

A decorative graphic of white wavy lines on a teal background, located in the top left corner.

We see **what you hear**

Optimise office acoustics with our dB tile range

A large, flowing graphic of white wavy lines that spans across the middle of the image, creating a sense of movement and sound waves.

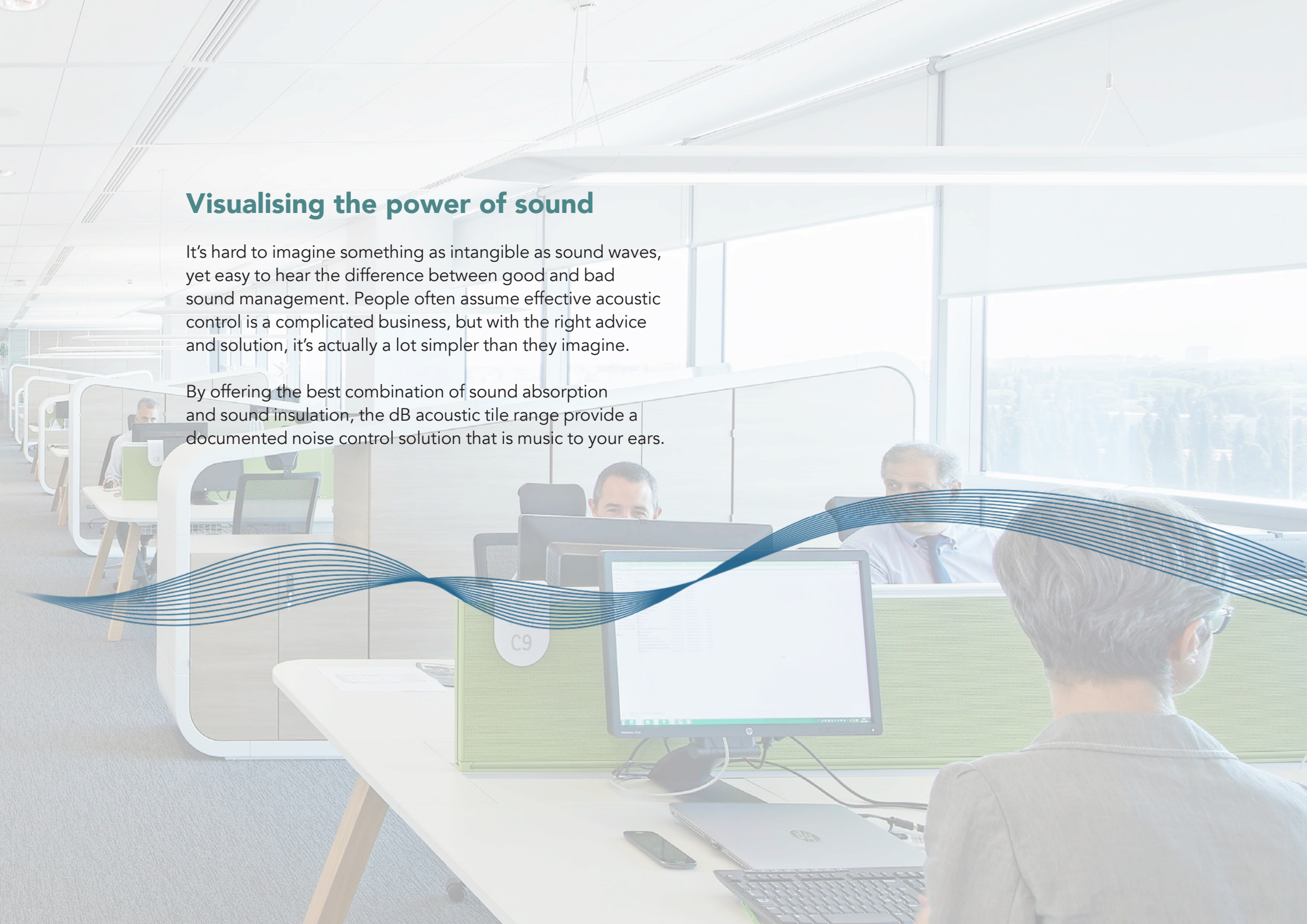
Sounds Beautiful



Visualising the power of sound

It's hard to imagine something as intangible as sound waves, yet easy to hear the difference between good and bad sound management. People often assume effective acoustic control is a complicated business, but with the right advice and solution, it's actually a lot simpler than they imagine.

By offering the best combination of sound absorption and sound insulation, the dB acoustic tile range provide a documented noise control solution that is music to your ears.





27% **66%**

Reduction in stress levels because of an improved acoustic environment in offices.*

Decrease in overall staff performance as a result of distracting noise.**

Creating the perfect office – why acoustics matter

Modern offices have to be flexible enough to accommodate an increasingly diverse range of activities, uses and employee types, providing access to adequately soundproofed areas when extra concentration, creativity or privacy are required. It's hard to focus with other distractions in the room, and staff conversations, phone calls and machinery can seriously hinder productivity.

High noise levels = high stress levels

You often hear about poor acoustics reducing efficiency or lowering performance in the workplace, but what exactly does this mean? Can noise levels in an office really affect an employee's productivity or impact their well-being? Evidence seems to suggest this is the case. Studies show that loud environments have a negative effect on workers' concentration levels, work quality and ability to retain information. Healthwise, exposure to excessive noise can cause physical and physiological stress, resulting in poor job satisfaction and increasing the risk of absenteeism.

