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Highlights:

Architecture like in a picture book

Things will get colourful — P. 22

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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.

——— Imprint:

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Know-how – an untouchable capital

Our knowledge defines who we are. And the more we pay into the capital “knowledge,” the more we and others profit. We learn throughout our entire lives, sometimes without wanting to. But the best thing about it is: No one can take away our intellectual property.

Just imagine what would happen if we used this time to expand our knowledge as much as possible. If we opened ourselves up to all the wonderful and interesting things out there instead of hiding away! Our PREFARENZEN journal is only one of many possibilities to get lost in our thoughts. That is why we strive to capture many small details around the PREFA universe and share them with you in every issue.

Our work at PREFA also depends on many small details: The high aesthetic standards and functionality of our products is one thing, the accumulated know-how from the company’s 75 years of existence is another. Thanks to our great team, we have gained a lot of knowledge over the years that is not only greatly beneficial for us, but also for each of our partners: building owners, installers and especially architects.

In addition to our departments for innovation and development as well as application technology, our PREFA academy is also part of the epicentre of our know-how. Here, all of our partners and employees benefit from valuable and relevant information concerning high-quality roof and façade solutions. Moreover, the transfer of knowledge through numerous PREFA consultants, who offer professional support for big and small architecture and planning offices as well as installers from the first planning hour onward, should not be forgotten. It is a successful collaboration of an international and continually growing network that is reflected in unique projects.

You are curious to find out about our current projects? Then join us on a journey to fascinating new and historical objects on the following pages, objects that were also created for several generations thanks to PREFA.

And if you would like to show or tell us something, feel free to send us an E-Mail to ***info@prefarenzen.com***.

Many interesting pages are waiting for you – so enjoy!

Your PREFARENZEN ambassador

Jürgen Jungmair
Head of International Marketing PREFA

Ciao PREFA!

When PREFA first entered the Italian market from Austria in 2007, no one knew how hard the path to success would be. The first clients were private home builders and tinsmiths in South Tyrol who found out about the aluminium roof tile in a roundabout way. Today, PREFA is well established throughout Northern Italy and is highly appreciated by both architects and tinsmiths.

Text: Carl Bender
Photos: Portraits PREFA, Croce & Wir (6)

Nadia Carcione
Marketing PREFA Italy

Andrée Secchi
PREFA object consultant

Looking back, you will come across the Tyrolean Gerold Hassel and the Niederfriniger family from Bozen. Always on the go, Hassel already represented PREFA in western Austria in the 70s and eventually came into contact with Luis Niederfriniger around 1990. Since then, his company has always been a reliable PREFA distribution partner for Italy. In the beginning, PREFA was a lesser-known supplier of the established metal trader, who mainly dealt with copper, zinc and coated sheet steel. When PREFA decided to open its own sales office in Italy, it quickly became clear that this would happen in collaboration with the company known today as ALPEWA.

In 2007, PREFA moved into the office rooms that had been made available on the premises of their loyal trade partner. Under the leadership of Gerold Hassel and his equally committed team of five, it did not take long until they enjoyed their first remarkable successes. Nadia Carcione has been working in marketing from the very beginning and fondly remembers this time: “We did everything to make PREFA known in the entire country and convince people of the advantages of aluminium products. Almost every week, we took part in trade fairs and went to markets or village festivals to come into direct contact with tinsmiths, roofers or private individuals. At first, it was mainly about renovation – it was not until later that people also increasingly became interested in façades of new constructions.” The team, which has been loyal until today, also included Reinhold Augschöll, consultant and project developer for South Tyrol, the architect Andrée Secchi for all of the other regions, Andrea Rizzi in the technical office as well as the master tinsmith Elmar Waldboth, who is now in charge of the PREFA Academy Italia.

A lot has happened since 2007: The branch office became PREFA Italia srl, PREFA became the main supplier of ALPEWA, which took over the merchandise management and logistics and also acquired the neighbouring building for the PREFA Academy Italia.

“Today, there are 8 competent object consultants who assist architects in Upper Italy. We accompany projects of all sizes – from planning up to communicating with processors. This service is part of our recipe for success and is one of the reasons why PREFA is also on the radar of big Italian offices,” says Andrée Secchi, who advises architects, planners and surveyors on a daily basis and also benefits from the PREFA communication platform PREFARENZEN during these conversations.

Her colleague Alessandro Valentino is in charge of the Emilia-Romagna and the Toscana regions. Together with PREFA, he was involved in a revitalisation project of renowned architects over the past two years that proves to be not only significant, but also exemplary for Italy. This project was the reason why PREFARENZEN decided to head to Modena and report about it on the following pages.

1 —

— 2

3 —

— 4

— 5

6 —

1 —
Object: TH hotel complex, Courmayeur
Product: Prefalz
Colours: P.10 PREFA white, P.10 anthracite
Architecture: Studio di Architettura Domenico Mazza, Courmayeur

2 —
Object: iSartorazzi Hair Style and Beauty Salon, Ala di Trento
Product: roof and façade shingle
Colour: P.10 stone grey
Architecture: Krej Engineering, Ala di Trento

3 —
Object: housing complex, Asti
Product: siding
Bespoke colour: opal green
Architecture: GAP Studio, Asti

4 —
Object: marina, Loano
Product: Falzonal
Colour: white
Architecture: Nunzio Carraffa, Milan

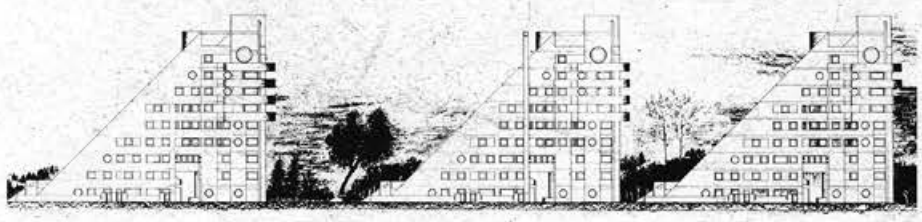
5 —
Object: detached house Giovannini
Product: Prefalz
Colour: P.10 anthracite
Architecture: Karl Heinz Castlunger, La Villa

6 —
Object: Chiesa del Cuore Immacolato di Maria, Jesolo
Product: Prefalz
Colour: patina grey
ⓘ Object-related individual solution
Architecture: Studio ADR, Jesolo

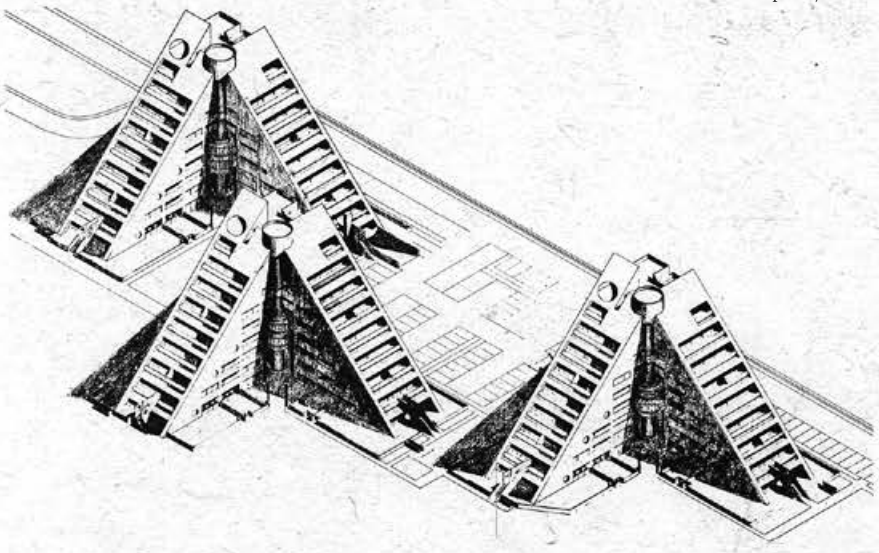
Le Piramidi in Modena– ready for the future

Text: Christiane Bürklein
Photos: Giacomo Podetti, Francesco Ferrarini

Three residential towers with an iconic appearance were renovated in accordance with the original ideas of their creators Romano Botti and Ada Defez. Thanks to PREFA, they received a brilliant new look and are ready for the next generations of inhabitants.



south view
plan from 1978



— *Timeless*

"On the outskirts of Modena, an architectural cooperative (Archicoop with Romano Botti and Ada Defez) created three residential towers with a total of 120 partially two-storey flats. Fairfaced reinforced concrete was employed in a brilliant manner, also thanks to the collaboration with the workers. The centrifugal floor plan around the elevator tower and the inclination of the balconies create a robust and vivid image that benefits from repetitions."

This is how the pyramids of Modena – Piramidi – are presented in the fourth edition of the famous international architecture magazine "L'architettura. Cronache e storia," 1981, the publication that was founded by the renowned Italian architect, historian and critic Bruno Zevi. This article, which appeared exactly 40 years ago, has lost neither its freshness nor its subtle irony in the description of the obvious contrast between the impressive ensemble of reinforced concrete and the suburban context of Modena with anonymous multi-storey residential buildings.

