

SWISSPEARL ARCHITECTURE 19

International Edition - High Profile Buildings

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SWISSPEARL ARCHITECTURE 19

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SOCIAL CHANGE AND COMMUNITY



For centuries, 'larger families' have ensured the fulfilment of various tasks for the benefit of the multi-generational family members who usually lived relatively close to each other. This favoured meetings and an exchange of knowledge and services between young and old and learners and workers, at home or in public areas. In this less materialistic and

less self-centred environment, the sense of sharing for the common well-being was more pronounced. It was usual to help each other: many participated in the care of the children, the elderly and the sick; hard work and the little joy or gain one had tended to be shared and family members gathered to celebrate events or just to enjoy the presence of the others, often telling stories of the past. Nobody was left alone.

In the Western world in particular, the fragmentation of the family and the changes in behaviour have reduced these relationships and new social institutions have had to gradually take over some of these tasks. In parallel, the development of industry, transport infrastructure and commercial facilities significantly changed life and the face of the city. New types of various buildings were necessary – all new challenges for the architects. The goal now is to satisfy growing community needs in a cost-efficient way within a sustainable urban development. In other words, to combine the advantages of the modern individual lifestyle with the benefits of having one's social needs met by the community.

Indeed, the scope of building purposes to fulfil is extremely large: dwellings adapted or adaptable to the different stages of life, centres for day-care of small children or the sick, disabled or dependent people (regardless of their age), learning and cultural institutions, hospitals and nursing homes (for the long-term sick or seniors), as well as the whole world of work, shopping, and leisure. This requires architectural skills as well as collective organisational excellence to utilise the collective resources in the best possible way. The focus is on finding cost- and energy-efficient building systems and materials to minimise the impact on nature whilst keeping an attractive standard of living for today and the generations to come.

A rear-ventilated wall system with high-quality façade panels, such as Swisspearl, contributes to long-term aesthetic and sustainable construction. As a part of the architectural language, Swisspearl is thus ideally suited for contemporary architectural tasks, whatever the type of building, and for the well-being of the entire community.

Enjoy the reading!

Christine Dietrich, Architect Head of Architecture, Swisspearl

LIVING TOGETHER Designing Buildings for Communal Life

In an era when architecture is increasingly seen as a marketing tool and as a medium to convey corporate identity, the value and importance of 'everyday', less glossy buildings that are user-friendly and communityoriented should not be overlooked. When considering the realm of public architecture, what might one deem to be the most important considerations? Might it be scale, plan layout, circulation, aesthetics, day lighting, orientation, views, colour, detailing, materiality, or a combination of the above? The user experiences many of these aspects subliminally: most people cannot easily pinpoint precisely what makes a building pleasant to be in, or why it has a particular atmosphere. It is the domain of the architect to try to analyse what attributes make a building resonate, what qualities impart a project with a sense of community, of privacy, or of wellbeing. Getting the scale and the plan layout right and taking all the above-mentioned aspects into consideration is a complex task that requires a trained eye, a good dose of common sense, and intuition as to what might work best. Thanks to sophisticated 3D virtual tools, one can simulate what a project will be like in reality even before the first foundations have been dug. How a building really functions though, how it feels to be in it, and how the user experiences it, remains shrouded until its completion.

This issue of *Swisspearl Architecture* features a wide range of buildings from around the world that accommodate community living: from student housing to nursing homes, from residential apartment blocks and primary schools to university facilities. Throughout this issue you will see how these buildings interact with their broader environment, how they have been designed to draw the public into them and how their façades – their face to the outside world – have been articulated to give them an aesthetically pleasing appearance. It is clear that the materiality of a building, the colour, texture and finish, is a key part of the visual appearance of a building. The use of materials allows for the 'humanisation' of the disparate parts so that



they become clearly legible to the user. In each of the buildings featured in this issue, the role of the cladding and the façade treatment has played a vital role in the overall appearance of the building, whether it be to accommodate eight-year-old primary school children or grandparents in their eighties.

A recurrent theme throughout the history of architecture has been the articulation of the façades; how the external characteristics of a building convey a specific architectural style. After all, the façade is a building's interface to the public domain; what it communicates to the passers-by on the street. The subdivision of an elevation into smaller units allows distances and dimensions to be intelligible. If a huge façade is reduced by graphic articulation into proportions that can be more easily grasped, then the building is no longer perceived as an overwhelming monolith. The articulation and materiality of a façade can serve to increase the legibility of a building and, furthermore, the perception of space. Even large-scale buildings that accommodate many users, like the projects featured here, do not need

Polje II Housing in Ljubljana, Slovenia, by Bevk Perović Architects

to be overpowering, but can rather be articulated to be more humanly scaled. Both the Center for Math and Science in Los Angeles and the primary school in Nova Gorica in Slovenia featured in this issue have utilised Swisspearl panels in shades of red. In both instances, the façade treatment has served to reduce the scale to give the buildings an inviting face.

Another aspect that affects the functioning of public buildings is the zoning. As the plan of a family unit should have a gradation of progressively more private spaces branching out from communal spaces, so too is it important to layer spaces in public buildings in order to accommodate the myriad of interactive scenarios that inevitably occur within a building. The Dutch architect and theoretician Herman Hertzberger calls this phenomenon 'territorial differentiation'. Allowing spaces to be open to a certain amount of interpretation so that they have greater 'accommodating' potential makes them more receptive to a diversity of situations. Finding the right balance to enable, for instance, residents of an old people's home to withdraw to privacy, whilst still being given the opportunity to seek contact with others is important.

In many countries, especially where security is an issue, the private domain is often fortress-like, creating places where people live in isolation and become alienated as they are locked behind their high, impenetrable walls. The sharp division between the streetscape and the more private, interior domain ought to be more vague in order to create impromptu places for meeting and places where dialogue can be initiated. For example, the high, covered exterior courtyard of the Los



Angeles Center for Math and Science featured in this issue blurs the boundary of 'inside' and 'outside' thus creating an intermediary zone for informal interaction. Another example is the housing scheme in Ljubljana, which has an urban plan layout and uniformity of form that demarcates the scheme as being a separate entity from the surrounding suburban fabric. The communal playground at the heart of the scheme creates an intermediary communal area for the residents to socialise. This transitional zone is a kind of a filter between the private apartments and the more public zones that surround the apartment blocks. Communal playgrounds are frequently employed as an element for social cohesion, especially in housing schemes. As the British architect Richard Rogers recently stated in a Guardian newspaper interview, "No man is an island, nor is any building or any space; everything flows from one to the other and gives order to space." Anna Roos

Nursing Home in Olang, Italy, by Aichner Seidl Architects

Mission College Center for Math and Science in Los Angeles, USA, by Quatro Design Group



La Casa Student Housing, Chicago, USA Anchor for the Community



The Resurrection Project (TRP) is a community organisation in the deprived Pilsen neighbourhood of Chicago. Established in 1990 by a coalition of local parishes and residents, TRP aims at improving the conditions and prospects of low-income families on Chicago's southwest side.

