

## Design for Leisure



Give your customers the best audio experience by using acoustic ceilings and wall panels.

**Sounds Beautiful** 

Do you want to create the best movie-going atmosphere in a cinema? Whether you're designing a cinema from scratch or refurbishing an existing one, this brochure is for you.

You'll find the latest trends that are shaping cinema design and tips for how to make the acoustics more than just a last detail.

This easy-to-navigate booklet is for Architects and Designers. It's a tool to inspire and guide the reader with insightful knowledge about optimising a cinema to give customers a memorable experience.

# Rockfon acoustic solutions create beautiful soundscapes for people to enjoy themselves and feel comfortable.

Parik Chopra

Managing Director, Rockfon

#### Content



Current trends in cinemas



How to design for the different spaces in a cinema



Entrance and ticket area



Concession stands and lounge



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Corridors and walk ways



Auditorium



Toilets



Product overview



Product highlight



We are your sustainability partner



Our services

## Current trends in **Cinemas**

The journey from cinema entrance to seat is taken for granted, but a great atmosphere and design can stand out as much as the characters on the silver screen.

We're excited to share some interesting insights and upcoming trends that impact the design of cinemas. We want to show you how it can support your clients' business and create a better experience for their customers.



#### Getting in the mood

People go to the cinema for the whole experience, to feel like they are attending an event, not just to watch a film. Whether its a shiny multiplex, a boutique cine-spot or a grand old palace, the design of a cinema needs to transport moviegoers to another world.

Playing with colours and patterns in the foyer and hallways are a great way to heighten the sense of expectation and make the wait for the film to start part of the experience.

#### How can we help?

Our acoustic ceilings and wall panel solutions come in 34 exclusive colours and in a variety of shapes, dimensions and applications to inspire and enhance your interior design scheme, helping set the mood in the cinema while controlling the noise levels.



#### Staying flexible

It's important for cinemas to be flexible and modular because there is sometimes a need to modify spaces for different events that need special visuals or live performances.

#### Where do we fit in?

Bespoke colours are also available using NCS or RAL references for ceiling tiles, grid, islands and wall panels. Our acoustic ceilings are modular in design allowing you to create multi-functional spaces. The flexibility in sizes, edges and colours enable quick changes to suit any activity.

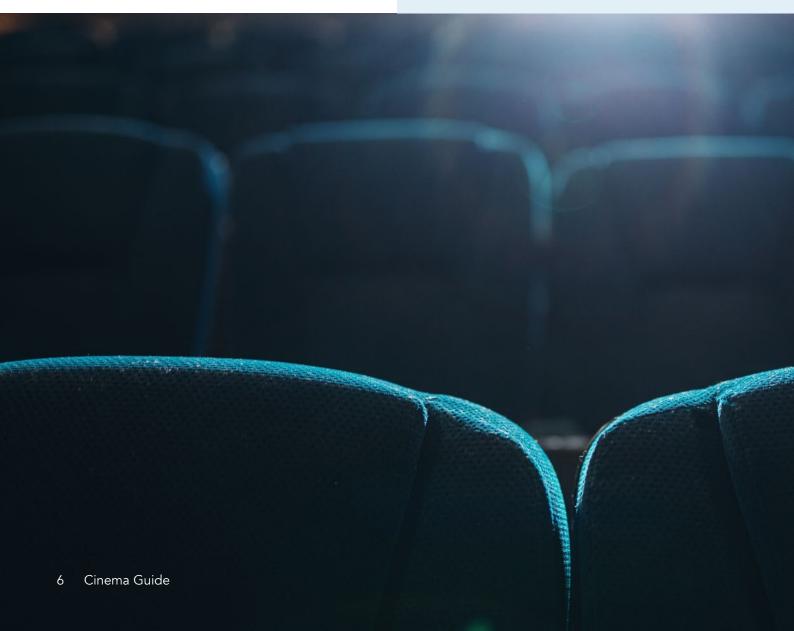


#### Sound

Great sound during a movie is imperative and that can't be achieved by a great sound system alone. Sound in cinemas needs to be absorbed and controlled, otherwise sound waves would be ricocheting off the floors, ceilings and walls, destroying the whole movie-going experience.

#### How can we help

We offer the best in class acoustic solutions. Stone wool is the core material in all Rockfon products, and it is an extremely sound absorbent material. They are independently tested in certified laboratories using an Alpha w measurement ( $\alpha_w$ ) in accordance with ISO11654.





Excellent acoustics are vital to the movie-going experience. Lousy acoustics in a movie theatre is like watching a movie with too much light. It just doesn't work.

Pascal van Dort, Global Acoustics Ambassador

## How to design for different spaces in a cinema

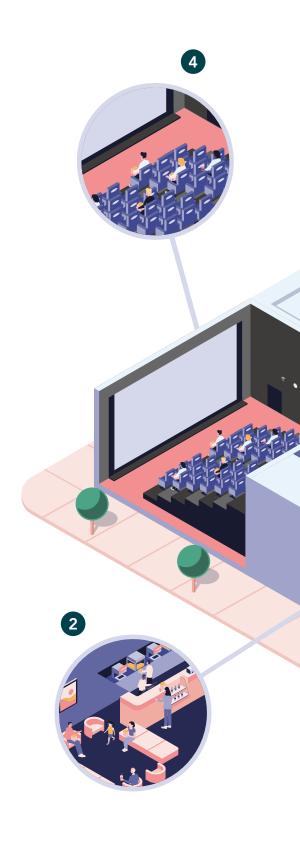
#### Different people, but create the same feeling

Creating an experience that makes people feel great is what going to the cinema is all about. Setting the stage for success means thinking about the vibe, the design, easy navigation, comfort and acoustics. The right mixture of these elements is guaranteed to be a blockbuster success.

