

**NORDSK  
PROFIL<sup>®</sup>**

**NAPSU**  
FACADE SYSTEM





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# STYLISH FACADES WITH A LOW CARBON FOOTPRINT

## FACADES WITH OPTIONAL DESIGN

Nordisk Profil is a manufacturer and supplier of patented Danish facade systems that enhance architectural freedom and set new standards for building facades.

With 30 years of experience, we take pride in creating customized and unique facades that transform urban landscapes and contribute to sustainable, climate-friendly, and, above all, fire-safe construction.

We specialise in modular facade solutions for all types of construction, both renovation and new builds, and offer a flexible concept that can be tailored to all kinds of requests and needs.

## COMPLETE SOLUTION

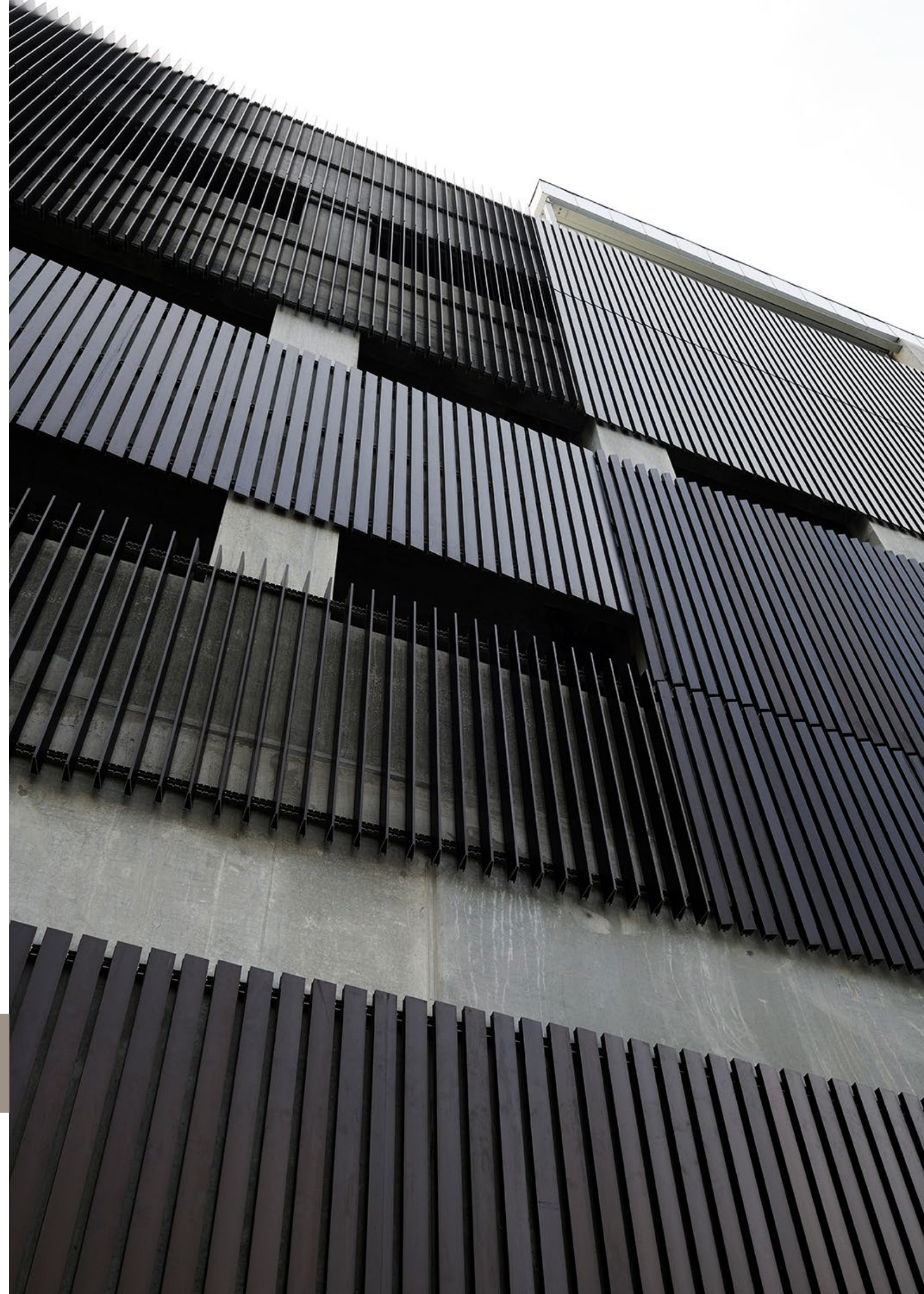
At Nordisk Profil, you receive comprehensive advice to ensure that you choose the best facade solution for your project.