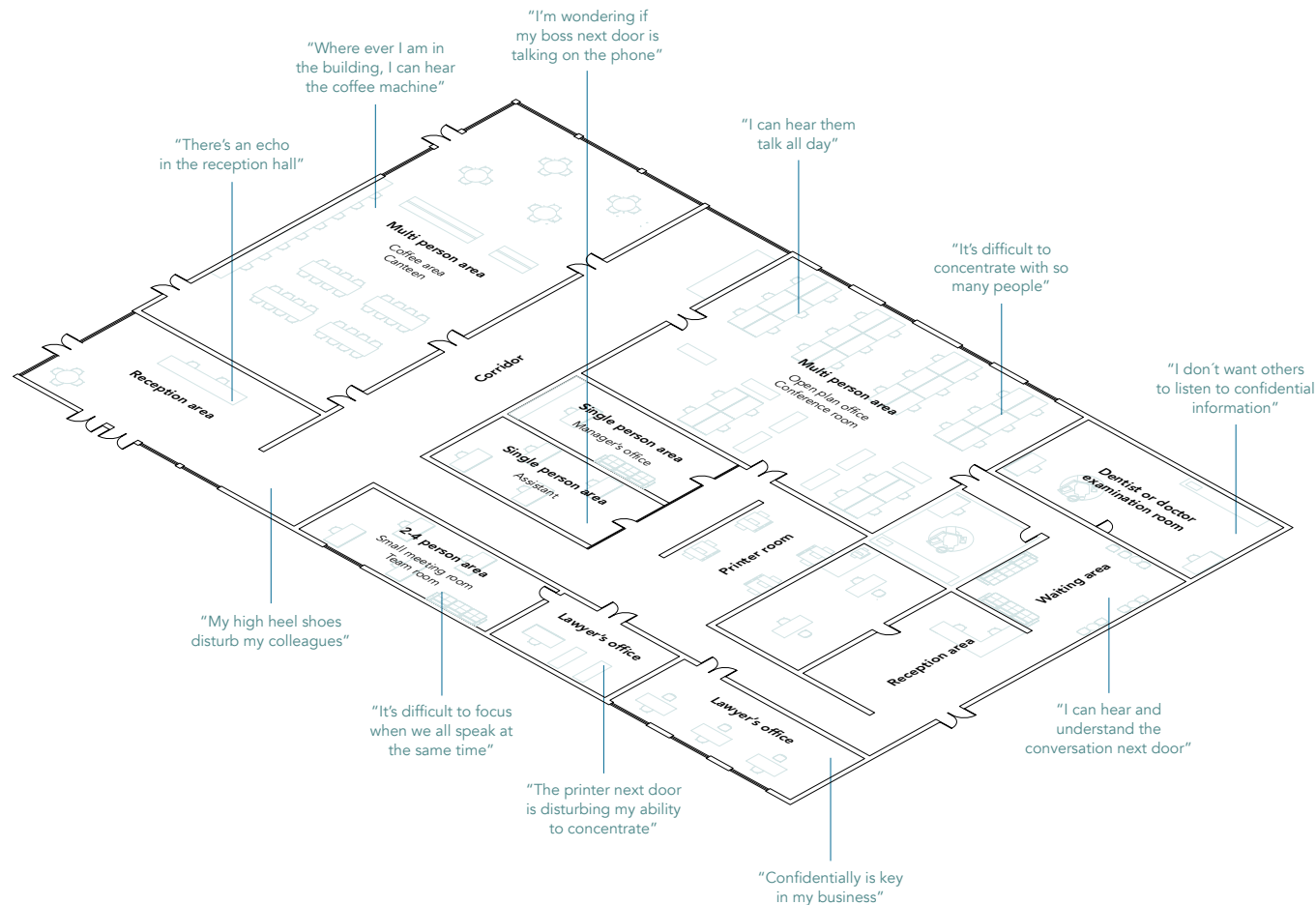
Prevention is better than cure

Acoustic management needs to be prioritised and thought into past, present and future building and renovation projects in order to create and maintain a healthy and thriving office culture.

Futureproof your office space by choosing a versatile acoustic ceiling solution from the beginning.

* Source: Sykes, David M., PhD. *Productivity: How Acoustics Affect Workers' Performance in Open Areas*. 2004.

** Source: WGBBC, *Building the Business Case: Health, Wellbeing and Productivity in Green Offices*, Oct 2016.



"We chose this range of products as it was crucial to ensure the ideal acoustic absorption and insulation from the shared working environments."

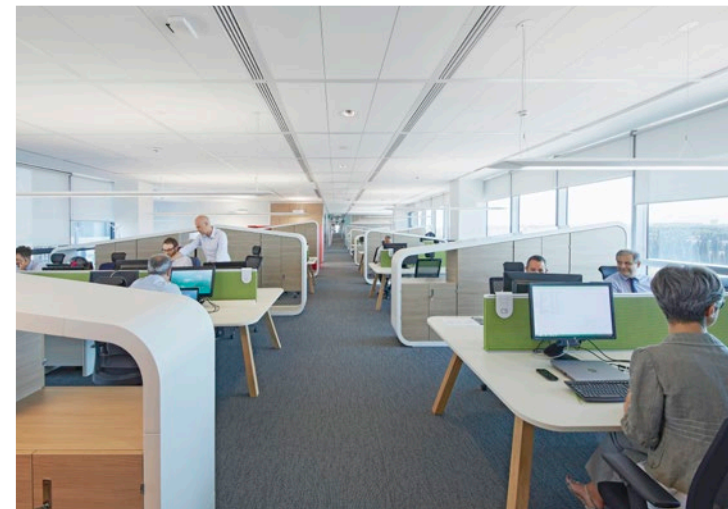
Paolo Mantero, Interior Designer, Studio Mantero

