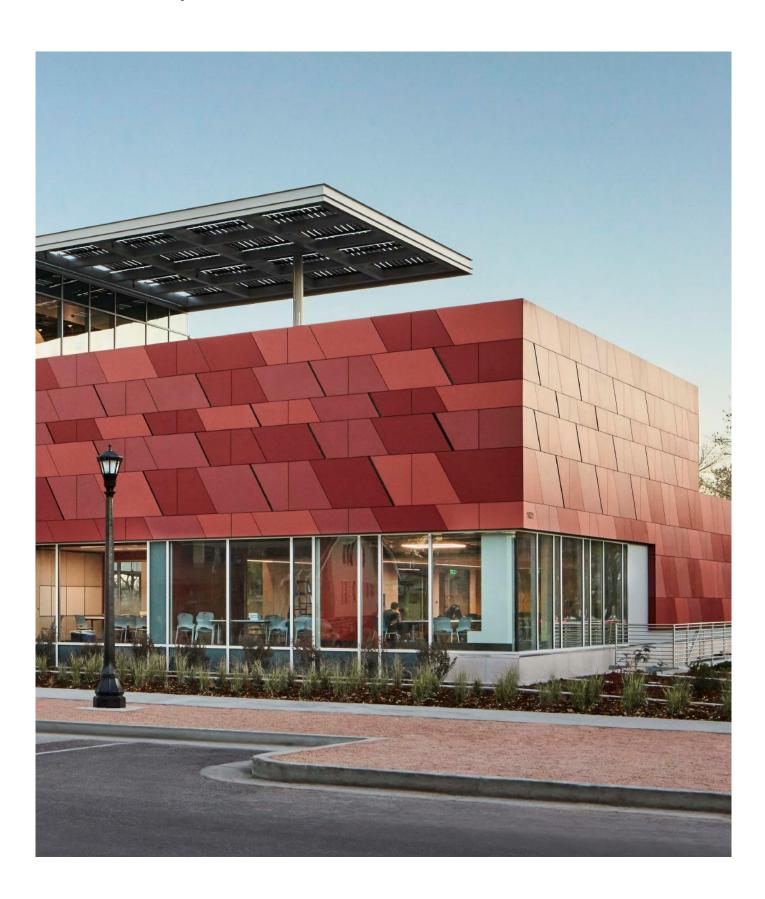
Swisspearl design solutions

SWISS Pearl_®

Products and system



Competence, excellence and innovation

Long term experience

For more than 40 years, Swisspearl's Research & Development teams have continuously expanded their unique expertise regarding fiber cement material technology, coloration and application of the whole systems. These significant technology advances are the backbone of Swiss quality. Swisspearl is the only manufacturer who masters the highly demanding production process for integrally colored shade in shade fiber cement panels offered in such a wide color variety.

Unique with long time proven quality

Swisspearl fiber cement panels are manufactured with low energy and high environment consciousness. Thus, the products are 100% environmentally friendly. Additionally, they are mainly made of local mineral raw materials. The proprietary processes pioneered by Swisspearl with special surface finish, sealed edges and back coating ensure optimal behavior and durability of the panels. This has been a proven process since the late 1950s. Furthermore, Swiss construction authorities testify to over 40 years as standard life expectancy. Millions of panels installed throughout the world prove the outstanding, reliable long term quality of the fiber cement panels and coating.

Content

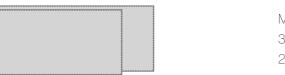
| Swisspearl product range | PANEL SIZES COLOR OVERVIEW FACADE AND INTERIOR COLORS ROOF COLORS | 6 8 10 32 |
|--------------------------|--|----------------------------|
| Designing possibilities | CUSTOMIZED PANELS PERFORATIONS ENGRAVINGS PANELS COATED ON BOTH SIDES SUN SHADING ELEMENTS CUSTOMIZED COLORS | 36 38 42 44 45 |
| Ventilated facade system | FASTENERS THE SYSTEM ADVANTAGES TECHNICAL GENERAL INFORMATION | 50 52 54 56 |
| General information | WARRANTY AND PROPERTIES OF MATERIAL | 60 |
| There for you | | 6 |



Swisspearl panel sizes

Facades and interior

Swisspearl Largo - large size panels



Max. useable, finished panel size 3050 × 1250 × 8 mm | 12 mm 2510 × 1250 × 8 mm | 12 mm



Swisspearl Linearis - slat panels



2500 × 147 × 8 mm 2500 × 300 × 8 mm 1500 × 147 × 8 mm 1500 × 300 × 8 mm



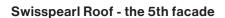
Swisspearl Modula - overlap panels



2500 × 300 × 8 mm 1500 × 300 × 8 mm



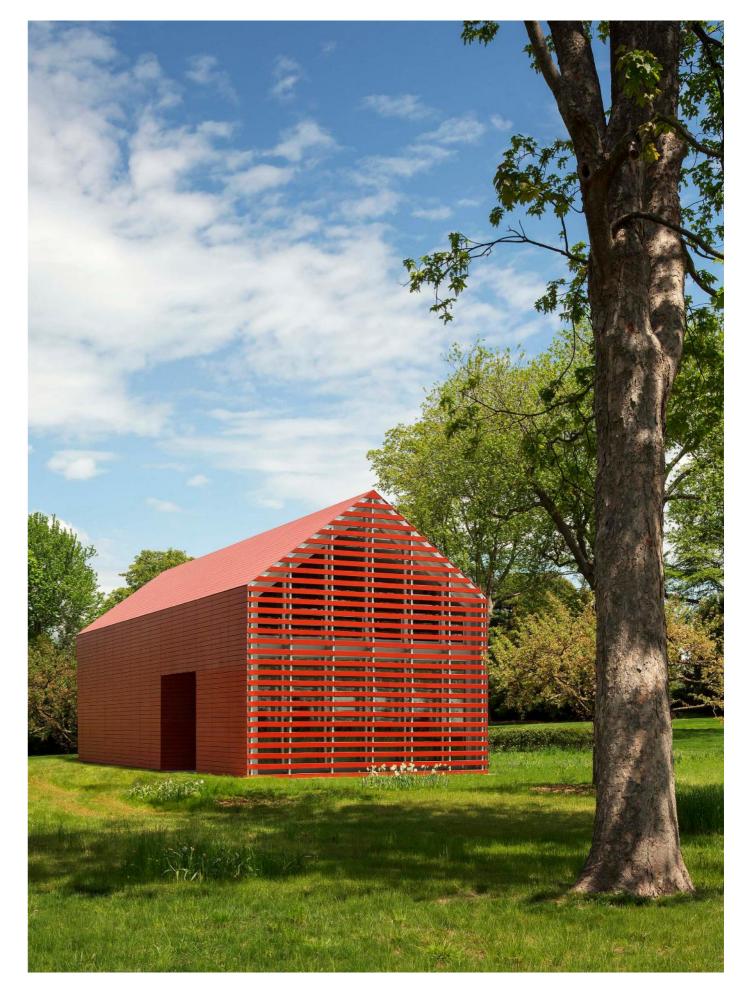
Roof





Max. useable, finished panel size $3050 \times 1250 \times 8 \text{ mm}$ $2510 \times 1250 \times 8 \text{ mm}$

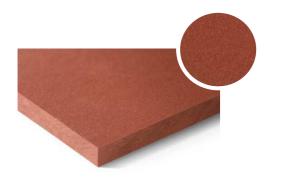




Page 4/5: Villa Faun, Oslo, Norway. Architect: Various Architects, Oslo, Norway. Photographer: Meraner & Hauser OHG / SNC, Bozen, Italy. Red Barn, Connecticut, USA. Architect: Roger Ferris & Partners, Westport, USA. Photographer: Paúl Rivera, New York, USA.

