

# SWISSPEARL ARCHITECTURE #22

COLOR RHYTHMS





'Farbrauch' (blaze of color),  
expansive installation  
with 5500 color charts, by  
Marcella Wenger-Di Gabriele, 2007

# COLOR RHYTHMS

Some architects mention colors and Swisspearl in one breath. The company has developed coating systems for more than twenty years, and has expanded its range of colors multifold. Today, in addition to our standard assortment of colors, we are able to respond to almost all of our clients' wishes thanks to our own development and individual consulting: we accompany clients from idea through initial prototypes to realization, thereby guaranteeing satisfactory and, in most cases, inspiring solutions.

We make a constant effort to preserve and expand the materiality of the cement composite with our coatings: the mineral substance has a unique structure and vibrancy and is made of natural raw materials. They are what make the Swisspearl product what it is. Through our long-term experience, we know how our materials can be optimally coated.

Nonetheless, the realization of new color lines and special colors and effects continually presents new challenges to our team's long-standing know how. We also work in close collaboration with customers, sales, and production. Our uppermost credo remains ensuring the quality and durability of the coatings. Therefore, the entire process runs in-house exclusively for Swisspearl products—from development through to application of the color coatings. In that way, we guarantee an optimal process cycle.

Color, shine, and feel: these give a façade a face, an unmistakable appearance. Whether red, green, white, or yellow, the color of a building is what commonly stays in one's memory. With our virtually endless color possibilities, we support architects in the creation of all types of objects. That is our declared goal, and will remain in the future.

Dr. Niklaus Margadant, Head Coating Technology



**In coating technology, Niklaus Margadant finds himself at the interface between production and design. The realization of creative ideas and inspiration from architects and planners in a product via an industrial process constantly brings him new challenges and a source of fascination.**



# COLOR RHYTHMS

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**Ueli Schweizer, product manager Swisspearl;  
Rose-Marie Spoerli, color designer;  
Carlos Martinez, architect; Marcella Wenger-  
Di Gabriele, color designer and docent  
(from left to right).**

## ROUND TABLE TALK

# COLORING IN ARCHITECTURE

**Coloring in architecture is a controversially discussed creative field. In order to grasp its diversity and complexity, "Swisspearl Architecture" invited designated Swiss professionals to a round table talk to the Zurich-based Haus der Farbe, where the color designer and docent Marcella Wenger-Di Gabrielle holds her lectures. Her former colleague, color designer Rose-Marie Spoerli, advises Swisspearl, among others, on the compilation of its color collection. The architect Carlos Martinez is known for building projects with powerful colors. Product manager Ueli Schweizer assures a market-friendly interplay of material and color at Swisspearl. The journalist Michael Hanak hosted the conversation.**

**What designs with color in architecture are possible? Do you have any special preferences? Any no-go's?**

**Marcella Wenger-Di Gabrielle:** Color designers should consider themselves as the architects' partners. In my opinion, color should serve architecture and become a part of the architecture. My aim is to reinforce a space in terms of its character rather than work against it. Color planning is an essential part of design.

**Carlos Martinez:** Our architectural office has always enjoyed working with color, whether in residential complexes, single-family homes, or industrial buildings. The most daring structure that we have built until now comprises four multi-family homes in four different colors, each with three different color tones. In this case, finding the right color palette was highly elaborate and complex as the twelve color tones all had to agree with one another. We were able to achieve this quite well in collaboration with Swisspearl.

**Rose-Marie Spoerli:** With regard to the façade, which is a long-lasting element, I am careful when dealing with color. I believe that it requires colorful accents, but they have to be skillfully placed. A particular continuity, congruence, is required between inside and outside. In a certain way, the attitude should coincide across the entire building.

**Ueli Schweizer:** Color and materiality always belong together. Every material is also colorful. Applied colors

must therefore also correspond with the character of the respective material. As a rule, the texture thus shines through with layered cement composite panels. We want products that leave a great deal of design potential open for the architects. Our standard range offers immense possibilities; working with the standard range is possible with a good ninety percent of the buildings. But we can also offer something special.

**Carlos Martinez:** An important aspect is aging, or rather, the beauty of the transient. As architects, we often explain to the owners that buildings gain character as they age. But a lot of them do not want any patina on the façade nowadays.

**Ueli Schweizer:** Yes, users throughout the world want as little upkeep on a building as possible.

**Marcella Wenger-Di Gabrielle:** It is probably a symptom of our consumer society that people continually desire ever more flawless things. Therefore, it is pre-programmed that at some point one will suffocate in the things that don't age and never die.

**Carlos Martinez:** Color is an important element in architecture. I find it beautiful that architecture is more colorful than it was twenty years ago. There are basically two things relevant to coloring: one, location, and the other, the function of the building.

**Marcella Wenger-Di Gabrielle:** Colors are sensual and their effect can be described with terms similar to those used for noises and sounds. If we could hear colors, then there would certainly be fewer shrill and loud ones. The softer a hue is, the closer one listens, and is therefore better able to recognize the fine nuances.

**How do you find the right color? How do you decide within the spectrum from gaudy to demure? And how much color can specific places handle?**

**Rose-Marie Spoerli:** The appropriate colors can be found by looking carefully at the architecture: the building form, materiality, surroundings, and purpose of the structure. It is possible to camouflage something, make it almost disappear, or to design it in a striking way, through to emphasizing a solitary structure. I often first decide whether a building should be light, medium, or dark before choosing the actual colors.



**Marcella Wenger-Di Gabrielle:** Striking colors and contrasts can take on disproportionate importance and become disturbing depending on the context. In a row of seven white buildings, a single black one in between is like a missing tooth, and among seven sandstone green buildings, a bright red one seems like a drumbeat. Searching convulsively for what is agreeable, one orients on popular trends and substantiates the supposed originality even more through its indestructibility. However, that which is flawless is foreseeable and accordingly, short lived. A dash of friction and disturbance is necessary, but of course, composed with care!

**What strategies do you apply for finding the appropriate colors for a building project? And how do you harmonize multiple color tones?**

**Marcella Wenger-Di Gabrielle:** In my opinion, dealing responsibly with color in the outside space is most important. Assuming that color has a sound, then it is important that the person—the architect and the color designer—master the instrument that generates the sound and are not playing it for the first time, as we are speaking about a public appearance. Apart from that, it is important that someone tunes the instrument and makes sure that it sounds good. In addition, I think that subjectivity has no business in designing the color of exterior spaces. My favorite color is not relevant in architecture.

**Carlos Martinez:** There are rules stipulating what colors are right. For that reason, there are professionals and courses in which one teaches and learns the correct ways of dealing with the issue. Although, it's true, there are no simple recipes.

**Marcella Wenger-Di Gabrielle:** There are no prohibitions and there also shouldn't be any set of rules.

**Carlos Martinez:** The decision of how colorful a design should be must be made early on. For us, color cannot be added retrospectively, added on to the finished project

design. Otherwise, it would be purely cosmetic; in a design process the question of the building's effect is posed right from the start. Color plays a decisive role in this. It is also important with regard to corporate identity and marketing, especially with commercial buildings.

**Rose-Marie Spoerli:** I often have the experience that certain architects already know in the first draft of a design, for example, that they want cement composite cladding with a pronounced horizontal subdivision in precisely this or that tone. When the color is already defining, then my work is focused on a further important aspect of color design, namely, the fine tuning of the individual elements and building components. In this case, my task is to intervene in a way that is complementary and harmonious.

**Marcella Wenger-Di Gabrielle:** The colors should be adaptable in a design process. Otherwise, the two components, architecture and color, threaten to come undone.

**Ueli Schweizer:** Yet there is also monochrome architecture that fascinates me, which I find just as interesting as multicolored. Through this, other design elements are given more emphasis, for example, on a façade cladding with panels, the arrangement of joints, the combination of different formats, proportions, or the integration of the roof. My heart is moved by a result with expressive power, in which there is an interplay of material and color.

**Carlos Martinez:** Color is the most visually powerful element. Color breaks form.

**Marcella Wenger-Di Gabrielle:** ... or it can strengthen architecture.

**Carlos Martinez:** Yes. A lot of people who choose a random color for their house, are not at all aware of its power and effect. However, architects and clients are beginning to become ever more aware of the significance of coloring.

**Marcella Wenger-Di Gabrielle:** Also interesting is the issue of the ideal sought in each case. One of the worst is what many believe is particularly reserved: white. However, white along with yellow, are among the most striking colors on buildings.



### What are your prognoses and desires for the future?

**Marcella Wenger-Di Gabrielle:** My wish of a good surface material in architecture is that the surface does not appear to be something, but instead, represents the material. For example, if it is cement composite one should perceive cement composite. It becomes darker when it rains, and light again when it dries. Nowadays, the finishes of many building materials are highly developed and “highly intelligent.” One must view this starting situation as a challenge and commence the work just as contemplatively and intelligently.

**Rose-Marie Spoerli:** For me, the addressed “true” materiality is also very important. I believe that every material has its own color. A wool carpet looks different than a synthetic carpet, even when we are speaking about a red carpet in both cases. It is possible to furnish almost everything with any color desired nowadays. But there are colors that fit particularly well—or not at all—to a certain material.

**Marcella Wenger-Di Gabrielle:** It can also occur that the materials selected are deliberately alienated by means of coloring. The designer can play with deceiving the senses. However, he must always ask, what are the benefits of having something look like something other than it is?

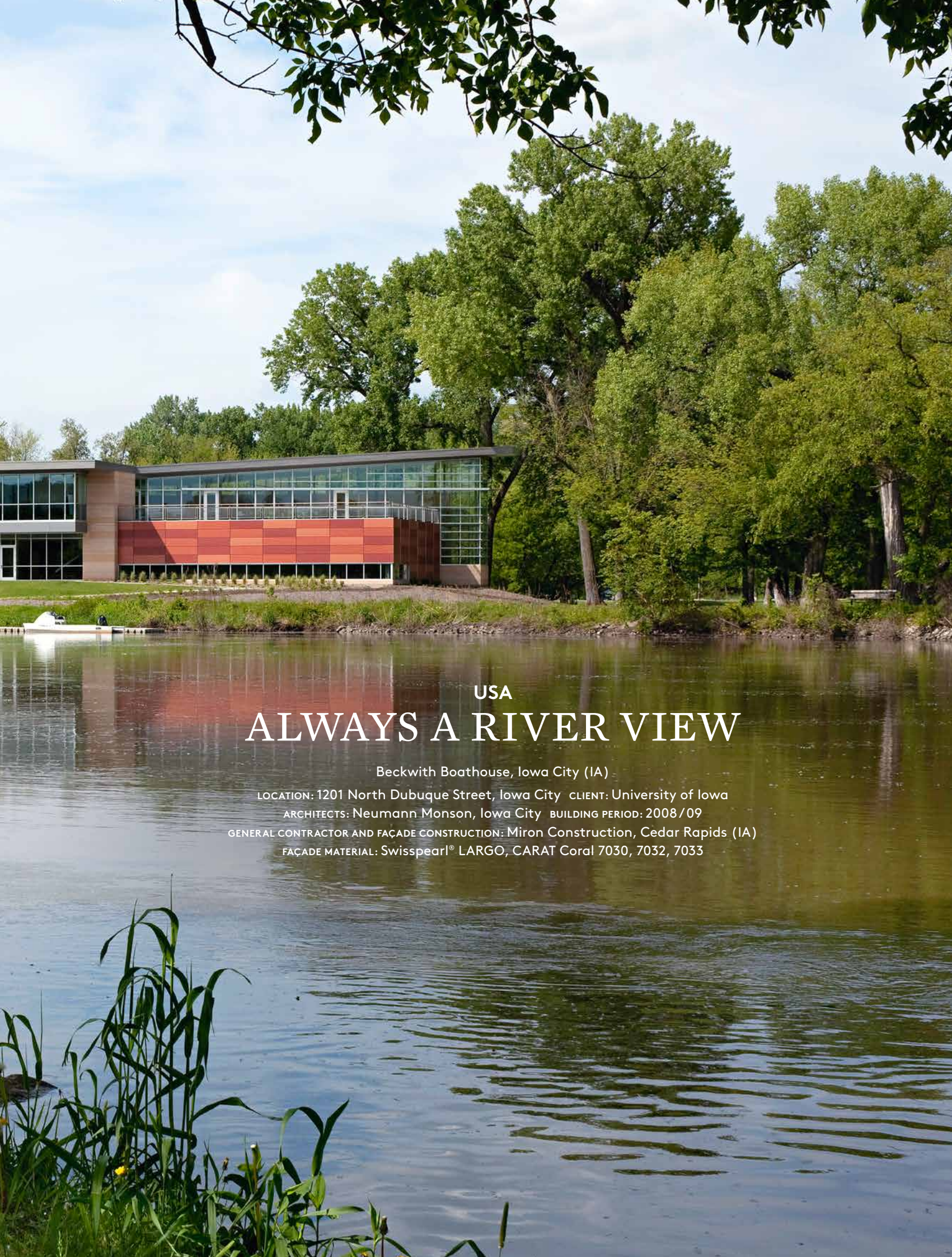
**Ueli Schweizer:** For us, it is important to combine color with the material’s authenticity. For us as manufacturers of a building product that wants to orient foresightedly on changing markets, this is an exciting challenge.

**Marcella Wenger-Di Gabrielle:** In my opinion, we as color designers, but also the planners and the manufacturers of building materials, are obliged to give customers not what they want, but what they need.

**Thank you all for the inspiring conversation!**







USA

# ALWAYS A RIVER VIEW

Beckwith Boathouse, Iowa City (IA)

LOCATION: 1201 North Dubuque Street, Iowa City CLIENT: University of Iowa

ARCHITECTS: Neumann Monson, Iowa City BUILDING PERIOD: 2008/09

GENERAL CONTRACTOR AND FAÇADE CONSTRUCTION: Miron Construction, Cedar Rapids (IA)

FAÇADE MATERIAL: Swisspearl® LARGO, CARAT Coral 7030, 7032, 7033



The ground level of the boathouse is parallel to the water's edge, providing direct river access for boats and crew.

Iowa-based Neumann Monson Architects were commissioned by Iowa University to design a new boathouse to accommodate the women's rowing team. Positioned strategically on the curve of the Iowa River, the siting gives the boathouse a vantage point from where boats can be viewed gliding at speed through the water left and right up the sweep of the river.

ANNA ROOS Rowing is a prestigious sport for any university; therefore universities invest heavily in the support and infrastructure of their teams. Any rowing team worth their salt has a dedicated boathouse from where the team's rigorous training can be concentrated. This is the *raison d'être* of the new Beckwith Boathouse: to accommodate and support the women's rowing team in their training in order to give them the best chance of achieving success when competing against the teams of rival universities.

