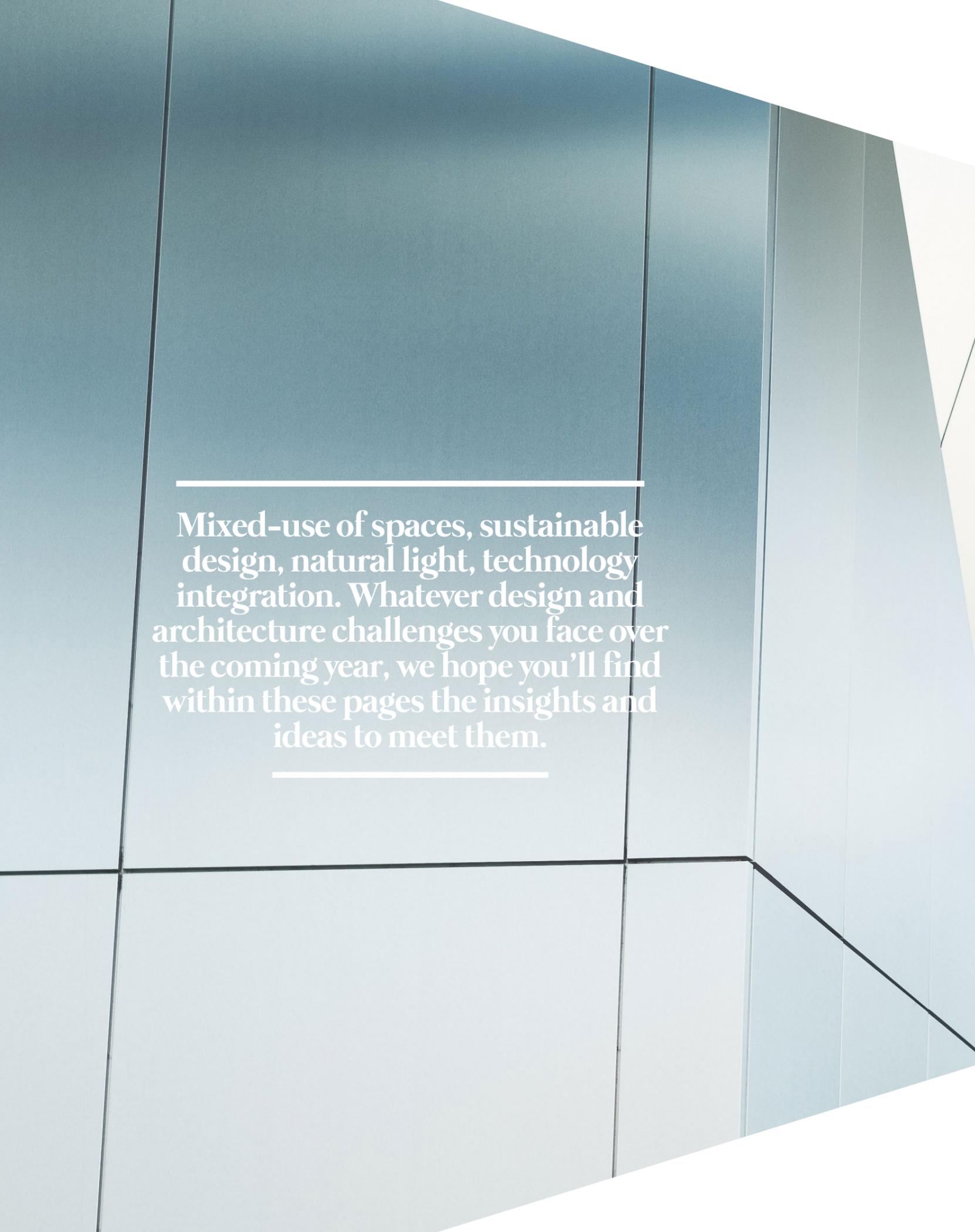




A B O O K  
2019

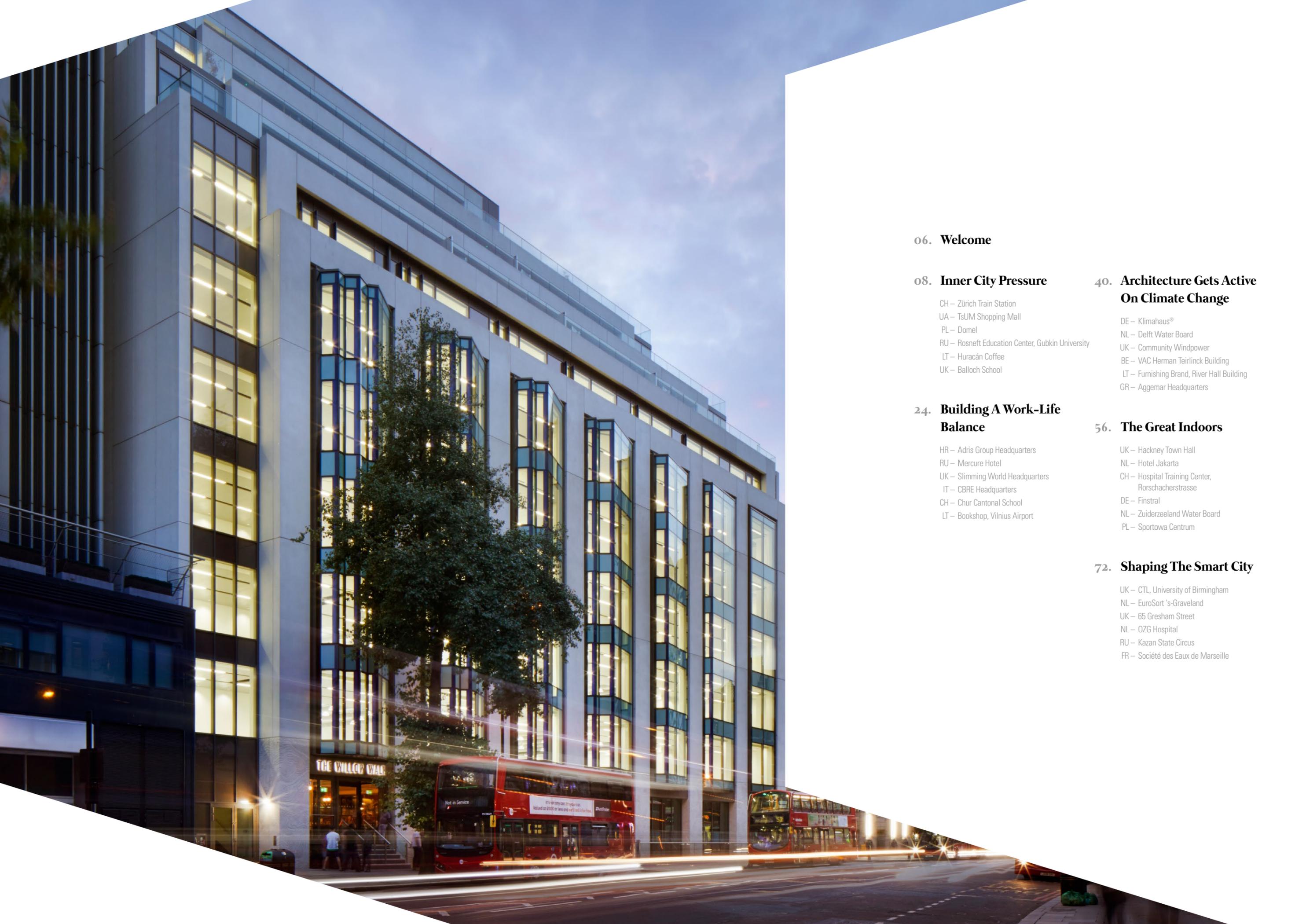


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Mixed-use of spaces, sustainable design, natural light, technology integration. Whatever design and architecture challenges you face over the coming year, we hope you'll find within these pages the insights and ideas to meet them.

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## Welcome to the Armstrong A Book 2019.

A YEAR OF IMMENSE ARCHITECTURAL  
INNOVATION AND ADVANCEMENT –  
AND A SHOWCASE OF THE LATEST  
THINKING IN SOLVING THE CHALLENGES  
OF CONTEMPORARY CONSTRUCTION.

This year's A Book takes an in-depth look at how these challenges and advances are shaping our industry. We reveal the astounding achievements made by the most ambitious projects from across the region; projects exemplifying the latest trends, from the rise of mixed-use spaces to the blurring of boundaries between internal and external spaces.

Whatever design and architecture challenges you face over the coming year, we hope you'll find within these pages the insights and ideas to meet them. Keep this latest A Book close to hand throughout your upcoming projects, and use the leading-edge thinking you'll find within to help inspire your next great space.

## INNER CITY Pressure

AS URBAN POPULATIONS SKYROCKET, HOW ARE ARCHITECTS TACKLING THE CHALLENGES OF INCREASINGLY CROWDED CITIES?

Current projections estimate that, by 2050, almost 70% of the world's population will live in cities – compared to 55% today<sup>1</sup>. This will place huge pressure on these cities' abilities to house, employ, cater for and entertain an extra 1.2 billion people. But what does this mean for architects and designers creating the spaces in which these people will live their everyday lives? The key lies in compact spaces that invite new design thinking...

### Finding space in the crowd

First though, some numbers. The UK is home to Europe's fastest-growing population – and this population is increasingly found in cities. Between 2002 and 2015, for example, the population of Liverpool grew by 181%, Birmingham by 163% and Manchester by 149%. Elsewhere in Europe, Amsterdam's population grew by over 17,000 residents between 2015 and 2016 – a substantial increase of over 2%. In France, the picture is slightly different, with Paris' population remaining fairly

stable – but most definitely not static, moving from the city centre into outlying districts, in a decided urban sprawl in search of more space.

As populations outgrow space, we're seeing the fulfilment of long-held predictions of compact living. In 2019, and beyond, our cities will continue their upward climb. Between the gradual realisation of high-concept vertical cities, megastructures and multi-use buildings, between sky gardens and the regeneration of old districts into desirable new commercial, residential and office spaces, developers will be pushed to seek out more space for the influx of new residents. But there's always more demand.

The younger, affluent demographics living and working in cities are driving demand for amenities like gyms, shops, bars and restaurants. They're also driving demand for spaces that benefit wellbeing, and that give them a sense of 'space' greater than the available footprint. Space to focus on work, or to enjoy, relax, talk, dine and sleep, without feeling the claustrophobic pressures of mass-occupancy buildings. And this, at least in part, can be achieved through intelligent design in the ceiling space.



<sup>1</sup> Source: UN.



### Less space, more design

Building wellbeing into a space hinges on a range of factors, from thermal to acoustic. But the availability of light and the use of seamless curves, striking angles and bright-white, high-reflectance ceilings is a good place to start.

Trends would suggest that city dwellers can overlook space limitations in favour of sleek, contemporary design. Monolithic ceilings, for example, enable aesthetics and functionality to work hand in hand, with ceilings that 'flow' around rooms, that please the eye, add shape, definition and form to rooms, while reflecting natural light to open up a greater sense of space. In others, ceilings can toy with light and shade, depth and planes, to create the illusion of more space – and prove that compact living can be synonymous with comfort and wellbeing, and certainly doesn't mean spending years living, working and moving between featureless, uniform boxes.

With urban population growth set to continue, we're just scratching the surface of the systems that will make life in compact spaces not just feasible, but desirable. Ceiling systems that look distinctive and perform exceptionally – and that turn even the smallest spaces into unique, comfortable, uplifting spaces in which our cities' inhabitants can live, work, rest, heal, learn, play, and enjoy some small relief from the pressures of inner-city life. ■





ZÜRICH TRAIN STATION  
PASSAGE SIHLQUAI  
EXIT EUROPAALLEE  
**Switzerland**

**ARCHITECT**  
Stücheli Architekten AG  
Dürig AG

**CLIENT**  
Schweizerische Bundesbahnen SBB

**CEILING CONTRACTOR**  
Röösl AG

# Ambition

The westernmost passage of Switzerland's largest railway hub sees more than 100,000 travellers crossing through every day. So, it was essential to create a positive environment that evoked impressions of light and calm – where commuters and passengers could enjoy cafés, food courts, boutiques and shops in visual and acoustic comfort.

# Achieved

As well as solving the challenge of creating a bright, welcoming environment, the team needed to work around the everyday operation of one of Europe's busiest transport stations. Metal Q-Clip Microperforated ceilings with acoustic fleece were the ideal solution, delivering outstanding brightness and acoustic comfort to this underground space, while also being fast and easy to install and maintain. With a clean, seamless and monolithic aesthetic, the ceiling brings shape and definition to the passage – brightening every journey for travellers to Switzerland's largest city.



Previous page  
Metal Q-Clip,  
Perforation Rd 1522,  
RAL 9003,  
White Acoustic Fleece  
U-Profile + DP12 A-Bar



Metal Q-Clip,  
Perforation Rd 1522,  
RAL 9003,  
White Acoustic Fleece  
U-Profile + DP12 A-Bar

Photographer:  
© Foto Lautenschlager



## TSUM SHOPPING MALL Ukraine

### ARCHITECT

Benoy

### CLIENT

TsUM

### MAIN CONTRACTOR

Altis Holding

## Ambition

One of Kiev's most recognisable landmarks, the six-storey TsUM Shopping Mall is an all-in-one retail, leisure and lifestyle destination in the heart of the city. For a wide-ranging refurbishment, its ceilings needed to reflect this; combining a distinctively futuristic, flowing, light-filled aesthetic with acoustic performance to please the ear as much as the eye.



## Achieved

A significant ambition, the project brought together 9,700m<sup>2</sup> of Metal R-H 200, 7,600m<sup>2</sup> of Metal F-L 601, over 1,300 linear-metres of custom curved Axiom Profiles, and 2,600 Metal Baffles V-P 500 in one solution. The result: a unique blend of curves, volumes and bright, cutting-edge ceilings that harness the power of light and colour in design – uplifting visitors while muting crowd noise to create a more personal, pleasing experience.



Metal R-H 200  
Metal F-L 601  
Metal Baffles V-P 500  
Custom Curved Axiom Profile  
U-Profile system

Photographer:  
© Benoy/TsUM

# DOMEL Poland

## ARCHITECT

Meteor Architects

## CLIENT

Domel Sp. z o.o.

## Ambition

As a premier producer of aluminium joinery, Domel's headquarters makes full use of the metal in its architecture. The client's ambition, however, was to carry through the clean, cool, modern and industrial aesthetic of aluminium and glass while creating an optimal working space through acoustic comfort and attractive lighting.

## Achieved

The reception area saw the team deploy a raw, dark and elegant solution comprising Metal R-Clip F and delicate Perla OP 0.95, while Metal D-H 700 Plain RAL 7024 continued the unique style into the corridor. The kitchen was an area of focus, with Optima L Canopy playing with light and shade. Together with Hydroboard in bathrooms and clean rooms, the solution blended rawness and delicacy, black and white, to create a greater sense of space – and a better place to work for happier, more productive employees.

 Perla OP 0.95 MicroLook 90  
Interlude HRC XL<sup>2</sup>

Metal R-Clip F, Unperforated, RAL 7024  
U-Profile + DP12 A-Bar

 Optima L Canopy Medium Rectangle B  
Hanging Kit

 Metal D-H 700, Unperforated, RAL 7024  
U-Profile + DP12 A-Bar

Perla OP 0.95 MicroLook 90,  
Unperforated, RAL 7024  
Interlude HRC XL<sup>2</sup>

Photographer:  
© Szymon Polański





## ROSNEFT EDUCATION CENTER, GUBKIN UNIVERSITY Russia

### ARCHITECT

Delta Engineering

### CLIENT

Gubkin University

### CEILING CONTRACTOR

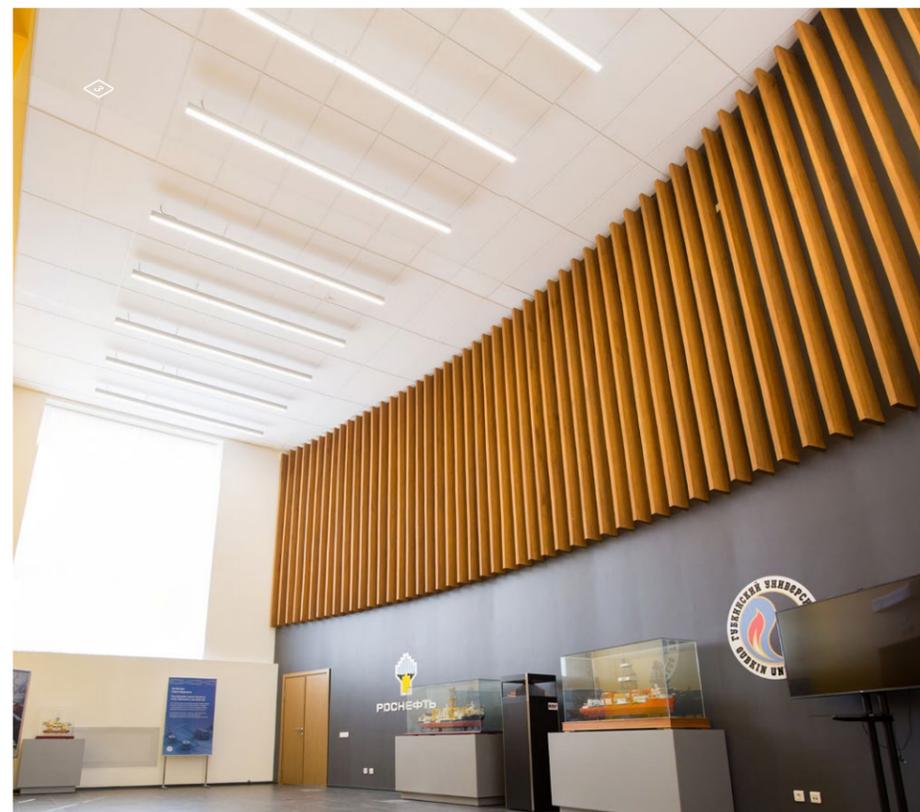
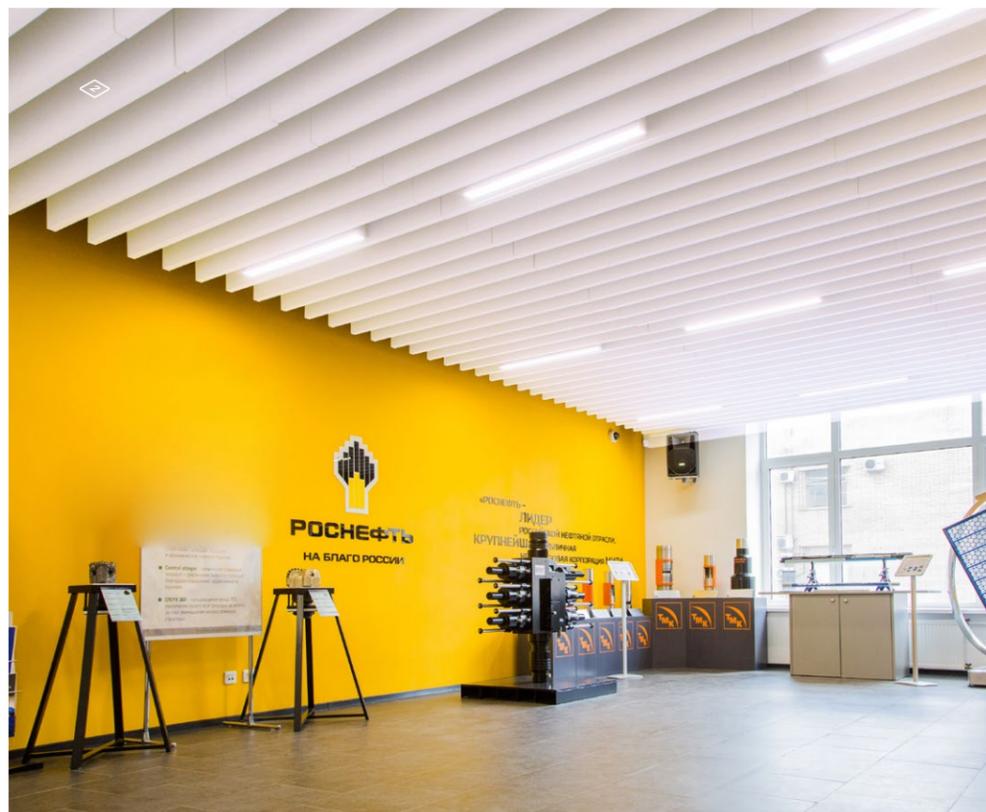
BNK

## Ambition

Acoustics are one of the most important features of the educational environment – but all too often, the open-plan, high-occupancy, cost-driven nature of school and university architecture prevent the use of traditional monolithic solutions to tackle sound absorption. For this department of Moscow's Gubkin University, a more inspiring visual approach was needed.

