

# TRANSPORT FLOORING FOR BUS & COACH

in  



creating better environments

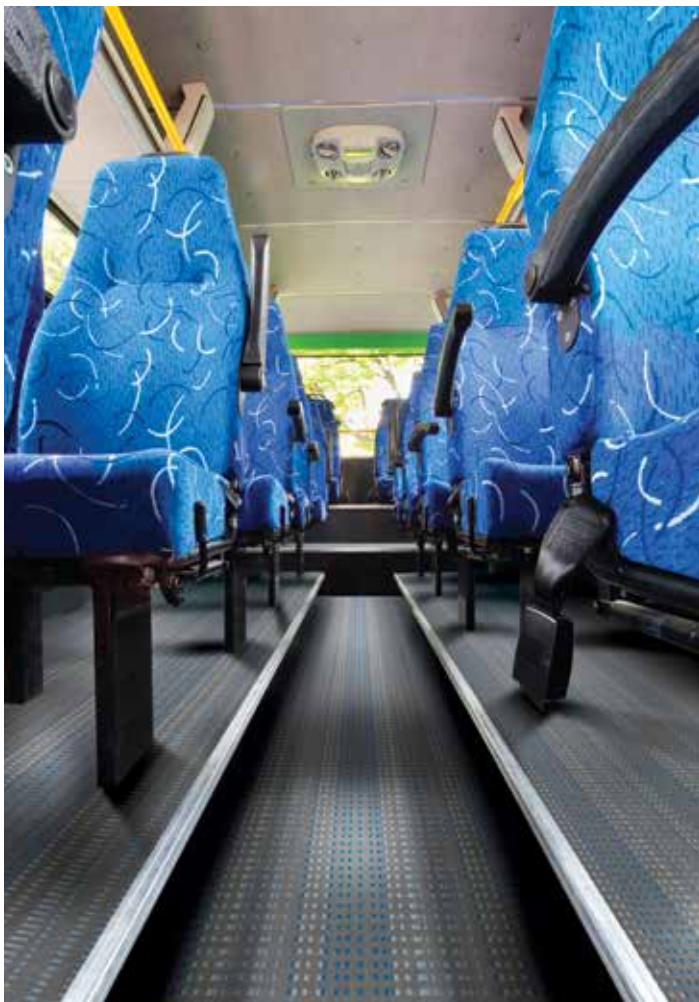
**Forbo**

FLOORING SYSTEMS

# Creating better Bus & Coach environments across the world

For Forbo Flooring, creating better environments means a better working, living or travel environment. To achieve this, Forbo has developed an unrivalled and versatile floor covering collection that truly adds to the quality of people's lives wherever they are.

Creating better environments also means caring for the environment and its people. For more than 100 years, inspired by the world around us, Forbo Flooring has been producing floor coverings. By using state of the art production processes we minimize the impact on our environment. All our manufacturing operations are ISO 14001 certified, raw materials are used efficiently and waste is minimised and recycled wherever possible. Ongoing research and development continue alongside an active environmental policy.



# Forbo Flooring, your partner of choice in Bus & Coach

Forbo Flooring Systems, addresses all the issues specifiers need to consider when looking at the floor covering needs for bus interiors.

### Bus & Coach flooring

Bus and coach interiors, including the flooring, play a key role in achieving customer satisfaction. However, designing a comfortable and aesthetically pleasing interior is not easy because the bus and coach industry has to meet an array of health and safety legislation. Forbo Flooring Systems offers the widest variety of flooring solutions that meet all these regulations and also provides all the expert advice you may need when selecting floor coverings for this specialist market.

### Entrance systems

Given that most vehicle interiors have to withstand heavy foot traffic, a durable flooring solution is a must. By investing in high-quality flooring – including effective entrance systems – and ensuring regular cleaning, operators can prolong the life of the vehicle flooring and keep it looking good. Coral textile entrance systems offer the ideal solution for entrance areas, as they meet all the necessary legislation while providing a stylish and effective barrier system.

### Durable

The combination of precisely-developed materials and unique construction methods makes our products exceptionally durable, ensuring high appearance retention and low wear characteristics.



## Content

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# Solutions for Bus & Coach environments

Forbo Flooring Systems offers textile, flocked flooring and safety vinyl for buses and coaches. All of these products meet international industry requirements and include a slip resistance rating of up to R13.

Forbo's products are fully certified and combine durability and a wide variety of designs and colours.

You can choose from a rich diversity of designs, ranging from natural designs to the sparkingly innovative. Our products are both stylish and extremely hard-wearing. We guarantee a combination of the best products in the market supplied from one specialised manufacturer.



