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Highlights:

Captains in the golden tower

New centre for maritime research in Oostende — p. 6

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For reasons of legibility, no gender-specific terms are used.
Any personal references that are only in the masculine form refer to men and women equally.

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Spirit of innovation!

How does it come into being? Can you promote it or even train it? At PREFA, we are certain that our spirit of innovation has always come from many different forces and influences: Pure curiosity, pride in the result, a lively exchange in the team and the ability to listen to and understand each other.

Sometimes, the ambition to simply be better and stronger than others plays a role, but true achievements are often brought to light by external factors. After all, isn't irritation the best motor for innovation? The inconsistencies, problems and difficulties that are thrown in one's path?

Whatever the reasons or motivations behind it, at the end of the day, we at PREFA pursue one goal in particular: creating safe roofs and strong façades for generations to come. Products where not only we, but also the architects, installers and especially the builders can say with a clear conscience: "I've certainly picked out something good."

What the future holds? Strong things, I am sure. Until the moment when all forces, strengths and ideas collide once again and we not only face the next challenge but master it. That also applies to you, by the way!

But now, you can relax and let yourself be inspired by the following pages of our PREFARENZEN journal. For exciting (architecture) stories from all across Europe can certainly stimulate the spirit of innovation.

Your PREFARENZEN ambassador

Jürgen Jungmair
Head of International Marketing PREFA

PS: You would like to add something, have questions or ideas? Then write us, we look forward to receiving your e-mail at ***info@prefarenzen.com***

Leuk PREFA!

Innovative architecture meets floating ground: Architects in the Benelux countries rely on materials that live up to the creative demands and prevailing weather and climate conditions. On the mainland and above all: when living on water. PREFA has been active in the three countries for many years and is participating in the extreme construction boom.

Text: Mara J. Probst
Photos: Croce & Wir

In the Belgian and Dutch coastal areas as well as the Rhine-Meuse delta that is marked by the rhythm of the tides, one cannot help but think of architecture in the original sense of the word stem (Ancient Greek "*archē*"), from its base, and ponder about what building foundation can be. People have long turned the circumstance that there is a lack of soil, which they so desperately need, to their own advantage. For in the Netherlands – one of the most densely populated countries in the world –, they have never regarded the mainland as a fixed constant. Plans for flood polders, a system of dykes, land reclamation areas and water pumping systems such as the *Zuiderzeewerken* can be traced back to the 17th century. Whoever builds on waterfront properties naturally turns away from the conventional and enters a dialogue with two extremes: floating flexibility and concrete anchoring.

One with the elemental force: In times of a rising population as well as rising sea levels, entire residential areas are being built from the ground in Amsterdam. Steigereiland, which is reclaimed land to the east of Amsterdam, has space for around 2000 buildings. Adjacent to this is *Zeeburgerbaai*, two residential islands with detached and semi-detached houses. For the architect Susanne Aniba of Attika, the project was all about individuality. None of the houses resemble each other, and yet, they have one thing in common: the anthracite-coloured PREFA façade.

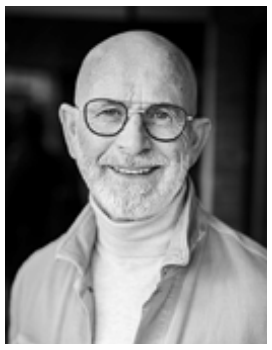
Belgium is also undergoing change. The city of Kapellen in the Flanders region is currently experiencing a transformation under the motto "design and build". This is also how the new theatre and cultural centre *Polyvalente Cultureel Centrum* by the architects met zicht op zee came into being. In cooperation with the city, the focus was put on maximum usability for the residents. The gold shimmering rhomboid façade tile becomes a central design element that determines the style both outside and inside. Cultural openness that makes an impact.

Henk Smienk (Netherlands), Stéphan Dupret (Wallonia, Brussels) and Tom Vanhandenhove (Flanders, Luxembourg) are part of a network made up of ambitious PREFA object consultants that has been expanding within the Benelux countries over the past few years. Their claim: sharing expert knowledge with architects and providing them with advice when using PREFA. With its longevity and weather resistance, PREFA scores in aqua living in every case.

Successfully building on and in water clearly works best with the latest scientific knowledge. Let us take you with us to the maritime research centre in Oostende in the Flanders region.

Tom Vanhandenhove
Object consultant Belgium

Stéphan Dupret
Object consultant Belgium



Henk Smienk
Object consultant
Netherlands

1 —

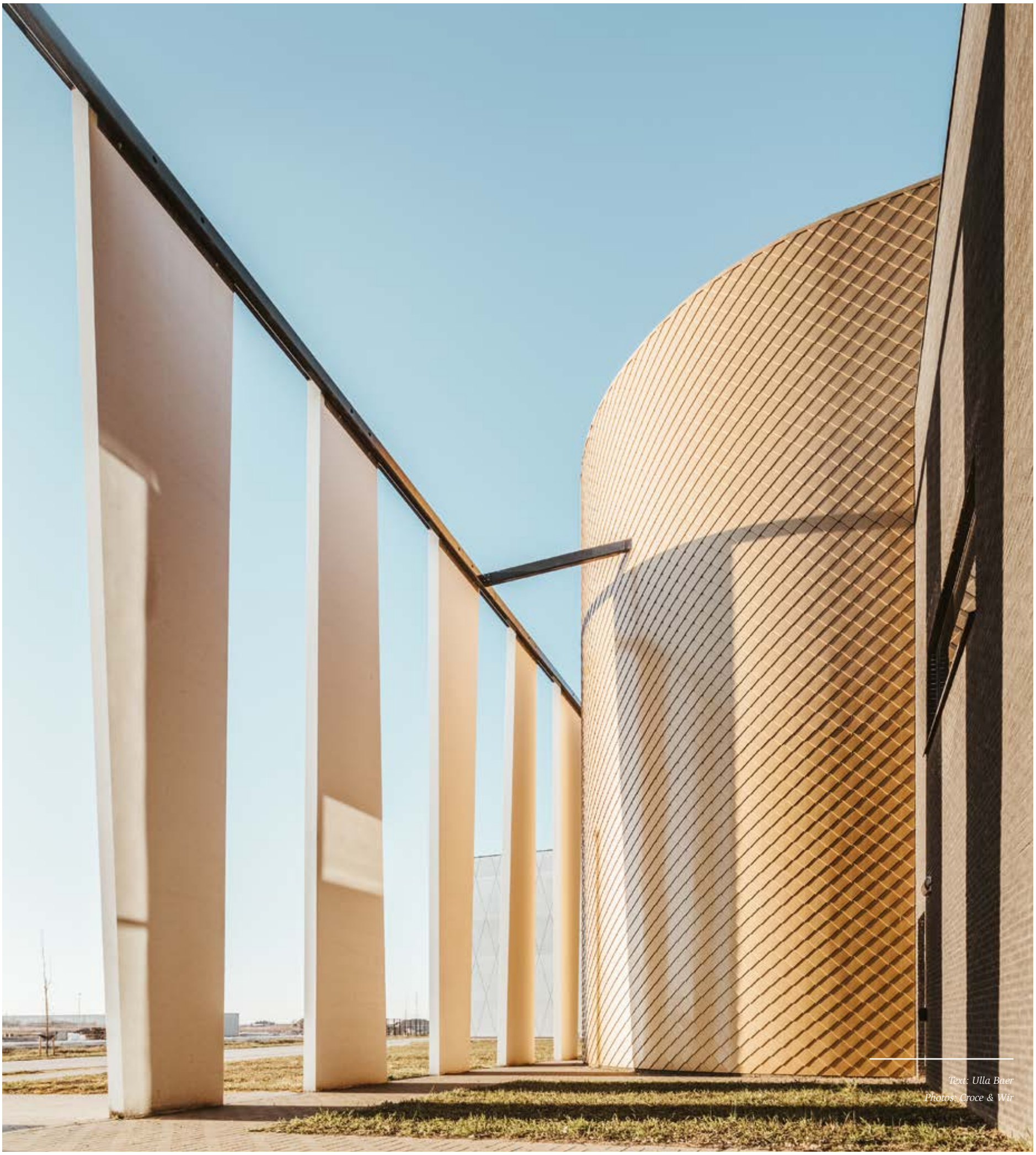
2 —

3 —

1 —
Object: Polyvalente Cultureel Centrum, Kapellen, BE
Product: rhomboid façade tile 44 × 44
Bespoke colour: Maya gold
Architecture: met zicht op zee architecten

2 —
Object: residential buildings Zeeburgerbaai, Amsterdam, NL
Product: Prefalz
Colour: P.10 anthracite
Architecture: Attika Amsterdam

3 —
Object: office building Kasteeltje Heisel, Brussels, BE
Product: rhomboid façade tile 20 × 20
Colour: P.10 anthracite
Architecture: Studiebureau W.J. & M.C. van Campenhout



