



Steni – World of Surfaces

May 2023

Steni

Designed and manufactured in Scandinavia with proprietary technology

What

- › Steni is a Norwegian stone composite panel manufacturer offering the building industry facade solutions for almost 60 years
- › Our roots are Norwegian with International sales and distribution partners



Why

- › The building industry requires durable surfaces with lasting expressions

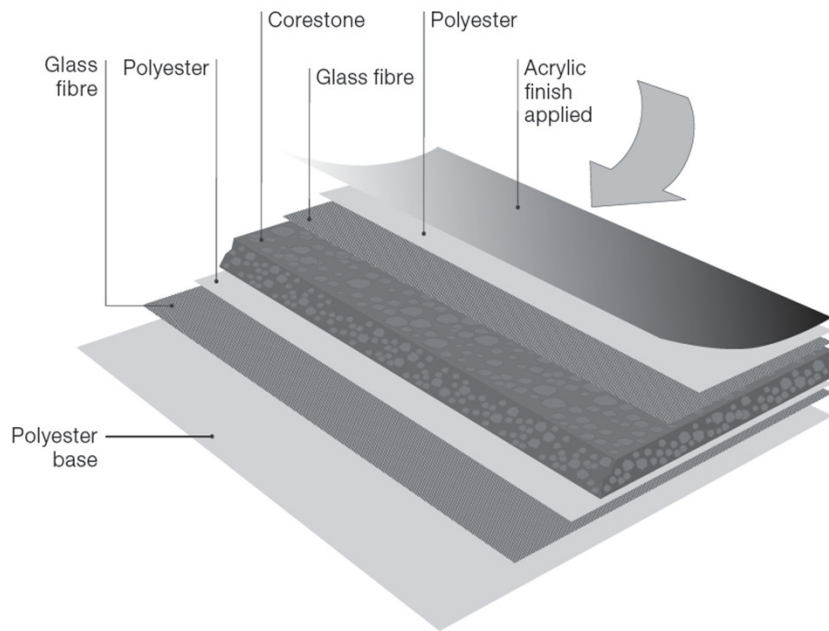


How

- › The Steni technology takes natural stone as its core component and uses a world of surfaces and textures to express individuality in its panels



steni colour panel



Technology

- Steni panels are manufactured by a continuous process whereby a substrate of glass fibre and granulated aggregate chippings are built up with resin as a binder
- The smooth surface of the Steni Colour panels is achieved with an electron beam which cures the acrylic surface colour.
- Steni Vision panels are printed and then an electron beam cures the clear acrylic surface.
- Steni Nature panels go through the same process with aggregate stone chippings being embedded in the surface rather than an acrylic colour finish. The panels are oven cured to achieve optimal adhesion

