# **SWISSPEARL ARCHITECTURE 9**

International Edition - High Profile Buildings

**SWISSPEARL®** 

## **SWISSPEARL ARCHITECTURE 9**

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64 Sports hall, Strakonice, Czech Republic Show room Daher & Cie, Beirut, Lebanon

# HONEST VALUE



With the climate changing, economic systems collapsing and an ongoing worldwide economic downturn, we face some tough challenges. Actually, one of the reasons for all these problems is man-made: the short-sighted greed of always wanting "more for less money or work".

Hopefully, the process of solving these

problems will also lead to a change of culture in which the race for fast money will be replaced by more traditional ways of thinking and decision-making.

What does this mean for future construction? In a fast changing world, more investors and building owners will aim at a secured, lasting ROI of their properties. Therefore, hedging against disastrous depreciation of their assets will be a major concern. The key to maximising long-term profitability of money invested in buildings is the use of systems and materials that have proved their reliability over decades without costly failure or heavy maintenance. Although initially more expensive, they represent honest value.

Also, operating costs during the life cycle of the buildings are sure to be in focus. Reducing energy consumption to lower the energy bill and reduce the effects of future cost-increase in energy will become more and more important. Sustainable low energy design with insulated, ventilated façades is a path that has proved its energy efficiency over decades in many countries with severe climate conditions. Again, honest value. The following pages show how the clients' desire for durable and trustworthy performance over a long period can be met with the basic value of good architecture.

Anders Holte, CEO Eternit (Schweiz) AG



Petit-Lancy, Switzerland, 2002

# THE PERIPHERY AS AN ARCHITECTURAL THEME

By Vittorio Magnago Lampugnani Fotos: Joël Tettamanti



Spreitenbach, Switzerland, 2002

As regards the periphery, or more precisely, suburban space, contemporary architectural culture plays different and controversial roles that can be traced back to two basic positions. One of them regards the periphery as nothing more than a negligible area devoid of all social and architectural qualities and no chance of ever acquiring these qualities. The other sees it as a contemporary and modern form of urban life that is just as inevitable as it once seemed new and strange to historic cities, but certainly not without dynamism and even fascination. This positive view was anticipated by the visual arts, which accepted the periphery not only as a social but also as an architectural field of observation. As one of the first, the American realist painter Edward Hopper was fascinated by the suburban architecture and the street infrastructure that characterised the United States' urbanisation from the 1920s.

Despite all the differences in their approaches, the architects that rejected the suburbs and those with a more positive attitude were united in the restraint with which they treated the object of their like or dislike in terms of planning and design. One camp was of the opinion that there was nothing worth saving, the other thought that things were more or less in order as they were. Thus, although there is plenty of building going on in the suburbs, it is more or less sporadic. Little attention is paid to overall connections in either concrete or conceptual terms.

The phenomenon of the suburbs is by no means new. Back in Antiquity, the transition between the town and the surrounding landscape was marked by an unclearly demarcated area. For centuries, the privileged domicile of those who could afford a suburban villa as well as a city palace, the suburbs were discovered in the mid-19th century as an alternative to the over-compacted, dirty, dilapidated and unhygienic town that was within the means of even the middle and lower income brackets. Whereas the English Garden City Movement probably played an influential role, there was also an attempt to direct a phenomenon that was already gaining round onto a better urbanistic and social path. It was not by chance that, in his book Town Planning in Practice published in 1909, Raymond Unwin, the respected figurehead of the Garden City Movement, decried the arbitrary building of cramped housing on open landscapes that was evidently designed with a complete lack of concern for the social requirements of the inhabitants. Even the otherwise progressive 1933 Charte d'Athènes made the uncontrolled and disorderly urban growth of the mechanical age



Chavannes, Switzerland, 2002

responsible for the chaos of contemporary cities, attacking above all the suburban settlements.

Even so, 20th century society as a whole tended increasingly to favour the single-family house with a garden as a miniature and surrogate of the aristocratic castle and the upper class country house, largely without scruples in terms of urban planning.

The former suburbs such as Hampstead Garden Suburb in London, Riverside in Chicago and Coral Gables in Miami were exclusive, but also unmistakeable and of the highest quality as regards both the landscape and urban space. What followed was almost without exception uniform and ubiquitous, regardless of whether opulent, low-cost or cheap. In the interplay of political, sociological and economic energies, the cities exploded into increasingly fragmented peripheral settlements that stopped growing out of the compacted centre but covered it with loose and largely labyrinthine structures. It is in these structures that around one third of today's European population live.

The phenomenon and the structures were given different names in the attempt to define them at least theoretically: over-development, settlement dispersement and, recently, urban sprawl. The term, which was first coined in the 1930s, became established in both scientific literature and in newspaper features and was extended in the 1950s by the term exurbanity, which described the intermediate zone between the city, suburbia and the landscape. It is this exurban sprawl that is currently growing fastest and establishing itself as the worst form of periphery – which it really isn't any longer.

The extent, the speed and not least the largely unplanned character of this development, inevitably led to problems of a social, technical, economic and ecological and urban planning nature. The planning and urban development theoretician Kevin Lynch drew attention to this last aspect as early as 1960 in his influential book *The Image of the City* in which he sought for identification signs and large forms in the North American agglomerations. He had a theory that new design principles should create new urban densities in the unhierarchical juxtaposition of the modern territorium. This postulate is still valid today.

Of course, the periphery is not the city centre and should not try to emulate it. It is a new and independent urban form and should be preserved and reinforced as such. Accordingly, the (necessary) improvements will not come from outside in compliance with the ideal



Frinvillier, Switzerland, 2002

that the suburbs are alien, but be developed from inside in order to emphasise and elaborate what is already present in the suburban agglomerations and is waiting to be discovered.

In this way, the suburbs can (and must) be set on an equal footing with the city centre, but in a new and complementary way. Only thus can the qualitative gap that is so prevalent in contemporary cities be bridged: by allowing the contemporary city to consist of a centre and a periphery, but in which the periphery has qualities that, although different from those of the centre, are equal in all functional, social and aesthetic respects. *Vittorio Magnago Lampugnani* 

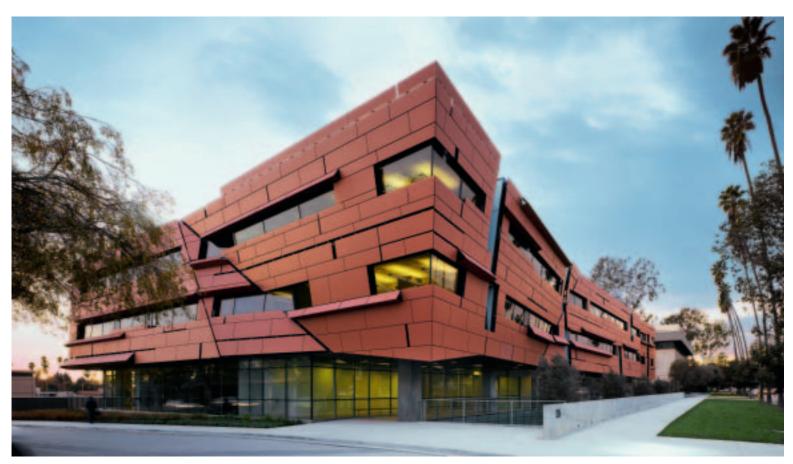


Vittorio Magnago Lampugnani, who was born in Rome in 1951, studied architecture at the Universities of Rome and Stuttgart. Since 1994, he has acted as professor of the History of Urban Development at the ETH Zurich, as well as running his own architectural office in Milan with two partners. He has issued numerous publications on matters relating to urban development.

Joël Tettamanti was born in Efok (Cameroon) in 1977. 1997 - 2001: trained to be a photographer at the Ecole cantonale d'art de Lausanne (ECAL). Since then: freelance photographer in Lausanne and Les Breuleux, numerous exhibitions and publications in Switzerland and abroad. www.tettamanti.ch



The eagerly awaited Cahill Center in Pasadena brings together Caltech's top-ranked astrophysicists under one roof. The standout elements of the new Center are its fractured façade and its dramatic staircase that penetrates all four floors and acts as an "occupiable telescope".