Independence and diversity

The Swisspearl facade panels get their independence through countless finishes and colors that offer seemingly limitless diversity. Below is an overview of the surface and color options. They are described in greater detail on the pages that follow.



CARAT

Unique natural look and timeless beauty.
The translucent lightly pigmented finish adds
a distinguished expression.



GRAVIAL

Rich contrast, unique interplay of light and shadow. The linear geometrical grooved surface offers countless options for making a special statement.



VINTAGO

Natural authentic, lively and unique look. The sanded surface highlights the purity of the fiber cement panel.



AVERA

TEXIAL

A collaboration between woven fabric and embossed fiber cement. The unique embossing creates a vibrant interplay of

light and shadow.

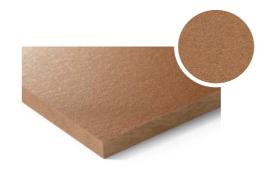
Authentic and vibrant.

The transparent coating lets the original natural look of the fiber cement shine through.



INCORA

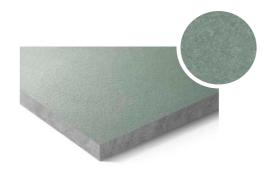
Stylishly authentic with a vivid spreading pattern and unique interplay of colors.



REFLEX

A shiny look and metallic character.

Depending on the lighting and vantage point, the reflective surface coating produces amazing nuances of color.



NOBILIS

An authentic fiber cement look. Select grey/color tones give the Nobilis panel its unique character.

Swisspearl Carat

Unique natural look and timeless beauty

Carat is a through colored fiber cement panel with a translucent lightly pigmented finish. The unique natural look and timeless beauty of the monolithic material ensure a distinguished expression.





INFO

Panel

Base panel: Integrally colored

Top layer:Translucent lightly pigmented

Panel size (refer to page 6)

Swisspearl Largo:

Arbitrary panel size up to a maximum size of 3050 x 1250 mm, thickness 8 mm and 12 mm. Largo panels can also be used for the interior.

Swisspearl Linearis:

4 different panel sizes, thickness 8 mm.

Swisspearl Modula:

2 different panel sizes, thickness 8 mm.

For a detailed summary of the sizing and color options, please refer to our delivery program.

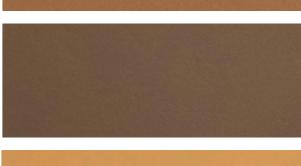
Colors

A wide standard range of 25 colors and additional custom colors.

Special HR - coating

Carat HR has a special coating that offers increased scratch resistance to the standard Carat and protection against heavy soiling and graffiti. Carat HR is available in all standard Carat colors.





Special F - coating

Carat F has a special covering coating that provides increased protection against weathering. Carat F is available in all standard Carat colors.

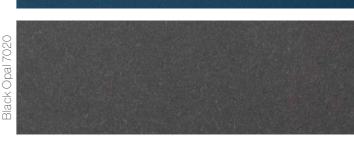
Installation

The whole range from flat layer to lapped coverings, with face or concealed fastening.













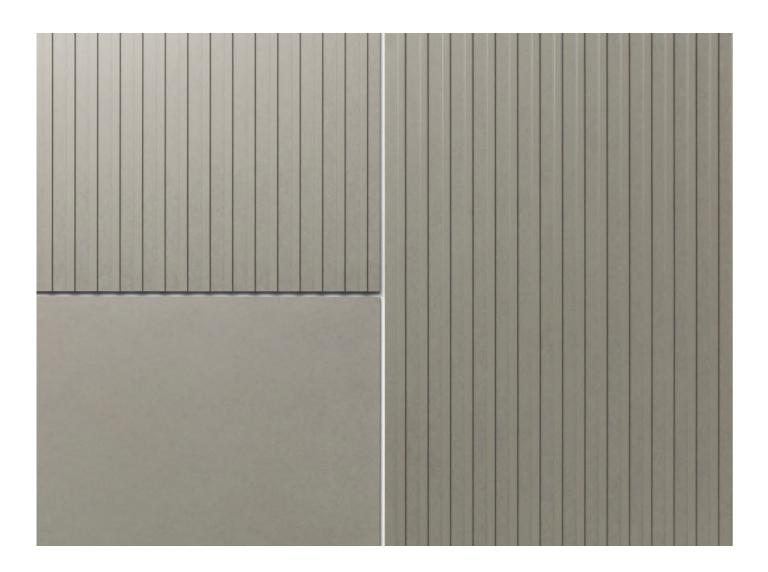




Swisspearl Gravial

Rich contrast, unique interplay of light and shadow

Gravial is a large format fiber cement panel with a linear, geometrical grooved surface. Depending on the position and incident daylight, Gravial offers a rich contrast and unique interplay of light and shadow. It is perfect for making a special statement on both the interior and exterior of a building.





INFO

Panel

Base panel: Integrally colored | Grey based Top layer: Translucent

Panel size (refer to page 6)

Swisspearl Largo:

Arbitrary panel size up to a maximum size of 3050 x 1250 mm, thickness 12 mm.

Largo panels can also be used for the interior.

For a detailed summary of the sizing and color options, please refer to our delivery program.

Colors

A standard range of 6 colors.

Installation

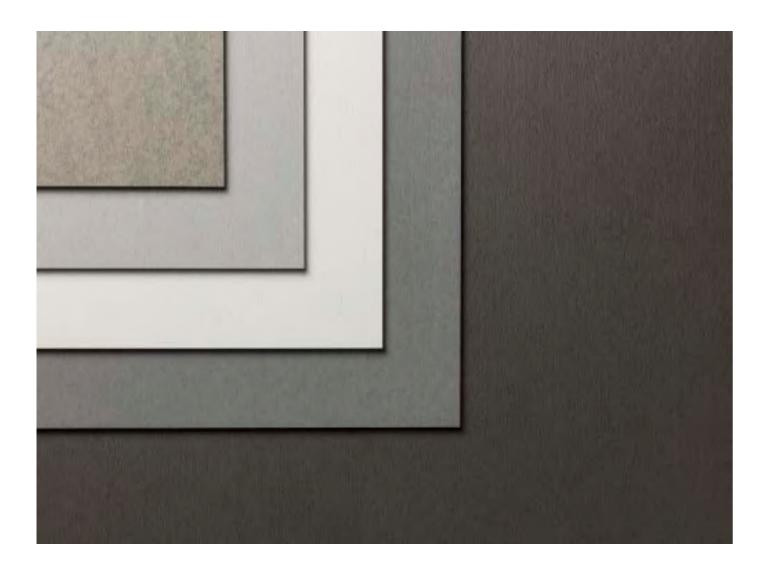
The whole range with face or concealed fastening.