Three main product-lines

Myriads of design options



Three main product-lines

Steni Colour

Four main Themes with 60 + 20
colours in 3 gloss options



Steni Nature

Fourteen standard colour options
with four material grade sizes



Steni Vision

64 standard themes with
custom options available



Strong Colours

Four main colour groups with 60 standard colour options and three gloss finishes



Steni Colour New collection



STANDARD COLOURS STENI COLOUR

BASE COLOUR

 SN 8010 NCS S 0502-Y Stockcode: M-PM	 SN 9500 NCS S 1000-Y	 SN 9505 NCS S 1500-Y	 SN 9501 NCS S 2002-G50Y	 SN 8671 NCS S 3502-Y	 SN 8672 NCS S 4502-Y	 SN 8673 NCS S 5002-Y	 SN 9502 NCS S 7502-Y	 SN 9503 NCS S 7502-B	 SN 9504 NCS S 8005-R200B
 SN 8011 NCS S 1005-Y20R	 SN 9513 NCS S 1002-G50Y	 SN 9505 NCS S 1004-Y20R	 SN 8681 NCS S 3502-G	 SN 9506 NCS S 3002-G50Y	 SN 9507 NCS S 3004-Y50R	 SN 9508 NCS S 4005-Y20R	 SN 9509 NCS S 4005-G80Y	 SN 9510 NCS S 4003-Y30R	 SN 9511 NCS S 4005-Y50R
 SN 4072 NCS S 2010-Y10R	 SN 9413 NCS S 1000-Y10R	 SN 9512 NCS S 2005-Y30R	 SN 9513 NCS S 2000-Y30R	 SN 9514 NCS S 2000-Y20R	 SN 9515 NCS S 3000-Y20R	 SN 9516 NCS S 4000-Y20R	 SN 9517 NCS S 2000-Y20R	 SN 9518 NCS S 3000-Y30R	 SN 9520 NCS S 4000-Y40R
 SN 9520 NCS S 2005-Y20R	 SN 9521 NCS 1 704-Y50R	 SN 9522 NCS S 1505-Y30R	 SN 4012 NCS S 2000-Y30R	 SN 4500 NCS S 2000-Y40R	 SN 4057 NCS S 3000-Y50R	 SN 9524 NCS 3B1.7-Y60R	 SN 9525 NCS S 4000-Y50R	 SN 9526 NCS S 5000-Y50R	 SN 9530 NCS 5000-Y60R
 SN 9527 NCS 2503-Y60R	 SN 9528 NCS 2509-Y77R	 SN 4203 NCS S 3010-Y70R	 SN 9529 NCS 3008-Y77R	 SN 9530 NCS S 4010-Y70R	 SN 9531 NCS S 4000-Y80R	 SN 9533 NCS S 5020-Y80R	 SN 9534 NCS S 5020-Y80R	 SN 2028 NCS S 4050-Y80R	 SN 9535 NCS S 6000-Y80R
 SN 9536 NCS S 2005-G50Y	 SN 9538 NCS S 3000-G50Y	 SN 9537 NCS S 4000-G50Y	 SN 6362 NCS S 4000-G50Y	 SN 9537 NCS S 4010-G30Y	 SN 9538 NCS 531.7-G40Y	 SN 9539 NCS 2703-B10G	 SN 9540 NCS 3805-B95B	 SN 7020 NCS S 5010-B90B	 SN 9541 NCS 5011-B95B

ACCENT COLOUR

 SN 8103* NCS S 7000-R	 SN 8107* NCS S 1000-Y80R	 SN 9101* NCS S 1070-Y80R	 SN 9102* NCS 0B 76-Y40R	 SN 9518* NCS S 3040-Y20R	 SN 9200* NCS S 1070-Y10R	 SN 9302* NCS S 0565-G50Y	 SN 9303* NCS S 1070-G30Y	 SN 8304* NCS 1040-B30G	 SN 9303* NCS S 0530-B30G
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GRAYSCALE

 SN 8001 NCS S 0500-N Stockcode: M-PM-HG	 SN 9002 NCS S 1000-N Stockcode: M-PM	 SN 9003 NCS S 2000-N Stockcode: M	 SN 9000 NCS S 3000-N Stockcode: M	 SN 8004 NCS S 4000-N	 SN 8005 NCS S 5000-N	 SN 8006 NCS S 6000-N	 SN 8007 NCS S 7000-N	 SN 8008 NCS S 8000-N Stockcode: M-PM	 SN 9000 NCS S 9000-N Stockcode: M-PM
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- New Steni Colour collection 70 colour options in three gloss options and 10 Accent colour options in two gloss options.

