

# Acoustics & DESIGN

INTERIOR & CEILING INSPIRATION FOR PROFESSIONALS



*Excellent acoustics boost turnover*

## High-end Hospitality & Acoustics



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## IN THE SPOTLIGHT

TAS BUILDING  
DEN BOSCH.  
READY FOR  
THE FUTURE.

View the article  
from page **32**



Photo: Catalina Lopez Guerrero

**OWA**

*Colophon*

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GUEST EDITOR:

# Elles Borgert



With this magazine we want to show the versatile design possibilities of ceilings to architecture and interior design enthusiasts. For this edition we asked architect Elles Borgert to join us during the creation. For once, she took on the final editorial responsibility. But she much rather delves into the design and details of her projects.

I have been realising projects with Aerde Borgert Architects for 10 years. Together with my partner Ruud van Aerde and our team, I focus mainly on inner-city redevelopment, renovation and redevelopment of preferably monumental and industrial buildings. We do not focus on a particular type of segment, but our projects do have a common denominator: they almost always involve existing buildings. That brings challenges. Also in the field of acoustics.

### Aesthetic impact

For me, the power of design lies in the detail, materialisation and new spatial experiences. By applying these themes at every scale level, we are able to create sustainable and future-proof designs. Ceilings are also an important element here. I consider what is appropriate for the ceiling finish for each project. Some projects require a suspended ceiling to conceal technical installations and structural elements. Other projects call for the use of acoustic ceiling canopies, for example, leaving those elements partly visible.

To ensure the acoustic quality of a building, we regularly work with acoustic consultants. On the basis of our design and the applicable building regulations, they make acoustic calculations and suggest possible acoustic solutions. Based on the client's wishes,

demands and the available budget, I select the appropriate ceiling solution for each room. In representative areas such as entrance halls or meeting areas, I often use visually attractive - and often slightly more expensive - acoustic solutions. And in rooms where practicality is most important, such as sanitary rooms, I more often opt for standard ceiling solutions.

### Acoustics and design in architecture

Over the past few years, I have come to understand the importance of acoustics more and more. Unfortunately, not enough attention is given to acoustics in every project. While good acoustics contribute enormously to the positive experience of a room. When we renovated our own office, we also used OWAplan, which helps to create a very pleasant working environment. So when I was asked to appear in this first OWA magazine, I was immediately triggered. This magazine demonstrates that acoustics and design in architecture go hand in hand perfectly. It's nice to make a small but meaningful contribution to that.

*Elles Borgert*



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Photo: Catalina Lopez Guerrero



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**OWA CORPUS - BECKHOFF AUTOMATION**  
 Beckhoff Automation's enormous company restaurant, with extremely high ceilings, was unpleasantly noisy when it was busy. Acoustic measures were necessary, but the open character had to be preserved. The lightweight Corpus ceiling islands significantly reduce reverberation times. The already installed electrical, ventilation and sprinkler system did not have to be adjusted.



# OWA Elements



Sometimes spaces require an approach other than standard ceiling systems. Create surprising compositions with acoustic elements.

Sometimes spaces need something extra, to complete the overall picture both acoustically and visually. For those who like to experiment with three-dimensional compositions, OWA offers the Elements collection. With a wide range of ceiling islands, baffles and wall panels in different sizes, you can create playful and characteristic ceilings.



## OWA SELECTA - ARCHITECTURAL FIRM

Important starting points for this office were large open spaces, an industrial look and comfortable workplaces. As the design included many hard surfaces, calculations were made as to what was needed for optimal room acoustics. The chosen Selecta ceiling canopies are the perfect middle ground between creating a pleasant acoustic climate and preserving the pure, characteristic appearance of the building.



## CORPUS

### Classic design, personal design freedom

The design award-winning Corpus ceiling canopies are stylish, functional and offer an abundance of design options. Corpus is particularly suitable for very large rooms and helps connect different zones. With ten different rectangular, three-dimensional shapes, all with the highest absorption value ( $\alpha_w$  1.0), Corpus creates a whole new dimension in ceiling design.

## FREESTYLE

### Enrich room interiors with FreeStyle baffles and wall panels

Bring ceilings and walls to life and create calm interior acoustics with FreeStyle baffles and wall panels.

FreeStyle baffles are available in many different colours. Play with natural and artificial lighting and create powerful patterns. The vertical application of FreeStyle ensures maximum reduction of reverberation times.

FreeStyle wall panels offer a high absorption value ( $\alpha_w$  0.90) and are available in various shapes and colours.



## CURVE

### Create intriguing formations with eclectic ceiling canopies

The Curve 1 (convex) and Curve 2 (concave) ceiling canopies are elegantly shaped lightweights. The canopies are available in various colours for playful, intriguing formations that bring any ceiling to life. They can be placed individually or combined in interesting patterns. Curve meets sound absorption class A ( $\alpha_w$  1.0), guaranteeing excellent acoustics.

### DISCOVER THE OWA ELEMENTS COLLECTION ONLINE?

Please use the product index in the back of this online magazine, with hyperlinks that give direct access to the product pages. You will find all technical information on those pages, including tools for specification texts and CAD drawings.

# OWAplan *in luxury villas*

The degree of luxury in a villa is often measured by visible elements such as the kitchen, home automation, furniture, or the presence of a swimming pool.

But slowly, the awareness is growing that good acoustics are an invisible yet essential form of luxury. Meanwhile, the **seamless, acoustic ceiling OWAplan** is delivering visually and acoustically pleasing results in numerous villas.







