



# RAIL FLOOR & WALL COVERINGS

creating better environments



FLOORING SYSTEMS

FORBO RAIL **PRODUCT SELECTOR**

		Product Category	Product Line	Description	Application Area	Number of Standard Designs	Bespoke Design / Custom Colouration	Suitable for use on the following vehicle types				Conformity			Thickness	Weight	Acoustic	Thermal Conductivity	Wear Layer Resistance	Light Resistance	Installation & Service Products						
								High Speed Train	Regional Train	Light Rail Vehicle	Metro	EN45545-2	ASTM E648-00 E662-01	Ghost	ISO 1766	ISO 8543	ISO 717-2 ISO 140-8	EN 12524	G 35-024 Annexe D >4 apr. 1 M de cycl.	EN ISO 105/B02	Cold Welding PU Mastic	Hot Welding	Pro-Fit (Hook & Loop System)	Pre-Cut Kits	Cut Lengths	Full Technical Specification	
FLOOR COVERINGS	Entrance Flooring Systems	Coral® FR	Classic FR	Textile EFS - the ultimate moisture absorber	Vestibule/ Entrance	13	✓	●	●	○	–	HL2	OK	OK	8.5 mm	3.4 kg/m²	Δ Lw = 31 dB	0.13 m² k/W	>4	7-8	NA	NA	Yes	Yes	Yes	Page 68	
			Brush FR	Textile EFS - the great all rounder	Vestibule/ Entrance	18	✓	●	●	○	○	HL3	OK	OK	9 mm	3.4 kg/m²	Δ Lw = 32 dB	0.093 m² k/W	>4	> 5	NA	NA	Yes	Yes	Yes	Page 68	
			Duo FR	Textile EFS - the ultimate dirt & moisture remover	Vestibule/ Entrance	8	✓	●	●	○	–	HL2	OK	OK	9 mm	3 kg/m²	Δ Lw = 29 dB	0.140 m² k/W	>4	> 5	NA	NA	Yes	Yes	Yes	Page 68	
			Welcome FR	Textile EFS - with a strong linear effect	Vestibule/ Entrance	8	✓	●	●	○	○	HL3	OK	OK	8 mm	2.2 kg/m²	Δ Lw = 27 dB	0.090 m² k/W	>4	> 5	NA	NA	Yes	Yes	Yes	Page 68	
	Resilient floor coverings	Marmoleum® FR² Marmoleum® Striato FR	Real FR²	Linoleum - classic marbled blend	Saloon floor covering	33	✓	●	●	●	●	HL3	OK	OK	2.5 mm	2.9 kg/m²	ΔLw: <5 dB	0.17 W/m.K	4	≥ 6	Yes	Yes	No	Yes	Yes	Page 69	
			Fresco FR²	Linoleum - subtly blended, tone on tone	Saloon floor covering	38	✓	●	●	●	●	HL3	OK	OK	2.5 mm	2.9 kg/m²	ΔLw: <5 dB	0.17 W/m.K	4	≥ 6	Yes	Yes	No	Yes	Yes	Page 69	
			Vivace FR²	Linoleum - lively, high contrast aesthetic	Saloon floor covering	9	✓	●	●	●	●	HL3	OK	OK	2.5 mm	2.9 kg/m²	ΔLw: <5 dB	0.17 W/m.K	4	≥ 6	Yes	Yes	No	Yes	Yes	Page 69	
			Concrete FR²	Linoleum - solid marbled design	Saloon floor covering	33	✓	●	●	●	●	HL3	OK	OK	2.5 mm	2.9 kg/m²	ΔLw: <5 dB	0.17 W/m.K	4	≥ 6	Yes	Yes	No	Yes	Yes	Page 69	
			Concrete FR²	Linoleum - plain visual with subtle texture	Saloon floor covering	11	✓	●	●	●	●	HL3	OK	OK	2.5 mm	2.9 kg/m²	ΔLw: <5 dB	0.17 W/m.K	4	≥ 6	Yes	Yes	No	Yes	Yes	Page 69	
			Striato FR	Linoleum – with a subtle linear pattern	Saloon floor covering	20	✓	●	●	●	●	HL3	OK	OK	2.5 mm	2.9 kg/m²	ΔLw: <5 dB	0.17 W/m.K	4	≥ 6	Yes	Yes	No	Yes	Yes	Page 69	
	Textile floor coverings	Coral® Move Vision FR	Coral Move FR	Broadloom carpet - bespoke tufting designs	Saloon floor covering	∞	✓	●	●	○	○	HL3	OK	OK	8 mm	3 kg/m²	Δ Lw ≥ 28 dB	0.07 m² W/m.K	>4	≥ 6	NA	NA	Yes	Yes	Yes	Page 72	
			Coral Move Vision FR	Broadloom carpet - digitally printed	Saloon floor covering	∞	✓	●	●	○	○	HL3	OK	OK	8 mm	3 kg/m²	Δ Lw ≥ 28 dB	0.07 m² W/m.K	>4	≥ 6	NA	NA	Yes	Yes	Yes	Page 72	
		Tessera® FR	Alignment FR	Broadloom carpet - contemporary texturisation	Saloon floor covering	24	✓	●	●	○	–	HL2	OK	OK	6 mm	2.5 kg/m²	Δ Lw = 25 dB	0.06 W/m.K	>4	≥ 6	NA	NA	Yes	Yes	Yes	Page 71	
			Helix FR	Broadloom carpet - textured linear design	Saloon floor covering	13	✓	●	●	○	–	HL2	OK	OK	6 mm	3 kg/m²	Δ Lw = 25 dB	0.06 W/m.K	>4	≥ 6	NA	NA	Yes	Yes	Yes	Page 71	
			Nexus FR	Broadloom carpet - metallic web overlay design	Saloon floor covering	9	✓	●	●	○	–	HL2	OK	OK	5.4mm	2.4 kg/m²	Δ Lw = 25 dB	0.06 W/m.K	>4	≥ 6	NA	NA	Yes	Yes	Yes	Page 71	
		Flotex® FR	Flotex Colour FR	Flocked - Rotary printed semi plain designs	Saloon floor covering	90	✓	●	●	○	–	HL2	OK	OK	3.3mm	1.225 kg/m²	Δ Lw ≥ 22 dB	0.08 W/m.K	>4	≥ 6	NA	NA	No	Yes	Yes	Page 70	
			Flotex Vision FR	Flocked - High definition digitally printed giving real design freedom	Saloon floor covering	∞	✓	●	●	○	–	HL2	OK	OK	3.3mm	1.225 kg/m²	Δ Lw ≥ 22 dB	0.08 W/m.K	>4	≥ 6	NA	NA	No	Yes	Yes	Page 70	
		WALL & CEILING COVERINGS	Fleet® FR	Fleet FR	Textile wall and ceiling covering	Vestibule/ Saloon/ Buffet cars and staircases	8	✓	●	●	●	–	(R1) HL2	OK	OK	3 mm acc. To NF EN 29073-1	0,55 kg/m²	ΔLw = 17 dB	N/A	3	>6	NA	NA	No	Yes	Yes	Page 73

● Certified and suitable for use  
○ Certified but not recommended for use  
– Not certified



# MANY SOLUTIONS. ONE SUPPLIER.

We pride ourselves on offering a truly comprehensive product portfolio with leading edge products specifically designed to cater for each area of a rail project.

From entrance to exit, whether new build or refurbishment, Forbo can help you choose the right floor and wall covering solutions for your projects.

The **PRODUCT SELECTOR** tool overleaf, is to help illustrate at a glance which products are suitable for different rail vehicle types. Then throughout the brochure you'll find in depth product range information as well as detailed technical specifications and reference to the installation and cleaning and maintenance guides for our full product portfolio.



# THIS IS OUR WORLD

Forbo has developed a truly comprehensive and compliant floor and wall covering product offering for the global rail sector. Whether you are sourcing floor coverings for high speed, intercity, regional or light rail carriages, or for trams or metro vehicles, we can provide you with an exceptional range of products and services to meet the necessary requirements.

Within our floor coverings portfolio you will find high performance entrance systems, linoleum flooring, broadloom carpets, flocked floor coverings and the widest range of designs and colourways on the market, giving you a world of choice. We also supply adhesives, accessories and specialist installation tools.

At Forbo, we fully appreciate the logistical challenges for both new build and refurbishment projects. We will work closely with you in understanding your specific requirements, in order to deliver the optimum service levels and solutions.

If you're looking for a totally unique floor or wall covering design solution, then our in-house design team will work closely with you every step of the way in meeting your design specifications. The entire RAIL portfolio can be fully customized.

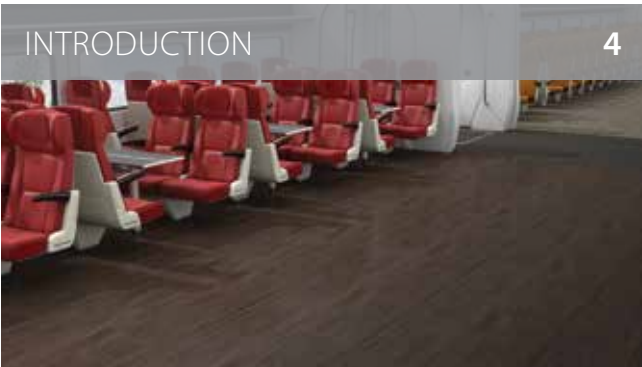
## Working with Forbo means:

- *A sole source of supply for all your flooring requirements*
- *The largest and most versatile choice of floor and wall coverings*
- *A custom design service*
- *Optimal efficiencies through tailored services and logistics*
- *Global advice, support and cross border project management*

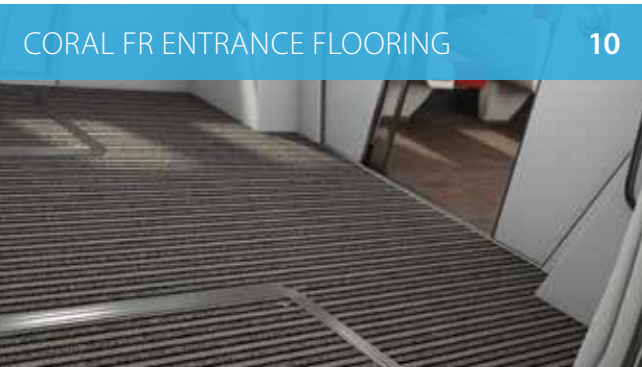
You can rely on Forbo to deliver an exceptional floor and wall covering solution for your rail project.



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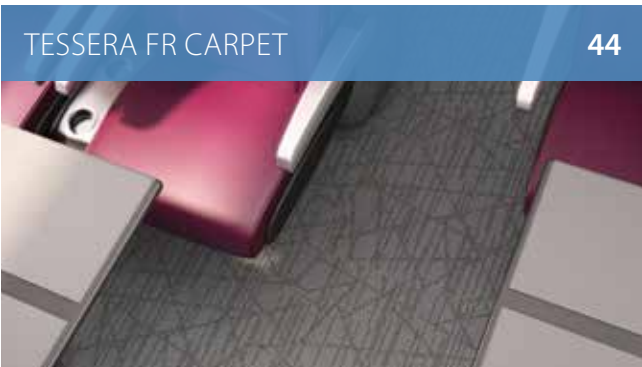
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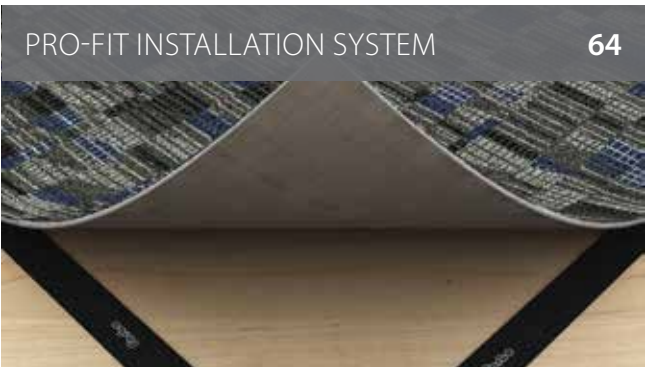
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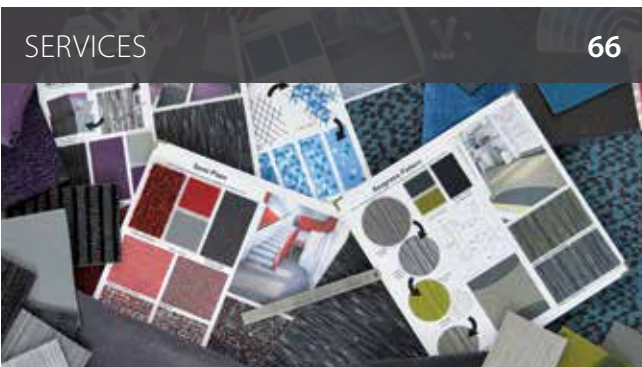
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# A SHOWCASE OF DESIGN AND COLOUR

Our collections are designed in-house and realised with the most modern printing and manufacturing techniques, resulting in inspiring designs no matter what combination of floor and wall coverings you select. Custom colourations and bespoke designs are possible throughout the portfolio.

We also ensure that our products are produced to the latest technical standards to ensure that your floor and wall coverings will offer outstanding performance throughout their lifetime.



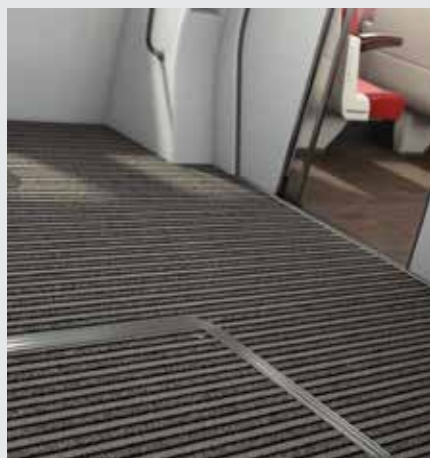
# RELIABLE LOGISTICS ACROSS THE WORLD

It's all about getting the right product to the right place, at the right time. In our world, we are recognised as a trusted partner. Our global logistics network ensures that your project arrives when you ask for it, on time and to your total satisfaction.





## ENTRANCE FLOORING SYSTEMS



### **coral® FR**

A collection of textile clean-off products for entrances with heavy traffic.

## RESILIENT FLOORING



### **marmoleum® FR²** **marmoleum® striato FR**

Forbo's linoleum brand – natural, sustainable, durable, high quality and innovative in colour and design.

## FLOCKED FLOORING



### **flotex® FR**

A textile flocked floor covering combining the cleaning properties and durability of a resilient flooring with the comfort, slip resistant and acoustic properties usually associated with textile flooring.

## BROADLOOM CARPET



### **tessera® FR**

Tessera FR offers stylish, sustainable and hardwearing carpet in various pile constructions, shapes and textures, delivering specific performance and aesthetic benefits.

## BROADLOOM CARPET



### **coral® move FR**

Coral Move FR is a bespoke made to order product and our design team will work to match design and colour requirements on an individual project by project basis.

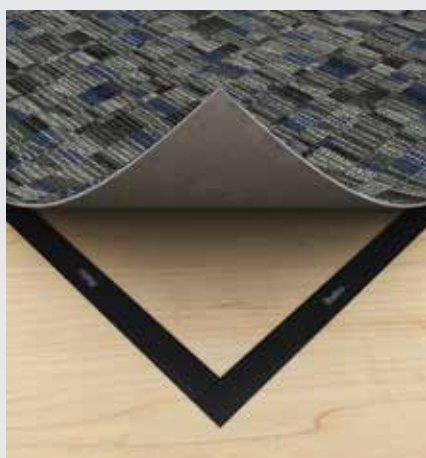
## WALL & CEILING COVERING



### **fleet® FR**

The robust, hard wearing properties of our Fleet FR wall and ceiling covering, make it ideal to meet high traffic rail environments.

## PRO-FIT



### **Pro-Fit**

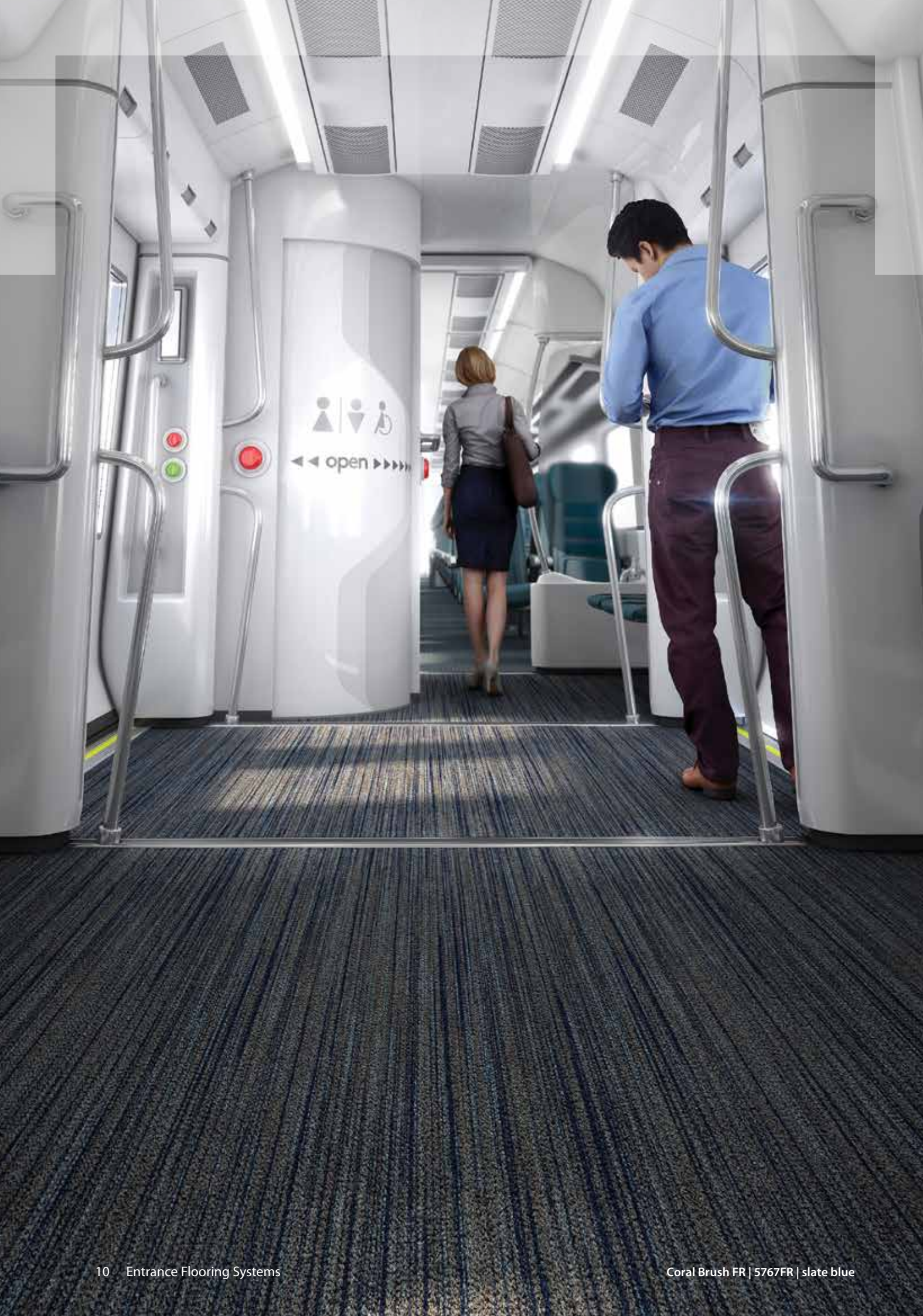
An adhesive-free installation solution, improving efficiencies in time, cost and operation throughout the life of the vehicle.



