STENI® - LASTING EXPRESSIONS

# FAÇADES:

60<sup>Y</sup> SIXTY YEAR WARRANTY

- CREATIVE OPPORTUNITIES

(A) SECURES AND PROTECTS





# MORE THAN A FAÇADE PANEL

Steni's high-quality façade solutions will give your building a unique and enduring architectural expression. Our high-quality façade panels of polymer composite have been designed to handle a harsh and demanding climate.

Steni was established as a family-owned company in 1965. Today, the majority shareholder is Accentone 2012 Holding Ltd. Steni's head office, production plant and warehouse are situated in Lardal, in the county of Vestfold in Norway.

Steni has sales companies in Norway, Sweden, Denmark and Finland, and another for the Benelux countries. Steni has agreements with distributors for the sale and marketing of our façade panels in the rest of Europe, the United States and Canada.

#### FACTS

Established in 1965 Majority shareholder Accentone 2012 Holding Ltd High-quality façade panels of polymer composite Head office and production plant in Vestfold, Norway International company Approx. 130 employees



FACADE PANELS THAT PAY OFF Price is not just purchase price.



LOW GLOBAL ENVIRONMENTAL IMPACT Continuous improvement of our carbon footprint.



ONE CORE -MANY SURFACES The core is the same, but you can play with the surfaces.



# CONTENTS



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PLAY WITH COLOUR Infuse your building with your own personal style.



YOUR OWN UNIQUE FAÇADE You are only limited by your imagination.



A NATURAL EXPRESSION

For more info visit steni.com

#### STENI FAÇADE PANELS

# ONE CORE -MANY SURFACES

With Steni façade panels, you can infuse the building with your own personal style. You can play with surfaces, colours, prints and colour combinations.

All of Steni's façade panels are fibreglass-reinforced polymer composite panels with a core of crushed limestone. Together, the combination of materials with different properties produces an extremely strong and durable final product. Polymer composite is increasingly being used in the production of automobiles, boats and aircraft. It is also becoming more and more popular for products that are exposed to extreme stress.

All façade panels from Steni have a 60-year functional warranty. They can be installed at any time of year, regardless of temperature and weather conditions. The panels are frost and moisture resistant and can be immersed in water for long periods without damage.

Steni façade panels have a low CO<sub>o</sub> footprint, are colourfast and require minimal maintenance.





#### COLLABORATION PARTNER

When you enter into a partnership with Steni, we can offer many services that will simplify all your project work. As your partner, we can offer consultancy and technical services, as well as good logistics support, all the way from the planning phase to daily operations. We have sales representatives in several markets, and we will gladly participate in construction meetings and start-up meetings.



#### STENI COLOUR

Steni Colour façade panels have a smooth surface of electron beam cured acrylic. You can choose from 60 standard colours and three gloss levels, or select a custom colour based on NCS or RAL.



#### STENI VISION

Steni Vision façade panels have a smooth, printed surface of electron beam cured acrylic. Your design and decoration options are almost limitless: use your own photos, illustrations and/or other motifs.



#### STENI NATURE

Steni Nature façade panels have a surface of crushed natural stone. You can choose from 12 different colours of natural stone. Four grades: fine micro, fine, medium and coarse.



#### STÅLE KRISTIANSEN, REGIONAL MANAGER

All façade panels from Steni have a 60-year functional warranty. The composite construction produces an

extremely impact-resistant yet flexible façade panel. The panels are bendable down to a radius of 3.5 metres, which allows you to design organic shapes into the façade.

#### **FACTS**

60-year functional warranty Easy fixing Water resistant **Environmentally friendly** Colourfast Format-flexible Impact resistant Maintenance-free / easy cleaning PRODUCT ADVANTAGES

# LOW GLOBAL ENVIRONMENTAL IMPACT

At Steni, we work continuously to minimise the negative impacts of our products and processes on the environment – locally and globally. We have a strong focus on continuous improvement of our carbon footprint and our products are – and will remain – market leaders in this regard.

Steni façade panels can be delivered to regular public waste treatment facilities at the end of their usable life. Steni waste is "inert": it has no impact on the external environment.

Steni façade panels have a low carbon footprint. They produce 14–17 kg of  ${\rm CO_2/m^2}$ . A life-cycle analysis has been conducted for STENI façade panels and all our panels have an Environmental Product Declaration [EPD].

