


# Act Responsible Build Sustainable

Be inspired by European,  
sustainable architecture

**SWISSPEARL**





**In Europe, construction is responsible for 40 % of the total energy consumption, 40 % of the material consumption and 20-35 % of the significant damage to the environment.**

**On top of this is the substantial amount of waste from the building sites.**

**It has become more important than ever for the construction industry to make more sustainable choices and make a difference for the environment and future generations. By complying with or certifying buildings with DGNB, BREEAM, LEED or other sustainable labels, the industry contributes to a more circular economy.**

**In Swisspearl, we are aware of our responsibility, and we continuously work towards becoming more sustainable. That is why we are proud to deliver products to sustainable and architecturally remarkable buildings across Europe.**

**Be inspired by some of our customers' architectural gems where the environment has been one of the key stones in the development.**

**Act responsible. Think sustainable.**







## Skolen på Duevej, Frederiksberg, Denmark

Architect: AART Architects & Nordic Office of Architecture

Type: School

Year: 2017

Product: Swisspearl Construction, Cembrit Windstopper

Sustainability label: DGNB Gold & DGNB Diamond



“ In cooperation with Frederiksberg municipality, we have had an ambition to create a school building where we would achieve utmost effect from combining a sustainable agenda with new, inspiring and healthy learning environments. Therefore, we suggested an expansion with its own character and agenda based on sustainable materials, flexible facilities, minimal maintenance costs and inspiring architecture all in harmony with its surroundings.

**Architect and Partner Mads Nygaard, AART Architects**





## Skolen på Duevej, Frederiksberg, Denmark

In 1903 - long before DGNB certifications and sustainability demands - when architect Valdemar Schmidt designed the school on Frederiksberg, he hardly would have known that the very same school would stand out as a pioneer project for modern school buildings more than 100 years later. Nevertheless, this is what happened. After an extensive transformation in 2017, the school was rewarded with one of the highest honours for architectural quality - the DGNB Diamond-certification. However, this time it was not Valdemar Schmidt's deed, but instead it was AART Architects and Nordic Office of Architecture at the helm. From the very beginning of the project, the architect companies had high ambitions for the interplay between architecture and sustainability.

As part of the process to obtain the DGNB-certification, there has been high demands for the choice of materials. This is good news, as certifications naturally give rise to choosing more sustainable building materials:

“The developer's ambitious requirements for the DGNB-certification have been a motivating factor for us. The demands mean that we have chosen materials on an informed basis and thereby structured our work with sustainability with the school. Early in the process, we have been able to assess how our architectural intentions will be honoured in the DGNB-paradigm by applying tools for life cycle assessment and life cycle costs. DGNB has thereby made it easier to introduce sustainable materials and solutions into the project from a holistic perspective.”

**- Architect and Partner Mads Nygaard, AART Architects**

BREEAM® NOR

## Ringvegen 16, Gjøvik, Norway

Architect: JAF Arkitektkontor

Type: Commercial

Year: 2019

Product: Swisspearl Patina Original P 222

Sustainability label: BREEAM-NOR Very Good







## SISAB Förskola Sandslottet, Sköndal, Sweden

Architect: Liljewall Arkitekter

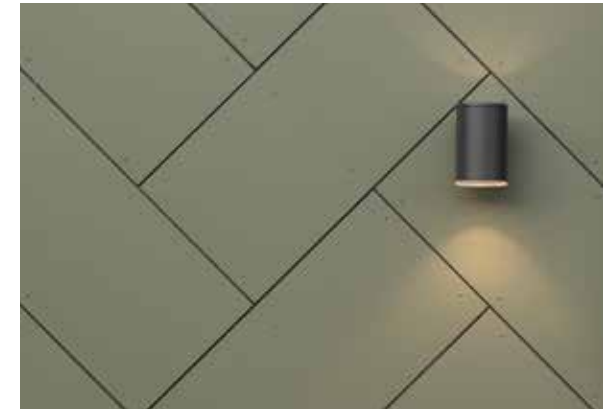
Type: Kindergarten

Year: 2018

Product: Solid S 656, S 676

Equivalent product: Zenor

Sustainability label: Certified Miljöbyggnad Silver





## Önsta Förskola, Västerås, Sweden

Architect: Archus Arkitektur

Type: Kindergarten

Year: 2018

Product: Swisspearl Patina Original P 222, Cembrit Transparent T 383 (discontinued)

Equivalent product: Carat

Sustainability label: Certified Miljöbyggnad Silver





“ We decided to give the large community centre a village-like shape that resembles a flower, where each petal house has a different unit. The building consists of four main elements connected by a shared entrance hall. Its common entrance also emphasises the idea of a community.

