



# flotex® FR

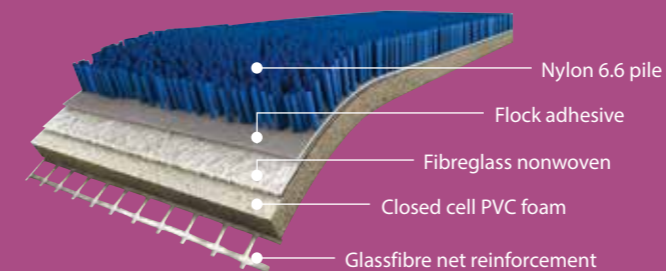
Flotex FR is a unique, textile, flocked floor covering, combining the cleaning properties and durability of a resilient flooring with the comfort, slip resistance and acoustic properties usually associated with textiles.

- High definition print offers you complete freedom of design
- Bespoke design service
- Lightweight approximately 1225 gram/m<sup>2</sup>
- 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.



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### 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.



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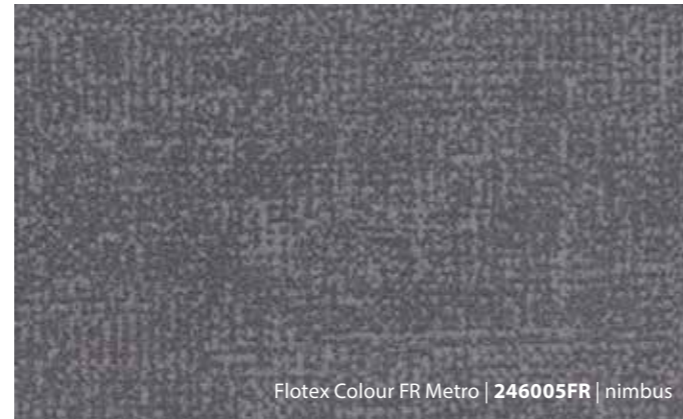
# flotex® colour FR

