Forbo Flooring Systems is part of the Forbo Group, a global leader in flooring and movement systems, and offers a full range of flooring products for both commercial and residential markets. High quality linoleum, vinyl, textile, flocked and entrance flooring products combine functionality, colour and design, offering you total flooring solutions for any environment.
Forbo Flooring. We are making floors since 1847 and are now entering a new product category. For the first time we make our own homogeneous vinyl sheet. It’s part of our overall strategy of providing our customers all the products and solutions they need from our own factories. Forbo is already a leading player providing safety, acoustic and general purpose commercial vinyl, carpet tiles, LVT, cushioned vinyl, Flotex, entrance systems and of course linoleum.

Sphera is Forbo’s new premium, homogeneous vinyl collection. Styled by our European design team and using the latest production technology in an advanced purpose-built manufacturing plant, Sphera comprises three distinct ranges, Element, Energetic and Evolution. Each range offers differentiated aesthetics to ensure that Sphera adds interest and style to floor designs across a broad range of applications.

The Forbo Sphera collection is setting new standards in homogeneous vinyl due to its design, technology and performance. All the latest insights and technology have been used to create ‘smart’ and innovative solutions resulting in a premium collection.
Forbo Flooring has invested in a purpose-built, state of the art production facility and it signals a true change in how homogeneous vinyl is designed and manufactured.

Homogeneous vinyl is currently most popular in healthcare and education segments. Forbo sees application not just here, but across a number of different segments. Part of the collection has been developed with the more luxurious look of retail and hospitality in mind, adding a touch of design to a durable, but conventional product category.

Making Sphera
Being able to build the facility from scratch has enabled Forbo to invest in the most up to date equipment and technology available, and to produce a product that offers unique opportunities for designers, as well as exceptional quality for end users and installers.

Within this production, there are three main processes that are unique to Forbo. Forbo’s new internal extrusion process enables the controlled creation of multiple chips sizes and shapes. This results not only in a sophisticated chip design effect for Sphera Element, but other unique design options, with the ability to add special characteristics through the addition of highlight, glitter or transparent chips to the chip mix, like in Sphera Energetic and Sphera Evolution.

The second unique process utilises a combipress for sheet making: a combination of pressure and temperature to achieve a perfectly in gauge (2.0mm) product every time.

Lastly, a relaxation zone without water cooling, which instead uses a controlled air temperature and air flow to achieve best in class dimensional stability.

STEP 3: Lacquering & embossing
In-line, Sphera has a special UV-cured lacquer applied. After drying the lacquer, application of an embossing achieves a particularly matt finish, which diffuses light and conceals any minor sub-floor imperfections. The Forbo engineered process provides a film of lacquer with consistent thickness on both the peaks and in the valleys. Forbo calls this SMART-top, as it resist stains and matches the proven performance of Eternal sheet vinyl ranges. Resistance to betadine, commonly used in the healthcare sector, also sees Sphera outperform other homogeneous vinyls currently in the market place.

STEP 4: Relaxation
Homogeneous vinyls acquire tension during production. The tension in Sphera is removed by heating the material again and then slowly cooling to achieve the most dimensionally stable sheet product in this category.

The manufacturing process for Sphera includes four main steps:

STEP 1: Producing granulate
PVC granules are created by combining PVC dry blend and colour pigments. Three coloured PVC compositions are mixed together to create a vinyl mass, which is then pushed through a die plate which can create chips in any shape or form, depending on the design effect desired. This new chip technology is what gives Sphera its unique visual character and its bright and saturated hues.

STEP 2: Sheet making
The chips are then released by precision scatter units onto a conveyor belt. A steel belt press forms a homogeneous sheet with a truly non-directional visual of the required thickness. Unlike conventional manufacturing, there is no need to back sand the product.