Natural Stone Finishes

Four main colour options - with four standard material grades



Steni Vision

Freedom and expression – Standard designs and custom options to allow freedom of expression



Steni Vision



New Steni Vision Standard Collection and Steni Custom

New
Standard collection
64
options



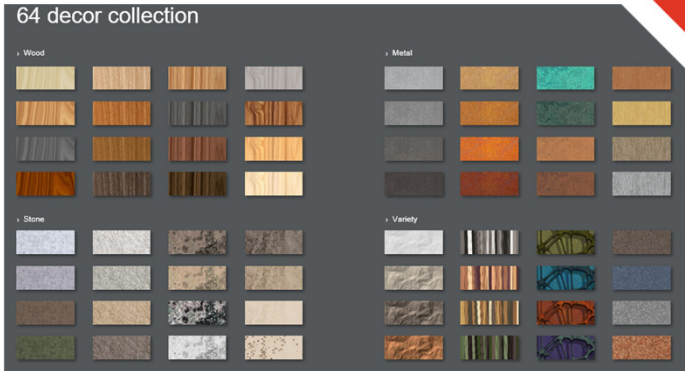






› The Arctic Salmon Center in Norway has been given a unique appearance with Steni Vision Custom





64 decor collection

- Wood
- Metal
- Stone
- Variety



› Steni Vision custom designs used to create a playful expression in this school - Finland



Installation Guidelines



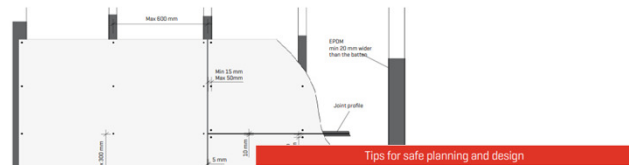
Slide 11

AP15 looks old fashioned
Adrian Pye, 17-02-2021

Installation Guide

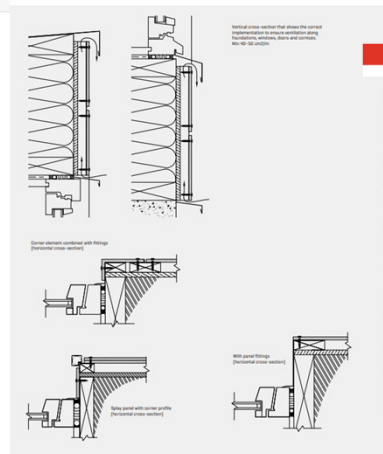
FS100 FLAT INSTALLATION USING MECHANICAL FIXINGS

INSTALLING
STENI COLOUR, STENI VISION AND STENI NATURE



DETAILS AND TERMINATIONS

INSTALLING AROUND WINDOWS AND DOORS
Various combinations of fixings, corner profiles and panel solutions are possible.



IMPORTANT INFORMATION

Design of the fixable system must always be in accordance with applicable national and local regulations. Designers are responsible for selecting products and solutions that satisfy these requirements, both individually and as a complete system.

WINDLOADS

The following formula is used to calculate the dimensional wind load capacity for different panel dimensions:

$$q_{w,d} [N/m^2] = N_s \cdot F_{w,d}$$

N_s is the number of fixing points per m² (see table 1a/1b)

$F_{w,d}$ is the design wind load capacity of the screws (see table 2a/2b)

Calculation of the fixing point and batten distance

Wind load depends on the shape and height of the building, as well as the terrain surrounding the building.

The design wind load on the facade ($q_{w,d}$) can be calculated according to the rules in EN 1991-1-4.

The dimensioning criterion is $q_{w,d} \leq q_{w,d}$

The required number of fixing points per m² is thus as follows:

$$N_s = q_{w,d} / F_{w,d}$$

Table 1a shows the minimum number of fixing points per m² for different panel widths and horizontal installation.

Table 1b shows the minimum number of fixing points for vertical installation. For both tables, vertical battens and standard drill patterns apply.

Panel width in mm	Number of fixing points per m ² (N _s)		
	Batten distance in mm		
	300	400	600
150-200	14,0	14,0	20,0
200-400	12,0	12,0	9,0
400-600	10,0	10,0	6,0
600-1200	10,0	10,0	6,0

Table 1a: Number of fixing points for horizontal installation

Panel width in mm	Number of fixing points per m ² (N _s)		
	Screw distance in mm		
	210	300	240
150-200	20,0	20,0	—
200-400	12,0	12,0	20
400-600	—	—	14,0
600-1200	—	—	10,0

Table 1b: Number of fixing points for vertical installation

Installation Guides

- Our installation guide provide details as to various fixing methods.
- Steni provide technical assistance together with optimisation advice to reduce waste on site and time in installation.
- Standard and non standard drill patterns are available.
- Steni provide standard formats and have the ability to cut offline where required.