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

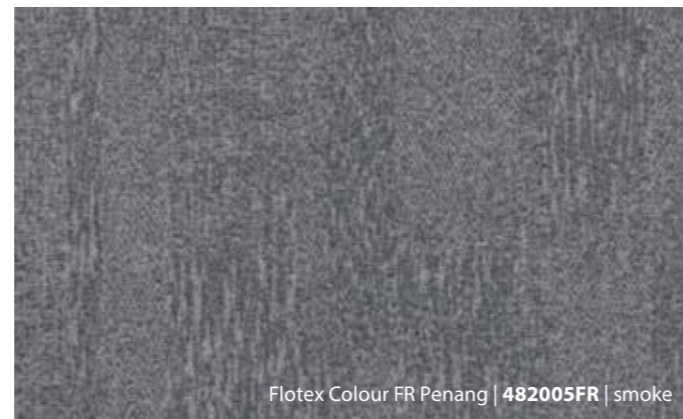


Flotex Colour FR Metro | 246005FR | nimbus

## 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

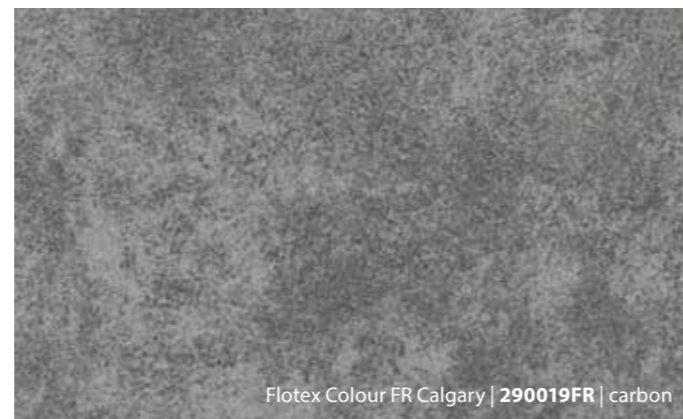


Flotex Colour FR Penang | 482005FR | smoke

## 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

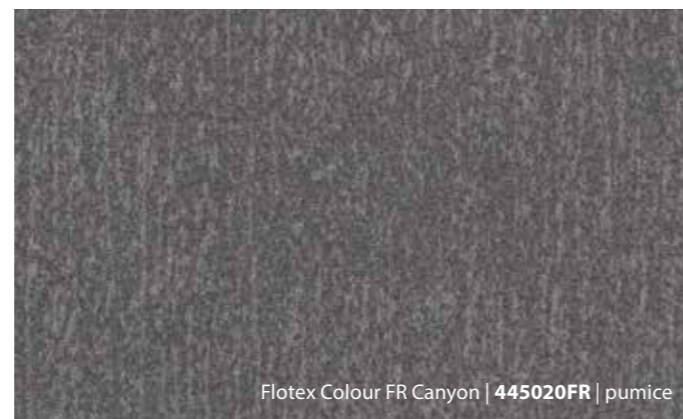


Flotex Colour FR Calgary | 290019FR | carbon

## Canyon FR

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 Colour FR Canyon | 445020FR | pumice

# 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.



## 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 print are just some of the possibilities amongst the wide range of images.



## Lines FR

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



## 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.



## 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.



## Shape FR

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



# FLOTEX FR – CUSTOM DESIGN SERVICE

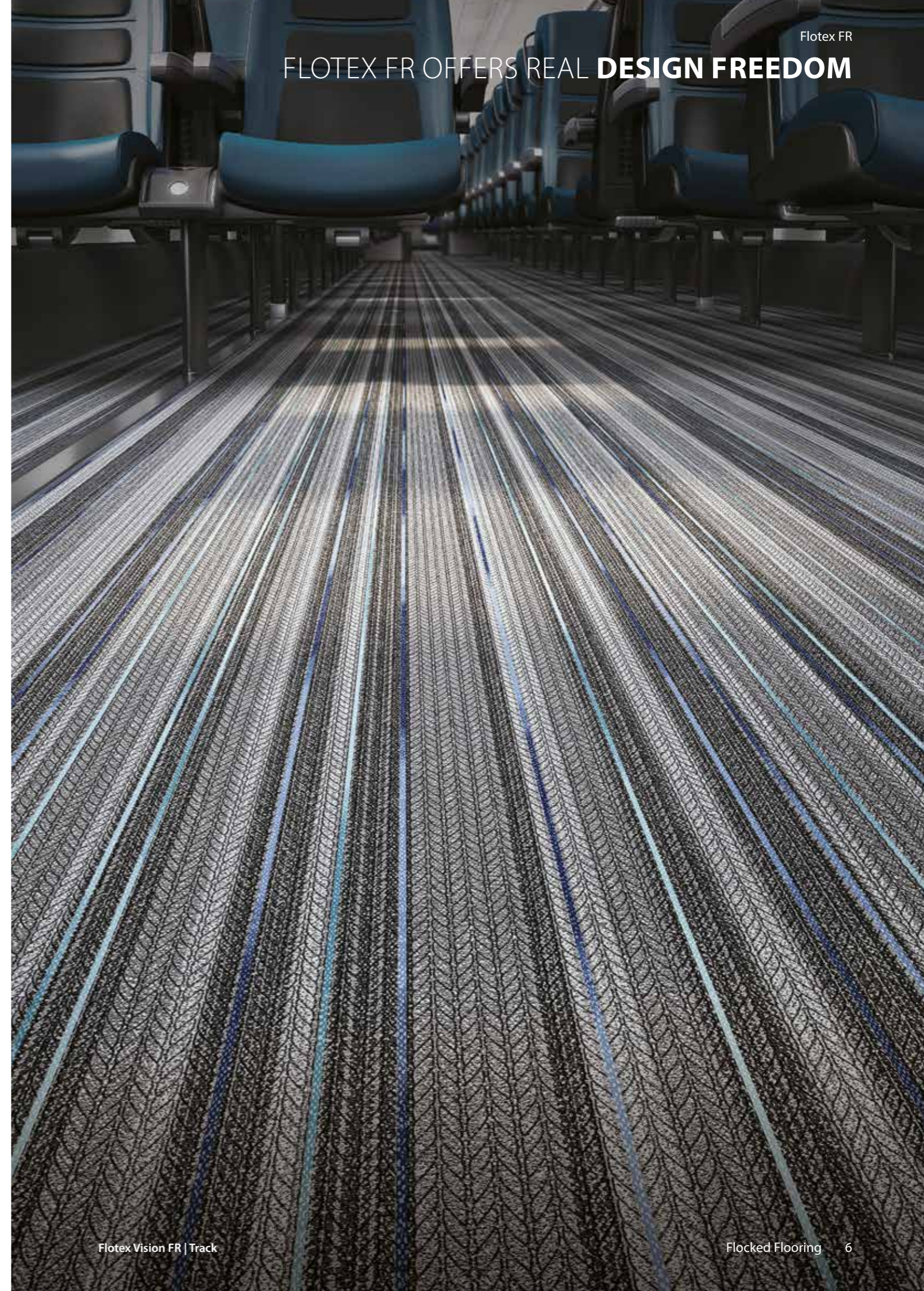
Create your own masterpiece using our custom design service alongside our high definition printing technology. Our experienced designers can help at any stage in the design process, depending on what involvement you require.