Architect Petri Saarelainen,  
Architects Lahdelma & Mahlamäki Ltd



## Kastelli Monitoimitalo, Oulu, Finland

Architect: Architects Lahdelma & Mahlamäki Ltd  
Type: Community Centre  
Year: 2014  
Product: Cembrit Cover (discontinued)  
Equivalent product: Planea  
Sustainability label: LEED® Gold







BREEAM® NOR

## Rosenlund, Lillehammer Oppland, Norway

Architect: Link Arkitektur AS

Type: Office building

Year: 2014

Product: Cembrit Transparent T 242 (discontinued)

Equivalent product: Carat

Sustainability label:

Rosenlund Building C: BREEAM NOR Good.

Rosenlund Office building: BREEAM NOR Pass.





## Confido Medical Centre, Tallinn, Estonia

Architect: Rein Murula, Karl Koosa, Aleksei Tihhonov -  
Rein Murula Arhitektuuribüroo OÜ  
Type: Private medical clinic  
Year: 2020  
Product: Swisspearl Patina Original P 222  
Sustainability label: LEED® Gold



“ The smooth-panelled facade with its joints strongly emphasise the building's shapes. Together with the windows and their positioning, which vary between different floors, the facade boards gave us the opportunity to form a rhythmic and dynamic facade, which is the backbone of the entire building's aesthetics.

Architect Rein Murula, Rein Murula  
Arhitektuuribüroo OÜ







## **Confido Medical Centre, Tallinn, Estonia**

A key starting point in the design of the Confido Private Medical Clinic near Tallinn Harbour was the promotion of health, which the building's architecture and material solutions also support. Instead of a monotonous clinical hospital-like appearance, the building is architecturally diverse and inspiring and has used modern, sustainable and safe materials.

“The main idea of the facade concept was for the curving and pulsating rhythms of the main facade to follow the dynamics of the roundabout. Swisspearl Patina Original facade boards perfectly suited the building's architectural concept and, from the perspective of construction physics, are the best and safest alternative in light construction.”

### **Sustainability, ecology and aesthetics combined**

Swisspearl's facade boards support the dynamics of the building's curved facade.

“With Swisspearl's products, it's easy to achieve all these objectives [weather-resistant, ecological and aesthetic]. The LEED® Gold environmental certificate was awarded to the building. The smooth and pale fibre-cement board suits our architectural purposes, both aesthetically and technically, thanks to its durability and weather resistance.”

**- Architect Rein Murula, Rein Murula Arhitektuuribüroo OÜ**





## SISAB Förskola Fiberpennan, Hägersten, Sweden

Architect: Cedervall Arkitekter, AB

Type: Kindergarten

Year: 2019

Product: Cembrit Solid S 212, S 353, Cembrit Windstopper Extreme

Equivalent product to Solid: Zenor

Sustainability label: Certified Miljöbyggnad Silver



# IKEA Hotel, Älmhult, Sweden

Architect: Arkitekterna Krook & Tjäder Uulas

Type: Hotel

Year: 2016

Product: Swisspearl Patina Original P 222

Sustainability label: BREEAM Excellent

BREEAM®







## Tankefuld, Svendborg, Denmark

Architect: C&W Arkitekter

Type: Housing

Year: 2020

Product: Swisspearl Patina Original P 333

Sustainability label: DGNB Gold

“ In connection with the project, there has been high demands for everything from energy supply and rain water protection to appliances. From the project's beginning, it has been crucial for the developer that the demands for the DGNB-certification has been conformed to. This also means that the ambition for the DGNB-certification was raised from Silver to Gold during the project.

**Project manager and partner**  
Kim Fink, C&W Arkitekter







## Tankefuld, Svendborg, Denmark

Just outside of Svendborg, the municipality has subdivided an entirely new residential area, "Tankefuld" (Thoughtful), where green and innovative solutions have played a central role. The area consists of 44 residences divided in multiple cluster houses that together form cosy courtyard areas, gardens and small pathways for recreational purposes.

The project developer is Fyn's Social Housing Association, while C&W Arkitekter has drawn the lines for the project that has been built with a massive focus on social and economic sustainability. It has, therefore, been the ambition to build a modern Cittaslow in the midst of nature - a housing area with focus on quality, sustainability and local products. Sustainable solutions have been implemented from the internal construction to the exterior of the housing project that is expected to receive DGNB Gold.

### **A natural look is the vibe - also for the facade**

It has been important for Fyn's Social Housing Association that the expression of the houses match the surrounding, open landscape, while it has also been a requirement to apply materials with documented environmental properties. Therefore, the housing area consists of green roofs and a facade partially covered with wood as well as the fibre cement board Swisspearl Patina Original with a natural look.





“ Our goal was to make use of this central location by building a high-quality shopping centre that is not only advanced from an engineering perspective, but also follows sustainable development criteria, providing the preconditions for successful business operations for tenant companies and a consistently pleasant customer experience for visitors. The result is a commercial, social and functional landmark in Okhta.