BNL-BNP Paribas, Rome, Italy

27,000 m² Rockfon® dB, Edge D/AEX Rockfon® System Bandraster™

The new Headquarter of BNL-BNP in Rome, Italy is a LEED Gold certified building. This meant that areas such as sustainability, lighting and acoustics were high on the agenda from the beginning of the design phase. The nature of the building and the many open workspaces combined with meetings rooms placed in busy areas made Rockfon's dB range a natural choice. Not only did Rockfon's acoustic tiles fulfill the sustainable criteria, they also offered the design flexibility needed to control the building's acoustic needs. The result retained the architects' desire for a bright and airy space, yet provided the functionality and noise management required for ultra-modern shared offices.

CASE STUDY



Rethinking the office space

As new buildings are constructed and old buildings are being renovated, their design has to cater for the shifts in working patterns. Flexibility is key, both in terms of design and materials

Create the optimal acoustic work environment

What makes the office space an acoustical challenge is that it consists of multiple room types, from the open plan office, where absorbing sound and controlling the sound level is vital for a good indoor climate, to adjoining offices and meeting rooms, where privacy and confidentiality is key and where you wish to contain the sound.

Some building owners opt for sound insulation solutions that act as a barrier, preventing noise from entering or leaving a space, but this has no effect on absorbing or controlling the sound within the room. Others prefer to use sound absorption panels, which help increase speech intelligibility and reduce reverberation, but do not block sound from disturbing the people next door.

With the Rockfon dB range you do not need to compromise. The unique combination of both high sound insulation AND sound absorption lets you create the optimal acoustic work environment no matter your space.

ACOUSTIC WELL-BEING IS
PRIMARILY DETERMINED BY

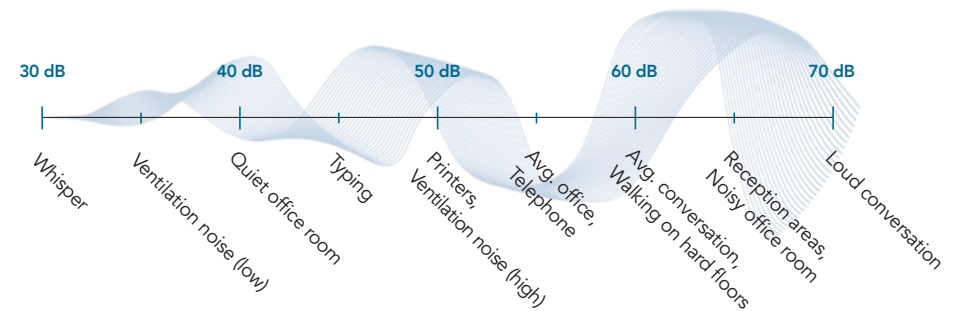
SOUND ABSORPTION (α_w)

Expresses how sound behaves in a room. It can reduce the disturbing echo and control the noise level ensuring good speech intelligibility.

SOUND INSULATION ($D_{n,f,w}$)

Expresses how much sound is reduced from one room to another. Sound insulation can prevent noise from traveling and increase room confidentiality and privacy.

NOISE THERMOMETER IN DB



Sound transmission between two offices

It isn't just the sound insulation capabilities of a product that affect the amount of noise being transferred from a neighboring room; the sound absorbing properties of the product will also have a positive influence. Something which is NOT reflected in the $D_{n,f,w}$ values.

As the illustrations indicate, ceilings with the same dB value, but different sound absorption levels, will result in different sound pressure levels.

When the sound source room has a ceiling with high sound absorption, it results in a lower sound pressure, meaning that less sound is transmitted to the adjoining room, as much of it has been partially absorbed by the ceiling.

When the receiving room also has a high absorbing ceiling, the sound pressure level will further decrease as the remaining sound entering the room is absorbed.

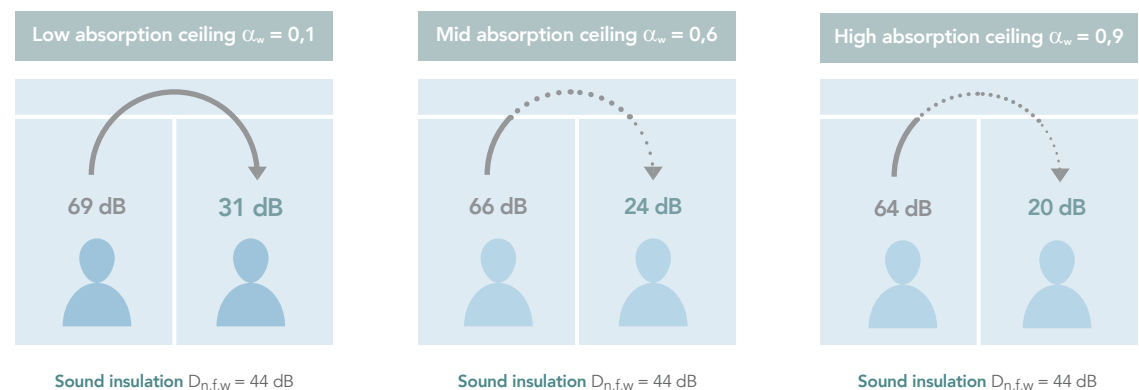
As opposed to a low absorption ceiling the sound is reduced both in the source room and again in the receiving room resulting in an overall lower sound pressure level.

