PREFARENZEN

extra

for architects and you

NO — 01

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Please let us know what you think of the new “EXTRA” and which topics you’d like to see covered in future. Simply scan the QR code and send us your feedback.

Thinking Ahead, Reorienting

PREFARENZEN looks back on a long-standing tradition. Over the years, PREFARENZEN books and journals have shed light on a wide range of projects and topics, tracked developments, and sparked architectural discourse. With the first issue of “EXTRA,” however, we are opening a new chapter. “EXTRA” is a magazine in a new format, with a sharper focus on content and a broader perspective that transcends borders.

PREFA, as the leading manufacturer of aluminium roof and façade systems as well as integrable PV modules and mounting solutions for rooftop solar setups, intentionally pairs rapid digital communication with the tangible impact of high-quality print publications.

This new format serves as a platform for in-depth discussion. It is aimed at the European architectural community and, more broadly, at everyone who views design as part of the interplay between technology, materials and social responsibility.

Furthermore, “EXTRA” sees itself as an open stage for new perspectives. In the future, there will be an increased focus on presenting projects submitted by readers that address relevant architectural topics. Contributions that make one’s own work, ideas, or special insights accessible to a broader audience are expressly welcome as catalysts for a lively and diverse exchange around architecture.

With circular construction, we place the transformation of architecture at the centre. We see deconstruction rather than new construction as an opportunity to rethink resources and shape the transition to a new building culture.

PREFARENZEN Editorial Team

PREFARENZEN
PRDCT

Estelle in the City
Inspiration with a Profile

Profiled aluminium façades combine industrial precision with architectural expressiveness. Their geometry responds sensitively to light, weather, and perspective—transforming building envelopes into dynamic surfaces. A look at the material, production, and design potential of ***PREFA extruded profiles*** *shows how technical components become a versatile tool for contemporary and sustainable architecture.*

Photos: Croce & Wir

Architecture of Lines, Light and Shadow

Where aluminium is shaped into profiles, it transcends simple cladding and forms its own architectural language - a language of lines, shadows, and proportions. While smooth surfaces simply reflect light, profiled surfaces add depth, define sharp edges with light, and introduce a subtle irregularity that we interpret as liveliness.

As daylight changes, this effect is constantly shifting. Façades become dynamic surfaces whose appearance is recomposed over the passing hours.

For architects, the appeal therefore lies not solely in the material but in the design tools it unlocks. Profile heights, grids, orientations, and colour variations can be varied and combined. From just a few standard profiles, individual building envelopes emerge, each with its own tectonic grammar—precise, clear, and yet surprisingly versatile in expressing contemporary architecture.

Laws of the Sky

Rain, mist, or snow further enhance this spectacle. A wet aluminium surface reflects more intensely and darkly, while droplets create a delicate pattern of highlights. Mist, on the other hand, softens the façade's harshness, making it appear soft and diffuse.

It is particularly in northern and central European climates, with their variable sky conditions, that aluminium reveals a special quality: the façade reacts sensitively to every atmospheric change.

Ultimately, it becomes clear that aluminium façades are not merely technical solutions for building envelopes; they are an architectural instrument – in which light itself becomes a co-creator.

The Profile System

The six PREFA standard profiles - two serrated profiles and four ripple profiles - each have a width of 200 mm and vary in profile height. This modular system allows for a wide variety of façade structures.

The 1.8 mm thick elements are installed with sliding clips allowing for thermal expansion, whilst a concealed overlap ensures a virtually jointless appearance. The profiles can be installed in any order and orientation.

The extruded profiles are supplied uncoated or powder-coated in lengths up to 6200mm. Some architectural firms deliberately favour the natural ageing of the material: through oxidation, aluminium develops a characteristic grey patina.

For anodised surfaces, PREFA works with specialist partner companies. In the electrolytic anodising process, the topmost metal layer is transformed and hardened in a controlled way. Colour shades – ranging from natural through various bronze tones to black – are created by adding metal salts.

Available Extruded Profile Variants

Ripple profile 44/200
Ripple profile height: 44 mm
Ripple profile width: 200 mm

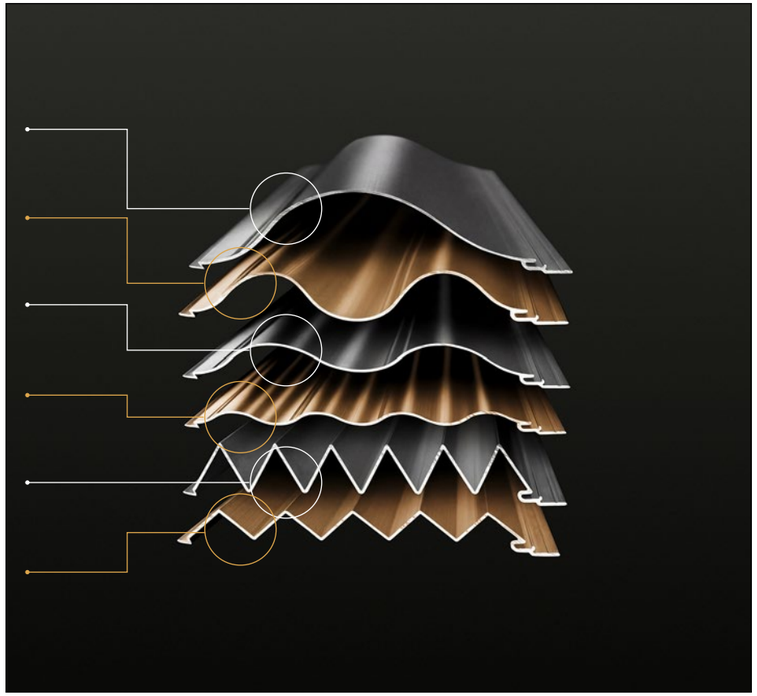
Ripple profile 34/100
Ripple profile height: 34 mm
Ripple profile width: 100 mm

