

architectum

INTERNATIONAL MAGAZINE FOR BRICK ARCHITECTURE

IN THIS ISSUE:

- Combination of old and new
- Creating space through extension
- New possibilities of use

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CHRISTOF DOMENIG
CEO Wienerberger Building Solutions

UPGRADING EXISTING BUILDINGS, SAFEGUARDING THE FUTURE

Architecture can make a significant contribution to creating a world that is sustainable and liveable for all. Renovating, extending, or upgrading existing buildings with brick are all options for responding to the issues of growing cities, demand for space, and excessive consumption of resources. There are many ways to integrate the advantages of modern, functional architecture into old buildings, without having to sacrifice their original charm. Ceramic building materials offer advantages in every respect, because they are naturally robust and insulating, and also versatile, allowing the creation of sophisticated architectural designs.

This edition of *architectum* showcases some outstanding examples of brick architecture. They demonstrate the diverse range of approaches that can be taken when renovating existing buildings, both in terms of visual design and building structure. The projects also illustrate the different ways that clay building materials can be used, and how they bring out and emphasise the character of the existing building. The key focus of the renovation projects tends to be restoring the original state of usability, maximising comfort, and updating the brick building to meet modern needs and standards. The extension projects highlighted in this issue put special emphasis on consistency and continuing to respect the building structure in all ways. Finally, the variety of effects that can be achieved with brick mean that the upgraded buildings featured here can truly shine in their repurposed roles and potential uses.

All these different ways of renovating and redesigning buildings have the advantage of ensuring the long-term use of the buildings and increasing their value. Ceramic building materials shape urban landscapes and contribute not only to contemporary architecture, but also to providing sustainable solutions for future generations.

Enjoy reading!

Christof Domenig

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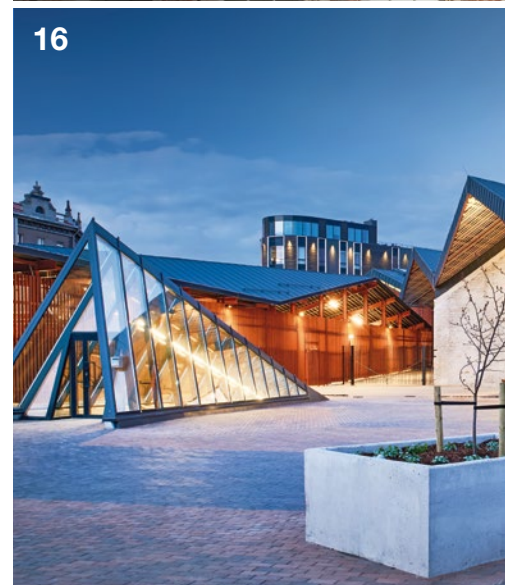
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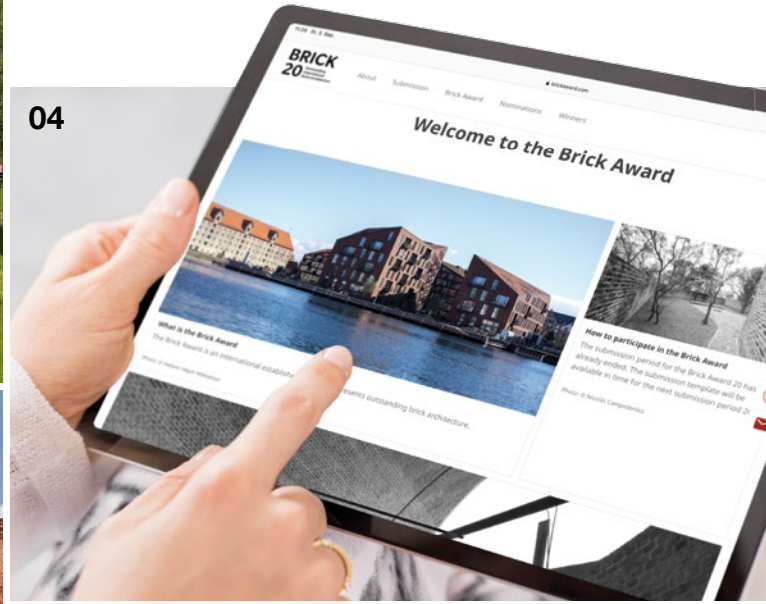


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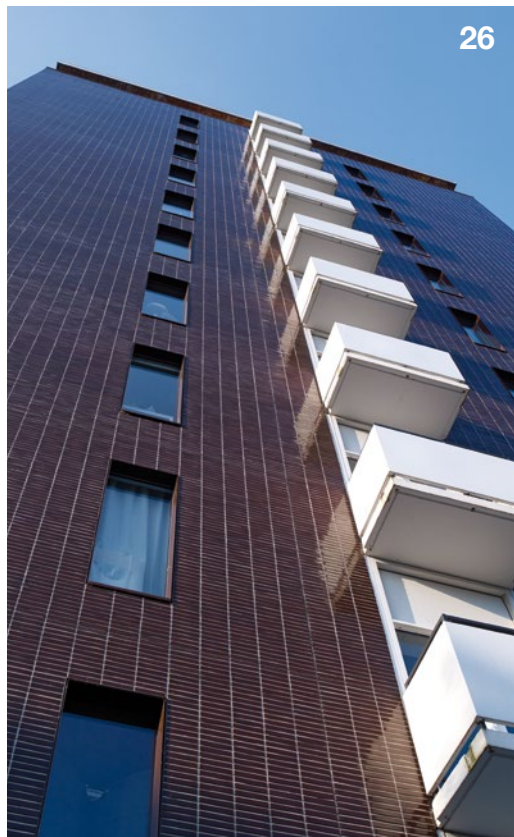


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BRICK AWARD 20: INTERNATIONAL AWARD FOR EXCELLENT BRICK ARCHITECTURE

AWARD CATEGORIES:

The Brick Award 20 will be awarded in the following categories:

Feeling at home: Single-family homes, semi-detached homes and small housing developments.