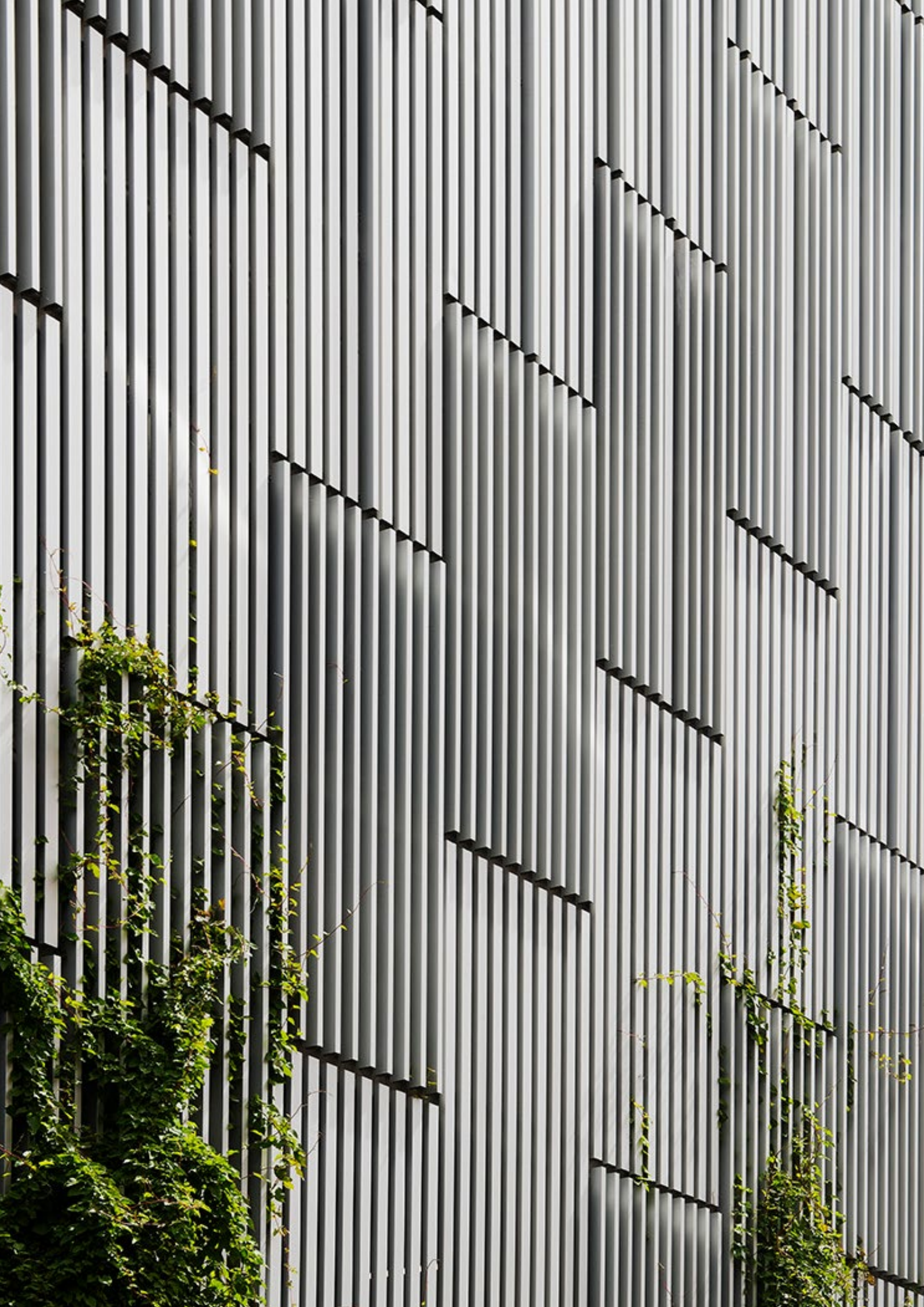
You're not just buying facade cladding. You're purchasing complete facade systems that are ready for installation, taking into account the facade's elements and design.

With a focus on delivering exclusive facade solutions, all produced in Denmark, we ensure the highest quality with full control over the entire value chain, from raw material procurement, to delivery to the customer.

## OUR PRINCIPLE IS SIMPLE

Freedom to choose  
Let your fantasy guide and create something extraordinary





# A FUTURE-SAFE FACADE CHOICE

## STYLE REQUIREMENTS

The core idea behind Nordisk Profil's facade cladding is to provide custom facade solutions that make it possible to transform all types of building projects into beautiful architectural master pieces.

We build with a focus on sustainability, fire safety, and the ability to strike a good balance between the client's vision, needs, technical requirements, and budget.

Our facades are for those who demand high standards for the final product, wish to build responsibly, and expect a future-proof facade of the highest quality.

**Quality products are like an investment that stands the test of time.**

## UNIQUE QUALITIES

- 100% collected and reused aluminium with low CO<sub>2</sub> emissions
- Maintenance-free
- Modular and optional design
- No visible screws or transitions
- Built-in thermal movement
- Quick and easy installation

# NAPSU LAMELLAE CLADDING

## THE RIGHT CHOICE

Stricter legal requirements for the climate footprint of construction, demand action. The CO<sub>2</sub> footprint must be reduced, and the choice of materials play a key role in this.

Recycled aluminium, used as the primary material for the facade, can be one way to achieve significant CO<sub>2</sub> savings.

Nordisk Profil exclusively uses Greenline aluminium, which is 100% collected and recycled. It has a very low CO<sub>2</sub> footprint of only 1.8 kg CO<sub>2</sub>-eq/kg, compared to primary aluminium, which leaves a footprint of 11.1 CO<sub>2</sub>-eq/kg.

Greenline aluminium meets the same high standards as primary aluminium, while also offering the possibility of installing a facade with the best EPD values on the market.

**Replace conventional building materials with aluminium and help reduce the construction industry's climate footprint.**

## NAPSU

Napsu is a climate-friendly solution unlike any other.

The facade system is designed as an open facade solution, where aluminium lamellae are mounted on an underlying aluminium structure. This creates an elegant view of the building's supporting facade, offering the opportunity to craft dynamic and exciting architecture through the interplay of light, shadows, and material combinations.

The aluminium lamellae can be mounted both horizontally and vertically with flexible spacing and optional lengths, making it a facade system with complete design freedom.

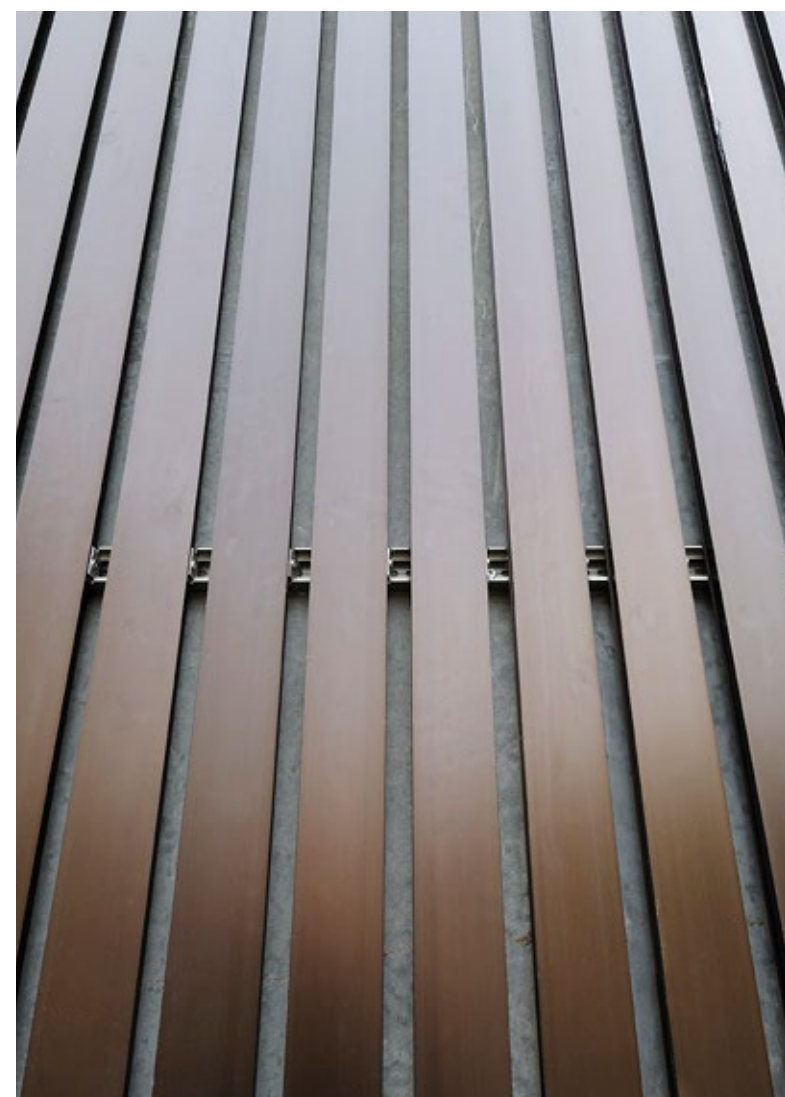
Thanks to the modular construction, the system can easily be expanded to meet future needs – entirely without visible transitions. It is also easy to disassemble and reuse in other projects.