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Forbo’s Sphera homogeneous vinyl is leading the product category by design, technology and performance. The greenfield production set up allowed for the newest technologies and insights to be used, that’s what we call: SMART

SMART SOLUTIONS IN HOMOGENEOUS VINYL

DESIGN  COLOUR

• In-house design and colour development ensures the palette complements a broad range of commercial spaces
• A new technology delivers bright and saturated hues, resulting in striking colours and tones, many with high light reflection values
• A harmonious and balanced palette of 138 colours that coordinates well with Forbo’s extended portfolio of vinyl, Marmoleum and textile floor coverings

TECHNOLOGY  SUSTAINABILITY

• State of the art steel-belt press and thermofix technology ensures consistent quality
• Green energy and zero waste technology ensures efficient and sustainable manufacturing
• Low emissions & phthalate free manufacturing ensures Sphera can contribute to a healthy indoor environment

PERFORMANCE  DURABILITY

• Unique embossing process following lacquer application delivers durable performance
• In-line coating and subsequent embossing process for superior appearance
• Evenly distributed top-layer provides superior all over protection
• SMART top surface finish ensures Sphera has a high resistance to chemicals, scratches and stains
• Achieves highest binder content type 1 according to EN ISO 10581
WHERE TECHNOLOGY MEETS DESIGN

Forbo has a long history in producing PVC flooring. Engineers and designers joined forces and combined their experience to innovate. The result: a premium homogeneous vinyl floor covering!
The development of the Sphera collection was a joy for Forbo’s entire European design team to work on. Faced with a day zero starting point, they took a dynamic approach to building colour palettes based on how people move through buildings.

“Instead of analyzing specific segments to define colour ranges for our new Sphera, we decided to approach colour in a more holistic way”, said Dorothe Kessels, Head of Project Vinyl Design. “Today one building can contain many identities that refer to different segments. For example a hospital building contains also offices, shopping areas (and even sport facilities). And the reception area of a hospital becomes more and more like a hotel lobby.

Another example being the contemporary office where the focus is increasingly on the health and well-being of the employee. The office of today not only provides a huge variety of different workspace applications it also offers spaces to relax, to socialize or to eat out integrated into the building.

The team therefore decided to focus on the different dynamics taking place in a building. Depending on the different interactions there would be different user needs and priorities. Ranging for a secluded space for privacy, to a semi open space for dialogue or an open public space for spontaneous interaction and everything in between. Five keywords were defined together referring to the different identities a space can have.
Every person at some point benefits from having access to an area where there is no distraction from sound or light. ‘CONCENTRATING’ colours are designed to create a very calm and relaxing atmosphere which helps with focus and output. The pale pastel colours are included in the Sphera Element and Energetic range for that very reason.

Your batteries can be recharged in different ways depending on what your mind, body and soul need. Some like to be able to switch off and read a book whilst others like to play sport or run to clear their heads. All these different expressions can be achieved by selection in the offer of the whole Sphera collections, from light to dark, from neutral to colourful.

Starting with entrances to buildings such as schools, universities and hospitals the colour development work was based around ‘RECEIVING’ and how to create positive first impressions for building users. There needed to be a very strong connection between the outside and the first few steps into a building where it was felt a positive, open atmosphere should be created with lots of light. Therefore the new Sphera Element neutral & natural colours were designed to leave visitors with the feeling that these buildings are highly accessible and welcoming (with almost half of the entire collection delivering LRV’s higher than 40% and the new white reaching 72%).

Making your way through a building is all about having easy to navigate transitional spaces. ‘MOVING’ is what inspired the bright, primary colours in the Sphera Energetic range and are helping building different departments, access points and understand directions to move around easily. This sort of zoning/wayfinding has to not only be noticeable, with lots of stand out, but quick to visually interpret.

‘CONNECTING’ is about those places where you meet, interact, exchange ideas or just talk. They need to be dynamic, inspiring and often see colours combined which create a degree of friction or intensity. Sphera Evolution and Energetic are designed to energise building users and help generate creative sparks in areas such a break out areas or open plan meeting spaces.
A NEW ERA
OF PREMIUM
HOMOGENEOUS VINYL
FLOOR COVERING

Sphera Element adds character and style to floors across numerous applications. Whether in demanding, hygienic healthcare environments, in flexible, multi-purpose modern public buildings or in education facilities and offices where durability and colour are key.
SPHERA ELEMENT; THE WIDEST AND MOST COMPLETE COLOUR OFFER IN THE HOMOGENEOUS MARKET.