“The Piramidi were an architectural episode, but they were also one of my father’s best works.”

With its 120 flats, the building complex consists of three 36-metre-high buildings, 10 inhabitable storeys plus a basement storey for cellars and garages. It was already planned in 1975 and built with variants within three years, from 1978 to 1981. The project anticipates both the densification of the urban fabric as well as the promotion of vegetation in the urban space of the decades to come. What is also noteworthy is the special attention that was paid to social aspects: There are large common rooms at the lift exit, and the roof, which is used by all of the inhabitants, offers a 360-degree view that reaches from the skyline of Modena and the Apennines to the Alps.

The modern quality of the living concept is characterised by volumes that are arranged in a staggered manner and enable a wide range of variations regarding the size of the flats due to their L-shaped floor plan. In addition, they give their tenants the feeling they are living “in villas on top of each other.” This is still impressive, particularly in an urban context characterised by mediocre planning and anonymity, with its typical “condomini,” which are multi-family houses. Unfortunately, the concrete is not in good shape anymore, which is in part due to the radical design choices at the time. This applies especially to the forgoing of any kind of drainage systems in favour of pure forms, which allude to Mesopotamian and Central American civilisations. This led to infiltrations that made a series of strategic interventions necessary today, after 40 years.

— *True*

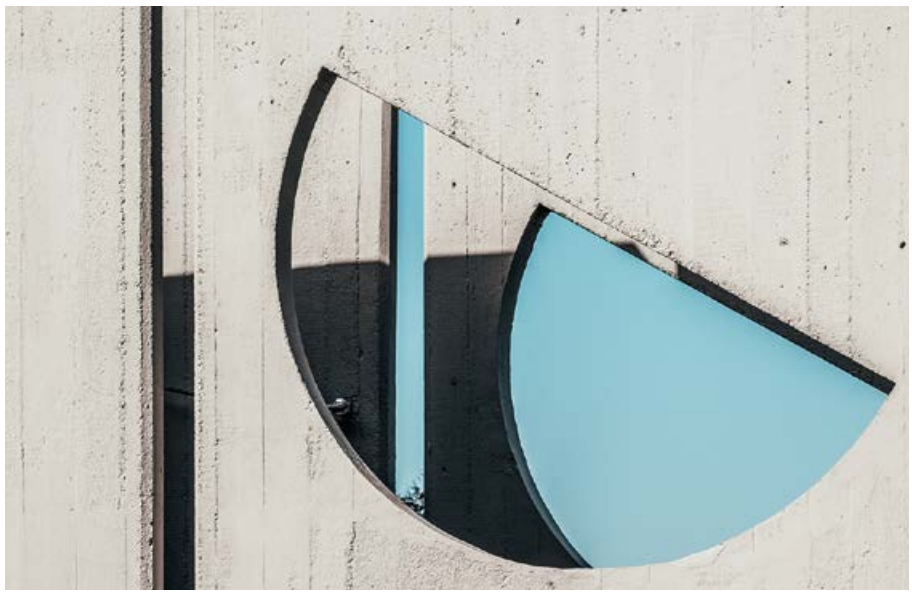
We meet the architect of the pyramids, Andrea Cavani, who has a special relationship with them: A few years ago, his dream of living here came true when a flat became available. That is quite rare, for whoever lives here likes to stay here, as we find out in the course of the morning. On this morning, Cavani, who was born in 1974, earned a degree in architecture in Ferrara (completed in 2001) and has experience in international offices, remembers Romano Botti. The architect of the Piramidi lived with his family in the first tower, while his studio was located in a flat on the ground floor in the second tower. We can rightfully understand this as a declaration of love to his own work, which his son Massimiliano – who is also an architect – confirms: “The Piramidi were an architectural episode, but they were also one of my father’s best works.”

The eclectic architect and painter Romano Botti studied in Venice, at the University Institute of Architecture (I.U.A.V.), where he learned from renowned architects like Carlo Scarpa, Gino Valle and Marcello D’Olivo. Botti eventually began his professional career in Modena and made a name for himself with a project that can be considered avant-garde both from a formal as well as a conceptional perspective, the primary school of Campogalliano (1970-1975). It was followed by the residential towers on Via Morane – the pyramids – and a retirement home in Castelfranco and one in Casa Bicocchi, all of which are extremely innovative projects in the area of Modena. Reinforced concrete is the actual protagonist of the housing complex. Andrea Cavani tells us that he has always loved this material – so much that he closely studied its potential in the course of his dissertation on Pier Luigi Nervi, the undisputed master in the use of reinforced concrete of the 20th century. Nevertheless, the refurbishment of the towers posed a great challenge for him: “30% of the original concrete had to be reconstructed. To respect the material and the design idea, we did meticulous research before we sampled and finally began with the precise restoration.”
For Cavani, restoration means to show “the truth,” to bring the original qualities of architecture back to light. He does not hide the various interventions, thereby following the radical, experimental approach of Botti and Defez, who purposely suggested an architecture made entirely of fairfaced concrete where smaller construction defects “remain in view.”

“I did not want to create a historical falsification, I wanted to document the time and the life of the architecture.”

—

Object: Le Piramidi, Modena
Product: Prefalz
Colour: P.10 brown
Architecture: Romano Botti and Ada Defez, Udine
Revitalisation: Andrea Cavani, Modena



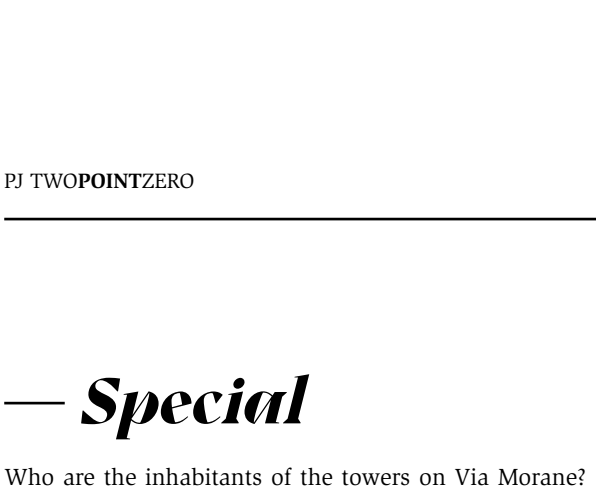
“Even after 40 years, the Piramidi are still something special, they have not lost their charm. Where do you find something like that nowadays?”

Together with the masons, he ended up developing a special technique for the reconstruction of the concrete that is based on the texture of the shuttering formwork and therefore resembles the original elements: “I did not want to create a historical falsification, I wanted to document the time and the life of the architecture.” Yet, at this point, it was also necessary to protect the restored surfaces. After a careful sampling, a siloxane colour was used for the vertical concrete surfaces, while the folding material Prefalz by PREFA was chosen for the diagonal façades. “The system uses a material that is 100% recyclable and was also made from recycled material itself,” explains PREFA consultant Alessandro Valentino. The material gives the refurbishment an especially sustainable and reversible quality, which projects the housing complex into the future. The light weight of Prefalz did not increase the load on the structure and additionally facilitated work on the construction site, which was already quite complicated due to the inclination of the façades, but was expertly executed by the company GAL. “In practice, we applied a cladding to protect the existing structure that does not burden the buildings and enables us to communicate the architecture.”

Aluminium had already been used for the pyramids before, albeit rather informally, as Andrea Cavani explains: “As the sloping façades did not have a drainage system, collecting profiles for protection against rainwater were installed subsequently. We focused on this in order to define the technical details.” He continues: “It was not easy to decide on the colour of the cladding, which also had to do with the fact that the project was developed in a participatory process and in direct discussions with the inhabitants. In the end, we decided on this traditional shade of brown because we found it to be more appropriate than neutral grey. The grey aluminium would not have harmonised with the concrete, so it was better at this point to search for a clear differentiation.”

— *Special*

Who are the inhabitants of the towers on Via Morane? For they are the ones who made this restructuring process possible in the first place. If you consider housing complexes with similar formal characteristics that are from around the same time, such as the “Vele” in Scampia, which is the setting of “Gomorra,” the “Zen” in Palermo or the “Corviale” in Rome, it is easy to identify substantial differences. The mentioned examples were actually created as social housing, while the “Piramidi” were built for the free market according to the will of an enlightened client. This attracted inhabitants who were not afraid of the radical language of the new housing complex and whose pioneering spirit is reflected in the renovation of the towers 40 years later. For in Italy, it is still the case that little is invested in the congenial restoration of architecture that was built between the 1970s and 80s.



We experience this when we visit Erika Nojer, a dynamic Austrian who has been living in Modena for more than half a century. She is kind enough to show us not only her beautiful attic flat, but also the purchase agreement for her flat from 31 January 1981. The large balcony that is embedded in the sloping façade becomes an extension of the living room and the generous terraces, one of them in the upper floor, offer a wonderful view of the city, the Apennines and the Alps. During our visit, she reveals to us that she “wanted something special, not a flat in an anonymous housing complex. Even after 40 years, the Piramidi are still something special, they have not lost their charm. Where do you find something like that nowadays?”
Who could contradict her if we look at the precise geometrical elaborations of this architecture designed by Romano Botti, with which he wanted to change the paradigm of living thanks to an intelligent articulation and proportions on a human scale?