Ripple profile 22/100
Ripple profile height: 22 mm
Ripple profile width: 100 mm

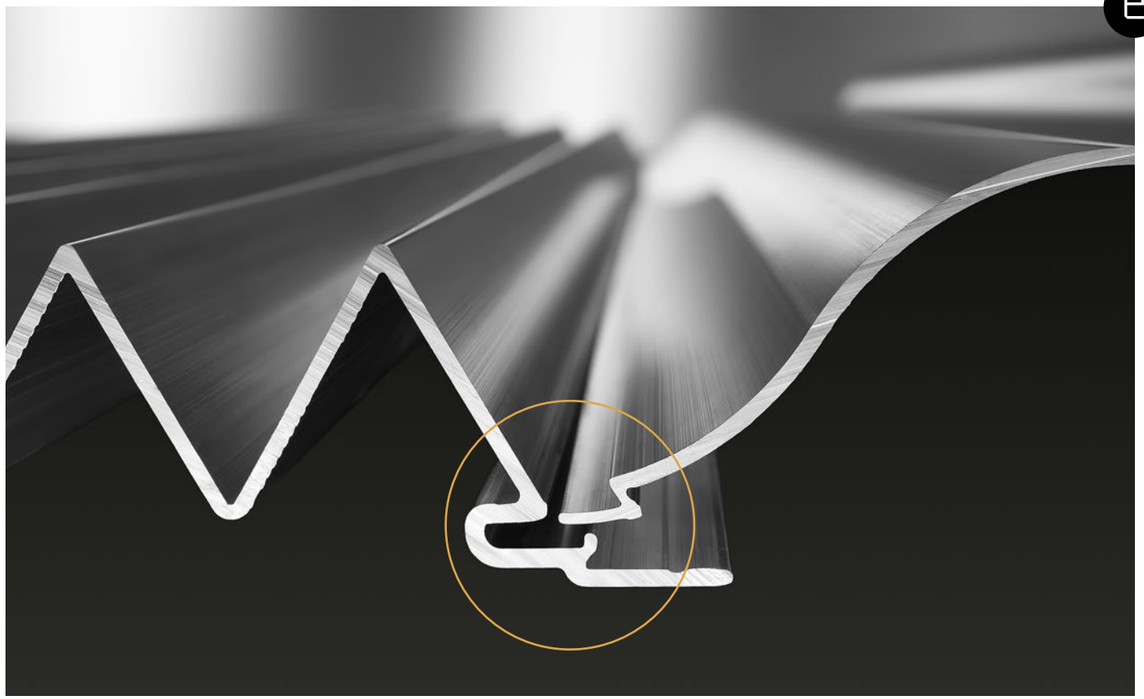
Ripple profile 10/50
Ripple profile height: 10 mm
Ripple profile width: 50 mm

Serrated profile 29/33
Serrated profile height: 29 mm
Serrated profile width: 33 mm

Serrated profile 18/40
Serrated profile height: 18 mm
Serrated profile width: 40 mm



*E*stelle, the radiant spirit of contemporary architecture



Infinitely Recyclable

In developing and producing its extruded profiles, PREFA relies on the expertise of its sister company, Neuman Aluminium, which is located on the same site. There - as well as at nine other locations worldwide - extensive expertise is available in manufacturing aluminium components for the mobility, packaging, and construction industries.

The raw material consists of 80% recycled aluminium, supplied as seven-metre-long billets weighing around 600 kilograms, made from various wrought alloys. In the approximately 100-metre-long extrusion hall, these billets are preheated in furnaces and then heated in induction furnaces to temperatures between 490 and 550°C. At this temperature, the material reaches the viscosity required for uniform profile formation during pressing through the dies.

For each pressing operation, only as much material is removed from the billet as is required for a profile length of approximately 60 metres. To compensate for slight distortions caused by the pressing process, the still-hot profile is stretched under tension and then cooled in cold air.

*E*stelle, the restless soul of urban elegance

FOCUS:**PREFARENZEN**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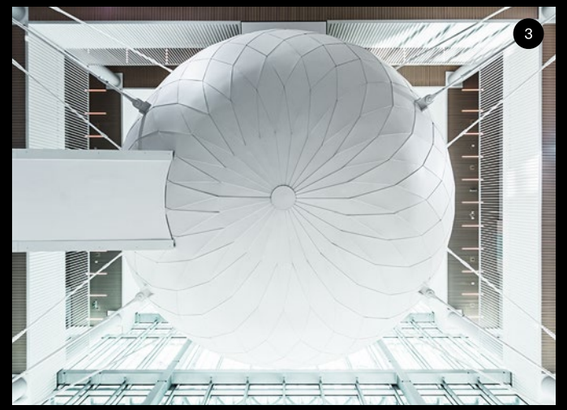
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PREFARENZEN places particular emphasis on high-quality architectural photography. Since its inception, the company has relied on photographers from the **Croce & Wir** team to document the flagship projects realised by architects across Europe.
With passion, technical precision, and a keen eye for detail, they create images that go far beyond merely depicting buildings – they bring architecture, materials, and design concepts to life.


4

1 FR Office Building, Studio Vincent Eschalier
2 DE Detached house, Neff Kuhn Architects
3 HU University, Bánáti + Hartvig Architects, LIMA Design Ltd.
4 NO Office building, PVArkitekter


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5 CH Detached House, Stefan Camenzind, Evolution Design Ltd.
6 BE Theatre and Cultural Centre, met zicht op zee architecten
7 CZ Sports Hall,sporadical architektonická kancelář
8 AT Tobacco Shop, Poppe* Prehal Architekten
9 CZ Holiday Home, NEW HOWarchitekti
10 NO Swimming Pool, LINK Arkitektur
11 DE Office Building, slapa oberholz pszczulny architekten


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12 IT Children's Care Home,FRONTINI ARCHITETTI
13 AG AT Seethalerhütte, dreiplusarchitekten
14 DE Listed Church with Solar Roof, architect Peter Troppmann
15 CH Residential Building, Tilla Theus und Partner AG


14

15

Constructing for Circularity

Nordwestbahn site, Vienna. Five hundred second-semester students. One radical approach: **deconstruction rather than new construction**. The focus is on the construction revolution and what architects will need to do in the future to design sustainably. Materials, structures and manufacturers such as PREFA take centre stage

From Building Component to Component Catalogue

At TU Wien's real-world laboratory, the circular economy is not just discussed but put into practice. The starting premise is as simple as it is far-reaching: anyone building in the future must relearn how to handle materials and construction processes. Astrid Staufer and Kai Merkert have been championing this approach at the Department of Building Construction and Design for years. Their approach: dismantle, understand, reuse. Using the general cargo hall on the Nordwestbahn site - one of Vienna's largest urban development areas, where housing for around 16,000 people is being built on 44 hectares by 2034 - they examined the structure with students as early as 2023, assessed the reusability of the building components, and transferred them into systematically organised digital catalogues. Shortly before deconstruction, the building became a source of materials, ensuring that the components remain available as a tangible resource for new projects.