# THE WIDEST PORTFOLIO OF FLOOR AND WALL COVERINGS FOR RAIL

We pride ourselves on offering a truly comprehensive and compliant floor and wall covering product portfolio for the rail sector. Combining durability, performance, excellent fire resistant properties and great aesthetics.





**coral® FR**

**TEXTILE CLEAN-OFF ENTRANCE SYSTEMS**

**Coral has been the market leading textile entrance flooring brand for over 50 years and offers more choice than ever before with attractive and sustainable clean-off systems in styles and constructions to suit all applications, budgets and aesthetic requirements.**

First impressions are crucial, which is why effective entrance flooring that stops dirt and moisture being tracked into carriages/saloon areas is fundamental to modern rail vehicle design.

By removing wet and dry soiling from the soles of shoes and wheel treads, an effective entrance system reduces premature wear and tear to interior floor coverings, minimises cleaning and maintenance costs and protects passengers by reducing slip hazards.

- **Cut to size/shape option**
- **Stops up to 95% of dirt and moisture**
- **Excellent dirt storage/soil hiding**
- **High moisture absorption**
- **Reduces cleaning costs and prolongs the lifetime of on board floor coverings and finishes**
- **PVC and phthalate free**
- **Available with Pro-Fit backing for quicker installation. (excludes Coral Duo FR)**



Providing the ideal solution for rail vehicle entrances, Coral FR entrance flooring is available in four different formats: Welcome FR, Classic FR, Brush FR and Duo FR – each with their own unique benefits.

***Please ensure that 'FR' is clearly noted on all orders.***

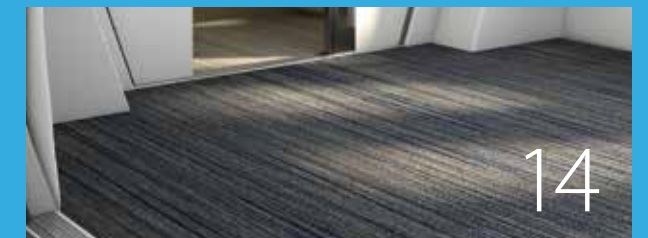
### **coral® classic FR**

The ultimate moisture absorber



### **coral® brush FR**

The great all-rounder



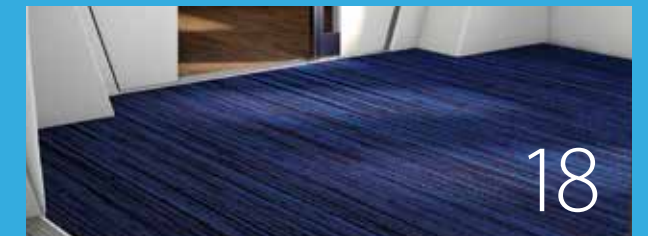
### **coral® duo FR**

The ultimate dirt and moisture remover



### **coral® welcome FR**

Where design meets environment



### **coral® logo FR**

Bespoke design





# coral® classic FR

## The ultimate moisture absorber

Research shows that taking just two steps on Coral Classic FR's moisture retaining construction is enough to absorb half of the foot-borne moisture that would otherwise be carried inside on the soles of passengers shoes.



- Cut to size/shape option
- High moisture absorption
- Dirt scraping for effective clean-off
- Excellent dirt storage/soil hiding
- Advanced colouring and design choice
- Reaction to fire EN 45545-2 : HL2
- Available with Pro-Fit backing for quicker installation



4744FR | espresso LRV 4



4751FR | silver grey LRV 9



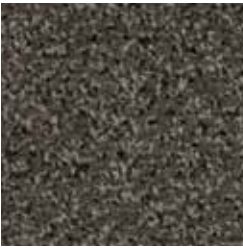
4750FR | warm black LRV 4



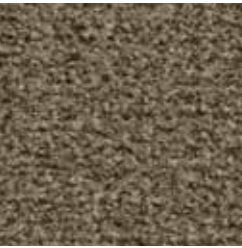
4730FR | raven black LRV 2



4721 | mouse grey LRV 4



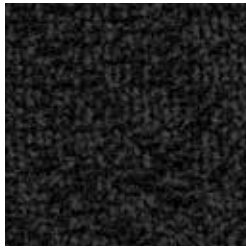
4764FR | taupe LRV 6



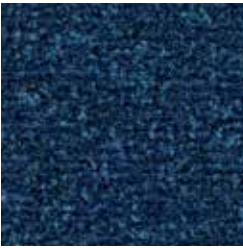
4774FR | khaki LRV 11



4701FR | anthracite LRV 6



4756FR | bronzetone LRV 2



4727FR | navy blue LRV 2



4759FR | old rose LRV 6



4758FR | olive LRV 7



4753FR | bright red LRV 5

Description	Tufted cut pile	
Dimensions	Roll width 185cm Roll length ≤ 27.5m	
Total thickness	ISO 1765	Approx 8.5mm
Pile weight	865 gram/m²	
Yarn	100% polyamide-BCF solution dyed	
Collection size	13	
Area of use	Heavy Use	
Impact noise reduction	EN-ISO 717-2	ΔLw = approx 31 dB
Tested flammability standard	EN 45545-2	HL2*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	< 2 kV
Thermal resistance	ISO 8302	0.13 m² K/W

*\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)*

Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)  
Full technical specifications are available on page 68.



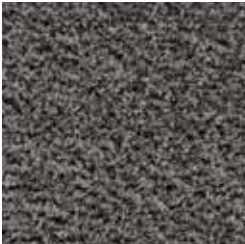
# coral<sup>®</sup> brush FR

## The great all-rounder

Coral Brush FR is suitable for all types of entrance areas, absorbing moisture and removing dry soiling as the weather demands.



- Cut to size/shape option
- High moisture absorption
- Dirt scraping for effective clean-off
- Excellent dirt storage/soil hiding
- Advanced colouring and design choice
- Reaction to fire EN 45545-2 : HL3
- Available with Pro-Fit backing for quicker installation



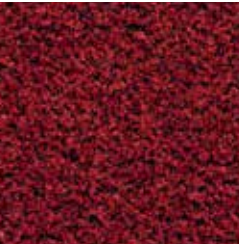
5714FR | shark grey LRV 5



5764FR | petrified grey\* LRV 5



5754FR | straw brown\* LRV 11



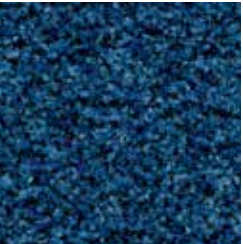
5723FR | cardinal red LRV 2



5741FR | cannon grey\* LRV 2



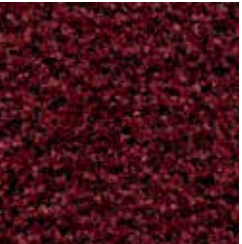
5721FR | hurricane grey LRV 3



5722FR | cornflower blue LRV 4



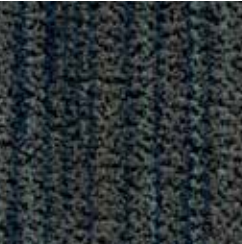
5716FR | masala brown LRV 5



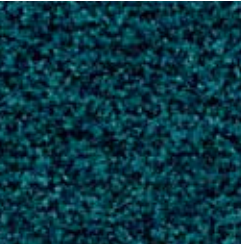
5706FR | brick red LRV 2



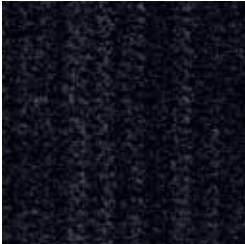
5710FR | asphalt grey LRV 2



5767FR | slate blue\* LRV 3



5705FR | Bondi blue LRV 4



5750FR | aztec black\* LRV 1



5724FR | chocolate brown LRV 2



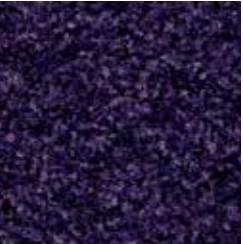
5727FR | stratos blue LRV 2



5730FR | vulcan black LRV 1



5715FR | charcoal grey LRV 2



5709FR | royal purple LRV 2

Description	Tufted cut pile	
Dimensions	Roll width 185cm Roll length ≤ 27.5m	
Total thickness	ISO 1765	Approx 9.0mm
Pile weight	920 gram/m²	
Yarn	100% regenerated ECONYL® polyamide	
Collection size	18	
Area of use	Heavy Use	
Impact noise reduction	EN-ISO 717-2	ΔLw = approx 32 dB
Tested flammability standard	EN 45545-2	HL3*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	< 2 kV
Thermal resistance	ISO 8302	0.093 m² K/W

*\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)*

Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)  
Full technical specifications are available on page 68.



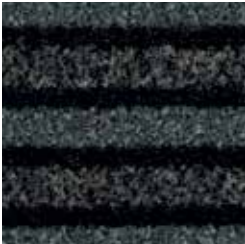
Designs marked with a \* have a more linear design whereas the other 13 colour references have an all-over aesthetic.



# coral® duo FR

## The ultimate dirt and moisture remover

Coral Duo FR is the ideal solution when you need maximum dirt removal, unrivalled dirt retention and exceptional moisture absorption, all in just a couple of paces.



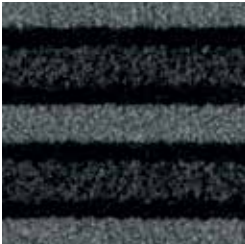
9721FR | dark steel LRV 2



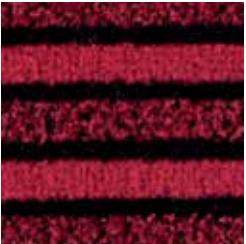
9714FR | Sicilian sand LRV 4



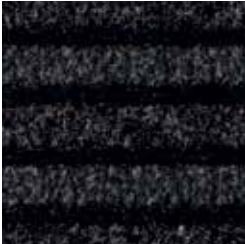
9730FR | black diamond LRV 1



9710FR | luna pearl LRV 4



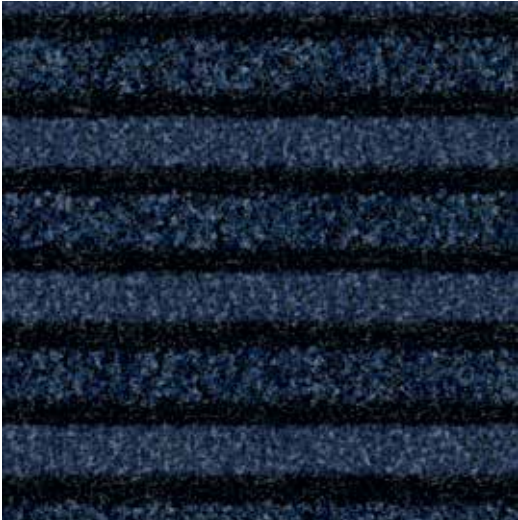
9723FR | African red LRV 3



9725FR | cafe bahia LRV 1



9724FR | cafe supreme LRV 2



9727FR | Volga blue LRV 1

- Cut to size/shape option
- High moisture absorption
- Dirt scraping for effective clean-off
- Excellent dirt storage/soil hiding
- Advanced colouring and design choice
- Reaction to fire EN 45545-2 : HL2

Description	Tufted cut pile	
Dimensions	Roll width 185cm Roll length ≤ 27.5m	
Total thickness	ISO 1765	Approx 9.0mm
Pile weight	670 gram/m²	
Yarn	100% polyamide of which 66% is regenerated ECONYL® Nylon	
Collection size	8	
Area of use	Heavy Use	
Impact noise reduction	EN-ISO 717-2	ΔLw = approx 29 dB
Tested flammability standard	EN 45545-2	HL2*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	< 2 kV
Thermal resistance	ISO 8302	0.140 m² K/W

*\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)*

Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)

Full technical specifications are available on page 68.



# coral® welcome FR

## Where design meets environment

With its contemporary linear design and rich, deep pile, Coral Welcome FR packs the style and aesthetic appeal of a luxury carpet and makes an unequivocal statement in any entrance area.

- Cut to size/shape option
- High moisture absorption
- Dirt scraping for effective clean-off
- Excellent dirt storage/soil hiding
- Advanced colouring and design choice
- Reaction to fire EN 45545-2 : HL3
- Available with Pro-Fit backing for quicker installation



3205FR | blue lagoon

LRV 3



3202FR | desperado

LRV 2



3201FR | silver shadow

LRV 3



3208FR | matrix

LRV 2



3219FR | colour purple

LRV 1

Description	Tufted cut pile	
Dimensions	Roll width 190cm Roll length ≤ 27.5m	
Total thickness	ISO 1765	Approx 8.0mm
Pile weight	780 gram/m²	
Yarn	100% regenerated ECONYL® polyamide	
Collection size	8	
Area of use	Heavy Use	
Impact noise reduction	EN-ISO 717-2	ΔLw = approx 27 dB
Tested flammability standard	EN 45545-2	HL3*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	< 2 kV
Thermal resistance	ISO 8302	0.090 m² K/W

*\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)*

Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)  
Full technical specifications are available on page 68.



3210FR | black magic

LRV 2



3207FR | blue velvet

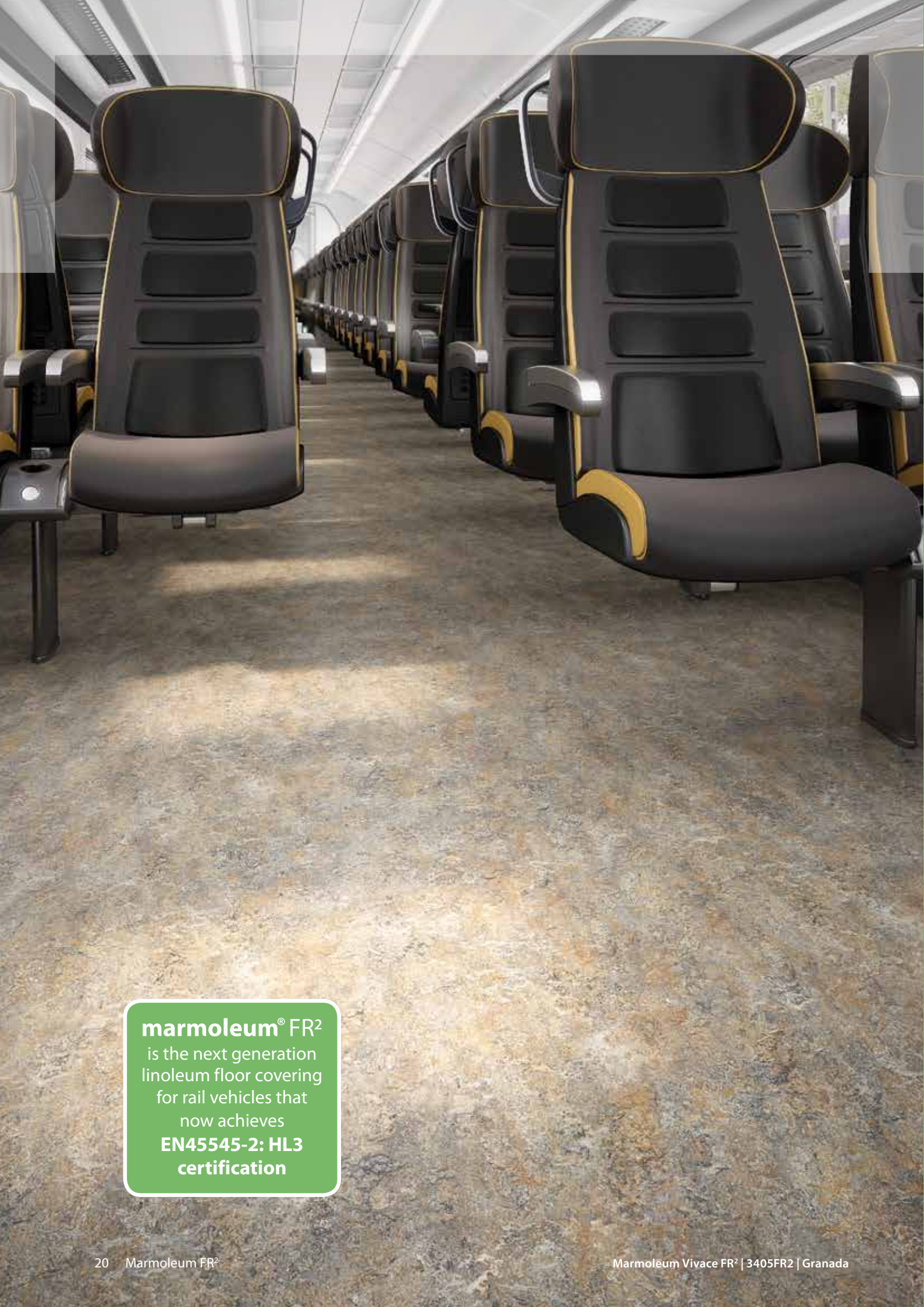
LRV 1



3206FR | volcano

LRV 1





**marmoleum® FR²**  
is the next generation  
linoleum floor covering  
for rail vehicles that  
now achieves  
**EN45545-2: HL3  
certification**

## marmoleum® FR²

## LINOLEUM

### marmoleum® real FR²

Real FR is our classic aesthetic, consisting of many carefully selected individual colour tones that combine to create beautifully graded colours, from warm neutrals and calm greys to exciting brights and trend led shades. Developed to create choice, Real FR can be mixed together or combined with other Marmoleum designs to provide more imaginative compositions.