Cahill Center for Astronomy and Astrophysics, Pasadena, CA, USA **REACHING FOR SPACE** 



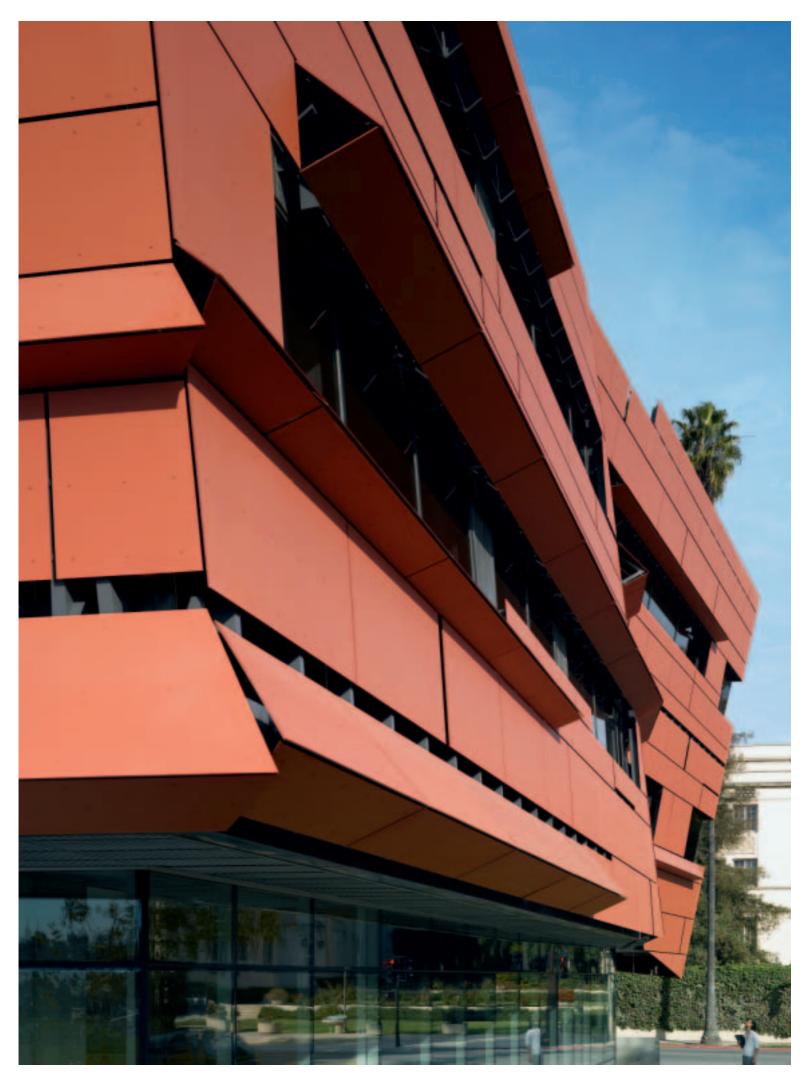
Layers of the terracotta coloured cladding of the upper levels seem to have shifted against each other, giving the building the appearance of an earthquakedamaged brick wall.

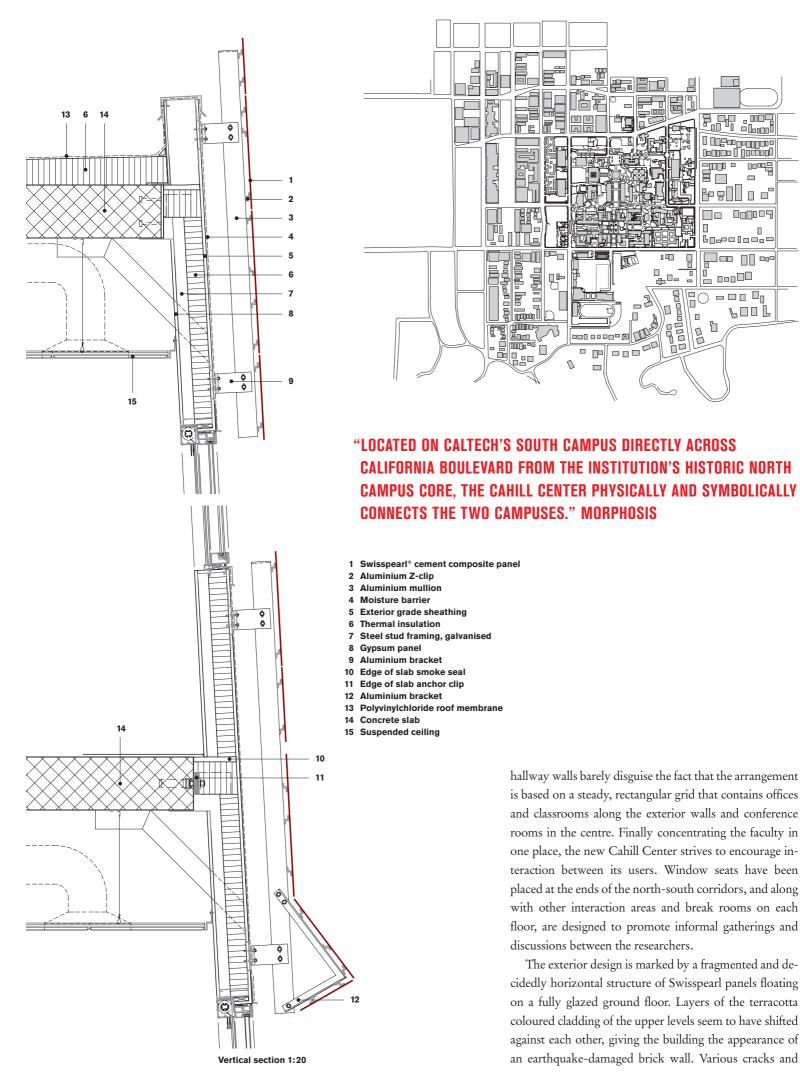
The highly renowned astrophysics faculty at the California Institute of Technology (Caltech) has for decades been dispersed across the campus amongst several overcrowded buildings. The Cahill Center for Astronomy and Astrophysics in Pasadena designed by the architectural firm of Morphosis and named after its generous sponsor Charles H. Cahill who provided the lead gift for the \$50,000,000 building assembles the faculty and its associated groups into a single space.

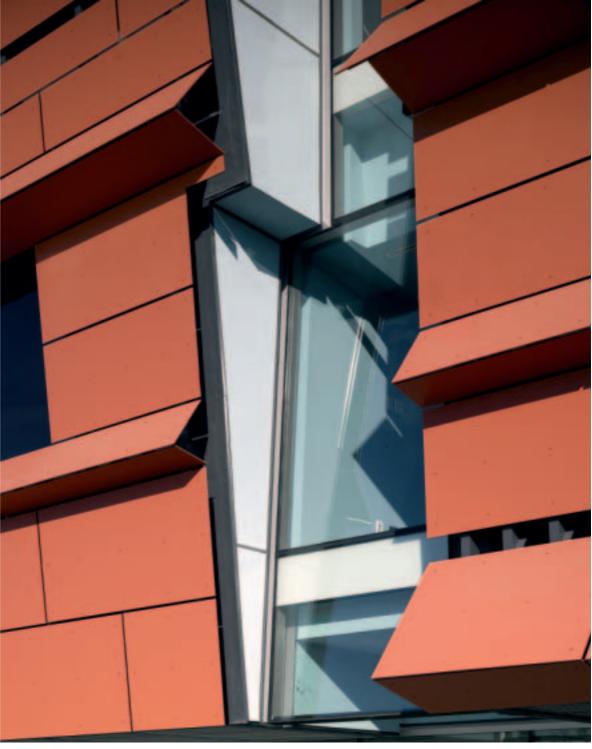
Located on California Boulevard, the Cahill Center links the South Campus to Caltech's core in the north, thus establishing an axis between the two parts of the institution. The north-south hallways that bisect the upper floors of the building serve as so-called "stitches" and corroborate the connections between the campuses. Floor to ceiling glazing marks these stitches on the façade and frames views over the large baseball fields to the south and the historic center to the north.

The building consists of four floors, one of them underground which houses all the laboratories, and affords ample access to natural light. The ground level serves as a social and gathering space which features the 148-seat Hameetman auditorium (named after another donor) as well as a library. The lobby's visual centerpiece is its spectacular staircase that penetrates all four floors. Twisting through a conglomerate of fractured white walls with angular windows, it compresses as it advances, until finally narrowing to a tilted rooftop skylight. Thus, the staircase conceptually acts as an "occupiable telescope", referring to the purpose of the Center itself.

Compared to the dramatic staircase, the interior design of the upper floors appears rather staid. The distorted





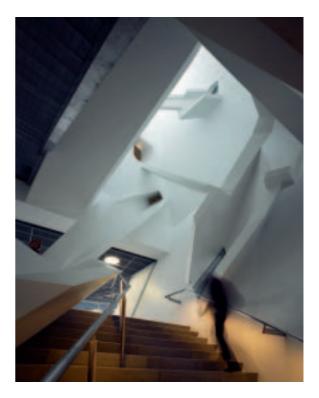


fissures add to the eruptive character of the façade, as well as deep and straight diagonal voids that seem to be carved into the façade, recalling Gordon Matta-Clark's famous "Splitting" series from 1974.

The Cahill Center is noteworthy not only for its design, but also for its eco-friendliness for which it received LEED Gold certification. The ventilated façade system reduces heat gain and the need for air conditioning. Additionally, at certain points the panels above the windows are tilted and angled in such a way as to protect the offices and classrooms from direct sunlight. Its sophisticated design, along with other sustainable elements such as the green roof and the use of high efficiency systems, will significantly reduce energy consumption.

