

EcoFlex™ Echo

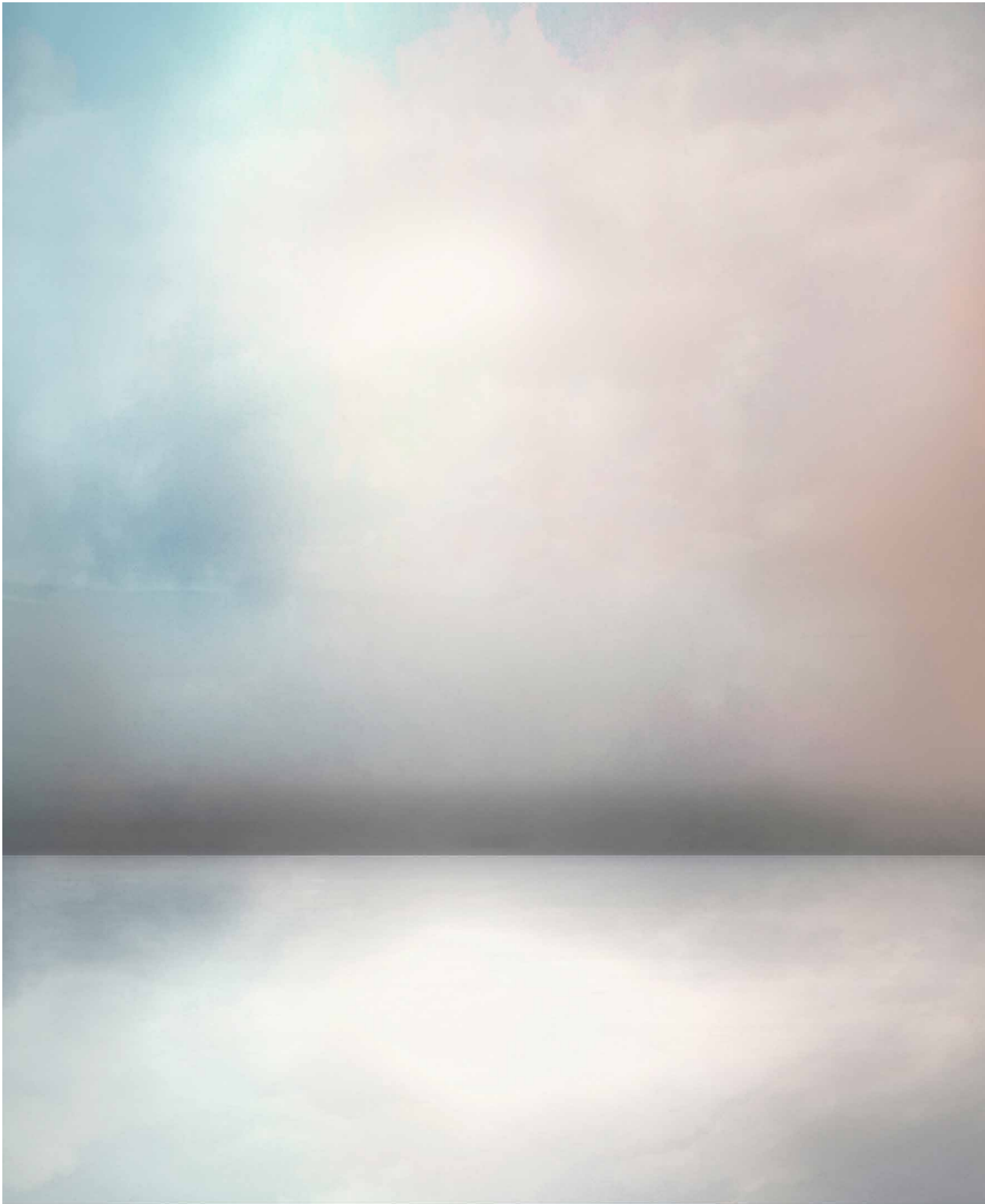
# Capture the essence of sound



COMMERCIAL

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CARPET TILES



## EcoFlex™ Echo

**Good sound conditions** stimulate our health and wellbeing.

Designer for today's needs, IVC Commercial presents a new acoustic carpet tile backing. Alongside our trusted EcoFlex™ Statera backing solution, **EcoFlex™ Echo completes the range with enhanced acoustics and an increased level of underfoot comfort.**



# Acknowledging the power of acoustics

When designing a **well-balanced space**, a series of elements needs to be taken into consideration.