Swisspearl Vintago

Natural authentic, lively and unique look

Vintago is a through colored fiber cement panel with a sanded HR (high-resistance) surface. The sanding process creates a natural, raw surface that highlight the originality of the fiber cement panel.



INFO

Panel

Base panel: Integrally colored Top layer: Translucent

Panel size (refer to page 6)

Swisspearl Largo:

Arbitrary panel size up to a maximum size of 3050 x 1250 mm, thickness 8 mm.

Largo panels can also be used for the interior.

Swisspearl Linearis:

4 different panel sizes, thickness 8 mm.

Swisspearl Modula:

2 different panel sizes, thickness 8 mm.

For a detailed summary of the sizing and color options, please refer to our delivery program.

Colors

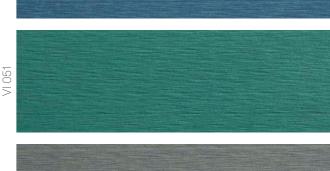
A wide standard range of 10 colors.

Installation

The whole range from flat layer to lapped coverings, with face or concealed fastening.













Swisspearl Texial

A collaboration between woven fabric and embossed fiber cement

Texial is a large format fiber cement panel with an embossed surface that gives the appearance of woven fabric. By manual embossing, every panel is one-of-a-kind and creates a vibrant interplay of light and shadow.





INFO

Panel

Base panel: Grey based
Top layer: Translucent lightly pigmented

Panel size (refer to page 6)

Swisspearl Largo:

Arbitrary panel size up to a maximum size of 3050 x 1250 mm, thickness 8 mm.

Largo panels can also be used for the interior.

Swisspearl Linearis:

4 different panel sizes, thickness 8 mm.

Swisspearl Modula:

2 different panel sizes, thickness 8 mm.

For a detailed summary of the sizing and color options, please refer to our delivery program.

Colors

A standard range of 5 colors.

Installation

The whole range from flat layer to lapped coverings, with face or concealed fastening.











²⁰ Swisspearl Avera

Authentic and vibrant

Avera is a through colored fiber cement panel that attains an unparalleled natural texture as a result of the dynamic production process. The transparent coating creates a vibrant surface appearance with a varied texture and dynamic color tones. The standard HR (high-resistance) coating also gives the panels excellent scratch resistance and protection against heavy soiling as well as graffiti.





INFO

Panel

Base panel: Integrally colored Top layer:Translucent

Panel size (refer to page 6)

Swisspearl Largo:

Arbitrary panel size up to a maximum size of 3050 x 1250 mm, thickness 8 mm.

Largo panels can also be used for the interior.

Swisspearl Linearis:

4 different panel sizes, thickness 8 mm.

Swisspearl Modula:

2 different panel sizes, thickness 8 mm.

For a detailed summary of the sizing and color options, please refer to our delivery program.

Colors

A wide standard range of 9 colors.

Installation

The whole range from flat layer to lapped coverings, with face or concealed fastening.

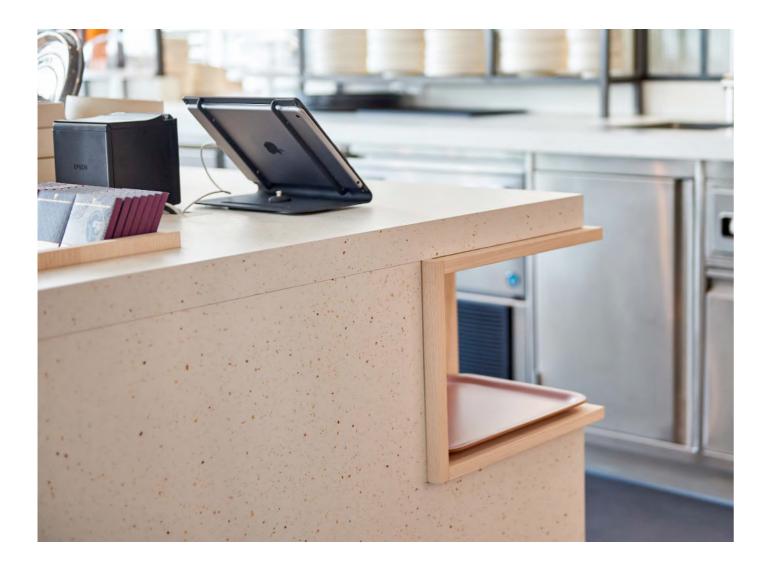




²² Swisspearl Incora

Stylishly authentic with a vivid spreading pattern

Incora is a through colored fiber cement panel with a quality granulated marble that creates a unique and dynamic look. These panels stand out for their vivid spreading pattern and uniquely balanced interplay of colors.





INFO

Panel

Base panel: Integrally colored Top layer: Translucent

Panel size (refer to page 6)

Swisspearl Largo:

Arbitrary panel size up to a maximum size of 3050 x 1250 mm, thickness 8 mm.

Largo panels can also be used for the interior.

Swisspearl Linearis:

4 different panel sizes, thickness 8 mm.

Swisspearl Modula:

2 different panel sizes, thickness 8 mm.

For a detailed summary of the sizing and color options, please refer to our delivery program.

Colors

A standard range of 2 colors.

Installation

The whole range from flat layer to lapped coverings, with face or concealed fastening.





²⁴ Swisspearl Reflex

A shiny look and metallic character

Reflex is a large format fiber cement panel with a reflective surface coating. The metallic character gives the panels a sophisticated, shiny look; depending on the vantage point, the coating creates amazing nuances of color.





INFO

Panel

Base panel: Integrally colored Top layer: Iridescent

Panel size (refer to page 6)

Swisspearl Largo:

Arbitrary panel size up to a maximum size of 3050 x 1250 mm, thickness 8 mm and 12 mm. Largo panels can also be used for the interior.

Swisspearl Linearis:

4 different panel sizes, thickness 8 mm.

Swisspearl Modula:

2 different panel sizes, thickness 8 mm.

For a detailed summary of the sizing and color options, please refer to our delivery program.

Colors

A wide standard range of 11 colors.