Learn more about the optional aluminium lamellae, installation, and the system's features on the following pages.

## FACADE SYSTEMS WITH CE-CERTIFICATE

As a customer, you can build safely and sensibly with facade systems from Nordisk Profil, always guaranteed that your products are manufactured in accordance with applicable legislation.

Our fire-approved facade systems are CE marked, ensuring they meet the highest European standards for safety and quality.



## MAINTENANCE

Aluminium is a practical and durable material that needs little maintenance – especially when it is powder coated or anodized.

To maintain the facade's colours and gloss, we recommend cleaning the surface of the lamellae a few times a year – especially in areas with high salt levels or a chemical-rich environment.

**70% of the aluminium used today is still in its original form.**

# OPTIONAL ALUMINIUM LAMELLAE

## CREATE AN IMPRESSIVE FACADE WITHOUT LIMITATIONS

Facades should create a visual impact and impress. They should appear sharp and adapt to their surroundings. Therefore, it is important to choose a facade solution that offers opportunities rather than limitations – in terms of form, structure, colours, and materials.

### ANODIZING

Anodizing, as a surface treatment, is highly suitable as it is the material itself that seals and forms the surface. In this process, the protective surface remains UV-resistant, as well as hard, corrosion-resistant, mechanically durable, and long-lasting with excellent weather resistance.

It is possible to choose different anodizing colours and design the lamellae in a glossy, matte, or brushed finish – exactly as desired.

Anodized lamellae retain their metallic and decorative appearance for decades and are maintenance-free.

### POWDER COATING

Powder coating is a surface treatment process that provides aluminium surfaces with a range of positive properties while also giving them a decorative appearance.

The result is a strong, even, and durable layer that protects against corrosion, wear, weathering, and is UV-resistant.

If you want to create unique and creative facades, powder coating is an excellent choice. With a wide selection of colours, patterns, and finishes, the possibilities are many.

**Here is a selection of the most commonly used finishes and colours. Aluminium lamellae can be supplied in all RAL colours.**



LV020



ES200



ES400



ES600



ES900



RAL 9006



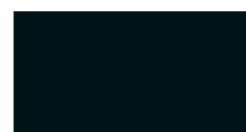
RAL 7038



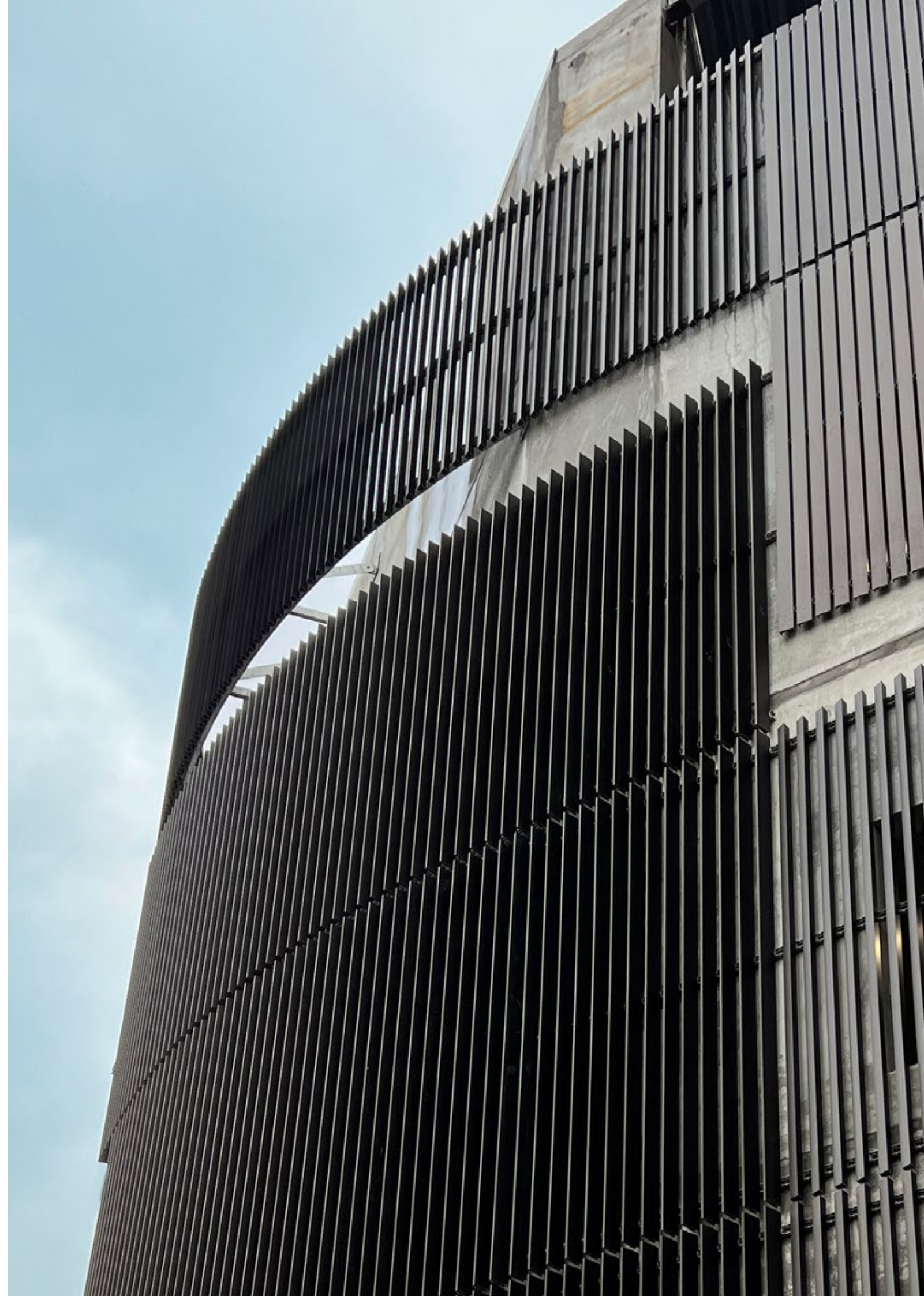
RAL 7008



RAL 7016



RAL 9005



# INSTALLATION OF FACADE SYSTEM

## UNIQUE AND SIMPLE PLUG AND PLAY SYSTEM

Napsu is like building with LEGO. The facade system offers countless creative combinations, is easy to handle, and delivers a precise, sharp look.