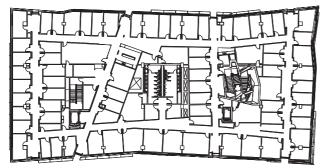
The Cahill Center completes a series of projects in which Morphosis experimented with folded and ruptured

Swisspearl façades. Yet, compared to recent buildings such as the Student Recreation Center in Cincinnati or the San Francisco Federal Building, the Cahill Center appears rather conservative and restrained, mainly due to its colour scheme and scaled-down dimensions, both of which connect it with Caltech's historic core across California Boulevard. *Patrick Zamariàn* 

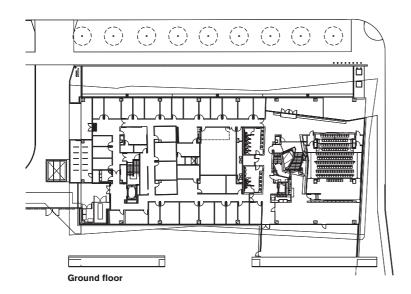




"THE BUILDING IS THE RESULT OF A SERIES OF FORCES THAT COLLIDE TO PRODUCE UNIQUE SPACES OF DISCOVERY. FORCE LINES TRACK THE MOVEMENT OF FORM AND LIGHT THROUGH THE BUILDING'S FACETED FAÇADE, THE CENTRAL VERTICAL VOLUME, AND THE STITCHES." MORPHOSIS



Upper floor 1:1000



Location 1216 E. California Blvd., Pasadena, California, USA

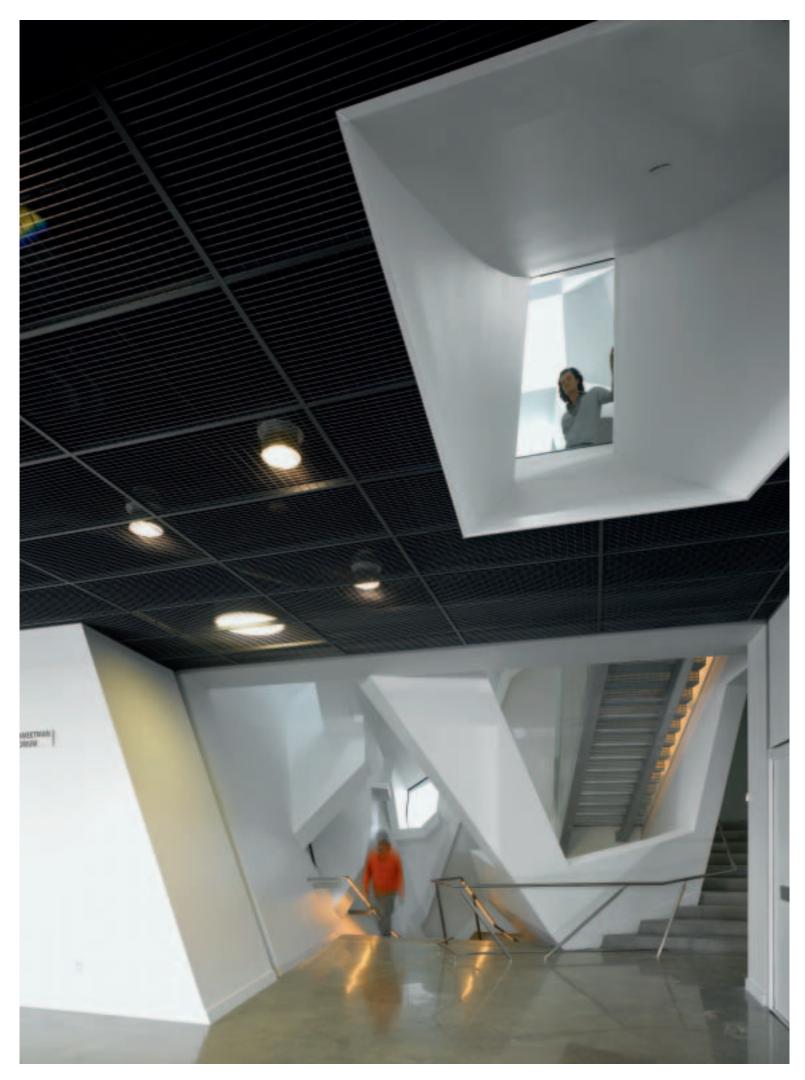
Client California Institute of Technology, Pasadena Architects Morphosis, Santa Monica

Building period 2007-2008

**General contractor** Hathaway Dinwiddie Construction Company, San Francisco

**Façade construction** Anning-Johnson Company, Los Angeles

Façade material SWISSPEARL  $^{\mbox{\tiny (B)}}$  CARAT, Coral 7030-R

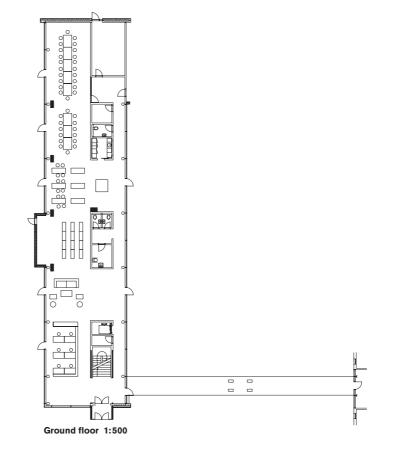




### Extension of OK Headquarters, Århus/Viby, Denmark Corporate Transparency

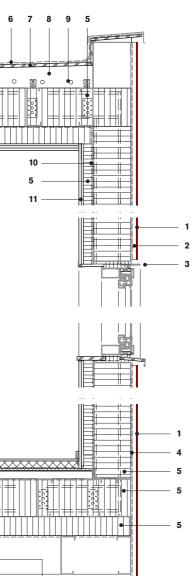
The oblong volume of the new office building is clad in anthracitecoloured Swisspearl panels. The large windows are shaded with metal slats and open onto the nearby street.

In its short history, Danish OK Benzin's headquarters has already been extended three times. Through a fusion of seven smaller enterprises in the 1960s, followed by expanding a chain of smaller vending gasoline plants, OK Benzin had become Denmark's leading gasoline company. For the latest addition to their Århus site the company now decided to organise an architectural competition, which local architects Brugger & Nielsen won. 1600 square metres of new office space were to be added to the existing structure. "It was important for us to create an extension that both physically and functionally plays with the existing buildings," says executive planner Thomas Jespersen. The new building is an oblong volume lying parallel to the main building and connecting to an existing wing, thus forming a U-shape with a central plaza. The architects spanned the latter with a glazed skywalk that connects the new office wing with the main building and creates an internal circuit. The façade was clad in anthracite-coloured Swisspearl panels interrupted by large glass sections. The side facing the street consists of tall windows only, supplying the offices with daylight and the company with a new openness to the public. Mirko Beetschen









Location Åhave Parkvej 11, Viby near Århus, Denmark Client OK a.m.b.a., Viby

Architects Brugger & Nielsen A/S, Århus

Building period 2007-2008

General contractor, façade and roof construction

A. Enggaard A/S, Svenstrup

**Façade material** SWISSPEARL® CARAT, Black Opal 7021

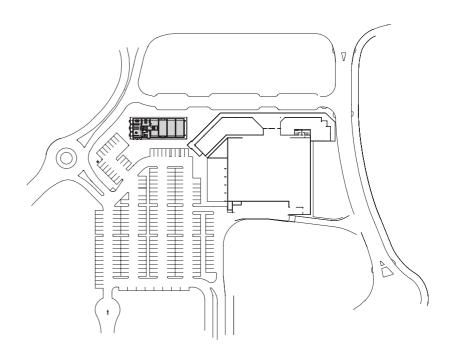
- 1 Swisspearl\* cement composite panel 8 mm
- 2 Ventilation cavity, vertical omega profiles
- 3 Aluminium lintel profiles
- 4 Windstopper 4 mm
- 5 Thermal insulation
- 6 Bituminous roofing membrane
- 7 Plywood 16 mm
- 8 Battens to provide roof slope
- 9 Ventilation holes
- 10 Vapour barrier
- 11 Gypsum panels, double-ply



Commercial Building Ropes Crossing, Sydney, Australia A Box on Human Scale

The brief for the project was to create flexible spaces that would provide easy access to commercial facilities, with the ability to be converted to community use. The design is abstract; it does not refer to a vernacular architecture but rather to an international style. The strong horizontality and weightless cantilevered box owe homage to Corbusier's Villa Savoye. However, in contrast to the villa, Caro's building is a play of subtle surface textures and materials: Swisspearl panels, plywood, concrete, glass, timber, steel. The textures emphasise the rhythm he has composed on the long North and South façades. The smooth black opal Swisspearl panels form the sleek background to the subtle relief created by the adjustable glazed louvers and the chamfered plywood reveals of the slot window openings.

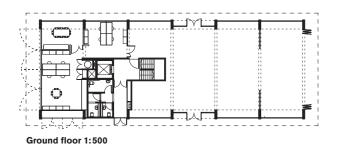
The elongated horizontal volume is counterbalanced by the pop-up vertical of the clock tower clad in vertical timber sections. The surface treatment of the façades contributes to creating the human scale; a positive attribute for any commercial or community building project. *Anna Roos* 



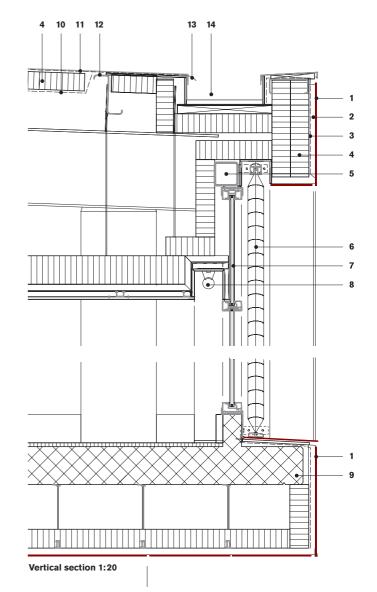
The wall cladding returns to the soffits of the cantilevered first floor element to express the sculptural and three-dimensional qualities of the form.



