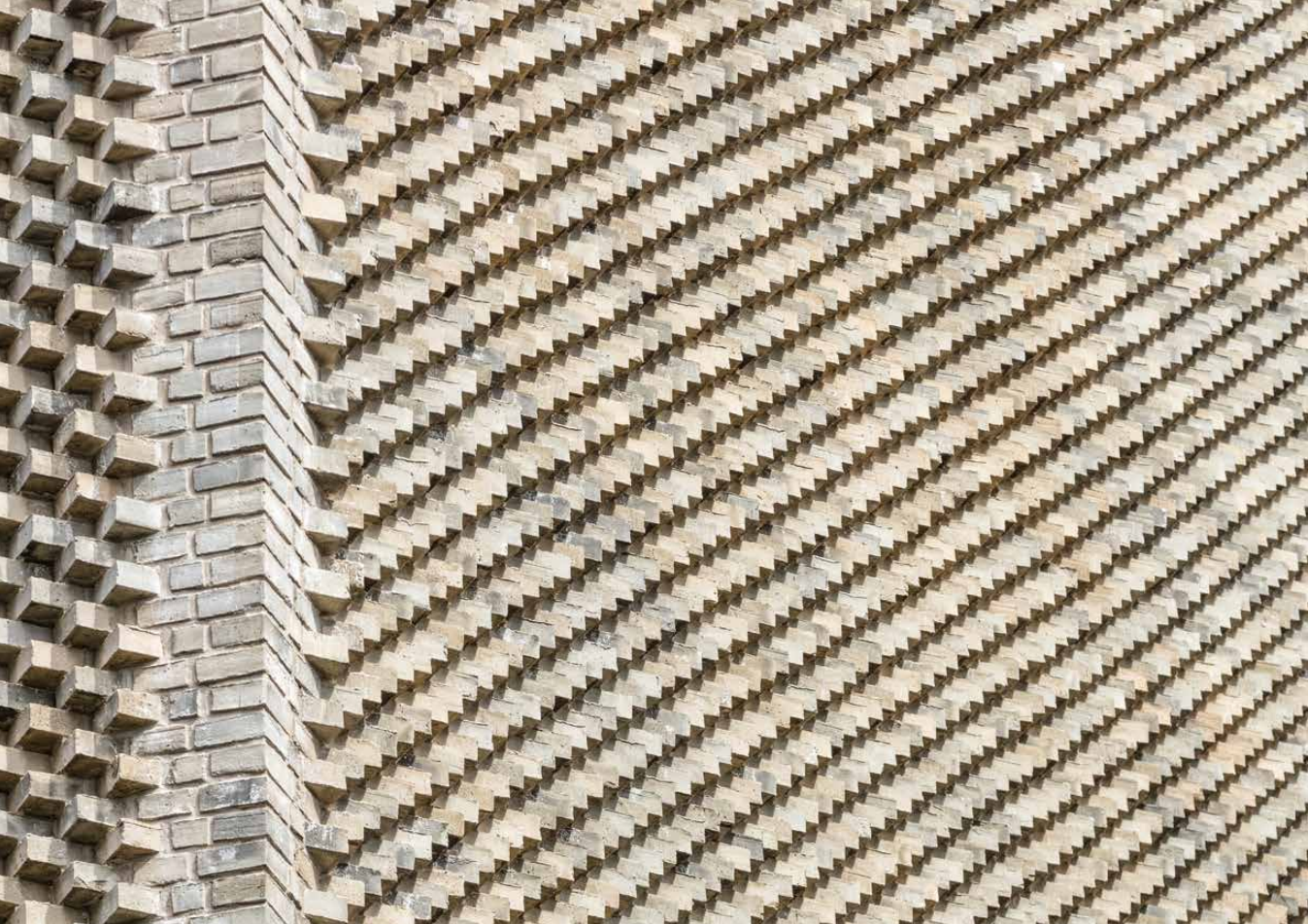


A MAGAZINE ABOUT BRICKWORK AND RESPONSIBLE ARCHITECTURE

# PETERSEN





*The angled header bond on the façades forms what is known as a sawtooth bond. At the corners, windows and back edges, the transitions are in smooth brickwork. Praksis Architects wanted a neutral coloured brick so that the shadows from the sawtooth bond would be as sharp as possible. The result was a light, coal-fired and blue-tempered custom brick by Petersen Tegl.*

# NEW SETTING FOR SCIENTISTS

THE NEW 22-APARTMENT BUILDING FOR VISITING SCIENTISTS AND RESEARCHERS IN THE CARLSBERG DISTRICT OF COPENHAGEN CRIES OUT FOR NEW METAPHORS TO DESCRIBE CLADDING. AS THE BRICKWORK SPARKLES IN THE LOW AFTERNOON SUN, IT HAS A STRIKING BEAUTY THAT MAKES THE LIGHT-COLOURED, COAL-FIRED BRICKS SHINE LIKE A THOUSAND CERAMIC JEWELS, WRITES THOMAS BO JENSEN.



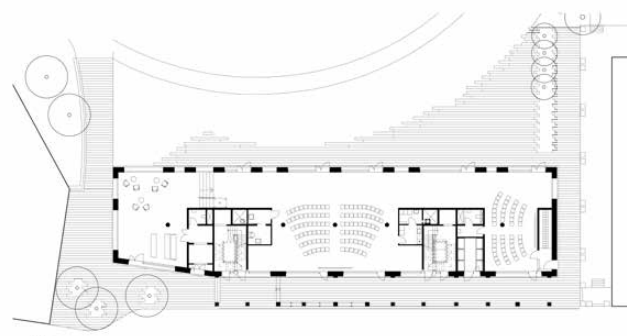
*View of the Carlsberg District. On the left, the 1878 home of the founder of the Carlsberg Breweries, J.C. Jacobsen. The garden is now a public park overlooked by the researcher apartments (in the middle of the photo). The 100-metre high Bohr Tower contains apartments and a part of UCC Campus.*

It was no coincidence that the ground was broken for the Carlsberg Foundation’s new researcher apartments on the 200th anniversary of the birth of the founder of the brewery, J.C. Jacobsen, as he was a great patron of the sciences. He set up the Carlsberg Foundation in 1876, at the same time as he formally handed over the brewery to the Royal Danish Society of Sciences and Letters. Since then, the Carlsberg Foundation has not only run the brewery, but funded basic research in the natural sciences, social sciences and humanities. Its subsidiary, the New Carlsberg Foundation, was established in 1902, when J.C. Jacobsen’s art-loving son Carl thought the time was right to set up a fund for the arts.

The Carlsberg Foundation apartments are part of an ambitious master plan for the entire 330,000-m² Carlsberg District in Valby, west Copenhagen. The Danish architectural firm Entasis drew up the master plan following a major international competition in 2007, in the run up to the relocation of the company’s brewing activities in 2008. The plan is that the district, which is still being developed, will accommodate 600,000 m² of new buildings: 45% residential, 45% commercial and shops, and 10% cultural. Carlsberg HQ, workplace for about 800 people, will remain part of the district, and the many

*“While it is quite common for contemporary facing wall buildings to have a concrete rear wall, Praksis Architects have succeeded in achieving the gravitational effect of a historic, all-brick building, while retaining the free bond qualities of the facing wall on the surface.” Thomas Bo Jensen, architect*

*The loggia and retracted top floor of the former mineral water factory from 1927, designed by Carl Harild, have clearly influenced the design of the researcher apartments.*



*Plan of the ground floor.*



*Cross section through the apartments with the mineral water factory in the background.*



*The apartments' west façade, facing the garden, has inset balconies. Bohr Tower and the old bottling hall, with the hanging gardens to the right.*



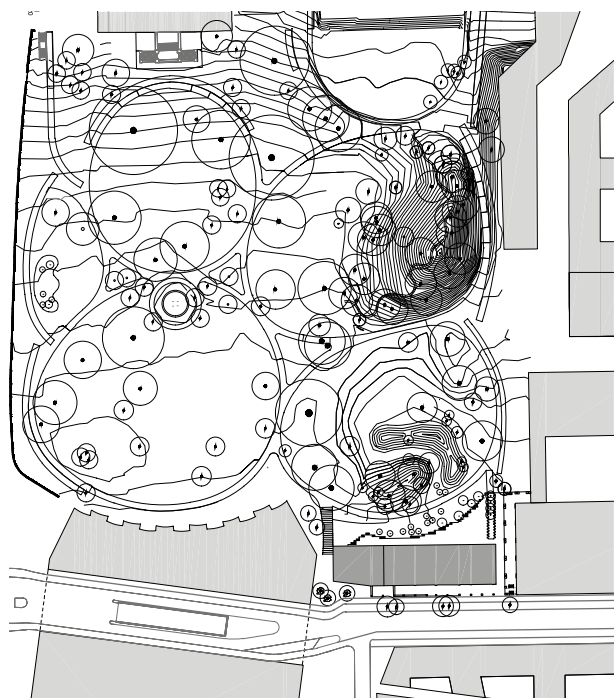
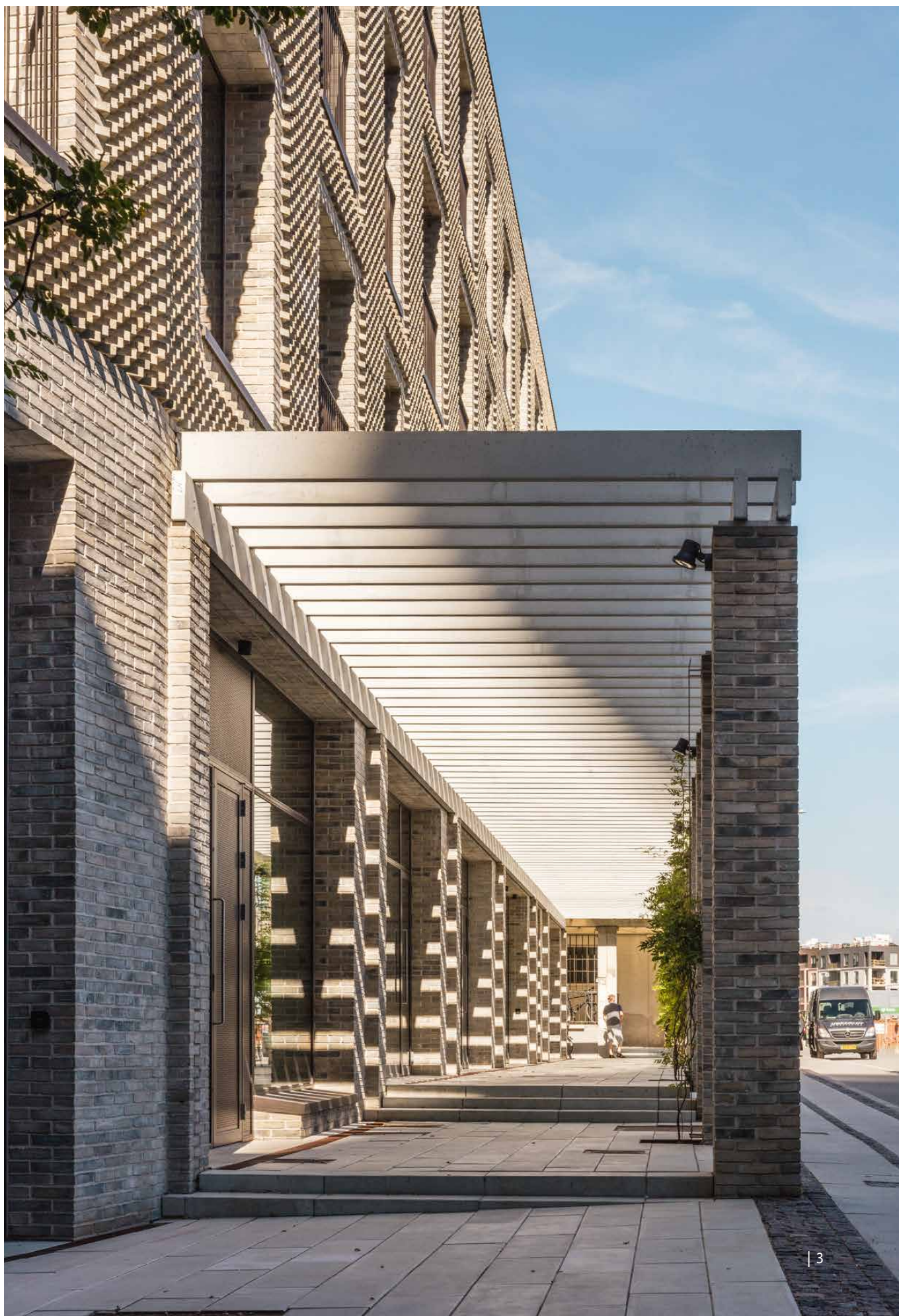
*The simple and serene body of the building has an exquisite level of detail. The break in the east façade endows the building with an elastic feel.*

*The outward facing function of the ground floor is signalled by the openness of the façade. The large windows are shielded by a loggia that runs almost the entire length of the building, supported by piers.*

protected and listed buildings will be preserved intact.