# Forbo Flooring, experience in Bus & Coach



## Entrances

Entrance flooring systems are fundamental to modern vehicle interior design. The flooring for the entrance of a city bus should offer safety with improved slip resistance (**up to R12**), whilst the entrance steps of a coach should protect the interior from dirt, dust and water. Entrance flooring systems will minimise maintenance costs by protecting the flooring and will help to maintain the appearance of the flooring throughout the lifetime of the vehicle.

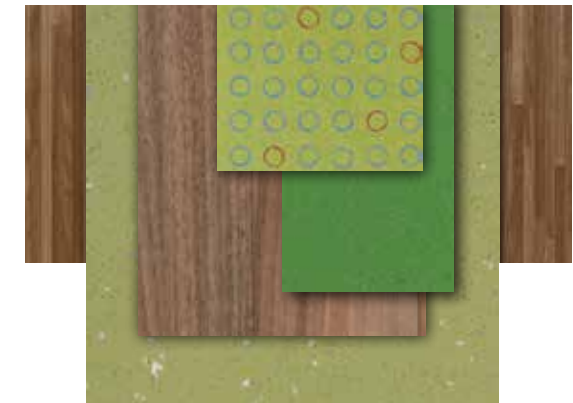
**coral<sup>®</sup>**  
**surestep**  
**safestep**



## Vehicle interiors

Whether the requirement is flooring for inner city buses or luxury coaches, Forbo offers a range of products including Eternal (vinyl), Flotex (textile) and Safestep/Surestep (safety floors) to meet your specific requirements.

**surestep**  
**safestep**  
**eternal**  
**flotex<sup>®</sup>**



## Our experience, your project

Interiors in public transport play a key role in achieving customer satisfaction. Forbo has a list of references as a total solutions provider and is the only total solutions provider in the market!

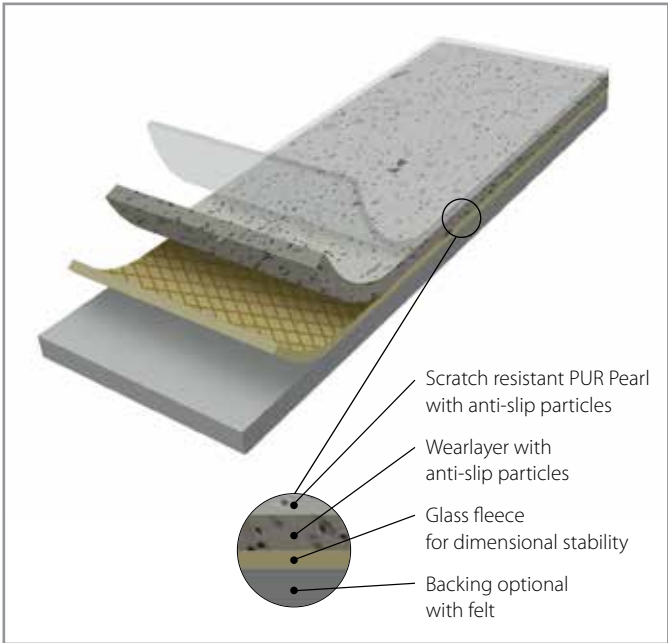
Being able to supply you with adhesives, high quality flooring and floor care advice, ensures continuity throughout the installation and you can be assured of the accountability from a single supplier.

## More than a supplier

Forbo is the only complete flooring system provider in the market offering:

- High quality flooring products
- Adhesives and mastics
- Installation training and FloorCare advice