Whether it's a choice of colours, decoration items, lighting or use of materials; each will contribute to the overall feeling of a room.

In this, the aspect of acoustics is often underestimated, despite **optimal sound insulation and absorption being essential** to create a healthy and productive working environment.

That's why **soundproofing through flooring** has become a necessary part of interior design in modern construction and renovation projects.

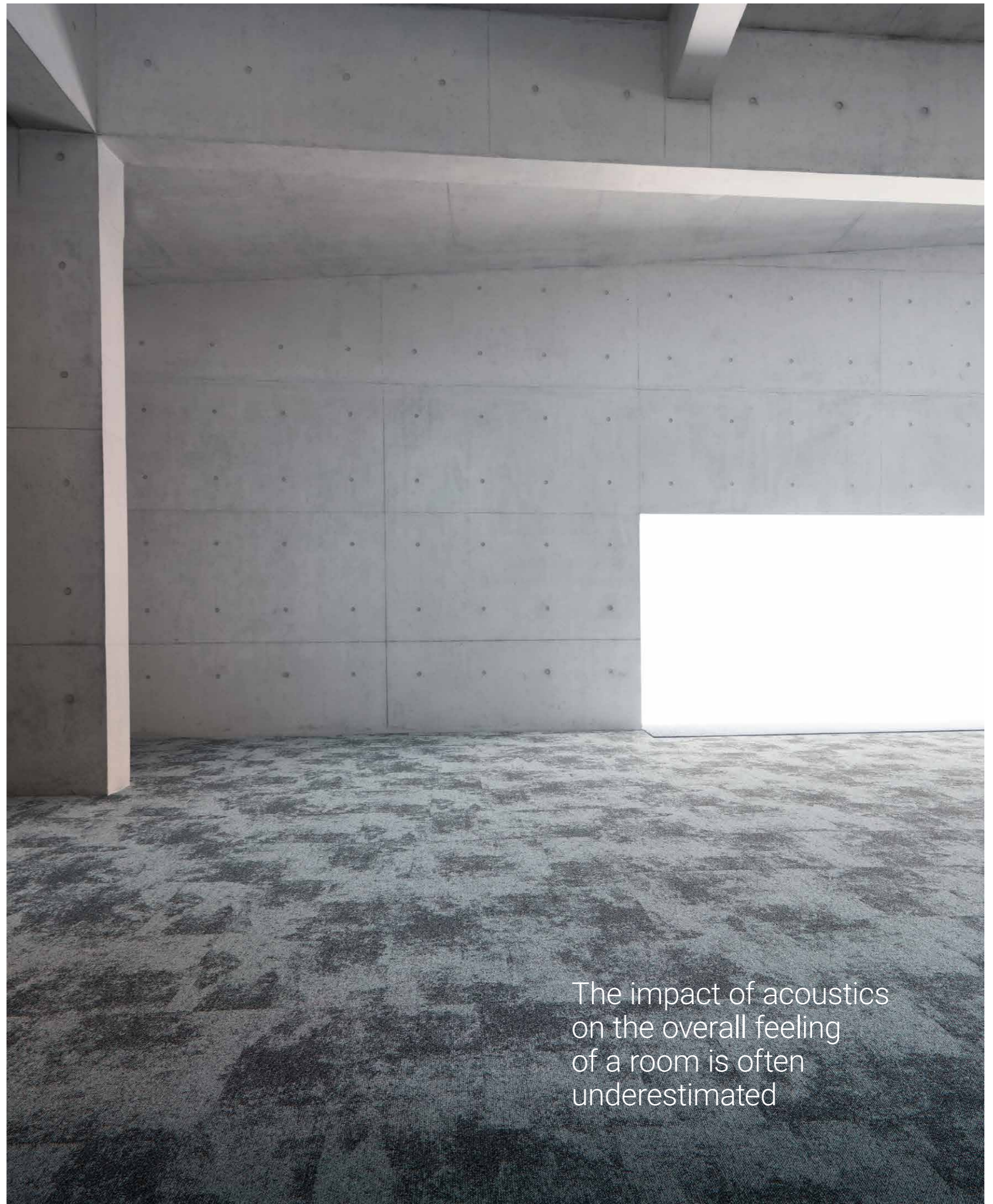
## Rising to today's challenges

Hard materials, commonly used in **contemporary architecture** for their durability and sleek finish, evidently don't provide the ideal conditions for good sound reduction.

