



FLOTEX:
THE HIGH-TECH TEXTILE
FLOORING SOLUTION

How Flotex compares
to traditional carpets

INTRODUCTION

In many business environments, the choice of flooring material is driven by practical considerations.

Hard flooring is often favored due to ease of cleaning and maintenance, despite the fact that some hard floors come with drawbacks like low acoustic performance and an increased rate of allergens in the air.

Softer materials, like carpets, are often avoided, even though these are aesthetically pleasing and also improve the acoustic properties of a space. This is usually due to the misconception that carpets lower air quality, and because many soft textiles are harder to clean than hard floor materials.

With Flotex, Forbo Flooring offers an alternative: a stylish and practical flocked textile that combines the comfort and warmth of a carpet with the resilience and ease of cleaning of a hard floor. All while also reducing the amount of allergens in the air and boosting indoor air quality to create a safer, cleaner environment and promote well-being.

In this whitepaper, we explore the properties that allow Flotex to embody the best of both worlds. We also dive into why this unique textile is the ideal flooring material across a wide range of settings and contexts.





ACOUSTIC PROPERTIES

In many business contexts, acoustics is considered a secondary factor to other practical considerations when it comes to flooring.

Increasingly however, the role flooring material plays in controlling noise, and improving the acoustic characteristics of space, is being recognised as a critical factor in promoting health and well-being in work environments.

In fact, research from the Danish National Research Centre for the Working Environment shows that even low to moderate noise levels can increase irritation and dissatisfaction in the work environment. Noise may also contribute to health issues such as elevated blood pressure and cardiovascular disease as well as increase overall stress levels¹.

Textile flooring materials, like Flotex, offer the benefit of reducing indoor noise levels by absorbing both impact (i.e., footfall) and airborne noise.

Quick Facts

- Nearly 60% of noise complaints arise from footfall noise
- Textile flooring reduces impact noise considerably compared to hard floors, and halves reverberation time (time for sound to decay or "fade away")

Noise reduction

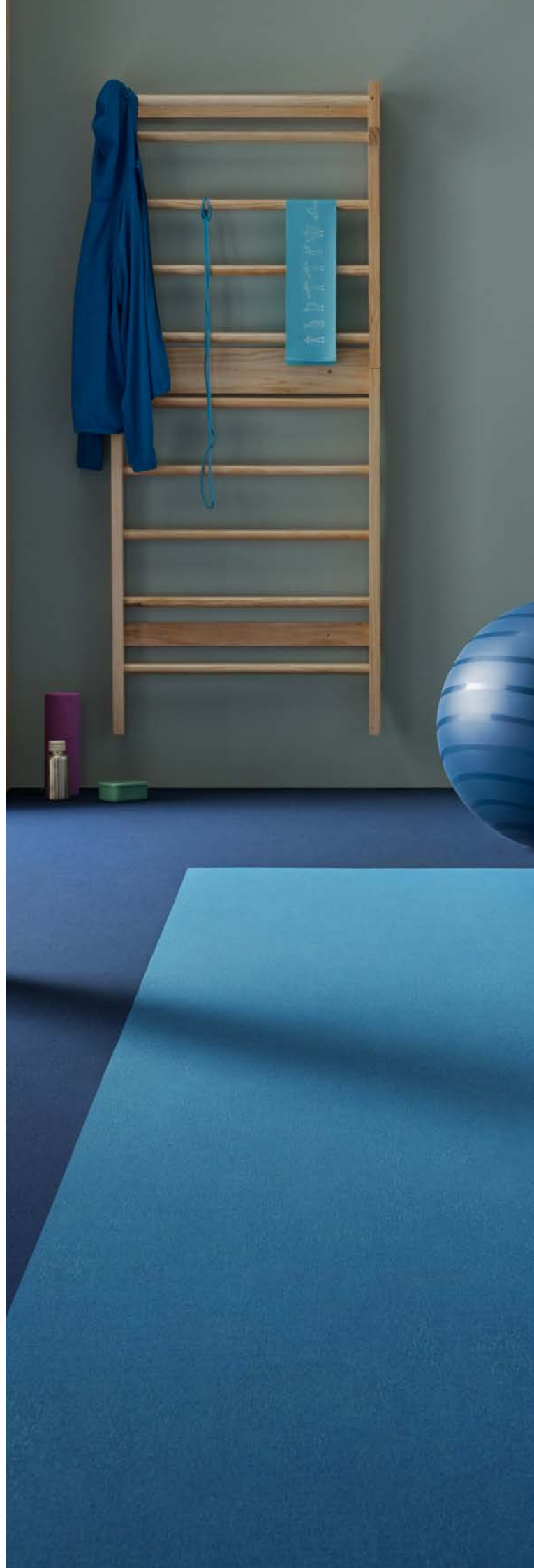
Flotex flocked flooring is designed with a PVC foam backing layer. This results in over 21 decibels (dB) of impact sound reduction. This is similar to the performance provided by carpets (20-25dB) and a large improvement on hard flooring like Luxury Vinyl Tiles (LVT) (5-15 dB). Flotex also absorbs noise reflected from walls or furniture (with up to 0.10 α_w room sound absorption). This makes it an ideal addition to any space where noise disturbances are of concern. The result is a more restful atmosphere in shared workspaces or between units within a building.