Text: Ulla Baer
Photos: Croce & Wir

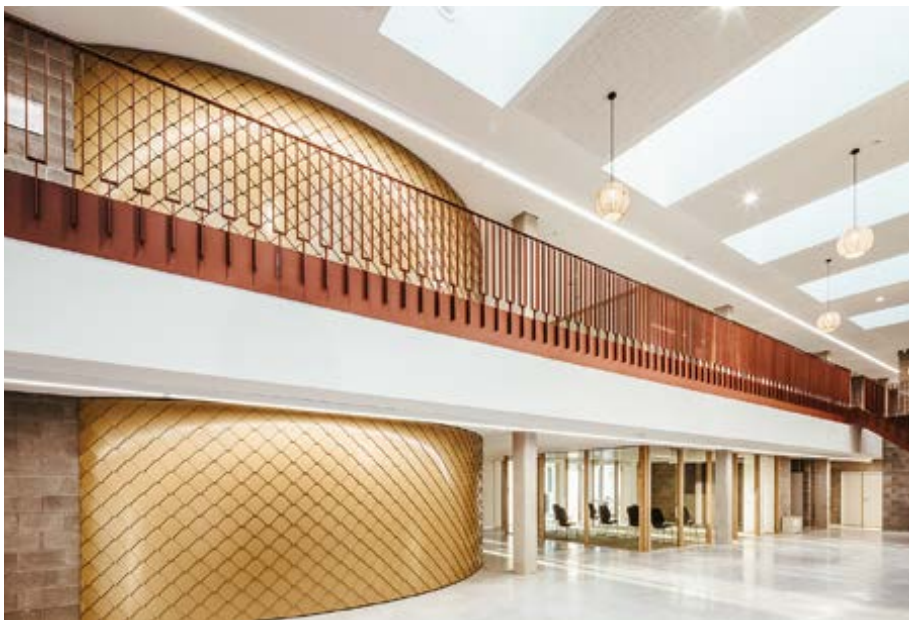
Captains in the golden tower

We saw how dependent we are on functioning shipping when a 400 m long container ship by the name of "Ever Given" got stuck in the Suez Canal: Global supply chains were delayed and there was a standstill in the 163 km long canal. A team of young researchers at the Flanders Maritime Laboratory (FML) in the Belgian Oostende reveals insights into their work and its significance for humankind.

Tourism, harbour and research

Oostende – which translates to “east end” in English – in the west of Belgium? You may ask how this goes together. Yet if you look back in history, it becomes clear that the Flemish city by the North Sea used to be located on the eastern end of the former island Testerep long ago. In the meantime, the island is connected to the Belgian mainland and the city’s name has become a relic of former times. It is known as a coastal city and seaside resort with a long promenade, where visitors can enjoy fresh fish at several snack bars in the presence of lurking seagulls.

In order to make the hidden underwater occurrence visible, a glazed viewing tunnel right under the canal offers the researchers a dry underwater perspective. And because freshwater resources are rare in Flanders, the water from the canal is intermediately stored in a subterranean bunker, which can hold up to 3,5 million litres.



On the way to the inner harbour of Oostende, you come across large buildings that have an industrial character. The FML, which lies on the Gent-Brugge-Oostende canal and has started operation just recently, already shines from afar. It is where the Flemish government and the universities of Leuven and Gent do research on the influence of waves, tides and wind on ships and structures at sea.

Giant miniature

The building complex contains a towing tank, a wave basin, an office area and a room for the future ship simulator. With a length of 174 m and a width of 20 m, this tank is the only basin in the world where fully automatic manoeuvres can be carried out. Scale models with lengths of up to 8 m are tested in captive and free running mode. The scales can vary between 1:25 and 1:100. At a scale of 1:100, the pool corresponds to a full-scale basin with a length of 17.4 km and a width of 2 km.

© FML

The facility in Antwerp was built with 5000 TEU container ship sizes in mind. In order to accurately model 25,000 TEU ships, it was necessary to build a modern research centre. With the large water surface that is available there today, it is possible to do research on the behaviour of ships with a length of 400 m and the capacity of 25,000 containers.

Manoeuvre in the towing tank

The towing tank is equipped with a towing carriage that can be moved on two separate tracks like a bridge crane. In addition, an integrated CNC controlled high-performance towing system enables an unmanned, fully automatic steering of the model in 24-hour operation. Aside from the researchers, there are also other beneficiaries of this facility: the ship building industry or investors in infrastructure buildings, for example in port facility expansion. Even the **“Red Torpedoes” – Belgium’s kajak team** – have already trained here. In contrast to the researchers, they appreciated the current- and wave-free environment, which they cannot find in any other open water, and practiced their starting process hundreds of times under constant conditions.

© DMOW (Department of Mobility and Public Works) - Red Torpedoes

© FML

Storm warning in the laboratory

In the 30 × 30 m large and 1,4 m deep wave tank called Coastal & Ocean Basin (COB), multidirectional waves and current speeds of up to 0,4 m/s can be generated with state-of-the-art generators at any relative angle. Before large and expensive dykes, harbours, breakwaters, offshore (floating) wind turbines or wave energy converters are built, engineers from all over the world can test them here using scale models and study their behaviour under waves, wind and currents. This involves questions such as: What influence do waves and currents have on the structures of dykes, wind turbines or breakwaters? How do they affect the efficiency of energy conversion systems? How will climate change and the associated rising sea levels affect the lives of the millions of people living in coastal regions?

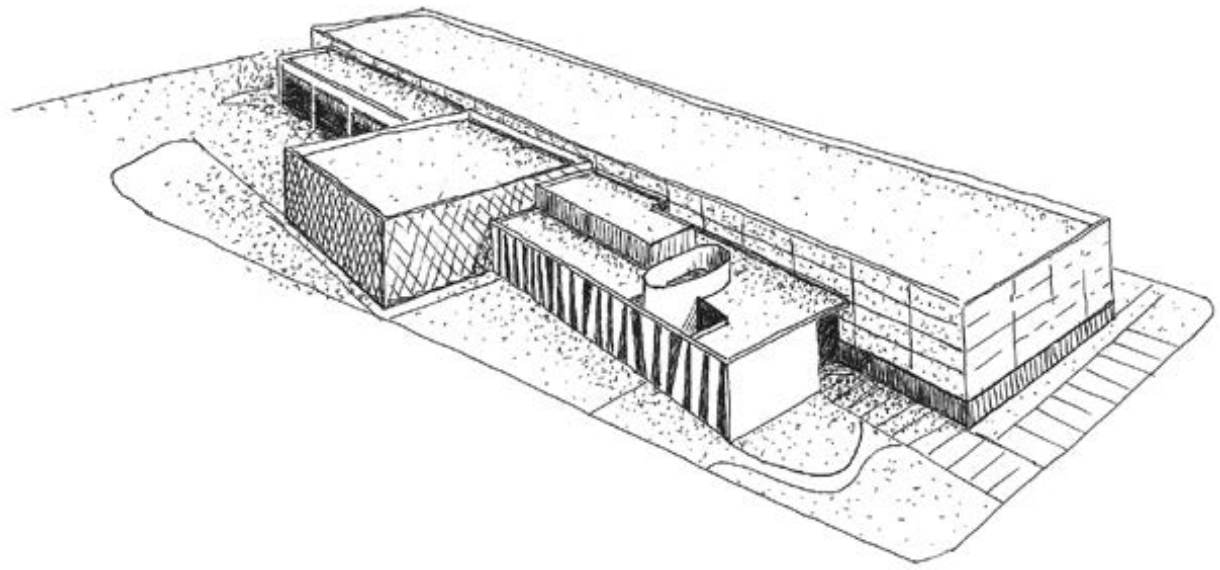
Dry training in a virtual harbour

A 360° ship simulator for training and research purposes will be built in the cylindrical tower, which is currently still empty. With this simulator, it will be possible to train complex maritime manoeuvres under various external conditions. The necessary software is also developed based on the results from the tests in the towing tank and in the ocean basin.

An increasing number of interactions between ships that are becoming larger and larger and harbours that stay as big as they are makes it necessary to simulate manoeuvres and automise them as a result. While ten years ago, some harbours only saw one container or cruise ship per week, they often count five to ten times as many today that are being loaded or unloaded at the same time. For 250 to 400 m long container ships which have to enter a narrow parking position that barely leaves 1 m of space on the left and right, new forms of automated steering as they are tested and developed at the FML are of fundamental importance.

Windowless identity

In a former spinning mill in Ghent, Ruben Beeuwsaert of signum + architects reveals the approach with which his office managed to win the competition for the maritime research centre FML in Oostende.



Text: Ulla Baer
Photos: Croce & Wir
Illustration: Ruben Beeuwsaert

No success without a challenge

"Was there an image in your head – no matter how abstract – before you began the design process for the competition for the FML in 2014?", we asked Ruben Beeuwsaert over a cup of coffee. "Yes, there was this idea of segmenting the necessary, large cubatures into individual buildings according to their function and giving them their own identity by using different façades." The architect regards it as a special challenge to plan a building with such a large volume that may only feature windows in the area of the administration building. The maritime research centre complements the wide portfolio of his office, which realises assignments of various sizes and in various areas – among them new projects for Volvo Cars Gent and Coca-Cola, a cultural centre for the city of Brakel and a library.