The straightforward handling and easy installation consist of only three components that are assembled in just three steps.

The result is durable and entirely free of visible screws, giving the facade an elegant finish. If future expansion of the facade is needed, it can be done just as easily, without visible transitions or other technical challenges.

### THE SYSTEMS THREE COMPONENTS

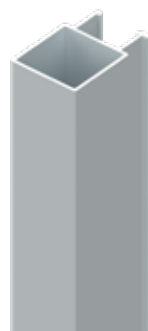
#### 1. ALU MOUNTING RAIL

Mounting rails with punched holes



#### 2. ALU LAMELLA

Lamellae in optional lengths and variable c-t-c distances



#### 3. FIX-PLATE

Setup with fix-plates



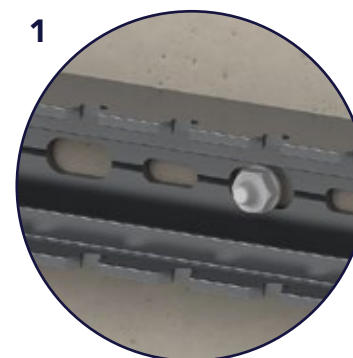
The mounting rail, lamellae and fix-plates are prepared for thermal movement with full control over all components of the structure.

### THE SYSTEMS INSTALLATION PHASES

#### 1. MOUNT

The mounting rail is attached to the load-bearing facade with a maximum distance of 400 mm between fixing points.

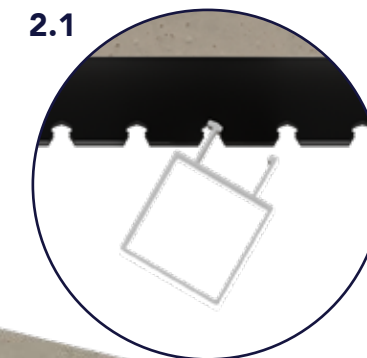
1



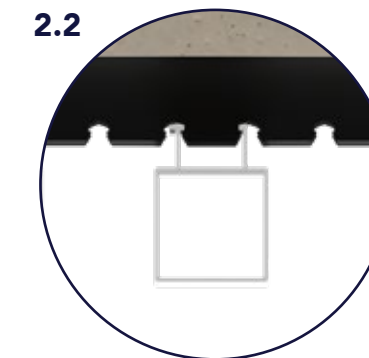
#### 2. CLICK

The lamella is pushing into the click groove, and the wide base is pushed into place. When the lamella foot is in the click groove, the lamella is tilted in one complete motion into place - 'click'.

2.1



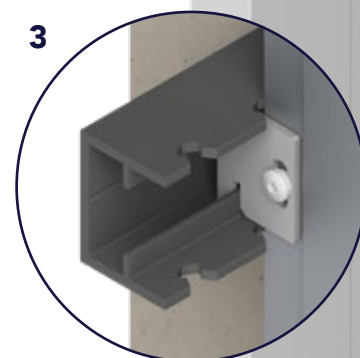
2.2



#### 3. FIX

When a lamella is clicked into place, fix-plates are mounted in all cross joints between the mounting rail and lamellae.

3



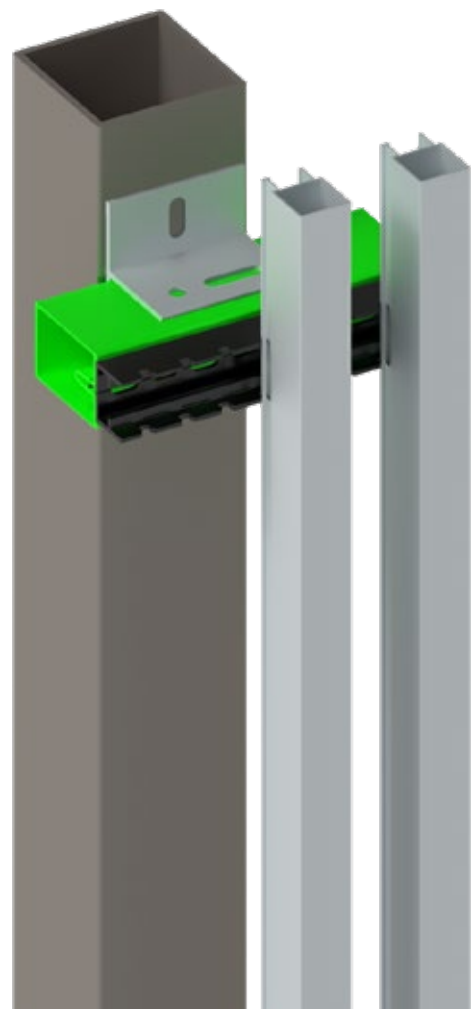
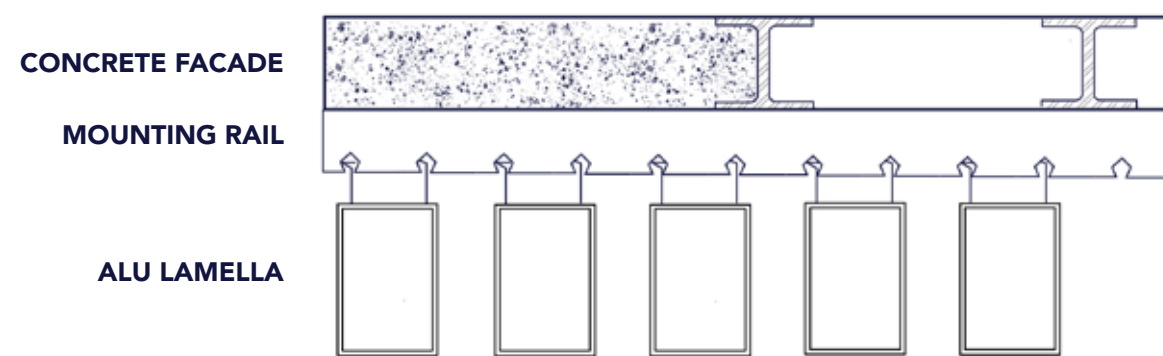
CAR PARK: TOMSGÅRDSVEJ  
ARCHITECT: KANT ARKITEKTER



# NAPSU ON LOAD-BEARING FACADES

## NO LIMITATIONS

Napsu is mounted on load-bearing structures like concrete and steel, but there are no limitations on what the load-bearing material is. The most important factor is that the system's mounting rail can be attached to the structure.