# Product overview

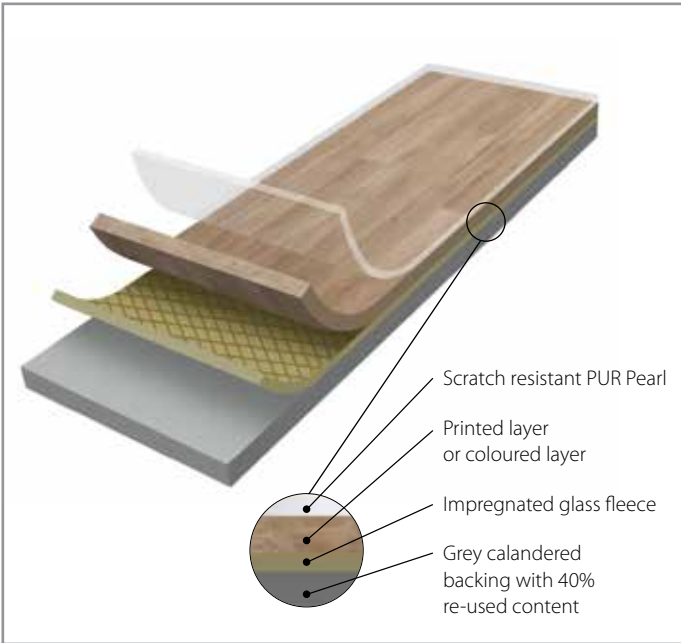


## surestep safestep

A durable floor covering combining outstanding slip resistance (**up to R12**) with a wide range of design possibilities. The PUR Pearl surface provides superior, long-lasting appearance and performance.

### Benefits

- R10, R11 and R12 in anti slip enhanced performance
- PUR Pearl lacquered surface providing easy cleaning and maintenance
- Low gloss surface for low scuff and a natural look
- Coloured durable wear layer for a long-lasting appearance
- High recycled PVC content
- Wide design variety
- Optional with or without felt backing for better adhesion properties

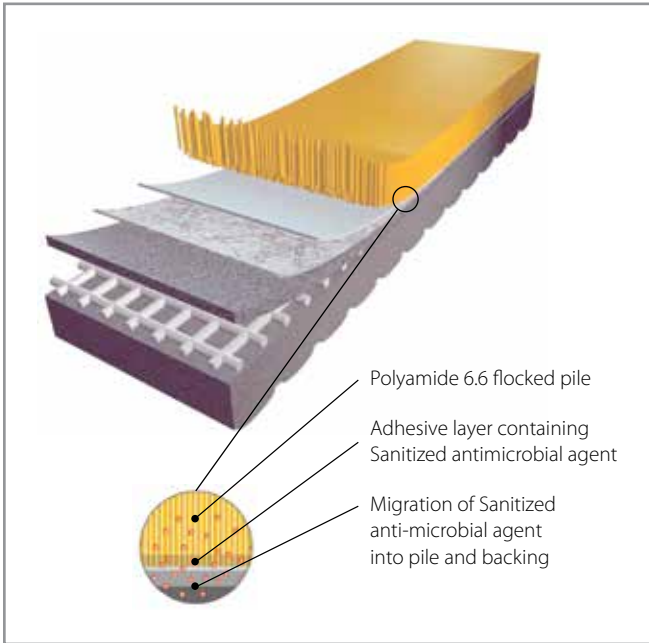


## eternal

A highly durable floor covering with a wide range of design possibilities. The PUR Pearl surface provides superior, long-lasting appearance and performance.

### Benefits

- R10 in anti slip enhanced performance
- PUR Pearl lacquered surface providing easy cleaning and maintenance
- Low gloss surface for low scuff and a natural look
- 100% transparent durable wear layer for a long-lasting appearance
- High recycled PVC content
- Wide design variety
- Optional with or without felt backing for better adhesion properties

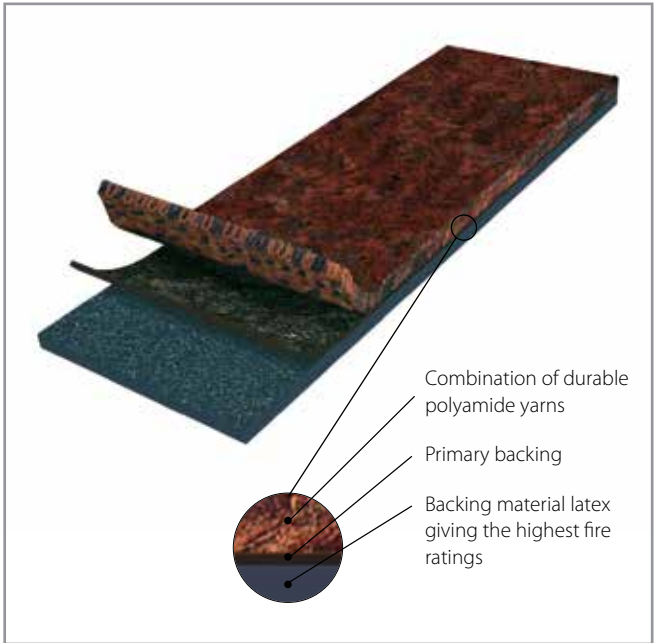


## flotex®

A unique floorcovering, combining the cleaning properties and durability of a resilient flooring with the comfort, slip resistant and acoustic properties usually associated with textiles.