- 1 Swisspearl® cement composite panel
- 2 Ventilated cavity
- 3 Waterproof membrane
- 4 Thermal insulation
- 5 Steel frame
- 6 Operable louvre blinds
- 7 Opaque glazing
- 8 Blind
- 9 Reinforced concrete slab
- 10 Vapour barrier
- 11 Steel deck roofing
- 12 Steel roof framing
- 13 Flashing
- 14 Steel box gutter



Location Ropes Crossing, Western Sydney, Australia
Client Delfin Lend Lease, Millers Point
Architects Tony Caro Architects, Sydney
Building period 2007–2008
Façade construction Omega Façade, Glenbrook
Façade material SWISSPEARL® CARAT, Black Opal 7020

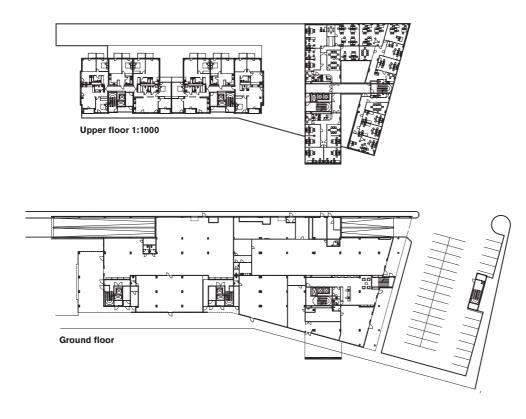


This multifunctional complex unites administrative, commercial and residential functions in one location. Intended as a landmark for visitors arriving from the north, it also upgrades its immediate neigbourhood marked by monotonous prefabricated apartment blocks from the Soviet era.

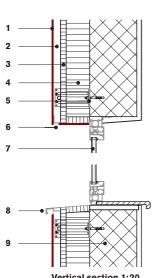
### Kamanė Business Centre and Housing Complex, Vilnius, Lithuania THE BEEHIVE



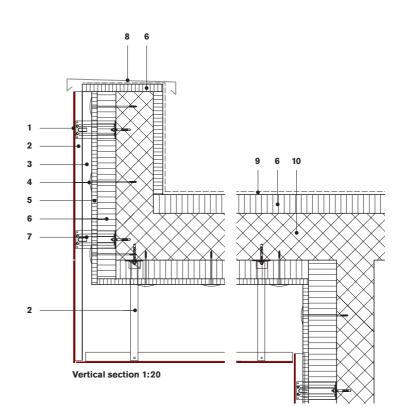




"THE SIGNIFICANCE OF THE BUILDING IN TERMS OF FORMING THE FIRST IMPRESSION OF VILNIUS, ITS CHARACTER AND QUALITY OF ARCHITECTURE, WAS ONE OF THE KEY ASPECTS DURING THE DEVELOPMENT OF THE PROJECT." **VILNIUS ARCHITECTURE STUDIO** 



Vertical section 1:20



1 Swisspearl<sup>®</sup> cement composite panel 8 mm

2 Aluminium substructure

5 Wind proof insulation 30 mm

4 Insulation holder

6 Thermal insulation 7 Wall holder

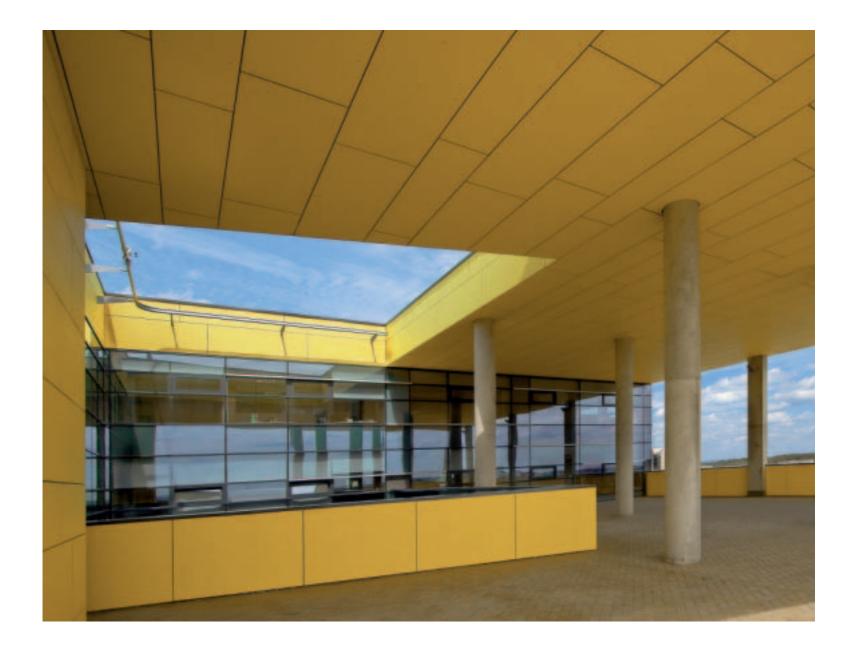
8 Metal parapet cap

- 1 Swisspearl<sup>®</sup> cement composite panel 8 mm
- 2 Ventilation cavity
- 3 Wind proof insulation 30 mm
- 4 Thermal insulation 125 mm
- 5 Wall holder
- 6 Ventilation profile
- 7 Aluminium windows
- 8 Metal window sill
- 9 Concrete structure

9 Roofing 10 Concrete structure

3 Air layer

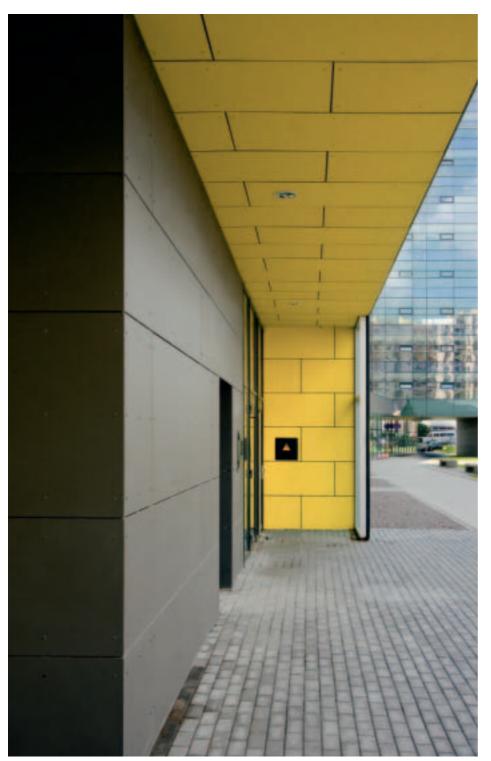
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The contrast between the historic core and vast residential districts comprised of dull apartment blocks built in the Soviet era is characteristic of many cities in Eastern Europe. This contrast is particularly striking in Vilnius, the old town centre which was included in the UNESCO World Heritage List in 1994 owing to its highly praised Baroque architecture. In Vilnius, rapid economic and thus urban growth has necessitated the development of peripheral suburban areas. The city's planning approach seeks to decentralise the urban structure of the city by establishing new multifunctional centres on the outskirts. One such centre is the Kamane project built by Vilnius Architecture Studio (VAS). The name "Kamanė" - Lithuanian for "bumble bee" - is programmatic for the concept of the new complex which incorporates commercial, administrative and residential functions. Analogous to a beehive,

it thus provides a place to live and work, forging a strong sense of community. The complex comprises a 10-storey administrative and an 11-storey residential block connected by a low-rise building for commercial use at ground level, as well as two underground parking levels.