Technical solutions and services



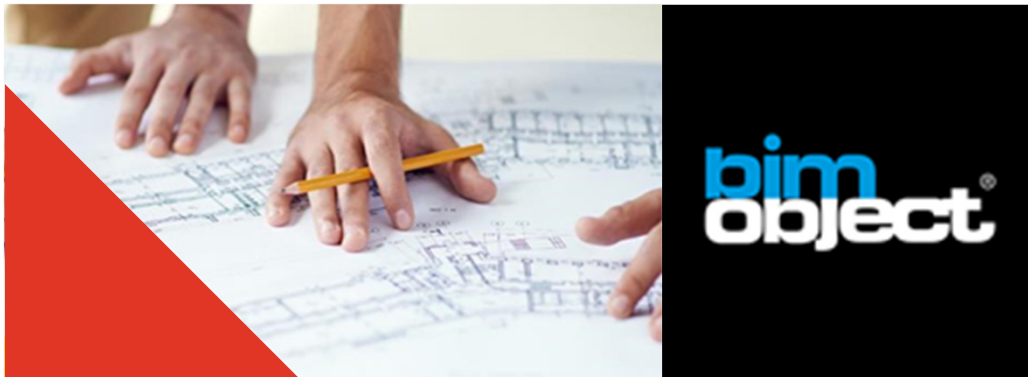
Slide 13

AP14 looks old fashioned
Adrian Pye, 17-02-2021

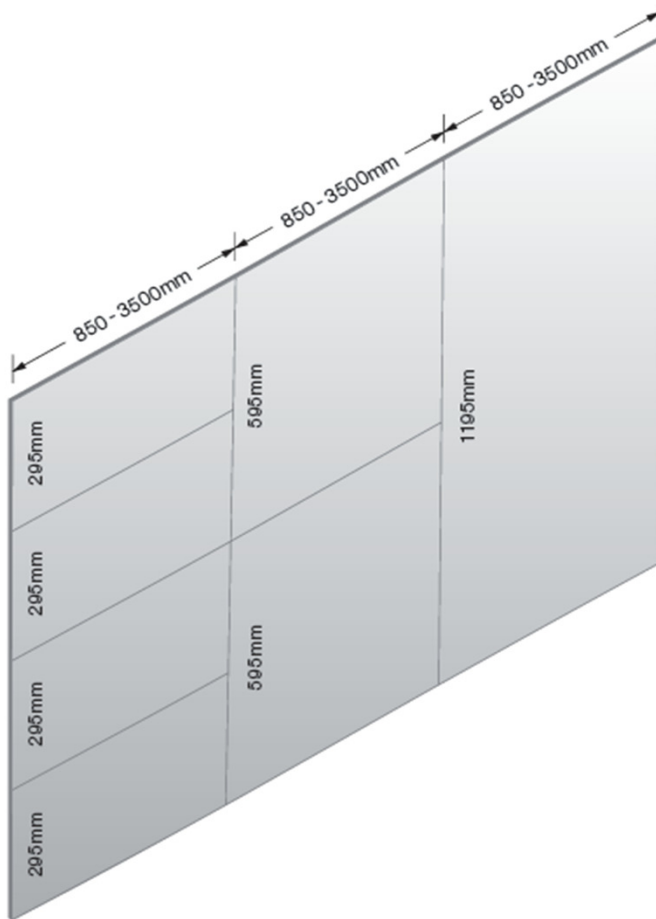
Technical solutions and services



- Elements solutions



- Optimisation service and design generator through BIM



Format flexibility

- Steni panels offer the best format flexibility on the market and can be factory supplied in four standard widths (295mm, 395, 595, and 1195mm).
- Standard lengths 850mm to 3495mm (Steni Vision 3190mm)
- Steni offer the option for offline cutting and panel optimisation through our planning department.