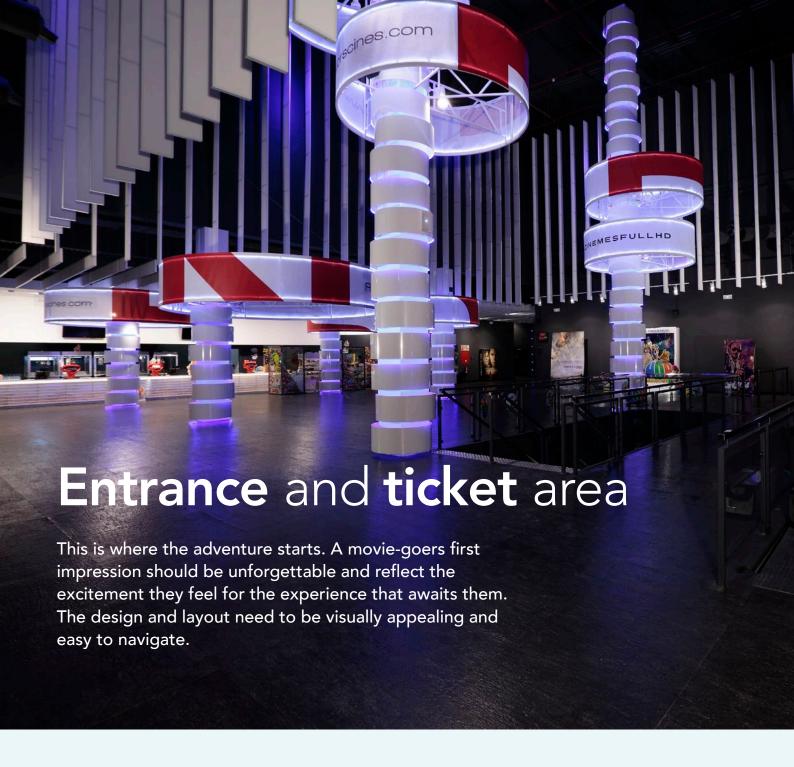
#### Strength of Rockfon

We aim to create spaces that sound stunning - and in a busy area like a movie theatre, excellent acoustics is a must. Our broad range of acoustic solutions gives you the freedom and opportunity to create a comfortable and unique space for visitors to enjoy themselves in.

- Entrance and ticket area
- 2 Concession stands and lounge
- 3 Corridors and walk ways
- 4 Auditorium
- 5 Toilets







#### Here are some products we recommend

#### Rockfon Blanka®

The bright, matt white surface that looks and sounds great. Rockfon Blanka® offers the best acoustic level to ensure a comfortable indoor environment. The super white and smooth surface comes in edges and dimensions to complement every space.



Its unique surface reduces the visual contrast between your grid and tile, giving you an elegant and almost monolithic look, even if you choose to have an acoustic ceiling tile with a visible grid.

#### Rockfon Color-all®

Available in 34 exclusive colours, everything from subtle to bold long-lasting colours. It is available in concealed, semi-concealed and visible grid solution and it in a variety of tile sizes, giving you total design freedom.

#### 

The Rockfon Color-all ceiling tiles are ideal for this type of project. They fulfil all the acoustic and design requirements demanded by a high-tech multiplex.

Philip McCabe,
Development Director for Principal Contractor,
Britannia Construction.

#### The power of colour

The entrance sets the scene for how the rest of the experience will be. This space should make customers feel immediately comfortable - and colours are a great way to set the mood.

Applying colour psychology can be a great way to create and stimulate feelings and behaviours to create positive outcomes. For example, light blues and soft greens soothe and calm the mind, a great way to make people feel at ease.

#### Control the sound

The entrance and ticket area are busy with people meeting up and buying their tickets. Conversational noise can become excessive in these high footfall areas.

Having the right acoustic materials on the ceilings and walls can be a great way to avoid elevating noise levels and overwhelming customers.



#### Set the scene with a great design

#### Entrance and ticket area design solutions

Going to the cinema is a special occasion - and the interior design is a part of the experience. It's important that sound levels at the entrance and ticket area are controlled, to avoid the space becoming too noisy.

#### Product Highlight

#### Rockfon® Mono® Acoustic

A unique design solution for new build or renovation projects alike. Perfect for ceilings and walls, the innovative monolithic surface delivers outstanding acoustic comfort.

The refined white surface provides high light reflection and light diffusion, ensuring even light distribution and reducing the need for artificial light.





CASE STUDY



#### Acoustic design tips

Three tips for creating an excellent acoustic comfort in the entrance and ticket area.

- 1. Use high-quality sound-absorbing materials to reduce the sound and prevent it from spreading.
- 2. Create sound barriers in the interior design to absorb the noise.
- 3. Have soft material on the floors to improve sound absorption.