What to do with the volume?

The approach to avoid any kind of human dimension in the façade was the key to success. The glass façade of the administration building purposely spans two floors, just like the free-standing tapered elements in white located before it. As a result, you hardly have a human scale and the size of the building is put into perspective in an overall view. The design was also praised for packing the functions of the three research institutions into individual structures: This made it possible to form a varied cubature which also reveals on the outside that different areas are located on the inside.

The golden centre

The façades of the large building parts of the towing tank, coast and ocean basins as well as the administrative wing were executed in three harmonious grey tones with different joint divisions and surfaces between rough and polished concrete. For the façade of the oval tower, which will contain a 360-degree ship manoeuvre simulator in the future, the architect decided to use the rhomboid façade tile in Maya gold by PREFA. Therefore, visitors can perceive this rotunda as the visual centre of the overall composition both on the inside and the outside.

The aluminium rhomboids offer orientation, radiate a pleasant symbolic warmth and round off the architects' material concept. With the exception of the extensively glazed administration building, all structures are windowless – for inside, it is all about creating constant humidity and measuring conditions as well as preventing the growth of algae in the basin water with incoming daylight.

We love bricks?

According to a Belgian saying, "every Belgian is born with a brick in their stomach". Even the FML cannot do without the material that is so popular in Belgium: Somewhat hidden behind the tapered, white elements located to the left and right of the ship simulator, you can come across a small surface with black façade bricks in the entrance area. They allow the "white curtain" to shine even brighter and underline the Belgians' love for their bricks.

Ruben Beeuwsaert

Above all, this combination bears witness to the skill and ability to also give other materials a chance and use them in a masterly fashion.

The Dutch *& water*

Text: Kerstin Schweighöfer
Photos: Croce & Wir

© Ossip van Duivenbode | © DE URBANISTEN

© Jan van der Ploeg

DE URBANISTEN, Dirk van Peijpe

Rotterdam – water from all sides

Lunch break on the Benthemplein in Rotterdam, right behind the railway station. The square is lined by several schools and a small brick church. A few teenagers have gathered on the steps leading down to a **blue-green coloured basketball field** like in an amphitheatre. Some of their classmates are playing ball and skateboarding there. Two more colourful playing fields that also resemble a depression in the ground are shining through behind the deciduous trees. At first sight, you may think that they are perfectly normal sports fields: markings, baskets – everything is there. But, as fifteen-year-old Diwano says with a laugh while coming up the steps with his skateboard: "Just wait until it rains!" The two girls he has in tow nod in agreement: "Then the playing fields turn into ponds!"

1,7 million litres of rainwater, which would normally flood basements and streets during heavy rainfall, can be temporarily collected in the three colourful concrete depressions. That equals around 8500 bathtubs. This is the reason why the square is also called Waterplein, water square. Other cities like Antwerp, Copenhagen and New York have created water squares like these too. You can already find around half a dozen of them in Rotterdam. The idea comes from DE URBANISTEN, a group of Dutch urban planners and landscape architects who specialise in the problems that climate change entails in rural areas. "Many cities are finding it difficult to cope with excess water," co-founder Dirk van Peijpe explains. "You can try to solve it the classic way via the sewer system, by using larger and larger pipes and even more pumps. But you can also say: That is old-fashioned, we are not staying down here, we are going to focus on the area above and look into how the public space can be used for this purpose."

There is a lack of public space in the densely populated Netherlands, especially in the cities. Unless you rely on using space multiple ways: rainwater storage tanks as design elements and parts of public space that can increase the quality of life. “That is why we included the residents when planning the Benthemplein.” The parish, for example, wanted to have a baptismal font in one of the concrete depressions. Its wish was fulfilled and when the weather is nice, baptisms take place there sometimes. And the schools use the largest depression as an amphitheatre for performances. Urban planner van Peijpe has noticed that the three basins are used even if they are filled with rainwater: “I saw someone paddle there with a rowing boat once.” Some people even swim in them, “but that is the exception”.

The water squares are only one of many original solutions with which Rotterdam tries to remain dry. For nowhere in the Netherlands can climate change and its consequences already be felt as strongly as in the port city by the Meuse. Three rivers flow into the North Sea here: Rhine, Meuse and Scheldt. 85% of the urban area are below sea level, almost seven metres at the deepest point. The result: In Rotterdam, the water comes from three sides – from the front, meaning the coast, since the sea level is rising, from behind, as climate change also makes the rivers swell up, and from above due to heavy rain.

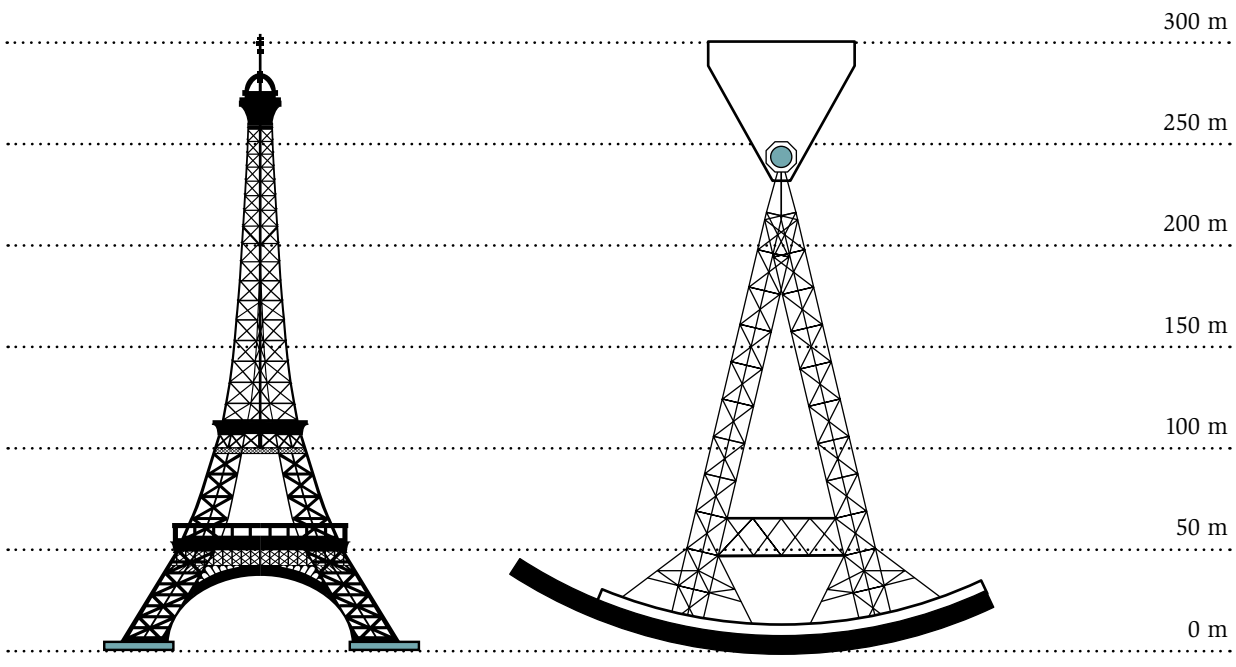
This has made the second largest city of the Netherlands a pioneer – also with regard to the construction of rooftop gardens, which the city promotes with almost 500.000 Euro per year. Rotterdam in particular has an unusually high number of flat roofs: After German bombardments erased the historic centre in 1940, the port city was rebuilt as a modern metropolis. This has led to a total of 15 million square metres of available roof area. 2500 roofs have already been greened. The most famous green roof is the Dakakker, a farmhouse at the top of a skyscraper including a restaurant where the vegetables can be eaten right on site – panoramic view included.

Parallel to this, the city is currently creating seven parks. One of them is the Hofbogen park, named after a railway line, the Hofbogen line, which has been shut down in the meantime. On this viaduct, a roof park that winds its way through Rotterdam for two kilometres in a northerly direction is being built at a height of six metres. The project reminds of the *Highline* in New York and the *Promenade Plantée* in Paris – with the difference that the Hofbogen park is far more narrow, only a total of six metres.

With measures of this kind, the city wants to not only relieve the sewer system but also provide cooling and – at least that is the hope – lower the average temperature during summer by up to seven degrees. For green areas can work like natural refrigerators. According to the plan, every inhabitant of Rotterdam should be able to reach a cool place within a ten-minute walking distance in the event of a heat wave.

The Dutch have also armed themselves against a “flood from behind” for a long time. Because precipitation and thaw ensure that climate change also makes rivers swell, a special flood protection programme for river basins was adopted: The measures include the reconstruction of meadow landscapes as well as the creation of tributaries, **retention basins** and so-called catastrophe polders that can be flooded in an emergency. Rotterdam has also received such an area outside of its city limits, which was combined quite pragmatically with the construction of a rowing course: In 2016, the World Rowing Championships took place there. In an emergency, five billion litres of Rhine water can be dammed and ‘temporarily stored’ in this area.