With our unique dB range you get the best of both worlds ensuring your space the most optimal acoustical climate.

A sound pressure level reduction of 3 dB equals a reduction to 1/2 the initial sound power.

A 6 dB reduction equals a reduction to 1/4th the initial sound power.

3 CEILINGS WITH SAME SOUND INSULATION PERFORMANCE BUT DIFFERENT SOUND ABSORPTION PROPERTIES



Total sound pressure level in speech frequency range 500 - 4000 Hz



Listen with your eyes

For optimal sound management, it's essential to understand how sound behaves and travels within a certain space. Imagine the benefits of actually seeing what you are hearing, of being able to visualize hidden noise sources.

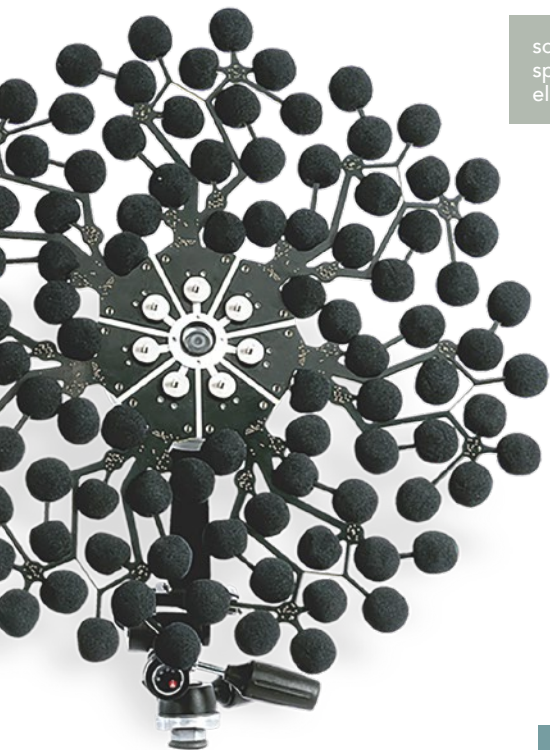
The most critical areas for sound transmission are often around light fittings or where the partition wall meets the ceiling. These "red" zones are where the majority of the distracting sound finds a path to enter the room. However, there is a solution that can turn these critical "red" zones into comfortable "blue" zones without compromising on the flexibility of the space.



Our dB range of acoustic tiles and accessories provide the most effective solution for your sound management issues. Depending on the level of confidentiality needed, you can control your noise levels accordingly, with either a basic dB tile for moderate sound blocking or combine it further with Rockfon's accessories for full privacy.

In combination with the right sound insulating properties of the partition walls, the ceilings are an important parameter to noise control. Choosing the right ceiling solution and making sure that the connections to the walls are handled accordingly can make all the difference between a good acoustic experience and a great one.





IT'S ESSENTIAL TO UNDERSTAND HOW

sound behaves within a certain space – we can help identify and eliminate your noise issues.

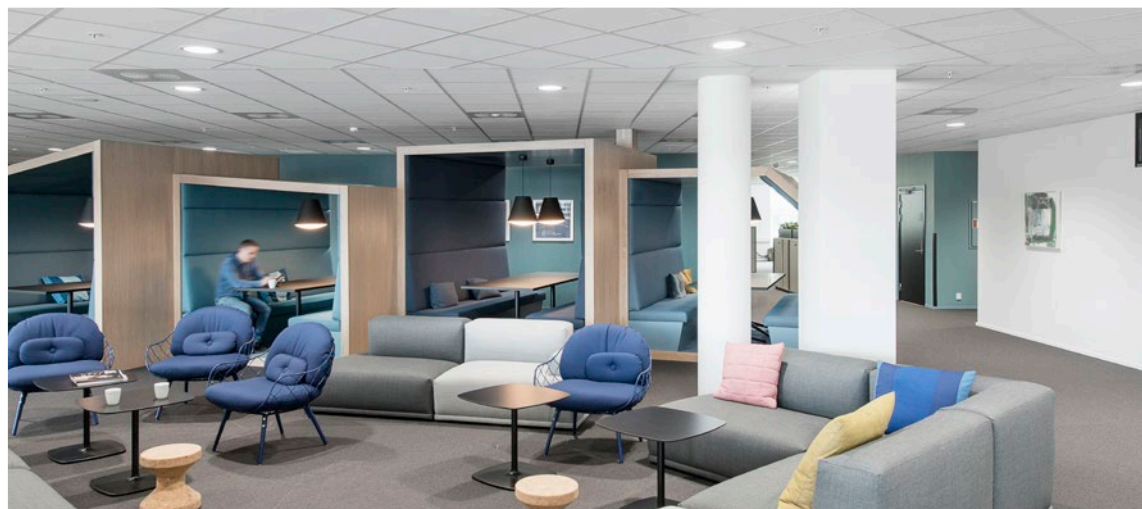
"In our previous office you had challenges of being able to hear what was being discussed in the adjoining meeting rooms but this significantly improved in the new offices."