Installation

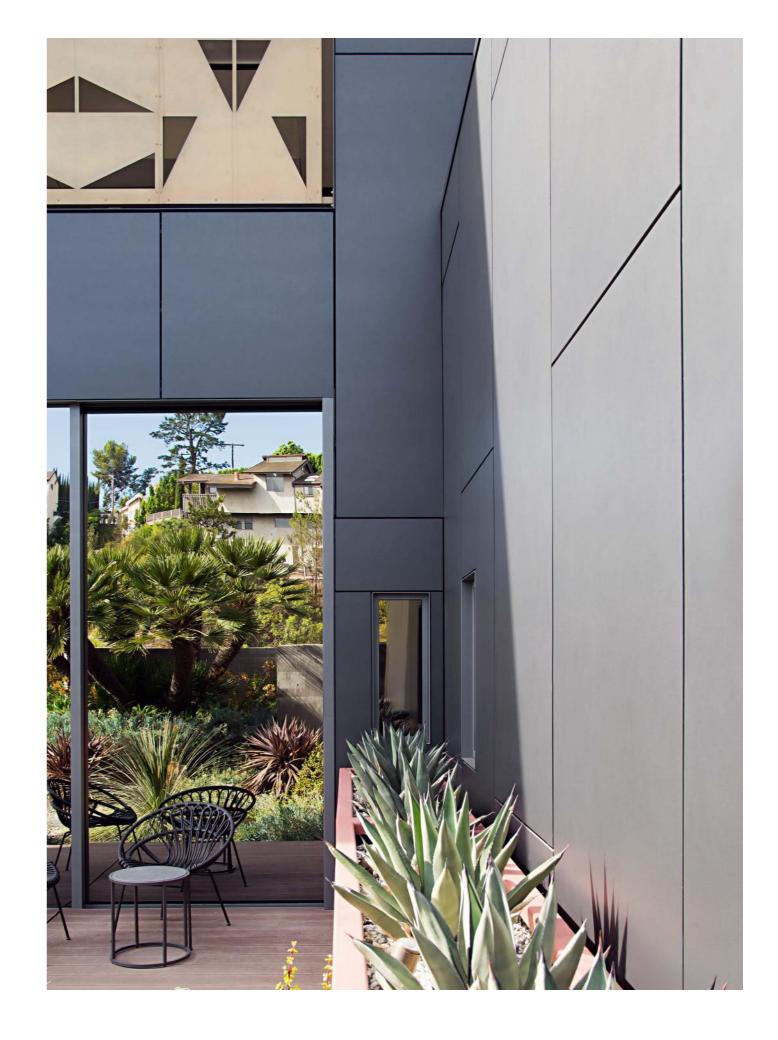
The whole range from flat layer to lapped coverings, with face or concealed fastening.











Page 26: Villa Martinuzzi, Pula, Croatia. Architect: Tobis Engineering, Zadar and Zagreb, Nataša Jozipović, Croatia. Photographer: Vjekoslav Skledar, Zagreb, Croatia. Black Villa, Beverly Hills, USA. Architect: Roger Kurath, go Design 21, California, USA. Photographer: Michael Hayes, Los Angeles, USA.

²⁸ Swisspearl Nobilis

An authentic fiber cement look

Nobilis is a large format fiber cement panel with a translucent lightly pigmented surface coating. Select color tones highlight the authenticity of the fiber cement.





INFO

Panel

Base panel: Grey based
Top layer: Translucent lightly pigmented

Panel size (refer to page 6)

Swisspearl Largo:

Arbitrary panel size up to a maximum size of 3050 x 1250 mm, thickness 8 mm and 12 mm. Largo panels can also be used for the interior.

Swisspearl Linearis:

4 different panel sizes, thickness 8 mm.

Swisspearl Modula:

2 different panel sizes, thickness 8 mm.

For a detailed summary of the sizing and color options, please refer to our delivery program.

Colors

A wide standard range of 12 colors.

Special HR - coating

Nobilis HR has a special coating that provides excellent scratch resistance to the standard Nobilis and protection against heavy soiling and graffiti. Nobilis HR is available in all standard Nobilis colors.

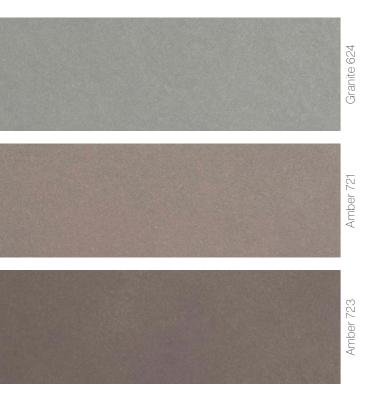




30

Installation

The whole range from flat layer to lapped coverings, with face or concealed fastening.





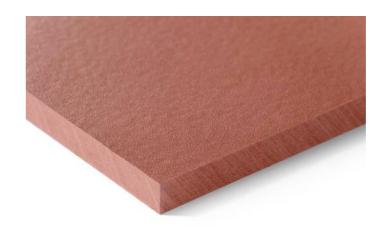
House XL, Pot na Črnile, Slovenia. Architect: SONO Arhitekti, Lokavec, Slovenia. Photographer: Meraner & Hauser OHG / SNC, Bozen, Italy.

Swisspearl Carat R-Color

For use in roof areas

Carat R panels are for use in roof areas and have been treated with a special weather-resistant coating. This gives the construction ideal protection against all weather conditions as well as increased UV resistance.





INFO

Panel

Base panel: Integrally colored Top layer: Opaque

Panel size (refer to page 6)

Swisspearl 5th facade:

Arbitrary panel size up to a maximum size of 3050 x 1250 mm, thickness 8 mm.

For a detailed summary of the sizing and color options, please refer to our delivery program.

Colors

A wide standard range of 10 colors.





