SAINT-GOBAIN

The Power of **Archinature**

SAINT-GOBAIN **CATALOGUE OF REFERENCE PROJECTS** | 2025

See video

360 years of tradition and innovation in harmony with nature

SAINT-GOBAIN

Cover photo by: ©Sebastian Deptuła / HB Reavis

What is the origin of the title '**The Power of Archinature**'?

> **Architecture** (Latin architectura [architector] 'I build'., Greek [archi] 'chief' and [tekton] 'builder').
>
> **Nature** (Latin natura 'initial character', Greek φύσις [physis] 'nature') – in the broadest sense, the universe, reality.
>
> **Archinature** – a combination of the words 'architecture' and 'nature'.

For 360 years, Saint-Gobain has been creating unique solutions that coexist with nature and help to tame the natural elements - fire, water, air and earth. With innovations adapted to the challenges of each era, we combine tradition and modernity, supporting architects and investors in creating spaces that fit harmoniously into their surroundings.

Our holistic approach to construction sets the standard for sustainability, responding to the needs of the modern world - both people and the environment.

Archinature, the fusion of architecture and nature, is not just a beautiful idea - it is a reality that we co-create with our products and technologies. Today, instead of standing in opposition to nature, architecture is increasingly blending with it, building spaces that serve man and the environment. It is precisely such projects, created with a view to good health, well-being and a better quality of life, that set the course for modern construction.

'The Power of Archinature' presents a selection of reference projects that demonstrate how, with high-quality materials, innovative technologies and a bold vision for the future, we can shape a world that becomes a better home for all - in line with our purpose **„Making the world a better home"**.

Discover the 'Power of Archinature' and our 360 years of experience in harmony with nature!

Joanna Czynsz-Piechowiak
CEO of Saint-Gobain Poland and Ukraine

We are proud to present Saint-Gobain Poland's very first publication of this kind: "The Power of Archinature".

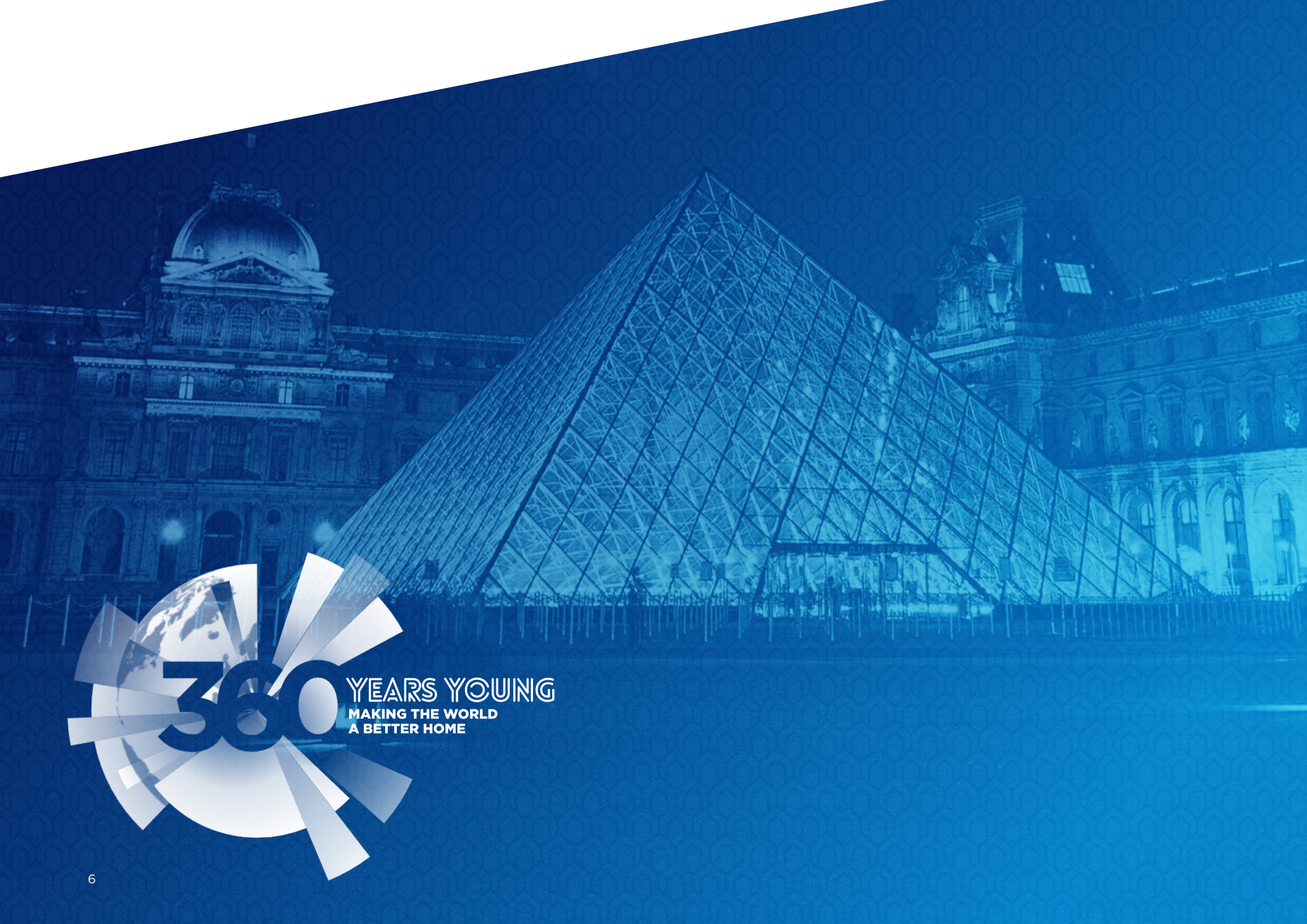
This unique publication celebrates the 360th anniversary of the Saint-Gobain Group worldwide and follows up on our centuries-long mission to create building solutions that improve comfort, health and quality of life. From the time of Louis XIV until today, we've been combining innovation with responsibility and providing solutions that serve people and future generations.

The buildings presented herein are not only impressive examples of contemporary architecture, but above all proof that **sustainable construction can harmoniously reconcile the needs of humans with those of the surrounding nature**. These are projects created in the spirit of architectural balance, which requires an understanding of the entire ecosystem.

This album perfectly reflects the **idea of synergy between Saint-Gobain brands and demonstrates the strength of our minds and the commitment of our experts**. Thanks to our joint efforts, we have created living spaces that respond to the challenges of the modern world: functional, energy-efficient and healthy.

It also tells the **story of architects' visions and the relationship between design concepts and solutions, aesthetics and technology**. Each project has its own unique history, and we are proud to be a part of it. Thanks to our multidisciplinary approach and the integration of the knowledge and experience of our brands, we support the creation of buildings that not only impress with their form, but also have a real impact on user comfort. We believe that together we can Make the World a Better Home.


SAINT-GOBAIN
MAKING
THE WORLD
A BETTER
HOME


360
YEARS YOUNG
MAKING THE WORLD
A BETTER HOME

There are buildings in the history of architecture that have become permanent landmarks of the world's architectural heritage, serving as tangible and intangible symbols of the aspirations and endeavours of successive generations.

Ewa P. Porębska

Critic, expert and curator of architecture, expert of the European Union Mies van der Rohe Award and the European Union Public Urban Space Award

The 360-year history of Saint-Gobain is replete with examples of such projects in which the company has been involved. One of the most famous is the Louvre Pyramid, designed by Ieoh Ming Pei, winner of the Pritzker Prize, and completed in 1989.

However, climate, economic and political changes mean that the challenges facing architecture are evolving at an ever-increasing pace. **‘Contemporary societies grow (..) by trying out new solutions that are meant to improve the quality of life,’** argues sociologist and social activist Joanna Erbel in her book "Wychylone w przyszłość. Jak zmienić świat na lepsze" (Leaning into the Future: How to Make the World a Better Place).

Looking at the examples of the latest architectural projects featured in this publication, **it's worth paying attention to the values and ideas that guided their designers, investors and contractors**, noticing the diversity of attitudes towards the broadly understood environment, nature, heritage and the pursuit of innovation. **‘The Power of Archinature’** is intended as a guide for those seeking architecture that serves both people and nature.

Take a look at our **projects**

See the challenges we have overcome

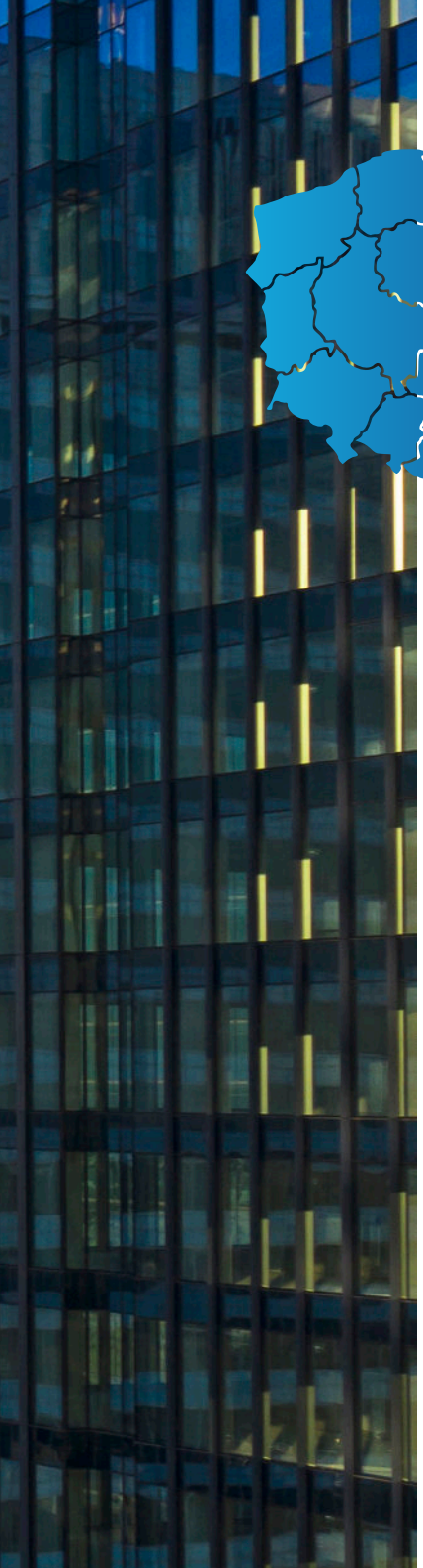
- Durability
- Acoustic comfort
- Clean air
- Safety
- Energy efficiency
- Thermal comfort
- More light
- Aesthetics

Aim higher, reach further

VARSO PLACE

Photo by: ©Sebastian Deptuła / HB Reavis

Zdjęcie: ©Sebastian Deptuła / HB Reavis



VARSO PLACE

Warsaw

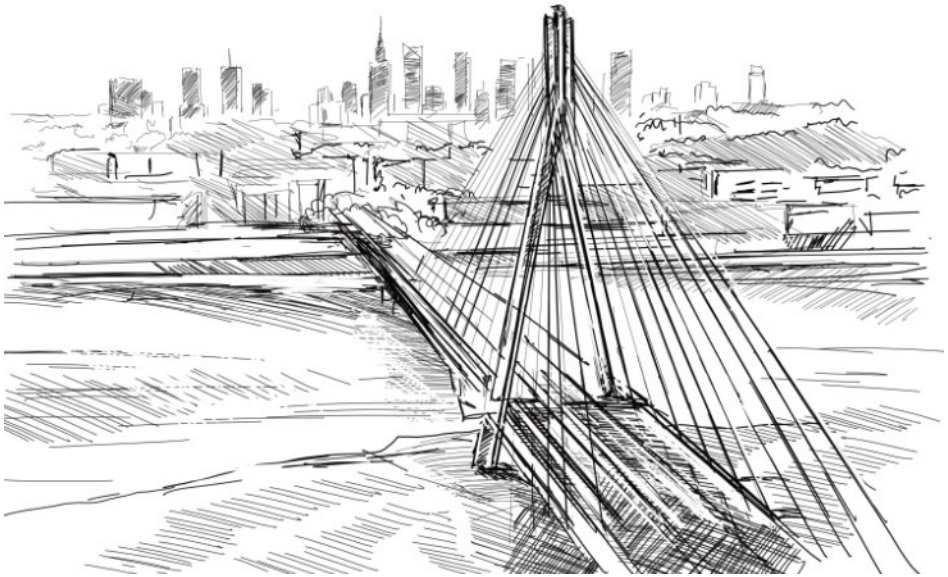
The centre of Warsaw has undergone an impressive transformation. The city, which not so long ago was struggling with the burden of its history, is now reborn and vibrating with fresh energy.

Its modern buildings are stunning, telling a story of the strength and ambition of Poland's capital city, echoed by the glazed facades of the newly constructed buildings. The revitalisation of the space around the Central Station has become a symbol of an extraordinary metamorphosis, the rhythm of which is set by global trends in urban planning and architecture. But today we want to turn your attention to a new icon of the heart of Warsaw. Move your gaze from the Palace of Culture and Science and look up... And a little higher... And then you will see the Varso Tower rising proudly above the city, writing yet another chapter in the story of Warsaw's aspirations.

Varso Tower, which is part of the Varso Place office and retail complex, is by far the tallest skyscraper not only in our country, but in the entire European Union, as it measures 310 metres including the spire. This is where the Saint-Gobain Group in Poland opened its new headquarters, on the 28th floor. **The office space designed by TRZOP Architekci** is not only a top-quality work space, but also a truly special place that serves as a unique showroom for Saint-Gobain brands. The uniqueness of this development lies in the fact that Saint-Gobain Group materials and technologies can be found throughout the Varso Place complex.

CHALLENGE

- Acoustic comfort
- Thermal comfort
- Energy efficiency
- Safety
- Durability
- Aesthetics



The challenge was to combine functionality with comfort at the very highest level. Energy efficiency, fire safety, humidity resistance, excellent acoustics, optimum interior microclimate and protection of the rooms from excessive sunlight and overheating had to be guaranteed. Only complex and innovative solutions could meet such high expectations, making the building a showpiece of modern architecture.

Photo by: ©Bartosz Makowski

"Varso Place in Warsaw's Wola district is one of the most modern multifunctional complexes in Poland. Its landmark is the 310-metre Varso Tower (designed by Foster + Partners), which became the tallest building in the European Union when it was completed. It is linked to the two lower office and commercial buildings Varso 1 and Varso 2 (designed by HRA Architekci) by the so-called 'podium', i.e. the lowest part of the Varso Place complex, with stone facades and proportions reminiscent of Warsaw's pre-war townhouses in the vicinity.

A great advantage is the thoughtfully designed greenery, as well as the observation decks - with the higher one (230 metres) now being among the highest in Europe.

Certificates such as BREEAM Outstanding and Europe's first WELL Core & Shell pre-certificate attest to the quality of the solutions used in the building which have a positive impact on the health and well-being of its users."

Ewa P. Porębska

Critic, expert and curator of architecture, expert of the European Union Mies van der Rohe Award and the European Union Public Urban Space Award

See
Saint-Gobain's
office

SOLUTION

The three Varso Place buildings - Varso 1 and 2, designed by HRA Architekci and Varso Tower by Foster + Partners - feature innovative solutions from as many as 10 brands belonging to the Saint-Gobain Group.

Acoustic comfort, which, especially in the workplace, is invaluable, is ensured by partition walls, suspended and modular ceilings, free-hanging elements, eye-catching fabrics and wall panels. The combination of these solutions makes it possible to absorb excess sound even more effectively, improve conversation comfort, minimise sound reflections and reduce reverberation.

Another challenge was to take care of **thermal comfort** in such a huge space of more than 70,000 square metres at any time of year, and in an energy-efficient manner. And this is where the solar control glass used on the façade of Varso 1 and 2 proves its worth: it protects the interiors from overheating without restricting daylight to the inside, and reduces the building's cooling requirements.

Warm edge spacers in Varso 1 façade glazing increase the thermal insulation of the façade, preventing the escape of heated air outdoors and improving the **energy efficiency** of the investment. Mineral wool, which is an integral part of the building envelope system, also stands for excellent thermal insulation properties as well as openness to diffusion and fire resistance of the structure.

Fire safety of the building users is due, among other things, to the fireproof glazing. A record-breaking tall building must also be extremely durable and resistant to mechanical damage thanks to special pre-walls) as well as moisture. For this reason, it is worth paying attention to what is invisible but equally important.

A solid **foundation** is the basis of the building. The foundation slabs and walls of the underground parts of the building are protected by a high-quality waterproofing system. Injection systems were applied to protect the building from groundwater infiltration. Structural concrete was used at various stages of construction, including in the largest building in the complex, to ensure greater durability.

Aesthetics plays a no less important role in the project. Here every detail, even the smallest one, counts. An example? Floors and walls covered with a thin layer of decorative concrete, giving the interiors an industrial feel. In the Saint-Gobain office on the 28th floor, there is also glass with variable translucency, mirrors laminated with coloured foils or ornamental glass. In this way, TRZOP Architekci created the effect of a perfect colour balance.

OUTCOME

'Pioneering ' is a word that perfectly encapsulates the idea of Varso Place - a development where concern for human comfort and the environment go hand in hand. Varso Place proves that modern architecture is capable of going beyond the ordinary. It is a project that not only aims high in the literal sense, but also sets the highest standards in design.

Cezary Błaszczyk

Managing Director,
HB Reavis Investments
Poland

"The Varso complex is an office space that promotes the well-being of employees and supports companies' operations in accordance with ESG principles. The prestigious tenants at Varso Tower, such as Saint-Gobain, attest to the fact that environmental standards and sustainability principles are of key importance in today's office market. For years, we have valued the materials offered by Saint-Gobain, including the energy-efficient glass used on the facades of Varso Place and the Forest office campus. Thanks to this solution, our high-rise buildings not only provide fire safety and effective noise protection, but also excellent acoustics, which is extremely important for the comfort of work."

Photo by: ©Bartosz Makowski

The building belongs to an elite group of investments awarded the prestigious **BREEAM Outstanding** and **WELL Building Standard** certificates by independent institutions. Such a high rating testifies not only to the well-being of the users, but also to the sustainable nature of the solutions used. In addition, the **Barrier-Free** certificate emphasises the key importance of the building's accessibility for everyone.

"With its monumental silhouette, Varso is both an impressive building and a fascinating example of the harmony between modernity and functionality. The many nooks and crannies here have their own unique character, the diverse zones break up the monotony typical of this type of developments, but do not disturb the harmony. The feeling of comfort I have had since crossing the doorstep of Varso is largely due to the greenery design. The presence of trees not only enlivens the apparently 'austere' interiors, but also makes us feel good.

I am truly delighted that this is where Saint-Gobain's headquarters are located. Our modern office incorporates many of the solutions from our construction brands, bringing ergonomics and comfort to the highest level. I also appreciate the attention to detail and aesthetics. You can definitely feel that the space has been designed with the employees in mind. A bonus is the breathtaking view of the beautiful panorama of Warsaw, which we can admire thanks to large windows providing at the same time an ideal amount of daylight. The division of the office into different zones provides an opportunity for creative work undisturbed by noise, and promotes integration; it also makes it possible to organise fully professional, yet intimate business meetings with our clients."

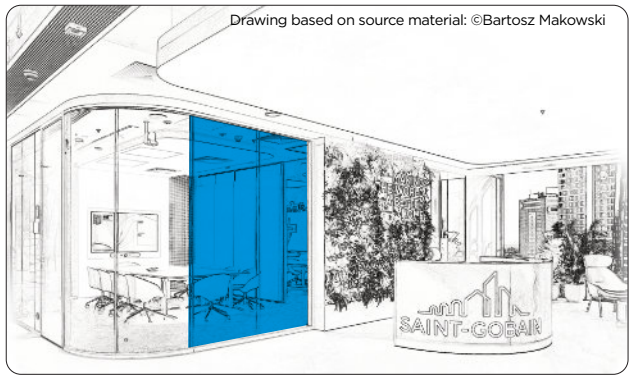
Monika Rezulak

Project Sales Director,
Saint-Gobain Solutions

PRODUCTS

Virtual walk

Drawing based on source material: ©Bartosz Makowski



Drawing based on source material: ©Bartosz Makowski

In the Saint-Gobain office on the 28th floor: glass solutions for interior use by **Saint-Gobain Glass** and **Glassolutions**, including variable-transparency glass, mirrors, coloured-film laminated mirrors, ornamental glass.

Free-hanging units, stretch fabrics, wall-mounted panels | **Ecophon**

Mineral wool | **Isover**

Fire-resistant glass | **Vetrotech**

Partition walls, suspended and modular ceilings. Pre-walls | **Rigips**

Waterproofing and injection systems | **GCP**

Structural concrete | **Chryso**

Microcement | **Weber**

Warm edge spacers | **Swisspacer**

Solar control glass | **Saint-Gobain Glass**

Glass units with solar control glass | **Glassolutions**

Drawing based on source material: ©Sebastian Deptuła / HB Reavis

Caring for young patients

WIELKOPOLSKA **PAEDIATRICS CENTRE**

Photo by: ©Paweł Suder

WIELKOPOLSKA **PAEDIATRICS CENTRE**

Poznań

Explore
Wielkopolska Paediatrics Centre

Imagine a place where every single corner has been designed to make children smile and their loved ones feel at ease. Where care and innovation go hand in hand and cutting-edge technologies blend with the warmth of family support. It is a symbol of conscious architecture and multi-dimensional social responsibility.

Wielkopolska Paediatrics Centre in Poznań is more than a hospital. It is a space where every decision is driven by attention to the needs of young patients and their families - from the architecture, through the diagnostic and therapeutic infrastructure, to the smallest aspects of daily care.


Photo by: ©Paweł Suder

In the north-western part of Poznań rises the **Wielkopolska Paediatrics Centre - a seven-storey building designed by Industria Project**, which has become a symbol of the modern approach to paediatrics in Poland. Its construction started in 2018, in response to the need to create a place where young patients could benefit from comprehensive treatment and care in comfortable conditions. Thanks to the commitment of many specialists, one of the most modern public children's hospitals in our country was created, including ten departments, several specialist clinics and 354 single patient rooms with bathrooms and facilities for carers.

The building is divided into two parts: the patient area and the diagnostic, emergency and surgical wards. The two sections are connected by a central area with a staircase and lifts. The patient room area, designed in an H-shape, provides optimum amount of daylight. The diagnostic and emergency area on the ground floor houses the ED, admission room and diagnostic imaging, and the administrative space on the upper floors. The facility has laboratories, a canteen, a kitchen and a school. The hospital uses state-of-the-art technological solutions. The operating suite consists of five automated theatres equipped with procedure transmission systems. There is also a pneumatic tube system and a pharmacy robot that dispenses medication to patients. The building's visually attractive, colourful and green appearance blends harmoniously into its surroundings, creating a kind of 'hospital quarter' together with the nearby medical facilities.

CHALLENGE

How do we create a space that not only heals bodies, but also soothes emotions? This is a question not only asked by doctors and nurses, but also by architects who strive to design environments that are conducive to healing on every level.

The design and construction of the Wielkopolska Paediatrics Centre was like putting together a complicated jigsaw puzzle in which every piece had to fit perfectly to ensure safety, functionality and comfort for the youngest patients. The architects from Industria Project and the developers had to meet strict hospital standards, where fire safety is a key priority - especially in the corridors, which are the key escape routes. In the case of hospitals, the durability of surfaces, which are often exposed to damage from transported medical equipment, is also a major factor.

But a hospital is much more than a technical challenge. It is a place where silence, stillness and daylight have therapeutic power. Studies have shown that good acoustics and access to natural light promote healing, so reducing noise - from the sound of medical equipment to the hum of ventilation systems - and adequately illuminating the rooms, became a priority. Every solution used was carefully considered to create a space where every detail supports the recovery process.

Staying in hospital is an emotionally taxing experience, often marked by stress and uncertainty. Health concerns, longing for the warmth of home, and physical discomfort are just some of the challenges faced by young patients.

Photo by: ©Paweł Suder

Piotr Springer, PhD, Eng. of Architecture

Deputy Director of the Institute of Architecture and Heritage Protection at the Faculty of Architecture, Poznań University of Technology

Coordinator of postgraduate studies in Investment and Design in Healthcare

Expert of the European Commission and the Slovak Agency for Research and Development

Architect, Healthcare Project Advisor, TEDx Speaker

Member of international organisations, including the American Society for Health Care Engineering | Architects for Health | Healthcare Planning Academy | The Nursing Institute for Healthcare Design and the European Network Architecture for Health

"The architecture of hospitals poses a great challenge to planners. The quality of space in medical facilities has a direct impact not only on the comfort but also on the safety of all users: patients, staff and visitors. It is particularly difficult to design paediatric hospitals, where the sensitivity of young patients and the unique role of their carers in the treatment process must be taken into account. The Wielkopolska Paediatrics Centre in Poznań is a building that has met all these challenges. The WPC's design of only single patient rooms with a bathroom and dedicated space for the carer helps to reduce the risk of nosocomial infections and provides necessary privacy for family relations between children and parents. The interiors full of subtle details, including an arrangement reminiscent of the natural environment, offer a chance to temporarily put health problems behind them, reducing the stress on patients."

SOLUTION

Safety

Acoustic comfort

Clean air

More light

Thermal comfort

Photo by: ©Paweł Suder

What makes a hospital a place that is both safe and welcoming? At the Wielkopolska Paediatrics Centre, the answer lies in carefully selected solutions from Rigips, Isover and Saint-Gobain Glass, which have transformed the interiors into a space that cares about the health of the youngest patients.

Robust partition walls provide **durability and safety**, and in areas where silence is required, acoustic improvements have been applied, effectively **reducing noise** and facilitating recovery.

Acoustic comfort is enhanced by special wall claddings and suspended ceilings made of sound-absorbing panels.

Products featuring **air purification** technology have also been used here, which are recommended for patient rooms or doctors' surgeries. Even finishes, such as coffered ceilings, have been designed with patient comfort in mind.

Well-lit, friendly rooms with large windows that let in precious sun rays create a space that promotes relaxation and regeneration. But sunlight is not everything. The use of solar control and low-emission glazing makes it possible to effectively **to control the temperature indoors**.

Photo by: ©Karolina Dambek / Industria Project

Photo by: ©Karolina Dambek / Industria Project

"At Saint-Gobain, we believe that the right environmental conditions in healthcare facilities are crucial to the condition of patients, the efficiency of medical staff and the well-being of visitors. We design our solutions to the highest standards in acoustics, thermal performance, hygiene, daylight and impact resistance.

Rigips systems with Isover wool minimise noise and provide optimum acoustic conditions for each type of space, which is of paramount importance in facilities where peace and quiet are vital to the recovery of patients. Isover materials also provide effective thermal insulation, promoting temperature stability and ensuring thermal comfort all year round.

Our solutions are also adapted to environments with the highest hygienic requirements. Mould-resistant products enhance sanitary and epidemiological safety, while advanced glazing systems promote access to natural light, improving the ambience and well-being of building users.

Thanks to their high resistance to mechanical damage, our materials are ideal for high-traffic spaces such as corridors and operating theatres. In this way, we support the health and comfort of people at all times during their stay in the facility."

Mateusz Chyła

Project Business Development Manager, Saint-Gobain Solutions

OUTCOME

Wielkopolska Paediatrics Centre is a place where innovation meets empathy and every detail is designed with the health and well-being of the children in mind.

Ideal acoustic and thermal conditions have a positive effect on both physical and mental health, which is particularly important in the case of sick people, who may not perceive temperature and noise levels in the same way as healthy people.

Adequate acoustics together with stable thermal conditions also improve the quality of sleep. It is during deep rest that the body recovers most intensively, and restful sleep is an indispensable part of successful convalescence.

Karolina Dambek
Architekt, Industria Project

"The guiding idea was to create a facility that combines the highest standards of treatment, safety and comfort with a holistic approach to recovery. Taking into account the great importance of the carer's presence in the child's recovery process, we designed a place that provides a comfortable environment for both parties. A sense of privacy, tranquillity and positive experience is promoted by single rooms with space for relatives, playrooms, classrooms, relaxation areas, a family hotel and catering and a fully equipped kitchen.

Today, the Wielkopolska Paediatrics Centre is a model of innovative approaches to designing medical facilities. Despite the limited volume and acoustic challenges, it has succeeded in creating a quiet space with advanced technology.

The facility combines the functionality of multiple units providing care for the young patient, ensuring that outpatient clinics, imaging diagnostics, rehabilitation and specialist treatment can all be provided in one place. The building houses modern laboratories, operating theatres and diagnostic rooms. It impresses people not only with its ergonomics, but also with its design.

