

SWISSPEARL ARCHITECTURE 12

International Edition - High Profile Buildings

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SWISSPEARL ARCHITECTURE 12

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CREATIVE DIFFERENTIATION



In an ever increasingly more competitive environment with fewer construction projects, it will become more important even for the exceptional designer to demonstrate his or her design abilities. One has come to assume that functional expectations will be fulfilled. It only becomes exciting when investors begin to place more

value on the distinguishing aspects of their project. Through high-quality architecture and/or interior design, both the designer and the client are able to visually rise above the rest. Despite budget restrictions, architects today possess more and more options to showcase their design abilities in a one-ofa-kind building, perhaps even as new trendsetters. Complex volumes, forms, and contours are the raw materials for innovative design. Creative colour combinations or spectacular perforation concepts for light distribution and transparency can lend any building an intriguing expression. The ornamentation of façade and wall surfaces through colour concepts, perforations, or three-dimensional surface structures can provide other paths leading to an extraordinary design, something that the client will appreciate as increasing the value of the building. For Swiss manufacturers like ourselves, it is especially exciting to be able to react to the extraordinary challenges and ideas coming from all parts of the world and develop solutions for realising architects' conceptions with our versatile Swisspearl line of products. We work to ensure that both designer and client are proud of their exceptional building with its beautiful façade: their business card for many years to come.

On the following pages you will find diverse and exceptional design ideas from throughout the world. Enjoy your journey!

Anders Holte, CEO Eternit (Switzerland) AG





Contemporary Approaches to Façade Design SURFACE OVER STRUCTURE

Modernism's dismissal of historicist architecture not only put an end to its opulent eclectic façade designs, but in effect, to façade design itself. Inspired by the writings of Louis Sullivan, whose 'Form follows function' would become the often misinterpreted catch phrase of the Modern movement, architect Adolf Loos launched a contemptuous verbal attack on his contemporaries in 1908. The very title of his manifesto, 'Ornament and Crime', staked the high moral claim of a new generation of architects in their quest for true and honest forms. New construction methods such as reinforced concrete and steel-frame structuring allowed for radically new spatial and formal dispositions and were to be exposed to the greatest possible extent, undistorted by any kind of applied decor recalling the alleged mendacity of a past and overcome era.

However, it wasn't until after World War II that architects like Louis Kahn or Oscar Niemeyer fully exploited the formative potential of concrete. Engendered by Le Corbusier's plastic post-war oeuvre, 1960s Brutalism was to be the climax of the modernist struggle for structure over surface. Postmodernism's unprecedented lavishness of form and material constituted a vigorous response to the perceived bleakness and blandness of post-war architecture. The smart ambiguity of its precursors, however, soon degenerated to a mere cult of façades and in turn triggered a new minimalism rooted once again in the work of the modern pioneers.

The challenge of designing façades remained, not least due to increased concern for energy and sustainability issues and the prioritisation of multi-layered and ideally ventilated structures over monolithic walls. In times when the outermost and thus visible layer is not normally the load-bearing one, the notion of structural honesty is evidently obsolete. Frank O. Gehry's titanium claddings or Thom Mayne's folded and tilted cement composite façades illustrate the cladding's independence from its supporting structure in an exemplary manner. Even in the birthplaces of modern architecture, such as Germany or Switzerland, where a strong modern tradition has always been maintained, a certain horror vacui seems indisputable as monochromatic and unstructured wall surfaces that express little else than the way in which they were built have clearly lost their appeal.

Instead, at present architecture is marked by a steering towards highly evocative and often decorative façade designs. Jean Nouvel's much-admired Arab World Institute from 1989 with its ornamental arrangement of motor-controlled apertures was an early example of this trend. Few architects have explored the communicative potential of façades as thoroughly as Herzog and de Meuron. Their li-



Christ the King Jesuit College Preparatory School, Chicago, USA

Bus Station, Velenje, Slovenia

Metro Station, Santiago de Chile, Chile

brary in Eberswalde, for instance, displays a series of serigraphically printed photo images on glass and concrete elements that allegorise the collection of knowledge and information provided within the building. Projects like this have had a profound impact on a younger generation of architects who use ornamental elements to suggest a building's specific context or purpose. A prime example is Caruso St John's Nottingham Centre for Contemporary Art whose repetition of scalloped concrete panels with lace patterning refers to the city's past as a centre of lace manufacturing.

Swisspearl façades offer an unparalleled range of options to give each building its desired individual appearance – be it through the considered selection of colour, format and fixation or by modifying the panels themselves. Bevk and Perović used an irregular pattern of conspicuous aluminium disc fastenings to add a lively touch to their social housing estate in Ljubljana. More subtly, their Slovenian compatriots, Mojca Gregorski and Ajda Vogelnik Saje, attached vertical wooden joint profiles to their Kindergarten in Kidričevo, which symbolically indicate the building's pine forest environs.

Architects often draw on natural or organic forms to animate their façade designs. Witraz Architects employed digital printing technology to decorate the panelling of their gym in Rødovre with bitmap images of hibernal trees.

An increasingly popular method to alter the appearance of the panels is laser-cut perforations. They are not only used for bespoke interior applications, but also for the ornamentation of the building envelope itself. Xten Architecture used abstract floral motifs to link their Diamond House in Santa Monica to its canyon setting, and Gužič and Trplan's bus station in Velenje displays a random pattern of circular holes. Reminiscent of information boards and traffic signalisation, the façade indicates the purpose of the building while filtering the incoming light and shielding the interior from outside views.

Chicago architect John Ronan used both prints and perforations for the detailing of Christ the King Jesuit College Preparatory School. Most notable, however, is his programmatic approach to façade design. The tonal arrangement of blue and grey panels at Christ the King mirrors the school's business-like aspirations, while the vibrant colour scheme of his Gary Comer Youth Center speaks to the building's youthful orientation. Furthermore, Ronan's mosaic-like arrangements are a response to the occurrence of graffiti in urban areas – obviously a problem that the modernist prophets of plain surfacing could not have anticipated. *Patrick Zamariàn* The first Catholic high school to be built on Chicago's West Side in more than 80 years, Christ the King Jesuit College Preparatory School sets a striking contrast to its decayed surroundings. A tonal arrangement of cement composite panels adds depth to the façade and gives it a corporate appearance in keeping with the business-like approach of the school.

Christ the King Jesuit College Preparatory School, Chicago, USA BEACON OF HOPE







"A SCHOOL PROJECT IS NOT ABOUT STROKING THE EGO OF THE ARCHI-TECT, IT'S ABOUT TAKING WHAT LITTLE MONEY YOU HAVE AND DOING THE ESSENTIAL THINGS IN A SMART AND ELEGANT WAY." JOHN RONAN

Located in Chicago's poverty-stricken and crime-ridden Austin neighbourhood, Christ the King Jesuit College Preparatory School alleviates a serious shortage of high school classroom seats in the area. It brings hope to its predominantly African-American community whose children would not otherwise have access to a private high school education. The school operates on the Cristo Rey model, which was developed twelve years ago in Chicago by the Jesuits and includes a corporate internship programme in which all students work one day a week for a company that, in turn, subsidises their tuition. The Cristo Rey Network incorporates twenty schools in urban areas across the USA and has a success rate second to none. Ninety-nine per cent of its graduates are accepted into a college or university, which explains the unanimous support that Christ the King has attracted from its mostly non-Catholic community. Architect John Ronan has designed a 94,000 square foot building for 600 students that mirrors an existing Jesuit middle school on the same block, thus embracing an enclosed landscaped courtyard. Lined with digitally printed cladding panels that depict the Stations of the Cross, the courtyard serves as a sacred space for religious services as well as an outdoor gathering and recreation area. The building itself comprises a three-storey academic wing running east-west that connects at right angles to a large, but slightly lower sports hall that can also be used as an auditorium.