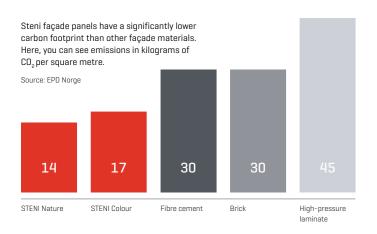




#### ENVIRONMENTAL CLASSIFICATIONS

- EPD documents, EU (EPD Norway, Institut Bauen und Umwelt e.V.)
- ECO Product, Norway
- Sunda Hus, Sweden
- ECO Platform, EU

#### CARBON FOOTPRINT



# NO ENVIRONMENTALLY HARMFUL SUBSTANCES

None of Steni's products contain substances on the REACH list, on the Norwegian priority list, the Sunda Hus priority list or the Nordic Ecolabel Appendix 6.

#### LONG LIFESPAN

With a long lifespan and low resource consumption for maintenance, STENI panels are an environmentally sound choice. The "Life Cost Calculation" [LCC] [NS 3454:2013] of a product is a good indication of the product's resource consumption over time. Products from Steni have a low LCC.



#### JAN ÅGE SØDERLIND, COO

We have a strong focus on the environment in our manufacturing operations. We use a number of environmentally friendly substances in our manufacturing process, and we use crushed natural stone as the core of our panels. We focus on continuous improvements, and our products do not cause any harm to the outside environment. This, combined with the long lifespan of our panels, makes Steni an environmentally friendly façade alternative.



# A ROBUST FAÇADE

When you choose façade panels from Steni, you get a robust façade that is designed to withstand the harsh Nordic climate.

#### WATER IMPERMEABLE

**PRODUCT ADVANTAGES** 

Steni façade panels are 100% water impermeable – which means that they can actually stand immersed in water without swelling. It also means that after cutting, you do not have to seal the edges.

#### MOISTURE AND FROST RESISTANT

Our panels are also moisture and frost resistant. They can withstand extreme outdoor temperatures and can be worked and bent down to -30°C.

#### COLOURFAST

Steni Colour and Steni Vision have a double electron beam hardened surface, which provides excellent colour fastness over time.

#### **IMPACT RESISTANT**

Steni's façade panels are robust and impact resistant.





#### WASHING AND MAINTENANCE

We recommend an annual visual inspection to check whether pollution, temperature fluctuations, weather conditions or any of the building's material properties have affected the stability and appearance of the façade.

Review the following checkpoints and initiate remedial actions if necessary:

- Check that the façade has been washed properly
- Check for external marks/damage from vandalism, collisions, etc.
- Check the attachment points

#### REMOVING GRAFFITI

Steni has a partnership with Blue & Green AS, which develops and manufactures cleaning products for a wide variety of surfaces. Which products you use depends on what has been used to mark the wall, and they are gentle on both cleaning personnel and the environment. Watch a video on steni.com on how to remove graffiti.

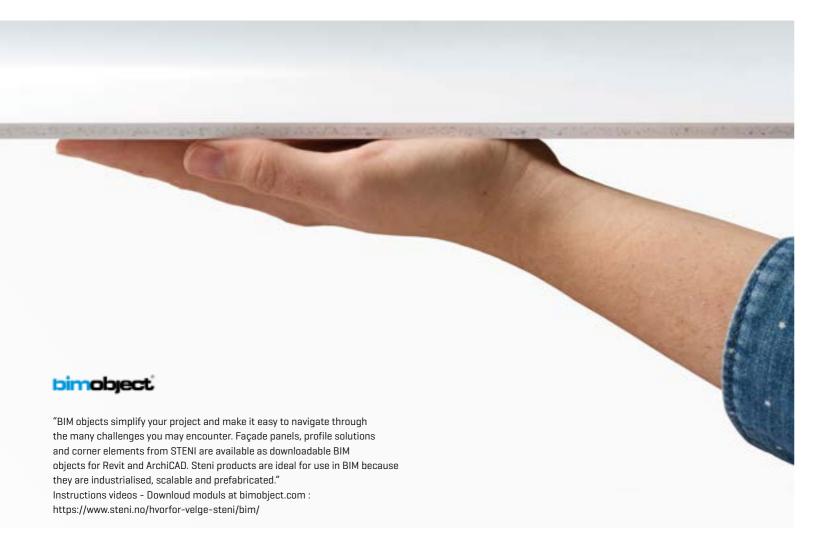


You can normally use a pressure-washer with a pressure of up to 100 bar on STENI panels. We recommend holding the nozzle at a distance of 20-30 cm from the panels. High-pressure washing with hot water [70-80 °C] is normally very effective and is environmentally preferable to the use of chemicals.