### Benefits

- Nylon 6.6 ensures high durability
- Hygienic
- Easy to clean; easy soil removal due to short Nylon fibres
- Bacteriostatic
- Improved indoor air quality (independent proven by Allergy UK)
- Slip resistant



## coral®

The market leader in entrance systems providing an exceptionally versatile and proven range of 'clean-off' entrance system products and customizable carpets.

### Benefits

- High moisture absorption
- Dirt scraping for effective clean off
- High dirt storage
- Advanced colouring & choice
- Excellent at soil hiding



# step

Surestep and Safestep are Forbo's offer in slip resistant vinyl. The collection is slip enhanced with carborundum or aluminium oxide particles providing an R10 to R12 rating without affecting the clarity in design. The Wood and Stone designs look good in luxurious coaches and for creating warm and user-friendly areas in buses while ensuring slip resistance.

## surestep & safestep

Surestep and Safestep provide proven design and functionality. With a wide colour palette and a highly durable slip resistance this range provides a good choice for many types of transport applications. Safestep offers slip resistance up to R12.

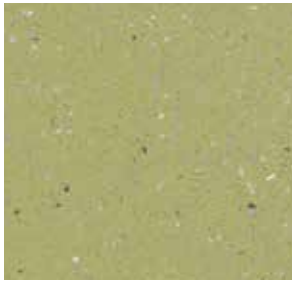
Surestep can optionally be provided with a felt backing to improve the adherence properties in combination with specific adhesives and sub-floors.



## surestep & safestep



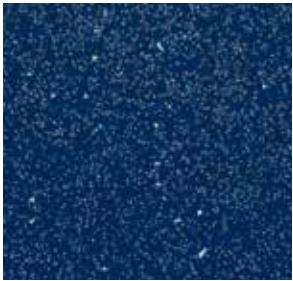
171532 | sun



17842 | pistachio



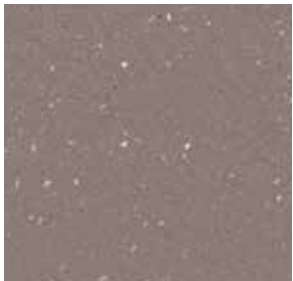
171712 | sky



171782 | night



171222 | dune



171812 | taupe



176282 | dragon



171602 | plum



18242 | sunny beech



18802 | elegant oak



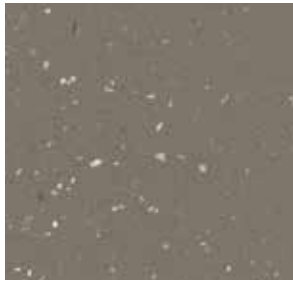
18942 | natural oak



18662 | pear



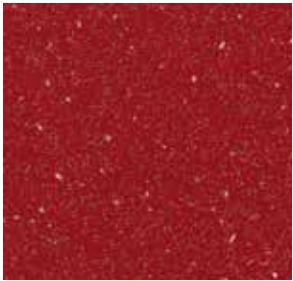
174362 | clay



174262 | umber



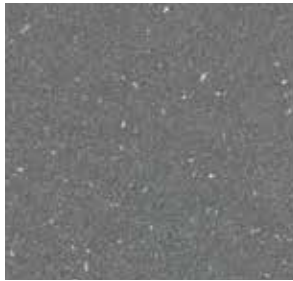
174642 | cloudy



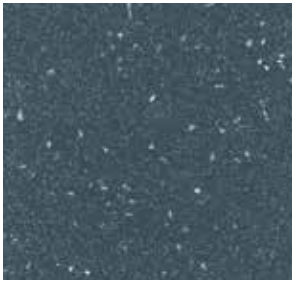
174562 | pepper



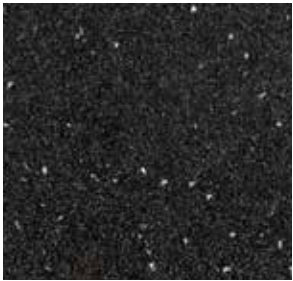
175032 | smoke



175952 | elephant



175962 | steel



175992 | charcoal

Colour palette Surestep: 48 colours.  
Shown above is only a selection of designs and colourways available. To view the full range please visit [www.forbo-flooring.com/transport](http://www.forbo-flooring.com/transport).



# eternal

Eternal is synonymous with assured quality. The brand's benefits are easy to see and clearly recognizable. Quite simply, Eternal is chosen for its trustworthy performance and broad range of designs and colours.

## eternal

The Eternal collection mixes realistic and contemporary designs to offer a unique pattern and colour signature. Designer quality for sheet vinyl.



