



# Creative Façade Solutions

Small and Medium Formats

**SWISSPEARL®**





## Many design possibilities

Like a skin, small and medium modules in thicknesses of 4 and 6 mm take up the form and volume of any façade, regardless of the shape of the building. This allows brilliant creative opportunities in the design. The linear pattern of the cement composite elements, emphasized by light and shadow, is adaptable to building size, geometry, window position, etc. All formats manufactured by the Swiss Group are specially designed for rain-screen cladding applications along with the very reliable rear ventilation system. Together with the wide range of colours, these reliable long-lasting facade solutions are the key to appealing modern architecture for all types of buildings, whether new construction or renovation.

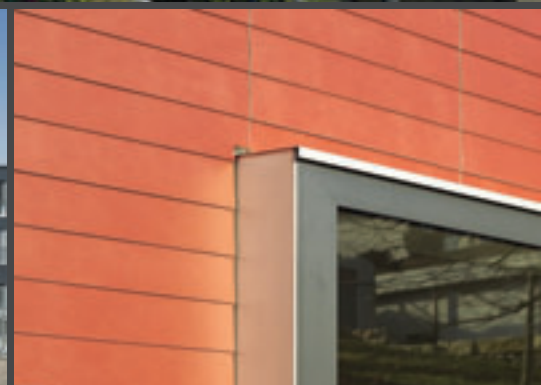




## Versatile formats for modern architecture

Thanks to the versatility of the different modules in lengths of up to 120 cm (visible height up to 54 cm), which can be easily combined, the architect can create unique patterns ideally suited to expressing the contemporary character of his projects. Thus, the customers' individual needs and design desires can always be satisfied – and at a good cost-value ratio. Most of the modules are available in a variety of distinctive finishes; all are delivered ready to install with pre-drilled holes, and usually with the hidden fastening system.

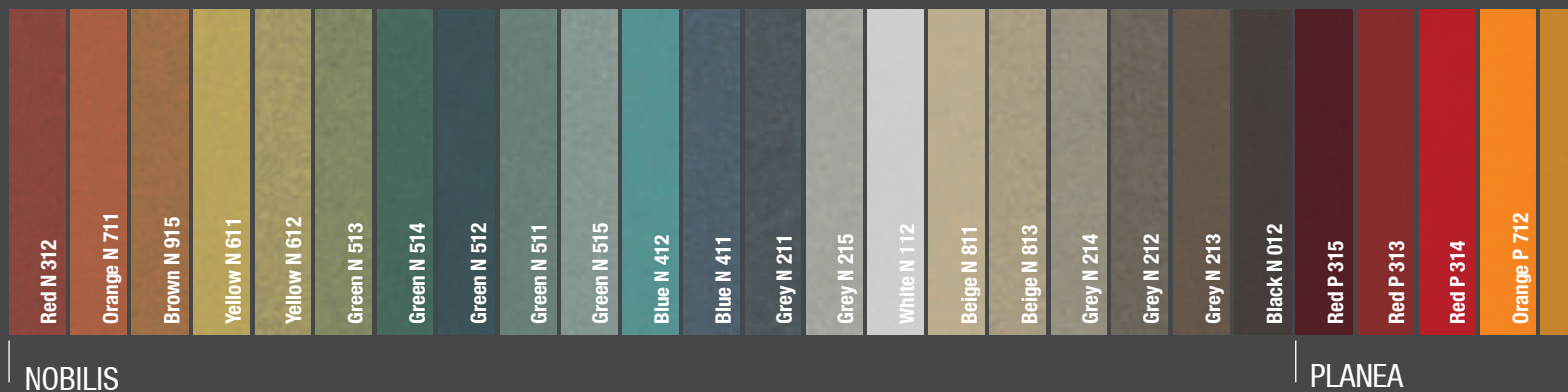






## Attractive colour range for attractive buildings

Three surface aspects, four colour ranges with a total of more than 50 standard colours and the possibility of custom shades and two finish choices, matte or semi-matte, complement the exciting design potential of the various available formats. Whether in vibrant or translucent colours, the high-quality coating on a pure acrylic base assures good long-term colour fastness and consistency as well as high resistance to weather conditions. The durable, weatherproof outer skin is practically maintenance-free during its life span of at least 40 years so that the façades keep their attractive appearance for decades.