One major obstacle for the advancement of these predominantly Latino communities are high college drop-out rates and thus low graduation rates. Located in the heart of Pilsen and with excellent public transport links to all major Chicago universities, La Casa is a dormitory building that offers up to one hundred college students the advantages of on-campus living without uprooting them from their familiar environment.

Each of the five upper floors accommodates a supervisor's apartment and two separate dormitories for ten students each. The individual bedrooms are grouped around a communal kitchen area that connects to a fully glazed living space. Further amenities include a gym, laundry room and retail space as well as an adjacent resource centre providing administrative and academic support to students. Urban Works designed the six-storey building as an in-situ concrete structure whose envelope reflects the distinction between the public and private domains. The former, i. e. the ground floor spaces and the living rooms in the corner sections of the upper storeys, feature full-height curtain wall glazing; the latter are sheathed in Swisspearl panels and framed by brickwork. The architects initially devised a terracotta cladding and this notion still echoes in the choice of three shades of coral red that lend a subtle texture to the slightly protruding façade. *Patrick Zamariàn*



Location 1818 S. Paulina Ave., Chicago (IL), USA
Client The Resurrection Project (TRP), Chicago
Architects UrbanWorks, Chicago: Patricia Saldana Natke, Robert
Natke, Meggan Lux, Maria Pellot, Christopher Byington
Building period 2012
General contractor Denco, Chicago
Façade construction RG Construction, Elmhurst (IL), USA
Façade material SWISSPEARL® CARAT, Coral 7030, 7031, 7032





"THE OPEN LIGHT-FILLED SPACES, COLOURFUL FLOORS AND COMMUNAL KITCHENS MAKE THIS BUILDING – THE FIRST NEW CONSTRUCTION BUILDING ON 18TH STREET IN YEARS – A POWERFUL ANCHOR FOR OUR COMMUNITY." CLIENT STATEMENT

- 1 Swisspearl[®] cement composite panel 8 mm
- 2 ventilation cavity
- 3 moisture barrier
- 4 thermal insulation
- 5 vapour barrier
- 6 building board
- 7 steel stud wall
- 8 gypsum board
- 9 waterproofing
- 10 concrete





Ground floor 1:500

Aarhus Arkitekterne have rebuilt an existing nursing home, developing a clever layout that not only enhances the community feel and facilitates internal processes, but also helps make the building one of the greenest in the country.

Nursing Home Solgården, Hundborg, Denmark CIRCLE OF LIFE







The history of Aarhus Arkitekterne goes back more than 100 years. The architectural company has left its traces all over Aarhus, Denmark's second largest city. Today, it has offices both in Aarhus and Copenhagen and employs about 60 people.

A few years ago Aarhus Arkitekterne got a commission to rebuild a small nursing home from the 1960s in the little town of Hundborg in northwestern Jutland and have created one of Denmark's greenest buildings. "The original facility was remarkably lively and welcoming," says Lars Sylvester, the project manager at the architectural company. "We wanted to keep this spirit and make it grow in new inspiring and up-to-date surroundings, making life easier for residents and staff with modern technology and a new design." The nursing home is situated in a small park, and the new building was positioned so that it makes use of the slightly sloping ground and both levels can be accessed directly. The new location of the home at the centre of the park makes the latter more accessible and strengthens the communal character of the institution; park and nursing home are open to the public, especially encouraging elderly people from the town to take part in the life at Solgården.

The stroke of genius was to design the new facility in the shape of a large ring. This minimises the distances within the building and facilitates internal processes. At the same time, the compact shape of the structure made it possible to keep the surface area at a minimum and reduce heat loss from the building. Ground source heat pumps and solar panels are among the additional energy-saving measures.

Large triple-glazed windows all around the building supply the apartments with plenty of daylight while making use of the sun to gain heat. The apartments, distributed on the south, west and east sides, have their private rooms on the outer side of the building and enjoy views onto the natural surroundings, while the communal rooms such as the kitchen and living rooms are on the inside, looking onto the central courtyard, thus integrating each resident in the daily life of the nursing home. The northernmost part of the building houses the service rooms. The new facility measures 3,800 square metres and consists of 32 two bedroom apartments, offices, service rooms, a kitchen and a community centre. *Mirko Beetschen*





Location Solgårdsvej 14, Hundborg, Denmark **Client** Community of Thisted, Denmark Architects Aarhus Arkitekterne, Aarhus, Denmark Building period 2011-2012

General contractor and façade construction

Jakobsen & Blindkilde A/S, Aulum, Denmark

Façade material SWISSPEARL® NOBILIS, grey N214





- 1 Swisspearl[®] cement composite panel 8 mm
- 2 ventilation cavity
- 3 sealing sheeting
- windstop board 4
- 5 vapour barrier 6 thermal insulation
- 7 fibre gypsum board
- 8 profiled wooden cladding
- 9 concrete



The Polje housing estate is designed as a 'chessboard' of buildings and open spaces, which together form a simple, but visually rich ambience and intriguing combination.



Polje II Housing, Ljubljana, Slovenia ALTERNATING BLOCKS





Ground floor 1:500



Vertical section 1:20

- 1 Swisspearl® cement composite panel 8 mm
- 2 ventilation cavity
- 3 moisture barrier
- 4 oriented strand board 5 timber batten
- 6 gypsum board
- 7 concrete
- 8 thermal insulation
- 9 vapour barrier



Alternating solids and voids provide a lively rhythm across the façades.

Creating an optimal urban plan for a housing complex that takes into account orientation, views and unit layout to obtain the optimum density and quality of life, whilst still being spacious and affordable, is inevitably a delicate balance of choices and compromises. This housing estate, designed by Bevk Perović Architects, on the periphery of Ljubljana has six identical blocks staggered on the site to create alternate openings and voids. The site is knitted into the existing suburban fabric to the west, whilst three of the six blocks are strung along the access road overlooking green fields to the east. In order to avoid a high-rise estate with all its negative connotations, the height of the blocks has been restricted to four stories. This keeps the project to a human scale and prevents the creation of an anonymous tower block ghetto. The urban plan allows for 'breathing' spaces for the individual blocks, affording them privacy and light. The central opening, demarcated by four blocks, is a communal playground - the heart of the estate - where parents and children can congregate informally.

Each block has a square plan with a central service core where the lift, stairs and light well are situated. Around this runs a corridor that accesses the eight units in twin pair entries on each corner of each floor.



The central outdoor communal space is the heart of the complex.

The units are small, two or three rooms in size, each with a balcony opening out from the open plan kitchencum-dining and living space. The balcony is an important ancillary space that relieves the otherwise constricted living/dining open plan area.

