

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.**

This backing is available on all our carpet tile collections for orders of 200 m<sup>2</sup> or more.

# 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.

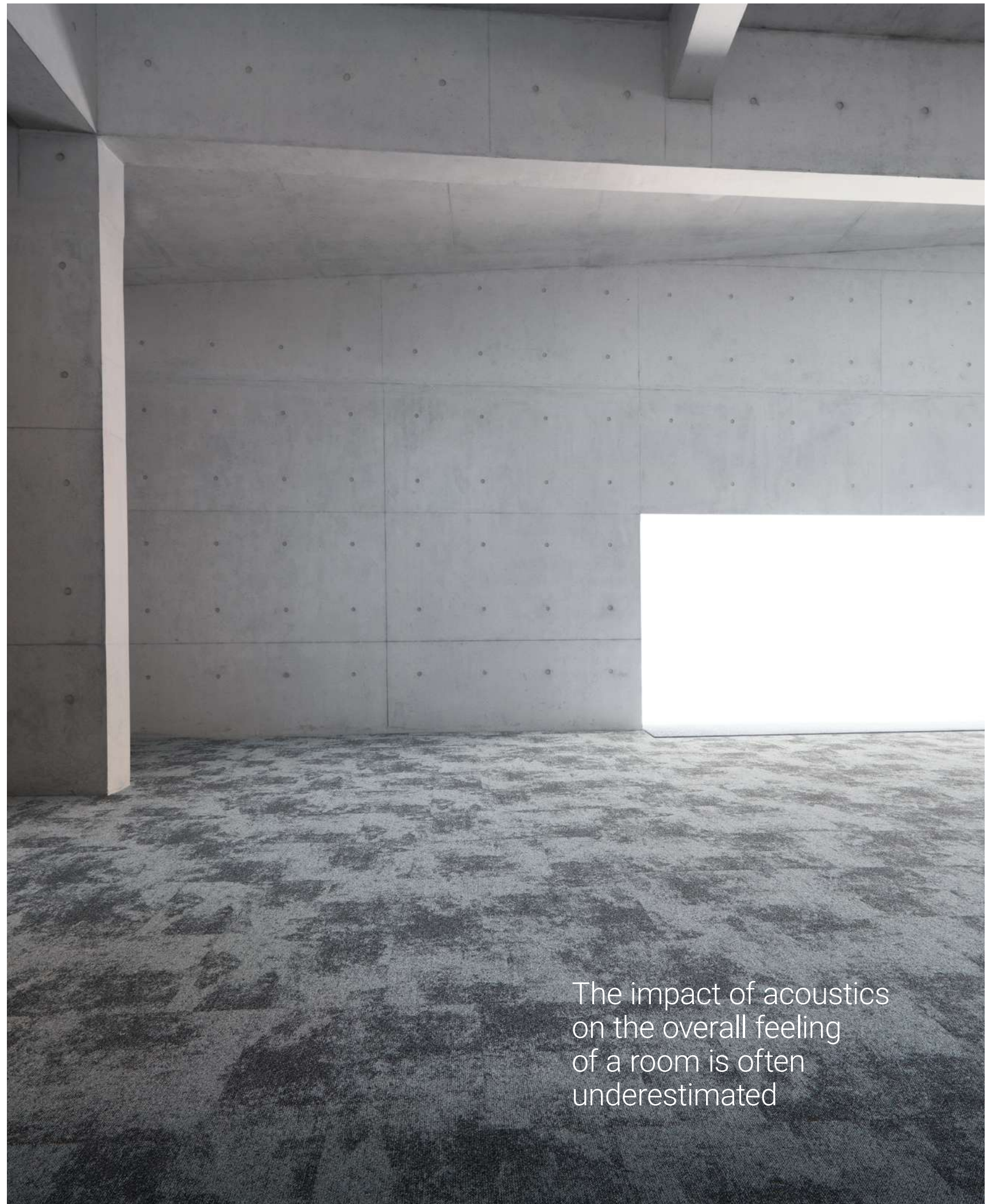
In this, the aspect of acoustics is often underestimated, despite **optimal sound insulation and absorption being essential** to create a healthy and productive working environment.

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**.