A successful approach, as we hear during our conversation with another inhabitant of the “Piramidi,” Giorgio Bombarda. When he heard that a new and special housing complex was being built in 1980, he took his wife with him to take a closer look at it. At first, his wife was sceptical because of its unusual form and the fairfaced concrete, but 40 years later, they still enjoy living here: “We are happy that the pyramids were renovated without disfiguring them, ready for the next forty years.” The fact that their daughter has decided to move into the complex with her family clearly bears testimony to this, as it offers a quality of life that is hard to find nowadays. Not only the floor plan of the houses themselves, which have independent entrances on the ground floor, but also the dialogue with the green context.

In addition to the sloping façades that are populated by trees, you also have the gardens of the houses on the ground floor as well as the green spaces with their selected trees and bushes between individual building structures – not to mention the immediate vicinity of the Parco della Resistenza, one of the green lungs of Modena.

Architect Cavani explains to us why the “Piramidi,” which do not appear self-referential or inappropriate in relation to their environment despite their size, are so special: “They are like Romanesque architecture and exhibit a strong correlation between structure, form and space. That explains why they are in a harmonious relationship with the city and are appropriate for the people’s needs. They belong to the landscape and to the life of this part of the city as if they had always been here, they are timeless.”

After Cavani’s respectful refurbishment with PREFA materials, the architectures of Botti and Defez are now ready for the coming decades: a timeless housing complex with an unchanged and distinctive character.

A stroll through Modena, from *architecture* to *automobiles*

Text: Christiane Bürklein
Photos: Francesco Ferrarini, ARES Design Modena, Croce & Wir

After our visit at the “Piramidi,” we decide to take a walk through Modena, a city whose rich facets range from cuisine to music – it is the birthplace of the opera singers Luciano Pavarotti and Mirella Freni –, from architecture to automobiles. And they are all within walking distance, for within a radius of a few kilometres, we practically experience a journey back in time through the history of the city. Modena has three monuments of Romanesque origin that were declared UNESCO World Heritage Sites in 1997: the cathedral, the bell tower Torre Civica Ghirlandina and the Piazza Grande – the heart of the city. We stroll past the Palazzo Ducale and its park to the Enzo Ferrari museum, which was designed by the Italian Architect Renzo Piano.

Modena is known as the capital of the Italian Motor Valley, which is home to some of the most important car and motorcycle brands. You can find the works of the famous automobile manufacturers Maserati and Pagani right in the city and those of Ferrari in Maranello, just 20 km further south.

Yet our attention is drawn to a very extravagant car that passes us by. After a little research, we find out that Modena also has another destination for automobile lovers that has existed since 2014 – the company **ARES Design**, which specialises in the individual refining of vehicles with a special focus on bodywork and inner workings.
We find the company at the edge of the city centre. It counts 130 employees and has been located here since 2018, in the extensive rooms of a former FIAT car dealer with a characteristic round concrete access ramp leading up to the roof. We are invited on a tour of the factory and receive an answer to the question: "Why Modena?" The Swiss founder of the company Dany Bahar, whose career path previously led him to Red Bull, Ferrari and Lotus, decided on this location because "made in Modena" is something special. This designation of origin emphasises the quality of the final product and continues the long tradition of inventors and technicians from Modena, the DNA of masters of their craft.
In an ideational continuation of our visit to the "Piramidi," we are particularly interested in the series "Legends Reborn," which reinterprets old sports car models. This includes the luxurious Panther ProgettoUno that is based on the legendary super sports car **De Tomaso Pantera** from the 1970s.

The vehicle is the product of the company Automobili De Tomaso, which is also based in Modena and initially constructed race cars for the Formula 1 before it began to build road-going sports cars as of the mid 1960s.
Here, this icon of automotive history is awakened to new life according to customer specifications and produced in a limited edition of 21 in an interplay of traditional craftsmanship and the latest technology. The original vehicle is revamped and made fit for the future without losing its inherent charm.

The contemporary touch is refreshing. It may be a different discipline, but the comparison with Andrea Cavani's refurbishment of the "Piramidi" is obvious: In both cases, a respectful way of dealing with a timeless past is central. The resemblance between the two vehicles is clearly recognisable, just like the new design of the façade does not change the character of the architecture.

We decide to round off our eventful day at the Trattoria Santa Croce, where we enjoy an excellent dinner with local delicacies, from tigelle to tortellini up to cotechino with lentils, accompanied by a dry Lambrusco DOC from Castelvetro. The only thing missing is an aria by Pavarotti or – for those who prefer more modern music – a song by the Modena City Ramblers, everything "made in Modena."

Cotechino con lenticchie

Carsten Cech Germany's first PREFARENZEN ambassador

Text: Anneliese Heinisch
Photo: Croce & Wir

An innovative spirit, communication and the right material: In his everyday life, the experienced object consultant Carsten Cech always tries to maintain a successful balance between these components. Carsten, who in his own words has been "doing mischief" at PREFA since 2017, took us back to the stages of his life before his career at PREFA and offered interesting insights into the fields of activity that open up to him in his multi-faceted role as PREFARENZEN ambassador.

— Eisenach, sports and technical skills

"Even as a child, I always wanted to be where something was going on. And it turned out very early on that working with sheet metal felt like it was made for me." The trained tinsmith turned object consultant answers our questions from his home office in Eisenach in a calm and determined manner. His busy schedule with virtual expert consultations and meetings does not disrupt the atmosphere in any way.

Carsten was born in Eisenach at the edge of the Thuringian Forest. He is firmly rooted here and sees no reason why he would ever permanently leave his hometown. "I'm fortunate to live where other people spend their holidays," as he tells us with a twinkle in his eye. The Thuringian shares his memories of his "completely ordinary childhood of an Eastern-German boy" in the area surrounding the Wartburg Castle that included a tight sports programme, summer holidays by the Baltic Sea and also his favourite sport, handball. While his passion for the type of sport remained, his technical skills began to play an increasingly large role in his life, which is why he decided to begin a two-year apprenticeship as a plumber and installer after he graduated from polytechnic secondary school.

— Project development and personal contact

Right when his apprenticeship ended, the "turn-around" arrived in Germany and Carsten began his basic military service that lasted one and a half years. Afterwards, he worked as a tinsmith at various roofing companies, but it did not take him long until he realised he wanted more: In 1998, he started his training as master tinsmith at night school and was awarded the title four years later.

After working at a roofing company, he was drawn to sales in the metal roof and flat roof industry, where he was already responsible for architects. "I enjoyed it a lot. I just knew from then on that I really wanted to co-develop projects," as Carsten explains. Interpersonal communication has always played an important role for him, both then and now: "I am someone who likes to draw a few lines on a piece of paper and explain something with detailed sketches. So I have to say that I still prefer personal contact."

— The man architects trust

Carsten's work also includes providing architects with an understanding of how detailed solutions can be optimally planned based on the PREFA specifications in advance. Therefore, when he comes across a realised object later on, he can proudly say that he had a hand in it too.

From Fulda to Hanover, from Magdeburg up to large parts of Thuringia: The object consultant advises several architects in his sphere of activity. Before the coronavirus pandemic, he had around 120 to 180 travel days per year with on average three to four appointments a day. Sometimes, they can take a little longer than planned. Luckily, he lives close to the German PREFA location Wasungen. "If necessary, I can quickly react and obtain samples or fabricate them myself if a detail needs to be created."

— Aluminium and monument protection

"It may have been a niche product once, but aluminium has definitely become a standard today," Carsten tells us enthusiastically. According to him, the material will also increasingly be used in monument protection projects in Germany in the future, particularly when it comes to determining the extent to which a building's original appearance should be maintained. "You inevitably have to ask yourself: Do I want the object to look just like it used to look or should it have the same appearance with the characteristics of modern materials like aluminium, but on top of that also something new?"

He referred to a corresponding example with a white roof in Hanover in this context – the Lower Saxony State Museum. When the building was built, it received a glass roof, which proved to be problematic after it was opened: The exhibits sustained heavy damage resulting from their exposure to sunlight. Therefore, the glass roofs were coated with lime on a yearly basis. "Today, that is not a solution anymore, also in an ecological sense," as Carsten points out. As the white colouring of the building had to be maintained, the architect found an ideal, permanent alternative with two standing seam systems, one with patina-grey roofing sheets and one in PREFA white. If everything goes according to plan, it can be admired in its completed form in May 2021.

— PREFA in Germany

Carsten offers clear statements about how PREFA is perceived in Germany: "We are the market leader in the areas of coloured aluminium, roof and façade here." This also explains the awareness of the products across the country. "PREFA is a very established brand here in Germany. It is something to be proud of because we all played a part in this development. We have clearly set accents no one else has been able to imitate in a comparable way," Carsten raves. He is one of nine object consultants who help planning and contracting clients realise their ideas all across the country. "I'm always happy when I'm able to correctly interpret architectural concepts and suggest corresponding materials, ideas and solutions to planners."