The projecting concrete slab, a 'cream-slice' structure with infill panels of Swisspearl is easy to comprehend. The chocolate-coloured Swisspearl cement composite panels counterbalance the cool off-shutter concrete. Lively rhythms have been created by the alternating play of solids. Opaque planes are formed by the Swisspearl cement composite panels and closed shutters, whilst the voids are shaped by the fenestration and balcony spaces. The elongated lines of the projecting floor slabs, as well as the long line of the balustrades create a strong sense of horizontality. This horizontal emphasis has been offset by the clear vertical forms of the Swisspearl panels, the subtle imprint of the concrete shuttering on the concrete walls, as well as the delicate vertical lines of the steel balusters that run across the balconies and window openings. The three-dimensionality of the volumes has been emphasised by the configuration of the openings and particularly by the 'wraparound' articulation of the corner balconies.

Overall, this well-balanced housing scheme creates a strong, formal impression. The shifting blocks, each identical to the other, form a unified ensemble; a sense of place where a community of families live together and share the communal outdoor spaces that flow through the volumes. *Anna Roos*

Location Polje 10–10E, Ljubljana, Slovenia Client JSS MOL Housing Fund, Ljubljana Architects Bevk Perović, Ljubljana Building period 2011 Construction manager GP Grosuplje d. d., Ljubljana-Polje Façade construction Matevž Šarbek s. p., Kresnice, Slovenia Façade material SWISSPEARL® NOBILIS, custom colour Broncit N 161-1804 The Finnish architect couple Mirja and Pekka Koski-Lammi have turned two 1970s grey apartment blocks into a colourful and friendly little housing estate.

Residential Building, Espoo, Finland **RETHINKING THE SEVENTIES**







"WITH SWISSPEARL'S BROAD COLOUR RANGE, WE WERE ABLE TO GIVE LIGHTNESS AND A FRESH LOOK TO THE MONOTONOUS 1970S FAÇADES." MIRJA KOSKI-LAMMI



We all know the effect old photos of ourselves have when we look at them years later: we are horrified about the clothes of those times and especially the terrible colours we used to wear. To a certain extent, the same goes for buildings – colours that used to be all the rage are totally outdated now. With architecture, luckily, there seems to be a kind of 'historical recognition', so that after a certain number of years, the built sins of our fathers become historically relevant. The 1970s, however, are still too close for comfort and the combinations of dark browns, beiges and splatters of orange are eyesores for most of us.

The two apartment blocks in Espoo, Finland's second largest city and part of Helsinki's metropolitan area, were built in 1974 and originally had a very plain exterior with naked concrete façades on the back and The original ventilation windows were covered with Swisspearl panels with ventilation slits.





Location Kotitontuntie 6-8, Espoo, Finland

Client As Oy Kotitontuntie 6–8, Helsinki, Finland

Architects Koski-Lammi, Helsinki

Building period 2011-2012

General contractor and façade construction NHK Rakennus Oy, Helsinki Façade material SWISSPEARL® CARAT, Onyx 7091, Coral 7030, 7033, Topaz 7072, 7073 dark wooden cladding in front. Even though the latter were replaced by corrugated sheet metal in 1990, the overall look of the buildings was not just simple, but also poor. The owners decided to renovate and commissioned the Helsinki-based architecture couple Mirja and Pekka Koski-Lammi for the job. In addition to a fresh appearance for the two buildings, the client's main goal was to improve the thermal insulation.

The architects achieved the latter by adding an insulation layer onto the old façades and replacing all the entrance doors and the windows of the apartments. For the new façades, they opted for Swisspearl panels as they offered the best solution: they are light enough to mount and at the same time highly resistant to wear. And, the material offered a wide variety of colours. "The basic idea of our architectural design was to give back the contrast between the front and back façades of the buildings," says Mirja Koski-Lammi. The fronts with their access balconies now present a mosaic of warm yellows and reds, each apartment distinguished from the ones around it. The entrance side was also upgraded with a steel-and-glass canopy at the top. The rear sides of the two blocks now sport plain white plaster walls, the only colour highlight being the cement composite balustrades of the new French windows. Time will tell how well the new colour concept will be accepted by generations to come. Mirko Beetschen





THE TWO APARTMENT BLOCKS FROM 1974 HAVE A VERY DIFFERENT LOOK AFTER THE RENOVATION. THE ENTRANCE SIDE PRESENTS A MOSAIC OF YELLOW AND RED SWISSPEARL PANELS, HIGHLIGHTING THE INDI-VIDUAL APARTMENTS.

Buildings before renovation



This condominium marks the first stage of a larger scheme to create a new riverfront community on Nuns' Island opposite downtown Montreal. It comprises 164 loft units and offers residents a range of amenities such as a gym and a spectacular rooftop pool. The envelope is characterised by an intricate and multi-layered combination of different materials and colours.

Condominium ZUNI, Nuns' Island, Montreal, Canada POOL WITH A VIEW







"THANKS TO SWISSPEARL, THE DESIRED CONTRAST BETWEEN THESE LIGHT SKINS HAS BEEN ACHIEVED TO PERFECTION." MORAND ÉMOND ARCHITECTES



Pointe Nord is a real-estate development on Nuns' Island in close proximity to downtown Montreal and is part of the city's multi-billion dollar 'Harbourfront' regeneration scheme. Scheduled for completion within the next ten years, Pointe Nord will transform vacant land at the northern tip of the island into a new residential district. The eco-friendly 'urban village' will provide 1,600 housing units along with retail space and a network of public parks, cycling routes and pedestrian promenades along the St. Lawrence River.

Spearheading the enterprise, and therefore of particular significance for its overall success, is ZUNI (Zone Urbaine Nord de L'Ile), designed by Morand-Émond Architectes. Situated vis-à-vis Bell Canada's sprawling new campus, the L-shaped building comprises 164 apartments spread over six to seven storeys. These so-called 'lofts' feature extensive glazing and an open-plan layout anchored by a free-standing service core. Detached from walls and ceiling, the core contains the bathroom and built-in storage units allowing it to accommodate the spatial requirements of different resident groups. Residents share a landscaped courtyard with the owners of the neighbouring town houses also designed by the same architects. Further amenities include a gym and a rooftop swimming pool commanding spectacular views of the river and the city skyline.

Echoing the spirit of newness that infuses the scheme, the architects opted for a decidedly contemporary look. The façades of the courtyard received a comparably restrained treatment, with large areas of white Swisspearl panelling reflecting natural light and serving as a neutral backdrop to the landscaped gardens. The same panels, in combination with regularly spaced window openings and continuous balconies, were used for the street fronts. However, superimposed over this mundane arrangement are wafer-thin black metal frames that add rhythm and depth to the façade. Moreover, scattered within these frames are a number of black and orange metal cubes constituting a modern interpretation of bow windows and the signature element of the project. *Patrick Zamariàn*

Location Nuns' Island, Montreal, Canada Client Corporation Proment, Nuns' Island, Montreal Architects Forme Studio/Morand-Émond Architectes (Yves Émond), Montreal Building period 2010–2011 General contractor Reliance Construction, Montreal Façade construction Revêtement RHR Inc., Saint-Jean-sur-Richelieu, Canada Façade material SWISSPEARL® CARAT, Onyx 7099, Black Opal 7024, Agate 7219 and custom colour Amber 139–10A "AT ZUNI, THE SMALL MODERN LOFTS WERE CONCEIVED, DESIGNED AND BUILT BY RETHINKING THE WAY WE LIVE, WHILE KEEPING IN MIND THE PRINCIPLES OF HOUS-ING ESTABLISHED OVER THE YEARS." MORAND-ÉMOND ARCHITECTES



- 1 Swisspearl[®] cement composite panel 8 mm
- 2 ventilation cavity
- 3 moisture barrier
- 4 thermal insulation
- 5 building board
- 6 galvanised steel structure
- 7 wood sunscreen
- 8 cementitious board
- 9 waterproofing
- 10 metal flashing



Typical dwelling layout





Second floor 1:1000

Home for the Elderly, Grosuplje, Slovenia New Extension, Old People's Home



Perforated Swisspearl panels allow dappled light in, whilst affording a sense of privacy.