## Achieved

The team turned to a flexible, high-performance solution to make a visual impression, as well as an acoustic one. Optima Baffles and Optima Curved Canopies, with excellent levels of sound absorption, helped to create acoustically comfortable spaces in which students and tutors could hear and be heard in lectures and tutorials, or enjoy quiet, focused working. The modern linear aesthetic and bright whiteness of the solution also created an uplifting visual backdrop – a stimulating educational environment that invigorates the learning process.



1 Optima Curved Canopy Hanging Kit

2 Optima Baffles Hanging Kit

3 Sierra MicroLook Prelude 15 XL<sup>2</sup>

Photographer:  
© Alexander Gorchakov

# HURACÁN COFFEE Lithuania

## ARCHITECT

Giedraitis & Architektai, UAB

## CLIENT

Šviežia kava, UAB

## Ambition

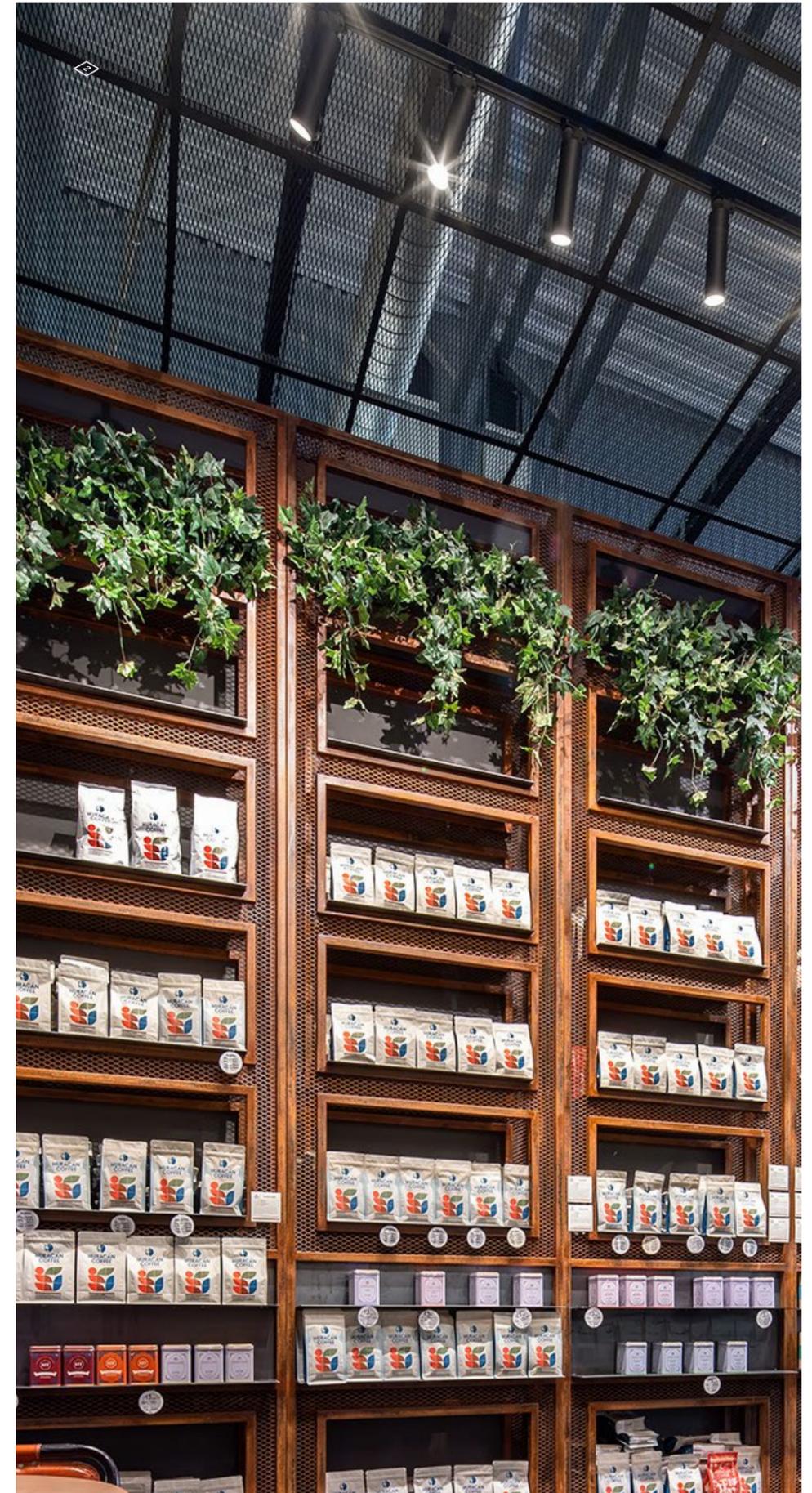
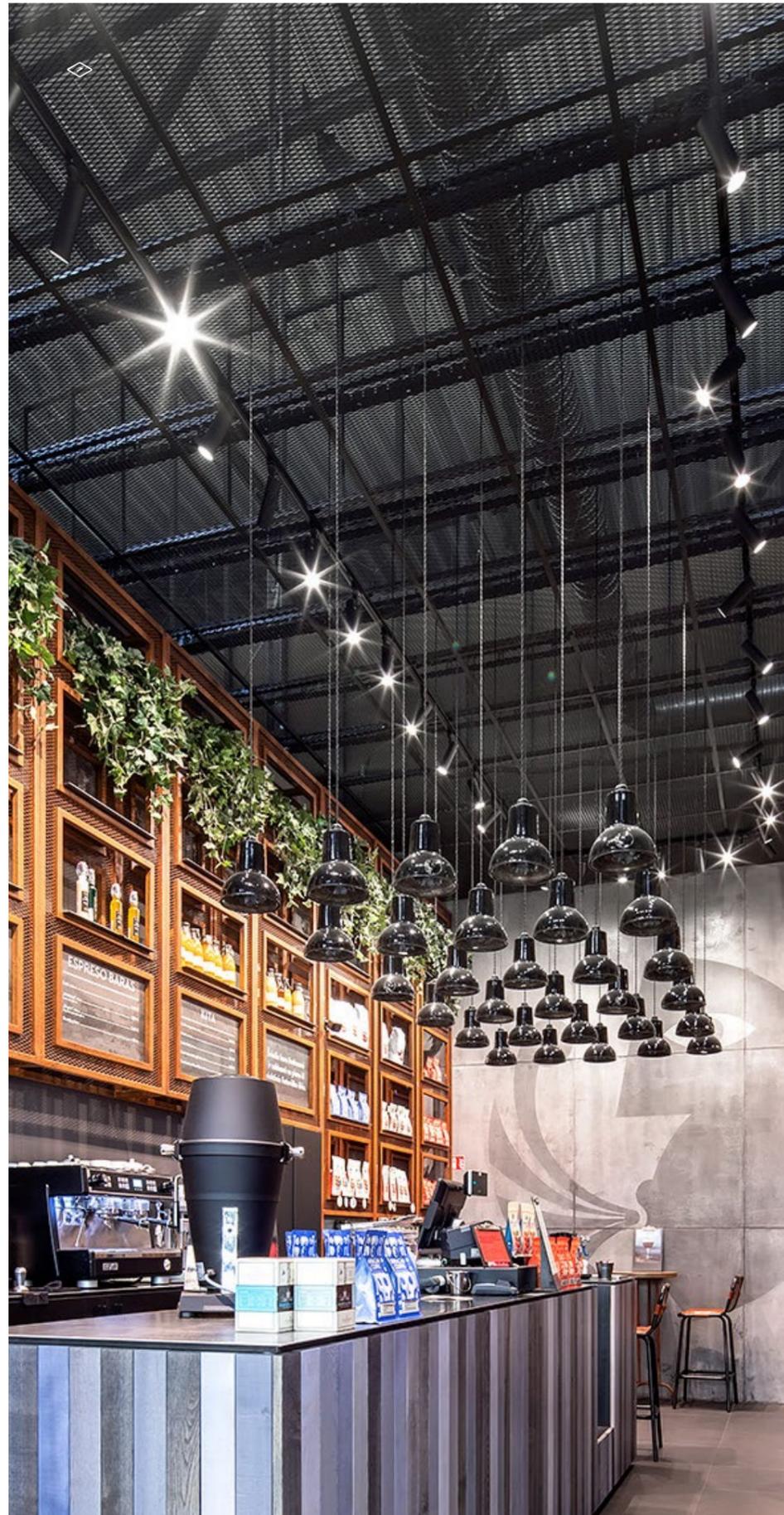
One of Lithuania's most popular café chains, Huracán is a young, enthusiastic company that's passionate about perfect coffee, the customer experience, and supporting the farmers and families it works with. For one of its Vilnius branches, the team sought to create an atmospheric, cosy and contemporary environment that reflected these values – somewhere visitors would enjoy spending time sipping the city's finest, responsibly sourced coffee.

## Achieved

Natural. Modern. Light and ecological. The architect's vision for a wood-furnished yet bright space required a complementary ceiling solution; an industrial mesh look. Using Mesh Metal RB55 Black, suspended on Prelude 24 NT+, the team lent the space a light, characterful air, while integrating the systems, services and equipment necessary for the café to function. And, fitting with the café's values, the silver Cradle to Cradle Certified™ system means its ceiling shares the same commitment to sustainability and social responsibility.

 Mesh RB55 Black  
Prelude 24 NT+

Photographer:  
© Szymon Polański





# BALLOCH SCHOOL United Kingdom

**ARCHITECT**

Holmes Miller

**CLIENT**

West Dunbartonshire Council

**MAIN CONTRACTOR**

Morgan Sindall

**CEILING CONTRACTOR**

Brian Hendry Interiors Ltd



## Ambition

A massive investment for a Scottish council, this £16m project to co-locate three schools on one campus required a huge coordinated effort. The three main challenges in making the 5,000m<sup>2</sup> educational space fit for almost 750 students demanded contemporary aesthetics, acoustic performance and – above all – sustainability.

## Achieved

Three schools, three challenges, three solutions. The team selected a trio of Armstrong systems: Cradle to Cradle Certified™ Perla OP 0.95 Tegular mineral tiles, Parafon Hygien Board mineral tiles, and TechZone™ incorporating Perla OP MicroLook 90 planks. TechZone™, in particular, was specified for its ability to easily and flexibly integrate a range of lighting and sprinkler systems, while mitigating unwanted noise and delivering a clean, monolithic finish. The three systems together created open-plan, aesthetically pleasing spaces throughout the campus, while building in Class A sound absorption to aid learning. And, beyond this, 300m<sup>2</sup> of tile off-cuts were recycled – preventing almost a tonne of material going to landfill.



Perla OP 0.95 Tegular  
Prelude 24 XL<sup>2</sup>

Photographer:  
© Gillian Hayes –  
Dapples Photography

## BUILDING A Work-Life Balance

IN AN ARCHITECTURAL WORLD OF WALLS AND CEILINGS, WHAT HAPPENS WHEN THE BOUNDARIES BETWEEN SPACES BLUR?



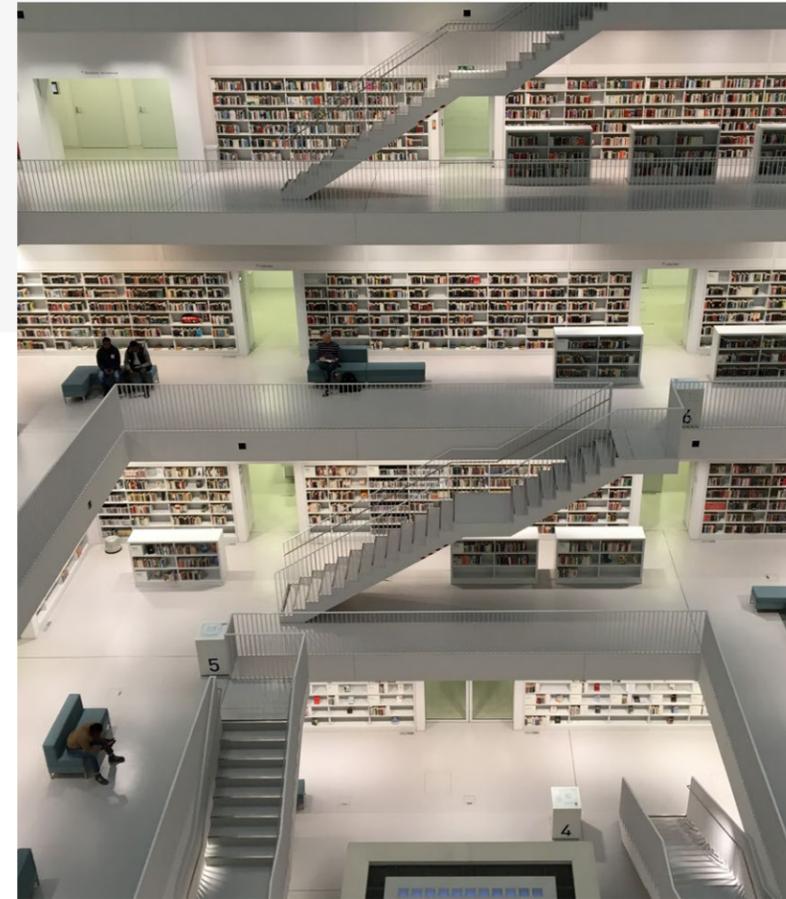
As our city centre populations grow, space is being squeezed – just as demand from younger urban demographics for local facilities, from retail to dining, fitness to leisure, is rising. To answer this dual challenge, we're seeing an increase of mixed-use developments: commercial, retail, leisure, even residential spaces, all occupying the same footprint. As our cities continue their vertical climb, this will only advance.



### The versatility of space

Mixed-use developments are leading this, as cities across Europe regenerate old industrial districts into complete communities where residents can live, shop, eat, work and play. They're also becoming flagships for sustainable living – the Clichy-Batignolles eco-neighbourhood, for example, has transformed a Parisian railway enclave into a mixed-use concept encompassing social and private housing, nursing home, retail businesses, theatre and park.

Here, however, we're focusing on a more specific convergence. Urban lifestyles are driving a change in working patterns. Articles praise the virtues of remote working, while our workplaces undergo a steady transformation linking productivity and happiness. As offices become more like homes, and homes become places of work, boundaries of aesthetics, purpose and performance are dissolving. Especially when these spaces occupy the same surface.



### Beyond the 9 to 5

The driving force behind this is wellbeing. A key component of BREEAM, HQE, DGNB and LEED, wellbeing depends on factors such as natural light availability, thermal and acoustic comfort, and indoor air quality. In the workplace, this has tangible benefits – increased productivity for one, as well as happier, more engaged employees.

At home, the picture isn't so different. Compact urban homes are made more desirable – and valuable – by giving people brighter, airier, more personal spaces to relax. The same principles apply to both work and home, which is why architects will continue to take cues from the home to build the workspace – especially when those spaces occupy the same development, and developers seek to carry through one overarching concept.

Open-plan spaces are increasingly prevalent in these new developments, for home and work. Making communication clearer and collaboration closer, it also has the benefit of flooding rooms with natural light and airflow. And, in this open-plan concept, we're seeing an aesthetic convergence between traditionally separate rooms into one mixed-use space. Breakout areas at work, for example, or home offices.

Office canteens or dining areas. Welcome receptions or lounges. Projects are integrating these spaces into the wider whole – not as hideaways, but as key parts of home and workplace. Open spaces where light can still pervade, that can be bright and colourful, and that take advantage of ceiling systems that 'zone' noise, giving people space to focus without taking them out of the room.

Ultimately, the days of the drab office are over. Workplaces are taking cues from the home – and vice versa – to create strikingly colourful, characterful and uplifting spaces. Versatile spaces that can be used for multiple purposes: focused work, collaboration, rest, relaxation, leisure, fun. The unifying elements: light, colour and design, with each space reflecting a bigger concept, breaking down the boundaries between home and work, private and commercial spaces, and building a better work-life balance by focusing on wellbeing; making people feel at home – even at work. ■

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ADRIS GROUP  
HEADQUARTERS  
Croatia

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**ARCHITECT**

Jedanjedan Arhitektura d.o.o.

**CLIENT**

Croatia Osiguranje d.d.

**CEILING CONTRACTOR**

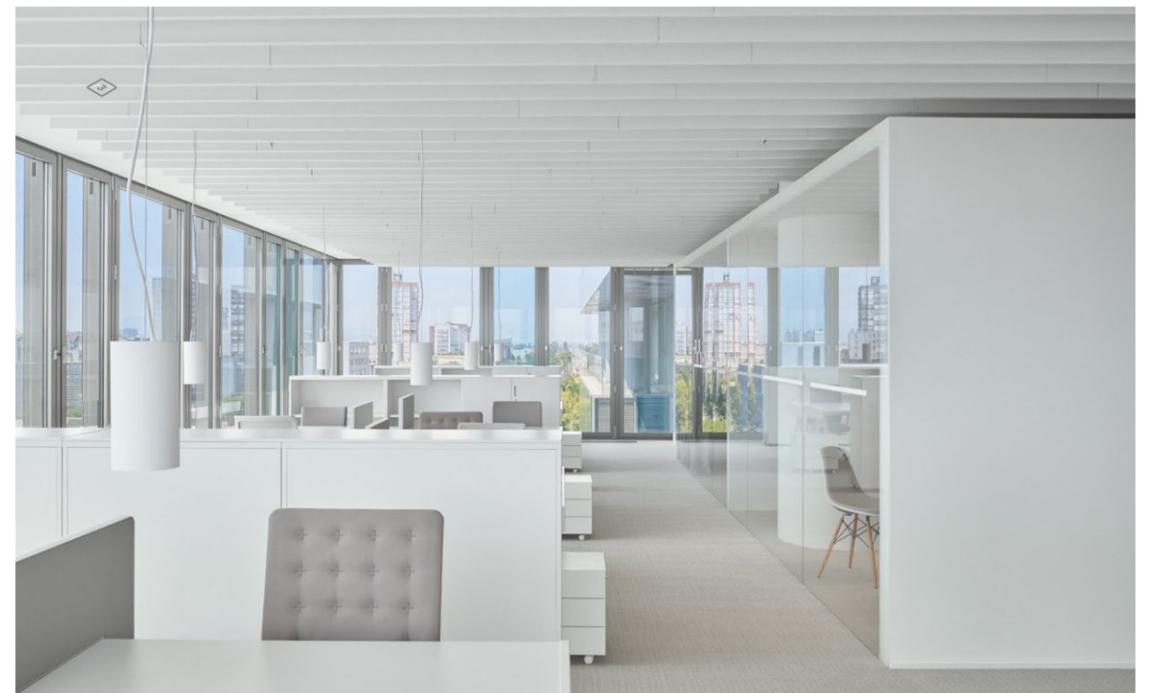
IKALL d.o.o.