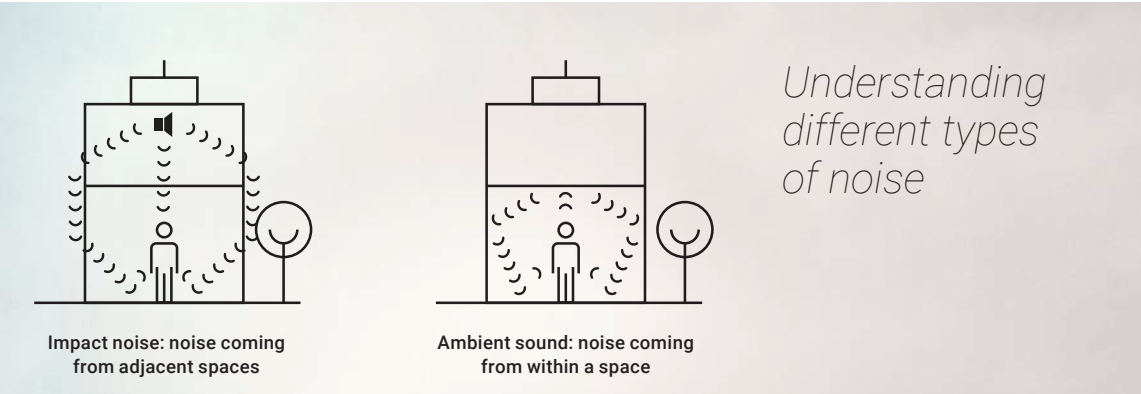
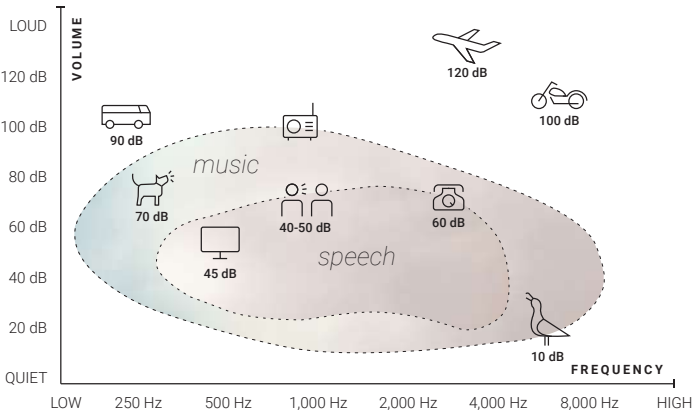
The impact of acoustics on the overall feeling of a room is often underestimated



# 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.



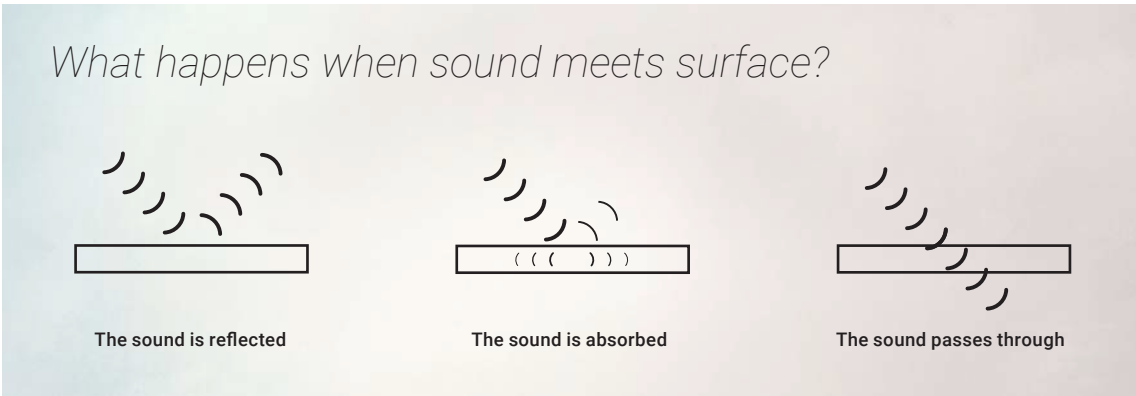
## Optimal impact sound reduction

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  $\alpha_s$  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.







... and beneath  
your feet

# Backing every flooring project

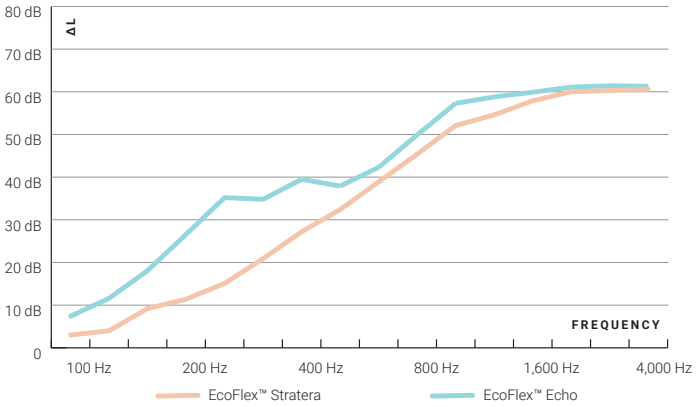
At IVC Commercial we believe everyone is entitled to better acoustics and ergonomic comfort. That's why we've developed a superior backing that considers acoustic insulation, sound absorption and underfoot comfort.