**VILLA K**  
**LAB32 ARCHITECTS**

The glass rear facade of this villa provides stunning natural light. Additionally, the residents desired a sleek, minimalist interior, predominantly featuring hard materials and surfaces. Despite this, thanks to the high-quality sound absorption of OWAplan, the acoustic climate remains warm and inviting, while the smooth ceiling surface accentuates the minimalist interior design.

Photo: Koen Stijnen



**RENOVATED AND MODERNISED  
1930s HOME  
KING KONGS INTERIOR DESIGN**

Situated just a stone's throw away from a vibrant city center stands this spacious, meticulously renovated 1930s home. The large windows, hard floor surfaces, and sleek plastered walls could potentially lead to acoustic discomfort. Thus, the residents opted for OWAplan in conjunction with other acoustic measures.

Various built-in components such as spotlights, speakers and fire detectors have been meticulously concealed within the sleek ceiling, down to the millimeter. The decorative moldings on the ceiling have been spray painted together with OWAplan for a seamless look, ensuring that all the home's distinctive features are preserved while the residents enjoy premium acoustic comfort.



Photo: Peter Baas



## AN ARCHITECT'S VIEW

# CLARK TEENSMA, LAB32 ON THE IMPORTANCE OF ACOUSTICS IN LUXURY VILLAS

*"It's the invisible, yet  
crucial finishing touch"*

Lab32's portfolio is characterized by a high architectural quality and a minimalistic design language. Late founder Loek Stijnen gained recognition for his spatially intriguing solutions, enriching numerous projects both domestically and internationally. It was his precise architectural vision that made Lab32 stand out among clients. Following Loek's unexpected passing in 2018, Clark Teensma continued the firm – and thus Loek's spirit and vision – as the leading architect. Acoustics are a valuable component of the design process for Clark.

### Architecture and Acoustics

Clark has been involved with Lab32 for a long time. Initially, for over 10 years as Loek's right-hand man, and now as the leading architect. 'For sixteen years, I've been immersed in spatial challenges. Along the way, I learned that acoustics are inseparable from architecture. There was little to no emphasis on this during my studies. However, upon entering the professional field, I received feedback from clients about acoustics. When you receive those comments frequently enough, you naturally start looking for solutions. Currently, we use an acoustic ceiling in 9 out of 10 projects.'

### Strategy

Bringing attention to such a valuable yet costly investment can sometimes be a challenge. 'During the design phase, it's not the first thing that comes to mind,' Clark admits. 'But I know the value of good acoustics and address the subject gradually. This value doesn't always get through to clients – they mainly see the price tag. But when they find themselves in a room full of people without acoustic measures, after the project is completed, they'll experience the echo chamber that's created. Yes, acoustic

ceilings are expensive. But in my opinion, they are worth every pound.'

Clark prefers to direct clients to homes or showrooms nearby that have acoustic ceilings, so they can experience the difference firsthand. 'That's the only way to truly convince them. And even then, people often opt for acoustic ceilings in only a few rooms.'

It's only after housewarming parties and birthday gatherings with many guests that they discover how beneficial an acoustic ceiling truly is. And that the additional expense has brought a significant amount of comfort. But by then, it's often too late. To properly install an acoustic ceiling, sufficient height is required. This is often not achievable after the completion of the building process, due to factors such as window and door frames.'



### OWAplan in Villa K

In Villa K, a project by Lab32 in Zeeland, OWAplan was placed in the spacious living room and kitchen area. In the basement, there is a lounge area. 'Here,

the client opted only for a small OWAplan section above the bar. In retrospect, they would have preferred to have more OWAplan panels installed there. After all, the lounge area is where the most talking, partying, and laughter happens.'

For Clark Teensma, OWAplan is a practically invisible luxury product. 'For architects, it's a feast for the eyes because it seamlessly blends with the space. And that's also the pitfall; clients are used to paying for things that stand out. However, the sound absorption provided by OWAplan allows minimalist furnishing, without the need for visually intrusive elements such as curtains and thick carpets, just for the sake of acoustics. This is what makes OWAplan particularly popular in the luxury segment.'

### VILLA K, KITCHEN LAB32 ARCHITECTS

The combination of OWAplan and the partially built-in light fixtures accentuate the clean lines of this serene kitchen design.

Photo: Koen Stijnen



## MUSEUM VOORLINDEN KRAAIJVANGER ARCHITECTS

Dirk Jan Postel's design is entirely dedicated to the exhibited art: flat, sleek, and without distractions. Likewise, the sleek, seamless acoustic OWApplan ceiling extends over 2,000 square meters. All installations, ventilation grilles, lighting fixtures, and cameras are integrated into the ceiling down to the last millimeter.



Photo: Ruud Peijnenburg

## OWApplan: two absorption values, two surface finishes, all RAL colours

OWApplan was originally developed for use in luxury hotels, museums and other buildings where standard ceiling systems do not fit the desired aesthetic. Architecturally, OWApplan meets the highest possible standards, including fire safety, resistance to humidity and colour fastness.

### OWApplan 70 or 90, S or XS?

In terms of acoustic performance, there are two options available. OWApplan 70 offers an absorption value of  $\alpha_w$  0.70 and is therefore ideal for projects with no strict acoustic requirements. OWApplan 90 goes a step further, providing A-class sound absorption ( $\alpha_w$  0.90).

To enable the acoustic performance, a slightly open surface structure is required. Special materials and spraying techniques ensure a surprisingly refined surface. You can choose between the options fine (S) and extra fine (XS).