# WIDE VARIETY OF FORMATS

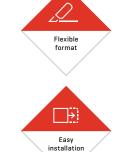
All buildings are different. Steni takes that into account. The panels are easy to install and, with a proven product life of 60 years, life-cycle costs are low.

Our continuous production process allows you to choose from a wide range of standard formats, with a width of up to 1,195 mm and a length of up to 3,495 mm. This means that there is very little wastage.

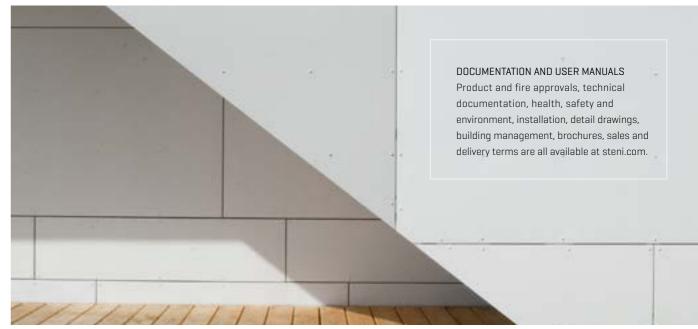


#### **EASY FIXING**

Façade panels from Steni are easy to fix. Our façade panels are fixed as ventilated cladding. You can find detailed installation instructions at steni.com.









TOM KRISTIAN HVAAL, TECHNICAL SUPPORT DEPARTMENT

We are committed to finding good solutions together with you as our

customer. We contribute our expertise to optimise formats and find the best combinations. This minimises wastage and costs, and facilitates efficient logistics and installation on site.

# GUARANTEED LONG LIFESPAN Façade panels from Steni have a 60-year functional warranty. That means minimal maintenance on the finished building – just simple cleaning – and thus lower costs throughout the entire lifespan of the building.



# FAÇADE PANELS THAT PAY OFF!

Price is not just purchase price. Life Cycle Costs – LCC – are the costs incurred for a building from early planning to the end of its lifespan.

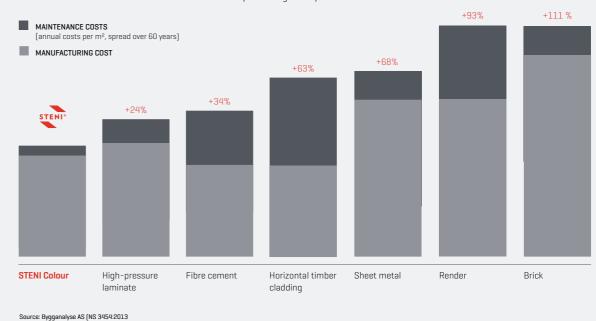
When you buy façade panels from Steni, we offer you a range of services to help you with logistics and installation. You can order panels in custom formats. Façade panels can be pre-drilled and we offer MM packaging (materials management). All this makes work on the construction site easier. You save valuable time and money – and with minimal wastage.

At Skullerud in Oslo, Boligbygg has renovated the housing complex into pleasant apartments with bright, exciting façades and green grounds.



#### LIFE CYCLE CALCULATION

Additional percentage compared to STENI Colour



PRODUCT ADVANTAGES 17

# UNIQUE CORNER SOLUTIONS

Steni is the only supplier on the market to offer such a wide range of sizes and corner solutions.

Steni develops customised solutions together with our customers, and we offer moulded L- and U-shaped elements in a variety of angles for all our products and finishes. Curved and corner elements provide exciting opportunities and produce seamless transitions that give aesthetic beauty to a building.

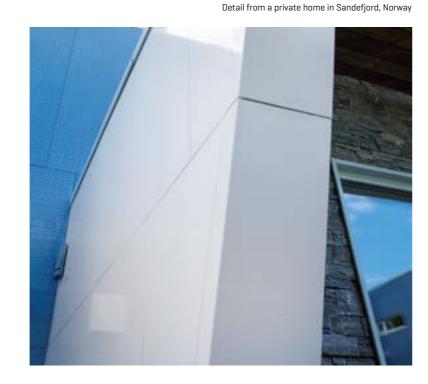
#### PLAY WITH ANGLES

The TVNorge building in Nydalen in Oslo is a modern and attractive building, where the architect and Steni have played with angles and columns with razor-sharp edges.

"No other panel solutions can be delivered with these options," says Ragnvald Halset, architect at NYARK. He is responsible for the architecture of many of the modern façades that adorn the Nydalen business park.