— PREFARENZEN as a vocation

"PREFARENZEN stands for a unique form of communication with architects. The high quality of our media and activities is greatly valued all over Europe," Carsten says with an infectious smile. Identifying the demands and wishes of architects in his consultations, taking them seriously and meeting them to the best of his abilities is just as important to him as actively participating in PREFARENZEN. "Trips to objects that have already been realised with PREFA and inspiring other planners – that is also part of what I do."

PREFARENZEN has brought about significant benefits for the object consultant: "I have an entirely new reputation with my clients. It's nice to see how the content I provide for an article has an effect." His favourite PREFARENZEN medium? "I think I'll have to say the PREFARENZEN book, it's a great figurehead. And the architects I look after are inspired by it again and again."

— And the future?

Carsten hints that the PREFA academies will experience some changes. In these academies, of which there are nine in seven countries across Europe, technical seminars are held for tinsmiths. In the meantime, plans have been made to also offer courses that are specifically tailored to meet the needs of architects. "During the winter months, we train tinsmiths due to the weather conditions, while the spring and summer are reserved for architects. We're well positioned in this area and have a lot to offer," Carsten explains. He also feels called to actively participate in this project: "The plans aren't set in stone yet, but the journey will definitely take us there." We wish you all the best for your journey!

PJ word rap

with CARSTEN CECH

Dancing or singing? — **singing**
Order or chaos? — **order**
Sun or moon? — **sun**
Loud or quiet? — **loud**
Snow or rocks? — **rocks**
Ball or racket? — **ball :)**
Burger or schnitzel — **schnitzel**
Bike or e-bike? — **e-bike**
Ice or water? — **water**
North Sea or Baltic Sea? — **Baltic Sea**
Car or motorcycle? — **motorcycle**
Salty or sweet? — **salty**
Spring or fall? — **spring**
Apple or pear? — **apple**
Dollar or yen (JP)? — **dollar**
Rock or classical music? — **rock music**
Writing or reading? — **reading**
Photo or video? — **photo**
Chicken or egg? — **egg**

White is white?

Text: Claudia Gerhäusser
Photos: Croce & Wir

*Mark Jenewein of **LOVE architecture and urbanism**, Stefan Camenzind of **Evolution Design**, Kai Beck of **heinemeyerbeck architekten** and **PREFA Academy** director Leo Höld reflect on various reasons for white covered roofs. They have all made their own experiences with the lightest of the achromatic colours and express different opinions on their effect and singularity.*

White stands out visually in many contexts, but there is something neutral about it as well. In colour scales such as the NCS Natural Color System, it is described as zero percent of black. That is also why it is symbolic of lightness and can stand for the transition of the material to the immaterial in a cultural context or a "not existing yet," as the Japanese designer Ken'ya Hara formulates in his book "White".

For **PREFA Academy** director Leo Höld, white is one of several ways to express yourself through design. He explains that the surface colour is often not that popular at construction sites "because red or other darker colours are more established and there is a common preconception that light surfaces are more sensitive." However, Höld tells us that in practice, architects often see things differently and value the "living" traces that trees, lichens, Sahara dust or weathering leave behind on a roof. Apparently, an easily overlooked advantage of a light surface is that there is less heating in the sun. "The tinsmiths' tools simply do not get as hot as on darker surfaces, which is why they remain usable. That saves time during the working process, which usually takes place in the blazing sun," as Leo Höld explains.

In physical terms, white surfaces reflect enormous amounts of light and do not heat up as much in the sun as darker areas made of the same material. Thus, more and larger white surfaces – whether on a roof or a façade – would logically be a measure that could easily be implemented to reduce ambient temperatures in cities and densely built residential areas. In the future, differences in temperature of a few degrees on streets and squares could be even more decisive for our quality of life and our well-being than ever before. This alone explains why white surfaces should experience a renaissance. According to a study carried out by the University of Athens, they are even up to 15 times less costly in purely mathematical terms with a comparable cooling effect on their environment than green roofs and façades[1]. In addition, they can be easily realised in existing buildings. However, white and green surface areas should not be played off against each other, as greening also implies other factors such as shading, photosynthesis and a lively atmosphere.

But: "Many of the measures against global warming discussed in geoengineering are unexplored or seem utopian. However, there are also very simple ideas that can be easily implemented – for instance buildings with white instead of conventionally red or dark roof surfaces," as Baulinks[2] reported in 2012. At the beginning of 2020, the architecture magazine Bauwelt[3] cited three factors that determine ambient temperatures and microclimate in an urban environment – radiation, air movement, humidity. It also states that the "traditional architecture of different cultures and a few contemporary projects show that climatic conditions and thermal phenomena interact with the built environment and can be actively used to create a thermal well-being and specific atmospheres."

That sounds logical, demanding and effective – but it is not the only aspect that makes architects choose white. **LOVE architecture and urbanism**, Graz, **Evolution Design**, Zurich, and **heinemeyerbeck architekten**, Stuttgart, are intrigued by the challenges that the realisation of white surfaces in architecture entails and their effect in daylight. The three architectural offices from Austria, Switzerland and Germany explain why they use white in their designs and tell us about the experiences they have made.

Leo Höld
Director PREFA Academy Austria

[1] Santamouris (2012) Cooling the cities: – A review of reflective and green roof mitigation technologies to fight heat island and improve comfort in urban environment, Group Building Environmental Research, Physics Department, University of Athens, Athens, Greece.
[2] www.baulinks.de/webplugin/2012/1219.php4 (accessed 7.3.2021).
[3] www.bauwelt.de/rubriken/betrifft/Keine-heisse-Luft-3569013.html (accessed 7.3.2021).

LOVE loves white

When you take a look at the homepage of **LOVE architecture and urbanism** from Graz, Austria, a striking number of projects are dominated by the colour white. For years, the team of architects has been using the colour in countless architectural variations for various designing tasks. **LOVE** has always worked with white surfaces and contrasted them effectively with other colours.

An ocean liner in the urban periphery

One of the projects in which white is used almost lavishly is the eight-storey residential, office and commercial building Doninpark in Vienna Donaustadt the architects completed in 2013. The 110 m long building lies in the urban periphery like an ocean liner and is a residential construction with mixed use on the ground floor. With its large volume, it extends along one of Vienna's arterial roads – or is it anchored there? Mark Jenewein rather describes it as a "white, glittering cloud whose large roof and façade surfaces needed to be optically combined to form a whole." Together with the white PREFA roof, the white, glittering façade dematerialises the enormous construction volume.

A certain coolness

But how exactly does it work that the soffits of an overhang, bevels of roof surfaces and façade surfaces of this magnitude exchange their massive character for a certain coolness? According to Jenewein, "white is not a decision." He describes the white façades and the white roof of the Doninpark as a neutral platform that functions like a stage for local urban life. Complementary buildings add an additional, exciting touch to the white surface. For this reason, the ground floor zone of the Doninpark was equipped with black enamel glass panels.

That the aluminium roof surface was covered with the rhomboid roof tile 29 × 29 in PREFA white is based on a certain pragmatism. "If different materials meet but ultimately the same colour should be achieved, white is very uncomplicated in implementation. We do not perceive the differences between nuances as strongly as with other colours." In addition, the PREFA rhomboid roof tiles are characterised by a surface texture that slightly refracts the sunlight and, according to Jenewein, "vibrates before our eyes, very much like the glitter in the façade." This way, there is an approximation between the effect of the roof and that of the façade.

Neutrality and elegance

Mark Jenewein likes the neutral quality of white and its beautiful elegance. This fascination also accompanies the newest project of **LOVE**, which they are presenting at the Biennale 2021 in Venice. N186 is an experimental sculpture consisting of 186 white ceramic tubes that are spherically arranged and all converge in a single point. It serves as an object for multidimensional light projections. The project reflects the research interest that LOVE has in the colour white and testifies to an intense love for the subtle changeability, the neutrality and the contrast effect the colour implies. You could also simply say: LOVE loves white.

—

Conversation with Mark Jenewein, LOVE architecture and urbanism, Graz
Object: housing construction Doninpark, Vienna, Austria
Product: rhomboid roof tile 29 × 29
Colour: PREFA white

Is that a house?

Is that a house? With its striking geometry, the Flexhouse in Meilen near Zurich is “a specific conception of space” according to its architect Stefan Camenzind. And it is his first white house. Until this project, Camenzind’s office **Evolution Design** rather focused on expressive colours, which they used to make spaces and buildings distinctive and more individual. He says that “everyone likes white and no one is bothered by it” – which does not really seem to be a compliment for the colour. For this reason, Stefan Camenzind did not immediately think of white for his special project, the Flexhouse, when he was looking for the right product colour. After several colour experiments for the building’s façade, however, the small PREFA rhomboid roof tiles in pure white in the format 305 × 175 mm proved to ideally accentuate the house’s soft curves and also made the shadow on the curved façade more interesting. For Camenzind, white was ultimately “a conscious decision.”