### Assembly and finishing

The OWApplan base panels are biodegradable and are installed using the proven S7 suspension system. The panels are covered with an acoustic fleece. Certified sprayers apply an acoustically open coating to the panels. OWApplan can be sprayed in any RAL colour.



WANT TO LEARN  
MORE? WATCH THE  
VIDEO EXPLAINING  
OWAPPLAN.



## REFRESHING IDEAS FOR FRESHER SCHOOL ENVIRONMENTS

A comprehensive product range to meet the strictest guidelines

In The Netherlands, a Fresh School is an energy-efficient school building (primary or secondary education) with a healthy indoor environment. The program of requirements serves as a guideline for clients of new construction and renovations for schools. The requirements are focused on energy consumption, air quality, temperature, lighting, and sound. Leon Spijkers, acoustic expert at OWA Benelux, is frequently approached by architects for advice. He always considers the whole set of measures. 'The synergy between the different themes ensures an indoor climate that stimulate learning performance, health, and well-being the most.'



**HYPERION LYCEUM - AMSTERDAM**  
**ECTOR HOOGSTAD ARCHITECTS**

The building has been consciously designed in an unconventional and elusive manner to continually engage, stimulate, inspire, and challenge students. Within this space, canopies composed of OWA Sinfonia Premium panels create clean lines that extend into the adjacent classrooms. The open, floating effect adds additional contrast in the unusually high spaces.



Photo: Petra Appelhof





**OBS JULES VERNE  
UTRECHT, THE NETHERLANDS  
BRIQUE ARCHITECTS**

The interior of this energy-efficient school is uniquely tailored to the educational vision. The central study areas on the first and second floors can be connected with the surrounding classrooms at the touch of a button, creating an open learning environment. For the acoustic challenges, the perfect all-round ceiling solution Sinfonia has been chosen. The series comprises five variants, each with unique acoustic features but identical in appearance.

Photo: Isabel Nabuurs





**OBS JULES VERNE - UTRECHT  
BRIQUE ARCHITECTS**

For the office section within the school, OWA Sinfonia Privacy panels were utilized. This type of panel of maximum reduction of longitudinal noise between rooms and ensures that confidential conversations stay in the room.

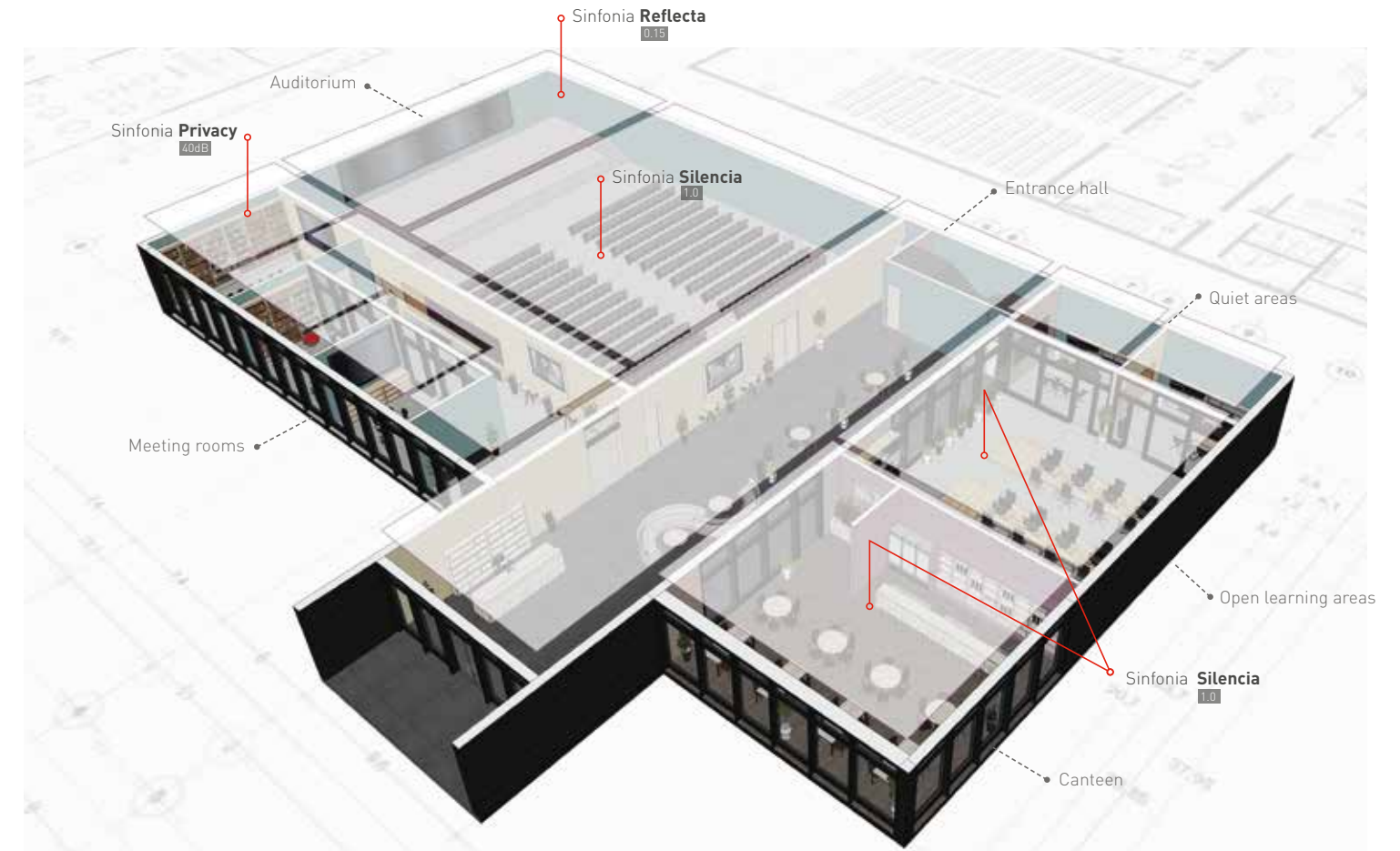
Photo: Isabel Nabuurs

In The Netherlands, there are no legal obligations for acoustics in schools. However, based on the Program of Requirements for Fresh Schools, clients can still establish the desired ambitions. Interestingly, the program is limited to classrooms and adjacent spaces.