This new extension to an old people's home forms a strong, contemporary counterpoint to the existing row of 1970s apartments and acts as a kind of bookend or 'conclusion' to the street that encloses it. All three façades of the split-level extension are clad in muted beige Swisspearl panels that visually refer back to the pre-existing ensemble of housing. The manner in which the covered balconies have been angled on the southeastern corner also serves to 'pull' the façade back toward the connected buildings that run to the south, whilst also opening to the façade to the green fields to the east. The provision of balconies is important as an extension of the modest rooms. Each balcony has a panel attached to the balustrade that provides both shade and privacy. The perforated panels can shift position and animate the surfaces in the three rows of

apartments by adding a feeling of sliding movement. The compact, well-proportioned volume houses eighteen two-bed units with *en suite* bathrooms accessed via a generous, day-lit corridor.

Overall, the architecture of the old-age home extension creates a separate address for the inhabitants, whilst at the same time giving them a connection of community with the adjacent row houses. Creating a sense of belonging is vital in an old people's home, where people have to readjust to a new, unfamiliar environment at an advanced age. As this transition is inevitably difficult, the more humane the architecture, the better. *Anna Roos*





8 steel balustrade

"THE EXTENSION OF THE BUILDING AT THE NORTH END OF THE SITE CLEARLY INDICATES THE HETEROGENEOUS BUILDING STRUCTURE, THUS CREATING THE CONNECTION BETWEEN THE RURAL AND THE MODERN URBAN ARCHITECTURE, BETWEEN THE NEW AND THE OLD ..." M & M CONSULTING

Location Ob Grosupeljščici 28, Grosuplje, Slovenia
Client Dom starejših občanov, Grosuplje
Architects M & M Consulting d. o. o., Ljubljana, Slovenia
Building period 2012
Construction manager TIPO Investicijske gradnje d. o. o., Ljubljana
Façade construction Matevž Šarbek s. p., Kresnice, Slovenia
Façade material SWISSPEARL® NOBILIS, N811



On the University of Iowa's huge campus, Neumann Monson Architects have bundled several functions into a very elegant and efficient building.

West Campus Transportation Center, Iowa City, USA **THREE AT ONE STROKE**







"THE SWISSPEARL CEMENT COMPOSITE SYSTEM WAS CHOSEN FOR ITS WONDERFUL AESTHETIC QUALITIES WHILE STILL PROVIDING ECONOMY OF FABRICATION AND INSTALLATION, DURABILITY AND A LONG LIFESPAN." CHANNING SWANSON, ARCHITECT



It's hard to imagine that what presents itself as a very self-assured, elegant building in the middle of the campus of the University of Iowa (also known as UI or simply Iowa) today, was originally intended as two different projects. "The client's brief was fairly straightforward," says Channing Swanson who, together with his colleague Tim Schroeder, managed the project at Neumann Monson Architects. "It called for a bus station and an office building as two separate structures on the site. The value we were able to create was in the reorganisation of that brief to put the office building over the bus interchange."

Founded in 1847, the University of Iowa's campus today encompasses some 120 buildings, distributed over an area of 1900 acres in Iowa City, Iowa, and is also home to the University of Iowa Hospitals and Clinics, one of the largest university-owned teaching hospitals in the US. With more than 30,000 students, about 13,000 employees and one million visitors each year, the university has to be organised and work like a small city.

Due to the expansion of other facilities on the large campus, it was necessary to relocate the offices of the UI Parking & Transportation Department as well as the



bus interchange for the university's public transport system. Stacking the offices above the bus interchange brought the advantage that the offices could function as the roof of the transportation hub, thus using less space and material, allowing a different distribution of the budget and raising the overall quality of the project. Iowa-based Neumann Monson Architects designed an elegant two-storey structure in the form of a floating beam, the new West Campus Transportation Center (WCTC). The main body of the building – the upper floor with the offices – rests on two foundations, spanning a sheltered open space below. In addition, the upper floor extends on both of the longer sides to form a canopy for the transportation hub.

The office floor is fully glazed on the street sides and clad in Swisspearl rain-screen panels on the others. "We chose Swisspearl because it was one of the few products that met a set of parameters for the cladding", says architect Channing Swanson. The material needed to be durable, relatively lightweight, aesthetically pleasing and not too expensive, to name just a few of the requirements.

"The WCTC also needed a connection with two nearby parking facilities and ultimately with the main entrance of the hospital, now in the form of a 230 meter long enclosed walkway", the architect further explains. Because of the dense network of underground utilities on the site, the only way to create support for the structure was to drive six slim caissons into the ground along the route of the walkway and to connect those with steel beams. The result is an airy "skywalk" projecting from the southeast corner of the beam. *Mirko Beetschen*

Location Evashevski Drive, Iowa City (IA), USA
Client The University of Iowa, Iowa City
Architects Neumann Monson Architects, Iowa City
Building period 2011–2012
General contractor Knutson Construction, Cedar
Rapids (IA), USA
Façade construction Architectural Wall Systems, West
Des Moines (IA), USA
Façade material SWISSPEARL® CARAT, Amber 7080,
7082 and Onyx 7093

The two-storey building in the shape of a big floating bar encompasses a bus interchange on the ground floor, more than 900 square metre of office space on the upper floor as well as a glazed skywalk to the nearby hospital.





"IT WAS IMPORTANT THAT THE CLADDING MATERIAL FITS INTO THE EXISTING BUILDING CONTEXT AND CONVEYS A PROGRESSIVE SENSIBILITY." CHANNING SWANSON, ARCHITECT



1 Swisspearl[®] cement composite panel 8 mm

- 2 ventilation cavity, vertical sub-framing
- 3 sun shade
- 4 painted aluminium plate blades
- 5 curtain wall
- 6 thermal insulation
- 7 aluminium sub-framing
- 8 aluminium sheet joint closure
- 9 waterproofing
- 10 corrugated steel decking
- 11 cement screed
- 12 prefabricated concrete





Understanding that sustainability and green jobs were an integral part of this vision, the college set the bar at the highest levels of sustainability to serve as a tangible example of the transformative nature of green technologies in the lives of students and teachers, as well as the community at large.