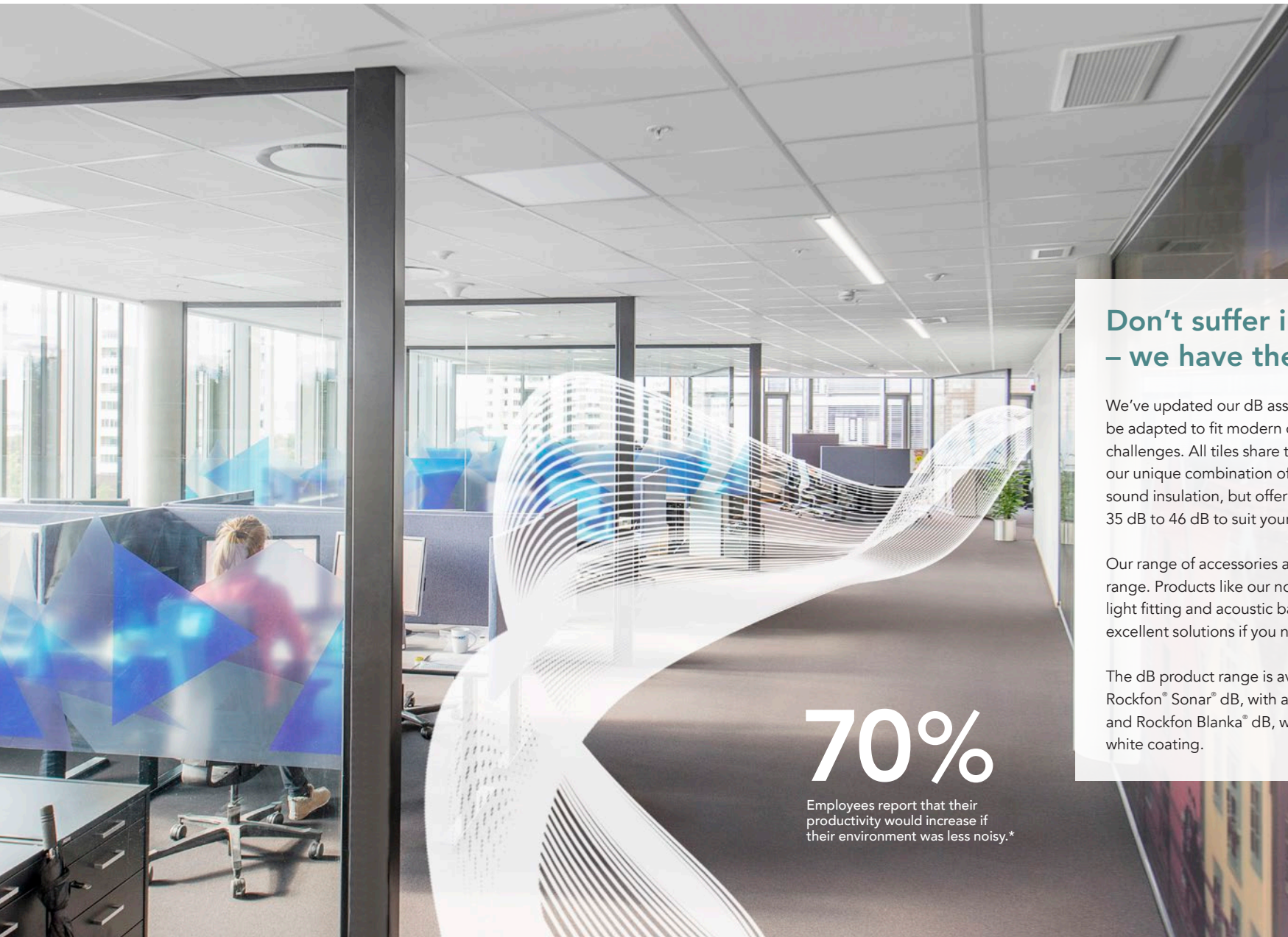
Øivind Hansen, Facility Manager, Skanska

Sundtkvartalet, Norway

31,000 m² Rockfon® Sonar® dB, Edge A

Sundtkvartalet is a large office building where, amongst others, Skanska is a main tenant. Skanska's needs and demands have been leading in the project where effective, flexible and good offices and workstations have been in focus. As Skanska works with contracts that requires a high degree of confidentiality Rockfon® Sonar® dB is installed in most offices in Sundtkvartalet. It provides enhanced room-to-room sound insulation as well as a high-level of sound absorption in areas where confidentiality is important.





Don't suffer in silence – we have the solution

We've updated our dB assortment with new options that can be adapted to fit modern offices' design needs and acoustic challenges. All tiles share the same Rockfon technology with our unique combination of high sound absorption and high sound insulation, but offer varying levels of sound control from 35 dB to 46 dB to suit your privacy requirements.