And in **older buildings**, where noise reducing materials aren't structurally integrated, **an acoustic floor can make all the difference**.

EcoFlex™ Echo carpet tiles are equipped with an acoustic backing, reducing noise levels and **providing improved comfort**.

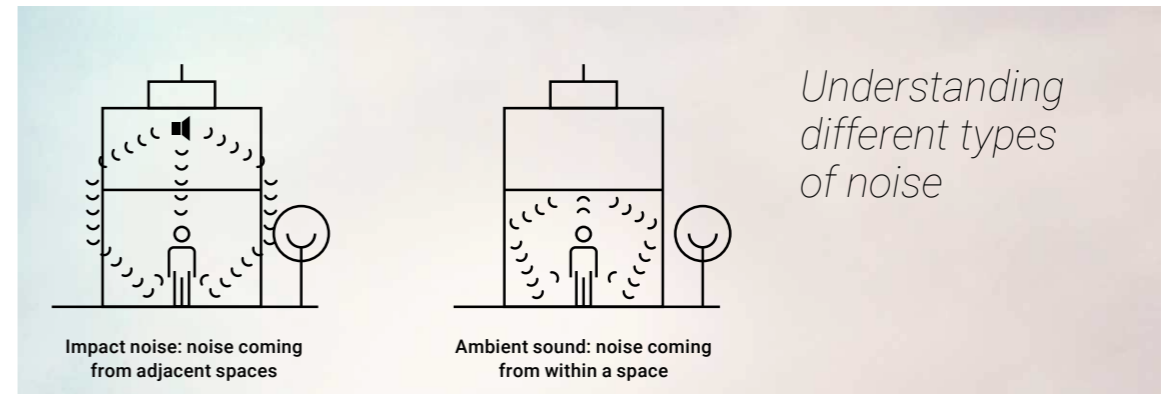
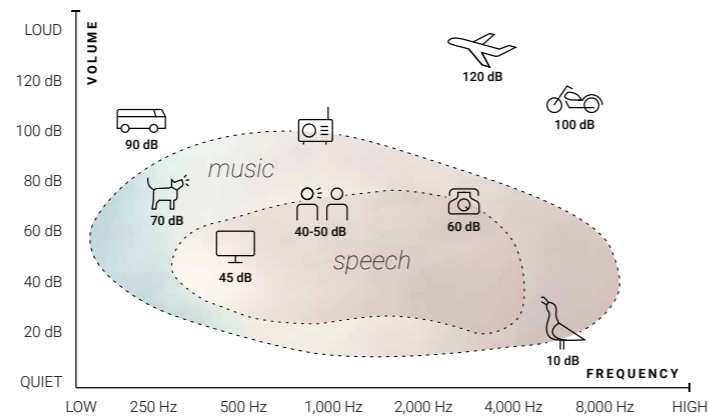
The impact of acoustics on the overall feeling of a room is often underestimated



# Considering sound in all its forms

Sound is a free spirit. It can originate at any place and at any time. While searching for the right flooring materials, it helps to **understand the way sound travels** and how we make sense of it.