# Ambition

A regional powerhouse in everything from tourism to insurance, health food to real estate, Adris Group's strategy is: 'Be the first, be better and be different'. This certainly extended to its new headquarters – an ambitious vision for Croatia's first 'green headquarters'. Built around energy efficiency, abundant greenery and eco-friendly materials, the new premises aimed to combine a very different aesthetic with an uncompromising approach to sustainability.

# Achieved

Not only did this become Croatia's first green headquarters, but it became Croatia's first building to receive LEED certification. A key part of this sustainable performance was creating a comfortable indoor environment for wellbeing – including acoustically. Optima Baffles provided the ideal solution, with noise-reducing properties complemented by a contemporary linear aesthetic to match the minimalist design of the building, with excellent light reflectance to save energy. Altogether, a fitting solution helping the project be truly better, different – and a world first.



Previous page  
Optima Baffles  
Hanging Kit

Plain Board  
Prelude 24 XL<sup>2</sup>



Optima Baffles  
Hanging Kit

Plain Board  
Prelude 24 XL<sup>2</sup>

Photographer:  
© Vedrana Ergic



## MERCURE HOTEL Russia

### ARCHITECT

AIK DPM

### CLIENT

AccorHotels Mercure

### MAIN CONTRACTOR

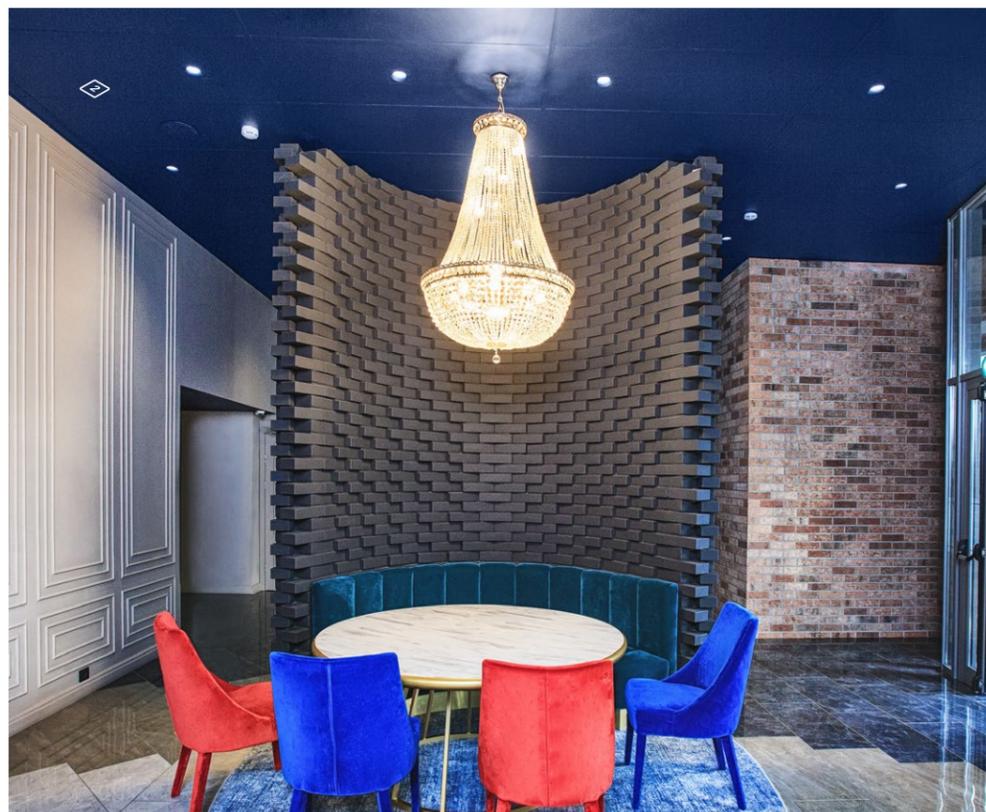
Balt Sofit Proekt

## Ambition

Located at the intersection of the historic Tragheim of Königsberg, the Mercure Hotel offers state-of-the-art hospitality in Kaliningrad. As with any hotel, first impressions rarely count more than in the lobby and bar area, so as part of a redesign project a new ceiling system was required that would immediately make guests feel relaxed and entranced in equal measure.

## Achieved

The lobby bar area saw the team employ dark blue ceilings throughout to evoke the beauty and stillness of a cold winter's night in Kaliningrad. The considered use of lighting added a further starlit quality to the space, while being aesthetically sensitive to the lobby's signature fireplace. The chosen solution also maintained the hotel's balanced acoustics, creating a space ideally suited for both entertainment and relaxation.



 Sierra OP Board,  
RAL 5013  
Prelude 24 XL<sup>2</sup>

 Sierra OP SL2,  
RAL 5013  
System Z Corridor – T-Bar

Photographer:  
© Egor Sachko

# SLIMMING WORLD HEADQUARTERS United Kingdom

## ARCHITECT

CPMG Architects

## CLIENT

Slimming World

## CEILING CONTRACTOR

Telling Finishings Ltd



## Ambition

One of the UK's leading weight loss organisations, Slimming World brings together members to share experiences and change behaviour and lifestyles. So, its own head office should be a bright, welcoming and sociable meeting space – which is why a refurbishment needed to deliver a pristine ceiling solution with unparalleled levels of hygiene.

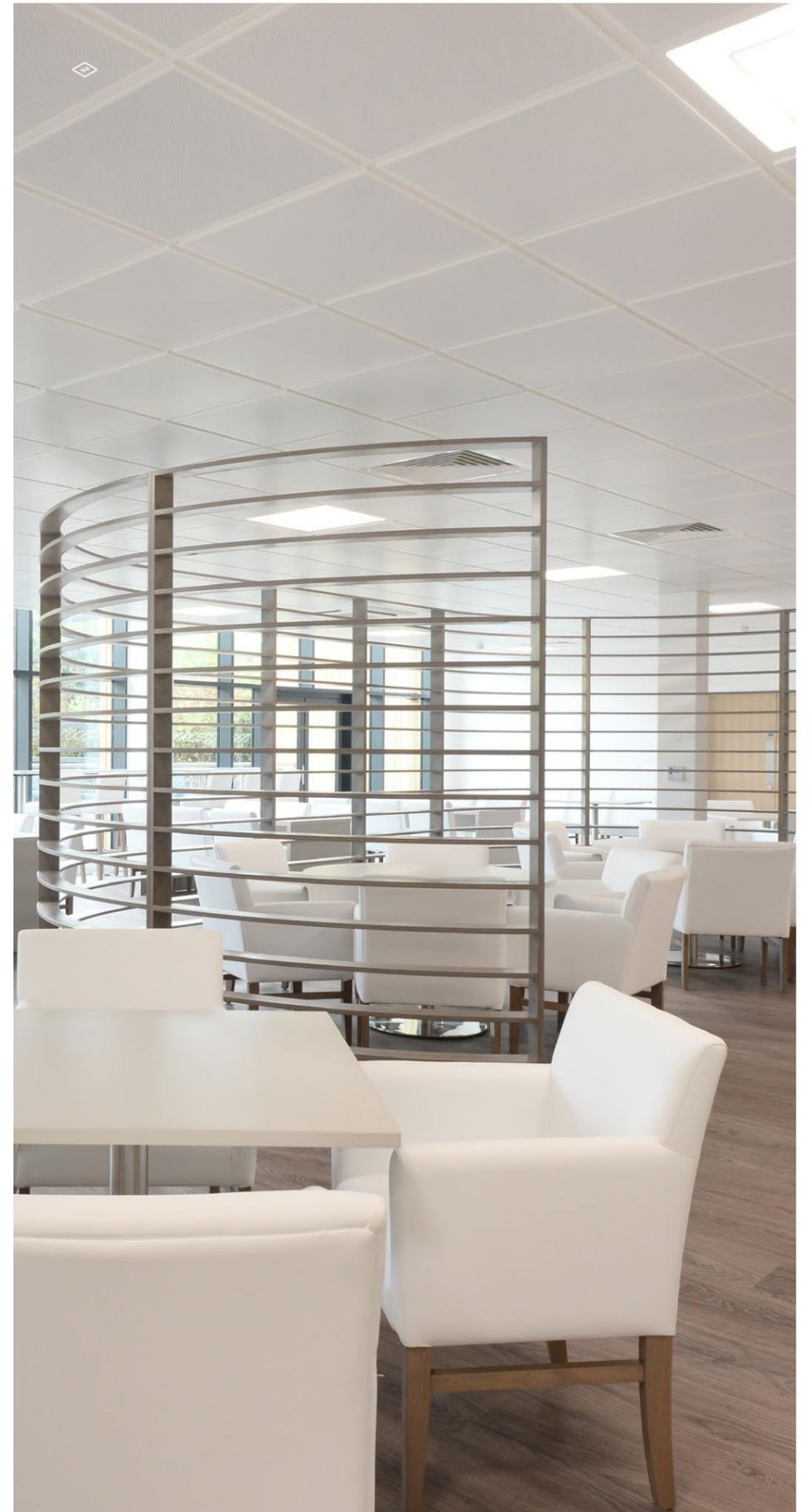
## Achieved

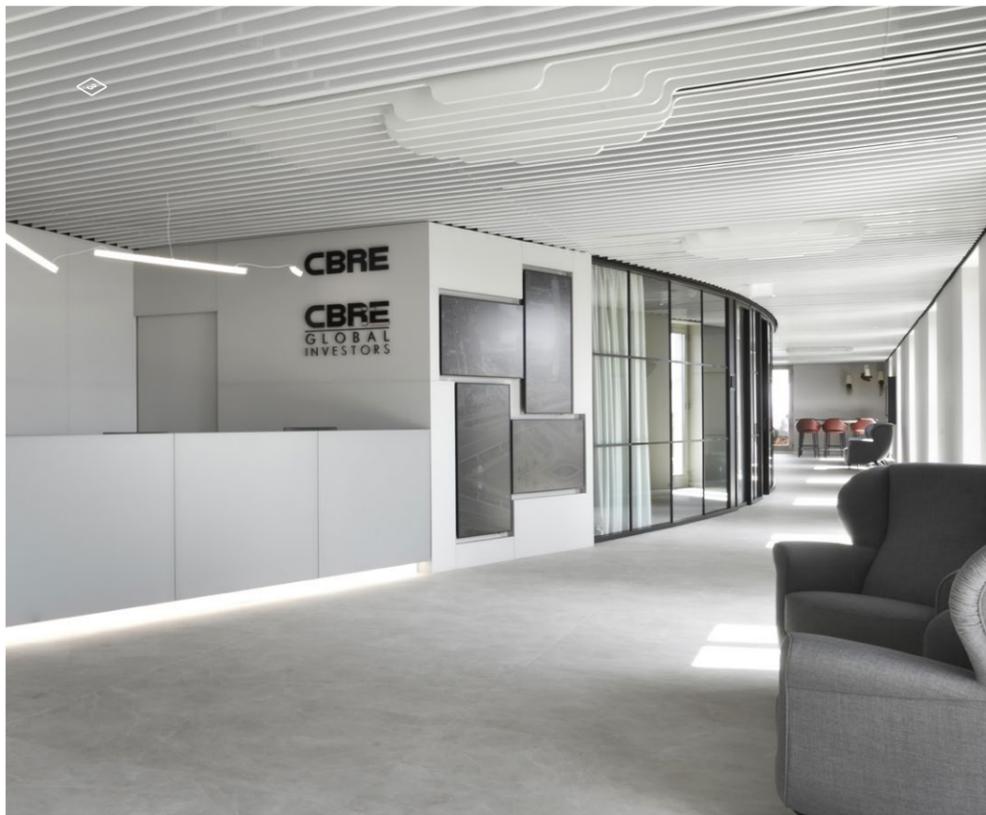
To make this a reality, Metal Tegular 8 Microperforated tiles with TrioGuard™ coating was used within the restaurant areas for its ability to prevent dirt build-up and look newer for longer. Elsewhere, Ultima\* and Ultima\* OP Tegular delivered smooth, bright white aesthetics with Class A acoustic performance for greater comfort. Finally, Parafon Hygien Board was installed in kitchen areas for outstanding hygiene and easy cleaning. Together, these solutions opened up the potential of Slimming World's headquarters – creating positive spaces to help people make similarly positive life changes.



Metal Tegular 8,  
Perforation Rd 1522,  
TrioGuard™ dirt-resistant coating,  
Premium OP19 Acoustic Fleece  
Prelude 24 TLS

Photographer:  
© Simon Miles





# CBRE HEADQUARTERS Italy

**ARCHITECT**  
EMA Design Studio

**CLIENT**  
CBRE Italia

**CEILING CONTRACTOR**  
Mattarozzi

## Ambition

At the core of a redesign of CBRE's Italian headquarters were the values of its 'Workplace 360' strategy: innovation, wellness and flexibility. The aim was to create a space that encourages interaction, accessibility and the free exchange of ideas; an open-plan, smart workplace that enhances collaboration as much as focus, relaxation and wellbeing.

## Achieved

Reflecting this ambition, the project showed a high degree of collaboration, with CBRE's expertise joining that of the architect and contractor to deliver an advanced technical solution of aesthetically pleasing ceilings that perform well acoustically. Creating custom solutions for each floor, the team used Canopy floating ceilings, alongside Microperforated Metal Baffles V-P 500, to deliver a unique selection of ceilings featuring high sound absorption to aid focus and team working – all part of contemporary, comfortable, welcoming spaces reflective of CBRE's global pedigree.

-  Optima L Canopy Circle Hanging Kit
-  Custom Optima L Canopy Hanging Kit
-  Custom Metal Baffles V-P 500 U-Profile

**Photographer:**  
© Armstrong Ceiling Solutions

# CHUR CANTONAL SCHOOL Switzerland

## ARCHITECT/CLIENT

Graubünden Building Department, Chur  
Cantonal School of Graubünden

## CEILING CONTRACTOR

Montalta AG Deckensysteme

## Ambition

In even the most cutting-edge educational institution, successful learning requires spaces that promote peace and quiet for effective study. This was critical to the creation of a new media learning centre at the Cantonal School of Graubünden – a digitally equipped library renovation in which acoustics and design needed to work hand in hand.

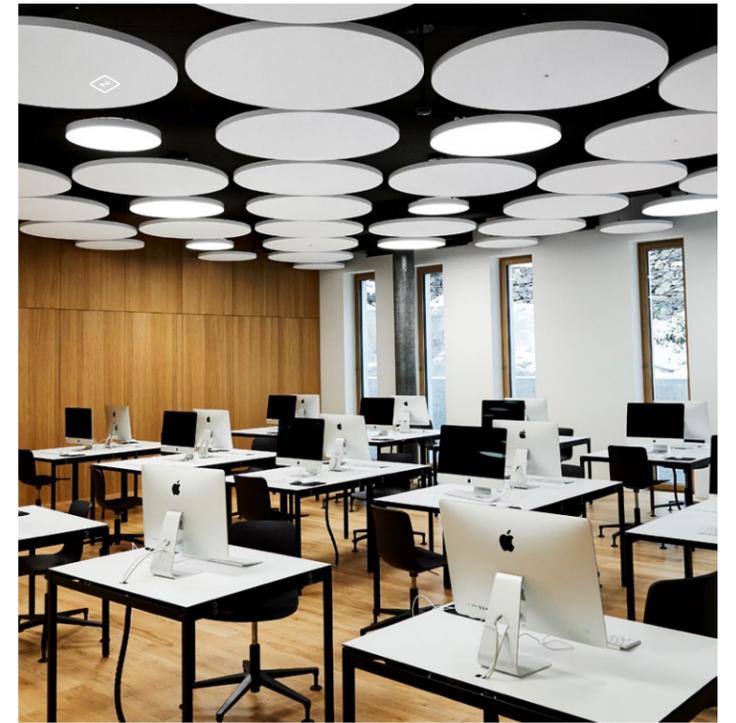
## Achieved

Optima L Canopies Circle presented the answer. Combining excellent acoustic performance with a contemporary design style, this solution enabled the team to create a learning space that looked as good as it sounded. Bright, bold, circular shapes meet with effective sound absorption in a fresh, airy library that gives students the visual and aural focus to tackle even the most complex and challenging academic subjects.

 Optima L Canopy Large Circle & Small Circle  
Hanging Kit

 Optima L Canopy Large Circle  
Hanging Kit

Photographer:  
© Foto Lautenschlager





## BOOKSHOP, VILNIUS AIRPORT Lithuania

### ARCHITECT

Vilniaus Architektūros Studija, UAB

### CLIENT

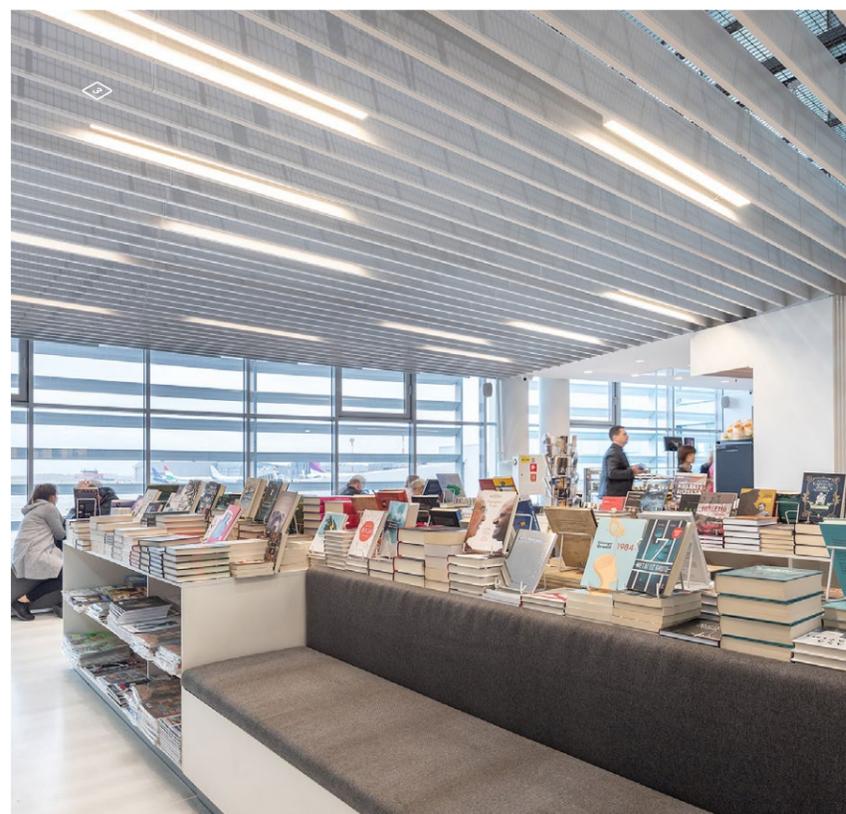
VI Lietuvos oro uostai

## Ambition

The millions of travellers passing through Vilnius Airport every year might never look up, but the ceilings above their heads are always at work keeping them comfortable. So, for a high-traffic airport bookshop, the ceiling needed to be functional and durable, making the area bright and comfortable – acoustically and visually, so that travellers with their feet back on the ground could still enjoy the airy sense of space around them.