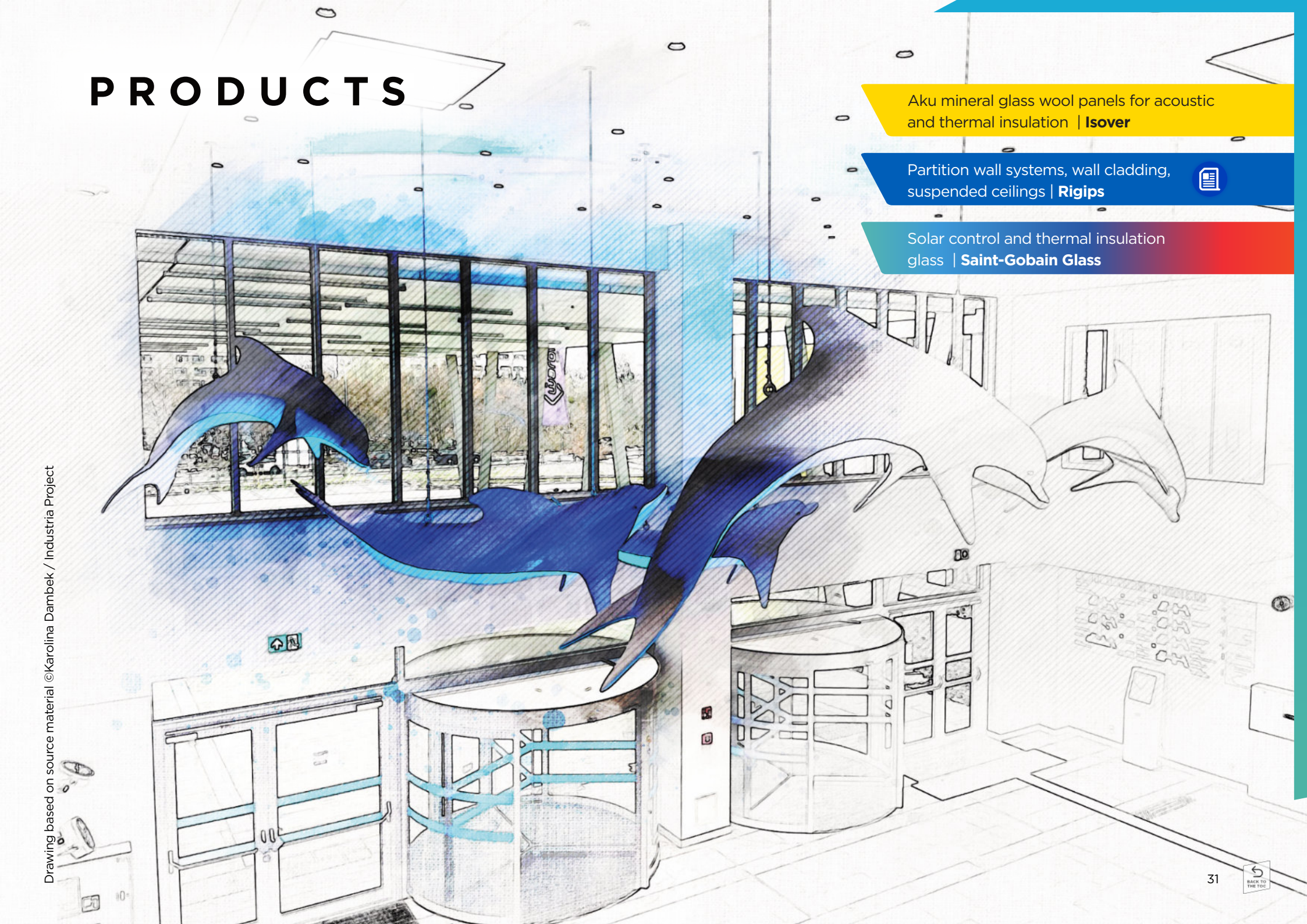
Situated away from the hustle and bustle of the city, it offers an aesthetically designed external infrastructure - a glass patio, a green roof over the entrance and playgrounds. Children can take a break from the typical hospital setting and find respite in the fresh air, which has a positive effect on their well-being. The hospital's unique design, with colourful facade elements and individual visual identity of each floor, creates a friendly atmosphere. The acoustically pleasing interiors eliminate chaos and minimise the negative emotions that can accompany hospitalisation."

PRODUCTS

Aku mineral glass wool panels for acoustic and thermal insulation | **Isover**

Partition wall systems, wall cladding, suspended ceilings | **Rigips**

Solar control and thermal insulation glass | **Saint-Gobain Glass**



Drawing based on source material ©Karolina Dambek / Industria Project

A dialogue between past and future

POLISH HISTORY **MUSEUM**

Photo by: ©Bartosz Makowski

POLISH HISTORY **MUSEUM**

Warsaw

On the site of the former Warsaw Citadel, where whispers of the past can still be heard, a place has emerged that redefines the story about our country. The Polish History Museum, with its majestic building blended into the historical surroundings, is not only a space for education and building national identity. It is also a symbol of conscious architecture and multidimensional responsibility for society.

The Polish History Museum, erected with attention to a wealth of experience, but also to the comfort and safety of visitors, shows that today's architecture can serve the well-being of people. The power of modern solutions has created an environment where each visitor has the chance to immerse themselves in Polish history in a comfortable atmosphere conducive to reflection. It is a place where the past speaks in a distinctive and engaging way, opening up new perspectives for understanding the events that shaped our country.

The building designed by the WXC studio is an impressive six-storey space covering 44,000 m^2. Inside, there is a permanent exhibition telling the story of Poland covering an area of 7,000 m^2, as well as a temporary exhibition space with an area of 1,400 m^2. Visitors have access to cinema theatres, auditoriums, workshop spaces and refreshment areas. A public terrace provides a panoramic view of the city, giving the museum additional value as a meeting place and writing a new history of generations and human relationships.

Explore
Polish History
Museum

Photo by: ©Bartosz Makowski

CHALLENGE

Museums impose strict requirements in relation to their function. The Polish History Museum's task is not only to present the story of our homeland, but also to ensure the comfort of the thousands of people who pass through its corridors every day. It was therefore essential to combine aesthetics with functionality and attention to the comfort of visitors and their safety. Conditions had to be created that foster education and reflection and care had to be taken to reduce noise in museum spaces and offer the durability of materials in areas subject to intensive use while maintaining present-day design standards. It is no coincidence that solutions from 11 Saint-Gobain brands were used in the construction of this building in order to meet these challenges in a holistic manner.


Photo by: ©Bartosz Makowski

"The premises of the Polish History Museum are among the largest museum buildings in Poland. It is home to the collections of our national heritage, and at the same time a place of celebration of the community and a space for democratic dialogue. The opportunity to design a museum complex with the seats of the Polish History Museum and the Polish Army Museum in the historic space of the Warsaw Citadel is an extraordinary honour and responsibility for us as architects.

The architecture of the Polish History Museum was conceptualised as a philosophical story about the process of history as a universal heritage of our civilisation. The language of this tale is stone, whose layered structure represents the layers of history made up of successive social and cultural processes. A symbolic complement is provided by architectural details in the form of ornaments that are quotations from the architectural tradition.

At the level of spatial composition we have referred to a specific moment in our history - the period before the Citadel was built, when the site of today's museum complex housed the barracks of the Royal Foot Guard. The noble tradition of this place is evidenced by the location of the central representative square of the Guard, once a military training ground.

The building of the Polish History Museum, as the seat of a contemporary public institution, is, however, primarily intended to support the mission of the institution and to serve as a living, community-forming centre of culture and education. For this reason, in addition to exhibition spaces, the Museum building houses a modern auditorium for 600 people, a cinema and theatre hall, a library, conference and workshop rooms and a professional conservation department."

WXCA Team

SOLUTION

Maciej Jeżewski

Project Business Development Manager, Saint-Gobain Solutions

"The Polish History Museum is a project that combines impressive architecture with innovative material solutions that perfectly highlight the character and function of the building. Solutions from as many as 11 Saint-Gobain brands were used, from the façade and interior glazing to the floors, ceilings and roof fountain. The aim was to create an open, perfectly illuminated space that can be flexibly adapted to a wide variety of cultural events.

One of the most impressive elements of this project, in my opinion, is the building's façade, which consists of enormous glazing made of extra-white glass, enriched with a solar control coating, supported by high glass ribs. This solution not only adds to the visual lightness of the building, but also ensures optimal daylighting of the interiors, emphasising the modern character of the building.

There is no denying that work on this project was challenging, especially because of the use of a wide range of products from different brands, the availability of which was dependent on production runs. This experience taught me how important it is to anticipate potential difficulties early on in a project and to take measures to prevent future complications. I also learnt how patience and consistency are crucial. Despite the challenges, the end result perfectly reflects the ambition of this unique project. And I am really proud of it."

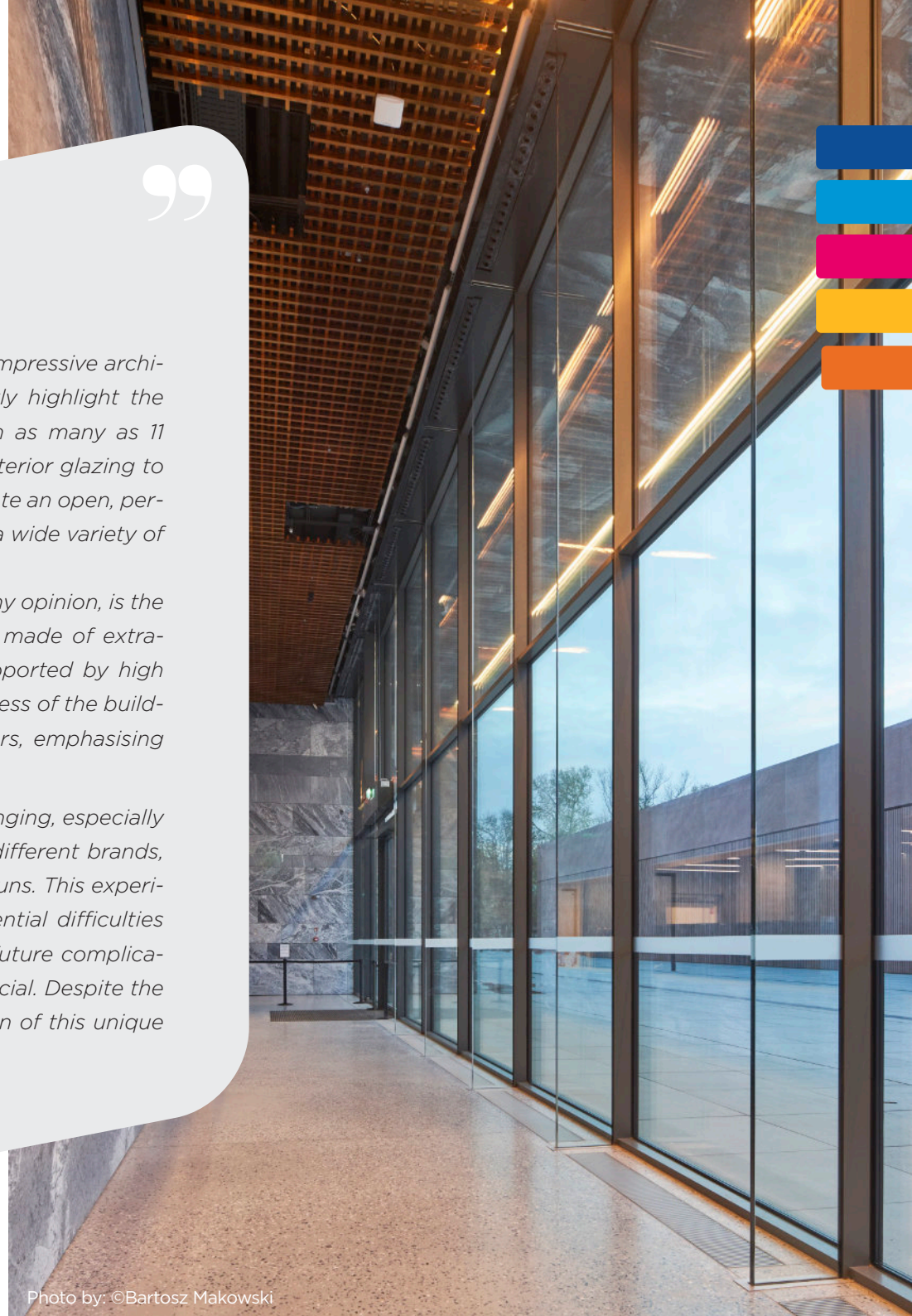


Photo by: ©Bartosz Makowski

Durability

Acoustic comfort

Thermal comfort

More light

Aesthetics

A key objective in the design of the Polish History Museum was to create a space that combines aesthetics, functionality and sustainability, responding to the challenges posed by the daily intensive use of passageways, exhibition halls and offices. Each area of the building must be able to withstand the weight of the display cases with exhibits, cabinets and screens and be resistant to impact and deformation.

To meet this challenge, Rigips systems were used for partition walls, pre-walls and suspended ceilings with increased resistance to mechanical damage. In the office areas, additional innovative combinations of plasterboard walls were used with Vetrotech glass wall and **fireproof** door glazing, combining **safety** with sophisticated elegance.

A robust floor was equally important - after all, it has to bear the weight of thousands of pairs of feet, all kinds of furniture and equipment every day. For this reason, a highly wear-resistant Weber cement screed was used throughout the facility to ensure the **durability and reliability** of the floor.

Given the demanding foundation conditions, high groundwater level and the prospect of long-term service life, the **waterproof insulation** of heavy-type foundations was an important aspect.

GCP's advanced solutions were used for this purpose. The brand's waterproofing system can also be found in the fountain on the building's roof. In order to **strengthen** the reinforced concrete structures, new polymer admixtures from Chryso were used to increase their load-bearing capacity. The **reliability** of the sewage systems, on the other hand, was ensured by PAM Building's cast-iron systems.

The echo of footsteps and the hubbub of conversations accompanying visitors to the exhibitions were among the biggest challenges of the project. Rigips suspended ceilings and partition walls, as well as a range of Ecophon acoustic solutions, were used to create a **quiet space** in the main exhibition area and cinema halls. Rigips products also improve the acoustic properties in other parts of the building, such as the corridors and bathrooms. The ceilings in the cinema zone and the auditorium are additionally soundproofed with Isover mineral wool, which in addition to providing good sound absorption also ensures **thermal comfort**.

Acoustic and safety requirements of the project have been met by using Glassolutions laminated safety glass with an acoustic foil in the balustrades.

In general, glass plays a major role in this project. The museum's glazed library, the horizontal, large-surface skylights, the glass façade or the monumental glazed ribs made of low-iron glass have been developed with a view to the **best design**, **optimal illumination** of the space, **minimising heat low in winter** and **preventing overheating in summer**. The huge glass units made of solar control and low-emission glass have been fitted with **visually attractive**, **warm edge** Swisspacers.

OUTCOME

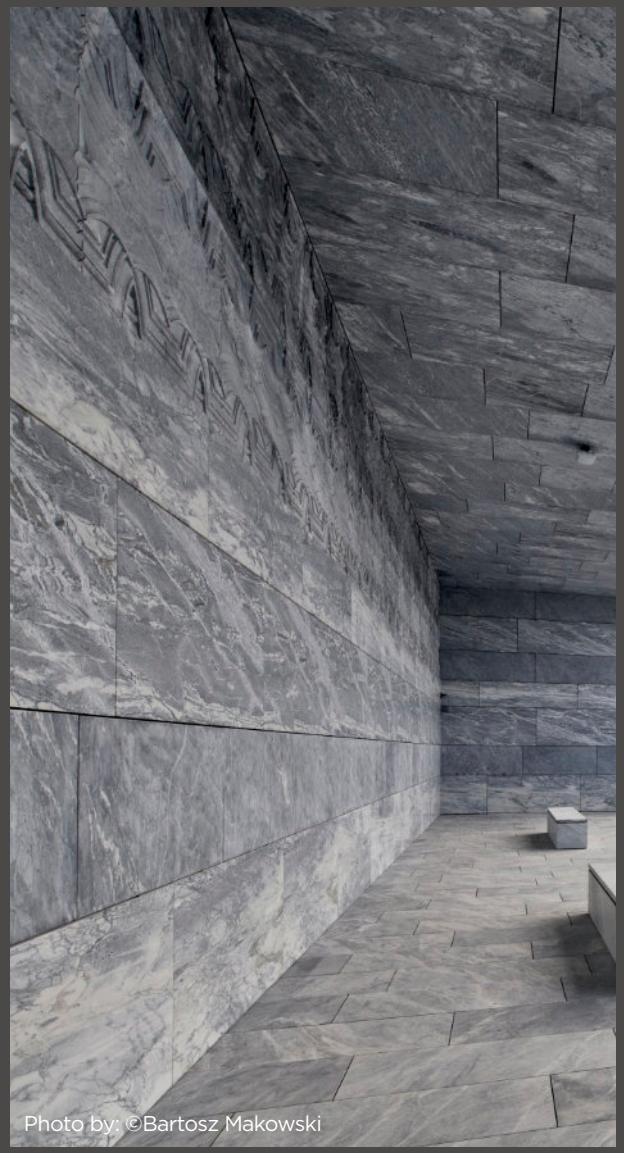


Photo by: ©Bartosz Makowski

The timeless beauty of the Polish History Museum stems from the harmonious combination of the translucency of the façade glazing with the austerity of the stone and aluminium, which allows the building to fit seamlessly into the historical surroundings of the Warsaw Citadel while retaining a modern look.

Aesthetics, safety, and energy efficiency were all of great importance in the design of the building. Innovative technologies and materials made it possible to create a development that meets the highest standards of sustainable construction, and impresses both in terms of form and functionality, as reflected in the numerous awards and distinctions.

In November 2024, the building triumphed as winner of the **Global Awards for Excellence 2024**. Awarded by the Urban Land Institute since 1979, the accolade is considered one of the most prestigious in the real estate industry. The jury recognised the project for its aesthetics, eco-friendly solutions and harmonious combination of exhibition, educational and social functions, naming it the **best cultural investment** in the world. In the same month, the museum also won the **Architecture MasterPrize 2024** in the Cultural Architecture category, and in December 2024 it was named one of the seven most beautiful museums in the world, receiving the **Versailles Prize** (Prix Versailles). The project was also recognised in the Polish edition of the S**aint-Gobain Gypsum Trophy** competition, as one of the most interesting projects using Rigips, Isover and Weber solutions. In January 2025, the Polish History Museum was awarded the **German Design Award** in the category ‘Excellent Architecture’. This **recognition, awarded by the German Design Council** since 1953, honours the most outstanding achievements in architecture and design in the world.

PRODUCTS

Drawing based on source material: ©Bartosz Makowski

Extra-white glass, solar control glass, low-e glass, laminated safety glass with acoustic film | **Saint-Gobain Glass**

Warm edge spacers | **Swisspacer**

ESG/VSG glass ribs, skylights, single-chamber acoustic glass in interiors | **Glassolutions**

Fire-resistant glass | **Vetrotech**

Weberfloor microcement | **Weber**

Mineral wool | **Isover**

Free-hanging sound absorbing panels and acoustic systems | **Ecophon**

Partition walls, suspended ceilings, pre-walls with Habito boards, Special profiles | **Rigips**

Waterproofing and injection systems, including in a fountain on the roof | **GCP**

Structural concrete | **Chryso**

Indoor sewage systems | **PAM**

Solutions from 11 Saint-Gobain brands at the Polish History Museum

Direction: Future Station: Lublin!

METROPOLITAN **STATION**

Photo by: ©Rafał Chojnacki

METROPOLITAN STATION

Lublin

Movement, light, harmony. The new Metropolitan Station in Lublin is a space where travelling becomes an exciting experience - not only thanks to its modern infrastructure, but also the perceptible atmosphere of tranquillity and openness to the world.

The elegant form combines design with care for passengers, creating a place where functionality meets sensitivity to human and natural needs. Here, every detail has been designed to ensure comfort and safety, from the light that permeates the interiors to the well-thought-out architectural solutions.

New Metropolitan Station in Lublin designed by Tremend is an inspiring space that goes far beyond the standard definition of a railway station. Together with the adjacent infrastructure, it forms part of the city's emerging Integrated Transport Centre, which will link urban, regional and national transport.

With an area of over 18,000 m^2, the building consists of three storeys, offering passengers and employees a space full of light and modern solutions for comfort. The Lublin station is not only a transfer point - it is also a space for relaxation, with a viewing terrace and a recreation area that allows a moment's rest on the journey. Every element of the building reflects care for people and the environment, emphasising the role of sustainable architecture in public space.

Explore
Metropolitan
Station

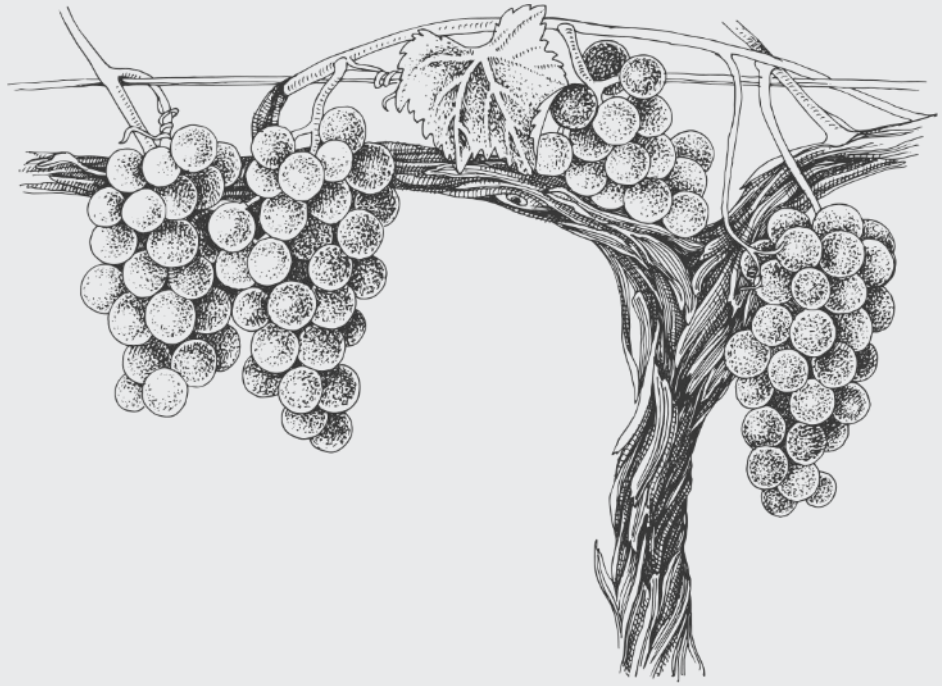
Photo by: ©Rafał Chojnacki

CHALLENGE

The building, which serves thousands of travellers every day, has to accommodate busy passenger traffic while ensuring the comfort of both users and employees. Another important goal was to maintain the representative character of the building and harmoniously integrate the modern structure into the urban fabric.

As an integral part of Lublin, the station is to serve not only as one of the most important transport hubs in the region, but also as a public space open to residents and tourists - a place where everyone can feel at ease, regardless of their destination or the number of kilometres they have to travel.

The idea of creating a bright, open space full of natural light had to go hand in hand with a need to reduce energy consumption (including for heating and air-conditioning) and CO_2 emissions.



Magdalena Federowicz-Boule

Architect, CEO and Creative Director
of Tremend

"The concept of an Integrated Transport Centre (ITC) in Lublin focused on the revitalisation of a post-industrial area and the regeneration of the areas adjacent to the railway station outside the historic Old Town, giving them a new function and importance in the urban fabric.

It is a unique example of sustainable architecture, combining functionality with respect for the historical context and care for the environment. The simple, modernist form of the building contrasts with the eclectic architecture of the nearby 19th-century railway station, while the openwork pillars - inspired by Lublin's cut-outs and vines, an element of the city's emblem - add lightness and expressiveness to the building.

For the Tremend team, this was more than just a project - it was a demonstration of their commitment to developing a city where transport and architecture go hand in hand for a sustainable future.

An important part of this vision is the green, human-scaled infrastructure that pervades the entire space of the building: from the vertical garden on the façade to the unique 'sky square' on the roof, serving as a relaxation and recreation zone and at the same time becoming a new tourist attraction for Lublin. Ecological solutions such as glass roofs with photovoltaic panels, heat pumps, rainwater recovery systems or an energy-accumulating concrete wall are a significant addition to environmentally conscious architecture.

The ICT in Lublin is not only a modern transport centre, but also an architectural landmark of the city, opening up a new chapter in public space and inspiring residents to use friendly, sustainable infrastructure."

SOLUTION

When standing in front of the entrance to the Metropolitan Station, our attention is drawn to the impressive glass façade, on the shoulders atop which a vast green roof seems to rest, further supported by characteristic openwork pillars.

Energy efficiency

Thermal comfort

Acoustic comfort

Safety

Aesthetics

The structured glass façade, fixed on rotating joints, creates the effect of a smooth, uniform sheet, adding visual lightness to the mass. But the glass in this project has more than just a decorative function. It is of key importance to the comfort of the users and the **energy efficiency** of the building.

In order to **reduce overheating in summer and retain heat effectively in winter**, glazing with solar control properties was used in combination with insulating glass. As a result, the building is energy-efficient and the optimum thermal balance is maintained.

Upon crossing the threshold of the station, another unique glass structure appears before our eyes. Inside the main area of the building there is an additional, fully glazed structure based on the so-called 'box in the box' concept. This solution allows **for more effective control of acoustic** and **thermal conditions**, increasing user comfort. The facade system of the 'box' is made of three different panes of highly selective glass manufactured by Saint-Gobain Glass, ensuring **privacy** thanks to Glassolutions Variable Translucency Glass used in the office area from the outside and Vetrotech enhanced **fire resistance** glass from the inside. The structure has a clever heating system - heat is supplied to the interior of the central zone and the rest of the building is heated indirectly by means of recuperation, which allows for **reduced energy consumption** and carbon footprint of the building.

Complementing the glazing solutions are Rigips drywall systems, partition walls, installation and lift shafts and suspended ceilings - which not only contribute to the **aesthetic of the interior**, but also provide effective **fire protection and smoke control**. **Energy efficiency** is additionally boosted by the use of Isover mineral wool in air conditioning and ventilation ducts.

Photo by: ©Rafał Chojnacki

OUTCOME

Thanks to well-thought-out architectural solutions, Lublin Metropolitan Station has become a place where light, space and modern technology work together to create a comfortable environment for travellers. An investment such as this cannot go unnoticed.

The Tremend studio's design was recognised at the **World Architecture Festival**, one of the most prestigious industry events worldwide, and won an 'architectural Oscar' for best design in the 'Transport' category. In doing so, it confirmed its uniqueness among modern public buildings.

Maciej Jeżewski

Project Business Development Manager, Saint-Gobain Solutions

"The design of the Metropolitan Station in Lublin, part of the Integrated Transport Centre, presented a unique architectural and engineering challenge. The aim was to create an aesthetically pleasing, well-lit space that would prevent overheating in summer.

Already at the planning stage in 2018, we started working with architects and contractors, choosing the best materials and technologies. A key solution was to use glass with solar control and heat-insulating properties to ensure year-round thermal comfort.

The greatest challenge but at the same time a source of our great pride is the 'box in the box' concept - an internal glazing zone in which three types of glass were combined: COOL-LITE XTREME 70/33 II solar control on DIAMANT low-iron-glass + ECLAZ ONE II low-emissivity glass on DIAMANT + PRIVA-LITE XL glass + EI 30 CONTRAFLAM 30 fire-resistant glass, ensuring the comfort and safety of users.

Working on the project has taught me to anticipate difficulties and manage the risks associated with the availability of advanced materials, as well as to be patient in pursuit of my goal. The Lublin Metropolitan Station is an example of a project combining aesthetics, functionality and a sustainable approach that inspires both the industry and the local community."

PRODUCTS

Mineral wool | **Isover**

Fire-resistant glass | **Vetrotech**

Partition walls, suspended ceilings, installation and lift shaft housings, smoke curtains | **Rigips**

Lightweight expanded clay aggregate | **Leca**

Solar control and thermal insulation glass on extra-white base glass | **Saint-Gobain Glass**

Solar control glass, variable translucency glass | **Glassolutions**

Drawing based on source material ©Rafał Chojnacki

A place made of dreams and clouds

Visualization by: ©PORT Studio

‘IN THE CLOUDS’ **HOTEL**

”IN THE CLOUDS” HOTEL

Komarno

Searching for peace and balance, architects Marcin and Martyna Kolanus came across a forgotten farm at the foot of the Kaczawskie Mountains, in the heart of a picturesque village. Among the old walls and the whisper of nature, they saw the potential to create a place where time slows down and every detail tells a story of respect for the past and the future.

