3423	painters palette		•								•	•	24%	4020-Y20R
	Vivace	3424	Chagall's circus		•								•	•	16%	5020-R90B
	Vivace	3425	autumn leaf		•								•	•	15%	6010-Y30R
	Graphic	5301	graffito		•								•	•	9%	9000-N / 1010 -Y
	Graphic	5302	print		•								•	•	48%	1010-Y / 9000-N
	Graphic	5305	scrabble		•								•		68%	1010-Y / 9000-N
	Graphic	5306	domino		•								•		5%	9000-N / 1010- Y
	Graphic	5311	signo		•								•		12%	7502-Y / 5005 - G80Y
	Graphic	5313	aquatint		•								•		32%	3005-G50Y / 5005-G80Y
	Graphic	5314	scenario		•								•		23%	5005-Y20R / 5005-G80Y
	Graphic	5315	dry point		•								•		8%	8000-N / 5005-G80Y
	Piano	3601	warm grey		•								•		32%	3005-G50Y
<b>7</b>	Piano	3607	grey dusk		•	-		-					•		11%	7500-N
atterned	Piano Piano	3613 3622	almost darkness mellow yelllow		•	-		+					•		5% 39%	8500-N 2060-Y20R
Ě	Piano	3625	salsa red		•	<del>                                     </del>		<del>                                     </del>					•		11%	3560-Y80R
	Piano	3629	frosty grey		•								•		49%	2005-G50Y
l a	Piano	3630	angora		•								•		37%	4010-Y10R
ب	Piano	3631	otter		•								•		20%	6005-Y20R
<b> </b>	Piano	3632	sealion		•								•		10%	7005-Y50R
	Piano	3633	Pyrenean Lily		•			İ					•		58%	1030-Y10R
	Piano	3634	meadow		•								•		43%	2030-G80Y
	Piano	3635	strawberry fields		•								•		20%	1070-Y80R
	Piano	3636	powder		•								•		50%	1515-S30R
	Piano	3637	fo		•								•		25%	3030-Y40R
	Piano	3638	school red		•								•		8%	7020-R
	Piano	3639	thistle		•								•		12%	6020-R40B
	Piano	3640	Pacific blue		•								•		17%	4040-B20G
	Piano	3641	eggshell		•	-							•		69%	1010-Y10R
	Piano	3642	periwinkle		•			1					•		24%	4020-B
	Piano	3643	submarine		•								•		7%	7020-R80B