## Achieved

Practicality was critical to the solution – which was why the team settled on a ceiling comprising vertical Metal Baffles V-P 500. Durable and easy to maintain, the solution perfectly fits the functional needs of the airport space. Even more importantly, it provides easy access for maintenance and services integration, and clever concealment of technical equipment, cables and other devices. And finally, it adds to the brightness and acoustic comfort within the space, making Vilnius Airport's bookshop a more enjoyable place to browse between journeys.



Metal Baffles V-P 500,  
Perforation Rd 1522  
U-Profile

Photographer:  
© Szymon Polański

## ARCHITECTURE GETS ACTIVE On Climate Change

BEYOND REGULATIONS. BEYOND CODES.  
IN 2019, OUR CITIES WILL GO ON THE  
ATTACK AGAINST CLIMATE CHANGE.

12 years. That's how long, in 2018, a report from the UN's Intergovernmental Panel on Climate Change (IPCC) gave us to limit ecological catastrophe – and the clock is ticking. If we are to swerve the impact of global warming, drought, flooding and more, every industry needs to play its part. Construction has long been doing so – but there's always more that can be done. So, how might we go beyond the requirements of codes like LEED and BREEAM, creating projects that actively combat climate change?

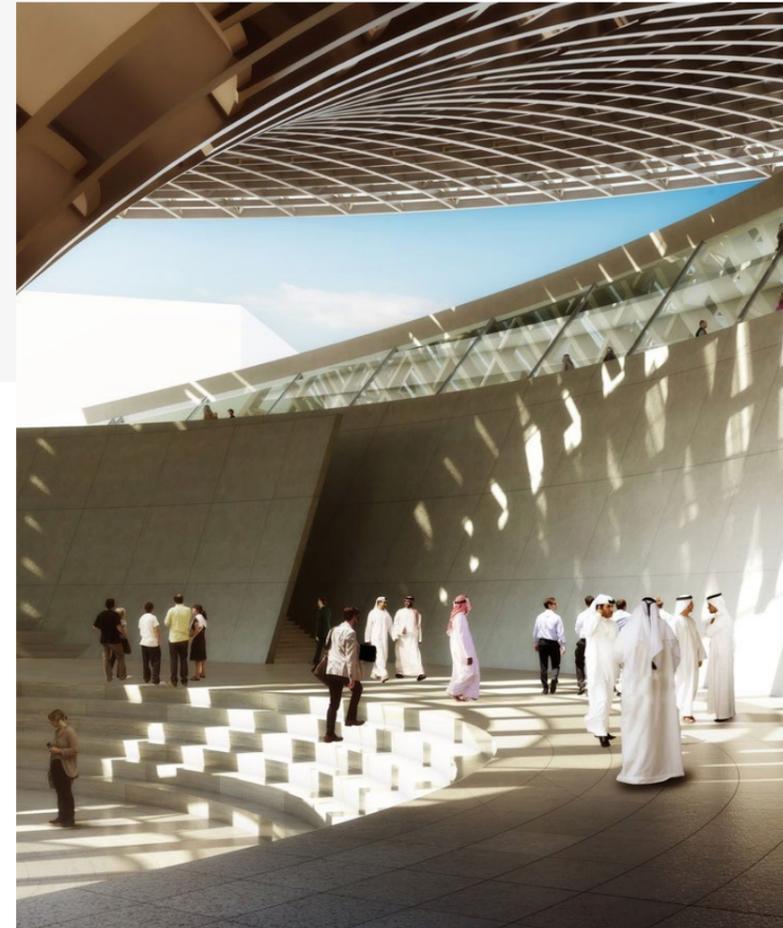
### A beacon of hope

Next year sees the curtain rise on Expo 2020 in Dubai. At the centre of this world-shaping show: the Sustainability Pavilion. If architects are looking at more active ways to curb climate change, that's the ideal place to start.

The green principles built into the self-sufficient pavilion show what can be achieved when we build beyond codes. The living envelope, for example, covers part of the structure with vegetation-clad roofs and garden walls, creating a standout aesthetic while blending with the natural world. Internally, the combination of shaped and sloping ceilings, wooden beams and glass façade provide an unpowered balance of heat and cool for thermal comfort in the Dubai heat – just as they flood the building with natural light. Crucially, too, the materials used are recyclable – so, even as it stands long after 2020 as a mixed-use exhibition space, when it comes to tear-down, nothing will be wasted.

We'll be seeing much more of this in the coming years, with many practices experimenting, particularly, with bamboo as a sustainable building resource, amongst other renewable materials. Our buildings, it seems, will get closer to nature, while minimising their impact on it.

Above all, however, the Sustainability Pavilion raises an important point that we need to remember when building greener: that sustainability can be an aesthetic in itself. The pavilion's 'energy trees', its cultivated greenery and natural structure combine in a fusion of looks and performance – a critical lesson for developers who dare to experiment; to go beyond box ticking and uniform design.



### Smart sustainability in the ceiling space

It's easy to be cynical about the practical applications of the Sustainability Pavilion in the regulation-driven bounds of the everyday. But its principles of passive sustainability can easily be applied to interior spaces.

For instance, passive heating and cooling: ceiling systems can passively absorb heat in the day, then release it at night, creating a constant, comfortable temperature around the clock. Similarly, high-reflectance, bright white ceiling systems can play their part in distributing natural light throughout a space, reducing reliance on artificial lighting.

Finally, recycling. Cradle to Cradle Certified™ systems ensure that all materials used in a ceiling can be reused over multiple lifetimes, while teams are increasingly working hard to reduce waste sent to landfill, as well as cutting the carbon cost of transporting lightweight systems to sites. But, once again, there's always more that can be done.

On the way to 2020 and beyond, we should expect more. More natural and recyclable materials used. More smart systems that passively reduce energy consumption and increase self-sufficiency. More thinking about how sustainability can permeate into every aspect of the build – and, in fact, every aspect of our lives. Because if we're to avoid climatic catastrophe within our own lifetimes, we need to get active on climate change right now. ■

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KLIMAHHAUS®  
Germany

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**ARCHITECT**  
GfG Gruppe für Gestaltung GmbH

**CLIENT**  
Klimahaus® Bremerhaven

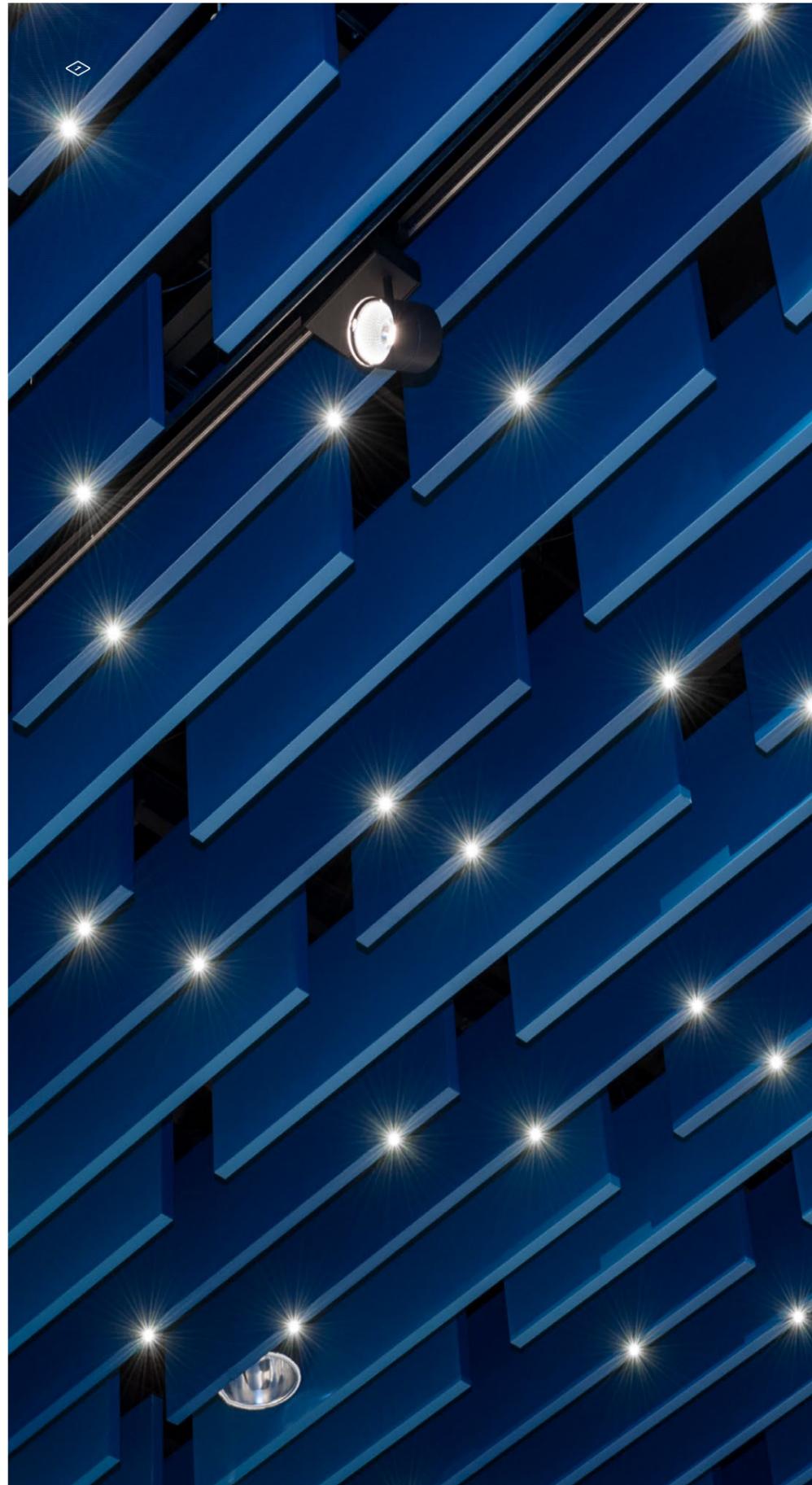
**CEILING CONTRACTOR**  
Ulrich Weber Stukkateur-  
und Trockenbaubetrieb

# Ambition

Café Südwärts needed to be more than a place to stop for refreshments. It needed to be part of the round-the-world journey of Klimahaus®, a southbound exploratory vessel en route to the Antarctic. Every aspect of its design needed to reflect this – and the team devised a striking solution that was at once visually thrilling and acoustically practical.

# Achieved

Creatively combining Metal Baffles V-P 500 in shades of blue, the team transformed the ceiling into a star-studded polar firmament – an ambient evocation of the Antarctic night sky. Matching these aesthetics was a firm focus on practicality: a special substructure allowed the team to hide and maintain access to equipment above the starlit scene, while the solution's acoustic performance gave visitors the peace and quiet to contemplate their Klimahaus® journey.



Previous page  
Metal Baffles V-P 500,  
Various colours (blue) & dimensions  
U-Profile



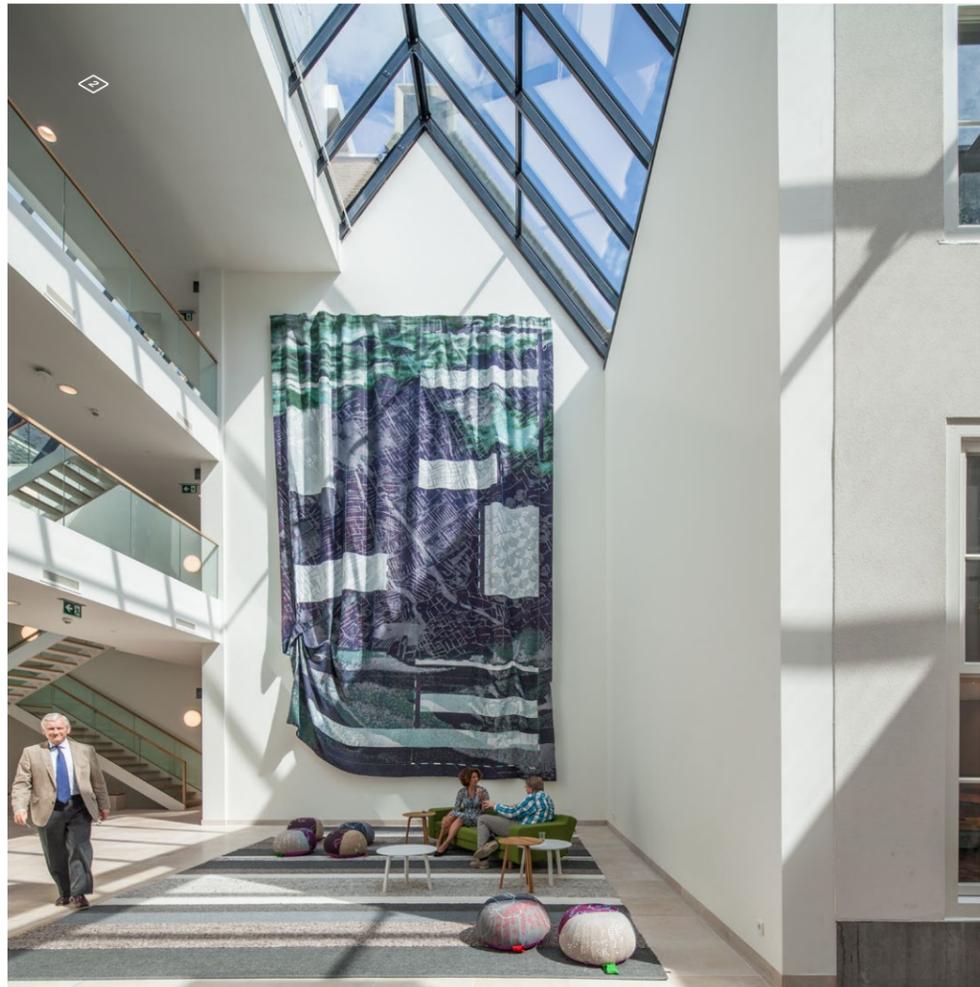
Metal Baffles V-P 500,  
Various colours (blue) & dimensions  
U-Profile

Photographer:  
© Bettina Meckel –  
Fotodesign



“The stone bricks on the floor and glass enclosure called for ceilings that would absorb sound perfectly. The Eleganza™ ceiling more than meets that requirement.”

Yuri Sigmond, Project Manager – Mecanoo



## DELFT WATER BOARD Netherlands

### ARCHITECT

Mecanoo

### CLIENT

Delft Water Board

### CEILING CONTRACTOR

Pennings Akoestiek B.V.

## Ambition

The dual challenges of an €18m renovation of the Delft Water Board’s head office were sound and visuals. The desire for bright, open and welcoming spaces needed light-filled rooms in which flowing curves and expressive angles granted a sense of physical space, while at the same time absorbing sound to minimise crowd noise.

## Achieved

The team looked to deliver a seamless, monolithic aesthetic with high acoustic performance. Eleganza™, installed on DGS (Drywall Grid System) throughout entrance hall, corridors, restaurant and meeting spaces, created clean, contemporary and easy to maintain ceilings. Successfully reconciling old and new parts of the building, it opened up light, spacious areas where people could meet and talk – while controlling noise to give them the comfortable conditions to hear and be heard, to think and to work.



Eleganza™  
Drywall Grid System

Photographer:  
© Mecanoo

# COMMUNITY WINDPOWER United Kingdom

## CLIENT

Community Windpower Ltd

## CEILING CONTRACTOR

Heaton Ceilings Ltd



## Ambition

As its name suggests, Community Windpower is leading the UK's drive towards renewable energy, instrumental in the identification, design, development and operation of on-shore wind energy generation projects. So, its new offices understandably needed to put sustainability at the core – without compromising on aesthetics or acoustics.

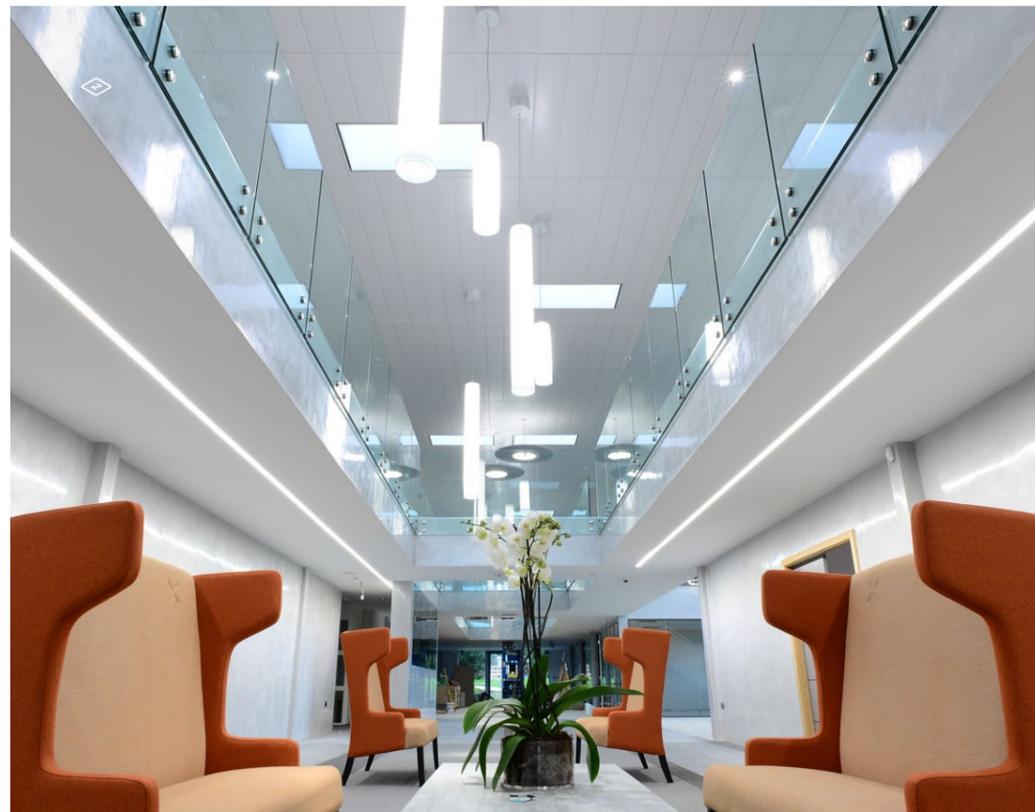
## Achieved

Building in sustainability from concept to completion means considering every aspect of it at every stage, from energy self-sufficiency to water recycling. When it came to the ceiling, Metal MicroLook 8 Lay-In planks, Dune eVo MicroLook and Perla OP 0.95 MicroLook mineral tiles delivered a contemporary aesthetic with superior acoustic performance. More importantly, the solution enhanced the ecological credentials of the build, with Cradle to Cradle Certified™ materials minimising waste and environmental impact – helping to make this green building a landmark of future-facing sustainable construction.