The two-storey main entrance on Jackson Boulevard leads into the lobby, which houses a reception area. Placed in the vertex of the L-shaped structure is the dining room, whose floor-to-ceiling glazing emphasises the public aspirations of the new school. In addition, the academic wing accommodates twenty-five state-of-the-art classrooms,



administrative offices, and science and computer labs along with various meeting rooms and counselling suites. The library is situated on the top floor and overlooks the courtyard and the adjacent Moore Park through a largescale panoramic window.

However, the most remarkable space in the overall complex is the 210-seat St. Ignatius Loyola Chapel, which anchors the eastern end of the building. The concretefloored sanctuary is lit from above by a skylight monitor, which runs through all three stories of the building and captures additional morning light through three wave-distorted glass block walls. The remaining interior wall is backed with sound insulation and clad with cross-shaped perforated Swisspearl panels. Thus, along with the acoustic stretch-fabric ceiling, it provides for a subdued sound level within the chapel. Location 5088 W. Jackson Boulevard, Chicago, IL, USA Client Archdiocese of Chicago Architects John Ronan Architects, Chicago Building period 2008–2010 General contractor Norcon, Inc., Chicago Façade erector The Levy Co., Northbrook, IL, USA Façade material SWISSPEARL* CARAT, Black Opal 7021 and 7022, Sapphire 7060 and 7061



"THE BUILDING HAS A BUSINESS-LIKE AESTHETIC. WE WANTED IT TO LOOK LESS LIKE A TRADITIONAL SCHOOL AND MORE LIKE A COMPANY." JOHN RONAN



Second floor 1:1000



First floor





- Vertical section 1:20
- 1 Swisspearl[®] cement composite panel 8 mm
- 2 Swisspearl® cement composite panel 12 mm
- 3 Ventilation cavity, vertical sub framing
- 4 Moisture barrier
- 5 Thermal insulation
- 6 Waterproofing membrane
- 7 Concrete masonry unit
- 8 Aluminium panel
- 9 Concrete
- 10 Membrane roofing
- 11 Thermal insulation, extruded polystyrene
- 12 Precast concrete
- 13 Structural steel beam

Ground floor





"THE BUILDING IS DESIGNED TO INSPIRE. WITH GOD'S GRACE, WE ARE CREATING A BEACON OF LIGHT AND HOPE – A PLACE WHERE OUR YOUNG PEOPLE WILL BECOME TOMORROW'S LEADERS; LEADERS WHO NOT ONLY BETTER THEMSELVES, BUT COMMIT TO SERVE AND LIFT UP THEIR COMMUNITY." REV. CHRISTOPHER J. DEVRON, SJ, SCHOOL PRESIDENT



For speed of construction (and to allow construction phasing if necessary), Ronan used a steel-frame structure with concrete plank floors for the academic wing and load-bearing masonry with long-span trusses for the gym. A seemingly random arrangement of windows and Swisspearl panels in a blue and grey colour scheme gives the two building parts a unified and deliberate corporate appearance, echoing the business-like approach of the school and setting it apart from the modest brick houses of its environs.

Christ the King is the latest in a series of educational buildings by John Ronan, such as the Akiba-Schechter Jewish Day School and the award-winning Gary Comer Youth Center (see Swisspearl Architecture 4). Three others are due for completion this year. Christ the King's thoughtful and elaborate interaction of form, space and materiality, engendered by a genuine concern for social issues, corroborates Ronan's standing as 'one of the leaders of Chicago's architectural resurgence' (Blair Kamin, *Chicago Tribune*). This is all the more astounding as his winning competition project for the 3,000-student Perth Amboy High School in New Jersey, and arguably the finest example of his work thus far, has yet to be built. *Patrick Zamariàn*



Interview with John Ronan, Chicago



John Ronan was born in 1963. He received a Master of Architecture degree with distinction from the Harvard University Graduate School of Design in 1991. Ronan is an Associate Professor at the Illinois Institute of Technology and the lead designer and principal-in-charge of John Ronan Architects, which he founded in 1999 in Chicago.

Jesuit College Preparatory School is set in a very deprived area in Chicago, marked by modest houses and vacant lots. How does it relate to its built environment?

The school is located on the site of a former Catholic parish called Resurrection Parish. We tore down the existing buildings on site except for a smaller structure that is an operating middle school also run by Jesuits but not affiliated with the high school. We put the high school at the opposite end of the site, and together the two L-shaped buildings form a protected courtyard – a controlled outdoor environment that can be used by students from both institutions. The more recent buildings in this area are fortress-like, in response to the real security issues that exist. We wanted to make sure that we didn't do that. The building is sited right on the sidewalk, not pulled back from the street. It is meant to engage with the street but also create the largest possible courtyard in the rear.

In 2004, you won the prestigious national competition for the Perth Amboy High School in New Jersey. You proposed a school that doubles as a community centre, and this social engagement has since become a core theme in your work. What role does Christ the King play for the community?

It does, maybe in a lesser way than the Perth Amboy project, create a node within the community. The intention of the school was not to create a fortress or an ivory tower, but to ingrain itself in the community and become a part of it. The chapel can be used for weddings and there are community events in the sports hall that happen on a monthly basis. It will be interesting to see where that goes. I don't know if they are going to have an open sports hall where anybody can come. There are some pretty serious security issues in that regard, which is why you can't just throw the doors open – you have to be judicious about who you are letting in and when. That is a fine line you have to walk, I guess.

You mentioned the chapel. How did you conceive this space?

Spirituality is integral to the life of the Jesuits, so this spiritual aspect needed to be embedded into the school and not separated from it. We didn't want to do a stand-alone chapel; it had to be integrated into the body of the building. As it was to be part of the school, the challenge was how to make it a special space so that it is not confused with the library or the dining room and so forth. Natural light was very important to that. There is a light monitor that runs vertically through the three floors of the building and creates a very light-filled space. The idea is not really to use fancy materials, it is rather about the relationship between the materials. The light that comes down in the centre and through the three glass-block walls activates the highly reflective polished concrete floor. They are mundane materials, but they transcend that mundaneness to become something more spiritual. The glass blocks and the concrete floors are all very hard surfaces, and that's why we did the acoustic wall in the rear with the little crossshaped perforations. They are basically laser-cut Swisspearl panels with an acoustic backing material behind them.

In previous projects, you created a variety of flexible and adaptable spaces. Are there such elements in Christ the King as well? Yes, the dining hall, for instance, serves various purposes. It is a dining room where they also hold fundraising dinners and community meetings; it is a study hall; and it is the place where students meet before going to their internships and where they are dropped off upon their return, so it has that kind of flexibility. The sports hall, of course, is also an auditorium; and I would also put the courtyard in that category as it is a flexible space that can be used for recreation, a place where kids can casually hang out, but, it is also a religious space. The Stations of the Cross panels on the exterior of the building turn the courtyard into a sacred space in springtime, when this religious ritual takes place.