Mission College Center for Math and Science, Los Angeles, USA **A BUILDING THAT EDUCATES**









Horizontal section

- 1 Swisspearl[®] cement composite panel 8 mm
- 2 ventilation cavity, vertical sub-framing aluminium 3 horizontal aluminium hat channel
- 4 moisture barrier
- 5 sheathing
- 6 thermal insulation, steel stud wall







Arrays of photovoltaic panels hover high up above the external communal courtyard where large boulders double as seating.

Set slightly apart, but within walking distance from the main campus, the new Center for Math and Science at Los Angeles Mission College's East Campus was designed to relate to the architectural language of the existing faculty buildings. The surrounding rugged landscape of the Pacoima Wash and the San Fernando Mountains create a spectacular backdrop for the faculty building.

The architects, Quatro Design Group, were requested to design a modern, "forward-looking" building. The college envisaged a state-of-the-art educational facility that would inspire students and give them a set of skills that would enable them to build a career path. As is appropriate for any new-build today, the architects sought a holistic and sustainable design approach that integrated sustainable energy use and affordable construction methods, while still being aesthetically pleasing. In planning the centre, the architects took careful consideration of both vehicular and pedestrian circulation in and around the building, as well as the orientation in response to day lighting, views and prevailing winds. The building has been carefully integrated into the site, while the landscaping design has taken its cue from the surrounding countryside. Three overlapping and intersecting forms are positioned in an irregular 'U' formation, thereby creating an interior courtyard that is sheltered by the canopy of photovoltaic panels held high up above. The three primary volumes are varied in height and interlock with one another to create a dynamic ensemble that is further emphasised by the sloping line of the parapet.

The elongated traverse volume that houses the tripleheight entrance lobby and lecture theatre is finished in cement plasterwork, while the other two wings are clad



Here the shifting two-coloured panels, interspersed with long windows, create a sense of movement on the elongated façade.

> Location 770 Wilshire Blvd, Los Angeles (CA), USA Client Los Angeles Community College District Architects Quatro Design Group, Los Angeles Building period 2010–2012

Construction manager Pankow, Pasadena (CA), USA Façade construction Dennis Jean, Irvine (CA), USA Façade material SWISSPEARL® CARAT, Coral 7030 and 7032 in two shades of coral Swisspearl. This cladding was the primary device used to visually tie the new building to the existing university campus, the roofs of which are made from terra cotta tiles. Furthermore, the use of the central communal public atrium that unifies the various zones echoes the organisation of numerous other campus buildings. The ground floor level creates a kind of a grey plinth that offsets the upper two levels in red.

Thanks to the strength and cooperation of the design and construction team, the multitude of challenges they faced could be successfully overcome. The green credentials of the building help reduce maintenance and energy costs leaving a real-life embodiment of the potential force of science for good. *Anna Roos*

The main triple-volume entrance is held between two primary volumes that lie perpendicular to it.

First floor 1:2000

Ground floor

A recently completed building on a Texas junior college campus serves as new entryway to the premises and sets the scene for further architectural developments.

Junior College Math and Science Center, Paris, Texas, USA **BUILD ON EDUCATION**

- 1 Swisspearl® cement composite panel 8 mm
- 2 ventilation cavity, vertical hut channels 3 thermal insulation
- 4 moisture barrier
- 5 exterior board
- 6 thermal insulation, metal stud framing
- 7 gypsum board
- 8 ventilated coping
- 9 up stand, to prevent wind driven rain water ingress
- 10 waterproofing 11 roof system
- 12 corrugated metal sheet

Paris Junior College was founded in 1924 and is Texas' oldest continuously operated community college. Together with SHW Group, a leading US architectural firm specialising in educational environments, Paris Junior College developed a master plan, evaluated existing facilities and sought ways to improve the organisation and language of the campus using modifications as well as new facilities. The recently finished Math and Science Center is the first component of this plan and creates a new entryway to the campus, sitting on an elevated point of the compound, visible from the main entrance, and leading directly into the heart of the college grounds. A two-storey glass lobby and an equally glazed rear wall create transparency and indicate the building's function as a thoroughfare. To draw students and visitors in and through the building, the Swisspearl cement composite panels are used on the front façade, then penetrate into the lobby and extend to the back, enhancing the desired pedestrian flow. Mirko Beetschen

"THE FOLDABLE NATURE OF THE CEMENT COMPOSITE PANELS PROVIDED THE CRISP LINES NEEDED TO EXPRESS THE BUILDING'S MODERN TONE, WHILE THE COLOUR HELPED TIE THE BUILDING INTO THE EXISTING CAMPUS ARCHITECTURE." VANDANA NAYAK, SHW GROUP

First floor 1:1000

Ground floor

Location 2400 Clarksville St., Paris (TX), USA
Client Paris Junior College, Paris (TX)
Architects SHW Group, Plano (TX), USA; Amy King, Terry Hoyle, Dan Fletcher, Jennifer Deng, Gwen
Morgan
Building period 2012
General contractor Balfour Beatty Construction,

Dallas (TX), USA

Façade construction R. M. Rodgers Inc. / Underwood Sheetmetal Inc., Houston (TX), USA Façade material SWISSPEARL® CARAT, Black Opal 7025

The façade in multiple colours expresses, in the words of Studio UR.A.D. architects, the playful character of the children and the school, while the design of the building itself remains comprehensible by expressing its individual parts.

Ledine School, Nova Gorica, Slovenia SEPARATE FAÇADES, SEPARATE FUNCTIONS

The design for the full renovation of Ledine School in Slovenia, close to the border of Italy, was chosen in an open architectural competition held in 2007. The functional division of the school has been made clearly visible by articulating the façades of the L-shaped plan into two distinct parts: one finished in white plaster, the other in red Swisspearl cement composite panels. The south-facing classroom wing is plastered and painted white and has retained its vertical sun-shade devices, whilst the perpendicular east-west wing, where the double-volume gymnasium is positioned, has been clad in two shades of russet red Swisspearl panels. The combination of the lighter and darker reds on the classroom wing imparts the building with a sense of visual movement and lightens the aesthetic. This clear division helps to demarcate the building and orient the staff and pupils. By extending the Swisspearl cladding all the way down to the ground level, Studio UR. A. D. has kept the architecture of the classroom wing abstract.