The range of human hearing depends on the power level (dB) and the frequency (Hz) of the sound. For our ears **0 dB is the so-called hearing threshold**, while 140 dB is the absolute limit for hearing comfortably. Likewise when it comes to pitch, **we start hearing at 20 Hz** while frequencies surpassing 20,000 Hz are beyond our hearing range.



## Optimal impact sound reduction



Carefully selected backing materials improve the carpet's

ability to **reduce impact noise**. Impact noise is a structural vibration that occurs when one object collides with another, such as footsteps on a floor. It typically arises in **adjacent spaces** most notably between spaces above and beneath. Sound insulation is expressed as a **weighted reduction** in impact noise, known as  $\Delta L_w$ . In other words, this value tells you how much sound transferred to adjacent spaces can be reduced by use of acoustic materials.

## Ability to absorb

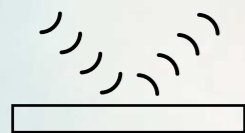


Flooring helps to **absorb ambient sounds** from

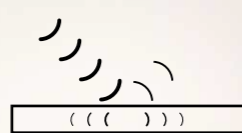
**speech** or other sources **within a room**. When it comes to sound absorption, **soft surface flooring** will always deliver better results than hard flooring. But by selecting the appropriate carpet backing, **absorption values** can be further improved.

A material's sound-absorbing properties are **measured over 18 frequencies** between 100 Hz and 5,000 Hz, leading to 18 different  $\alpha_w$  values. These are averaged into a single value: the  $\alpha_w$  or **weighted sound absorption** coefficient. Where an  $\alpha_w$  value of 0 indicates no sound absorption, an  $\alpha_w$  value of 1 means all sound has been absorbed.

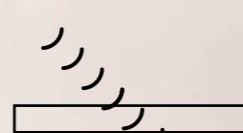
## What happens when sound meets surface?



The sound is reflected



The sound is absorbed



The sound passes through





Embrace softness  
in sound...

... and beneath  
your feet.

# Backing every flooring project

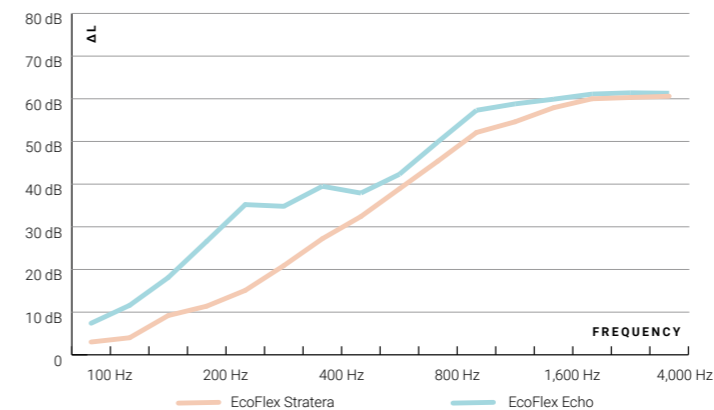
At IVC Commercial we believe everyone is entitled to better acoustics and ergonomic comfort. That's why we've developed a superior backing that considers acoustic insulation, sound absorption and underfoot comfort.

So, when there's need for specific technical requirements regarding the acoustics of a space, **EcoFlex™ Echo** provides the answer.

Offering improved levels of **impact sound reduction and sound absorption**, EcoFlex™ Echo carpet tiles are built to last. Tested in accordance with the EN1307 standard, EcoFlex™ Echo delivers **high quality in all aspects**, from dimensional stability and burning behaviour to a perfect seam finish.