Their project is more than just a hotel – thanks to their love of detail and innovative solutions, the place has been transformed into a sanctuary where ‘daydreaming in the clouds’ becomes a reality. This is a story about dreams coming true, the courage to change and a passion for the beauty of nature.

Photo by: Courtesy of PORT Studio

Photo by: Courtesy of PORT Studio

The history of the old farm in Komarno, which today houses the 'In The Clouds' Hotel, dates back to the 19th century. At that time, the village known as Kammerswaldau became a popular destination for tourists due to its picturesque location. Located at the foot of Mount Skopiec (724 metres a.s.l.), the highest peak of the Kaczawskie Mountains which belongs to the Crown of Polish Mountains, it is a typical linear village which is situated within the geopark of the Land of Extinct Volcanoes included in the UNESCO list in 2024. It used to be one of the largest farms in the village. The farm originally consisted of three buildings: one residential and utility building and two barns. The residential part had a large bread oven that supplied the village with baked foods.

One of the historic buildings became the centrepiece of the "In the Clouds" project. The highest point of the property offers a captivating view of the Sudeten Mountains and the Jelenia Góra Valley. The front yard is separated from the road by two majestic ash trees, which provide a unique opportunity to observe the changing seasons and reflect on the essence of the passage of time.

The history of this place has been rewritten by architects Marcin and Martyna Kolanus from the PORT Studio, who have come a long way from a destroyed farm to a cosy hotel built into the local landscape, with respect for the environment. This is the living proof that it is worth following your dreams and your values.

CHALLENGE

In the post-war period, the farmhouse building was neglected. Moisture penetrating through the hollow roof caused the roof trusses to deteriorate. The stone facades and brick ornaments, which were once a testament to the high status of the original owners, had been destroyed. The first step of the renovation was to stop the ongoing deterioration, reconstruct a significant part of the roof truss, replace the wooden ceiling with recycled beams that were more than a century old, illuminate the interior and ensure appropriate room temperature.

Old stone buildings are usually associated with little daylight inside. The construction restrictions at the time allowed only small wall openings. However, in this building it was possible to remove the brick infill from the six large gates to open up the structure to the surrounding nature and let light in. An extremely important part of the renovation was the choice of glazing to add a contemporary feel to the development.

Photo by: Courtesy of PORT Studio

"The desire to make our dreams come true and give up the rush of everyday life made us look for a place that would become our refuge away from the city, where we could breathe, take care of our well-being, celebrate time and life.

Daydreaming in the clouds was no longer just a remote future plan - we started to make it happen, while taking care to preserve our childhood selves.

Our dream and the charming location, often wrapped in clouds, inspired us to call the hotel 'In the clouds', which perfectly reflected the spirit of the project.

When we started building 'In the Clouds' Hotel, we wished to create an atmosphere that promoted inner peace and harmony. Our emotions focused on the joy of rescuing a valuable, albeit dilapidated property. We often live in a noisy, hectic environment, so we set ourselves the goal of making 'In the Clouds' the best possible place for the mental and physical regeneration of future guests.

It is a place that combines heaven and earth, dreams with the empirical experience of something ephemeral. We want your stay at our hotel to give you a taste of nature, an insight of the history of the place and a sense of an old community best experienced during the common bread-making workshops."

Marcin Kolanus

Architect, co-founder of the PORT Studio and co-author of the 'In the Clouds' Hotel

SOLUTION

Safety

Energy efficiency

Thermal comfort

Aesthetics

Both when designing new buildings and when conducting thermal refurbishments of existing buildings, the right choice of insulation materials plays a key role, making it possible to significantly reduce energy consumption for heating interiors. This is an important step in the efforts to reduce CO_2 emissions and respond to the challenges of today's environmental standards.

Rescuing time-worn buildings and giving them new life is an expression of care for the architectural heritage and, at the same time, a contribution to the concept of sustainability. In the case of the renovation of the 'In the Clouds' Hotel, it was very important to consider the environmental impact of the materials used in order to create a space that is harmonious and responsible towards nature.

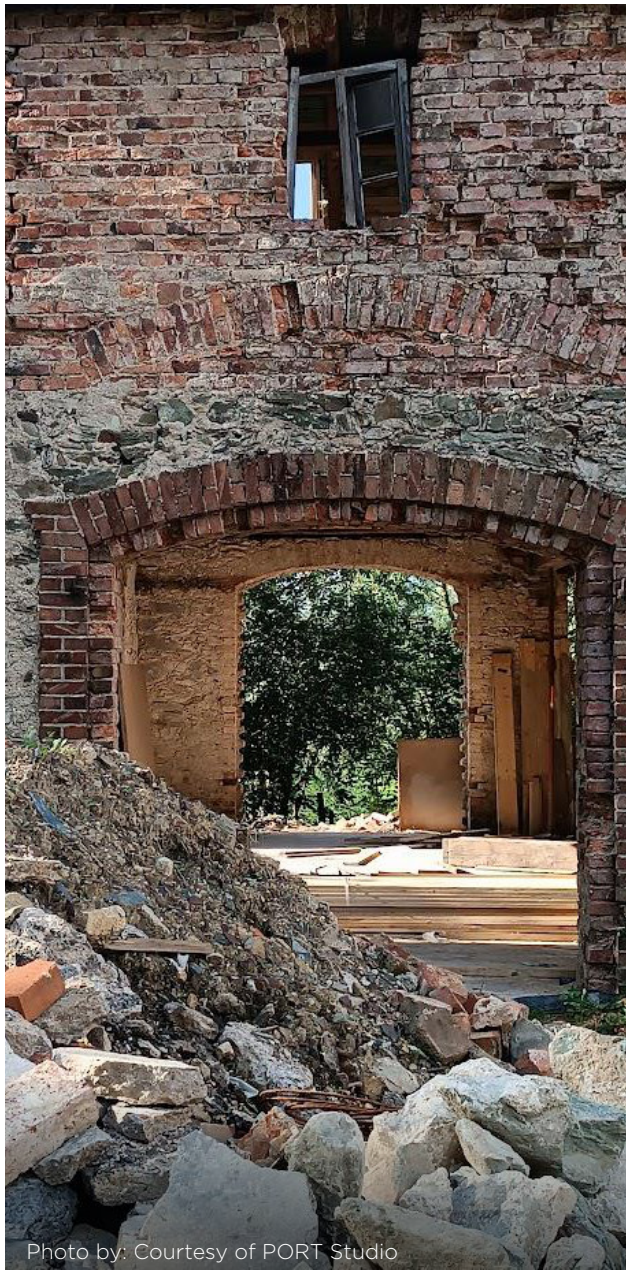


Photo by: Courtesy of PORT Studio

Photo by: Courtesy of PORT Studio

The project used glazing based on ORAÉ® glass, the world's first glass with a reduced carbon footprint, produced by Saint-Gobain Glass with a high proportion of cullet and renewable energy. The installed glazing units are provided with two functional coatings: low-e and solar control. As a result, the hotel guests can enjoy **thermal comfort all year** round and **aesthetic interiors**.

To further **increase thermal insulation** of the building and ensure its **energy efficiency**, Multimax 30 Pro mineral wool was used. Its exceptionally low thermal conductivity λ = 0.030 [W/m·K] provides excellent thermal protection with a minimal insulation layer thickness, which means **more useable building space**. Wool has been used in the attic, where it effectively supports thermal comfort, while contributing to **lower heating costs in winter and cooling costs in summer**. The product is manufactured in Poland, with a large proportion of recycled glass, which significantly reduces the carbon footprint of the investment. In addition, it meets the highest fire resistance class (A1), providing effective **fire-resistant barrier and increasing safety** of the building users.

OUTCOME

Modern technologies, when applied with responsibility and sensitivity, allow architecture to coexist with tradition and the natural environment.

The use of sustainable materials in the hotel project ‘In the Clouds’, including low-carbon glass and high-quality recycled mineral wool - has made it an integral part of the landscape, while emphasising respect for the local heritage. Thanks to them, the interiors radiate peace and warmth, ensuring a comfortable stay for guests at any time of the year.

The large windows open up the building to the majestic Kaczawskie Mountains. The colours of the sky, clouds and trees penetrate the interior, blurring the boundary between the inside and the surrounding nature.

Conscious design decisions have made the ‘In the Clouds’ hotel a place to escape the hustle and bustle of everyday life - a space that promotes serenity, calmness and inner balance, offering a return to the roots in the most beautiful way.

Monika Naczeńska

Marketing Manager
Exterior Glass,
Saint-Gobain Glass

”When I learnt about the history of this extraordinary place, which literally allows you to float in the clouds, I knew that the low-carbon footprint ORAÉ® glass would be the perfect choice for the renovation of the building. The sensitivity to sustainable construction of the project designer and investor, architect Marcin Kolanus, has confirmed this belief. The plans have turned into a process, which has culminated in the creation of the first hotel in Poland equipped with ORAÉ® glass.

”In the Clouds” opens up to the four corners of the world thanks to its impressive glass walls. Situated on a hill, far from other buildings and surrounded by greenery, it promotes the health and well-being of its visitors. The proximity to nature with a view of the Sudeten Mountains and the Jelenia Góra Valley encourages relaxation and contemplation. ORAÉ® glass fits perfectly into the concept of a well-thought-out renovation, in which each element has been carefully selected to create a coherent, harmonious unity.

The very name of the hotel intrigues and invites guests to explore a space where they will feel special. The carefully selected glazing ensures a unique atmosphere. ORAÉ® ECLAZ® provides excellent thermal insulation, reducing heating costs in winter and increasing thermal comfort, while ORAÉ® COOL-LITE® SKN 176 protects interiors from overheating in summer and maximises the amount of daylight entering the building. Thanks to this combination, the hotel space is not only beautifully lit, but also maintains an optimal temperature at any time of the year.”

PRODUCTS

MULTIMAX 30 PRO, Fasoterm mineral wool | **Isover**

Solar control glass on ORAÉ low-carbon base glass | **Glassolutions**

Heat-insulating glass on ORAÉ base glass with a reduced carbon footprint | **Saint-Gobain Glass**

Drawing based on the visualisation by: ©PORT Studio

A city that flows with the tide of change

OLSZYNKI PARK

Photo by: ©Bartosz Makowski

OLSZYNKI PARK

Rzeszów

On the outskirts of downtown Rzeszów, where the Wisłok River meets the urban landscape, a story unfolds about the synergy of the architecture, humans and nature.

Olszynki Park, two monumental towers rising above the surrounding buildings, have become a symbol of modernity, blending seamlessly into the panorama of the capital of the Podkarpackie region.

Explore
Olszynki Park

Photo by: ©Bartosz Makowski

Olszynki Park comprises two modern skyscrapers rising from a six-storey base, which have redefined the skyline of Rzeszów. The slender structures are eye-catching and impressive in scale. The taller of the two towers reaches a record height of 221 metres including the mast, making it the tallest residential building in Poland and a prominent landmark for travellers entering the city. The second tower, although 'only' 78 metres tall, forms a compact frontage together with the service, commercial and office section in Grotowskiego Square.

The location of Olszynki Park along the green boulevards is not only an aesthetic quality and added value for the residents of the complex. It is an example of architecture that actively participates in the process of transforming the character of the left bank of the Wisłok River.

The proximity of the buildings to the river emphasises the symbiosis of architecture and nature. The buildings are not isolated from their surroundings, but engage in a subtle dialogue with them, reflecting the sky, the water and the urban landscape. The shape is inspired by organic forms. The undulating arches on the facades of the buildings, which are reminiscent of sails, add dynamism to the entire structure.

The project designed by the local studio S.T. Architekci Robert Szulc and Maciej Trybus, is much more than just residential buildings. Olszynki Park is a complex that offers tenants a full range of amenities: shops, restaurants, cafes, a gym and a swimming pool. Thanks to the proximity of educational institutions – from kindergartens to universities – the buildings provide ideal living conditions for families. Lovers of culture and entertainment will appreciate the nearby philharmonic hall, the Podpromie Arena the Millenium Hall shopping centre.

Olszynki is one of the most recognisable green areas in Rzeszów. The name comes from the Polish word for alder trees (olchy) that used to grow in the vicinity. Today, we can rest here in the shade of ash, lime, maple and elm trees along the main alley and the foot and cycle path.

The location, close to the market square, riverside promenades and a park, is perfect for leisure activities. Future residents can enjoy walks or bike rides. Tourists can enjoy panoramic views from the public observation deck at the top of the taller tower, which can be reached by a glass lift.

The apartment building offers 292 apartments of various sizes and redefines the concept of comfort and luxury, providing everything you need at your fingertips.

Olszynki Park is a 'city within a city' where life goes on in harmony with modern architecture and the natural beauty of the Wisłok River.

CHALLENGE

The location on Szopena Street, in the vicinity of the Podkarpacka Philharmonic and the historic Lubomirski Castle, sets the bar high. Such surroundings require the highest standards - both in terms of aesthetics and functionality. Olszynki Park fully meets these expectations, impressing with its scale and precision of workmanship. A premium apartment building has to both blend in harmoniously with the rest of the city and ensure the highest level of comfort for its residents.

Photo by: ©Bartosz Makowski

"When designing Olszynki Park, we wanted to create buildings that would become an integral part of the urban fabric of Rzeszów and set new standards in shaping a modern landscape.

Thanks to the composition of the towers, based on dynamic arches and cubic forms, the buildings change their appearance depending on the perspective – from a slender, expressive structure to a stable, solidly embedded base. Thanks to the compositional axis parallel to the Wisłok River (the so-called 'Olszynki'), the buildings harmoniously blend into the natural surroundings.

The design challenge was to meet the requirements of the building's variable geometry – each floor had a different outline, which required precise preparation of technical and engineering drawings and involvement of local companies. In addition, it was necessary to draw up guidelines for the execution of the unusual façade, including Saint-Gobain façade glazing. We are glad that the design and construction of the project are mainly the result of cooperation between specialists from the Podkarpackie Province – a proof of the potential and high competence of our region.

Olszynki Park is the first step towards a modern skyline for Rzeszów. The project not only redefines the city skyline, but also sets the direction for its future development openness to tall buildings and the proximity of the river being a natural partner for urban space."

Robert Szular

Architect,
S.T. Architekci Sp. z o.o.

Tomasz Kozłowski

Architect,
S.T. Architekci Sp. z o.o.

Photo by: ©Bartosz Makowski

SOLUTION

Acoustic comfort

Safety

Energy efficiency

Thermal comfort

Aesthetics

Our project advisors offered the investor comprehensive solutions in the field of acoustics, fire protection and thermal comfort.

In some of the floors, especially where it was crucial to reduce sound transmission between storeys, Isover solutions with high acoustic insulation were used, which effectively **minimise noise**, ensuring silence and comfort for residents.

The interior walls of the building were erected using modern Rigips systems with high **fire resistance**, up to EI60 and EI120, which is crucial for tall buildings which are heavily used.

Thanks to the use of carefully selected glazing, the building facade combines **aesthetics** with functionality, offering residents unparalleled views while maintaining **thermal comfort**. Sun-control glass from Saint-Gobain Glass was used on the facade of the tall tower and the podium of the lower tower. This solution protects against excessive heating of the interior and reduces heat loss, contributing to the increased **energy efficiency** of the investment.

Photo by: ©Bartosz Makowski

"To be honest, my first reaction was one of surprise and slight disbelief – it was hard to imagine that such an impressive building could be built in Rzeszów. However, I have watched this vision become a reality, step by step. Soon, questions began to arise about specific solutions that we can offer within the Saint-Gobain portfolio. What has the greatest impact on ceiling acoustics, which walls will be optimal in fire resistance class REI 60 and REI 120, and many more.

Over time, the structure of the building, surrounded by cranes, began to rise towards the sky, clearly towering over the panorama of Rzeszów. Then, during the construction, a few questions about details arose. And we have this wonderful result – a unique building, the only one of its kind on this side of the Vistula river, which could be the pride of major European cities."

Marek Borówka

Project Advisor,
Saint-Gobain

Photo by: ©Bartosz Makowski

OUTCOME

Olszynki Park is a showpiece of Rzeszów. The investment heralds a new era for the city, which is constantly evolving, as well as reflecting the local authorities' desire to bring the surrounding nature closer to the residents.

„(...) For not we but those who come after will make the legends of our time, „said Aragorn, a character from J.R.R. Tolkien's novel, in the second part of the trilogy 'The Lord of the Rings: The Two Towers'.

Indeed, the two towers of Olszynki Park are now writing a new chapter in the rapid development of the Rzeszów agglomeration, for the sake of the quality of life of current and future generations.

PRODUCTS

Drawing based on source material ©Bartosz Makowski

Ściany działowe z odpornością ogniową | **Rigips**

Solar control glass | **Saint-Gobain Glass**

Rock wool for acoustic and thermal insulation of ceilings | **Isover**

The Green Pulse of the City

FOREST

Photo by ©Bartosz Makowski

Photo by ©Bartosz Makowski

FOREST

Warsaw

Immersed in the urban fabric, the green Forest Campus redefines office space, introducing a harmonious dialogue between technology, comfort and nature.

The **Forest Campus**, designed by **HRA Architekci** and located at 14 Burakowska Street, is a perfectly organised office complex that can easily be called an oasis of peace in the middle of a bustling metropolis. Surrounded by the lush greenery of Warsaw's Powązki, it brings nature into the urban landscape, offering a place to work and relax in one.

The architecture inspired by nature impresses with its refined details. The façade is decorated with vertical brown blinds reminiscent of tree bark, and the whole design is complemented by omnipresent greenery.

Forest offers 71,000 m² of modern office space designed to meet the diverse needs of tenants. The ground floor is bustling with retail and service spaces, including cafés, restaurants, a medical centre and even a nursery. Green areas play an equally important role in the complex – the campus boasts almost 4,000 m² of space filled with trees, meadows and shaded hills, creating a unique microclimate. The spacious roof of the lower part of the building is another gem of this project – it houses an urban garden filled with various species of flowers, herbs and vegetables. It is also a venue for workshops and cultural events with a beautiful view of the city skyline. The Forest Campus is more than just offices – it is a space where work and everyday life intertwine with nature.

Explore
Forest Campus

CHALLENGE

When designing Forest, the architects and investors aimed to achieve visual consistency with functional diversity of space, taking into account the solar energy permeability and user comfort. A key element was compliance with the rigorous standards of multi-criteria certification. To meet these requirements, advanced analyses of lighting, acoustics and thermal parameters were carried out, resulting in a design that perfectly combines aesthetics, usability and environmental care.

Photo by ©Bartosz Makowski

Stanisław Rewski, architect
Co-founder of HRA Architekci

"The Forest Campus is a unique design that won a closed competition organised by the investor, HB Reavis, in 2016. Located next to the Radosław AK Roundabout, the building takes the form of a 120-metre tower rising from a podium of varying height. Its distinctive cascading form and dynamic tectonics make it an integral part of the capital's skyline and a new landmark for Warsaw.

The name 'Forest' captures the spirit of this project – full of greenery and places ideal for rest and relaxation, creating a friendly space for both campus users and local residents. The building is surrounded by a public atrium with greenery and a minimalist fountain. Large, open-access podium roofs serve a recreational function, offering a space ideal for rest and relaxation surrounded by greenery. Aluminium blades and perforated screens on the façade protect the interior from overheating, while environmentally friendly solutions, such as natural ventilation through opening elements in the façade and rainwater irrigation, increase the performance efficiency of the investment."

Photo by ©Bartosz Makowski

SOLUTION

Durability

Acoustic comfort

Energy efficiency

Thermal comfort

More light

What do we expect from the ideal workspace? **Silence**, which fosters concentration, **sun-filled** interiors with plants that alleviate the stress of everyday challenges, and a **comfortable temperature** i.e. no discomfort associated with cold in winter or excessive heat in summer. These are the foundations of employee well-being and productivity, which have been achieved at the Forest Campus thanks to advanced technological solutions.

The use of highly selective COOL-LITE® XTREME 70/33 II and COOL-LITE® SKN 176 I solar control glass has limited **overheating of interiors**, reducing the need for cooling and increasing the **building's energy efficiency**. The **acoustics** of the rooms have been improved thanks to Ecophon ceilings and panels, which effectively reduce noise, creating comfortable and friendly workplaces.

The Rigips wall and ceiling systems, including Glasroc X Ocean boards, which are moisture resistant thanks to glass fibre reinforcement, ensure **excellent durability and quality of interior finishes**. **Effective waterproofing** has also been provided for in this lush green complex, using the Preprufe 300R PLUS system and DeNeef injection solutions from GCP, which perform well in demanding conditions of high humidity.

Photo by ©Bartosz Makowski

Forest is a project that perfectly combines office space with the natural environment. Lush greenery and close contact with nature make this place unique, and its sustainability is confirmed by high scores in BREEAM and BREEAM Communities certifications.

"One of the distinguishing features of the building is its large glazed surfaces. Apart from the obvious advantages, such as aesthetic qualities and well-lit interiors, their use also poses design challenges. Greater exposure to the sun carries the risk of overheating the rooms, which is why selective COOL-LITE XTREME solar control glass was used to limit the temperature rise inside the office building and thus reduce the need for air conditioning.

Additionally, large glazing areas can give rise to the phenomenon known as thermal pockets, which can cause glass to crack due to sudden temperature changes. The use of solar control glass not only improved the energy efficiency of the building, but also effectively reduced this phenomenon, increasing the durability and safety of the glazing."

Jakub Rydkodym
Technical Sales Support Manager, Saint-Gobain Glass

OUTCOME

Campus Forest doskonale łączy biznes z relaksem. Wnętrza zaprojektowane zgodnie z ideą biophilic design przybliżają człowieka do natury i tworzą przyjazne środowisko pracy. Obfita roślinność, patio, tarasy i loggie – tu praca biurowa ma zupełnie inny charakter. Ciche wnętrza sprzyjają koncentracji, mimo lokalizacji w sercu miasta. Słoneczne wnętrza i odpowiednia temperatura powierza, wolna od zimowego chłodu i letniego przegrzewania, wspierają zarówno efektywną pracę, jak i wypoczynek.

Projekt został nagrodzony Polską Nagrodą Zielonego Budownictwa PLGBC 2021 oraz posiada certyfikaty BREEAM na poziomie Excellent i WELL, które potwierdzają jego proekologiczny i przyjazny użytkownikom charakter.

Jerzy Grochulski, PhD, Eng.
Faculty of Architecture,
Warsaw University
of Technology

President of the Association of Polish Architects between 2006 and 2012

"Good contemporary architecture is intelligent. In addition to its attractive form, it fulfils the requirement of sustainability and is user-friendly. The Forest Campus building in Warsaw, designed by HRA Architekci, meets the requirements of design based on the rational use of resources, offers a comfortable working environment, is the kind of architecture people expect and may be considered a future standard.

Awareness of the scarcity of global natural resources and energy, reflected in the author's design decisions, proves that the building's solutions comply with sustainable construction standards, and that the building fully meets the functional and social expectations of modern users.

Its architecture appeals with well-balanced proportions and a great look, and is a nice addition to the cityscape. The materials used, along with the building's layout and its tree-lined patio, are features that deserve special attention."

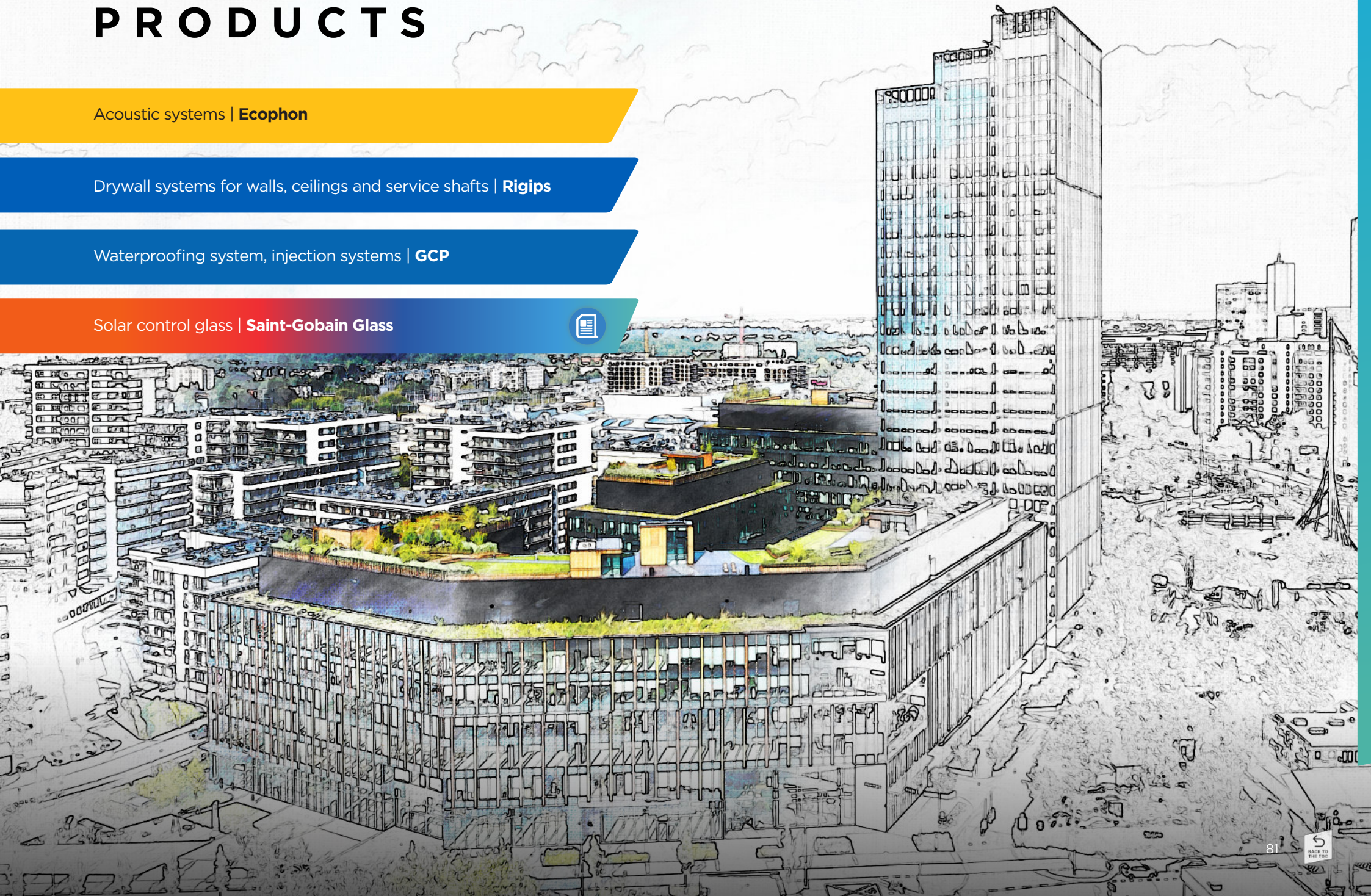
PRODUCTS

Acoustic systems | **Ecophon**

Drywall systems for walls, ceilings and service shafts | **Rigips**

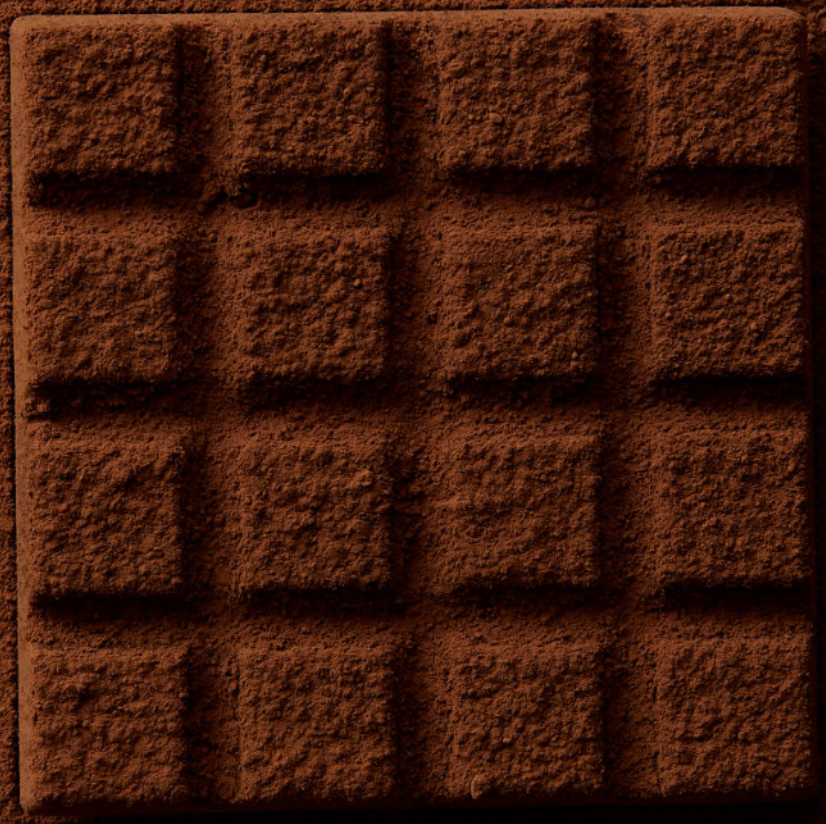
Waterproofing system, injection systems | **GCP**

Solar control glass | **Saint-Gobain Glass**



Drawing based on source material ©Bartosz Makowski

Renovation of the Kingdom of Sweets



E.WEDEL CHOCOLATE FACTORY **MUSEUM**

Photo by ©Bartosz Makowski

E.WEDEL CHOCOLATE FACTORY **MUSEUM**

Warsaw


Photo by ©Bartosz Makowski

Do you remember Tim Burton's movie about an eccentric chocolate maker and his magical factory? You don't need a golden ticket to visit the place we are about to show you – everyone can discover the secrets of chocolate goodies and enjoy them as much as they want.