#### Tough training

An approximately fifty-meter-long structure stretches horizontally along the riverside site. The eastern, glazed façade is wedged at an acute angle to the western façade creating a generous outdoor terrace where the athletes can train outdoors under the majestic cottonwood trees and enjoy views of the river. When the students train indoors they can still enjoy reflected views of the river through the mirrors mounted along the back wall. Bright, airy interiors with floor-to-ceiling openings bring the river vista into the interiors. On ground level, state-of-the-art rowing tanks enable the women to continue their demanding training throughout the year. A paved outdoor area on the riverbank is a launch pad for the boats or "sculls." Due to the sheer scale of the sculls, the storage, training, and repair spaces have to be large enough to be able to accommodate their excessive dimensions. An eight-person scull can be as long as twenty meters!

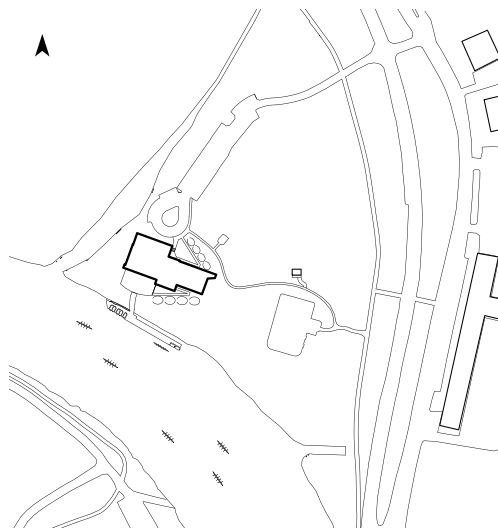
#### Ship-like

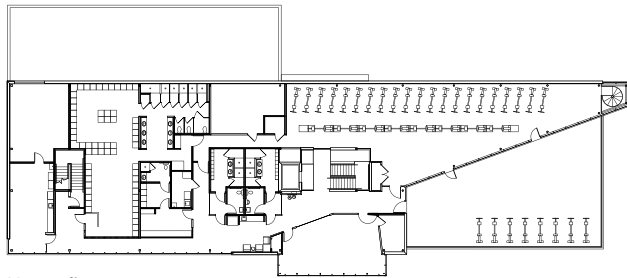
On the western elevation, clerestory glass windows naturally ventilate the upper floor. The glazing wraps around a planar wall clad with Swisspearl panels. Deep, somewhat heavy eaves overhang on the southeast façade facing the water shading the glazed façade whilst allowing oblique winter sunrays to enter. The dynamic roof lifts up towards the east and is reminiscent of the proud prow of a ship floating through the water. A spiral staircase linking the two levels is set in the crook of the eastern façade surrounded on three sides by

glass. The transparency of the building here; the ability to see right through the building, gives the boathouse an orientation and forward thrust. Elongated, sweeping planes on the western elevation also lend the building a feeling of movement.

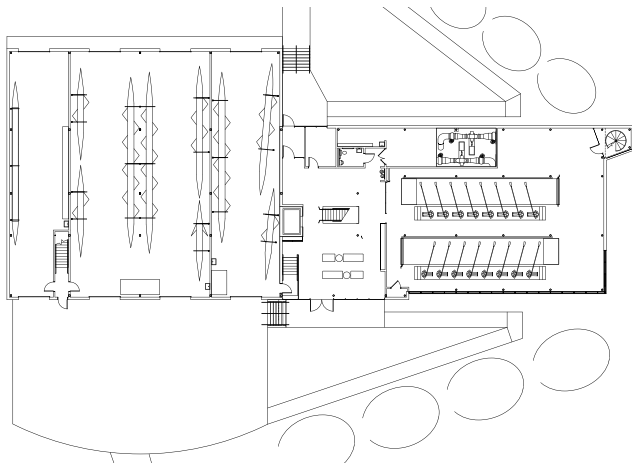
#### Coral colors

The architects have added a splash of color to the building with their choice of three shades of deep red "Coral" Swisspearl panels, which compliment the other palette of materials: glass and stone cladding. A plinth is created by a band of stone cladding to the west whilst, where the building dips down to meet the river, the stone cladding extends up the entire height of the first floor, above which there is a change of material to the slender, horizontal Swisspearl panels in russet shades. The interplay of the three materials sliding across one another is another device the architects have used to create a sense of movement and dynamics. Thanks to the incorporation of a wide range of sustainable features, the boathouse has been awarded a LEED Gold-rating—a first for Iowa University.





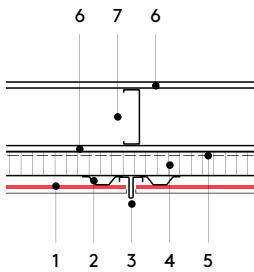
Upper floor



First floor 1:750

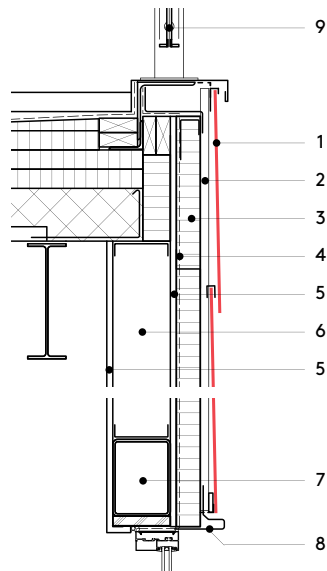
“The colorful façades provide an energetic complement to the surrounding river valley.”

Neumann Monson Architects



Horizontal section 1:20

- 1 Swisspearl® LARGO panel 8 mm
- 2 ventilation cavity, panel support profile
- 3 metal trim
- 4 thermal insulation
- 5 vapour barrier
- 6 building board
- 7 metal stud framing



Vertical section 1:20

- 1 Swisspearl® LARGO panel 8 mm
- 2 ventilation cavity, panel support profile
- 3 thermal insulation
- 4 vapor barrier
- 5 building board
- 6 metal stud framing
- 7 steel tube
- 8 metal trim
- 9 balustrade



## NORWAY

# SIGNATURE BUILDING

Multipurpose Hall, Lovund

LOCATION: Lovund CLIENT: Municipality of Lurøy

ARCHITECTS: Stein Hamre Arkitektkontor AS, Mo i Rana (associate Trine Jamtli) BUILDING PERIOD: 2013/14

GENERAL CONTRACTOR AND FAÇADE CONSTRUCTION: Momek Civil AS, Mo i Rana

FAÇADE MATERIAL: Swisspearl® LARGO, CARAT Black Opal 7021, 7025, Coral 7031, Azurite 7040, 7043, Jade 7052, Amber 7083; REFLEX Silver 9000, Platinum 9020

**Offering communal facilities such as a stage, fitness center, and youth club, this multipurpose hall provides a new focal point for a small island community in the Norwegian Sea. The architects devised a stepped section and eye-catching multicolored Swisspearl façades for the building, which despite its size sits comfortably among the small-scale timber structures of the existing village.**

**PATRICK ZAMARIÀN** Lovund is a small island settlement located just south of the Arctic Circle and roughly thirty kilometers off the west coast of mainland Norway. Populated by less than five hundred inhabitants, the village consists of residential bungalows and two-story houses along with a church, a small number of shops, and a hotel. In 2013, the municipal government commissioned Stein Hamre Arkitektkontor to design a new multipurpose hall, envisaged as a unifying structure and focal point for the community. Comprising a double-height sports and gathering space as well as a number of additional facilities, the scale of the new building was inevitably going to be at odds with the neighboring low-key timber structures. The design approach sought to balance the conflicting priorities of emphasizing the public character of the building while preventing it from becoming an alien object within its village setting.

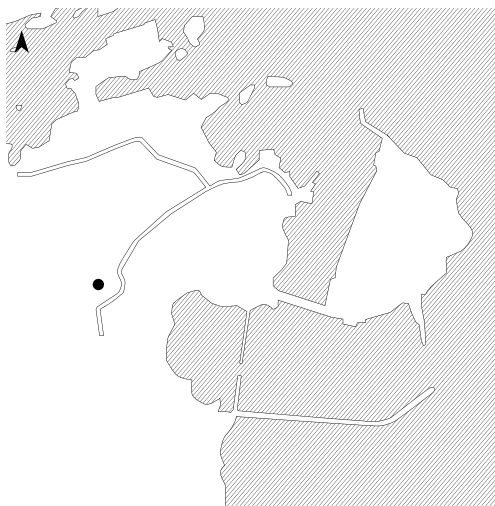
### Stepped section

The architects applied two strategies to integrate the new building within the local vernacular, the first of which concerns its siting and massing. The hall is set against the backdrop of a visually imposing rock and partially concealed by some of the existing buildings, including a single-story school building to which it links via an enclosed passageway. Moreover, the architects devised a stepped section by dividing the program into a main double-height volume and a single-story annex. The former contains a stage as well as a gym, which can be partitioned into two smaller units if required. The ground floor to one side of the gym houses locker rooms, a

school kitchen, and a glass-fronted entrance lobby; accessed from this vestibule, the upper level accommodates a fitness center and a youth club as well as the technical room and storage space. The annex to the other side of the hall, which holds additional storage rooms, aligns in height with the adjoining buildings, thus mediating between them and the main volume of the new village hall.

### Vivid coloring

A second strategy employed to mitigate the contrast between new and old involves the façades. True to its designation as a signature building for the island community, the colorful paneling advertises its public function—yet, it does not do so at the expense of the existing village. The architects developed a pattern of vertically arranged Swisspearl panels whose dimensions echo the timber cladding of the neighboring buildings. The design of the lower parts is restrained and limited to panels in black, gray, and taupe, which harmonize with the slightly protruding black aluminum frames encasing the vertical window slits. In contrast, the upper parts of the main volume exhibit an eye-catching composition of panels whose wide array of colors reflects the diversity of activities taking place within the building. Inspired by the colors of the adjacent buildings and arranged in contrasting vertical stripes, the paneling, when seen from a distance, dissolves the closed wall surfaces and lets them blend with their surroundings.







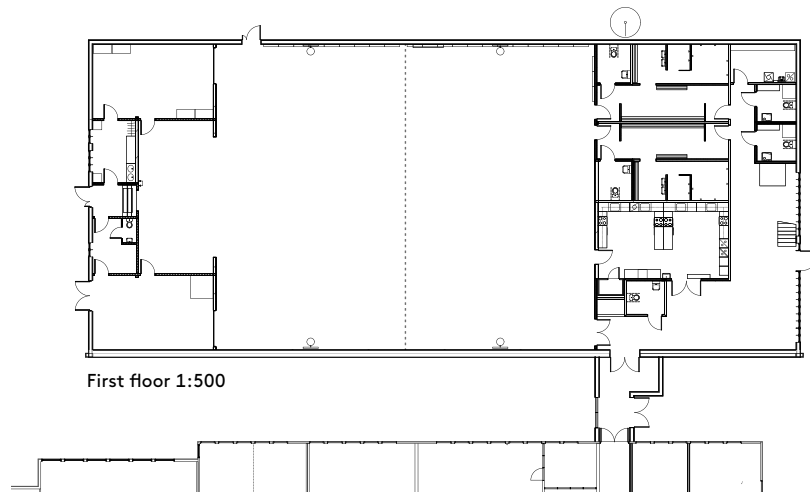
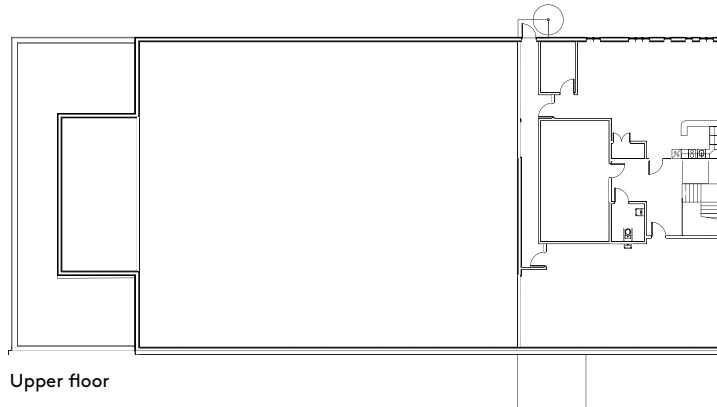


“The project culminates in a signature building that represents the optimism that is so present in Lovund.”

Trine Jamtli, Stein Hamre Arkitektkontor AS

The architects devised a stepped section by dividing the program into a main double-height volume and a single-story annex. The former contains the main functions of the building, while the latter provides storage space.





“The building stands as an attraction —  
both a local amenity and a symbol  
externally.”

Trine Jamtli, Stein Hamre Arkitektkontor AS







## AUSTRALIA

# COLORING IDENTITY

PEGS Middle Boys School, Melbourne

LOCATION: Keilor East, Melbourne CLIENT: Penleigh and Essendon Grammar School (PEGS), Moonee Ponds

ARCHITECTS: McBride Charles Ryan, Prahran BUILDING PERIOD: 2013

GENERAL CONTRACTOR AND FAÇADE CONSTRUCTION: Building Engineering, West Melbourne

FAÇADE MATERIAL: Swisspearl® LARGO, CARAT Onyx 7099, Black Opal 7020, 7024; REFLEX Platinum 9020, Black Velvet 9221, Cobalt Blue 9241 (concealed attachment Sigma 8)



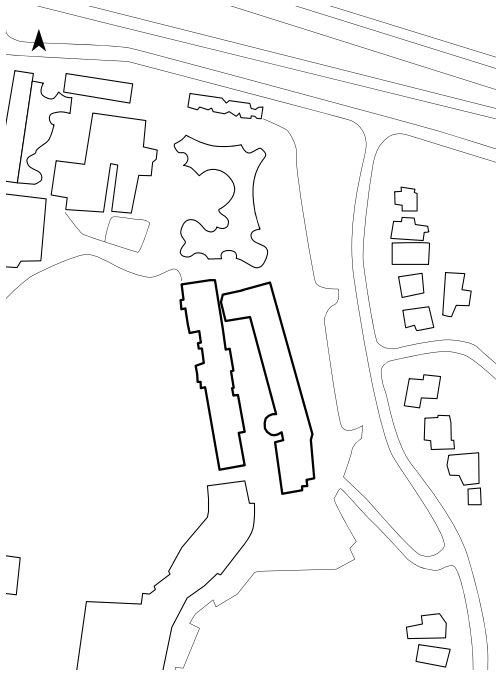
**For the design of the Penleigh and Essendon Grammar School campus in Melbourne, the architects favored distinct identities for the three principal sites. They differentiated each campus by using a play of color daubs in order to create three small and fiercely independent towns strung together by proximity.**

ANNA ROOS How can one prevent a façade of such an extraordinary length as the one of Penleigh and Essendon Middle School from being dull and repetitive? McBride Charles Ryan, the design architects, have risen to the challenge with their school building in Melbourne by using a play of color daubs using Swisspearl panels to create a kind of pixelated surface in shades of grey, dusty blue, and white on the street-facing façade. As in a painting, the white fields create accents and highlights on the façade. Stretched along the entire length are two strips of glazing that create a fissure of reflected sky, also creating depth and enlivening what might otherwise

have been a monotonous elevation. Besides color, a further device the architects have used to reduce the scale of the building is to prize open the façade at the point of entry from the parking area. A rock-like mass of concrete thrusts its way from beneath the façade plane demarcating the entry to the school. The manner in which the landscaping has been manipulated is effective. An embankment rises up to meet the façade, anchoring the building into its site.