#### Cinemes Centre Splau

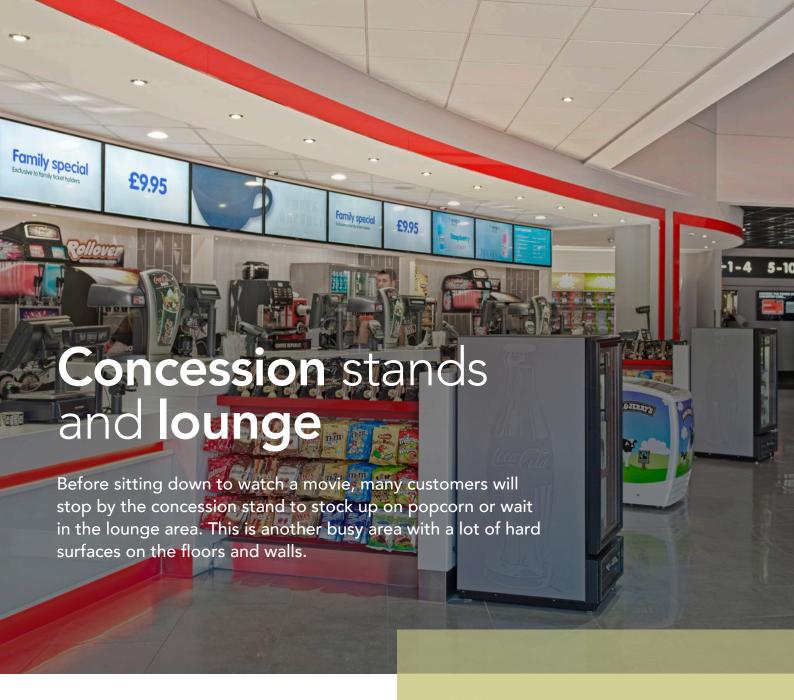
llobregat, Spain

#### Challenges:

A key challenge for the architect was the proximity of the auditoria to the common areas and foyer.

#### Solutions and results:

The architect designed a dual ticket and lounge area. A visible suspended ceiling with a beautiful contrast of white baffles hanging down from the ceiling controls the sound. They appear like a moonlit forest with the striking tall free-floating installation hanging in the middle.



#### Make the minutes count

Cinema operators are increasingly focused on encouraging people to dwell, offering an environment where people can socialise as an all-day, allevening experience. Complementary food and drink offers like cocktail bars, dining restaurant or a more traditional cafe bar are becoming increasingly common. Excellent acoustics are key to creating the right balance of comfort and privacy in these busy spaces.

We have to prevent sound passing from one room to another. Noise from the common areas and lobbies shouldn't disturb the screening rooms.

Marta Batlle,
Technical Architect and Engineer

#### Let's control the noise

Concession and lounge areas are places where visitors can buy snacks and wait to get into the theatre to watch their show.

Because these areas tend to be busy, it requires good noise control solutions and zoning techniques. This combination can help reduce irritation caused from having too many people gathered together.

#### A safe space to grab some food

Hygiene is a crucial concern wherever food is served. It is vital in these spaces that the building materials, including the ceiling, can be regularly cleaned and disinfected if necessary. It is also key that the building materials in this space don't contribute to the spread of micro-organisms and bacteria.





#### Get the right solutions for your design

#### Concession stands and lounge design solutions

Concession stands and the lounge area are busy and crowded spaces in the cinema. To make the experience more comfortable for everyone, these spaces need solid sound absorbing materials, enhancing the atmosphere and experience without a lot of annoying noise getting in the way, while still respecting the need for good hygiene and cleanability.

#### Product highlight

#### Rockfon Blanka®

A bright, white ceiling that looks and sounds stunning. With Rockfon Blanka®, you get a smooth, deep matt and super-white surface with high light reflection and light diffusion. Its durable surface are engineered to create a noticeably brighter and

more comfortable indoor environment, that can be cleaned, so you don't have to choose between design and functionality. In this example, the visible Charcoal grid is framed with C-profiles with Blanka placed at an angle to play with the height and patterns of the ceiling.





#### Here are some products we recommend

#### Rockfon® Universal® Baffles

Suitable for exposed soffits, these are the perfect solution if you seek to improve speech intelligibility. Includes multiple suspension design possibilities and available in 33 contemporary colours.