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.

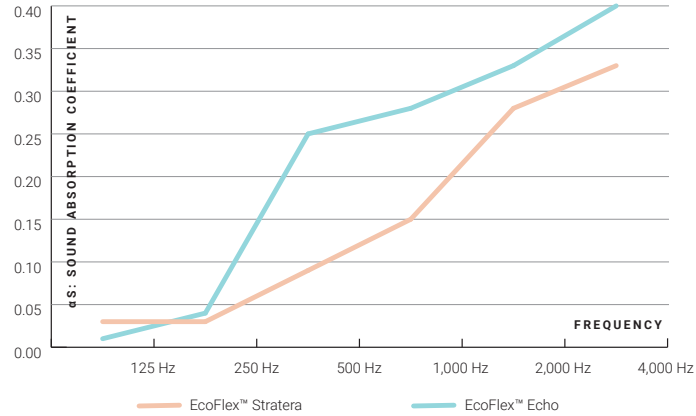
Standard IVC Commercial Carpet Tiles with the **EcoFlex™ Statera** backing system are also developed with attention to acoustic properties. They offer a qualitative solution for projects where **no specific values** are required.

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.

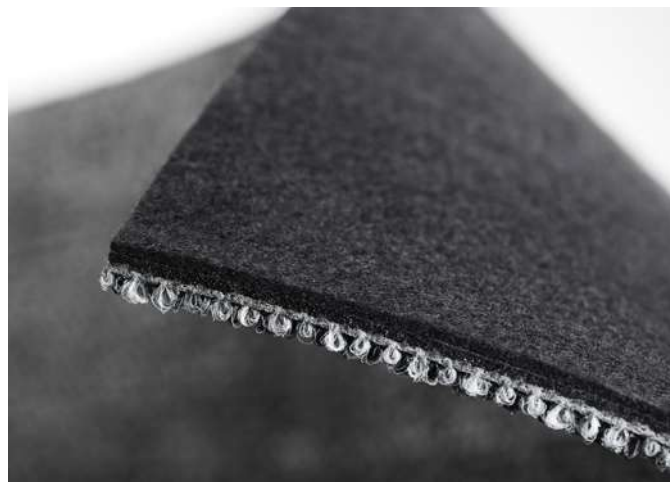
This smart choice of material also ensures a **higher level of underfoot comfort** and prevents muscle fatigue.

## 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**



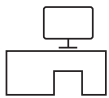
EcoFlex™ Echo





# 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™ Statera versus EcoFlex™ Echo:

Comparison of aw and dB values

	ECOFLEX™ STATERA	↔	ECOFLEX™ ECHO
ART INTERVENTION			
Creative Spark	0,15 aw	↔	0,30 aw
Expansion Point	0,15 aw	↔	0,25 aw
RUDIMENTS			
Basalt	0,15 aw	↔	0,25 aw
Jute	0,15 aw	↔	0,25 aw
Teak	0,15 aw	↔	0,25 aw
Clay	0,15 aw	↔	0,25 aw
Clay Create	0,15 aw	↔	0,25 aw
CONTOUR			
View	0,15 aw	↔	0,25 aw
Perspective	0,15 aw	↔	0,25 aw
BALANCED HUES			
Balanced Hues	0,20 aw	↔	0,25 aw
IMPERFECTION			
Grit	N/A	↔	0,25 aw
Bruut	N/A	↔	0,30 aw
Rupture	N/A	↔	0,30 aw

	ECOFLEX™ STATERA	↔	ECOFLEX™ ECHO
ART INTERVENTION			
Creative Spark	32 dB	↔	35 dB
Expansion Point	27 dB	↔	33 dB
RUDIMENTS			
Basalt	28dB	↔	32dB
Jute	28dB	↔	32dB
Teak	28dB	↔	32dB
Clay	28dB	↔	31dB
Clay Create	28dB	↔	31dB
CONTOUR			
View	25dB	↔	28 dB
Perspective	25dB	↔	28 dB
BALANCED HUES			
Balanced Hues	28dB	↔	33 dB
IMPERFECTION			
Grit	N/A	↔	29 dB
Bruut	N/A	↔	31 dB
Rupture	N/A	↔	30 dB

The complete technical data sheets are available on [ivic-commercial.com](https://www.ivic-commercial.com): just scan the QR code







[www.ivo-commercial.com](http://www.ivo-commercial.com)