**SVP of Project Development Veli-Matti Kullas**

## Okhta Mall Shopping Centre, St Petersburg, Russia

Architect: L Architects Ltd

Type: Shopping centre

Year: 2016

Product: Cembrit Cover C 210 (discontinued)

Equivalent product: Planea

Sustainability label: LEED® Gold



## Arken, Växjö, Sweden

Architect: Sajt Arkitektstudio AB

Type: Apartment complex

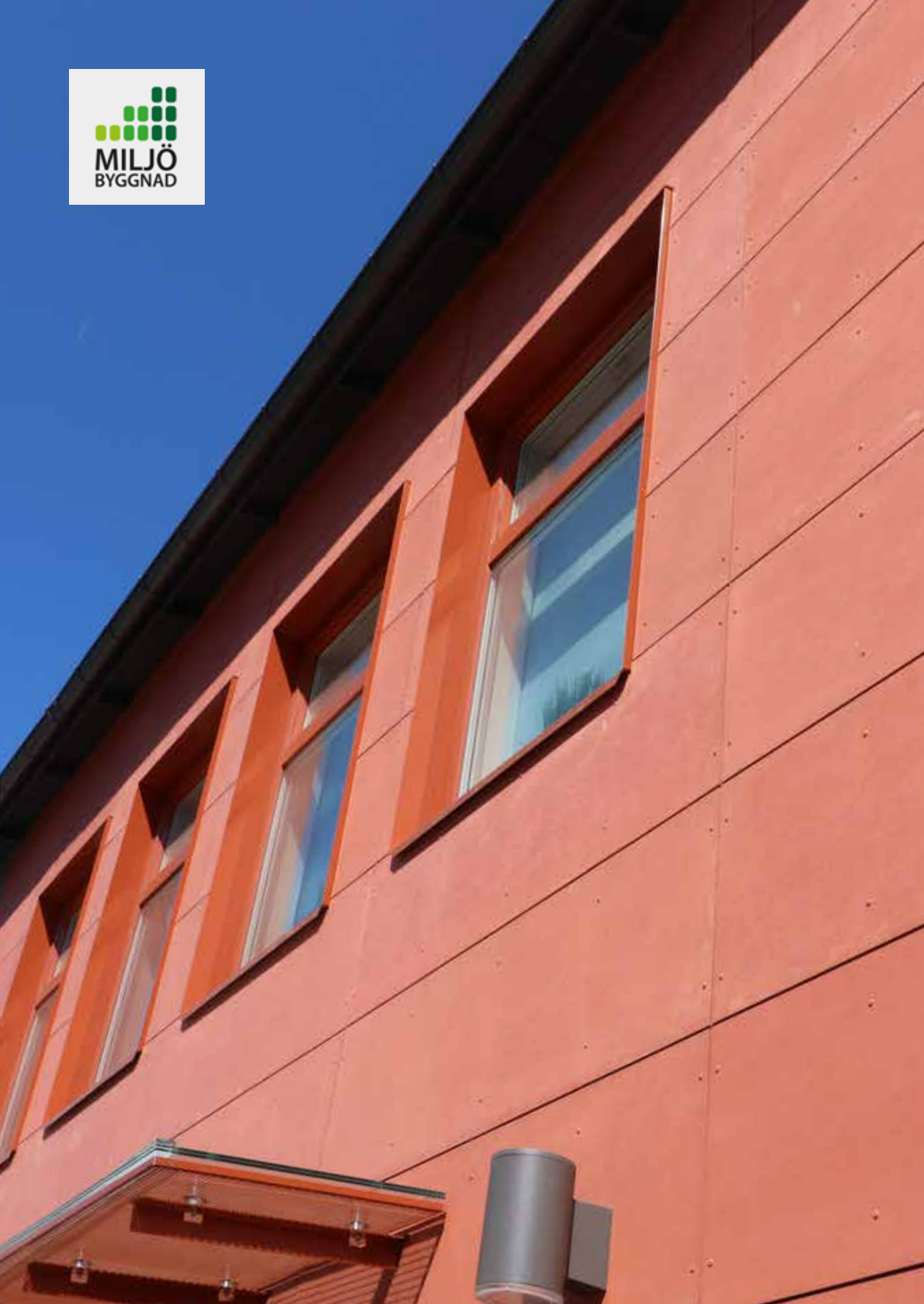
Year: 2019

Product: Swisspearl Patina Original P 070, P 545

Sustainability label: Specified according  
to Miljöbyggnad Silver and wood  
lightweight system







## SISAB Förskola Lilla Tensta, Spånga, Sweden

Architect: Liljewall arkitekter

Type: Kindergarten

Year: 2017

Product: Swisspearl Patina Original P 050, P 070, P 313, P 343, Cembrit Transparent T 383 (discontinued)

Equivalent product: Carat

Sustainability label: Certified Miljöbyggnad Silver





## Made in Aarhus, Aarhus, Denmark

Architect: Lendager Arkitekter ApS

Type: Social housing

Year: 2016-2021

Product: Cembrit Windstopper Extreme

Sustainability label: DGNB Gold

“ The intention with the housing project has been to create a diverse and sustainable neighbourhood that is in line with Aarhus Municipality’s strategies for the development of the area Lisbjerg. As the name indicates, the whole idea behind the project has been to use and upcycle recycled materials from Aarhus and surrounding areas as much as possible.