The 22 apartments are for guest researchers from abroad. The communal area on the top floor leads to a large roof garden with breathtaking views of Copenhagen's towers and spires, many of which bear evidence of Carl Jacobsen's donations. The ground floor reception rooms open onto the beautiful Carlsberg Garden, which was originally J.C. Jacobsen's private woodland and botanical garden.

You immediately sense that this is a building that strives to relate in a subtle manner to its surroundings. The building is situated between two of the many fine buildings in the Carlsberg District: to the south, architect Svenn Eske Kristensen's dark-red brick bottling hall from 1969, with its sensational hanging gardens; to the north, the Carlsberg architect Carl Harild's white-plaster mineral water factory from 1927, now converted into 'Dansehallerne', a national venue and training centre for dance and choreography. The latter has blue-grey tile on the ground floor and a column-borne pergola to the south, a motif echoed in the researcher apartments' entrance façade. Its tree-lined, receded top storey is also reflected in the new building, with a correspondingly indented floor covered with tombac.



*Plan of the Carlsberg Gardens. The researcher apartments are bottom right.*



*Section of the east façade where the stairs can just be made out behind the window. All joints are recessed, to emphasise the character of the brick.*

*The west façade with inset balconies. The beautiful shadows cast by the brickwork change constantly but are particularly strong in the low afternoon sun.*



*The view up the stairwell from the ground floor.*

On the opposite side, as it rises to its full six storeys, the building interacts with the hanging gardens’ decorative brick shells. The concave shells are the result of a pattern of angled bricks, called “sawtooth bond”, which engenders a significant relief effect and a play of shadows on the surface. The apartments, too, have adopted this sawtooth bond on the façades and gable surfaces. However, in order to interact with Dansehallerne, the ground floor is exempt, and all of the building’s edges, corners and wall openings are framed with a stretcher bond.

While it is quite common for contemporary facing-wall buildings to have a concrete rear wall, Praksis Architects have succeeded in achieving the gravitational effect of a historic, all-brick building, while retaining the free bond qualities of the facing wall on the surface. The sharp-toothed relief swathes the whole building like a piece of coarsely woven hessian, held in place by the calm, welted surfaces around the corners, the windows and the west façade’s deep balcony niches. This is where traditional metaphors used for textiles come up short, however. “Diamond bond” might be a better term, because in the low afternoon sun, the brickwork sparkles with a striking beauty that makes the bright, coal-fired bricks shine like a thousand ceramic jewels.

The researcher apartments are solidly anchored in this historic context. However, as is always the case with Praksis Architects projects, the building refuses to be anonymous. Although interwoven sensitively into the Carlsberg District’s physical surroundings, it adds a new and dignified layer to the area’s architecture. It makes no apologies for joining such refined company. It demands recognition as an equal partner.

***The Carlsberg Foundation Researcher Apartments***

*Opened: 2016*

*Client: The Carlsberg Foundation*

*Architect: Praksis Arkitekter*

*Contractor: Skjøde*

*Bricklayer: EMR*

*Engineer: Henry Jensen*

*Landscape architect: Arkitekt Kristine Jensens Tegnestue*

*Brick: Custom brick D190*

*Text: Professor Thomas Bo Jensen, Aarhus School of Architecture*

*Photos: Anders Sune Berg*

*Portrait photo: Laura Stamer*



*The apartments have inset balconies with brick walls, and roofs and floors in Cumarú wood.*



*The interiors and exteriors are finished to a very high standard. Inside the apartments, the windows and floors are in oiled oak.*

The interior lives up to the robust, high-quality exterior in several ways. The two main staircases, made of light terrazzo, illuminated by large windows, like in an old classicist housing block, have been placed in front of the landings in order to match the fixed rhythm of the windows on the façade. This is effective and rather elegant, except perhaps for the slightly unfortunate safety glass between the window and stairs. The stairwells could probably have offered a more beautiful experience if the square-cut, closed box around the vertical panopticon had been replaced by lighter, transparent railings. That would have done the space and terrazzo greater justice, and been an affectionate nod to the functionalist tradition on which the building so lovingly draws.

The apartments radiate solidity in their materials. The front door, window sills, floors and even door handles are, like the solid window frames and the inbuilt lining on the balconies, made of oiled oak. The fixtures in the bathrooms and kitchens are simple and functional, and the lighting and furniture are well suited to their surroundings, without looking ostentatious.

Even though the price per square metre is not significantly higher than average, it is clear that the Carlsberg Foundation did not compromise on quality – not even in the well-designed common rooms on the top floor. Here the glass doors and metres of black natural stone cladding come close to creating a stifling hotel atmosphere – but the architects' confident grasp of their materials make the interior inviting, and it looks just as durable as the exterior. The Carlsberg Foundation has every right to be proud of this building – as should the small South Funen architectural firm, which has deservedly been showered with prizes this year.



*Mette Tony and Mads Bjørn Hansen, aka the award-winning Praksis Arkitekter.*

*“A pattern of angled brick adorns the spaces between the windows on the gables and walls. The transition from stretcher bond to sawtooth is almost imperceptible, but the effect is phenomenal. From the stretcher bond’s shadowless surfaces the bricks literally unfold, like a sea of light and shadow.” Thomas Bo Jensen, architect*

*The exterior brickwork was inspired by the concave, brick shells on the old bottling halls from 1969, designed by the architect Sverre Fehn. Both buildings face Jacobsen’s Old Carlsberg Gardens.*

*A corner of the red brick bottling hall.*





Grundtvig's Church, the porch. P.V. Jensen-Klint, 1913-27.  
 Photo: Ole Meyer.



Eastern High Court, Bredgade, Copenhagen. V.L. von Platen, 1702. Extension on the left by Martin Borch, 1903.  
 Photo: Anders Sune Berg.



The Church of St. Mary in Elsinore, with patterned brickwork from around 1485. Photo: Thomas Bo Jensen.



Fogedgården (The Bailiff's Yard), Copenhagen. Kay Fisker, 1943.  
 Photo: Anders Sune Berg.

# INNATE BRICK PATTERNS

RELIEF AND COLOUR EFFECTS WERE USED IN BRICKWORK AS FAR BACK AS BABYLONIAN TIMES, AND HAVE RESURFACED PERIODICALLY EVER SINCE. A NEW WAVE OF PATTERNED BRICKWORK HAS SWEEPED ACROSS EUROPE IN RECENT YEARS.

From a distance, a wall made of ordinary brick appears to be a uniform, rustic surface. As you move closer, the structure of the joints slowly become visible – and up close, it is not hard to see more or less orderly pattern effects on the surfaces. The patterns are in with the bricks, as it were, emerging from the bond's "lattice" of brick and joints. No matter how random a bond may seem, there is always an inherent pattern, which emerges, relatively simply, through a process of "unconcealment" – as Martin Heidegger said of art and poetry. Ways of achieving this include emphasising the effect of the joints on the overall look, or by using relief effects or different-coloured bricks.

Relief and colour effects date all the way back to the Babylonians. Experimenting with moulded bricks made them aware of the potential of relief, and new firing techniques revealed the great richness of colour afforded by a combination of carefully mixed raw materials and firing. Bricks now emerged in a blaze of colour hitherto concealed in the neutral, greyish tones of unfired clay. The rhythmic repetitions of bricklaying cried out for moulded and glazed bricks in bright colours. Walls were no longer simply parts of a construction.

Suddenly they were also vehicles for symbols, poetry and aesthetics. A more sophisticated layer – structurally unnecessary, perhaps, but culturally enriching – had entered the world of brick architecture.

The techniques spread via Byzantium and the Moors to southern Europe, and later with the Lombards up through Central and Northern Europe. The earliest brick buildings in Northern Germany, the Netherlands and Denmark, for example, utilised patterned brickwork, often by sorting the light and dark bricks from unevenly fired batches. Two different bonds were used to achieve diagonal patterns. In Denmark, this effect is seen in the Goose Tower in Vordingborg and the Carmelite Priory of our Lady in Elsinore. Later, the inherent syntax of the new and more systematic Flemish bonds, block bonds and cross bonds directly informed this pattern making.

The Eastern High Court in Bredgade in Copenhagen, originally built as an opera house in 1702, is a beautiful example of cross bond's inherent potential for creating patterns. The textile qualities of the brick wall are made visible, almost like a woven tapestry suspended between the pilaster strips at fixed intervals. As we jump forward to the era of functional-

Chilehaus, Hamburg. Fritz Höger, 1924.  
 Photo: Daniel Sumesgutner.



Sprinkenhof, Hamburg. Fritz Höger, Hans and Oskar Gerson, 1927-43.  
 Photo: Daniel Sumesgutner.



Sprinkenhof, Hamburg.  
 Photo: Daniel Sumesgutner.





*Linoleum House, Copenhagen. Paul Baumann, 1931.  
Photo: Anders Sune Berg.*



*Aarhus University. Gable facing the ring road. Kay Fisker, C.F. Møller, Poul Stegmann and C. Th. Sørensen, 1946.  
Photo: Anders Sune Berg.*

ism, there are many examples of this eye for the “immanent ornamental potential” of brickwork. A classic example is the architect Paul Baumann’s Linoleum House on Åboulevarden in Copenhagen, where red and yellow bricks highlight the cross bond’s diagonal pattern. It looks as if a big, hand-woven carpet has been stretched over the whole façade, with carefully inset square windows fitting into the pattern, making the building appear to have been sprinkled with stardust from distant, exotic relatives. Kay Fisker’s Fogedgården (Bailiff’s Yard) on Jagtvej in Copenhagen is another good example. Here again, the pattern stems from the cross bond. Refined horizontal stripes surround large, deep-set windows, and flow into diagonal bands above the entrances, where smaller windows lie flush with the wall’s surface, as if to underline the character of the brickwork’s thin skin or cladding.

What is particularly fascinating about these examples is that they do not rely on additional ornamentation – rather, they are produced by the brickwork’s own inherent pattern or through other simple means. These kinds of effects are also achieved in a refined manner that emphasises architectural qualities such as heaviness and lightness, rhythm, contrast

and repetition. For example, take a trip to Hamburg and look at the brick architecture from the 1920s. Via breathtaking reliefs of endless zigzag patterns or rhythmically protruding pilaster strips, as seen in Fritz Höger’s monumental office buildings Sprinkenhof and Chilehaus, the hidden poetic forces of brickwork are unconcealed with startling vividness. These buildings were constructed during a golden era of brick architecture, as was Grundtvig’s church in Copenhagen – an excellent example of what can be achieved with quite ordinary, standard bricks.

In recent years, the focus has again returned to the inherent decorative potential of brickwork. For a while, boring stretcher bonds stopped architects from playing with pattern effects, but they are once more gaining popularity in many parts of the world. A topical example akin to the Linoleum House in Copenhagen or Sprinkenhof in Hamburg is the residential area in Osnabrück by Lorenzen Mayer Architekten. Here, a diagonal crisscross pattern in a classic block bond is highlighted via the protruding brick – resurrecting an ancient technique from Byzantine and Moorish architecture. The pattern helps to underline that this is cladding rather than

a load-bearing structure, which is always a dilemma with modern facing walls. In a way, emphasising the interlaced qualities of “the cladding’s tectonics” helps the brickwork embrace its new role as thin facing wall, rather than a supporting structure.