# eternal

|   |   |   |   |
|---|---|---|---|
|    |    |    |    |
| 41322   smoke   | 41012   tomato  | 41232   night   | 41252   mercury   |
|    |    |    |    |
| 40212   mouse   | 40352   corn  | 40162   marine  | 40662   steel   |
|   |   |   |   |
| 40812   taupe   | 40602   plum  | 40882   apple   | 40382   carbon  |
|  |  |  |  |
| 10542   grey oak  | 11912   whitewash oak   | 11732   warm zebrano  | 11382   anthracite stripe   |
|  |  |  |  |
| 11442   washed beech  | 11542   traditional oak   | 10232   dark walnut   | 10812   black beech   |

Colour palette Eternal: 113 colours.  
Shown above is only a selection of designs and colourways available. To view the full range please visit [www.forbo-flooring.com/transport..](http://www.forbo-flooring.com/transport..)



# flotex®

A unique floor covering that looks and feels like a carpet but with straight fibres making it easy to clean. Flotex has a smooth, velour like surface that is comfortable to walk on, with excellent slip resistant properties.

## flotex®



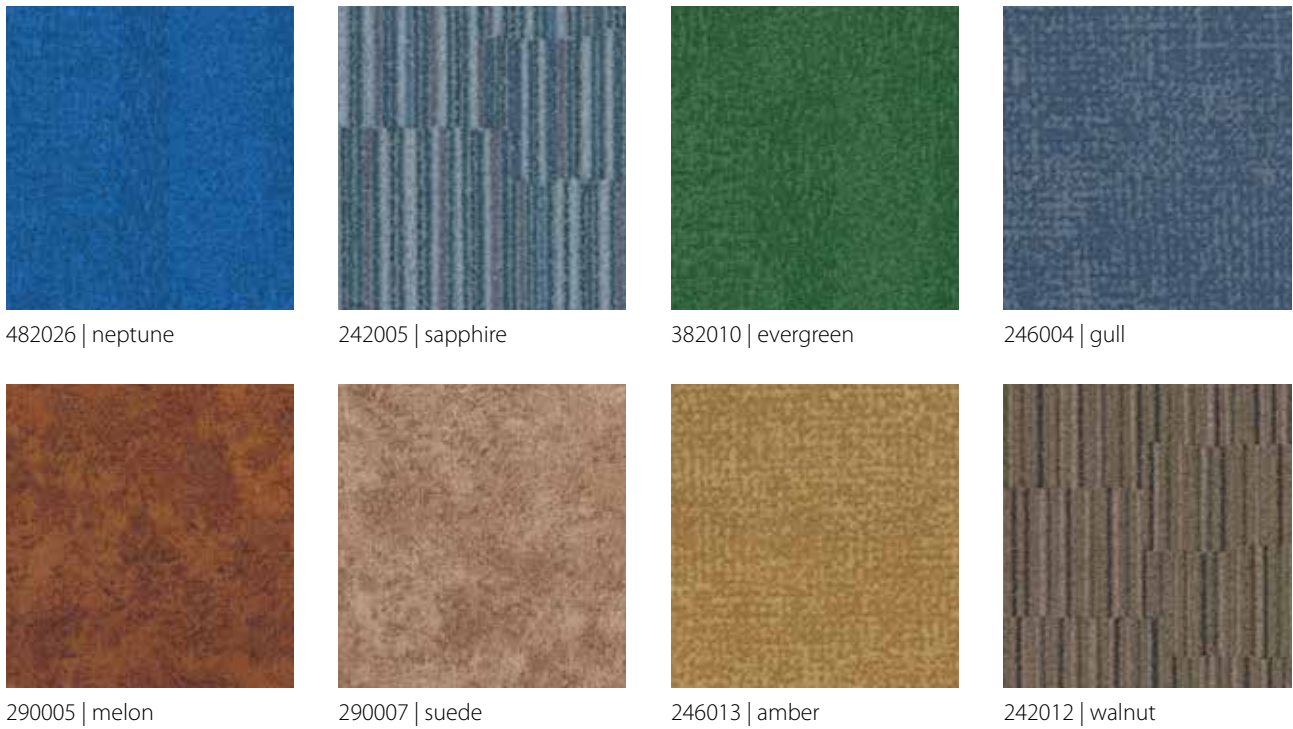
Flotex Colour designs are characterised by their subtle nuances in colour and by the design styles that deliver small scale designs and a semi plain allover look.