Architect and DGNB auditor Jørn Kiesslinger, Lendager Arkitekter ApS







## Iso Omena Shopping Centre, Espoo, Finland

Architect: HPK Arkkitehdit Oy

Type: Shopping centre

Year: 2016

Product: Swisspearl Patina Original P 020

Sustainability label: LEED® Platinum



“ Our goal was to carry out a multifaceted expansion encompassing a number of different buildings, as is often the case in urban construction projects. The light colours used on the facades were chosen based on the existing light colour scheme of the Matinkylä area.

Partner and Architect Risto Ingman,  
HPK Arkkitehdit Oy





## Iso Omena Shopping Centre, Espoo, Finland

### **A shopping centre demands a great deal from its materials.**

A shopping centre sets certain requirements in regard to material choices.

“In addition to being durable and visually appealing, the facade must be easy to maintain, meaning that cleaning and servicing must be as convenient as possible”. In addition to durability and visual appeal, environmental friendliness also played a part in the choice of materials.

### **Green building is about choices**

Iso Omena is one of the first LEED® Platinum certified shopping centres in Europe. This means that the property boasts excellent energy, material and water efficiency, as well as a high-quality indoor environment. One of the factors contributing to this was the use of low emission surface materials and local products. What's more, the recycling rate for the project's construction waste was approximately 90%.

The facade of the Iso Omena expansion was constructed out of Swisspearl Patina facade elements, which will gradually acquire a distinctive patina. “Swisspearl's references, the durability and the colour of the material as well as the size of the elements all contributed to the choice of material”.

**- Head of Department Jukka Sammi from Sweco Rakennetekniikka Oy**





# Siemens Headquarters, Finspång, Sweden

Architect: Strategisk Arkitektur

Type: Office building

Year: 2012

Product: Swisspearl Patina Original P 222,

Cembrit Solid S 030, S 101

Equivalent product to Solid: Zenor

Sustainability label: LEED Gold



“ The goal was to create a building with not only focus on functionality, cost-effectiveness, quality and flexibility, but also sustainability.

The house was finished off with a green roof to mark the environmental obligation and create a pleasant view for the neighbouring housing area.

Other not so obvious aspects but just as important - such as the office having a green roof made by sedum plants that insulates and cleans the outside air and the building being heated by its own ground source heat pump system.

**Architect Julie Sponar, Strategisk Arkitektur**





## Betan Neighbourhood, Ängelholm, Sweden

Architect: Fojab Arkitekter i Malmö AB

Type: Apartment complex

Year: 2013

Product: Swisspearl Patina Original P 222

Sustainability label: Certified Miljöbyggnad Silver







Fyrreparcken is undergoing an extensive transformation from being a ghetto to being an attractive housing area with 478 sustainable residences. So far, the project is Denmark's largest DGNB-certified transformation that includes a significant energy renovation as well as all new and modern facades. The immense transformation is pre-approved for a DGNB Silver-certification.

## Fyrreparcken, Vollsmose, Denmark

Architect: ERIK Arkitekter

Type: Social housing

Year: 2021-2023

Product: Swisspearl Patina Original P 070

Cembrit Windstopper

Sustainability label: DGNB Silver







## SISAB Förskola Röda Tråden, Farsta, Sweden

Architect: Visbyark AB

Type: Kindergarten

Year: 2018

Product: Swisspearl Patina Original P 545, Cembrit Solid S 676

Equivalent product to Solid: Zenor

Sustainability label: Certified Miljöbyggnad Silver







## Villa Björken, Upplands Väsby, Sweden

Architect: Hans Eek

Type: Family house

Year: 2012

Product: Swisspearl Patina Original P 020, P 070, P 222

Sustainability label: Passive House Certified

Villa Björken was the first internationally certified villa in passivhus technology in Sweden. The house is built with highly efficient heating, ventilation and sun protection to maintain an optimal and comfortable indoor temperature and climate. Solar cells placed on the south side of the roof produce as much solar energy as the house needs for heating, hot water and electricity. The grass roof on the other side marks the environmental and energy optimising ambition in the project.