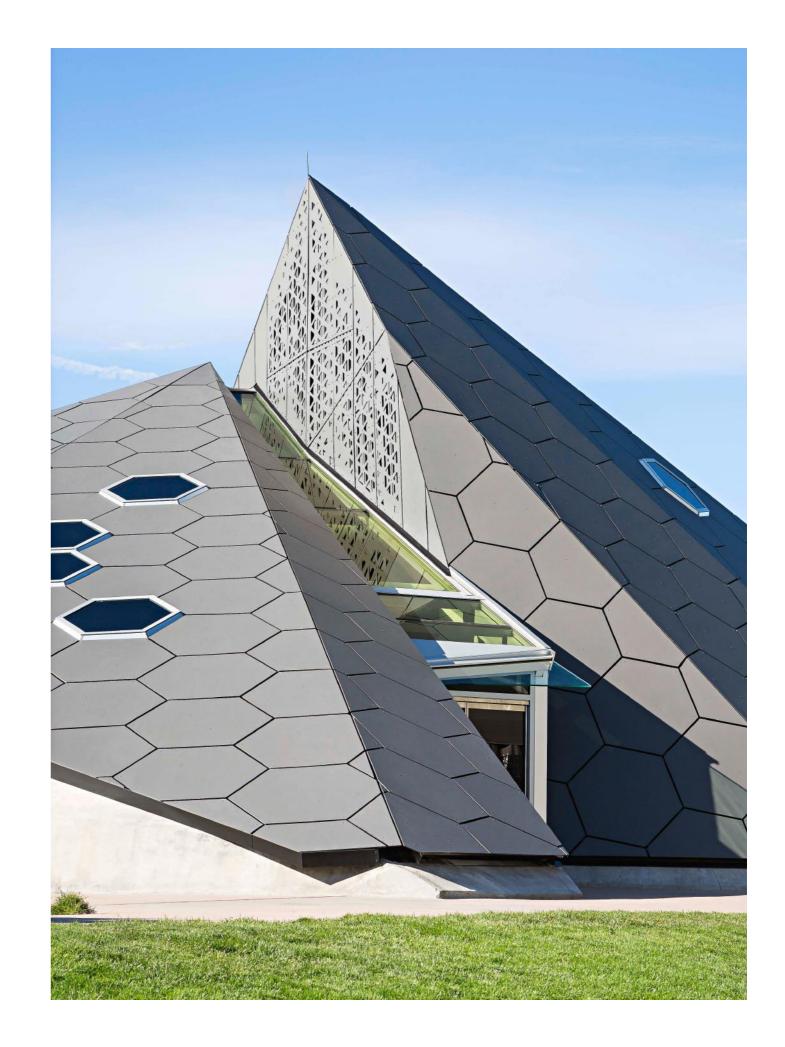
³⁶ Customized panels

Be creative

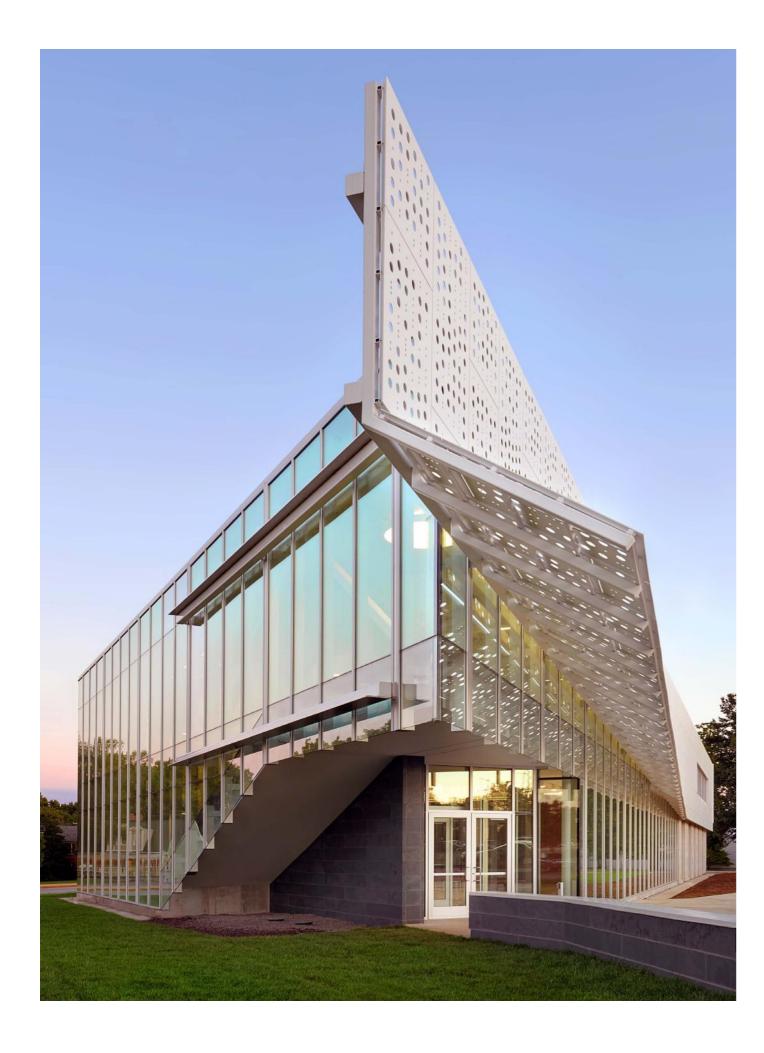
The designing possibilities offered by the wide range of finishes and colors may be complemented with special fabrication or surface treatments. These additional options allow an exclusive, special touch to be given to every high profile building.

The various Swisspearl specialties rest on the integrally colored panel platform. Panels with perforations, engravings or other surface treatments are provided with an outstanding finish. They may be used individually or in combination with other Swisspearl panels in the same shade, different shade or with other materials.





Page 34/35: Hydropower Plant, Tosbotn, Norway. Architect: Stein Hamre arkitektkontor, Mo i Rana, Norway. Photographer: Meraner & Hauser OHG / SNC, Bozen, Italy. Marina Business Center, California, USA. Architect: Hanson La, Los Angeles, USA. Photographer: Tom Bonner Photography, California, USA.



Perforations

Designing possibilities with functionality

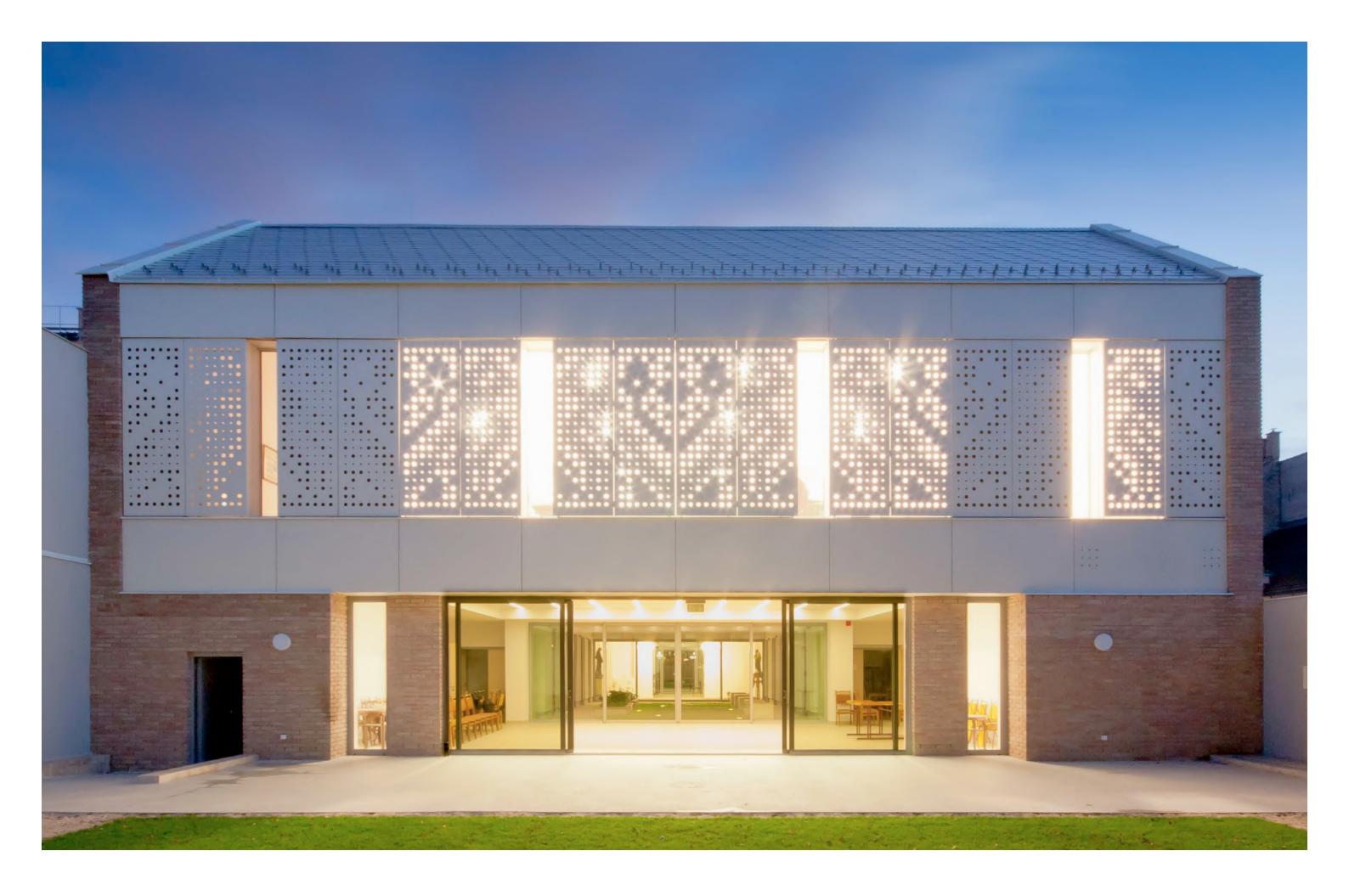
Holes, slots and other shaped perforations allow the creation of unusual effects. Perforated panels may have a function (sliding shutters, lighting concepts, windscreens, separation, sound absorption, etc.) or be purely decorative. Each perforation project needs to be checked by our technical advisors. As a guideline, the surface of perforations may be up to 18%