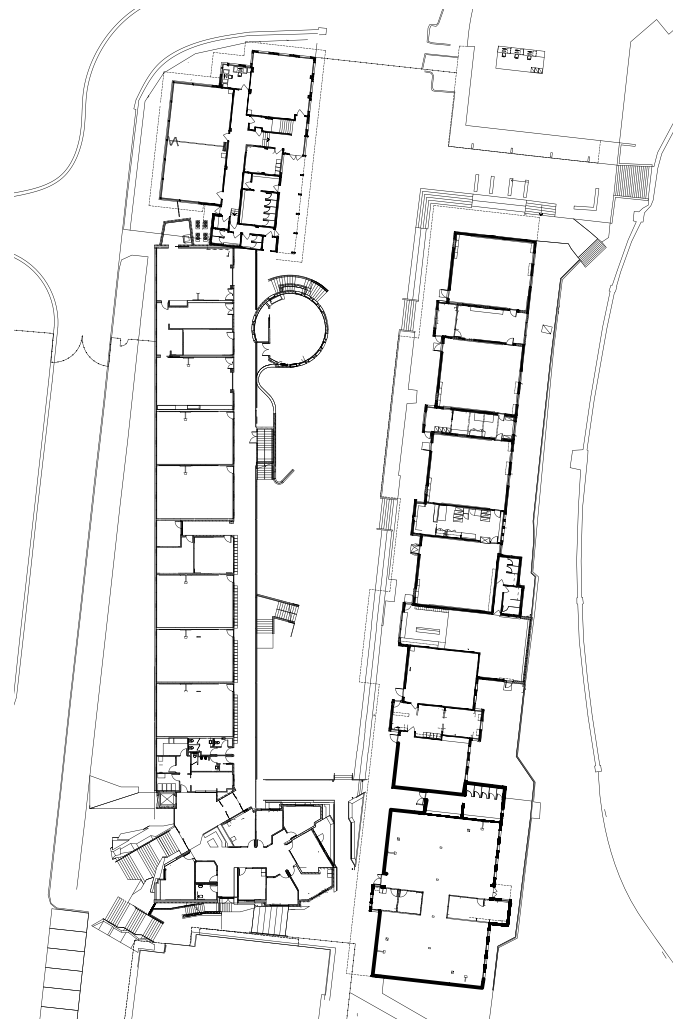
#### **Checkerboard walkways**

If one rises through the entry and moves through the building to the rear façade, one



“The design emerged:  
simple, distinct, and rational.”

McBride Charles Ryan Architects



First floor 1:1000

would be surprised to find a completely different color articulation. Here, panels of black and acid green alternate diagonally in a checkerboard pattern that extends all the way from the walls to the delicate balustrades, slender supporting columns, and deep eaves. At the head of the building, leading off the entry, is a cluster of irregular offices crowded around a circulation zone. Fifteen classrooms on two levels are accessed by covered walkways that also serve to shade the generous windows; allowing in light and views without glare. Artificial lighting is presumably hardly necessary in the classrooms as window openings are present on both eastern and western façades. Melbourne is known for its inclement, unpredictable weather, thus the covered walkways serve as weather protection from both rain and sun. The upper level classrooms are able to access the out-

door play area via three sets of stairs that cascade down along the open walkway. An elaborate, folded glazed-brick surface sweeps dramatically along the stair and around a circular art room, pulling up on ground level to create a secondary entry into the building. The alternating small-format bricks in blue and white diagonal bands are reminiscent of the construction of Lego blocks, perhaps apt for a school. Though one could argue that the introduction of another material here detracts from the overall materiality of the façades: most of the other façades are clad in Swisspearl panels.

#### Separate identity

No doubt, the articulation and strong use of color on the elevations of this middle school will give it a clear identity and set it apart from the other architecturally expres-

sive ensemble of buildings that comprise the three school campuses of Penleigh and EsSENDON. Thus the architects have fulfilled their initial objective of creating a distinct identity for the school.





Combining Swisspearl panels with other colored materials lends the playground vitality and drive.







SWITZERLAND  
IN THE MEADOW ON THE RIVER

Residential complex Aarenau, Aarau

LOCATION: Aarenastrasse 21–31, Aarau CLIENT: Allgemeine Wohnbaugenossenschaft Aarau und Umgebung (ABAU), Aarau

ARCHITECTS: Metron AG, Brugg COLOR CONSULTING: Ann Hagnauer, con color, Brugg BUILDING PERIOD: 2013/14

FAÇADE CONSTRUCTION: Neba-Therm AG, Olten FAÇADE MATERIAL: Swisspearl® LARGO, NOBILIS Green N 513, Green N 515,  
Yellow N 611, Yellow N 612, Beige N 811, Grey N 214



**For Metron Architects, the attractive location in a meadow landscape was the clincher to visually embed their part of the Aarenau superstructure in the surroundings. Various shades of green in the façade take up the coloring of the landscape. Through the vertical cement composite strips in six color tones, the three multi-family buildings gain a more powerful connection and the residential area a stronger, definitive expression.**

MICHAEL HANAK Aarau, the small city in the Swiss midlands, can further expand only in the floodplains on the city's eastern border. The design plans for the final major building site reserves in the Scheibenschachen quarter emerged from an urban planning competition that had already taken place twenty years earlier. In these plans, ENF Architekten established an alternation of long building sites and green strips perpendicular to the centered access road. A new, exemplary city district, which offers an attractive contribution to the city, is meant to emerge step-by-step.

The project by Metron Architects resulted from the investor competition 2009/10 called by the city council for building site 4. The residential complex completed in 2014 comprises three structures: two elongated rows and a short head building, which surround the common courtyard space. A broad ramp leads from the bus station to the inner courtyard, where community life is concentrated. All paths cross here, green islands and long wooden benches invite one to spend some time. The six building entrances, a multipurpose room, and narrow kitchen balconies are also oriented on the courtyard, while the broad livingroom balconies open to the surrounding parks. The complex combines generous free spaces, urban qualities, and clear architectural forms. It creates sites of encounter and possibilities for retreat.

#### **Inexpensive and social**

A total of forty-two apartments with two and a half to five and a half rooms are distributed across the three full stories and the attached lofts. Additionally, a common space is available to residents. Inexpensive apartments and possibilities for social contact were just as important to the cooperative client and the architects as the minimal energy standard and economic, solid construction.

All buildings are furnished with rear-ventilated façades. The façade cladding is subdivided into narrow, story-high strips between the balconies, which protrude on all longitudinal sides, and the roof ends on the narrow sides. The exposed concrete thus

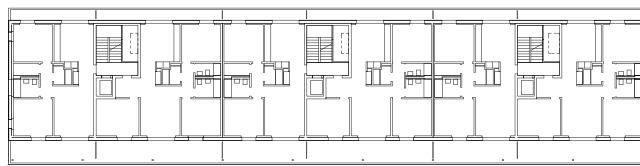
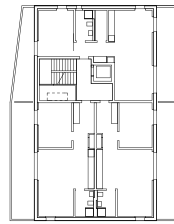
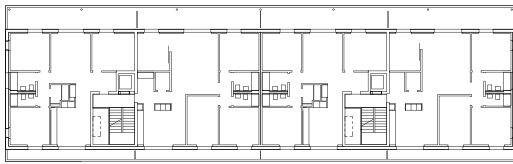
structures the volume horizontally; and the cement composite, vertically. In doing so, the cement composite panels reveal six different color tones and five different widths. The standard measurement of 122 centimeters, contingent on production, was cut in strips of 24-, 30-, 40-, 60-, and 80-centimeter widths, to allow for as little cutting waste as possible. The shades were selected from the color palette of the manufacturing company: two shades of green, two of yellow, one beige, and one gray.

#### **Harmonious integration**

The color concept is based on the strategy of integrating the structures into the surroundings. The residential complex integrates harmoniously into the meadow landscape with its green fields and woods, and the flow of the river. The yellowish green corresponds to the blossoms and the bleached leaves of some of the plants. The bluish green recalls the Aare water flowing by. And the beige is close to the shade of the pebbles in the area. No system can be recognized in terms of the distribution and succession of colors and widths in the finished building. Supposedly, it all happened by chance. The architects, did, however, control the surface percentage of the shades, which they determined on the model at a scale of one to five.

At the end of a site visit, project head Martin Köferli mentioned his personal satisfaction with one effect of the varied multi-coloring: the paraphernalia placed on the balconies does not disturb the overall picture as the façades prevail in our awareness due to their colorfulness. The architects are pleased that the buildings can tolerate the splashes of color from the individual inhabitants.

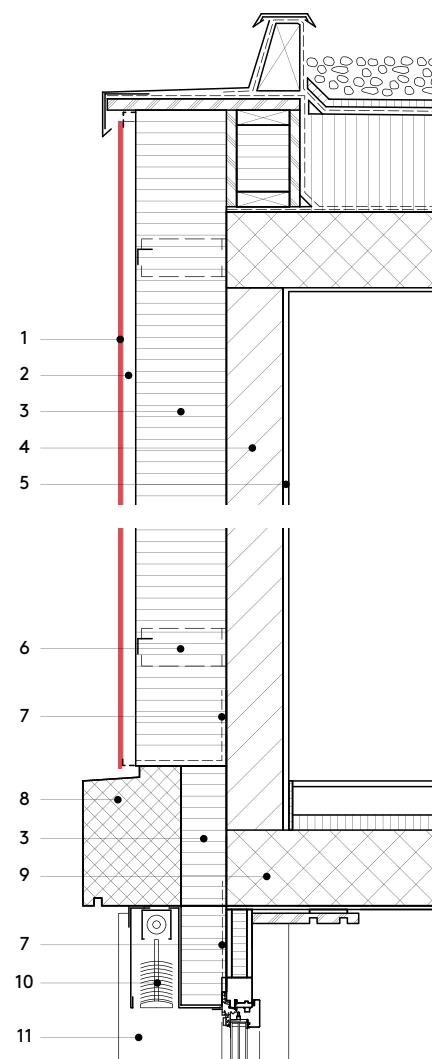




Upper floor 1:750

“The appearance is shaped by the playfully implemented façade panels. The choreography of the colors develops from the fluctuating green-blue-gray earthy tones of the surrounding landscape.”

Martin Köferli, Metron AG



Vertical section 1:20

- 1 Swisspearl® LARGO panel 8 mm
- 2 ventilation cavity, vertical timber batten with sealing sheeting
- 3 thermal insulation
- 4 brickwork
- 5 plaster
- 6 bracket
- 7 waterproofing
- 8 prefabricated concrete
- 9 concrete
- 10 sun blinds
- 11 window frame



The perforations in the cement composite panels in front of the bathrooms at the ends of the building let air and light enter without disturbing the appearance of the façade.





Bob Gysin & Partner BGP Architects have translated the balancing act between “self determination and private sphere” and “integration and community” in an architectural concept. Playing a central role are solid-colored façade panels in various tones of red as well as continuous balustrade bands and perforated balcony railings.



## SWITZERLAND

# COMPLEMENTARY

Old-age home Köschenrüti, Zurich-Seebach

LOCATION: Traktorenstrasse, Zurich CLIENT: SAW Stiftung Alterswohnungen der Stadt Zürich

ARCHITECTS: Bob Gysin & Partner BGP, Zurich BUILDING PERIOD: 2012–2014

FAÇADE CONSTRUCTION: Robert Spleiss AG, Küsnacht

FAÇADE MATERIAL: Swisspearl® LARGO, CARAT Coral 7030; PLANEA Red P 313 and P 315;  
NOBILIS Grey N 215 (balcony)



**RAHEL HARTMANN SCHWEIZER** The grounds of the Köschenrüti old-age home mark the transition between the Seebacher residential neighborhood and the landscape, which stretches from Chatzenbach through to Büsisee and is bordered by the highway. It is within the sphere of influence of the Katzenbach master plan, which upgrades the landscape area along this body of water. Bob Gysin & Partner BGP Architects reacted to this by integrating the core message of the master plan into their concept—intensification of the formative succession from the open landscape through to a park-like stretch of green in the neighborhood. Testifying to

this is the natural design of the green space between their buildings. They strive for urban planning integration with two angular building volumes that take up the opposing directions of the row-construction in the northeast and south.

### **Individuality versus community**

On the one hand, the dominating outdoor qualities emerge through the slightly asymmetrical positioning of the two angles. They encompass both a “village square” for common use, as well as intimate zones for retreat. On the other hand, the façades are bent several times, which prevents a monotone devel-

opment and better shields the altogether ninety apartments from one another.

The architects have hereby translated the guidelines of the Stiftung Alterswohnungen Zürich into a coherent architectural composition. The concept and construction of the complex should guarantee residents both a high degree of individuality as well as offer them the possibility for communal activities.

### **Unity versus diversity**

The façades are suitably designed and show the unity in diversity. All of the closed areas are clad with solid-colored Carat façade panels in coral red, red, and muted orange,



Ruby, red, and muted orange at different intervals give the façade rhythm. They do not follow any mathematical rhythm, but rather, the principle of contingency, whereby panels of the same color never collide.



which lends the buildings a uniform structure. But the architects have varied the number of panels and succession of colors on each, so that the cladding “dances” in the rhythm of the meandering development. The balustrade bands provide borders to prevent them from “overflowing.” The glazed finishing characteristic of the Nobilis panels lends them a lighter texture, thus removing their severity. Their perforation in the area of the balconies additionally eases the uniformity.

#### **Building versus surroundings**

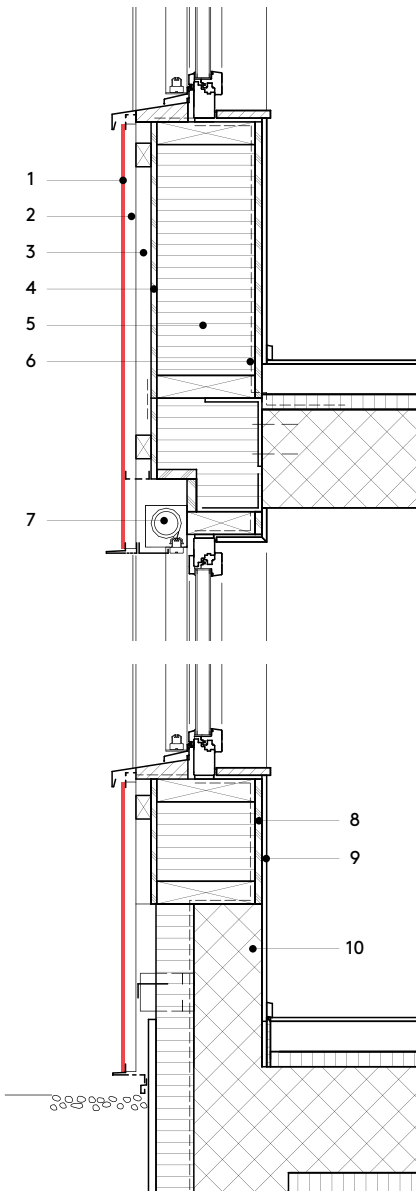
Joining the complementarity of interval and line is the supplementary color mood of the red tones of the façade and the surrounding green space. Inside, this is repeated in a nuanced form, whereby individual accents of the exterior colors combine with those in green-blue.