He praises the collaboration with Steni in the work to further develop the product, and he believes that the composite material used today has such a high-quality gloss that it can be a good replacement for glass.

"With these façade panels, the architect can play – not just with angles, but with colours, colour combinations and gloss levels – and infuse the building with their own personal style."



Curved solutions and corner elements in many different angles invite creative design solutions and complement the façade.

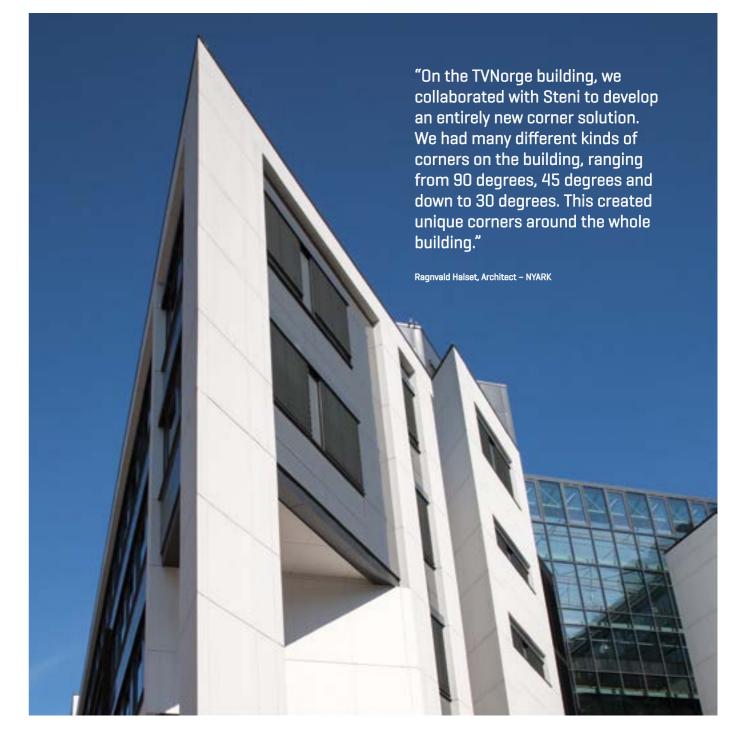




#### KENNETH HAUGEN, REGIONAL MANAGER

Our wide selection of L- and U-shaped elements in a variety of angles encourages

creative design solutions. Our façade panels are bendable down to a radius of 3.5 metres, which allows exciting options. We would love to discuss façades with you – we can find the best solutions together!



#### **PROJECT**

Location: TVNorge building / Oslo, Norway Architect: Ragnvald Halset, NYARK Contractor: Vedal Client: Avantor Year: 2010 Product: Steni Colour



#### CORNER ELEMENTS

Curved solutions and corner elements in many different angles
60-year functional warranty
Easy installation
Water resistant
Environmentally friendly
Colourfast
Format-flexible
Impact resistant
Maintenance-free / easy cleaning



With Steni Colour façade panels, you can play with colours, colour combinations and surfaces and infuse the building with your personal style.

You can choose from 60 standard colours and three gloss levels, or select a custom colour based on NCS or RAL.



#### FACTS ABOUT COLOUR -

60 standard colours
Three gloss levels
Can be installed at any time of year
Water resistant
Environmentally friendly
Colourfast
Format-flexible
Impact resistant
Maintenance-free / easy cleaning
60-year functional warranty

STENI COLOUR 21

#### COLOURFUL LEARNING **ENVIRONMENT**

Location: Bjølstad student housing complex / Fredrikstad, Norway

Architect: BAS Arkitekter Property developer: Ove Skår

Client: Student Welfare Organisation in Østfold (SIØ)