Built dynamics

The house is located south of Zurich, just above Lake Zurich. The property Camenzind designed the house for was something of an unbeloved remnant, bordered by a narrow street, sidewalks and a six-metre-high railway embankment. Here, everything is always slightly in motion and different speeds collide. “To absorb the dynamics with architecture” was Camenzind’s basic idea of the design. You could mistakenly reduce his idea to associations with a sailing ship in motion – if it was not for the precise alignment of the rooms in accordance with interesting views and sites in the surroundings and the extremely unusual transitions between the storeys. For inside and outside, the levels blend into one another due to the round ends. You will not find a classical skirting board or the obligatory spray water base in this house. Instead, an unusual impression of space continuity is facilitated. This continuity is underlined by the detailed tinsmith work, which required meticulous precision.

Always more than one truth

The Flexhouse’s floors and ceilings are defined by loops and are contrasted by large glass surfaces. Camenzind mentions that “through this house, I learned that a lot of daylight brings a calmness into the rooms” and “the more daylight and vision, the less bad weather its residents experience.” Furthermore, he concludes that it pays off to give residents more control again over the visibility of their private life with large glass surfaces with curtains. This way, the house becomes a designable means of communication between its residents and passers-by and stirs emotions. That its observers enjoy the colour white nicely matches Stefan Camenzind’s attitude as an architect. “Architecture is always more than one truth – it is also the appearance of something and has a direct influence on our well-being.”

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Conversation with Stefan Camenzind, Evolution Design, Zurich
Object: Flexhouse, Meilen near Zurich, Switzerland
Product: small PREFA rhomboid roof tile
Colour: pure white
ⓘ *Object-related individual solution*

Monochromatic triplets

"White is not really my colour," Kai Beck tells us in our conversation. In fact, the architect – black shirt, black trousers, black glasses – lives in a sharp-edged, black wooden house, which he realised with his office **heinemeyerbeck architekten** almost at the same time as the conversion of the white apartment building in Stuttgart in Southern Germany. Later on, a semi-detached house was added that is completely silver-grey. Between 2015 and 2020, this resulted in monochromatic triplets that have it in them in terms of their material characteristics and their form.

Of shadows and lines

When they started working on the white apartment building, Kai Beck and his partner Sebastian Heinemeyer did not intend a continued confrontation with monochromatic architectures. Their client wanted them to convert a tenement building from the 1950s that was in need of renovation as cost-effectively as possible. The house, which had two storeys and a slightly inclined roof at the time, should receive another storey and be made more usable. In the course of the expansion, Beck and Heinemeyer decided to make the inclination of the roof steeper, doubled the room volume under the roof and created an additional apartment with four strikingly large dormers that is light and generous. The dormers not only influence the form and character of the result, they also determine the alignment of the seams of the aluminium roof covering. The seams of the used Prefalz in P.10 pure white alternately run from the ridge to the eaves in a conical manner, so the individual sheets had to be tapered in a specific way – which was challenging detailed manual work for the tinsmiths. On the light roof surface, the seams stand out prominently as shadow lines. Resembling a fine, regular line drawing on a piece of white paper, it gives the roof an unusually graphic look and does not lay it on thick, as one may know from other roofs.

In the beginning, there was a white synthetic window

The colour white came into play because the lower storeys of the existing house had white synthetic windows that should not be exchanged at the request of the client. "We seized the opportunity and declared the colour as our concept," as Kai Beck reveals. They gave the old house a new white plaster façade, eliminated projections and recesses of the building and clarified its architectural language with the uniform colour of the roof and the façade. To them, it was all about the technical and aesthetic purity, which is often mistakenly described with the word "modern" – Beck and Heinemeyer prefer to define it as "contemporary" instead. The shape of the building is highlighted through the white surfaces. Beck mentions that "we wanted to make it possible to perceive the exactness and reservation of the house." Neighbours who describe the house as "pleasant" and "unexcited" confirm that he successfully realised his idea. The conversion and the execution were such a success that, in the meantime, the client himself has moved into the house.

White makes everything visible

However, Kai Beck still hesitates when it comes to using white surfaces for buildings. "It can also drift into triviality if white surfaces are not executed accurately and precisely and are only used due to their neutrality. White makes everything visible – including weaknesses in the execution or unsophisticated combinations of materials." Therefore, a white roof needs a high level of know-how and high-quality material. The idea that white can also have a climatic impact is new to Beck. Until now, he has always considered the material he uses "to be more important than the chosen colour of a roof surface from the perspective of sustainability." But is he really right about that?

Conversation with Kai Beck, heinemeyerbeck architekten, Stuttgart
Object: new roof construction/conversion, 2015-2019
Product: Prefalz
Colour: P.10 pure white

Photos: heinemeyerbeck architekten

Three *kindergartens* in colour

Text: Claudia Gerhäusser
Photos: Croce & Wir (Hennstedt), Martin Lukas Kim (indoor photo Hennstedt), Martin Croce (Weitersfeld, Hargelsberg)

***Jebens Schoof Architekten BDA** design a particularly red kindergarten in the Geest in Northern Germany and create a Pixi book for the regional building culture, while the working group between **konstrukt:ING** and **g.o.y.a. – group of young architects** in the Austrian Waldviertel (Forest Quarter) takes full advantage not only of the blue and white colour palette, but also of the texture palette of PREFA. If you add the coloured serrated profiles on the kindergarten of Hargelsberg by **Haas Architekten**, it gets quite colourful. And what do children think when they see all of this?*

Hennstedt, Dithmarschen – We are in Northern Germany, practically between Hamburg and Denmark. The small town is located on a sparsely populated plain with a guarantee for an undisturbed vision. Strong wind – the proverbial stiff breeze – is quite common in the vast Geest area. You have to build differently here.
From an architectural standpoint, red brickwork shaped the building history and building culture for a long time. What most people know as clinker today is actually clay and was long considered a substitute building material for the natural stone that is missing in the region. In the late Middle Ages, farmers discovered the advantages of the red bricks and used them to make their traditional timber framework more weather-resistant. With their contrast of red building bricks, white window frames, half-timbered constructions and green heath meadows, many villages in the area are still unmistakeably shaped by the regional history today.
But various other building styles and new building materials have also taken their place in Dithmarschen over the past few years. The formerly prominent original red brick was pushed into the background and the feeling for the countryside, the material and the people faded a little.

— Mr. Schoof, are people overcome with something like fear when they are confronted with the colour "brick red" in construction up here? *"A fear of red? No, not really, but it is time to pick up on the local building culture again and reinterpret the typically regional with an aspiration – you can ideally pass this idea on to younger generations with a kindergarten, for instance."*

With six female and four male employees, Jebens Schoof Architekten BDA belong to the larger offices in the northern Schleswig-Holstein. Peter Schoof, one of the two founders, grew up in Dithmarschen. After stays in North America and his studies in Hanover, he returned for the competition of a Waldorf kindergarten. Schoof decided to collaborate with Ole Jebens for the realisation of the project, though they had formerly been rivals in the competition. Opponents turned into partners because both were convinced by industrial wood construction and its architectural potentials. In 2010, this made them pioneers in Northern Germany – and they were initially smiled at.
As they both stuck to their idea of establishing wood as a material and its industrial prefabrication in the North, more jobs followed. Today, Jebens und Schoof's office concentrates on only a few, invited competitions. In addition to private commissions, they mainly cover projects for communities in the area of healthcare, but they also realise kindergartens time and again.