Health benefits

The noise-reducing properties of the material also result in improved concentration, enhanced well-being, and greater productivity for those using the space. This improves on the performance typically seen with hard flooring, and reduces the likelihood of health and wellness issues (such as stress and physical discomfort) that can arise from noisy environments.

¹ Is noise exposure in non-industrial work environments associated with increased sickness absence?

<https://bit.ly/3yuk7QM>





IMPROVED AIR QUALITY

One of the benefits of textile flooring is the ability to trap dust and other particulate matter, including allergens such as pet dander or pollen.

This trapped debris can then be easily removed when cleaning, resulting in improved indoor air quality that can be particularly beneficial for individuals with allergies or sensitivities.

Flotex's unique construction, with densely packed nylon fibers, enhances these benefits even further by trapping a greater quantity of allergens from the environment. The material's unique design also makes it easier to clean compared to carpets, improving both air quality and hygiene.

Quick Fact

There is a common misconception that textile flooring materials, like carpets, exacerbate allergies and respiratory irritation. Well-maintained carpets, however, can actually reduce the number of allergens in the environment. This is demonstrated by data from the Swedish Institute for Fiber and Polymer Research, which documented triple the number of allergy cases in Sweden following the removal of 70% of carpets from bedrooms over the period 1975-1995.



FLOTEX

Up to 80 million straight nylon fibres per m² are electrostatically flocked into the backing. The unique structure ensures dirt and allergens can be released when vacuumed.



CARPET FLOORS

Loop and cut pile carpets have a structure that makes removing allergens and fine dust more difficult in comparison to the smooth, straight and almost upright fibres in Flotex flocked flooring.

Allergen capture

Flotex's dense pile allows it to capture twice as many allergens as conventional carpets. And because the individual nylon fibers stand straight, rather than looping as in carpets, allergens can be easily extracted during vacuuming resulting in a clean floor covering that continues to perform.

This unique design is what ensures much higher air quality than typically seen with hard flooring or even well-maintained carpets. As a result, a Flotex floor improves quality of life for allergy sufferers.

These qualities have led to Flotex being the only textile flooring to receive the prestigious Allergy UK Seal of Approval. This designation is awarded to materials scientifically proven to prevent, diminish, or eliminate allergens from their environment.



Low VOC emissions

An additional benefit of textile flooring is lower emissions of Volatile Organic Compounds (VOCs). Carpets, for example, only emit a small amount of non-toxic VOCs in the first few weeks after installation. Flotex shows similar properties, releasing only trace amounts of non-harmful VOCs. In combination with its enhanced ability to capture allergens, the result is a higher overall standard of air quality compared to carpets.

EASE OF CLEANING

One of the drawbacks often associated with textile floors is that they can be difficult, or sometimes even impossible, to clean.

The process of cleaning is both costly and time-consuming. Thanks to Flotex's design, this high-performance textile is much easier to maintain than traditional carpeted floors. Flotex is designed to dry quickly, reducing "down-time" when space cannot be used and removing the need for the specialist "wet-dry" equipment typically needed to vacuum and wash carpeted floors.



Vacuuming

Flotex releases up to 76% of particulate dirt, compared to just 46% for loop pile carpets.



Spray cleaning

Flotex releases up to 97% of dirt, compared to just 64% in loop pile carpets.



Drying time

Flotex dries rapidly (within 4 to 6 hours), compared to the 24 hours typically required for loop pile carpets. It is also waterproof, making it easier to deep clean.



Cleaning agents

Simple cleaning agents like soap and water can be used to rapidly clean Flotex flooring for most basic stains. Stronger detergents can be used to remove more persistent stains, like ink or oil.

WARMTH, COMFORT, AND DURABILITY

The choice of flooring material also has an impact on the feeling of comfort and warmth in a space.