Flotex HD represents the unique High Definition digital print collection that creates superior texture with almost 3D-like appearance. Flotex HD, through its technology, allows for large endless pattern repeats and vivid life like colours creating a new dimension for Flotex and making the product attractive for todays transport environments.

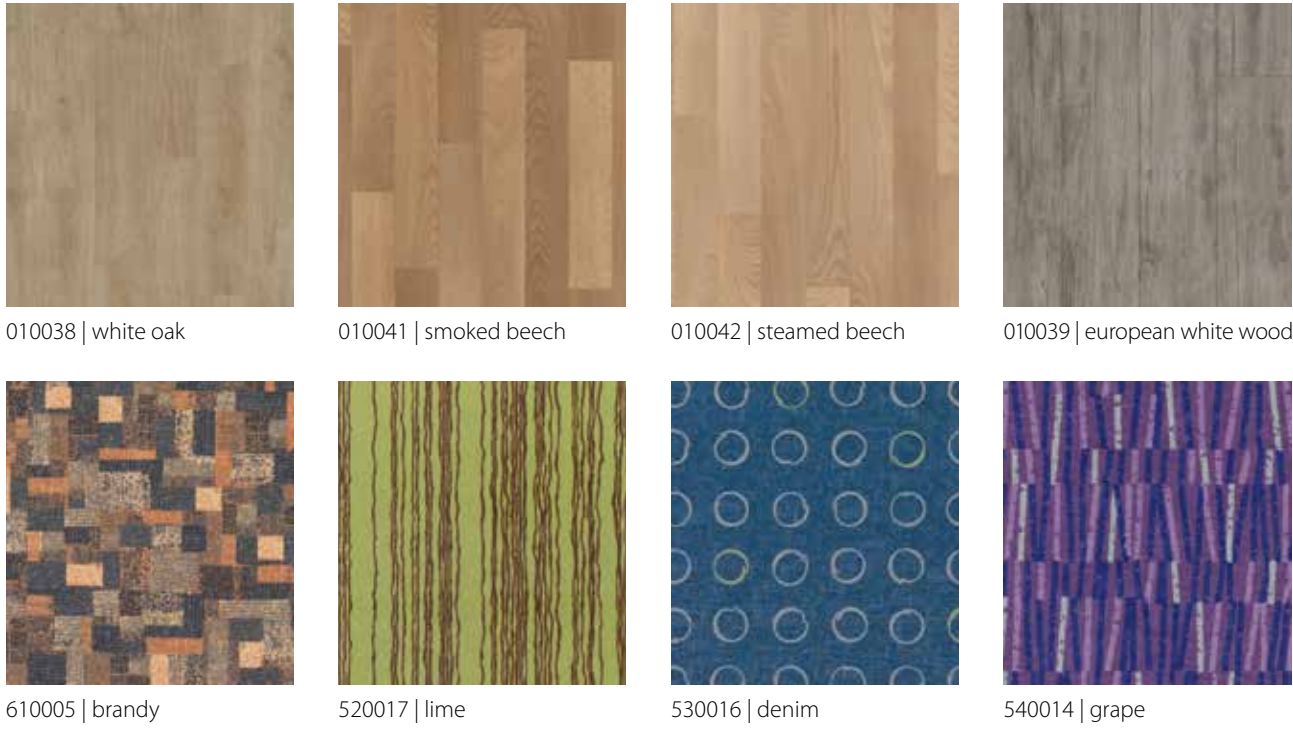
Flotex offers consistent protection against a wide variety of bacteria thanks to Sanitized; a highly effective integral antimicrobial treatment that results in a healthier environment. Thanks to its unique construction, which helps to reduce the amount of allergens in the atmosphere, Flotex has been awarded the prestigious Allergy UK Seal of Approval.



# flotex® colour



# flotex® HD



Colour palette Flotex 236 colours.  
Shown above is only a selection of designs and colourways available. To view the full range please visit [www.forbo-flooring.com/transport..](http://www.forbo-flooring.com/transport..)



# coral<sup>®</sup>

An exceptionally versatile range of entrance systems to choose from, performing as the ideal moisture and dirt barrier. There will always be a Coral product to meet your needs.

**coral<sup>®</sup>** brush

Coral Brush is ideal for passenger walkways and entrances including steps when you require a floor covering that can simultaneously absorb moisture and remove dry soiling.