Leon Spijkers: 'In practice, other spaces such as corridors, auditoriums, and sports halls are increasingly being used as flexible locations for learning activities. As schools adopt more dynamic learning styles, characterised by increased interaction between teachers and students, as well as among students themselves, the desire to actively control the sound level in different spaces has increased.'



The consultants at OWA prefer to work together with clients and architects to explore ways to make the entire building flexible for learning activities. 'When speech intelligibility and acoustics improve in the learning spaces, it enhances the job satisfaction of teachers,' says Leon. 'As a result, the academic performance of students naturally improves. With our advanced range of acoustic products, we can make a tangible contribution to this, enabling schools to meet the highest Class A (excellent) standards within the Program of Requirements for Fresh Schools 2021. The architects we collaborate with extensively know how to reach out to us effectively.'



## OWA Sinfonia

One harmonious ceiling, five essential functions

**OWA Sinfonia is a beloved ceiling series that is particularly well-suited for educational buildings. With its various types of panels, you can achieve a suitable acoustic environment in every space. Each panel offers different performance characteristics, but has a uniform appearance. This ensures that all physical spaces are balanced and visually harmonious.**

Sinfonia is a mineral ceiling panel with a smooth surface texture, available in white, black and all RAL colours. Its numerous application possibilities, sleek appearance and excellent performance in terms of acoustics, insulation, fire resistance, and hygiene make Sinfonia the perfect all-round ceiling solution for school buildings.

**WANT TO VIEW ALL OWA PRODUCTS FOR SCHOOLS PER ROOM TYPE?**



Discover our entire product range for education, categorised by room and tailored to meet the applicable guidelines.



SCHIPPERSBEURS ANTWERPEN  
LOUNGE BAR FIERA  
CATHERINE VERBRAEKEN

In the historic heart of Antwerp lies this international top location. The breathtaking interior is perfected with OWApplan in black. Lighting and other elements are carefully integrated into the ceiling. The A-class absorption value ensures a pleasant acoustic climate, regardless of the number of guests.



FACT  
Excellent  
acoustics boost  
turnover

# HIGH-END HOSPITALITY & Acoustics

Shortening reverberation times improves the ambiance and increases turnover

When designing a hospitality interior, the focus is often primarily on furniture, mood-setting elements, and a suitable lighting plan. Acoustics hardly ever comes into play. Until completion, visual attractiveness inevitably takes precedence. Which is partly understandable, viewed through the eyes of both the interior architect and the hospitality operator, both of whom pursue creating The Perfect Picture.

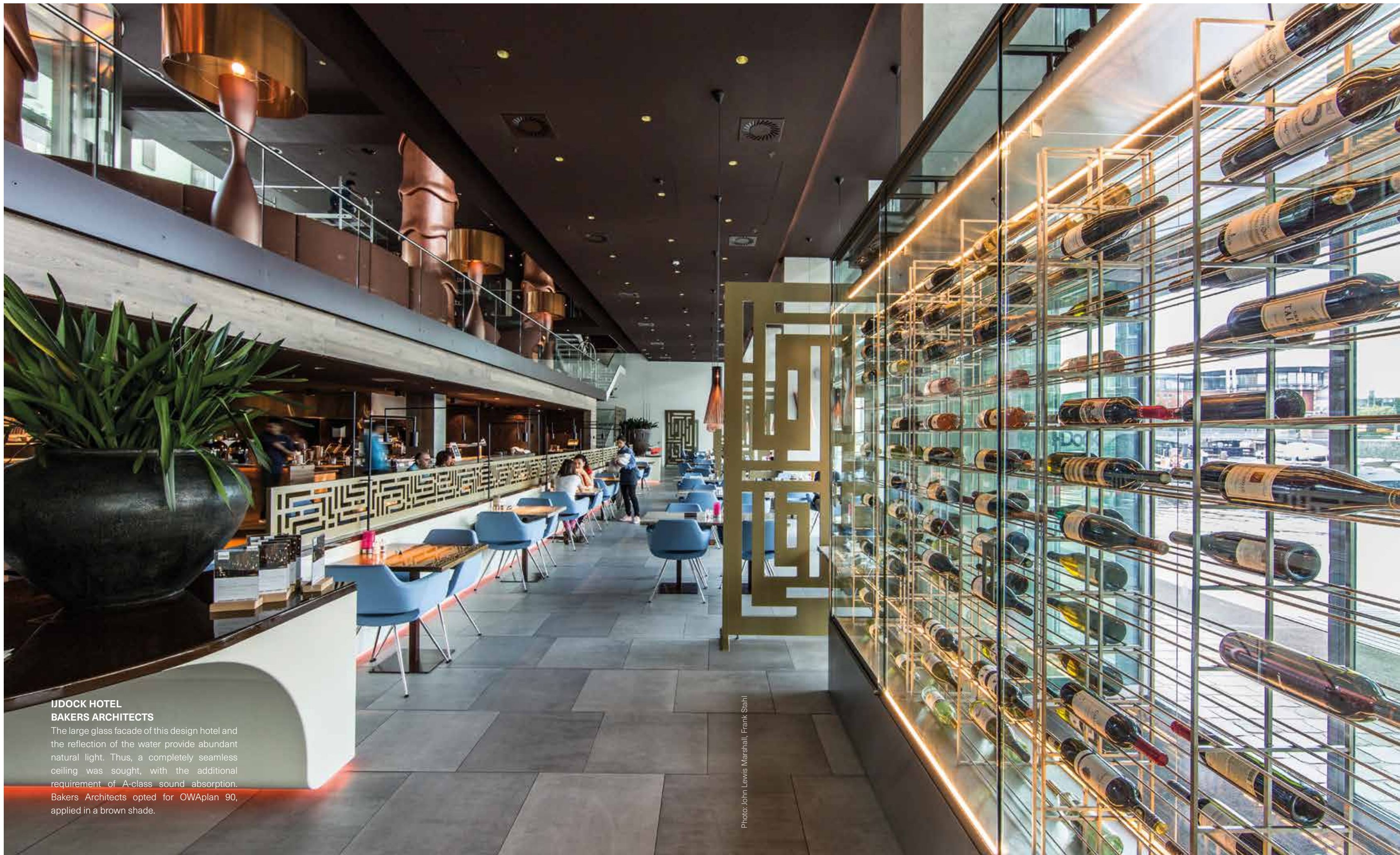
And then the doors open. The crowd streams in. And the interior is filled with voices, music, and ambient sounds. They blend into an acoustic cloud that fills up the space. Sometimes it's manageable, and the acoustic environment is just right. But often, the sound waves go haywire. The result: guests that