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:

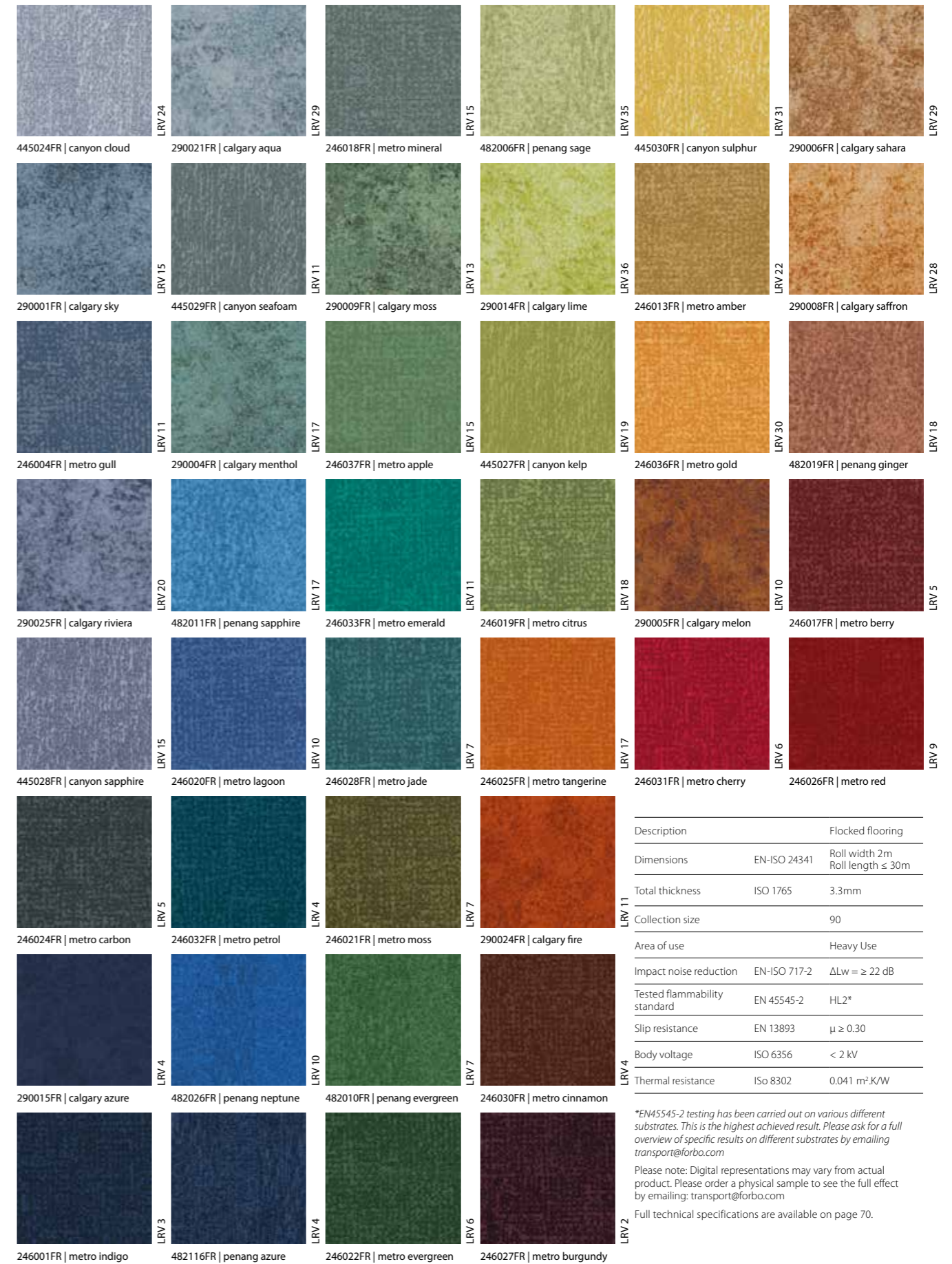


# FLOTEX FR OFFERS REAL DESIGN FREEDOM



# 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	ISO 8302	0.041 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

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.