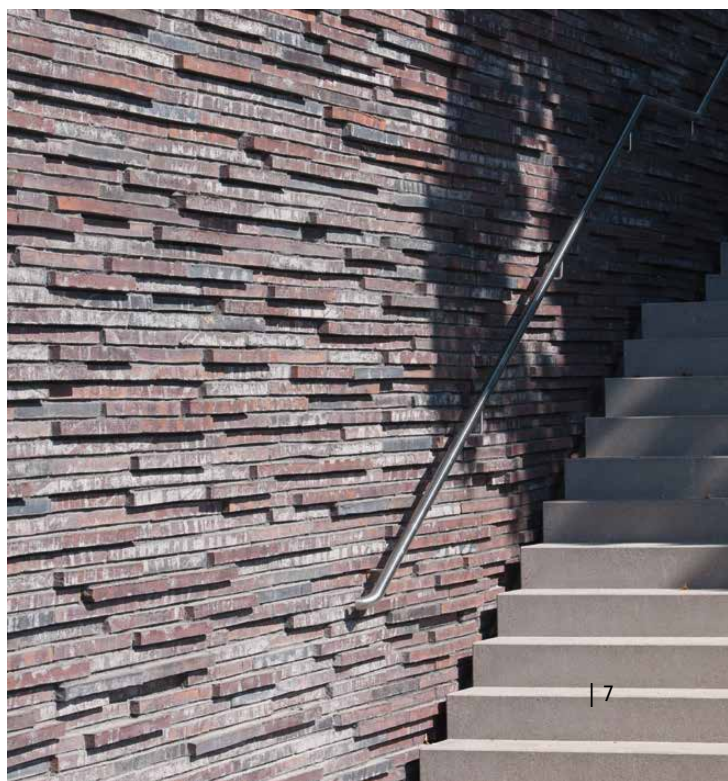
An excellent recent example of this is the Carlsberg Foundation’s researcher apartments by Praxis Architects, as described on page 2-5 of this magazine. Here, an ordinary facing wall overlays an inner concrete wall. However, in the gable surfaces and the wall surfaces between the windows, a pattern has been made of angled brick – a so-called sawtooth bond. The transition from stretcher bond to sawtooth bond is almost imperceptible, but the effect is phenomenal. From the stretcher bond’s shadowless surfaces, the bricks literally unfold like a sea of light and shadow. Yet more proof that great beauty is concealed within even the most anonymous brickwork.

*Text: Professor Thomas Bo Jensen, Aarhus School of Architecture*

*Lotter Strasse, Osnabrück, Lorenzen Mayer Architekten, 2016.  
Photo: Paul Kozłowski.*

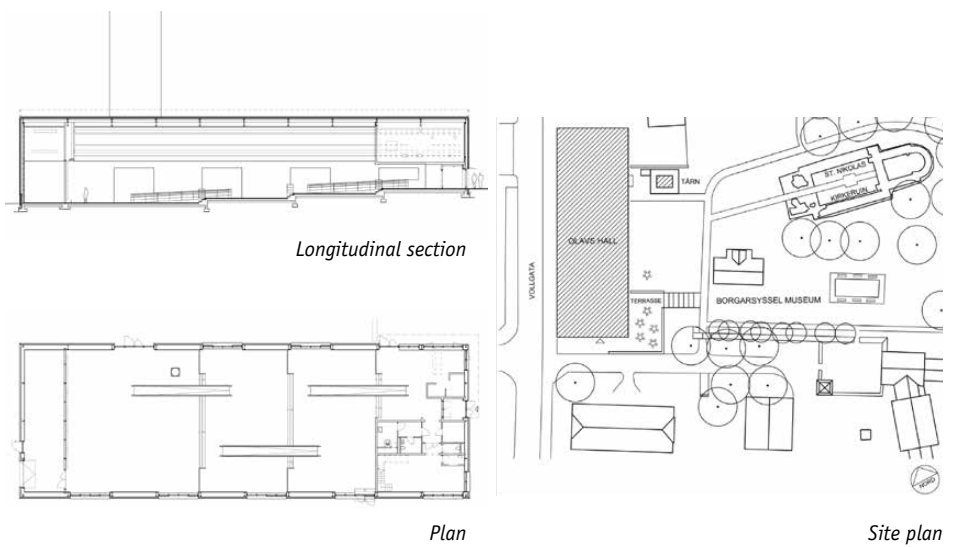


*Globetrotter, Frankfurt, Prof. Moths Architekten, 2012.  
Photo: Paul Kozłowski.*





For the low wall that surrounds the outdoor museum café, Erik Møller Arkitekter chose a version of Kolumba in the same reddish-brown shades as Cover.



## LOCAL HISTORY SWADDLED IN BRICK

A NEW EXHIBITION HALL AT THE REGIONAL MUSEUM IN SARPSBORG IN EASTERN NORWAY HAS A SIMPLE, SERENE AESTHETIC THAT IS BOTH CONTEMPORARY AND IN KEEPING WITH ITS HISTORIC SURROUNDINGS.



Visitors enter Borgarsyssel Museum from the north. The tight main body of the building has no gutters and a roof pitch of 30 degrees.

The new building is the first thing you see when you arrive at Borgarsyssel Museum, the cultural heritage museum in Sarpsborg. The handmade tiles on the façades and roofs of Olav hall make it immediately apparent that, in terms of both form and materials, the new building is at once modern and yet fits in with the surrounding wooden houses that have been part of the town's open-air museum since 1921.

The new building, which will house cultural history exhibitions, is the result of a 2008 competition won by Erik Møller Arkitekter. It took several years to secure funding, but in 2014 the architects were given the go-ahead for the project, every part of which was painstakingly designed. Construction began the following year. The deadline for completion was 2016, when the town of Sarpsborg celebrated 1,000 years since its founding. On 29 July last year, the King of Norway inaugurated Olav hall and its very first exhibition,

which tells the exciting and sometimes highly dramatic history of Sarpsborg.

Borgarsyssel Museum is part of the Østfold Museums Foundation, which runs ten cultural heritage museums in eastern Norway. Gunn Mona Ekornes, director of the Foundation, says "Since Norway gained independence in 1905, cultural heritage museums have had a tremendous impact throughout the country. Back then, communicating local history was an important part of the nation-building process – and it still is. However, it is absolutely necessary that it is done in a modern way, using the latest technology, and we are now able to do that."

The 50-metre-long Olav hall runs parallel to Vollgate, the street where visitors arrive at the museum, and forms the spine between the street and the museum garden. The building's understated and tranquil idiom fits in seamlessly in its location, and its shape, volume and relatively closed charac-

The wooden buildings at the entrance form part of the open-air museum.



Visitors enter the open-air museum via a gravel path. Parallel to this is a wall of local granite through which a gate leads to the ruins of the 12th-century St. Nikolas Church.



*The new building is a single large volume measuring 50 x 17.5 metres. The north-west corner is pulled back a bit from the façade to emphasise the café and entrance. The 32-metre lookout tower is part of the museum and a new landmark for Sarpsborg.*

ter bring to mind an old barn. The Petersen Cover cladding, with its material idiom and red-brown colour, also expresses kinship with the neighbouring houses' tiled roofs, and interacts beautifully with their wooden exteriors, which are painted in different colours. At an early stage, the architects considered using wood, but following consultation with the client, they decided to opt for brick. "The building was to be a break from the historic context, a piece of modernity, and the brick cladding contributes to that. Østfold also has large deposits of clay and once housed many brickworks, so the choice was also historically justified," says Ekornes.

The high tower a few metres from the hall acts as a counterpart to the museum. A staircase winds around the moulded concrete tower, leading visitors to a viewing platform 28 metres above ground. "You learn a lot about cultural history by observing the land-

scape from above. You understand the river and hydroelectric power stations' importance and influence on industries and the location of farms. You can also study the ruins of the 12th-century St. Nikolas Church, located in the museum garden. The tower is a beautiful new landmark in the town, and helps bring people to the museum," Ekornes adds.

Visitors are fascinated by the new building's harmonious and serene form, and excited by the architects' exquisite and consistently rendered detail. "We chose Corten steel for all the exterior details," says Thomas Knudsen, project architect at Erik Møller. "The rusty colour of the steel recurs in the bricks' red-brown shades, and both materials have coarse finishes that match each other beautifully. We insisted upon drawing all of the details, because standard elements would have ruined the overall look. "The inward-facing corner posts, the recessed



*In both size and design, the new building reflects a kinship with the open-air museum's old wooden buildings. The brick cladding on the roof and façade also endow it with its own contemporary identity.*

*Since the Borgarsyssel Museum was founded in 1921, it has expanded to include old houses from the Østfold area.*



*There are fine views of the new exhibition building from many parts of the museum grounds.*



The surrounding terrain falls 1.7 metres from the southeast to the northwest. The slope is occupied by a Kolumba plinth that emerges out of the soil. All of the building elements are made of Corten steel, including the recessed windows, where two rows of perforated shutters can be adjusted to meet the lighting needs of each exhibition.



Thomas Knudsen

*“The rusty colour of the steel recurs in the bricks’ red-brown shades, and both materials have coarse finishes that match each other beautifully. We insisted upon drawing all of the details, because standard elements would have ruined the overall look.”*  
*Thomas Knudsen, architect*

windows, the drainage grate along the side of the building, and the ventilation chimney and snow guard on the roof are all in Corten steel. In front of the windows to the exhibition hall are mounted Corten steel shutters that can be opened or closed to varying degrees to suit the current exhibition. The surrounding terrain falls 1.7 metres at street level from southeast to northwest, and the slope is taken up by a plinth of hard-fired Kolumba in the same red-brown shades as the Cover cladding. The same brick is also used for the low wall around the café terrace.

Access to the museum is to the north, where a small hall leads into the café and ticket booth. Inside the building, four gentle inclines lead up to a raised level. From here, you can survey the exhibition, which spans several levels connected by small staircases.

The varied levels throughout the building add spatial dynamics. The interior is constructed from a few simple materials. The glossy concrete floor and light-grey walls and ceiling emphasise the more colourful fabrics and elements in the exhibitions. The ceiling, which follows the shape of the roof, is raised eight metres over the terrace and ten metres over the lower floors – the generous height opening up all sorts of possibilities for the exhibitions. The Corten steel shutters are perforated so that the penetrating daylight forms varied patterns on the floor.

Both the client and the architect acknowledge that the project encountered numerous challenges along the way. The construction phase involved a turnkey contract, and at an early stage the builder wanted to swap the Petersen Cover for a cheaper, machine-made

The first exhibition in the new building is dedicated to Sarpsborg’s 1,000th anniversary and relates the town’s dramatic history in exciting ways.

The Norwegian children’s author and graphic artist Thorbjørn Egner (e.g. *When the Robbers Came to Cardamom Town* and *Karius and Bactus*) designed the reliefs conveying the history of Sarpsborg in 1936.