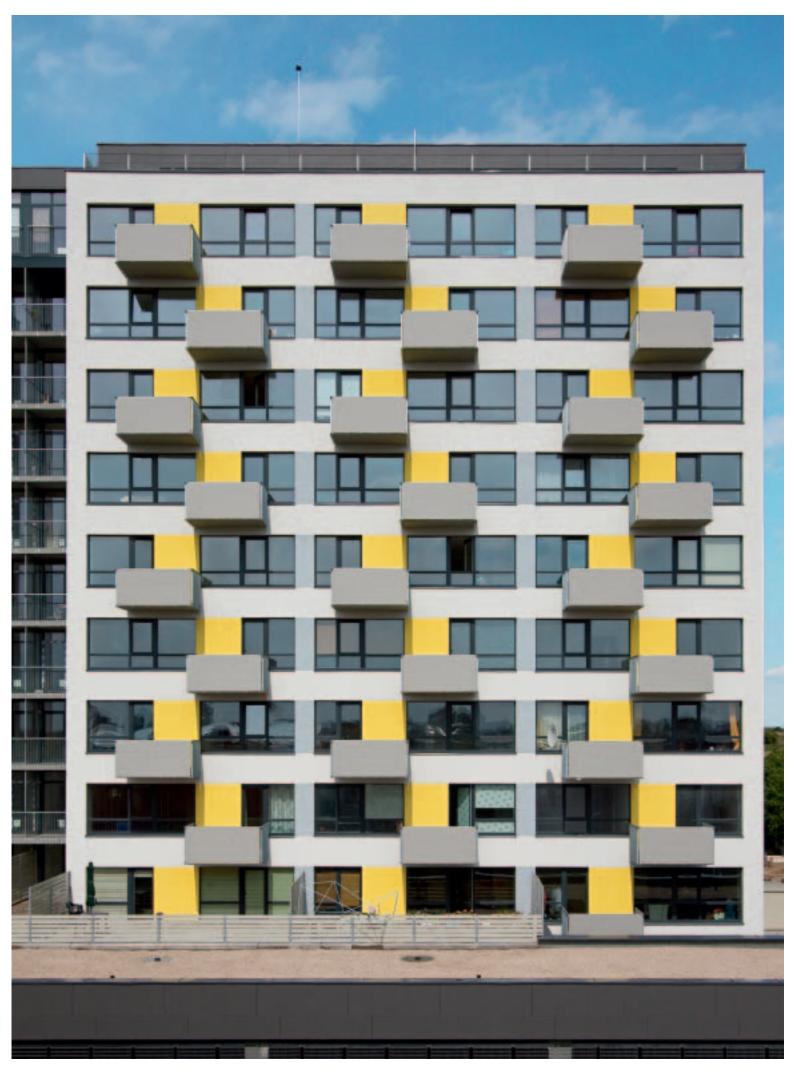
Located on Ukmerges Street, one of the major routes into Vilnius linking Lithuania's capital with its Latvian counterpart, the new multifunctional complex strives not only to upgrade its surrounding area, it also serves as a landmark for arriving visitors as well. The street-facing administrative building projects extensive aluminium glazing and grey Swisspearl cladding contrasted by the bright yellow panelling of the stair tower and the underside of the roof terrace's canopy. Its wedge-shaped form not only accentuates the dominant street corner of the complex but also allows for expressive perspectives within the fully



glazed inner courtyards. At the rear of the administrative block, sheltered from street noise and pollution, the apartment block rises above the commercial building using its roof as a terrace for the residents. Further exterior spaces include conjointly used courtyards as well as fenced playgrounds within the immediate vicinity of the residential building. In contrast to the other sections of the complex, the façades are bright and cheerful, featuring irregularly arranged loggias on one side and extruded balconies on the other.

The chosen ventilated façade system emphasises the importance attributed to sustainable architectural solutions with regard to cost-effectiveness and durability. Further, the wide colour range of Swisspearl panels enabled the architects to combine the environment's prevailing greyish tones with vividly coloured insertions, thus exuding a sense of liveliness to the neighbourhood without denying its grim urban context. *Patrick Zamariàn* 

Location Ukmergės Street 369a, Vilnius, Lithuania Client UAB Kamintos investicija, Kaunas Architects Vilniaus architekturos studija (VAS), Vilnius; Artūras Asauskas, Vidmantas Kančiauskas Building period 2006–2008 General contractor UAB Kaminta, Kaunas Façade erector UAB BFSG, Metalo 6a, Vilnius Façade material SWISSPEARL\* TECTURA, Black Opal 7020R and custom colour Yellow 106–06 AS1

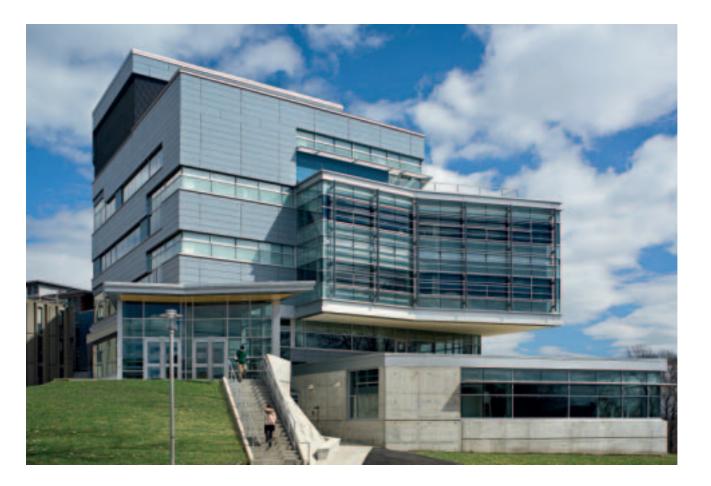


Payette architects have given the 60 year-old Brandeis University campus near Boston a new heart within the science complex. With a whole set of measurements and a cutting-edge Science Center, they not only reorganised the pedestrian flow, but also connected the various faculties to encourage interdisciplinary discourse.

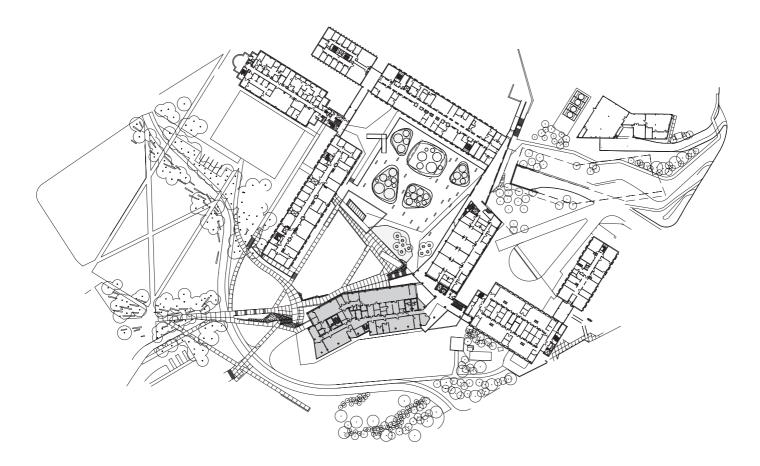
### Brandeis University Carl J. Shapiro Science Center, Waltham, MA, USA A "RIVER" RUNS THROUGH IT