Is it already Climate-Neutral?

Consider the **PREFA roof tile** as an example. While aluminium is highly recyclable, the installation method is key. Only if components can be removed from the building in a sorted and residue-free manner does recycling actually become reuse. A few figures illustrate the scale of the potential savings: one square metre of roof tile equals about 12.9kg of CO_2. For a 1,200m² roof, this results in roughly 15.5 tonnes of CO_2, embedded in the components, comparable to over 93,000 kilometres of driving or 26 flights from Berlin to Palma. This deconstruction approach reveals the grey energy stored in building materials.

Text: Claudia Gerhäusser
Photos: Croce & Wir

❶ PREFA Roof Tile 1951
❷ Reinforced concrete column with corbel
❸ Steel truss
❹ Glulam beam with steel tension rod

Photos: Kai Merkert

> *Every material does what it does best.*

Reversibility as a Design Principle

"Every material does what it does best," says Astrid Staufer. The consequence, she explains, is to treat construction and design as reversible from the outset. Kai Merkert notes that the PREFA roof tile closely approaches this ideal in practice. Component reuse should not be treated as an afterthought but rather as a fundamental part of the design process in the long run. Currently, circumstances are evolving: for instance, in Austria, early transfer of ownership allows building elements to be removed from the waste cycle before they become waste. Therefore, architectural planning now also involves considering material flows and ownership structures.

CONSTRUCTING · FOR CIRCULARITY ·

Material Knowledge as a Shared Resource

An industrial brick hall behind Vienna's Westbahnhof is also under investigation; its roof is covered with PREFA roof panels dating from 1951. Whether components from this structure will be reused in TU Wien's new Circular Materials Library remains to be seen; in any case, the PREFA tile will be included as a display sample. Depending on their suitability, materials from other sources are reused as part of the hands-on project. With the analogue materials library, TU Wien is expanding its role within the circular research network. In this library, knowledge is consolidated through samples, mock-ups and a digital database, and made accessible as a tool for teaching and practice.

The New Beauty

For Astrid Staufer and Kai Merkert, it is clear that economics alone is no longer a sufficient argument. Architecture must once again make its technical foundations visible: "It is about a new tectonic system, ..., in which the flow of forces remains legible like a story and building components are reused in new configurations." The architectural shift has long been underway. Its roots lie in design, in the cradle-to-cradle principle. Today, this is becoming architectural practice. Climate-neutral construction is becoming a reality, driven by an increasing number of specialist firms. A different aesthetic and a climate-sensitive building culture are emerging - beyond any notion of bricolage - becoming "more constructive and more beautiful."

Astrid Staufer: *Professor and Head of the Department of Building Construction and Design at TU Wien, co-founder of Staufer & Hasler Architekten, and active in teaching and research at ETH Zurich, EPF Lausanne, ZHAW and, since 2011, at TU Wien.*

Kai Merkert: *Senior Lecturer in the Department of Building Construction and Design at TU Wien, where he is responsible for the introductory course Building Construction 1. Studied architecture at TU Darmstadt and TU Munich. Worked at Herzog & de Meuron, Tim Hupe Architekten, BEHF Architects and StudioVlayStreeruwitz.*

INVISIBLE PROCESSES, **VISIBLE ARCHITECTURE**

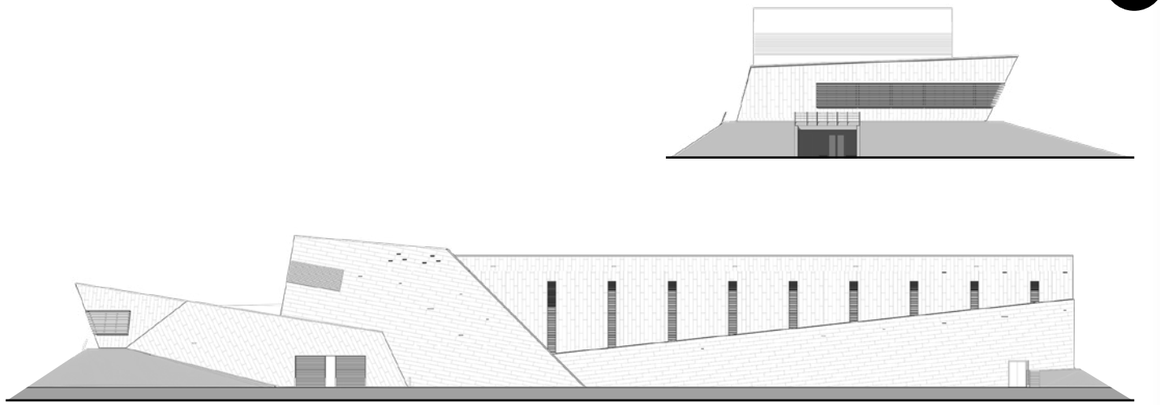
How a Drinking Water Pumping Station in the Netherlands is Redefining Infrastructure Construction.

Photos: Croce & Wir

Technical buildings are rarely at the centre of architectural debate. They serve a functional purpose, safeguard supply systems and generally remain in the background. This is precisely what makes WML's new pumping station in Lottum, the Netherlands, so remarkable: it demonstrates that even highly specialised infrastructure can be far more than a mere enclosure for technical processes. The project brings together security of supply, circular thinking, material innovation, and landscape-oriented design to create an exemplary model for a new typology of technical architecture.

The initiative was developed with the support of Volantis, an interdisciplinary planning and consultancy firm whose team includes architects, engineers, structural engineers, site managers and specialist consultants. Guided by a holistic approach, the practice integrates architecture, technology and sustainability into a unified design process. Its work is particularly focused on the healthcare and industrial sectors, where complex challenges demand precise, innovative and durable solutions.