Living together: Multi-family dwellings

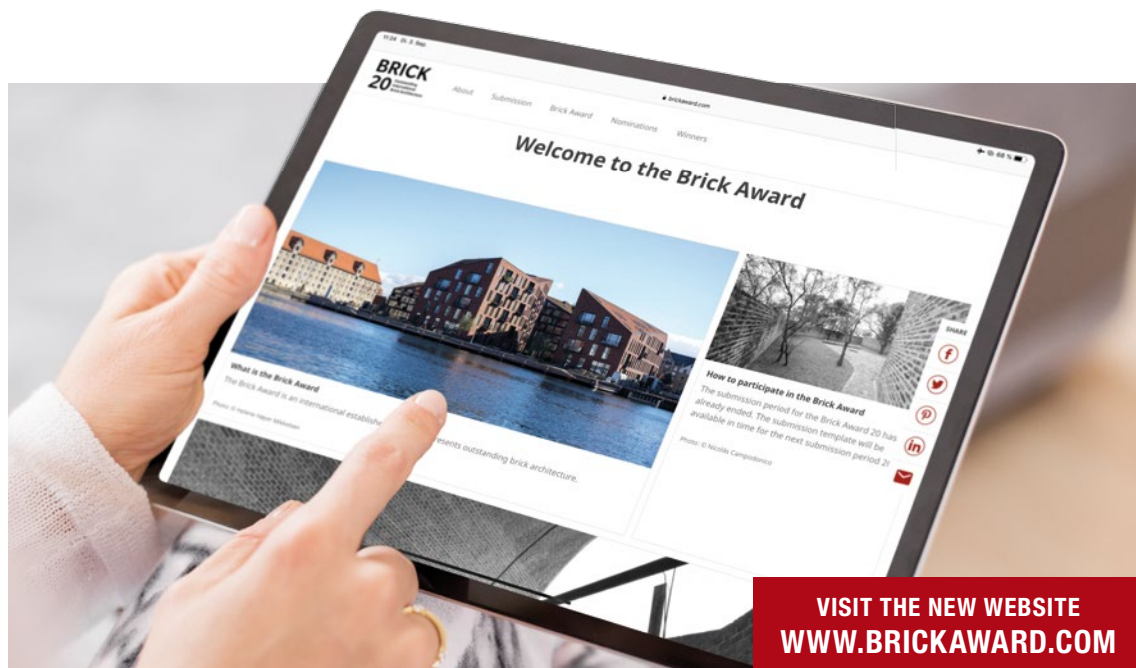
Working together: Commercial buildings, office and industrial buildings

Sharing public spaces: public buildings for education, culture and health, public spaces and infrastructure projects

Building outside the box: innovative concepts and possible applications of bricks, the use of new construction technologies, special brickworks, custom-made bricks and new mouldings

PARTICIPATION CRITERIA

- Innovative design and architectural concept
- Ceramic building materials play a major role in the project (however, the use of Wienerberger products is not a requirement)
- High quality in terms of aesthetics, form and design
- Interaction of functionality, sustainability and energy efficiency



For more than a decade, Wienerberger AG has been organising the biennial international Brick Award, creating a platform for showcasing excellent brick architecture and its architects. The 50 nominations for 2020 are now confirmed.

Wienerberger launched the Brick Award in 2004 to show just how exciting, unusual and modern brick architecture can be. Since then, projects from around the world involving clay building materials have been nominated to compete for the award in an independent competition every two years. Projects that employ a wide variety of ceramic building solutions can be submitted: from backing bricks and facing bricks to clay roof tiles and paving bricks. The Brick Award includes five different categories and the winners are chosen by an inter-

national jury of renowned architects. The first prize (including first place in the relevant category) wins a sum of € 7 000 and the four other category winners receive € 5 000 each. A total of 644 amazing projects were submitted by architects from 55 countries for the Brick Award 20.

NEW WEBSITE The Brick Award website was given a makeover in the summer of 2019. Its clear and simple design presents all the nominated projects in detail, with exciting videos showcasing the winning projects. Click through the latest nominations for the Brick Award 2020 at www.brickaward.com and be inspired by exceptional architecture. The current Brick Book will also be published to accompany the award ceremony. It presents the 50 shortlisted projects, including the winning projects. The ninth edition of the Brick Book will be released at the award ceremony in June 2020. ■

The Brick Award itself was honoured in 2019: With the Grand Prix of alpha awards in the category 'Marketing', the Brick Award received the most prestigious prize in the award industry in German-speaking countries.



THE PRINCIPLE OF FLOW

The Ugala Theatre in Viljandi opened its doors for the first time in 1981. Since then, it has developed into an institution that houses everything from children's performance to international classical music. The architects from R-Konsult, who had originally designed the building, were commissioned to renovate the extraordinary venue.

The original Ugala Theatre was built 30 years ago and at that time was one of the most modern buildings in the Baltic States. What is the challenge of renovating such a prestigious building? Were there restrictions or unexpected obstacles?

Architect Irina Raud: Reconstructing a building that was our own design after 30 years was an interesting challenge especially as it has now been declared under protection – a landmark of 20th century architecture. In general, it is more labour-intensive to reconstruct an existing building than to design a new one. You have to consider what to keep and what to add. Every angle needs to be remeasured. A good renovation means that it will go unnoticed. The building was reopened in autumn of 2016. The idea was that visitors will then step into a fresh, but by no means new building. As the original ideas and functionality are still working well after all these years we did not have to make any fundamental changes.

Which role do the right materials play in this context?

The exterior of renewed Ugala resembles the so-called old version. If you took two photos of Ugala's new and old building, they would look completely alike. The old façade stone was removed, but it was replaced with a similarly designed and stacked red brick. That is why cooperation with Wienerberger worked so well for us. The smooth red bricks produced in the Aseri factory were perfectly suitable. In addition, specially designed bricks were made for the project and we used a lot of brick plates and corner plates, to reflect the original visual character of the theatre.

What was the vision behind your design? What inspired you?

When architect Inga Orav and myself went to see the future site of the theatre back in 1969 it was a grey and rainy day. There were a number of small sheds >

The architectural idea of a brick building built in terraces came to the architects during their first visit to the site.

»We managed to redesign the building so nothing was taken from the visitor experience – instead we found ways to use the building more and more expediently.«

Erkki Tammeleht,
architect R-Konsult



> on the land with roofs wet from the rain that shined red from rust. The roofs created a bright contrast with the grey sky. That is what brought about the idea that the new building should be red – red brick.

The Ugala is a unique and strong building, but still merges into the surrounding environment. How does architecture manage to do this?

In functional and spatial design of Ugala, the creek that runs through the area was our main inspiration, as well as the high greenery area of the cemetery at the back of the land. Merging with nature, the theatre park rises as terraces and continues with different levels of the building up to the stage tower. This creates a situation where a large building was no longer visually as vast but seemingly a part of the landscape. That is how we felt at the time and this approach was successful.

How much do details matter?

The existence of original details in the Ugala theatre building is vital. Starting from the way external wall bricks are laid up to door handles and light fixtures. It is a challenge that I always happily accept. In the old Ugala building, there were architectural and interior architectural details that could definitely be called originals because you would not see them

anywhere else, as many details had to be invented for the initial project. Nowadays, we have a lot of wholesale products, which is the reason why today's architecture has relatively little detail. Mass production is taking over and there are increasingly few original solutions, but even so, one of the principles of Ugala's renovation was to use as much work by Estonian designers as possible. The custom bricks made especially for us also contribute to the unique character of the theatre.