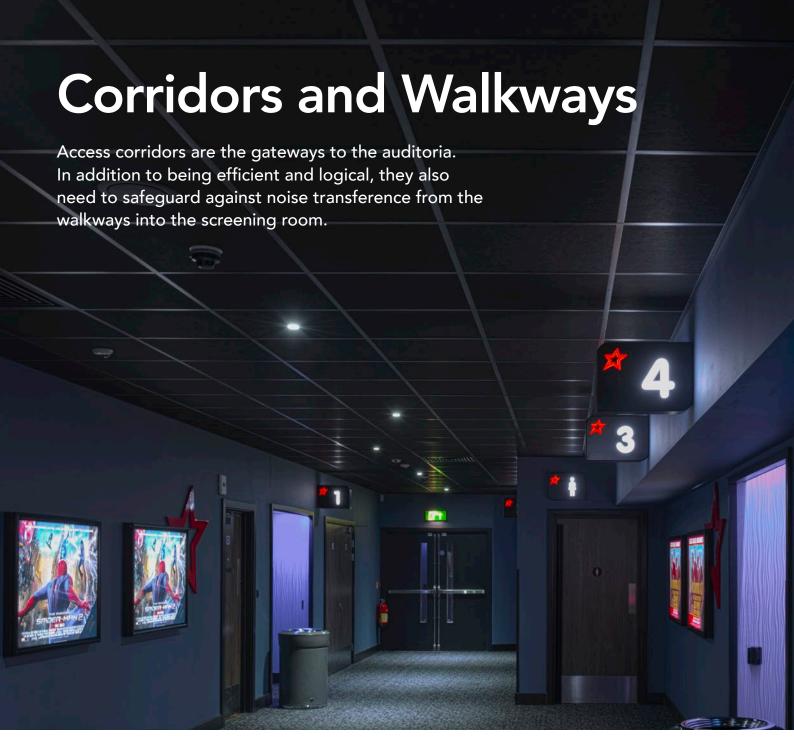
#### Rockfon Eclipse®

These frameless and innovative acoustic islands come in a variety of geometric shapes offering excellent sound absorption. A great complement to improve speech intelligibility with a colourful and fun design. These can be suspended alone from an exposed soffit or under a traditional acoustic ceiling.

#### Acoustic design tips

Three acoustic design tips to consider when creating concession stands and lounge area.

- 1. Aim for a short reverberation time to create a better feeling when entering the space.
- 2. Ensure you have thick and dense soundabsorbing materials on the ceilings to ensure speech clarity.
- 3. Have soft materials on the floors to counteract impact sounds.



#### Controlling noise

To properly control noise in walkways requires embracing excellent acoustics. By using high-quality sound-absorbing material on the ceiling and walls you can remove obtrusive noises from finding their way into the screening rooms.

#### Better together

Sound absorption and sound insulation go handin-hand; in fact, there is a direct link between the two. When the sound source has a ceiling with high sound absorption, it creates a lower sound pressure in the room, which decreases the amount of sound transmitted to the adjacent space. If the room also has good sound insulation sound transmission is lowered even further and enhances the acoustic control. To get an even better sound absorption level in the walkways, a good idea can be to install additional acoustic solutions on the wall.

#### Here are some products we recommend

#### Rockfon Blanka®

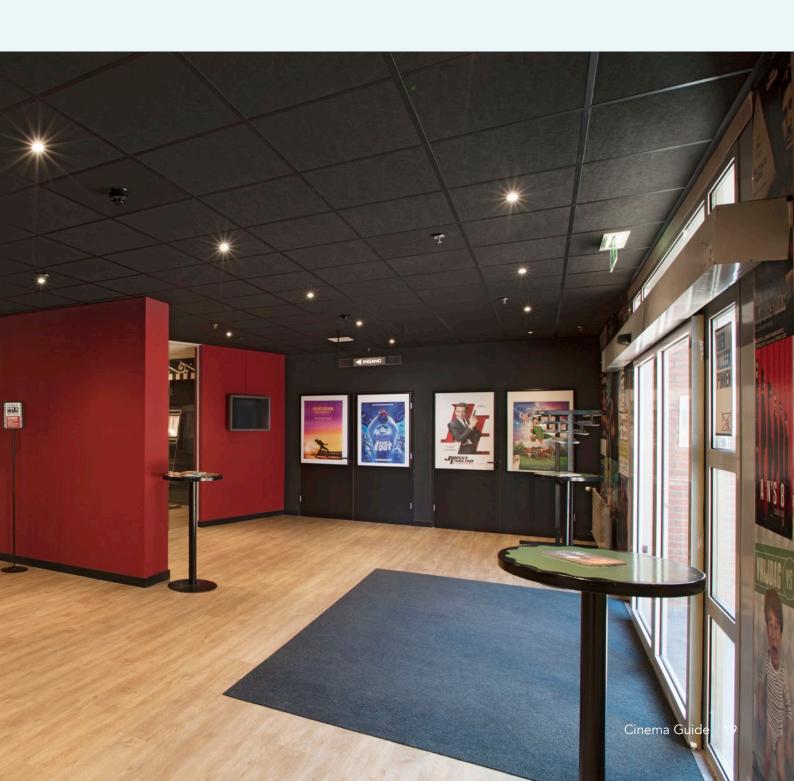
The bright, matt white surface that looks and sounds great. Rockfon Blanka® offers the best acoustic level to ensure a comfortable indoor environment. The super white and smooth surface comes in edges and dimensions to complement every space.

#### Rockfon Color-all®

Available in 34 exclusive colours, everything from subtle to bold long-lasting colours. It is available in concealed, semi-concealed and visible grid solution and it in a variety of tile sizes, giving you total design freedom.

#### Rockfon Eclipse® wall panel

These architecturally friendly, frameless acoustic wall islands are perfect for dynamic open atria where a lot of verbal communication is a regular occurrence. The wall islands are ideal for adding additional sound absorption to bring the noise level down.



#### Setting the tone and feeling

#### Corridors and walkways design solutions

When designing corridors and walkways in cinemas, it is essential to think about the shared strength of sound absorption and sound insulation. When a room combines the two acoustic elements, it reduces the amount of noise that is transferred from one room to another. This is vital for not interrupting the movie-going experience.

#### Product Highlight

#### Rockfon Blanka dB

Our Blanka dB range of high absorbent acoustic tiles has a stone wool core with a high-performance membrane on the back which reduces the transmission of noise from room to room.

The four options provide increasing levels of sound insulation and sound absorption so you don't need to worry about people in the cinema being disturbed by noise from the hallways.



The Color-all range offers the well known benefits of Rockfon acoustic solutions including the highest sound absorption, Class A, and best in Class A1 fire protection.