Sphera Element offers a fresh, light and contemporary colour palette which adds a sophistication to floor design. The collection includes a wide range of warm and cool neutrals which complement interior finishes such as wood and stone along with pastels and bright accent colours for areas requiring applications or zoning.
A DIFFERENT PERSPECTIVE ON PREMIUM HOMOGENEOUS VINYL

The intricate mix of spheres, granules and colour pigments create a fantastic vibrant visual, making homogeneous vinyl look different. Energetic offers an inspiring pallet of semi plain and larger particle mix colours that are made up from the semi plain colour base. Transparent granules provide depth and dirt hiding properties. Energetic is created for modern spaces in contemporary as well as classic applications.
The aesthetic of Energetic reflects that of rubber, concrete and resin flooring with 11 Vivid colourways featuring chips of two accent colours. The Vivid colourways are complemented by 41 flecked tones to inspire creative floor designs. By exploiting the colour and design connections across the collection, the full potential of Energetic can be realised.
SPHERA EVOLUTION PRESENTS A THRILLING DESIGN INNOVATION IN HOMOGENEOUS VINYL

Sphera Evolution has the thrilling sensation of crossing design boundaries, that until now has not been experienced in homogeneous floor coverings. All items presented in the Evolution range are colour coordinated and as such can cater for consistent multi story floor plans that radiate a similar atmosphere and design quality. Sphera Evolution can also be used as highlight combined with other Sphera collections and is designed with retail, public spaces and higher end healthcare environments in mind.
The look of this product is innovative and new in homogeneous vinyl. The visual enrichment, created by adding effects and / or transparency, adds depth and a 3rd dimension. It's expressive and outspoken, it demands observation and sparks curiosity. The unique identity of this range is drawing attention to Forbo as a homogeneous vinyl manufacturer and to the Sphera collection in particular. It can be used in a very wide variety of applications.

The Evolution consists of three different design directions:
Plain: 12 items with a plain background and pearlescent, silver or gold glitter highlights.
Shaded: 6 dark coloured items with silver or gold glitter effects, and silver or gold metallic highlights.
Pearl: 6 light coloured items with pearlescent effects and a 3D look which is created by adding a transparent component.
When it comes to flooring in commercial buildings, there is often more than just the general office space to consider. Whether you are looking to refurbish communal areas or are in need of something unique to give an area the “wow” factor, Forbo offers total flooring solutions from one supplier.

In below overview some inspiring combination possibilities with Sphera Element and other flooring solutions. For more possibilities and information contact your local Forbo Flooring systems contact.

COMBINATIONS FORBO PORTFOLIO

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sphera element

To combine with

FORBO FLOORING MORE

Why deal with multiple suppliers when you can deal with one? Forbo Flooring Systems is a global producer of flooring solutions. Our flooring solutions offer includes:

• Environmentally friendly, functional and design-oriented linoleum
• An extensive range of sheet project vinyls, acoustic vinyls and safety vinyls.
• Static control flooring for areas with sensitive electronic equipment.
• High quality European manufactured Luxury Vinyl Tiles.
• Carpet tiles for both public and commercial environments.
• Flocked sheet and tiles for areas that need the benefits of both textile and resilient floor coverings.
• Cushioned vinyls for the home.
• Entrance flooring systems that keep interior floors clean, dry and safe.

Please visit our website www.forbo-flooring.com to see our extensive range of flooring products.
Beautiful as well as functional
Decorative flooring can be beautiful and functional at the same time. Think about routing on the floor in for example hospitals or museums, or zoning to identify different areas of a building.

With our Aquajet cutting technique we can create the most refined and detailed floor designs. The very precise water cutting technology offers a sophisticated detailing in the designs. Perfect to create your own identity on your floor; a logo, a piece of art, or even a portrait.

Let the floor stand out
Forbo Flooring offers over 300 welding rods to choose from. Heat welding provides a strong, watertight and hygienic seam. A subtile uni coloured match is available for every Sphera item. Use contrast colours as an accessible and effective way to create an authentic look.

A multi coloured solution is also available in Vinylweld. This tone-in-tone welding rod is blending into the visual of the floor, matching the three colour tones and following the movement of the visual.