Perforated panels are not available in HR finish nor Avera, Incora, Texial, Vintago and Gravial.









42 Engravings

To impress

Geometric designs, unique custom patterns, company logo, etc., the creative possibilities are unlimited. Engravings may be within a panel, change from one panel to the other or run over several panels to create a bigger pattern. The structural feasibility of each intended pattern needs to be checked. As a guideline, the depth of engravings is 1.5 mm (panel 8 mm thickness) or up to 4.0 mm (panel 12 mm thickness).

Engraved panels are not available in HR finish nor Avera, Incora, Texial, Vintago and Gravial.









⁴⁴ Panels coated on both sides

Twice the look

Any panel may be finished on both sides. Typical applications are panels for balconies or balustrades (minimum thickness: 12 mm), partition walls visible on both sides, sliding shutters, etc.



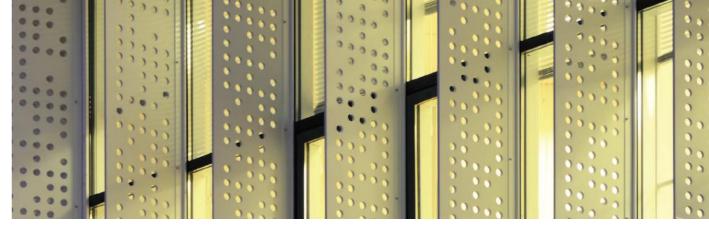


Sun shading elements

Break the light

Additional customized treatment such as perforation is of course also possible for sun shading elements. With these functional and aesthetic elements heat buildup in sun exposed rooms can be reduced allowing significant reduction in energy costs for cooling needs.





⁴⁶ Customized colors

Create your own color

You want to create your own color for the facade, interior or the roof? No problem! Swisspearl has an unmatched competence and knowledge regarding special colors. Thousands of custo-mized colors were supplied according to architects' specification.









50 Appearance of the cladding

Face fastened

Swisspearl facade panels are installed on timber or metal sub frame. The fastening method using face fastened screws or rivets allows an efficient attachment to the supporting structures. In fact, the fastener heads are available in exactly the same shade of colors as the panels, and are hardly visible even a slight distance away as they blend with the overall surface.

Concealed panel attachment methods

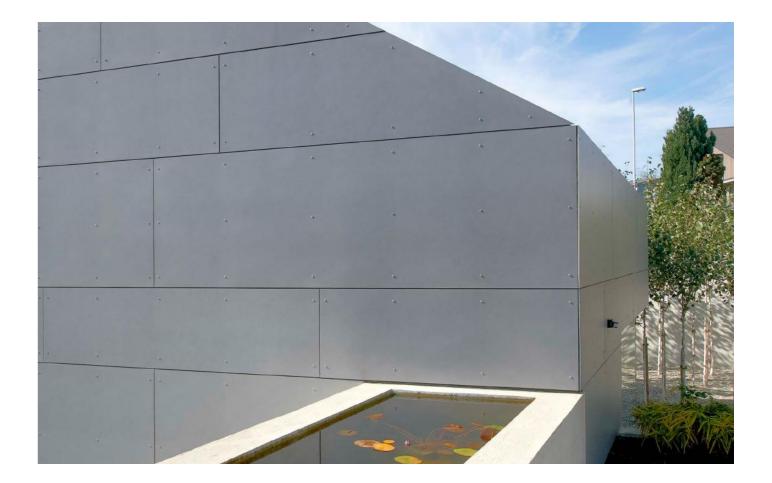
The concealed attachment has been designed for applications with the highest aesthetic standards. This high-end method of use brings out the full attractiveness of the surface finish of the Swisspearl panels.

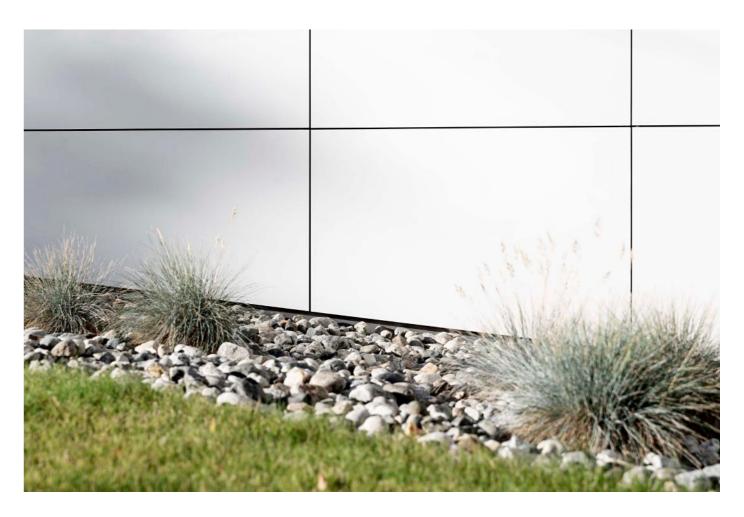
Sigma concealed panel attachment is available for 8 and 12 mm panel thickness.