## coral<sup>®</sup> brush



5764 | petrified grey



5716 | masala brown



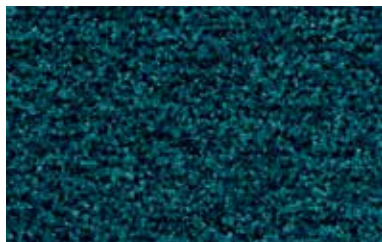
5715 | charcoal grey



5723 | cardinal red



5730 | vulcan black



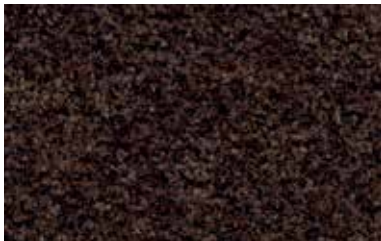
5705 | bondi blue



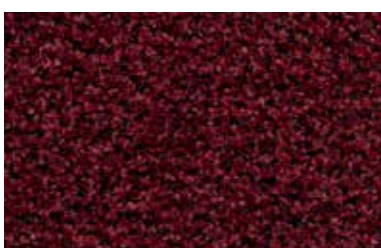
5754 | straw brown



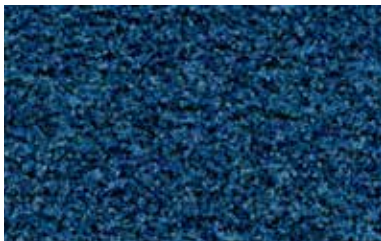
5741 | cannon grey



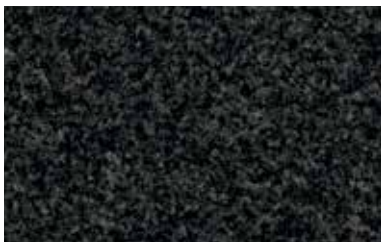
5724 | chocolate brown



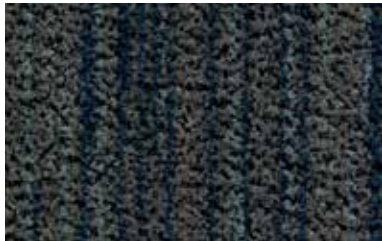
5706 | brick red



5722 | cornflower blue



5721 | hurricane grey



5767 | slate blue



5750 | aztec black



5714 | shark grey



5727 | stratos blue



5709 | royal purple



5710 | asphalt grey

Colour palette: Coral brush: 18 colours.



# Service products



## Welding rods

Welding rods ensure high levels of hygiene because they make seams easy to clean while preventing water reaching the subfloor. Forbo offers welding rods to match to all the vinyl references.



## Sealant

Helmipur SH100 is the perfect bonding solution to seal edges or seams that are hard to reach with welding rods.



## Adhesives

Forbo offers a variety of suitable adhesives for flooring installations. Eurocol 640 is a very low VOC-emission adhesive with a high initial grab for vinyl, polyolefin and rubber floor covering and the eurocol 650 is a low VOC-emission, solvent-free and powerful dispersion-based contact adhesive with a strong adhesion.



## Installation tools & training

Based on our experience and our continuous research we can recommend and supply a complete assortment of high-grade installation tools. These will help you to achieve a simple and professional installation of our floor coverings.



## Aquajet

We recognize that sometimes a client wishes to create something totally unique, perhaps something specific to a particular project, such as signage to facilitate the restrictions and safety guidelines within the bus. Whatever may be required, our in-house design team has skills and experience to turn ideas into reality. From an initial concept, detailed drawing, or computer file, our design team prepares a flooring design that is transferred electronically to our Aquajet cutting machines. These computer-controlled machines represent state-of-the-art cutting technology and produce precision cut items accurate to a fraction of a millimeter. The pattern is inlaid and, importantly, retains all the performance characteristics of the original product. Whether it is a complete bus layout in floorcovering, a company logo, signage or thematic design, the possibilities are limitless.

For more information about Service Products contact your local Forbo Flooring office or visit our website [www.forbo-flooring.com](http://www.forbo-flooring.com).

# Solutions

Forbo offer a truly comprehensive and compliant flooring product portfolio for the bus and coach sector. Within the portfolio are entrance systems, safety floors, vinyl floors and flocked flooring as well as all adhesives, accessories and installation tools. You'll see we also offer the widest range of design and colourway options available on the market giving you a world of choice.

Forbo have years of experience with regards to material scheduling and specific logistical requirements, both for the new build and refurbishment of bus and coach vehicles. We will work closely with you to understand your exact requirements, in order to achieve the optimum service level.

Working with Forbo means;

- A sole source of supply for all your flooring requirements
- The largest and most versatile choice of floorcoverings
- A bespoke design service
- Global advice, support and cross border project management.