### marmoleum® fresco FR²

Fresco FR has a strong palette of subtly blended tone-on-tone items, each creating a fresh, delicate and balanced aesthetic. The soft contrast of its refined marbled structure gives a gentle feel which sets the stage for calm and soothing interiors. The softness of Fresco FR enables it to sit well next to all other Marbled and Striato FR items.

### marmoleum® walton FR²

Presenting the pure character of linoleum. The solid identity of Marmoleum Walton FR with its smooth surface and minimal, unpretentious material expression makes it the ultimate and pure representative of our linoleum flooring. Its plain visual makes Walton FR easily adaptable to the context it is used in, and the subtle texture gives it a soft and natural look.

### marmoleum® concrete FR²

The solid marble design of Marmoleum Concrete FR² differentiates itself from the classic Marmoleum FR² flooring with its subtle concrete structure. The color palette is neutral with both warm and cool tones, yet with an extension of 6 bright colours for creating a powerful accent in your floor design.

### marmoleum® vivace FR²

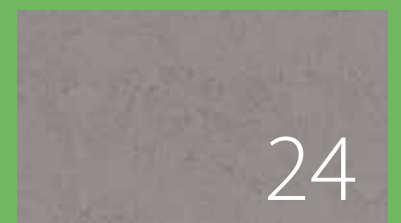
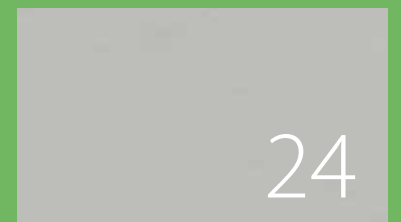
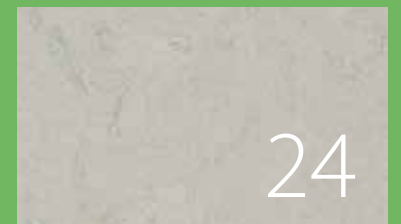
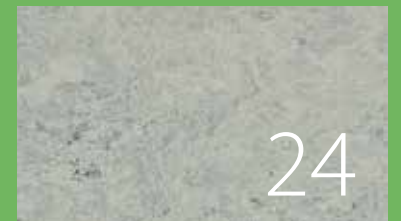
Vivace FR² is our liveliest and most outspoken aesthetic made with six to eight tones in each colourway. The differentiated elements combine to create a chameleon-like product that adapts well to a multitude of interiors, co-ordinating easily with many other surface finishes and colours. The high-contrast construction of Vivace FR² makes it a smart choice for areas prone to soiling, where the superior appearance retention of the product is valued.

## MARMOLEUM STRIATO FR

### marmoleum® striato FR

Marmoleum Striato FR offers a palette that is neutral with warm tones and grey-infused hues spanning from light to dark, delivering natural looking floors that are great on their own and in combination with other floor coverings. The subtle linear pattern will easily pick up colours from its environment and works well with other materials.

*Please ensure that 'FR²' or 'FR' is clearly noted on all orders.*





# marmoleum® FR<sup>2</sup> / marmoleum® striato FR

**Marmoleum is over 150 years old and is a natural floor covering that is associated with sustainability, durability, high quality and innovative design.**

For the rail sector, Marmoleum FR<sup>2</sup> and Marmoleum Striato FR, offer total versatility in terms of colour and design, but what makes these floor coverings really stand out is the fact that they are created using a high percentage of natural raw materials, with renewable and recycled contents.

- **Homogeneous durable construction**
- **Low life cycle costs – can be renovated and repaired**
- **Wide range of colourways per design**
- **Made from high percentage of natural ingredients**
- **Aquajet cutting service available**
- **Reaction to fire EN 45545-2 : HL3**
- **Cigarette burn resistant**
- **Suitable for all modes of Rail vehicles including underground and sleeper vehicles**

## Environmental leadership:

**71%**  
natural  
raw  
materials\*

**29%**  
of raw  
materials  
are rapidly  
renewable\*

**44%**  
recycled  
material  
content\*

\*The above results are for Marmoleum FR<sup>2</sup>.

There is a small variation in results for Striato FR. Please ask for further details.

## Infection control & Allergy UK

Independent testing by the University of Glasgow has proved that Marmoleum has a unique suitability for a diverse range of environments where hygiene and control of bacteria are important. Marmoleum FR<sup>2</sup> is also an Allergy UK approved floor covering.



## Topshield<sup>2</sup>

All Marmoleum FR<sup>2</sup>/Striato FR floors include Topshield<sup>2</sup>, a double layer, UV-cured finish that is scratch and scuff resistant, easy to maintain and ensures long lasting appearance retention. With its natural bacteriostatic properties and resistance to chemicals, it is the ideal solution for heavy traffic rail vehicles.



## Welding

In the majority of installations, Marmoleum does not need to be welded as it is completely dimensionally stable and will not shrink after proper installation. However, if welding is the preferred option, there are matching welding cords for every Marmoleum FR<sup>2</sup>/Striato FR design.



## Aquajet

Forbo recognise that sometimes you may wish to create something totally unique, perhaps something specific to a particular project, such as signage to facilitate the restrictions and safety guidelines within the train. 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 the 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 millimetre.

The pattern is inlaid and, importantly, retains all the performance characteristics of the original product. Whether it is a complete rail layout in floor covering, a company logo, signage or thematic design, the possibilities are limitless.

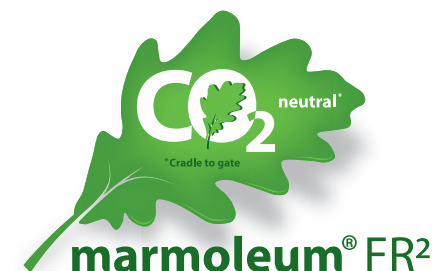


# MARMOLEUM FR<sup>2</sup> NATURALLY

Forbo's Marmoleum FR<sup>2</sup> and Striato FR have been independently confirmed as CO<sub>2</sub> neutral floor coverings in the cradle to gate phase of the product's life cycle, without the need for offsetting.

In simple terms, the CO<sub>2</sub> produced in the extraction, transportation and manufacturing process of Marmoleum is balanced by the removal of CO<sub>2</sub> through the growing of its natural ingredients such as flax, jute and rosin.

As such, Forbo Marmoleum is the best flooring choice for every sustainable interior. By using durable materials in your rail projects, you can also contribute to a better environment.

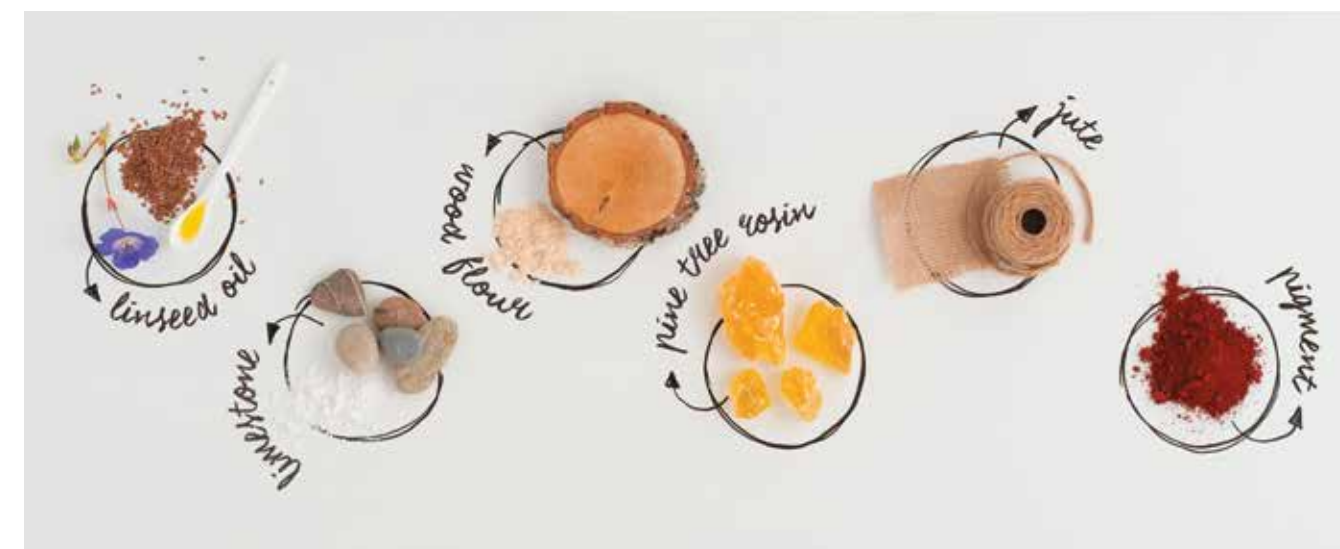


A floor covering made from natural materials.

Key materials from which Marmoleum FR<sup>2</sup> is created:

- **linseed oil from the seeds of the flax plants**
- **fibres from jute stems**
- **rosin from pine trees**
- **upcycled wood residues from controlled sustainable forestry**
- **limestone**
- **pigments**

A natural floor covering that is strong, durable and sustainable. Marmoleum FR<sup>2</sup> is a unique offering in the world of resilient floor coverings.





marmoleum® FR<sup>2</sup>  
fresco FR<sup>2</sup> | real FR<sup>2</sup> | vivace FR<sup>2</sup> | walton FR<sup>2</sup> | concrete FR<sup>2</sup>

3038FR2 | Caribbean LRV 55

3173FR2 | Van Gogh LRV 46

3075FR2 | shell LRV 44

3407FR2 | donkey island LRV 36

3403FR2 | Asian tiger LRV 29

3370FR | terracotta LRV 18

3846FR2 | natural corn LRV 56

3411FR2 | sunny day LRV 45

347FR2 | golden saffron LRV 41

3174FR2 | Sahara LRV 29

3233FR2 | shitake LRV 23

3741FR2 | yellow glow LRV 58

3251FR2 | lemon zest LRV 52

3825FR2 | African desert LRV 26

2767FR2 | rust LRV 19

3352FR2 | Berlin red LRV 10

Landscape image

3225FR2 | dandelion LRV 46

3126FR2 | Kyoto LRV 18

3352FR2 | Berlin red LRV 10

3125FR2 | golden sunset LRV 38

3131FR2 | scarlet LRV 13

3127FR2 | Bleeckerstreet LRV 9

3268FR2 | honey suckle LRV 33

3263FR2 | rose LRV 17

3273FR2 | ruby LRV 10

3363FR2 | lilac LRV 38

3266FR2 | lilac LRV 37

3123FR2 | arabesque LRV 23

3740FR2 | purple glow LRV 21

3270FR2 | violet LRV 17

3272FR2 | plum LRV 13

3353FR | eggplant purple LRV 8

3732FR2 | asteriod LRV 45

3828FR2 | blue heaven LRV 34

3360FR2 | vintage blue LRV 29

3219FR2 | spa LRV 32

3055FR2 | fresco blue LRV 23

3731FR2 | flux LRV 22

3730FR2 | Stella LRV 17

3881FR2 | green wellness LRV 51

3267FR2 | aqua LRV 28

3269FR2 | turquoise LRV 28

3264FR2 | Greek blue LRV 17

3739FR2 | blue glow LRV 16

3030FR2 | blue LRV 12

3261FR2 | marine LRV 8

3885FR2 | spring buds LRV 46

3742FR2 | green glow LRV 39

3224FR2 | chartreuse LRV 38

3053FR2 | dove blue LRV 27

3358FR2 | petrol LRV 9

3359FR | bottle green LRV 7

Forest image

3413FR2 | green melody LRV 34

3247FR2 | green LRV 13

3259FR2 | mustard LRV 38

3265FR2 | avocado LRV 31

3260FR2 | leaf LRV 27



marmoleum® FR²

fresco FR² | real FR² | vivace FR² | walton FR² | concrete FR²

3858FR2 | Barbados LRV 65

3726FR2 | Venus LRV 52

2713FR2 | calico LRV 53

2499FR2 | sand LRV 56

3120FR2 | rosato LRV 51

3861FR2 | Arabian pearl LRV 50

3711FR2 | cloudy sand LRV 49

3234FR2 | forest ground LRV 33

3427FR2 | agate LRV 39

3232FR2 | horse roan LRV 40

3708FR2 | fossil LRV 34

3141FR2 | Himalaya LRV 40

3729FR2 | mica LRV 42

3728FR2 | kaolin LRV 36

3890FR2 | oat LRV 31

3252FR2 | sparrow LRV 29

3706FR2 | beton LRV 28

3727FR2 | drift LRV 31

3246FR2 | shrike LRV 21

3702FR2 | liquid clay LRV 23

3709FR2 | silt LRV 22

3254FR2 | clay LRV 17

3568FR2 | delta lace LRV 13

3426FR2 | cork tree LRV 16

3874FR2 | walnut LRV 11

3236FR2 | dark bistre LRV 7

Description	Linoleum sheet	
Dimensions	EN-ISO 24341	Roll width 2.0m Roll length ≤ 32m
Total thickness	ISO 1765	2.5mm
Collection size	124	
Impact noise reduction	EN ISO 717-2	ΔLw = <5 dB
Tested flammability standard	EN 45545-2	HL3*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	≤ 2 kV
Thermal conductivity	EN 12524	0.17 W/m·K

*\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)*

Please note: Digital representations may vary from actual product.  
Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)

Full technical specifications are available on page 69.

3257FR2 | edelweiss LRV 58

3369FR2 | titanium LRV 48

3883FR2 | moonstone LRV 45

3724FR2 | orbit LRV 37

3889FR2 | cinder LRV 30

3146FR2 | serene grey LRV 27

3420FR2 | surprising storm LRV 31

3712FR2 | orange shimmer LRV 31

3866FR2 | eternity LRV 21

3367FR2 | alloy LRV 25

3704FR2 | satellite LRV 23

2629FR2 | eiger LRV 19

3405FR2 | Granada LRV 28

3734FR2 | blue shimmer LRV 20

3137FR2 | slate grey LRV 16

3723FR2 | nebula LRV 17

3705FR2 | meteorite LRV 16

3048FR2 | graphite LRV 14

3421FR2 | oyster mountain LRV 17

3735FR2 | purple shimmer LRV 18

3872FR2 | volcanic ash LRV 10

3725FR2 | cosmos LRV 9

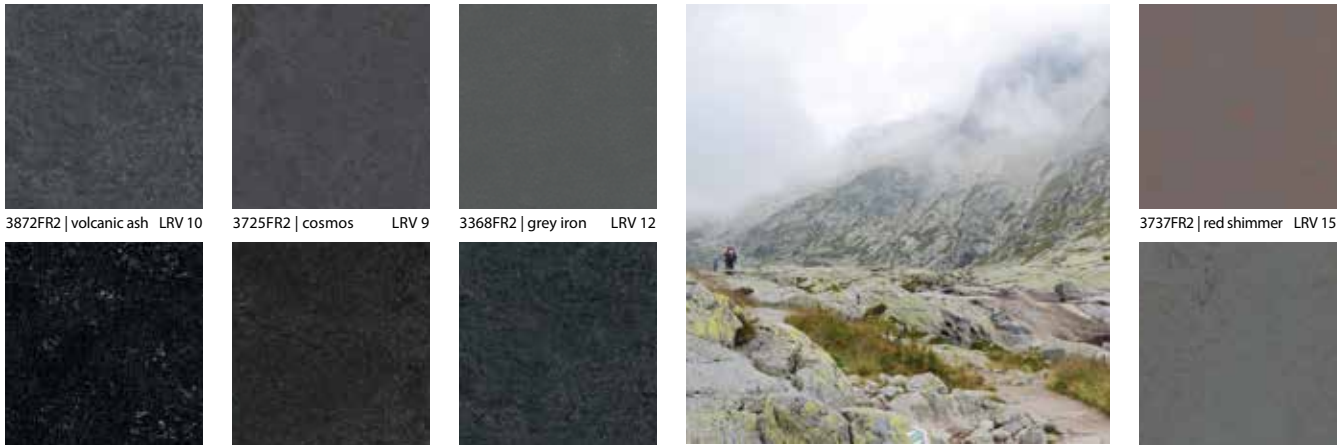
3368FR2 | grey iron LRV 12

2939FR2 | black LRV 5

3707FR2 | black hole LRV 7

3139FR2 | lava LRV 9

3703FR2 | comet LRV 14





# marmoleum® striato FR

Marmoleum Striato FR offers a palette that has neutral and bright colours with warm tones and grey-infused hues spanning from light to dark, delivering natural looking floors that are great on their own and in combination with other floor coverings.

The subtle linear pattern will easily pick up colours from its environment and works well with other materials.



5232FR | rocky ice LRV 44



3575FR | white cliffs LRV 57



5230FR | whitewash LRV 49



5244FR | hint of yellow LRV 70



3573FR | trace of nature LRV 27



5246FR | orange highlights LRV 33



5217FR | withered prairie LRV 23



5221FR | colour stream LRV 26



5216FR | Pacific beaches LRV 48



5241FR | sunshine yellow LRV 39



5238FR | straw field LRV 42



5225FR | compressed time LRV 34



5240FR | canyon shadow LRV 18



5239FR | oxidised copper LRV 27



5242FR | red roses LRV 21



5245FR | blue stroke LRV 69



5243FR | peacock blue LRV 23



5218FR | Welsh moor LRV 8



5237FR | black sheep LRV 18



5247FR | dark aura

LRV 11

Description	Linoleum sheet	
Dimensions	EN-ISO 24341	Roll width 2.0m Roll length ≤ 32m
Total thickness	2.5mm	
Collection size	20	
Impact noise reduction	EN-ISO 717-2	ΔLw = <5 dB
Tested flammability standard	EN 45545-2	HL3*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	≤ 2 kV
Thermal conductivity	EN 12524	0.17 W/m-K

*\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)*  
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Full technical specifications are available on page 69.