Philip McCabe,
Development Director for Principal Contractor,
Britannia Construction

#### Acoustic design tips

Three acoustic design tips to improve the acoustic environment in movie theatre circulation areas.

- 1. Have sound barriers separating the hallways from the lounge and ticket area
- To help achieve Rw ≥ 74 dB airborne sound insulation between the corridors and auditoria, add a layer of stone wool materials on the walls and ceilings
- 3. Use the ceiling to create a 'wow' factor which transports customers into a space that will really impress





#### Here are some products we recommend

#### Rockfon Color-all®

Our Color-all range of ceiling tiles and wall panels come in Charcoal plus 33 other colours, including dark tones like Scarlet and Space. Matching matt suspension grids are also available.

#### Rockfon® VertiQ® Wall Panel – black

Attractive and durable wall panel which is highly sound absorbent and impact resistant. You have the freedom to choose between four colours - including Black - and it can be installed both vertically and horizontally.

#### The influence of colours

There is nothing worse than watching a movie at the cinema in a poor environment. The audience wants to plunge themselves into what they're watching, and because movie theatres use reflected light to project a film onto the screen, having dark colours on the walls and ceilings is essential. Ambient light, even those caused by reflections found on surfaces in the auditorium can be distracting for audiences.

#### Down with the reverberation time, up with the feeling

One of the most important things to think about when designing a screening room is sound reflection. It is important to stop reflections happening between the walls because it really interferes with the sound experience and immersion of the audience. A great way to help control reverberation is with acoustic solutions both on the ceilings and walls. This will help stop sound from bouncing off the hard surfaces and ruining the true sound experience.

The matt black colour of the Charcoal surface is an excellent solution to create the dark environment required to prevent the projector light reflecting on to the screen.

Philip McCabe,
Development Director for Principal Contractor
Britannia Construction



#### Get the perfect harmony of colour and acoustics

#### Cinema room design solutions

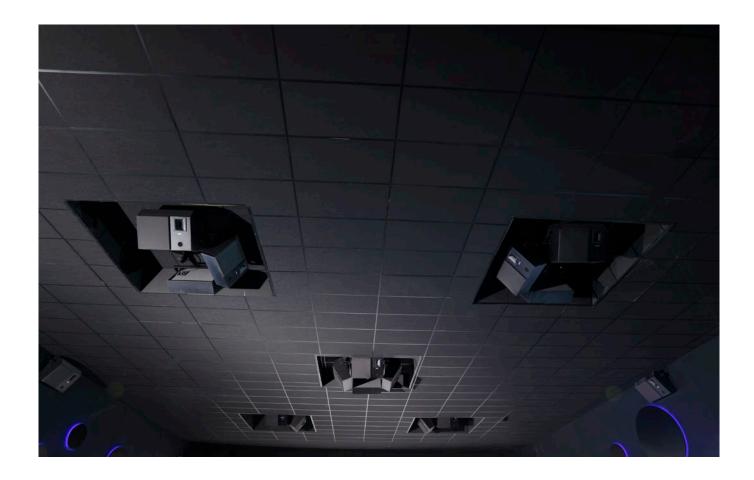
To get the atmosphere just right in an auditorium, dark colours, matt surfaces and great acoustics are a necessity. It is vital to control reverberation in the space to enhance the moviegoing experience.

#### Product highlight

#### Rockfon Color-all® Grid

Our Rockfon Color-all grid comes in 34 colours and the textured surface drastically reduces reflections that are found on metal surfaces by diffusing the light, suppressing the enhancing the colour finish.

This surface gives you an elegant and almost monolithic look, even if you choose to have an acoustic ceiling tile with a visible grid.





#### CASE STUDY



#### Cineworld

#### London, United Kingdom

#### Challenge:

As one of the UK's leading cinema chains, Cineworld wanted to provide a memorable experiences for its visitors. To fulfil the design and acoustic demands, Cineworld had to enhance the atmospheric sound and light conditions throughout the movie theatre.

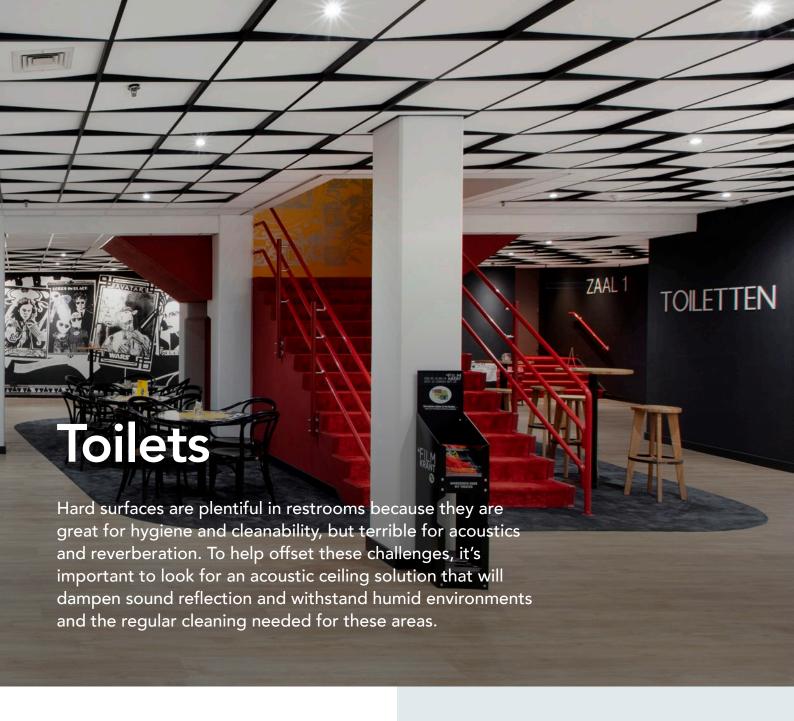
#### Solution and results:

For superior acoustic control, Cineworld installed Rockfon Color-all® tiles in the screening room. Rockfon Color-all® was able to create the perfect dark environment required for the reflected light to show on the screen. The tiles were installed at an angle to the walls to create a dramatic diamond effect.