TERRA

EKOSAL

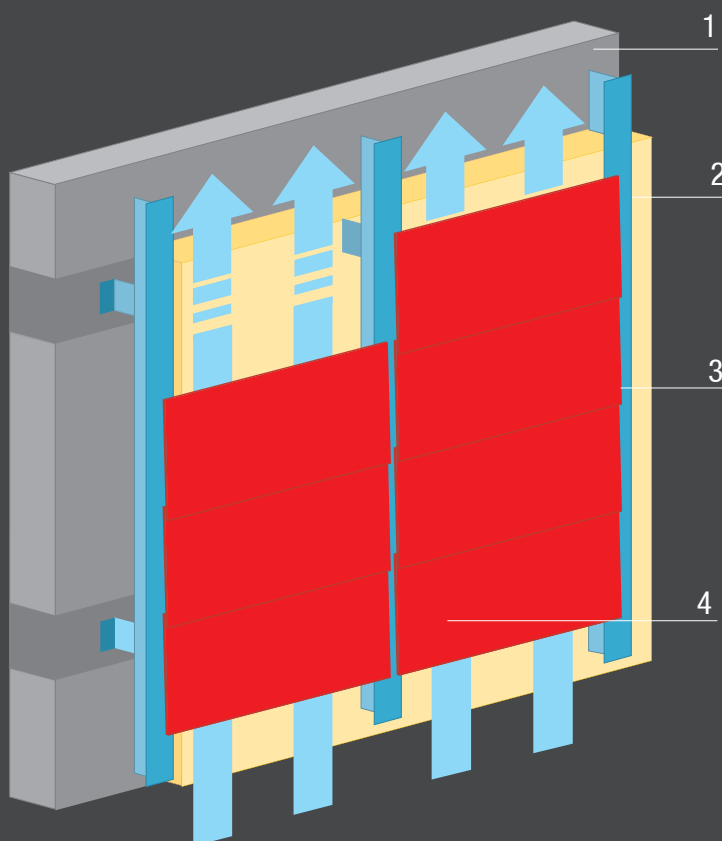
## Ideal for retrofits and renovations

Many buildings of the 1970s and 80s need to be updated to match the current sustainability and energy performance standards and regulations. Improving the energy efficiency of 30- to 40-year-old buildings with the environmentally friendly ventilated façade system and cement composite modules is not only a good contribution to climate protection, it is also a great opportunity for cost- and environmentally conscious building owners, investors and architects to enhance the durability, appearance and value of the property.

With higher quality materials for the envelope, the weather skin has a much longer life expectancy and remains attractive for a longer time. Maintaining the value of the initial investment without expensive maintenance later on is an important benefit to add to improved living comfort and the growing savings achieved year after year on the energy expenses of older buildings.

# Energy-Efficient Buildings with Ventilated Façades

Ventilated façades consist of multi-layered structures characterized by a distinct functional separation of the individual component layers. Each layer and the intelligent interplay of the four relevant components contribute to lower energy consumption and CO<sub>2</sub> emissions.



## 1 Support structure

The non-requirement for a special surface, together with the minimal load caused by the cladding, enable ventilated façade systems to support various structural types, whether mono-layered or multi-layered, i.e. formed by a number of different materials.

## 2 Insulation

The insulation, applied directly to the support structure, regulates the thermal conditions of the building, i.e. it prevents heat loss in winter and heat build-up in summer.

## 3 Air gap and sub-structure

The air gap (20-30 mm) is placed between the insulating layer and the cladding modules, thereby allowing the temperature differences between the outside air and the air inside the gap to maintain a constant vertical air current.