 Metal MicroLook 8 Planks  
Prelude 15 XL<sup>2</sup>

 Dune eVo MicroLook 90  
Prelude 24 TLS

Photographer:  
© Simon Miles





## VAC HERMAN TEIRLINCK BUILDING Belgium

### ARCHITECT

Neutelings Riedijk Architecten  
Conix RDBM Architecten

### CLIENT

Extensa NV

### CEILING CONTRACTOR

Inside-Projects

## Ambition

The purpose of the Herman Teirlinck Building, a new Flemish government building in a historic, sustainable neighbourhood in Brussels, was to create space for 2,600 civil servants within a compact urban footprint. Sustainability and wellbeing were at the core, with a firm focus on giving employees and visitors a bright, comfortable and welcoming workspace.

## Achieved

To maximise natural light and acoustic comfort, while echoing the modern look of the building, 8,500 Optima L Canopies covered its open spaces, together with Ultima® OP mineral tiles creating a 'public street' in the concourse – all conveying a contemporary aesthetic while maximising acoustic comfort. Meanwhile, a bespoke Metal Clip-In ceiling with custom perforations added a modern look to the computer facilities. And, conforming to stringent sustainability requirements, the building comprises everything from Cradle to Cradle Certified™ materials to geothermal heating, concrete core cooling to solar energy generation.



Optima L Canopy Circle  
Hanging Kit



Metal Q-Clip,  
Custom perforation  
U-Profile + DP12 A-Bar

### Photographers:

© Filip Dujardin  
© Michael van Oosten

# FURNISHING BRAND, RIVER HALL BUILDING **Lithuania**

## ARCHITECT

G. Natkevicius & Partneriai, UAB

## CLIENT

Sirin Development, UAB

## Ambition

Befitting one of the world's most recognisable home furnishing and DIY giants, River Hall Building in Kaunas is as much about aesthetics as practicality, functionality as quality, design as value. Staying true to a strong brand with a firm commitment to sustainable development, the team needed to create durable, long-lasting, continuous ceilings that would lend an air of exclusivity and comfort to employees within a large office space.

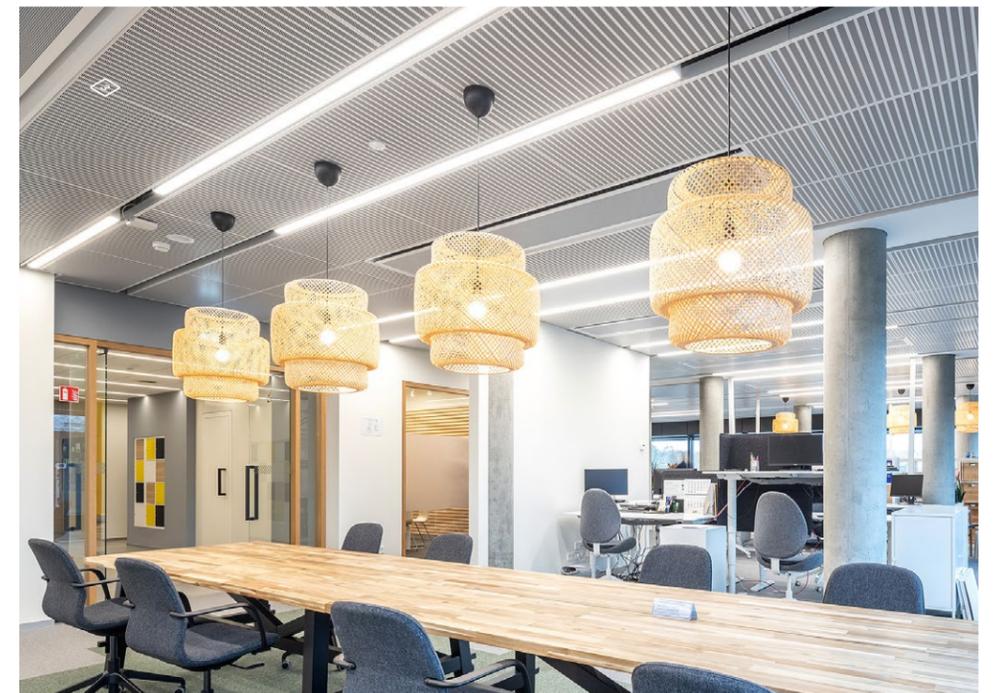
## Achieved

In such an environment, acoustic performance is key. So, the team turned to a perforated Metal R-Clip F ceiling system with acoustic infill, suspended on U-Profile, to deliver high levels of sound absorption and a concealed monolithic appearance. The Cradle to Cradle Certified™ solution's demountable tiles also enabled easy access to the plenum space, simplifying and streamlining maintenance – making it even more practical, and helping the building adhere to the highest standards of design, service integration, wellbeing and sustainability.



Metal R-Clip F,  
Perforation Lg 25042,  
Global White  
U-Profile + DP12 A-Bar

Photographer:  
© Szymon Polański





## AGGEMAR HEADQUARTERS Greece

### ARCHITECT

Rena Sakellaridou Sparch PC

### CLIENT

Aggemar Real Estate Development S.A.

### CEILING CONTRACTOR

Intrakat S.A.

## Ambition

The inspiration for this visionary Athenian Headquarters came from the client's own maritime activities. Taking cues from ocean voyages, flowing curves and fluid geometry play with directions and manipulate horizons – and internal spaces needed to extend this concept, with playful interiors that combine natural light with wide open spaces evoking the sea.



## Achieved

These open, airy, nautically influenced spaces – from offices to corporate museum, library, gym, restaurant, amphitheatre and more – were made possible through the versatile Metal R-H 200 ceilings. With high light reflectance, the solution aids the natural diffusion of sunlight throughout the building's interior spaces – which, together with the system's full Cradle to Cradle Certified™ status, contributes to the project receiving LEED Platinum Certification for outstanding achievement in sustainability, health and wellbeing.



Metal R-H 200  
U-Profile + J-Bar

Photographer:  
© Erieta Attali

## THE GREAT Indoors

IN A WORLD WHERE BOUNDARIES ARE DISSOLVING, 2019 WILL SEE NATURE COME IN FROM THE COLD...

It all starts with light. For years, architects have realised the benefits of natural light. It's one of the cornerstones of wellbeing and sustainability, rooted in real benefits: health, happiness, comfort and productivity. Together with reducing reliance on artificial lighting, architects are focusing on increasing the amount of glass in the building envelope to deliver these benefits. But how are they spreading these benefits further into their spaces?



### Bright ideas in reflectance

The first method: creative ceiling design. Floating ceilings, canopies, baffles and contemporary design can play with light and shade to add depth to a space and spread light beyond window areas. Combined, perhaps, with skylights or vents permitting further inflow, this can also create an instant connection between outdoors and indoors. And if artificial lighting is absolutely necessary, creative ceiling design can conceal equipment, or make energy-efficient LED lighting into feature pieces – enhancing aesthetics and wellbeing in everything from commercial and retail to office spaces.

Another method of ensuring the availability of natural light is reflectance. Ceiling solutions with class-leading whiteness, alongside intelligent use of open-plan space, can brighten spaces and enhance wellbeing. And, while certain projects have used darker colours, these are increasingly design statements – punctuating breakout spaces, for example. In general, we're seeing a lightening of ceiling design, with preference for systems that retain their brightness to bring the radiance of the outside world inside. But, also in 2019, we're seeing this go further...



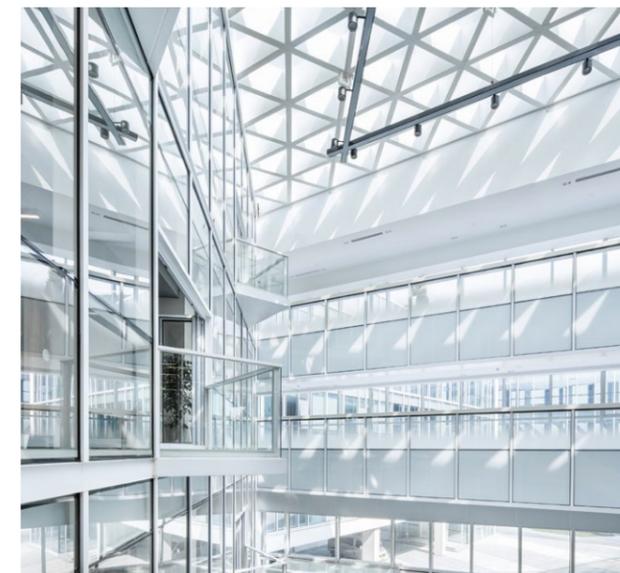
### Letting the world in

Just as boundaries between home and work are dissolving, we're seeing more and more outdoor touches on indoor workspaces: extensive use of glass and greenery, flooding areas with natural daylight, improving air quality and thermal comfort, and giving people a greater sense of space.

This is also an indicator of the growing importance of sustainability. Future-focused workplaces, retail, leisure and commercial spaces are bringing indoor vertical gardens and green rooftops into their architecture, combining them with natural materials – bamboo, for example – and generous use of glass, to make spaces more desirable to work, shop or relax in. And, ultimately, this progression towards more open, transparent, naturally inspired aesthetics gives us another reason to be cheerful about our architectural future – the rise of living buildings.

Increasingly, architects are pledging that their future will be built around sustainability. Green buildings are the aim – with the Infuture Hatalaska Foresight Institute and Skanska making them a 'pillar' of tomorrow's office buildings. The International Living Future Institute has taken this one step further with its Living Building Challenge; going beyond codes of sustainability to make a positive environmental impact through a rigorous set of construction criteria.

As buildings become greener, as 'living buildings' bring nature into the built environment, and as the bounds between interior and exterior spaces dissolve, the principles we design and build with today will be vital. Principles like smart design and high-reflectance ceilings that harness the potential of daylight and spread it throughout brighter, richer and more uplifting spaces that enhance sustainability and wellbeing. It all starts with light. ■



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HACKNEY  
TOWN HALL  
United Kingdom

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**ARCHITECT**  
Hawkins\Brown Architects

**CLIENT**  
Hackney Council

**MAIN CONTRACTOR**  
Osborne

**SPECIALIST SUB-CONTRACTOR**  
Roskel Contracts Ltd (Omega)

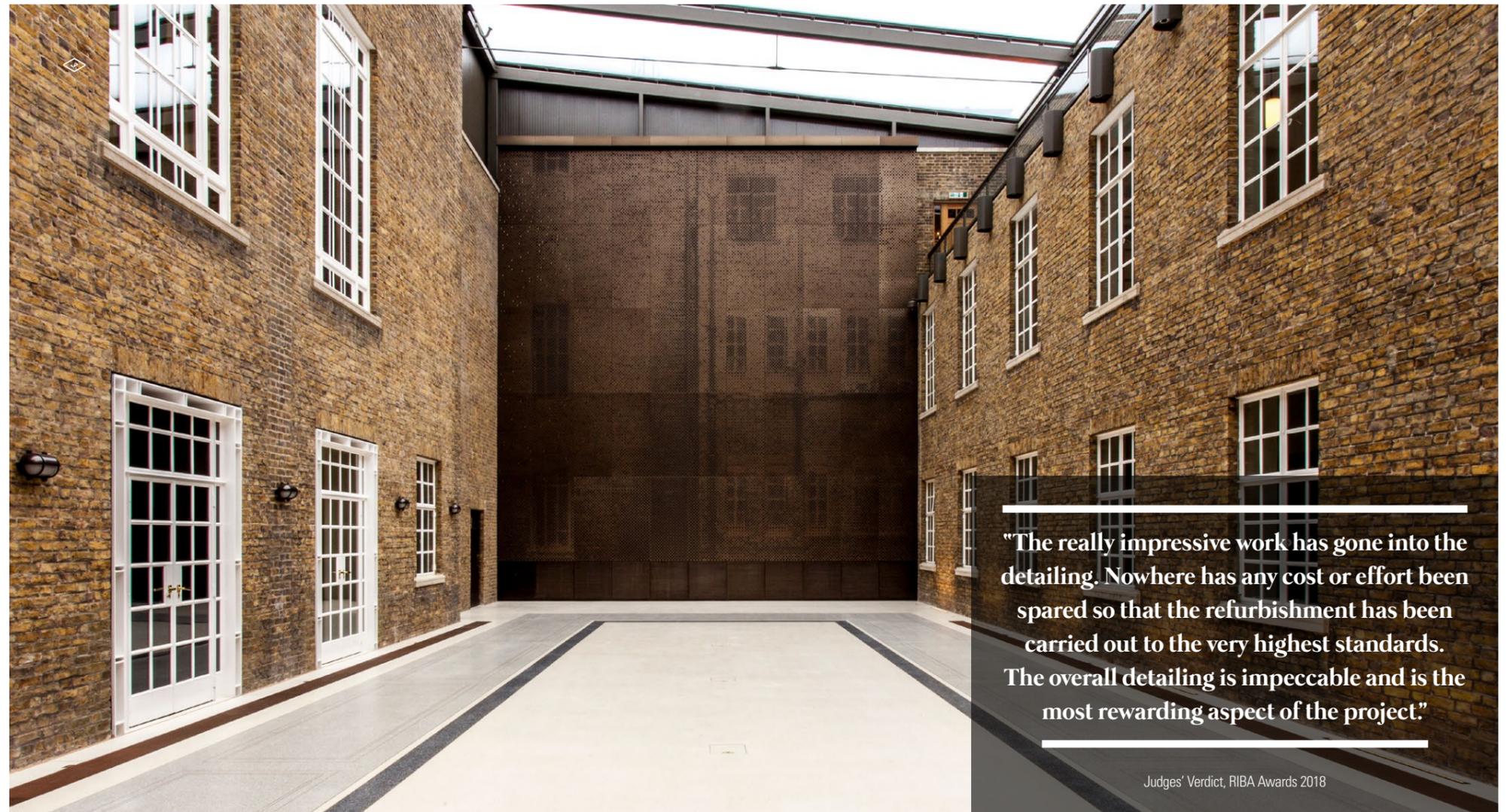
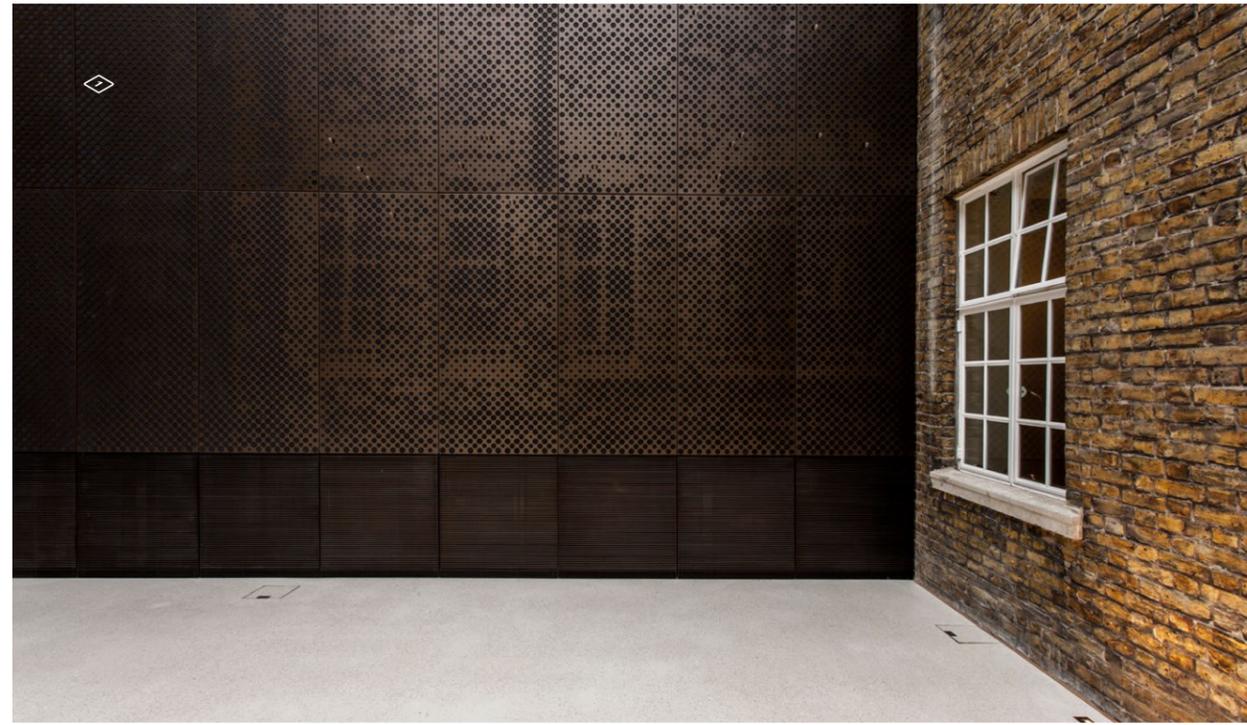
# Ambition

Dating back to 1937, the Grade II listed\* Hackney Town Hall was overdue for refurbishment. As part of an extensive 12-year, 12,500m<sup>2</sup> restoration, there was an opportunity to transform its dated, underused interior courtyards into multi-functional atria that pay homage to the building's original Art Deco aesthetic while creating a striking new look.

# Achieved

The team achieved this by painstakingly creating full-height, bronzed aluminium wall panels using Armstrong's W-H 1000 wall system with custom laser perforations. These perforations, designed to individual, photographic patterns, echoed the original brickwork while arrestingly incorporating a butterfly effect to diffuse light into the space. With the creation of this feature – not to mention the increased energy efficiency of the building and the diversion of 97% of waste from landfill – the regeneration of Hackney Town Hall received a RIBA Award in 2018.