This is an area where textile flooring provides a distinct advantage compared to hard floors. Textile flooring provides better insulation than hard floors and therefore reduces heat loss, making an environment more comfortable and reducing the need for additional heating. In some cases, however, this can come at the expense of durability, with some textile flooring showing lower resistance to “wear and tear” than harder materials.

Flotex’s unique design means it provides improved tactile and thermal properties when compared to harder flooring materials, while still offering similar durability to hard floors.

Warmth and Comfort

Flotex is designed with warmth and comfort in mind. The dense surface arrangement of nylon 6.6 fibers (up to 80 million per m² compared to 300 000 per m² in carpets) makes Flotex soft underfoot.

Durability

Unlike many traditional textile flooring options, Flotex is durable, resistant to wear, and designed to quickly revert to its original shape. High numbers of densely-placed, vertical nylon fibers, along with short fiber length (2mm), make this textile highly resistant to abrasion (comparable to ceramics). This makes Flotex a perfect solution for areas that are subject to heavy foot and wheeled traffic (e.g., airports, hotels) and damage from movable furnishings or chairs. It is also slip-resistant, making it safe to use with any age group.



AN EXTENSIVE RANGE OF DESIGN OPTIONS

For interior decorators and designers, Flotex offers additional benefits that extend beyond simple functionality.

Collaborations between the Forbo creative team and top designers from around the world mean this versatile and beautiful product is available in a vibrant range of patterns and designs to suit any application. Flotex is also available in solid colours, traditional textile patterns like houndstooth, and a range of additional stylish and contemporary designs.

Meanwhile, the Flotex Naturals range takes on the appearance of natural materials like wood or stone. The high-definition printing technology used in creating these designs means they look highly realistic, allowing designers to recreate the classic ambience of anything from distressed oak flooring to stylish antique pine.

In addition, Flotex is available in a range of formats, including sheets, tiles and planks. This allows for nearly endless combinations and options, making it easy to design the perfect floor pattern to enhance any space. This also adds extra functionality, as differently coloured or patterned floor sections can be used to fulfill practical goals, like delineating pathways through busy areas.

This wide range of design options makes Flotex the perfect textile flooring to add an elegant touch to any room or building. All while retaining the cleanliness, allergy-reducing properties, and comfort of a Flotex floor.



Custom Floor Design

In addition to the extensive Forbo Flotex collection, we also offer a digital printing service that allows designers to bring any idea or pattern to life. That means an infinite range of design options at your fingertips.



FLOTEX: THE TEXTILE FLOOR FOR ANY SPACE

The combination of functionality and aesthetics makes Flotex the perfect flooring solution across a wide range of applications — from offices to healthcare facilities, hotels and retail outlets.

In addition, Flotex's durability, cleanliness and acoustic performance make it uniquely suited for use in areas where traditional textile flooring falls short.

Quick Fact

With the Flotex Next backing as option for most of our sheet collections, Flotex can also be installed with no adhesive (loose lay) making it easy to move or remove flooring materials. This makes Flotex Next particularly suitable for busy areas, as installation time is reduced and there is minimal disruption and no lingering adhesive odor. Flotex Next can also be installed with minimal subfloor preparation and walked on immediately after installation, making it possible to install flooring with minimum downtime, or even while the premises is open.

HIGH-TRAFFIC AREAS



The ease of cleaning a Flotex floor, combined with the material's resistance to "wear and tear", makes it the perfect flooring solution for high-traffic areas like airports, convention centers, and public spaces. Flotex's noise reduction and anti-slip properties add to its utility in these scenarios, while its visual appeal contributes to a stylish and welcoming ambience.

FOOD-AND-BEVERAGE AREAS



Because of the potential for spills and messes in eating areas, a textile floor is not usually the first choice for these spaces. Thanks to its unique properties, however, and the ease with which it can be cleaned, Flotex is perfectly suitable for these areas. It offers a best-of-both-worlds approach that combines the comfort of a textile floor with the ease of maintenance usually reserved for hard flooring.

EXTREME CONDITIONS



Flotex's durability makes it the number one choice for floor areas that must be resistant to hard usage and the possibility of daily wear. For example, ski centers, changing rooms, or even trains. And because Flotex also reduces noise levels, this material has the added benefit of promoting a greater sense of comfort and relaxation in typically high-noise areas.