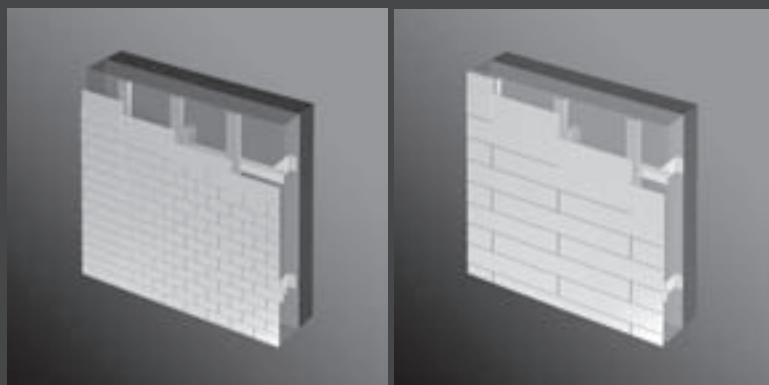
## 4 Cladding

The main functions of the outer cladding are both aesthetic and protective. It deflects the majority of rainfall and protects the insulation against climatic stresses and mechanical impact.



The rain-screen cladding application with rear ventilation and cement composite facing is the most reliable system from the viewpoint of building physics.

Used in the tough alpine climate for over 70 years, state of the art ventilated façades with thermal insulation appropriate for the local conditions have proven their efficiency over a long period in many European countries. This cladding system effectively protects the building structure, and the entire building, from the elements for a long time. The rot-resistant and incombustible modules are extremely durable and virtually maintenance free – in all aspects an extremely advantageous and attractive solution.



## Advantages

- The most reliable system from the viewpoint of building physics with guaranteed performance.
- Specially designed system for rain screen cladding application; fully tested for timber and metal sub-frames.
- Rear ventilation system reduces humidity.
- Air circulation optimizes the efficiency of insulation.
- Suitable for new buildings and refurbishments of every type and size.
- Increased life expectancy of building substance.
- Improved sound-proofing.
- Nearly no maintenance.
- Never any plaster, paint or sealant problem.
- Building tolerances can be readily accommodated.



No thermal bridges



Heat from rooms is kept in wall structure



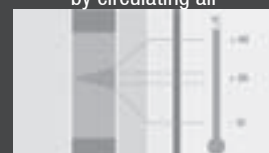
Condensation is carried away



Moisture evacuated by thermal action


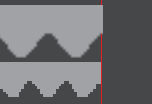



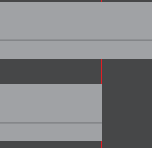
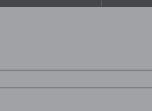