\*A protected historic building



**“The really impressive work has gone into the detailing. Nowhere has any cost or effort been spared so that the refurbishment has been carried out to the very highest standards. The overall detailing is impeccable and is the most rewarding aspect of the project.”**

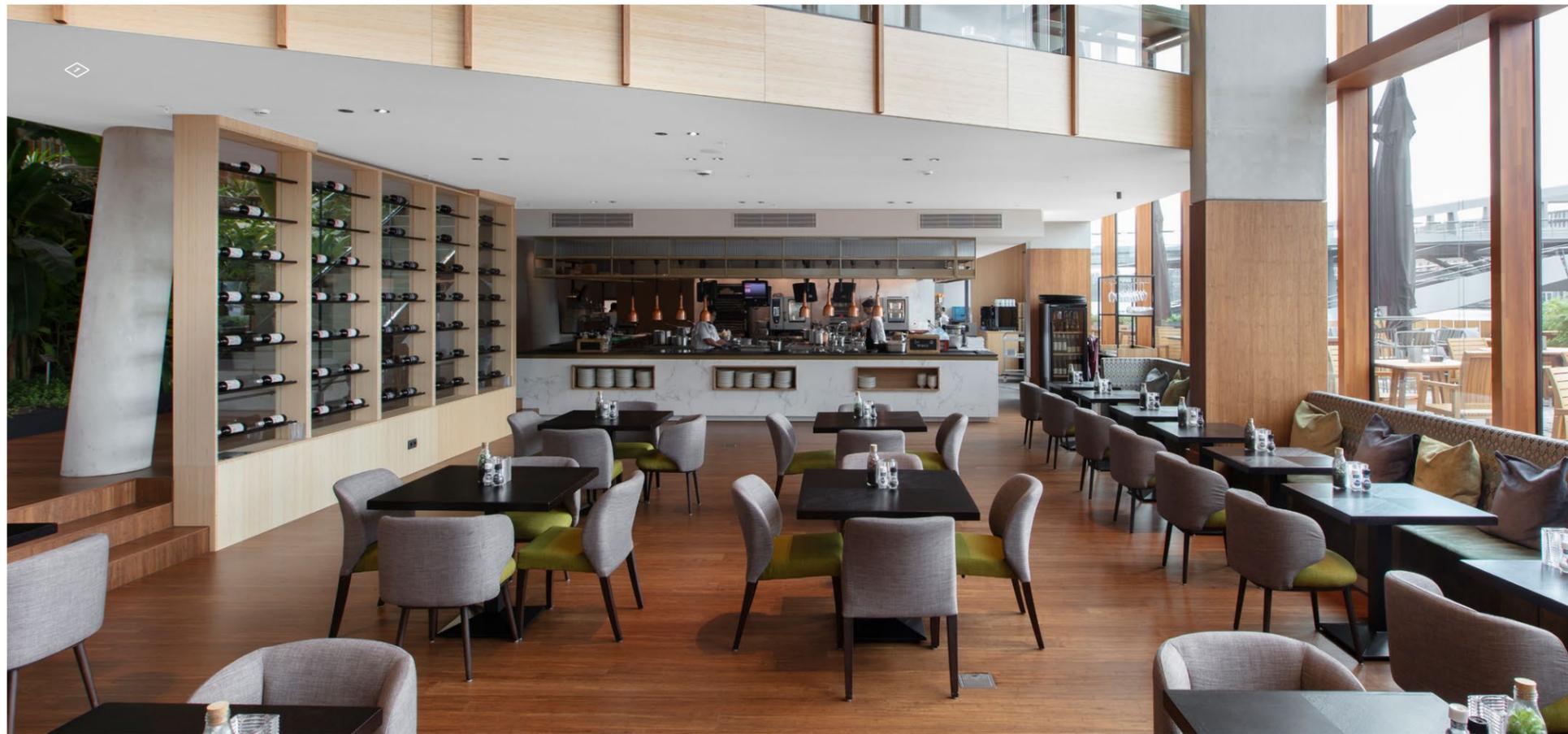
Judges' Verdict, RIBA Awards 2018

Previous page  
Bespoke Metal W-H 1000 wall panels,  
Custom perforations  
C-Wall Profile



Bespoke Metal W-H 1000 wall panels,  
Custom perforations  
C-Wall Profile

Photographer:  
© Grant Smith  
© Francesco Montaguti –  
Hawkins\Brown  
© Siobhan Doran



## HOTEL JAKARTA Netherlands

### ARCHITECT

SeARCH

### CLIENT

WestCord Hotels B.V.

### CEILING CONTRACTOR

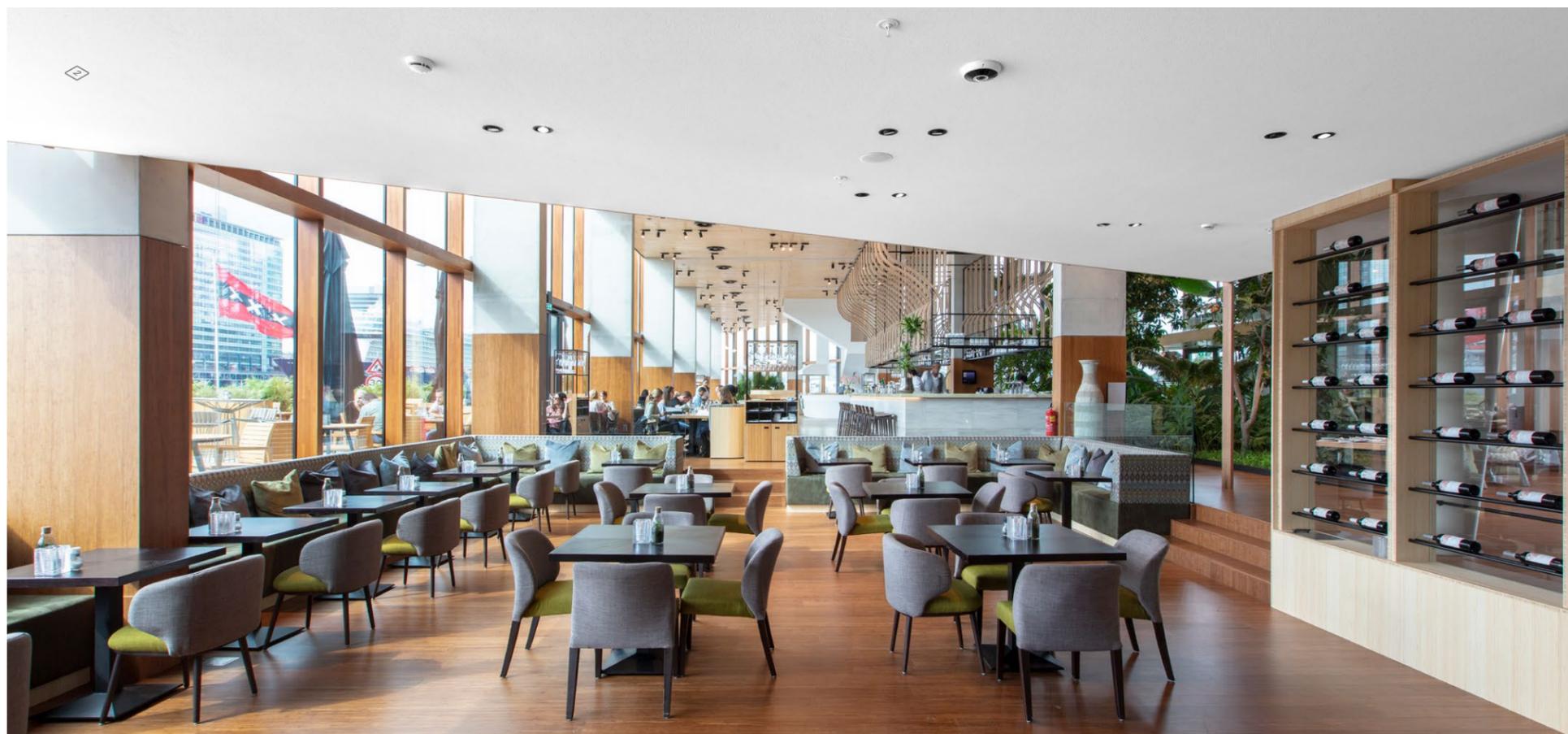
Pennings Akoestiek B.V.

## Ambition

A vision for an energy-neutral hotel on Amsterdam's Java Island, Hotel Jakarta offers 20 luxurious four-star rooms amid Indonesian influences, where natural wood, sprawling glass, spectacular views and sustainable design meet. The challenge for such an ambitious destination was ensuring that this physical space also gave visitors the auditory space to enjoy it too.

## Achieved

Within the hotel's restaurant, diners' comfort was paramount. The team specified Eleganza™ on DGS (Drywall Grid System); a seamless acoustic system with 95% sound absorption, to give every guest the sound space to enjoy their experience in comfort. The system's monolithic look offers a completely seamless, refined and structured finish, reflects the venue's premium positioning – with the system helping Hotel Jakarta receive four-star BREEAM certification, as a quality, sustainable destination for the world's travellers and explorers.



 Eleganza™  
Drywall Grid System

Photographer:  
© Michael van Oosten

# HOSPITAL TRAINING CENTER, RORSCHACHERSTRASSE Switzerland

## ARCHITECT

Forma Architekten AG

## CLIENT

St. Gallen Cantonal Hospital, Department Bau und Raum

## CEILING CONTRACTOR

Siplan Herisau AG  
Barcol-Air AG

## Ambition

The commercial building at No. 226 Rorschacherstrasse serves as a fusion of healthcare and education: a training facility for St. Gallen Cantonal Hospital. Externally blending with the urban streets of St. Gallen, the interior challenge was to create an immersive, expressive learning environment – a modern space to inspire excellence in healthcare.

## Achieved

Toying with light and shadow – and interior design expectations – the team created a playful stepped ceiling effect with custom Metal R-H 200 ceilings in the lobby and canteen, making an instant impact on visitors. Metal D-H 700 floating ceilings were combined with the Metal F-H 600 system in open plan areas and linear Metal Baffles V-P 500 in the auditorium. The result: a strikingly geometric, accented ceiling that plays with planes while blending modernity and practicality – diffusing light and expressive design throughout the building.

1 Metal D-H 700, Perforation Rd 1511, RAL 9016  
U-Profile

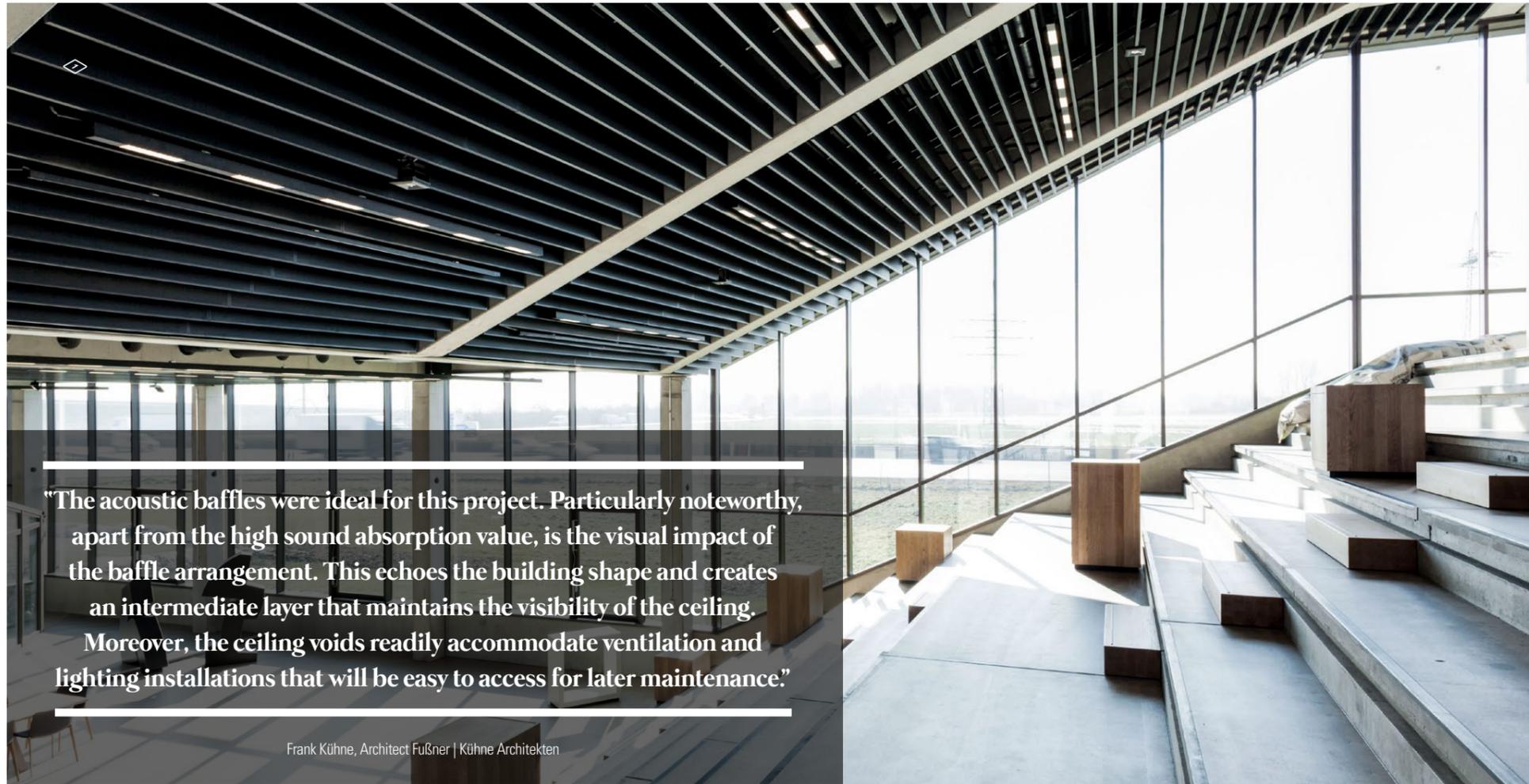
Metal F-L 600, Perforation Rd 1511, RAL 9016  
Wall Bracket + J-Bar

2 Custom Metal R-H 200, Perforation Rd 1511,  
RAL 9016, various heights  
U-Profile + J-Bar

3 Metal Baffles V-P 500, Perforation Rd 1522, RAL 9016  
U-Profile

Photographer:  
© Foto Lautenschlager





“The acoustic baffles were ideal for this project. Particularly noteworthy, apart from the high sound absorption value, is the visual impact of the baffle arrangement. This echoes the building shape and creates an intermediate layer that maintains the visibility of the ceiling. Moreover, the ceiling voids readily accommodate ventilation and lighting installations that will be easy to access for later maintenance.”

Frank Kühne, Architect Fußner | Kühne Architekten

## FINSTRAL Germany

### ARCHITECT

Fußner | Kühne Architekten

### CLIENT

Finstral AG

### CEILING CONTRACTOR

Schmid Trockenbau GmbH



## Ambition

Creating a flagship training centre for a window technology specialist understandably requires large areas of fenestration, flooding the interior with light. However, when accompanied by concrete, tiling and sound-reflective metal, this raises noise issues – which is why Finstral needed an acoustic solution that would complement the visual concept.

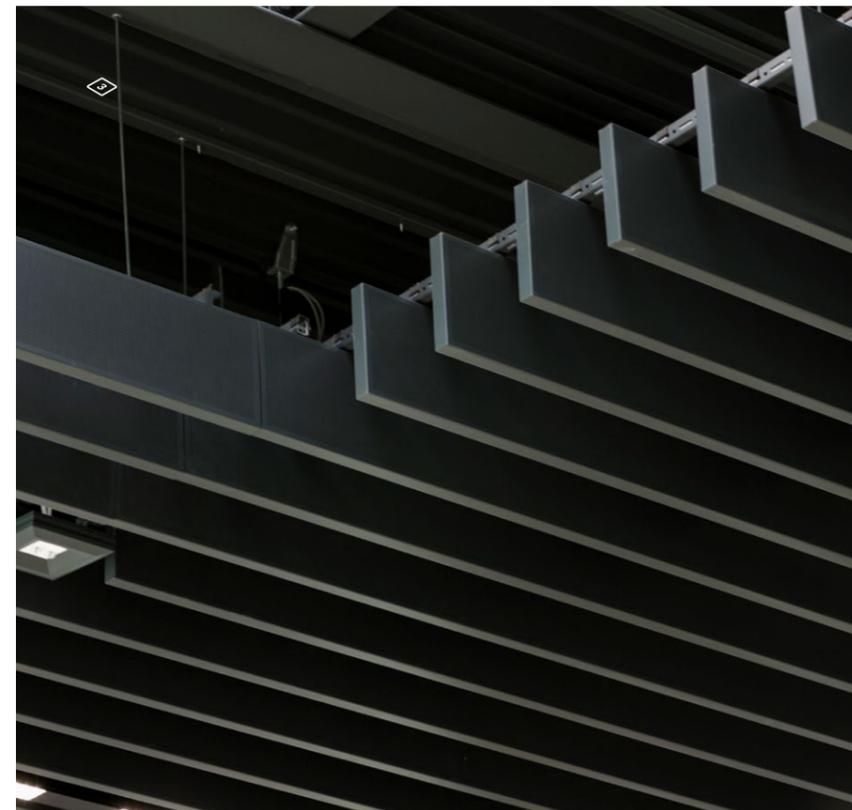
## Achieved

The team incorporated 2,900 linear metres of highly sound-absorbent Metal Baffles V-P 500 to achieve this balance of sight and sound. The solution, designed in an anthracite-coloured finish and a stepped configuration, provided a pleasing aesthetic in line with the contemporary angles, edges and ‘grandstand’ of the wider building, as well as concealing mechanical and electrical components. But, above all, it delivered class-leading acoustic performance – creating the optimum indoor environment for training to inspire.



Metal Baffles V-P 500,  
Perforation Rd 2535,  
RAL 7016,  
Various dimensions  
U-Profile

Photographer:  
© David Güntsch



# ZUIDERZEELAND WATER BOARD Netherlands

**CLIENT**  
Waterschap Zuiderzeeland

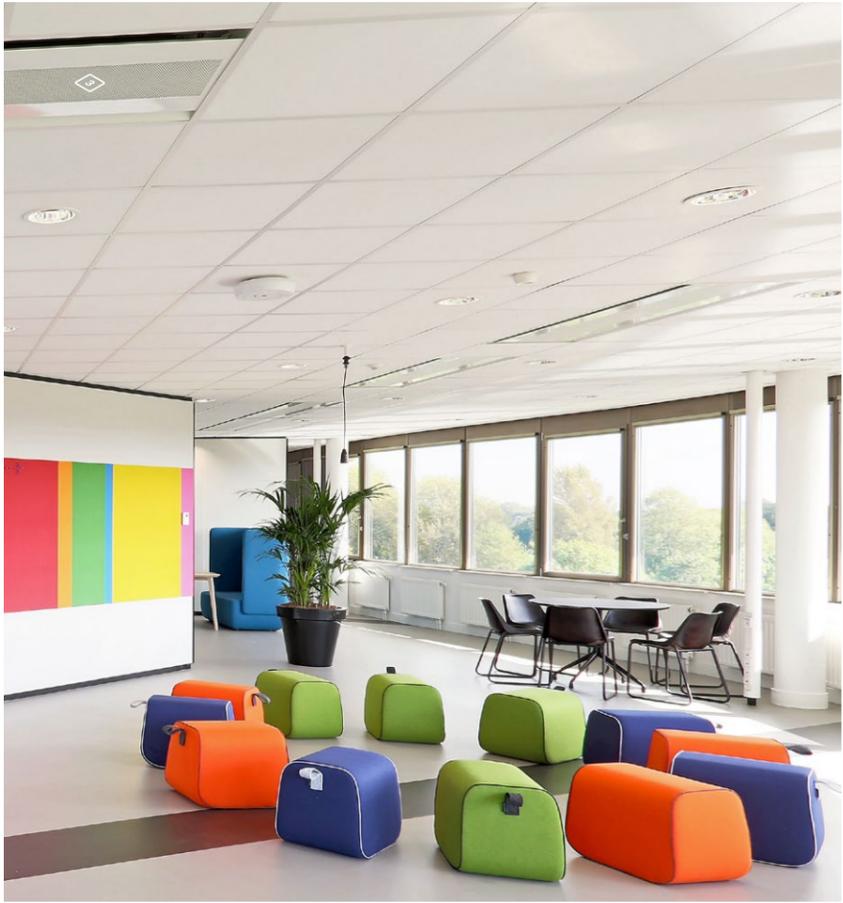
**INTERIOR CONTRACTOR**  
Intermontage Leurink B.V.

## Ambition

As part of a major office overhaul in the city of Lelystad, the Zuiderzeeland Water Board's focus was, rather fittingly, on sustainability. Working to rigid, rigorous codes and criteria, the aim was to create an energy-neutral 'waterschaphuis' (water board house) in harmony with the environment – filled with natural light, space and greenery.