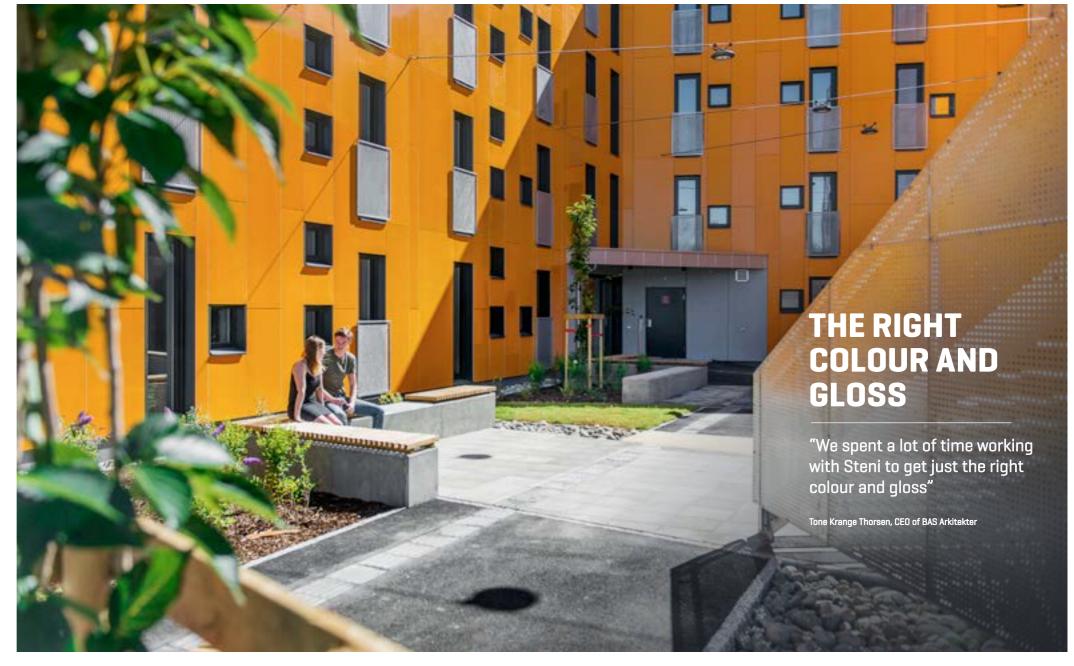
Year: 2016

Product: Steni Colour

#### At the Bjølstad student housing complex in Fredrikstad, the orange Steni panels generate both interest and debate.

"We spent a lot of time working with Steni to get just the right colour and gloss," says Tone Krange Thorsen, CEO of BAS Arkitekter, who were responsible for designing the Bjølstad student housing complex. "There was a lot of trial and error before we landed on the final solution, something approaching the ochre colour Daffodil Yellow. Steni produced a colour with the NCS code S1080-Y30R in 50/50 half matt and high gloss."

Thorsen is very pleased with the result and explains that orange is the signature colour of the Student Welfare Organisation in Østfold. Aside from that, however, it was important to create a building that will stand the test of time, since student housing has such a high turnover of residents. From experience, they know that means rough use. The Student Welfare Organisation has low maintenance budgets, which is why they selected Steni façade panels combined with cladding in ash-treated ore-pine that was treated with iron vitriol.



The Bjølstad student housing complex in Fredrikstad has façade panels in the Student Welfare Organisation's signature orange colour.



Orange is the signature colour of the Student Welfare Organisation in Østfold, so it was natural to use orange on the student housing complex in Fredrikstad.



Photo: Erik Burås

#### COLOURS



S 1080-Y30R Half matt/ High gloss

Orange façade panels combined with ash-treated cladding in ore-pine.

STENI COLOUR

# LIFESPAN WAS DECISIVE

Location: Samsøvej assisted living centre in Holbæk, Denmark

Architect: Kullegaard AS Contractor: STB Byq

Client: Holbæk Municipality and DOMEA

Year: 2014-2016 Product: Steni Colour

In order to create a better setting for both residents and staff, the new assisted living centre in Holbæk in Denmark was formed as a figure eight, clad with black façade panels from Steni.

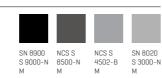
"The client wanted the façade cladding that had the longest lifespan," says architect Kasper Kullegaard. "The choice naturally fell on Steni Colour. It also gave us the opportunity to play with two different shades of the dark colour. The façade is sharply modular, so there is nowhere on the façade with cuts or divisions in the individual panels. The use of different shades creates the impression of depth and emphasises the iconic and curved shape of the building."

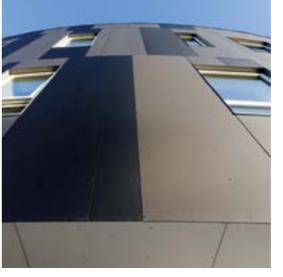
# The Samsøvej assisted living centre is 5,600 square metres in size and is shaped as a figure eight. The geometric shape of the building reduces the length of the hallways, so that the distances are shorter for staff as they move around the building. The figure eight also creates a positive environment and sense of security for both residents and staff.



Photo: Per Sørensen

#### COLOURS





Curved panels give a unique impression.



The inside of the figure eight encloses sunny and sheltered courtyards for residents.