What is the idea behind these multipurpose spaces?

Basically, it is a sustainable strategy to build a smaller building in which each space can do two or three things. These types of spaces are more beneficial to the client as there is less chance that over time the building will become functionally obsolete because it didn't anticipate this type of programme or that kind of use. Christ the King, like much of your other work, shows a very modernist formal approach, marked by clear-cut rectangular volumes and neatly arranged floor plans. There seems to be a sense of pragmatism and adequacy in your projects. Would you agree with that?

Yes, I would. At the heart of it, I am more interested in space and materiality than I am in form. Form is not usually the driver of the project; it is usually a spatial idea that is engendered by the materials. A school project is not about stroking the ego of the architect, it's about taking what little money you have and doing the essential things in a smart and elegant way. There is this tendency now for everything to be an object building and to call attention to itself. Architecture is coming to be about spectacle, and the most mundane, workaday buildings are asserting themselves as self-referential formal objects. I don't think this is a positive trend. Every situation does not call for an object building. Christ the King is really about defining that street wall and creating that courtyard space on the other side, which is not to say that everything has to be at 90 degrees. We did that in this case more out of economy and formal crispness.

As in previous projects, there is a contrast between the volumetric arrangement of your building and its striking, multicoloured façade design. What is the idea behind that?

Well, the neighbourhood is mostly brick houses and institutional buildings, and we wanted to step outside of that and do something more progressive that would say: This is the future of this neighbourhood! Also, there is a business-like approach to education in this building, it is very much focused on achievement and having a career. For instance, the students are not dressed like normal high school kids, they wear business clothes because they go to their jobs. Therefore, the building has a more business-like aesthetic than a typical high school. We wanted it to look less like a traditional school and more like a company. Aesthetically, the playful arrangement of the windows and the panels activates the façade. There are only four different colours of panels on this building, but combining them in such a tonal way has a multiplying effect and makes it look more like six or eight colours.

Rather than limiting yourself to fair faced concrete or monochromatic plastering, you usually clad your buildings in some sort of panelling. Why is that?

Most schools have to be built very quickly to be open in time for the next school year, and that is what these panels allow you to do. What is beautiful about this separation of the actual layers is that you can build the structure and the enclosure, keep working on it throughout the winter, and then come back in the spring and put on the exterior cladding. When you talk about schools there is an efficiency to this approach, and, of course, you can get the insulation on the outside, which in terms of energy is a much more sustainable approach. In general, if you look at the trajectory of architecture, it is moving away from monolithic systems towards more layered compositions where each layer has a different role. It may be for structure, it may be for energy efficiency, it may be for insulation, in which case the outer surface, here, the Swisspearl panels, has the public role of projecting the image to the city. I am interested in manipulating these layers. If you look at the façade you can see that the ACM panels are in a different layer than the Swisspearl panels. So, you get this kind of depth and solidity, not through the conventional means of a thick monolithic wall, but from a density created by layering.

You have used Swisspearl in two major projects, the Gary Comer Youth Center and Christ the King. What criteria do you apply when selecting a cladding material, and how would you assess the overall quality of the Swisspearl panels?

I think that Comer and Christ the King are very similar in that the context is very similar. They are both neighbourhoods that have had their troubles with gangs and drugs as well as the incidence of graffiti, an issue that we addressed in the Comer project and, to a certain degree, in this one too. This sort of tonal arrangement of the panels makes that kind of attention less likely and if it does happen, the Swisspearl panels are quite easy to replace. We have an attic stock of those panels. You are asking about criteria. The first criterion is: Does it look good? And, will it stay looking good? Like Eero Saarinen used to say: There are basically two kinds of materials that you should restrict yourself to: materials that stay constant, that look the same after 10 or 20 years; and materials that age gracefully, they change, but in a positive way. I would put the Swisspearl panels in that first category. We have used different manufacturers for panels, and Swisspearl are of the highest quality in terms of their colour stability. We don't get any chalking or efflorescence and they are coloured all the way through, so if anyone scratches them with a key or something, it is not going to ruin the panel. The same is true for their dimensional stability. We give Swisspearl the dimensions and we know it is going to have that Swiss precision. We know they are going to be within 1/16th of an inch, which means we can use very tight tolerances - and we hold contractors to these tight tolerances because it gives the building this crisp aesthetic that we are looking for.

How was the cooperation with Swisspearl?

The company was very easy to work with. We used standard Swisspearl colours on the Christ the King project, but all the colours on the Comer Center were custom colours except one. They were not daunted at all by special requests like that. Another example is the perforated panels in the chapel. We did a drawing and sent them the file, which they used to digitally cut out the crosses from the panels. They are very accommodating in those kinds of things, whereas other companies are less so.

It has been several months since completion of the project. Are you happy with the outcome?

Yes, I am. The building was done for a very modest budget but doesn't look it. I am very happy with how it came out. We used simple, honest materials, and it has a certain dignity to it, which is due to the proportions, the spaces, but also the materials. I think the neighbourhood was surprised, and, actually, the owners were surprised at what they got for their money.

Interview by Patrick Zamariàn



This new gymnasium hall compliments a cluster of buildings, which together form Rødovre School in the larger conurbation of the Danish capital. Convex porthole windows and digital images covering the façades counterpoint the building's cubic nature and give it its unique appearance.



Gymnasium, Rødovre, Denmark SHADOW PLAY





"THE HOLES WHICH APPEAR AS EYES FROM THE OUTSIDE ADD IDENTITY TO THE BUILDING AS WELL AS CREATE A CONNECTION BETWEEN INNER AND OUTER SPACES." WITRAZ ARCHITECTS

Set in the northeast corner of Rødovre School grounds on the outskirts of Copenhagen, this new gymnasium by Witraz architects connects to an existing, smaller sports hall through a partially new middle building and provides mutual access to both facilities. Continuing the roofline of the existing building, yet clad with the same auburn and light reflective Swisspearl cement composite panels as the new one, the interjacent structure successfully mediates between the two gymnasiums. Lit solely by skylights, it accommodates auxiliary rooms such as lavatories, showers and changing rooms.

The new sports hall itself is conceived as a fully enclosed wooden box, topped by a clerestory roof, which visually diminishes the considerable scale of the building and allows for ample natural light to illuminate the interior space. Carried by a steel-frame structure, the façades are marked by an arrangement of square and rectangular reddish-brown Swisspearl panels that sublimely corresponds to the framing of the clerestory windows. Various circular elements on the outside as well as the inside counterpoint the cubic and unpretentious nature of the building and give it its unique appearance. Most notable is a number of randomly arranged vaulted windows in varying diameters that are reminiscent of ships' portholes and establish a visual connection between inside and outside. The portholes are complemented by additional circular motifs painted on the inside walls which, along with the randomly placed lamps and skylights, add a buoyant touch to the interior space. More subtly, bitmap images, printed directly onto the panels by means of an UVcurable inkjet flatbed printer, evoke the shadow play of trees and branches on all four façades of the gymnasium hall.