The starting point in Lottum was particularly demanding. The new facility was required to replace an existing drinking water production plant while ensuring uninterrupted operation throughout the construction period. As a result, the project was implemented in several phases: new plant components were constructed alongside the existing infrastructure before the older facilities were gradually decommissioned and dismantled. Architecture thus played a strategic role, helping to orchestrate the construction process, technical requirements, and security of water supply with precision.



Location, Resource and Responsibility

The approximately two-hectare site is located in a former meander landscape west of the Meuse, within a protected landscape and water conservation area. Unlike many other regions of the Netherlands, drinking water is not produced here from treated river water. Instead, the facility draws on abundant groundwater reserves located around 70 metres below ground - a resource that has shaped the site since 1947.
The modernisation project addresses emerging challenges such as groundwater salinisation and organic micropollutants. To meet these demands, the wellfield is being expanded and the treatment infrastructure designed as a modular system, allowing it to be adapted to future requirements over time.
WML is a publicly owned, non-profit water utility headquartered in Maastricht. Owned by the Province of Limburg and its municipalities, WML operates around 25 groundwater pumping stations, employs approximately 400 people and provides drinking water to around 560,000 households and 16,000 businesses. Sustainability and the responsible use of resources are therefore an integral part of the company's institutional identity.

Visible in the Landscape

Does a technical building really need architectural expression? From a purely functional perspective, the answer is often no. In the case of WML, however, tradition, location, and public perception all speak in favour of such an approach. The company has a long history of commissioning carefully designed operational buildings and clearly regards them as part of its identity.
Moreover, the pumping station is located along a major access route within a popular recreational landscape. Walkers, cyclists and residents inevitably encounter the building. It was therefore conceived not as a neutral piece of infrastructure but as a deliberately designed architectural object.
The 100-metre-long production building, articulated into four staggered volumes, responds to the gentle contours of the former river landscape. Embankments, landform modelling and a differentiated articulation of the building volumes reduce the perceived scale of the large structure and anchor it within the surrounding landscape.

Technology on the Inside, Architecture on the Outside

What is striking is that the technical processes are deliberately not staged. Unlike many industrial and infrastructure projects that overtly express their function, the drinking water treatment process remains hidden for practical reasons and to protect the facility.
Instead of relying on transparency, the design opts for architectural interpretation. Through its dynamic composition, materiality, and colour palette, the façade references water, soil, air, and iron oxides - the elements at the heart of the purification process. The design thus establishes a subtle connection to the processes it houses, while keeping the underlying technology out of sight.

Hans Honée, Infra-Project Manager WML

Material Selection as a Design Statement

The project's ambitions are perhaps most clearly reflected in its material strategy. A façade of Corten steel was initially envisaged – an obvious choice, thanks to its warm, earthy appearance and its strong visual connection to iron oxides. Yet the idea was abandoned during the design process, primarily because of the material's substantially higher carbon footprint.

Instead, the architects opted for **PREFA Siding.X** façade panels manufactured from recycled aluminium. Pronounced longitudinal and transverse folds, together with a specially developed finish that echoes the appearance of weathered steel, deliver a similar architectural expression. At the same time, the façade is fully demountable and recyclable while generating significantly lower emissions. The building envelope thus becomes a tangible expression of the project's underlying philosophy, where architectural quality and environmental responsibility are inseparable.

A similarly thorough assessment was undertaken for the structural works, examining which materials were technically essential and where substitutions were possible. The water-bearing basement levels are constructed largely from concrete incorporating recycled aggregates, owing to the demanding requirements for watertightness and durability. Above ground level, bio-based and demountable structures predominate.

Wood in the High-Security Area

At first glance, it may seem surprising that a drinking water facility is largely constructed from timber. Questions about hygiene, moisture resistance and water quality naturally arise. However, extensive research has shown that a load-bearing timber structure within a closed system can be realised without any technical difficulties.

The structural frame, large sections of the walls, and numerous interior components were therefore constructed from timber. The result is not only environmentally significant; it is also reflected in the atmosphere of the interior spaces. In contrast to the filters, pipes, and mechanical components, an interior space emerges with an unexpected sense of warmth and tranquillity. The combination of natural materials and high-tech elements creates an almost solemn quality.

Designing for Deconstruction

A central theme of the project was, and remains, how buildings can be designed today for future disassembly. Nearly every component was evaluated for ease of dismantling, separability, and reusability. Currently, connections are designed to be detachable, components are interchangeable, and technical elements are arranged in a modular way.

In addition, all materials are systematically documented in the form of material passports. A material inventory map shows which resources are embedded in the building and how they can be recovered at a later stage. The building thus becomes a temporary material store.

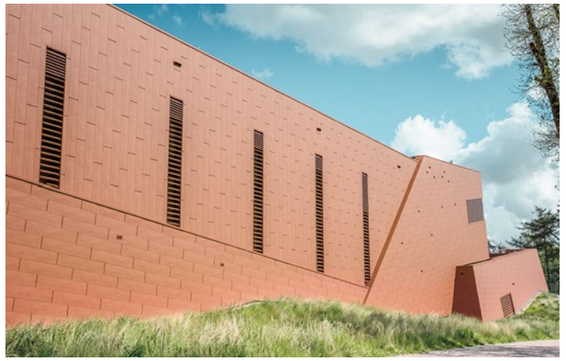
Flexibility Over Finality

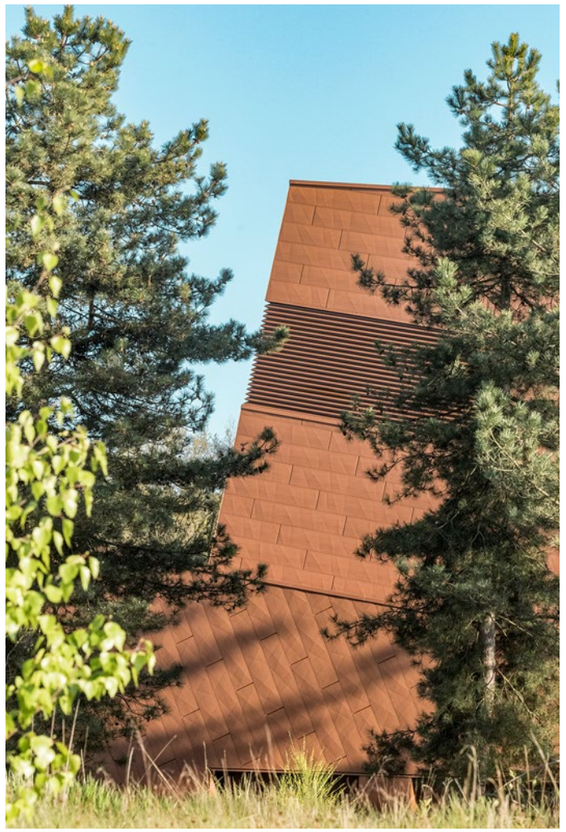
The building systems also reflect this approach. The water treatment system comprises replaceable sand and activated carbon filters, and the roof has been designed to allow elements to be opened and components replaced. The building is not conceived as a finished end state, but as a transformable structure capable of responding to new technical, ecological and regulatory requirements.