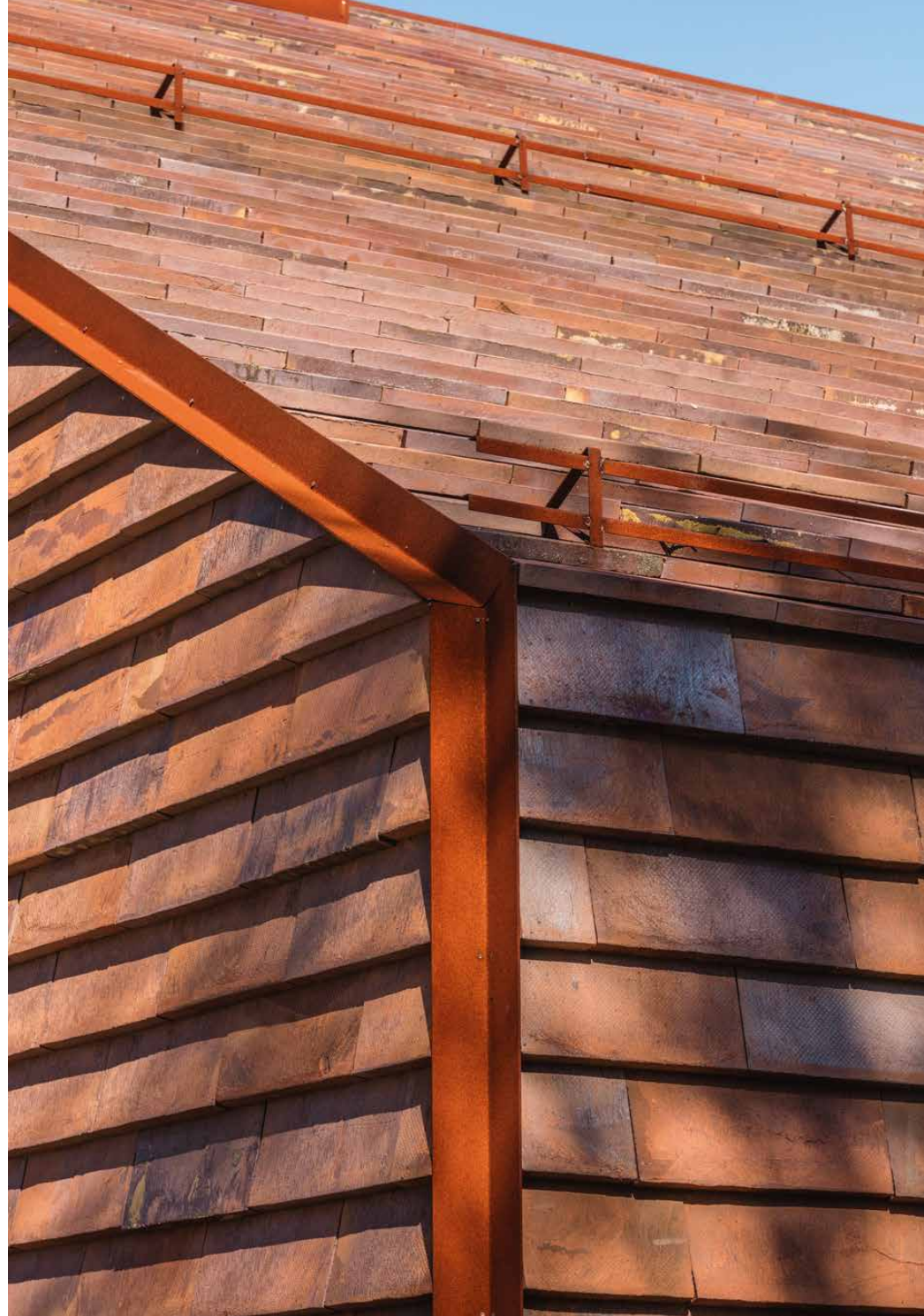




The exhibition building is located just a few metres from the ruins of St. Nicholas Church, at the bottom of the photograph.



The staircase, which winds its way around the concrete core of the tower is also made of Corten steel.



Like all of the other elements, the inward facing corner posts and the snow guard on the roof are designed by the architects and made of Corten steel.

brick. Thomas Knudsen, however, insisted that the building should use brick with a rustic, handmade look. At the joyous inauguration ceremony, the client, contractor and architects all agreed that Petersen Cover was the right choice.

**Olav hall, new exhibition building in Borgarsyssel Museum, Sarpsborg, Norway**  
 Opened: 2016  
 Client: The Østfold Museum's Foundation  
 Architect: Erik Møller Arkitekter, KPF Arkitekter  
 Contractor: AF Byg Østfold  
 Engineer: Cowi  
 Brick: C48, K48  
 Text: Ida Præstegaard, cand arch.  
 Photos: Anders Sune Berg

*"The building was to be a break from the historic context, a piece of modernity, and the brick cladding contributes to that. Østfold also has large deposits of clay and once housed many brickworks, so the choice was also historically justified."*  
 Gunn Mona Ekornes,  
 Director of the Foundation



Gunn Mona Ekornes

According to Gunn Mona Ekornes, the views of the surrounding landscape from top of the tower reveal much about the area's cultural history – for example, the 6,000-metre long river Bromma played a major role in the early industrialisation of the area.





*The new residential building occupies a fantastic location in Brooklyn Bridge Park, a few metres from the East River. The apartments offer views of Manhattan and the three bridges: Williamsburg, Manhattan and Brooklyn.*

# ONE JOHN STREET

ALLOY DEVELOPMENT WANTED A VARIED LOOK FOR A NEW RESIDENTIAL BLOCK IN BROOKLYN, AND USED DIFFERENT BRICKS AS WELL AS DIFFERENT SIZES OF WINDOWS AND PIERS TO ACHIEVE THE DESIRED EFFECT.

DUMBO (Down Under the Manhattan Bridge Overpass) is a Brooklyn neighbourhood buzzing with life. Even the acronym says something about the role played here by local infrastructure. Afforded the opportunity to build a 12-storey residential building on a prime site in DUMBO, Jared Della Valle – builder, architect and CEO of Alloy Development – considered it crucial that the new building engage in a dialogue with the former factories and warehouses around it. As a developer, he knew that large windows would make it easier to sell the apartments. As an architect, he was equally aware that the building would look out of place with too much glass.

Della Valle responded to the challenge by designing One John Street with progressively

smaller windows – about 6.5 cm wide and 5 cm in height – with each successive storey. He wanted the piers at the top to be wide enough to make the modern building, from a distance, express a form of kinship with its historic surroundings.

Della Valle wanted a brick with rustic qualities – and he found exactly what he was looking for at Petersen Tegl. He chose the grey Kolumba K91 for the bottom of the exteriors, a mixture of Kolumba and the somewhat smaller, darker grey and coalfired D91 for the middle, and only D91 at the top.

“We used the differences in the colour and dimensions of the two bricks to articulate the varied idiom we wanted in the façade. From a distance, the D-bricks at the top mimic the brick on the neighbouring buildings.

At street level, we wanted people to notice Kolumba’s handmade qualities and Roman format. The ground floor is pulled back 1.5 m from the rest of the façade, and the underside of the cantilevered floor is clad in Kolumba. Every handmade Petersen Kolumba brick bears the thumbprint of the craftsman who made it, and these are clearly visible as you walk around the building.”

“The piers become wider as you move upward, and on the upper floors they are wider than a single brick. We didn’t want a ‘stacked look’, so we cut the bricks to retain the stretcher bond. The lowest and narrowest piers are just 25 cm wide.”

To further emphasise the variation in the façades, a great deal of work was also put into the joints. “When you use shorter

*The windows protrude from the façade so that the apartments’ views are unobstructed and not marred by mountings.*

*Kolumba has been used in the lower part of the building so that the hand-made brick can be enjoyed from street-level.*



*“Petersen brick was far from the cheapest option, but we could afford it, because we prioritised brick as an essential part of the experience we wanted the building to convey.”  
Jared Della Valle,  
builder and architect*

**One John Street,  
residential building with 42 apartments**  
Client, developer and architect: Alloy & Monadnock  
Opened: 2016  
Contractor: Monadnock Construction  
Engineer: De Nardis Engineering and Ettinger Engineering  
Landscape architect: MVVA (Park) & Coen + Partners (Building)  
Brick: Mix of K91 & D91  
Text: Fred A. Bernstein  
Photos: Tom Eckerle



Architect and builder Jared Della Valle chose brick, because it was important that the building – both architecturally and in terms of materials – had a certain kinship with the surrounding former factories and warehouses. In the background, 1 Main Street with its iconic Clock Tower.

bricks, you have more vertical joints. We used mortar in a shade darker than the bricks. The combination of the D-bricks' darker colour and the many joints reinforced the variation in the façade," Della Valle explains.

The necessary but often unsightly expansion joints – which reveal that the brickwork is not a bearing structure, but a facing wall on top of concrete – were also processed. "We wanted to hide all the expansion joints, so we mixed a caulking grout with powdered blue vitriol, so the finished expansion joints look similar to those in the rest of the exterior. The result is that the brickwork looks like a bearing structure," Della Valle says.

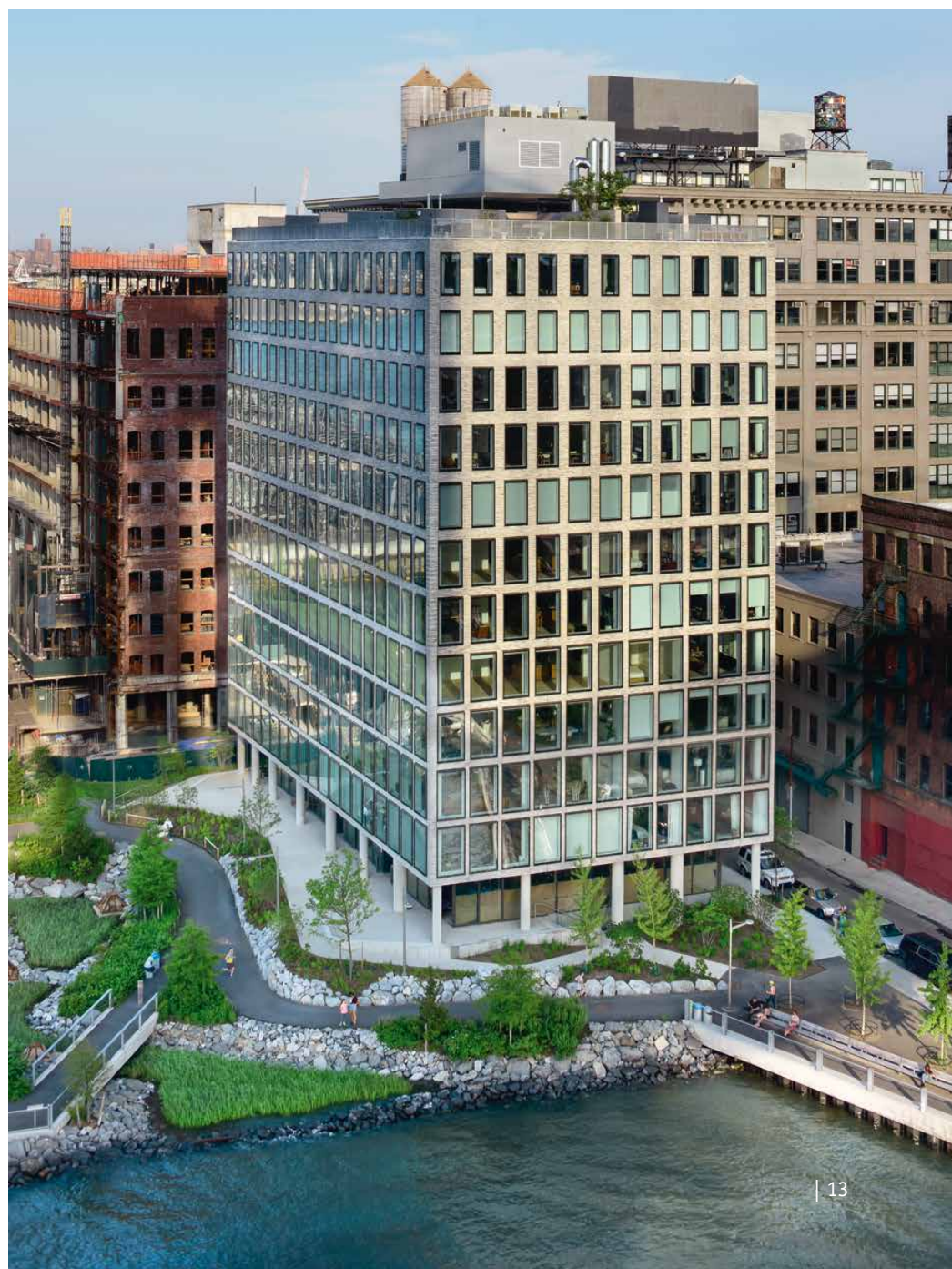
The 42 apartments, which range from 140 to 335 m<sup>2</sup> were sold at prices ranging from \$3.5–8 million, despite their relatively "un-

derstated" interiors. According to Della Valle, it was not a difficult decision to prioritise the exterior of the 40-meter-high building rather than the interior: "The building faces the popular new Brooklyn Bridge Park, so it is very exposed. It is extremely important that it lives up to the promise of its site. It is a private, yet public building. For example, it houses a branch of the Brooklyn Children's Museum," says Della Valle.