And then, there is the flood from the front: What protects the people in Rotterdam and the surrounding area from it is the **Maeslantkering** near Hoek van Holland, the world’s largest flexible **storm surge barrier** and the city’s outermost line of defense, so to speak. It is located by the *Nieuwe Waterweg*, the lifeline of the port of Rotterdam, and consists of two gigantic snow-white steel constructions, each of them more than 300 metres long. They lie to the right and left of the shore like two Eiffel Towers that have fallen over. The highlight: The shipping traffic to the largest port in Europe is only affected in the case of an imminent threat of flooding, for it is then that the steel arms can be cast out to the channel to block it with the help of ball joints. They are set in motion as soon as the water level by Rotterdam threatens to rise by three metres. “That has been the case twice since it was completed in 1998 – in the years 2007 and 2018,” explains hydraulic engineer Marc Walraven, who is responsible for the smooth running as manager of the operational team. For safety reasons, a test closing takes place every year. In the worst-case scenario, the Maeslantkering could withstand a storm surge as it has statistically occurred every 10,000 years until now. In the future, closings will happen more and more often on account of global warming – not only once in ten years, as has been the case in the past, but once every seven or even five years. Researchers are already developing future scenarios in which the coastal band is left to the sea, the people there retreat to the hinterland or head in the other direction, meaning the water, to live on artificially created islands from then on. Technically, anything would be possible. But, as Walraven says: “We are still safe here for the time being!”



Aqua living – life on the water

Surrounded by high-tech skyscrapers, something is bobbing up and down in the *Rijnhaven* in Rotterdam – only three storeys high, with a pitched roof and timber-clad façades. It has the aura of a Swiss chalet that has strayed downstream into the Rhine-Meuse delta – climate-neutral, made of recyclable materials and with solar cells on its roof. What the Rotterdam-based *Powerhouse* architects have placed in the port basin on a 90 times 27 metre large floating platform is sustainable architecture at its best. And for a good reason: The new world centre for climate adaptation, the **Global Center on Adaptation GCA**, is located in this largest swimming office building worldwide. Its goal: to limit the major economic and environmental damage that climate change is already causing on a daily basis. For instance by developing storm early warning systems, breeding heat-resistant plants or building dams and dykes.

The GCA is one of the most spectacular examples of so-called aqua architecture, that is: floating buildings. In the Netherlands, more and more people are drawn to the water to live and work. With good reason: The small country in the Rhine delta is one of the most densely populated countries in the world and traditional building ground is scarce. The water surfaces, by contrast, have increased along with the measures against climate change, and the pragmatic Dutch have discovered that the flooded polders and artificial retention basins are not only suitable for draining surplus water masses in a controlled manner, but can also serve as building land.

Leven met water is the new strategy: It is no longer about fighting against the water but living with the water. The result: Aqua living has become a trend, floating buildings are springing up everywhere in the country. Their foundation is usually a concrete tub filled with polystyrene. Connected to stakes via rings, they stay in place. This also makes it possible for the *waterwoningen* to easily adapt to the water level and move up or down with it.

In Rotterdam, this can be up to two metres due to the tides, as Minke van Wingerden knows. She and her husband, an engineer, gave Rotterdam the world's first **floating farm**: a transparent cube, 27 by 27 metres in size, that drifts in the Merwehaven. If you are heading towards it, you can already see the silhouettes of the 38 dairy cows from afar. The entrepreneur couple sees it as a solution to how long transport routes can be avoided and cities can produce their goods themselves in the future. It was triggered by Hurricane Sandy, which hit New York in 2012 and flooded all of Manhattan. The van Wingerdens happened to be there on a business trip and witnessed the catastrophe: "After two days, the shelves in the stores were empty because they could not be stockpiled anymore, there were supply bottlenecks. But a floating farm could continue to provide a city with food even after a flood." That is why further **floating farms** are already being planned in New York, Singapore and China – not only with dairy cows but also with greenhouses, for fruit and vegetables. According to the couple, Rotterdam was just the beginning: "To show the world that it's possible."

The jetty island **Steigereiland**, realised by the Amsterdam-based architectural office Marlies Rohmer, serves as a model for this: Europe's first drifting quarter with 43 swimming houses. Like elegant white ships, they lie in a haven to the right and left on a total of four jetties and are up to 160 square metres large, distributed over three floors: "It gives you a feeling of freedom and tranquillity," says Inge Valk, who together with her husband has already lived on Steigereiland for a good ten years and finds it wonderful: "In the summer, we can jump into the water, and in the winter, we dart between the houses on our ice skates."

New land

No other nation has known how to face the water as successfully as the Dutch. And they were not even intended in the divine plan of creation. There is a reason why there is the saying that “God created the world, but the Dutch created the Netherlands”. Without dykes and dams, surge barriers, locks and pumps, 40 % of the country would be flooded. The Dutch have already been fighting against the sea for centuries. In the process, they not only put a stop to the water but also wrest new ground from it.

The boldest example of land reclamation is still Flevoland, the youngest province of the Netherlands and the pride of the entire nation. For it was wrested from the IJsselmeer as the world’s largest embankment project in the 20th century. 29,000 hectares, originating from the sea foam like Aphrodite. Flevoland is home to the Netherlands’ youngest national park, the 29,000 hectare nature reserve *Nieuw Land* – new land.

© Gert Schutte

A paradise for hikers and nature lovers! The very idea that you could only find water and centuries-old wreckage here at one point is fascinating. Friends of landscape art also get their money’s worth on this drained seabed: You can find nine impressive artworks in the landscape all over Flevoland, the world’s largest land art collection. It is spread out over 190 kilometres and offers a different artwork every 30 minutes by car. For example the “**green cathedral**” by the Dutch conception artist Marinus Boezem – a forest of 178 trees in the shape of a cathedral – as big as that of Reims.

*Another artwork you cannot overlook is located on the shore of the Markermeer, on a breakwater dam off the coast of Lelystad. **Exposure**, a sculpture by British sculptor Antony Gormley: a huge squatting human figure made of steel bars – 26 metres high and with a weight of 44 tonnes.*

VINEX city Almere

La Defense

Railway station Almere Centrum

However, the new province was mainly wrested from the sea to give young families from the Amsterdam catchment area what has become unattainable for most people in Amsterdam: air and space to live, particularly affordable space. Almere, a city straight from the drawing board that is less than a 30-minute car drive away from Amsterdam, is the epitome of experimental architecture and was built especially for them.

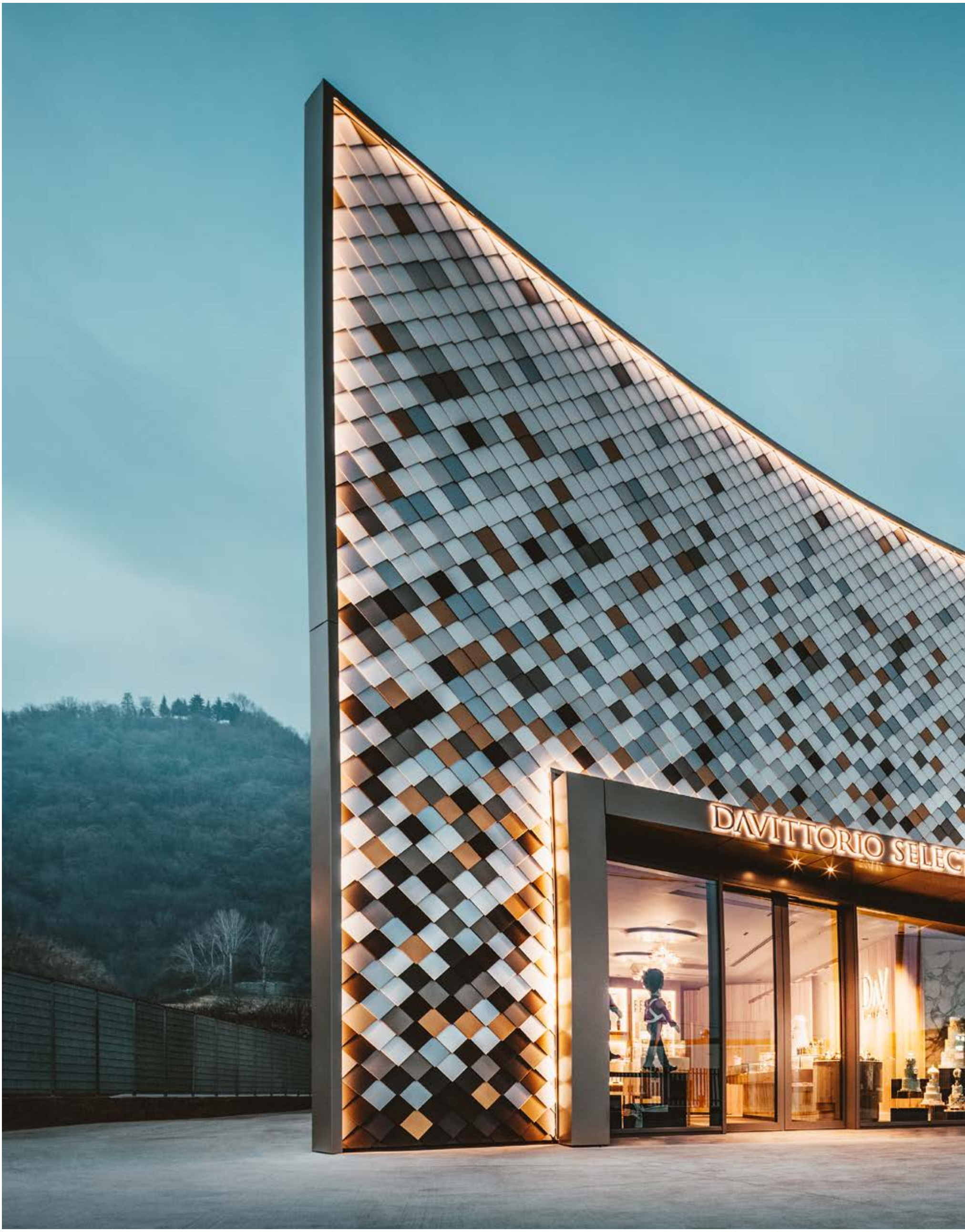
In 1976, the city could be “occupied”. Almere grew faster than any other city in Europe: from zero to 180,000 inhabitants in the first 30 years. In the meantime, there are nearly 220,000. The number can increase to 400,000, which will probably be the case due to the extreme housing shortage. The city centre was expanded for the first time as early as 2005, which the very first planners had already assumed in the 1970s.