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	Туре	Design number	Colour name	Thickness 2.0mm	Thickness 2.5mm	Thickness 3.2mm	Thickness 4.0mm	Decibel 17dB - 3.5mm	Acoustic 14dB - 4mm	Ohmex	Available in tile	Authentic guanran- teed until 2020	Welding rod uni	Welding rod multi colour	LRV value	NCS code
	Striato	3573	trace of nature		•								•		27%	5005-Y20R
	Striato	3575	white cliffs		•								•		57%	2010-Y
	Striato	3576	sliding glacier		•								•		45%	1005-Y / 7500-N
	Striato	3577	petrified wood		•								•		6%	8500-N
	Striato	5213	waving wheat		•								•		42%	2040-Y10R
	Striato	5216	Pacific beaches		•								•		48%	2020-Y10R
<b>-</b>	Striato	5217	withered prairie		•								•		23%	5010-Y30R
<b>(</b>	Striato	5218	Welsh moor		•								•		8%	8005-Y80R
inear	Striato	5221	colour stream		•								•		26%	2070-Y90R / 3050-B / 3030-G20Y
	Striato	5222	mangrove roots		•								•		25%	4020-Y10R
·=	Striato	5223	Grand Canyon		•								•		14%	5030-Y50R
	Striato	5224	layered rock		•								•		43%	3010-G90Y
	Striato	5225	compressed time		•								•		34%	4010-Y30R
	Striato	5226	grey granite		•								•		29%	5005-G50Y
	Striato	5227	water colour		•								•		49%	2010-G90Y
	Striato	5228	hidden colours		•								•		9%	7502-B
	Striato	5229	fresh walnut		•								•		15%	6020-Y50R
	Striato	5230	white wash		•								•		49%	2010-Y30R
	Uni	123	black		•								•		4%	9000-N
	Uni	171	cement		•								•		30%	4502-Y
	Uni	173	paving		•								•		13%	6502-G
	Uni	186	lead		•								•		21%	5502-B
	Concrete	3568	delta lace		•								•		13%	7005-Y20R
	Concrete	3701	moon		•								•		61%	1510-G90Y
	Concrete	3702	liquid clay		•								•		23%	5005-Y20R
	Concrete	3703	comet		•								•		14%	6502-G
	Concrete	3704	satellite		•								•		23%	5502-Y
	Concrete	3705	meteorite		•			•					•		16%	6502-Y
	Concrete	3706	beton		•			•					•		28%	5005-G80Y
	Concrete	3707	black hole		•			•					•		7%	8500-N
	Concrete	3708	fossil		•								•		34%	4005-Y20R
<b>7</b>	Concrete	3709 3710	silt		•			•					•		22%	5010-Y10R
│ . <b>⋍</b>	Concrete	-	stormy sea		•			•					•		25% 49%	5010-Y10R
_	Concrete Concrete	3711 3712	cloudy sand		•			•					•		31%	2010-Y 4502-Y / 1050-Y50R
Solid	Concrete	3712	orange shimmer purple haze		•								•		30%	4005-G20Y / 2020-R50B
<b>S</b>	Concrete	3713	blue dew		•								•		32%	4005-G20Y / 2040-B10G
	Concrete	3715	phosphor glow		•								•		34%	4010-Y10R / 3050-G90Y
	Cirrus	3352	Berlin red		•								•		10%	4050-Y80R
	Cirrus	3353	eggplant purple		•								•		8%	8005-Y80R
	Cirrus	3355	rosemary green		•								•		21%	5010-G70Y
	Cirrus	3357	leather		•								•		12%	7010-Y10R
	Cirrus	3358	petrol		•								•		9%	7020-B10G
	Cirrus	3359	bottle green		•								•		7%	8010-G30Y
	Cirrus	3360	vintage blue		•								•		29%	3020-B
	Cirrus	3361	cardboard		•								•		20%	5020-Y10R
	Cirrus	3362	yellow moss		•								•		30%	3040-G90Y
	Cirrus	3363	lilac		•								•		38%	3005-R50B
	Cirrus	3364	ink		•								•		6%	8010-R90B
	Cirrus	3365	original brown		•				İ				•	İ	11%	6020-Y50R

# Technical specifications

Marmoleum meets the requirements of EN ISO 24011 Marmoleum Acoustic meets the requirements of EN 687 Marmoleum Decibel meets the requirements of EN 686