"Petersen brick was far from the cheapest option, but we could afford it, because we prioritised brick as an essential part of the experience we wanted the building to convey. As both architect and client, we were in the fortunate position of being able to decide that this was the right place to spend money," says Della Valle.

*The gradually increasing breadth of the pillars as they progress upwards references the style of the adjacent historic buildings.*

Site plan





*In 2011, Cadogan Developments opted to demolish two 1960s office buildings and instead build a large complex. The main façade toward Sloane Street is red sandstone.*



*On a number of small houses on Pavilion Road, which runs parallel to Sloane Street, the architects chose a reddish-grey D-brick for the gables.*



*Brick is the dominant building material in Kensington and the obvious choice for most of the new façades.*

*The new restaurant and gabled houses are built on the same scale as the existing houses on Pavilion Road.*



## RE-IMAGINING THE FAMILIAR IN LONDON

A NEW SHOPPING AND OFFICE COMPLEX ON LONDON'S EXCLUSIVE SLOANE STREET TRANSFORMS AN OLD URBAN HIERARCHY USING AN AESTHETIC GLUE TO BIND HISTORIC ELEMENTS TOGETHER AND CREATE NEW THINGS TO SEE AND DO.

The fashionable Sloane Street and the surrounding streets, squares and green spaces make up central London's second-largest privately owned neighbourhood, the Cadogan Estate, named after one of England's oldest aristocratic families, whose London holdings date back more than three hundred years.

Over the centuries, the Cadogan Estate has continued to expand and develop this historic district, which now largely consists of fashionable shopping streets and attractive luxury flats dating from the late 19th century. Architecturally, the area is mainly characterised by detail-rich, red-brick fronts, varied building heights and white-painted bay windows. However, there are also back alleys populated by much more humble abodes, known as mews, typically built in simple, grey/yellow brick. Originally, the mews served as stables and accommodation for the staff of the mansions on the main street – today they are charming and highly desirable private homes, studios and small shops.

Sloane Street is famous for its luxury designer boutiques – and in this fashionable environment, two 1960s office blocks attracted unfortunate and unwanted attention. The Cadogan Estate chose to demolish them and make way for a new shopping and office complex, with a scale, quality and architectural idiom to match the standards of the rest of the district.

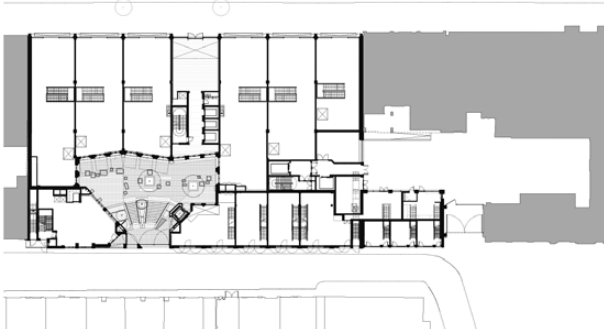
In 2009, select architects were invited to submit proposals to a competition. Stiff + Trevillion won with a project that quite convincingly reinterprets and embraces both Sloane Street's fashionable character and the intimate mews to the rear, on Pavilion Road.

The main element in the new complex, which was completed in 2016, is a 60-metre long retail and office building on Sloane Street. The slightly undulating façade alludes, in a subtle and elegant manner, to the area's classic bay window motif, while the red sandstone cladding is a contemporary nod to the street's other redbrick buildings. Details in lava stone add to the understated elegance of the exteriors and provide a sturdy frame for the more fragile sandstone.

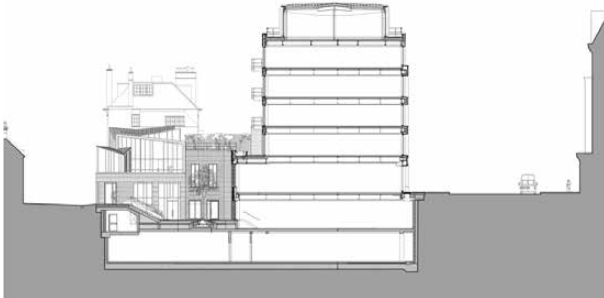
The buildings to the rear of the complex – which contain, among other things, small shops and restaurants – face Pavilion Road and reflect its character in their scale and



Site plan



Ground-floor plan



Cross Section

façades. The rear of the main building forms the backbone of a number of smaller and lower elements clustered around an open courtyard. Inspired by the famous Corso Como in Milan, the planted and furnished courtyard unfolds like a green and atmospheric oasis that is directly accessible from the main building, while an opening towards Pavilion Road also invites the neighbourhood's residents and visitors to use the courtyard.

The rear of the main building and all of the back buildings except one are covered in a single, specially mixed, greyish-yellow Petersen brick in myriad shades, which contributes to the rustic charm of the complex. It also ensures that the new buildings are an immaculate fit with the mews on Pavilion Road. A single building to the rear – a restaurant – is covered with a red Petersen Kolumba. This provides the kind of variation seen elsewhere in the area – specifically, the red Kolumba alludes to the exquisite Arts and Crafts building on a nearby corner.

The new buildings are already making their presence felt in Pavilion Road, where a new community of fashion boutiques and artisanal food shops has begun to flourish.

By drawing so deliberately on the district's historic and hierarchical building principle – an elegant frontage with much more humble back buildings – and transforming it via a dynamic, aesthetic trick, Stiff + Trevillion have created a particularly successful urban complex that generates new contexts and new roles for a desirable and traditional part of the city.

#### 131 Sloane Street, London

Client: Cadogan Developments Ltd

Built: 2016

Architect: Stiff + Trevillion

Engineer: AKT II

Façade engineering: Arup Façade Engineering

Building services: Hoare Lea

Landscape architect: Bradley-Hole Schoenaich Landscape Architects

Brick: Kolumba F6 and various moulded bricks D137 FF and DNF

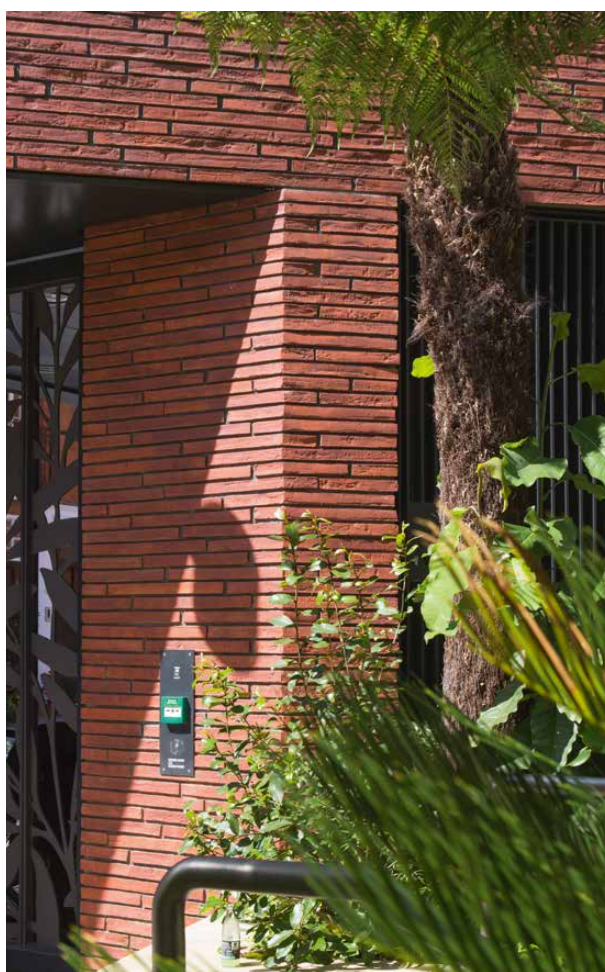
Text: Tina Jørstian, cand.arch.

Photos: Paul Kozlowski, Kilian O'Sullivan and Hufton + Crow



A sunken palm garden between the main building on Sloane Street and Pavilion Road serves as a communal courtyard for local residents and businesses.

Stiff + Trevillion developed a custom deep-red Kolumba for the building that houses the restaurant on Pavilion Road.

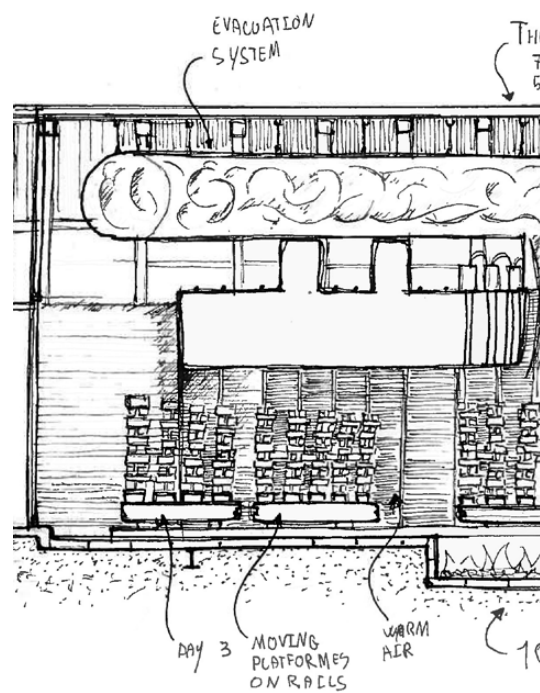


The brick chosen by the architects for the new buildings reflect the colours of the surrounding houses from the late 19th century.





The 16 students from the master's programme in Spatial Design at the Royal Danish Academy of Fine Arts, School of Architecture in Copenhagen had a great time handmaking their own bricks at the brickworks in Broager.



# DO NOT CUT KOLUMBA

IN SPRING 2017, 16 STUDENTS AT THE SCHOOL OF ARCHITECTURE IN COPENHAGEN COMPLETED A PROJECT THAT INVOLVED SKETCHING, DESIGNING AND BUILDING – AS WELL AS PRODUCING THE BRICKS FOR – A FLOOR AND FIREPLACE IN THE GARDEN OF THE SWISS EMBASSY IN COPENHAGEN.

“The material was really special to us, because all 800 Kolumba bricks were hand crafted by ourselves. Feeling the weight and texture of the clay, holding the wooden mould and making each brick ourselves strongly influenced our way of thinking,” recalls architecture student Alexander Rantanen Barstad. He visited Petersen along with 15 fellow students from the master programme Spatial Design at the Royal Danish Academy of Fine Arts, School of Architecture in Copenhagen, as part of the project “Material Includes”.

The project grew out of the programme Architecture in Residence (AiR), which is one of several initiatives launched by the Swiss ambassador to Denmark, Benedikt Wechsler. Since Wechsler took up his post in 2015, the Embassy has engaged in new and outgoing diplomacy activities. The embassy has amongst other things, become a catalyst for a range of fruitful collaborations between companies, universities and schools as a result of the Architecture in Residence (AiR) programme. One of these collaborative projects, “Material Includes”, resulted in a small construction project in the embassy garden in Hellerup. Petersen Tegl, which regularly works with the embassy, put its production facilities at the disposal to this project, which lasted a total of six weeks.

The assignment was to create a place for gathering consisting of two architectural elements: a rectangular floor and an inbuilt fireplace, both in brick. The venue had to be suitable for varied and flexible use. The students showed great tenacity during the project. As planned, the fireplace and floor piece were inaugurated on 2 June, when the Swiss embassy opened its doors to the Copenhagen design festival, 3 Days of Design.

The aim was that the meeting place – as a small piece of a better world – would invite diverse people including people with physical disabilities. And so, the students started by interviewing elderly and/or disabled people, whose memories, needs and experiences informed the design. For both disabled and elderly people, the physical environment can be perceived as strewn with obstacles, which can severely limit their spatial experiences. Good design solutions, on the other hand, help to open up physical spaces and positively influence how people experience them. This is the case with this designed piece, where the desire for inclusion is brought into play with patterns, borders, textures and dimensions, enhancing sensory experience. It lies just a few metres from the Sound, and the brick paving around the fireplace is wide enough for a wheelchair user, where the sea view is best enjoyed.