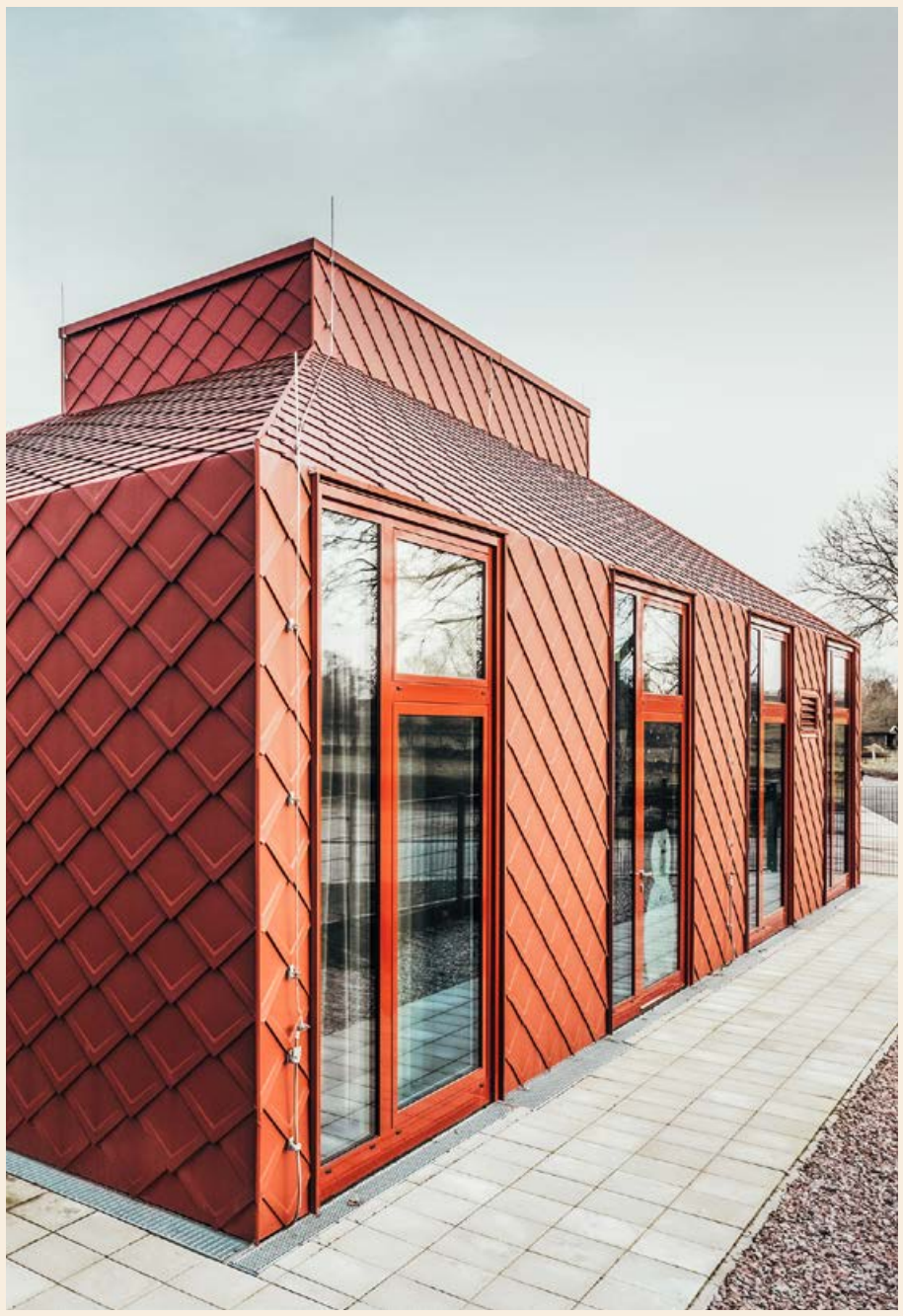
— What did you do differently than other architects here in rural Dithmarschen? *"From the very beginning, a complete and professional handling of all construction phases was always important to us. We did not want someone else to take over the construction site or the realisation. In addition, we had a lot of experience with the new wood construction technique. We managed to successfully defend ourselves against a widespread 'We've always done it this way.' Another factor is that we meticulously document our projects with professional photographers, so we also attracted attention with that."*

The architects tried out a new material for the project in Hennstedt. As PREFA offered a lightweight skin for the rhomboid three-dimensional framework made of structural composite lumber, Jebens and Schoof decided to use the rhomboid roof tile 44 × 44 in P.10 oxide red. For them, it was all about a consistent design language. The fact that roof overhangs became obsolete due to the rhomboid skin corresponded with their idea of reinterpreting local types of houses. The new construction in red complements an existing structure, and with its form and colour, it blends in with the appearance of the village just enough to still be recognisable as contemporary and new. The building was realised in collaboration with PREFA, and as part of this process, the installer company attended a PREFA course in Hamburg and also expanded its competencies. Moreover, the direct and quick exchange of information with object consultant Olaf Possel and the ideal support impressed the architects. Peter Schoof particularly stresses this aspect, as he himself is interested in craftsmanship details and independent learning.

— How is Schoof's sense for details reflected in Hennstedt? *"Building for children can really be a lot of fun. I also discovered many things through my own children – including floor-to-ceiling windows, so children do not lose sight of the light, wind and weather. When the rain runs down the window pane, children observe it and trace the drops with their fingers. They try to truly understand the inside and the outside. The floor plan structure, that the group rooms all have access to a generous movement space, is also important. Children use movement like grown-ups do. In their everyday lives, they need coincidental encounters and they arrange to meet to talk about what's new." He also mentions that, with time, he learned that the corners of a kindergarten require particularly robust details. "Children go wild when they play football and they touch buildings everywhere."*

With the new extension, the situation for the kindergarten and the children in Hennstedt improved significantly. Now, six groups, around 90 children, are all under a roof and can eat together in the central room, do gymnastics and play. The large windows that are so important to Peter Schoof "are not always practical in everyday life," as Daniela Böning, the director of the kindergarten in Hennstedt, tells us: "Looking outside and inside also distracts some of the children."

— And the question of colour? *Schoof does not believe in the idea that everything needs to be colourful for children. "We like to use colours in our kindergarten projects, but never too many and never colours that are too bright. As architects of a kindergarten, we have an aesthetic educational mission. Overstimulation would definitely be counterproductive."*



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Object: day care centre, Hennstedt
Product: rhomboid roof tile 44 × 44
Colour: P.10 oxide red
Object-related individual solution
Architecture: Jebens Schoof Architekten BDA, Heide

Pixi – what?

Mr. Schoof, your office is working on a Pixi book?
*"Yes. The book's title will be **'I have a friend, she is an architect'** and puts an end to old conceptions of roles in architectural practice. It should also show excellent and beautiful architecture that helps children learn something about design. I hope this will convey a certain sensitivitiy and fun with your own surroundings for children." So a Pixi book can also cover building culture.*

Children & bright colours

But what do children think about all of this? How do they react to bright colours?
Daniela Böning*, the kindergarten teacher from Hennstedt, remarks: "Children bring the colours with them. As kindergarten teachers, we also had a say in the interior design in Hennstedt. More reserved and neutral colours in the group rooms and in the big play and dining hall are great, empty surfaces the children like to fill with their own drawings, handicrafts and with life. If everything is colourful right from the start, some children do not know where and how they are allowed to express themselves."*

g.o.y.a. architects / konstrukt:ING and **Haas Architektur**, who also realised kindergartens with PREFA products, feel they have this educational mission as well. However, the two offices approach the subject differently than Jebens Schoof Architekten. Together with the engineering office **konstrukt:ING Ltd., g.o.y.a. architects** built an extension of the existing local kindergarten in Weitersfeld in the Forest Quarter. From a design perspective, the aim was to achieve a colour gradient as a smooth transition between the building and the sky. For this reason, PREFA object consultant Christian Wirth drew from the colour palette of Falzonal and introduced sample coatings in various shades of blue to the project for the roof and façade rhomboids. The architects and the general planner combined the shiny Falzonal surfaces on the façade with rhomboid façade tiles 29 × 29 in P.10 pure white, whose texture optically emphasises the impression that they span the entire elongated building structure.

Object: kindergarten, Weitersfeld
Product: rhomboid façade tile 29 × 29
Colour: P.10 pure white
Bespoke colours: light blue and turquois
Object-related individual solution
Architecture: ARGE konstrukt:ING and g.o.y.a. group of young architects, Vienna

The kindergarten created by **Haas Architektur** in the Upper Austrian Hargelsberg is even more explicit in its use of colour. Christian Haas followed a clear structure here. Each of the four kindergarten groups were given a bright colour and the serrated profile by PREFA was coated in these colours. Parts of the external façade and accents in the interior also received the group colours and help children orientate themselves in the building. The common rooms logically combine all colours. This results in a vibrant play of colour that unites all of the groups.

Object: kindergarten, Hargelsberg
Product: serrated profile
Bespoke colours: May green (RAL 6017), yellow green (RAL 6018), signal violet (RAL 4008), signal yellow (RAL 1003), zinc yellow (RAL 1018) and light blue (RAL 5012)
Architecture: Haas Architektur, Enns

Making your mark with a profile

It is not a secret that many architects have a passion for surfaces. With your mobile phone, you have a constant companion who not only connects you with the world, but also serves as a third eye with a seemingly infinite storage. This makes it possible to create personal photo libraries in passing, with images of more or less striking materials, structures, colours and surfaces that have the potential to inspire. If you take a closer look, they are usually standardised industrial products “off the rack.” Two architects found a completely new way to happiness when they were searching for special façade solutions. In the first case, the architect happened to meet a PREFA object consultant who left an impression on him with a unique concept regarding the production of individually designed aluminium profiles.

Text: Carl Bender; Photos: Martin Croce, Croce & Wir

The rebirth of ornamentation

Born in Vorarlberg, Günter Mohr settled in Vienna in 2006 after finishing his studies and mainly focuses on planning complex infrastructure projects today. Due to his successfully completed projects, the construction department of the Österreichische Bundesbahnen (Austrian Federal Railways) that is responsible for the modernisation of train stations regularly invites him to calls for tenders. On one of these occasions, his planning and design concept for the renewal of the train station in Unterpurkersdorf, which is west of Vienna, was met with much interest and approval. The project concerned the new construction of the platform as well as a pedestrian bridge and was expanded by including the planning of a windowless technical building.
The plot for the building is located right next to a platform, which is why its façade has to withstand high wind pressure and wind suction in the long term. Günter Mohr was familiar with both of the two-millimetre thick and highly stable PREFA standard extruded aluminium profiles with waves and jags. Yet he also knew he would not be able to smoothly bridge the rounded corners of his building with them.