are unable to have a proper conversation and staff members feeling overwhelmed by the noise, and end up feeling exhausted by the end of the evening.

Making adjustments afterwards is possible, but much more complicated than during the construction process. Installation materials, lighting, and other interior elements drastically limit the possibilities. The solution? Before renovating an existing hospitality venue, have an acoustic assessment conducted. This way, sound waves across the entire spectrum can be accurately mapped, and acoustic measures can be integrated into the interior design. For new construction projects, specialised firms can conduct virtual acoustic simulations based on the design.

**Did you know** that OWA consultants can conduct complimentary acoustic measurements? Using specialized equipment, they map out reverberation times per room. The report provides insight into the minimum acoustic measures you need to take, to ensure a pleasant acoustic environment.





**IJDOCK HOTEL**  
**BAKERS ARCHITECTS**

The large glass facade of this design hotel and the reflection of the water provide abundant natural light. Thus, a completely seamless ceiling was sought, with the additional requirement of A-class sound absorption. Bakers Architects opted for OWAplan 90, applied in a brown shade.

Photo: John Lewis Marshall, Frank Stahl





**RESTAURANT DE SLAGMOLEN  
JANSEN BUILDING GROUP NV**  
The facelift and expansion of this two Michelin-starred restaurant have been perfected with over 150 square metres of OWAplan. The high, slanted ceiling combined with numerous light fixtures creates a magical effect.

Photo: Max Vicca



Explore more hospitality projects featuring OWA products.

## 'The ear-splitting hell of New York dining'

That's how New York Post journalist Steve Cuzzo describes the local restaurant culture. The pleasure of dining in company disappears when you have to shout to be heard, or can follow the conversation at the table next to you word for word.

It's therefore not surprising that poor acoustics are more frequently complained about than poor service. And that problem is not limited to the borders of America.

### REVERBERATION TIME CALCULATION

In recent years, sensitivity regarding the acoustic design of rooms has increased significantly. It is therefore important to determine the necessary product properties early on in project planning.

Calculate the reverberation time with the room acoustics calculator.

Calculate room acoustics with







## TAS BUILDING DEN BOSCH



## OFFICE CITY FOR A GROUP OF COMPANIES

**TAS**, reads the sign in large letters on the facade. The brand-new building owes its name to the founder's father, Balthasar. In the village where he lived, his name was abbreviated to Tas. TAS now has acquired its own meaning: Toekomst (future), Alles (everything) and Synergie (synergy). 'These are themes that unite a group of companies with different dynamics and approaches. We are ready for the future, capable of handling everything and doing so in perfect synergy. That's how we go the extra mile for our customers,' says Arnold den Haan, General Manager at CNSTRCT. And within a group of companies like this, a pleasant acoustic climate is, of course, essential.



"In the building concrete dominates the space. We aimed for the ceiling to mirror this aesthetic, while also improving acoustics."

#### WARM, RAW AND OPEN

The interior was designed by King Kongs Interior Design Agency from Eindhoven. BSA Wim de Bruijn Exterior Design (now SYNRG) was responsible for the transformation of the building.



Future, Everthing and Synergy. 'These are themes that unite a group of companies with different dynamics and approaches.'



**Arnold den Haan has been the General Manager at CNSTRCT for six years. As the internal lead for the renovation process, he was involved in the transformation from planning to the impressive inauguration of the TAS building in Den Bosch.**

Previously, the various brands represented by the company group were housed in different locations. When the decision was made to consolidate the companies under one roof, the search for a larger office space began. This was not without its challenges. A large workspace, large production hall, and a spacious outdoor area: the options were minimal in the surrounding area. Eventually, they came across the current location. 'The former headquarters of the largest mail distributor in the country [PTT office] was drafty and creaky and consisted of many small units. This has been transformed into an open, high-end office building that meets A++++ energy labels,' says Arnold.