Were the people who actually use the building (actors, employees, visitors etc.) involved in the renovation project? If so, how?

Cooperation with the theatre was an integral part of the reconstruction project. Their ideas and suggestions laid the foundation for our work. For example, the theatre staff wanted a roof for the café terrace on the second floor. The architect's role is, and hopefully will be in the future, to create an enjoyable environment, an environment that users do not have to think about but can simply use and feel comfortable in. We have improved the opportunities for audience movement by taking into account the needs of people with reduced mobility, enabling them to move in the same zone as others so they would not be isolated elsewhere.

It was important to the architects that the theatre, despite its massiveness, should harmonise with the surrounding nature.

»In the case of the Ugala Theatre, we had to modernise a building with a clear and strong architectural voice in a way so as not to lose what makes Ugala unique.«

Anna Temmo, architect R-Konsult

v.l.n.r.: Irina Raud, Anna Temmo, Erkki Tammeleht



The renovation gave the renowned theatre a completely new outer shell made of red bricks, which resemble the original façade stone. Where necessary, custom bricks were used.



FACTS AND FIGURES

Project name
Theatre Ugala, Viljandi, Estonia

Architect
R-Konsult architects, Irina Raud,
Anna Temmo, Erkki Tammeleht

Client
Theatre Ugala

Products used
Terca ceramic bricks Red Smooth
and customised designed bricks,
Terca ceramic brick slips and
corners Red Smooth

Completion
2016

Have the requirements for theatre buildings changed over time?

From the audience's point of view, it is not much. What a person cares about is that they are comfortable, that the theatre's inherent mystery is preserved, and that the artist is respected. The goal of architects always was, and hopefully still is, to create the type of environment and atmosphere, a background, where a person feels good, not to push yourself onto them, not to steal the solo. 🗨



The 500 year old manor house was renovated with a new roof made of traditional clay roof tiles.

RENOVATION FIT FOR A KING

Some buildings deserving of protection are symbols of Europe's turbulent history – manor houses, castles, and palaces should be preserved for reasons of interest and research. An English manor house was given a new but authentic roof comprising tens of thousands of handmade clay roof tiles.

The Tudor manor house, The Vyne, in Sherborne St John, near Basingstoke, is a historical gem from the 16th century. The property requires constant maintenance and care must be taken to preserve the original aesthetics. The building's listed status and faithfulness to the original appearance of the house were the top priorities when the 1 600 m² roof was renovated in 2015, and all 71 000 roof tiles were replaced.

ORIGINAL MODEL The manor house was built between 1500 and 1520 as a home for one of the lords under the Tudor King Henry VIII. It was privately owned from then until 1956, when it was bequeathed to



Now time is working on the roof tiles: In the course of the next few years, the roof tiles will darken due to the weather and come closer and closer to the original appearance.

the National Trust. This non-profit organisation protects natural and architectural monuments in Great Britain. They wanted the new roof to be as close a match as possible to the original. For this reason, the clay tiles were manufactured by hand, using traditional methods and the local Weald clay. This clay occurs naturally in the local area, including in the ground beneath the manor house, so the tiles that formed the original roof were very likely made from this same clay. There was another advantage to making the tiles by hand: visitors were invited to immortalise their hand prints on the clay tiles in exchange for a voluntary donation. As a result, there are 12 885 individually 'signed' roof tiles in the reno-

FACTS AND FIGURES

Project name

The Vyne, Basingstoke,
United Kingdom

Architect

Nick Cox Architects

Client

Ken Biggs Contractors Ltd


Products used

Keymer Traditional Antique roof tiles

Completion

2018

vated roof, and around £64 000 was raised towards the work in donations.

COMPREHENSIVE RENOVATION The roof had undergone a series of minor repair works in the past, but this major project was the first truly comprehensive renovation of the roof in more than 150 years. All the tiles were replaced, the chimneys were dismantled and rebuilt, slats and cables were reattached and new insulation was fitted. It took a total of 18 months to complete the restoration project. The highly authentic clay roof tiles will age naturally over the years like their original predecessors, becoming even more beautiful over time. 

REVAMPING HISTORY

Copies of original beaver tail tiles were made to order for a project to re-roof several historic buildings, which formed part of an old cobalt mine in Norway. In this way, the present-day museum retains the character of the original 1790 construction.

The open-air Blaafarveværket museum in Modum, Norway, has been a cultural attraction for 50 years and is famous for its exhibits dealing with the topics of art, culture, history and nature. The historic building was originally used to process cobalt, a blue mineral. From 1772, cobalt was mined from a nearby mountain and gave the old factory and the present-day museum their names (Blaafarge = blue colour). In 2016, the roof had to be renovated for the museum to continue running properly. Tone Sinding Stensvik, the Managing Director, was adamant that an architecturally authentic solution be used. In 2018, this solution went on to win the Europa Nostra Award, an EU prize for heritage conservation.

HANDMADE TO ORDER The roofs of the oldest buildings, including the listed Glass Smeltery, still consisted of original beaver tail tiles from around 1790. In line with historic preservation practices, it was intended to keep the tiles for reuse, but they turned out to be in too poor a condition to be relaid. The solution was therefore to send samples of the original clay tiles to the Wienerberger factory in Eisenberg, Germany, where copies of the old, rippled roof tiles were produced and treated with a specially developed Cecilienhof engobe glaze. This method lent the roofs an authentic weathered appearance, helping them to blend in harmoniously with the other buildings in the complex.

AIMING FOR AUTHENTICITY After the successful renovation of the oldest buildings, Steinsvik used the

FACTS AND FIGURES

Project name
Blaafarveværket Museum, Modum

Architect and Client
Blaafarveværket Museum, Modum

Roofer
Buskerud Blikk AS, Drammen

Products used
Koramic Straubing beaver tail tile,
colour: Cecilienhof, custom-made

Koramic P451, colour: Vieille
Victorian

Completion
2016–2020

The copies of the old, rippled beaver tail roof tiles were treated with a specially developed engobe glaze to achieve the right weathering effect.





The open-air museum has been open for more than 50 years and is a popular tourist attraction in Norway.

same method in 2017 to roof further wooden houses with beaver tail tiles. The next stages of the project followed in 2018 and 2019: the restoration of the roofs of the original barn and the smaller half-timbered houses. Handmade clay tiles were not required here, but the aim was still to create a harmonious overall look. The Koramic P451 Vieille Victorian tile was chosen. If the condition of the original tiles was good enough, they were removed, cleaned and reinstalled. The new Koramic tiles were used to supplement them as needed. Further re-roofing projects are set to continue into 2020, including – among other things – the former private residence. And, once again, they will have the same key concern: respectful treatment of the listed buildings and aesthetically authentic solutions. ■

PLAYING WITH LIGHTNESS

Architect Ahmed Faouzi wanted this project to be seen as a new, urban landmark of the city. The Pierre Mendès France sports hall in the city of Villeneuve d'Ascq, in northern France, was renovated to be more energy-efficient and, at the same time, was given a new, more inviting building envelope. The sports hall can now continue to keep the city's cultural and sporting heritage alive.