Also complementary is the connection between practical and aesthetic considerations. The architects thus aimed at an economical application, or a reduction of offcuts and therefore chose the maximum height and width for the balustrade panels. With that, however, they also achieved a strong band effect. The perforation provides better lighting of the sleeping spaces behind it, and simultaneously generates a stimulating play of shadows. With their ecologically-sound qualities and their color, the panels also refer to the rural context.

“The materials used are meant to fulfill high demands in terms of artistic quality and durability, and also minimize health and environmental effects.”

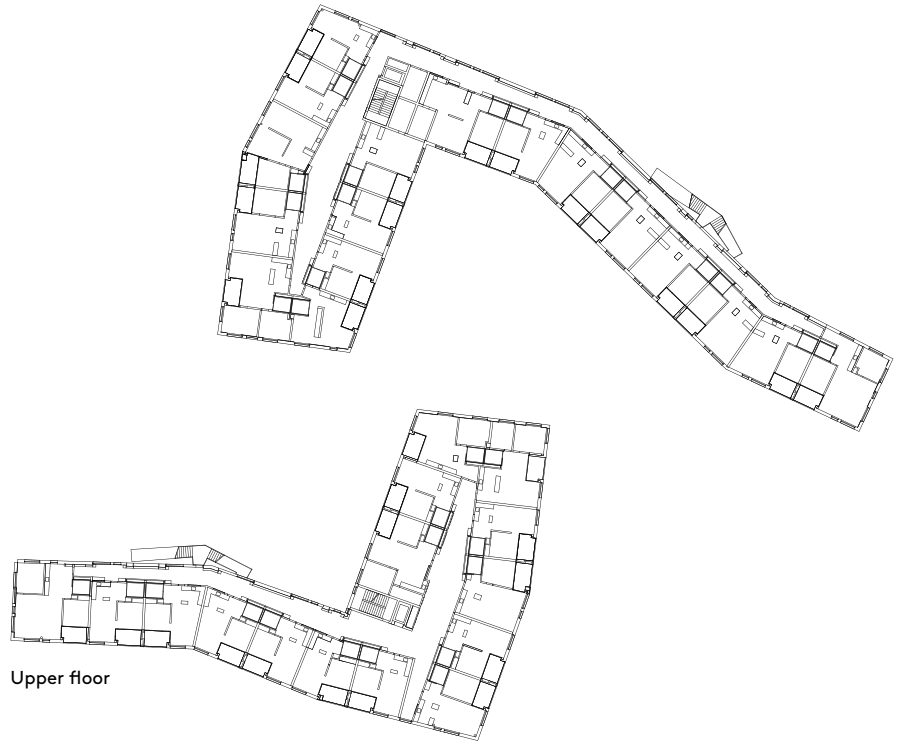
Bob Gysin & Partner BGP





Vertical section 1:20

- 1 Swisspearl® LARGO panel 8 mm
- 2 ventilation cavity, vertical timber batten
- 3 horizontal timber batten
- 4 wood fiberboard
- 5 thermal insulation, mineral wool
- 6 vapor barrier
- 7 canvas sun blind
- 8 glass mat gypsum board
- 9 gypsum plaster board
- 10 concrete



First floor 1:1000



## SWITZERLAND KNIT, TRÈS CHIC

Residential block Widenbüel, Mönchaltorf

LOCATION: Lindhofstrasse 3–7, Sunneweg 5, Mönchaltorf CLIENT: GEWO Züri Ost, Uster

ARCHITECTS: Architektick Tina Arndt & Daniel Fleischmann, together with Scherrer Valentin, Zurich

BUILDING PERIOD: 2012–2014 FAÇADE AND ROOF CONSTRUCTION: Lerch AG, Winterthur

FAÇADE MATERIAL: Swisspearl® SMALL FORMAT, PLANEA Red P 315; NOBILIS Black N 012 and Grey N 212; Swisspearl® LARGO, CARAT Black Opal 7020 ROOF MATERIAL: Swisspearl® INTEGRAL PLAN, NATURA Vulcanit N 6510

**Aviation once opened up the roof for architecture as a fifth façade. Architektick and Scherrer Valentin Architects turn the tables: they transform each of the five façades of the five building volumes of the Widenbüel housing complex in Mönchaltorf into roofscapes. The cladding, composed of detailed, rhombus-shaped façade slates in gray, black, and red oscillates visually between screen matrix and handicraft texture.**

RAHEL HARTMANN SCHWEIZER In 2000, the German architectural office Hild and K stirred attention with a single-family home in Aggstall near Munich: They arranged the formwork of the solid structure, lined with solid brick, relief-like in a rhombus-shaped pattern. The structure makes the façade look like a knitted sweater. Hild and K are part of a generation of architects who take up the theme of clothing—virulent since Gottfried Semper’s famous definition of the textile arts as the precursors of buildings made of stone—in numerous variations.

One variant can be seen in the housing complex in Mönchaltorf. The architects’ desire to emphasize the geometry of the five building volumes—both façades and roofs—was pivotal in stirring interest in the textile aspects of a façade. The uniqueness of the five-cornered outline of the buildings can be seen in the situation plan. They seem to be individual chunks that were blasted off of a huge boulder. As the architects describe the design, “the buildings’ surfaces push away and their corners pull together.” The ground plans develop from inside to outside. Each is oriented around a central stairway, which first leads to entrances, wet rooms, and réduits; then corridor zones, and in the outermost layer, living and sleeping spaces as well as kitchen and balconies.

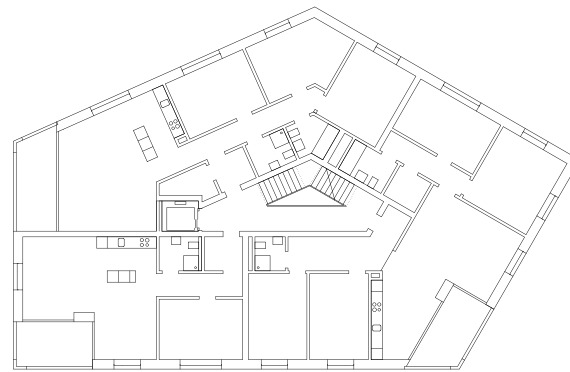
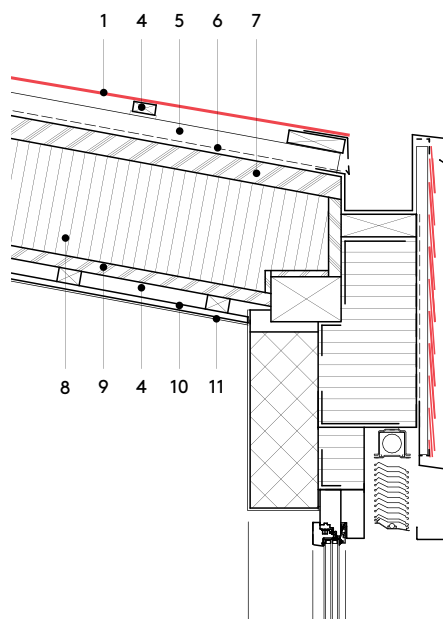
### “All over”

Rather than leaving the blasted monolithic blocks “raw,” the architects covered them in a fine-meshed knitted dress of diamond-shaped, gray, black, and red shingles of cement composite, which stretches seamlessly over all five façades. For the roofs, large-scale panels were used due to the lack

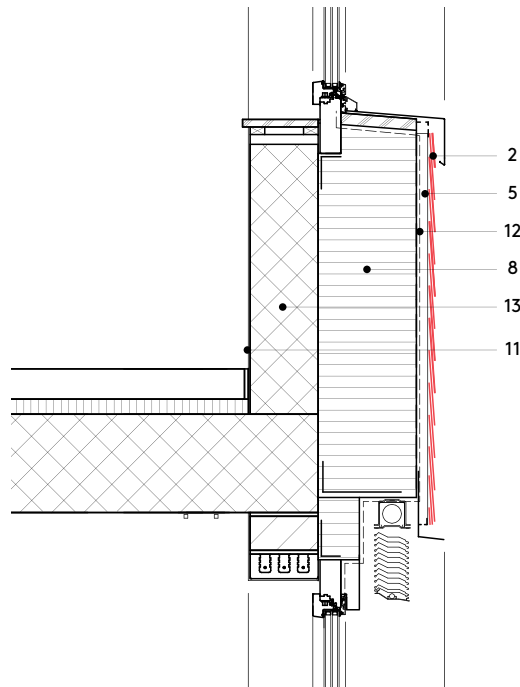
of a sufficient inclination for façade slates. The goal was to emphasize the strong geometry of the building volume. But the effect is subtly differentiated—depending on the angle and incidence of light. At times the comb strips meld to a practically uniform rust-brown tone, other times they generate a moirée effect, letting the eye glide erratically over the flickering grid of a surface that recalls a CRT display. The situation from up close is similar: with one of the two clashing façades always in the bright light and the other in the shadows, the corners appear sharply cut. When there is the same incidence of light on both surfaces, the corners dissolve—which most definitely fits with the “all over” idea. This is intensified even greater as the façade builder inserted the combs with such meticulous precision that the halved elements seem as though they had not been cut, but rather, folded. Moving closer to the façade, revealed is the knit pattern whose relief structure emerges especially through the play of light and shadow. The architects experimented intensively with the colors, and also considered a plethora of tones. “But that would have turned out too wild, which is why we kept the palette concentrated to red, black, and gray,” says Tina Arndt.





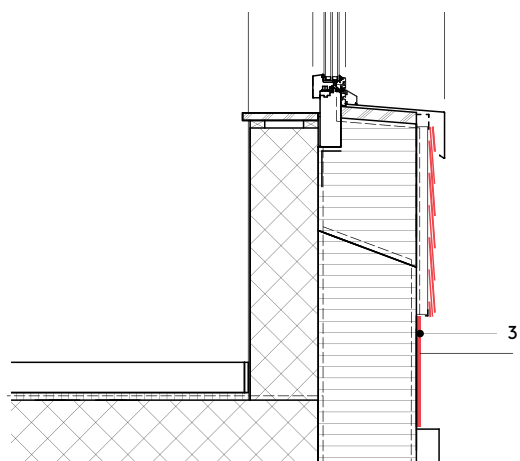


Typical floor plan 1:400



“The arrangement of the buildings is chosen in such a way that the corners occupied by the living spaces grant the apartments different orientations and views.”

Tina Arndt, Architektick



Vertical section 1:20

- 1 Swisspearl® INTEGRAL PLAN panel 8 mm, R-coating (roofing)
- 2 Swisspearl® SMALL FORMAT panel 4 mm, double layer
- 3 Swisspearl® LARGO panel 8 mm
- 4 timber batten
- 5 ventilation cavity, timber batten
- 6 membrane
- 7 soft fiber board
- 8 thermal insulation
- 9 timber board, stiffened
- 10 gypsum plaster board
- 11 plaster
- 12 moisture barrier
- 13 concrete





The buildings A and D have two colors, red and black; on building B, rows of red and gray alternate; and the central building C displays the entire palette of red, black, and gray.





# SLOVENIA

## RUBIK'S CUBE FOR YOUNG AND OLD

Villa, Ljubljana

LOCATION: Bežigrad, Ljubljana ARCHITECTS: Point d.o.o., Ljubljana Šentvid

BUILDING PERIOD: 2010–2012 GENERAL CONTRACTOR: Inženiring Rupena, Ljubljana

FAÇADE CONSTRUCTION: Zaključna dela DEMMO Franc Helbl s.p., Laporje

FAÇADE MATERIAL: Swisspearl® LARGO, CARAT Onyx 7092, Topaz 7072; REFLEX Mystic Brown 9271

The former suburb Bežigrad in Ljubljana, characterized in the 1930s by smaller, single-unit villas and terraced houses, is currently seeing an increase in the construction of individual multi-unit villas and apartment blocks that are radically changing the idealized image of the garden city. This freestanding house by Point is a contemporary interpretation of these freestanding multi-unit villas.

ANNA ROOS The ability to adapt a house over time has at last been recognized as an important aspect of any brief for a domestic house. Lifelong employment is something of the past and people are increasingly working from home and spending the bulk of their time in their private spheres, blurring the lines of work life and private life. Thus, the architects of this detached house have incorporated a self-contained granny flat on the ground floor with its own open plan kitchen, living, dining spaces, study, and double bedroom, which can be rented out separately. On ground level is even the luxurious addition of a small indoor pool, to which both units have access. The integrity of the lower unit is maintained by the fact that one can close off this level with a door, either at the main entry lobby or, alternatively, further back in alignment with the rear wall of the garage. The upper level of the house has three bedrooms, an open plan kitchen dining area, and a study facing the road. A spacious outdoor terrace links this area to the living room on the garden side. Rather than face onto the garden, the main double bedroom faces southwards onto another, smaller outdoor terrace space with greenery.

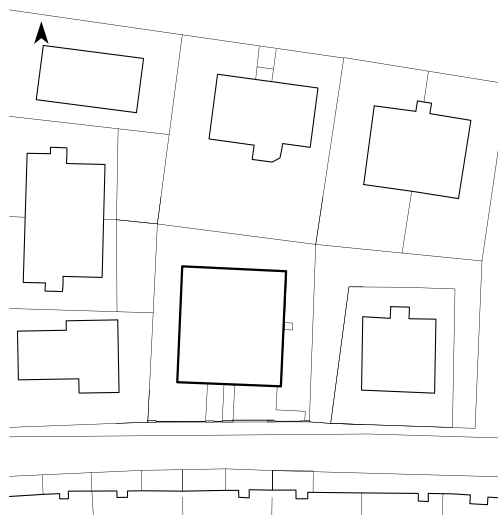
Shifts. Shutters, also made from Swisspearl panels, completely enclose the volume when they are in a closed position to create a uniform, homogenous whole. To break the integrity of the orthogonal box, the architects have cut away a long section on ground level adjoining the parking to create a sheltered entry space and, to the rear, along the entire width of the façade, to create a covered outdoor space that opens onto the garden. The surfaces of both cutaway areas are accentuated by a change of material and texture: here the wall and horizontal overhangs are clad in slender horizontal timber slats; another shade of brown to add to the mix of honey-brown shades on the other façades. The elongated cutaway voids in the lower section of the house are counterbalanced by the voids of two generous terraces on the upper level that can also be closed by means of sliding shutters. Since the eaves line remains intact along the building edge, the presence of the balconies remains hidden from an exterior perspective when the shutters are closed. Elongated horizontal panels on the eastern façade disrupt the pattern of vertical stripes and indicate the depth and height of the garage behind it.