## Torvbråten Skole, Asker, Norway

Architect: LINK Arkitektur

Type: School

Year: 2020

Product: Swisspearl Patina Original P 020, P 545, P 626

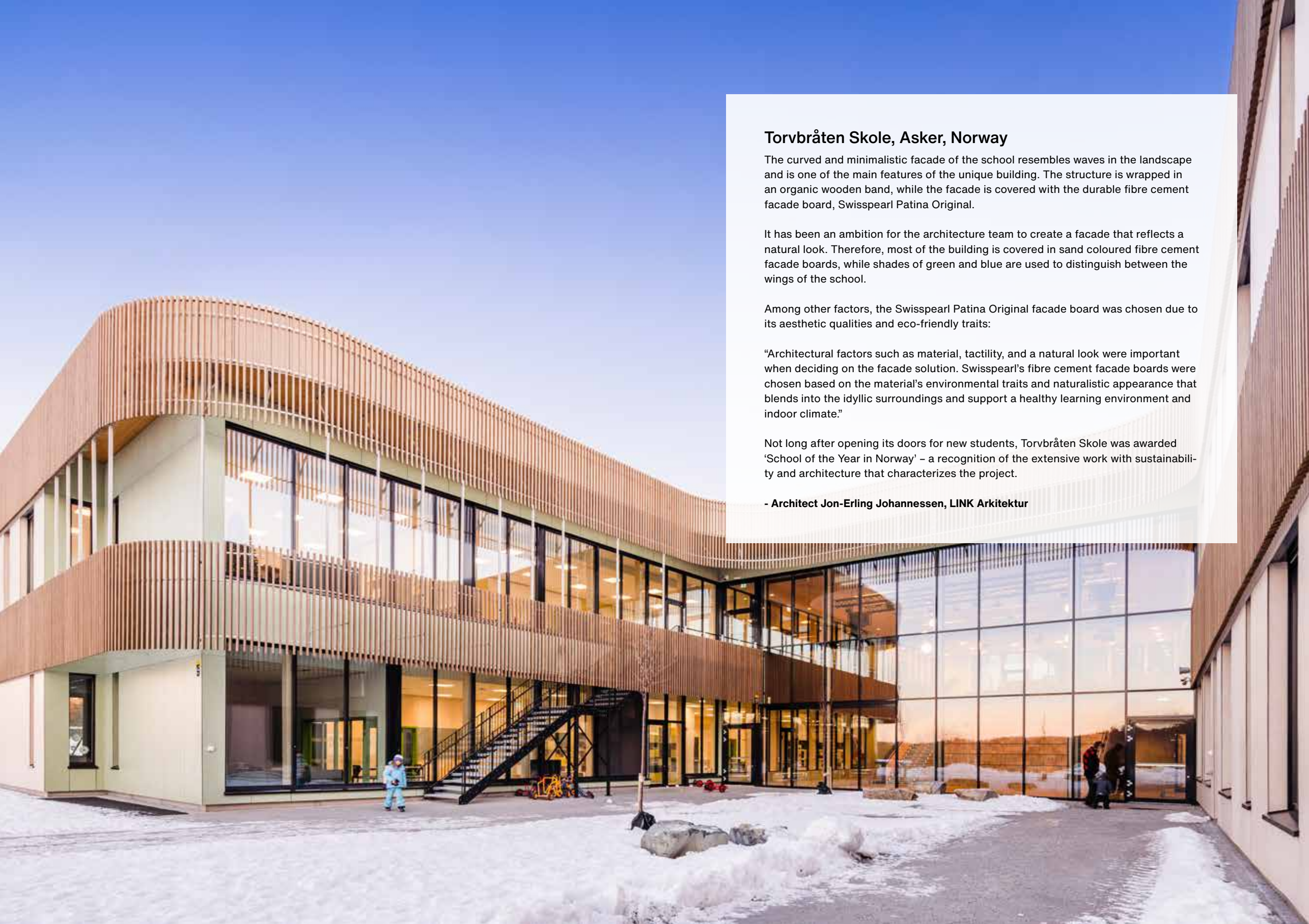
Sustainability label: School of the Year 2021 for the focus on energy consumption, carbon emissions, green agenda and ideal learning environment.

“ Torvbråten School is an ambitious pioneer project that shows how a school can be designed, constructed, and run to enhance liveability, at the same time supporting the green agenda. All architectural and functional details of the building are focused on lowering energy consumption and carbon emissions, while it has been an absolute key priority to create the ideal learning environment for the students and teachers.

Architect Jon-Erling Johannessen,  
LINK Arkitektur







## Torvbråten Skole, Asker, Norway

The curved and minimalistic facade of the school resembles waves in the landscape and is one of the main features of the unique building. The structure is wrapped in an organic wooden band, while the facade is covered with the durable fibre cement facade board, Swisspearl Patina Original.

It has been an ambition for the architecture team to create a facade that reflects a natural look. Therefore, most of the building is covered in sand coloured fibre cement facade boards, while shades of green and blue are used to distinguish between the wings of the school.