# What to do now?

For more information about any of the products and services offered by Forbo Flooring Systems, to request samples/brochures or a visit then contact us:

Email: [transport@forbo.com](mailto:transport@forbo.com)

Website: [www.forbo-flooring.com/transport](http://www.forbo-flooring.com/transport)

Tel: +44 (0)1773 744121

## Let us keep you up-to-date

Visit us at [www.forbo-flooring.com/transport](http://www.forbo-flooring.com/transport) for more information.



Linkedin: Forbo Flooring Transport



















@forbotransport

# transpress

Email us at [transport@forbo.com](mailto:transport@forbo.com) to sign up to our quarterly transport newsletter for:

- **Product information**
- **Design inspiration**
- **Forbo transport news**
- **Industry news**

Technical specifications

|   |                              | Surestep   | Safestep<br>(up to R12) | Eternal         | Flotex<br>colour    | Flotex<br>HD        | Coral brush                            |
|---|------------------------------|--|-------------------------|-----------------|---------------------|---------------------|--|
|    | Total thickness              | ISO 1765 / EN-ISO 24346                          | 2.0 mm                  | 2.0 mm          | 4.3 mm              | 4.3 mm              | 9 mm                                   |
|    | Roll width                   | EN-ISO 24341                                     | 200 cm                  | 200 cm          | 200 cm              | 200 cm              | Approx. 105/155/205 cm                 |
|    | Roll length                  | EN-ISO 24341                                     | 20 - 27 m               | 20 - 27 m       | 30 m                | 30 m                | 27.5 m                                 |
|    | Total weight                 | ISO 8543 / EN-ISO 23997                          | 2750 gram/m²            | 2750 gram/m²    | 1800 gram/m²        | 1800 gram/m²        | 4050 gram/m²                           |
|   | Pile installation weight     | ISO 8543   |                         |                 | Approx. 250 gram/m² | Approx. 250 gram/m² | 920 gram/m²                            |
|   | Pile thickness               | ISO 1766   |                         |                 | Approx. 2 mm        | Approx. 2 mm        | 7 mm                                   |
|   | Pile material                |  |                         |                 | 100% polyamide      | 100% polyamide      | ECONYL® 100% regenerated polyamide BCF |
|    | Dimensional stability        | ISO 2551   | < 0.1%                  | < 0.1%          | ≤ 0.2%              | ≤ 0.2%              | Pass                                   |
|    | Abrasion resistance          | ISO 24338  | ≤ 2mg/mm³               | ≤ 2mg/mm³       | ≤ 2mg/mm³           |                     |  |
|    | Indentation residual         | EN-ISO 24343-1                                   | ≤ 0.05 mm               | ≤ 0.05 mm       | ≤ 0.05 mm           |                     |  |
|    | Light fastness               | EN ISO 105/B02                                   | ≥ 6                     | ≥ 6             | ≥ 6                 | ≥ 6                 | ≥ 5                                    |
|   | Flexibility                  | EN-ISO 24344                                     | Ø 10 mm                 | Ø 10 mm         | Ø 10 mm             |                     |  |
|  | Resistance to chemicals      | ISO 26987  | Very good               | Very good       | Very good           | Very good           | Very good                              |
|  | Electrical resistance        | EN 1081 / ISO 10965                              | > 1.10⁹ Ω               | > 1.10⁹ Ω       | R1 > 1.10⁹ Ω        |                     | > 10⁹ Ω                                |
|  | Contact sound insulation     | ISO 717-2  |                         |                 | ΔLw = 20 dB         | ΔLw = 20 dB         |  |
|  | Slip resistance              | DIN 51130/51131<br>EN 13845 Anhang C<br>EN 13893 | R10<br>ESf              | R11, R12<br>ESf | R10                 | R13                 |  |
|   |                              |  |                         |                 | DS: > 0.30          | DS: > 0.30          | DS: > 0.30                             |
|  | Fire resistance              | EN 13501-1                                       | Approved                | Approved        | Approved            | Approved            | B <sub>f1</sub> -s1                    |
|  | Personal charging            | EN 1815 / ISO 6356                               | < 2 kV                  | < 2 kV          | < 2 kV              | < 2 kV              | < 2 kV                                 |
|  | Heat transmission resistance | EN12524 / ISO 8302                               | 0.25 m² K/W             | 0.25 m² K/W     | 0.048 m² K/W        | 0.048 m² K/W        | 0.093 m² K/W                           |



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**forbo**  
FLOORING SYSTEMS

creating better environments