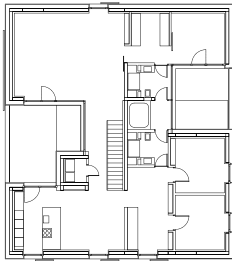
### Close, enclose, shifting shutters

Formally speaking, the house is an abstract, orthogonal volume. As with the other projects showcased in this issue, color plays a central role in the architectural expression of the building's façades. In this instance, the color palette is rather muted: vertical bands of Swisspearl panels in tones of ochre, beige, yellow, and white encircle the entire building on all four façades. POINT took their cue for their color concept from the muted color tones they saw in the surrounding neighborhood. The upper and lower horizontal lines of the vertical windows demarcate two horizontal lines where the color of the panels

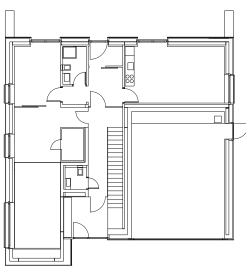
### Balancing act

Overall, the architects have managed to strike a careful balance in the architectural expression of the house, creating a light-hearted, playful appearance without the building looking frivolous. Their aim with the treatment of color was to keep the architecture discreet, blending the house into its environment whilst still creating a contemporary piece of architecture.





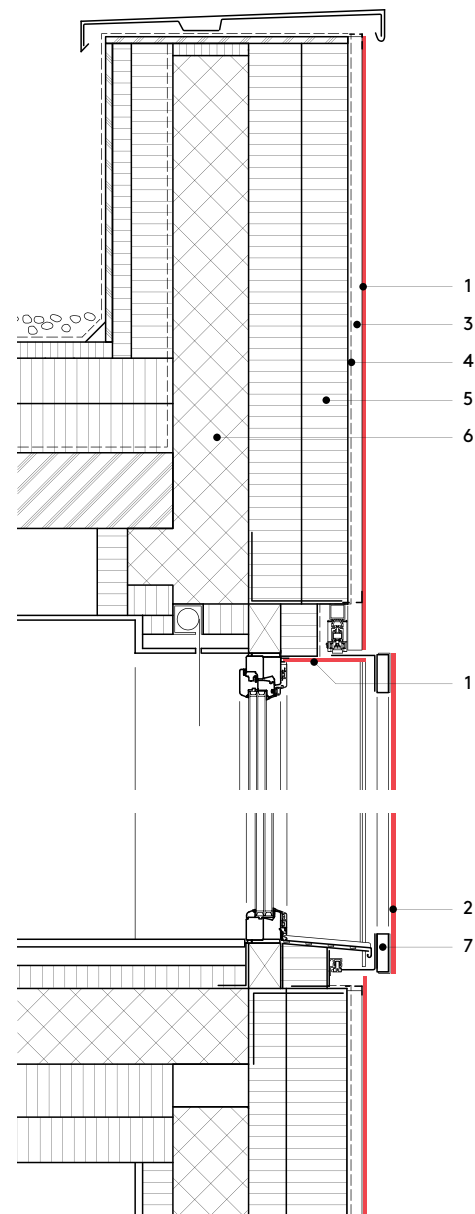
Upper floor



First floor 1:500

“The new residential house interprets and reflects today’s heterogeneously composed space and in a somewhat unusual way integrates into the context of the neighborhood.”

Point d.o.o.



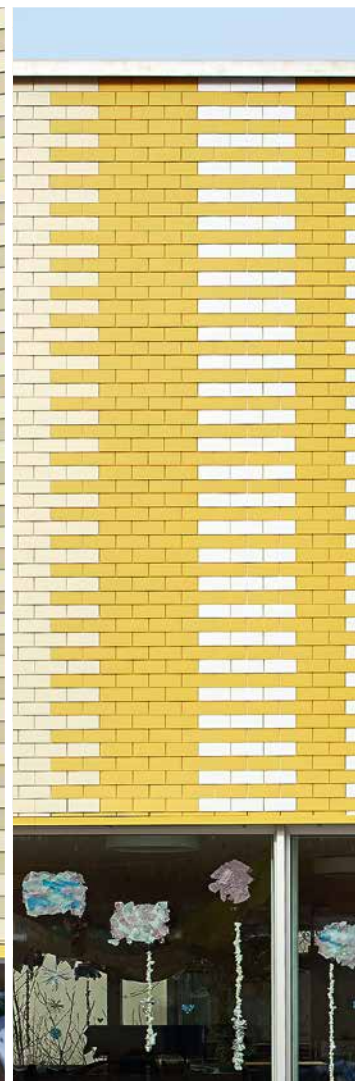
Vertical section 1:20

- 1 Swisspearl® LARGO panel 8 mm
- 2 Swisspearl® LARGO panel 12 mm
- 3 ventilation cavity
- 4 moisture barrier
- 5 thermal insulation
- 6 concrete
- 7 aluminum beam



The theme of sliding shutters continues on the lower, timber-clad, cutout areas.





## SWITZERLAND

# CANARY-YELLOW PLUMAGE

Kindergarten Spittel, Affoltern am Albis

LOCATION: Mühlebergstrasse 34, Affoltern am Albis CLIENT: Primarschule Affoltern am Albis

ARCHITECTS: Illiz Architektur GmbH, Zurich/Vienna GENERAL PLANNER: Pöyry Schweiz AG, Zurich

BUILDING PERIOD: 2013/14 FAÇADE CONSTRUCTION: Markus Schnider, Bonstetten

FAÇADE MATERIAL: Swisspearl® SMALL FORMAT, PLANEA Yellow P 613 and P 616, Beige P 812, White P 113

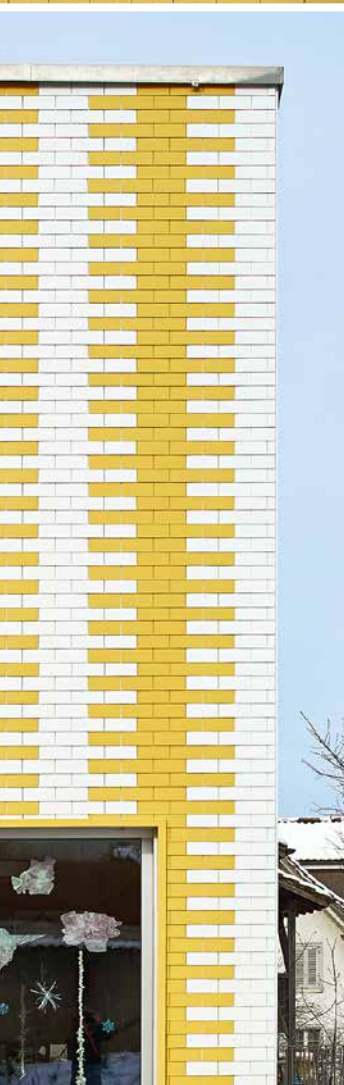
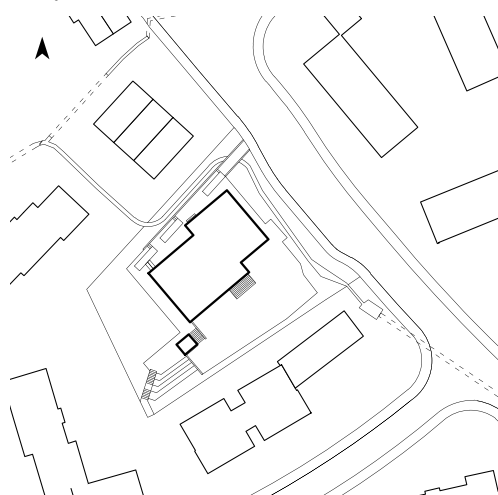
**In the course of renovating and adding a story to a kindergarten built in 1968, the commissioned architects from Büro Illiz lent the structure a powerful presence and identity with an external skin of longitudinal façade tiles in rhythmic colors.**

FRANK PETER JÄGER The Spittel Kindergarten in Affoltern am Albis no longer met the Canton of Zurich's current guidelines for school buildings. These guidelines demand that every main space be assigned a smaller group space. In addition, the building from 1968 did not have sufficient working spaces for the teachers, and no spaces for materials. The one-and-a-half-story structure was furnished with a simple, quite attractive brick façade typical of its era, with exposed concrete ribbons on the attic and window fronts. The substance was well preserved, which is why the client decided to renovate and expand the existing building.

The Büro Illiz Architektur from Zurich and Vienna was awarded the contract. For a number of reasons they decided against tying in directly with the existing architecture. The façade of the building, in particular, should feature a minergie standard, which would have been hardly possible without intervention in the existing façade, and visible intersections between old and new. In the search for a façade solution for the insulated building with one story added, Sabrina Mehlan and Petra Schlömer, the architects responsible for

the project, decided on an external skin of horizontally placed, slender Swisspearl façade shingles in the colors: white, light-gray, beige, and canary yellow.

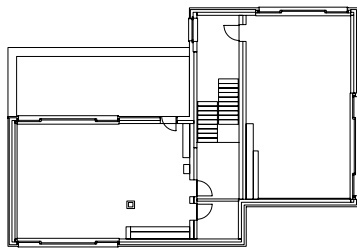
In the extended building, each of the three classrooms has access to an 80-square-meter main space, as well as a group space of 36 square meters. The spaces and internal circulation areas, especially the stairway, seemed aged, cluttered, and somewhat dark. The architects were able to completely change the image of the spaces with surprisingly few interventions, such as a new stairway railing, elegant lighting, and mainly, with color. But rather than yellow and beige, a powerful green and mainly the omnipresent white of the walls, built-in closets, and balustrades define the renovated interior spaces, making them light and airy. In the new upper story, so much use area was created that the



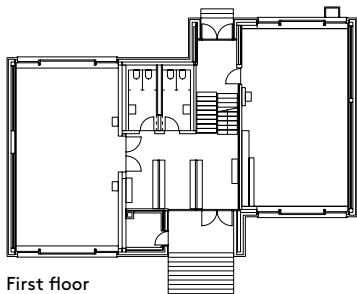
architects were able to expand the two classrooms to the outdoors with a spacious rooftop terrace.

These gaps within the cube fit well into the building's new appearance. Its closed, colorful, shingle texture is broken only by the opening of the entrance; and large, horizontal windows—a building homogeneous in form, heterogeneous in its appearance. Apart from its openings, defining the image of the building are mainly the three different application patterns of the pre-hung slabs.

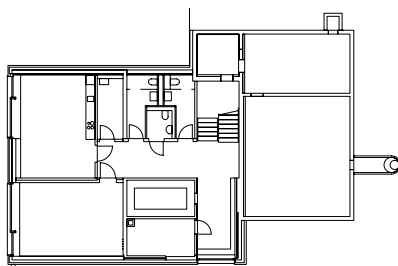
The façade, with its in part flowing color transitions, and in part contrasting juxtaposition, is reminiscent of plumage or the reflection of a lake's waves. Whatever image it may evoke, the architects responsible for the project were concerned with lending the extended building a new suitable identity for the changed cubature and distinguishing it as a public structure within the neighborhood of sober, white plastered residential buildings.



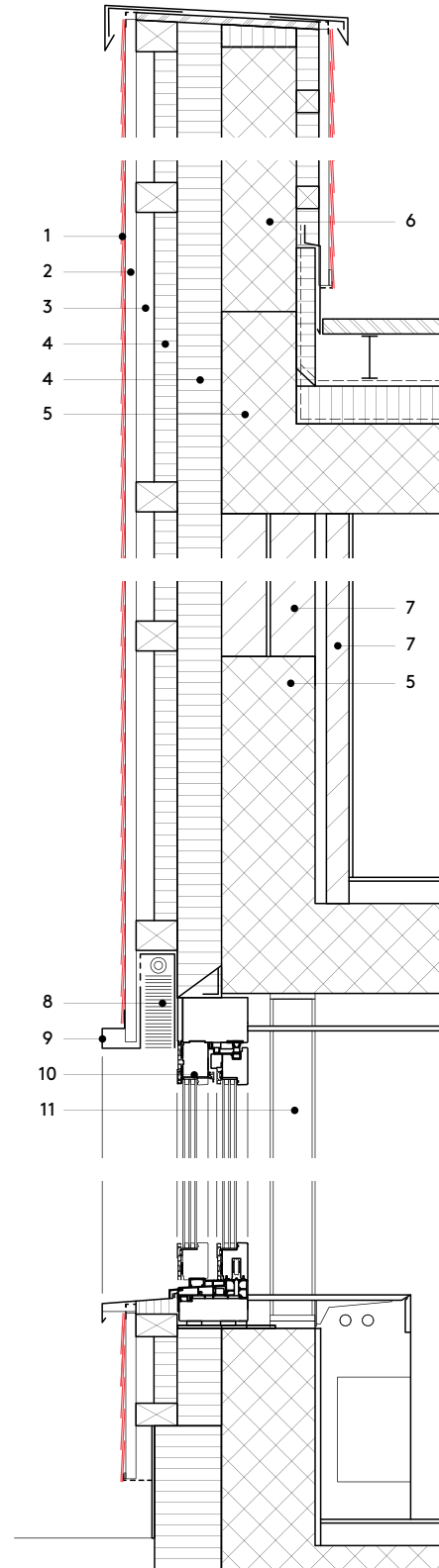
Upper floor



First floor



Basement floor 1:500



Vertical section 1:20

- 1 Swisspearl® SMALL FORMAT panel 4 mm, double layer
- 2 ventilation cavity, vertical timber batten
- 3 batten
- 4 thermal insulation
- 5 concrete, existing building
- 6 concrete
- 7 masonry, existing building
- 8 sun blinds
- 9 window frame
- 10 window timber/aluminum
- 11 steel column





“The goal of coloring the façade was to make the building harmonious with its surroundings and also to strengthen its position within the neighborhood.”

Sabrina Mehlan, Illiz Architektur GmbH



## SPAIN/ITALY

# COLORFUL RECREATION SPACES

**These two commercial buildings in Southern Europe both contribute to the regeneration of their respective districts. Their architects used Swisspearl to communicate the purpose of their buildings: a uniform white cladding with a multicolored front gives Los Mondragones a distinctive but unobtrusive presence in its urban context; the eye-catching new façade at Noverasco advertises the center's revived communal aspiration for its suburban neighborhood.**

**PATRICK ZAMARIÀN** Part of an urban regeneration scheme involving the transition of a former barracks area into public use, the project by Árgola Arquitectos provides a large sports complex, along with a supermarket and three underground parking levels. The former two have separate entrances from a canopied forecourt on Calle Ribeira del Bierro; garage access and emergency exit are via two new backstreets on either side of the complex. Largely closed along the three public roads, the sports center opens toward the adjacent plot, where, benefitting from ample sunlight and sheltered from views, the pools and running tracks are located.

Unlike their Spanish counterparts, the architects of One Works were tasked with refurbishing a pre-existing retail park. A typical postwar example, the shopping center consists of a number of small-scale, two-story units grouped around a landscaped inner courtyard and separated from the surrounding roads by greenery. Besides improving the energy performance of the complex, the objective was to transform it into a meeting place for the neighborhood through upgrading its surface materials and altering its external appearance.