MARMOLEUM FR<sup>2</sup>/STRIATO FR **REFERENCES BY DESIGN**

Real FR <sup>2</sup>	Fresco FR <sup>2</sup>	Vivace FR <sup>2</sup>	Walton FR <sup>2</sup>	Concrete FR <sup>2</sup>	Striato FR
2499FR2 sand	2939FR2 black	3403FR2 Asian tiger	3352FR2 Berlin red	3568FR2 delta lace	3573FR trace of nature
2621FR2 dove grey	3125FR2 golden sunset	3411FR2 sunny day	3358FR2 petrol	3701FR2 moon	3575FR white cliffs
2629FR2 eiger	3126FR2 Kyoto	3413FR2 green melody	3359FR2 bottle green	3702FR2 liquid clay	5216FR Pacific beach
2713FR2 calico	3131FR2 scarlet	3407FR2 donkey island	3353FR2 eggplant purple	3703FR2 comet	5217FR withered prairie
2767FR2 rust	3139FR2 lava	3405FR2 Granada	3370FR2 terracotta	3704FR2 satellite	5218FR Welsh moor
3030FR2 blue	3203FR2 henna	3420FR2 surprising storm	3360FR2 vintage blue	3705FR2 meteorite	5221FR colour stream
3032FR2 mist grey	3246FR2 shrike	3421FR2 oyster mountain	3355FR2 rosemary green	3706FR2 beton	5225FR compressed time
3038FR2 Caribbean	3247FR2 green	3426FR2 cork tree	3363FR2 lilac	3707FR2 black hole	5230FR whitewash
3048FR2 graphite	3251FR2 lemon zest	3427FR2 agate	3368FR2 grey iron	3708FR2 fossil	5232FR rocky ice
3053FR2 dove blue	3252FR2 sparrow		3369FR2 titanium	3709FR2 silt	5237FR black sheep
3055FR2 fresco blue	3254FR2 clay		3367FR2 alloy	3711FR2 cloudy sand	5238FR straw field
3075FR2 shell	3257FR2 edelweiss			3712FR2 orange shimmer	5239FR oxidised copper
3120FR2 rosato	3259FR2 mustard			3723FR2 nebula	5240FR canyon shadow
3123FR2 arabesque	360FR2 leaf			3724FR2 orbit	5241FR sunshine yellow
3127FR2 Bleeckerstreet	3261FR2 marine			3725FR2 cosmos	5242FR red roses
3136FR2 concrete	3262FR2 marigold			3726FR2 Venus	5243FR peacock blue
3137FR2 slate grey	3263FR2 rose			3727FR2 drift	5244FR hint of yellow
3141FR2 Himalaya	3264FR2 Greek blue			3728FR2 kaolin	5245FR blue stroke
3146FR2 serene grey	3265FR2 avocado			3729FR2 mica	5246FR orange highlights
3173FR2 Van Gogh	3266FR2 lilac			3730FR2 stella	5247FR dark aura
3174FR2 Sahara	3267FR2 aqua			3731FR2 flux	
3219FR2 spa	3269FR2 turquoise			3732FR2 asteroid	
3224FR2 chartreuse	3271FR2 hunter green			3733FR2 yellow shimmer	
3225FR2 dandelion	3273FR2 ruby			3734FR2 blue shimmer	
3232FR2 horse roan	3825FR2 African desert			3735FR2 purple shimmer	
3233FR2 shitake	3828FR2 blue heaven			3736FR2 green shimmer	
3234FR2 forest ground	3846FR2 natural corn			3737FR2 red shimmer	
3236FR2 dark bistre	3858FR2 Barbados			3738FR2 orange glow	
3268FR2 honey suckle	3860FR2 silver shadow			3739FR2 blue glow	
3270FR2 violet	3861FR2 Arabian pearl			3740FR2 purple glow	
3272FR2 plum	3866FR2 eternity			3741FR2 yellow glow	
3847FR2 golden saffron	3872FR2 volcanic ash			3742FR2 green glow	
3881FR2 green wellness	3874FR2 walnut			3743FR2 red glow	
	3883FR2 moonstone				
	3885FR2 spring buds				
	3889FR2 cinder				
	3890FR2 oat				
	3891FR2 sage				





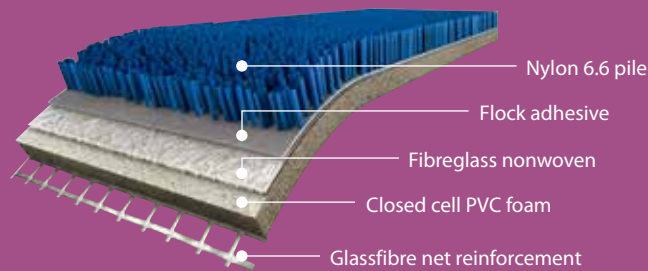
# flotex® FR

Flotex FR is a unique, textile, flocked floor covering, combining the cleaning properties and durability of a resilient flooring with the comfort, slip resistance and acoustic properties usually associated with textiles.

- High definition print offers you complete freedom of design
- Bespoke design service
- Lightweight approximately 1225 gram/m²
- Easy to clean
- Impervious backing makes it suitable for wet cleaning
- Excellent acoustic properties up to 22 dB
- Slip resistance > 0.30
- Durable construction: using Nylon 6.6
- Dimensionally stable
- Improved indoor air quality (independently proven by Allergy UK)
- Easy to repair any damaged areas
- Ortho-phthalate free
- Cut to size/shape option
- Reaction to fire EN 45545-2 : HL2.

Flotex FR can be digitally printed. Its high definition quality and specialist printing technology allow for large endless pattern repeats and vivid lifelike colours. This creates a new dimension for Flotex FR and provides ultimate design flexibility for rail environments.

## Flotex FR construction

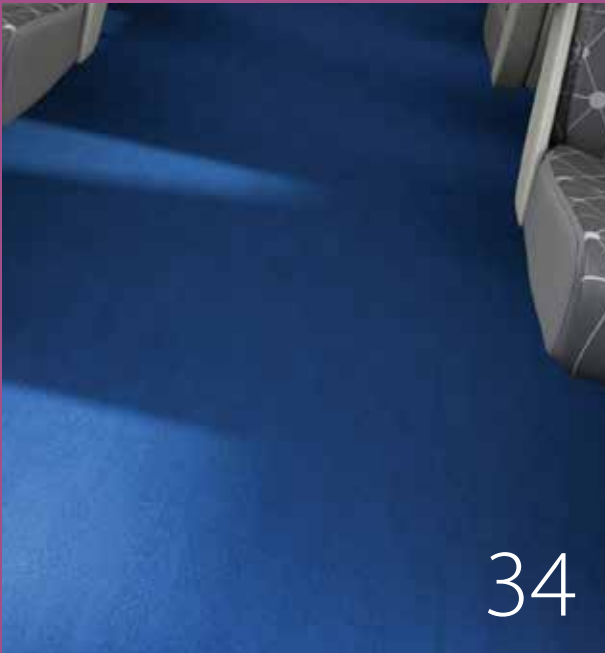


*Please ensure that 'FR' is clearly noted on all orders.*

# FLOCKED FLOORING

## flotex® colour FR

Flotex Colour FR is a collection of four designs (Metro, Penang, Calgary and Canyon) which together form a rhapsody of colour across a broad spectrum.



## flotex® vision FR

Flotex Vision FR offers an infinite number of design options ranging from abstracts with an intricate colour spectrum to realistic images of natural materials.





# flotex® colour FR

A collection of four semi plain designs. The full colour palette can be viewed on pages 38 and 39.

## Metro FR

Metro FR is a versatile semi-plain floor design which covers a wide and modern colour bank. The understated pattern conveys texture without definite form, creating an authentic feel that is unique to Flotex flooring.

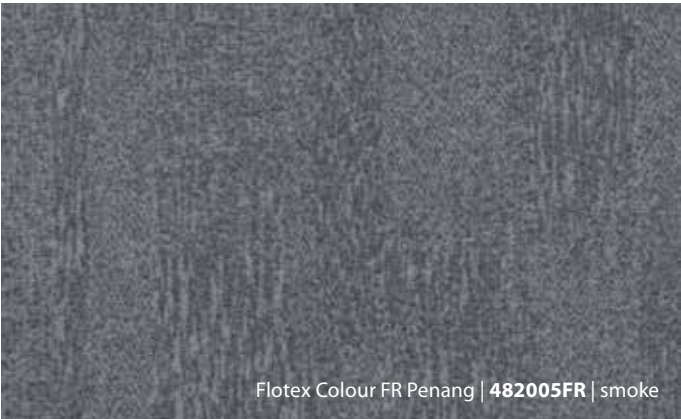
Available in 35 colourways



## Penang FR

Flotex Penang FR offers a stunning look for any modern environment. It creates a subtle linear effect and comes in a range of rich modern shades.

Available in 21 colourways



## Calgary FR

Flotex Calgary FR offers a wide colour choice in a soft, natural design that works well in larger areas. The pattern can be easily combined with complementary Flotex or resilient ranges and is the perfect choice for application areas that require a muted ambience.

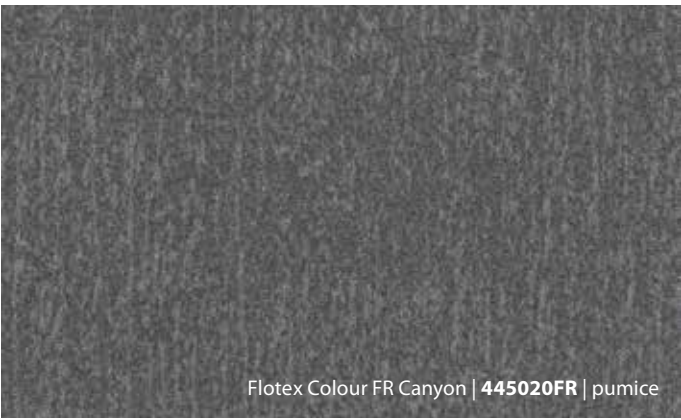
Available in 22 colourways



## Canyon FR

*NEW* Flotex Canyon FR is a heavily grained semi-plain inspired by natural earth and rock. It has a distinctive strong texture with a medium contrast.

Available in 12 colourways



# flotex® vision FR

With over 500 individual items to choose from, plus the option to re-colour several designs, Flotex Vision FR is best viewed on our digital library ([www.forbo-flooring.com/flotexvision](http://www.forbo-flooring.com/flotexvision)) which is continuously updated. The designs fall into six broad categories of floral, image, lines, naturals, pattern and shape. High definition digital print designs that create superior textures and almost 3D like aesthetics.

## Floral FR

A selection of eight floral designs, ranging from abstract, graphic flower motifs to romantic images of roses and butterflies. Each of the eight design types in this category is available in a variety of colourways.

Available in 118 references



## Image FR

This design category contains a wide variety of photographic images that have been transformed into interesting and unique floors. Grass, leaves, water drops, buttons or zebra skin are just some of the possibilities amongst the wide range of images.

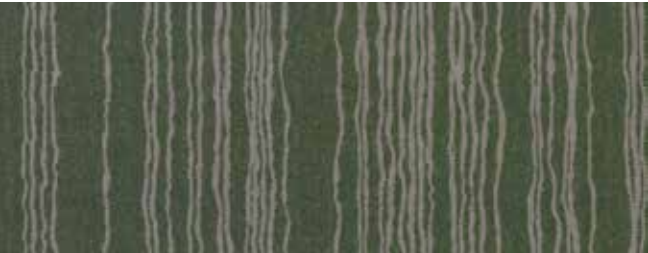
Available in 34 references



## Lines FR

Eight linear/stripe designs, each with their own characteristics, ranging from muted and sophisticated colourways to very complex and multi-colour.

Available in 151 references



## Naturals FR

This collection offers photorealistic images of natural materials such as wood, stone, ceramics or cork floors. The design technology creates amazingly realistic floors but with the added benefit of improved acoustics, slip resistance and reduced maintenance costs.

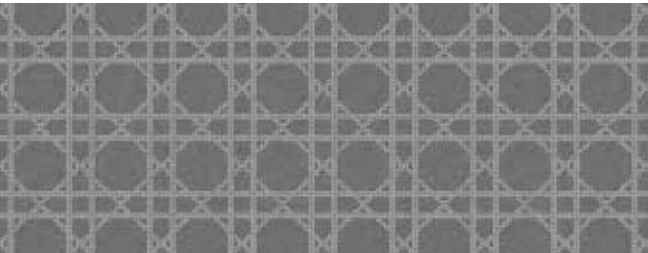
Available in 57 references



## Pattern FR

The intricate play of networks and patterns creates a textured, non-directional visual. Each design in this category is available in a number of colourways.

Available in 148 references



## Shape FR

A collection of organic shapes and motifs delivering beautiful all-over patterns, including both contemporary and traditional designs.

Available in 126 references



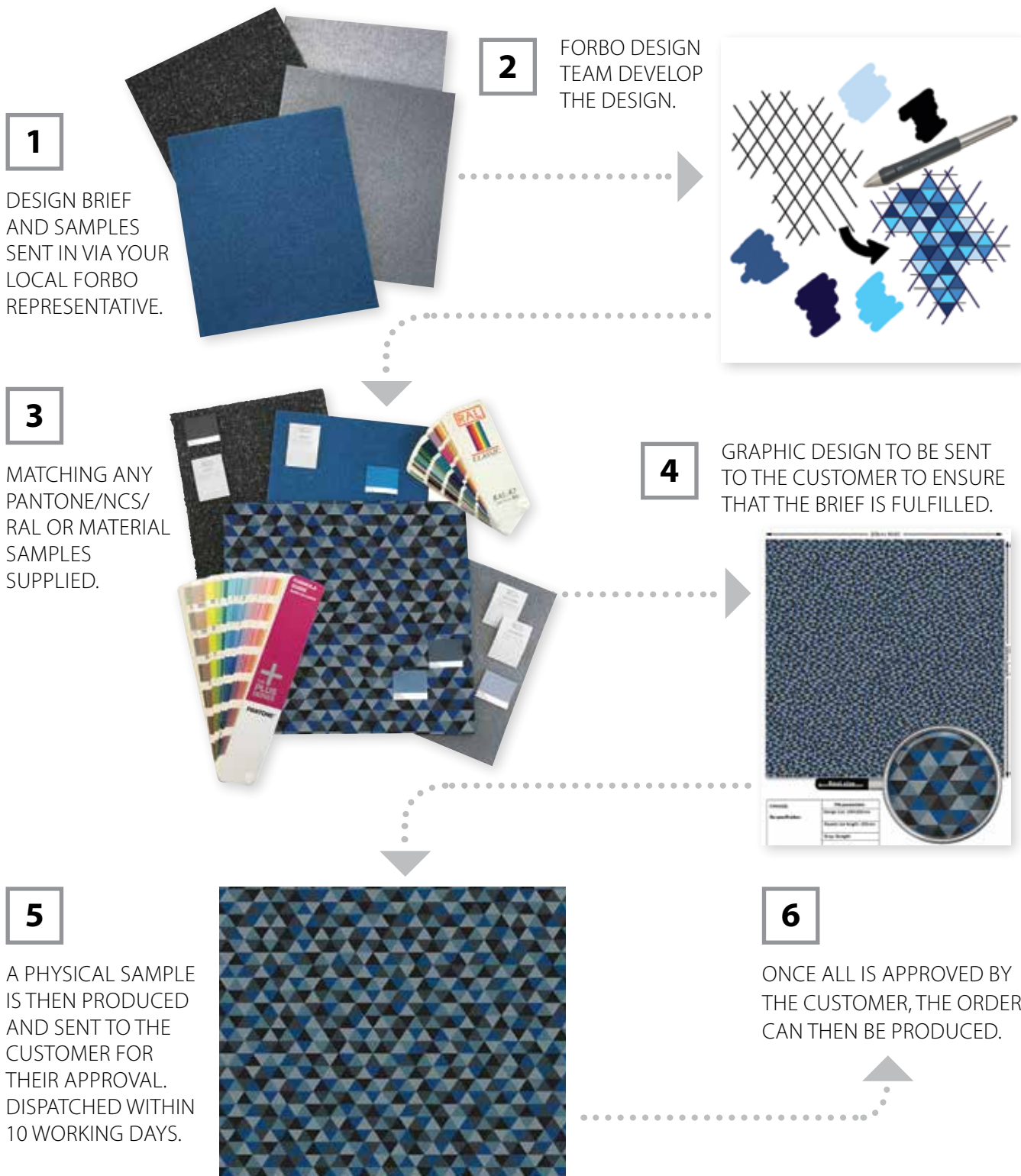


# FLOTEX FR – **CUSTOM DESIGN SERVICE**

Create your own masterpiece using our custom design service alongside our high definition printing technology. Our experienced designers can help at any stage in the design process, depending on what involvement you require.

If you are looking for design ideas, re-colouration of existing designs or help with the development of a unique design that works perfectly with your rail interior design scheme, then we have the resource to help. Alternatively, you can choose from over 500 existing references in our Colour and Vision collections.

## STEPS IN THE **CUSTOM DESIGN PROCESS:**



# FLOTEX FR OFFERS REAL **DESIGN FREEDOM**



flotex® colour FR

metro FR | penang FR | calgary FR | penang FR



Description	Flocked flooring	
Dimensions	EN-ISO 24341	Roll width 2m Roll length ≤ 30m
Total thickness	ISO 1765	3.3mm
Collection size	90	
Area of use	Heavy Use	
Impact noise reduction	EN ISO 717-2	ΔLw = ≥ 22 dB
Tested flammability standard	EN 45545-2	HL2*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	< 2 kV
Thermal resistance	EN 12667	0.04 m²K/W

*\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing transport@forbo.com*

Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: transport@forbo.com

Full technical specifications are available on page 70.