Over a dozen international architects could express themselves here. The master plan for the inner-city expansion was created by OMA, the Rotterdam-based office of Rem Koolhaas, who designed the new cinema complex himself – a gigantic red cube. The Japanese architect Sejima built a glass theatre into the water, the Dutchman Peter Kilsdonk a functional, sober, expressive main railway station and his colleague in Paris Christian Portzamparc erected a spectacular residential complex with a roof garden landscape: De Citadel. Equally impressive: The Wave, a residential complex by René van Zuuk that reminds of a rearing wave. And La Defense by Ben van Berkel/UN Studio that boasts a rushingly colourful inner courtyard.
The patina of a real city is still lacking here, Almere is simply too young for that. But in the meantime, the residents no longer have to defend themselves for living here, on the contrary: They are proud of their city and the countless architecture fans and urban planning delegations from all over the world that are drawn to Almere.
This is also evidenced by a T-shirt that is highly popular among its inhabitants: “I’m not a tourist,” it says, “I live here!”

De Citadel

Silverline, The Wave

De Kunstlinie theatre


DAVITTORIO SELEC

Noble packaging for sweets

An Italian family saga

Object: DaV Pastry Lab, Bergamo, IT
Product: rhomboid façade tile 20 × 20
Colours: P.10 brown, bronze, P.10 dark grey, Maya gold, plain aluminium, PREFA white, pure white
Architecture: ARPOSTUDIO

An *Italian* family saga

Text: Christiane Bürklein
Photos: Croce & Wir, b/w photos Cerea family

It all started with a cup of hot chocolate in the mid 1960s, at the Orobica bar in Bergamo. Back then, the young Bruna would go to the bar run by Vittorio Cerea after visiting the cinema: *“I saw Vittorio and immediately fell in love with him.”*

Bruna and Vittorio Cerea

f.l.t.r.: Roberto, Rosella, Bruna, Barbara, Francesco, Enrico

“I was able to conquer him – with his mother’s help.” They got married two years after this encounter and on 6 April 1966, the young couple opened their own restaurant in the old town of Bergamo. Bruna was responsible for the desserts, especially cakes and ***„cannoncini“***, puff pastry rolls filled with vanilla cream, while Vittorio did the cooking.

He followed a bold concept and specialised in creative fish dishes at a time when menus were still largely dominated by meat dishes. The logistical effort for purchasing fresh fish and seafood far away from the coast quickly paid off. Stories about the outstanding quality and excellent preparation at the Da Vittorio restaurant spread like wildfire in Bergamo and Milan. Courage brought success and landed them the first Michelin star in 1978.

The family became larger: Enrico, Roberto, Francesco, Rossella and Barbara, they grew, divided their time between their studies and working at the restaurant and are still in the business today. Bruna Cerea and her five children have been running the restaurant since Vittorio’s death in 2005, which happened shortly after the restaurant moved from Bergamo to Brusaporto. Both Enrico and Roberto are cooks, Francesco is in charge of the external catering, Rossella is responsible for food and service at the restaurant as well as Hotel Dimora and Barbara takes care of the back office. Barbara’s husband, Simone Finazzi, is the Da Vittorio Group’s pastry chef and also manages the DaV Pastry Lab.
In the course of time, the Cerea family’s strategy was rewarded with two more Michelin stars (1996, 2010). But their success was not limited to Italy: The „Da Vittorio St. Moritz“, which was opened in the Carlton Hotel in St. Moritz in 2012, has already received 2 stars – just like the restaurant “Da Vittorio Shanghai” that opened in Shanghai in 2019.

The Cerea family’s commitment to the environment and social issues should be mentioned. From the investment in a vertical cultivation system for aromatic herbs and vegetables, where plants are grown in multi-level structures, to the efficient use of natural resources and agricultural areas up to activities that the Cerea family sees as a way to give back to the community. These activities range from sending surpluses from catering events to the food bank *(Banco Alimentare)* to supporting the local community during the pandemic by providing a cantine service for the field hospital in Bergamo or delivering food. Entirely in line with the family values, cohesion and mutual support.

Noble packaging for sweets

You can describe the new DaV Pastry Lab of the Cerea family in Albano Sant'Alessandro near Bergamo as a true treasure. Every day, thousands of delicious masterpieces are created at the new production facility, which nicely blends into the industrial area with an impressive rhomboid PREFA façade with 7 different colours. We spoke with the architect Sergio Mecca of ARPOSTUDIO and Simone Finazzi, Pastry Chef of the Da Vittorio Group and son-in-law of Bruna Cerea.

It took the family a long time to find a new location, as the production facility in Brusaporto could no longer meet the increasing demand within the company's own operations and for its catering service and mail order business. In the end, they decided to convert a former warehouse from the 1990s and the architectural office ARPOSTUDIO based in Bergamo, which had already provided advice and support during the search, was entrusted with the job.

Sergio Mecca, the leading architect, knows the Cerea family well, which is why he was able to support them during all project phases, starting with the choice of location up to the refunctioning and details of the interior design. “We designed every square centimetre here,” architect Mecca tells us, for the entire structure had to be adapted to the new needs of the DaV Pastry Lab.

—
Simone Finazzi

“We wanted to face new challenges and were looking for a confrontation with reality so we could continue to grow,” Simone Finazzi explains. “Our employees should have everything they need to do their work without unnecessary energy expenditures, both physically and structurally.” The master confectioner Simone Finazzi has been active in the Da Vittorio company since 1987 and has been responsible for the pastry line of the famous restaurant as a member of the Cerea family since 1995.

Architect Mecca not only had to face the task of transforming the existing warehouse into a modern production facility for food that meets all the requirements, but also had to create an outlet that corresponded with the Da Vittorio brand and the high-quality, fine delicacies.

The architect placed a concave wall extending beyond the building in front of the functional building. “It was not easy to find a material that allowed me to realise the façade design. The PREFA rhomboid façade tile 20 × 20 was suitable for cladding the concavity and was also available in seven harmonising colours. The original idea was based on the rising of dough, a real transformation. It should express this movement and therefore not have a static appearance.” The rhomboid tiles become lighter from the basis to the top and create a striking colour quality and a special, vibrating light effect that gives the front a dynamic quality.

The DaV Pastry Lab unites functionality, beauty and sustainability, adorning the anonymous context of the industrial area like a landmark. You can tell how practical it was to erect the new production site in such a well-developed place particularly on weekends, when people from the surrounding area come to buy the sweet creations, among them eight different kinds of ice cream: for festive occasions or for themselves. When they enter the DaV Pastry Lab, they can leave their everyday lives behind them for a moment and immerse themselves in the fragrant wonder world of the Cerea family.

Interview: Prof. Martin Schneider

Better to work broadly than work past reality

Interdisciplinarity and nature conservation as the key to the construction industry of tomorrow

There are certain preconceptions that civil engineers and architects do not get along, and both even less so with real estate developers. However, in construction practice, each of the three areas is dependent on the other two. Prof. Martin Schneider, Head of the Civil Engineering and Architecture Department at the Carinthia University of Applied Sciences (FH Kärnten, Austria), is committed to a close cooperation between the three subjects in education and also designs interfaces between various departments, institutions, companies and industries at research level across Europe. In his conversation with PREFARENZEN, he explains why he understands studying as training, tells us about the role nature conservation plays in his area and also reveals what he thinks about aluminium as a building materials technician.