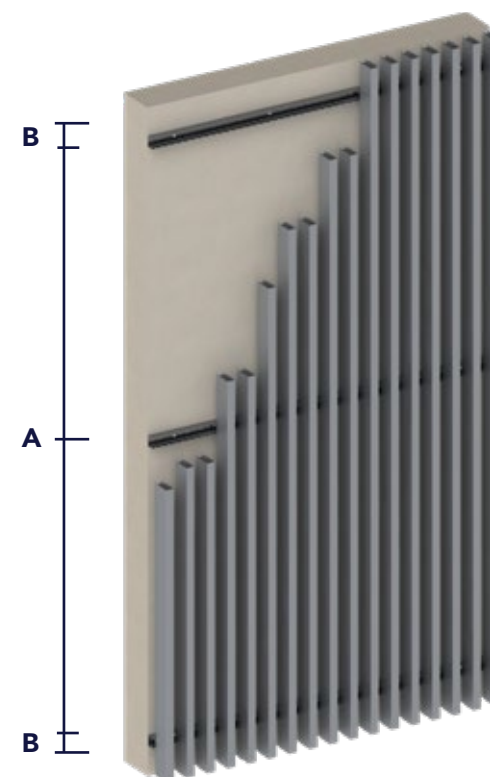


## THE SYSTEMS LOAD-BEARING STRUCTURE

In cases where the facade solution cannot be mounted directly onto the building's load-bearing facade (structure), the system solution includes an additional supporting structure.

This structure consists of reinforcement profiles, support brackets, horizontal and vertical support profiles, as well as T-connectors.

Each component is individually designed and calculated for each project, taking into account structural stability, thermal movement, and wind load.



## FREE SPAN ON LAMELLAE

There are requirements for the spacing between the lamellae as well as the distance from the mounting rail to the end of the lamella:

**A:** The free span, between the lamellae attachment to the mounting rail, is typically 1400-2000 mm. The span depends on the type of aluminium, the dimensions of the lamella, and the overall construction of the facade.

**B:** The free span, from the center of the outermost mounting rail to the end of the lamella, is typically 100-250 mm. The span depends on the type of aluminium and the dimensions of the lamellae.



# CREATE UNIQUE FACADES WITH CURVED SOLUTIONS

Organic forms create a harmonious balance between form and function. They have the ability to transform any building into an architectural gem.

**EXTERNAL CORNER**

**INTERNAL CORNER**

Napsu is suitable for facades where there is a desire for a more organic and visual expression in the form of:

- CURVED SURFACES**
- ROUNDED CORNERS**
- COLUMN SOLUTIONS**
- ROUND FINISHES**

Curved facades with a radius over 1800 mm require a mounting rail that is shaped to the structure during on-site installation.

Curved facades with a radius under 1800 mm are mounted using brackets.

CAR PARK: **HAVNEMØLLEN P1**  
ARCHITECT: **STUDIO SANGBERG**



# TECHNICAL SCREENING

## HIDE AND PROTECT

Napsu is an ideal and aesthetic solution for various types of enclosures.

Whether the need is large or small – from technical installations and bike shelters to staircases and other storage solutions – Napsu provides a presentable and robust enclosure.

The system also functions as an effective ventilation screen and can help reduce noise levels in a stylish and practical manner.

The angle of the lamellae can be adjusted to achieve the desired degree of shielding, both in terms of airflow and visibility.

## FAULTLESS INSTALLATION

The system is easy to install, as the mounting rails with lamellae simply click into place. There is a guarantee of flawless lamellae installation, and with full built-in control of thermal movement, the lamellae will appear perfectly aligned, without any tolerances.



## COMBINE FACADE MATERIALS

### DESIGN AND COMBINE AS YOU WISH

At Nordisk Profil, we don't just offer 'clean' lamellae solutions, but we offer the opportunity to play, design, and combine with a variety of materials.

Napsu can be combined with partial solutions, for example, perforated plates, stretched metal, trapezoidal plates, profile plates, solar panels, green walls etc.

We don't deliver standard solutions  
We deliver your solutions

### COMPLETE SUPPLIER AND SPECIALIST

Nordisk Profil is the supplier of Napsu and delivers all components.

We are also your specialist and advisors in regards to solution, design, installation and fire-technical requirements, etc.

We offer no standard solutions, but strive to work closely with our clients in order to ensure that you get the full potential out of your project with the ideal solution – both now and in the future.

See inspiring projects and  
references on our website.  
Perhaps you can be inspired  
for an upcoming project?



APARTMENTS: **BELLA 3N**  
ARCHITECT: **URBAN AGENCY**



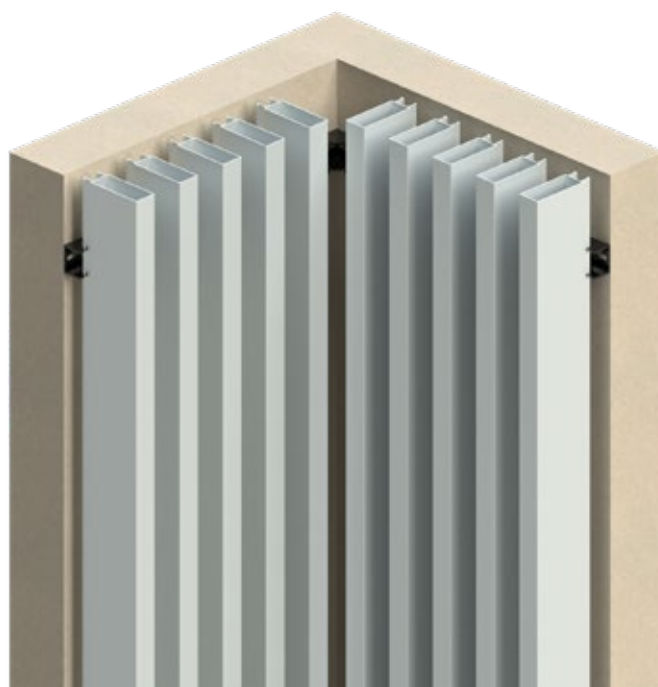
# CORNERS AND TRANSITIONS

## CORNERS

For each project it is important that details regarding corner solutions, section divisions, and transitions are solved with respect to both design, thermal movement, and fire technical conditions.

Napsu facade systems takes into account this requirements and guarantees a complete and quality-assured solution.