STENI COLOUR

### STENI COLOUR

Steni Colour is installed as ventilated cladding and can be installed at any time of year, irrespective of the temperature and weather.

Steni façade panels are 100% water impermeable, which means that they can remain submerged in water. They require minimal maintenance and can be cleaned with most cleaning agents used to wash houses. With the proper cleaning agents, you can also remove graffiti without ruining the panels (see page 9). You can also use a pressure-washer on the panels.

#### GLOSS LEVELS





HIGH GLOSS

Steni Colour comes



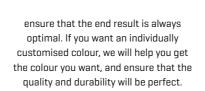






ANNE GRY ALLUM, STENI LABORATORY

We continuously work with testing, checking and correcting colours to





Henius House, Ålborg, Denmark.



The façade panels are water and frost resistant.





STENI VISION

#### NICKBY HEART

Location: Nickby Heart / Nickby, Finland Architect: ARK-house arkkitehdit Oy Illustration/graphics: Aimo Katajamåki Contractor: Hartela Oy

Client: Municipality of Sipoo

Year: 2016

Product: Steni Colour and Steni Vision

In Nickby, about 35 km north-east of Finland's capital Helsinki, we find Nickby Heart – a school that used STENI Colour and Steni Vision to create a unique façade design.

The school was designed by the architect Pentti Kareoja from the Finnish architectural firm ARK-house arkkitehdit Oy. The colours, graphics and design of the building are intended to contribute to a positive learning environment for the students, where they experience well-being, security and belonging. Nickby Heart is shaped like a star. The common administrative functions are located in the middle, while the teaching areas are out in the arms of the star.

"Nickby is a small town, and the school has a central place in the urban landscape. That's why we felt it was important to give the building an expression – through its shape and façade – that covered the educational needs, while also generating pride and identity for both the students and the whole town," says architect Pentti Kareoja.

On the exterior, the arms of the star create pleasant courtyards. Since every façade is clad in a different colour, each courtyard between the arms of the star has its own distinctive atmosphere. The colourful impression is balanced by the black details at the tips of the star, as well as by the dark graphics. Here we see playful animal and human figures.

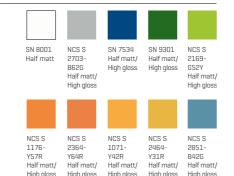
The graphic designer Aimo Katajamäki created this vibrant façade. The piece is called "The Flow of Knowledge and Acrobatics of Life". The inspiration for the line structure in the graphic comes from the fairy tale "Puss in Boots".

#### **FACTS**

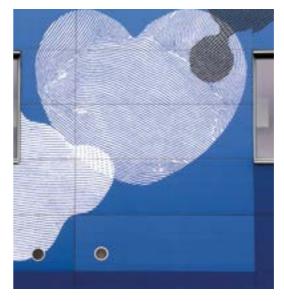
Nickby Heart has both a Swedish and a Finnish part – altogether, 740 students attend the school. The planning of part 2 is already underway and, when construction is completed in 2020, the school will house around 1,100 students.



#### COLOURS



Details from the orange and blue courtyards. The artwork was designed by the graphic designer Aimo Katajamāki.





31 STENI VISION

### STENI VISION

#### Steni Vision is perfect for creating optical illusions, or emphasising a building's identity.

You can integrate information into the façade, or use Vision to actually integrate the building into the surrounding environment.

Steni Vision can be used in combination with Steni Colour or with other products from Steni. Just like all our other façade panels, Steni Vision requires minimal maintenance and can be cleaned with most cleaning agents used to wash houses.

#### GLOSS LEVELS



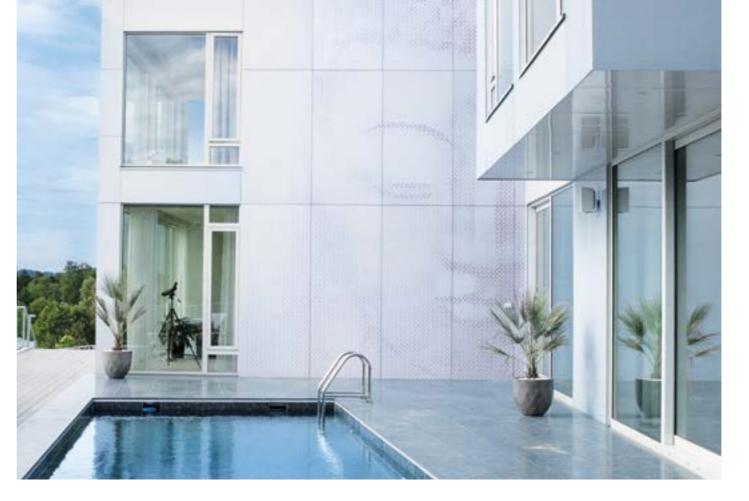


HALF MATT



HIGH GLOSS

Steni Vision is available in three gloss levels.