Nature-inclusive measures have been incorporated into the outdoor space: infiltration areas, vegetated embankments and integrated bat roosts demonstrate that technical infrastructure can also be designed as habitat.

This is precisely where the relevance of this pumping station lies: it redefines longevity not by relying on maximum durability in the static sense, as with traditional utility facilities, but on the ability to adapt.

A technical building may not need architecture, but architecture makes it more future-ready.





A Model for Future Challenges

The WML pumping station in Lottum exemplifies how infrastructure construction can evolve. Systems such as these no longer have to choose between function, sustainability and design. They can serve all three levels simultaneously.

For architects, this carries an important message: some of the most significant new design responsibilities are emerging precisely in building types that have long remained outside the architectural spotlight. Waterworks, substations, mobility hubs and recycling centres are increasingly shaping our landscapes in visible ways. If they have to be built anyway, they should offer more than just technology.

Lottum makes a compelling case for this: a technical building may not need architecture, but architecture makes it more future-ready.

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Experience the Project in Motion
Scan the QR code.

ROOTED IN THE EARTH, REACHING FOR THE SKY

An architect lives by shifting spatial boundaries and by the freedom to change perspectives.

Shortly after sunrise, architect **Eric Schellevis** (53) leaves his old farmhouse in Lottum on the Meuse, not far from the WML pumping station. A little later, he is talking to clients, reviewing designs, or working on new ideas for existing spaces. For him, this is everyday life, yet it is just one of two passions that shape his life.

Sometimes his gaze wanders over the colourful fields and dense forests surrounding his home. There he lives with his wife, his daughter, and two horses. The farmhouse had already been largely renovated when the family moved in. However, he redesigned some areas himself. Shaping spaces, altering structures and giving existing buildings a new identity are things that accompany Eric Schellevis not only professionally but also in his private life.

Even during his studies, he was inspired by architects such as Rem Koolhaas, John Hejduk, Toyo Ito, Bernard Tschumi and Mies van der Rohe. Yet a distinctive style does not emerge from role models alone; it develops over the years. To this day, he continues focusing on proportions, tone-on-tone colors and material ideas, the purpose of a function, and how forms and spaces interact.

He began his career at the Academie van Bouwkunst in Maastricht and later continued his part-time master's degree in Tilburg. Even before obtaining his architectural qualification in 2001, he was already designing projects independently.

Today, Eric Schellevis works at Volantis Architects, part of the Sweco Group. Until last summer, he was a co-owner of the firm before it was sold to Sweco to enable further growth. He sees a key challenge in his work as convincing clients of the necessity of sustainable building. For him, this should have been the new normal long ago.

And then there is a second passion, one that has captivated him since childhood: flying. Eric Schellevis draws inspiration from freedom, a change in perspective, and humanity's capacity to achieve what the body isn't naturally made for. This is made possible through intelligence, creativity, and technology.

Perhaps that is precisely the constant in his life's journey: remaining curious, continuing to marvel, and never ceasing to discover.

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BUILDING TYPE E
– A MODEL SETTING NEW STANDARDS

Building Type E is far more than a mere experiment. It marks the dawn of a new building culture that enables flexibility and innovation without compromising key protection objectives. Whether this model becomes established in the long term will depend largely on how successfully legal certainty, broad acceptance, and transparent costs can be reconciled.

Simple Experimental Building in Bavaria: Fewer Standards, Greater Freedom and Lower Costs.

In response to rising construction costs, a growing housing shortage and an increasingly complex framework of standards that often stifles innovation, Building Type E was developed on the initiative of the Bavarian Chamber of Architects. The approach is regarded as a bold initiative and is now being discussed not only in Germany but also in Austria and at EU level as a potential model for 'simplified construction'. This raises the question of what opportunities and risks this presents for investors, tenants and the whole construction industry.

A key problem is that the so-called 'generally accepted rules of technology' have long since gone beyond minimum standards in many areas, leading to high comfort requirements—for example, in sound insulation or technical building services. Overall, this dense body of regulations now comprises more than 3,000 construction-related standards, making planning and building increasingly complex and costly.

This is where Building Type E comes in. Developed from a pragmatic mindset, this planning approach gives architects greater freedom in new construction, conversion and refurbishment projects. The focus is on the fundamental safety objectives of building regulations - in particular fire safety, structural stability, sustainability, thermal insulation and accessibility - which must continue to be strictly adhered to. However, the model also enables far-reaching simplifications: project stakeholders can determine individually which standards are necessary for their project, rather than being obliged to adhere to the entire body of regulations. By following the Building Type E model, savings of up to 30% in construction costs can be achieved.

Since December 2023, the Bavarian Building Code has permitted deviations from standards, provided that equivalent protection can be demonstrated. This paved the way for 19 pilot projects across all administrative districts, supported by the Bavarian State Ministry of Housing, Construction and Transport.
In July 2024, the Federal Ministry of Construction published a guideline, followed by a draft bill in November 2024. The Bavarian approach is thus becoming a model for Germany as a whole.

Photos: Sebastian Schels, Munich

A HOUSE THAT BARELY NEEDS HEATING
Ingolstadt 2022-2025

Together with the non-profit housing association, a block of flats comprising 15 social housing units for families is planned in a typical new-build neighbourhood on the outskirts of the city; its design ensures that sunlight reaches every room. In cooperation with the engineers from 2226 in Vorarlberg, **neuburger, bohnert and müller Architekten** are designing a building that requires no conventional heating. It challenges the prevailing notion that energy efficiency can only be achieved through complex building services; instead, it relies on the very tools of architecture itself. Solid walls and ceilings that serve as insulation and thermal mass, the interplay of façade and window surfaces, of proportions, quality materials, and light.