Both design teams made extensive use of Swisspearl panels, albeit in a dissimilar fashion. In Granada, the architects chose







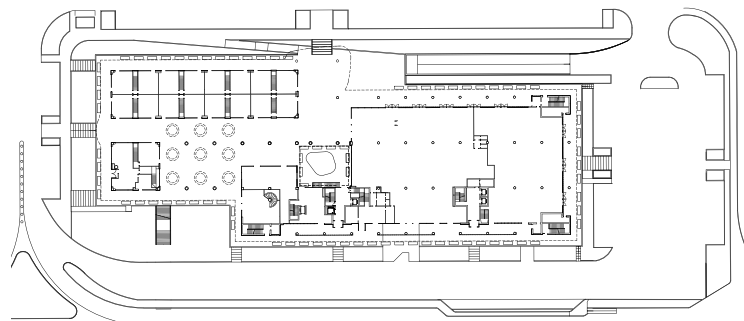
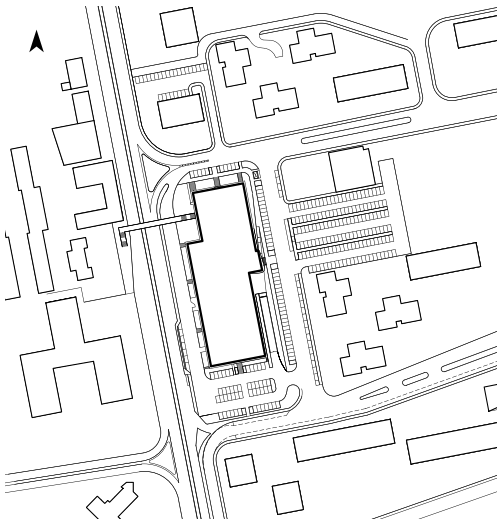
## NOVERASCO SHOPPING CENTER, NOVERASCO DI OPERA

LOCATION: Via Enrico Fermi, 1-7, Noverasco di Opera CLIENT: Prelios, Milan

ARCHITECTS: One Works, Milan (associates Giuliana Ledda, Luca Bonazzoli)

BUILDING PERIOD: 2011-2013 FAÇADE CONSTRUCTION: S.A.L.F., Albiano D'Ivrea

FAÇADE MATERIAL: Swisspearl® LARGO, CARAT Crystal 7010; PLANEA Rougit 0860 F and Rougit 0983 F



First floor 1:2000



a restrained, uniform white cladding to strengthen the distinction between the vast sports complex and the subordinate, corrugated sheet-clad retail section. Toward the main road, a slightly projecting volume displays a mosaic of scattered windows and Swisspearl panels in earth tones, the integral coloring of which allowed the architects to respond to the complex edge geometries without affecting the overall look of the building.

In contrast, at Noverasco the architects devised a conspicuous cladding pattern that wraps around the entire complex, unifying rather than diversifying the different units. Signaling the public function of the shopping center, the façades feature a striped arrangement of perforated white and red panels, which echoes the color scheme and vertical emphasis of the neighboring residential high-rises.



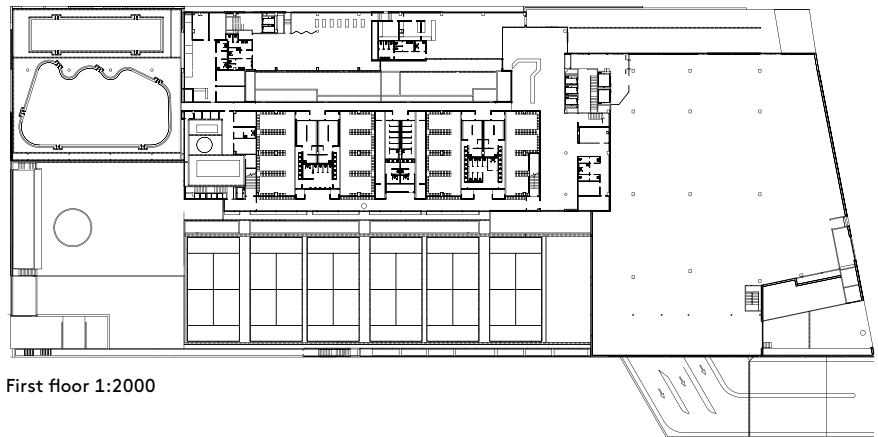
## LOS MONDRAGONES COMERCIAL AND SPORTS CENTER, GRANADA

LOCATION: Calle Ribeira del Biero, Granada CLIENT: Nuovit, Granada

ARCHITECTS: Árgola Arquitectos, Madrid (associate Julio Dominguez) BUILDING PERIOD: 2011–2014

GENERAL CONTRACTOR: Construcciones Otero, Granada FAÇADE CONSTRUCTION: Marmoles Coliseum, Yuncos (Toledo)

FAÇADE MATERIAL: Swisspearl® LARGO, CARAT Coral 7033, Onyx 7099; REFLEX Crimson 9231, Sunset 9230



First floor 1:2000



Both the sports center and the supermarket are accessed via a canopied forecourt on Calle Ribeira del Biero.

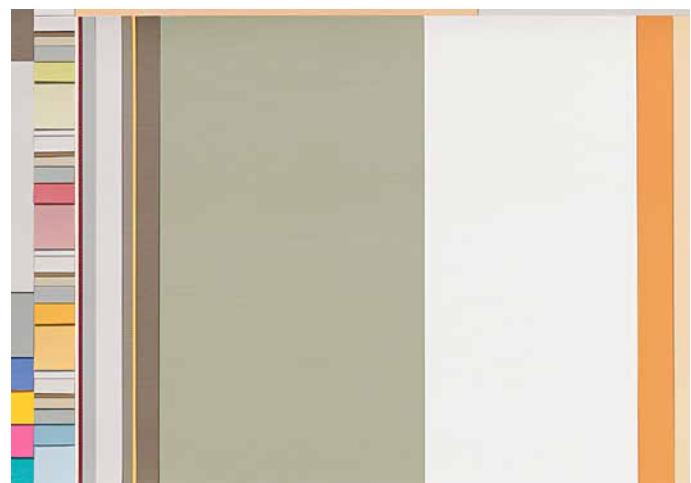
“High energy performance was a fundamental premise when choosing the building system for the façade. The anchoring system and placement of Swisspearl guaranteed energy efficiency.”

Árgola Arquitectos



The color strategies are abstract representations that are derived from working with concrete buildings. Here is the "second layer" strategy, based on the example of two residential buildings by Knapkiewicz & Fickert. Collage with hand-painted color samples 57 × 57 cm.

Color portraits show the color tone of a specific building, such as the Klee residential complex in Zurich built by Knapkiewicz & Fickert from 2006 to 2011. In this type of depiction, the succession of colors in space and also quantities of colors are visible. Collage with hand-painted color samples, 36 × 51 cm





## ESSAY

## COLOR UNLEASHED

**When color plays far more than a supporting or distinguishing role in architecture, reinterprets and transforms it, as it were, designers quite often find themselves on a slippery slope. The authors examine how and where such a strategy, which unquestionably belongs to the high art of architectural design, has been successfully implemented.**

LINO SIBILLANO AND STEFANIE WETTSTEIN Haus der Farbe, located in Zurich, pursues the potential of color in three-dimensional design. For its most recent publication *Color strategies in architecture*, it examined strategies in which color has largely achieved autonomy with regard to architecture. Structures from the twentieth and twenty-first centuries provided the starting point; from architectural icons to hidden treasures.

Placing colored surfaces in rhythmic succession over a façade or an interior is an option wherever detailed cladding is employed: mosaic tiles, ceramic or stone panels, glass, synthetic or cement composite. This is nothing new and numerous examples have made their way into art history: mosaics in Roman villas, thermal baths, and Byzantine churches or the Cosmati's impressive stone floors in Italy. Color is hereby always placed onto the architectural shell thus forming a new coat, a skin that gives the architecture an additional layer of interpretation. One possible strategy based on this principle is called "second layer." Haus der Farbe examined this on the basis of structures by the Zurich architectural office Knapkiewicz & Fickert, who masterfully handle this play with the second layer.

**"Second layer" tells a second story**

In this color strategy, color lies as a mask, as it were, over the architectural framework and tells a second, additional story. This polyphonic superimposition of two voices—the one, statically structural; the other, colorfully dynamic—creates an expanded level of expression and meaning. It stimulates a visual-aesthetic discourse about conventions and transgressions, perception and taste, truth and lies in design and the beholding of architecture. Herein is the potential of this color strategy, which presents a challenge for both designers and beholders.

Rather than playing with detailed shells, the architects Kaschka Knapkiewicz and Axel Fickert apply color directly to the surface thereby transforming scale and

proportion, obscuring volumes and tectonics, and suggesting alternative interpretations and meanings for architecture. They employ the colors on their buildings subversively and playfully, sometimes in a way that is supportive, other times contradictory, and again and again, provocative. Masquerade is a fitting analogy as a stylistic and intelligent masquerade is humorous but not comical; not serious but nonetheless, earnest. In form and message, the flawlessly employed

**This polyphonic superimposition of two voices—the one, statically structural; the other, colorfully dynamic—creates an expanded level of expression and meaning.**

expressive means are clear and decisive while not drifting off to become gaudy. They disturb and provoke, but at the same time are also capable of being fascinating and touching. In this way, they incite us to look repeatedly in an effort to understand what lies concealed behind them. The search for certainty and truth urges us to observe and contemplate. Like the masquerade, the "second layer" color strategy, too, is a balancing act; the threat of plunging into tastelessness and banality lurks constantly. Its

artistry lies in intelligence, and the preservation of style. The treatment of such a daring color strategy therefore demands great architectural and color competence and precision. Audacity, humor, and self-irony are required in addition to a sure hand in design and a fine sense for the significance of creative means of expression.

We call a different strategy in which color dominates architecture, “Immersive Pop.” In this case, color does not play with architecture; it floods it, as it were. We looked at an example by Rainer Rümmler, who created underground stations of unique concentration and colorful presence in Berlin in the 1970s.

#### “Immersive Pop” plays with convention

By defining a succinct color strategy as “Immersive Pop,” we make use of a concept that, on the one hand, brings to mind the Pop Art movement, and on the other hand, the phenomenon of pop culture. However, this strategy is about a specific attitude towards art, culture, aesthetics, and design rather than the typical language of color and form of an art movement or style. The central moment is the playful treatment of conventions and innovations, conformism and the transgression of limits. Established categories, such as high culture, sub culture, and popular culture, are questioned; classical traditions, fashions and trends, elite taste and mainstream are confronted with one another and re-interpreted. At the same time, an expressive, distinctive, and fashionable language of design plays a central role in this creative approach.

Over the course of three decades, the architect Rainer Rümmler (1929–2004) designed and realized distinctive underground stations for Berlin’s public transportation system along the lines of “Immersive Pop.” The stations he created have a fully styled design, sometimes artistic, occasionally eccentric, in all cases, however, practical; and in terms of the overall compositions and use of materials, worked out to the smallest detail. With a language of form and color that is typical of the era, the architect staged a submersion in the underground, a dropping out of the urban potpourri. The fashionable and extravagant interplay of expressive forms is symbolic of a change in

perspective and is an obvious means for generating attention. Moreover, the daringly designed subway stations have the look and feel of trendy lounges, and their well-calculated aesthetics provide a high-quality space to linger.

“Immersive Pop” addresses directly, flaunts itself; forcefully and boldly standing out from the everyday and familiar. The multiple meanings of the abbreviation “pop” thus provide orientation. In addition to “popular,” “pop” also means the sound “pop,” or as a verb, to pierce or pop something. Here, concern is primarily to be recognizable and approachable rather than to achieve clarity. This offers the chance for uniqueness and distinctiveness. In this regard, “Immersive Pop” is also related to strategies from marketing and branding.

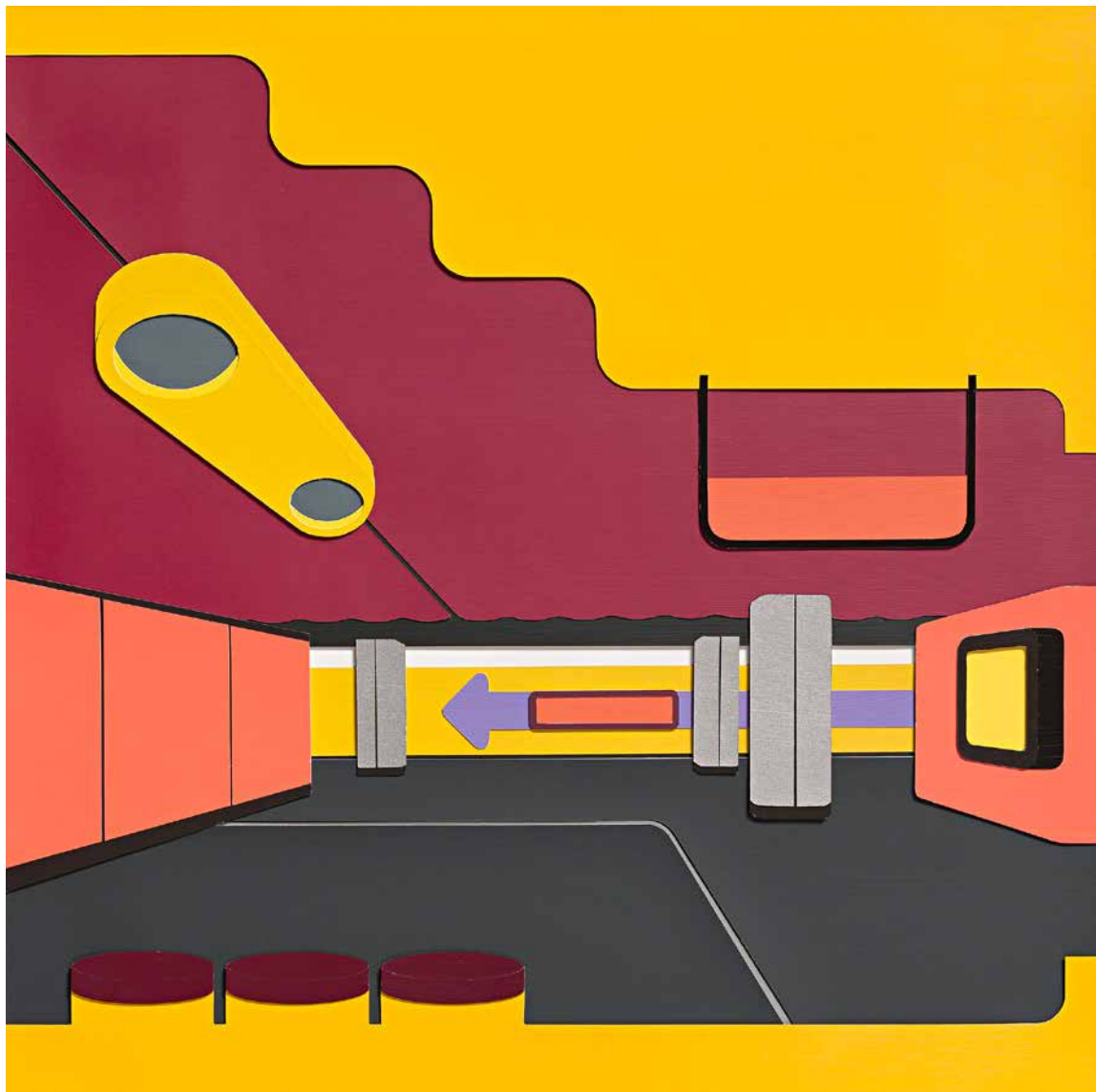
Along with a fine sense for current trends and aesthetic conventions, this fashionable color strategy, which at times tests borders, also demands a stylistically confident way of dealing with creative means of expression, a certain willingness to take risks, and playfulness. It also requires an acute knowledge of the effect and appropriateness of design-related decisions. After all, “Immersive Pop” strives for a direct and intense spatial experience, which originates in a current, yet likewise short-lived aesthetic language. Accordingly, the implementation of this color strategy

must be contemplated with extreme precision in terms of the planned use.