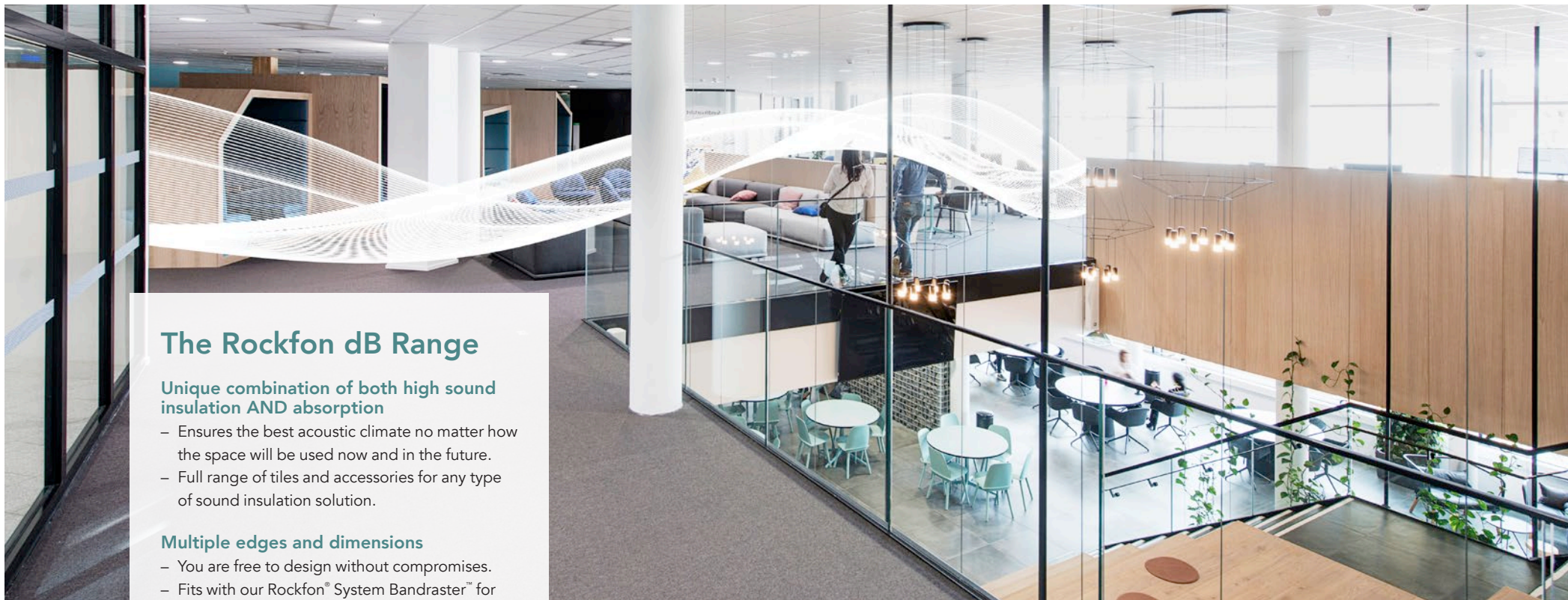
Our range of accessories are designed to complement the dB range. Products like our noise-blocking Rockfon® Rocklux® light fitting and acoustic barrier Rockfon® Soundstop™ are excellent solutions if you need to block sound totally.

The dB product range is available in two surfaces: Rockfon® Sonar® dB, with an attractive micro-textured surface and Rockfon Blanka® dB, which features a smooth and super-white coating.

70%

Employees report that their productivity would increase if their environment was less noisy.*

* Source: Sykes, David M., PhD.
Productivity: How Acoustics Affect Workers' Performance in Open Areas. 2004.



The Rockfon dB Range

Unique combination of both high sound insulation AND absorption

- Ensures the best acoustic climate no matter how the space will be used now and in the future.
- Full range of tiles and accessories for any type of sound insulation solution.

Multiple edges and dimensions

- You are free to design without compromises.
- Fits with our Rockfon® System Bandraster™ for easy integration to partition walls.
- Or go for a modern and stringent design with our Rockfon® System Ultraline™.
- Formats for all room types.

Elegant and versatile surfaces

- Easy to mix the dB products with our regular acoustic tiles within the family ensuring the same look throughout the building.
- The super-white surface of Rockfon Blanka brings in the light 11% further due to its unique L-value and light diffusion properties.

Low weight product

- Easy to handle and install.
- Faster to cut.

ROCKFON BLANKA DB

Rockfon Blanka's surface has been specially developed to create an unparalleled brightness and whiteness – a designer's dream, with functional benefits too.




With a light reflection index of 87%, Rockfon's dB tiles offers outstanding light reflection and light diffusion properties that maximize the uniform spread of natural light. 77% of building owners and architects identified improved indoor lighting conditions and daylight as the most important feature of healthier buildings.

The enhanced surface durability makes Rockfon Blanka more resistant to dirt and everyday wear and tear, extending the product lifetime.

Source: Dodge Data & Analytics, "Smart Market Report", 2016

Rockfon Blanka® dB 35

- Combines room-to-room sound insulation as well as good sound absorption for a flexible office layout where confidentiality is not an issue

| Edge detail | Module size (mm) | Weight (kg/m²) | MS / MS easy access (mm) | Recommended installation system |
|--|------------------|----------------|--------------------------|-----------------------------------|
|  A24 | 600 x 600 x 25 | 3,4 | 50 / 100 | Rockfon® System dB T24 A, E™ |
| | 1200 x 600 x 25 | 3,4 | 50 / 100 | Rockfon® System dB T24 A, E™ |
| | | 3,4 | 50 / 100 | Rockfon® System dB Bandraaster A™ |
|  E15 | 600 x 600 x 25 | 3,4 | 60 / 100 | Rockfon® System T15 E™ |
| | 1200 x 600 x 25 | 3,4 | 60 / 100 | Rockfon® System T15 E™ |
|  E24 | 600 x 600 x 25 | 3,4 | 60 / 100 | Rockfon® System dB T24 A, E™ |
| | 1200 x 600 x 25 | 3,4 | 60 / 100 | Rockfon® System dB T24 A, E™ |

MS = Minimum suspension

MS easy access = Minimum suspension - tiles demountable

Selected performances

For complete datasheet information please visit our website.