Among other factors, the Swisspearl Patina Original facade board was chosen due to its aesthetic qualities and eco-friendly traits:

“Architectural factors such as material, tactility, and a natural look were important when deciding on the facade solution. Swisspearl’s fibre cement facade boards were chosen based on the material’s environmental traits and naturalistic appearance that blends into the idyllic surroundings and support a healthy learning environment and indoor climate.”

Not long after opening its doors for new students, Torvbråten Skole was awarded ‘School of the Year in Norway’ – a recognition of the extensive work with sustainability and architecture that characterizes the project.

- Architect Jon-Erling Johannessen, LINK Arkitektur



## Børnehaven Karolinelund “Bakkelandet”, Aalborg Denmark

Architect: Bjerg Arkitekter

Type: Kindergarten

Year: 2017

Product: Cembrit Cover C 630 (discontinued), Cembrit Windstopper Extreme

Equivalent product: Planea

Sustainability label: DGNB Platin



“ Our ambition has been to design a facade that first and foremost falls naturally into the surroundings. We have also thought the everyday life in a kindergarten into the building design, and therefore we have chosen to make the facade dynamic with different expressions depending on which angle the building is viewed from.

Architect and partner Mark Krebs,  
Bjerg Arkitekter







## SISAB Förskola Tabulatorn, Råcksta, Sweden

Architect: Sweco Architects AB

Type: Kindergarten

Year: 2013

Product: Swisspearl Patina Original P 070,  
Cembrit Cover C 450 (discontinued)

Equivalent product: Planea

Sustainability label: Certified

Miljöbyggnad Silver

“ The challenge has been to create an interesting exterior design while we manage the resources and adapt to the ambitious energy requirements. With fibre cement we can vary the expression from lighter patches to darker, which gives a varying expression with associations to stone. The coloured boards give the possibility to work with colour effects.

**Architect David Essinger, Sweco Architects**





## Portalen, Lillestrøm Akershus, Norway

Architect: LPO Arkitekter AS

Type: Apartment block

Year: 2016

Product: Swisspearl Patina Original P 020, P 050, P 222

Sustainability label: Parts of the project are certified as BREEAM-NOR Very Good



Lillestrøm has become a hub and gateway to the area around Oslo. The portal (Portalen) is strategically located between the Norwegian Trade Fair and Lillestrøm station, Norway's 4th most important railway station. The buildings function as a portal to Lillestrøm whether you come via the national road from the south or by train. In total, the project consists of an office building, two apartment blocks, a hotel building of a total of 55,000 sqm. In addition, a new square and green outdoor areas have been established between the blocks. In the spring of 2019, the project was awarded the Skedsmo municipality's architecture and urban development prize. The whole square, diagonal street, architecture and interior are the main reasons for the prize.