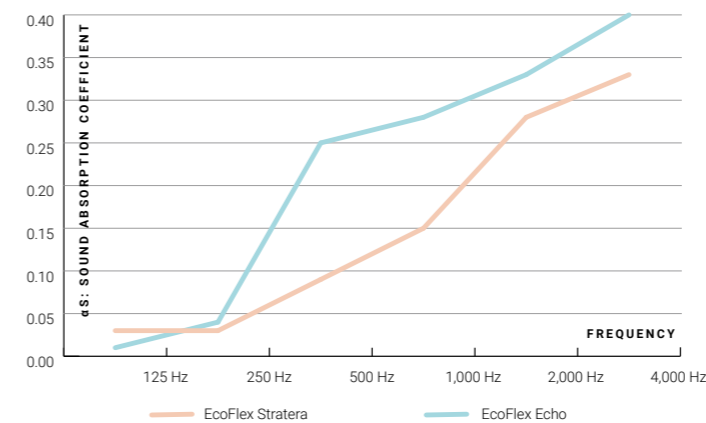
Standard IVC Commercial Carpet Tiles with the **EcoFlex™ Statera** backing system are also developed with attention to acoustic properties. They offer a qualitative solution for projects where **no specific values** are required.

Impact Sound Insulation Shared Path ( $\Delta L$ )



EcoFlex™ Echo reduces impact noise by **up to 25%** compared to a standard backing.

Sound Absorption Shared Path ( $\alpha_s$ )



EcoFlex™ Echo improves sound absorption values by **up to 100%** compared to standard backing.



# Going beyond acoustics

## Composed for improved comfort

Dedicated to the future of flooring and the lasting comfort of our customers, we are continuously committed to ensuring the long-term quality of our products.

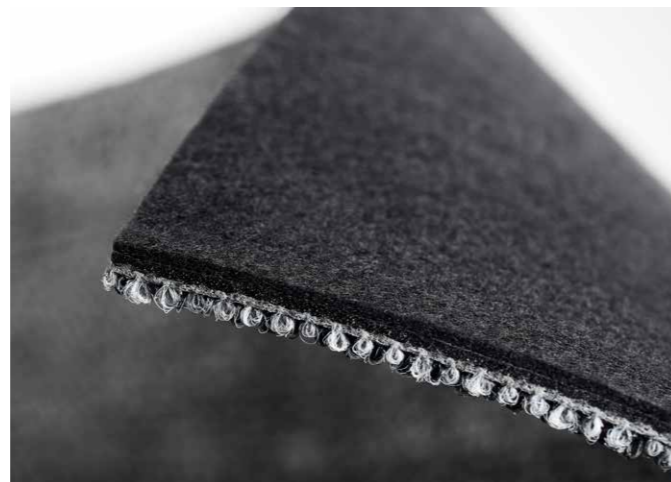
This smart choice of material also ensures a higher level of underfoot comfort and prevents muscle fatigue.

## Eco-friendly flooring

Making products more sustainable is an integral part of our innovation and design process.

EcoFlex™ Echo's improved acoustic performance is obtained through an additional layer of 94% recycled polyester felt.

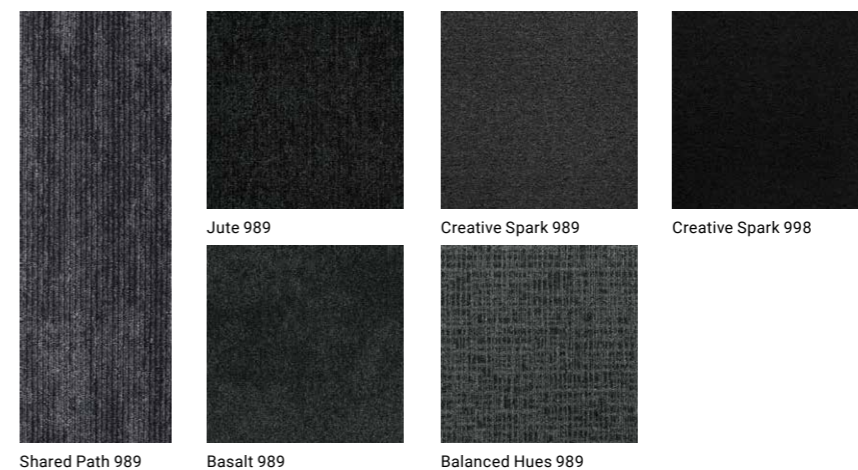
Improved performance and underfoot comfort is obtained through a 94% recycled polyester felt layer



EcoFlex™ Echo

# Standard acoustic offer

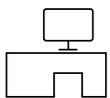
EcoFlex™ Echo is available on 17 carpet tiles in a variety of colours from stock. The backing can be specified on other carpet tiles subject to a minimum order quantity.