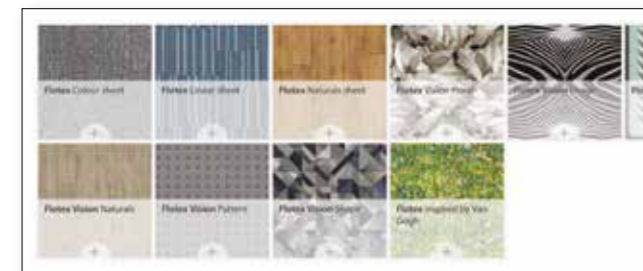
# flotex<sup>®</sup> vision FR

**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)

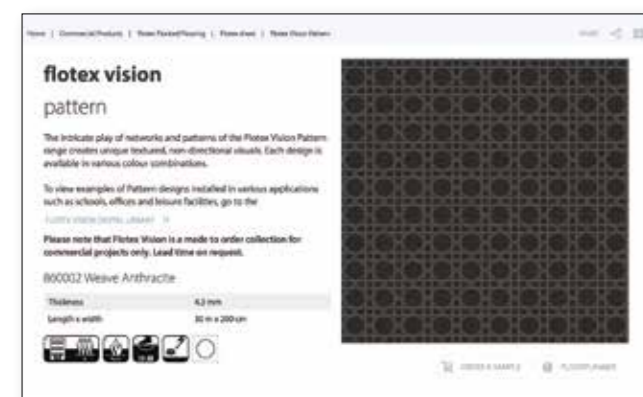
**2** CHOOSE THE DESIGN CATEGORY  
(E.G. FLOTEX VISION PATTERN SHEET)



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



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



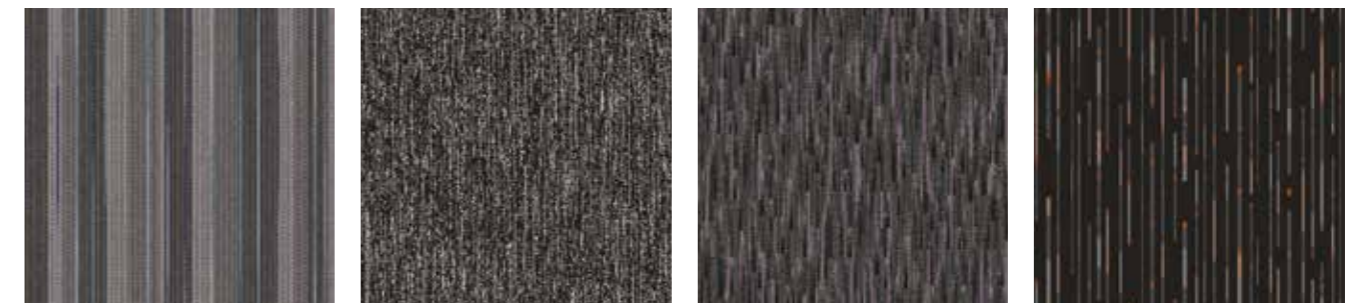
**5** CLICK ON THE 'FLOORPLANNER' LINK UNDERNEATH THE SAMPLE IMAGE – HERE YOU CAN VIEW THAT REFERENCE IN A ROOM SETTING. YOU CAN CHANGE THE ROOM SCENE AND THE FLOORING PRODUCT/DESIGN/COLOR IN ORDER TO GET A GOOD FEEL FOR HOW THAT REFERENCE LOOKS IN A RAIL VEHICLE.