In summer, part of the heat is evacuated by circulating air

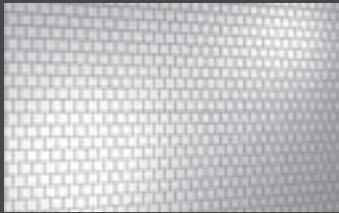



Air layer + insulation reduce difference in temperatures

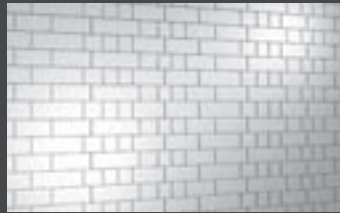
## Overview of the range


	Sub-frame		Quantity per m <sup>2</sup>	Format		Thickness		PLANEA	NOBILIS	TERRA	EKOSAL
	Wood	Metal		[mm]	[inch]	[mm]	[inch]				
	Double layer										
	Rectangular strips	W	8.23	3 x 300 × 300	3 x 11-13/16 × 11-13/16	4	5/32	■	■	■	
		W	12.35	3 x 200 × 300	3 x 7-7/8 × 11-13/16	4	5/32	■	■	■	
		W	19.61	3 x 200 × 200	3 x 7-7/8 × 7-7/8	4	5/32	■	■	■	
		W	27.78	5 x 120 × 150	5 x 4-23/32 × 5-29/32	4	5/32	■	■	■	
		W	27.78	6 x 100 × 150	6 x 3-15/16 × 5-29/32	4	5/32	■	■	■	
	with cut corners	W	27.78	6 x 100 × 150	6 x 3-15/16 × 5-29/32	4	5/32	■	■	■	
		W	27.78	10 x 60 × 150	10 x 2-3/8 × 5-29/32	4	5/32	■	■	■	
	Rhombus strips	W	12.36	2 x 300 × 300	2 x 11-13/16 × 11-13/16	4	5/32	■	■	■	
		W	19.61	3 x 200 × 200	3 x 7-7/8 × 7-7/8	4	5/32	■	■	■	
	Festoon strips	W	55.56	10 x 60 × 75	10 x 2-3/8 × 2-61/64	4	5/32	■	■	■	
	Strips with custom sub formats	W	8.23	1 x 900 × 300	1 x 35-7/16 × 11-13/16	4	5/32	■	■	■	
		W	13.08	1 x 900 × 200	1 x 35-7/16 × 7-7/8	4	5/32	■	■	■	
CLINAR											
	Rectangular strips	W	6.18	1200 × 300	47-1/4 × 11-13/16	6	15/64	■	■	■	
		W	8.23	900 × 300	35-7/16 × 11-13/16	4	5/32	■	■	■	
		W	12.35	600 × 300	23-5/8" × 11-13/16	4	5/32	■	■	■	
		W	9.80	1200 × 200	47-1/4 × 7-7/8	6	15/64	■	■	■	
		W	13.80	900 × 200	35-7/16 × 7-7/8	4	5/32	■	■	■	
		W	19.61	600 × 200	23-5/8 × 7-7/8	4	5/32	■	■	■	
Single layer											
CLINAR											
	Rectangular strips with vertical stack bond	W M	6.17	900 × 300	35-7/16 × 11-13/16	6	15/64	■	■	■	
		W M	7.94	900 × 200	35-7/16 × 7-7/8	6	15/64	■	■	■	
		W	9.26	600 × 300	23-5/8 × 11-13/16	6	15/64	■	■	■	
		W	11.90	600 × 200	23-5/8 × 7-7/8	6	15/64	■	■	■	
	CLINAR CLIP	W M	1.55	1200 × 600	47-1/4 × 23-5/8	6	15/64	■	■	■	
		W M	2.08	1200 × 460	47-1/4 × 18-7/64	6	15/64	■	■	■	
		W M	2.78	1200 × 360	47-1/4 × 14-11/64	6	15/64	■	■	■	
	EKOSAL	W M	1.54	1200 × 600	47-1/4 × 23-5/8	6	15/64				■






Rectangular strips  
10 x 60 x 150 mm  4 mm




Strips with custom subformats  
900 x 200 mm  4 mm




Strips with custom subformats  
900 x 300 mm  4 mm




Rectangular strips  
5 x 150 x 200 mm  4 mm




Rectangular strips  
900 x 200 mm  4 mm




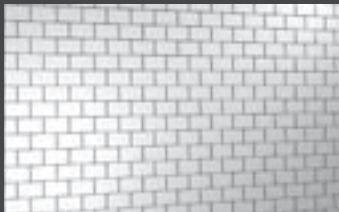
Rectangular strips  
600 x 200 mm  4 mm



Rectangular strips  
900 x 300 mm  4 mm



Rectangular strips,  
3 x 300 x 300 mm  4 mm




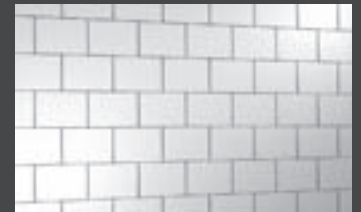
Rectangular strips  
6 x 150 x 100 mm  4 mm




Rectangular strips with cut corners  
6 x 100 x 150 mm  4 mm




Festoon strips  
10 x 60 x 75 mm  4 mm




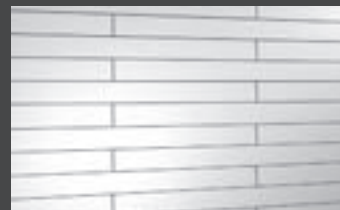
Rectangular strips  
3 x 200 x 300 mm  4 mm