Sound absorption

$\alpha_{0,0}$: 0,80 (Class B)



Direct sound insulation

R_w = 19 dB



Room to room sound insulation

$D_{n,f,w}$ = 35 dB

$D_{n,f,w}$ with Rockfon Soundstop 21 dB = 44* dB

$D_{n,f,w}$ with Rockfon Soundstop 30 dB = 50* dB

The sound insulation properties (R_w , $D_{n,f,w}$) presented in the datasheet represent A-edge tiles.

*) Values obtained on the basis of theoretical analysis.



Light reflection and light diffusion

87% light reflection
>99% light diffusion



Surface durability

Enhanced durability and dirt resistance.

Wet-scrub resistance: Class 5

The wet-scrub resistance is tested in accordance with EN ISO 11998:2007, rated on a scale from 1 to 5, where 1 is best.



Reaction to fire

A2-s1,d0



Environment

Fully recyclable stone wool



Visual appearance

Super-white surface
L value: 94.5

The whiteness (L value) of the product is tested in accordance with ISO 7724 and measured on a scale from 1 (black) to 100 (white).

Deep matt surface, perfect in critical side-light
Gloss: 0.8 gloss unit at 85° angle

The gloss of the product is tested in accordance with ISO 2813.




Indoor environment

A selection of Rockfon products have been awarded



Rockfon Blanka® dB 41

- Combines enhanced room-to-room sound insulation as well as a high level of sound absorption (Class A) for a flexible and quiet office layout

| Edge detail | Module size (mm) | Weight (kg/m²) | MS / MS easy access (mm) | Recommended installation system |
|--|------------------|----------------|--------------------------|-------------------------------------|
|  A24 | 600 x 600 x 35 | 5,6 | 50 / 150 | Rockfon® System dB T24 A, E™ |
| | 1200 x 600 x 35 | 5,6 | 50 / 150 | Rockfon® System dB T24 A, E™ |
| | | 5,6 | 50 / 150 | Rockfon® System dB Bandraster A™ |
|  D | 600 x 600 x 35 | 5,6 | 62 / 87 | Rockfon® System XL T24 D™ |
| | 1200 x 600 x 35 | 5,6 | 69 / 69 | Rockfon® System T24 Stepped Z D™ |
|  D/AEX | 1200 x 600 x 35 | 5,6 | 150 / 150 | Rockfon® System Bandraster Dzn/AEX™ |
| | 1500 x 600 x 35 | 5,6 | 150 / 150 | Rockfon® System Bandraster Dzn/AEX™ |
| | 1800 x 600 x 35 | 5,6 | 150 / 150 | Rockfon® System Bandraster Dzn/AEX™ |
|  E15 | 600 x 600 x 35 | 5,6 | 60 / 150 | Rockfon® System T15 E™ |
| | 1200 x 600 x 35 | 5,6 | 60 / 150 | Rockfon® System T15 E™ |
|  E24 | 600 x 600 x 35 | 5,6 | 60 / 150 | Rockfon® System dB T24 A, E™ |
| | 1200 x 600 x 35 | 5,6 | 60 / 150 | Rockfon® System dB T24 A, E™ |

MS = Minimum suspension

MS easy access = Minimum suspension - tiles demountable

Selected performances

For complete datasheet information please visit our website.



Sound absorption

α_w : 0,90 (Class A)



Direct sound insulation

R_w = 21 dB



Room to room sound insulation

$D_{n,f,w}$ = 41 dB

$D_{n,f,w}$ with Rockfon Soundstop 21 dB = 50* dB

$D_{n,f,w}$ with Rockfon Soundstop 30 dB = 55* dB

The sound insulation properties (R_w , $D_{n,f,w}$) presented in the datasheet represent A-edge tiles.

*) Values obtained on the basis of theoretical analysis.



Light reflection and light diffusion

87% light reflection
>99% light diffusion



Surface durability

Enhanced durability and dirt resistance.

Wet-scrub resistance: Class 5

The wet-scrub resistance is tested in accordance with EN ISO 11998:2007, rated on a scale from 1 to 5, where 1 is best.



Thermal insulation

Thermal conductivity:
 λ_D = 40 mW/mK



Reaction to fire

A2-s1,d0



Visual appearance

Super-white surface
L value: 94,5

The whiteness (L value) of the product is tested in accordance with ISO 7724 and measured on a scale from 1 (black) to 100 (white).

Deep matt surface, perfect in critical side-light
Gloss: 0.8 gloss unit at 85° angle

The gloss of the product is tested in accordance with ISO 2813.



Indoor environment

A selection of Rockfon products have been awarded








Environment

Fully recyclable stone wool

Rockfon Blanka® dB 43

- Combines enhanced room-to-room sound insulation as well as a high level of sound absorption (Class A) for flexible office layouts where confidentiality is important

| Edge detail | Module size (mm) | Weight (kg/m²) | MS / MS easy access (mm) | Recommended installation system |
|--|------------------|----------------|--------------------------|-------------------------------------|
|  A24 | 600 x 600 x 40 | 7,0 | 50 / 200 | Rockfon® System dB T24 A, E™ |
| | 1200 x 600 x 40 | 7,0 | 50 / 200 | Rockfon® System dB T24 A, E™ |
| | | 7,0 | 50 / 200 | Rockfon® System dB Bandraster A™ |
|  D | 600 x 600 x 40 | 7,0 | 62 / 92 | Rockfon® System XL T24 D™ |
|  D/AEX | 1200 x 600 x 40 | 7,0 | 150 / 150 | Rockfon® System Bandraster Dzn/AEX™ |
| | 1500 x 600 x 40 | 7,0 | 150 / 150 | Rockfon® System Bandraster Dzn/AEX™ |
| | 1800 x 600 x 40 | 7,0 | 150 / 150 | Rockfon® System Bandraster Dzn/AEX™ |
|  E15 | 600 x 600 x 40 | 7,0 | 60 / 200 | Rockfon® System T15 E™ |
| | 1200 x 600 x 40 | 7,0 | 60 / 200 | Rockfon® System T15 E™ |
|  E24 | 600 x 600 x 40 | 7,0 | 60 / 200 | Rockfon® System dB T24 A, E™ |
| | 1200 x 600 x 40 | 7,0 | 60 / 200 | Rockfon® System dB T24 A, E™ |

MS = Minimum suspension

MS easy access = Minimum suspension - tiles demountable

Selected performances

For complete datasheet information please visit our website.