The commune of Villeneuve d'Ascq, on the eastern edge of the city of Lille, in northern France, was voted France's sportiest city in 1996. And no wonder – the town invests more than 10% of its annual budget in sport and exercise. The town has a population of just over 60,000 inhabitants and a total of 27 sports halls, including the Pierre Mendès France facility, in the district of Prés. It was originally built in 1984 and restoration work to the building was completed in 2018. The sports centre has a total area of 700m² and comprises two single-storey buildings, one of which houses the sports courts, while the other contains changing rooms and toilets. Today, the sports hall is colourful, open and flooded with light – the architect has succeeded in creating an airy yet expressive structure that conveys a sense of activity to visitors from the moment they enter the building.

WELL-GROUNDED The double-skinned, lower part of the brick building was clad in Terca facing bricks. "The idea is that the base of the building anchors it to the ground and is reminiscent of a mixture of tree bark and soil," says Ahmed Faouzi, the municipal architect, about the visual concept. The effect was achieved using Terca Marono bricks in chestnut brown with a deliberately rustic surface. In addition to the basic choice of brick in its irregular shades of brown, the same extruded brick also appears on the façade in a range of colourful variations. The result is a non-uniform, natural overall look with colourful ac-

cents on the base of this modern sporting facility. The sports hall itself is perched – almost floating – on top, and the large windows and lightweight design let lots of light into the gymnasium. The combination of brick, wood and steel panels makes for a durable structure and creates a playful, yet clear, aesthetic for the renovated building. "The robust and homely aspect of the brick base combined with the variety of textures and colours lends a sense of lightness to the building despite its size and height", says the planner. The newly renovated sports hall means that not only has the city made one of its most important buildings fit for the future, but it has also upgraded the urban landscape with a colourful, modern structure. ◀

FACTS AND FIGURES

Project name

Pierre Mendès France sports centre, Villeneuve d'Ascq, France

Architect

Ahmed Faouzi

Client

Villeneuve d'Ascq Town Hall

Products used

Terca Marono extra E1, Terca glazed bricks in blue, green, yellow, orange, and watermelon yellow

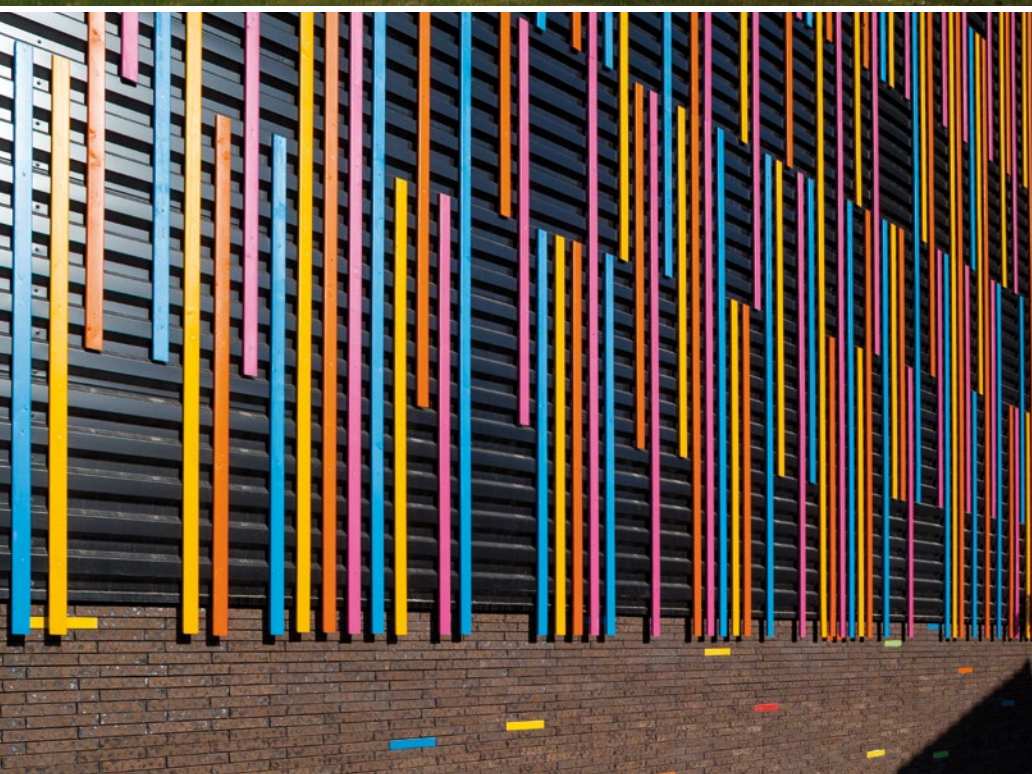
Completion

2018



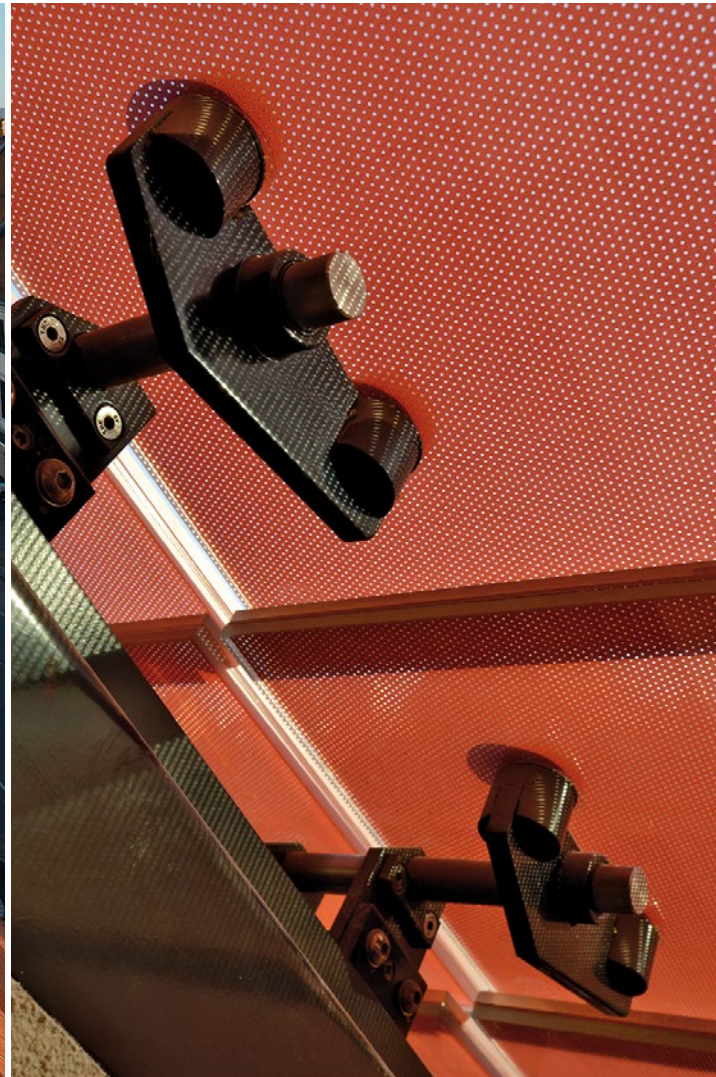
Opting for natural and sustainable materials has successfully united aesthetics and functionality.