Welcome to the kingdom of Jan Wedel – Poland's Willy Wonka, who won the hearts of Poland's young and old sweet lovers over 100 years ago.

Almost everyone can recall the taste of chocolate bars labelled ‘E.Wedel’ or of fluffy milk marshmallows. We owe these carefree childhood memories to Karol Wedel, a German confectioner who opened a small chocolate factory in Warsaw in 1851, winning the hearts of the city's residents.

His son Emil moved the factory to Szpitalna Street, creating the famous Chocolate Café, but it was his grandson, Jan Wedel, who gave the brand its modern dimension. In 1923, he built a factory on Zamoyskiego Street, commissioned a poster design featuring a boy on a zebra and introduced the iconic ‘Ptasie Mleczko®’ (Bird's Milk) chocolate bar. Simply put, he made Wedel an icon of Polish chocolate.

Today, we can admire the greateness of the first Polish chocolate empire by visiting the **E. Wedel Chocolate Factory Museum** at 5 Emila Wedla Avenue. Thanks to an investment by Lotte Wedel, it was created in revamped silos that were once used to store cocoa beans. The building **designed by BIMArchitekci** resembles a giant chocolate bar, while the interiors by **WWAA studio** combine modernity with the warmth of natural materials, creating a space that engages all the senses.

The main attraction is the opportunity to immerse yourself in the world of chocolate – from interactive exhibitions, workshops and tastings, to watching the work on real production lines – from cocoa beans to the finished product.

Explore
E.Wedel
Museum

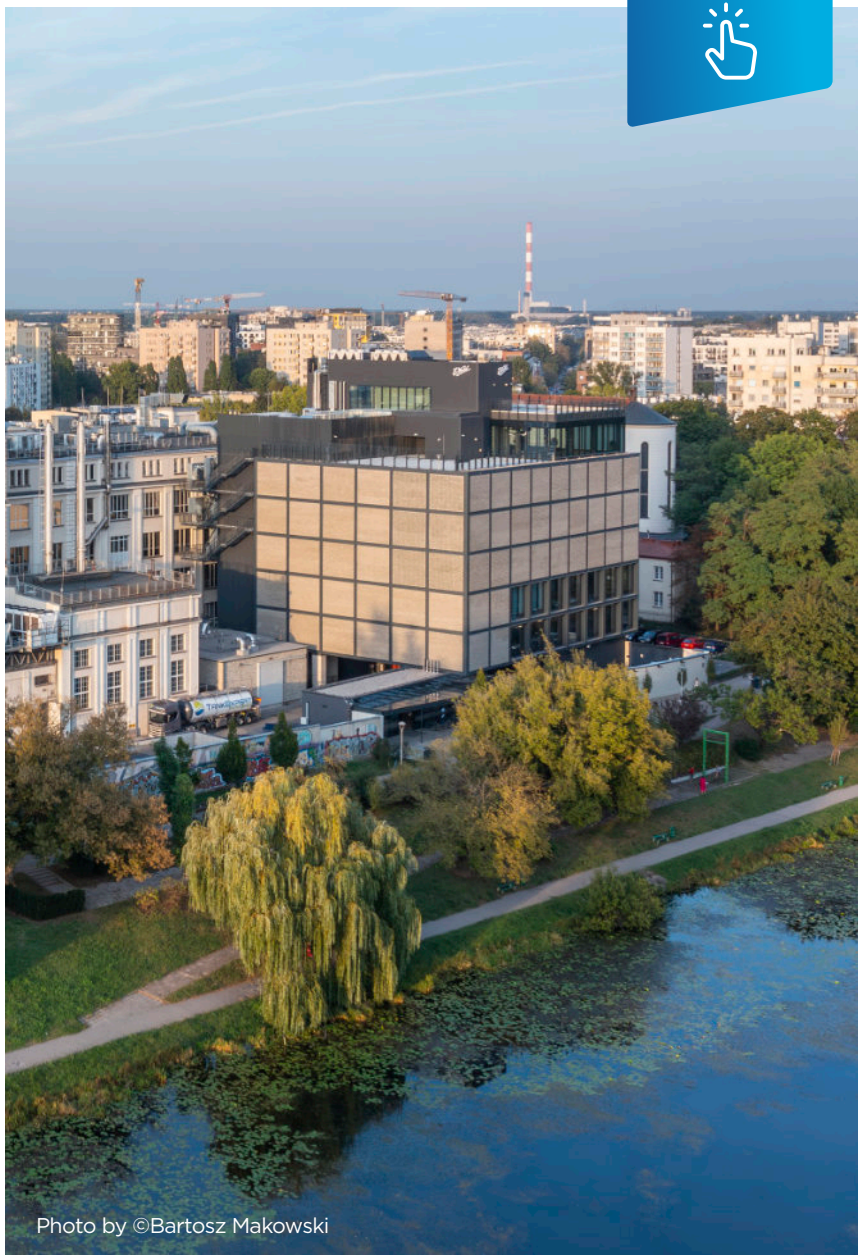


Photo by ©Bartosz Makowski

Photo by ©Bartosz Makowski

CHALLENGE

Designing a space that combines exhibition and production functions required precise organisation of passageways in the building. The key challenge was to ensure a smooth flow of visitors while meeting strict health and safety requirements. It was also important to create conditions that would allow for good visibility of the exhibits, so that visitors could fully experience and discover the secrets of chocolate craftsmanship – as befits a museum.

Michał Brzychcy, architect
BIMArchitekci

”When designing the E. Wedel Chocolate Factory Museum building, we wanted to create a space that would engage visitors in a multisensory journey through the brand's tradition and appeal to all the senses. We wanted the architecture to evoke emotions, curiosity and memories, just like chocolate. We were inspired by a box of pralines – simple and elegant, yet hiding a world of sensations, a wealth of shapes, flavours and colours.

The building's façade resembles a chocolate bar and reflects the diversity of Wedel products. The clever interplay of light, textures and materials makes the building captivating and redefines the experience of this delicacy.

The renovated and repurposed old cocoa silos have become an integral part of the new narrative – a testament to the transformation that combines tradition with a modern educational and experiential function. During the work, we discovered the original grey brick used to build the former factory. We decided to incorporate it into the design as a tribute to both the history of the place and the traditional building techniques of Warsaw's Praga district, where brick has always been a characteristic element of architecture.”

SOLUTION

- Durability
- Acoustic comfort
- Safety
- Energy efficiency
- Thermal comfort
- Aesthetics
- More light

In order to create a harmonious and functional space where visitors can move freely between the exhibition and production areas, four main walkways have been designed.

Their layout on each floor is organised around a central area, making traffic flow more intuitive and allowing visitors to move between floors in a circular pattern. Safety glass was used in the construction of this central area to preserve **transparency**, **lightness and openness of space** and good visibility of the exhibition. What is also important, the glass staircase allows visitors to observe the chocolate production process in conditions that meet the highest standards of occupational hygiene.

Glass solutions from Saint-Gobain Glass and Glassolutions were used both inside the building and on its façade. Glazing is an important element of the investment design in terms of its **safety**, **thermal comfort** and **energy efficiency**.

It allows **natural light to penetrate**, emphasising its connection with its surroundings and creating a coherent ensemble with the nearby Kamionkowskie Lake. Keeping in mind that Wedel's success began from a small cocoa bean, the museum clearly reflects the harmony between the architecture and the surrounding nature.

Appropriate acoustic conditions are ensured by Isover Stropoterm mineral wool boards, which effectively soundproof the space, and free-hanging Ecophon Solo Rectangle panels which reduce reverberation and improve visitor comfort.

Structural durability in demanding conditions and **protection against moisture and fire** was achieved thanks to the use of Rigips Aquaroc cement fibre boards, which are highly resistant to abrasion and damage.

Zdjęcie: ©Bartosz Makowski

"The E. Wedel Chocolate Factory is one of the most recognisable industrial buildings in Warsaw. The building combines the rich history of the confectionery brand with modern architectural trends, becoming a symbol of a contemporary approach to the design and modernisation of industrial spaces. Its concept is based on a harmonious combination of historical elements and modern details. The brick front, reminiscent of early 20th-century buildings, blends perfectly with the modern facades made of COOL-LITE® ST 150 glass used in triple-glazed units, creating a balanced and harmonious composition.

One of the most distinctive features of the factory is the canopy over the main entrance, made of 66.4 COOL-LITE® ST 136 laminate, which combines visual lightness with high technical strength, serving both a protective and aesthetic function. It was designed to emphasise the central role of the entrance, which welcomes both visitors and employees.

The roof of the building features an observation deck designed for visitors who want to admire the rapidly developing city from above. The deck balustrades made of 88.4 ESG VSG DIAMANT laminated glass provide safety and excellent transparency, while giving the space a modern look."

Maciej Mańko

Marketing Manager,
Saint-Gobain Glassolutions

OUTCOME

Thanks to the passion and determination of the Wedel family, this sweet tradition has survived for over 170 years and the E.Wedel brand has become a symbol of exquisite chocolate, gaining recognition both in Poland and around the world.

Thanks to the care taken in renovating the building, the love for this product can be passed on to future generations.

The museum has been recognised for its innovative approach to architecture and design, receiving the German Design Award 2025 in the category 'Excellent Architecture – Signage and Wayfinding'. The creative visual information system not only makes it easier for visitors to navigate the facility, but also enriches the experience, introducing them to the world of chocolate from the moment they enter the building.

The signage system, designed by Studio Blisko, draws inspiration from the arrangement of pralines in boxes. Each space is revealed to us gradually, like successive flavours of chocolate treats. From the ticket office to the roof terrace, we are guided by graphic elements reminiscent of the design and colours of Wedel's iconic products. The clearly visible texture of the wood brings to mind a velvety bar of dark chocolate, while the colourful tiles scattered throughout the space evoke decorated desserts, adding a sweet character to the interior.

Tomasz Malkowski

Architectural critic and journalist

"The investor should be commended for not moving the factory from its historic birthplace to somewhere outside the city. Not only did he preserve the nearly century-old complex, but he also expanded it with an interactive museum. Cultural investments in the Praga district of Warsaw are still rare. The chocolate museum revitalises the Kamionek area and the picturesque shores of Kamionkowskie Lake, towards which it faces.

The architects designing the new wing managed to preserve the genius loci of the site; they also partially utilised the structure of the abandoned silos. The area has always been filled with the intense aroma of cocoa.

Now, the museum itself stimulates our senses. Its shape resembles a giant box of chocolates, thanks to the brick facades framed by a steel grid structure. Thanks to uncovering structural elements, the designers chose the same material – grey brick – from which the factory was originally built, just like many other buildings inpre-war Warsaw. The modern museum pays tribute to the history of the Wedel brand and of the city."

Drawing based on source material ©Bartosz Makowski

PRODUCTS

Free-hanging acoustic panels | **Ecophon**

Stropoterm mineral wool panels | **Isover**

Cement-fibre board | **Rigips**

Solar control glass | **Saint-Gobain Glass**

Cement-fibre board | **Glassolutions**

Architecture rooted in greenery

LAKESIDE

Photo by ©Adam Grzesik

LAKESIDE

Warsaw

Is it possible to work in harmony with nature without giving up the vibrancy of city life? Can an office building be more than just a place for business meetings and report writing?

Lakeside proves the answer is ‘Yes’. Landside is a space where modern architecture blends with nature, creating an environment ideal for concentration and relaxation. The glass façade reflects the buzz of the city, but also the tranquillity of the nearby lake. Here, everyday life is not tedious, but energising and inspiring.


Photo by ©Adam Grzesik

Lakeside is a modern office and service complex in the heart of Warsaw's Mokotów district, designed by Grupa 5 Architekci for developer Atenor Poland.

Located at 2 Szturmowa Street, in the immediate vicinity of Dolina Służewska Park and the Służewiec Horse Racing Track, it offers approximately 24,000 m^2 of Class A office space, in addition to excellent transport links to key locations in the capital, as well as convenient international connections.

The building consists of two structurally separate blocks connected by a passageway on the second and third floors. Each of them is characterised by a recessed ground floor with a simple façade, above which the subsequent floors gradually increase in size, creating a dynamic composition. The façade, made of dark panels and glazing, adds delicacy to the building.

One of the key advantages of Lakeside is its harmonious integration with the surrounding greenery. Green terraces, a roofed courtyard and carefully designed areas around the building blend seamlessly with the nearby park, creating a coherent recreational space ideal for catching your breath.

The interiors of Lakeside have been designed with comfort and functionality in mind. Full glazing provides plenty of natural light, while opening panels let in fresh air. The building is equipped with top-class anti-smog filters and energy-efficient LED lighting. There are also amenities for cyclists and electric car chargers.

CHALLENGE

Designing a Class A office building that harmoniously blends into the surrounding landscape was a key challenge for the Lakeside project. On the one hand, there is the bustling, urban fabric of Warsaw, and on the other, the soothing proximity of the vast green area of the Służewiecka Valley and the lake. The architects had to find a balance between modernity and a subtle dialogue with nature, so that the building would not overwhelm the surrounding space, but become an integral part of it.

Every element – from the foundations to the façade – had to be sustainable, meet the highest energy standards for buildings and have the least possible impact on the environment.

Rafał Grzelewski, architect
Grupa 5 Architekci

”Lakeside is the definition of harmony between modernity and nature, openness and privacy, functionality and aesthetics. For me, as an architect, the most important thing was to create a place that fulfils its function but also builds a relationship with its surroundings. It is an office building that lives in tune with the rhythm of the city and nature.

A place where you can focus on work, but also take a breather, look out at the greenery, and feel that architecture can be more than just a structure. It is a building that breathes.

The goal of Grupa 5 Architekci was to combine two worlds – the geometry of urban office space and the soft, organic lines of the landscape. Hence the decision to use large glass panels that frame views of the surroundings and to give the building a dynamic but not overwhelming form. We wanted the architecture of Lakeside to reflect the spirit of modern Mokotów, but also to invite interaction and relaxation.

On the one hand, we have strong divisions, a shifted block design and a distinct façade structure, and on the other, winding paths, openwork roofs and green terraces that soften the formal character of the office building.

Lakeside sets a new standard for office buildings today. Thanks to the conducted circularity analyses and the use of materials compatible with the circular economy's principles, its energy efficiency has been maximised. During construction, all electricity was sourced from wind farms. Our efforts have been recognised: Lakeside received the European Property Awards 2024-2025 in the Best Office Architecture Poland category, Property Design Award 2024 for the best office building of the year, a nomination for the SARP 2024 Award of the Year and a BREEAM certificate at the Outstanding level, which is a testament to our commitment to sustainable development and user comfort.”

SOLUTION

The scale of the project required adapting the design to the diverse functions of the rooms. One of the key challenges was selecting the glass for the façade. The glazing had to fit in with the **aesthetics of the building** and meet strict **energy efficiency**, **safety** and user comfort requirements. That is why three types of glass were selected: COOL-LITE® SKN 176 II solar control glass, PLANITHERM® XN II thermal insulation glass and STADIP® PROTECT laminated safety glass, to ensure **maximum illumination of interiors**, **optimum temeprature** at any time of year and **protection against noise** and **external factors**. The glass façade ensures **resistance** to strong wind gusts, thermal stress, accidental impacts and vandalism, guaranteeing a high level of safety. For facility managers, the **excellent energy efficiency** of the façade is an additional advantage, resulting in lower energy consumption of the building.

Another challenge was integrating the drywall construction with the glass façade. This required specialised solutions to ensure the **stability**, as well as **optimum acoustics** inside the building. Rigips drywall systems were used to build the partition walls, due to their excellent soundproofing properties and minimal thickness. In areas requiring special acoustic protection, the 3.40.05 AKU system was used, with Isover Aku mineral wool panels providing an additional noise barrier. For even better acoustics and to conceal technical installations, suspended ceilings were installed, which not only perform an aesthetic function, but also significantly increase the comfort of work in the office building.

Photo by ©Adam Grzesik

EFEKT

Lakeside's high standards, compliance with strict sustainability standards and concern for the quality of life of its users have been confirmed by prestigious certificates – BREEAM at the Outstanding level and WELL at the Gold level. This Mokotów office building redefines comfort at work, combining aesthetics, well-being and responsibility for the environment.

Michał Samborski

Project Consultant,
Saint-Gobain

"The Lakeside project was designed to combine modern functionality with human comfort and harmoniously integrate the building into the surrounding landscape.

The use of natural materials and solutions supporting energy efficiency, sustainable development and the quality of the interior space was crucial.

Working on this project has given me an even greater appreciation of the value of collaboration with the design team and engineers, optimising construction processes, selecting the right products and putting them into practice. Attention to the smallest details was essential here. Regular meetings with the architect and contractors allowed us to precisely tailor the technologies to the design specifications. I am particularly proud of the thermal and acoustic insulation systems, which not only increase comfort by ensuring optimal temperature and reducing noise, but also contribute to optimising the building's energy consumption, reducing its impact on the environment. This experience has confirmed my belief that innovation, durability and high standards of use can be effectively combined in construction. And although at first glance the building attracts attention with its architecture, it is the attention to details such as energy efficiency, silence and indoor air quality that has the greatest impact on the daily well-being of the people who spend time there."

Drawing based on source material ©Adam Grzesik

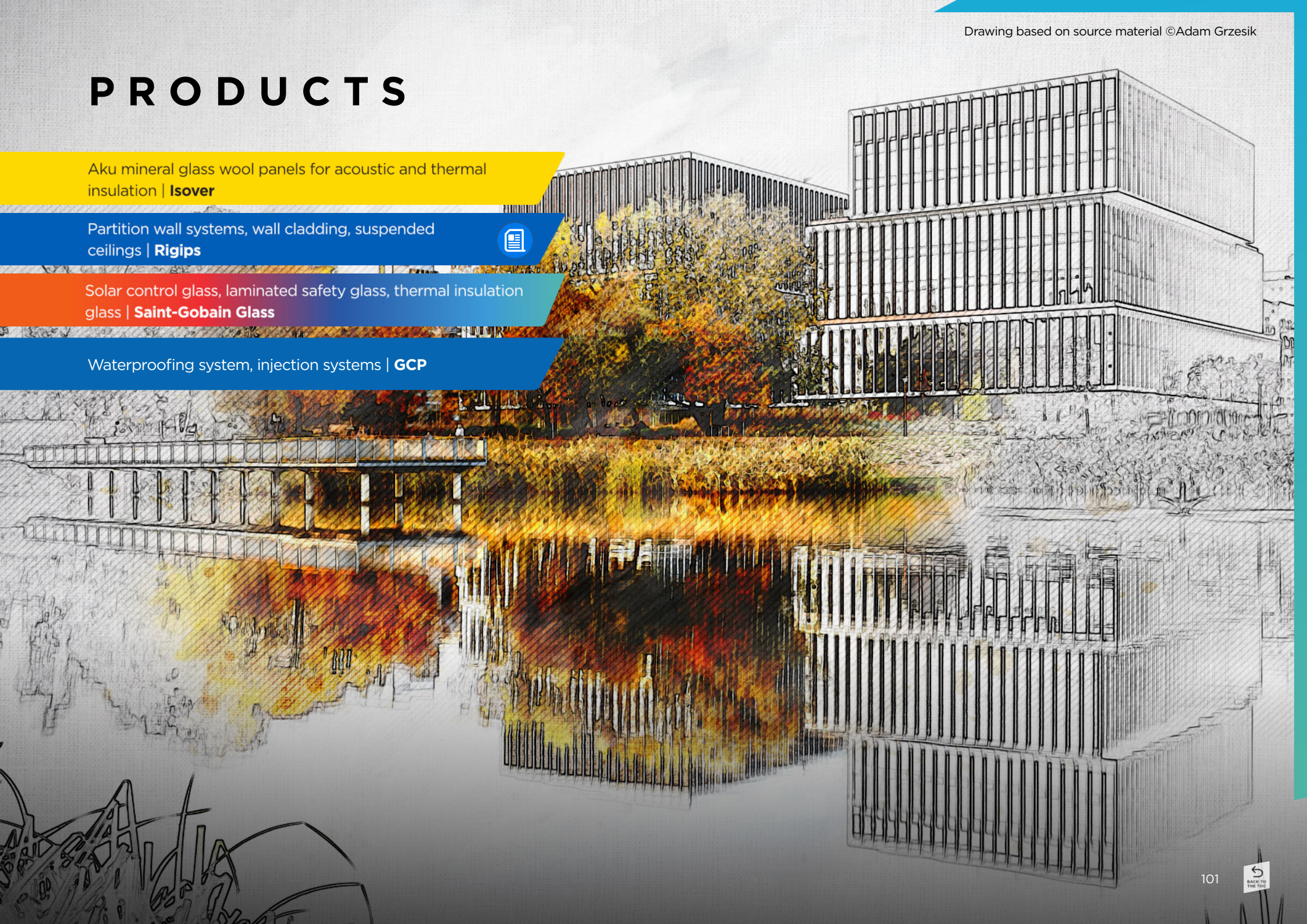
PRODUCTS

Aku mineral glass wool panels for acoustic and thermal insulation | **Isover**

Partition wall systems, wall cladding, suspended ceilings | **Rigips**

Solar control glass, laminated safety glass, thermal insulation glass | **Saint-Gobain Glass**

Waterproofing system, injection systems | **GCP**



A new chapter for an industrial legend

NORBLIN **FACTORY**

NORBLIN **FACTORY**

Warsaw

At the corner of Żelazna and Prosta Streets, where the heart of Warsaw's Wola district beats, there has been a lingering memory of former industrial power – the Norblin Factory.

Unfortunately, over time, the building fell into ruin, abandoned by time and people, like the hero of a forgotten legend. But this story was not destined to sink into oblivion. Instead, it has been given a new chapter, in which tradition intertwines with modernity.

The factory, founded in the 19th century by the Norblin family together with their partners Buch and Werner, became a symbol of the development of Polish industry. For decades, it produced silverware and silver-plated items, delighting customers with its craftsmanship and quality. However, after the plant closed in 1982, the building lost its former glory and, over the years, seemed to fade away like the last flame in a smelter furnace.

Hope came with the idea of Capital Park, which set itself the goal of revitalising this extraordinary place. The design work was entrusted to **PRC Architekci**, and materials and solutions that supported the implementation of the project while respecting its historical character played a huge role in this process.

The revitalisation was not just a renovation, but a restoration of the soul of a place that remembered the clatter of machines, the smell of metal and the sound of workers' conversations. Today, the Norblin Factory is not only an architectural gem, but also a vibrant urban ecosystem. Walking through its passageways, you can come across historic machines and fragments of the former railway tracks that tell the story of the city. Cafés, restaurants, galleries, offices, a boutique cinema, an organic food market and the Norblin Factory Museum all contribute to a space that pays tribute to the past and invites you to think about the future.

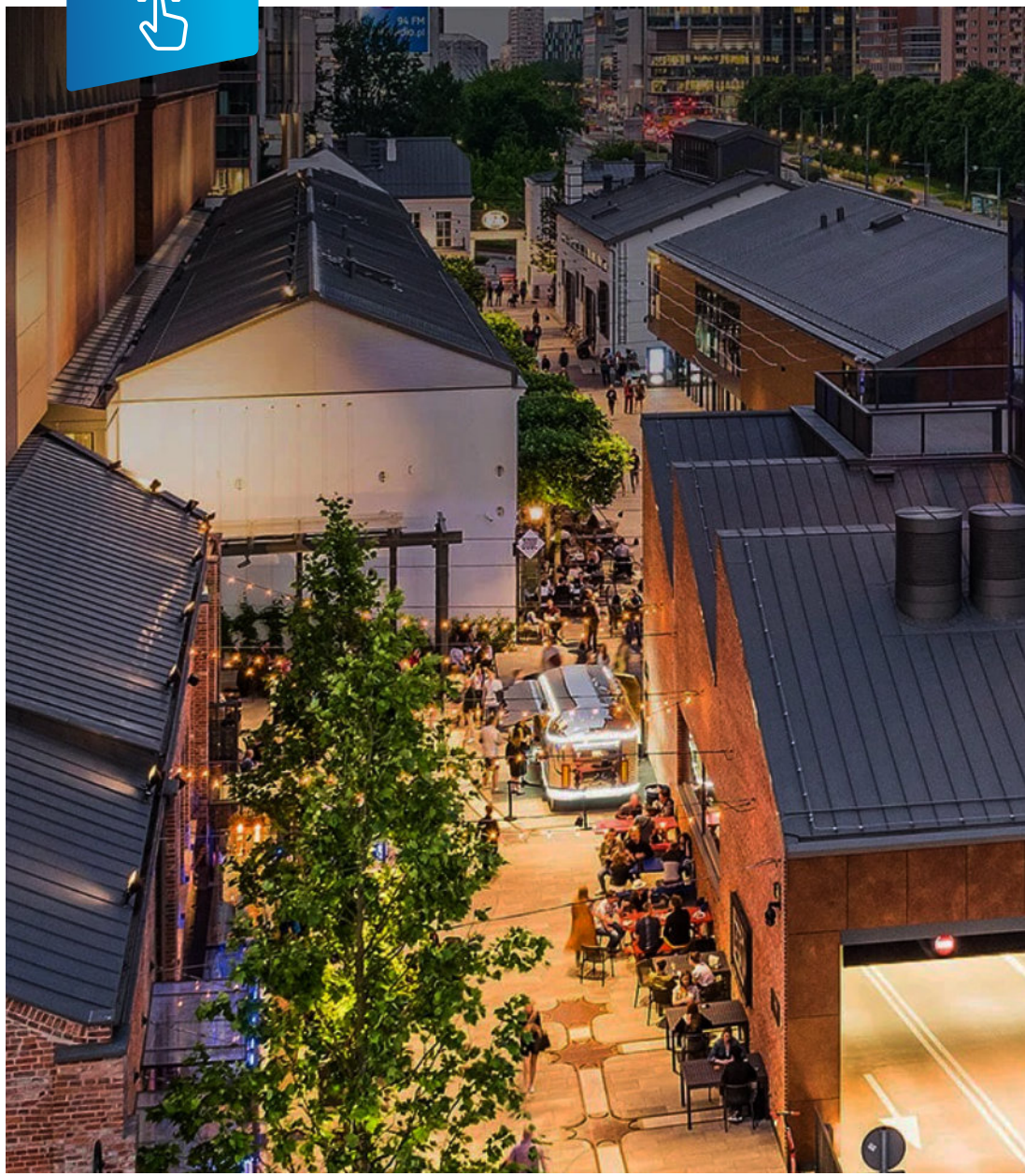
WYZWANIE

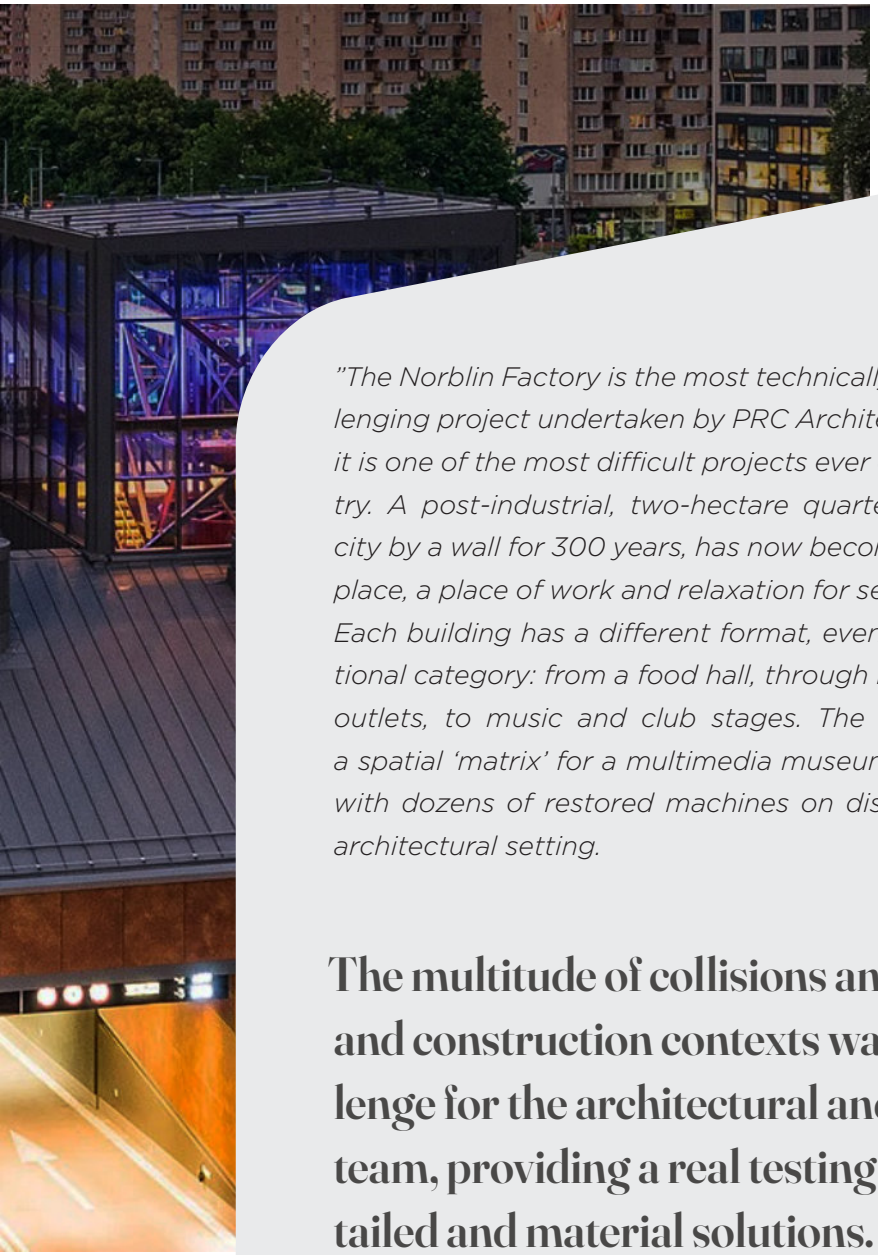
The Norblin Factory stands as proof that even forgotten places can be reborn. It is a story of vision, passion and respect for history, which continues to inspire future generations.