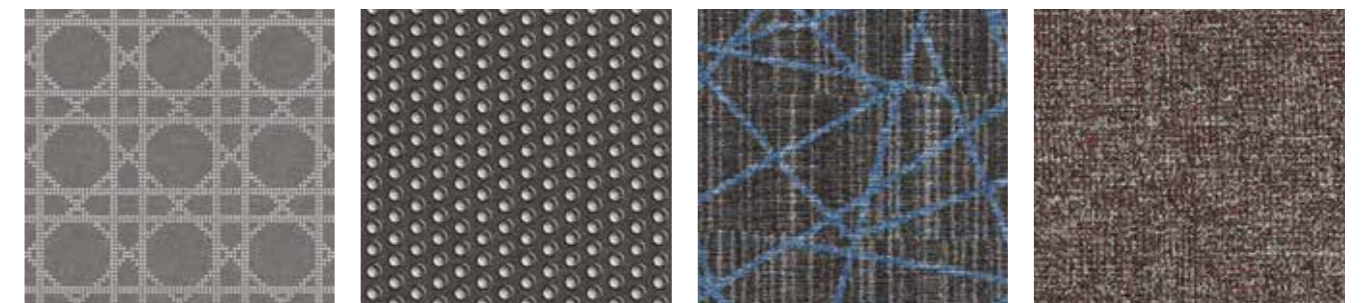
**6** IF YOU SEE A DESIGN THAT YOU LIKE BUT THE COLOURWAY OPTIONS DON'T WORK FOR YOUR PROJECT THEN CONTACT US AT [TRANSPORT@FORBO.COM](mailto:TRANSPORT@FORBO.COM) TO ENQUIRE IF IT WOULD BE POSSIBLE TO RE-COLOUR THAT PARTICULAR DESIGN.

ALTERNATIVELY YOU CAN LOOK TO CREATE SOMETHING COMPLETELY BESPOKE.

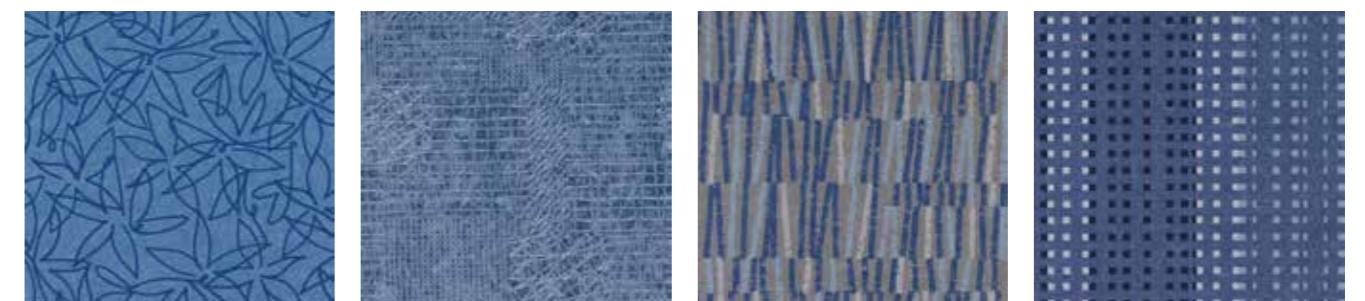
Shown here is only a selection of the many different designs available. Most designs are available in numerous different colourway options. Flotex Vision is best viewed on our 'up-to-date' digital library: [www.forbo-flooring.com/flotexvision](http://www.forbo-flooring.com/flotexvision)