The sports hall has been renovated to create a colourful and open building flooded with light for the town's sports-loving inhabitants.



»The robust and homely aspect of the brick base combined with the variety of textures and colours lends a sense of lightness to the building despite its size and height.«

Ahmed Faouzi, Architekt



Above: This is the first architectural project in Slovenia to demonstrate that large roof openings can successfully be used in historic, listed buildings.

Right: The new attic floor shows that there are some innovative and highly aesthetically pleasing solutions for roof windows.



A CHAMELEON-LIKE ROOF

The renovation of the Hotel and Restaurant Maribor in Slovenia proves that a large sloping roof can be repurposed and used in a modern way whilst also meeting the historic preservation standards.

The main square in Maribor, called Glavni trg, is surrounded by historic buildings. One such building, on the western side of the square, was built in 1657 and housed a beer brewery for many years. However, it had been known only as a burned-out ruin for some time. The building was eventually renovated and restored to its original beauty, both inside and out. It has been radiating charm again since 2017, as the Hotel and Restaurant Maribor.

MULTI-PURPOSE The fully preserved ground floor now houses the Restaurant Gastilna Maribor, which retains all the spirit of the old brewery. Conference rooms and offices were created on the first floor, and the attics were transformed into apartments and ho-

FACTS AND FIGURES

Project name

Hotel and Restaurant Maribor, Slovenia

Architect

Gregor Reichenberg, Reichenberg Arhitektura

Client

Galerija Gosposka


Products used

Beaver tail roof tiles in Natural Red

Completion

2017

tel rooms. The building is listed as a historic monument, leaving Reichenberg Arhitektura, a Maribor architectural firm, little scope for changing the external appearance of the structure. Even internal changes presented major challenges.

INVISIBLE WINDOWS The building's greatest potential lay in the previously unused attic space. The experts faced the task of finding a compromise between the historic and the modern. Consequently, all the elements used in the building are either original or reconstructed. Most of the building components and a part of the roof were preserved in their original state. Another part of the roof had to be replaced with a new steel roof due to wear and tear. The 3500m² roof was tiled with clay beaver tail tiles in the colour Natural Red. The new attic storey has three levels that receive plenty of natural light from the roof openings on the street side of the building. In order to alter the external appearance as little as possible, these openings were fitted with moveable glass louvres that preserved the continuity of the roof slope and blinds in the same colour as the tiles. The windows are therefore virtually invisible and ensure that the historic appearance of the building is preserved. 

In order to alter the external appearance as little as possible, these openings were fitted with moveable glass louvres that preserved the continuity of the roof slope and blinds in the same colour as the tiles.

CREATING SUSTAINABLE VALUE FROM OLD AND NEW

The great market hall of the Baltic Station Market in Tallinn was extended and a steep roof added. Now, paving stones in a variety of colours welcome visitors and connect forms and people alike.

Markets are characterised by variety, bustle and interaction. So market halls must serve a wide range of purposes. And that is exactly what the Baltic Station Market in northern Tallinn seeks to do. Established in 1993, it is a large market with multiple functions. A 2017 extension to the market aimed to bring the building, which dates back

to the 1870s, up to date and help it appeal to the broadest possible audience.

COMBINATION OF OLD AND NEW The project also aimed to preserve the building's historic character, such as the main façade formed by three two-storey limestone warehouses, says Raivo Kotov, an architect at KOKO architects in Tallinn. "The fusion of old and new works particularly well in the Baltic Station Market because the function of these buildings calls >



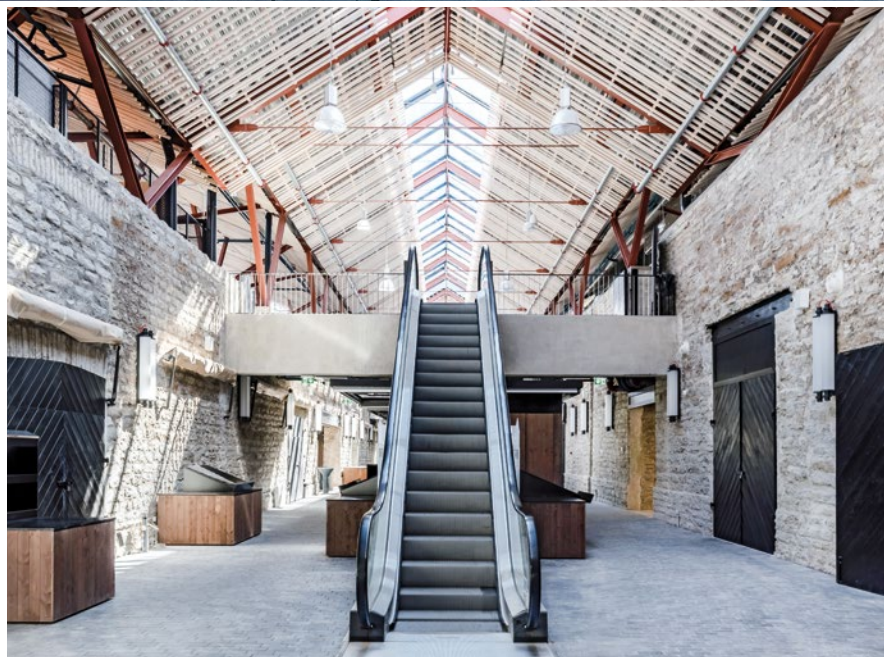
The newly designed building is intended to unite different types of market and fulfil multiple functions.





»What is important is that we did not just redesign one building, but we also increased the value of the building's surroundings – public squares and a terraced public space where people can relax.«

Raivo Kotov, KOKO architects





Seating in the outdoor area is connected by ramps and terraces that invite visitors to linger.