The timber-clad solid construction serves as a thermal mass, storing solar radiation as well as residual heat from occupants and lighting, and maintaining indoor temperatures between 22 and 26° C. CO_2-controlled window vents ensure natural ventilation with minimal energy loss. Domestic hot water is heated via instantaneous water heaters. Electricity is supplied by a PV system. There is no underground car park or basement. Omitting these features is not a loss but a gain: storage spaces in the gardens encourage social interaction, whilst a reduced building mass allows the use of durable, high-quality materials. Omission does not imply a lack of design or architectural quality. By reallocating budgets, simple construction (and Building Type E, in particular) can lead to architecturally compelling results rather than ending up as modular, serialised low-cost solutions.

nbundm*
neuburger, bohnert and müller Architekten

Schleswig Holstein –
As Simple as Possible, as Good as Necessary

Photos: Bernd Perlboch, Preetz

Prof. Dipl.-Ing. Dietmar Walberg, Managing Director of ARGE eVp
"Building type E is a construction standard that strikes a balance between construction costs and user comfort."

While Austria, for example, generally seeks to cushion rising housing costs through increased subsidies, the course has long since been set in Schleswig-Holstein. Here, social housing construction is facilitated by a regulatory standard that does not compromise quality and safety requirements.

With the Arbeitsgemeinschaft für zeitgemäßes Bauen e.V., (ARGE) Schleswig-Holstein has created an expert body that bridges the gap between subsidy policy and construction practice. The ARGE has developed into a central construction and housing network in Schleswig-Holstein, focusing on building research, consultancy and technical quality assurance, and is recognised by the federal government.
Today, it ensures that social housing is not only subsidised but also implemented to a high standard in planning, technical specifications and energy efficiency.

Photo: Bernd Perlboch, Preetz

How can Building be Made Simpler and More Affordable Again?

Over time, housing construction has become shaped by standards that drive up costs while significantly increasing resource consumption, planning complexity and construction time. As a result, rents for newly let properties have risen to levels that many people can no longer afford.

In a study, the ARGE investigated which regulatory simplifications are sensible and feasible to make social housing construction simpler and more cost-effective. The results were summarised in the 'Regelstandard Erleichtertes Bauen' (Regulatory Standard for Simplified Construction) and have since September 2023 served as a legally sound and technically viable basis for housing promotion.

Balance between Cost Reduction, Quality, and Legal Certainty

The regulatory standard focuses on the consistent simplification and reduction of excessive standards without compromising basic living standards. This saves resources and shortens construction times.

Dietmar Walberg and his team observe that, in practice, widely accepted technical standards are frequently equated with binding regulations in tender documents and are therefore rarely questioned by investors or contractors.

The ARGE adopts the following approach to legal certainty:
- Safety-related requirements remain binding, including structural stability, fire safety and health protection.
- Deviations may be permitted where comfort or higher-quality fit-out standards are concerned, provided this is clearly agreed in the contract.
- DIN standards are not automatically legally binding. Therefore, clear agreements and good documentation are required in the event of deviations.

Achievements and measures of the standard:
- **Costs:** Reduction in construction costs by up to approximately 25%
- **Planning:** Focus on needs-based, simplified planning
- **Construction:** Optimisation of the structural framework and components (thinner walls and ceilings)
- **Technical fittings:** Reduction to minimum standards (simple electrical fittings, no complex technology)
- **Energy standard:** Limitation to statutory minimum requirements

- **Building facilities:** Omission of cost-intensive elements (e.g. basement, underground car park, green roof)
- **Building services:** Simplified lift planning (e.g. pre-installation instead of full fit-out)
- **Resources & climate:** Reduced use of materials and lower greenhouse gas emissions
- **Living space & cost-effectiveness:** More usable space with the same building dimensions
- **Practical relevance:** Introduction as a funding standard for social housing

A Benchmark Project for Simplified Building Standards

ECONOMICAL CONSTRUCTION
1 External wall thickness: 11.5–15 cm
2 Internal wall thickness: 11.5–20 cm (standard block size)
3 Ceiling thickness: 16–18 cm (reinforced concrete)
4 Ventilation system without heat recovery
5 Projecting balconies

BASIC FITTINGS
6 Practical kitchen
7 Minimal electrical fittings

BASIC REQUIREMENTS FOR ACCESSIBLE CONSTRUCTION
8 Accessible ground-floor design in accordance with Schleswig-Holstein building regulations and DIN 18040-2.
9 No lift

ALTERNATIVE STORAGE ROOMS
10 No basement
11 Outdoor storage replacing basement space

REDUCED NUMBER OF PARKING SPACES
12 No underground car park
13 Low parking space ratio 0–0.7

Do Aluminium Façade Systems Meet Standard Building Requirements?

In the context of the ‘Simplified Building Regulations’, façade solutions must generally be assessed on economic and functional grounds.
The use of an aluminium façade system, for example, **PREFA rhomboid façade tiles** or façade shingles, reflects a deliberate shift away from short-term investment cost considerations towards an assessment based on life-cycle performance and sustainability.
Such system solutions offer a high degree of design flexibility through standardised formats and a range of colour options, while ensuring clearly structured planning and execution. The high degree of prefabrication ensures consistent construction quality and reduces the risk of on-site errors.

PREFA aluminium is fully recyclable and, when dismantled and separated by material type, can be reintroduced into the material cycle with virtually no loss of quality. The small-format design allows individual elements to be replaced selectively, reducing material waste and simplifying repair work.
Owing to the coated surface’s durability and weather resistance, maintenance and repair costs remain low throughout the building’s lifecycle. Regular recoating and extensive refurbishment cycles are unnecessary.