#### Acoustic design tips

Three acoustic design tips to improve the acoustic environment in screening rooms.

- 1. Use a high-sound absorbing material on the ceilings and walls that have a matt surface to avoid creating reflections.
- 2. Choose heavy fabrics for the seats and curtains.
- 3. Cover the floors with carpet to avoid leaving hard, reflective surfaces exposed.



#### Don't underestimate the restrooms

To control noise in bathrooms, it's important to find an acoustic solution that will dampen noise but that can also withstand thorough cleaning, which is tough on the material. It is also essential that the building materials used in the toilets don't contribute to the spread of microorganisms.

#### Acoustic design tips

Two acoustic design tips to consider when designing restrooms.

- 1. Use sound-absorbing solutions that meet the most rigorous hygiene codes and safety regulations and that are resistant to mould and bacteria.
- 2. Make sure sound absorption is high to reduce noise is bouncing off the surfaces.

#### Here are some products we recommend

#### Rockfon Blanka®

The whitest ceiling tiles offering you the best acoustic properties to ensure a comfortable sound level. The super white and smooth surface offers edges and dimensions to complement every space. It helps you to capitalise on natural light and it looks as stunning as it sounds. A possibility to reflect your vision and still have the best-in class ceiling.

#### Rockfon® Hygienic®

Rockfon Hygienic is a non-hygroscopic and durable ceiling that's perfect for areas that requires frequent cleaning. Safe and clean restrooms are ensured when choosing this ceiling solution as it's resistant to mould and bacteria.

#### Chicago Metallic™ Matt-White 11 Grid

Its unique surface reduces the visual contrast between your grid and tile, giving you an elegant and almost monolithic look, even if you choose to have an acoustic ceiling tile with a visible grid.

#### Rockfon Koral®

This multi purpose tile provides Class A sound absorption - the highest available on the market. It comes in an attractive white, micro-textured surface in a selection of standard edges and dimensions.



## Cinema product specs and where to use them

Let's take a final look at the products and rooms that you've just seen

	₩	₩	₩			
Properties	Rockfon <sup>®</sup> Mono <sup>®</sup> Acoustic	Rockfon Blanka®	Rockfon Color-all®	Rockfon <sup>®</sup> Koral <sup>™</sup>		
Surface  durability	-	Enhanced durability and dirt resistance. Wet-scrub resistance	-	-		
Cleaning	Vacuum	Vacuum - Damp cloth	Vacuum	Vacuum - Damp cloth		
Hygiene	Stone wool provides no sustenance to microorganisms					
Sound absorption	$\alpha_{\rm w}\!\!:$ up to 1.00 (Class A)	$lpha_{ m w}$ : up to 1.00 (Class A)	$lpha_{ m w}$ : 0.95 (Class A)	$lpha_{ m w}$ : up to 1.00 (Class A)		
Light reflection	87% light reflection >99% light diffusion	87% light reflection >99% light diffusion	Colour-dependent	86%		
Humidity and sag resistance	Up to 100% RH					
Environment	Recyclable					
Reaction to fire	A2-s1,d0	A1	A1 Color-All Mercury: Class A2-s1,d0	A1		
Impact resistance	-	Class 3A (Fastening clip)	-	-		
Direct sound insulation	$R_w = 22 \text{ dB}$	-	-	-		

<sup>\* (</sup>Twice a year) - Low pressure foam cleaning - High pressure cleaning: Max. 80 bar, min. 1 metre distance, water spread at 30° angle. The tiles should be clipped and sealed into the grid with a silicone sealant containing fungicide. - Chemical resistance: resistant to diluted solutions of ammonia, chlorine, quaternary ammonium and hydrogen peroxide.

<sup>\*\*</sup> C - centre distance between baffles' rows, H - suspension height: net distance between baffle and the soffit

W	•	***				
Rockfon <sup>®</sup> Hygienic™	Rockfon Eclipse®	Rockfon <sup>®</sup> Universal <sup>™</sup> Baffle	Rockfon® VertiQ® wall panel			
Enhanced durability and dirt resistance.	-	-	-			
Vacuum, damp cloth, dry steam cleaning*	Vacuum - Damp cloth	Vacuum	Vacuum			
Stone wool provides no sustenance to microorganisms						
α <sub>w</sub> : 1.00 (Class A)	A <sub>eq</sub> (m²/item)	A <sub>eq</sub> (m²/item) C, H**	α <sub>w</sub> : 1.00 (Class A)			
85%	87% light reflection (rear side: 79%) >99% light diffusion	White (77%) Charcoal (4%) Color-all (Colour dependent)	White 72% Lightgrey 61% Grey 33% Black 5%			
Up to 100% RH						
Recyclable						
A1	A1, Rockfon Eclipse Rectangle 2360: A2-s1,d0	A2-s1,d0	A2-s1,d0			
-	-	-	-			
-	-	-	-			

#### The right product in the right space

Going to the movies is more than just about seeing a movie, its about having an experience. More and more we're seeing how acoustic solutions can create comfortable surroundings and soundscapes to give the best movie experience for customers. Please look at our overview to see what products we recommend for the perfect combination of wellbeing and acoustic comfort in movie theatres.