**“Immersive Pop”  
strives for a direct and  
intense spatial  
experience, which origi-  
nates in a current,  
yet likewise short-lived  
aesthetic language.**

#### Research methods and forms of depiction

The investigation of color strategies occurs with the help of an empirical and phenomenological approach to color and architecture, and Haus der Farbe has developed an appropriate research method for that. First of all, it is necessary to observe colors precisely and grasp their relationship to space. The colors are taken on site as color samples and later carefully mixed by hand in the studio and spread on paper. This crafts-based and cognitive process of appropriation is similar to the process of measuring and drawing existing buildings, and is effective at various levels: it leads to an intensified understanding of scale and dimension, and the relationships between the



The "Immersive Pop" color strategy depicted in buildings by Rainer Rümmler. Collage with hand-painted color samples, 57 x 57 cm.

Color portrait of the Berlin underground station Rathaus Steglitz, 1969–1973, by Rainer Rümmler, Denate Department for Building and Housing, Berlin. Collage with hand-painted color samples, 36 x 51 cm.





The hand-painted color samples of the colors taken on site forms the basis for the composition of the color portraits and color strategies.

In numerous team workshops, the gathered material—color samples, images, and texts—are prepared and discussed.

The visualizations of the color strategies are also designed as a team, and with the hand-painted color samples of the colors taken from on site.



colors, the architectural elements, light relations, and spatial compositions can be experienced directly. In addition, when remixing the colors by hand, one echoes the coloring of the buildings intensively and “grasps” it in the truest sense of the term. This inductive process, leading from the individual to the general, opens a level of meaning accessed by perception and observation, and supports a comprehensive understanding of the use of color in architecture. The approach thus also makes sense because color is seldom static in its appearance and can enter into a relationship with a space in diverse ways.

When all color samples are present, one analyzes them against the backdrop of the architectural situation, characterizes the color palette, and decodes the role of color in design, that is, the superordinate strategy, step-by-step. On the basis of this, the relevant color strategy is made visible with two different forms of representation.

In order to visualize the color strategy, Haus der Farbe has developed a three-dimensional form of depiction, which is organized as a collage with the hand-painted samples. While the depicted spaces are indeed based on each of the examined buildings, they are, nonetheless, fictive. They are heavily abstracted compositions, which primarily make visible how color enters into a relationship to space and architecture in each of the relevant strate-

gies. The depicted color strategies can thus be understood as specific positions of color design.

The color portraits of the individual buildings are abstract depictions of the color tones of each building and identify quantities, affinities, and relationships between the individual colors. They are likewise collaged with the hand-painted color patterns, whereby at issue are artistic

compositions that are designed using visual judgment. Their primary claim is that of reproducing the color climate of a building in that they show the coloring pictorially. Ideally, a beholder recognizes a building from its color portrait.

Color is undoubtedly an essential and diverse means for spatial design, far more so than decoration or superficial building cosmetics. When color is understood as an integral component of

design and skillfully employed, it yields creative and functional added value. Ideally, the first, strategic approaches to a color concept arise early on in the design process in connection with the development of ground plans, volumetrics, and building forms. A color design that is anchored in the overall concept naturally takes into account the various aspects of architecture: space and light, architectural language and context, function and atmosphere, and materiality and texture.

**When color is understood as an integral component of design and skillfully employed, it yields creative and functional added value.**

**Haus der Farbe  
Fachschule für Gestaltung in  
Handwerk und Architektur**

**Haus der Farbe is celebrating its twentieth anniversary this year. Since its founding, the technical college has been dedicated to a high-quality culture of craftsmanship and construction. Haus der Farbe promotes, in particular, color competence in architecture, design competence in handicrafts, and trans-disciplinary dialogue in building. This occurs in the form of practice-oriented activities in the areas of education, research, and consulting.**

**Haus der Farbe has published a volume entitled “Color strategies in architecture.” The book presents and discusses six color strategies. The publication is supplemented by an exhibition in Wintherthur, which will run until October 2015.**

**Color strategies in architecture, 168 pages, format 20 × 27 cm, Schwabe Verlag Basel.  
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## CUSTOM MADE

## IMITATING NATURE

This new iconic structure raises awareness for Denver Botanic Gardens' important work in botanical and environmental research. Both form and skin of the building were inspired by natural phenomena—the former mimics the collision of two tectonic plates; the latter recalls the honeycomb pattern of a beehive composed of almost five hundred hexagonal Swisspearl panels.

**PATRICK ZAMARIÀN** In July 2013, Denver Botanic Gardens, an institution with a long tradition of commissioning cutting-edge architecture, invited selected architectural practices to submit proposals for a “Science Pyramid,” prominently located next to a sunken amphitheater and partially surrounded by an existing pond. Complementing recent additions, the new structure was to provide an exhibition space for the institution's conservation and research efforts, thereby highlighting the Gardens' broader mission as a scientific research body.

Ben Niamthet, an associate principal with Denver-based BurkettDesign, used biomimicry as the conceptual driver of his winning competition entry. Faced with the task of designing a transparent pyramid, as specified in the competition brief, Niamthet drew his inspiration from the geological processes causing the ragged rock formations of the nearby mountain ridges. The volumetric configuration of the building is modeled on the collision of two tectonic plates, with the resulting twin-peaked, multi-faceted pyramid rising nearly thirty-four feet from an elevated platform.

The envelope of the structure was likewise informed by a biological metaphor and features almost 500 dark gray, hexagonal Swisspearl panels, arranged in a honeycomb pattern and interspersed with thirty photovoltaic collectors and multiple windows and skylights. The shell is bisected by a strip of electrochromic glass whose opacity adjusts according to the solar intensity, allowing a degree of transparency without affecting

the video displays and touch-screen exhibits inside.

The architects' approach produced a geometrically complex pyramid comprising sixteen facets, each with a different degree of inclination, and a variety of ridges, valleys, and angular openings. To translate this ambitious scheme into reality, they teamed up with Studio NYL's Skins Group, whose structural engineers devised a steel frame consisting of digitally calculated and partially prefabricated painted steel tubes that are fully exposed in the interior of the building.

Creating a continuous honeycomb skin around this structural framework proved difficult, particularly as the architects wished the envelope to function as a high-performance rain screen containing a ventilation gap between its five-inch insulation layer and the façade panels in order to reduce thermal gain. While this technology is well established for vertical surfaces, it is only the second such application as a roof system worldwide, and the first in the United States. Unsurprisingly, the design team invested considerable time and effort into researching suitable cladding systems, ultimately arriving at the conclusion that Swisspearl was the only manufacturer prepared to warranty its product for sloping surfaces.

The success of the envelope depended on the invariable quality of the Swisspearl panels. The gaps between these were set at one inch, based on an evaluation of the airflow requirements of the rain screen system as well as the distance at which the joint pattern should be discernible. The desired uniform look of the honeycomb pattern necessitated more than 1,500 joints of consistent width, which, in turn, prohibited even minute variations in panel size and appearance.

Panel width needed to be consistent to ensure that adjoining panels would appear flush. To reduce the thickness of the panels, the architects opted for exposed, yet unobtrusive fasteners, which do not compromise the unified look of the cladding. Swisspearl

Science Pyramid,  
Denver Botanic Gardens,  
Denver (CO), USA

**LOCATION**  
1007 York Street, Denver

**CLIENT**  
Denver Botanic Gardens

**ARCHITECTS**  
BURKETTDESIGN, Denver  
Barton Harris, Project Architect  
Rieko Ishiwata, Project Architect  
N. Ben Niamthet, Project Designer

**STRUCTURAL ENGINEER**  
Studio NYL, The Skins  
Group Boulder (CO)  
Chris O'Hara

**BUILDING PERIOD**  
2014

**GENERAL CONTRACTOR**  
GH Phipps Construction Co.,  
Greenwood Village (CO)

**FAÇADE CONSTRUCTION**  
NDF Construction,  
Greenwood Village (CO)

**FAÇADE MATERIAL**  
Swisspearl® LARGO,  
CARAT Black Opal 7020 R

“There are no visible color or surface variations from panel to panel—this is astounding given that the panels were neither supplied nor installed in batched packages.”

Barton Harris, principal-in-charge, BurkettDesign

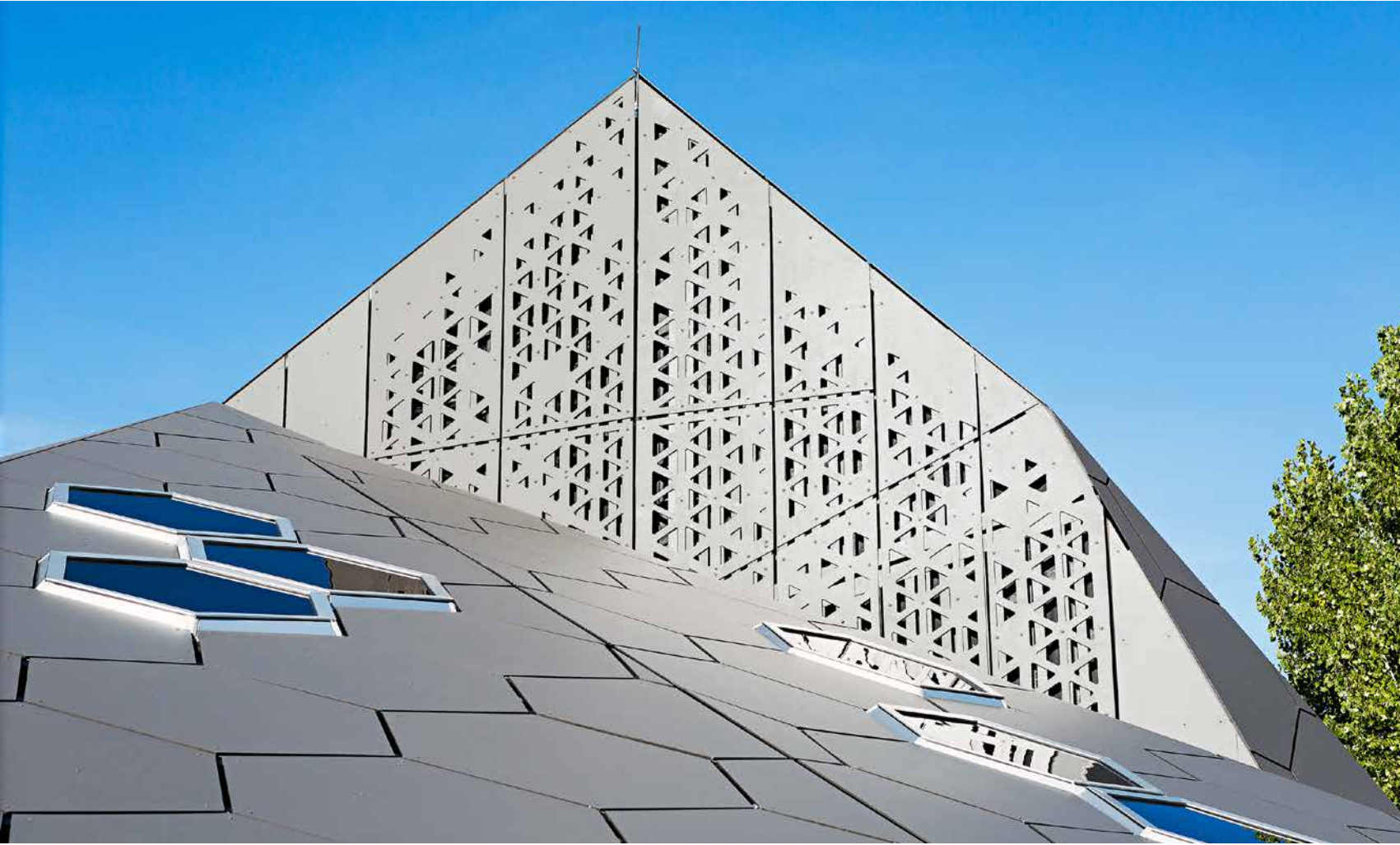


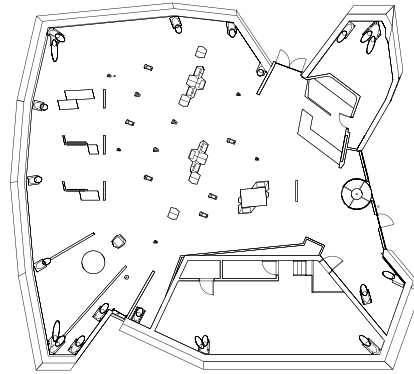
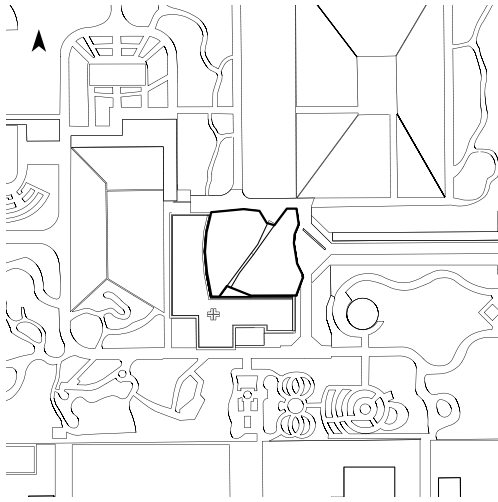
offered an attachment solution for each of the myriad partial pieces, some of which were no larger than one inch by two inches, and its technicians used client-supplied CAD files to saw blade-cut full four-foot hexagonal shapes in factory conditions. More demanding were the numerous partial hexagons, which installers wearing mountain-climbing gear adjusted in the field to adapt to the building's wide range of architectural elements. The color integrity and material consistency of the panels guaranteed that the uniformity of the paneling could be maintained, regardless whether the individual elements were prefabricated or custom-cut on site.

True to its purpose as a showcase project for an institution concerned with research on environmental issues, the new Science Pyramid incorporates a number of eco-friendly measures, key among which is its innovative and technologically advanced ventilated façade composed of sustainable, durable, and low-maintenance Swisspearl panels. Aesthetically, too, the Science Pyramid achieves its objectives. Working closely with structural engineers and manufacturers, the architects managed to transpose their ambitious design scheme into an iconic structure whose fractured surface is wrapped in an astonishingly flawless honeycomb cladding made of almost 500 individual hexagonal panels. Most importantly, the \$ 6 million landmark, which opened to the public in September 2014, appears to fully succeed in drawing visitors' attention to the scientific work of Denver Botanic Gardens—according to CEO Brian Vogt, “it's drawing people in droves.”