However, restoring the building to its former glory posed numerous technical challenges. Thermal insulation of the layered walls proved particularly difficult – it was necessary to find a material with the lowest possible lambda heat transfer coefficient in order to achieve the required insulation parameters with minimal thickness.

Another obstacle was the insulation of the sloping roof, where it was also crucial to use thin layers with high thermal efficiency. In addition, the non-standard spacing of the roof structure elements necessitated the selection of materials that meet high fire resistance standards (REI30). Every detail required innovative solutions so that modern solutions could coexist harmoniously with the historical character of the place.

Explore
Norblin Factory





Igor Galas, architect

Partner, Board Member of PRC Architekci
General designer and design author

"The Norblin Factory is the most technically and functionally challenging project undertaken by PRC Architekci, and I dare say that it is one of the most difficult projects ever completed in the country. A post-industrial, two-hectare quarter, separated from the city by a wall for 300 years, has now become a city-wide meeting place, a place of work and relaxation for several thousand people. Each building has a different format, even within the same functional category: from a food hall, through restaurants and service outlets, to music and club stages. The project also serves as a spatial 'matrix' for a multimedia museum of the former factory with dozens of restored machines on display in an appropriate architectural setting.

The multitude of collisions and functional and construction contexts was a major challenge for the architectural and engineering team, providing a real testing ground for detailed and material solutions.

For example, the underpinning and shifting of buildings became a symbol of the project during its execution. In the former foundry building, which now houses the MOXO music club and restaurant, the entire technological and technical infrastructure was placed in a specially created two-storey underground section in order to preserve and display the steel structure. A similar requirement was met for the former drawing hall, which now houses a market with stalls selling organic food. The installations were placed above the roof slopes, in the space under the transfer ceiling. The reconstructed skylight with LED lighting imitates the colour of daylight, giving the illusion that there is a sky abovera-ther than nine storeys of the building.

There are many similar stories and ideas in this project. In order to implement them and combine them into a convincing architectural narrative, it was necessary to rely on often sophisticated technical solutions – and Saint-Gobain undoubtedly provided them. However, the ongoing and often unconditional support and technical advice provided by its experts, which we benefited from throughout the many years of the Norblin Factory designing and construction, proved particularly valuable."

SOLUTION

Durability
Acoustic comfort
Safety
Energy efficiency
Thermal comfort
Aesthetics

Restoring the splendour of the Norblin Factory was made possible thanks to the cooperation of six Saint-Gobain brands, which provided advanced technological solutions to improve the functionality of the complex.

Excellent **acoustic comfort** has been achieved thanks to innovative Ecophon sound-absorbing systems that effectively reduce reverberation and suppress noise, both in common areas and offices. Thanks to the materials used, the interiors promote concentration, creating a pleasant working environment, while the service and entertainment areas offer a high standard of relaxation.

To ensure **thermal comfort** modern insulation solutions were used, which significantly reduce heat loss while maintaining an optimal temperature inside the building. ISOVER Multimax 30 and Super-Mata products, characterised by an exceptionally low thermal conductivity coefficient, made it possible to achieve the required energy parameters with minimal partition thickness. As a result, the building is **energy efficient** and environmentally friendly, while providing comfort to users throughout the year.

The **fire resistance** of key structural elements, such as ceilings and partitions, has been increased through the use of certified solutions with a fire resistance rating of REI30. Specialised fire protection systems from Isover and Rigips, as well as Vetrotech fire-resistant glass used in automatic doors and REI60 ceilings on the footbridge, protect passageways by limiting the spread of fire and smoke while maintaining **aesthetics** and **transparency of space**.

When it comes to **structural safety**, proven construction technologies and high-quality materials that reinforce the building's shell were used. Chryso concrete admixtures improved the durability, tightness and resistance to weather conditions, while advanced GPC waterproofing systems protected the underground parts of the complex against moisture. As a result, the structure will retain its properties for many years, ensuring the reliability of the building.

Saint-Gobain brands' proposals have made it possible to create a space that harmoniously combines history with modernity, tradition with innovation, and aesthetics with functionality.

Photo by ©Bartosz Makowski

"The regeneration of the Norblin Factory was mainly about blending the historic metalworks into the urban fabric. The design stage took over 12 years. Of course, most of the work took place during the construction phase, but over that time, both the technical conditions and the purpose of the building changed. Thanks to the 'design and build' formula, we were able to adapt our solutions on an ongoing basis to new guidelines and to the surprises hidden within the historic walls. Working on this project has consolidated my knowledge of insulating buildings from the inside – today, this is a standard solution in many revitalised buildings.

A wide range of products made it possible to meet the emerging challenges – from Vetrotech solutions, through proven Rigips and Saint-Gobain Glass systems, to the best ISOVER Multimax 30 insulation. One of the most demanding elements was the glass bridge serving as an escape route, which had to meet strict safety and thermal insulation standards. This required many precise calculations and the selection of appropriate materials. The ceiling above the exhibition hall is also worth noting. When you are inside, it may seem that a light roof structure is spreading above you – in fact, you are standing on the lowest floor of the office building. This architectural solution is very impressive."

Władysław Pawłowski
Project Business Development Manager, Saint-Gobain Solutions

OUTCOME

Marcin Szczelina
Architectural critic

Editor-in-Chief ArchiSnob

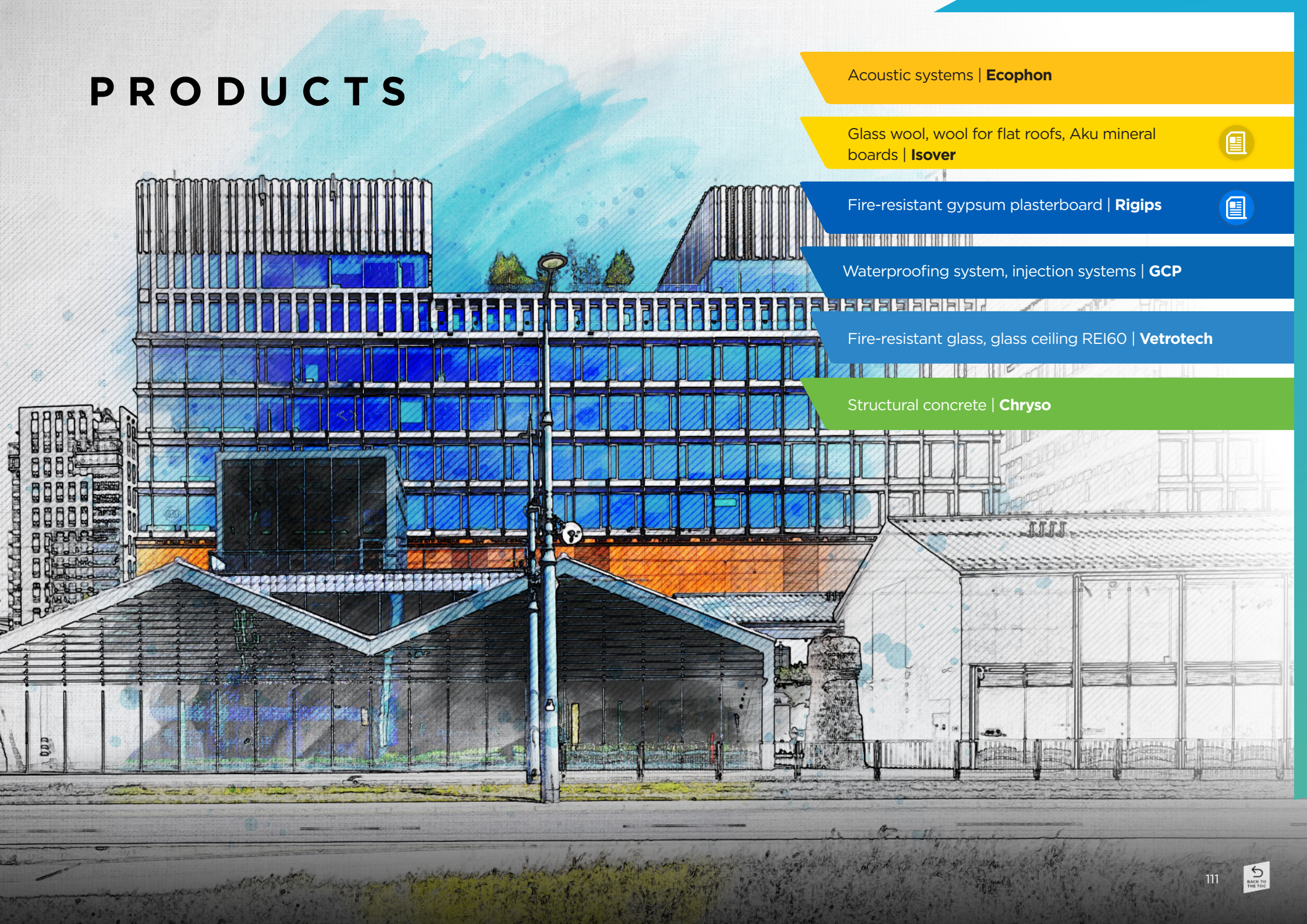
"The Norblin Factory is an architectural puzzle – at first glance chaotic, full of tension between the new and the old, but ultimately coherent and consistent. It is one of those places that show how difficult it is to preserve the spirit of the past without falling into historical pastiche. You could say that PRC Architekci were given a puzzle with missing pieces to solve, and yet they managed to put together a picture that not only works but also intrigues.

It is hardly possible not to appreciate the effort that went into bringing this area back to life – moving a 900-tonne building or suspending entire structures is something you would expect to see in an architectural Mission Impossible. Instead of turning this part of Wola into another sterile enclave of glass and concrete, the designers managed to create a space that is surprisingly lively and multi-layered. The maze of streets and tangle of buildings mean that Norblin is not immediately recognisable – and that's a good thing, because architecture should be like good wine, not fast food."

Today, the Norblin Factory is a vibrant urban centre where history and the future come together to tell a shared story.

This proves that with courage, vision and respect for heritage, forgotten places can be reborn and inspire future generations.

PRODUCTS



Acoustic systems | **Ecophon**

Glass wool, wool for flat roofs, Aku mineral boards | **Isover**

Fire-resistant gypsum plasterboard | **Rigips**

Waterproofing system, injection systems | **GCP**

Fire-resistant glass, glass ceiling REI60 | **Vetrotech**

Structural concrete | **Chryso**

The sweet success of a great makeover

CUKROWNIA ŻNIN **HOTEL**

Photo by ©Marcin Hołub

CUKROWNIA ŻNIN **HOTEL**

Żnin

Let's now move to Pałuki, a region rich in culture, located on the borderlands of Kujawy, Krajna and Greater Poland. More specifically, let's go to its unofficial capital, the picturesque town of Żnin. This is where the star of our story is located, writing it anew today.

Cukrownia Żnin (The Żnin Sugar Factory), once the main employer for the local community, is now a source of inspiration for designers looking for a good example of restoring historic buildings to their former glory. Waking up in a hotel room overlooking the lake, sipping a cup of coffee or relaxing your body and mind during a spa treatment, you can feel a pleasant sweetness that brings you back to life.

Explore
Cukrownia
Żnin Hotel

Right on the shore of the Great Żnińskie Lake, there is a unique complex of brick buildings of a former sugar factory. The rich history of the Żnin sugar factory has left a strong mark on the minds of local residents. Back in the 19th century, on the initiative of local landowners, an industrial plant was built, operating as a limited liability company from 1894 to 2004. Over the years, it changed owners several times, before finally passing into Polish hands after World War II. During the communist era, the factory was modernised and became the main employer in the region. In 2002, it was incorporated into KSC Polski Cukier holding. Economic transformations led to its closure in 2004, and since then the buildings have fallen into ruin. This bitter ending to the story was simply unacceptable to ARCHE, which decided to revitalise the complex using modern solutions while preserving the spirit of a bygone era. 2017 marked the beginning of a makeover that transformed the deserted buildings into an attractive industrial park, all thanks to the creative collaboration between **ARCHE Group** and the **Bulak Projekt**, **MIXD**, **LESS IS CORE** and **MML Architekci** studios.

The space saved from oblivion has been filled with new energy, and the original traces of its industrial past emphasise the unique character of the investment. The impressive conference, hotel and restaurant complex impresses with its functionality and minimalist aesthetics. The design is based on the idea of a ‘city within a city’, where everything that visitors need is right at their fingertips. The post-industrial details present everywhere preserve the unique atmosphere of the former sugar factory. With the well-being of the planet in mind, the architects were guided by the principles of ‘less waste’ and ‘upcycling’, therefore the old industrial machines from the factory warehouses and the original elements of the plant continue to tell their story within the renovated brick walls.

CHALLENGE

While some may view something as a thing of the past, others see untapped potential that can be transformed into a true masterpiece. In the once dilapidated buildings of the Żnin sugar factory, echoes of the past can still be heard, and a trained eye can see the continuation of an interesting story. This investment is a perfect example of how an old structure can be brought back to life thanks to the sensitive vision of designers. While preserving the former shape and character of the place, the architects had to demonstrate extraordinary imagination and technical skills to ensure that the revitalisation would be a total success. And so it was.

No old structures were altered during the development, and new ones were added only where necessary. The most important challenge was therefore to adapt the existing infrastructure and reinforce it in the most critical areas. Technical measures focused primarily on ensuring fire safety to the EI30 standard and adequate sound insulation, thanks to which the entire complex offers users the highest level of comfort.

The Cukrownia Żnin Hotel is not only a place for guests, but also for.. swallows. One of their largest habitats in Poland has been preserved under the A1-A3 passageway. A section of the building has been deliberately left uninsulated so that the birds can nest there safely. This proves that modern architecture can coexist with nature!

Photo by ©Marcin Hołub

SOLUTION

Durability

Acoustic comfort

Safety

The Cukrownia Żnin Hotel was given a second chance at life, and it took full advantage of it. The use of innovative technological solutions proposed by Rigips and Isover allowed this historic building to rise from the ruins. Above all, however, the products used guaranteed its safety and functionality while maintaining the highest architectural standards.

Acoustic comfort has been ensured by soundproof wall systems and sound-absorbing ceiling systems, which successfully minimise reverberation and reduce noise. Such a quiet space makes it easier to socialise and relax, and also helps people to concentrate better during business meetings.

Fire safety is an important aspect of this multifaceted investment. Ceilings and partitions are fundamental elements responsible for the durability of the structure, which is why their protection had to be raised to the maximum level. Fire protection systems safeguard passageways, minimising the spread of fire and smoke without interfering with the aesthetics and transparency of the space. Airtight construction is a way to ensure the safe use of the building for many years. Selected materials characterised by high resistance to the destructive effects of moisture which were used in the pool area and bathrooms, further improve **structural safety**.

Photo by ©Marcin Hołub

Piotr Kaba

Investment Sales Consultant,
Saint-Gobain

”The revitalisation project of the Żnin sugar factory was a unique challenge for us. It is a prestigious project in which we wanted to participate not only for business reasons, but also as a partner providing the highest quality solutions. Thanks to our previous cooperation with the Arche Group, we knew how to meet the investor's high requirements.

From the very beginning, we worked closely with architects and contractors, providing our recommendations at both the design and execution stages. Although it is a 19th-century building, it meets contemporary standards thanks to modern Rigips acoustic and fire wall systems. These solutions remain invisible but guarantee comfort and safety for users.

Of crucial importance was also the development of individual technical documentation for the top floor of the hotel. The Rigips BOX system allowed us to create a self-supporting structure with a lightweight ceiling, which made it possible to preserve the original roof of the old factory and the unique industrial character of the interior. We are particularly proud of the implementation of this solution, as it was used for the first time in such demanding hotel conditions. This experience has shown us that innovative projects require flexibility and a willingness to go beyond standards. And this is the key to creating truly innovative spaces.”

Photo by ©Marcin Hołub

OUTCOME

The impressive modernisation of the Żnin Sugar Factory has been recognised by the industry. The facility has received numerous Polish and international awards, including the European Property Awards 2021 in the 'Commercial' category, the Architecture MasterPrize™ Award 2021 Architectural Design Award in the 'Restoration & Renovation' category, the SARP 2021 Award of the Year in the 'Architecture in Heritage Space – Real Estate' category, and a nomination for the 2022 Mies Van Der Rohe Award.

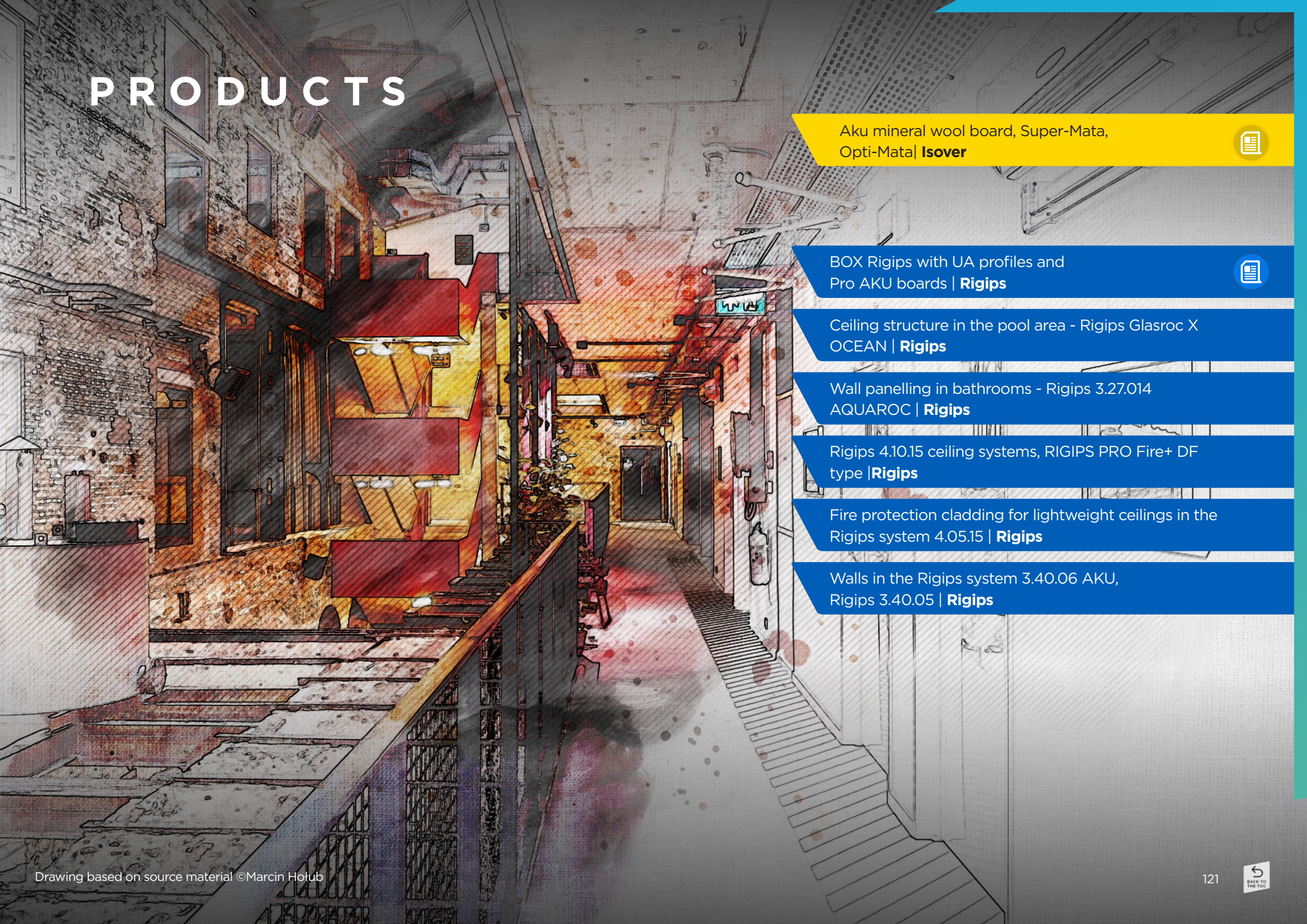
This multifunctional space lets you soak up history and touch modernity at every turn. Visitors to the Cukrownia Żnin Hotel have a great opportunity to actively contribute to a new chapter in this incredibly colourful story, because it's not over yet.

Artur Celiński
Editor-in-chief of Architektura-murator magazine

"Visitors to Cukrowa Żnin Hotel will surely find many words to express their admiration for the enormous amount of work carried out by the investor in transforming the former industrial buildings into a fully-fledged hotel establishment.

In this particular case, however, it is easy to overestimate the work involved and, unfortunately, to underestimate the effort and dedication that went into it. Żnin is a groundbreaking project, as the restoration was not limited, as is often the case, to the characteristic walls and structural elements. Although no one in Poland really expected it at the time, the architects and contractors undertook the tedious process of inventorying and dismantling all the smaller elements, from post-industrial interior details, through metal pipes and rods, to wood from old sheds and extensions. First, they were placed in a 1,300 sq m warehouse, and then, piece by piece, they were inventoried, renovated and reused on the premises of this or other Arche Group projects. In addition, local craftsmen were involved in the work."

PRODUCTS



Aku mineral wool board, Super-Mata, Opti-Mata| **Isover**

BOX Rigips with UA profiles and Pro AKU boards | **Rigips**

Ceiling structure in the pool area - Rigips Glasroc X OCEAN | **Rigips**

Wall panelling in bathrooms - Rigips 3.27.014 AQUAROC | **Rigips**

Rigips 4.10.15 ceiling systems, RIGIPS PRO Fire+ DF type |**Rigips**

Fire protection cladding for lightweight ceilings in the Rigips system 4.05.15 | **Rigips**

Walls in the Rigips system 3.40.06 AKU, Rigips 3.40.05 | **Rigips**

Drawing based on source material ©Marcin Hołub

A modern complex without complexes

GDAŃSK **FORUM**

Photo by ©Bartosz Makowski

GDAŃSK **FORUM**

Gdańsk

Photo by ©Bartosz Makowski

Presenting extraordinary architectural gems on the map of Poland, this time we are heading to the seaside. Near the picturesque Gdańsk Old Town and the historic railway station, we come across the Gdańsk Forum – a shopping centre that is now one of the city's biggest attractions.

The modern compound influences the character of the seaside agglomeration and fits in stylishly with the rapidly growing trend of sustainable construction. In the sun-filled space where you can enjoy coffee and dessert, you can feel here the energy of the once popular Gildia pavilions.

Poznaj
Forum Gdańsk

The shopping and entertainment centre located on the Radunia Canal was built on the site of former commercial areas as part of the revitalisation of the Sienny and Rakowy Market. In the 1990s, the area was bustling with life and enjoyed great popularity among residents, many of whom still fondly remember the old shopping arcade. Its attractive location, strong ties to tradition and excellent natural conditions did not escape the attention of vigilant investors (**Multi Poland**), who wanted to bring this urban space back to life.

Thanks to the creativity of architects from the **SUD Architekt Polska** design studio, who have mastered the art of restoring the former magic to places and buildings, the revitalisation process began at the end of 2014. After four years, the investment was completed, and a multifunctional centre was created in the heart of Gdańsk, impressively combining the old with the new. Today, it is an ideal place for social gatherings and business contacts.

The efficient urban renewal project has led to the creation of a spacious arcade with an intriguing, original design featuring historical elements. The building has been divided into three zones: The Boulevard, Modern Court and The Street. The six floors house shops, service outlets and offices. The open public space perfectly corresponds to the achitectural form, which echoes the old brick buildings, among which the historic monastery building has been preserved. Large glazing ensures good visibility, and about one-third of the centre is green space. The Radunia Canal flows through the shopping centre square. The architects have preserved the exposed canal bed with its adjacent greenery, footbridges and a bridge dating from 1807. Water also flows through the centre of the building, forming the central axis of the main shopping alley.

Photo by ©Bartosz Makowski

During archaeological work preceding the construction of the Gdańsk Forum, almost **130,000 historical artefacts were unearthed and are now on display in interactive showcases along the canal**. The history of Gdańsk and this location is being revived to enhance the colourful fabric of contemporary life.

CHALLENGE

Every major investment is like a challenging voyage. Before finally reaching a safe harbour, there are many difficulties along the way. Conscientious architects are not afraid of challenges, but boldly catch the wind in their sails and implement their action plan with great sensitivity. Thanks to their forward-looking approach to urban space, the Gdańsk Forum is now a place where admiration for modern design is accompanied by a breath of history.

The project required a well-thought-out design and attention to detail. The main task was to construct solid walls with a maximum height of 5.2 metres in the commercial premises. It was therefore essential to ensure adequate acoustics, protect the partitions against moisture, reinforce the ceilings and partition walls, and invest in monumental glazing on the façade to provide users and tenants with the right level of comfort and safety.


Photo by ©Bartosz Makowski

Jocelyn Fillard

Chief Architect SUD
Architekt Polska

"In the past, this place was a market for crayfish and cattle. Over time, the area became forgotten and neglected and was even used as a car park. A railway embankment running through the plot divided the town into two parts. However, the advantage of this area was the presence of the Radunia Canal and a historic brick monastery.

The main objective of the project was to highlight this historical heritage by creating a bustling commercial centre with numerous public areas where residents could enjoy a vibrant lifestyle.

Rafał Langowski

Chief Architect
Gdańsk Forum,
SUD Architekt Polska

Shopping centres are usually monumental, massive structures. In the case of Gdańsk Forum, we designed a complex of smaller buildings inspired by the landscape and historical architecture of Gdańsk. The main building features a sculpture by Tomasz Górnicki depicting a lion, the symbol of the city. Part of the complex's roof has been designed as a hanging garden, creating a fifth façade sloping towards the Old Town.

The second important task was to connect the two parts of the city separated by a railway line. This urban planning and technological achievement was made possible by creating a real 'bridge building' over the railway tracks, based on a large sandwich panel.