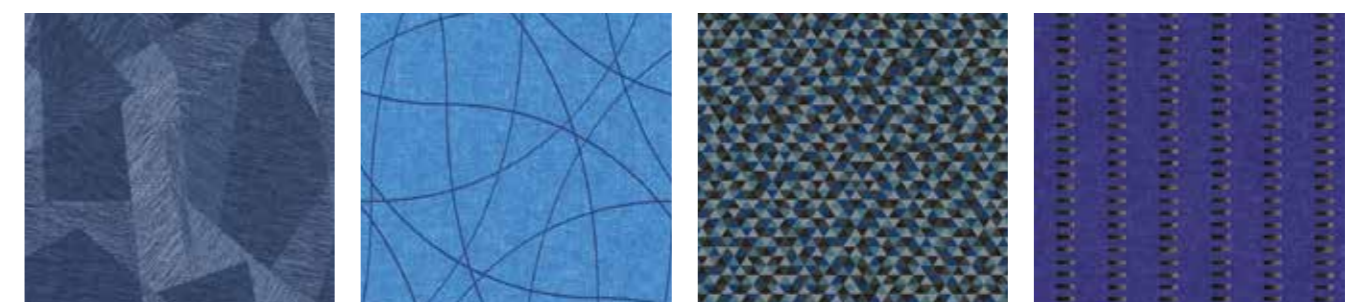
Track Essence Strobe Binary



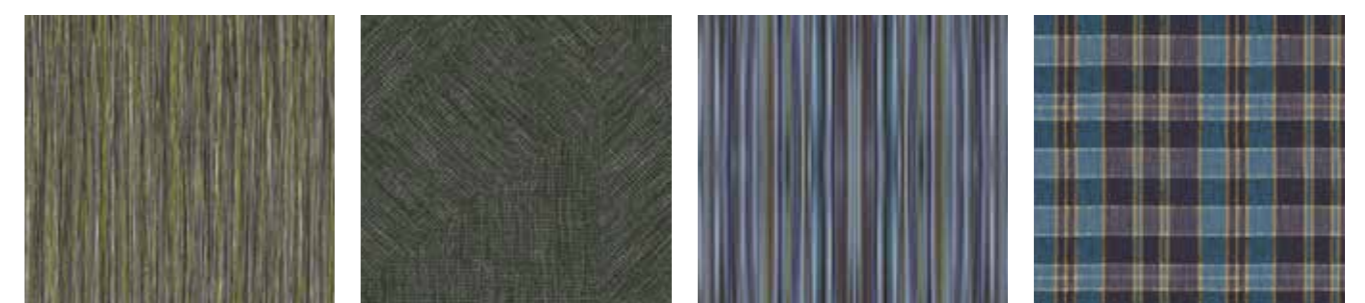
Weave Full Stop Web Hybrid



Field Network Vector Trace



Traverse Curve Facet Pulse



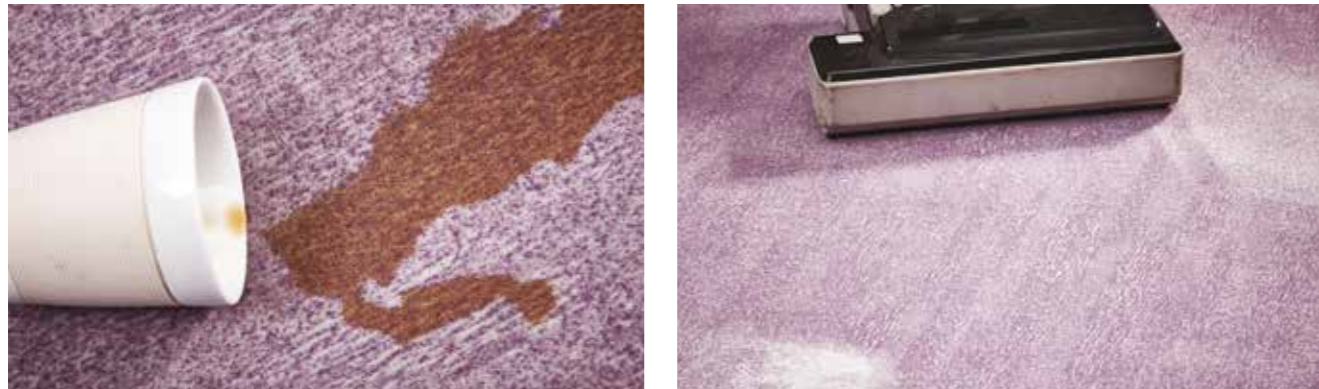
Seagrass Junction Spectrum Plaid glacier