Against this backdrop, such a façade solution can be considered economically viable over its life cycle and well-suited to circular construction principles, despite the higher initial investment. This assessment therefore aligns with the standard’s broader goals, particularly in terms of durability, resource conservation and long-term economic efficiency.
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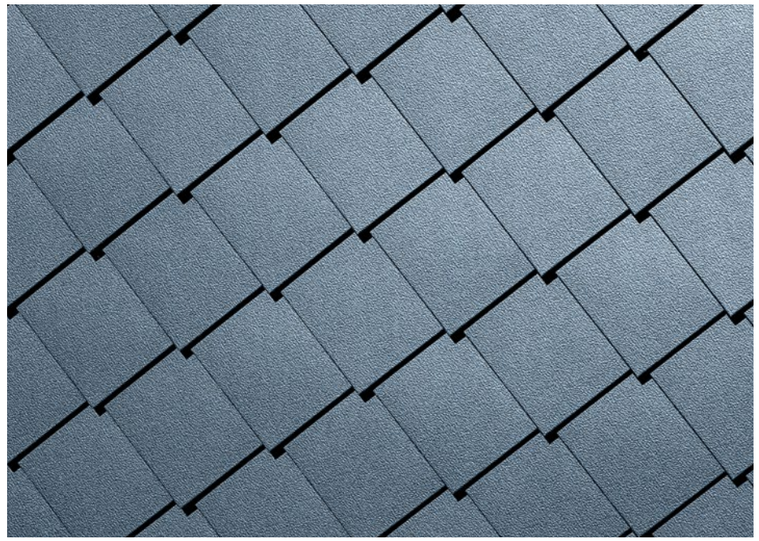
PREFARENZEN PRDCT

MICRO-TEXTURED SURFACES AS AN ARCHITECTURAL FEATURE

In architecture, the perception of buildings is shaped not only by form, but also by surface textures. The response from the architectural community was equally strong when PREFA introduced base material with a coating quality entirely new to the construction industry, produced using the coil-to-coil process, and launched the first products featuring the so-called P.10 coating. A precisely calibrated curing technology, in which a microscopically fine textured structure develops during the drying process, creates the matte depth effect that gives buildings a sense of visual calm and lasting quality.

Anyone in the architectural industry who confidently provides a **40-year colour guarantee** against chipping, flaking, blistering, and cracking for outdoor products understands how complex colour and coating issues are. From the first **PREFA roof tiles** in red and green to today's colour palette with the P.10 coating, six decades of intensive collaboration with coating manufacturers and developers of coil-coating technologies have shaped the journey.

Photos: Croce & Wir

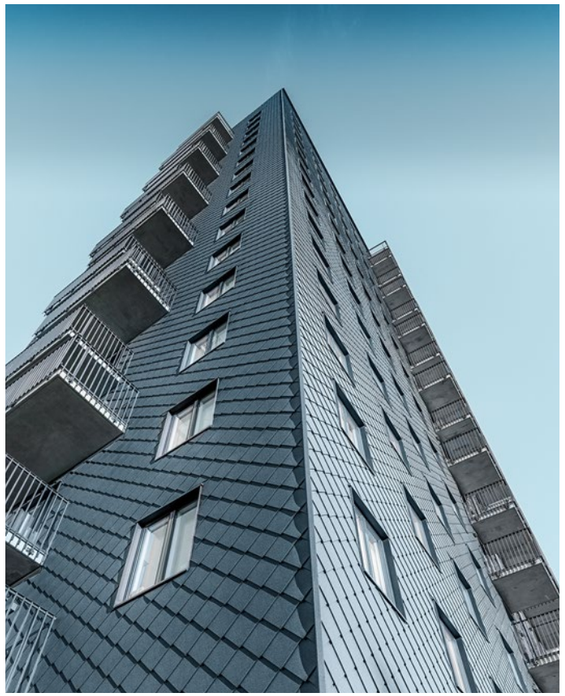


Reproducible and Sustainable

Coil coating, also known as strip coating, is one of the most efficient methods for coating steel, stainless steel or aluminium sheets. This process ensures consistent coating thickness and uniform, reproducible surface quality. Modern coating systems, often extending over more than one hundred metres, run at speeds of up to 200 metres per minute. Unlike traditional spray painting, coil coating results in virtually no paint loss from overspray.

Development of the Crinkle Texture

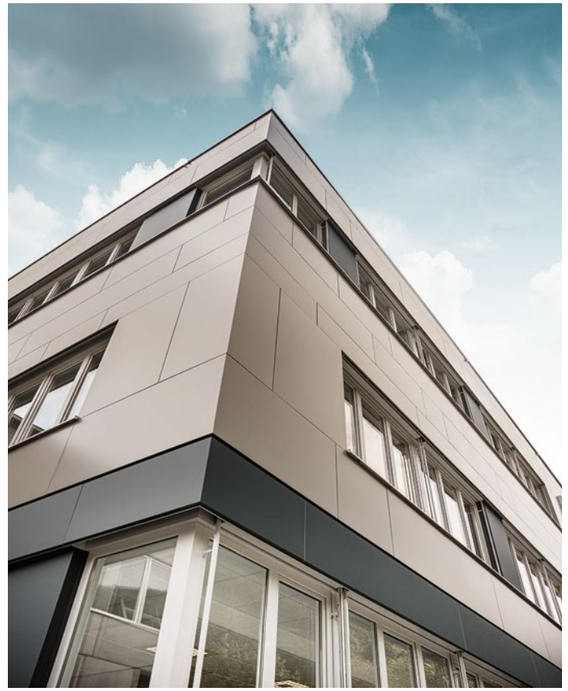
Specific resins, high-quality pigments, and additives influence the flow behaviour and surface tension, while controlled heating and cooling phases regulate the cross-linking dynamics between the surface and the substrate. This creates uniform microtextures that appear homogeneous yet matte and softly textured to the eye.



* *The **Stucco finish** is produced after coating using special texturing rollers and additionally enhances the stability of the aluminium sheet.*

Interaction of Light and Colourfastness

The fine irregularities scatter incoming light in multiple directions, creating a layered, soft reflection — similar to fine velvet or satin. At the same time, UV-stable binding agents and evenly distributed pigments ensure high colour consistency and resistance to fading. For architecture, this results in a durable, colourfast coating with a subtle interaction of light—technically precise and aesthetically sophisticated at the same time.