The forest of tomorrow

"The forest of tomorrow must be different from the one we have today!" A statement like that sinks in. For Martin Schneider, forest and building industry are closely interrelated. In fact, the forest is the resource for a more sustainable building industry. "If the tree species in the forests change due to climate change, then building with the building material wood will also have to adapt accordingly." Schneider likes to apply the idea of the "forest of tomorrow" to other areas as well. For instance, he finds that construction management and real estate development should be just as sustainable and resource-saving as networking between architects, engineers and the industry. And it is also important to him that these aspects are already communicated at university. "For example, we offer an extra-occupational course to train specialists for nature conservation in the building industry at the FH Kärnten."

Sustainable management

According to Schneider, sustainability is the basis for being able to better design our living environments. It is not only since yesterday that projects, buildings and processes are given the label "sustainable". Partly to signal that sustainability is necessary and possible in most areas, partly to stand out from conventional approaches. But for him, it is not about an image or delimitation. He wants to stabilise the domestic construction industry in the long term. You could say that neither an architect nor a construction engineer can turn something into a truly sustainable project that is not thought sustainably from the very beginning. "A real estate manager who acts sustainably asks himself, for example: Should I even build in a certain place and under the prevailing conditions? What am I destroying if I build here? What needs to be built?" He tries to counteract pure speculation with a new philosophy and put the spotlight back on the question of the demand on the real estate market. "As absurd as it may sound: Our estate management course conveys ways of thinking that prevent an overexploitation of space and surface," Schneider states. Based on this kind of project development, architects and engineers can better integrate construction methods, optimised building components and an economical use of resources with the aim of reducing CO_2 emissions. The professor indicates that they are far ahead of politics and procurement regulations in this respect, but he is certain that there will be conditions and CO_2 limits in the building industry in the future. His students should be able to deal with this. "In the long term, the ecologically optimised building method will replace the building methods that are chiefly practiced today in all areas. The way we build today will become a niche area that will likely be described as traditional or conservative in the future." Even as a real estate manager, one will ultimately not be able to escape this development.

Interdisciplinary from the very beginning

Sustainable real estate management, architecture and civil engineering as three sides of the same coin – the different subject areas at the FH intertwine as interdisciplinarily as possible. Schneider draws a direct reference to the guiding idea of the Bauhaus, where "interdisciplinary from the very beginning" was also the basis for education. "Representatives were active in various different design areas and linked them with technical subjects in an interdisciplinary manner, also on behalf of and in close cooperation with the industry." For some time now, Martin Schneider has been working on how this can be transferred to engineering and construction management. The answers to this are working digitally and studying in project units where you can work in a concrete and interdisciplinary manner. Teachers should also participate in interdisciplinary research. Instead of "school", Schneider would prefer the term "Centre for Sustainable Building" per se when he is talking about the FH Kärnten.

But how did this Bauhaus idea land him in Carinthia? Martin Schneider is from Central Germany and studied broadly at the Bauhaus-Universität Weimar, the Friedrich Schiller University Jena and the University of Education Erfurt. In Weimar, he focused on traffic engineering and traffic planning. Material technology and fire protection came at a later point. After writing his dissertation at the Technical University of Vienna, he worked for an international construction company for a long time, where he was responsible for large infrastructure facilities and construction sites all over the world. He has been teaching building material technology, building analysis and concrete restoration at the FH Kärnten since 2014 and has also been in charge of teaching management in Spittal an der Drau for the past two years. All of these situations have left their marks. What chiefly interests him about teaching today is that you meet people who want to do things differently. "Studying is training," Schneider explains, "we need to train more for what is required later on in the working world." That seems logical from an educational perspective. You probably will not be able to prepare for a tennis match with artistic gymnastics. However, what will remain open is how research and teaching can act as impulses for a further development of the established working world. "In the future, one possible solution could be studying on demand," says Schneider. With micro degrees for those who are employed and a dual education system of teaching and studying, interactions with the working world become possible. The specialised fields at the FH Kärnten are being modified and expanded in this respect.

Optimised planning

"Building Information Modelling is only the beginning," Schneider tells us and indicates that digitalisation and thus an optimised planning will change many things in the future. Platform-based work and life-cycle oriented building will dominate in building practice and planning. The building task will then no longer stop with the completion of a building. Instead, structures will be installed that make circular building more natural. The approach here will be interdisciplinary as well. For instance, there is the research project CoNNa – Construction Needs Nature –, where architects and civil engineers work together in a construction laboratory to tackle the conflict issues of nature protection, the use of space as well as the scarcity of resources in the building industry. They seek implementation practices on how to establish nature conservation at construction sites. In addition, there are the fields of geoinformatics and virtual and augmented reality. "With augmented reality, we are already able to plan and realise building projects whose complexity can no longer be represented in classic sectional or floor plan drawings," says Schneider. This goes so far that masons, equipped with AR glasses and construction robots, can realise projects directly from the computer model without ever having seen a paper plan.

Aluminium – but recycled, please

Schneider points out that today, we are also at a turning point where the topics of resources and climate as well as biodiversity require new construction methods in the building industry. His opinion on aluminium in this context? He says that he feels sorry for the building material at times. "Aluminium is far too often measured by its initial production, which requires a lot of energy and can entail dangers in bauxite mining. The fact that aluminium can be recycled several times without losing its material properties and can therefore be used in a particularly energy-efficient way should not be ignored," he adds. "Aluminium is far better than its reputation."

There must be fantasists

Nevertheless: "Innovations in the building industry are always delayed," regrets Schneider. Safety aspects and a tightening of the building laws often stand in the way of a high development speed. "You cannot simply ignore the specifications and laws. But we need women and men with an imagination and visions who challenge our will to research."

Text & interview: Claudia Gerhäusser
Photo: Croce & WIR

Like figures on a chessboard

Text: Mara J. Probst
Interview: Claudia Gerhäusser
Photos: Croce & Wir
Illustration: SUPERBLOCK

Where there were once agricultural testing facilities, pigsties and greenhouses, you can now find carefully designed social housing buildings. With the "Wildgarten" (in English "wild garden"), the architectural office SUPERBLOCK realised a large-scale project with a diverse range of flats on the Rosenhügel in Vienna's Hietzing district.

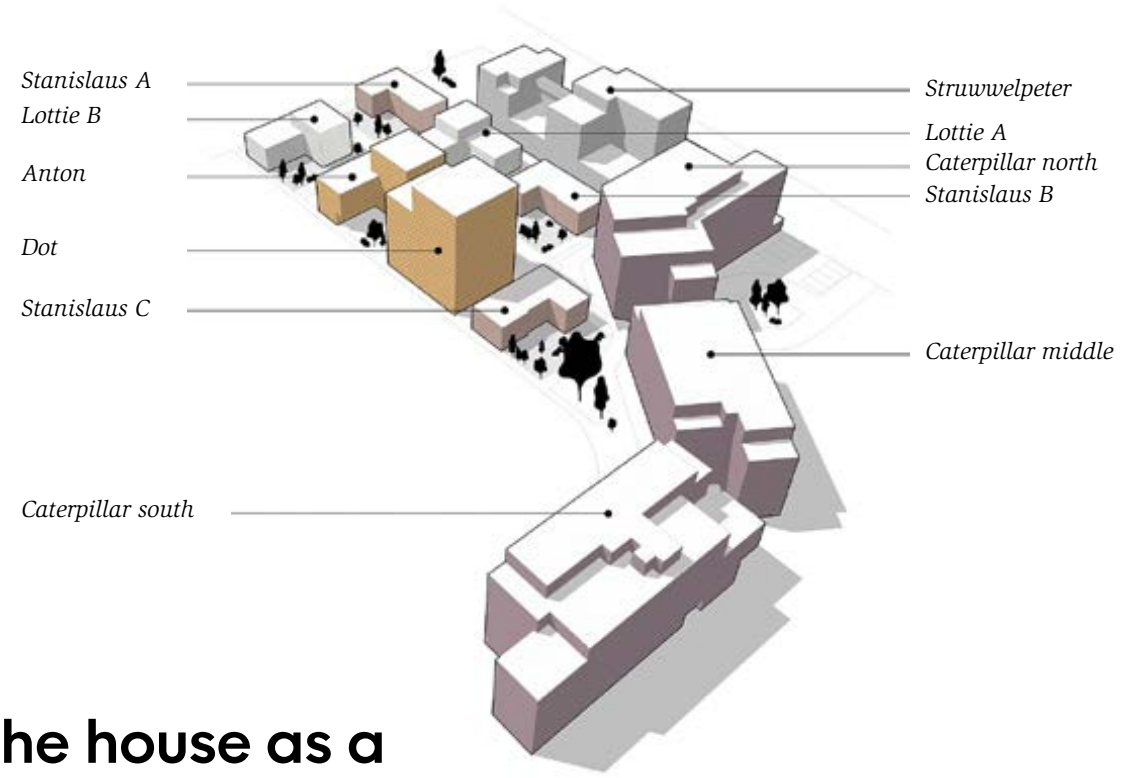
Thinking living further

For years, the two founders of SUPERBLOCK, Verena and Christoph Mörkl, have been working on innovative approaches to social housing on a larger scale, which already emerged in Vienna in the interwar period of the last century. As a "city within the city" concept, the community building offered its residents an infrastructure like a kindergarten, dental clinics, grocery stores and generous green areas. These structures were what made the block of flats a "super block". For their own office, such social mindsets also contained the potential to weave social anatomies into the respective building projects.