#### **ENTRANCE AND TICKET AREA**

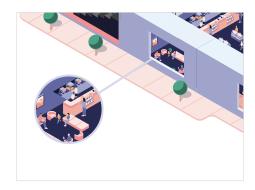
Noise control

Rockfon® Mono® Acoustic

Rockfon Blanka®

Rockfon Color-all®

Rockfon Eclipse®



#### **CONCESSION STANDS AND LOUNGE**

Noise control & speech clarity

Rockfon® Mono® Acoustic

Rockfon Blanka®

Rockfon Color-all®

**W** Rockfon® Universal™ Baffle



#### **CORRIDORS AND WALKWAYS**

Noise control & sound insulation

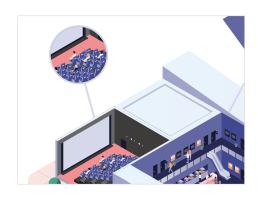
Rockfon® Mono® Acoustic

Rockfon Blanka®

Rockfon Color-all®

Rockfon Eclipse®

Rockfon® VertiQ®



#### AUDITORIUM

Noise control

Rockfon Color-all®

Rockfon® VertiQ®



#### TOILETS

Noise control & hygiene

Rockfon Blanka®

**W** Rockfon® Koral™

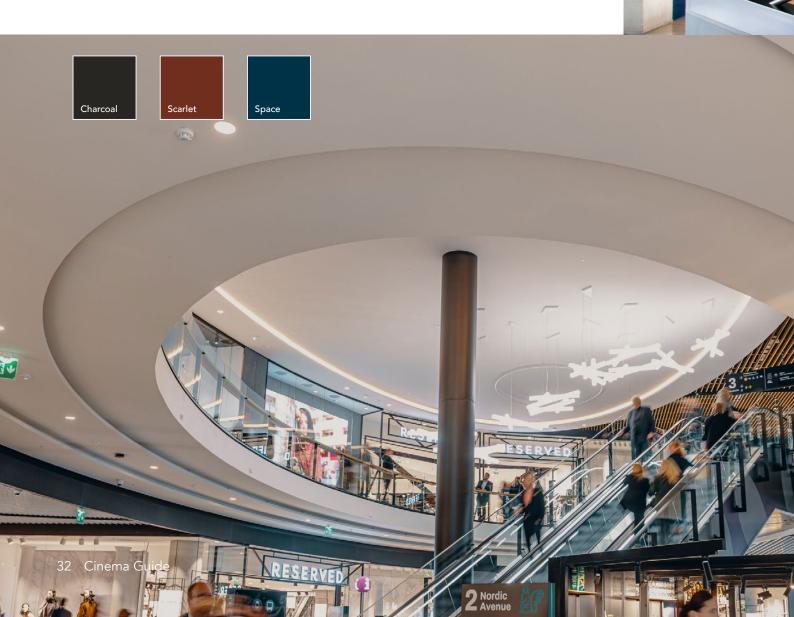
**₩** Rockfon® Hygienic<sup>™</sup>



### The influence of Rockfon Color-all®

Want to enhance wellbeing and ambience by using colour? Our coloured ceilings and wall solutions don't just reduce noise, they also help create unique spaces. The range comes in 34 exclusive colours that inspire and enhance your interior design, giving you the possibility to set the tone for your visitors.

- Includes Charcoal, Scarlet, Space and other powerful dark colours
- An extensive range of semi-concealed and concealed edges in a large variety of module sizes
- Contemporary colours which can make your design stand out

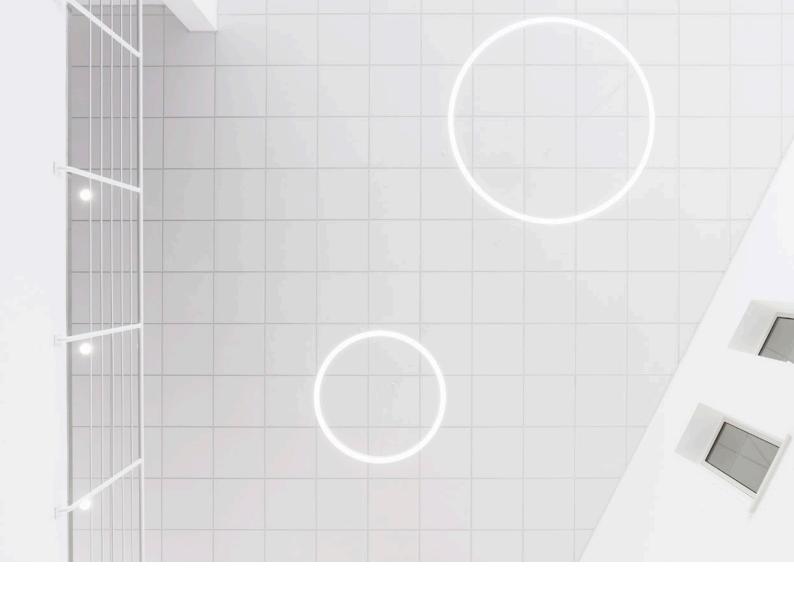




#### As stunning as it sounds Rockfon® Mono® Acoustic

Be creative and make the entrance area visually dramatic for the cinema goers.