The design process of architecture and design projects often start from form, that is an architectural vision expressed as a figure or contour. “Material Includes” took a different approach – here, the first step was to make the Kolumba bricks. The students lodged near Petersen Tegl and produced 800 bricks in a single day. As part of the process, they studied different Northern European clays and their properties, as well as the machinery, the special construction of the furnace, cooling, packing, transport, and the brickworks’ branding strategies and working environment. Back at the school, they experimented with glazes, mortars and compositions. In parallel, the students derived inspiration from the interviewees’ experiences of brick, cladding and fireplaces.

Kolumba is not modular in its dimensions, i.e. its length is not a multiple of its width. In addition, the firing process makes the bricks slightly irregular, and therefore they did not easily fit into the given rectangular shape of the design. In the meantime, the students’ increasing fondness for the special bricks led to the dogma: “Do not cut Kolumba”. They filled the gaps between the Kolumba with smaller Flensburg bricks, which were glazed with contrasting colours to make the edges of the floor stand out. This gave the Flensburg bricks a decorative role that

defies rational explanations. Once the last brick had been laid, the students concluded that brick can be used in far more ways than you might think.

**Material Includes**  
A project by 16 students on the master's programme Spatial Design at the Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation (KADK).

Brick: K54, K56, K57, D31 and D73 FF  
Text: Heidi Svenningsen Kajita, architect MAA, PhD and Masashi Kajita, architect MAA, PhD.  
The Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation (KADK).  
Partners: Vedbæk Byg and Peter Wedell-Wedellsborg, architect MAA

Architecture in Residence (AiR) was developed and is curated by the architects Peter Wedell-Wedellsborg and Heidi Svenningsen Kajita.  
The AiR programme's main partners are the Swiss Embassy in Denmark and KADK.

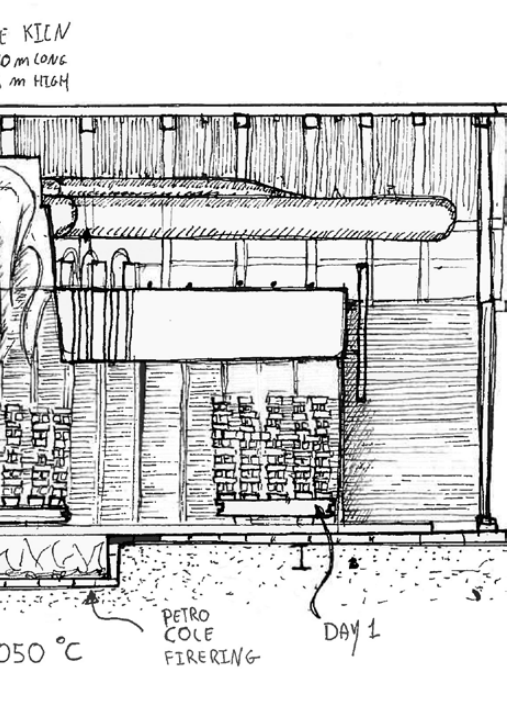
Photos: Jacob Bloch og Anders Sune Berg

The project was initiated by producing the bricks. They were produced in one day.



Back at the Academy, the students worked on detailing the floor and the fireplace.





The students made sketches by hand of every part of the production they experienced at the brickworks – including the coal firing in the big furnace.



Do the measurements fit?



The students had complete responsibility for the job, including laying the bricks for the floor and firepit.



The students' work resulted in an informal and inclusive meeting point in the otherwise formal garden at the Swiss Embassy in Copenhagen. The location, on the banks of the Sound, could hardly be more beautiful. The project fits in with Ambassador Benedikt Wechsler's objective that the embassy should be a setting for intensive and outgoing diplomacy, including collaboration with companies and educational institutions.

For their firepit, the students chose the hard-fired K57, which can withstand extremely high temperatures. For the floor, they used a combination of K54, D31 and D73 in Flensburg format. The golden and white glazed brick is not only decorative but stands out for people with a visual impairment. The corners are marked with K57 in a herringbone pattern, while the floor is edged with K56 and filled with smaller, glazed bricks – since Kolumba is not modular.





*Maison de l'Innovation is a robust and sustainable building with an industrial look. The reconstructed footbridge at first-floor level originally connected the ironworks' three blast furnaces.*



*Furnace A looks like a vast sculpture and is open to the public for various exhibitions.*



*Green spaces, industrial monuments and educational and research facilities are closely intertwined in the Cité des Sciences. The Dutch architect Jo Coenen conceived the visionary master plan for the area.*



*The building volume is clearly defined in order to create a contrast with the crude, preserved parts of the ironworks. The grey brick and mortar façades add to the homogeneity. A wild bond enhances the textual idiom.*

# INNOVATION BETWEEN THE BLAST FURNACES

THE NEWLY BUILT RESEARCH COMPLEX IN THE BELVAL DISTRICT IN SOUTHERN LUXEMBOURG STANDS IN TRANQUIL CONTRAST TO THE MONUMENTAL, SCULPTURAL REMAINS OF A FORMER IRONWORKS.

Maison de l'Innovation – completed in 2015 – is part of a larger urban development project converting 120 hectares of a former ironworks into a new district centred around Luxembourg's university campus. Several of the old industrial buildings have been preserved and endow the area with a rough-hewn, dramatic character.

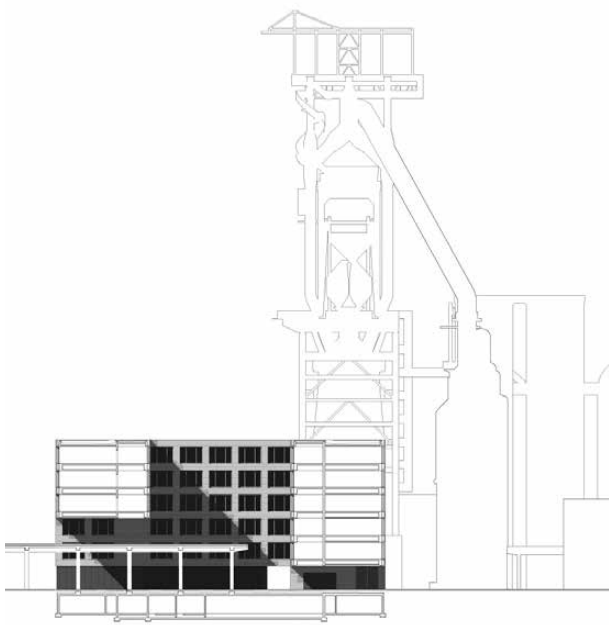
The discovery of a seam of iron ore beneath Esch-sur-Alzette in the early 20th century led to the construction of the Belval plant on the outskirts of the town, where the ore was mined and processed. Three large blast furnaces, two of which have been preserved, were built in 1965, 1970 and 1979. However, by the 1990s, they were no longer profitable, and the western part of the plant closed in 1997.

The land made available has since been subject to a major redevelopment plan that will stimulate growth and activity in the region. The plan includes the construction of the Cité des Sciences, with room for higher education, student facilities, sports, business, culture and leisure, spread over 30 buildings

and a total of 675,000 m<sup>2</sup>. The two remaining blast furnaces act as landmarks and reminders of the area's industrial past. One of the furnaces is open to the public, hosts exhibitions and has viewing platforms.

"The aim was to integrate the blast furnaces with something new, and this inspired the idea to build Maison de l'Innovation between the blast furnaces," says architect Patrick Siebenaler of BSARC Bourguignon Siebenaler, which designed the new research complex. Originally, the three blast furnaces were connected by a walkway at first-floor level. "The walkway linked the three blast furnaces with the workers' changing rooms, because the ground floor below was filled with machinery. The bridge was demolished, but has now been partially reconstructed."

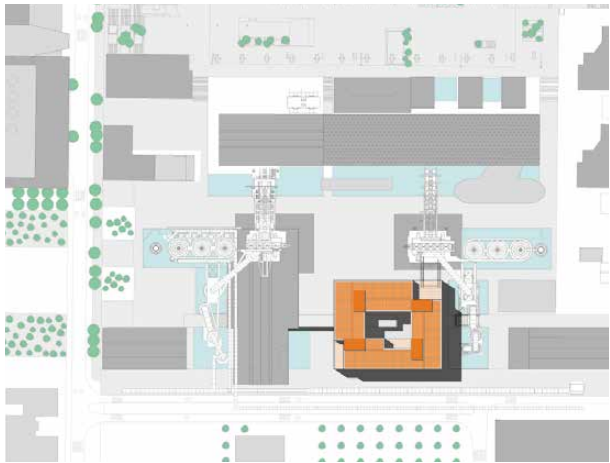
The new building encases the walkway in a rectangular six-storey (plus basement) block with nine bays. The volume stands in clear contrast to the two enormous blast furnaces. Pedestrians can pass through at street level on all sides,



Section with a blast furnace in the background.



Plan of the fourth floor, which extends to terraces on two corners.



Site plan



The remains of the former ironworks are home to a wealth of shapes, colours and materiality.



Maison de l'Innovation's well balanced architecture is based on a classical sense of proportion. A calm background for the meeting between the remains of the ironworks and the large reflecting pools edged by rustic iron plates.

and there is access to a central courtyard. The ground floor's public areas include a café, restaurant, and exhibition space, while the floors above house offices and laboratories. Three terraces appear to have been carved out of the total mass – one facing the courtyard, two the surrounding area.

On the office floors, a simple, grid-based layout allows for flexible usage. Maison de l'Innovation houses the Luxembourg Institute for Science and Technology (LIST), where environmental and information technologies and materials are developed. The new building's focus is on sustainability. The floors are separated by a double concrete structure that stores heat. Natural ventilation is also used to control the circulation of air and heat.

The grey-brick exterior walls and corresponding grey mortar bestow a homogeneous look, making the building appear to be a unified mass. Siebenaler explains: "It's a really solid building. We suggested brick to the client and knew Petersen from the Kolumba Museum in Cologne. But here we wanted

to use a smaller, grey brick with a high degree of texture, so the walls are almost reminiscent of concrete cast in situ. The bond is not structured in a particular pattern. The bricks are laid freely, because the idea was to create texture."

"Luxembourg doesn't really have a brick tradition, but for us that was a positive experience," he continues. "People are talking about the building partly because of the bricks. The use of brick is becoming much more common in Luxembourg. Other buildings on the new campus have brick façades, too."

The architectural idiom is subdued and rational, somewhat reminiscent of modernist buildings from the early 20th century. The recessed rectangular windows endow the façade with a fine rhythm, alternating between the stark black around the panes and the materiality of the grey brick surfaces. "The blast furnaces very much dominate the area," says Siebenaler. "They are almost 100 metres tall and have complex, filigree-like structures. There's a whole lot going on, so we wanted our project to be the opposite, with calm and simple architecture."

**Maison de l'Innovation, Luxembourg**  
 Built: 2015  
 Client: Les Fonds Belval, Société de Gestion & Travaux  
 Architect: BSARC Bourguignon Siebenaler  
 Contractor: Bureau Greisch  
 Engineer: Betic  
 Landscape architect: Michel Desvigne  
 Brick: D91 FF  
 Text: Martin Søberg PhD, architectural historian  
 Photos: Paul Kozłowski



*The new building features laboratories, classrooms, offices and a conference centre. Three central and welcoming gardens draw natural light into the underground space.*

*In terms of colour, the masonry in Andlinger Hall matches the greyish, sedimentary stone called argillite used, for example, in Princeton University's Blair Hall, built in 1897.*



*Williams and Tsien's new research building is right next to the Engineering Quad building, which dates back to the 1950s.*



*The new building is designed as a series of large, interconnected volumes. The smooth brick surface is broken only by the recessed windows and doors on the façade.*

*The distinctive 230 m<sup>2</sup> semi-submerged conference hall has space for 200.*

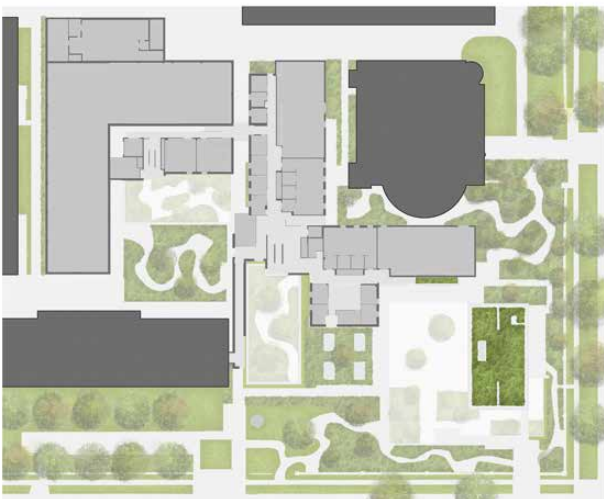


# HANDMADE BRICK INVITES YOU INSIDE

ROUGH-HEWN BRICK FAÇADES MAKE THE NEW BUILDING ON THE PRINCETON UNIVERSITY CAMPUS STAND OUT FROM OTHER HIGH-TECH RESEARCH FACILITIES.