* *The* **microtexture** *of the P.10 coating reduces unwanted reflections on large smooth surfaces, as demonstrated here on the* **PREFABOND aluminium composite panel** *in P.10 Prefa bronze.*

Spotlight on Down Under: How Two **Pioneering Craftsmen** Are Conquering **Oceania's Architectural Market**

Photos: Johannes Vogl, Stephen Goodenough, Nigel Greening, Simon Devitt, Simon Whitbread, Croce & Wir, Martin Leitner

Through its online presence and at international trade fairs, PREFA products attract architects and investors from around the world. As a result, European wholesalers are reporting a growing number of deliveries to the United States, Canada, Japan, Mexico, and Arab countries. PREFA's connections with Australia and New Zealand, by contrast, stem from the initiatives of two Europeans who have long supported architects and roofers with their expertise and craftsmanship in the planning and installation of PREFA materials.

One of them is **Johannes Vogl**, former Technical Sales Manager at The Roofing Company in Christchurch (NZ) and now working with Architectural Envelopes in Cromwell (NZ).
"The market here is still too small to support a sales structure like the one we have in Europe. We are in direct contact with PREFA headquarters in Austria and handle logistics and sea freight ourselves," explains Johannes.

Johannes Vogl

Although **New Zealand** is known for its strong ‘metal roofing culture’,...

He supports architectural firms from the planning stage through to completion.
„My experience with intricate detailing is often regarded as an added assurance by both architects and installers. With every new project, interest in PREFA aluminium systems, the colour options, and the matte P.10 coating continues to grow among my clients and professional network.”

* In Australia and New Zealand, ***aluminium*** has become the preferred material for roofs and façades, largely due to the region’s harsh climatic conditions, including intense UV radiation, salt-laden air and, in some areas, extreme winds. **PREFA’s aluminium solutions** are designed to meet these demanding environmental requirements through durable surface finishes, robust fixing systems and alloys specifically developed for coastal conditions.

Sydney: **Urban Mining*** vs. Traditional Mining

Martin Leitner takes a different approach. From an early age, the enthusiastic master tinsmith was fascinated by working on roofs and learned the craft from scratch. Today, he runs a small tinsmith's workshop in Kössen, Tyrol.

Alongside extreme sports, one of his great passions is working at height. Initially, his only connection to Australia was through Christian Dagn, his father's best friend, who had emigrated there years before to establish himself as a tinsmith.

In 2014, Martin Leitner accepted an invitation to Sydney for the first time to work for a few months at the well-established company KFC Roofing Supplies. In addition to trading in roofing materials, the company operates a central workshop of around 6,000m² for the precision prefabrication of sheet-metal components.

Using an online planning system, independent local tinsmiths define the trays, parapet flashings, and other sheet metal components they require. The parts are then manufactured from the selected material in a two-shift operation and made available for collection overnight.

While local roofers generally work with little more than their tools and a vehicle, the central workshop handles the more demanding prefabrication work.

Martin Leitner quickly settled into the system, but soon noticed that the machines and tools fell short of the quality standards common in Europe. To simplify and streamline communication with European suppliers, he has since acted as KFC Roofing Supplies' main point of contact from Tyrol. In this role, he supports the Sydney-based team with everything from troubleshooting to the organisation and procurement of spare parts.

Martin Leitner

Every year during the European winter, he returns to Sydney, where he has found both close friendships and a second home. As an Austrian subcontractor, he supports projects that require specialist expertise and high-level craftsmanship, working exclusively with PREFA aluminium or copper.

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***Urban Mining**, in the sense of systematically recovering building materials, has yet to become established in Sydney. However, the conditions for its development - particularly in terms of raw material recovery and sustainability targets - offer considerable potential. Those planning demountable aluminium façades today may well be seen as pioneers in just a few years' time, much as they already are in Europe.

PREFA employs around 800 people across Europe, with sites in 22 countries.
Research, development, and production take place in Austria and Germany.
In each country, teams comprising marketing experts, specialist advisors for installers, and architectural consultants ensure that the wide range of products is used and installed in a technically correct manner that complements the architecture.

The first aluminium roof tiles were installed 80 years ago. To this day, they continue to protect many buildings from the elements.
PREFA has enhanced the roof tile concept and offers a broad selection of proven complete systems for roof and façade cladding, which incorporate integrated PV modules, along with mounting solutions for rooftop solar installations and a portable flood protection system.

AT Austria: 3182 Marktl/Lilienfeld, T +43 2762 502-0, E office.at@prefa.com
DE Germany: 98634 Wasungen, T +49 36941 785-0, E office.de@prefa.com
CH Switzerland: 4704 Niederbipp, T +41 71 952 68 19, E office.ch@prefa.com
FR France: 68127 Sainte Croix en Plaine, T +33 479448458, E office.fr@prefa.com
CZ Czech Republic: 193 00 Prague, T +420 281 017-110, E office.cz@prefa.com
IT Italy: 39100 Bolzano, T +39 0471 068680, E office.it@prefa.com
HU Hungary: 2045 Törökbálint, T +36 23 511-670, E office.hu@prefa.com
PL Poland: 02-295 Warsaw, T +48 22 720 62 90, E office.pl@prefa.com
NL The Netherlands BE-3861 RS Nijkerk, T +31 611 49 75 26, E info.nl@prefa.com
BE Belgium: 2500 Lier, T +32 47 85 45 388, E info.be@prefa.com
LUX Luxembourg: BE-2500 Lier, T +32 47 85 45 388, E info.be@prefa.com
SK Slovakia: 949 01 Nitra, T +421 905 444 088, E office.sk@prefa.com
SI Slovenia: 1290 Grosuplje, T +386 51 612 500, E office.si@prefa.com
DK Denmark: 1050 København, T +45 60 54 21 65, E info.dk@prefa.com
RO Romania: HU-2045 Törökbálint, T +40 755 543 454, E office.ro@prefa.com
UK Great Britain: CV34 4HL Warwick, T +44 1608 544325, E office.uk@prefa.com
IRL Ireland: UK-CV34 4HL Warwick, T +44 1608 544325, E office.uk@prefa.com
HR Croatia: A-3182 Marktl/Lilienfeld, T +385 99 211 6001, E office.hr@prefa.com
NO Norway: 3735 Skien, T +47 474 88 284, E info.no@prefa.com
SE Sweden: 218 45 Vintrie, T +46 10 49 86 660, E office.se@prefa.com
SRB Serbia: A-3182 Marktl/Lilienfeld, T +381 60 6633120, E office.rs@prefa.com
BIH Bosnia and Herzegovina: A-3182 Marktl/Lilienfeld, T +387 65 350 291, E office.ba@prefa.com

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www.prefa.com