## Achieved

The ceiling played a critical role in bringing this vision to life. Specifying 3,700m<sup>2</sup> of Perla OP 0.95 Board, sustainability was secured from the start. Taking back the old ceiling, including the suspension system, the team could recycle these materials for use as new solutions. In turn, the new ceiling system, itself made from up to 52% recycled material, also carries Cradle to Cradle Certified™ status. Finally, the solution delivered outstanding light reflectance, working with the many windows within the building to flood interiors with light – and reduce reliance on artificial lighting.



 Perla OP 0.95 Board  
Prelude 24 XL<sup>2</sup>

Photographer:  
© Bjorn Kiezenberg –  
Intermontage Leurink B.V.



## SPORTOWA CENTRUM Poland

### ARCHITECT

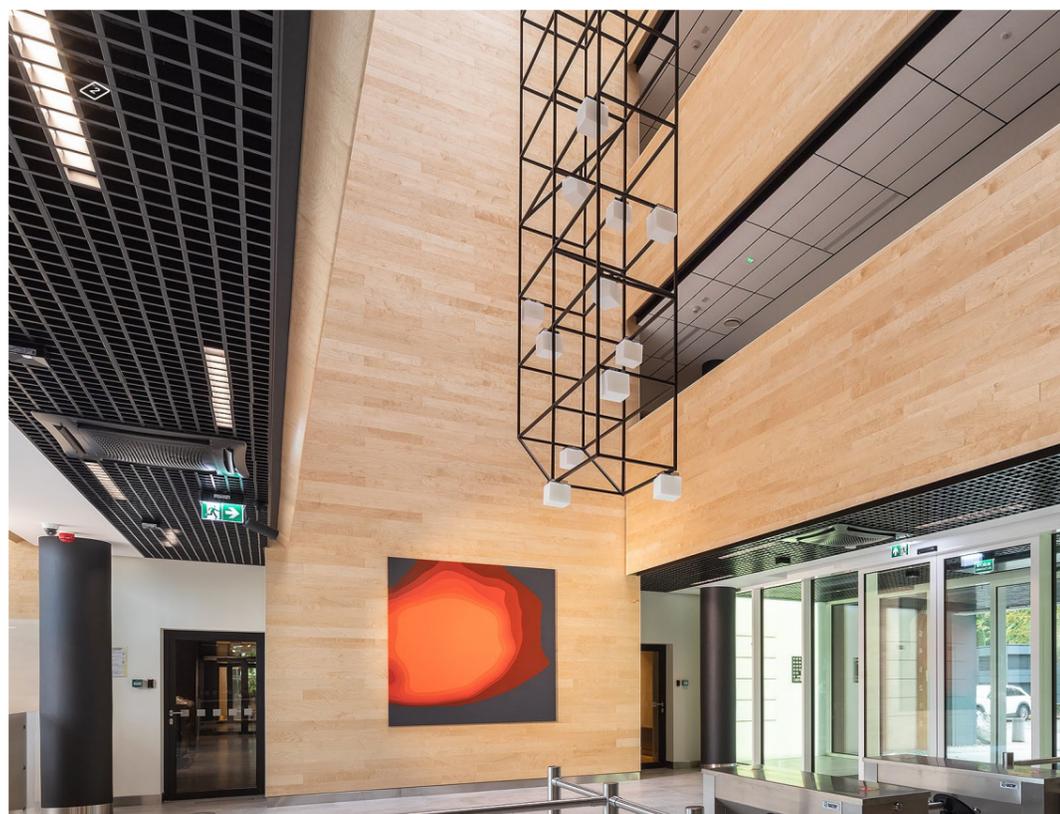
Fort Targowski Sp. z o.o.

### CLIENT

Sportowa Centrum Sp. z o.o.

## Ambition

A modern office development in the coastal city of Gdynia, Sportowa Centrum was designed with innovative, expressive design at the forefront, thematically echoing the maritime heritage of the area. Matching this, however, was the need for wellbeing – ensuring that interior spaces were bright, acoustically comfortable and enjoyable, to create the perfect working environment for employees.



## Achieved

Achieving this ambition demanded unwavering attention to detail, from design to materials – and the results reflect this. Brightening and modernising spaces with special integration of ceiling systems, the team used Armstrong's Cellio open cell ceiling system in black within the main halls. Corridors, meanwhile, feature Ultima+ MicroLook 90 acoustic tiles, installed on a black Interlude HRC XL<sup>2</sup> grid system, delivering a striking visual impact while enhancing acoustic comfort. Easy-to-install Axiom Transitions and Profiles provided the final touches – saving installation time while adding a precise finish to lighter, warmer, more comfortable spaces for the people working within.



Cellio C49, RAL 9005,  
Prelude 15 TL, RAL 9005

Ultima+ MicroLook 90  
Interlude HRC XL<sup>2</sup>, RAL 9005

AXIOM Transition, RAL 9005

AXIOM Profile, RAL 9005

Photographer:  
© Szymon Polański

## SHAPING The Smart City

WHAT ROLE DOES THE CEILING PLAY IN THE INVISIBLE WEB CONNECTING OUR SPACES?

For fans of cinema, 2019 holds a certain significance. In Ridley Scott's *Blade Runner*, it was the year that saw flying cars swoop across a neon-lit Los Angeles. It's safe to say we're far from that. But that's not to say 2019 is a technological let-down.

The Internet of Things (IoT) is transforming the way we use our spaces. Smartphones talk to security systems; we control our environment from heating and air-conditioning to lighting and music with a gesture or a word; conference calls cast content across continents with a tap of the screen. This evolution of the way we use space in the 'smart city' requires complex technology – the real magic is making it look simple.

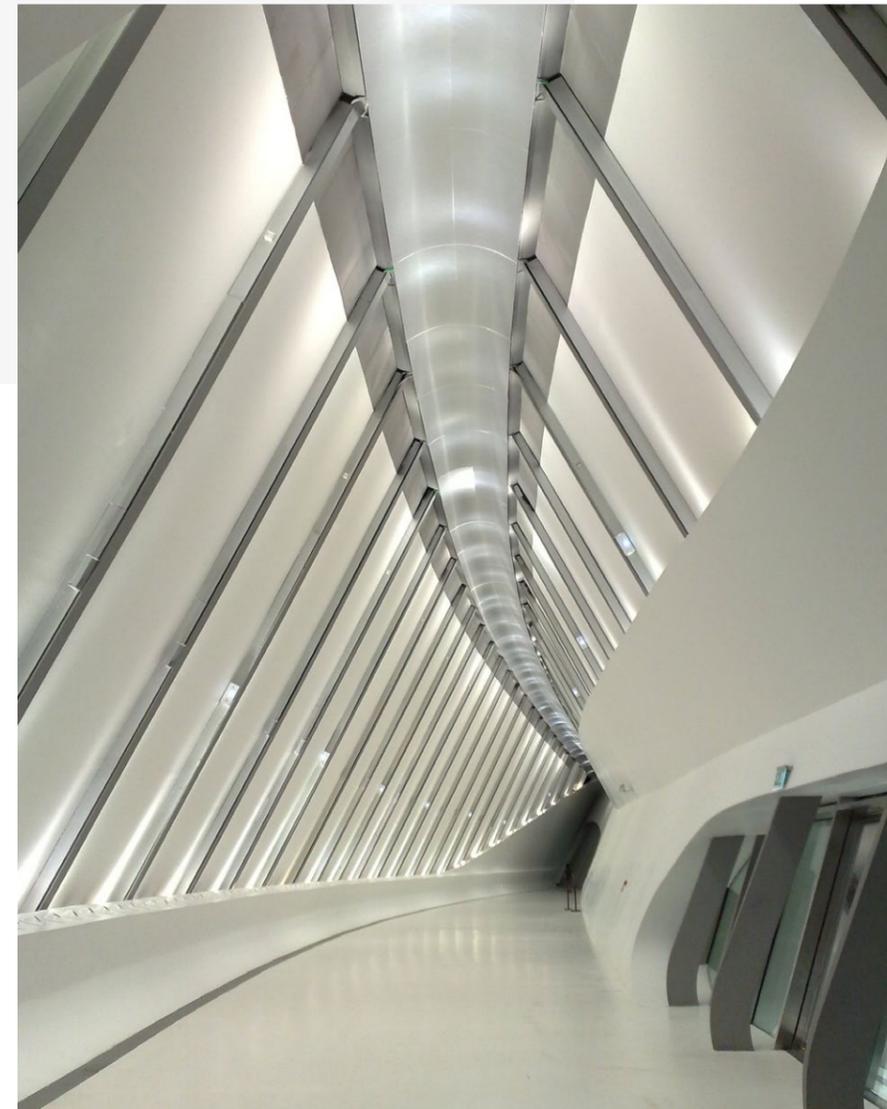
### The architectural evolution

The concept of the connected building relies on sensors that react to input, and collect and share data. The wave of a hand in front of a motion sensor, or the sound of a voice calling to a microphone, or even using data to learn and build a pattern of environmental control to make life easier and more comfortable.

One of the main opportunities for architects is to design these sensors into new-build spaces from the outset. Building in complex sensor networks that enable extensive control over smart buildings is leading to the rise of 'smart hotels' where everything is accessed from one device, or future-focused offices enabling more flexible working.

This is just scratching the surface. Architects are beginning to combine data gathered by smart sensors with augmented reality (AR) for building maintenance – enabling facilities managers to 'see' where a problem lies. The IoT could provide the means to use data for predictive maintenance, or to optimise energy efficiency; to streamline collaboration in construction projects, or optimise air quality to enhance wellbeing.

The possibilities are always evolving. But where we are now is that, from homes to workplaces to retail, leisure and commercial buildings, smart technology is connecting them all. And technologists need to work with designers and architects to ensure that these smart buildings look as good as they perform. Which is where ceilings come in.



### The hidden role of the designer

Trends tell us that technology should be invisible. Minimalism is elegance, and with a movement towards natural materials, light and open-plan spaces, it's desirable for smart technology to be concealed.

Whether it's integrated into new builds from the outset or added later, the hardware that makes smart buildings possible needs to be hidden yet accessible for maintenance. For example, low-energy, smart LED lighting that uses motion sensors or remote control to minimise wastage, or energy-efficient smart ceiling fans. WiFi-enabled projectors or entertainment systems linked up to home assistants, such as Google Home or Amazon's Alexa. As data moves between these systems unseen, it's up to the ceiling to conceal and blend the technology into the space itself, whether that's through monolithic systems shaped around technological features, or the use of canopies, baffles and floating ceilings to hide equipment within the ceiling space.

While the eyes of the world are very much on the technologies within our smart cities, we can't lose sight of the other meaning of 'smart' – how our spaces look. Architects need to balance form and function, usability and aesthetics – keeping in mind at every stage the goal of creating spaces that people want to live, work, rest, heal, learn and play within. And, above all, shape these ever-more complex, smart spaces to look and feel effortlessly simple. ■



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CTL, UNIVERSITY  
OF BIRMINGHAM  
**United Kingdom**

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**ARCHITECT**  
Associated Architects

**CLIENT**  
University of Birmingham

**MAIN CONTRACTOR**  
Morgan Sindall

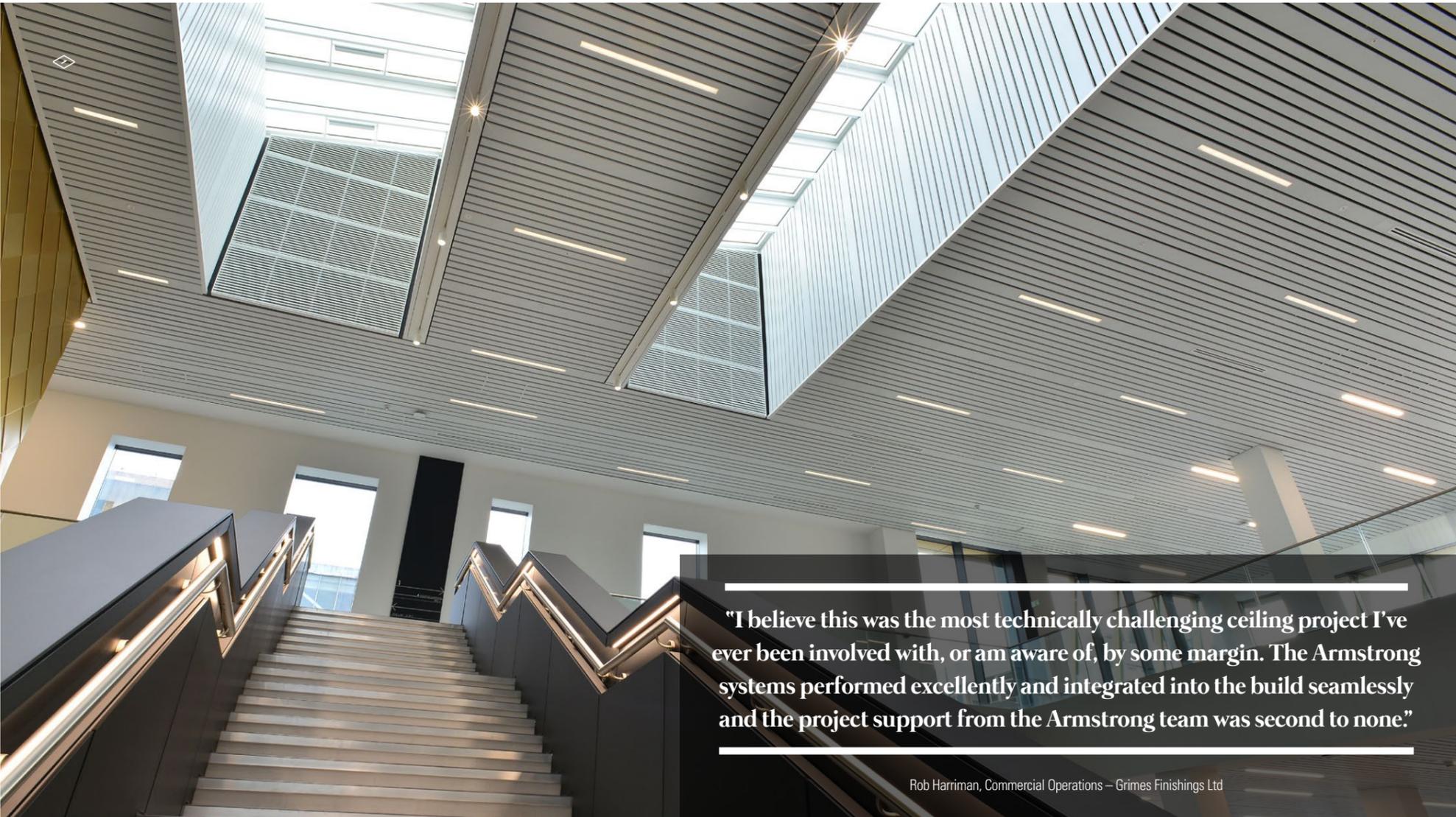
**CEILING CONTRACTOR**  
Grimes Finishings Ltd (Omega)

# Ambition

Part of a £40 million investment in STEM subjects, the University of Birmingham's Collaborative Teaching Laboratory (CTL) building aims to replace traditional, discipline-specific labs with innovative teaching spaces. With cost-efficiency and study effectiveness key drivers in the design of the building, an intelligent and high-performing ceiling solution was required that would deliver with distinction.

# Achieved

A number of metal wall-to-wall systems were specified for the next-generation laboratory facility to be used in conjunction with Armstrong's Drywall Grid System (DGS) for plasterboard interface features such as bulkheads alongside Metal S-Clip F planks. Typically faster and easier to install than traditional drywall framing, the C-Profile linear system also incorporates services such as lighting and sprinklers. Arguably, however, the most striking system was the custom C-Profile linear modular metal system used on the ceiling and walls of the three-storey atrium, as well as in corridors and breakout areas. And the result of using such innovative systems? Increased functionality in teaching spaces, more effective use of staff time and the reinvention of practical classes.



**"I believe this was the most technically challenging ceiling project I've ever been involved with, or am aware of, by some margin. The Armstrong systems performed excellently and integrated into the build seamlessly and the project support from the Armstrong team was second to none."**