# Acoustics tailored to different applications

The extent of required sound insulation and absorption is inextricably linked to the purpose of a space.



In offices, especially **open-space concepts**, reducing noise is crucial for **concentration and productivity**. By minimising excessive sound employees find it easier to concentrate, perform and come up with creative ideas.



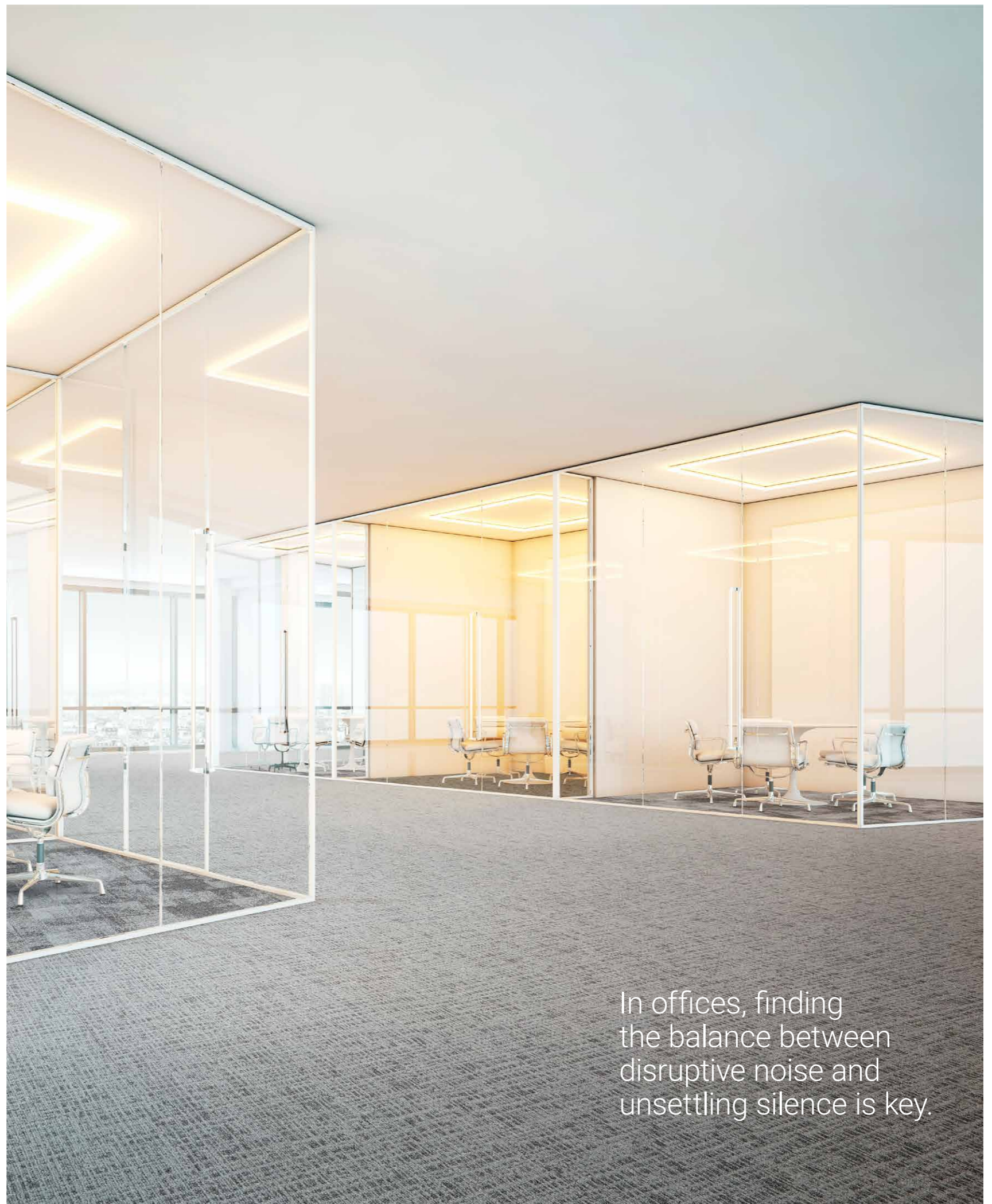
The **hospitality industry** is increasingly confronted with acoustic demands. Particularly in hotels and gastronomic restaurants, where calmness is synonymous with luxury, powerful acoustic flooring like EcoFlex™ Echo is invaluable.