Patrick Zamariàn





"A STRING OF GLASS CROWNS THE BOX AND FORMS A CONNECTING Element between the building and the sky." Witraz Architects

- 1 Swisspearl® cement composite panel 8 mm
- 2 Ventilation cavity
- 3 Moisture barrier
- 4 Thermal insulation, steel construction 300 mm
- 5 Thermal insulation
- 6 Internal cladding
- 7 Timber framework
- 8 Lightweight block
- 9 Concrete foundation
- 10 Roof membrane
- 11 Corrugated sheet metal
- 12 Double glazing
- 13 Gypsum panel fireproof
- 14 Steel beam
- 15 Window frame wood / aluminium



The printing of the panels is organised locally by the clients. In addition to silk screening, ink jet technology can be used, as in this case.



Location Rødovrevej 139, Rødovre, Denmark Client Rødovre Municipality, Rødovre Architects Witraz Architects, Copenhagen, Denmark; Birgit Mouritzen Building period 2007–2009 General contractor and façade erector ASON, Lyngby, Denmark Façade material SWISSPEARL® REFLEX Autumn Leaves 9270



CetraRuddy Architects from New York City have built an apartment block in the rapidly changing Hunters Point neighbourhood in Queens, striving high on one side just to leave room for a generous plot of green on the other.

Lhaus, Long Island City, USA **RISE UP**





Attic floor 1:1000



First floor



Location Long Island City, NY, USA
Client The Stahl Organization, New York
Architects CetraRuddy Incorporated, New York
Building period 2007–2009
General contractor The J Companies, New York
Façade consultant Leavitt Associates, Boston/Norfolk, USA
Façade construction KNS Building Restoration Inc., Middle Village, NY, USA
Façade material SWISSPEARL* CARAT, custom colours

The mental image of New York City that comes readily to mind is Manhattan. What most people aren't aware of, however, is that Manhattan is only a part of New York and is in fact the smallest of its five boroughs. The other four are the Bronx, Staten Island, Brooklyn and Queens, the latter two on the western end of Long Island. Manhattan has always been the heart of the city and its ongoing attractiveness not only led to architects starting to build vertically 120 years ago, but also to a constant pressure on real estate. The story of how former industrial and working class neighbourhoods like Soho, Chelsea or the East Village were gentrified and how urban pioneers crossed the East River to conquer new land is well known.

The westernmost neighbourhood of Queens is Long Island City, which enjoys quick and easy access to midtown Manhattan by being just one subway station away



- 1 Swisspearl® cement composite panel 8 mm
- 2 Insect screen
- 3 Ventilation cavity, vertical sub framing 30 mm
- 4 Thermal insulation, horizontal sub framing
- 5 Moisture barrier
- 6 Glass fibre faced gypsum sheathing
- 7 Thermal insulation
- 8 Metal furring
- 9 Gypsum panel
- 10 Hardwood flooring
- 11 Concrete

from Grand Central Terminal. Today, it is one of the fastest developing neighbourhoods with the highest concentration of art spaces in New York.

It is here in Hunters Point that the architectural company CetraRuddy recently completed a residential building on a small city block. The L-shaped layout with an eleven-storey peak in the northwest corner preserves the southeast part of the plot for a generous semi-public garden. While the street level features native granite, the lower part of the building is clad in Swisspearl panels and the upper levels in profiled aluminium, a reference to the historic industrial neighbourhood. "For the lower portion of the building, we chose a cement composite cladding in two colours vibrantly patterned to reflect the kinetics surrounding the site", says Project Manager Brian McFarland. The lower floors of the building host one- and twobedroom units, while the upper floors were planned with larger, mostly duplex units, which take advantage of the expansive view. That view won't be obstructed in the foreseeable future, at least not to the south, because the Midtown Tunnel entrance is below. As part of the outdoor facilities, the architects lessened the negative effect of the tunnel, the noise, by installing a cascading fountain as well as tall plantings that will grow into a dense screen. *Mirko Beetschen* The lower part of the building is clad in Swisspearl panels in two colours, vibrantly patterned to reflect the lively traffic around the building. The upper portion is cloaked in profiled aluminium, a reference to the former industrial neighbourhood.

"WHILE DESIGNING LHAUS, WE COMPARED A VARIETY OF RAIN-SCREEN WALL CLADDINGS. WE WERE ATTRACTED TO SWISSPEARL BECAUSE OF ITS FLEXIBILITY, EASE OF INSTALLATION AND BUDGET APPROPRIATENESS." BRIAN MCFARLAND, CETRARUDDY





The New-York-based architectural firm, 1100 Architect, designed a decisively modern residence that blends into the natural surroundings of the idyllic Hudson River Valley.



House Pincus & Motulsky, Garrison, USA SHIFTS OF GREY



The Hudson River Valley is one of the most historic regions in the US and was declared a National Heritage Area in 1996. With its sprawling woods, water landscapes, many landmarks and vicinity to the metropolitan region of New York, the Hudson River Valley has always been a coveted residential area. The US-German architectural firm, 1100 Architect, owned by David Piscuskas and Jürgen Riehm, was recently faced with the task of replacing an older one-storey house with a contemporary residence on one of the river slopes outside Philipstown.

"The design was guided by its immediate surroundings, both the vistas provided by its perch above the Hudson River and the geological strata of the land", the architects explain. With their shifts and overlays, the façades of the three-storey structure remind the onlooker of rock laid bare and split open. Fissures become windows, pro-

Situated in upstate New York on a slope over the Hudson River, this single-family house takes its inspiration from its natural surroundings. The shifts in its façade as well as its colour imitate the local schist.



"OUR GOAL IN THIS PROJECT WAS TO INTEGRATE THE HOUSE INTO THE LANDSCAPE, WHEREBY THE SWISSPEARL COLOUR PALETTE PLAYED A MAJOR ROLE." 1100 ARCHITECT

trusions, terraces. The merging of interior and exterior was a guiding theme throughout the house. In all the rooms, large windows frame the generous views. The building not only has a swimming pool, it has a garden and a separate orchard as well. Although the house sports modern air conditioning technology, its primary source of cooling is natural ventilation through the many apertures and an open central gallery. The latter links all levels and supplies natural light. As for green technology, the building is also equipped with a geothermal heat pump and a green roof terrace.

For the façade, David Piscuskas and Jürgen Riehm went for Swisspearl panels. "For one thing, it was affordable", says Riehm, "and it provided the right shades of grey as well as the right panel size for our concept. There is even a variant that sparkles like the local schist." Today, the back-ventilated façade shows a geometrical random pattern of panels in different shades of grey, interrupted by irregularly placed windows and accentuated by smaller red panels wherever ribbon windows permeate the walls.