FACTS AND FIGURES

Project name
Baltic Station Market, Tallinn,
Estonia

Architect
KOKO architects

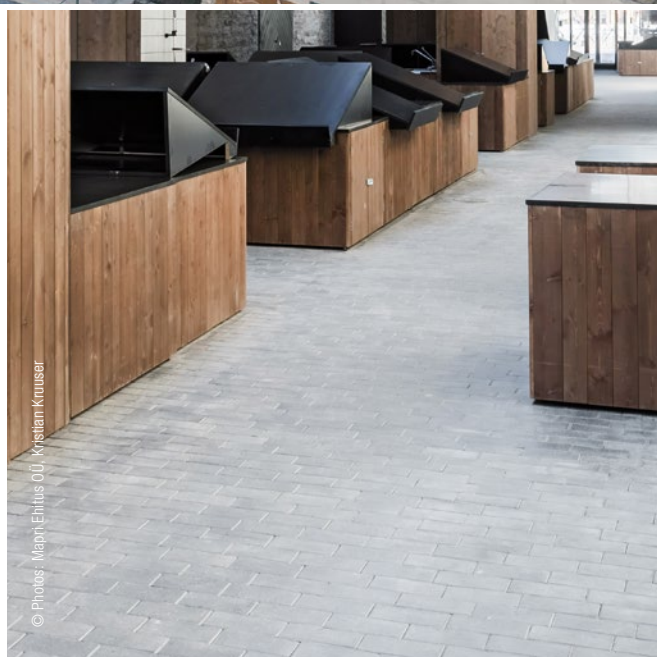
Client
Astri Kinnisvara

Products used
Penter paving bricks (Dresden
and Westminster)

Completion
2016

> for a high, open space.” The new extension incorporates a single steep roof, a basement level for new purposes and a remodelled outdoor area. “For us, it is really important that we don’t erase and replace the existing levels of our projects; rather, we seek to integrate old and new layers and build on the surroundings”, says Raivo Kotov.

IN PERFECT HARMONY Inside the hall, the market now occupies three floors. The front portion of the roof juts out from the building protecting the outside area. The shape of the roof defines the skyline and ties in perfectly with the paving stones of the extended square, giving it a unique look. Durable and natural materials were an important consideration. Kotov: “We wanted to ensure that the building didn’t just look good when it was finished, but that it will still look good in another 50 years. It has to age gracefully. And clay is a material that will still look elegant and that retains its value.” In addition to restructuring the market hall, another major goal of the extension was to increase the value of the surrounding area by creating a square where people can meet and relax. ■



The extension used bricks in a variety of colours and ceramic tiles in brick size.

A NEW LOOK FOR AN OLD BUILDING

Architects play with forms, structure, materials and with the surfaces of their designs. The architects behind an extension to the John Paul II primary school in Psary, near Wrocław in Poland, chose roof tiles for the design of the façade.

FACTS AND FIGURES

Project name

John Paul II primary school, Psary, Poland

Architect

Mroziuk Architektura

Client

Baumatech

Products used

Koramic Orea 9 in natural red

Completion

2018

Roof tiles on a façade? It sounds a little strange, but the planners of this extension were inspired to clad the entire building (a total façade and roof area of 2500 m²) in roof tiles by a local construction style that uses brick-faced façades. They used the Koramic Orea 9, a high-quality ceramic roof tile that met their requirements for minimalism and functionality. This was vital as the right shape of tile combined with a suitable installation method ensures that the building is protected against the weather on all sides.

TRADITIONAL FAÇADE A T-shaped extension was added to the original school building during renovation project in 2018 and is connected to the old schoolhouse by a corridor. This building now houses the sports hall, additional classrooms, a common room with kitchen area and offices for teachers and the head teacher. Krzysztof Mroziuk and Karol Pietrucha

The look of the new school building is defined by plainness and simplicity. The roof tiles on the façade emphasise the sharp horizontal and vertical lines of the building.




from the architectural firm Mroziuk Architektura Studio in Poland, designed the extension and addressed the issue of the traditional façade design before the work started: “In the area around Wrocław in particular, façades are often clad in brick, so we used ceramic roof tiles to reference the typical façade design of local rural buildings”, explains architect Krzysztof Mroziuk.

MINIMALIST – PLAIN AND SIMPLE The entire façade of the T-shaped extension is made from roof tiles, along with pieces of reclaimed wooden board. The size of



Roof and façade design creates a unified appearance: roof tiles are also ideal for façade cladding.

the Koramic Orea 9 tile makes it ideal for large, continuous surfaces. The straight lines of the façades and gable roof with open gables meant that full cladding was no problem. The Sturmfix fastening system was used to install the tiles. This system ensures easy installation and equally simple dismantling in the event of repairs. It also provides reliable stability in high winds. The ceramic roof tiles on the façades of both the extension and the original building create a minimalist and simple overall look that is based on traditional construction techniques despite the unconventional appearance. 



AWARD FOR OUTSTANDING INFILL DEVELOPMENT

The architects who planned the renovation and upward extension of a listed Kontor building in Leipzig took a careful yet assertive approach and their design has received multiple awards. Brick is the element linking the stylistically very separate extension and the charismatic original building.

The plan was to renovate the former celluloid factory, an industrial monument constructed in 1896 and now used as office space, and extend it by adding two apartments on the roof. To do so, the wooden staircase in the existing building was replaced with a steel structure and a lift was installed. The original premises are now used as a co-working space. When designing the upward extension, architects from the Koche Architekten agency opted to create a stylistically and structurally compact structure on the solid base building. The new attic floor, and particularly the brickwork itself, references essential characteristics of brick architecture: the load-bearing, highly insulating masonry, constructed from Porotherm bricks, was modelled on the structure of the existing building, creating a visual link between the two elements. It meant there was no need to employ a composite thermal insulation system, and the construction technology maintained the durability and sustainability of the building. Brick ceiling panels transfer the load to load-bearing internal and external walls. The horizontal stratification of the original, two-tone façade is mirrored, but given a more modern interpretation, by the rough, horizontal relief effect of the grey render on the extension.

VISUAL BOUNDARY The extension stands out distinctly from the original building, mainly due to the colour difference, but also due to the irregular sizing and positioning of the windows. They are only aligned with a few outer edges of the main building's windows, emphasising the independent nature of the new attic

FACTS AND FIGURES

Project name

Kontor building, Leipzig, Germany

Architect

Knoche Architekten BDA

Client

Private

Products used

Combination of Porotherm bricks

Completion

2017

Although the new storey stands out visually from the original building, there are parallels between the structures of the walls.





AWARD-WINNING DESIGN

This excellent architectural design has already won a number of awards, including the 2017 Architecture Prize of the City of Leipzig. Furthermore, in 2019, Knoche Architekten won recognition from the Association of German Architects (BDA) in Saxony for “the successful renovation and infill development of an industrial monument and extraordinary architectural artistry”.