**INTERNAL CORNER**



**EXTERNAL CORNER  
L-SHAPE**



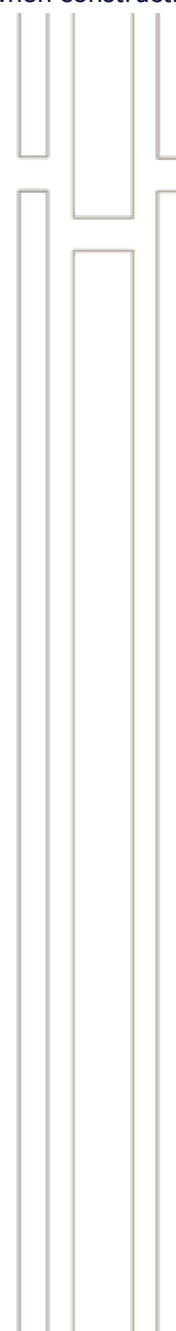
**EXTERNAL CORNER  
45° DEGREE**



## HORIZONTAL TRANSITIONS

The length and division of the aluminium lamellae are most often dictated by the facade design, taking into account floor heights, section divisions, and window placements, etc.

Aluminium lamellae can be supplied in lengths of up to 8 meters. However, it is important to account for the material's coefficient of expansion to ensure space for thermal movement when constructing transitions.

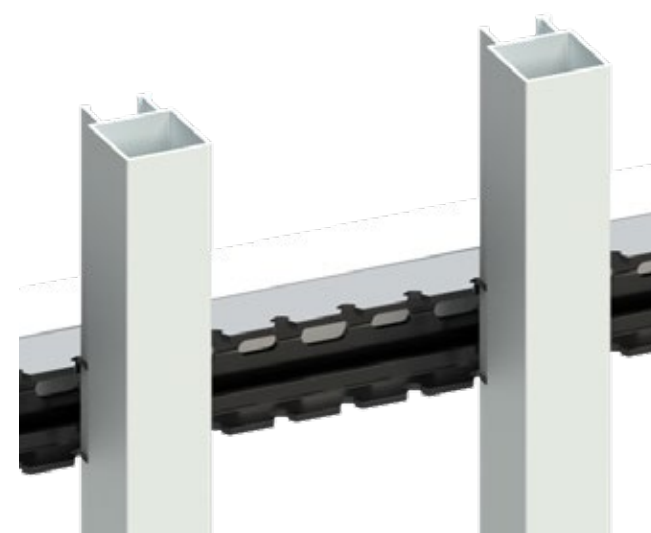


## COVER PROFILES

### FRONT PROFILE

#### COVER PROFILE FOR MOUNTING RAILS

To achieve a more refined result, it is possible to cover the mounting rail, this is done by fastening a cover profile.



WITHOUT COVER



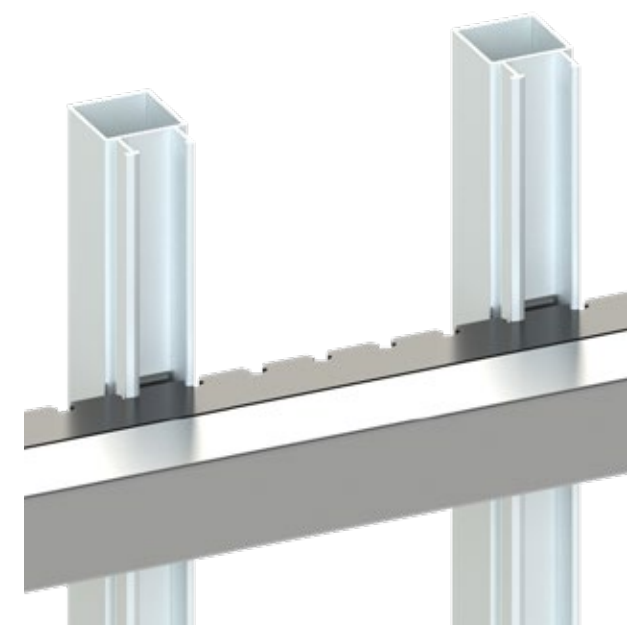
WITH COVER



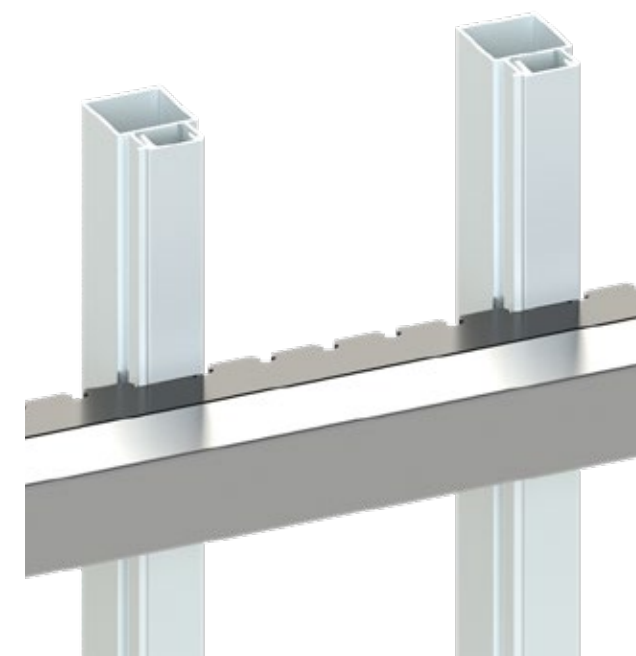
### BACK PROFILE

#### COVER PROFILE FOR LAMELLAE

If lamellae are placed in front of a window, facade opening, or in another position where they are visible from the back, it is possible to mount a cover profile on the back of the lamellae.