In December 2020, demolition began. Both the interior and exterior were completely stripped and redefined under the direction of Bureau voor Stedebouw & Architectuur Wim de Bruijn. The design agency King Kongs from Eindhoven created a true office city within the building, where the various companies and departments come together. Since February 2022, the company group has been a proud resident of the TAS building.

As a construction specialist, acoustics are very important to Arnold. 'Concrete dominates the original building structure. We aimed for the ceiling to mirror this aesthetic, while also improving acoustics. That's why we decided to use OWA RAW. At first glance you don't see that it's not real concrete, but ceiling panels. That is of course the goal we wanted to achieve. In addition, other OWA products such as OWAplan in colour and Sinfonia in black have been used in various spaces. I think the end result is beautiful.'

[SEE MORE?](#)  
View images of the TAS building and explanations about the application of OWA RAW.





# OWA RAW:

*how to apply?*



With OWA RAW, we introduced an evolutionary ceiling system with the appearance of concrete. How do you apply this unique product most attractively?

On the previous pages we presented **OWA RAW Concrete** in the TAS building in Den Bosch. In that project, the panels are applied between the concrete beams, with electrical wiring partially concealed above the ceiling.

## BREDABEST

In this company canteen, a large portion of the installation technology is concealed above the S7 suspension system. The combination of OWA RAW with the coarse piping, fixtures, and other technical elements gives the space a distinct industrial look.

Photo: Anja Tuinder



**BAKERY & LUNCHROOM  
RAALTE, THE NETHERLANDS**

The combination of hard materials, wood, and OWA RAW panels creates a vibrant, warm atmosphere. Thanks to the acoustic damping, this feeling is further emphasized for visitors of this beloved bakery.





FACT  
OWA RAW  
is 100%  
recyclable

## TWO VARIANTS



OWA RAW CONCRETE



OWA RAW GREY

The OWA RAW variants were developed in close collaboration with a forward-thinking collective of architects. They were seeking a new type of ceiling that wouldn't disrupt the minimalistic atmosphere of an industrial interior design. With OWA RAW, we exceeded their expectations.

OWA RAW Concrete offers an acoustic absorption value of  $\alpha_w$  0.70, while OWA RAW Grey achieves a value of  $\alpha_w$  0.90. This performance is comparable to most standard suspended ceiling systems. Additionally, strict attention was paid to standard requirements such as stability, fire resistance, and resistance to humidity. The product is also fully Cradle to Cradle certified according to the OWA Green Circle recycling system.

During the refinement of the production process, considerable attention was given to ensuring the correct colour shades and the organic appearance of the surface. As with real concrete panels, the colour tones of OWA RAW can vary to achieve a natural-looking surface with an organic appearance.

### Multiple mounting options

OWA RAW can be applied in many ways. The most popular method is with the S7 suspension system. Thanks to the variable suspension height, piping and installation work can be routed either above or below the ceiling. For access to maintenance-sensitive installations above the ceiling, nearly invisible access hatches can be integrated.

It is also possible to directly glue OWA RAW to the ceiling surface, or place it in a suspension frame to create rugged islands. Advice and guidance from an OWA specialist is then necessary for a good end result.



### FONTYS R10, EINDHOVEN ECTOR HOOGSTAD ARCHITECTS

In this school building with an A++++ label, the 100% recyclable OWA RAW was a must-have. Over 8,500 square metres of OWA RAW was installed above the open learning and collaborative spaces, combined with 3,000 white OWA FreeStyle baffles and custom OWA Sinfonia ceiling canopies.

Photo: Petra Appelhof

WOULD YOU LIKE TO KNOW HOW  
TO INSTALL OWA RAW? View the  
schematic drawings on the website.





# OWA HYGIENE HUMANCARE

**ACOUSTICALLY COMPLIANT  
WITH THE STRICTEST  
POSSIBLE GUIDELINES**

**The need for materials and methods to prevent the spreading of bacteria and infections has increased significantly. On the architectural front, OWA contributes to this with five new hygienic ceiling variants. In almost all conceivable cases, these enable compliance with increasingly stringent guidelines for each type of space.**

The new series bears the basic name Hygiene Humancare and is available in the Ocean, Sinfonia Silencia, Plus, Pro and Lab variants. All panels are made of bacteria- and fungus-resistant mineral wool and are 100% resistant to humidity. Factors such as the sound absorption class, cleanroom class, cleaning methods and degree of germ reduction account for the variations.

OWA Hygiene Humancare contributes to a healthy indoor climate, as evidenced by various certifications such as Eurofins VOC emission class A+, AgBB, and Blauer Engel.