Environmental Profile



Slide 16

AP16 looks old fashioned
Adrian Pye, 17-02-2021

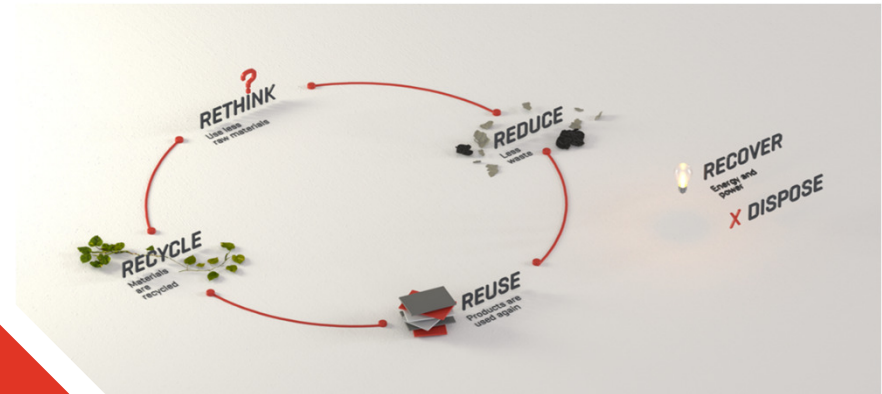
Steni Reuse:

Panels for the next generation with 60 year warranty and 100 year life expectancy

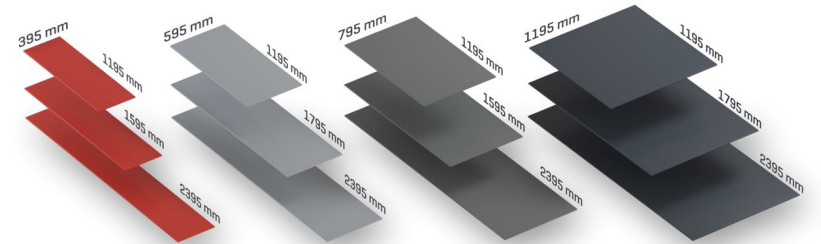
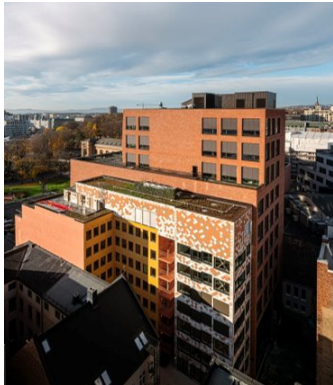
Facts

- EPD

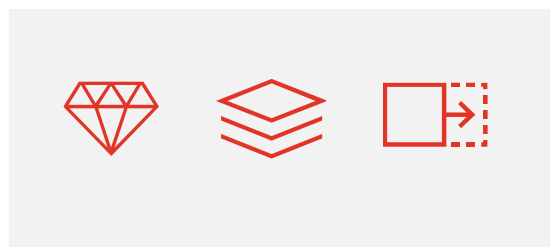
- Low global environmental impact
- No environmentally harmful substances
- BREEAM Excelent applicable
- Low LCC – 60Y functional warranty



Steni Reuse



USP`s – Why choose Steni



- **60 year functional warranty**
- **Total economy:**
 - Optimisation.
 - Easy of installation
 - Low life cycle cost.
- **Format flexibility:**
 - Standard and non standard panel format options.
 - Drill patterns.
- **Corner elements**
- **The environment**
 - Easy to maintain
 - EPD and HPD
- **World of surfaces**
- **BIM**



LASTING EXPRESSIONS

steni.com