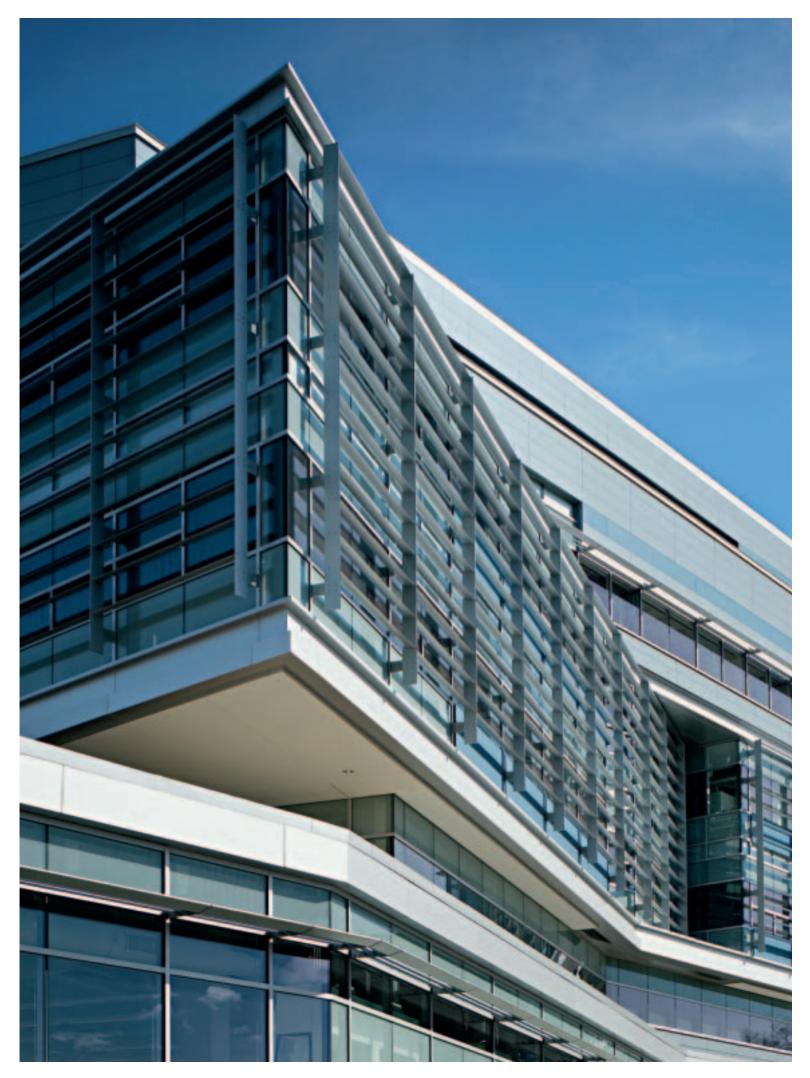


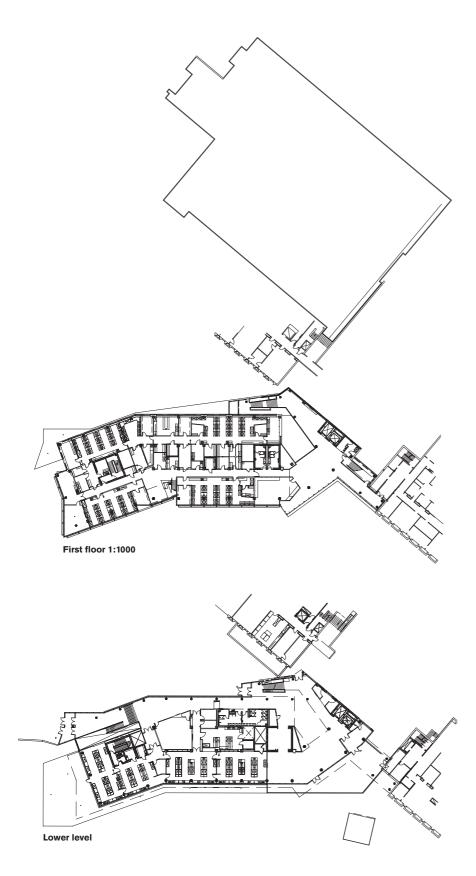




"A DETAILED MASTER PLAN OUTLINED THE PHASED APPROACH TO THE EVOLUTION OF THE SCIENCE COMPLEX AS A VITAL CAMPUS CENTRE OF INTERDISCIPLINARY SCIENTIFIC DISCOURSE." PAYETTE ARCHITECTS





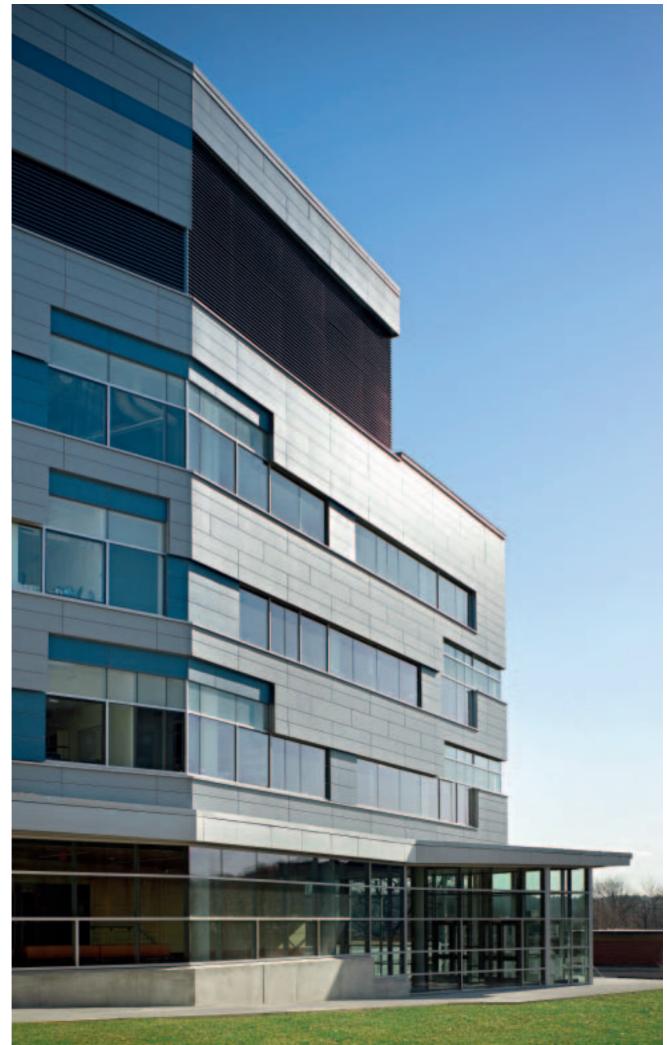


Location 15 South Street, Waltham, MA, USA Client Brandeis University, Waltham Architects Payette, Boston Building period 2007–2009 General contractor John Moriarty and Associates, Winchester, MA Façade construction T. J. McCartney, Nashua, NH Façade material SWISSPEARL\* CARAT, Azurite 7042 and Sapphire 7061 Brandeis University, just nine miles west of Boston in the state of Massachusetts, was founded in 1948. Describing itself as "combining the faculty and resources of a worldclass research institution with the intimacy and personal attention of a small liberal arts college", Brandeis "supports an innovative and exciting programme of learning that emphasises an interdisciplinary approach to knowledge". With ever-changing educational insights, new technologies and larger faculties, a renovation and extension of the old buildings became vital in the new millennium. Boston-based architectural firm Payette, a thorough expert in campus planning and design, was hired with the task of expanding and reorganising the Science Complex. Executive architect Kevin Sullivan: "The existing site is the product of an ambitious modernist plan executed in the 1960s and 70s. The core buildings and the central elevated plaza, however, fall short in their ability to sustain an interdisciplinary curriculum. They remain largely disconnected from their neighbouring buildings and spaces." The architecture discouraged other students from entering the science complex and hindered the interaction of the faculties. This was the main issue to be solved by the renovation.

The architectural team developed a complex master plan that outlines the strategic approach to the 154-million-dollar-project that was to be executed in the following five to ten years. To understand the complexity of the academic processes and meet all the needs, it started with a great survey of the status quo, and collected information through countless interviews and analyses. The team then developed a digital graphic technique that described the evolution of the Science Complex over time, so that everybody was quite clear about which part was affected when and how. The institutions remained fully operational throughout the whole building process.

At the centre of the project stands the new Carl J. Shapiro Science Center, an expressive modern building that was completed in early 2009. It replaces two of the ten old buildings forming the central plaza. The new Science Center, as well as countless smaller architectural features, provide a completely new pedestrian movement – called the River – alongside and through the complex. New front doors, transparent wall fabrics and interconnected landscapes contribute to an open and inviting campus that promotes interdisciplinary discourse. The new building is exemplary for this new "science flow", creating horizontal connections as well as vertical ones through large glass façades, glazed bridges, open staircases and a multi-storey open space.

The project planning focused on creating a vital and complex Science Center by providing green strategies. Hard surfaces were replaced by accessible landscapes, a new energy-efficient central plant was built, and building materials, both interior and exterior, were selected for their sustainability. "The project was conceived as a series of layers visibly hung from a concrete structure," says The façade of the new Science Center is constructed as a series of layers hanging from a concrete structure. The overlapping of the Swisspearl panels blurs the boundaries between the different materials.







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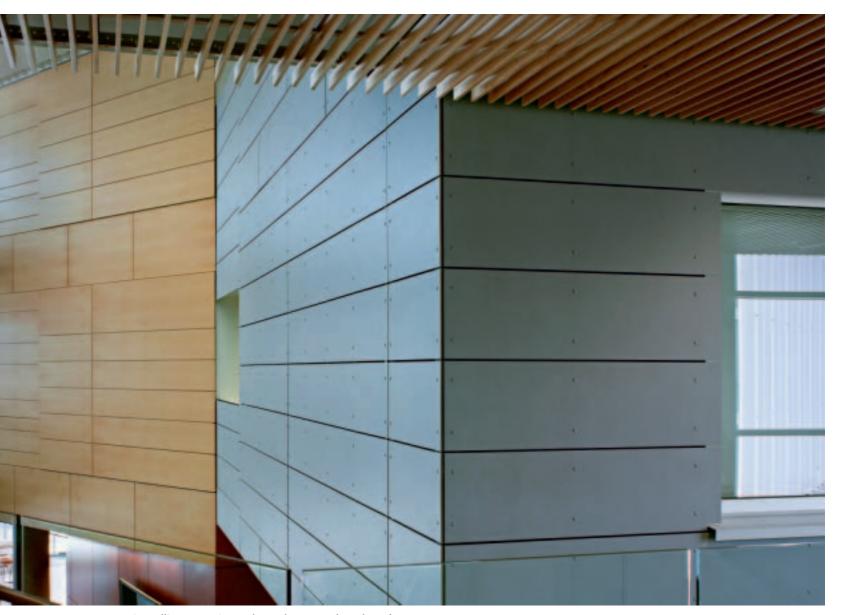
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Vertical Section 1:20

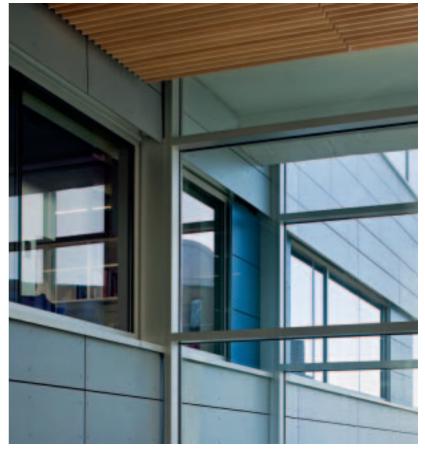
- 1 Swisspearl<sup>®</sup> cement composite panel
- 2 Ventilation cavity, aluminium sub-framing
- 3 Thermal insulation with UV protection on Z-furring channels
  - 4 Moisture barrier
- 5 Exterior sheathing, gypsum based
- 6 Cold-formed metal framing
- 7 Structural tube steel
- 8 Aluminium louvre
- 9 Thermal insulation
- 10 Metal-faced composite wall panel
- 11 Aluminium sunshade
- 12 Extruded aluminium sill
- 13 Membrane roofing
- 14 Gypsum based protection board
- 15 Vapour barrier

"WE PRIMARILY USED SWISSPEARL PANELS FOR ITS ARCHITECTURAL QUALITY AS A DELICATE, TAUT AND MAT SURFACE WITH A BROAD SPECTRUM OF LIGHT QUALITY, WHICH VARIES ACCORDING TO THE TIME OF DAY AND GIVEN SEASON." PAYETTE ARCHITECTS



Kevin Sullivan. "Swisspearl panels were selected as the exterior rain-screen cladding material not only for its recycled content and affordability, but mainly for its architectural quality." By allowing the panels to slide past and blur the boundaries between the various materials, the architects reinforced the layered concept of the architecture.