Rectangular strips  
600 x 200 mm  4 mm




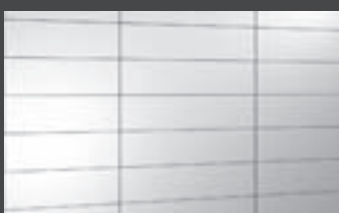
Rectangular strips  
600 x 300 mm  4 mm




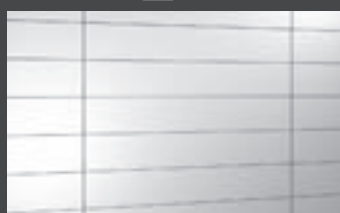
Rectangular strips  
1200 x 200 mm  6 mm



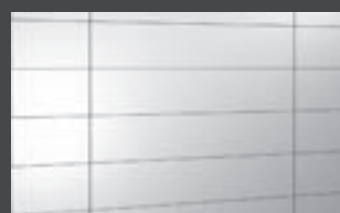
Rhombus strips,  
3 x 200 x 200 mm  4 mm




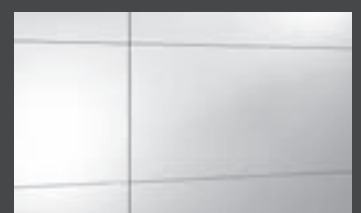
CLINAR  
600 x 200 mm  6 mm




CLINAR  
900 x 200 mm  6 mm



CLINAR  
900 x 300 mm  6 mm



EKOSAL  
1200 x 600 mm  6 mm

## 100% environmentally friendly

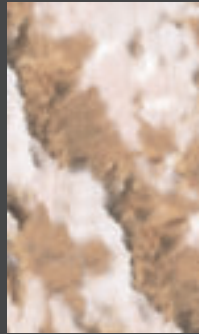
All cement composite modules are made primarily of mineral raw materials (Portland cement and lime stone), water and air. For more than 25 years, the Swiss Group has used high-quality, non-toxic fibres to reinforce the cement core. The manufacturing process, based on a closed water cycle and a slow, natural 28-day curing process, requires little energy. The high-tech coloration and finishing technologies are water-based, whilst still ensuring optimal performance, good colour stability and long-lasting quality of the small and medium formats.



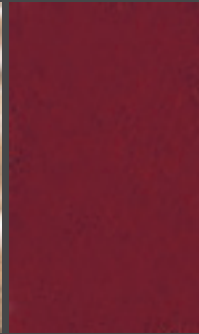
Portland cement



Reinforcing fibres



Process fibres



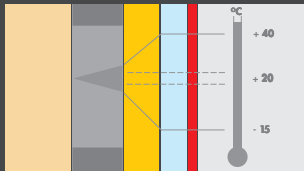
High-quality pigments





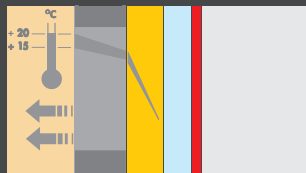
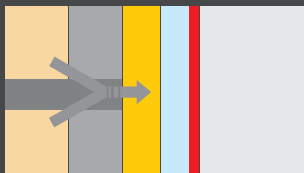
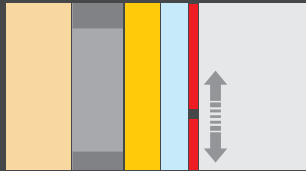
### Protection of support walls

The support structure is protected against outside temperature changes by the thermal insulation layer. The risk of crack formation is much reduced. The thermal insulation applied on the outside improves the security and long life span of the structural support wall.



### Heat protection during winter

Thermal insulation applied to the outside of the structural support wall permits continuous insulation without thermal bridges (e.g. ceiling face sides, separating walls).



### Heat protection during summer

Functional ventilation between the thermal insulation and the cladding prevents heat accumulation. Furthermore, it assists in making temperature changes (e.g. day and night) less noticeable.

### Protection of heat of room

The heat of the room is retained in the wall structure.



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