Sound absorption

α_w : 0,90 (Class A)



Direct sound insulation

R_w = 22 dB



Room to room sound insulation

$D_{n,f,w}$ = 43 dB

$D_{n,f,w}$ with Rockfon Soundstop 21 dB = 53* dB

$D_{n,f,w}$ with Rockfon Soundstop 30 dB = 56* dB

The sound insulation properties (R_w , $D_{n,f,w}$) presented in the datasheet represent A-edge tiles.

*) Values obtained on the basis of theoretical analysis.



Light reflection and light diffusion

87% light reflection
>99% light diffusion



Surface durability

Enhanced durability and dirt resistance.

Wet-scrub resistance: Class 5

The wet-scrub resistance is tested in accordance with EN ISO 11998:2007, rated on a scale from 1 to 5, where 1 is best.



Thermal insulation

Thermal conductivity:
 λ_D = 40 mW/mK



Reaction to fire

A2-s1,d0



Visual appearance

Super-white surface
L value: 94.5

The whiteness (L value) of the product is tested in accordance with ISO 7724 and measured on a scale from 1 (black) to 100 (white).

Deep matt surface, perfect in critical side-light
Gloss: 0.8 gloss unit at 85° angle

The gloss of the product is tested in accordance with ISO 2813.



Indoor environment

A selection of Rockfon products have been awarded






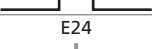
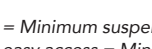
Environment

Fully recyclable stone wool



Rockfon Blanka® dB 46

- Provides enhanced room-to-room sound insulation as well as a high level of sound absorption (Class A) in areas where privacy and acoustical comfort are important

| Edge detail | Module size (mm) | Weight (kg/m²) | MS / MS easy access (mm) | Recommended installation system |
|--|------------------|----------------|--------------------------|--------------------------------------|
|  A24 | 600 x 600 x 50 | 7,9 | 50 / 200 | Rockfon® System dB T24 A, E™ |
| | 1200 x 600 x 50 | 7,9 | 50 / 200 | Rockfon® System dB T24 A, E™ |
| | | 7,9 | 50 / 200 | Rockfon® System dB Bandraaster A™ |
|  D | 600 x 600 x 50 | 7,9 | 62 / 102 | Rockfon® System XL T24 D™ |
|  D/AEX | 1200 x 600 x 50 | 7,9 | 150 / 150 | Rockfon® System Bandraaster Dzn/AEX™ |
| | 1500 x 600 x 50 | 7,9 | 150 / 150 | Rockfon® System Bandraaster Dzn/AEX™ |
| | 1800 x 600 x 50 | 7,9 | 150 / 150 | Rockfon® System Bandraaster Dzn/AEX™ |
|  E15 | 600 x 600 x 50 | 7,9 | 60 / 200 | Rockfon® System T15 E™ |
| | 1200 x 600 x 50 | 7,9 | 60 / 200 | Rockfon® System T15 E™ |
|  E24 | 600 x 600 x 50 | 7,9 | 60 / 200 | Rockfon® System dB T24 A, E™ |
| | 1200 x 600 x 50 | 7,9 | 60 / 200 | Rockfon® System dB T24 A, E™ |

MS = Minimum suspension

MS easy access = Minimum suspension - tiles demountable

Selected performances

For complete datasheet information please visit our website.



Sound absorption

α_{av} : 0,95 (Class A)



Direct sound insulation

$R_w (C; C_v)$ = 25 (-2;-4) dB



Room to room sound insulation

$D_{n,f,w}$ = 46 dB

$D_{n,f,w}$ with Rockfon Soundstop 21 dB = 55* dB

$D_{n,f,w}$ with Rockfon Soundstop 30 dB = 58* dB

The sound insulation properties (R_w , $D_{n,f,w}$) presented in the datasheet represent A-edge tiles.

*) Values obtained on the basis of theoretical analysis.



Light reflection and light diffusion

87% light reflection
>99% light diffusion



Surface durability

Enhanced durability and dirt resistance.

Wet-scrub resistance: Class 15

The wet-scrub resistance is tested in accordance with EN ISO 11998:2007, rated on a scale from 1 to 5, where 1 is best.



Thermal insulation

Thermal conductivity:
 λ_D = 40 mW/mK



Reaction to fire

A2-s1,d0



Visual appearance

Super-white surface
L value: 94.5

The whiteness (L value) of the product is tested in accordance with ISO 7724 and measured on a scale from 1 (black) to 100 (white).

Deep matt surface, perfect in critical side-light
Gloss: 0.8 gloss unit at 85° angle

The gloss of the product is tested in accordance with ISO 2813.



Indoor environment

A selection of Rockfon products have been awarded



Environment

Fully recyclable stone wool





Sounds Beautiful

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