Technical specifications
Sphera meets the requirements of EN-ISO 10581

<table>
<thead>
<tr>
<th>Specification</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binder content</td>
<td>EN-ISO 10581 type 1</td>
</tr>
<tr>
<td>Total thickness</td>
<td>EN-ISO 24546 2.0 mm</td>
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<tr>
<td>Surface finish</td>
<td>SMART-top</td>
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<tr>
<td>Collection size</td>
<td>Element 62</td>
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<tr>
<td>Commercial use</td>
<td>EN-ISO 10874 34 very heavy</td>
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<tr>
<td>Industrial use</td>
<td>EN-ISO 10874 45 heavy</td>
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<tr>
<td>Roll width</td>
<td>EN-ISO 24541 2 m</td>
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<tr>
<td>Roll length</td>
<td>≤ 27 m ≤ 28 m</td>
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<tr>
<td>Roll weight</td>
<td>EN-ISO 25997 2.9 kg/m²</td>
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<td>Dimensional stability</td>
<td>EN-ISO 25999 ± 0.2 %</td>
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<tr>
<td>Residual indentation</td>
<td>EN-ISO 24543-1 ≤ 0.10 mm ≤ 0.05 mm</td>
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<tr>
<td>Abrasion resistance</td>
<td>EN 680-2 group T</td>
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<tr>
<td>Centre chair continuous use</td>
<td>ISO 4918 / EN 425 pass</td>
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<tr>
<td>Light fastness</td>
<td>ISO 105-B02 ≥ 7</td>
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<tr>
<td>Flexibility</td>
<td>EN-ISO 24544 Ø 10 mm</td>
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<tr>
<td>Resistance to chemicals</td>
<td>EN-ISO 26987 very good</td>
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<tr>
<td>Slip resistance</td>
<td>DIN 51130 R9</td>
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<tr>
<td>Wetroom application</td>
<td>EN 13555 yes</td>
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<tr>
<td>Bacteria resistance</td>
<td>EN 846 Does not support growth</td>
</tr>
<tr>
<td>TVOC after 28 days</td>
<td>ISO 16000-6 ≤ 10 µg/m³</td>
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<tr>
<td>Reaction to fire</td>
<td>EN 13501-1 Bfl-s1</td>
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<tr>
<td>Slip resistance</td>
<td>EN 13805 DS: µ = 0.30</td>
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<tr>
<td>Body voltage</td>
<td>EN 1815 ≤ 2 kV</td>
</tr>
<tr>
<td>Thermal conductivity</td>
<td>EN 12524 0.25 W/m·K</td>
</tr>
</tbody>
</table>

All Forbo Flooring Systems’ worldwide organisations have a certified Quality Management System in accordance with ISO 9001.
All Forbo Flooring Systems’ manufacturing operations have a certified Environmental Management System in accordance with ISO 14001.
The Life Cycle Assessment (LCA) of Forbo Flooring Systems’ products is documented in individual Environmental Product Declarations (EPD) which can be found on all of our websites.
SPHERA, COMMITTED TO THE HEALTH OF ONE

Committed to the health of one
www.forbo-flooring.com/1049

With our portfolio covering we have the ambition to make a positive contribution to the quality of the indoor environment. We do this by offering environmentally responsible products and by paying special attention to safety, hygiene and well being.

Forbo Sphera has very low emissions of <10μg/m² after 28 days, is phthalate free and also offers colourways with high Light Reflectance Values ensuring that it can contribute to a healthy indoor environment. Its SMART-top surface treatment resists stains and is easy to clean ensuring safe and hygienic floors.

PRODUCED USING 100% GREEN ELECTRICITY FROM RENEWABLE RESOURCES

Our Sphera production site is part of an effective environmental management system and has achieved ISO14001 certification. All of the electricity we buy, comes from 100% renewable resources. Meeting present demands without compromising future needs.

Reducing, instead of reusing or recycling.
Saves energy.

FORBO’S HOMOGENEOUS FLOORING TECHNOLOGY

Uniquely embossed surface for optimal performance
Easy to clean and maintain.

Smart chemical resistance
SMART-top PUR surface finish ensures Sphera has a high resistance to chemicals, scratches and stains. Contributing to a longer lifetime and cost reduction.

Low emitting and 100% phthalate free
Phthalate free > contributes to a healthy indoor environment.

Produced in a zero waste environment
Zero landfill is achieved by the Sphera manufacturing plant.

High LRV values and bright, saturated hues
Studies show that a light indoor environment has a positive effect on the well being of the people.