The panels are supplied by the factory or certified fabricator accurately cut to size, including anchoring points to the panel rear face. Aluminum parts are fitted to the panel on site and the panels are hung to the appropriate supports on the sub-framing.

The sub-framing is made from either timber battens covered by a layer of EPDM for moisture protection; or by metal, i.e. aluminum or galvanized steel.

Panels ordered for adhesive application are called ARSB and are available upon request at time of order. Standard Swisspearl panels cannot be used for adhesive application.





The rear ventilation system

A highly sustainable solution

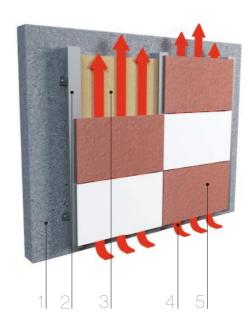
Providing considerable energy savings for any building, the environmentally friendly ventilated facade system and Swisspearl fiber cement panels are not only a good contribution to climate protection, they also offer a great opportunity to enhance the durability, appearance and value of a building.

All Swisspearl panels are specially designed for rainscreen cladding applications with rear ventilation. Combined with each other, they become the most reliable system from the technical construction viewpoint. This cladding system effectively protects the building and its structure from the elements for a long time. Furthermore, it reduces humidity and the air circulation optimizes the efficiency of insulation. Therefore, there will be no problem with mold, fungi, etc. The rot-resistant and non-combustible panels are extremely durable and virtually maintenance free - an attractive solution with many advantages.

Maximum longevity to exterior cladding

The five main components

The typical rainscreen system is based on natural rear ventilation. It is most reliable, sustainable and provides maximum longevity to exterior cladding. Ventilated facade systems consist of five main components:



- **1** Support structure
- 2 Sub frame

3

Thermal

insulation layer

- **3** Thermal insulation layer
- 4 Ventilated cavity
- **5** Swisspearl Cladding

Support structure Sub frame

The exterior wall of a building is mainly made of concrete, CMU blocks, brickwork, steel or timber frame with studs and planked by gypsum boards.

Swisspearl facade

panels are installed

on timber or metal

supports.

The advantage of an exterior thermal insulation is to keep the entire building structure at a constant temperature and to minimize thermal bridges and thus reduce the loss of energy to a minimum. Economic as well as ecological advantages result.

Ventilated cavity

The main task of the The outer skin of air cavity is the evac- the building enveluation of moisture and excess heat. Thanks to the pressure difference between bottom and top, the air circulation occurs naturally.

Swisspearl Cladding

ope has two main functions; to be aesthetically pleasing as well as protecting against influences from climate and environment.

⁵⁴ Cost efficiency

Savings up to 30% over typical facade

A Swisspearl facade is a cost-efficient and extremely economical building envelope which retains its value very well; thanks to its excellent characteristics such as easy assembly at all weather conditions, long life, functional reliability and being almost maintenance-free.

Swisspearl ventilated facades have proved in severe climates to be very energy efficient and cost effective over the long term. They also ensure a longer life expectancy for the building structure and the building envelope with low-cost maintenance.



Energy efficiency

Swisspearl facades are ideally suited for energy efficient construction concept. Sophisticated construction with long-lasting weather protection offers distinct, long-lasting energy efficiency.



Durability and maintenance

Rear ventilated claddings are virtually maintenance free. Costs for repainting, recaulking and repairing regularly is therefor eliminated. The longevity of Swisspearl cladding panels makes the economic advantage of the product obvious.



Sustainable and efficient

Outstanding features such as durability, functional reliability, maintenance free upkeep, and simple installation make Swisspearl facades an especially cost-effective, efficient, and high value building envelope starting from day one. The sustainability of Swisspearl products is proven by EPDs (Environmental Product Declarations).

One system

Many advantages

Rear ventilated cladding, often referred to as rainscreen cladding, in combination with the use of a thermal insulation on the outside of the exterior wall, generate numerous advantages as follows:



Long-lasting reliability

Unrivaled everlasting Swisspearl slates offer optimal protection of the facade construction against all manner of weather or outside influences, thus guaranteeing a long-lasting, reliable building envelope for decades.



Flawless

The exterior of every facade is subject to extreme temperature fluctuations. The Swisspearl facade system allows for unhampered dilation of the exterior mounted siding. Therefore, you don't have to worry about extensive repair work to fix cracks in the plaster or flaking due to frost on the exterior.



Fireproof

Swisspearl panels are composed of mineral and thus non combustible according to ASTM E-136. They have outstanding fire protection properties. A feature that offers the necessary safety even for especially compact structures. Fire classification according to NFPA 285 EN 13 501-1 & A2-s1, d0.



Architecturally inspiring

Swisspearl uniquely combines functionality with a strong aesthetic power of expression. Its unique material features, combined with the variety of forms and colors opens up virtually boundless realms of possibility for the design of first-class facades.



Moisture protection

No condensation and mildew on the walls. The back ventilation space allows diffused water vapor inside the building to escape to the outside in a controlled manner.



Ecological from A to Z

Minimal energy required for production and its long service life make Swisspearl panels the embodiment of sustainability in construction, even in comparison to wood. The layers of the Swisspearl facade system are also separable, making it easy to dismantle.

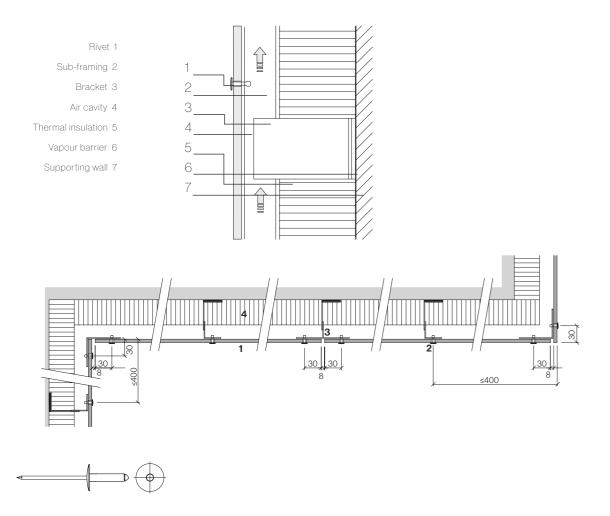


Optimized comfort

The special structural-physical properties of the Swisspearl facade system maintain an ideal, healthy environment in the building all year round. While the insulation placed throughout keeps the cold out of the living space, natural air circulation in the back ventilation space prevents heat transfer to the interior in the summer and keeps the living space pleasantly cool.

Ventilated facade system - Technical Ventilated facade system - Technical

Metal sub frame (aluminium or galvanized steel)

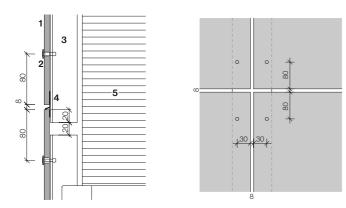


Rivets

minum. Heads powder coated or blank. Standard type 18 mm, longer rivets for lapped cladding panels.