Education environments must balance the need to absorb background noise with the ability for teachers and pupils to be heard clearly.



In other areas, such as **healthcare**, peace and quiet are the absolute norm. Clinical populations are generally **more sensitive** to unwanted sounds.



In offices, finding the balance between disruptive noise and unsettling silence is key.



# EcoFlex™ Echo / Creative Spark

## Carpet Tiles



### Technical Specifications

Construction		Tufted 1/10" gauge loop
Pile fibre composition		100% ColorStrand® Premium Nylon (40% recycled content) 100% solution dyed Pa6
Secondary backing		Ecoflex™ Echo (94% recycled PES Felt)
Total weight		4400 g/m²
Pile weight		540 g/m²
Surface pile weight		370 g/m²
Total thickness		8,4 mm
Surface pile thickness		3,1 mm
Surface pile density		0,119 g/cm³
Number of tufts		176.300/ m²
Wear classification	EN 1307	33 / LC1
Castor chair suitability	EN 985	A: intensive use
Fire classification	EN 13501-1	Bfl-s1
Dimensional stability	EN 986	≤ 0,2%
Colour fastness to light	EN ISO 105-B02	≥ 7
Rubbing fastness	EN ISO 105-X12	≥ 4
Colour fastness to water	EN ISO 105-E01	≥ 4
Thermal resistance	ISO 8302	0,114 m².K/W
Sound absorption	EN ISO 354	0,30 αw Hz 125 250 500 1000 2000 4000 αs -0,02 0,03 0,29 0,25 0,35 0,47
Impact sound reduction	EN ISO 10140-3	ΔLw = 35 dB
Permanent antistatic	ISO 6356	≤ 2 kV
Size & Packaging		50 x 50 cm (19,68" x 19,68") 4 m²/box - 24 boxes/pallet
GUT-Produs Number		3AA1D4DF

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# EcoFlex™ Echo / Shared Path

## Carpet Tiles



### Technical Specifications

Construction		Tufted 1/12" gauge loop
Pile fibre composition		100% Colorstrand® Premium Nylon (40% recycled content) 100% solution dyed Pa6
Secondary backing		Ecoflex™ Echo (94% recycled PES Felt)
Total weight		4450 g/m²
Pile weight		600 g/m²
Surface pile weight		365 g/m²
Total thickness		8,8 mm
Surface pile thickness		3,4 mm
Surface pile density		0,107 g/cm³
Number of tufts		230.400/m²
Wear classification	EN 1307	33 / LC1
Castor chair suitability	EN 985	A: intensive use
Fire classification	EN 13501-1	Bfl-s1
Dimensional stability	EN 986	≤ 0,2%
Colour fastness to light	EN ISO 105-B02	≥ 7
Rubbing fastness	EN ISO 105-X12	≥ 4
Colour fastness to water	EN ISO 105-E01	≥ 4
Thermal resistance	ISO 8302	0,111 m².K/W
Sound absorption	EN ISO 354	0,30 αw Hz 125 250 500 1000 2000 4000 αs 0 0,05 0,30 0,30 0,35 0,40
Impact sound reduction	EN ISO 10140-3	ΔLw = 32 dB
Permanent antistatic	ISO 6356	≤ 2 kV
Size & Packaging		25 x 75 cm (9,84" x 29,53") 3 m²/box - 24 boxes/pallet
GUT-Produs Number		6A8A980E