Photo: Petra Appelhof



## Specifications and performance per type of panel

Product name	Sound absorption $\alpha_w$ (EN ISO 11654)	Sound reduction $D_{n,f,w}$ (NEN 10848-2)	Cleanroom class (ISO 14644-1:1999)	Resistance to humidity RH (EN 15964:2014)	Hygiene (ASTM D5225 and NF S 90-531:2015)	Disinfectability <sup>2)</sup>	Germ reduction <sup>5)</sup>	Cleanability <sup>6)</sup>
<b>Ocean</b>								
For ceilings in humid areas, such as showers, toilets, changing rooms, laundries, swimming pools, and sports facilities.	0.95	28 dB	ISO class 4	100%	Mineral wool is bacteria- and mold-resistant.	On request		Finished with a moisture-resistant surface. Light cleaning: vacuuming or damp cloth.
<b>Humancare   Sinfonia Silencia</b>								
For ceilings in areas with risk mitigation against bacteria and microorganisms, such as corridors, therapy rooms, consultation rooms and living spaces in healthcare environments.	1.00	24 dB	ISO class 4	100%	Mineral wool is bacteria- and mold-resistant. It's classified as micro-biological class M1 for very high-risk area zone 4.	Disinfection possible by spraying.	5 log levels	Finished with anti-bacterial and mold-resistant biocide surface. Light cleaning: vacuuming or damp cloth.
<b>Humancare Plus</b>								
For ceilings in areas requiring cleaning and disinfection, such as in the food industry, leisure, or healthcare, including (large) kitchens, production areas, swimming pools, saunas and treatment rooms.	0.90	28 dB	ISO class 4	100%	Mineral wool is bacteria- and mold-resistant. It's classified as micro-biological class M1 for very high-risk area zone 4.	Disinfection possible by spraying and wiping.	7 log levels	Finished with a scratch-resistant, dirt- and moisture-repellent surface. Light cleaning: vacuuming or damp cloth. Intensive cleaning: wiping with sponge or high pressure.
<b>Humancare Pro</b>								
For ceilings in areas for medical treatments, infection prevention, and where clean environments are crucial, such as operating and treatment rooms, cleanrooms, and intensive care units (ICUs).	0.95	24 dB	ISO class 3	100%	Mineral wool is bacteria- and mold-resistant. It's classified as micro-biological class M1 for very high-risk area zone 4.	Disinfection possible by spraying and wiping.	7 log levels	Finished with a scratch-resistant, dirt- and moisture-repellent surface. Light cleaning: vacuuming or damp cloth. Intensive cleaning: wiping with sponge or high pressure.
<b>Humancare Lab</b>								
For ceilings in areas with pressure differentials in the medical and industrial sectors, as well as for clean rooms with minimal airborne particles, such as laboratories, cleanrooms, data centers, and pharmacies.	0.70	34 dB	ISO class 3	100%	Mineral wool is bacteria- and mold-resistant. It's classified as micro-biological class M1 for very high-risk area zone 4.	Disinfection possible by spraying and wiping.	7 log levels	Finished with a scratch-resistant, dirt- and moisture-repellent surface. Light cleaning: vacuuming or damp cloth. Intensive cleaning: wiping with sponge or high pressure.



## PATIENTS RECOVER FASTER WITH GOOD ACOUSTICS

It's widely known that noise pollution is detrimental to our concentration. But did you also know that poor acoustics affects the recovery of patients? Most noise pollution in healthcare arises from medical equipment, visitors, nursing staff, and fellow patients. Research has shown that reducing noise in hospitals lowers patients' blood pressure, improves their sleep, thus promoting recovery and shortening their stay.



DISCOVER THE NEW HYGIENE HUMANCARE PRODUCT RANGE DIGITALLY? View all products on our website.