## Waste terminal, Ursvik, Sweden

Architect: Tengbomgruppen AB

Type: Industry

Year: 2014

Product: Swisspearl Patina Original P 070

Sustainability label: BREEAM Excellent





## Förskolan Backen, Rissne, Sweden

Architect: Visbyark AB

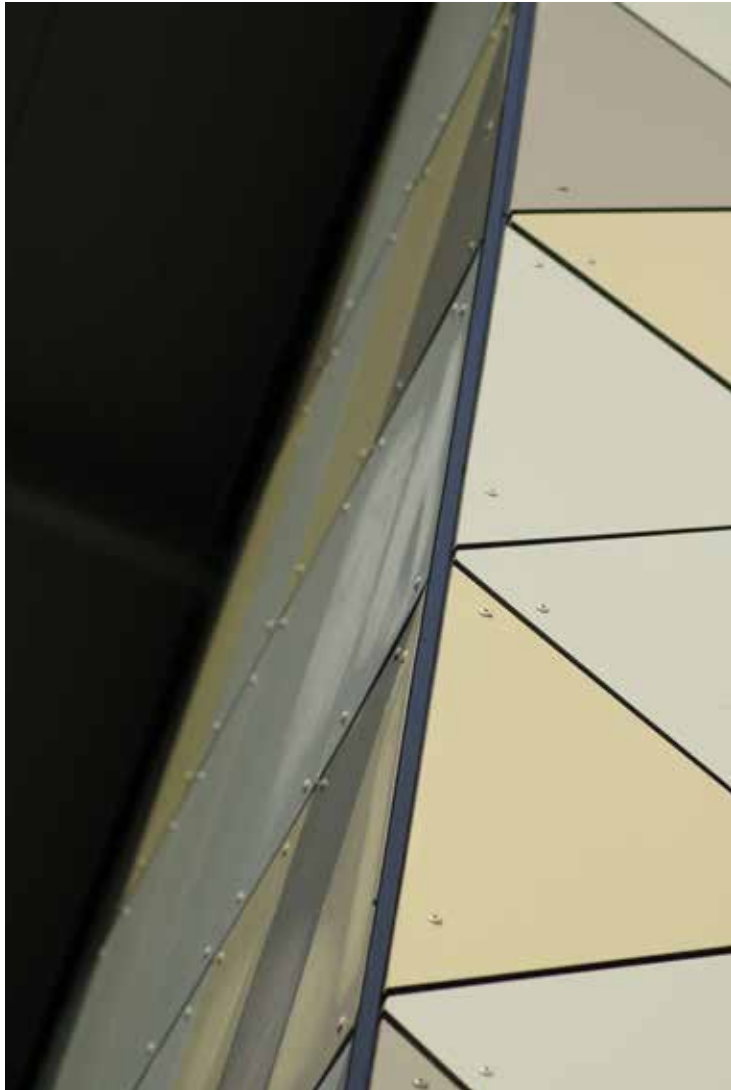
Type: Kindergarten

Year: 2020

Product: Cembrit Solid S 030, S 606, S 616, S 656

Equivalent product: Zenor

Sustainability label: Built and planned for Miljöbyggnad Silver but not processed by Certification



“ With a playful facade in different tones of green fibre cement, the building becomes a natural part of the sloping, green surroundings.

Visbyark AB







**FÖRSKOLAN BACKEN**



## Förskolan Backen, Rissne, Sweden

The new kindergarten has an environmental certification. During the entire building process, Flexator has had great focus on minimising the building's footprint on the environment. This means that sustainability has been a priority from the very beginning and throughout the building's entire life cycle; from choice of material and manufacturing process to ensuring that it is possible to reuse the material the day it has served its purpose on this building. The ambitions for sustainability and the environment have been high, and solar cells have been placed on the roof to contribute to the energy supply.

Backen Kindergarten has also been built to be easily adaptable and changed to fulfil new functionalities if the municipality's needs change in the future.





## School De Verwondering, Almere, The Netherlands

Architect: ORGA Architect

Type: School

Year: 2021

Product: Swisspearl Construction, Cembrit Windstopper Extreme

Sustainability label: Winner of the most sustainable building in the Netherlands 2021



The first fully ecological school in the Netherlands. The ecological character is particularly reflected in the building and its surroundings. The green facades inside and outside improve the air quality and the oxygen level, which increases the concentration level of the students and staff. Also, the greenery acts as a sound buffer, regulating the acoustics in the classrooms. Nature is integrated into the educational environment in many forms. This produces enormous positive effects on the condition, concentration and learning ability of the pupils.





## En lille grøn landsby, Fyn, Denmark

Architect: ERIK Arkitekter

Type: Social housing

Year: 2018

Product: Cembrit Windstopper Extreme

Sustainability label: DGNB Gold



“ The project has been interesting, as Civica has been immensely attentive to choosing thoroughly tested quality solutions that minimise the ongoing operating costs without compromising the building’s architecture. Therefore, we have worked closely with the building material manufacturers to find the right material that meets the high standards for the building.

Associated partner and building constructor,  
Anders Gottfred Petersen, ERIK Arkitekter





## Christmas Møller Kollegiet, Odense, Denmark

Architect: CREO Arkitekter

Type: Student housing

Year: 2011-2020

Product: Cembrit Solid S 191

Equivalent product: Zenor

Sustainability label: BR 2015 Low energy class 2. Solar cells on south-side of the roof.

Heat recovery is established from bath and kitchen with an efficiency of 82%







## SISAB Framtidens Förskola Håven, Sköndal, Sweden

Architect: Liljewall Arkitekter AB

Type: Kindergarten

Year: 2018

Product: Swisspearl Patina Original P 333, P 545

Sustainability label: Certified Miljöbyggnad Silver





## Central Fire Station, Oulu, Finland

BREEAM®

Architect: Arkkitehdit Kontukoski Oy

Type: Fire station

Year: 2021

Product: Swisspearl Patina Original P 222, P 565, Cembrit Solid S 525

Equivalent product to Solid: Zenor

Sustainability label: BREEAM environmental

certification application is pending for the building



“ We ended up using fibre cement boards, which made the facade more welcoming and pleasant to touch. It also makes the surface more lively. Swisspearl's through coloured fibre cement boards are very durable and weather resistant, and it is easy to change the boards when needed. The facade is durable and easy to maintain, which also makes its life cycle economic and ecological.

Architect Janne Leino, Arkkitehdit Kontukoski Oy



## Central Fire Station, Oulu, Finland

The central fire station is one of Finland's most modern fire stations. Through coloured, durable and easy-to-use Swisspearl Patina Original and Solid facade boards have been used for the building facades. The mainly white facade has been enlivened in places with down-to-earth accent colours.