The Payette architects are convinced that the renewal of the Science Complex will have a great impact on learning. "The new construction and renovations have transformed the introverted complex by reconnecting it to the larger campus. The configuration of the new buildings deliberately redirects campus circulation right through the Science Complex and creates a truly interdisciplinary facility." Inside the building, chemistry and biology faculties not only have state-of-the-art equipment, but also informal interaction spaces and the large atrium to intermingle with members from other faculties. *Mirko Beetschen* 





Chile hosted the FIFA U-20 Women's World Cup in 2008. The stadium itself is characterised by its light roof construction reminiscent of sweeping sails.

Estadio Bicentenario Nelson Oyarzún Arenas, Chillán, Chile Access to all Areas

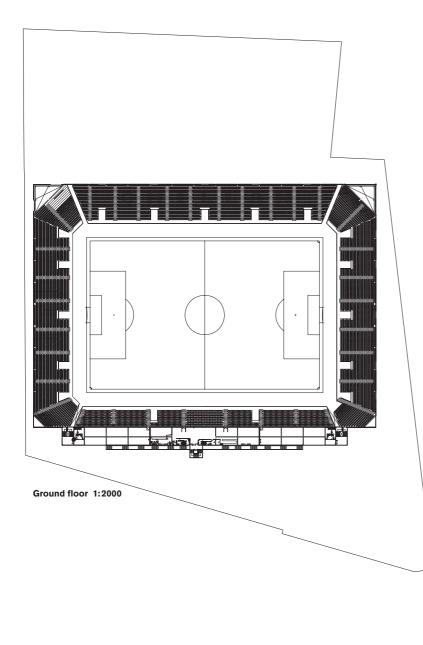




In 2008, Chile hosted the FIFA U-20 Women's World Cup. The country seized the opportunity to renovate several of its football stadiums and upgrade them to international standards. In the central Chilenian city of Chillán, this led to the demolition and replacement of the old municipal stadium which did not meet the FIFA requirements of north-south orientated pitches.

Located in the south periphery of Chillán, approximately one kilometre from the business centre, the new Estadio Bicentenario Nelson Oyarzún Arenas accommodates 12,000 visitors. The administrative building, a slender, four-storey edifice marking the west side wall of the stadium, is divided into areas for services, media, sports and VIPs and includes centralised access. The stadium itself is characterised by its light roof construction reminiscent of sweeping sails, its lively and colourful Swisspearl façade and its stunningly permeable basement. All three elements underline the polyvalent urban character of the new building, for which the traditional fortified design of football stadiums has been abandoned in favour of an open and modern typology.

Like many Chilenian cities, Chillán suffers from a serious shortage of public spaces. This shortage is especially noticeable in the stadium district, not least because of its close vicinity to the rodeo arena, which accounts for the occurrence of significant crowds on a regular basis. The new stadium meets the requirements of this condition by providing an intermediate public square that connects the two sports facilities and serves as a meeting point for the neighbourhood as a whole. Furthermore, the lowest ranks within the stadium are lifted three metres above ground level, thus creating permeability between the actual play-



ing pitch and its surrounding area. This allows for complementary activities and gives the stadium a functional flexibility that is unusual for these types of premises. The combination of the interior and exterior spaces can be regulated through a system of mobile gates which, according to the requirements of each activity, transforms the sports ground from a site with restricted access to a vast public space and vice versa.

Likewise, the façade design responds to the concept of the stadium area as a public space for gatherings before and during sports events, as well as for various cultural and social activities unrelated to the stadium's actual purpose. Large plain surfaces are incorporated in the mosaic of Swisspearl panels and facilitate the projection of events that take place in the stadium. The colour scheme of the panelling itself cherishes the artistic and cultural legacy of the area: red, the predominant colour which is also used for the seats and interior design, honours the jerseys worn by the local football club Ñublense; black is the typical colour of regional artisan craftwork; and the grey tones refer to the colours of the city's traditional architecture. *Patrick Zamariàn* 





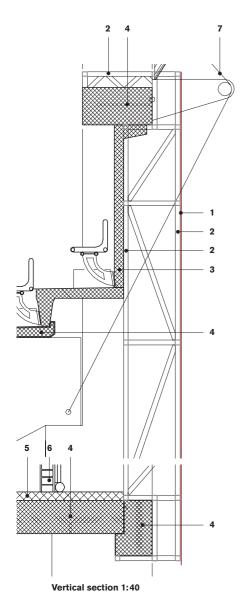




# "THE LACK OF PUBLIC SPACES WITHIN THE CITY MAKES THE STADIUM AN IMPORTANT PLACE FOR GATHERINGS AND RECREATION." JUDSON & OLIVOS ARCHITECTS



Location Calle Pedro Aguirre Cerda 297, Chillán, Chile
Client Municipalidad de Chillán
Architects Judson & Olivos Arquitectos, Santiago
de Chile; Ricardo Judson Bilbao, Roberto Olivos
Marchant, Javier Avila Burrows, Isabel Perelló Rosés
Building period 2006–2008
General contractor Constructora BCF, Santiago
de Chile
Façade construction Comintecc, Vitacura/Santiago
de Chile
Façade material SWISSPEARL<sup>®</sup> CARAT, Black Opal
7024; REFLEX, Silver 9000 and Platinum 9020



- 1 Swisspearl<sup>®</sup> cement composite panel
- 2 Galvanised steel structure
- 3 Concrete wall, prefabricated
- 4 Concrete beam, prefabricated 5 Concrete floor 6 Brick wall

- 7 Tension cable for tent membrane roof





# Interview with Judson & Olivos Architects, Santiago de Chile



Ricardo Judson Bilbao, Roberto Olivos Marchant, Isabel Perelló Roses, Javier Ávila Burrows

Judson and Olivos Architects, founded in 1997, develops projects in private real estate (mega projects of dwelling and town planning) and projects for the State through public architectural competitions. See also www.joarquitectos.cl or www.judsonyolivos.cl and page 32.

### What made you decide to become architects?

Our team consists of architects with different anxieties and influences in their approach to architecture. The education they receive in our studies results in an integral formation that permits us to orientate our creative vocation toward the development and evolution of our cities.

### Where do you work, and in what organisational structure?

Our office is located in Las Condes, a traditional residential area of Santiago, now transformed into a modern centre of offices. Judson and Olivos Architects consists of two partners, two associated architects and a team of ten designers. Each project is handled by a team headed by a chief architect who manages the project, coordinates relations with the client and establishes the time schedules and priorities for the successful development of the project.

#### What are the themes that interest you particularly in your work?

By virtue of their importance and social implications, the majority of our projects have an impact on the consolidation of our cities. The foundation of new neighbourhoods is a constant challenge for us, that compromises not only the project but also the city in question. These new neighbourhoods need to be autonomous, they need to be located in green areas and provided with commercial and social facilities with a good level of accessibility and communication with the existing urban structure. These are the main priorities in our work.

#### Who are your role models, and why?

Our office does not have specific models. We believe that you can find good architecture with many different focuses and tendencies since the codes of the architecture are universal.

#### What is your favourite building?

To be truly successful, a building must be incorporated in the city, it must be consistent with its environment and the public culture of the community that inhabits it, respond adequately to its geographical location, and be sustainable over time with a high level of commitment in the use of materials that respect the environment.

#### What would you describe as your greatest success in architecture?

For Judson & Olivos Architects, the power to execute projects of architecture in our country, Chile, in a highly active period has permitted us to have access to the development and elaboration of constructive and architectural solutions of high and modern technology in projects of great importance, thereby enabling us to optimise decisions and processes.