Things do not always look the same at a distance or up close. When you use Steni Vision, you can give the building an appearance from a distance that will change when you get close.



#### INTEGRATION

If you want your building to blend in as a natural part of its surroundings, Steni Vision gives you a unique opportunity. With façade panels with printed images of nature, the colours or other aspects of the surrounding environment, your building will integrate perfectly into its surroundings.



#### IDENTITY

With Steni Vision, you can give your building a uniquely personal expression. Here, at Newton Flight Academy in Bodø, illustrations related to aviation have been used on the façade panels on the school building, giving it a clear and unique identity.



Steni Vision can be used to replace regular information signs. With a touch of colour and clear text, there is no doubt about which building you have arrived at.





STENI NATURE

#### THE LØREN DISTRICT

Location: Løren District / Oslo, Norway Architect: AS Selvaagbygg

Contractor: AS Selvaagbygg Client: Selvaag Bolig

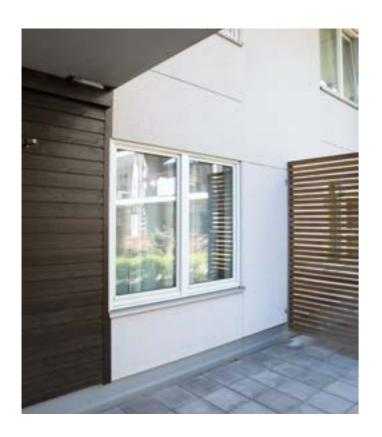
Product: Steni Nature

Year: 2007

Blocks of flats are exposed to heavy wear - and rough "use" - by both people and the environment. A façade must be able to stand up to all of that.

For the façades of the buildings in the Løren district of Oslo, the architect chose a combination of natural stone and wood. Steni Nature façade panels, with a surface of crushed natural stone, are a robust and aesthetically pleasing solution that stays beautiful year after year. The façade is also easy to wash – and it can withstand both play and ball games.

The façade panels of light natural stone with wooden inlays have lovely lines, and nicely set off the building's many sections.





COLOUR



**FACTS** 

The client decided to use Steni Nature instead of render. This simplified installation and much reduced the overall cost of the building.

Steni Nature works well in combination with



STENI NATURE

## STENI NATURE

Steni Nature is available in 12 different natural stone colours and four grades of stone: fine micro, fine, medium and coarse. The product is perfect for both new buildings and renovation projects.

STONE GRADES

FINE MICRO









COARSE











SURFACES 39

## STENI'S WORLD OF SURFACES

#### COLOURS

Colours create moods: blue for calm, yellow for joy, red for energy, green for harmony – the whole spectrum. Standard colours or a shade suited to your personality. Bright colours, soft colours, coordinated tones, patterns and markings, or combined with other materials – the universe of colour is yours to explore!



#### **GLOSS**

Gloss defines how the light interacts with the surfaces: matt, half matt or high gloss – a soft, harmonious idiom, or surfaces that shine like mother-of-pearl? Different degrees of gloss can subtly alter colours and visual impressions. Playing with gloss levels adds life and personality.

#### **GRADATION**

Texture adds character. A hand stroking a coarse, stony crag and a smooth rock – feel the difference! Crushed natural stone, from fine grain to coarse structure in Mother Nature's own shades. A rough surface that adds substance, or a soft, light expression?

#### **PRINT**

Your own personal signature: graphic elements, drawings, photos and patterns create your own bespoke expression. Build identity and reflect function and history. Identity, illusion, integration, information – aesthetics never seen before.

COLOUR CHART 41

# BE INSPIRED!

#### COLOUR



With Steni façade panels, you can play with colours, colour combinations and surfaces and infuse the building with your personal style. Steni colour comes in 60 standard colours, most in three gloss levels – or you can select a custom colour based on NCS/RAL. 12 natural stone colours and four grades of stone with Steni Nature. Your own image, pattern or illustration with Steni Vision. Or maybe you want to combine them all? The core of all Steni panels is the same – so you can just mix and match the surfaces. The choice is yours!