WITHOUT COVER



WITH COVER



CAR PARK: **KORNMØLLEN P2**  
ARCHITECT: **STUDIO SANGBERG**



## OUR GREEN FOOTPRINT

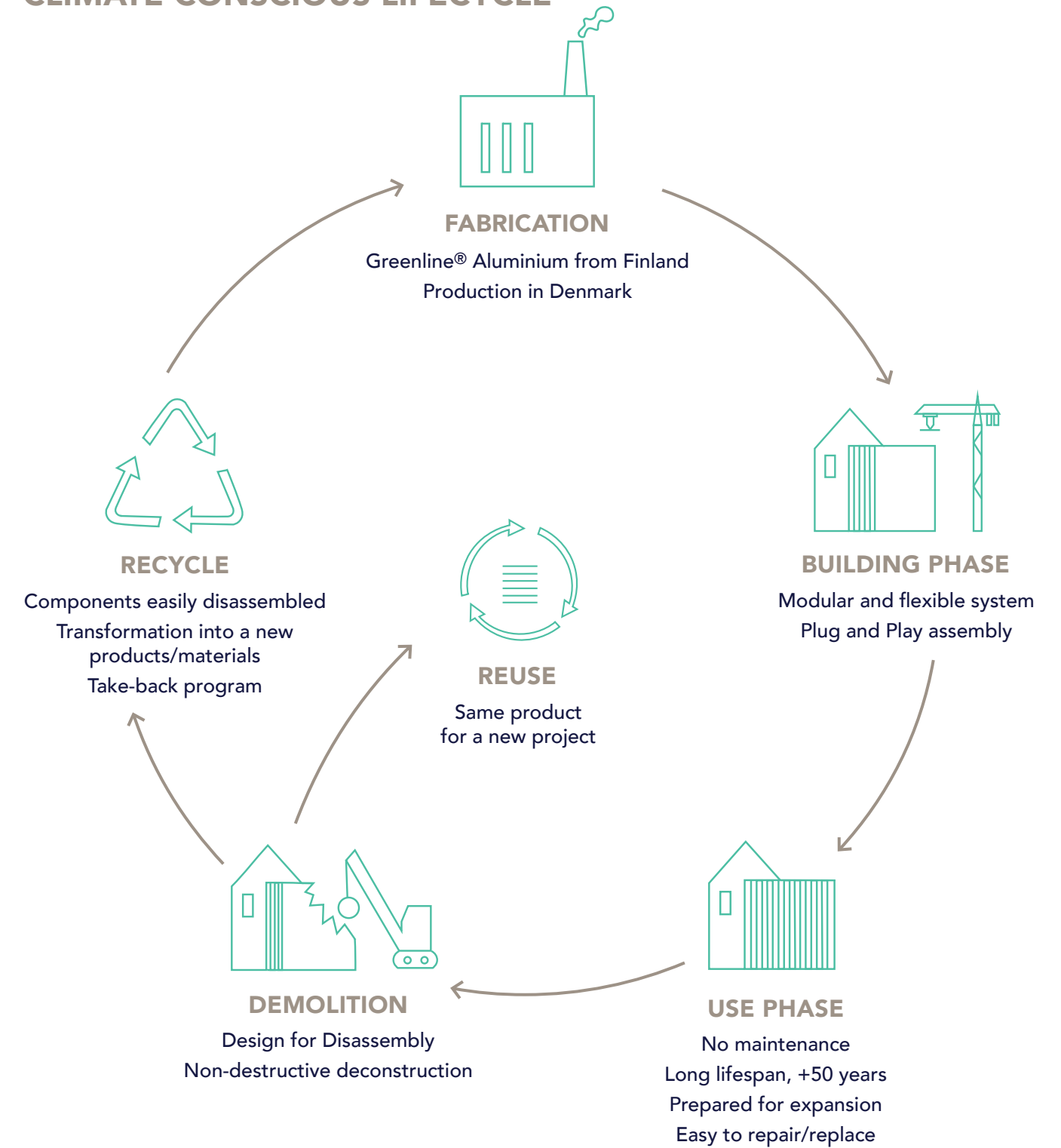
As a manufacturer and supplier of facade solutions, we see it as our responsibility to contribute to sustainable development in the construction industry with a focus on the environment.

We are focused on being a leader in proper and responsible facade solutions, with a strong emphasis on the products' lifecycle.

We guarantee CE-marked products that are flexible, modular, and recyclable – with ample opportunities for transformation to other purposes. We only offer a facade range with sustainable, circular, and well-documented properties.



## CLIMATE-CONSCIOUS LIFECYCLE



Read about the individual phases on the following pages.

# CLIMATE-CONSCIOUS LIFECYCLE

## FABRICATION

Napsu is manufactured using the finest materials with great consideration for the environment and climate.

The system's construction and profiles are made exclusively from Greenline aluminium, which is 100% collected and recycled.

Greenline has a very low carbon footprint of just 1.8 CO<sub>2</sub>-eq/kg compared to primary aluminium at 11.1 CO<sub>2</sub>-eq/kg.

Production and preparation in Denmark.



## BUILDING PHASE

The facade solution is customized and tailored to each individual customer and building project, ensuring minimal waste.

It is designed as a modular system with large design freedom and flexibility. Modular elements make it easy to expand and adapt the facade for future use.

Key features of the facade system includes easy, fast, and quality-assured installation thanks to the unique Plug and Play mounting system, which ensures a high level of detail.

## USE PHASE

The facade system requires minimal maintenance and has a lifespan of at least 30-50 years.

Aluminium is renowned for its exceptional durability, with 70% still in its original form.

The modular facade system is designed to handle facade repairs without visible transitions and allows for the addition of extra lamellae cladding from Nordisk Profil.

**Nordisk Profil deliver Greenline certification and EPD reports that document a low climate footprint and the markets best EPD values.**