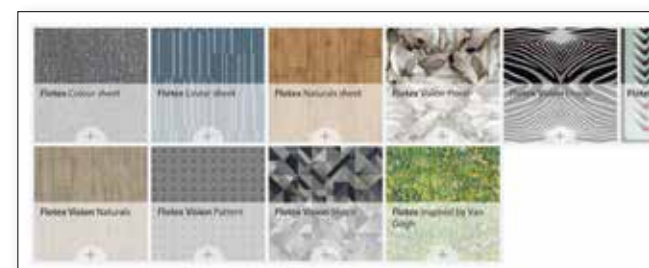
# flotex® vision FR

**GO ONLINE** AND DISCOVER  
OVER **500 DESIGNS** FOR YOUR FLOOR

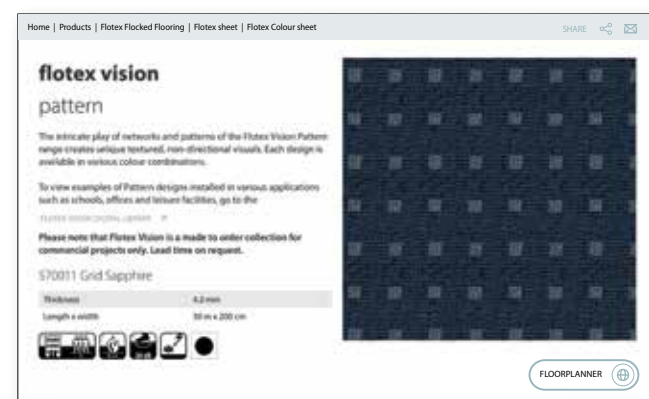
## STEPS IN THE FLOTEX VISION FR DESIGN PROCESS:

**1** ACCESS:  
[www.forbo-flooring.com/flotexvision](http://www.forbo-flooring.com/flotexvision)

**2** CHOOSE THE DESIGN CATEGORY  
(E.G. FLOTEX VISION PATTERN SHEET)



**4** CHOOSE THE REFERENCE  
THAT YOU PREFER  
(E.G. FLOTEX VISION – S570011 GRID)



**3** CLICK ON THE '**PRODUCT**' TAB TO SEE ALL THE  
DIFFERENT DESIGN AND COLOURWAY OPTIONS  
AVAILABLE IN THAT DESIGN CATEGORY.



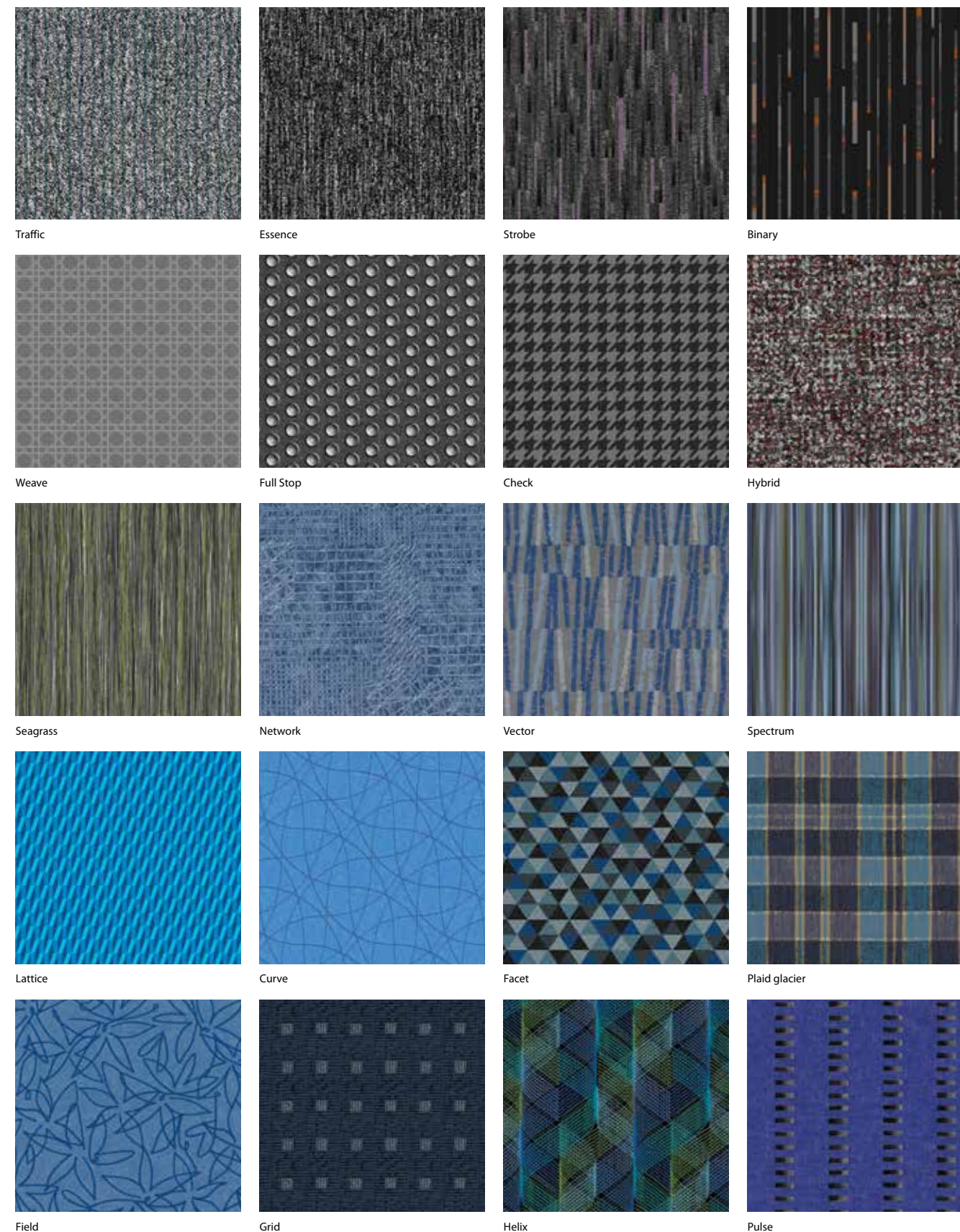
**5** CLICK ON THE '**FLOORPLANNER**' LINK  
UNDERNEATH THE SAMPLE IMAGE – HERE YOU  
CAN VIEW THAT REFERENCE IN A ROOM SETTING.  
YOU CAN CHANGE THE ROOM SCENE AND  
THE FLOORING PRODUCT/DESIGN/COLOR IN  
ORDER TO GET A GOOD FEEL FOR HOW THAT  
REFERENCE LOOKS IN A REAL VEHICLE.



**6** IF YOU SEE A DESIGN THAT YOU LIKE BUT  
THE COLOURWAY OPTIONS DON'T WORK  
FOR YOUR PROJECT THEN CONTACT US  
AT [TRANSPORT@FORBO.COM](mailto:TRANSPORT@FORBO.COM) TO  
ENQUIRE IF IT WOULD BE POSSIBLE TO  
RE-COLOUR THAT PARTICULAR DESIGN.

ALTERNATIVELY YOU CAN LOOK TO CREATE  
SOMETHING COMPLETELY BESPOKE.

Shown here is only a selection of the many different designs available. Most designs are available in numerous different colourway options. Flotex Vision is best viewed on our 'up-to-date' digital library: [www.forbo-flooring.com/flotexvision](http://www.forbo-flooring.com/flotexvision)



**All designs are available in multiple colourways**



# THE PROVEN CLEANABILITY OF FLOTEX FR

**With an unbeatable combination of performance attributes, Flotex flocked floor coverings have seen a huge rise in popularity in recent years and are now challenging conventional carpets in all sectors, including the global rail market where demanding conditions require flooring to be subjected to particularly rigorous cleaning regimes in order to maintain appearances.**

Here, we discuss why operators in the rail sector are increasingly specifying flocked floor coverings for their rail vehicle projects, and with reference to recent research, show how the construction of this innovative type of floor covering offers unrivalled cleanability when compared with other textile floor coverings.



## Key performance benefits

Flotex FR, electrostatically flocked floor coverings offer exceptional performance and provide a unique flooring solution, combining properties found in conventional resilient and textile flooring. Like resilient floor coverings, they are safe, hygienic, durable and washable, yet at the same time they offer the warmth, comfort, acoustic characteristics and slip resistance of textile flooring. These properties, together with the availability of fire resistant ranges and a phenomenal choice of aesthetic styling options, make flocked floor coverings an ideal solution for rail interiors.

## Cleanability

The dense surface pile of a flocked floor covering makes it extremely durable, while its upright nylon filaments and impermeable PVC backing means it can be cleaned right down to the base. The nylon pile captures airborne allergens and fine dust, which is easily released with regular use of a standard upright vacuum cleaner. This contributes towards better indoor air quality – indeed Flotex FR is the only textile floor covering for rail to carry the Allergy UK Seal of Approval™.

A recent Cleaning Research International study compared the cleanability of a flocked pile floor covering with a loop pile and cut pile carpet. Identically sized samples were conditioned, weighed and then soiled in accordance with BS EN 1269:1997 following Method B, using 10g of standard soil. They were then reconditioned and reweighed before being vacuumed with an upright cleaner fitted with a brush, a spray extraction, and a contra-rotating brush cleaner. At each stage, when dry, the samples were reconditioned and

weighed to determine how much soil had been removed. The results below clearly demonstrate the superior cleanability of the flocked floor covering which had the least amount of soil remaining after each cycle, with a 77.7% mean of soil removed after the use of a contra-rotating brush cleaner.

## Drying times

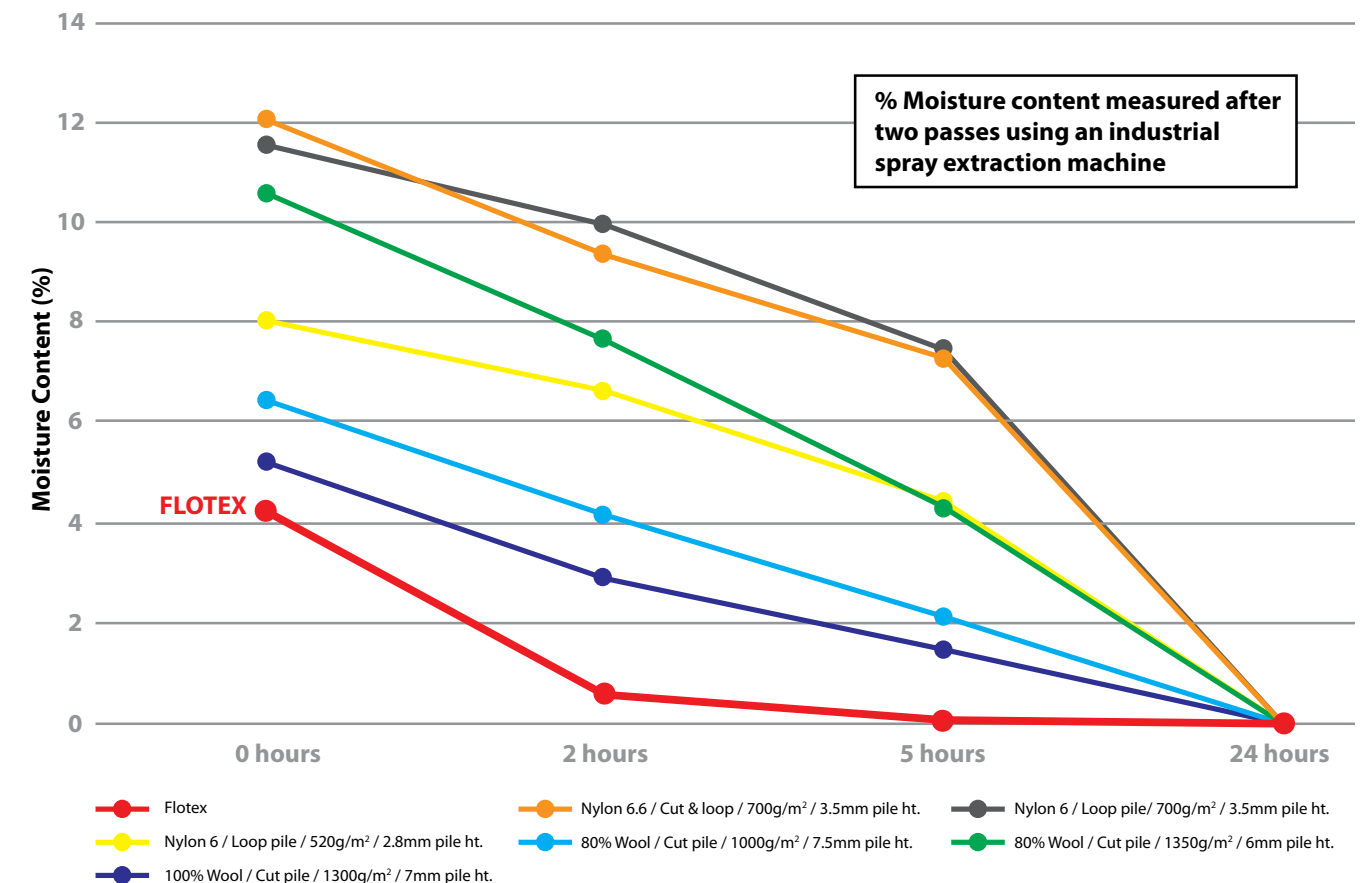
How long it takes for a floor covering to dry will also be of major concern to transport operators keen to minimise turnaround times. The research study also looked specifically at this aspect and tested the drying characteristics of flocked floor coverings alongside six different carpet constructions. Each floor covering was subjected to two passes using an industrial spray extraction machine and the remaining moisture content was measured after various periods of time, to establish how long each type took to dry.

The graph opposite shows that after just two hours, the flocked pile sample was substantially drier than all the other constructions of carpet, with only 0.57% moisture remaining, and after five hours, the pile was almost completely dry whereas other samples still retained significant amounts of moisture.

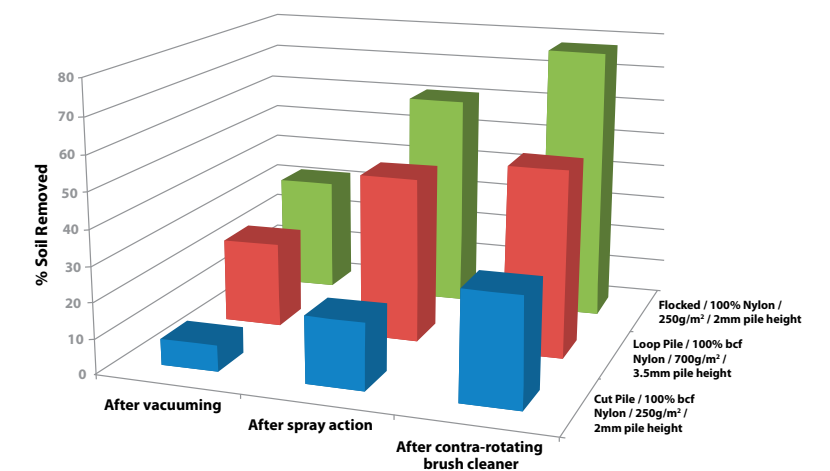
## A superior solution for transport applications

Flocked floor coverings are clearly different to any other carpets on the market in terms of cleanability alone. Add in their more rapid drying times, their durability, allergy benefits, acoustic and slip resistant properties, fantastic styling options and the availability of an FR collection (reaction to fire EN 45545-2 : HL2), and it's clear to see why this innovative floor covering is really going places in the rail sector.

## DRYING CHARACTERISTICS OF CARPETS



## % SOIL REMOVAL – FLOCKED v CUT PILE/LOOP PILE CARPETS



## Cleaning & Maintenance Guide

You can find our latest rail specific cleaning and maintenance guides for the full portfolio of floor, wall and ceiling coverings on our website: [www.forbo-flooring.com/transport](http://www.forbo-flooring.com/transport)

Alternatively you can scan the QR code to view and download the Rail Flotex FR Cleaning Video.



## Cleanability of flocked pile compared to other construction of carpets.

Source: Cleaning Research International





# tessera® FR

Tessera FR tufted carpets are renowned for their aesthetic styling and outstanding performance, even in the most demanding of heavy traffic environments. Tessera FR collection includes contemporary and classic styles to enhance a wide variety of rail vehicle interiors.

Tessera FR is a collection of attractive, hardwearing carpets, offered in various pile constructions and textures, all designed to deliver specific aesthetic and performance benefits. The installation of carpet in a rail vehicle adds significant warmth, comfort and acoustic benefits.

- Durability and appearance retention, made from 100% nylon
- Flexibility for colourisation
- Slip resistance
- Reaction to fire EN 45545-2 : HL2
- Cut to size/shape option
- Available with Pro-Fit backing for quicker installation

*Please ensure that 'FR' is clearly noted on all orders.*



## BROADLOOM CARPET

### tessera® alignment FR

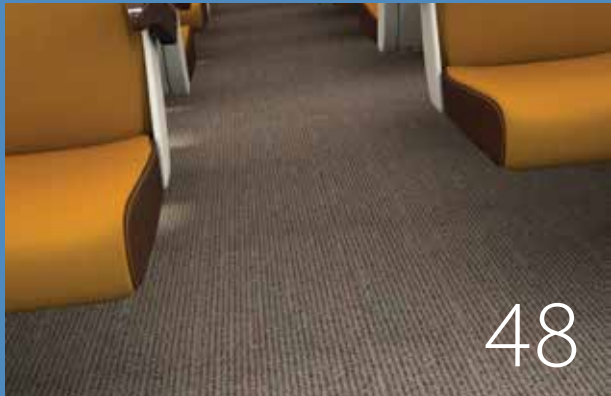
Sophisticated and cleverly textured to complement the most contemporary interior design



46

### tessera® helix FR

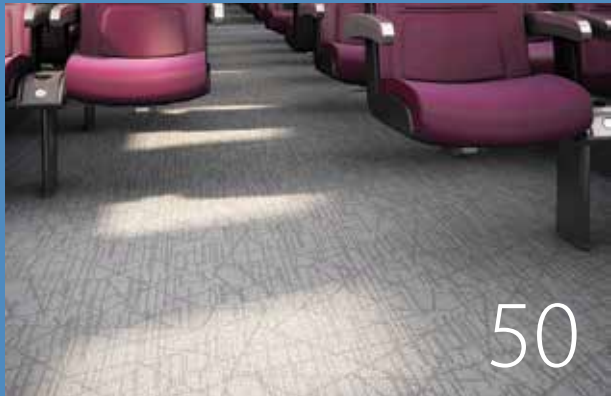
An understated linear design, combining rich texture and visual appeal



48

### tessera® nexus FR

Merging a metallic web overlay with a sophisticated striated ground, Tessera Nexus creates a network of connections




50



# tessera® alignment FR

Sophisticated and cleverly textured to complement the most contemporary rail interior design. Tessera Alignment FR is available in 24 colours.