The rooms of the single-family home are bright and airy. The ground floor has a loft-like character while the upper floors have smaller spaces with wood-plank floors, lending them a homier, more domestic atmosphere. *Mirko Beetschen*





Vertical section 1:20

- Swisspearl[®] cement composite panel 8 mm
 Concealed fastening parts
 Ventilation cavity, vertical batten
 Steel framing
 Moisture barrier
 Plenerd

- 6 Plywood 7 Thermal insulation 8 Wooden batten
- 9 Gypsum panel 10 Roof membrane



"THE GREY TONES OF THE LOCAL STONE PROVIDED THE COLOUR PALETTE FOR THE FAÇADE." 1100 ARCHITECT

Location 38 Cloudbank Road, Garrison, NY, USA Client Caitlin Pincus & Dan Motulsky, Garrison

Architect 1100 Architect PC, New York/Frankfurt am Main

Building period 2008-2010

General contractor Donahue & Chandler, Cold Spring, NY, USA
Façade construction Simmons Constructions Inc., New Paltz, NY, USA
Façade material SWISSPEARL* CARAT, Onyx 7091 and Sapphire 7060;
REFLEX Silver 9000; PLANEA, Red P-313, System SIGMA 8





Single family house, Prague, Czech Republic Structure with colour



On the northern edge of the Czech capital city of Prague lies a quiet quarter of the city called Suchdol. Here, a single family home was built recently which stands out because of its red cladding. The colour and design are accented by grey horizontal stripes that run around the entire house and mark the ceiling levels of the three storeys. The cladding is made of large-format colour-saturated panels from Swisspearl. Attached to a wood substructure, they form a rear-ventilated façade. The red and grey panels and French windows combine to form a clean visual structure. The architect has used the minimal piece of land efficiently with the careful placement of the house on the hillside. A carport extending to the street completes the basic rectangular shape of the building. A covered walkway leads to the living areas on this level, while the ground floor offers rooms with direct access to the garden. On the top level, there is one large room with roof terraces on both sides. *Michael Hanak*



Location Suchdol, Prague, Czech Republic Client Private Architects Jan Mertlík, Prague

Building period 2008

General contractor Petr Koukol, Kladno, Czech Republic

Façade construction Primaizol-Stanislav Hájek, Kutná Hora, Czech Republic **Façade material** SWISSPEARL[®] CARAT, Coral 7031 and Black Opal 7020

- 1 Swisspearl® cement composite panel 8 mm
- 2 Ventilation cavity, vertical batten 30 mm
- 3 Moisture barrier
- 4 Thermal insulation, batten $60 \times 120 \mbox{ mm}$
- 5 Wooden composite panel 100 mm
- 6 Thermal insulation, expanded polystyrene
- 7 Roof membrane 8 Cement screed
- 9 Insulation protection layer
- 10 Vapour barrier
- 11 Box gutter



Hulgaards Have, Copenhagen, Denmark Embedded in a Park

Ground floor 1:2000

Building apartments is not just a popular endeavour among architects, since it often involves the use of cement composite panels, it is also a welcome project at Eternit (Schweiz) AG. One impressive example is in the city of Copenhagen, which has made considerable investments in apartment construction in recent years.

Nørrebro is the name of the most popular quarter in Copenhagen. Although hip cafés, comfortable restaurants of every possible cuisine and second-hand shops have taken over this district in recent years, its outer area still offers an economical living area that is close to the city centre. Since much of the real estate in the area was outdated and rundown, the city introduced a renewal and upgrade programme.

As a large plot of land northwest of Nørrebro, previously used as a parking and maintenance garage for the city's traffic operations, became available in 2006, the city administration decided to hold an architecture competition. SLA Architects won the bid with the design of a public park that, based on the diversity of its many trees, was called '1001 Trees'. It was intended to conserve the unique, invigorating atmosphere of the park through four elements: trees, paths, cone-shaped hills and lighting.

The construction of the apartment buildings, which are integrated into the park, was carried out by the firm Arkitema, who were commissioned by the private contracting corporation, the Kay Wilhelmsen Group. The result was 248 rental and owner-occupied apartment units with two, three or four rooms. Placed in long zigzag patterns and up to seven storeys high, the buildings snake through the park. The characteristic appearance of the buildings is maintained by the oblique course of the roof

"THE FAÇADES ARE BUILT OF LIGHT, NON-STRUCTURAL ELEMENTS, Some executed in Situ, some prefabricated." Arkitema Architects

The residents of Copenhagen's northwest district can look forward to a new adventure park with lots of activity options.

The generous and handsomely detailed balconies connect the apartments with the surrounding city park.

- 1 Swisspearl® cement composite panel 8 mm
- 2 Ventilation cavity 36 mm
- 3 Moisture barrier, fibre cement panel
- 4 Thermal insulation, mineral rock wool 2 \times 140 mm
- 5 Thermal insulation, mineral rock wool 45 mm
- 6 Gypsum panel 2×13 mm, vapour barrier in between
- 7 Window aluminium/wood

Location Gråspurvevej, Copenhagen, Denmark
Client Kay Wilhelmsen Group, Copenhagen
Architects Arkitema, Copenhagen
Building period 2007–2009
Façade material SWISSPEARL* CARAT, Black Opal 7024

"THE ARCHITECTURAL EXPRESSION IS GREATLY INFLUENCED BY THE SETTLEMENT'S LOCATION IN A PUBLIC PARK AND ITS ORIENTATION RELATIVE TO THE COMPASS." ARKITEMA ARCHITECTS

lines along the building lines. Because the height of the roofs climbs continuously from four to seven storeys, Arkitema focused on the large format of the buildings with their succinct contours. The unity is emphasised by two-dimensional facades with black cement composite panels. Large-scale forms are animated through light and airy projecting elements. The apartments open on the arcade side of the building. On the other side, the balconies offer a private outdoor space, allowing the residents a connection to the surrounding park at all times. *Michael Hanak*

Apartment estate, Petersminde, Aarhus, Denmark Framed modules

The apartment modules were completely finished in the factory and quickly assembled on site.

Ground floor 1:1000

West of the Danish city of Aarhus, on a tract where a garden nursery once stood, the housing corporation AL2Bolig wanted to build apartments for the elderly and for young people. In 2005, they sponsored a competition that was won by the, also native to Aarhus, architect firm of Prisme architects. The site had clear advantages, such as immediate proximity to the forest and nature and quick and easy access to the city as well. The stated goal of the architects was to give the building project its own significant architectonic profile.

The final building plan comprised 25 apartments for the elderly in three different sizes and 63 apartments for young people. The Prisme architects arranged these laterally in a series of five rows. These rows are more or less parallel to each other and follow the course of the lightly terraced terrain. While the apartments for the elderly are in the one-storey buildings of the first three lines, the apartments for young people are situated in the two- and three-storey buildings behind. The apartment buildings climb up the hillside terraces adding a variation in height to the estate's profile. In addition, a community centre was added to the western end of one of the buildings.

The apartments are constructed of prefabricated wood modules. Each apartment for young people consists of

one module, while the apartments for the elderly consist of two modules. The Prisme architects chose factory prefabrication and on-site modular assembly as a means of keeping the building costs down while ensuring a high level of quality. The modules are collected under a common roof with a strong outward projection which in combination with the side façades creates a frame. The surface of this frame is covered with cement composite panels in order, as the architects have emphasised, to keep building maintenance to a minimum. In contrast, the closed parts of the modules themselves are covered with cedar lath, which is protected by the broad overhang of the roof. *Michael Hanak*

"THE IDEA WAS TO GIVE THE NEW ESTATE AN INNOVATIVE AND DIFFERENT ARCHITECTURE THAT SIGNALS QUALITY AND AT THE SAME TIME REFLECTS THE SIMPLE MODULAR DESIGN AND HIGH DEGREE OF PREFABRICATION." PRISME ARCHITECTS

Location Åbyhøjgård, Åbyhøj, Aarhus, Denmark Client AL2Bolig, Tilst, Denmark Architects Prisme Architects A/S, Aarhus Ingineer COWI A/S, Aarhus Building period 2009 General contractor and façade construction BM Byggeindustri Hobro A/S, Hobro, Denmark Façade material SWISSPEARL* CARAT, Onyx 7090 and Black Opal 7025

Importanne Centre, Sarajevo, Bosnia/Herzegovina BRIDGING THE GAP

In the Bosnian city of Sarajevo, architects from the local *studio non stop* recently created a multifunctional centre. Compartmentalised into eight distinctive tower units, it blends into the historical urban structure and forms a link between the traditional and the modern city.