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# EcoFlex™ Echo / Balanced Hues

## Carpet Tiles



### Technical Specifications

Construction		Tufted 1/12" gauge loop
Pile fibre composition		100% Colorstrand® Premium Nylon (40% recycled content) 100% solution dyed Pa6
Secondary backing		Ecoflex™ Echo (94% recycled PES Felt)
Total weight		4800 g/m²
Pile weight		720 g/m²
Surface pile weight		483 g/m²
Total thickness		9 mm
Surface pile thickness		3,9 mm
Surface pile density		0,125 g/cm³
Number of tufts		244.800/m²
Wear classification	EN 1307	33 / LC2
Castor chair suitability	EN 985	A: intensive use
Fire classification	EN 13501-1	Bfl-s1
Dimensional stability	EN 986	≤ 0,2%
Colour fastness to light	EN ISO 105-B02	≥ 7
Rubbing fastness	EN ISO 105-X12	≥ 4
Colour fastness to water	EN ISO 105-E01	≥ 4
Thermal resistance	ISO 8302	0,126 m².K/W
Sound absorption	EN ISO 354	0,25 αw Hz 125 250 500 1000 2000 4000 αs 0,00 0,05 0,25 0,25 0,40 0,40
Impact sound reduction	EN ISO 10140-3	ΔLw = 33 dB
Permanent antistatic	ISO 6356	≤ 2 kV
Size & Packaging		50 x 50 cm (19,68" x 19,68") 3,5 m²/box - 24 boxes/pallet
GUT-Produs Number		FA52FF8B

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# EcoFlex™ Echo / Basalt & Jute

## Carpet Tiles



### Technical Specifications

		Basalt	Jute
Construction		Tufted 1/12" gauge loop	Tufted 1/12" gauge loop
Pile fibre composition		100% solution dyed nylon	100% solution dyed nylon
Secondary backing		Ecoflex™ Echo (94% recycled PES Felt)	Ecoflex™ Echo (94% recycled PES Felt)
Total weight		+/- 4700 g/m²	+/- 4700 g/m²
Pile weight		+/- 600 g/m²	+/- 600 g/m²
Surface pile weight		+/- 390 g/m²	+/- 415 g/m²
Total thickness		+/- 8,4 mm	+/- 8,4 mm
Surface pile thickness		+/-3,2 mm	+/-3,1 mm
Surface pile density		+/- 0,125 g/cm³	+/- 0,127 g/cm³
Number of tufts		219.300 /m²	224.400 /m²
Wear classification	EN 1307	33 / LC1	33 / LC2
Castor chair suitability	EN 985	A: intensive use	A: intensive use
Fire classification	EN 13501-1	Bfl-s1	Bfl-s1
Dimensional stability	EN 986	≤ 0,2%	≤ 0,2%
Colour fastness to light	EN ISO 105-B02	≥ 7	≥ 7
Rubbing fastness	EN ISO 105-X12	≥ 4	≥ 4
Colour fastness to water	EN ISO 105-E01	≥ 4	≥ 4
Thermal resistance	ISO 8302	0,109 m².K/W	0,113 m².K/W
Sound absorption	EN ISO 354	0,25 αw Hz 125 250 500 1000 2000 4000 αs 0 0 0,25 0,25 0,30 0,35	0,25 αw Hz 125 250 500 1000 2000 4000 αs 0 0,05 0,25 0,25 0,25 0,30
Impact sound reduction	EN ISO 10140-3	ΔLw = 32 dB	ΔLw = 32 dB
Permanent antistatic	ISO 6356	≤ 2 kV	≤ 2 kV
Number of colours		12	12
Size & Packaging		50 x 50 cm (19,68" x 19,68") 4 m²/box - 24 boxes/pallet	50 x 50 cm (19,68" x 19,68") 4 m²/box - 24 boxes/pallet
GUT-Produs Number		65EB7088	94EFCC68

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