**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

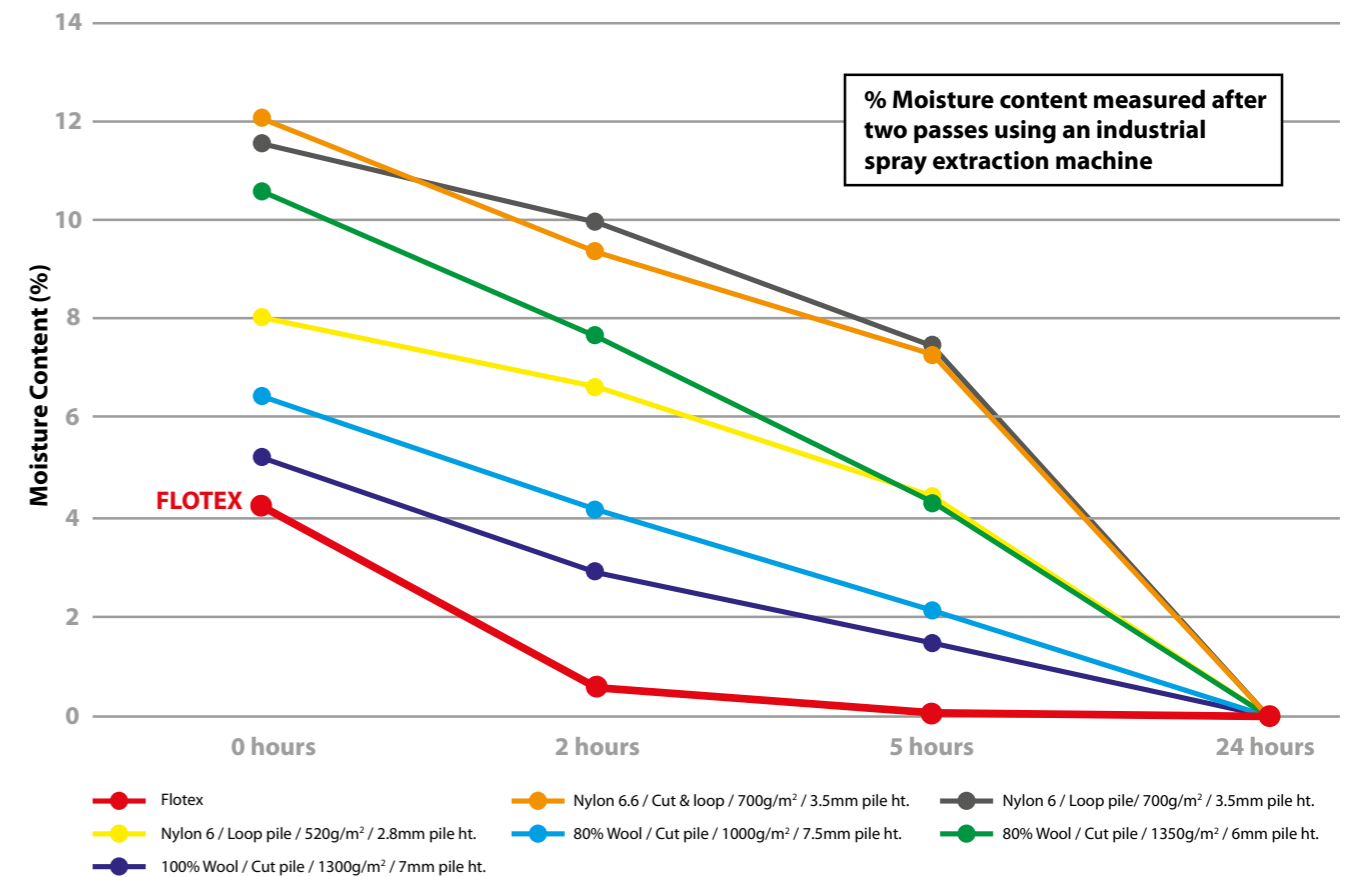
How long it takes for a floor covering to dry will also be of major concern to transport operators keen to minimise turnaround times. The research study also looked specifically at this aspect and tested the drying characteristics of flocked floor coverings alongside six different carpet constructions. 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.

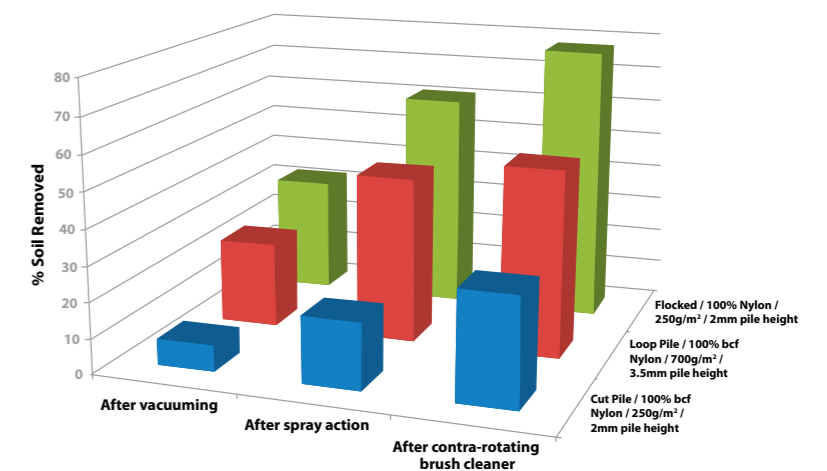
## A superior solution for transport applications

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