Hole diameters

All holes to panels for both fixed and sliding points to be of diameter 9.5 mm. All holes to sub frame for fastening the panels to be of diameter 4.1 mm.



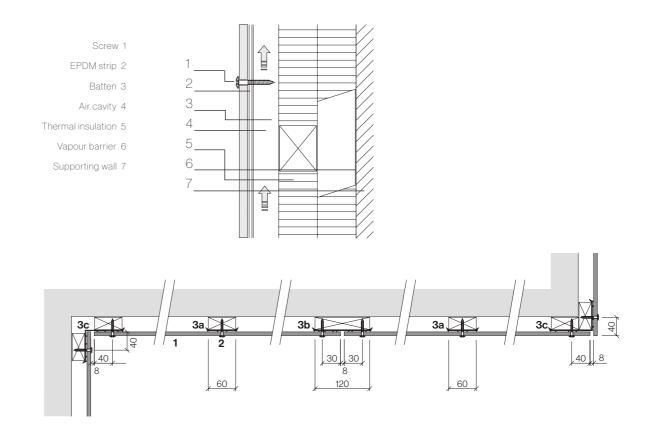
Aluminium profiles

Min. 2 mm thickness aluminum mill or anodized. Profile length about 3 m for installation story high breaks to coincide with horizontal panel joints.

Steel profiles

Steel panel supports to be min. gauge 18 (1.27 mm / 0.05") to obtain nominal pull out value. Profiles should not be longer than 6 m (20').

Timber battens





Screws / bit

T20W.

Stainless steel screw, with powder coated or blank head. Standard type 4.8×38 mm, head Ø 12 mm, drive

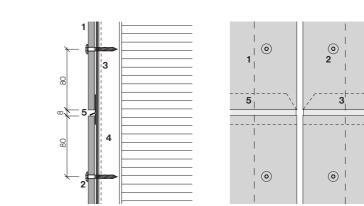
Hole diameters

1 0

Timber quality

Battens must be thickness gauged to 1 face:

- Thickness min. 27 mm (min. 3/4")
- Always use planed surface timber
- Solidity class II (FK II/C24)
- Recommended only using kiln-dried lumber
- Moisture content max. 20-%



General information ventilated facade

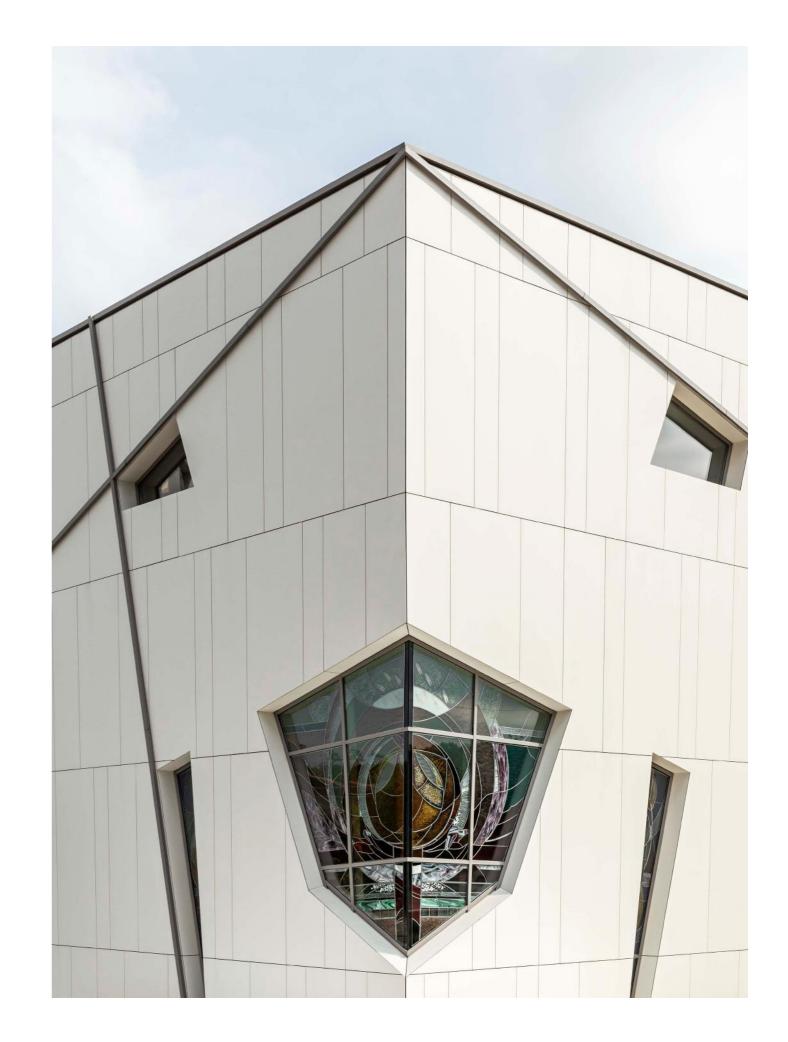
Facade engineering

Facade engineering is to be carried out by a locally licensed engineer based on the data supplied by Swisspearl (panel and fastening data, wind load tables) and based on the applicable local standards and regulations.

Sub frame/panel support

The panels are supplied including the fasteners but without the support profiles. This leaves the great advantage of flexibility for the project. For example:

- Verticals in metal or timber attached to horizontal Z
- Double threaded spacer screws for timber battens, adjustable in/out
- Aluminum bracket (fixed/sliding)
- Aluminum verticals adjustable in/out
- Timber sub frame made of horizontal and vertical layer
- Verticals in metal or timber to horizontal angle adjustable in/out



General information



Product warranty

The products are manufactured to highest standards and under permanent quality control programs by third party testing facilities as well as by the factory's own laboratories.

In case that any delivered product should not reach its specified performance, there will be a 20 year warranty covering the functional quality of panels and accessories. The warranty is granted on condition that the latest Design and Installation Manual has been fully complied with.

Properties of the material

The printed colors may differ from the original shade of the color. To see the exact color, and when matching up colors on adjacent parts of a building, one must use the original panel samples.

The natural ingredients used in the fiber cement panels will to some extent determine the unique character of the material. The intensity and color tone may vary slightly depending on the production batch.

There for you

Contact us

Swisspearl's comprehensive offering of services and advice allows to respond to the different needs of builders, facade builders, roofers, architects and planners in order to jointly develop informed solutions. Sharing knowledge plays a key role here. That is also why we have partnered up with exclusive Distributors to serve the market better.

Furthermore, Swisspearl supports its customers with comprehensive specialist advice, detailed documentation, technical manuals and its customer magazine, which has become a renowned publication for planners and architects.

Please do not hesitate to contact us. One of our dedicated and knowledgeable staff will be happy to provide you with help and advice.



The internationally distributed magazine Swisspearl Architecture sets Swisspearl fiber cement products within a contemporary architectural context.







Swisspearl CH-8867 Niederurnen T: +41 55 617 11 60 info@swisspearl.com

www.swisspearl.com

Member of the Swisspearl Group