Dominik Kaczmarek

Architect,
Project Design Team
SUD Architekt Polska

However, one of the biggest challenges was to revitalise the Radunia Canal. Our idea was to cover it with a monumental glass structure to preserve the urban atmosphere and integrate the canal with the building. The quality of transparency and technical parameters of the glass used both for this structure and on the facades have greatly contributed to the success of this place, allowing visitors to walk along the canal in a sheltered space, protected from the weather."

SOLUTION

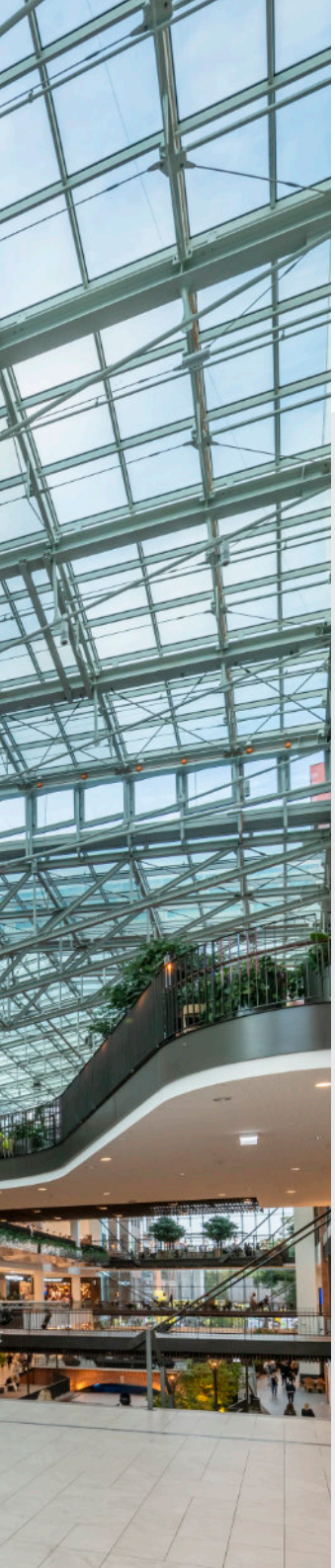
- Acoustic comfort
- Safety
- Energy efficiency
- Thermal comfort
- More light
- Aesthetics

The Gdańsk Forum has become a safe haven from which residents and tourists set off on leisurely strolls around the city. This is all thanks to the use of advanced products offered by Rigips, Ecophon and Saint-Gobain Glass, which guarantee **structural safety** and trouble-free use.

The pleasant atmosphere and **acoustic comfort** is a result of the use of sound-absorbing wall and ceiling systems that effectively **reduce reverberation and make noise less annoying**. The quiet interior keeps visitors in the mood for shopping, meeting friends, and doing business.

The installation of functional skylights made it possible to ensure **optimal amount of natural light** in passageways and minimised overheating of rooms. The large-size glass fins provided for in the project design ideally **blend into the surroundings**. Technologically advanced solar control glass effectively **protects the interior against excessive heat from the sun**, and laminated glass provides users with **top-level security**.

Photo by ©Bartosz Makowski



Marcin Piątkowski

Technical Sales Support Manager, Saint-Gobain

”When working on Gdańsk Forum, we wanted it to be not just a shopping centre, but also a place for meetings and relaxation.

The planning stage required close cooperation with architects and contractors, and one of the main challenges was to harmoniously integrate the modern structure of the building into the historic surroundings while ensuring natural lighting and energy efficiency. This was achieved by using COOL-LITE XTREME 60/28 II solar control glass on the façade, which not only provides excellent interior lighting, but also reduces energy consumption and effectively dampens outside noise, especially from the nearby flyover bridge.

The monumental glazing gives the structure lightness and transparency, softening its visual impact on the historic urban fabric. This is what I am most proud of, as it combines innovation and functionality with aesthetics, while ensuring light, thermal and acoustic comfort.

This project has reinforced my belief in the importance of interdisciplinary cooperation – from architects to specialists in various fields. The Gdańsk Forum is a living proof that aesthetics and advanced technologies can go hand in hand, creating a space that is not only functional and energy-efficient, but also visually appealing and user-friendly. It is an example of a modern approach to urban space design that takes into account both the needs of people and the surrounding environment.”


Photo by ©Bartosz Makowski

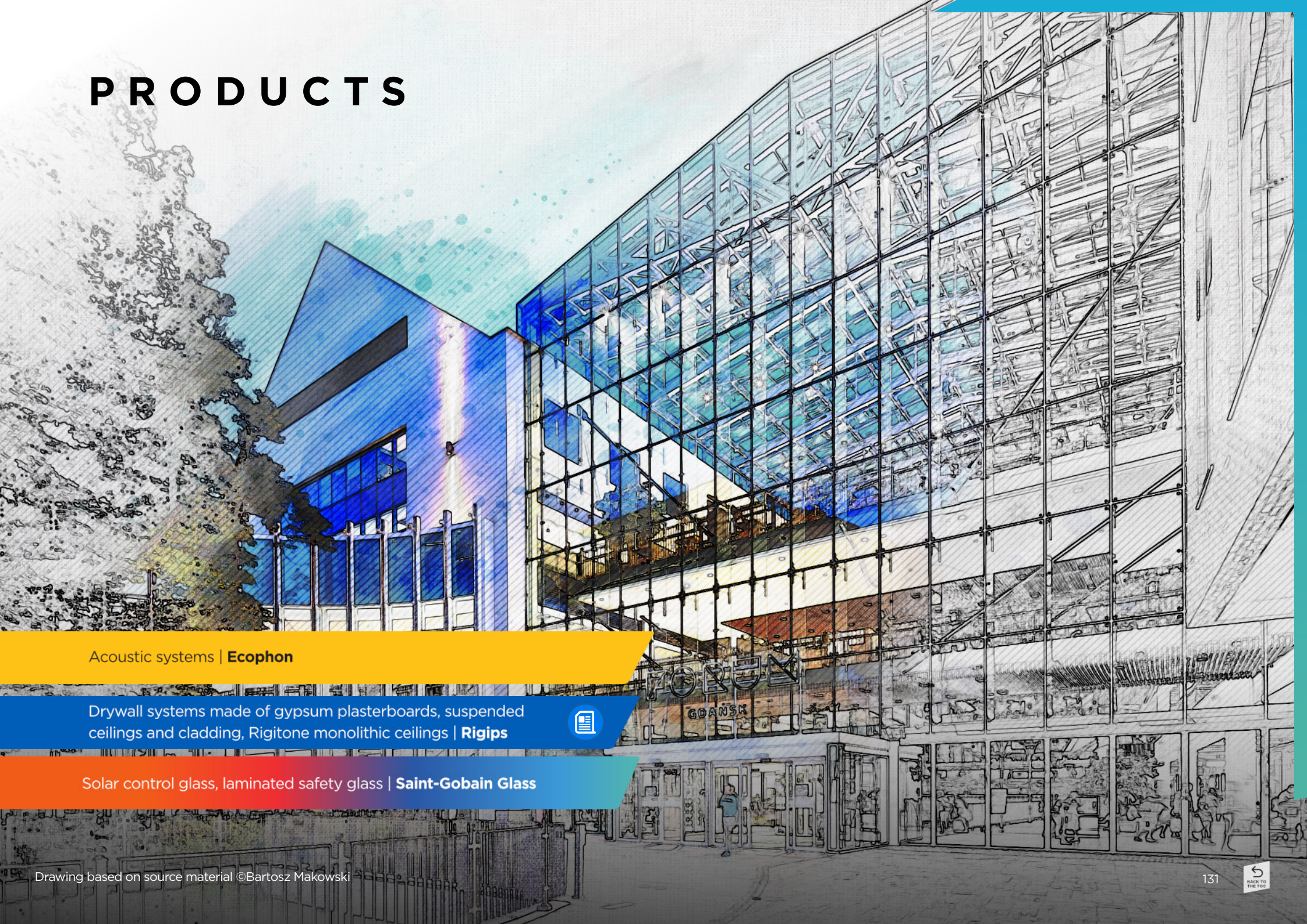
OUTCOME

The centre has received numerous awards, including in 2018 an award in the Prime Property Prize 2018 competition, in the 'Investment of the Year in the Retail Market' category, and in 2019 – the Property Design Award 2019 in the 'Shopping Centre Building' category, the Europa Property CEE Retail Award 2019 in the 'Large Retail Project' and 'Innovation in the retail sector' categories.

The modern glass-walled arcade dazzles at any time of day – filled with sunlight during the day and illuminated by artificial lights at night. The spectacular appearance and exceptional functionality of Gdańsk Forum have been recognised and appreciated also outside Poland.

It is a public space that draws its strength from the present-day vibrant energy of the city and from its history.

PRODUCTS



Acoustic systems | **Ecophon**

Drywall systems made of gypsum plasterboards, suspended ceilings and cladding, Rigitone monolithic ceilings | **Rigips**

Solar control glass, laminated safety glass | **Saint-Gobain Glass**

Drawing based on source material ©Bartosz Makowski

Symphony of form and sound

NOSPR

Photo by: Courtesy of Konior Studio. ©Radosław Kaźmierczak

NOSPR

HEADQUARTERS OF THE POLISH NATIONAL RADIO SYMPHONY ORCHESTRA

KATOWICE

Wednesday, the first day of October, the year two thousand and fourteen. Shortly after six in the evening, the air is filled with excitement, thick and tangible.

The bows tremble just above the strings, fingers hover over the keyboard, breaths intertwine with the instruments. And finally – the first sounds. They spread throughout the hall, filling the space, rising in a cascade and falling on the enchanted audience. This is how the beginning of a new chapter in the history of NOSPR sounded.

Photo by: Courtesy of Konior Studio. ©Radosław Kaźmierczak

In a place where miners' footsteps and the sounds of machines could once be heard, music now fills the air. The headquarters of the Polish National Radio Symphony Orchestra ("NOSPR"), designed by **Tomasz Konior and the Konior Studio design team** and built on the site of the former Ferdynand coal mine, engages in a subtle dialogue with the city's tradition. It has an important historical context for local residents, being a place with an industrial past and a symbol of Katowice's cultural transformation.

The walls, built from seven types of bricks, evoke memories of miners' houses, although here they take on a new meaning. Monumental brick pillars on the façade, divided by glass windows and concealing technical installations, give the building its characteristic rhythm.

The building consists of three harmoniously integrated layers. The outer ring houses the orchestra's backstage area, where musicians prepare for performances, record compositions in the recording studio, use dressing rooms, rehearsal rooms and technical facilities. The second layer is the inner atrium. Full of light, thanks to the white walls and transparent ceiling, it encourages reflection and creates a natural connection with the outside world.

The heart of the building is the Grand Concert Hall, where sound takes shape and power. Enclosed in a massive concrete structure with an anthracite surface, it appears like a monolith – raw, silent, ready to resound with music. Its interior resembles a masterful violin. Sensually contoured lines, golden wood and shine bring to mind a Stradivarius violin. The impressive space can accommodate 1,800 music lovers. The audience surrounds the stage on all sides, immersed in sound that spreads clearly and deeply.

The Chamber Hall, the little sister of the main hall, captivates with its subtle elegance. Decorated in white, it provides a visual contrast to the grand hall, while offering a cosy atmosphere for smaller ensembles.

The area around the building is bustling with life, blending music with the urban fabric. Squares, fountains, gardens and musical toys invite visitors to explore the space, allowing them to soak up the rhythm of the city.

Explore
NOSPR

Brick Facade of NOSPR Photo by ©Konior Studio

CHALLENGE

Tomasz Konior

NOSPR Designer, Founder
of Konior Studio

"The NOSPR is a legendary orchestra. It is hard to believe that for 70 years it did not have its own home. When the idea arose to build it on the site of a former coal mine, we saw it as an exciting challenge. We already had experience in building music venues, but this project required a new approach and enormous imagination. We set off on a journey to visit the most famous concert halls around the world. We visited Philadelphia, New York, Tokyo and Amsterdam. We met people who created similar spaces. Then came the moment to calm our emotions and translate our dreams and experiences into a design for a building rooted in its place of origin.

For the NOSPR building, context is the foundation and the material. Through the language of form, we sought to engage in a dialogue with the changing surroundings and the passing of time. We looked for solutions that would make this place both urban and musical. We wanted all visitors to remember its special atmosphere and long to return here.

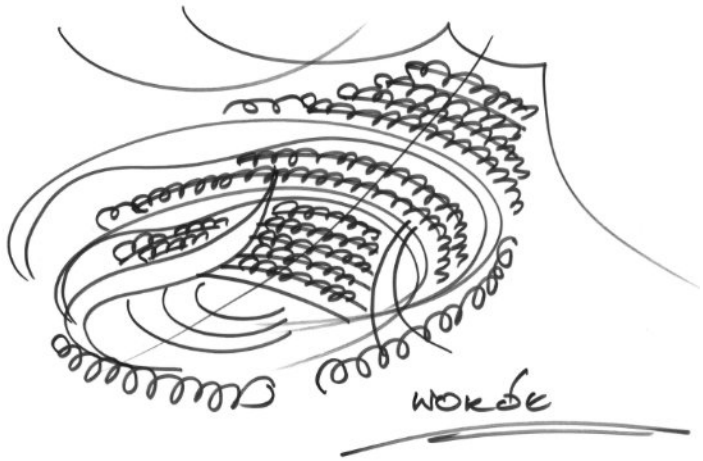
The materials used, with brick visible on the façade, continue the Silesian building tradition. Thus, the legend of the NOSPR has taken on a tangible Silesian dimension, and Katowice has gained the prestigious title of UNESCO City of Music.

This project is the result of the imagination and skills of many talented experts and of unconventional solutions. Every part of the building is a piece of a larger whole. We wanted the concert hall, the heart of the entire complex, to attract the most outstanding artists to Katowice and delight music lovers. In order to fully experience the music, we had to ensure perfect acoustic protection so that no outside noise would disturb the sense of unity between the musicians and the audience. In the Grand Hall, the audience surrounds the orchestra – this is how the word 'around', which constantly accompanied us during the design process, materialised.

Photo by: Courtesy of Konior Studio. ©Daniel Rumiancew

Every concert hall is like a living organism – it resonates with sound, pulsates with emotions, and brings the orchestra and audience together as one. Here, musicians must harmonise with each other, and the music must harmonise with the space in order to reach the audience in the purest form of consonance, enveloping them in sound and allowing them to immerse themselves in the sounds.

The perfect acoustics of the NOSPR Hall is the result of the work of internationally renowned acoustician **Yasuhisa Toyota** from the Japanese **Nagata Acoustics** studio, who has designed the acoustics for some of the world's most prestigious concert halls, such as the Walt Disney Concert Hall and the Elbphilharmonie in Hamburg. Here, every forte reaches its climax and every piano whispers softly in the ears of the audience.



The concept of the NOSPR Concert Hall, original sketch by Tomasz Konior


Photo courtesy of Konior Studio. ©Daniel Rumiancew

SOLUTION

Acoustic comfort

Aesthetics

Individual wave-shaped acoustic systems were designed especially for the Chamber Hall using Rigips materials. Each of these structures is a separate engineering masterpiece – intricately shaped system profiles and plasterboard panels moulded into a curved substructure required craftsmanship and precision. In order to verify the feasibility of the project, the Rigips team prepared a 1:1 scale prototype, allowing every detail to be refined. The wavy shapes on the walls not only add to the **interior aesthetics**, but most importantly **disperse sound** in a perfect way, providing listeners with a full acoustic experience.

What other solutions were used in the building's design to ensure good acoustics and comfort for visitors and employees? Ecophon acoustic systems, Isover glass wool panels for acoustic and thermal insulation of partition walls, and condensation, thermal and acoustic insulation of ventilation ducts.

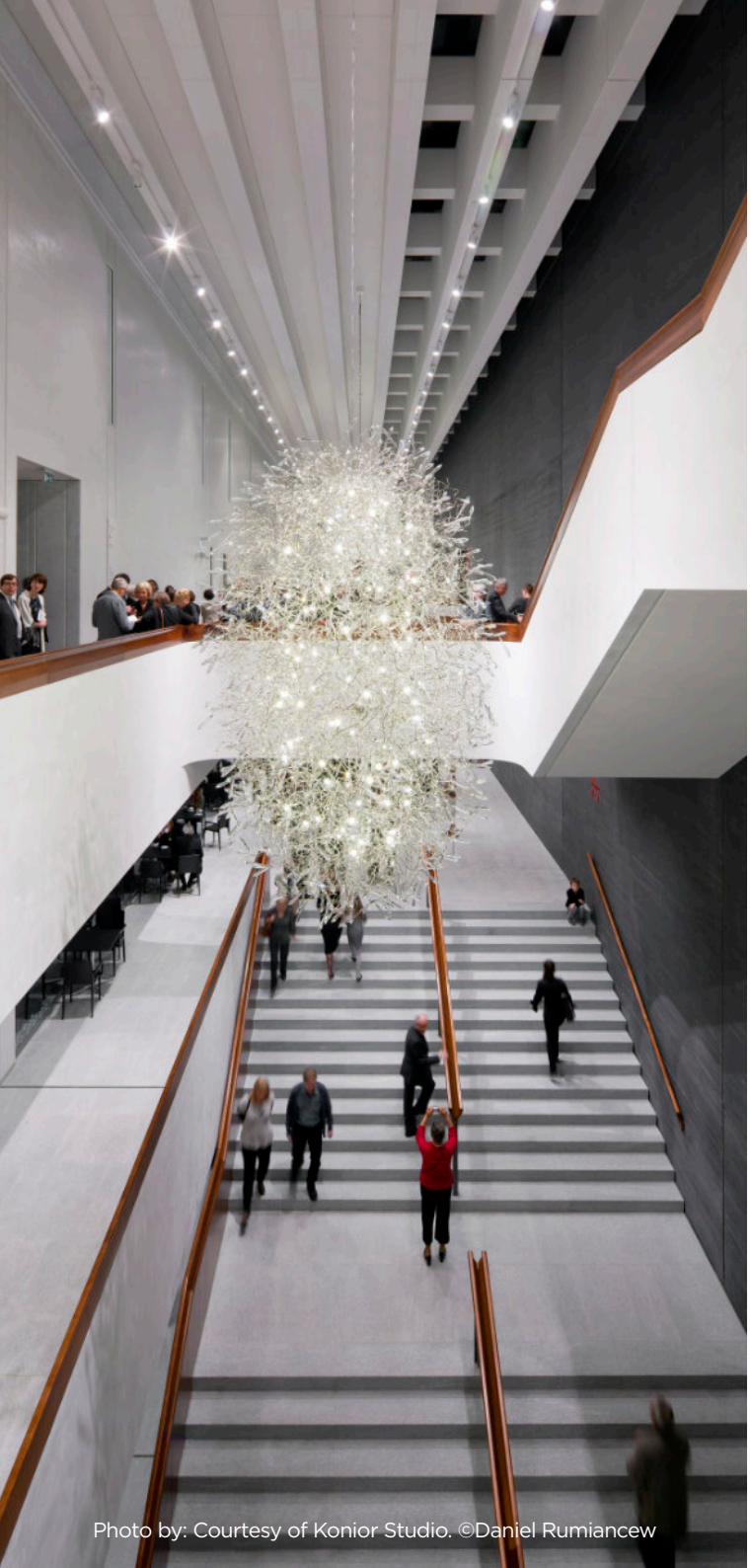


Photo by: Courtesy of Konior Studio. ©Daniel Rumiancew

Mikołaj Jarosz

Concept Developer
Ecophon

”NOSPR – and everything seems clear. Firmly rooted in the brickwork tradition of Upper Silesian architecture, drawing on the industrial heritage of the region, the building houses a concert hall which, in terms of acoustics, is considered one of the best in the world and unrivalled in the country.

The Chamber Hall remains somewhat in its shadow: much smaller and more modest, but thanks to its restrained elegance, it may even be more impressive than the Grand Hall. It also has excellent acoustics, thanks in part to the sound-diffusing walls made using the Rigips drywall system. Looking at their irregular shapes, it is hard to believe that this complex structure was created using only standard system profiles. Other rooms in the building also required specially designed interior acoustics. The main foyer is a special case: according to the design concept, it was to be finished with smooth, solid materials. However, a room finished in such a way would have been very noisy and echoey, making it difficult to use the sound system or even hold conversations. It was therefore necessary to integrate sound-absorbing materials into the interior structure. Ultimately, they were incorporated into the reinforced concrete ribs supporting the glass roof of the multi-storey space and encased in Ecophon ceiling panels, which allowed the load-bearing structure profiles to be completely hidden.”

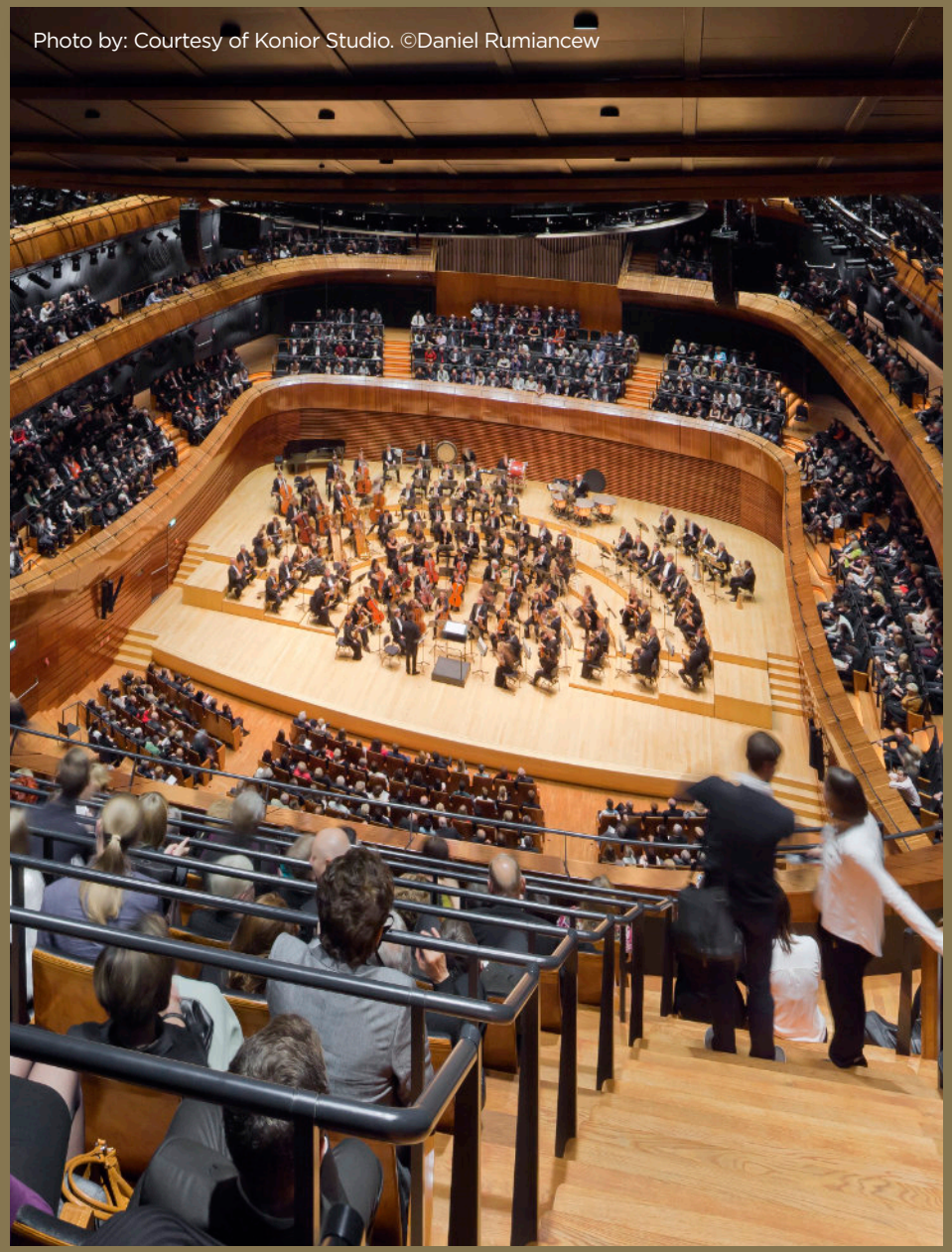


Photo by: Courtesy of Konior Studio. ©Daniel Rumiancew

OUTCOME

The NOSPR's perfect acoustics have been recognised internationally, as evidenced by the institution's admission to the prestigious ECHO (European Concert Hall Organisation). It is the only concert venue in Poland and one of only two in Central and Eastern Europe to be included among the 21 most renowned concert halls on the continent, thus proving its world-class status.

The seat of the Polish National Radio Symphony Orchestra is a true gem of architecture and acoustics – a place where sound and silence intertwine into a perfectly composed symphony, creating an unforgettable experience for all music lovers.

PRODUCTS

Acoustic systems | **Ecophon**

Glass wool for insulation of partition walls and ventilation ducts | **Isover**

Substructures made of system profiles and acoustic panels | **Rigips**

A place that defies convention

COPERNICAN REVOLUTION **LAB**

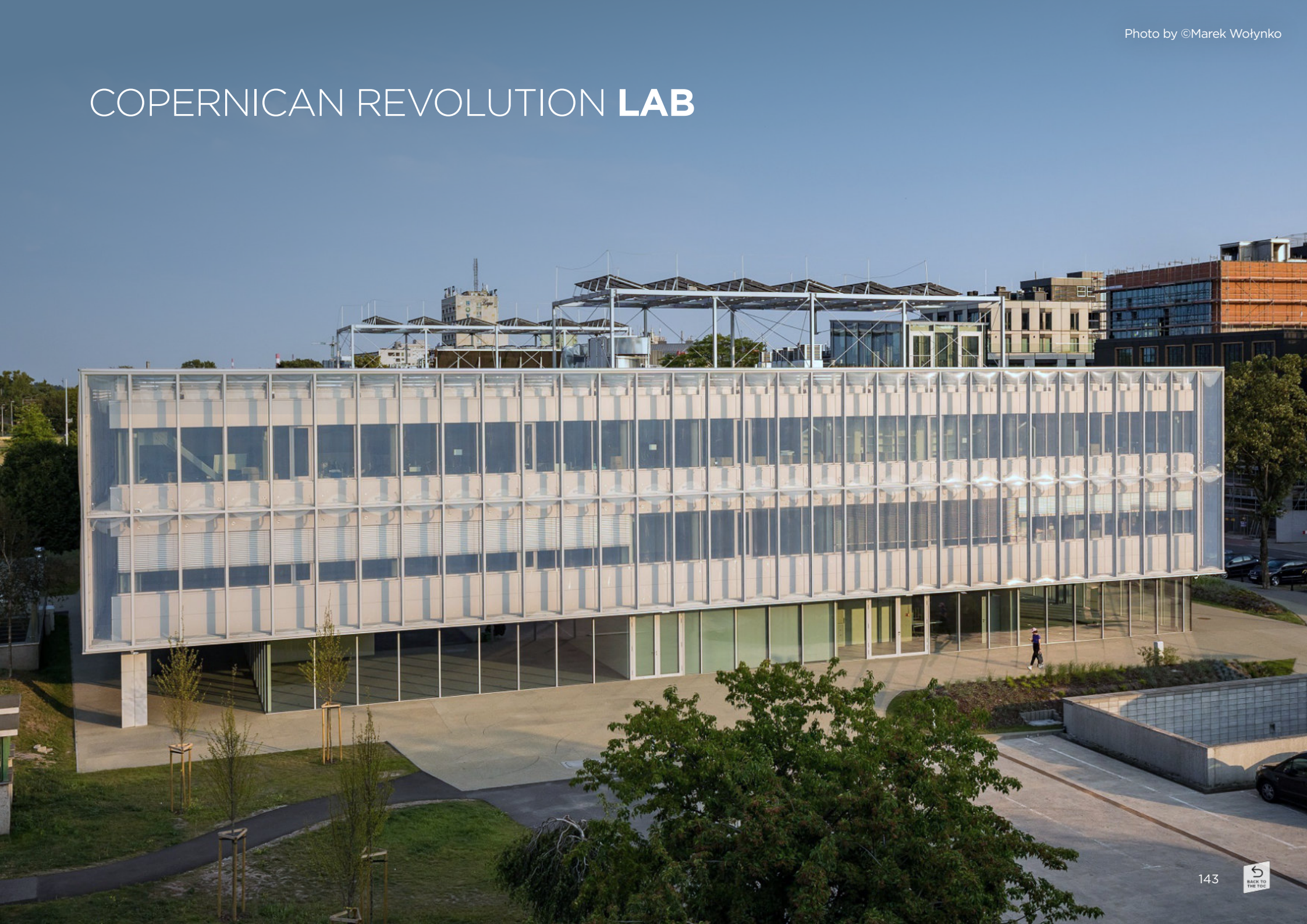


Photo by ©Marek Wołynko

COPERNICAN REVOLUTION **LAB**

PART OF THE COPERNICUS SCIENCE CENTRE

Warsaw

Five centuries ago, Nicolaus Copernicus changed the way humanity perceived the movement of celestial bodies – ”Stopped the Sun and moved the Earth(...)”.