Mono by name, multiple by nature. A unique design solution for new build or renovation projects. The innovative monolithic surface is perfect for ceilings and walls as it delivers outstanding acoustic comfort. The refined white surface provides a crisp and clean aesthetic to the space as well as it allows easy integration of lighting, air conditioning and ventilation systems.



#### The power of Rockfon® Blanka

#### A bright, white ceiling that looks and sounds stunning.

With Rockfon Blanka®, you get a smooth, deep matt and superwhite surface with high light reflection and light diffusion. The range comes in multiple dimensions and edges for full design flexibility. It's available in different thicknesses, making it optimal for busy environments, where sound needs to be controlled.

The acoustic ceiling tiles are engineered to create a noticeably brighter and more comfortable indoor environment so you don't have to choose between design and functionality as it also contributes to 23 % energy savings.

#### The design freedom of Rockfon Eclipse®

Want to add some great acoustics and design to your space? Then we've got just the thing. Our innovative frameless acoustic islands are available in a variety of geometric shapes. The clean minimalistic edges keeps everything looking clean and sharp. A great complement to improve speech intelligibility that can be combined with colour for a fun design. These can be suspended from an exposed soffit or under a traditional acoustic ceiling.

- Available in a variety of shaped formats with a clean minimalistic A-edge
- Available in white and 34 other Color-all colours
- Quick and easy to install



#### We are your sustainability partner

Sustainability sits at the heart of our research and development. It's why we use natural stone, constantly reduce our carbon footprint and recycle to look after our planet and our people.

Commercial buildings are an expensive investment, leading many property developers to choose sustainable building materials to stabilize the value and lifecycle of their investments. Luckily for us, over 90% of our products have a Cradle to Cradle certification at the Bronze and Silver level, meaning that when you choose Rockfon, you're getting more than just a great product, you get a real commitment to a more sustainable future.

Stone wool is a fully sustainable closed-loop product. It can be recycled again and again without any degradation in quality. We can recycle old stone wool ceiling tiles and off cuts from installation, helping make a meaningful contribution to a greener planet.

Visit our webpage for more information.



159 000 tonnes of stone wool were collected for recycling in 2019.



#### Figi Hotel Theatre

Zeist, Netherlands

#### Challenge:

The foyer in this old theatre needed to be renovated. The interior architect, Gerben van der Molen wanted to create a beautiful ceiling design which was also sustainable.

#### Solutions and results:

3D technology was used to create an unusual ceiling design from existing materials. The visible Charcoal grid is framed with C-profiles with Blanka placed at an angle to play with the height and pattern of the ceiling.

CASE STUDY \(\neg \)



## Be part of making the world sound better to everyone

Get started today

Rockfon is part of the ROCKWOOL Group and we are the world's leading acoustic company – and our mission is to keep things quiet.

#### We are the whoa for better experiences

Every day we are inspired to innovate with sound solutions that help people think concentrate and enjoy life more. Our acoustic solutions do more than reduce noise, they create comfortable surroundings to give the best movie experience for your customers.

#### We're here to help

We have 22 offices and 9 manufacturing facilities worldwide and we're on hand to help you find the right acoustic solutions for your next project.



# 38 Cinema Guide

#### We are your sustainability partner

Our high-quality products are made from natural stone. They work, they're beautiful and they last – until they're recycled to make new. And we provide all the necessary documentation to support you in creating a sustainable office project.

#### Our online resources

Explore our website for sound calculations, installation videos, documents, and a comprehensive BIM library with objects compatible with ArchiCAD and Revitt.

Speed up your design processes with this free to use support on:

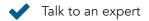
cee.rockfon.international

#### Let's connect

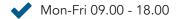
Give us a call whether you need advice on getting the right acoustic environment for your project, want to hear more about one of our products or just need technical support.

We're here to help.

Tel. (+48) 22 372 01 50, (+48) 22 372 01 60

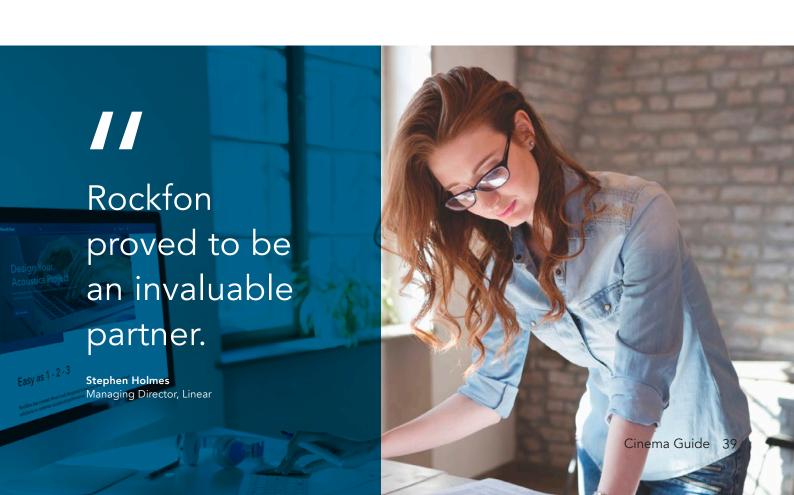






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cee.rockfon.international



#### **Sounds Beautiful**