In order to tie the two parts of the school together visually, an elongated overhang with a white fascia extends at right angles to the classroom wing all along the entrance area as protective cover and beyond, as a sunshade to the large window of the gym. This crisp, white line draws the two volumes of the school together and prevents the overall scheme from being disjointed. The overhang slices through the high glazing behind it, which forms part of the façade of the lofty entrance hall where the staircase that links the lower level to the upper classrooms is situated. The hall is the "internal communication core" of the school. Throughout the building, the finishes are light and bright; the russet red Swisspearl panels are counterbalanced by the canary vellow rubber floor finish on the upper level corridor, which has light brushing across its surface from the low level western window. Anna Roos

Location Cankarjeva 23, Nova Gorica, Slovenia Client Mestna Občina, Nova Gorica

Architects Studio UR. A. D. d. o. o., Nova Gorica; Boštjan Kikeli, Klemen Pavlin, Mojca Magajne, Tomaž Faganeli

Building period 2012-2013

Construction manager MARC d. o. o., Ajdovščina, Slovenia

Façade construction Alkam d. o. o., Kamnik, Slovenia Façade material SWISSPEARL® PLANEA, P111

Ground floor 1:1000

"THE FUNCTIONAL DIVISION OF THE BUILDING IS ALSO EXPRESSED IN ITS FAÇADE." STUDIO UR. A. D. A pop-out picture window to the gym gives a visual accent to the front façade and counterbalances the large opening of the school's entrance.

This extension to a primary school in northern Portugal adds a library and cafeteria to the existing facility, while also providing space for a kindergarten and nursery. The various functions are connected by a generous and fully glazed circulation area that can be used for indoor activities. The design of the building is marked by an eye-catching arrangement of red, orange and yellow Swisspearl panels that sets the school apart from its residential context.

Santiago de Custóias Primary School, Matosinhos, Portugal BIJOU IN THE BACKYARD

"THAT'S THE MAIN IDEA OF THE NEW PROJECT: TO ENLARGE THE SCHOOL USING THE SAME STRUCTURAL PRINCIPLES." PEDRO GOMES FERNANDES

Location Rua da Escola - Custoias, Matosinhos, Portugal
Client Municipality of Matosinhos
Architect Pedro Gomes Fernandes (Europlan), Porto, Portugal
Building period 2012
General constructor QTCIVIL - Engenharia e Reabilitação, Lousada, Portugal
Façade construction Stonarte, Serzedo, Portugal
Façade material SWISSPEARL® PLANEA, Red P 314, Orange P 712, Yellow P 613

- 1 Swisspearl[®] cement composite panel 8 mm
- 2 ventilation cavity
- 3 moisture barrier
- 4 thermal insulation
- 5 concrete 6 timber batten
- 7 aluminium panel
- 8 brickwork
- 9 timber batten
- 10 suspended ceiling

"WE TRIED TO CREATE A NEW IDENTITY FOR OUR SCHOOL BUILDING." PEDRO GOMES FERNANDES

This project has a long and rather unusual history. Five years ago, the council of Matosinhos, a city on the northern outskirts of Porto, invited architects Europlan to design an extension to a primary school they had originally built in the early 1970s. Although the council had previously undertaken repair works on Santiago de Custóias, these were largely cosmetic and did not address the school's desperate shortage of space. The library was crammed into one of the original classrooms; cafeteria and support areas occupied another one.

Consequently, the project objectives were twofold: to improve the infrastructure and increase the capacity of the existing school by freeing up classroom space and to provide additional learning facilities for children up to the age of six. As would seem sensible, the architects met these two objectives by devising two separate blocks. The first of these, connected to the existing school by a glazed passageway, comprises communal spaces, such as the cafeteria and the library on the ground floor and a multi-purpose room for complementary activities on the upper storey. The second block accommodates educational spaces in the narrower sense with the kindergarten located at ground level and the nursery above.

Breaking the programme into small parallel volumes, in keeping with the scale of the surrounding residential buildings, the architects adopted the pattern they had established for the original school complex. However, this is where the similarities end. Typical of the architecture of its time, the old school is composed of convoluted volumes, yet monosyllabic in terms of material and colour. In contrast, the new addition is

"THE INSPIRATION WAS TO RECREATE THE BUILDING BLOCKS MY CHILDREN USE AS TOYS, WITH VARIOUS SHAPES AND COLOURS." PEDRO GOMES FERNANDES

reticent in its formal vocabulary but eclectic in its choice of cladding materials. More significantly, the design of the new playground and recreation zones, both indoors and out, are a clear improvement to the previous ones. Taking advantage of the slope of the terrain, the passageway linking old and new is in fact a double ramp allowing split-level access to either floor while marking out an outdoor patio adjacent to the new cafeteria.

Moreover, the architects devised a third block which, along with the other two and a lower auxiliary structure, forms an enclosed playground area that allows maximum supervision of the youngest children. Not a designated component of the original brief, the block provides a generous and versatile circulation area that can be used for indoor play, exhibitions or any other sort of group activity. Thinking beyond the programmatic necessities envisaged by the official planners, it is the sort of vaguely defined, 'redundant' space that can lift public buildings, particularly school buildings, from mere functional facilities to veritable communal amenities.

The playground block is designed as a transparent layer that visually opens up the courtyard and transforms a residual plot of land between the school and the neighbouring apartment block from a non-descript backyard into a small triangular park where parents can sit and enjoy the lively spectacle while waiting for their offspring. Inspired by the branches of trees, the structure features extensive glazing supported by a meshwork of grey metal frames. In contrast, but no less conspicuous, the façades of the other two blocks boast a geometric arrangement of slit windows and red, orange and yellow Swisspearl panels in different formats. According to the architects, the design of Santiago de Custóias simulates the children's building blocks invented by German pedagogue Friedrich Froebel clearly a particularly apt inspiration for a kindergarten building. Using the same panels and colour scheme inside and out reinforces the effect, while additional elements such as the cylindrical elevator tower and the plain lateral façade of the playground block compliment the cubist interplay of elementary forms. Patrick Zamariàn

Talking with Pedro Gomes Fernandes, Europlan, Porto, Portugal

Pedro Gomes Fernandes was born in Oporto in 1968. He holds a degree in architecture from Oporto University School of Architecture (1993) and a Master's Degree in Architectural Composition from Escola Superior Artística do Porto (2010). He is the Principal-in-charge of Europlan and the lead designer for Santiago de Custóias primary school.

Extensions usually involve a criticism of the existing structure. In your case this concerns your own work. How did you handle this somewhat paradoxical situation?

Well, I wasn't directly involved in the original project. My father built the original school when I was six or seven years old. Nonetheless, I think you are right. An extension is always a comment on the original structure, and in this case it was a comment on our own work. Although the design work started before our revolution in 1974, when we still had an old-fashioned school model in this country, my father tried to do things differently and used a progressive Scandinavian model. I think all the principles in the original project were right, so in our design for the new extension, we tried to reinforce these principles. That's the main idea of the new project: to enlarge the school using the same structural principles.

What are these principles?

The programme is organised by blocks. In the original school you had two blocks: One was supposed to be for girls, the other for boys. Well, this didn't work. They ended up being separated by grades rather than sexes. But anyway, the blocks established a basic structure with two wings and a patio in the middle. We tried to use that same structure by organising the school in wings with playground spaces in between. The first of these wings next to the old school is the library and the school cafeteria; then there is a patio and finally the new classroom block. The only innovation was the third block connecting the other two, which we intentionally planned as a multi-functional space. At nine metres height, six metres width and forty metres length, it has funny dimensions in a way - but it works. Children can play there in the winter when it is raining, you can make exhibitions there - it allows for a lot of different activities. It can also be shut off from the rest of the school so the community can use it in the evenings or on weekends. This was not part of the original programme, but I think it is very good for the community as a whole.