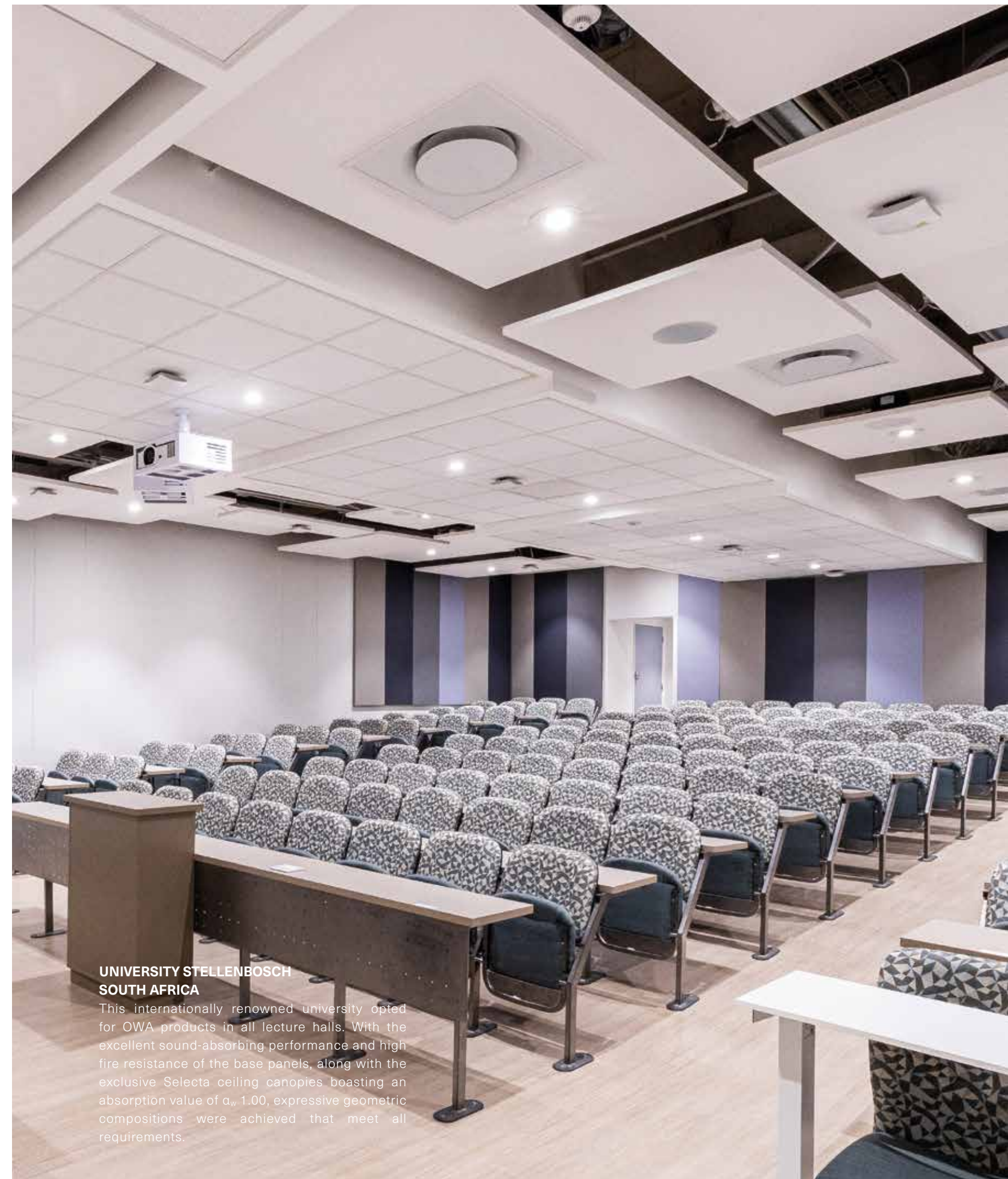




# OWA INTER NATIO NAL

## PROJECTS WORLDWIDE FEATURING CEILINGS FROM AMORBACH

OWA is a family-owned business deeply rooted in Amorbach, Germany. Since our founding in 1966, we have steadily built a global network of dealers and sales offices. Currently, OWA products are available in over 40 countries across 7 continents. On these pages, we showcase some of our many international projects.



### UNIVERSITY STELLENBOSCH SOUTH AFRICA

This internationally renowned university opted for OWA products in all lecture halls. With the excellent sound-absorbing performance and high fire resistance of the base panels, along with the exclusive Selecta ceiling canopies boasting an absorption value of  $\alpha_w 1.00$ , expressive geometric compositions were achieved that meet all requirements.



**DUPONT MEXICO**

This headquarters in Mexico City comprises a mix of large open spaces, smaller office areas, and shared workspaces. The varying room heights resulted in long reverberation times and poor speech intelligibility. Due to the earthquake risk in the region, a flexible solution was needed that would comply with local building regulations. Therefore, round Selecta ceiling canopies were chosen for these and more areas.



**ARCHITONIC BERLIN,  
GERMANY**

The Selecta Grande ceiling canopies emphasize the columnar layout of this office space. The strong absorption value ( $\alpha_w$  1.0) matches the acoustic performance of regular ceiling solutions.





**E-REGIO, GERMANY**

The cloud-like shape of the Cloud ceiling canopies gives the entrance of this energy company in Euskirchen, Germany, a fascinating appearance.







#### MCDONALD'S GERMANY

You can find OWA ceilings at McDonald's restaurants in many countries worldwide. Let's talk!

## QUICK GUIDE

FIND ALL INFO ABOUT THE PRODUCTS  
IN THIS MAGAZINE. FAST.

Scan the QR-code to visit our website directly.

### OWA ELEMENTS

CEILING CANOPIES



#### *Corpus*

Characteristic three-dimensional shapes in various sizes. Absorption class A ( $\alpha_w$  1.0).



#### *Selecta*

Exclusive lightweight canopies, available in five distinctive shapes. Absorption class A ( $\alpha_w$  1.0).



#### *Curve*

Eclectic canopies (convex and concave) for playful formations. Absorption class A ( $\alpha_w$  1.0).



#### *FreeStyle*

Baffles and wall absorbers. Absorption class C ( $\alpha_w$  0.60) and A ( $\alpha_w$  0.90).



#### *Cloud*

Create optical effects with baffles in round, cloud-like shapes. Absorption class A ( $\alpha_w$  1.0).

### OWA HYGIENE

BACTERIA- AND MOLD-RESISTANT



#### *Ocean*

For ceilings in humid spaces. Absorption class A ( $\alpha_w$  0.95), ISO class 4.



#### *Humancare | Sinfonia Silencia*

For spaces with elevated risks of bacteria, among others. Absorption class A ( $\alpha_w$  1.0), ISO class 4.



#### *Humancare Plus*

Scratch- and impact-resistant, easy to clean and disinfect. Absorption class A ( $\alpha_w$  0.90), ISO class 4.



#### *Humancare Pro*

For cleanrooms and medical treatment rooms, among others. Absorption class A ( $\alpha_w$  0.95), ISO class 3.



#### *Humancare Lab*

For hygienic ceilings in medical and industrial spaces with pressure differentials, such as laboratories. Absorption class C ( $\alpha_w$  0.70), ISO class 3.

### OWAPLAN

SEAMLESS ACOUSTIC CEILING SYSTEM



#### *OWApplan 70*

Absorption class C ( $\alpha_w$  0.70). Both variants are available in all RAL colours. Colour gradients, stripes, or patterns are also possible.



#### *OWApplan 90*

Absorption class A ( $\alpha_w$  1.0). Both variants are available in two surface textures: with a fine (S) or extra fine grain (XS).

### OWA RAW

FOR INDUSTRIAL INTERIORS



#### *OWA RAW Concrete*

Acoustic design solution with an open surface structure that resembles concrete. Absorption class C ( $\alpha_w$  0.70).



#### *OWA RAW Grey*

Acoustic design solution with a closed surface structure that resembles concrete. Absorption class A ( $\alpha_w$  0.90).

### OWA SINFONIA

FIVE FUNCTIONAL VARIANTS, ONE APPEARANCE



#### *Sinfonia*

High acoustic performance and fire resistance. Stylish surface, available in various colors and sizes.





[www.owa-ceilings.com](http://www.owa-ceilings.com)