CONCLUSION

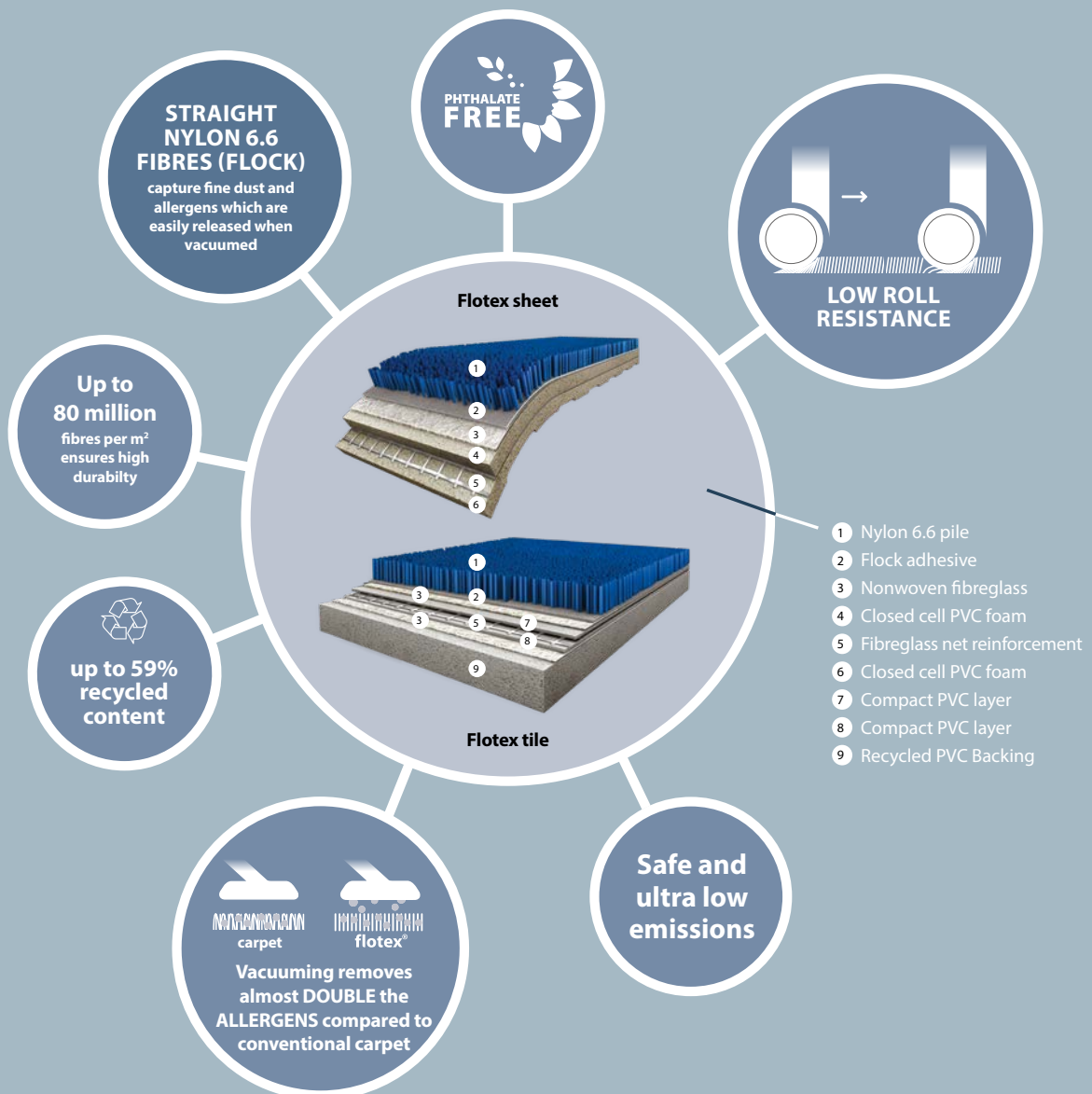
By combining the practicality and durability of a hard floor with the comfort and elegance of a carpet, Flotex offers the best of both worlds. This high-tech textile's unique properties also make it the perfect choice in any environment where ease of cleaning, durability, sound absorption and allergen reduction are top priorities.

At the same time, the wide range of colours and designs offered in the

Forbo Flotex collection produce limitless design possibilities, empowering designers to create spaces that combine visual appeal with comfort and day-to-day practicality.

For more information on how Flotex can transform your next design project, or to learn about other Forbo flooring solutions, contact us or read more here:

www.forbo-flooring.com/flotex



Forbo Flooring B.V.

P.O. Box 13
1560 AA Krommenie
The Netherlands
Tel.: +31 75 647 74 77
E-mail: question@forbo.com

Find us on