In order to keep the façade uniform, balconies were dispensed with. Instead, one of the apartments has an open atrium, while the other has a loggia.

floor. No balconies were incorporated into the extension to maintain the minimalist appearance of the façade. Instead, the smaller of the two apartments has a recessed loggia, while the larger one is organised around an open atrium. Encompassing just two apartments, this project may only make a minor contribution to infill development in the growing city of Leipzig, but it is responding to the increasingly important demand for mixed-use buildings, combining living and working space. ■

By redesigning the façade, the upgrade from a 60s department store to a modern office building was completed.



FACTS AND FIGURES

Project name

Le Plaza, Lille, France

Architect

Jacob Kalfsbeek

Client

Sergic Lille real estate agency

Products used

Argeton (Carrara white, Basalt grey, Metal grey, Volcano black)

Completion

2018

Horizontal, vertical, diagonal – the design of the courtyard at Le Plaza is based around very clear structures.

A QUICK FACELIFT

From department store to offices: The sixty year-old Le Plaza building in the centre of Lille was given a facelift and is now radiant in Carrara white, Basalt grey and Volcano black. It was important that this upgrade be completed as quickly as possible.

The Le Plaza in Lille, built in the 1960s, was originally designed to be a department store and now houses offices and seminar rooms. When the bleak 60s charm of the old ceramic façade became quite grim, the real estate agency Sergic Lille commissioned architect Jacob Kalfsbeek to visually upgrade the building envelope. The appearance of Le Plaza's original ceramic façade no longer met modern aesthetic standards. The client wanted a new interpretation of the building envelope – something that would give the whole complex a modern character and complete its transformation into an office building.

A colour scheme of Carrara white, Basalt grey and Volcano black was chosen for this project. Furthermore, the white should remain white for decades because the ceramic panels do not absorb air pollution.



CUSTOMISED SYSTEM SOLUTION “As the premises would continue to be occupied during the renovation work, we had to get the logistics just right in order to keep noise to a minimum”, says architect Jacob Kalfsbeek. To meet this demand, a ceramic system solution was chosen that requires very little installation time and that has a look adapted to modern notions. The benefits of the curtain wall façade system became evident when choosing colours and during the subsequent fitting of the tiles: little, if any, cutting was required until all the tiles were in place, which reduced noise and also saved time.

ENDURING AESTHETICS “The terracotta panels remain attractive for a long time because they don't absorb air pollution for decades”, explains architect Jacob Kalfsbeek. The ceramic façade panels are manufactured using an extrusion process and are both weather-resistant and frost-resistant. The panels can also be customised by giving them individual colours. The courtyard design is based around cross-beams and pillars. This creates an interplay of light and shade that animates the façade. This effect is now joined by random blocks of colour. “We chose Argeton panels because of their aesthetic properties. The huge range of colours allowed us create a predominantly white Carrara pattern, with a touch of Basalt grey, Metal grey and Volcano black”, says Jacob Kalfsbeek. ■

A BUILDING ENVELOPE LIKE A SECOND SKIN

An empty 60s building in Amsterdam was transformed into exceptional student accommodation. The most challenging part of the upgrade: finding the perfect glazed façade brick.

A massive eleven-storey building on the outskirts of Amsterdam: The Elsevier building in the north-eastern district of Bos en Lommer was designed as an office block in 1964 and was named after the local weekly newspaper. The building lost its appeal with the construction of the ring road and the motorway and fell empty. In 2012 it was decided that the Elsevier should be renovated, refurbished and repurposed. Amsterdam architecture agency Knevel Architecten took on the challenge and created student accommodation with 245 apartments over ten floors, plus an attractive ground floor with small retail units. The starting point for renovations to the façade was the original 60s design by Willem Dudok and Robert Magnée.

A STRICT COMMITTEE Fortunately, the main part of the Elsevier building was well preserved, and it was chiefly the gable and façade that needed renovating. The old gable consisted of prefabricated concrete elements, faced with bonded, glazed brick slips. “We had to replace those parts – it was impossible to achieve a good level of thermal insulation”, says architect Benjamin Robichon. “We also wanted to add a number of openings in the façade to let more daylight into the rooms behind it.” To solve the problem of noise from the motorway, a double façade system was developed that wraps around the building like a second skin. Special effort went into choosing the perfect Hilversum-size facing brick. Robichon says, “We spent a long time looking for the right colour combination with three or four different shades, because a single colour would have produced a very monotone look.” Robichon says they tried ten prototypes before achieving a result that all members of the strict committee agreed on. “It wasn’t just about the mixture of bricks, but also about the colour and texture of the mortar”, says the architect. “We hung

FACTS AND FIGURES

Project name

Elseviergebouw | Sara Burgerhartstraat, Amsterdam, Netherlands

Architect

Knevel Architecten BV

Client

Woningstichting Rochdale/DUWO

Products used


Terca brick slips

Completion

2015

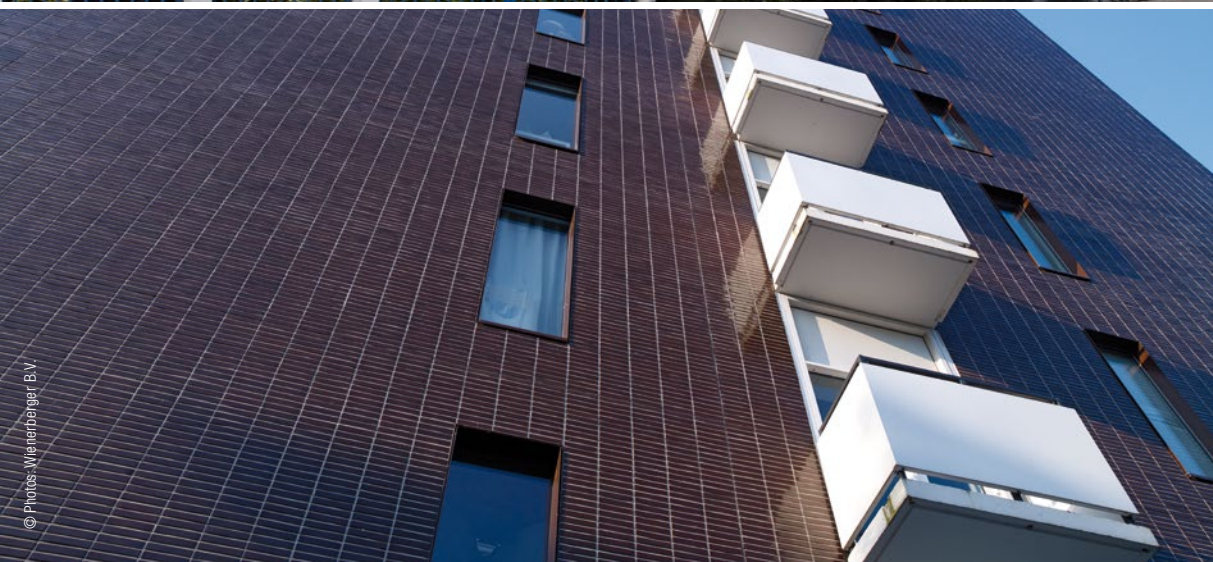
Moisture can only escape through the front of brick slips. For this reason, only lime-free adhesive and mortar were used.

the prototypes next to the existing wall so that we could see whether we had achieved the right effect and began combining them.” The Wienerberger Panningen Sample Library was particularly useful in this respect and helped with the complex process.