A profile made of five circles

At an event dedicated to the presentation of the PREFARENZEN book 2020, Günter Mohr met PREFA object consultant Christian Wirth and told him about his project and the resulting challenges. During their conversation, he heard for the first time that PREFA enables the production of individual extruded aluminium profiles. The preconditions are maximum dimensions of 200 × 80 mm and a minimum order of one ton. In the case of the standard profile, this amount corresponds to a surface of approximately 130 m².
The next day, Günter Mohr created the first draft outline of his profile. With his idea of realising the profile in the form of five symmetrically aligned circle segments, he automatically solved the problem with the façade’s roundings. This is complemented by fascinating silhouettes within the profile as well as optical effects that are created when you pass it by. About a year has passed since then and the industrially created ornament is draped around the remarkable building like a 6-metre high bronze curtain.

Object: ÖBB technical tower, Purkersdorf
Product: individual profile
Bespoke colours: Parkour IGP-HWF classic 591T, brown IGP classic 32
Object-related individual solution
Architecture: Günter Mohr, Vienna

Charitable housing at a high level

Cooperative housing has a long tradition in Switzerland. The General Building Cooperative Lucerne (ABL) is the largest housing cooperative of Central Switzerland and provides living space for 4500 people with around 2000 flats. The cooperative guarantees a high quality of life as well as fair rental prices and enables value-preserving investments in the form of refurbishments and – as in the exceptional case of "Himmelrich 3" – demolitions and new constructions. The urban development commission only agreed to this variant because the installation of an underground car park had resulted in an inclined position of the houses in the residential area over the past 20 years.

From September 2015 to June 2019, the original row buildings were replaced with a triangular perimeter development according to plans of the architects Enzmann Fischer Partner with 179 flats, 16 business premises and social institutions in the spirit of sustainability.

A façade in the public sphere

The planners originally intended a design with glazed terracotta profiles for the street- and court-sided façades and their soffits on the ground floor. However, the detailed planning proved to be very complex due to the many protrusions and folds and posed a challenge for the providing companies. In addition, the lowest offer exceeded the intended budget by far. The building commission of the ABL and the architects were forced to look for alternative possibilities that meet the required freedom from maintenance, sustainability and especially stability.

The knight in shining armour

Stefan Wildi, an experienced object consultant and sales manager for the German-speaking part of Switzerland, and the construction manager of the ABL Franz Studer already knew each other, as all of the roof areas of the extensive residential area had been clad with Prefalz. During a construction meeting, they touched on the subject of the façade and possible alternatives and a meeting with the architects was scheduled soon afterwards. Wildi suggested the two extruded aluminium profiles from the PREFA product range for the approximately 3.000 m² large façade and was met with interest from all participants.

The planning architect Reto Robbi had taken an interest in the aluminium extruded profiles from another manufacturer two months earlier, so he was already informed about possible cost savings. Yet the waves and jags of the two standard products were out of the question for him. Stefan Wildi had an ace up his sleeve and told him about the possibility to produce the profiles according to individual requirements. With the support of Elmar Schilter, head of PREFA Switzerland, it did not take the architect long to overcome all technical obstacles, so that he could finally develop two of his own profiles and come up with a solution for mounting.

Despite the specially manufactured tools for both profiles as well as the mounting by the Gerber & Gadola Fassadenbau AG, the costs could be reduced to a quarter, according to Franz Studer. He adds in all fairness that the soffits were not clad compared with the ceramic version, but painted in the colour of the anodised aluminium.

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Object: residential estate Himmelrich 3, Lucerne
Product: customised extruded aluminium profile
Bespoke colour: Sandaler L64-4
ⓘ Object-related individual solution
Architecture: Enzmann und Fischer, Zurich

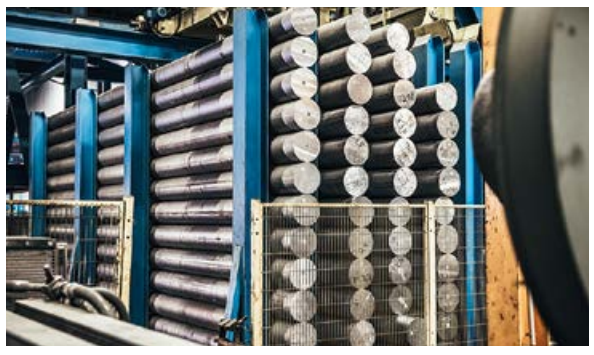
Uncharted territory with great potential

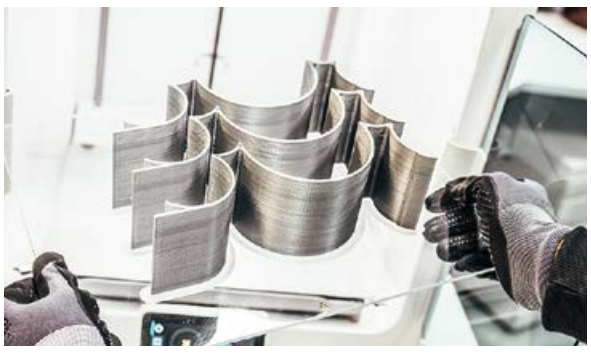
"When we received the first concrete inquiry regarding the production of an individually designed extruded profile from Switzerland, we had not completely defined all of the corresponding processes yet," as individual profile project manager Michael Strasser and Dieter Hauer, international head of PREFA application technology, recall. When proudly looking back on successful projects, they both agree that "we are lucky to have our sister company from the family-owned CAG Holding, the Neuman Aluminium Extrusion Plant, on the same premises as the PREFA production halls. These are the best preconditions for quickly realising challenges in a direct exchange between experts."

Find out more here:

prefarenzen.com/en/an-ornament-is-not-a-crime/

Dieter Hauer and Michael Strasser





Find out more here:

prefarenzen.com/en/turn-on-2021/

From layout to profile

"Today, we have got to the point that we review incoming designs with respect to their feasibility and, if necessary, we adapt them and are able to print prototypes in agreement with the planning architect. These 3D models serve to evaluate the assembly technology and the final approval by the designer. Parallel to this, the materials technicians and design engineers of Neuman focus on the feasibility, the dimensioning and the construction of the required tools. According to these plans, an external tool manufacturer creates the two-part matrices from massive steel plates via wire erosion and reinforces them at critical points with high carbon steel panels. These serve to extend the lifespan and secure the dimensional accuracy during the high heat and pressure stress in the pressing process."

Earplugs, a pounding heart and amazement

If you enter the 100 m long hall with the extruded aluminium profiles arranged next to each another, you cannot help but be amazed. In shifts, 60 employees produce various profiles for European customers with these machines. Here, the primary material, which is made from various kinds of wrought alloys and delivered in the form of seven-metre long and around 600 kg heavy bolts, is pre-heated in gas ovens with a share of 80% of secondary aluminium. Afterwards, it is heated in induction furnaces at even temperatures between 490 and 550 °C. This way, they reach the viscosity that guarantees error-free results during the pressing process through the matrices. For every pressing procedure, only the amount of raw material that is necessary for a profile length of 60 m is separated from the bolt. In order to correct slight torsions resulting from the pressing procedure, the 60-metre long profile is stretched with a tensile load at both ends while it is still hot before it is cooled by adding cold air. Only then are the profiles trimmed to the target length plus a few millimetres.

The form determines the colours

PREFA generally delivers the extruded aluminium profiles in an untreated or powder-coated version. Some architects prefer the greyish discolouration resulting from the natural oxidation of the aluminium. The powder coating offers many colours, but it cannot always be realised in profiles with fine edges. PREFA draws on external partners for the electrolytic oxidation of aluminium – the anodising process. In this process, the upper layer of the metal is transformed and hardened, which increases both its chemical as well as its mechanical durability. By adding metal salts, certain colour shades from colourless to several shades of bronze up to black can be achieved.

How will the profile be used in the future?

This is a question that will have to be defined in advance on a case-by-case basis in the future. Due to the complexity of the processes, profiles like these can only be created in close cooperation between the designing architects and PREFA experts. "Under the condition of mutual trust, we include both the industrial know-how as well as the entire manufacturing process as a valuable achievement in creative joint projects," as Dieter Hauer emphasises. He sees this as a great opportunity for PREFA to participate even more in the further development of building culture in the future.


A life under a PREFA roof
PREFA

Anna & Heinrich
A life under a **PREFA** *roof*

Text: Carl Bender
Photos: Croce & Wir

We are in Sankt Veit an der Gölsen, a small, tranquil place in the Lower Austrian Mostviertel (“cider quarter”). The late Gothic church with a massive tower – a former fortified church – is where Anna and Heinrich Wochner got married 59 years ago. They both grew up in simple circumstances and decided to extend the simple house that belonged to Anna’s parents to a generous family house with a great deal of effort and joy as well as manual skills. One of their first investments was a new roof with the classic PREFA roof tile.