219FR | equinox

LRV 24




218FR | luminosity

LRV 22




220FR | essence

LRV 17



222FR | Galileo

LRV 11



213FR | astral

LRV 11



215FR | stellar

LRV 6




209FR | celcius

LRV 8



221FR | gravity

LRV 10




223FR | solstice

LRV 5




210FR | climate

LRV 8



214FR | nocturn

LRV 4




217FR | meteorite

LRV 3




204FR | horizon

LRV 4




203FR | cyclone

LRV 2




239FR | apollo

LRV 2




238FR | terrestrial

LRV 2




237FR | sunspot

LRV 2




202FR | elixir

LRV 4



208FR | nucleus

LRV 2



244FR | firestar

LRV 2



242FR | hologram

LRV 2




241FR | north star

LRV 2



243FR | cosmic ray

LRV 2



240FR | wavelength

LRV 2

Description	Tufted multi-height cut and loop pile carpet	
Dimensions	EN-ISO 24341	Roll width 185cm Roll length ≤ 27,5m
Total thickness	ISO 1765	6.0mm ± 10%
Pile weight	ISO 8543	730 gram/m²
Yarn	100% polyamide	
Collection size	24	
Area of use	Heavy Use	
Impact noise reduction	EN ISO 717-2	ΔLw = 25 dB
Tested flammability standard	EN 45545-2	HL2*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	< 2 kV

\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)

Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)

Full technical specifications are available on page 71.





# tessera<sup>®</sup> helix FR

An understated linear design, combining rich texture and visual appeal. Tessera Helix FR is available in 13 colours.



807FR | glaze

LRV 14



804FR | taupe

LRV 14



806FR | mortar

LRV 12



808FR | silica

LRV 12



809FR | copper

LRV 10



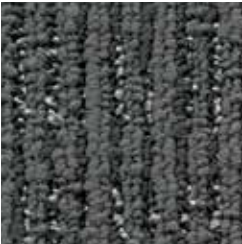
803FR | clay

LRV 9



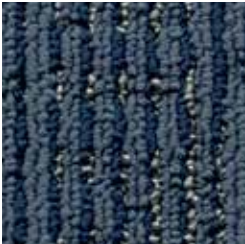
801FR | glass

LRV 12



802FR | oxide

LRV 9



812FR | marble

LRV 7



811FR | cobalt

LRV 5



810FR | carbon

LRV 5



813FR | zircon

LRV 10

Description	Tufted multi-height loop pile carpet	
Dimensions	EN-ISO 24341	Roll width 185cm Roll length ≤ 27.5m
Total thickness	ISO 1765	6.0mm ± 10%
Pile weight	ISO 8543	740 gram/m²
Yarn	100% polyamide	
Collection size	13	
Area of use	Heavy Use	
Impact noise reduction	EN ISO 717-2	ΔLw = 25 dB
Tested flammability standard	EN 45545-2	HL2*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	< 2 kV

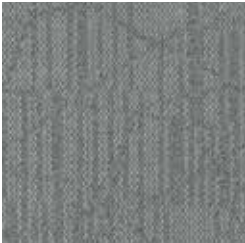
*\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)*  
Please note: Digital representations may vary from actual product.  
Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)  
Full technical specifications are available on page 71.





# tessera<sup>®</sup> nexus FR

Merging a metallic web overlay with a sophisticated striated ground, Tessera Nexus FR creates a network of connections in 9 contemporary colourways.



3500FR | agenda LRV 21



3503FR | engage LRV 19



3504FR | review LRV 12



3501FR | milestone LRV 13



3507FR | share LRV 12



3506FR | feedback LRV 11



3502FR | co-lab LRV 9



3508FR | groupchat LRV 7



3505FR | refresh LRV 7

Description	Tufted multi-height loop pile carpet	
Dimensions	EN-ISO 24341	Roll width 185cm Roll length ≤ 27,5m
Total thickness	ISO 1765	5.4mm ± 10%
Pile weight	ISO 8543	515 gram/m²
Yarn	100% Invista Antron® Lumena polyamide 6.6	
Collection size	9	
Area of use	Heavy Use	
Impact noise reduction	EN ISO 717-2	ΔLw = 25 dB
Tested flammability standard	EN 45545-2	HL2*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	< 2 kV

*\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)*

Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)  
Full technical specifications are available on page 71.





## coral® move FR

**Designed specifically for rail interiors Coral Move FR is an exceptionally versatile, premium cut pile carpet solution offering extensive design possibilities and colourways to complement a wide range of interior design schemes.**

Coral Move FR is a luxurious made-to-order floor covering, manufactured from 100% regenerated Econyl yarn, that offers the aesthetic styling, durability and longlasting appearance retention required for heavily trafficked carriage interiors.

Each Coral Move FR carpet is bespoke and our dedicated design team will work with you to deliver the desired aesthetic (design and colour), on a project by project basis.

- **Extensive customisation possibilities, including high definition digital printing (Coral Move Vision FR)**
- **Premium cut-pile carpet specification achieves luxurious ambience and underfoot comfort**
- **Durability and appearance retention due to 100% nylon construction**
- **100% of Coral Move FR yarn is Econyl® regenerated solution dyed polyamide**
- **Natural latex backing from rapidly renewable source**
- **Carpet pile density delivers slip resistance and outstanding acoustic properties**
- **Ease of maintenance due to open cut pile construction**
- **Reaction to fire  
EN 45545-2: HL3**
- **Available with Pro-Fit backing for quicker installation**



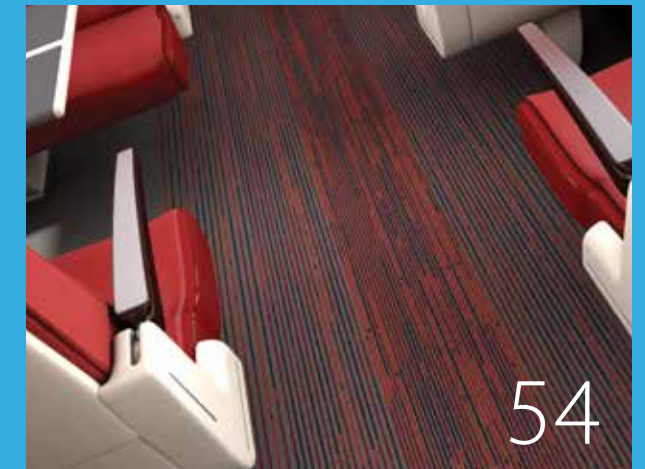
*Please ensure that 'FR' is clearly noted on all orders.*

**ECONYL®**  
Made with 100% Regenerated Nylon

## BROADLOOM CARPET

### coral® move FR

Luxurious cut pile carpets are manufactured to a bespoke specification combining one of seven attractive and practical soil hiding designs with up to six colours drawn from an extensive palette of 170 shades



54

### coral® move vision FR

Offering total design freedom, this luxurious cut pile carpet is digitally printed with a virtually limitless number of aesthetic styles, ranging from abstract designs with intricate colour combinations to realistic representations of natural materials



56



# coral<sup>®</sup> move FR

## DESIGN FLEXIBILITY

Coral Move FR carpet allows for numerous tufting design styles which can give very different overall aesthetics. Six different design styles are shown here, but these are only suggestions.

Each Coral Move FR carpet is bespoke and our dedicated design team will work with you to match carpet design and colour requirements on an individual project by project basis.

There are 140+ colourways in the standard yarn collection, but special colours can be matched to RAL/Pantone references as required.

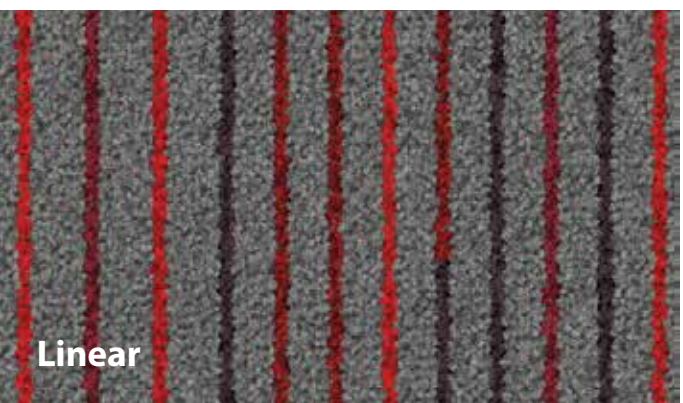
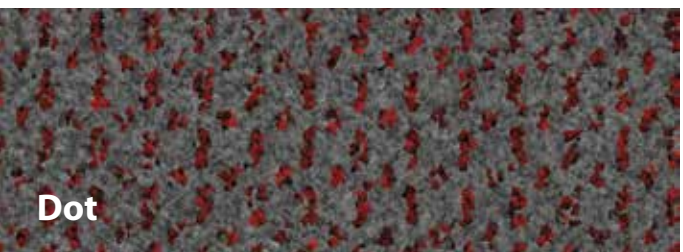
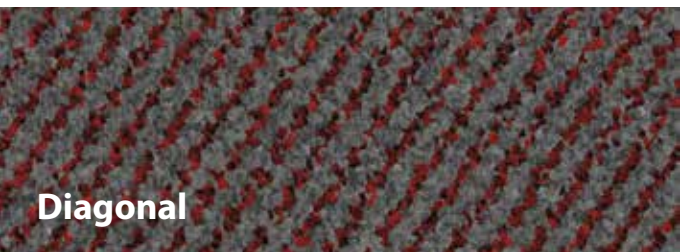
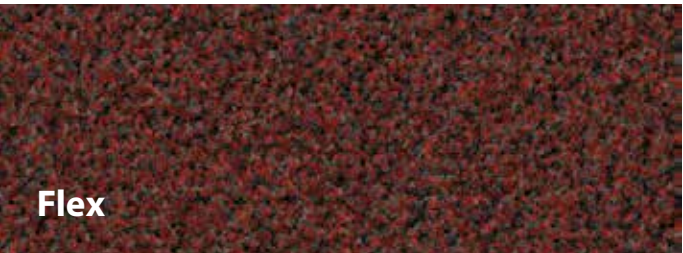
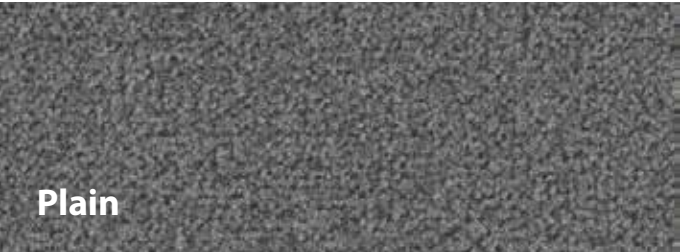


Description	Tufted cut pile carpet	
Dimensions	EN-ISO 24341	Roll width 185cm Roll length ≤ 27.5m
Total thickness	ISO 1765	8.0mm ± 10%
Pile weight	ISO 8543	750 gram/m²
Yarn	100% polyamide BCF ECONYL®	
Area of use	Heavy Use	
Impact noise reduction	EN ISO 717-2	ΔLw = ≥ 28 dB
Tested flammability standard	EN 45545-2	HL3*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	< 2 kV
Thermal resistance	ISO 8302	0.108 m²K/W

\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)

Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)  
Full technical specifications are available on page 72.

### Suggested design styles

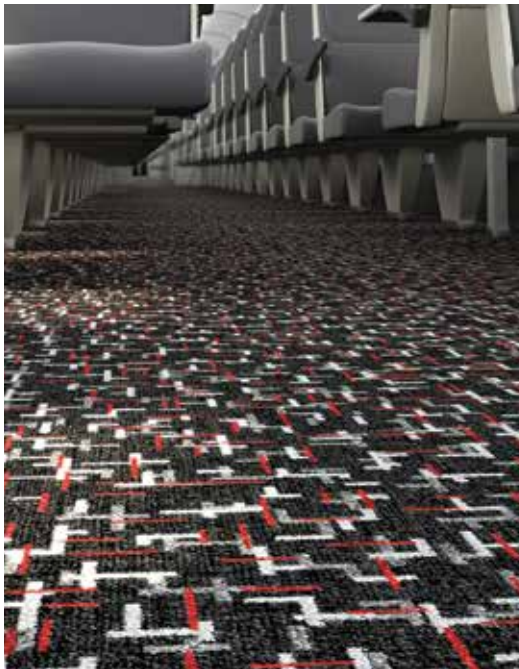
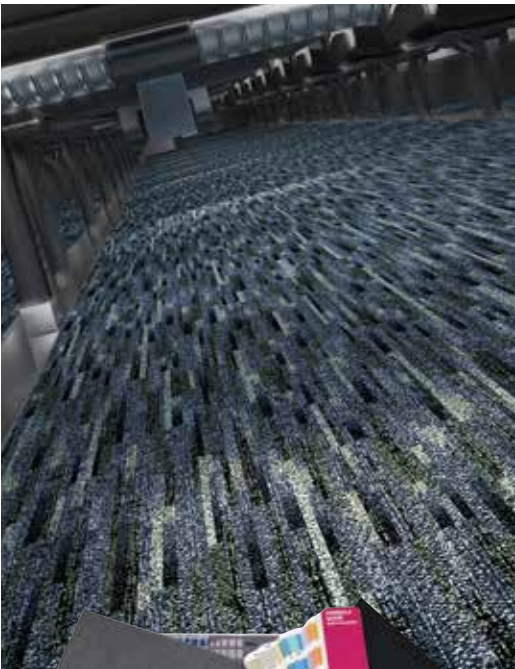
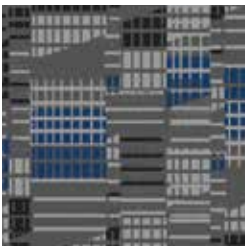
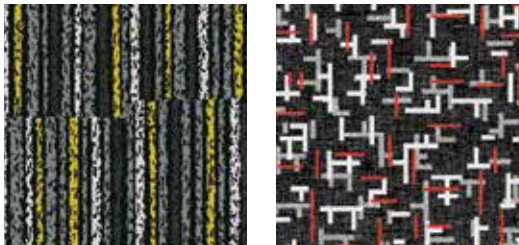




# coral<sup>®</sup> move vision FR

## DESIGN FREEDOM

Whilst offering the same technical characteristics as Coral Move FR, Coral Move Vision FR uses a digital printing process. This allows for far greater customisation possibilities in terms of design and colour.



**ECONYL<sup>®</sup>**  
Made with 100% Regenerated Nylon

Description	Tufted cut pile carpet	
Dimensions	EN-ISO 24341	Roll width 185cm Roll length ≤ 27.5m
Total thickness	ISO 1765	8.0mm ± 10%
Pile weight	ISO 8543	750 gram/m <sup>2</sup>
Yarn	100% polyamide BCF ECONYL <sup>®</sup>	
Area of use	Heavy Use	
Impact noise reduction	EN-ISO 717-2	ΔLw = 28 dB
Tested flammability standard	EN 45545-2	HL3*
Slip resistance	EN 13893	μ ≥ 0.30
Body voltage	ISO 6356	< 2 kV
Thermal resistance	ISO 8302	0.108 m <sup>2</sup> K/W

\*EN45545-2 testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)  
Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)  
Full technical specifications are available on page 72.

The digital printing process makes non-linear type designs possible, is perfect for more complicated designs or when there are many different colourways within a design. Pantone and RAL colours can be matched.

You can work with our dedicated design team on an individual project basis to ensure that the resulting Coral Move Vision FR carpet meets your precise design and colour requirements.



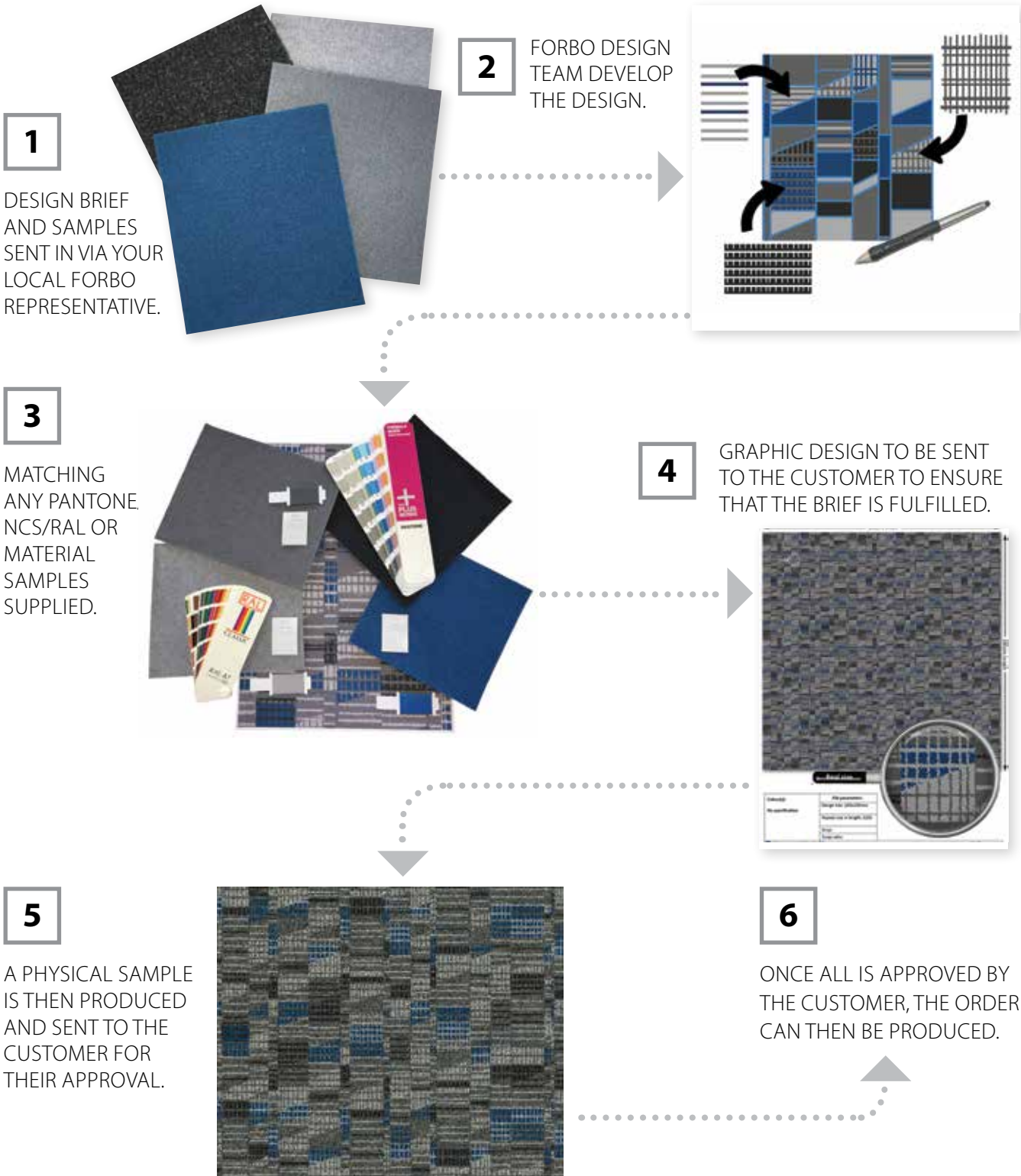


# CORAL MOVE VISION FR – CUSTOM DESIGN SERVICE

Create your own masterpiece using our custom design service alongside our digital printing technology. Our experienced designers can help at any stage in the design process, depending on what involvement you require.