What sort of community are we talking about? Can you describe the area?

Custoias is quite far from the city centre of Matosinhos. It is characterised by medium-density housing areas, i. e. small houses and low-rise multi-family buildings. I think it was important to revive this school because the neighbourhood really needed a new reference point. It is not one of the most beautiful parts of the city. It is a working class area with a lot of poverty, so the houses are not very beautiful. That's why we wanted to make a difference. We tried to create a new identity through our school building. That is one of the main parts of this project. Our design tries to express the activities of the children within. The indoor playground, for example, was originally conceived as a winter garden with indoor plants. That would have been too expensive to maintain so we asked ourselves: Why can't we build the plants using the structure? That's why all the columns pretend to be plants growing from the ground. It is a little unusual but I think it worked. That's my feeling anyway but, of course, I'm the architect [laughs]. I hope people like it.

What about the classroom and library blocks?

There are many schools here that are white or grey, and I just don't think they are the right place for children. We want children to know and enjoy their school. There is no point building a school if the children don't feel good there. I have two boys at that age, and I wanted to use children's motifs on the façades of the building. The inspiration was to recreate the building blocks my children use as toys, with various shapes and colours. It was a different approach,

but I think it worked very well because it gave me the freedom to design the shape of the windows the way we needed them. Take, for example, the babies' room. Babies don't walk; they crawl. Therefore, it is the only classroom where the windows go straight to the floor. The arrangement serves a clear purpose. Whenever you need to be pointed to the corridor, there's a wall; if you have a reason to stop, there will be a window and so forth. It was a very flexible way of composing the façade; plus, I very much enjoyed doing it [laughs].

What made you choose Swisspearl?

It is funny because usually as an architect you first make a design and at some point in the process you start thinking about the right materials for it. On this project, it was completely different. Your local agent visited me in my office and drew my attention to a school that was covered with coloured Swisspearl panels. Each block of that school had a different colour, and I thought to myself that this could be a very nice way to compose a façade. So, with this school, the material came first. Swisspearl was my first (and only) choice of material. The design process was reversed: I started with the colours, and then I did the actual design. It was very nice to do things differently, and it worked very well.

What are the strengths of Swisspearl panels?

We used the panels in the outside playground area. Children are going to play here, and they might damage the façade. We want the school to look the same in twenty years, so we needed a very resistant material. This is one of the main reasons why we chose Swisspearl. If you look at the plan, you can see we have colour panels facing in each direction. In light of that, it is very important to know how the material behaves in future. Otherwise, you will get different colours on different façades.

How did the city council react to your proposal?

They were hesitant at first because it cost a little more than they had expected. Your representative was fundamental in convincing them. He did all the work and explained the situation to the engineer in charge. In the end, they accepted the proposal because they saw the advantage of it over time. It was the same with the original school, which had been constructed in painted concrete. Almost forty years after it was built, the only restoration that was needed was to repaint the concrete, so in the long run it turned out to be really cheap. One surface restoration in forty years is very good. Our hope is that with the extension it will be the same in twenty, thirty years' time. When there will be restoration work on this building, it will be to paint the other materials. That's what we want, and that's why we used Swisspearl.

It has been about a year since completion of the project. Are you happy with your choice of material and the school as a whole?

Yes, absolutely. I really hope to use Swisspearl again on a future project. As for the school itself, it is too soon to judge the building because the reorganisation will not be completed until September 2013 when the new school year starts. The reactions from people who visited the school, I think, were very good. I have talked to neighbours who were watching the construction and I asked them about the colours. They thought it was different but they liked it, and they thought children would like it. I was happy to hear that, of course. Usually when a building opens and my job is done, I don't go there again unless I need to use it. I think with this one it will be different. I think it will be a very nice surprise to come back in a few years and see it in good shape.

Interview by Patrick Zamariàn

Marof Winery, Mačkovci, Slovenia Juxtaposition and Counterpoint

The horizontality of the winery ties it into the landscape while the verticality of the manor house emphasises its supremacy over the estate.

The agricultural estate Marof, in eastern Slovenia, has been in existence for well over a century. A complete renovation of the manor house, under the supervision of the Institute for the Protection of the Cultural Heritage, has restored it to its original stately condition. The former outbuildings have been replaced with new structures, including the new winery, which produces the new Marof wine. Nestled in 40 hectares of vineyards, the winery echoes the topography. Its volume subordinates itself to the manor house and the majestic linden tree that stands as a kind of a buffer between the two buildings.

Although the barn-like architecture of the new building forms a counterpoint to the eclectic neo-classical manor house, the two contrasting structures nevertheless relate to each other through their materials, most notably the twin use of burnt ceramic roof tiles on pitched roofs. The new building also responds to its wider environment and references the pattern of upright supports that hold the vines in place. This is subtly echoed in the play of delicate vertical strips of Swisspearl panels along the long horizontal façade.

Sculpting the landscape has allowed the accommodation of various subterranean spaces, including the grape press, storerooms where the wine barrels are kept and the wine matures, a laboratory and a bottle filling station. The surrounding mass of earth helps to maintain a constant temperature of 14°C. The visible part of the building holds the glazed reception area, which overlooks the surrounding vineyards, and the wine tasting area. *Anna Roos*

- 1 Swisspearl® cement composite panel 8 mm
- 2 ventilation cavity, timber batten
- 3 timber batten

- 10 vapour barrier
- 11 wooden support system
- 12 gypsum board

"THE BUILDING'S FORM FOLLOWS TERRAIN TOPOGRAPHY; ITS VOLUME COMPOSITION IS SUBORDINATED TO THE ADJOINING MANOR HOUSE AND THE OLD LINDEN TREE. IN ACCORDANCE WITH THE CULTURAL HERITAGE **GUIDELINES, THE ROOF IS FINISHED IN RED BRICK, THE ROOFING MATERIAL OF THE OLD OUTBUILDINGS.** FRAGMENTED FAÇADE SURFACE SETS UP A MULTITUDE OF **VERTICAL BARS, ECHOING THE VINE SUPPORT POLES." STUDIO KALAMAR**

Location Mačkovci 35, Mačkovci, Slovenia Client Panvita Marof d. o. o., Mačkovci Architects Studio Kalamar, Ljubljana, Slovenia Building period 2009 General contractor SGP Pomgrad d. d., Murska Sobota, Slovenia Façade construction Karba mge, Ljutomer, Slovenia Façade material SWISSPEARL® NOBILIS, grey 012, 212

Residence Krunska, Belgrade, Serbia Floating Cube

Designed by local architects Biro VIA, this residential building in the centre of Belgrade offers four apartments on the upper floors and retail space at ground level. The convoluted volume is the result of a careful examination of the urban context, taking advantage of the prominent corner location while respecting the existing streetscape. Taking its name from the eponymous road, Krunska offers retail space at street level and floor suites on each of the four residential storeys.