Mine and yours?

Vienna needs affordable flats! "Our project comprises building site number 2 of a total of nine building sites on an 11-hectare area located on the outskirts of Vienna and is an example of social housing that offers subsidised and privately financed flats," the architects explain. The construction of the complex consisting of 207 flats took two years and was finished in December 2020. There had already been a lot of discussion about privacy and the use of common areas during the planning stage: Are fences necessary? Where does the common area begin?

The master plan had envisaged that there would not be any fences, but the architects also found it important to understand privacy as a natural need. In the end, the solution was provided by 'suballmends', which represent transitions between private property and public open spaces within the neighbourhood.



The house as a subject

The name of the Nobel Prize winner Emil von Behring led to Erich Kästner's *Emil and the Detectives*, which is how they had the idea to name the buildings and building groups after characters from children's books. To develop unique typologies of the houses and residential units, which partially also vary in building height within a name category, they thought in building types of various sizes and gave them names. The architects called the largest building type "The Very Hungry Caterpillar", both "Dot & Anton" and "Struwwelpeter" are medium-sized types and "Lottie and Lisa" as well as the three Stanislaus buildings are smaller houses. Christoph Mörkl explains that, for their team, it was about creating different identities. Even during the construction phase, everyone involved used the playful names of the individual buildings, which, by the way, were also noted in this way in the plans and on the server platform. The fact that names were chosen instead of numbers and the objects were therefore personified, so to speak, not only brought humour to the building process: It should also have an effect on how the residents treat the respective object, design their living relationship and interact with one another.

The architects compare the organisation of the overall structure to a chessboard. “This way, a hierarchy was created with regard to the paths,” Verena and Christoph Mörkl reveal. In the 1st order, they focused on paths in the quarter – for instance the Emil Tischbein Weg (Emil Tischbein path), which runs from east to west and where communal spaces such as the children’s playground, the neighbourhood garage, a workspace and the laundry room are located. They organised the public allmende areas – green spaces that were planted with trees and shrubs – in the 2nd order. In front of Dot and Anton, blackberry bushes invite you to nibble …

Project manager Andrea Kieck

Diverse outfits

The diversity also continues in the choice of envelopes as well as their structures and colours. Project manager Andrea Kieck emphasises: “SUPERBLOCK wanted back ventilated façades, not least for environmental reasons. After a few discussions, we could convince the investors and decided to use the PREFA rhomboid façade tiles 44 × 44.” They discussed and determined technical processing details with the tinsmith, for example how the windows can be integrated into the façade in a weatherproof manner. In the end, three selected buildings of the Wildgarten were wrapped in a discreetly shimmering robe. With the colour pearl gold, Dot and Anton, for example, are given a very specific character.

In the entrance areas, **vintage-style textured rollers** with flower- and star-like patterns as well as **light boxes with large-format artworks** of plant cross sections at the macro level were used on the interior walls. If you step out of the building and look at the façade cladding from the outside, you see natural wood lathing and light grey plaster in addition to colour-coated aluminium rhomboids.

“In the end, what counts is what you get out of the work beyond what was expected.”

Before, afterwards – now!

The Viennese architects have a critical view of the topics building and environment. They would welcome a rethinking of the building industry and find a life cycle assessment of building components important. Without it, the sustainability aspect is often missing in the material choice. The recycled aluminium by the company PREFA, which was used for the façades on the Emil-Behring-Weg, met their high standards and sustainability criteria in any case. In their own work, they focus on circular economy, resource-saving construction methods and, even in large projects, on quality over quantity. “We don’t stop thinking at the property line, on the contrary,” they say. Although urban development is highly political, it pays off to be persistent: “In the end, what counts is what you get out of the work beyond what was expected.”

Mediator between *architecture* & technology

PREFARENZEN ambassador Christian Wirth on his new role as Head of Object Consultation in Austria

"Whenever a metal roof or façade comes up, the first idea should be 'PREFA!'", Christian Wirth emphasises with a smile. Once the new Head of Object Consultation Austria for roof and façade products starts to talk, there is no stopping him. We chatted with him about object consultation, hot topics and his experience with the architecture scene.

— Seeking partnership, reaching out your hand
"What characterises a good object consultant? That's a good question. In my opinion, he has to be solution-oriented and reliable, have an open-minded personality and, above all things, show empathy. After all, a large part of our work is all about building up trust and harmonising with the architect at a personal level.

With 15 years of experience in architecture consultation, I have come to the conclusion that the architecture market is by far the most fascinating market I know. The interesting encounters, variety of projects and challenging architectural details fill my day-to-day work with excitement and enthusiasm. I started to head the Austrian team of ten experienced object consultants, who all have a solid customer base, in early 2022.

Besides the large, established architectural offices, new constellations of young lone fighters and small creative groups, whose unusual ideas, contemporary architectural concepts and flexibility give them everything to hold their own in the market, are continuously springing up. Therefore, I am not worried about the market and am absolutely convinced that the architect and builder consultation we live day by day will become even more important over the next few years."

— Technology and fun
"We all share the same goals and offer architects support in choosing the right products, planning complex details, structural-physical matters as well as preparing tenders and one-to-one sampling – irrespective of the size of the project. We present the best options and offer corresponding arguments, which are accepted both by architects and builders. At the end of the day, that's what makes it fun for us."

— Architecture / fashion
"You can definitely compare architecture with fashion. The trends vary regularly, especially with regard to colours, surfaces and structures – as you can also see in our PREFARENZEN media. Currently, there is a noticeable tendency towards structured façades, such as siding.X. That is why PREFA needs to regularly identify international trends at an early stage, be flexible and also show courage sometimes. It's what makes us think outside the box and forge new paths."

— And what about your competitors?
"Our strongest competition is certainly in the area of façades. In most cases, however, everything revolves around project business, meaning that entire office or company buildings are converted. Subjects like sustainability and recycling have a higher priority here. Many other products simply cannot keep up with our lightweight systems, the colour variety and the 100% recycling rate. In this context, we are repeatedly confronted with arguments against our products. But if you are aware of the quality of your product, you can approach such conversations very calmly. With aluminium, one should always bear in mind that it may not grow back, but it does not disappear either. So if you opt for an aluminium façade, you will eventually get the money you spent on it back one day."

— Product (development)
"Behind an industrially produced roof or façade system, there is a complex development phase, a cost-intensive machine park and a calculation that orients itself on a long period of time. Therefore, not every new idea can lead to a new product.

We also repeatedly receive inputs from the architectural sector such as: 'The tile is beautiful, but can't you design it a bit longer?' Naturally, we respond by explaining that there are certain reasons why a product is the way it is. But in any case, such feedback triggers a thinking process in us and finally lands on our product developers' desks. For example, our square downpipe, a roof drainage downpipe with a square cross section, was created this way and has become very popular among architects."

— PREFARENZEN: Yes, please!
"There are different ways how objects find their place in the PREFARENZEN online magazine, journal and book. The easiest one is submitting them via the submission portal on the website. It is also possible to pass your object suggestions on to the responsible object consultant. The production of the articles in the PREFARENZEN media, which contain excellent textual and photographic documentations, is free of charge for architects. Many of them are not aware of that! But if you look back at the past two years, the increasing interest indicates that they are gradually discovering the added value for themselves."

— „I live in Traiskirchen …
…, but I left my heart in the Forest Quarter *(Waldviertel)*. I originally wanted to become a priest, but that quickly shifted towards a car mechanic and carpenter. I have always worked with my hands a lot, I got that from my grandfather, who was into wood turning and carving. After a few short detours, including training in mechatronics and precision technology, I eventually landed in building construction and ended up staying there.

I have several hobbies. I am a passionate barbecue cook, which pleases my two children most of all. For me, it's a way to relax, just like my painting and drawing sessions with an easel. My wife and I are also very athletic. In addition to cycling, swimming and skiing, we discovered HYROX for ourselves about a year ago. That's a competition-oriented fitness sport. We took part in a competition in Munich just recently and it certainly won't be our last one!"