A common destiny

“We were both born into the time of the Second World War and spent the first years of our life under very difficult conditions. Our fathers were away at war and our mothers and grandmothers had to make sure we would make it through this time. I also remember how my mother had to take all of us, my siblings and I, and hide from the war events in a cave for several days,” as Heinrich recounts, before adding that the post-war time was also accompanied by hunger and poverty.
Anna’s father did not return home from his captivity in Russia until 1950. The family was reunited, the traces of the war had vanished and people began to find employment in workshops and industrial firms.

The recovery

“My father took on all kinds of jobs so he could build this house for us,” recalls Anna. But the rest of the family also did their part. “When the house was being built, I was twelve years old and I remember making the bricks together with my siblings and my mother. There was a wagon loaded with slag at the train station right behind our building plot. We had to haul the material over that mother mixed with lime and water and filled into simple forms. It took several days until the bricks were completely dry and could be removed. The window frames and roof tiles were mainly from war ruins and demolished houses. But none of that bothered us. We were happy and proud to have a new home so soon after the war ended.”
Heinrich is from the rural community Kleinzell, which is about a two-hour walk away from Sankt Veit. Here, he completed his apprenticeship as a carpenter before taking on jobs in the area of river and stream regulation. He eventually asserted himself in a furniture manufacturing business before switching to a small industrial firm, where he worked as a metal polisher. This was where he discovered his talent for tinsmith craftsmanship and, together with a master tinsmith, was mostly in charge of building maintenance.

Happy times

During this time, Heinrich met and fell in love with his Anna. The couple was married in 1962. Together with their son, they lived in cramped conditions in his parents’ house for several years, which is why they were happy when the opportunity arose for them to move to Sankt Veit a few years later.
“We already began the conversions and extensions before we moved. Due to Heinrich’s skill and experience, we could do almost all of the work together,” Anna tells us, visibly proud. She was in charge of the household, looked after her parents and did the gardening work, while Heinrich began to search for a new job.

The big chance

Heinrich found his new workplace at PREFA in 1972. “I introduced myself at the company Fried. v. Neuman in nearby Marktl and practically got a job right away – in the PREFA roof tile production, which was operated as a division at the time.”
This location already had a hammer mill in 1780, where hardware and wagon axles were produced at the time. The Viennese iron merchant Friedrich von Neuman eventually bought the company in 1880 and turned it into a zinc and aluminium rolling mill. In 1955, the company took over the production and the marketing rights related to the PREFA roof tile from the Salzburg master tinsmith Alois Gödl, which turned out to be a great success.
Despite difficult conditions, Heinrich was very pleased with his position. “Back then, we produced roof tiles with simple machinery and laid them in our region the next day. Looking back, I greatly benefited from my experience as a tinsmith as well as my organisational talent. Around six months later, I already took on the position of warehouseman and was responsible for the organisation and rationalisation of the warehouse until I retired.”

Heinrich 1972

The new roof

In the course of his first inventory, he found remaining stock of brick-red coated roof tiles that probably came from a special order. Until then, the roof tiles were “dyed” in a heated chemical solution in a dipping process. This resulted in a grey surface, which was offered in addition to the uncoated, untreated design. It prevailed and determines the characteristics of many roofs in the region to this day.

Heinrich liked the idea of having one of the first coloured PREFA roofs and decided to buy the roof tiles with the agreement of the managing director at good conditions. And so it happened that in 1972, the couple replaced the old roof of the house with the red PREFA roof in laborious handwork and without outside help. “No repairs have been necessary to this day. The roof looks just like it used to back then,” Anna tells us with a satisfied smile.
PREFA was developing well at the time, was in the black and was increasingly concentrating on the production of the roof tiles and accessories. The first truck was acquired and the goods were sold directly to tinsmiths in the area.

Rescue before the fall

Unfortunately, the owners of the company Fried. v. Neuman at the time neglected necessary investments in the extension and modernisation of the aluminium processing, which is why the business slid into bankruptcy in 1980.

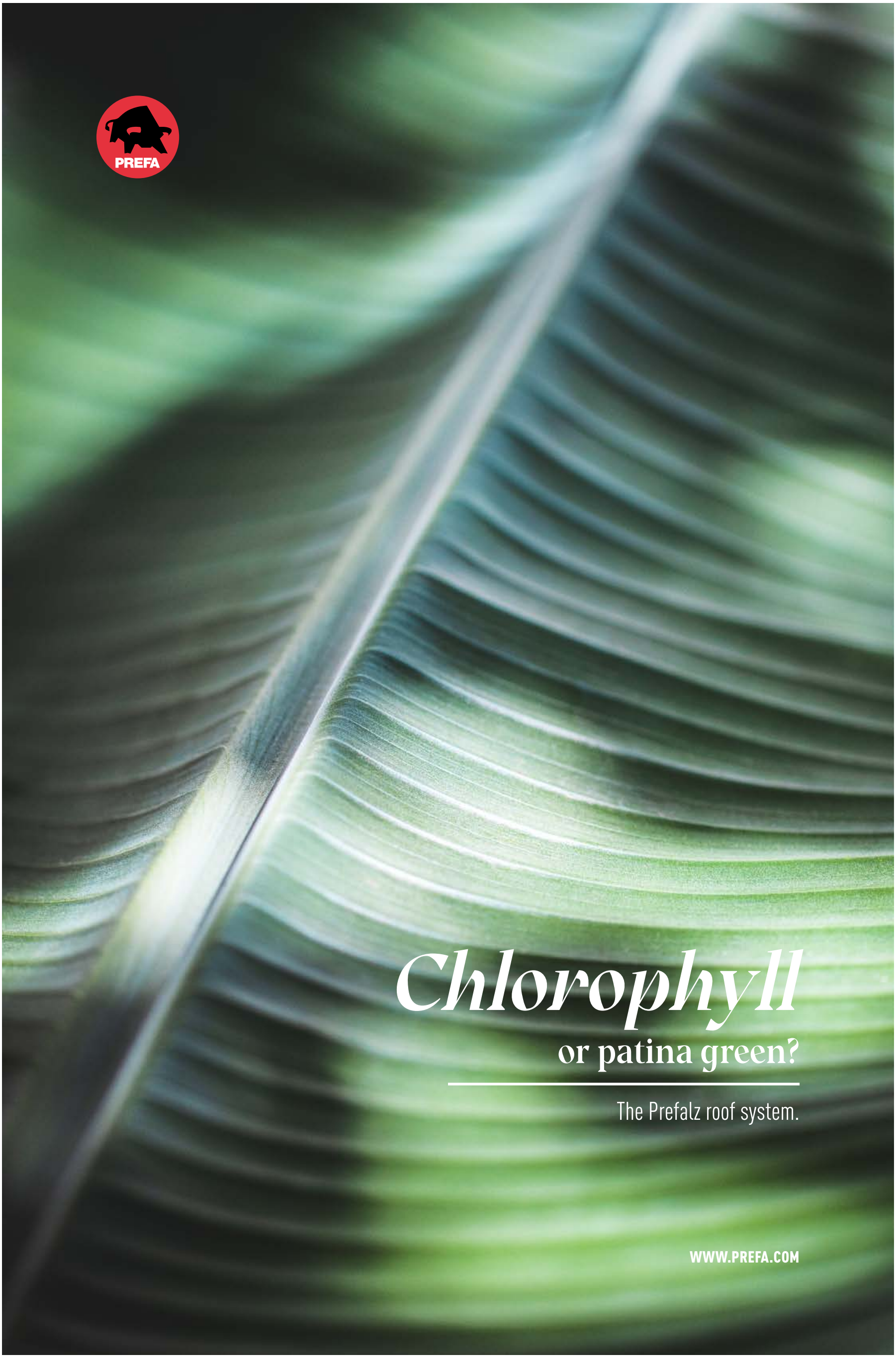
As more than 600 workers and families were affected, politics also intervened in the search for a suitable investor. And so it happened that the business group Dr. Cornelius Grupp decided to take over on 5 February 1981. “We as PREFA employees could tell right away that someone was in charge who is serious about what they do. While, at the time, the warehouse I managed was a simple wooden construction that was permeable to air, we soon moved into a newly erected hall with loading ramps. The best part about all of this was that the new owner responded positively to the employees’ experience and ideas,” as Heinrich recounts with shining eyes. With the foundation of the PREFA Aluminiumprodukte GmbH in 1986, Dr. Grupp enabled PREFA to stand on its own feet, which quickly advanced the development and internationalisation.

Looking back with pride

“I am very proud that I worked for PREFA for 25 years and was involved in the recovery. Although I have already been retired for 21 years, I am still in contact with former colleagues of mine and like to see how the products and the brand develop further.” Even now, Heinrich and Anna are never bored. They are both over 80 years old, are enjoying their time together and can hardly believe what they have achieved.

“One thing is certain: We’re not worried about our roof!”

Anna 2021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