Rob Harriman, Commercial Operations – Grimes Finishings Ltd

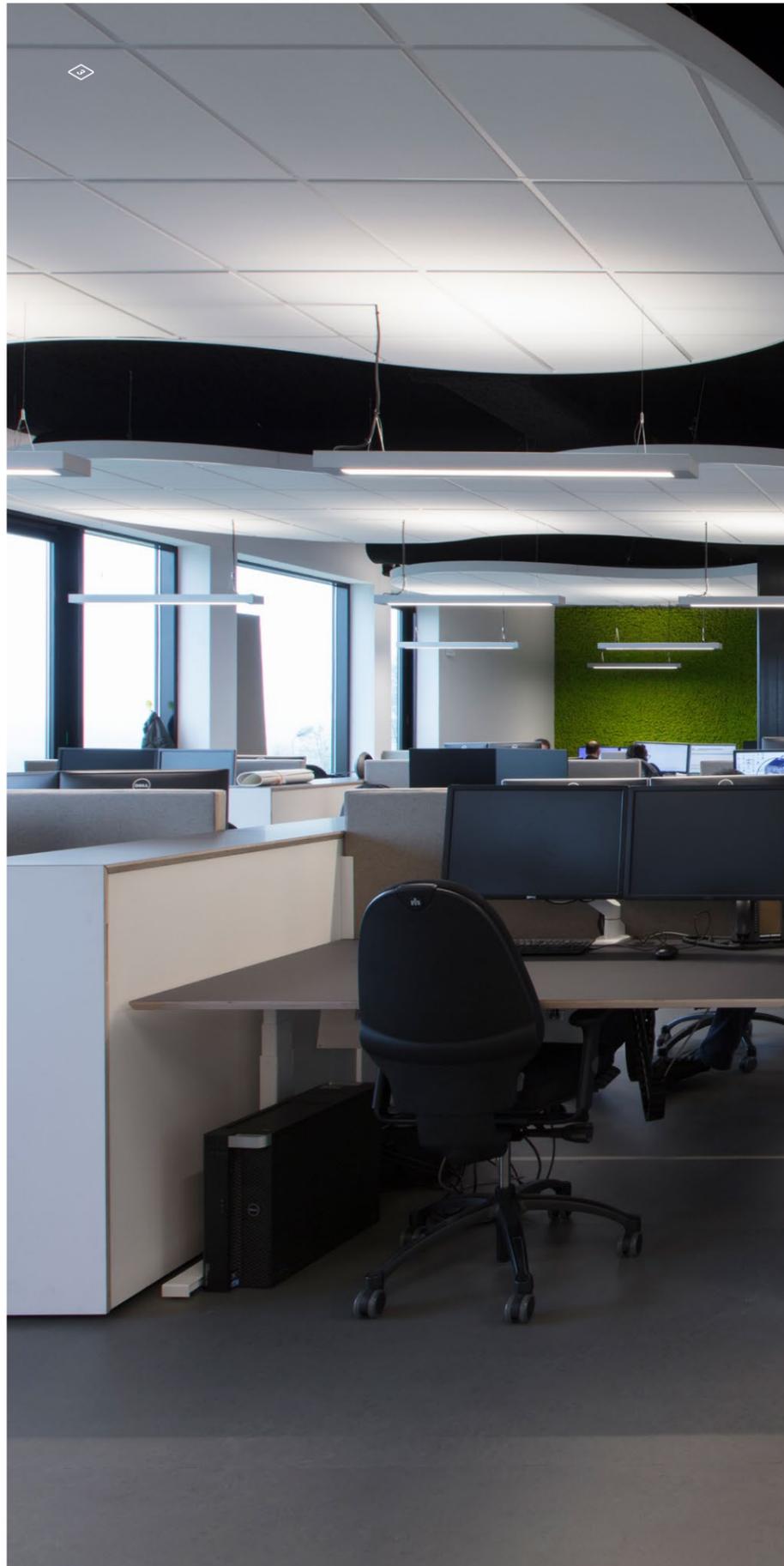
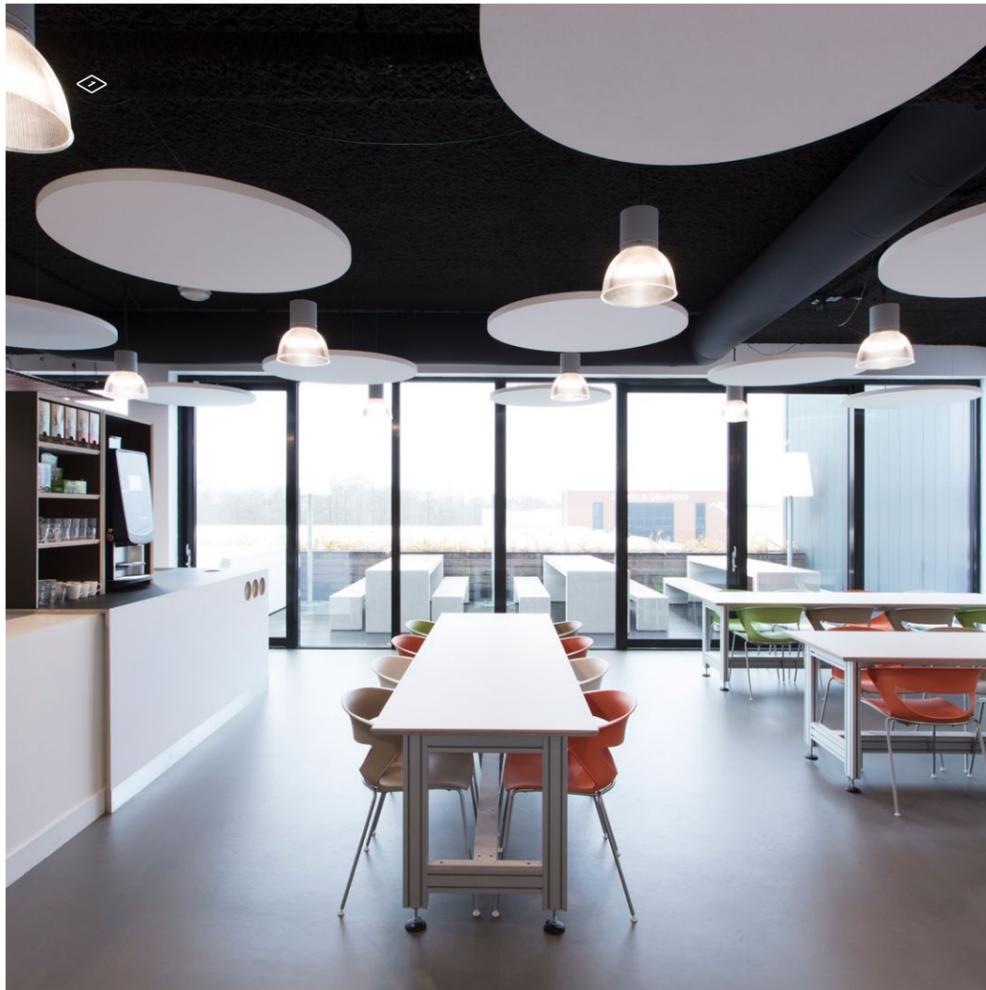


Previous page  
Custom C-Profile Metal linear modular system



Custom C-Profile Metal linear modular system

Photographer:  
© Simon Miles



## EUROSORT 'S-GRAVELAND Netherlands

### ARCHITECT

Stork & Albrecht, architecten en bouwadviseurs

### CLIENT

EuroSort B.V.

### CEILING CONTRACTOR

Verwol Complete Interieur Realisatie

## Ambition

Postal sorting business EuroSort had a vision for its 's-Graveland premises: creating an attractive, modern space in which people would enjoy working. Open-plan layout. Natural light. Contemporary design. All with easy installation to minimise disruption to this high-speed business' operations.

## Achieved

Opmeer-based contractor Verwol opted for a combination of Armstrong Canopy and mineral ceiling solutions. Axiom Curved Canopies, Optima L Canopies Circle & Small Circle, and 350m<sup>2</sup> of Ultima<sup>+</sup> OP ceilings were combined to cover 1,500m<sup>2</sup> of space. In doing so, the solution created a playful effect – helping to open up rooms with areas of light and shade to expand occupants' sense of space. It also enabled the team to conceal service equipment above the ceiling, while allowing easy ongoing access for maintenance. And, over and above this, the systems were easy and fast to install – helping EuroSort get back to business quickly, in a more structured, modern and aesthetically pleasing space.



Optima L Canopy Circle & Small Circle  
Hanging Kit



Axiom Curved Canopy  
Ultima<sup>+</sup> OP Board & Tegular  
Prelude 24 XL<sup>2</sup>

Photographer:  
© Michael van Oosten

# 65 GRESHAM STREET United Kingdom

## ARCHITECT

TP Bennett Architects

## CLIENT

Investec

## CEILING CONTRACTOR

OCP Contracts Ltd



## Ambition

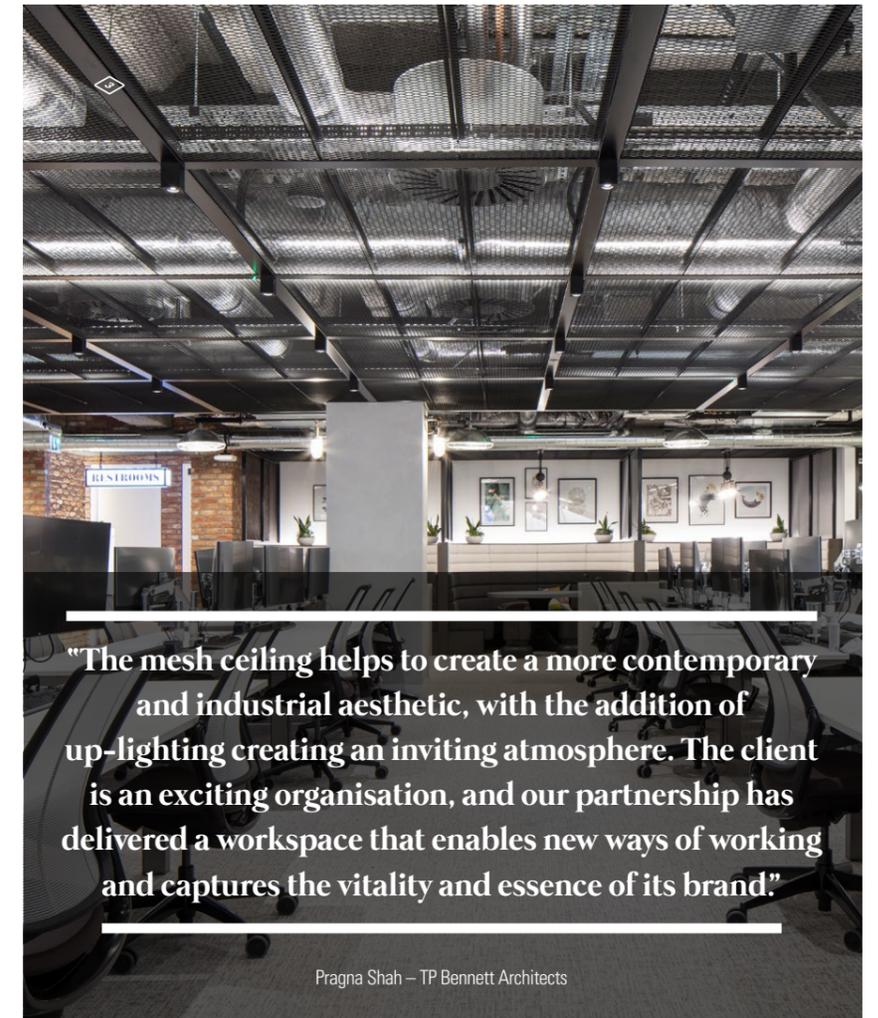
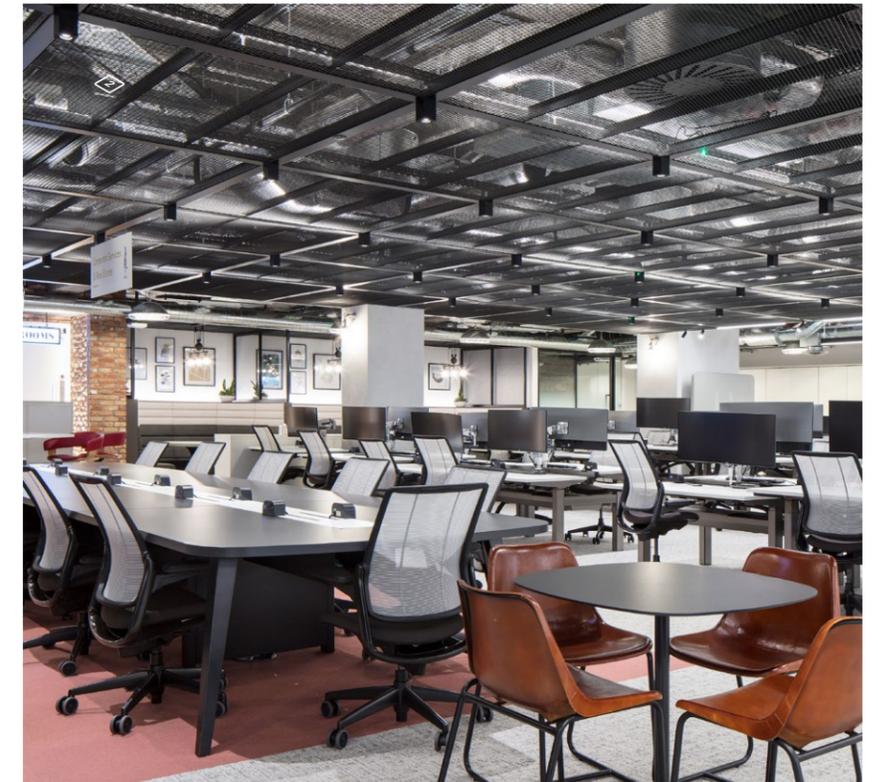
What began as a project for a dining hall and informal lounge in a prestigious London location quickly expanded in scope. The team's ultimate ambition for 65 Gresham Street was to create an open-plan office space suitable for multiple purposes – which, together with bringing to life the client's core message of 'out of the ordinary', required an adaptable, flexible and creative design approach.

## Achieved

The contemporary, industrial aesthetic of the ceiling was made possible by 150m<sup>2</sup> of Armstrong's configurable Mesh Metal K-H 400 MT tile and grid system. Using jet black RAL 9005 Mesh Metal tiles, customised with a larger open mesh area and installed on a standard Crossing Box with C-Profile suspension system, it also features custom Metal bulkheads spanning the perimeter. As a complete solution, this delivers visuals that are certainly out of the ordinary – and, crucially, it enhances everyday functionality too, by maintaining accessibility of services above the ceiling.

-  Custom 70% open area
-  Mesh K-H 400 MT, RAL 9005
-  Crossing Box + C-Profile
-  Custom Bulkheads

Photographer:  
© Tom Green



**“The mesh ceiling helps to create a more contemporary and industrial aesthetic, with the addition of up-lighting creating an inviting atmosphere. The client is an exciting organisation, and our partnership has delivered a workspace that enables new ways of working and captures the vitality and essence of its brand.”**

Pragna Shah – TP Bennett Architects



## OZG HOSPITAL Netherlands

### ARCHITECT

Leeuwenkamp Architecten

### CLIENT

Ommelander Ziekenhuis Groningen

### CEILING CONTRACTOR

Eissink Plafond- en Wandsystemen

## Ambition

A project to replace two hospitals with a new, sustainable facility in the northern village of Scheemda, the aim for the Ommelander Ziekenhuis Groningen was to create space to aid healing: natural daylight, a balance between privacy and openness, and – crucially – addressing the World Health Organization's recommendations for lower sound levels.

## Achieved

In enhancing acoustic comfort for patients and personnel alike, the team turned to a combination of Optima Canopies, Optima Baffles, Perla OP 0.95 and Bioguard Acoustic ceiling systems throughout the hospital. This acoustic solution worked to mute the hustle and bustle of the busy hospital, ensuring occupants could work, rest, heal and recover in peace.



1 Optima L Canopy Circle  
Optima Baffles  
Hanging Kit

2 Perla OP 0.95 Board  
Seismic Rx® XL²

Photographer:  
© Rob van Esch

# KAZAN STATE CIRCUS Russia

## ARCHITECT

Tatinvestgrazhdanproekt

## CLIENT

Kazan State Circus

## CONTRACTOR

Eurostroyholding

## Ambition

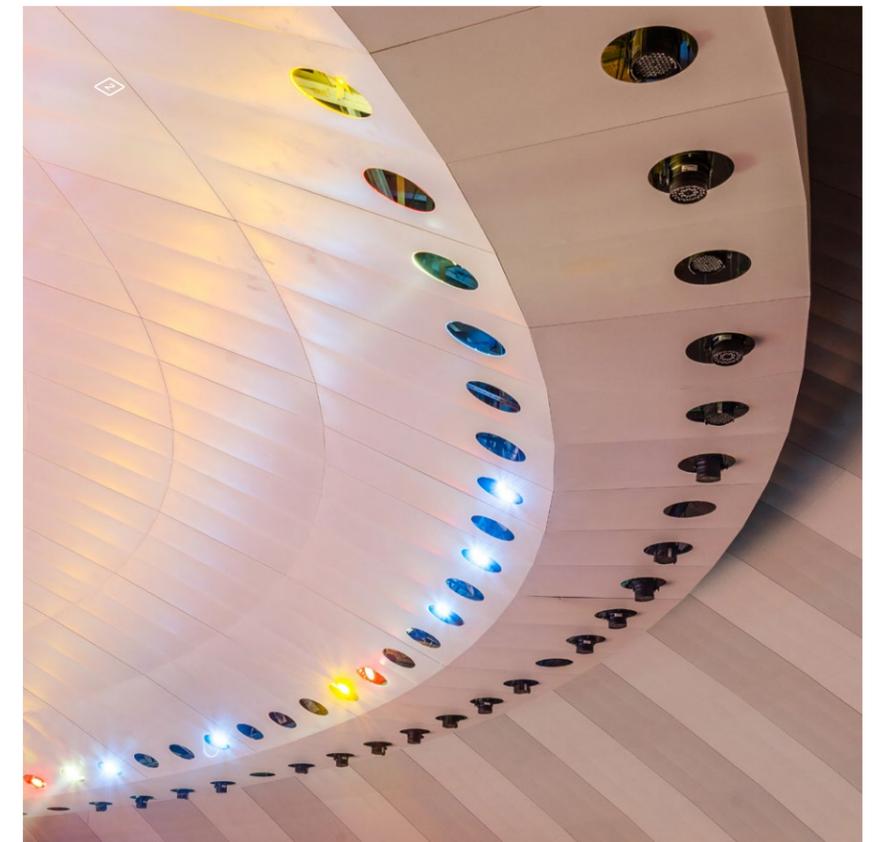
An unmissable destination in the heart of the city centre, Kazan State Circus is a landmark family entertainment venue. State-of-the-art architectural performance and acoustics are key to its success – but the integration of cutting-edge, lightweight and demountable systems with the preservation of the historical metal dome was just as crucial.

## Achieved

This was a feat unlike any other across Europe. With the hemispherical ceiling being over 20m high, and traditional heavy materials requiring extensive preparation and treatment, the design team turned to Armstrong for a solution. A bespoke Metal Hook-On acoustical ceiling system incorporating non-standard features and perforations, supported by a customised longspan suspension, provided a highly accurate solution perfectly matching the complex geometry of the building. The result: a ceiling that truly does justice to Kazan State Circus' dramatic aesthetic – with the visual and acoustic performance to match everything that happens below.

 Metal R-H 200 Trapezoid  
Metal R-H 200 Aluzink  
U-Profile + J-Bar

Photographer:  
© Nail Ziyatdinov





## SOCIÉTÉ DES EAUX DE MARSEILLE France

### ARCHITECT

Fabien Cadenel

### CLIENT

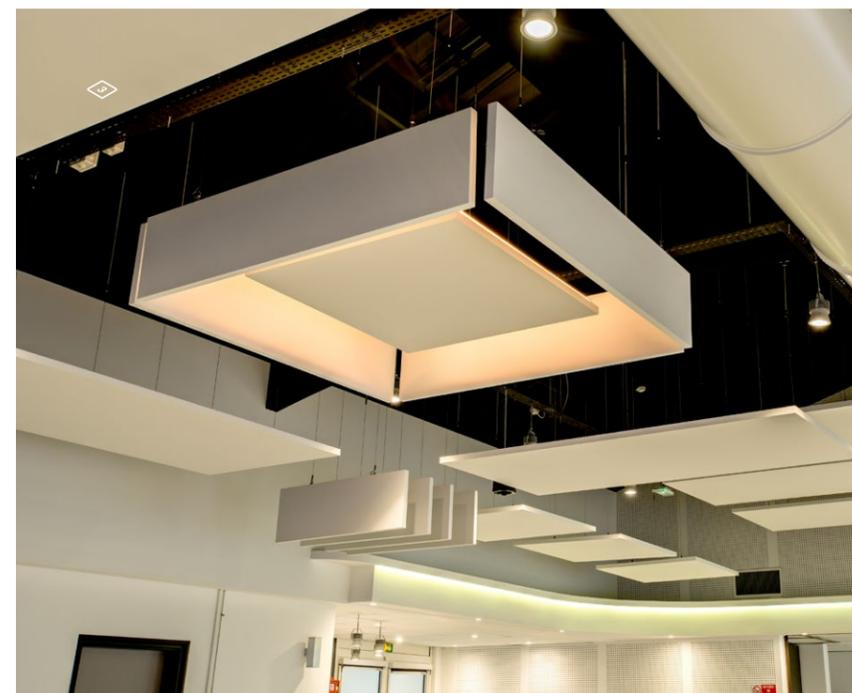
Société des Eaux de Marseille

## Ambition

Leading water distribution company Société des Eaux de Marseille is responsible for operating and maintaining the Canal de Marseille and its 250 structures. A striking and, rather fittingly, free-flowing ceiling solution was required for the company's new meeting spaces as part of a redesign project at its Marseille headquarters, with equal consideration for aesthetics and acoustics required.

## Achieved

Baffles and canopies were used throughout the space to create a grand sense of theatre while providing a channel for air to flow through – essential in a room often occupied by large crowds. Further atmosphere was created through the inventive use of vibrant lighting throughout the canopies, which also delivered the enhanced acoustic performance required to enable visitors to speak, socialise and share ideas in absolute comfort.



Optima L Canopy Square & Rectangle  
Optima Baffles  
Hanging Kit

Photographer:  
© StudioVu



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