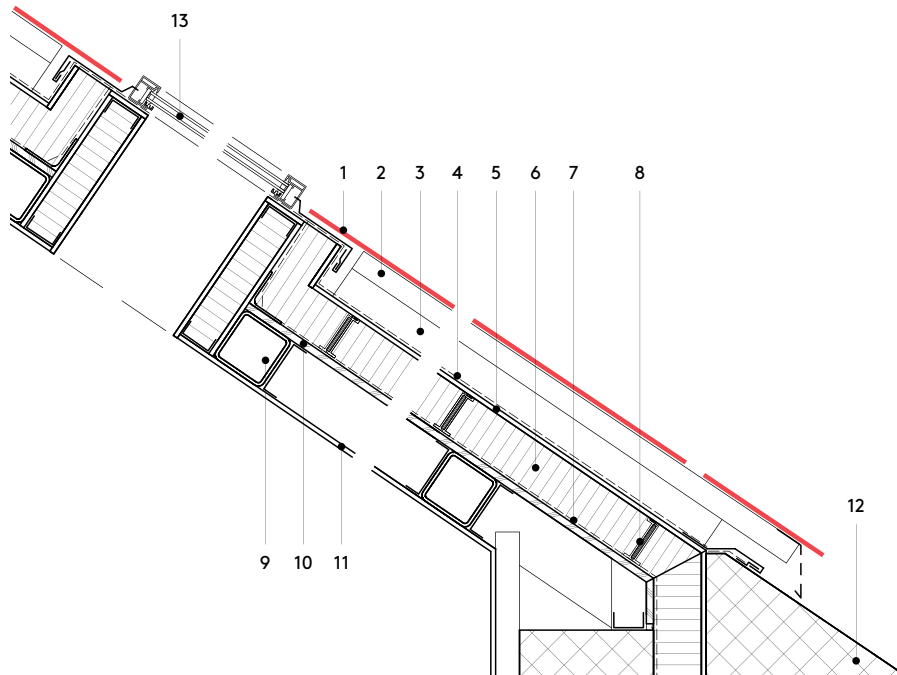
**The volumetric configuration of the building mimics the collision of two tectonic plates. The shell is bisected by a strip of electrochromic glass whose opacity adjusts according to solar intensity.**







First floor 1:500



Vertical section 1:20

- 1 Swisspearl® LARGO panel 8 mm, R-coating
- 2 ventilation cavity, panel support profile
- 3 ventilation cavity, Z-girts
- 4 waterproofing
- 5 sheathing
- 6 thermal insulation
- 7 vapor barrier
- 8 fiberglass bracket
- 9 steel tube
- 10 plywood board
- 11 gypsum board
- 12 concrete
- 13 skylight

The panel edge is sealed by hand. Panels are lifted up by vacuum cups. Completed panels are packed up in stacks.





“Preciseness in panel size and the gap between panels were critical to visually communicate the concept of a honeycomb.”

Studio NYL Structural Engineers, The Skins Group/Burkett&design



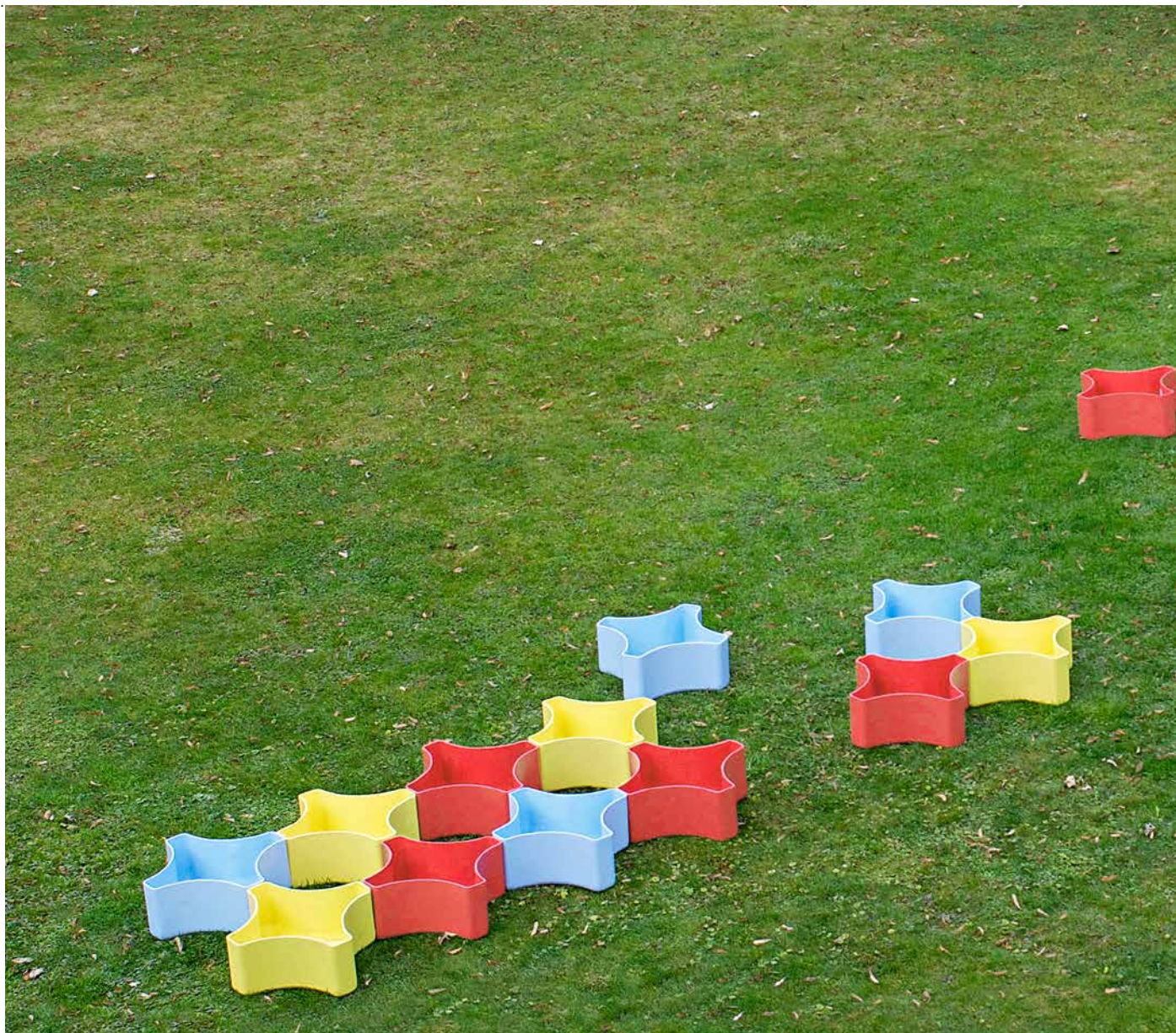
“As the architect, we were very concerned about the level variation between hexagonal cladding panels—the Swisspearl product made this concern vanish.”

Barton Harris, principal-in-charge, Burkettdesign





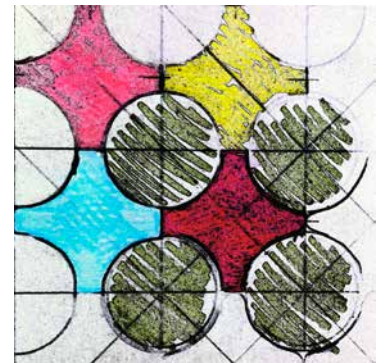
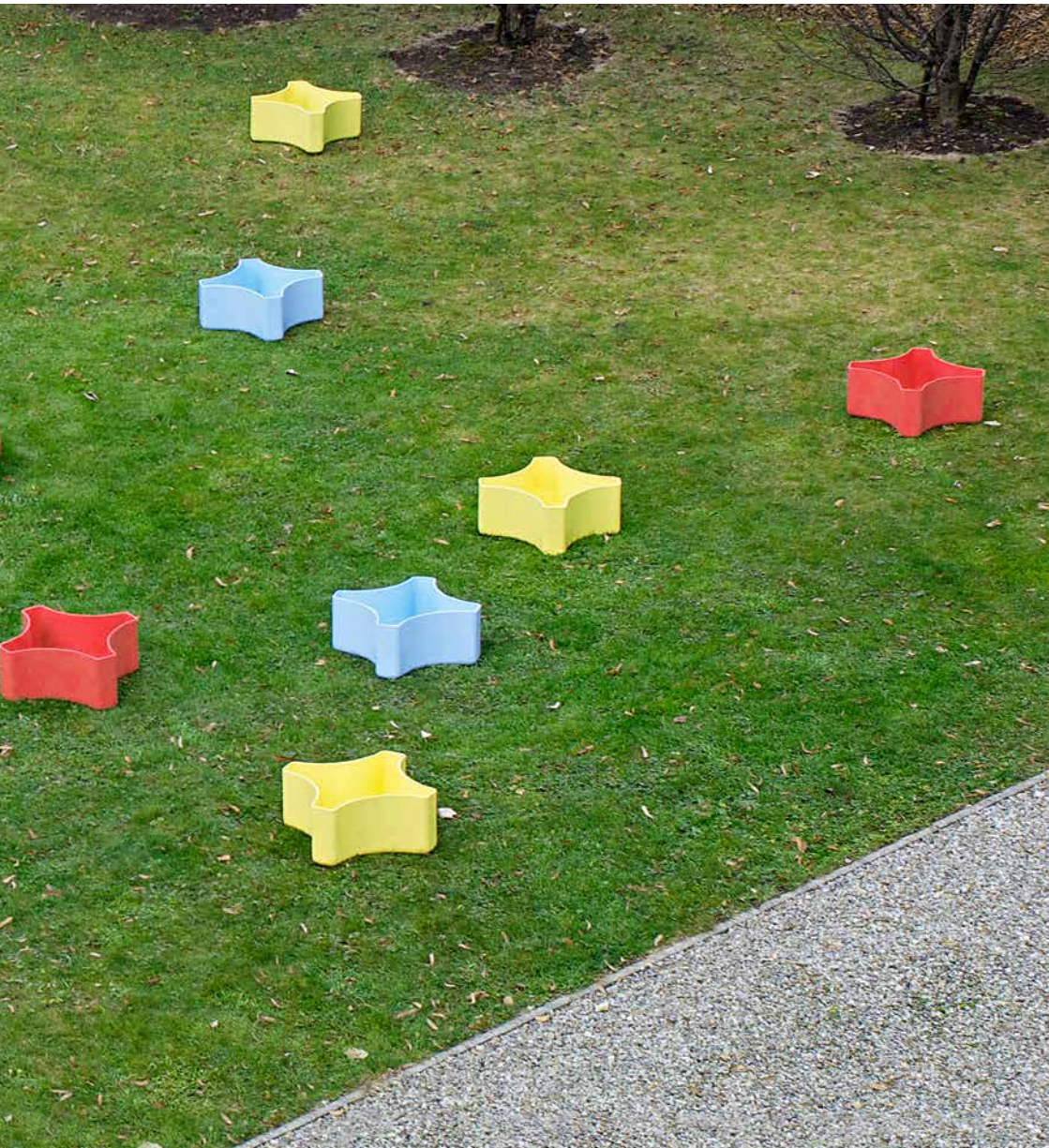
**Workers in mountain-climbing gear install the Swisspearl panels. Numerous on-site adjustments were necessary to meet the complex geometries of the cladding.**



## ART EXHIBITION CORNÉLIA PATTHEY'S KONFETTI

The “Konfetti” strewn in the garden of the castle in Mézières in western Switzerland plays with transfiguration. As an installation in the Musée du papier peint, it points to the repetitive character of the wallpaper exhibited there. In the transfer of material, form, and construction, the artwork examines a reversal of the original.

RAHEL HARTMANN SCHWEIZER The criteria of truth to materials became established in the twentieth century as a litmus test for the quality of traditional materials and industrial products. While Alfred Roth’s description in 1937 was still “stone as stone,” and “wood as wood,” for Max Bill, this definition was obsolete ten years later. “Truth to material” for him meant using the material’s qualities in such a way that material and form correlate. In 1954, Willy Guhl did this exemplarily with the “seat for garden and beach,” produced from a single loop, for which the Swiss Werkbund gave him the “Die gute Form/The Good Form” award in 1955. Also legendary are the stool and planters that were produced for the “G59” horticultural show in Zurich. Like with concrete, also with cement composite, natural colors are valued as an integral component of truth to materials—today, one appreciates the rich spectrum of the color palette.



However, confetti in glass form, or even a container in the form of confetti that is elevated to become an artwork? Cornélia Patthey distributed these in the castle gardens of the Musée du papier peint in Mézières in the canton of Fribourg. “Konfetti” was her contribution to the exhibition “vis-à-vis / visarte” as one of the seventeen artists from the canton’s section of Visarte, the Swiss professional association of visual art, who were given a carte blanche between January 10th and May 31st.

Transfiguration makes sense; paper confetti, as we know it today, has little to do with the original. In the eighteenth century, when the custom of tossing things during Mardi gras became established, it was done with sweets, with “Konfekt.” This retransformation as carried out by Patthey, is founded on three steps: the search for a repetitive figure to take up the character of wallpaper, the idea to utilize the lawn space

by means of a typical garden motif, and finally, realization in a form that has always been familiar to the artist. “I have known Swisspearl since my childhood—my father was an architect and we had cement composite chairs and a sandbox in the garden.”

The artist presented her idea using full-scale Styrofoam and paper models (60 × 60 × 25 cm) to the head of the Garden & Design market segment, Marcello Trabucco, and the Garden & Design workshop director, Beat Brechbühl at the Swisspearl workshop in Payerne. Both were immediately enthusiastic. Daniel Hauri, from the Garden & Design department, took on the concrete realization. Patthey helped create the first example and then subsequently pursued production of the containers in the classical confetti colors: red, yellow, and light blue.

Well-known confetti gains originality—not only because Patthey transfers a two-

dimensional form into a three-dimensional one. She also instigates a game between positive and negative forms. Confetti’s unique form is created by punching out circles, whereby the center of each group of four circles stretches out to a square. There are thus two traditional forms of confetti: circles and their in-between spaces, the punched out material, and the leftovers. It is the other way around with Patthey: the leftovers form the receptacle, while the circles are cavities. The art objects also captivate because the materials paper and cement composite are produced in a similar way: both raw materials are first mixed to a pulpy mass and the creation of form for both is realized by means of rollers.

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## COLOR RHYTHMS

The current edition of *Swisspearl Architecture* is devoted to the coloring of façades. Architects lend buildings and spaces character and identity by means of different colors. Color designers work out the design strategies necessary for this and fine-tune the tones. Residential and functional buildings thus present themselves at times harmoniously embedded in their surroundings, and at other times, contrasting or signaling, correspondent to their public function.