If you are looking for design ideas, re-colouration of existing designs or help with the development of a unique design that works perfectly with your rail interior design scheme, then we have the resource to help.

## STEPS IN THE CUSTOM DESIGN PROCESS:





The robust, hard wearing properties of Fleet FR wall and ceiling covering, meets the demands of high traffic rail environments that require long lasting performance and ease of maintenance.

- Durable, high quality polyester fibres
- EN45545-2 (R1) : HL2\*
- Reduces ambient noise, making it ideal for use in places that require a tranquil atmosphere and a minimum of noise distraction – sound absorption 4000 Hz :  $\alpha_w = 0.25$
- Lightweight at 550g/m<sup>2</sup>\*\*
- Self-adhesive backing allows for quick and easy installation, saving time and money
- Custom colouration can match NCS/RAL colours, to complement any design scheme

***Please ensure that 'FR' is clearly noted on all orders.***

\*(EN45545-2 testing has been carried out on a variety of different substrates. For details on all specific test results please email Forbo at [transport@forbo.com](mailto:transport@forbo.com)

\*\*This weight includes adhesive.



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Fleet FR | 7200282FR | light grey

Fleet FR | 7200286FR | red



# fleet® FR

Fleet FR is available in the 8 colourways as shown below or can be manufactured in custom colourways to match any NCS/RAL reference.

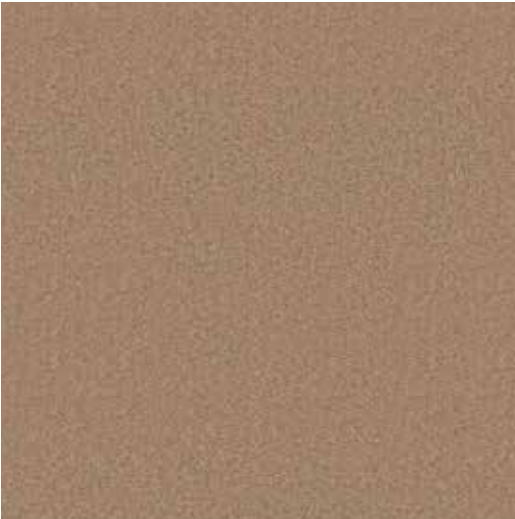


Fleet FR | 7200282FR | light grey

Fleet FR | 7200213FR | beige



7200283FR | cream LRV 34



7200213FR | beige LRV 20



7200282FR | light grey LRV 31



7200208FR | olive LRV 11



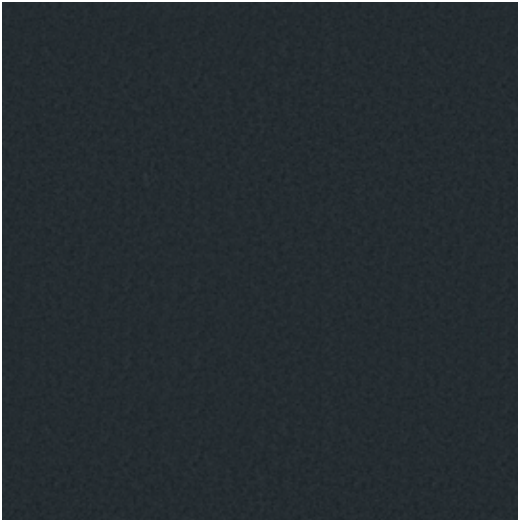
7200286FR | red LRV 6



7200201FR | slate LRV 11



7200227FR | violet LRV 5



7200202FR | mercury LRV 7

Description		Wall and ceiling covering
Dimensions		Roll width 2m Roll length 251m
Thickness (under 0.1 kPa)		3mm
Weight with adhesive		550g/m²**
Composition		Polyester fibres + PSA rubber based adhesive
Peeling strength (N/mm)	NF EN 1372	≥ 0.5
Resistance to pilling (Lisson Test)	NF EN ISO 12951	3
Collection size		8
Impact noise reduction	EN ISO 717-2	ΔLw = 17 dB
Fire test	EN 45545-2 (R1)	HL2*

*\*EN45545-2 (R1) testing has been carried out on various different substrates. This is the highest achieved result. Please ask for a full overview of specific results on different substrates by emailing [transport@forbo.com](mailto:transport@forbo.com)*  
*\*\*This weight includes adhesive.*  
Please note: Digital representations may vary from actual product. Please order a physical sample to see the full effect by emailing: [transport@forbo.com](mailto:transport@forbo.com)  
Full technical specifications are available on page 73.



# PRO-FIT – THE INNOVATIVE INSTALLATION SYSTEM

Pro-Fit is an adhesive free installation system, improving efficiencies in time, cost and operation throughout the life of the vehicle. It comprises an integral velour backing to the floor covering and a special fire retardant hook tape adhered to the sub-floor.



The Pro-Fit system is available for use with:

- **Coral FR entrance systems**  
(Classic FR/Brush FR/Welcome FR)
- **Coral Move FR/Coral Move Vision FR broadloom carpet**
- **Tessera FR broadloom carpet**  
(Nexus FR/Helix FR/Alignment FR)

Customers who use this system experience far shorter first installation times (normal adhesive installations require 24 hours drying time). For renewals the advantages are even greater as it is simply 'pull up the old and drop down the new floor covering' that is required. No glue removal, no difficult sanding, no drying time.

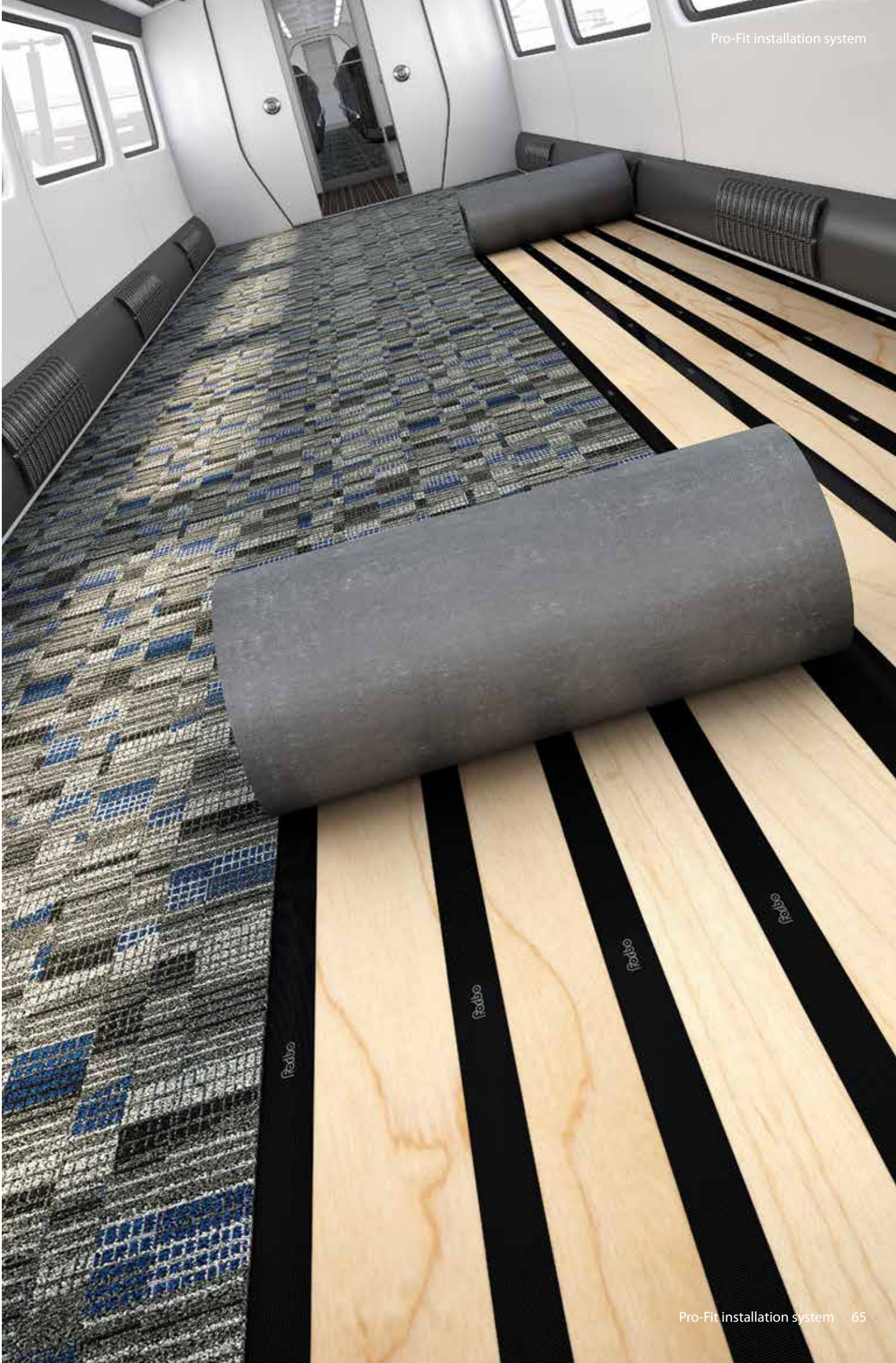
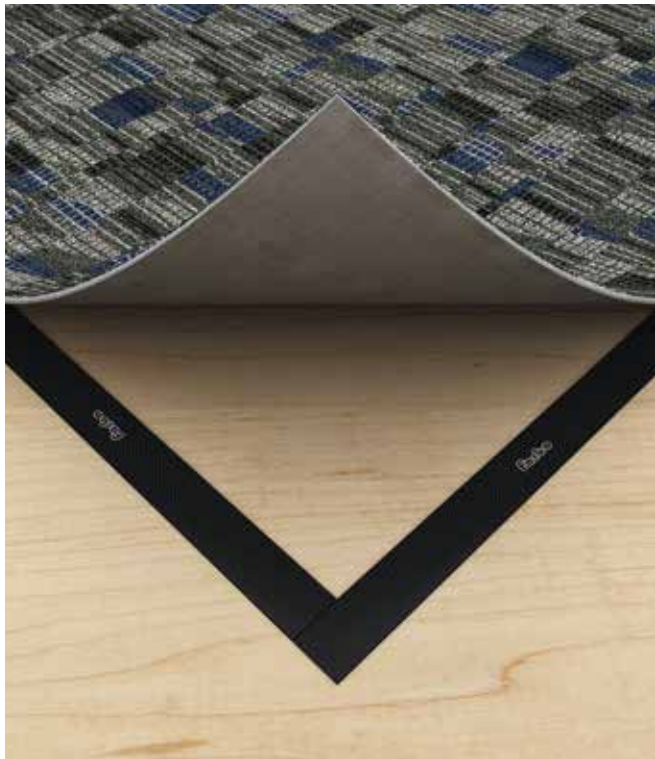
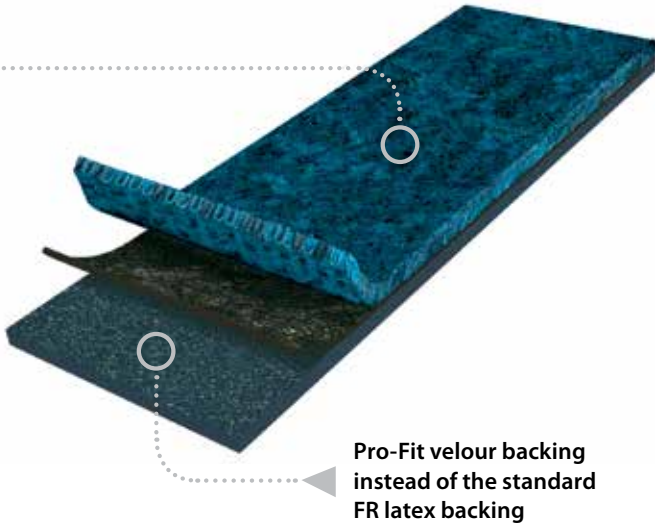
These advantages over traditional fully bonded adhesive systems mean cost savings for train operators as a result of:

- **Quicker and easier installation and replacement**
- **No need to wait for the adhesive to dry**
- **No waiting time before the carpet can be walked on**
- **Immediate use of the train after installation**

**Please ensure that 'FR Pro-Fit' is clearly noted on all orders.**

**For example 'Coral Classic 4751 FR Pro-Fit'. The Pro-Fit velour backing cannot be added to latex backed material after production.**

Detailed Pro-Fit installation instructions are available on our website at: [www.forbo-flooring.com/transport](http://www.forbo-flooring.com/transport)





## BESPOKE DESIGN SERVICE

The floor covering is a crucial element of any rail interior design; it creates the first impression and sets the tone. Whether you are looking to recreate a logo or design feature, match that perfect colour for your interior or visualise an entire rail flooring design scheme, we have the knowledge and technology to help and guide you every step of the way.

Our design team can offer support, guidance and advice based on their experience of rail design providing step by step assistance through the creative process from initial brief to approved samples.



### coral® FR

Custom colourways are an option for each of the Coral FR entrance flooring system products.

### coral® logo FR

Inset logos can be designed to match your requirements.

### flotex® vision FR

Whether you are looking for a new colourway in an existing design or a bespoke design, our design team can help.

### marmoleum® FR<sup>2</sup> marmoleum® striato FR

Re-colour any of the existing Marmoleum FR<sup>2</sup>/Striato FR designs.

### coral® move FR

Each Coral Move FR carpet is bespoke. Different tufting styles give very different overall aesthetics.

### coral® move vision FR

The digital printing process allows for extensive customisation possibilities in terms of design and colour.

### tessera® FR

Re-colour any of the Tessera FR designs to tie into your interior design colour scheme.

### fleet® FR

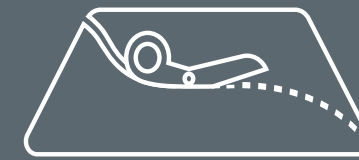
Custom colouration (matching to Pantone/RAL) is available for the wall and ceiling, Fleet FR product.

**For all enquiries please contact your local Transport Key Account Manager to find out more or email: [transport@forbo.com](mailto:transport@forbo.com)**

## SERVICES

In addition to the breadth of our rail portfolio combined with the flexibility in creating custom design and colour solutions tailored for your project, we realise that service is equally important in ensuring optimal efficiencies in time and cost management.

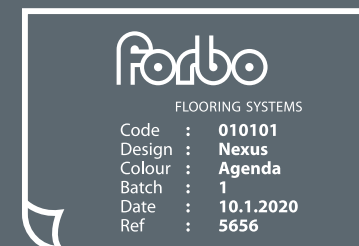
Forbo offer a range of services for both new build and refurbishment projects that ensure maximum efficiencies from delivery to storage, from labelling to packaging and from installation to operation.



### CUT TO SHAPE

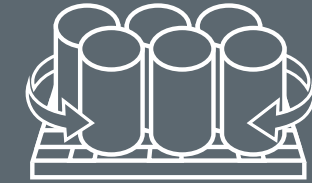
**Cutting to size and shape** – In order to save time and cost during installation, we are able to cut to specific roll lengths or to detailed floor plans, so that material can be dropped easily into place.

- Any geometry (including steps)
- Highly accurate in-house cutting technology
- Drawing plans can be imported for cutting e.g. DWG, DXF files



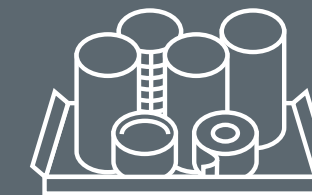
### BESPOKE LABELLING

**Bespoke labelling** - We offer a fully customized labelling service for all products tailored to your specifications, whether that be, part numbers, project references or barcodes for example. We'll agree with you what information is required and will then create something unique for your project.



### PACKAGING

**Packaging** – Whether you need all deliveries on a specific pallet size or type, specific boxes, crates, or custom wrapping, Forbo will make sure that the packaging is to your specification and satisfaction.



### MATERIAL SCHEDULING

**Material scheduling** – Appreciating that the flooring specifications and requirements for each carriage or car-set can vary, we can help by grouping together all materials specific to your build program ensuring the right materials find the right location. For example, this could include, the entrance matting for the vestibule area along with the saloon floor covering and any accessories such as Pro-Fit tape, all pre-cut, labelled and packaged as a kit.














### JUST IN TIME LOGISTICS

**Just in time logistics** – We understand that customers do not wish to be burdened with huge stocks of floor coverings for the duration of the project. Working to an agreed schedule of requirements Forbo will ensure that only the products required are delivered in accordance with the your program.