"IMPORTANNE CENTRE LIES ON THE BORDER BETWEEN THE HISTORICAL AND MODERN PARTS OF SARAJEVO AND OUR INTENTION WAS TO CREATE A CONNECTING ELEMENT." STUDIO NON STOP

Mending the tears in the urban fabric of European cities is one of the tasks of today's architects. Many an urban landscape, which had grown slowly over the centuries, experienced a break during the modernist movement of the 20th century. The urge to conquer 'the green' has also left sprawling semi-urban landscapes around the core cities, creating gaps between the centres and their peripheral neighbourhoods. The Bosnian architectural office, studio non stop, have come up with their own suggestions on how to bridge one of these gaps in the Marijin dvor neighbourhood in Sarajevo. Their multifunctional Importanne Centre features characteristics from both traditional perimeter blocks and the open architecture proclaimed by the modernist movement and widely adopted during the post-war years.

Instead of placing a single superstructure on the site, studio non stop decided to create a compact block of eight towers that looks as if its elements were built at separate times and by different architects. This effect is achieved by different heights, set-back connections between the units as well as different geometrical rhythms and colours of the façade panels. "We chose Swisspearl for its natural structure and optic", says Sanja Galic-Grozdanic, one of the company's founders and architects. "We wanted to create a modern equivalent to the façades of the 19th century buildings in this neighbourhood. The glass elements, in contrast, refer to the steel and glass architecture of the 20th century."

Not only the façades of the new centre are variegated, its contents are as well. In addition to residential and office units of different sizes and layouts, Importanne Centre houses a hotel and a large shopping mall. Seen from a distance, the centre appears as a little city with its own skyline, an impression that is enhanced by the irregularly placed recesses that look like natural imperfections in the urban fabric. *Mirko Beetschen*

"BY CHOOSING SWISSPEARL WITH ITS NATURAL SURFACE STRUCTURE, WE INTENDED TO REINTERPRET THE APPEARANCE OF THE FAÇADES FROM THE NEARBY 19TH CENTURY BUILDINGS." STUDIO NON STOP

Instead of one giant block, studio non stop has shaped the multifunctional Importanne Centre as if it were made up of eight different parts, seemingly grown together over time.

- 1 Swisspearl® cement composite panel 8 mm
- 2 Ventilation cavity
- 3 Thermal insulation
- 4 Sub framing
- 5 Concrete
- 6 Aluminium window

Location Zmaja od Bosne 7, Sarajevo, Bosnia/Herzegovina Client Teleoptic doo, Sarajevo Architects Studio non stop, Sarajevo Building period 2008–2010 Façade construction Hano doo, Sarajevo Façade material SWISSPEARL® CARAT Onyx 7090, Amber 7082, Jade 7052, Black Opal 7020 and Sapphire 7060

Archaeology Wing of the Israel Museum, West Jerusalem, Israel Dug into a Hilltop

The newly renovated archaeology wing of the Israel Museum in West Jerusalem forms part of an ensemble that opened decades ago, in 1965. Whilst preserving the external architecture of the original Modernist design, the interior was redesigned completely.

The museum is arranged in a series of cubic volumes on a hilltop, which read like a continuation of the topography; reminiscent of a quarry of the beautiful Jerusalem sandstone, in which the volumes are clad. The site stands opposite the Israeli parliament building, the Knesset. This juxtaposition of 'politics' and 'history' creates a strong *genus loci*.

The significance of an historic and archaeological museum in Israel cannot be underestimated. The preservation of the cultural and religious heritage of a nation (especially one as controversial as Israel's), is paramount to the creation of its history and therefore its identity. The museum boasts artefacts as remarkable as the *Dead Sea Scrolls*, the most ancient biblical manuscripts in the world.

The refurbishment of the interiors was conceived according to the display of the artefacts into various themes: Narrative Galleries, Contextual Galleries and Thematic Galleries. The ceilings have been designed like inverted umbrellas with central column supports. Within the brutal off-shutter concrete outer skin, the glazed display walls have been tastefully designed using grey Swisspearl panels assembled horizontally to echo the colour and patina of the pre-existing concrete. The neutrality of the materials does not distract the visitor from the artefacts being displayed and allows the exhibits to remain the focal point. The use of Swisspearl panels as an inner skin on the concrete interior walls has given the brutalism of the existing interiors a slick, contemporary aesthetic.

The high clerestory windows and the 'strata' of the offshutter concrete imply spaces excavated from the earth; an appropriate metaphor for a museum of archaeology. *Anna Roos*

"IT WASN'T ABOUT THROWING ANYTHING AWAY. IT WAS ABOUT REALISING THE AMAZING QUALITY OF THE ORIGINAL BONES OF THE ORIGINAL ARCHITECTURAL HERITAGE OF THE PLACE AND BUILDING ON THAT LEGACY." JAMES SNYDER, MUSEUM DIRECTOR

Location 11 Rupin Boulevards, West Jerusalem, Israel
Client State of Israel, Jerusalem Municipality
Designing Architect Pentagram Design Ltd.,
London, UK
Local architects Efrat Kowalsky Architects, Tel-Aviv,
Israel
Building period 2008-2010
Construction management Am-Gar Project Management Ltd., Jerusalem
Façade construction Lev D.A. Engineering Special
projects Ltd. & Or-Li-Ad Construction and Building
Ltd., Jerusalem

Façade material SWISSPEARL® NOBILIS, Grey N 214

"OUR PROJECT IS A 'RENEWAL'." JAMES SNYDER, MUSEUM DIRECTOR

Modular display case 1:30

- 1 Swisspearl® cement composite panel 8 mm, perforated acoustic panel
- 2 Swisspearl® cement composite panel 8 mm 3 Swisspearl® cement composite panel 8 mm, access panel
- 4 Removable metal tray 5 Installation void
- 6 Upper door hinge
- 7 Fluorescent lighting/light emitting diodes
- 8 Glass door
- 9 Display case 10 Metal panel
- 11 Metal structure
- 12 Lower door hinge
- 13 Skirting

In the midst of the Alps, the small town of Mayrhofen distinguishes itself with its open relationship to greater Europe and a successfully run conference centre. The 30 year-old building is now undergoing a thorough as well as convincing overhaul in the form of a precious mountain crystal.