NEW SKIN WITH AN OLD CHARACTER Although much of the new façade is similar to the original design, the structure of the new outer façade is very different. Timber frame components were used and clad with fibre cement panels. The glazed Terca brick slips were finally attached on site. The windows follow the rhythm of the bricks and were given dark frames that complement the façade. The building has therefore retained its original character but has been improved with modern engineering. For example, the lines between the prefabricated elements of the façade are no longer visible. 



The successful upgrade was only possible thanks to careful preparation and employing the right materials and people.



A number of façade openings were added during the renovation in order to allow more daylight into the building.

Burgmühle Brandenburg: The historic brick façade of the building was renovated and brought to life with extruded bricks in various shades.



The bridge connecting the two buildings had to be completely rebuilt. The bridge is now part of the residential space.



ECOLOGICAL RECONSTRUCTION OF LISTED MILL

In 2002, a mill, known as the Burgmühle, in Brandenburg an der Havel in Germany, burned down almost completely. The historic mill and neighbouring grain storehouse were renovated in 2015 and listed as historic monuments. They now provide Brandenburg residents with modern living spaces right on the waterfront. The project aimed to restore what remained of the building in as natural and ecological a way as possible.

The river Havel has always flowed between the mill and the granary. The river is a historic element of the Brandenburg Burgmühle and now enhances the quality of life for residents of the 64 apartments and two commercial units in the renovated building. A local property company, Jansen Immobilien GmbH, took over the building after it burned down almost completely in 2002, when the parts that hadn't collapsed were in danger of doing so. "To convert the Burgmühle into residential and commercial units, we needed high-quality ceramic building materials suitable for renovating buildings listed as historic monuments. They also had to meet the requirements of a multi-storey residential building in terms of acoustic insulation, fire safety and heat insulation," said investor Bernd Jansen.

HISTORIC CHARM Renovation was complex. Entire sections of the building had to be made safe before renovation and some parts had to be gutted or completely reconstructed. For the brick façade, Jansen wanted a brick that was a close match for the originals in colour, shape and size. The smooth, extruded bricks in two different shades of red create the deliberately irregular colouration of the brick façade. The historic, wooden ceilings between the floors were replaced with brick ceilings. Their light weight, combined with superior acoustic insulation and adaptability for different layouts, were all significant advantages. A solution was found that both respected the listed nature of the building and was suitable for the newly-built elements and the construction of balconies: red façade plaster and steel balconies to preserve the industrial character of the building.

CENTURIES OF BUILDING TRADITION The backing bricks, partitions, exterior walls, ceilings and brick façade for this renovation project were made by Wienerberger. This proved to be particularly advantageous for preventing thermal bridges: heat-insulated U-shaped blocks were fitted together very precisely with Poro-therm bricks in the walls, creating a highly insulating, sustainable wall construction. Renovating historic buildings also has a positive impact on urban developments. It creates contemporary accommodation in historic buildings with state-of-the-art thermal insulation and without having to build on additional land. ◀

FACTS AND FIGURES

Project name

Burgmühle, Brandenburg, Germany

Architect and Client

Jansen Immobilien GmbH

Products used

Extruded bricks in the colours Schleswig ruby red and Heide red shaded.

Combination of various Poro-therm bricks

Completion

2015



On the historical façades there were no balconies. In the light of modern needs for open space and fresh air, the monument protection authority allowed the construction of balconies – under the condition that the balconies would match the industrial character of the building.

BRICK FAÇADE WITH INTERPLAY OF LIGHT AND SHADE

The premises of the Madeta factory in Budweis, Czech Republic, used to occupy a large site with the charm of an old industrial quarter. Following a renovation project, the site is now dominated by modern, well-insulated buildings in a consistent design.

Madeta, the largest processor of milk in the Czech Republic, wanted the new Madeta Akademie to create a clear visual identity for the company's premises, invest in thermal insulation and sustainability and optimise synergistic use of the existing buildings. They wanted a modern building complex with a touch of industrial atmosphere, without completely abandoning the existing architectural structures. No easy task for the architects of +arch from Budweis, who had to work with rooms on varying levels and very specific space requirements within an existing collection of buildings. Some façades and windows were to be retained, which involved breaking up spatial structures or installing insulation. Elsewhere, new building elements were constructed. The client wanted the complex to have overall clarity, from the inside and outside.

MULTI-FACETED ENSEMBLE The Madeta Akademie was to be the dominant element of the ensemble. The façades of the existing building were cleaned, refurbished, insulated and brought together in a single framework with clearly structured elements. The new, vertical staircase tower and horizontal entrance portal in red brick direct the eye and create visual orientation. The building envelope of the tower combines openings with bricks that protrude from the façade, producing a varied interplay of light and shadow. Floor-to-ceiling windows mean the effect is also visible from inside. These modifications resulted in a building complex with a wide variety of potential uses: Two buildings with separate access and different functions

Projections and openings on the brick façade create an interesting interplay of light and shadow which, at first glance, gives the impression of an optical illusion.

FACTS AND FIGURES

Project name
Madeta Akademie, Budweis,
Czech Republic

Architect
+arch

Client
Madeta, Budweis

Products used
Porotherm 11.5 (inside), Porotherm
24 Profi Dryfix (outside), Terca
Austrian format dark red and Terca
Agora Wit Ivoor (on the building
façades), Penter Red paving

Completion
2018



now house nine meeting rooms, a conference room, a private restaurant with a connected presentation space and ample space for short-term and long-term accommodation with a total of 36 beds.

INTERNAL AND EXTERNAL UPGRADE During the course of the renovations, the outdoor area was converted from a forecourt of bare gravel to a leafy communal space. Planners were able to create a visual link between the Akademie and the neighbouring building with their choice of facing bricks. The adjacent building was clad in the same brick as the Akademie, but in a lighter and less dominant colour, creating a sense of connection between the two buildings while ensuring that the Akademie is not overshadowed. In addition to creative changes, the outer walls were also upgraded with thermal insulation. Inside, sound-absorbing and thermally insulating masonry was constructed. The end result is a functional building complex with a touch of industrial chic that ties in perfectly with modern design trends. ■



Colours reflect a hierarchy: dark reds for the Akademie; the same brick in the less conspicuous ivory colour on the neighbouring building.





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