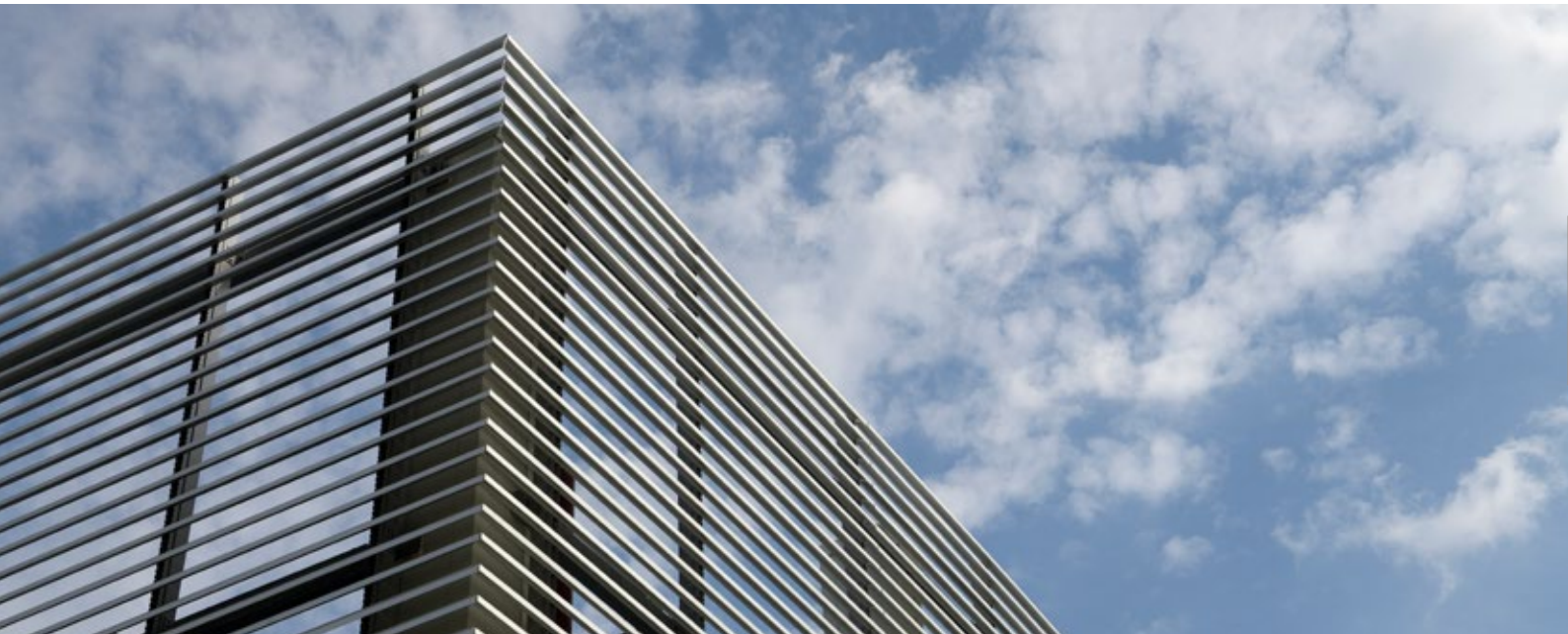
## DEMOLITION RECYCLING REUSE

It is essential for Nordisk Profil to offer products that can easily be disassembled and repurposed for other projects and purposes.

With the design principle 'Design for Disassembly', the facade system is designed and assembled to allow for easy separation of each individual component.

All components can therefore be dismantled and reused for other purposes, and the facade cladding can also be disassembled and reused 1:1 for a new building project.

In case of demolition, Nordisk Profil offers a take-back program, including collection and recycling.



**GREENLINE ALUMINIUM**  
CO<sub>2</sub> footprint is only 1.8 kg CO<sub>2</sub>-eq/kg.

CAR PARK: **MOBILITY HOUSE STIGSBORG**  
ARCHITECT: **JUUL FROST ARKITEKTER**



# DESIGN AND PROJECT MANAGEMENT

## GET OFF TO A GOOD START

At Nordisk Profil, we highly value close collaboration, working together to find the optimal facade solution.

We offer professional and comprehensive project planning, where the architect's visions are realised, and the client's or authorities' requirements are met – all with thorough review and assessment, as well as full control over material specifications.

## SPECIALISED PROJECT PLANNING FOR A COMPLETE RESULT

### TECHNICAL DRAWINGS AND ILLUSTRATIONS

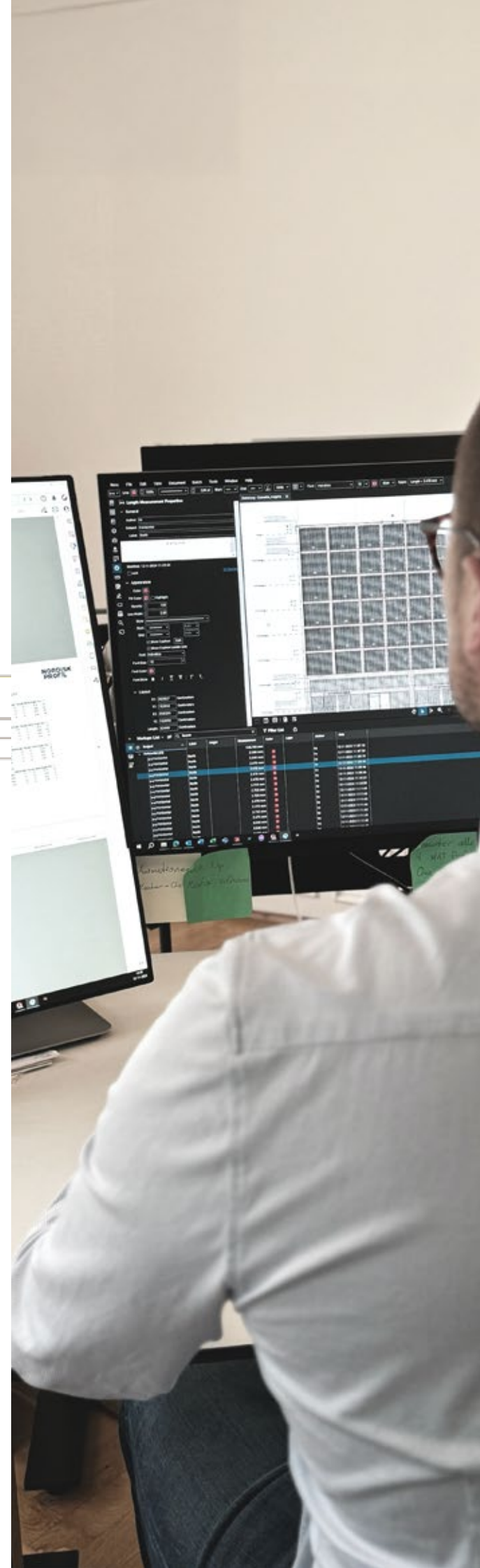
We prepare facade drawings, facade sections, and technical details that describe and illustrate the design and geometry of the facade solution. These drawings serve as a basis for collaboration with the architect, contractor, and installer to ensure consensus regarding the final solution, aesthetic expression, and installation process.

### STATIC CALCULATIONS

When Nordisk Profil is part of the project planning, we handle the facade solutions static calculations while taking into consideration all safety and performance standards. The calculations ensure that the facade withstands the forces it is exposed to while maintaining aesthetic and functional quality. The work includes factors such as self-weight, wind load, temperature effects, material strength, load-bearing capacity, connections, and fire safety assessment.

### MATERIAL SPECIFICATIONS

Based on collaboration with the project stakeholders, facade drawings, technical details, and structural calculations, we prepare the final material specification for all facade components. From then on you are ready to place an order for materials without surprises or cutting corners.



## LEAVE THE PROJECT PLANNING TO US

Project planning needs to be prioritised. Lead this to Nordisk Profil and get off to a good start, and leave the risks behind.



### EFFECTIVENESS

Leave the whole process to Nordisk Profil and save valuable time and resources.



### RISK FREE

Avoid the risk of having to create material specifications and detailed design solutions for corners, transitions, doors, windows, etc., on your own.



### IMPLEMENTATION SUPPORT

Our expertise is available from start to finish, supporting you throughout the entire implementation process.



### COLLABORATION

We don't expect ourselves to just deliver the expected, but also to be a reliable sparring partner that optimises wishes and needs for the facade for the benefit of you as a client.



Nordisk Profil is a specialist in facade solutions and a supplier of patented Danish facade systems that enhance architectural freedom and set new standards for building facades.

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