Renovation and Extension Europahaus, Mayrhofen, Austria **A CRYSTAL IN THE MOUNTAINS**

- 3 Aluminium Z profile
- 4 Ventilation cavity
- 5 Roof waterproofing
- 6 Timber board 30 mm
- 7 Moisture barrier, vapour permeable
- 8 Impregnated soft board 60 mm
- 9 Thermal insulation, mineral rock wool
- 10 Glued timber beam
- 11 Chipboard
- 12 Gypsum panel
- 13 Perforations for rear ventilation Ø 10 mm
- 14 Thermal insulation, black fleece 180 mm
- 15 Concrete

The conference centre 'Europahaus' was built in 1979 in the town of Mayrhofen, set in remote Zillertal in the middle of the Austrian Alps. The name hearkens back to the fact that Mayrhofen has been a member of the European Twin Towns since 1956 and received the Flag of Honour of the Council of Europe in 1973. The Europahaus hosts a wide variety of events such as seminars, concerts, and exhibitions. In autumn 2007, the municipality and the Tourism Association Mayrhofen invited several architecture offices to a contract award procedure, in order to conduct a general refurbishment of the building. The Architekturhalle, located in Telfs, was awarded the task. The goal was to bring the main building up-to-date, both in appearance as well as in function. The renovations would also encompass additional seminar rooms and foyers with their secondary service rooms.

"BECAUSE THE SAME MATERIAL WAS USED ON THE ROOF AS WELL AS THE FAÇADES, WE WERE ABLE TO CREATE THE ENTICING IMPRESSION OF A CRYSTAL, ONE WHICH GAINS A PLAYFUL LIGHTNESS THROUGH A HORIZONTAL STRATIFICATION AND THE VARYING SURFACE STRUCTURES OF INDIVIDUAL FAÇADE PANELS." ARCHITEKTURHALLE

In their restoration plan, the architects chose to maintain the building's characteristic form with its polygonal floor plan. Raimund Wulz, project architect, strongly states: "The hexagonal basic form already connected the original building to the mountainous surroundings and the crystalline shapes one finds there, such as in the snow or stones. This was adopted in the new design and expanded into the third dimension. The renovated building now presents itself as a light and bright whole."

The building gained an entirely new image through the renovations. White cement composite panels in the façades as well as on the roof determine the materiality. Largescale ribbon windows, which often appear dark through the reflection, and narrow light strips that shine yellow at night, are set flush and relatively freely in the closed surfaces of the façades. The fact that the glazed surfaces are set at the same level as the cement composite panels brings out the monolithic character of the chiselled building. The panels of the façades are arranged in different formats in horizontal layers. This layered effect is accentuated through the different surface structures of the individual panels. Both the façade's horizontal structuring as well as the shifted layers are reminiscent of geological formations commonly found in mountain valleys.

Moreover, the polymorphic façades mirror the complex spatial assemblage in the building's interior. A wide variety of spaces have been stacked on four floors. An auditorium is housed in the significantly larger below ground level. The largest of the three foyers, a hall, and a café dominate the ground floor. On the upper floor is a two-storey hall as well as other halls that can be joined to form larger spaces. Finally, new offices were constructed on the roof floor. All of the spaces have been unified in a strong stereometric shape under one roof – one that stands like a polished stone against the magnificent mountain backdrop. *Michael Hanak*

Location Dursterstrasse 225, Mayrhofen, Austria
Client Municipality of Mayrhofen and Tourism
Association Mayrhofen/Hippach
Architects Architekturhalle Raimund Wulz and
Manfred König, Telfs, Austria
Building period 2009/10
Façade erector Dachbau GmbH, Piesendorf, Austria
Façade material SWISSPEARL* REFLEX, custom
colour white 9403 and custom colour YY 1110, sand-

blasted

Façade erector Dachbau GmbH, Piesendorf, Austria

The twin buildings in Billund and Esbjerg in rural Jutland are a testament to the importance of the farming community in Denmark. The confident forms of the architecture, the neutral colours of the façades and the subtle landscaping integrates the agricultural centres into their picturesque surroundings.

Jutland Agricultural Consultancy Centres, Billund and Esbjerg, Denmark NEW LANDMARKS IN THE COUNTRYSIDE

One sees the building in Esbjerg on this photo and the preceding one, while the others show the building in Billund.

Completed in 2009, the Jutland Agricultural Consultancy Centres in Esbjerg and Billund were designed by architect Theodor Vodder of Lolk Architects to house a consultancy for farmers. Both towns, Esbjerg and Billund (famous for its Legoland Park), are situated on the Danish peninsula Jutland, which is a rural area dominated by agriculture. The buildings were designed to promote the facility to the public. Another objective of the architects was to create a clear, flexible layout for visitors and employees that would be both psychologically and aesthetically pleasing.

The architect's concept was inspired by the symbiotic relationship that farming has with the land. The image the architects had in mind was that of a farm in a field. Though the resemblance is tenuous, as the scale of the three-storey agricultural building is so much larger than that of an average farm building. In order to reduce the scale, the building was designed to tie into the surrounding topography by subtly manipulating the landscape around it.

The division of the building into three interlocking levels cantilevered one over the another is an effective way of reducing the scale and giving the building a distinctive, abstract architectural aesthetic. Each box, or level, projects past the level below and opens up in a different direction, giving the building a dynamic and the impression that the boxes have been stacked on top of one another. The manner in which the windows have been set back from the edges of the boxes emphasises their change of orientation whilst also shading the long horizontal expanses of glazing.

Mindful of the high level of energy consumed by the construction industry, the architects chose their materials

SWISSPEARL 12 55

and methods of construction with care, using renewable and recyclable materials that are durable and low maintenance, whilst excluding materials that pose a risk for health or that require a large amount of energy to produce. The basic palette chosen was in situ concrete for the structure with glazing and eight-millimetre Swisspearl cement composite panels for the façade cladding.

The lower storey was treated as a solid plinth with an arm that extends out into the landscape creating a perimeter for the outdoor eating area off the canteen. Whilst the plinth has been constructed in concrete and clad in offwhite Swisspearl composite panels, the upper two levels have been clad in dark grey Swisspearl panels. These panels are environmentally sound, low maintenance and give the façade an aesthetic of sleek neutrality. Juxtaposed alongside the smooth surfaces of the panels at ground level are vertical window openings interspersed with vertical timber slats that echo slender tree trunks in a new forest, a visual reference to the landscape of Jutland. The overall effect is an elegant, contemporary building that is a showcase for the agricultural centre. *Anna Roos*

"THE TWO NEW COUNSELLING CENTRES STAND OUT IN THE LANDSCAPE AS BEAUTIFUL AND HARMONIOUS BUILDINGS." LOLK ARCHITECTS

Location Majsmarken 1, Billund, and John Tranums Vej 25, Esbjerg Ø, Denmark **Client** Jysk Landbrugsrådgivning (Agriculture Consulting Jutland), Billund and Esbjerg

Architects Lolk Architects, Esbjerg, and Link Signatur, Aarhus

Building period 2009

Construction management K. G. Hansen & Sønner A/S, Grindsted, Denmark Façade construction Ejner Olesen Eftf. Aps, Grindsted

Façade material SWISSPEARL® CARAT, Onyx 7091, Black Opal 7025

Shopping Mall, Husnes, Norway Glazed Wall, Glazed Roof

The concept of the Husnes shopping centre, designed by Helén & Partners, was to create a place that would attract people not only to shop, but to spend their leisure time socialising in the restaurants and coffee shops.