*Section*



*Site plan*

Princeton University, in Central New Jersey, is known for its idyllic campus, which was immortalised by F. Scott Fitzgerald in *This Side of Paradise* and has provided the backdrop for countless films. Here, leafy courtyards are flanked by Collegiate Gothic buildings with variegated stone façades and asymmetrical massing.

However, when the University began growing in the 1950s, a number of buildings were constructed in a modernistic style, which today appears monotonous and somewhat outdated. One example is the massive red-brick building, 'the Engineering Quad Building', which could not immediately be modified. But its surroundings could, and that was exactly the purpose of a master plan completed in 2008, which recommended creating an 'engineering neighbourhood', so that the Quad building became surrounded by smaller buildings and attractive public spaces and thereby getting a better integration in the campus.

A \$100 million gift from businessman and Princeton graduate Gerhard Andlinger started the ball rolling. Tod Williams and Billie Tsien were commissioned to design the new facility. Called the Andlinger Center for Energy and the Environment, it would be devoted to research into sustainable energy production. Some labs would focus on examining materials at the atomic level, which requires an ultra-low-vibration environment. To achieve that level of stability, the labs had to be built directly on bedrock, below ground level.

The challenge was to make underground spaces appealing. Williams and Tsien responded by locating them in sunken gar-

dens. Williams took both his bachelor and master's degrees at Princeton, and so clearly understands the spirit of the campus, where outdoor spaces are key elements, not afterthoughts.

The architects divided the 129,000-square-foot building into three separate pavilions – two containing laboratories, one a lecture hall – that rise from four sunken gardens. The outdoor spaces beckon students and faculty outside, while ensuring that sunlight reaches the subterranean rooms. "Within the building, you'll always be moving from garden to garden, from light to light," says University architect Ron McCoy. From the outside, the facility's varied heights are reminiscent of Princeton's Collegiate Gothic quarters, with their syncopated skylines of towers and turrets.

Making the gardens special was the job of the University's landscape architect, Michael Van Valkenburgh. But Williams and Tsien did their part here, too, by cladding the facility in a grey Petersen brick. The masonry complements the red brick of the original Engineering Quad, as well as the greyish, sedimentary stone called argillite that covers many of Princeton's historic buildings.

According to Pulitzer Prize-winning architecture critic Inga Saffron, the use of handmade brick means that the new facility avoids the dull slickness that characterises so many science and engineering buildings. She wrote in *Princeton Alumni Weekly* that this, in turn, has an effect on campus life: "The less its exterior screams 'science', the more the Princeton community is likely to venture into the complex, to socialise and to attend events."



*Stability is crucial for the laboratories, and so they are built directly on the bedrock, below ground level.*



Given the focus of the research going on inside, it is not surprising that the building was designed to be energy-efficient. Placing the structure on bedrock moderates building temperatures, which reduces heating and air conditioning loads. Other sustainable features include the “green roofs,” which retain and filter storm water, while further insulating the building. All of these features helped the Andlinger Center qualify for a silver LEED rating.

But the building is much more than merely efficient. In Inga Saffron’s words, “It feels almost like a campus within a campus.”

**Andlinger Center for Energy and the Environment,  
Princeton, NJ, USA**

*Client: Princeton University*

*Architect: Tod Williams and Billie Tsien Architects | Partners*

*Landscape architect: Michael Van Valkenburgh Associates*

*Contractor: Sciam Construction*

*Structural Engineer: Severud Associates*

*MEP Engineer: Arup*

*Associate Architect: Ballinger*

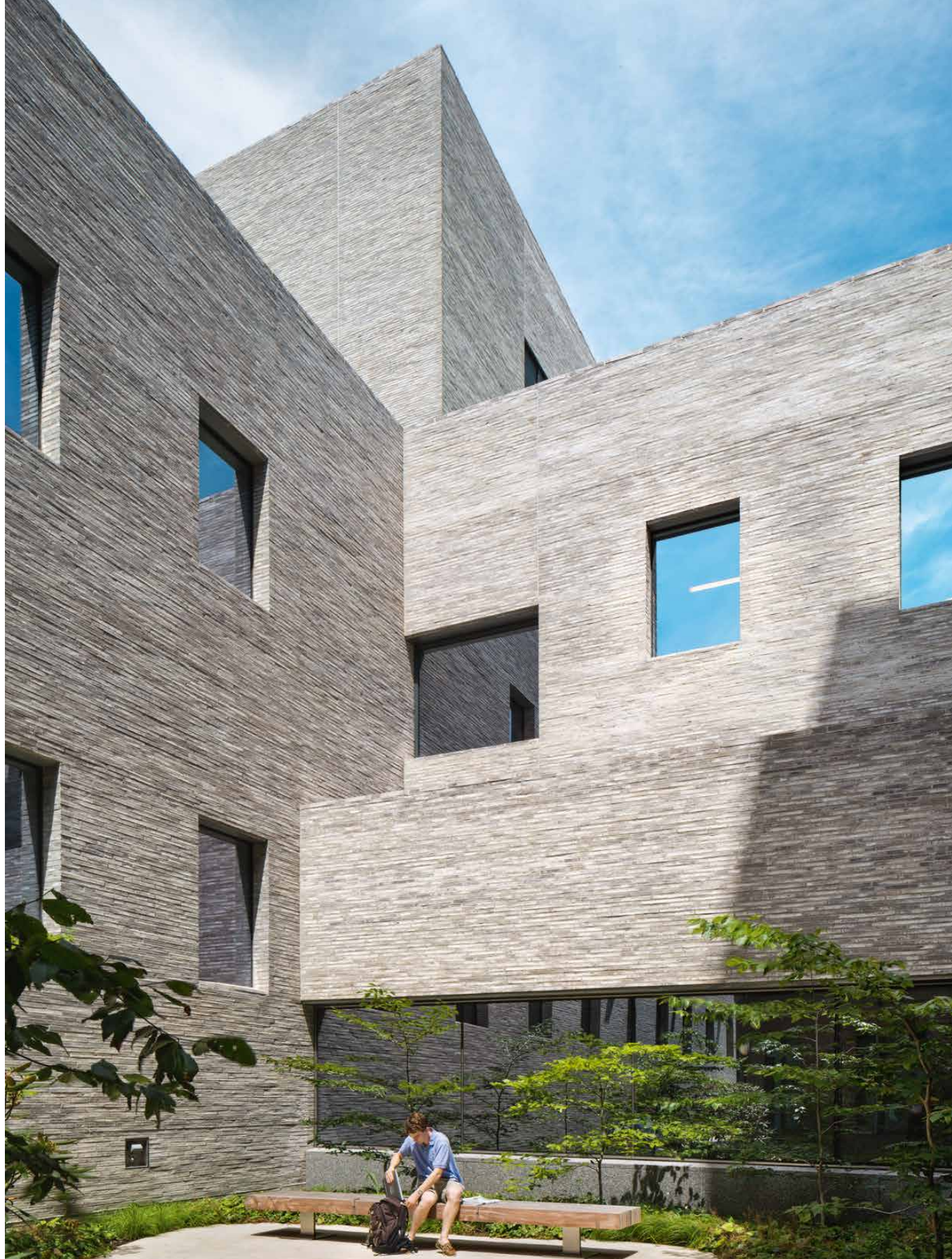
*Lab Consultant: Jacobs Consultancy*

*Cleanroom Consultant: Jacobs Engineering*

*Brick: K92 plus 18 special bricks made of the same clay*

*Text: Fred Bernstein, journalist*

*Photos: ©Michael Moran/OTTO*



*The harmoniously shaped complex offers plentiful greenery and social space.*

*“If masons hold the brick in their hand, and they like the material, that’s a very strong endorsement.” Billie Tsien*

**Tod Williams and Billie Tsien about  
their choice of bricks for Andlinger Center**

*At Princeton there is a lot of grey stone and red brick. We chose a light color brick for the facades, as we wanted the building to appear as if it were stone and brick at the same time. We used the texture of the brick and the color of the stone.*

*The leader of the Andlinger Center, scientist Emily Carter, wanted to change the paradigm of science but also about what science buildings are. She cared very much about the aesthetics and that the building did not feel as the typical male-dominated building. Science buildings contain a lot of technology and they tend to be almost like hospitals. The use of Petersen brick has humanized the building which might otherwise seem very cold.*

*Engineering is a bridge discipline, not any longer a pure study of chemistry, mathematics or biology. Today it is being realized that engineering and humanity must come together. In its use of handmade bricks, this building is joining these two and is therefore a powerful instrument. The Andlinger Center is not about making an icon, it is about being a place.»*



*Stig Sørensen, responsible for USA sales, and Christian A. Petersen met with Billie Tsien and Tod Williams at the brickworks.*

# KJÆRHOLM AND KOLUMBA SIDE BY SIDE

DESIGNER AND CURATOR CECILIE MANZ HAS SELECTED 130 EXAMPLES OF DANISH CRAFT AND DESIGN FOR A MAJOR EXHIBITION IN JAPAN THAT FOCUSES ON WELL-DESIGNED PRODUCTS FOR EVERYDAY LIFE.

Everyday Life: Signs of Awareness is the name of the major exhibition that opened in August at the 21st Century Museum of Contemporary Art in Kanazawa. Staged to celebrate the 150th anniversary of diplomatic relations between Japan and Denmark, this is the first major craft and design exhibition at the famous circular art museum designed by SANAA. Curator Cecilie Manz, who was nominated for the role by the Danish Arts Foundation, worked closely with in-house curator Hiromi Kurosawa and Kenya Hara, one of the founders of the home and lifestyle retailer Muji.

The result is an unusually inspirational exhibition that finds surprising and imaginative ways to present various visions of good everyday design in Denmark and Japan. One of the rooms features tableaux from a Danish home to present an entertaining but naturalistic picture of how we share our space with design products – Le Klint lamps, the Weekendavisen newspaper, Børge Mogensen chairs, Lego pieces, Eva Trio pots, and bikes.

“I worked with several themes for the exhibition. For all of them, materiality played a significant role in my choice of products. It is the hallmark of the best in Danish design that you can clearly sense that it is made by human beings. Another essential element in the success of

Danish design is that the products are created jointly by a craftsman, an architect and often a manufacturer,” says Cecilie Manz. “It was equally important to me to explain why things look the way they do. Here, the material is crucial, as it is the first thing that greets you when you sit on something new, touch something or walk past a house. Using the right material in the right place is highly important – and distinctly Danish.”

“The exhibition also shows that craftsmanship and design often converge. Gunnar Aagaard Andersen’s ‘Stool with slats’ is a prime example. The Danish skønvirke approach, akin to arts and crafts, art nouveau and Jugendsstil, is also important, as is evident from Engelhardt’s iconic street signs, on which he replaced the dot above the ‘i’ with a heart. We might not think about it on a day-to-day basis, but everything we use in Denmark has been designed in detail – from the bus stop to the light switch and the can opener. Products that do not try to stand out, but are hugely functional and beautiful, as well as distinctively Danish.”