Architects Biro VIA designed the lower two of these as a white cube, while letting the top floor float above a recessed and fully glazed intermediate level. These shifts in formal expression do not correspond with any differentiation in layout. The apartments are largely identical with the living room and dining area stretching across the entire front and the bedrooms situated in the lateral sections. Differences are in size rather than principle and related to the outdoor spaces. The third floor apartment, which opens onto a terrace, is considerably smaller than the two lower residential floors, which have no balconies.

The design of the building was driven by formal rather than functional considerations. However, what might otherwise be a vice is, in this case, a virtue, since these considerations reflect the architects' engagement with the urban context. The structure marks the corner of an existing perimeter block, and while its convoluted shape would perhaps appear intrusive as part of a continuous street front, it is certainly appropriate as its starting point.

The retail space features a large shop window facing the main road and is accessed via a forecourt; the en-

"THE BUILDING WAS DESIGNED AS A CUBICAL VOLUME WITH A TOP EXTENSION, CREATING TWO VOLUMES WITH A GLASS INTERLUDE IN BETWEEN." BIRO VIA

Location Krunska 87, Belgrade, Serbia Client City Properties, Belgrade Architects Biro VIA, Belgrade; Goran Vojvodić, Milena Katić, Dušan Radišić Building period 2010–2012 General contractor Gradina/Masarikov, Zemun, Serbia Façade construction Armont SP, Zemun Façade material SWISSPEARL® CARAT, Onyx 7099 08 ARSB; SWISSPEARL® PLANEA, Green P517 ARSB

trance to the residential units is situated in a side road. On either side, the building follows the alignment of the adjacent houses. While from afar the building stands out due to its floating top floor, at a closer distance, it fits seamlessly into the existing fabric.

The façade design echoes this unassuming approach. Contrary to recent trends, the designers refrained from mixing an array of colours and materials to draw attention to their building. True to the idea of two monolithic cuboids separated by a glass void, the architects chose a uniform cladding in white Swisspearl panels with a few pastel green accents. The neighbourhood abounds with historical villas from the 1920s and 1930s, and there is a certain irony in the fact that none evokes the period in quite the way this new building does. *Patrick Zamariàn*

Vertical section 1:20

1 Swisspearl[®] cement composite panel 8 mm

- 2 ventilation cavity, vertical sub-framing
- 3 moisture barrier
- 4 thermal insulation
- 5 concrete 6 blinds
- 7 glazing
- 8 glazed balustrade
- 9 bracket

Cultural Centre Vértes Agórájat, Tatabánya, Hungary Façade Pep-up

The aesthetic appearance of a building is vital if it is to succeed in its goal of attracting the public. The full renovation of this dilapidated 1980s cultural centre was primarily to make it more attractive to the community who found its current neglected guise unappealing. Both its functional and aesthetic qualities were in dire need of improvement. How to 'renew' the building as well as renovate it was clearly a vital decision.

The choice of Swisspearl panels fulfils the criteria of durability and sustainability and the bold colour palette gives the building a distinctive character. Saturated orange clearly demarcates the pop-out entry, while elongated strips of Swisspearl panels in the same fiery orange and hot red shift randomly across the primary façade and emphasise the extreme horizontality of the building. If the primary aim of this overhaul was to upgrade and improve its public image and meet the current technological standards, then one could certainly deem this project to be a success. *Anna Roos*

"THE ARCHITECTURE OF THIS BUILDING PRESENTS A CONTEMPORARY INTERPRETATION OF AN URBAN VILLA AND AN ANSWER TO THE PROBLEMS AND LIMITATIONS THAT COME ALONG WITH DESIGNING IN AN URBAN CONTEXT." BIRO VIA

The original centre was in a state of disrepair and its resemblance to a strip-mall meant it needed a facelift.

1 Swisspearl[®] cement composite panel 8 mm

- 2 ventilation cavity, vertical sub-framing
- 3 bracket
- 4 thermal insulation
- 5 existing sandwich panel construction
- 6 sound insulation
- 7 gypsum board
- 8 waterproofing
- 9 existing steel framing
- 10 existing slab construction
- 11 suspended ceiling

Location Szent Borbála tér 1, Tatabánya, Hungary
Client Tatabánya City Council
Architects Planbau Kft., Tatabánya
Building period 2012
Construction manager West Hungária Bau kft, Győr, Hungary
Façade construction Meilinger János, Győr
Façade material SWISSPEARL® CARAT, custom colours black, red and orange

Chromoscope - a Colour Concept

The most important technical university in Frenchspeaking Switzerland, the Ecole Polytechnique Fédérale de Lausanne, EPFL (Swiss Federal Institute of Technology), is constantly expanding their campus, but only with the highest demand for innovation. In 2013, the architects Richter - Dahl Rocha & Associés Architectes SA added another architectural jewel to the campus: a residential building for about 500 students. This building bears a very personal signature, or better, a very individual character: artist Catherine Bolle developed an individual colour concept for the cement composite panels for the courtyard façade.

Catherine Bolle and the architects Richter - Dahl Rocha & Associés have been cooperating for many years. The reciprocal integration of art and architecture varies from case to case. These range from the simple selection of a work to an entire project where the artist is included from the beginning of the architectural concept. The exchange between art and architecture leads to an intensive encounter and the fusion of the building design and the art intervention.

Cement composite panels form the basis of the design of the courtyard façades of the student apartments and at the same time serve as a canvas for the artist. But Bolle did not limit herself to the catalogue colours of the panels, instead she developed her own colour concept for the building. With a layer of transparent pigments combined of earth, iron oxide and ochre hues, she created an extraordinary display of visual poetry. She shifted the harmony of the colours and their light reflection. Thus Bolle was not only the artist but also a co-designer in the development process and leaves behind, in the truest sense of the word, her own artistic signature on the project.

Based on the orientation of the façades, the artist selected different mixtures for the colours. For the southern façade, she raised the iron oxide content in the colour mix and mixed in a warm ochre. Catherine Bolle speaks here of a 'view to the south'. The western façade received rich contrast tones and various combinations of the colours of the New World, while 'oriental' colours graced the façade facing east. Bolle consciously did not use any dark tones on the northern side, but rather the light clear tones one knows from Scandinavian design. The project Chromoscope ou l'expériencemétis (Chromoscope or an integrated experience) lends the new student residence at EPFL Lausanne its own very special character. *pd*

Catherine Bolle is a painter and sculptor in Lausanne. She studied at the Ecole Cantonale des Beaux-Arts in Sion. Her work includes paintings, sculptures and copper engravings as well as light, glass and spatial design – often in collaboration with renowned architecture firms.

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USA La Casa Student Housing, Chicago West Campus Transportation Center, Iowa City Mission College Center for Math and Science, Los Angeles Junior College Math and Science Center, Paris, Texas