Both the interior and exterior have been carefully designed to achieve this goal. The triple volume atrium uses curved steel girders, which support the fully glazed roof and allow the interior to be flooded with natural light. The exterior has an equivalent, strong architectural gesture to counterbalance the interior atrium, namely, the curved glazed wall that articulates the northern corner of the building. The sophisticated play of positive and negative forms and the interplay with the light Swisspearl panels and dark russet surfaces gives the building a degree of volumetric detail and complexity that is important for its aesthetic. This project stands out from the thousands of shopping malls that populate our world – from Beijing to Boston and Lagos to London. *Anna Roos*

On this early winter morning the Swisspearl panels were wet with dew.

Location Husnes Sentrum, Husnes, Norway Client Mosvold & Co AS, Kristiansand, Norway Architects Helén & Partners, Bergen, Norway Building period 2006–2008 Construction management and façade construction Bergen Byggutvikling AS, Bergen Façade material SWISSPEARL* REFLEX, Silver 9000

and Platinum 9020

"KEY FOR THIS PROJECT WAS REORGANISING THE INTERIOR TO MAKE A SHOPPING MALL INTO AN INSIDE SOCIAL SPACE WHERE PEOPLE CAN COMMUNICATE AND RELAX. TOGETHER WITH THE PARK, THE MALL HAS BECOME A SOCIAL IDENTITY FOR THE ENTIRE LOCAL SETTLEMENT." BERNT HELÉN

Service Building, Klagshamn, Sweden High-Tech Shed

Set in the Oresund strait, halfway between the Danish capital of Copenhagen and the Swedish city of Malmö, Lillgrund is one of the world's largest off-shore wind farms. Operated by Vattenfall, its 48 turbines provide electric power for 60,000 households. The new service building at Klagshamn pier near Malmö, designed by SWECO architects Peter Fröst and Boris Kildetoft, accommodates both the company's staff and Swedish Navy personnel.

In keeping with its harbour surroundings, the building is a simple and unpretentious structure whose shed-like design is derived from its functional and spatial requirements. Comprising a workshop as well as storage and office facilities, the two-storey building rests on a partly visible fairfaced concrete plinth and is clad in black Swisspearl panels. Horizontal features, such as aluminium window sills and suspended *brises soleil*, contrast with the panelling and give the building a sleek touch echoing its high-tech purpose. *Patrick Zamariàn*

"THE WHITE LIMESTONE WITH ITS BLACK FLINT STREAKS GAVE RISE TO THE CHOICE OF A BLACK FAÇADE WITH BRIGHTLY CONTRASTING DETAILS. THE BLACK SWISSPEARL PANELS GIVE, IN THE BRIGHT LIGHT AT THE COAST, AN EXCITING DIVER-SITY OF REFLECTIVE AND MATTE SURFACES THAT VARY DURING THE DAY AND WITH THE SEASONS." SWECO

Vertical section 1:20

Recreation Centre Lalandia Aquadome, Billund, Denmark Neutral Climate Envelope

The gigantic building sits enigmatically like a monolith in the middle of the green meadow. Strange sculptural shapes made up of blue, green and red hoses protrude from the façade. In actuality, this is Scandinavia's largest new Aquadome. Sections of numerous water slides pierce through the façade before entering the building again. The 10,000 square metres tropical water world is a part of the recreation centre and vacation complex Lalandia with its myriad of activities for big and small. It is located adjacent to Denmark's well-known tourist magnet, Legoland. The operators speak of positive synergies benefitting both attractions and the local community as well.

An existing industrial concrete structure was restored and renovated for the complex. The enormous water park itself as well as several other new buildings were constructed in steel, with spans up to 40 metres. All of the exterior walls are made up of concrete members covered with cement composite panels: the windowless hall with its shed roof of light grey panels and the smaller auxiliary buildings in dark grey. Independent of the actual weather outside, the illusion of a vacation on distant shores reigns within the neutral climate envelope. *Michael Hanak*

Location Ellehammers Alle 3, Billund, Denmark
Client Parken Sport & Entertainment A/S,
Copenhagen, Denmark
Architects Felthaus Architects, Kolding, Denmark
Building period 2007–2009
General contractor K. G. Hansen & Sønner A/S,
Grindsted, Denmark
Façade construction Ejner Olesen Eftf. Aps, Grindsted
Façade material SWISSPEARL* CARAT, Sapphire 7060

and Black Opal 7020

A tropical climate prevails in the spa landscape behind the enormous grey façade.

Poland - A Bridge between Old and New

The Wildeckie apartment building has four main storeys and two roof storeys. A total of 52 apartments were built, ranging from one to six rooms and from 40 to 113 square metres. In addition, two levels were built underground for a parking garage. The first underground floor has a typical entry and access to a lift, while the lower level garage is only accessible by means of car elevator.

The design by architect Piotr Bartosik is modern, but uses the contemporary architectural elements found in the surrounding buildings, which date back over the last hundred years, to create a visual connection. The investor wanted high-quality materials and finishing and chose Swisspearl cement composite panels to represent the bridge between the new architecture and the old buildings.

AKPB Piotr Bartosik

Apartment Building Wildeckie, Poznań, Poland Location Sw. Czesława 7/8, Poznań, Poland Client and General contractor Zielony Taras Sp. z o.o., Poznań Architects AKPB Piotr Bartosik, Poznań Building period 2008–2010 Façade construction AS Warsztat Sp.zo.o., Racula, Poland Façade material SWISSPEARL® REFLEX, Platinum 9020

Publisher

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Editor Michael Hanak, Zurich, Switzerland Advisory Board Stefan Cadosch, Zurich Detail plans Deck 4 GmbH, Zurich Translations Beverly Zumbühl and Arley Kim, Zurich Design Bernet & Schönenberger, Zurich Proofreading Jacqueline Dougoud, Zurich Printed by Südostschweiz Print AG, Chur, Switzerland

Photos

Nathan Kirkman, Chicago (pp. 2 left, 4–11) Miran Kambic, Radovljica (p. 2 right) Cristián Barahona, Santiago de Chile. (p. 3) Rune Backs, Copenhagen (pp. 14–19, 32–37, 52–57) Louis Dallara, Medford (pp. 20–29) Andrea Lhotáková, Prague (pp. 30–31) Sandro Lendler, Zagreb (pp. 38–41) Asaf Klinger Roy Rochlin, Holon (pp. 42–45) Tim Hursley, Jerusalem (p. 44 bottom) Angelo Kaunat, Grossgmain (pp. 46–51) Bent Raanes & Sarah Cameron Sørensen, Tromsø (pp. 58–59) Claes Westin, Malmö (pp. 60–61) Nils Rosenvold, Kolding (pp. 62–63) AKPB Piotr Bartosik, Poznań (p. 64)

Print run 20,000

The magazine Swisspearl Architecture is distributed exclusively by authorised distributors in 65 countries on 5 continents.

ISSN 1661-3260

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Austria Renovation and Extension Europahaus, Mayrhofen Bosnia/Herzegovina Importanne Centre, Sarajevo

Czech Republic Single family house, Prague

Denmark Apartment estate, Petersminde, Aarhus

Recreation Centre Lalandia Aquadome, Billund Jutland Agricultural Consultancy Centres, Billund and Esbjerg Hulgaards Have, Copenhagen Gymnasium, Rødovre

Israel Archaeology Wing of the Israel Museum, West Jerusalem

Norway Shopping Mall, Husnes

Sweden Service Building, Klagshamn

USA Christ the King Jesuit College Preparatory School, Chicago House Pincus & Motulsky, Garrison Lhaus, Long Island City