Cecilie Manz features the Kolumba brick – the exhibition’s only building component – alongside products that she describes as distinctly functional. For example, Børge Mogensen’s People’s Chair, the seat of which is made of paper cord, represents aesthetics and function

*Cecilie Manz’s exhibition is based on four themes, each housed in their own section of a cedarwood construction: “Time inherited”, among other things, juxtaposes products by Kaare Klint and Line Depping, and emphasises that designers today stand on the shoulders of previous generations. “Almost nothing” presents well-designed products that do not make a big fuss about their aesthetic, e.g. an insulin pen from Novo Nordisk and power socket from Lauritz Knudsen. “Functionality” showcases products in which design is subtly interwoven with functionality, like the Kevi chair, Hallingdal textiles and Kolumba. The fourth category, “Expressive craftsmanship”, focuses on the fusion of design and craftsmanship, including the jug created by Morten Løbner Espersen and Gunnar Aagaard Andersen’s “stool with slats”.*



The 21st Century Museum of Contemporary Art opened in 2004 and was designed by studio SANAA. It is located in Kanazawa on the east coast of Japan. Photo: Osamu Watanabe, courtesy: 21st Century Museum of Contemporary Art, Kanazawa

One room in the exhibition, curated by Kenya Hara, contains only enlarged labels from the home and lifestyle manufacturer Muji.



*“Materiality played a significant role in my choice of products. It is the hallmark of the best in Danish design that you can clearly sense that it is made by human beings. And it is also an essential part of the success of Danish design, that the products are created jointly by a craftsman, an architect and perhaps a manufacturer.” Cecilie Manz, designer and curator*

rolled into one. “I’ve turned the chair upside down. It was made as an integrated whole, and it is, of course, just as beautiful underneath,” she explains. Other products on the theme of functionality include Poul Kjærholm’s drawing cabinet from 1955 and Hallingdal from Kvadrat – one of Denmark’s most commonly used textiles, which Manz describes as a “workhorse” – created in 1965 by Nanna Ditzel.

“Kolumba shows that the concept of design can be embodied in something as functional as a building component, provided that it is a conscious and intelligent solution to a specific problem. Architect Peter Zumthor’s Kolumba is the result of just such a process being taken seriously and using old craftsmanship in a new way.”

“I’m delighted that the exhibition in Japan features a handmade building material. I carefully chose a brick with the biggest possible fingerprint to emphasise that it was a person who brought it to life.” Soon after the exhibition opened, Manz visited the brickworks factory, where she tried making a Kolumba brick by hand. “It was fun moulding the clay into a brick and interesting to talk with the team who make them by hand. It takes a minute to make a brick by hand, but that is no time at all compared with the hundreds of years they last. And

how important is production speed actually, you might ask, when you consider the long-lasting quality that comes out of the process...”

**Everyday Life: Signs of Awareness**

– an exhibition on craft and design to mark the 150th anniversary of diplomatic relations between Japan and Denmark

Venue: 21st Century Museum of Contemporary Art, Kanazawa, Japan

Curators: Cecilie Manz and Hiromi Kurosawa together with Kenya Hara

Dates: 5 August–5 November 2017

Photos: Cecilie Manz Studio

Text: Ida Præstegaard, cand. arch.

Over the last 8–10 years, crafts and textile artist Anne Fabricius Møller has been collecting objects from the streets and assembling them into artworks.



Two products in natural materials, wool and clay, produced to play roles in larger contexts. Hallingdal fabrics by Kvadrat, Kolumba by Petersen Tegl.

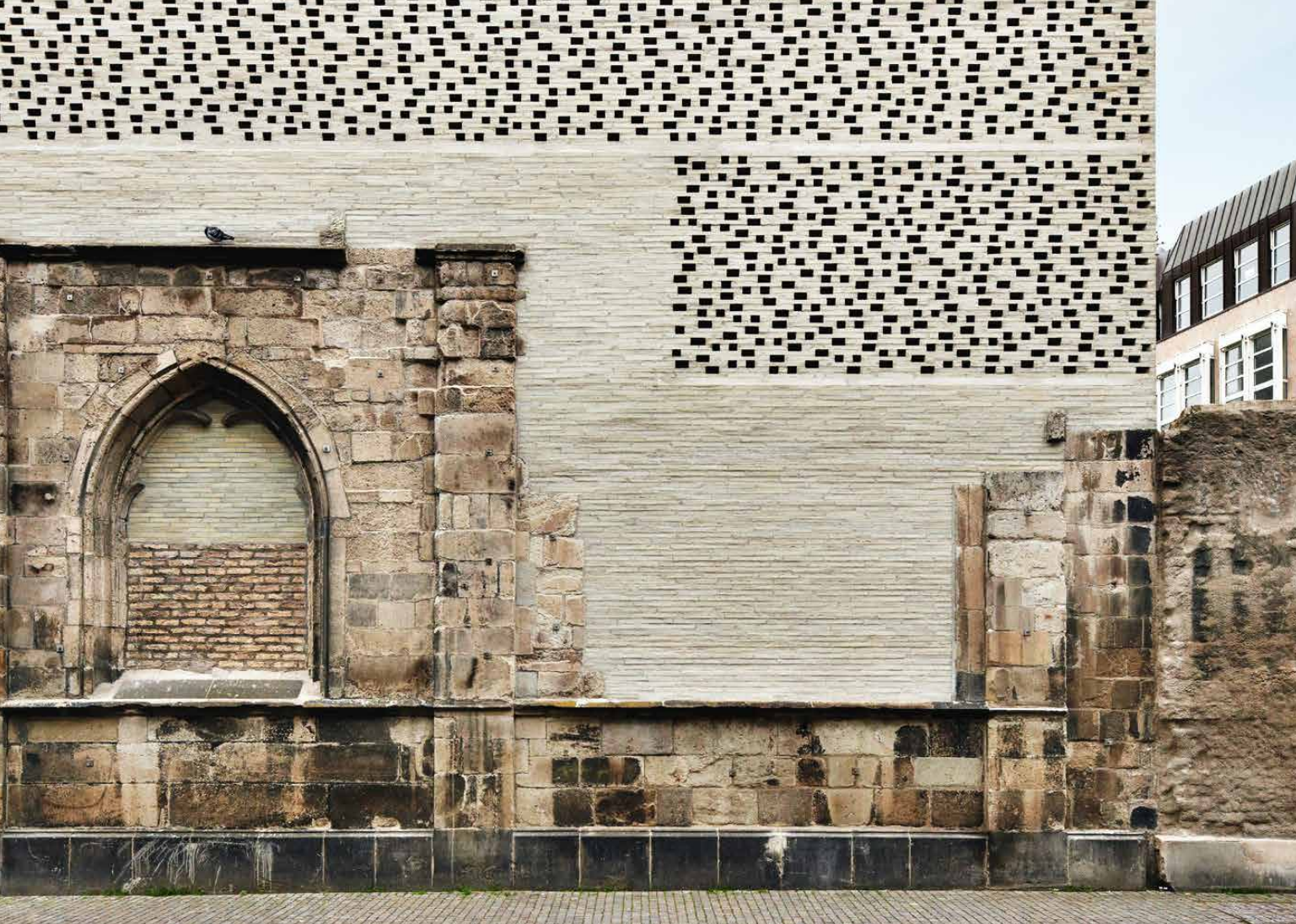
The project, called “Home”, consists of tableaux from Danish and Japanese homes, which look as if the occupants have only just departed. For example, the family breakfast table.



Minimalism and beauty in one. Bench, stools and storage unit – a tableau from the exhibition space “Home”.

During her visit to Petersen Tegl, Cecilie Manz threw herself into making her own Kolumba brick.





*Peter Zumthor is the architect behind the iconic Kolumba Museum from 2007, which was built to house the prestigious art collection owned by the Roman Catholic Archdiocese of Cologne. The museum contains beautiful exhibition spaces and integrates the chapel Madonna in den Trümmern, Roman ruins from the 1st century CE, and foundations from 9th- and 13th-century churches. Photos: Anders Sune Berg.*

## TEN YEARS FOR KOLUMBA



*The museum's perforated brickwork provides natural ventilation and a beautiful play of light and shade.*

*The brick – named after the museum – was ideal because its 40-mm height made it easy to fit in with the ruins' complex and detailed surfaces and shapes.*



Not many bricks celebrate an actual birthday. Then again, not many bricks were brought into the world by an internationally renowned architect.

The brick in question is, of course, Kolumba – which first saw the light of day a decade ago, when the Kolumba Museum opened in September 2007. The story bears repeating.

In the late 1990s, Christian A. Petersen was visited by a young Danish architect, Mads Bjørn Hansen, who had just returned from a year in Peter Zumthor's studio in Switzerland. One of the projects he had worked on there was a competition entry for the Kolumba art museum in Cologne for the Catholic Church. Zumthor had won the competition, and while Hansen was walking around Broager talking with Petersen, it started to become clear to him that this was a brickyard capable of turning Zumthor's vision into a reality.

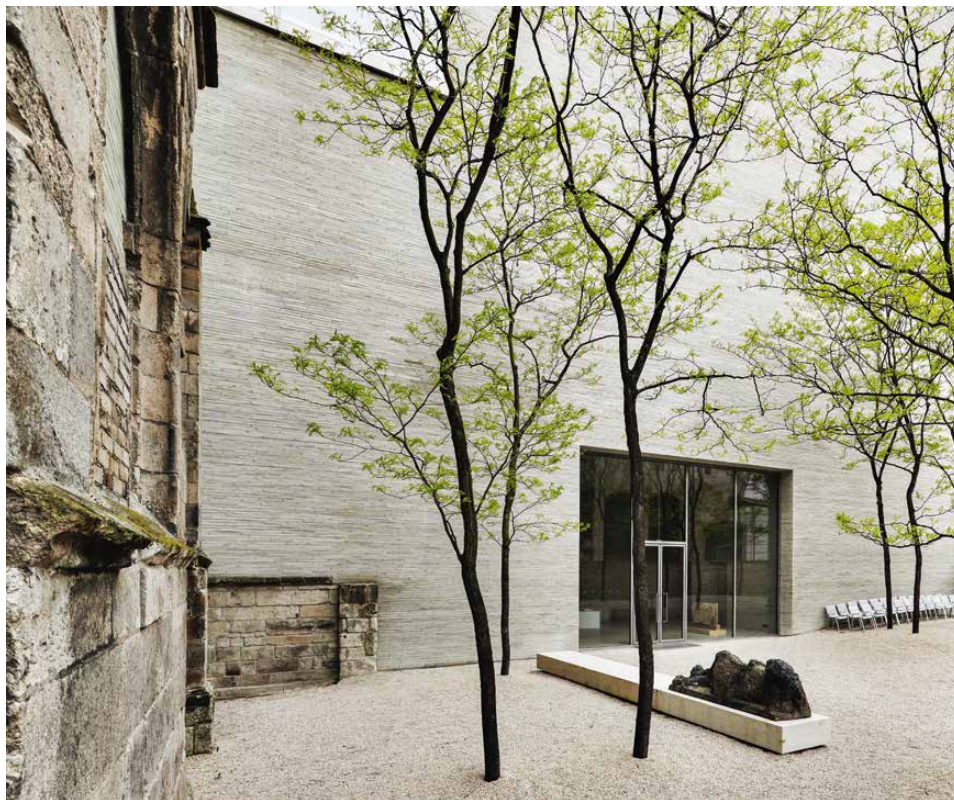
The Kolumba museum was to be built on top of Roman ruins and the foundations of several old churches, and so Zumthor wanted to use bricks with a Roman format. Hansen introduced Zumthor to Petersen, who immediately rose to the challenge.

"Zumthor asked about the maximum length of brick that we could make," Christian A. Petersen recalls. "I replied that if we put two bricks on one plate and reduced shrinkage during the firing, we could just about reach 54 cm." Zumthor liked the sound of that, and about two years later – after many experiments with colours and firing – the finished bricks in the delicate, light-grey shade he wanted were delivered.

Before the museum was completed, the Danish architects, Lundgaard & Tranberg, continued work on the brick. The result was a hard-fired Kolumba in dark, earthy colours for the Royal Danish Playhouse in Copenhagen. The Kolumba range now includes 28 different colours and is sold in 43 countries on five continents.

As a final twist to the story, Mads Bjørn Hansen, along with Mette Tony, later set up the studio Praksis – and their latest, award-winning building graces the cover of this magazine./IP

*The light, grey brick was originally the result of a firing error but Zumthor thought it was just right. It was then up to the brickworks to find out how to make the same mistake approximately 280,000 times. They succeeded.*



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