Text: Anneliese Heinisch
Photo: Croce & Wir

PJ Word Rap

with CHRISTIAN WIRTH

Bauhaus or Jugendstil? — **Bauhaus**
Parrot or raven? — **Parrot**
Couch potato or party animal? — **Party animal**
Pros or cons? — **Pro**
Sausage or steak? — **Steak**
Try or study? — **Try**
Haflinger or Lipizzaner? — **Haflinger**
Mountain or valley? — **Mountain**
Rock or pop music? — **Rock music**
Bicycle or hamster wheel — **Bicycle**
Formula 1 or Formula E? — **Formula 1**
Sushi or gnocchi? — **Sushi**

Like leopards in the midday sun

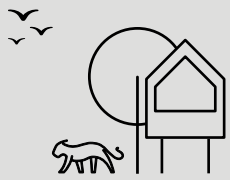
Houses in trees – whether they stand on stilts, are secured on branches or protrude on a slope – promise moments of contemplation. They connect the idea of protection and self-reflection with that of an adventure.

Text: Claudia Gerhäusser
Photos: Baumraum

It is tempting to outwit gravity and leave the chaos of the world behind us for a while. That explains why entire architectures are relentlessly lifted from the ground. With the corresponding prefabrication, the assembly on site has become simplified. But today, as was also the case long ago, it is something special to build next to or on trees. How close can a building with its anchors, supports and platforms come to nature without permanently damaging valuable metabolisms? After all, you are looking for a unity with your surroundings.

Longing for the "world between the treetops" is an archaic, an anthropological constant. When you walk through a forest, you inevitably look upwards. What awaits us there – that is the question. We follow our instinct and are on the lookout for places that can protect us from danger. We scan escape routes and, at the same time, look for the best position for us to get a clear view of the situation. Due to our evolution, we carry the urge to go up in us: Whoever can see far and observe without being seen often has the better chance of survival.

From dream to reality



More and more often, people turn to architects with their wish for a tree house. They are often investors who would like to offer this form of living for tourist purposes and draw on the expertise of experienced teams for the realisation. Building in conjunction with living trees poses many challenges. It is not only a matter of gently fixing the platforms but also requires extensive structural and botanical knowledge.

When choosing the roof and façade material, planners like to rely on PREFA's lightweight aluminium. The use of Prefalz creates a simple and elegant surface structure, which largely prevents the build-up of leaves and needles as well as the formation of moss thanks to its vertically running standing seams.

The three houses fox, badger and deer exhibit large glass fronts and are located on the site of a natural golf course in Lütetsburg, not far from the North Sea coast. Baumraum was also at work here, creating high-quality rooms for up to four people each.

Today, we rather connect the hope for better opportunities for development with the place between the branches. Those who dare to dive into the adventure and leave the world behind can be rewarded with unbelievable experiences, views and encounters. After all, you can not only find birds, squirrels and shy animals between the trees. Depending on where the trees are located, you can encounter silky anteaters, tree kangaroos or clouded leopards searching for their food in the twilight. What is certain is that the different environment supports a change of perspective on what exists. Unfamiliar sounds and smells carry your thoughts away to different places and in other directions that we are not used to. It may be that different decisions are made in a house in the trees than in those that are completely connected to the ground.

However, as humans, we are basically too heavy to live an arboricolous lifestyle forever. Creatures who live in trees weigh on average 14 kg. With the help of architecture, the construction and the mastery of the material, we are still able to take up the space between the leaves and branches in various ways. By building houses in the trees, we prove a certain lightness to ourselves.

In Switzerland, two friends use their house in the treetops as a retreat or flat for guests. Planned and coordinated by the architect Andreas Wenning from the office Baumraum based in Bremen.

Positive memories of your own childhood, of the first tree you climbed successfully can contribute to the fact that we also connect trees with positive emotions later on in life. Environmental psychologists state that we sleep better, are not as restless and have less stomach pains and headaches in forest and natural environments. The close contact with nature promotes and demands a basic emotional development and leads to a lasting improvement of motor skills and social behaviour. Environmental psychology attributes four functions to forests, one of which is recreation. According to a study by BOKU Wien[1], factors for the positive effect of forest spaces on our psyche are, among others, “a change and distance to everyday life, the range of fascinating things and the possibility to explore the space independently”.

During this short break in the trees, adults can also leave the conventions of urban life behind them for a while. For the time being, only the people you are sharing this special place with matter. The rest of the world is on pause. Between the branches, we are (like) leopards and sloths in the midday sun.

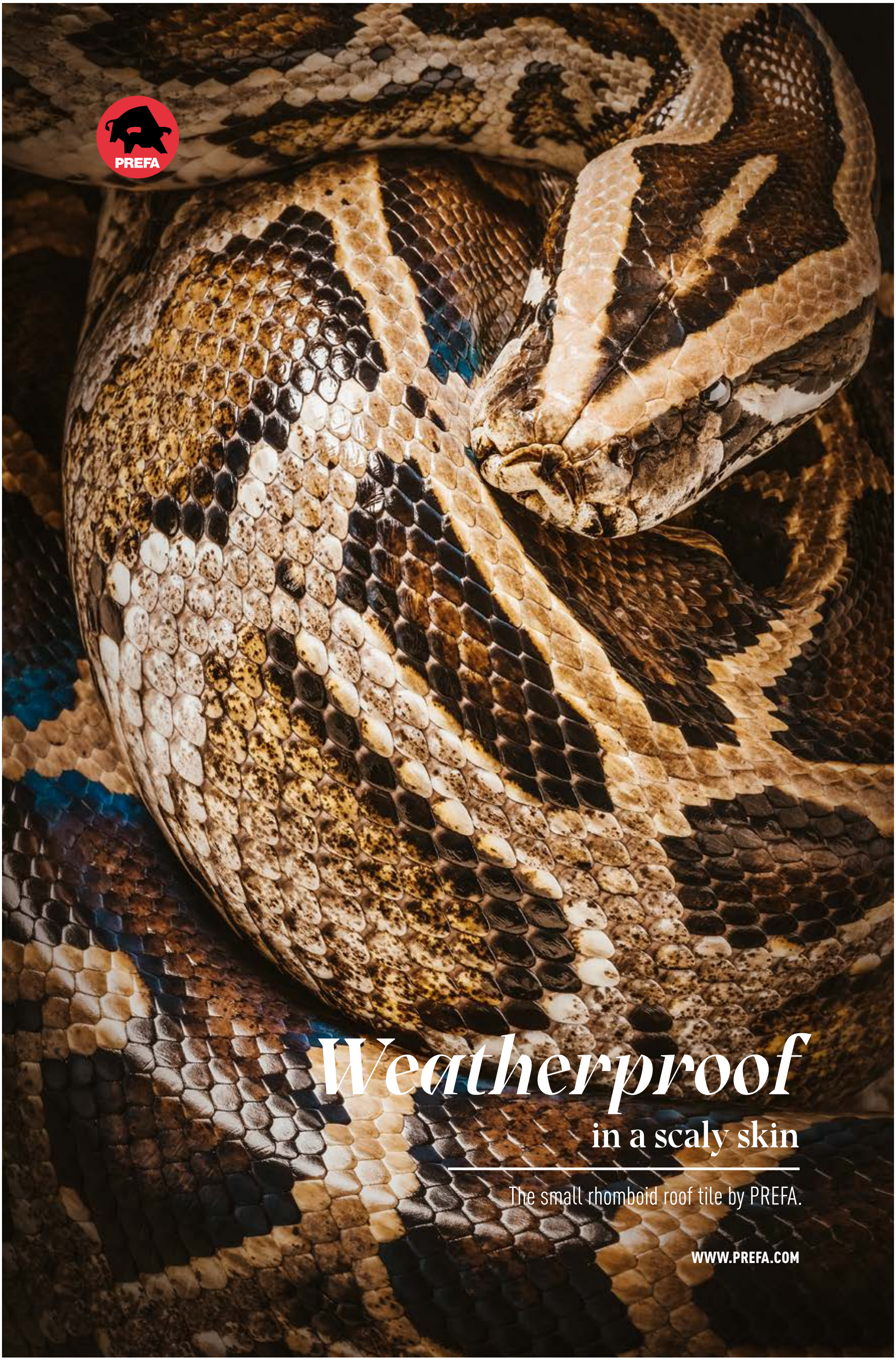
© Martin Croce

The tree houses at the Holiday Resort campsite near the famous Plitvice Lakes in Croatia are a delight for glamping enthusiasts. Designed by Ivan Plemenčić of abstracto studio from Zagreb.

© Jakob Nicklbauer

With the holiday home “BAUMCHALETS Allgäu”, the host Aron Holterman ten Hove and his friend Johannes Münsch, an architect from the Upcycling Studio in Innsbruck, have made a dream come true.

[1] Green Care WALD, study “On the health effect of forest landscapes” in cooperation with the Medical University and the BOKU, Peter Mayer, Head of the Federal Forest Research Centre; 2014.


PREFA
Weatherproof
in a scaly skin
The small rhomboid roof tile by PREFA.
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