Today, his name stands for a place that is ‘turning upside down’ the way we think about education and research. **The Copernican Revolution Lab** is a space for experimentation and discovery, where knowledge is acquired through practice. Part of the **Copernicus Science Centre** complex, it is its natural extension and a hub for new methods of teaching and discovering the world.

Photo by ©Marek Wołynko

Explore
Copernican
Revolution Lab

The term ‘Copernican Revolution’ refers to a groundbreaking change in the way humans think about and understand the world. And so the name of the ‘Copernican Revolution Lab’, is by no means accidental – the building was created to bring about a change in thinking about education, just as centuries ago Copernicus overturned the geocentric model of the universe, changing our perception forever. It is a place where, through research and experimentation, innovative processes are being developed to teach the skills necessary in the 21st century.

The Copernican Revolution Lab at the Copernicus Science Centre is not a traditional research centre. Research into human interaction with technology and the creation of engaging educational experiences are part of everyday life here. The laboratory is open to experts from various fields, which means that ideas come together and intertwine in unexpected ways. Inside, there are numerous interdisciplinary laboratories, workshop spaces and areas for conceptual work, designed to facilitate cooperation between

science and industry. From the outside, the building, designed by the Wrocław branch of the German studio **Heinle**, **Wischer und Partner**, is simple and minimalist, yet dynamic in form. Geometric precision and economy of expression, typical of contemporary research architecture, are the dominant features.

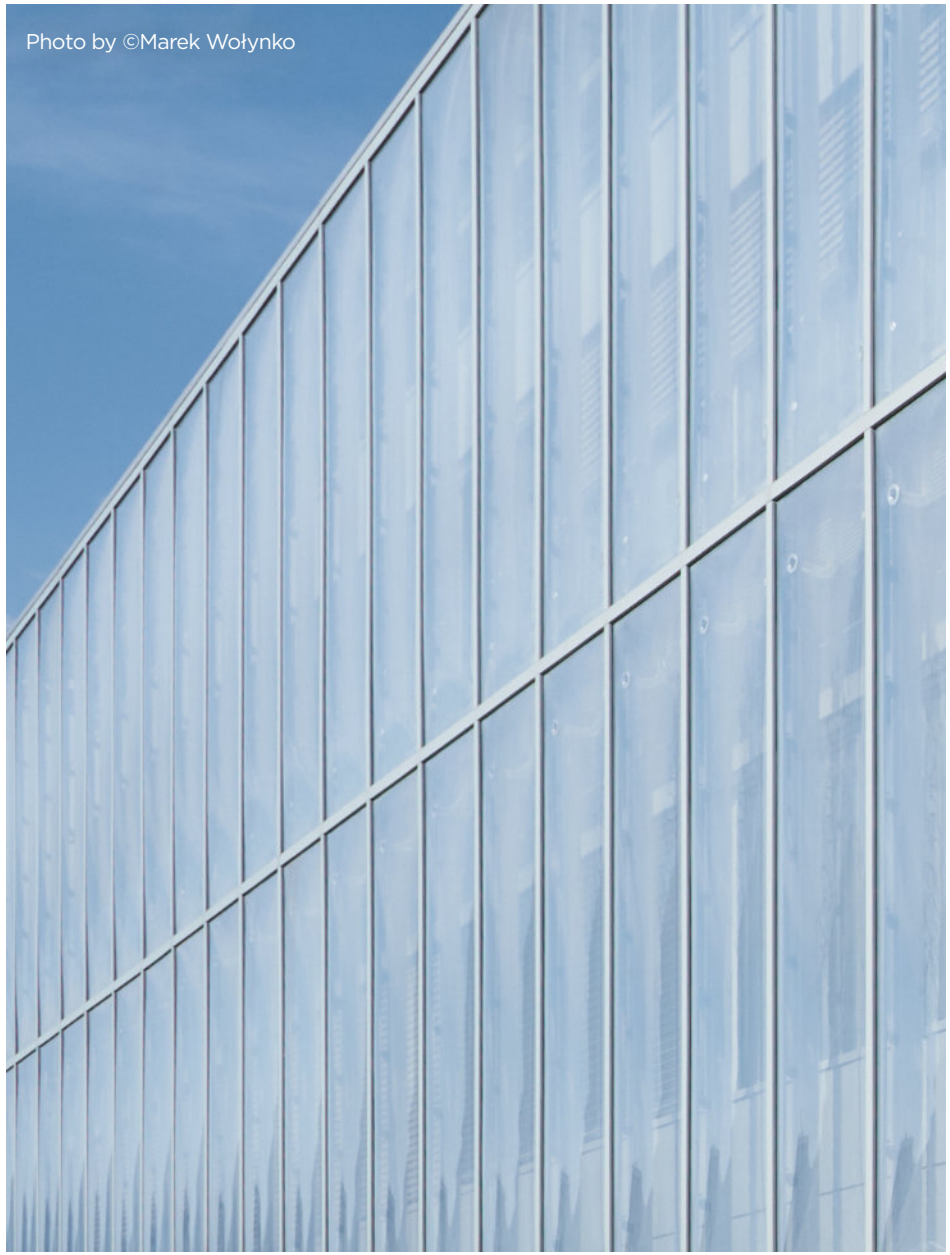


Photo by ©Marek Wołynko

CHALLENGE

In places where new ideas are born and scientists and educators seek more effective teaching methods, the key aspects of the environment are silence, light and safety.

That is why the interiors of the Copernican Revolution Lab have been designed to promote concentration, creativity and teamwork, in other words, to provide researchers with the ideal conditions to carry out their mission.

Photo by ©Marek Wołynko

SOLUTION

Sound has been controlled here with exceptional precision. Ecophon ceiling panels absorb noise and eliminate reverberation, creating a space that promotes concentration and undisturbed work. Saint-Gobain Glass and Glassolutions products provide **aesthetic** appeal to the interior spaces.

Where greater protection is required, Vetrotech Contraflam fire-resistant glass systems have been used, which combine **high fire resistance** with transparency and elegance. On the other hand, thanks to the use of Rigips partition walls, it was possible to freely **design the layout of rooms**, adapting it to various functions – from individual work to larger meetings and workshops.

In critical areas, the floor was made of weberfloor FIBROCEM cement screed, which, thanks to its strength and fast setting, not only **increased the durability of floors**, but also accelerated construction work. Additionally, the Isover TDPT wool layer used in the floors improved **acoustic** and **thermal insulation**, creating a quiet, comfortable space.

Structural durability is reinforced by Chryso®Delta architectural concrete, which provides a uniform, wear-resistant surface, and the GCP injection system **protects the building against moisture**, extending its service life.

The space has been designed to meet the highest standards of comfort, safety and sustainable construction. Precisely selected structural elements co-exist in harmony, making the architecture an ally of science and education.

Photo by ©Marek Wołynko

Robert Firmhofer

Historian of philosophy,
journalist, science populariser

Co-founder and Director of
the Copernicus Science Centre

"The Copernican Revolution Lab fits perfectly into the urban fabric of Powiśle. It is a simple, elegant building with a façade made of air-filled ETFE cushions. Thanks to its resistance to pollution, chemicals and extreme temperatures, this material ensures the durability and functionality of the façade. What is more, it allows a large amount of light to pass through while thermally insulating the interior, which significantly reduces the energy consumption needed for lighting, heating and cooling.

At the Lab, we create new exhibitions, exhibits, educational scenarios and interdisciplinary projects.

The large, open space, which can be freely arranged and adapted to current needs, fosters creative work and the development of ideas.

In our workshops, we build and refine prototypes, and in our laboratories, we conduct experiments. We test all the results of our work with future users in special research rooms connected to focus testing stations, which allows us to fine-tune our solutions on an ongoing basis."

OUTCOME

The Copernican Revolution Laboratory is more than just a research building – it is a space where new ideas are born. Just as Copernicus' theory once did, today the Laboratory is breaking down established patterns in education, opening up new possibilities for learning.

It is no coincidence that Saint-Gobain Poland has chosen the ground floor of the building as its meeting place. By organising co-working sessions and meetings with business partners, institutions, non-governmental organisations and innovators, the company shares valuable knowledge on sustainable development – both in architecture and in the everyday activities of modern business.

Henryk Kwapisz

Public Affairs Director
Saint-Gobain Poland

"The Copernican Revolution Lab caught our attention right from the start. The name itself suggests a place of breakthroughs and innovation – values that are close to the Saint-Gobain Group. We knew that our contribution to this project would be of exceptional importance.

We actively collaborated with Heinle, Wischer und Partner Architekci and the Copernicus Science Centre as the investor, right from the design stage, recommending optimal solutions for this cutting-edge space. The designers were aware of the challenges, especially in terms of acoustics and safety in open, collaborative spaces. In response to these needs, numerous glass partitions were used, and where fire protection was of paramount importance, our Vetrotech systems with high fire resistance were implemented.

In addition, the building also features technologies from Isover, Rigips, Weber, Ecophon and Glassolutions. Although many of them remain invisible at first glance, their functionality cannot be overlooked. One example is our conference space, of which we are particularly proud. It was designed with the participation of our experts, which is why the effect is truly outstanding. Speakers do not need a microphone to be heard perfectly, and conversations, even in larger groups, can be conducted quietly while maintaining full speech intelligibility. It is a space where you can truly experience what acoustic comfort is all about.

When you work on a project with a responsible investor such as the Copernicus Science Centre, you can be sure that the goal – innovation and comfort – will be achieved. But it was equally important to me that I could count on the support of my colleagues from various departments at Saint-Gobain – from legal and purchasing to technical consulting. It is easier to achieve success when you have a committed team behind you. And that was certainly the case of this project."

PRODUCTS

Quick-setting screed binder | **Weber**

Wool for acoustic and thermal insulation of floors and ceilings | **Isover**

Acoustic systems | **Ecophon**

Partition wall systems | **Rigips**

Injection system | **GCP**

Architectural concrete | **Chryso**

Fire-resistant glass | **Vetrotech**

Interior glass | **Saint-Gobain Glass**

Interior glass | **Glassolutions**

Drawing based on source material ©Marek Wołynko

The art of design: architecture that defies boundaries

MUSEUM OF MODERN ART

MUSEUM OF MODERN ART

Warsaw

Can art be defined? Can it be moulded into a shape? Perhaps it is not the form itself, but our emotions that determine its essence?

For years, the area around Warsaw's Defilad Square lay waiting for someone to give it new meaning. Today, a building is rising here that invites people, light and ideas into its world. The Museum of Modern Art. ("MSN") attracts attention, encourages visitors to stop and look inside. It is architecture that intrigues and provokes discussion.

The building of the Museum of Modern Art, inspired by the modernism of the 1950s and 1960s, is both austere and monumental. Its horizontal form counterbalances the Palace of Culture and Science, which dominates over the city. The uniform façade is broken up by a horizontal row of windows, allowing light to enter the interior and giving it a subtle dynamism. Here, every detail serves a function, in keeping with classic modernist principles.

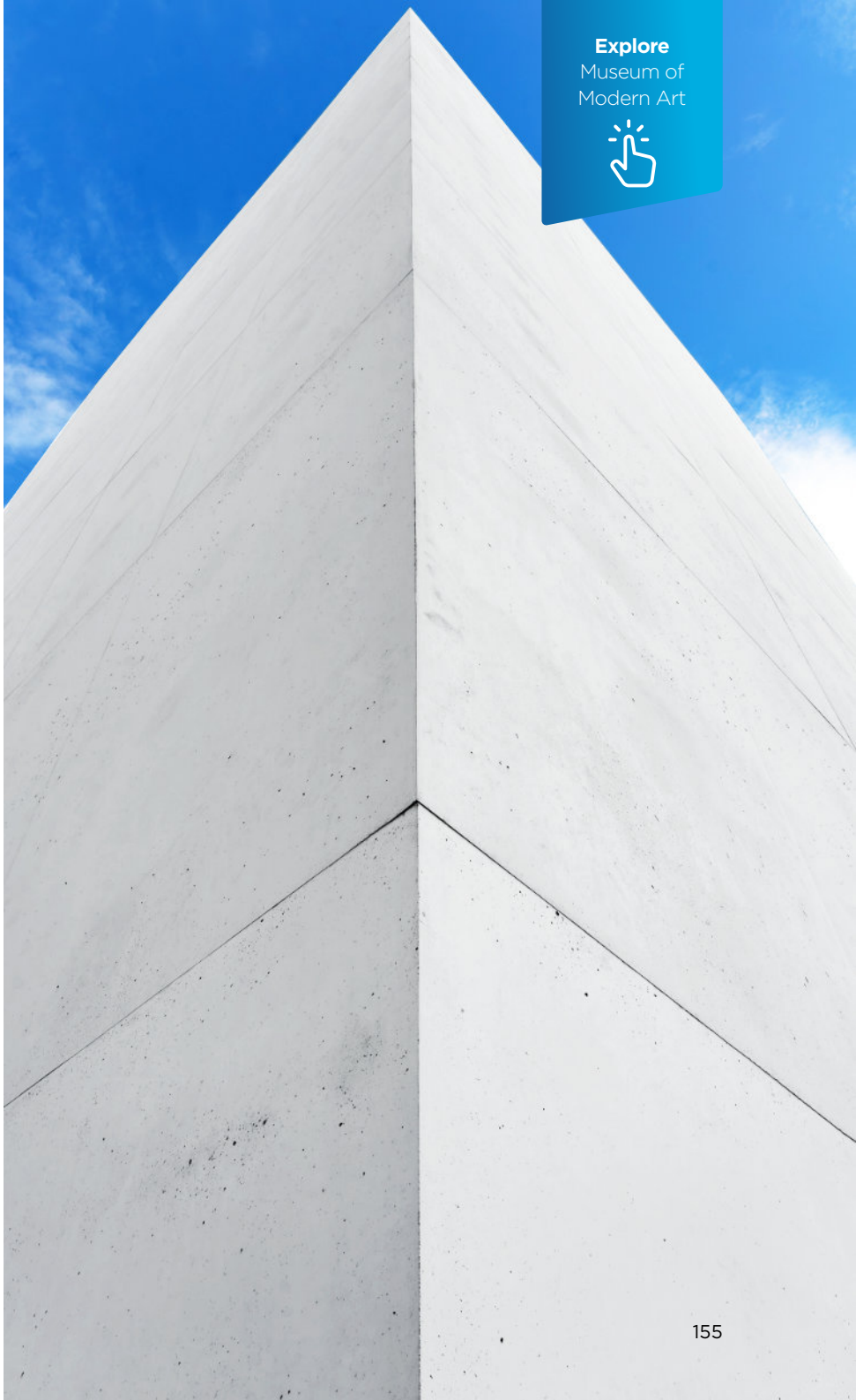
The museum was designed by New York-based **Thomas Phifer and Partners**, in collaboration with **APA Wojciechowski Architekci**, a Polish architecture firm.

What further distinguishes the building is the snow-white dyed-in-mass concrete, which has been used on the façade in a pioneering way, for the first time in Poland and Europe. It is not just a material, it is a manifesto of conscious, solid architecture that is resistant to time. Well-thought-out structural and technological solutions ensure the building's longevity, reducing the need for repairs and maintenance.

The fully glazed ground floor of the museum serves as a public space visible from the outside and accessible to everyone. It is here that the city and art intertwine most strongly, creating a space for recreation and leisure. They encourage open discussions about culture and art as natural elements that build community. Level 0 houses an auditorium, an educational and lecture space, a temporary exhibition gallery, a museum shop and a bistro.

The heart of the foyer is a staircase flooded with natural light, which connects the different levels of the building and organises visitor traffic. Its large windows offer views of the city, while the double staircase, inspired by classic forms, encourages interaction.

On level -1, there is a CINEMAMUSEUM presenting both alternative and mainstream film productions from Poland and around the world, while at the top of the building there are special rooms with a view of the bustling Marszałkowska Street.



Jarosław Kubik

Architect, APA Wojciechowski Architekci

”We had the great honour and pleasure of working with Thomas Phifer and Partners and engineers from Buro Happold on the design of the new building for the Museum of Modern Art in Warsaw.

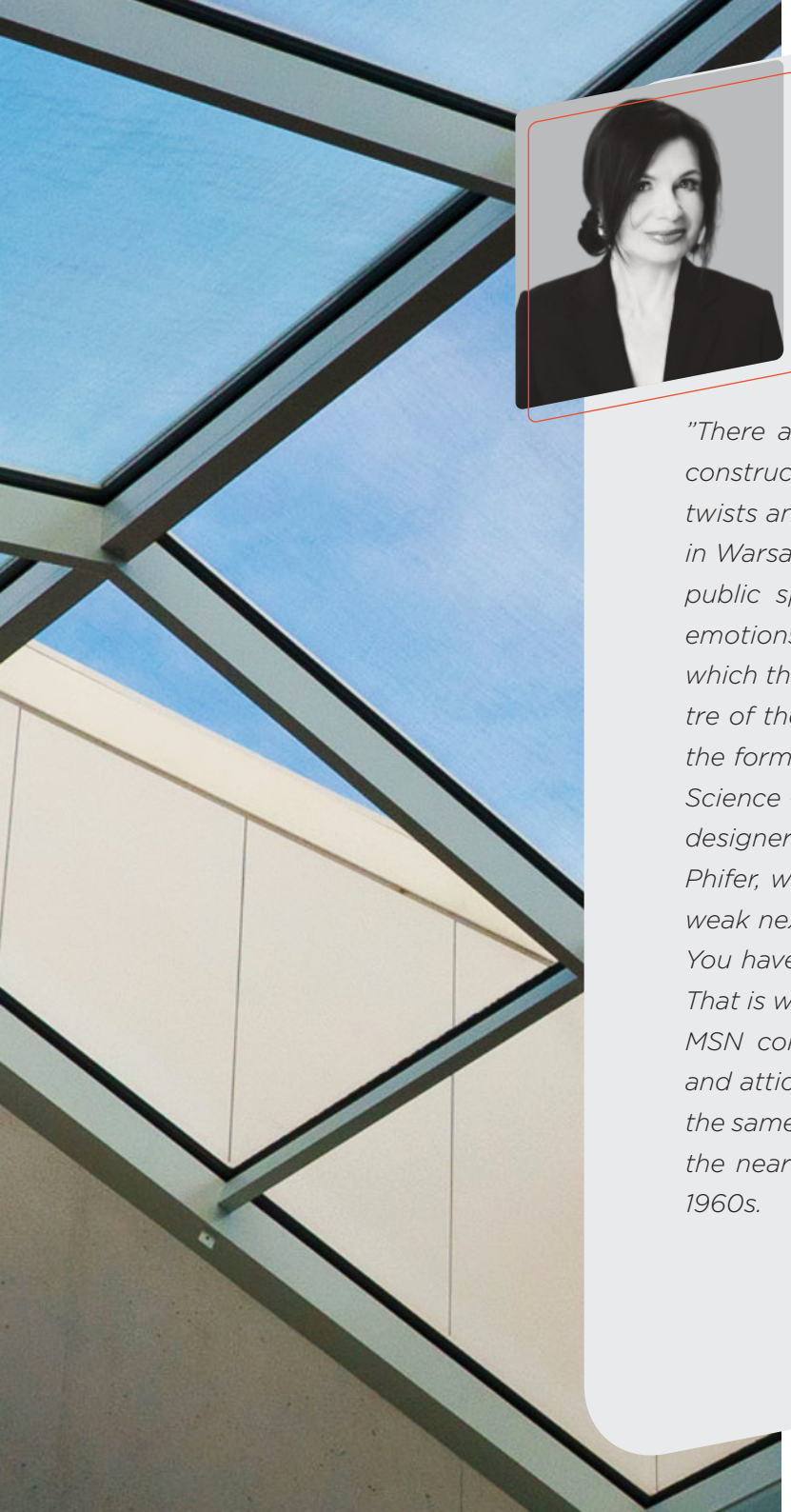
One of the most important objectives of the project was to create a building whose open ground floor would invite visitors inside and, together with the adjacent TR Theatre, contribute to the friendly character of this part of the city.

I would say that the main challenges were related to the location. On the one hand, there was the historical context of the place and the high expectations of Warsaw residents, and on the other, the museum was built on top of operational underground tunnels. Another real engineering challenge was the architectural concrete façade suspended on the building's structure. The use of natural light was key to the interior of the building, whether through large windows in the façade or skylights designed over almost the entire top floor. The use of Saint-Gobain glass made it possible to achieve a light colour that is as close to neutral as possible, which is extremely important from the perspective of the perception of the exhibited art.”

CHALLENGE

The sun creates a unique atmosphere inside the gallery, which evolves throughout the day.

On the first floor, the eastern rooms, illuminated by a wide strip of windows, are bathed in intense sunlight in the morning and then sink into a softer light in the afternoon. At the same time, the galleries on the western side come to life with the rays of sunlight gaining intensity. On the second floor, light enters through skylights, spreading evenly throughout the interior. The roof, known as the ‘fifth façade’ of the building, provides the galleries with a continuous supply of daylight. For this reason, it was important to use solutions that would allow to control the intensity of sunlight and the temperature inside so that these two factors would not adversely affect the perception of the exhibitions or detract from the pleasure of contemplating art.



Ewa P. Porębska

Critic, expert and curator of architecture, expert for the European Union Mies van der Rohe Award and the European Union Public Urban Space Award

"There are few buildings in Poland whose history of construction would be as long, complicated and full of twists and turns as that of the Museum of Modern Art in Warsaw; similarly, there are few places in the Polish public space that would arouse such strong social emotions and expectations as the plot of land on which the museum stands. Its location in the very centre of the capital, on a square marked by a symbol of the former communist era – the Palace of Culture and Science – posed a serious challenge for the museum's designers, because, as the American architect Thomas Phifer, who designed the museum, said, 'You can't be weak next to the Palace of Culture, with all its history. You have to create a building that can stand up to it.' That is why the horizontal, white, clean-cut form of the MSN contrasts strongly with the surrealist, column- and attic-adorned skyscraper from the 1950s, while at the same time engaging in an interesting dialogue with the nearby modernist commercial buildings from the 1960s.

The bright, austere interiors of the building, which form a logical system of white cube exhibition rooms, are dominated by a monumental staircase made of white concrete – undoubtedly the most memorable element of the composition. Precisely arranged openings/glazing in the façade and skylights (made using Saint Gobain products) allow plenty of natural light into the interior, which the architect treats as the basic building block of space. Thanks to this, according to Phifer:

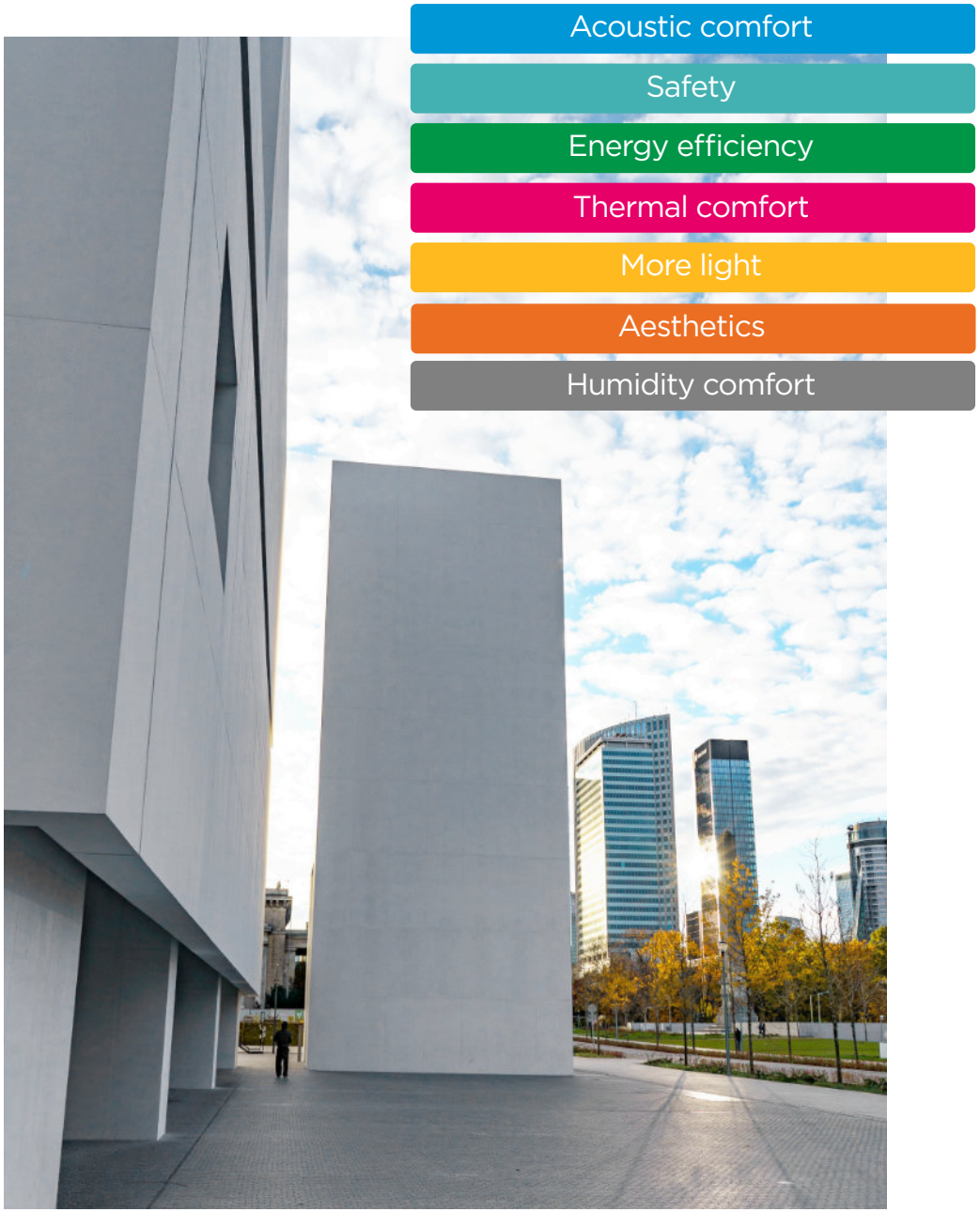
»When you walk onto the top floor, all that light passes through you. (...) You become united with the city and its light (...). This building is the light of Warsaw.«"

SOLUTION

Saint-Gobain Glass provided the solution with its highly selective COOL-LITE® SKN 083 solar control glass combined with ECLAZ® ONE thermal insulation glass, which **resist excessive heat radiation in summer and prevent heat loss in winter**. This solution also guaranteed unchanged **interior aesthetics** and **unrestricted access to daylight**, thanks to the use of extra-clear DIAMANT® glass for all components, which is characterised by excellent transparency and true colour reproduction. The additional use of warm edge Swisspacers means that the glass units used are characterised by **excellent thermal insulation, which improves energy efficiency** of the investment.

Another factor contributing to **optimum heat balance** of the building was Isover glass wool used in the construction of ceilings and walls. Suspended ceilings, partition walls, shafts and front walls were designed using Rigips systems. Ecophon's seamless acoustic plaster system was also used in the building design **for more effective noise reduction**.

The underground part of the building structure, with its highly complex foundation directly above the first line of the underground railway, required effective, durable external heavy-duty **waterproofing systems** from GCP Preprufe®, Bituthene® and Servidek® to ensure long-term protection of the structure. The durability of the concrete, which constitutes the majority of the structure, was achieved through the use of new-generation admixtures from Chryso.



Michał Szymański

Sales Director, Chryso Poland

"The Museum of Modern Art in Warsaw is an iconic building in which concrete plays a key role, both structurally and aesthetically. At Chryso Poland, we are delighted that our innovative concrete admixtures have contributed to the construction of this unique building.

Thanks to the use of our products, the concrete in the museum has achieved excellent mechanical properties, guaranteeing the durability and safety of the structure. At the same time, a perfectly smooth, minimalist surface has been achieved, which emphasises the modern character of the building. Dedicated solutions also ensure resistance to weather conditions, which extends the building's service life.

We are proud to have been able to participate in the implementation of such a high-profile project, combining artistic vision with advanced technology. Our solutions have made it possible to marry design with durability, responding to the challenges of contemporary architecture."