“For the Linnanmaa main fire station, it was important to design a building that is efficient and supports rescue operations as well as possible, while also taking ecological and cityscape perspectives into account. The project aimed for the construction and use of the building to be as energy-efficient and low-carbon as possible.”

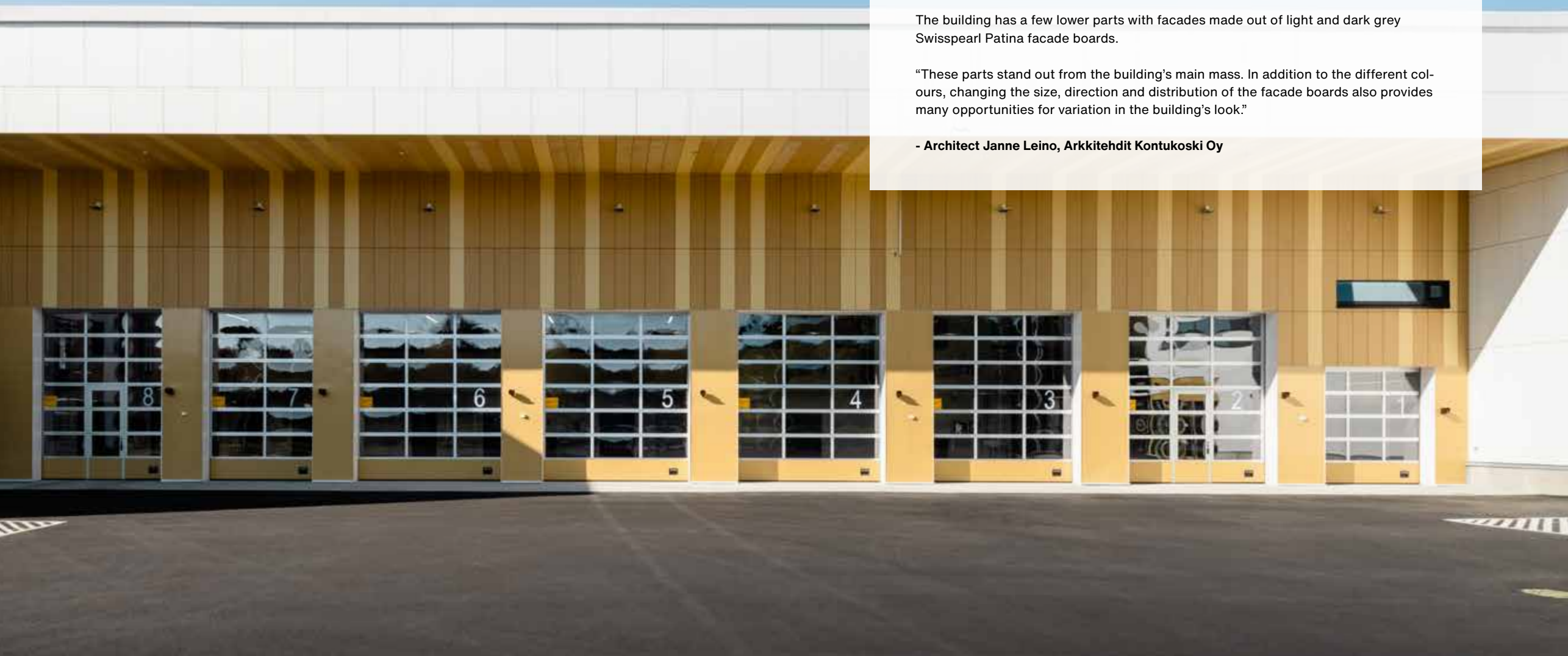
### Liveliness with variation in colour and dimensions

The large white facade surfaces have been enlivened in places with yellowish and brown facade boards. “With the rhythmic variation in the colours of the accent components, we wanted to convey a smaller scale as well as a down-to-earth, grain-field-like atmosphere that help the large building fit into the surroundings.”

The building has a few lower parts with facades made out of light and dark grey Swisspearl Patina facade boards.

“These parts stand out from the building's main mass. In addition to the different colours, changing the size, direction and distribution of the facade boards also provides many opportunities for variation in the building's look.”

- Architect Janne Leino, Arkkitehdit Kontukoski Oy





## Riksdalergatan, Sweden

Architect: White Arkitekter

Type: Apartment complex

Year: 2011

Product: 3 different Cembrit Cover colours (discontinued)

Equivalent product: Planea

Sustainability label: The Nordic Swan Ecolabel



“ Already at the time of the design, the housing association, Familiebostäder, had high ambitions regarding the sustainability issue and the three houses on Riksdalergatan became the Nordic region’s first apartment buildings to get the Nordic Swan Ecolabel.

“It was a challenge to transform the old, dull and unsafe environment into a safe and attractive residential area. At the same time, we wanted to match the colour scheme to the surrounding 1950s houses.”

Architect Johan Lundin, White Architects



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