\* Not available in matt



#### STONE GRADE

FM: Fine Micro (0,8-1,8 mm) F: Fine [1-3 mm]

M: Medium (3-5 mm)

C: Coarse (5-8 mm)

#### NATURE



SN 320 WHITE LINEN



SN 100 WHISPER WHITE Standard: F, M, C

SN 140 SIENNA



**SN 106 NORDIC LIGHT** Standard: F, M

SN 190 DUSTY RED MIX



SN 111 NORDIC SAND





SN 305 CARBON Standard: FM, M



SN 315 GRANITE





SV 10001 OAK GREY Standard: M,HM,HG



SN 20 SECRET BLEND



SN 500 EXTRA WHITE

SV 10002 OAK RED Standard: M,HM,HG

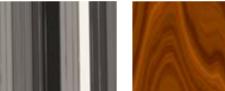




SV 10003 OAK BROWN Standard: M,HM,HG



SV 10004 OAK LIGHT Standard: M,HM,HG



STENI | Façade Brochure 2020



SV 20003 WHITE MARBLE Standard: M







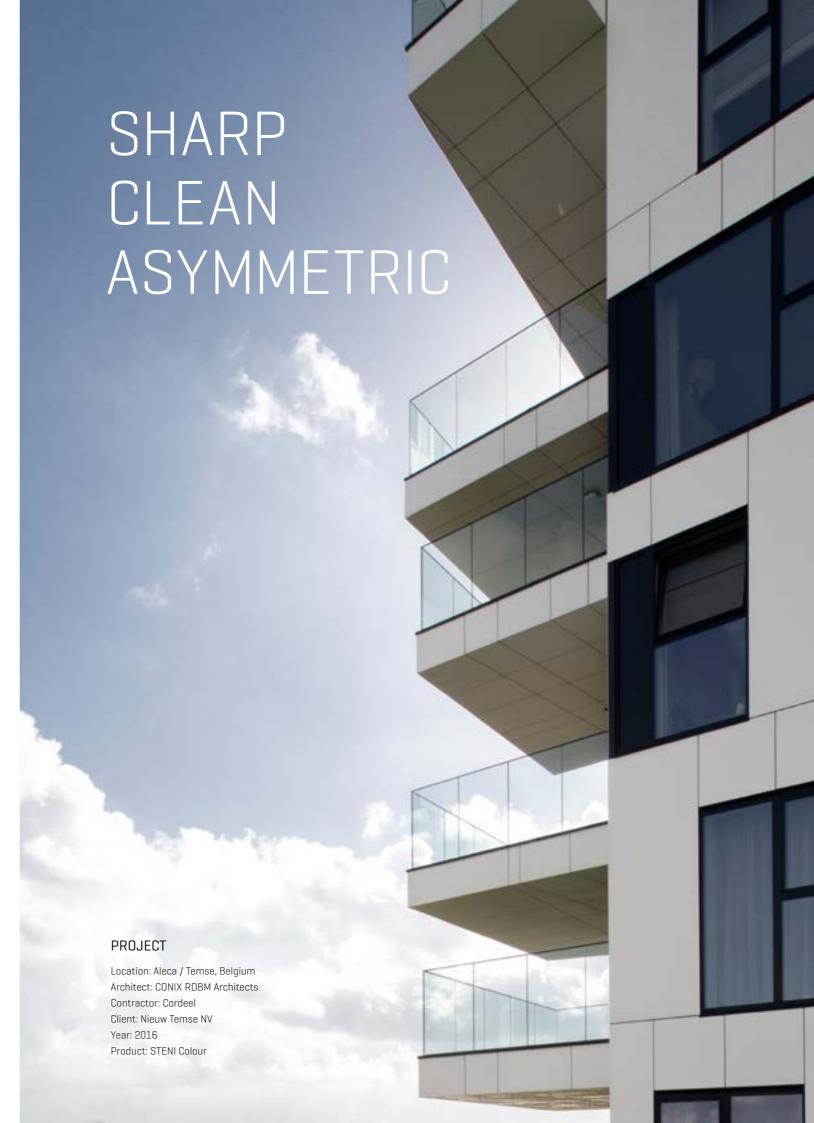






SV 20002 CONCRETE LIGHT





#### LASTING EXPRESSIONS

STENI delivers the market's most cost-effective façade solutions with unique and enduring architectural expressions. With our world of surfaces, you can design your façade exactly the way you want it. When you choose STENI façades, you get a product with a long lifespan, low life-cycle costs and excellent logistics solutions – along with a sustainable environmental impact.

Since our establishment in 1965, we have delivered more than 50 million square metres of façade panels around the world.