Whatever your requirements are, we will work with you to ensure that the project runs smoothly and returns the maximum efficiencies in time and cost.



TECHNICAL SPECIFICATIONS – CORAL FR














Technical specifications						
Coral meets the requirements of EN 1307						
		Coral classic FR	Coral brush FR	Coral duo FR	Coral welcome FR	
	Total thickness	ISO 1765	8.5 mm	9 mm	9 mm	8 mm
	Roll width	EN-ISO 24341	185 cm	185 cm	185 cm	190 cm
	Roll length	EN-ISO 24341	27.5 m	27.5 m	27.5 m	27.5 m
	Total weight	ISO 8543	3400 gram/m²	3400 g/m²	3000 g/m²	2200 g/m²
	Pile installation weight	ISO 8543	865 gram/m²	920 g/m²	670 g/m²	780 g/m²
	Pile thickness	ISO 1766	6.0 mm	6.0 mm	6.0 mm	5.0 mm
	Pile material		100% polyamide-BCF solution dyed	100% regenerated Econyl polyamide	100% polyamide of which 66% is regenerated Econyl polyamide	100% regenerated Econyl polyamide
	Light fastness	EN-ISO 105/B02	7-8	> 5	> 5	> 5
	Electrical resistance	ISO 10965	> 10⁹ Ω	> 10⁹ Ω	> 10⁸ Ω	> 10⁹ Ω
	Contact sound insulation	EN-ISO 717-2	Δ Lw = approx 31 dB	Δ Lw = approx 32 dB	Δ Lw = approx 29 dB	Δ Lw = approx 27 dB
	Area of use		Heavy Use	Heavy Use	Heavy Use	Heavy Use
	Tested flammability standards	EN 45545-2	HL2*	HL3*	HL2*	HL3*
		BS6853	1b	1b	1a	
		ASTM E.648 ASTM E.662	Class 1 Pass	Class 1 Pass	Class 1 Pass	
		NF P 92-501 NF F 16-101	M2 F1	M3 F1	M3 F1	
	Slip resistance	EN 13893	μ ≥ 0.30	μ ≥ 0.30	μ ≥ 0.30	μ ≥ 0.30
	Body voltage	ISO 6356	< 2 kV	< 2 kV	< 2 kV	< 2 kV
	Thermal resistance	ISO 8302	0.13 m²K/W	0.093 m²K/W	0.140 m²K/W	0.090 m²K/W

*\*EN45545-2 testing has been carried out on different substrates/adhesives. This is the highest achieving result.  
For a full overview of specific results on aluminium and plywood subfloors please ask.*

*Forbo Flooring Systems does its best to ensure that the contents of these technical documents are accurate at the time of publication.  
However for up to date technical specifications please refer to our website at: [www.forbo-flooring.com/transport](http://www.forbo-flooring.com/transport)*



TECHNICAL SPECIFICATIONS –  
MARMOLEUM FR² & STRIATO FR

Technical specifications		Marmoleum FR²: Concrete FR² Fresco FR²/Real FR²/Vivace FR²	Marmoleum Striato FR
Marmoleum meets the requirements of EN ISO 24011			
	Total thickness	2.5 mm	2.5 mm
	Surface finish	Topshield²	Topshield²
	Roll width	EN-ISO 24341	200 cm
	Roll length	EN-ISO 24341	≤ 32 m
	Total weight	EN-ISO 23997	ca. 2900 g/m²
	Residual indentation <i>Typical value</i>	EN-ISO 24343-1	≤ 0.15 mm -0.08 mm
	Light fastness	ISO 105-B02 method 3a	Method 3a: blue scale minimum 6
	Flexibility	EN-ISO 24344 (EN 435A)	ø 40 mm
	Resistance to chemicals	EN-ISO 26987 (EN423)	Resistant to diluted acids, oils, fats and to the conventional solvents. Not resistant to prolonged exposure to alkalis
	Acoustical impact sound reduction	EN-ISO 717-2	ΔLw: <5 dB
	Reaction to fire	ASTM E648	Class 1
		ASTM E662 flaming	Pass
		ASTM E662 non flaming	Pass
		EN 45545-2	HL3*
	Slip resistance	EN 13893	μ ≥ 0.30
	Body voltage	EN 1815	≤ 2 kV
	Thermal conductivity	EN 12524	0.17 W/m.K













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TECHNICAL SPECIFICATIONS – FLOTEX FR











Technical specifications			Flotex FR
Flotex meets the requirements of EN 1307			Flotex vision FR
	Total thickness	ISO 1765	3.3 mm
	Roll width	EN-ISO 24341	200 cm
	Roll length	EN-ISO 24341	30 m
	Total weight	ISO 8543	1225 g/m²
	Pile installation weight		250 g/m²
	Pile thickness	ISO 1766	Approx 2 mm
	Pile material		100% polyamide
	Dimensional stability	ISO 2551	≤ 0.20%
	Light fastness	EN-ISO 105/B02	≥ 6
	Electrical resistance	ISO 10965	≥ 10⁹ Ω
	Impact noise reduction	EN-ISO 717-2	Δ Lw ≥ 22 dB
	Area of use		Heavy Use
	Tested flammability standards	EN 45545-2	HL2*
		BS6853	1b
		ASTM E.648 ASTM E.662	Class 1 Pass
	Slip resistance	EN 13893	μ ≥ 0.30
	Body voltage	ISO 6356	< 2 kV
	Thermal resistance	EN 12667	0.04 m²K/W

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TECHNICAL SPECIFICATIONS – TESSERA FR

Technical specifications		Tessera nexus FR	Tessera helix FR	Tessera alignment FR
Tessera meets the requirements of EN 1307				
	Total thickness	ISO 1765	5.4 mm	6 mm
	Roll width	EN-ISO 24341	185 cm	185 cm
	Roll length	EN-ISO 24341	27.5 m	27.5 m
	Total weight	ISO 8543	2400 g/m²	3000 g/m²
	Pile installation weight		515 g/m²	740 g/m²
	Pile thickness	ISO 1766	3.2 mm	4 mm
	Pile material		100% polyamide	100% polyamide
	Light fastness	EN-ISO 105/B02	≥ 6	≥ 6
	Electrical resistance	ISO 10965	> 10⁹ Ω	> 10⁹ Ω
	Impact noise reduction	EN-ISO 717-2	Δ Lw = 25 dB	Δ Lw = 25 dB
	Area of use		Heavy Use	Heavy Use
	Tested flammability standards	EN 45545-2	HL2*	HL2*
		BS6853	1b	
		ASTM E.648 ASTM E.662	Class 1 Pass	Class 1 Pass
	Slip resistance	EN 13893	μ ≥ 0.30	μ ≥ 0.30
	Body voltage	ISO 6356	< 2 kV	< 2 kV

*\*EN45545-2 testing has been carried out on different substrates/adhesives. This is the highest achieving result. For a full overview of specific results on aluminium and plywood subfloors please ask.*

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TECHNICAL SPECIFICATIONS –  
CORAL MOVE FR & CORAL MOVE VISION FR











Technical specifications		Coral move FR Coral Move Vision FR	
Coral meets the requirements of EN 1307			
	Total thickness	ISO 1765	8 mm
	Roll width	EN-ISO 24341	185 cm
	Roll length	EN-ISO 24341	27.5 m
	Total weight	ISO 8543	3000 g/m²
	Pile installation weight		750 g/m²
	Pile thickness	ISO 1766	5.5 mm
	Pile material		100% polyamide BCF ECONYL®
	Light fastness	EN-ISO 105/B02	≥ 6
	Electrical resistance	ISO 10965	≥ 10³ Ω
	Impact noise reduction	EN ISO 717-2	Δ Lw ≥ 28 dB
	Area of use		Heavy Use
	Tested flammability standards	EN 45545-2	HL3*
	Slip resistance	EN 13893	μ ≥ 0.30
	Body voltage	ISO 6356	< 2 kV
	Thermal resistance	ISO 8302	0.108 m²K/W

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TECHNICAL SPECIFICATIONS – **FLEET FR**

Technical specifications		Fleet FR	
Description		Wall and ceiling covering	
	Roll width	EN-ISO 24341	200 cm
	Roll length	EN-ISO 24341	25 lm
Composition		NF ISO 1833-11	Polyester fibres + PSA rubber based adhesive
	Thickness (under 0.1 kPa) (mm)	NF EN 29073-2	3
	Weight with adhesive	NF EN 29073-1	550 g/m²*
	Roll width	CEN/TS 14159	2 m
	Roll length	CEN/TS 14159	25 lm
Peeling strength (N/mm)		NF EN 1372	≥ 0.5
Resistance to pilling (Lisson test)		NF EN ISO 12951	3
	Colour fastness		
Colour fastness to light (Xénotest)		NF EN ISO 105-B02	≥ 6
Colour fastness with dry friction		NF EN ISO 105-X12	≥ 4 / 5
Colour fastness with wet friction		NF EN ISO 105-X12	≥ 4 / 5
Colour fastness with solvent friction		NF EN ISO 105-D02	≥ 5
	Impact noise reduction	EN ISO 717-2	ΔL <sub>W</sub> = 17 dB
	Sound absorption at 4000 Hz	ISO 354	α <sub>w</sub> = 0.25
	Fire test	EN 45545-2 (R1)	HL2**

*\*This weight includes adhesive.*

*\*\*EN45545-2 testing has been carried out on different substrates/adhesives. This is the highest achieving result.  
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# INSTALLATION, CLEANING & MAINTENANCE

## Installation Guide

You can find our latest rail specific installation guide for the full portfolio of floor, wall and ceiling coverings on our website: [www.forbo-flooring.com/transport](http://www.forbo-flooring.com/transport)

Alternatively you can scan the QR code to view and download the Rail installation guide pdf.



## Cleaning & Maintenance Guide

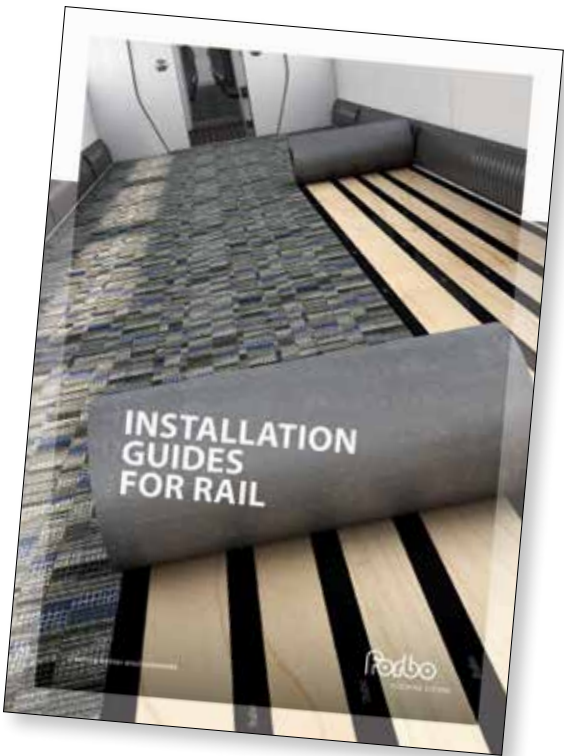
You can find our latest rail specific cleaning and maintenance guide for the full portfolio of floor, wall and ceiling coverings on our website: [www.forbo-flooring.com/transport](http://www.forbo-flooring.com/transport)

Alternatively you can scan the QR code to view and download the Rail cleaning and maintenance guide.



Any queries regarding installation or cleaning and maintenance guidelines for the rail portfolio of floor and wall products please contact your local Key Account Manager or contact us:

**Email: [transport@forbo.com](mailto:transport@forbo.com)**  
**Tel: +44 (0)1773 744121**



# FURTHER INFORMATION

## Online services

Access Forbo 24/7 to find inspiration and information by visiting [www.forbo-flooring.com/rail](http://www.forbo-flooring.com/rail). You can also follow the Forbo Transport page on LinkedIn and Twitter, for up-to-date product information, new projects, events happening and general industry news. Alternatively contact us by email at [transport@forbo.com](mailto:transport@forbo.com)

 LinkedIn: **Forbo Flooring Transport**  
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## TRANSPRESS

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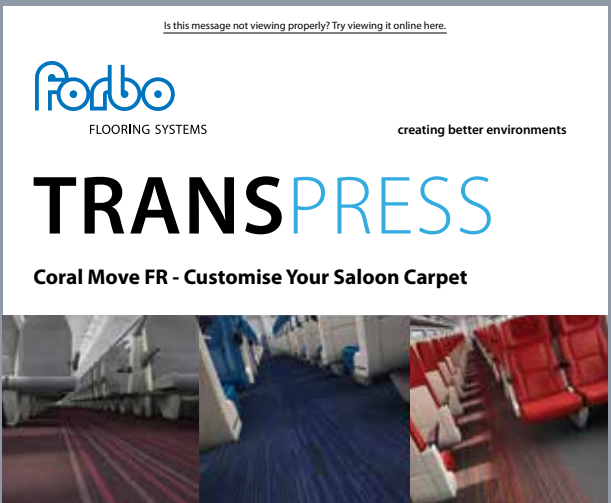
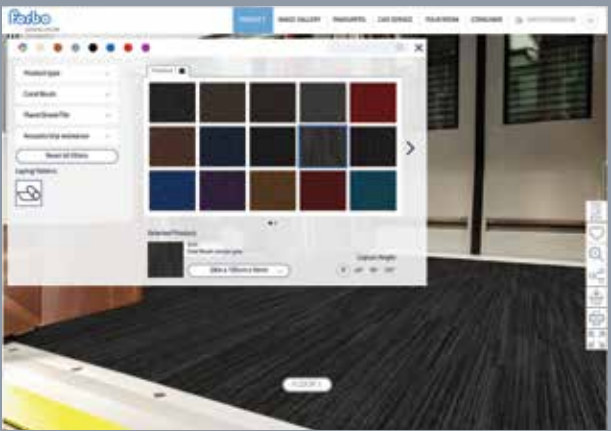


## Sample service

To request a brochure, sample cards or specific sampling material, please send your request to [transport@forbo.com](mailto:transport@forbo.com). We aim to dispatch transport requests same day/next day whenever possible.

For more information about any of the products or services offered by Forbo Flooring Systems, contact us on:

**Email: [transport@forbo.com](mailto:transport@forbo.com)**  
**Website: [www.forbo-flooring.com/rail](http://www.forbo-flooring.com/rail)**  
**Tel: +44 (0)1773 744121**





# WE BELIEVE IN CREATING BETTER ENVIRONMENTS

From how they're made to how they perform, we make outstanding floors that are truly sustainable. That's because our floors are good for people, good for their applications and good for the environment. So, from the train that they're in, to the world outside, we're helping our customers work, live, travel and relax in better environments.

### It's about the things you can't see

A Forbo floor is always beautiful and stylish to look at. A floor that's comfortable to live, work and play on. But looks aren't everything; often, it's the things you can't see that really matter. We believe true sustainability is about creating links of shared responsibilities and values between all stakeholders.

### From how it's made, our footprint...

From how we run our factories to how we choose our ingredients, the way we make our floors is a big part of how we meet our mission to create better environments.

We reduce, reuse, recycle and renew whenever possible. We also make our flooring in clean, efficient factories, powered by 100% renewable electricity.

### ...to how it performs, your footsteps...

We include the whole life of a floor when we think about its sustainability performance. Which means we make sure our floors start performing from the moment they're installed.

### Creating Better Environments

We'll only keep Creating Better Environments if we keep improving and innovating our products and services.

So, while we're proud of our existing certifications, we'll always be working to achieve better results – for you and the environment.



### Coral FR

Coral FR entrance flooring can stop up to 95% of dirt being walked into your rail vehicles. Entrance systems can reduce your cleaning bills by up to 65% thus saving you money, energy and chemical cleaners. They also reduce your environmental impact.

From old carpet fluff to abandoned fishing nets, many of our Coral FR collections are made from ECONYL® – a high quality yarn made from 100% regenerated polyamide.



We make Coral FR in a factory that runs entirely on green electricity and sends virtually zero waste to landfill.

### Flotex FR

The unique design of Flotex FR means it releases twice as many allergens on cleaning than standard carpet. Flotex is proven to have a positive effect on the lives of allergy sufferers and is the only textile floor covering to receive the prestigious Allergy UK Seal of Approval™.

Our Flotex FR flooring has an impervious backing making it suitable for wet cleaning and it often just needs water and standard cleaning materials (without chemicals).

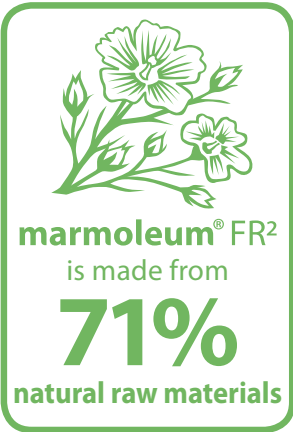


Recent research by Cleaning Research International has shown that the cleanability and durability of flocked floor coverings are unsurpassed amongst textile floor coverings which, along with the allergy benefits makes them particularly suited to high-traffic spaces.

### Marmoleum FR²

Marmoleum FR² is made from 71% natural raw materials, 29% of which are rapidly renewable and will grow back within ten years. It is also made with 44% recycled material content, to reduce the need for virgin raw materials.

At the end of its long life, Marmoleum FR² is 100% biodegradable under controlled conditions.



We finish Marmoleum FR² and Striato FR with Topshield², which, together with its natural bacteriostatic properties means the floor is hygienic and needs less cleaning with less harmful chemicals.

### Tessera FR

We're reducing the amount of virgin materials we use. For example, instead of throwing away yarn ends, we rewind them and tuft them into our Tessera carpet tiles.

All tufted Tessera carpets are manufactured using 100% renewable energy (electricity & biogas).



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 commercial and affordable housing and new build markets. High quality linoleum, vinyl, textile, flocked and entrance flooring products combine functionality, colour and design, offering total flooring solutions for any environment.



### 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/rail](http://www.forbo-flooring.com/rail)

Tel: **+44 (0)1773 744121**

### Let us keep you up-to-date



Linkedin: **Forbo Flooring Transport**



@forbotransport



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