			Marmoleum Real/Fresco	Marmoleum Real/Fresco/ Vivace	Marmoleum Real	Marmoleum Real	Marmoleum Decibel	Marmoleum Acoustic	Marmoleum Concrete	Marmoleum Walton	Marmoleum Striato	Marmoleum Graphic	Marmoleum Piano		
^	Total thickness	EN-ISO 24346	2.0 mm	2.5 mm	3.2 mm	4.0 mm	3.5 mm	4.0 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm		
	Domestic: heavy	EN-ISO 10874	Class 23	Class 23	Class 23	Class 23	Class 23	Class 23	Class 23	Class 23	Class 23	Class 23	Class 23		
	Commercial: general/heavy/very heavy	EN-ISO 10874	Class 32	Class 34	Class 34	Class 34	Class 33	Class 33	Class 34	Class 34	Class 34	Class 34	Class 34		
	Light industrial: moderate/general/heavy	EN-ISO 10874	Class 41	Class 43	Class 43	Class 43	Class 41	Class 41	Class 43	Class 43	Class 43	Class 43	Class 43		
	Roll width	EN-ISO 24341	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m	2.00 m		
	Roll length	EN-ISO 24341	≤ 32 m	≤ 32 m	≤ 32 m	≤ 32 m	≤ 32 m	≤ 32 m	≤ 32 m	≤ 32 m	≤ 32 m	≤ 32 m	≤ 32 m		
	Indentation residual	EN-ISO 24343-1	≤ 0.15 mm	≤ 0.15 mm	≤ 0.15 mm	≤ 0.20 mm	≤ 0.30 mm	≤ 0.40 mm	≤ 0.15 mm	≤ 0.15 mm	≤ 0.15 mm	≤ 0.15 mm	≤ 0.15 mm		
<b>a</b>															
3	Light fastness	EN-ISO 105-B02	Method 3: bl	ue scale minimu	m 6.										
52	Flexibility	EN-ISO 24344	ø 30 mm	ø 40 mm	ø 50 mm	ø 60 mm	ø 40 mm	ø 60 mm	ø 40 mm	ø 40 mm	ø 40 mm	ø 40 mm	ø 40 mm		
<b>*</b>	Resistance to chemicals	EN-ISO 26987	Resistant to	diluted acids, oils	, fats and to con	ventional solvent	ts. Not resistant t	o prolonged exp	osure to alkalis.						
<b>_</b>	Bacteriostatic properties		Marmoleum has natural bacteriostatic properties, which are confirmed by independent laboratories, even against the bacteria MRSA.												
	Cigarette resistance	EN 1399	Marks left on	Marks left on linoleum as a result of stubbed-out cigarettes can be removed.											
The	Slip resistance	DIN 51130	R9	R9	R9	R9	R9	R9	R9	R9	R9	R9	R9		
	Acoustical impact noise reduction	EN ISO 717-2	≤ 4 dB	≤ 5 dB	≤ 6 dB	≤ 7 dB	17 dB	14 dB	≤ 5 dB	≤ 5 dB	≤ 5 dB	≤ 5 dB	≤ 5 dB		
1001	Electrical resistance Marmoleum Ohmex	EN 1081	-	$\begin{array}{c} 1\text{-}10^6 < \!R1 < \\ 1\text{-}10^8 \Omega \end{array}$ static dissipative	- !	-	-	-	-	-	-	-	-		
LCA	Life Cycle Assessment		LCA is the fo	undation for secu	uring the lowest	environmental ir	npact.								
	Marmoleum meets the requiren	nents of EN 14041											<b>C €</b> EN 14041		
A.	Reaction to fire	EN 13501-1	C <sub>ff</sub> -s1												
198	Slip resistance	EN 13893	DS: ≥ 0.30												
B	Body voltage	EN 1815	< 2 kV												
	Thermal conductivity	EN 12524	0.17 W/m·K												

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### Other Forbo Marmoleum Collections

### Touch

Touch is a Marmoleum with a high level of tactility. The floor is created in an intricate range of earthly tone-in-tone colours. The use of ground wood flour and cork flour creates a fascinating, tactile patterned matte gloss surface and an elegant floor. Touch is created for residential and commercial environments to radiate warmth and elegance.

### The Unexpected Nature of Linoleum

This collection, based on modern design trends, is inspired by the natural phenomena around the world that make our planet special. Volcanic formations, tropical forests and lagoons as well as salt and ice formations have all inspired this collection of subtle, natural designs. Both the marbled and striped collections have unconventional colour combinations that are perfect for creating hugely inspiring floors that form serene environments with a natural touch.

### **Cork Linoleum**

Forbo Marmoleum is created by combining linseed and rosin with wood flour and limestone. For Cork linoleum, the wood flour component is replaced by finely ground cork particles. Cork enhances the shock absorbent quality of floors and gives warmth under foot. This makes Cork linoleum the ideal surface for therapy rooms and rest areas in day care centres. Cork linoleum is available in a range of natural colours ranging from sand and ochre to stone red and a selection of subtle greys.



touch

The Unexpected Nature of linoleum

cork linoleum®