OUTCOME

Set amid the bustling streets of downtown Warsaw, the sprawling and peaceful structure of the new Museum of Modern Art harmonises with its surroundings. Its austerity and simplicity are no accident – they provide a counterpoint to the multitude of artistic forms filling the exhibition galleries and the diversity of contemporary art narratives.

The MSN building is a platform for ideas, a space for reflection. It is a backdrop that does not overwhelm, but allows you to see more. It is a place where architecture and art become one.

Tomasz Pręcikowski

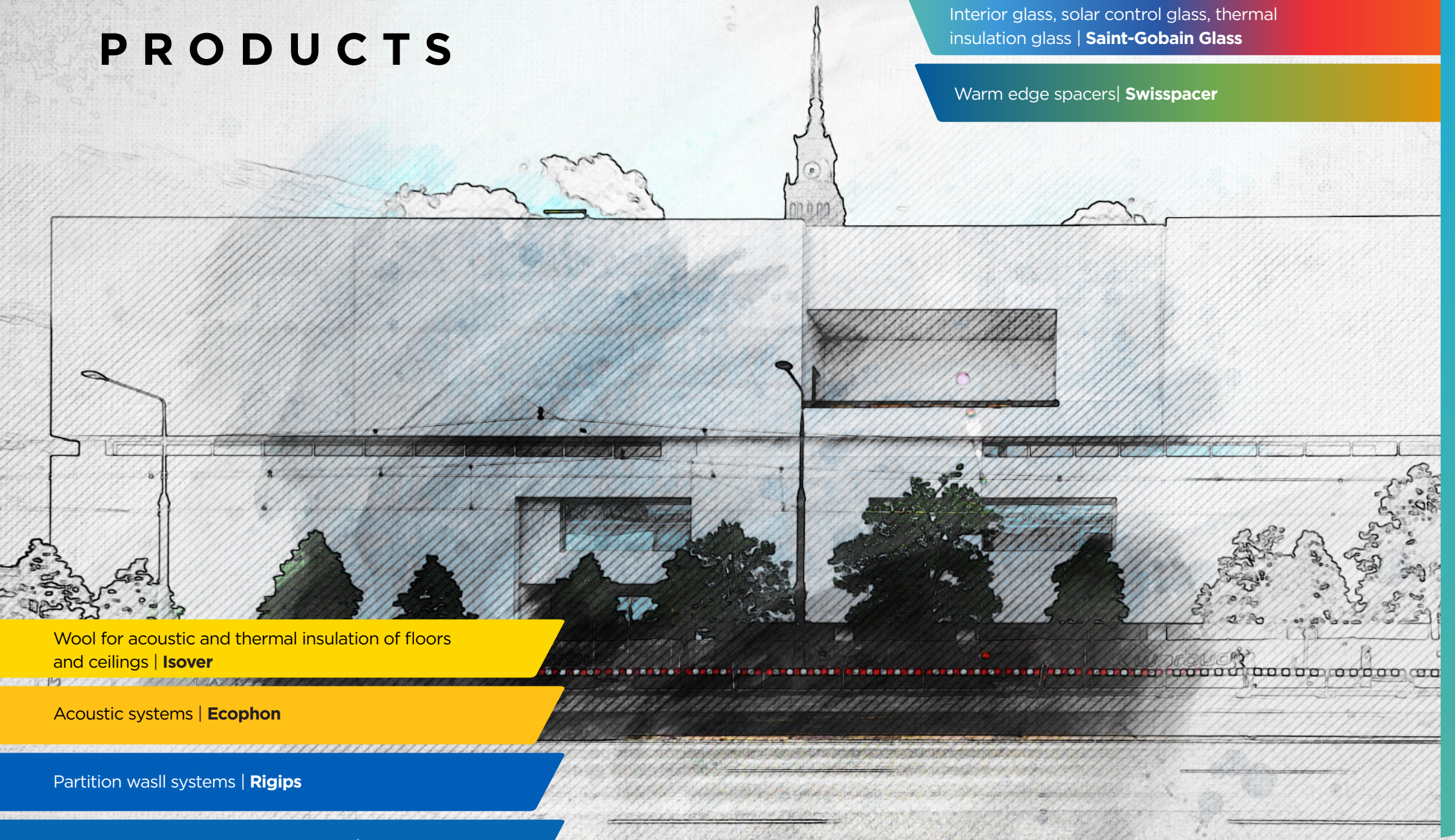
Sales Director, Eastern Europe, GCP Specialty Building Materials

"The construction of the new seat of the Museum of Modern Art was a unique engineering challenge, especially in terms of the foundation and securing of the underground part. The museum's foundation slab is located only 2–2.5 metres above the first line of the underground railway, and the station's diaphragm walls intertwine with the building's foundation slab, supporting it. The underground section, which houses valuable exhibits, conservators' studios and technical rooms, required appropriate thermal and humidity conditions to be ensured by effectively securing the reinforced concrete structure from the outside.

We had the opportunity to participate in this project from its inception, working with Thomas Phifer & Partners in New York, APA Wojciechowski Architekci, Happold Engineering, and the general contractor, Warbud S.A. During the design phase, we analysed the hazards and risks associated with the underground section, taking into account the soil and water conditions and the difficulties in founding the building. We also developed dedicated solutions for critical elements. During the construction stage, we recommended proven contractors and provided technical support at every stage of the process.

We are very pleased that that by using our modern and advanced heavy-duty waterproofing systems from GCP Preprufe®, Bituthene® and Servidek®, the underground part of the MSN building and other similar structures around the world are permanently and effectively protected against moisture, pressurised water, aggressive environments and biological contamination."

PRODUCTS



Interior glass, solar control glass, thermal insulation glass | **Saint-Gobain Glass**

Warm edge spacers| **Swisspacer**

Wool for acoustic and thermal insulation of floors and ceilings | **Isover**

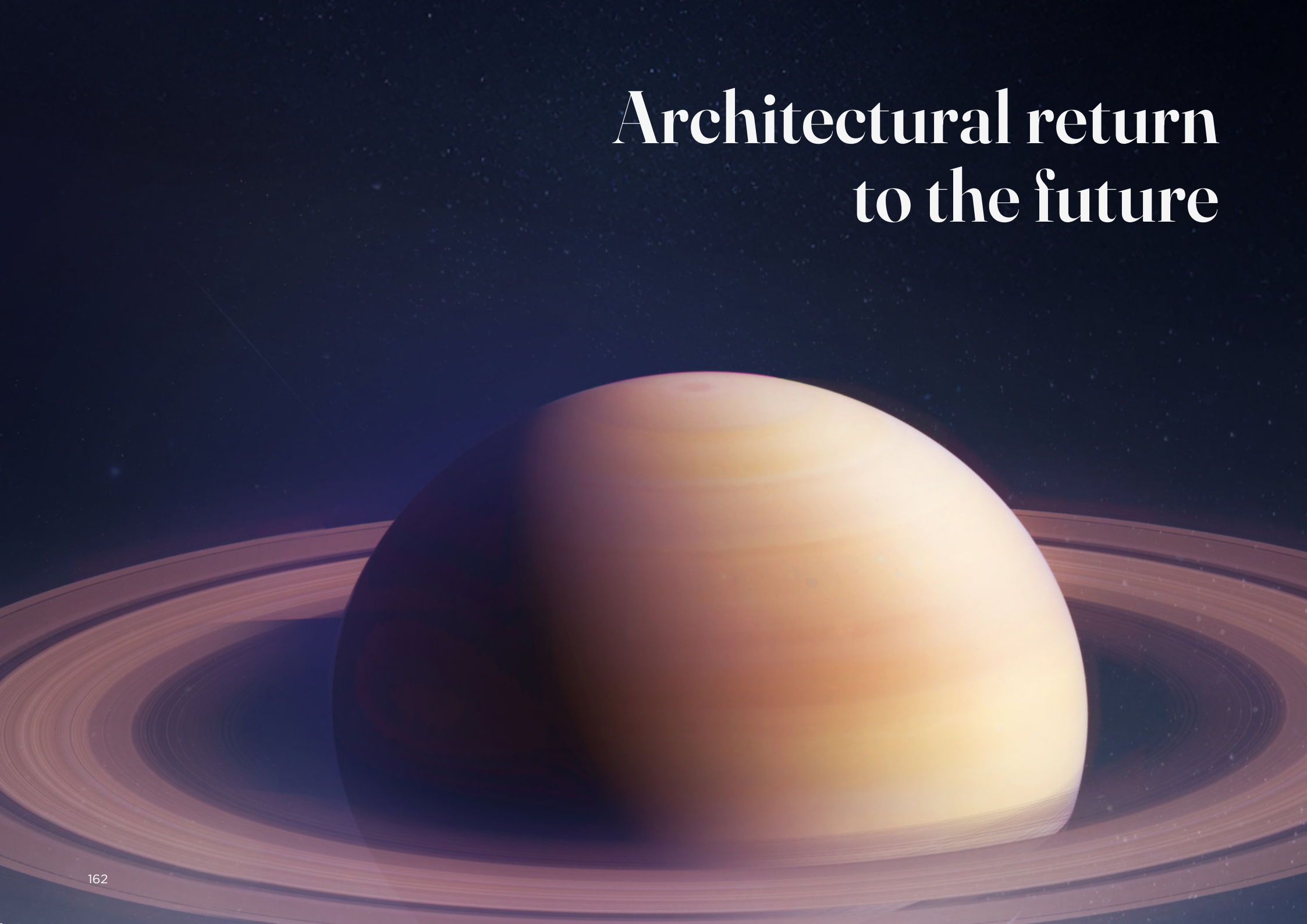
Acoustic systems | **Ecophon**

Partition wasll systems | **Rigips**

Water-proofing and injection systems | **GCP**

Architectural concrete | **Chryso**

Architectural return to the future



BUS STATION IN KIELCE

Photo by ©Bartosz Makowski

BUS **STATION**

Kielce

We don't need a DeLorean to go back in time – all we need is a bus to Kielce, where you'll find an iconic railway station straight out of the futuristic visions of communist Poland.

Named ‘The Saucer’ due to the original shape of its rotunda, it was a bold design for its time. Listed as a historic monument and recognised as an architectural landmark of the region, it underwent an impressive modernisation in 2020, retaining its status as an iconic place on the map of Poland.

Photo by ©Bartosz Makowski

Explore
Bus Station
in Kielce

The Kielce bus station, with its unusual shape resembling a spaceship, is located in the very centre of the city on Czarna Street. Its construction began in 1975, and the building was opened in 1984. The designers envisioned it as a functional terminal with collision-free traffic, which would take over all long-distance, regional and employee road transport. The building was designed to impress with its unusual shape and quality of construction, which were ahead of its time. During the communist era, it was hailed as an innovative technological and architectural achievement.

Unfortunately, in those years, contractors had problems with obtaining reliable materials. They had to use what was available, even though the quality was not entirely satisfactory. As it turned out, the pressure on time and low prices quickly took its toll. After 1989, the eyecatching dome with skylights began to be stained by water, and corrosion appeared on the structural elements. The passage of time, unfavourable weather conditions and poor-quality components caused the ‘cosmic’ station to gradually fall into a state of disrepair.

Fortunately, the city authorities decided to restore the bus station to its former glory by announcing an architectural competition for its modernisation. In 2018, the competition was won by the **Kamiński Bojarowicz Architekci** studio, and work began on improving transport links while maintaining the functionality and iconic appearance of the building. The investment was completed in 2020, revealing a new, yet still familiar, look of the station.

CHALLENGE

Designers who have a keen sense of social trends and investor expectations are also able to capture the atmosphere of bygone years and restore it to life with due precision. They upgrade the renovated buildings with modern solutions so that the structure does not become outdated too quickly. This was successfully achieved in the modernisation of the iconic bus station.

In order to preserve the former atmosphere of this place, the architects had to focus primarily on providing travelers with optimal conditions inside the building at any time of the year. An important aspect was to illuminate the space and ensure excellent visibility, i.e., an unobstructed view of the platforms. As you can probably guess, glazing is an important feature of this design.

Marcin Kamiński

Kamiński Bojarowicz Architekci

Bartosz Bojarowicz

Kamiński Bojarowicz Architekci

The challenge of redeveloping the Bus Station in Kielce, a modern monument and icon of our relatively small provincial town, was primarily an attempt to preserve the spirit and values instilled in the building by its original designers – M. Kubala, E. Modrzejewski, J. Radkiewicz, and A. Grabiwoda, while at the same time meeting present-day needs.

The common idea was to provide a good overview of the platforms surrounding the building from the interior and to create a visual interaction with the immediate surroundings of the complex.

The Kielce Bus Station also has cultural and social functions, housing a media centre which, among other things, organises interesting events, not only for passengers.

It was therefore necessary to avoid excessive sunlight and overheating of the interior, which was achieved by using a facade with electronically controlled solar light transmission without compromising visibility, using SageGlass technology."

Photo by ©Bartosz Makowski

SOLUTION

Durability

Safety

Energy efficiency

Thermal comfort

The round shape of the building offers excellent ergonomics and desirable lightness. The modernization work consisted of reinforcing the original structure and adapting the space to the current needs of users. Achievement of the **thermal comfort** and **safety of the passengers** was possible thanks to the use of innovative glazing from Saint-Gobain Glass and Glassolutions.

The exterior walls of the building are made of SageGlass electrochromic glass. A total of 640 panels, each with a surface area of approx. 9 m^2, were placed on a circular plan and fixed at specific points. The Kielce bus station is the first building in the world where such a process has been successfully implemented. The uniqueness of this solution also lies in the properties of the glazing itself. Integrated external sensors control the amount of light and heat entering the building, changing the transparency of the glass. Thanks to electrons passing through a special coating, the glass automatically changes color, blocking some of the UV radiation.

Blinds or other solutions controlling the amount of sunlight entering the rooms become unnecessary. Such a solution is **environmentally safe** and additionally makes it easier to **obtain environmental certificates**.

The thermal comfort of passengers and employees is further enhanced by COOL-LITE XTREME 61/29 II and 60/28 II solar control glass installed on the façade (including the mezzanine floors) and Isover mineral wool in the partitions.

The interior walls are made of Contraflam Structure 30 fire-resistant glass. Functional fire-resistant glass in class EI30 from Vetrotech ensures maximum level of **fire safety** and **guarantee mechanical resistance**. And thanks to the precise edge finish, the glass structure does not disrupt the visual consistency of the space, but rather emphasizes its lightness, purity, and elegance.

Photo by ©Bartosz Makowski

Grzegorz Sołtys

Vetrotech Sales Director for Eastern Europe Saint-Gobain Poland

"The specificity of this project was to preserve the iconic form of the building while raising its standard. For the architects from the Kamiński Bojarowicz Architekci studio, it was crucial from the outset to use modern glazing that would combine thermal comfort with sun protection. That is why SageGlass was chosen – glass manufactured at the Saint-Gobain factory in the United States, which adjusts light transmission depending on weather conditions.

Due to the shape of the building – a circular rotunda – the design required non-standard glass installation. We used point fixing with Lilli System brackets, which is the first project of this kind in Poland and worldwide. Each pane was divided into three independent zones controlled automatically or remotely using a phone or tablet or weather sensors located in the silicone joint between the glass panels. The dynamic solar control façade constructed in this way is unique in Poland.

The facade of the Bus Station in Kielce perfectly combines the architectural identity of the building with modern technologies. For our company, it is an example of openness to innovative solutions and readiness to take on ambitious design challenges."

OUTCOME

The futuristic bus station in Kielce is a timeless symbol for many people.

A building like this simply had to be restored to its former glory. A thorough modernization eliminated its weak points and former design flaws, highlighting the advantages of modern space. Anyone hungry for architectural thrills will surely enjoy this leap in time.

Jerzy S. Majewski

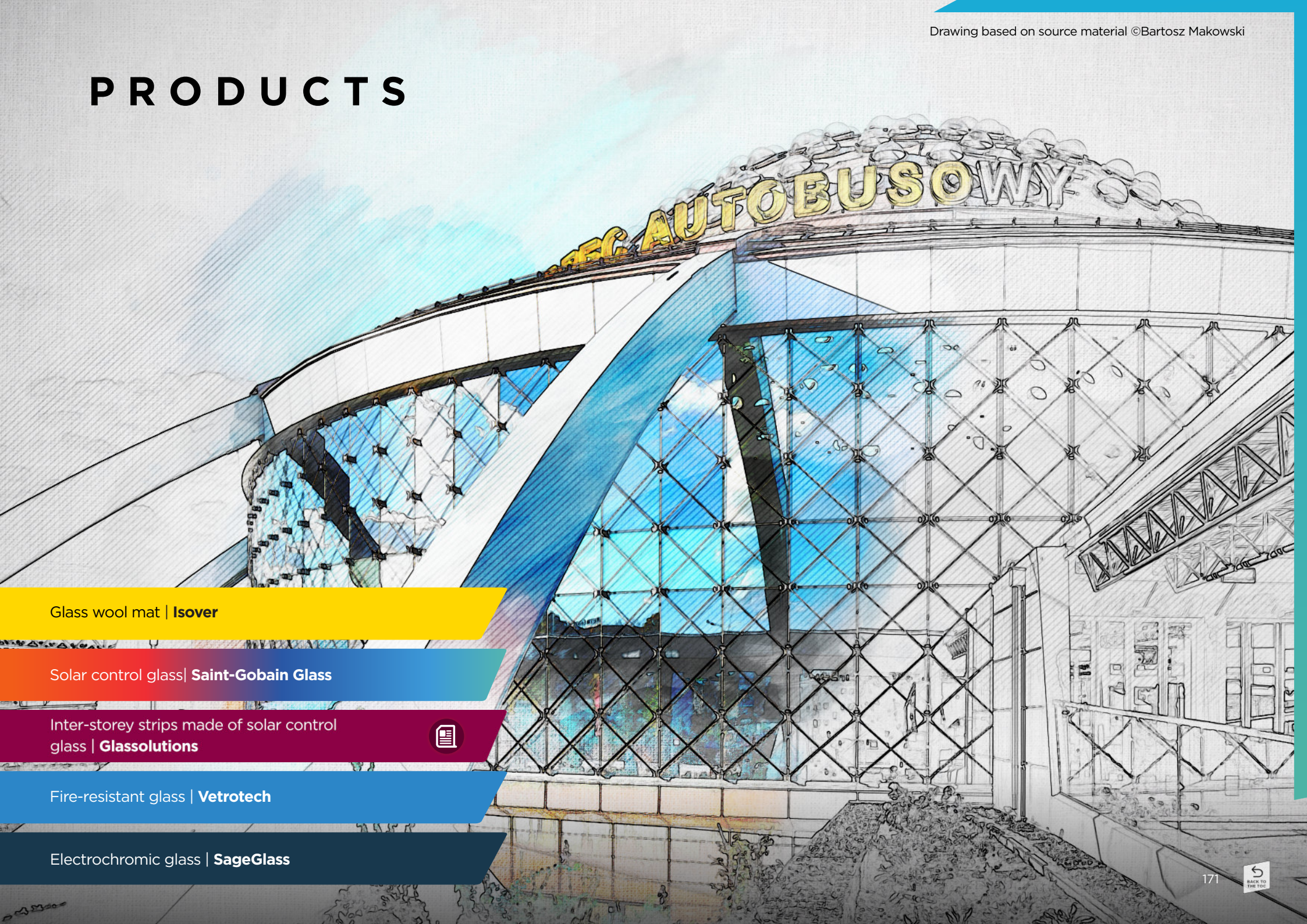
Journalist, columnist, Warsaw expert, art historian, journalist for the monthly magazine Stolic

”The construction of the bus station between 1975 and 1984 was one of the greatest architectural events in Poland at that time.

Innovative planning solutions incorporated into a grand urban design went hand in hand with an original form and formal and technical solutions that were pioneering at the time of the Polish People's Republic. The building was designed by Edward Modrzejewski and Jerzy Radkiewicz, in accordance with the concept created by an engineer Mieczysław Kubala, based on a central plan of an island, somewhat reminiscent of an airport terminal.

Bus platforms are grouped around the building housing a multi-level central hall covered by a dome shaped like a flying saucer. Underground passages beneath the bus platform, radiating out like spokes in a bicycle wheel, completely separate pedestrians from road traffic. Contemporary designers responsible for the modernization of the station (Marcin Kamiński and Bartosz Bojarowicz) were faced with the question which values should be preserved in a building that was worn out, poorly built, but nevertheless an example of excellent architectural design? Ultimately, they created a new structure, saving what constitutes the building's timeless value – its architectural concept and form.”

PRODUCTS



Drawing based on source material ©Bartosz Makowski

Glass wool mat | **Isover**

Solar control glass| **Saint-Gobain Glass**

Inter-storey strips made of solar control glass | **Glassolutions**

Fire-resistant glass | **Vetrotech**

Electrochromic glass | **SageGlass**

Echoes of past centuries in the new history of the Sukiennice

SUKIENNICE AND THE RYNEK UNDERGROUND

SUKIENNICE AND THE RYNEK UNDERGROUND

Kraków

The cobbled square resounds with the hubbub of merchants and the clatter of wooden carts. The air is filled with the smell of freshly tanned leather, wax, and aromatic spices brought from faraway lands.

Stalls lined up along the walls bend under the weight of bales of cloth, precious silks shine in chests, corals glisten on countertops, and craftsmen offer elaborately decorated products...

The origins of the Sukiennice (Cloth Hall) date back to the reign of Bolesław the Chaste in the 13th century. At that time, it was two modest rows of market stalls separated by a narrow street. Over the years, the Cloth Hall underwent numerous changes, and its current appearance is the result of renovation work carried out at the end of the 19th century. It was then that, thanks to the architect and conservator Tomasz Pryliński, Sukiennice gained stone arcades, giving it its recognizable shape, as well as architectural details designed by the artist Jan Matejko.

Although the medieval bustle of merchants has died down, the Sukiennice still remains a place of trade. Under its roof, you can find souvenirs, jewelry, and works by local artists. The upper rooms house the 19th-Century Polish Art Gallery, a branch of the National Museum, where you can admire masterpieces by artists such as Matejko, Chełmoński, Malczewski and Leonardo da Vinci's famous "Lady with an Ermine."

Let us now move on to 2007. At that time, a comprehensive revitalization of the Sukiennice began, aimed at restoring its former glory and adapting it to the contemporary needs of visitors. The Krakow-based **architecture firm ARCHECON**, managed by **Professor Andrzej Kadłuczka**, undertook the renovation of both the exhibition space and the backstage area. Modern ventilation, air conditioning, and lighting systems were installed to ensure appropriate conditions for storing valuable works of art. As a result of the renovation, the museum gained an additional 1,000 m^2 of space, and as much as 120 tons of rubble was removed from the construction site. The project also involved the creation of new spaces. And so, today, the Rynek Underground stretches out beneath the feet of passers-by. It is a museum that reveals the secrets of medieval stalls, cobblestones, and trade routes.

Explore
Sukiennice
and Rynek
Underground

CHALLENGE

It took four years for the Sukiennice to regain its former glory. The revitalization required both precise conservation of the smallest details of the building and an innovative approach to design. The main goal was to bring together tradition and modernity. On the one hand, it was important to protect the valuable works of art and preserve the historic character of the building, and on the other hand, to introduce innovative technological solutions while fully maintaining the unique spirit of the Sukiennice.

Dr Cezary Buśko

Archeologist, Author of the concept for the Rynek Underground exhibition

"The idea of creating the Rynek Underground in Krakow was undoubtedly ahead of its time."

The concept of adapting the remnants of a medieval town for museum purposes and the use of pioneering exhibition technologies met with resistance from a significant part of the local cultural establishment. However, the completed project is now not only an inspiration for creative museum curators, but also one of Krakow's leading tourist attractions.

The aim of the museum is to popularize the history of Krakow among a wide audience, so it has been designed with people with limited mobility in mind, and the exhibition is accessible to both the general public and history experts.

I can confidently say that this project is the crown jewel of my professional achievements. I am particularly proud of staging it within the original medieval cultural setting and using authentic medieval props. It was a unique challenge, and its successful completion gave me great satisfaction."

Photograph of the underground passages beneath Krakow's Main Market Square

SOLUTION

Durability

Safety

Aesthetics

In response to the challenges of maintaining appropriate conditions in the museum, innovative technologies were used. The Vario® vapor barrier system from Isover, responsible for **proper moisture management** in partitions, ensures the structural durabiliy for many years. Super-Mata, on the other hand, takes care of maintaining **the right indoor microclimate**, helping to create optimal conditions for displaying works of art while minimizing the risk of damage. In turn, GCP's specialized waterproofing system, used in the ceiling above the museum, provides comprehensive **protection of structures against moisture**.

The design also had to meet strict static requirements to ensure **complete safety** of the visitors. With this in mind, Saint-Gobain Glass has created a glass floor with an anti-slip pattern that combines functionality with modern design. Its surface **improves grip**, and the low-iron glass used in this solution offers **high transparency and overall visual clarity**, emphasizing the elegance of the space.

Kuba Błażewicz

Market Development
Manager Saint-Gobain

"The renovation of a building like the Krakow Sukiennice is a huge challenge for everyone involved, from the designer and material manufacturers to the contractor.

The museum's collection requires appropriate storage conditions, including temperature and humidity control. The renovation was primarily aimed at preserving the historic character of the building, protecting the works of art stored there, and creating a modern museum tailored to the needs of contemporary tourists.

In the case of Sukiennice, the quality of the work was guaranteed by proven solutions – and here the Saint-Gobain Group rose to the challenge, offering a set of Isover products that have been used in residential construction for many years, consisting of Super-Mata glass wool, which provides excellent thermal insulation, and Vario® variable diffusion resistance film, which enables proper moisture management in the partition. The Sukiennice is probably the oldest shopping mall in Poland, and although what is visible to the eye certainly delights both residents and tourists, for me one of the hidden gems is the abovementioned Super-Mata+Vario® set, which ensures the durability of the renovation work."

OUTCOME

Thanks to revitalization, the Sukiennice and the Rynek Underground have become one of the most important points on the cultural map of the Polish Royal City.

Despite the lapse of many centuries, the Sukiennice is still bustling with life, serving as a monument to the city's trading tradition and connecting the old and modern facets of Krakow.

Photo by ©Saint-Gobain/Shutterstock

PRODUCTS

Glass wool: insulation of ventilation ducts, insulation of partition walls and frame structures, vapor barrier film | **Isover**

Liquid waterproofing | **GCP**

Glass floors made of laminated safety glass | **Saint-Gobain Glass**

OUR BRANDS

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Manufacturer of flat glass for the construction, automotive, furniture and household appliance industries.

MORE

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Solutions, blocks and hollow bricks made of high-quality expanded clay.

MORE

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Innovative solutions for concrete, cement, infrastructure and prefabricated buildings.

MORE

WEBER

Thermal insulation systems, decorative plaster, facade paint, adhesive mortar, floors and waterproofing.

MORE

ISOVER

Comprehensive insulation solutions. Leading mineral wool manufacturer.

MORE

ECOPHON

Manufacturer of soundabsorbing suspended ceilings, wall panels and screens.

MORE

SWISSPACER

Leading manufacturer of warm edge spacers for glass bonding and window bars.

MORE

RIGIPS

Complete system solutions for drywall construction: partition walls, ceilings and more.

MORE

VETROTECH

Safe and fire-resistant glass solutions for the construction and maritime industries.

MORE

GCP

Construction technologies, concrete and cement additives, building materials.

MORE

PAM

Complete ductile cast-iron Systems for water supply and sewage systems.

MORE

Our catalogue of reference projects demonstrates the wide range of services we offer in various market segments. We aim to strengthen our leading position in these areas by offering comprehensive, tailor-made solutions and an innovative approach that combines the experience and expertise of Saint-Gobain brands and experts.

Our goal is to complement market offer and adapt it to local needs by working with a variety of partners, starting with architects and investors.

We create dedicated solution portfolios and project teams for the following sectors:

- EDUCATION
- HEALTHCARE
- HOUSING CONSTRUCTION
- OFFICE
- HOTELS
- PUBLIC BUILDING

We support innovative ideas, contributing the experience and expertise of Saint-Gobain to build in a modern and sustainable way.

AND THIS IS JUST THE BEGINNING!

Our journey through unique construction projects has just started. 'The Power of Archinature' will be regularly updated with new inspiring projects and stories.

ADD IT TO YOUR 'FAVOURITES' AND FOLLOW OUR SOCIAL MEDIA TO STAY UP TO DATE WITH THE LATEST PROJECTS.

SAINT-GOBAIN

MAKING THE WORLD A BETTER HOME