#### How do you find the right building materials for a project design?

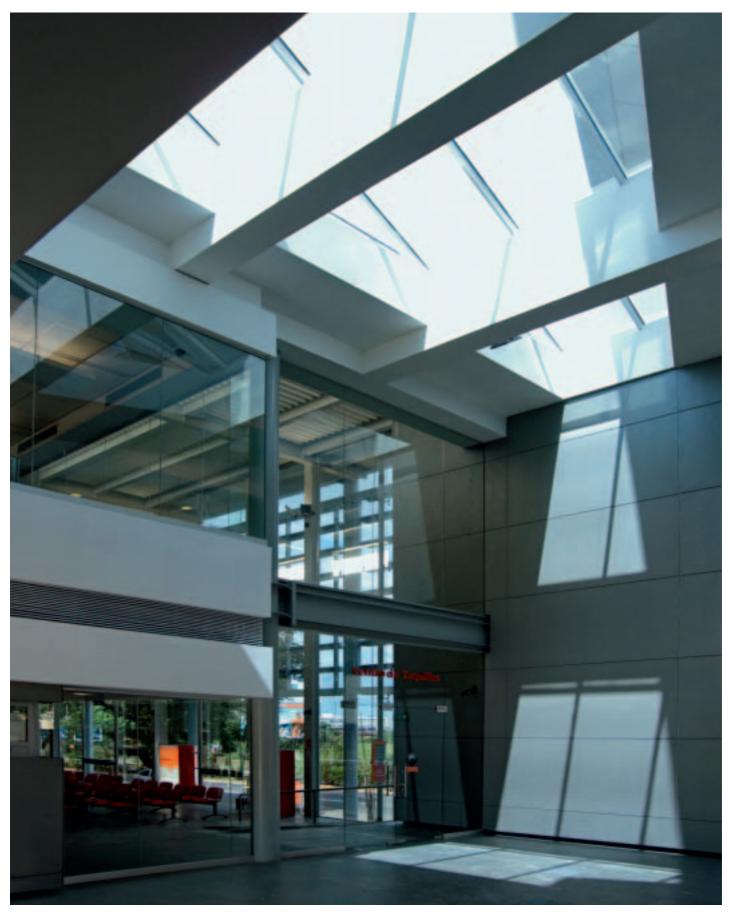
The outward appearance is the expression of many associated factors to the project: climate, environment, scale and private qualities of the assignment. Because of this, the material that formalises the idea is the synthesis of the determining factors that shape the project. Associated factors of cost, quality and availability play a part in influencing the decision.

### Why do you use cement composite panels?

These panels possess properties of modulation, format, colour and very harmonious durability in terms of current contemporary design. The sustainability of the façades is an important factor, and the minimum maintenance required by these panels guarantees their durability at the time of the proposal. *Interview by Michael Hanak* 

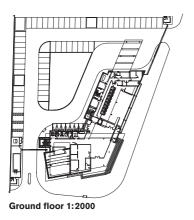
# Banco de Venezuela Measures against Heat

Swisspearl panels are also used in the central hall.



The bank is located on a large crossroad. On the corner, two separate wings meet in an obtuse angle. The higher, three-storey block has a projecting flat roof that can be seen from afar and is connected with the lower, two-storey section with a drive-in bank. Ramón Sahmkow from the GS Arquitectura office explains: "The architectural aim was to create a building that reflected the tropical climate, the nearby coast and the special light of the City of Maracaíbo."

The architects decided to depart from the regionally widespread concept of preventing heat penetration by means of small wall openings and opted instead for generously conceived window façades, light working premises and visual communication with the outside world. Other measures were also adopted for thermal insulation. The offices were placed on the coolest side of the building, and Venetian blinds were used to filter the sunlight. The hot surfaces were protected by a curtain façade with Swisspearl panels. *Michael Hanak* 





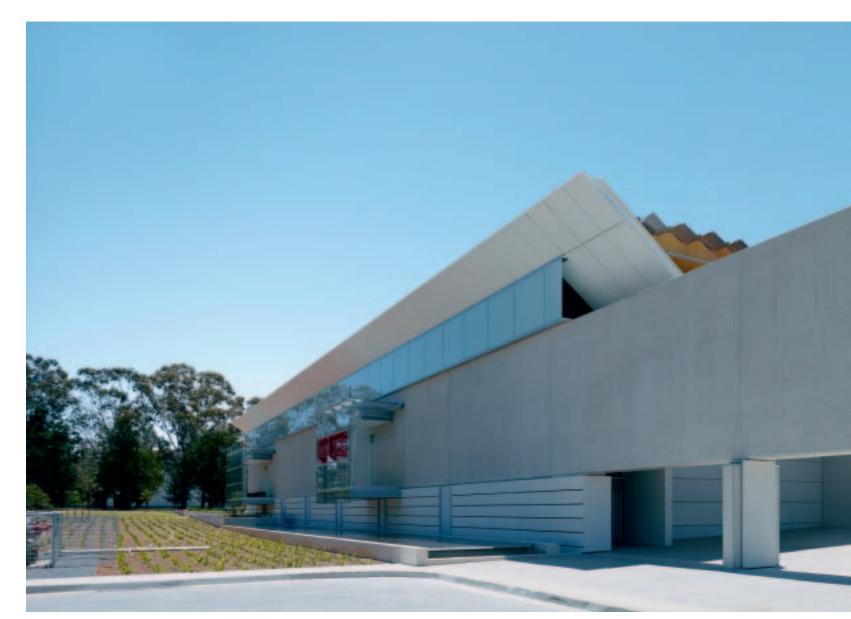


Location Av. Universidad / Av. Bellavista, Maracaíbo, Venezuela Client Banco de Venezuela, Caracas Architects GS Arquitectura, Caracas; Ramón Sahmkow Building period 2006–2008 General contractor GRS Construcciones, Caracas Façade construction Desarrollos Koma GPC, C.A., Las Mercedes / Caracas

**Façade material** SWISSPEARL® REFLEX, Silver 9000 and Platinum 9020



# National Portrait Gallery, Canberra, Australia Light for Art

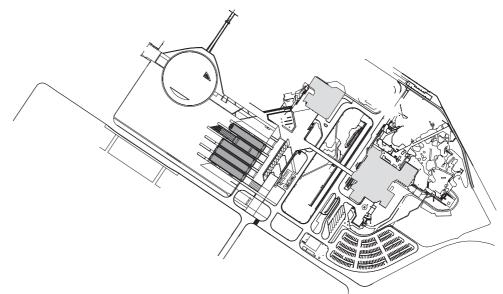


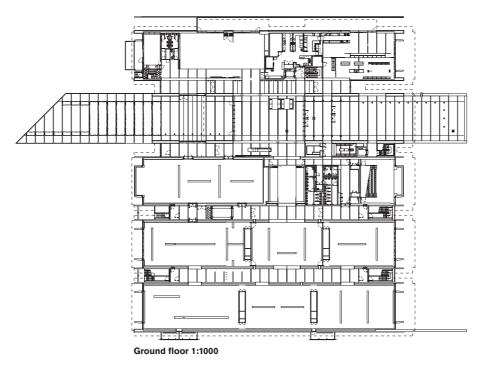
The precedent set by the grandiose Parliament House on Capital Hill in Canberra, Australia's capital, is continued by the newly completed National Portrait Gallery by architect Johnson Pilton Walker. The five parallel bands 12 metres wide and 70 metres long form the structure for the galleries and their various ancillary spaces.

The primary function of a gallery is to show works of art to their best vantage without damaging them by direct sunlight. Thus, indirect light is vital. The manner in which the architects have managed to allow diffuse light into the gallery spaces forms the core of the architectural language of the building. Clerestory skylights running along the length of the walls reflect light and funnel it into the gallery spaces via angled Swisspearl panels. There is a novel interpretation of the Swisspearl panels as design elements that articulate the flow of light. The building has character and presence without detracting or stealing the limelight from the artwork, which it was built to house. *Anna Roos* 

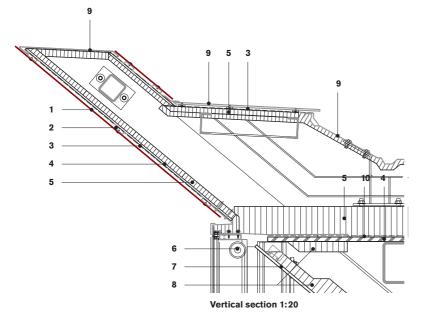
Location King Edward Terrace, Parliamentary Triangle, Canberra, Australia Client National Portrait Gallery, Canberra Architects Johnson Pilton Walker, Sydney Building period 2007–2008 Construction manager John Holland Group, Melbourne Façade construction Erincol Pty Ltd., Sydney Façade material SWISSPEARL® CARAT, Onyx 7099







"THIS DECEPTIVELY SIMPLE BUILDING WORKS FROM THE INSIDE OUT. CENTRAL TO THE BRIEF AND THE ARCHITECTURAL PROGRAM WAS THE IDEA THAT THE BUILDING SHOWS THE OFTEN LIFE-SIZE PORTRAITS TO ADVANTAGE." CATHERINE DE LORENZO, SENIOR LECTURER IN ARCHITECTURE AT THE UNIVERSITY OF NEW SOUTH WALES



- 1 Swisspearl® cement composite panel 8 mm
- 2 Ventilation cavity, sub framing
- 3 Moisture barrier
- 4 Plywood
- 5 Thermal insulation
- 6 Roller blind
- 7 Plasterboard
- 8 Acoustic insulation
- 9 Steel roof sheeting
- 10 Vapour barrier





The design draws inspiration from Canberra's climate and unique natural light, the essential character of many Australian rural structures, the institution's art collection and purpose: to increase the understanding of the Australian people – their identity, history, creativity and culture – through portraiture.

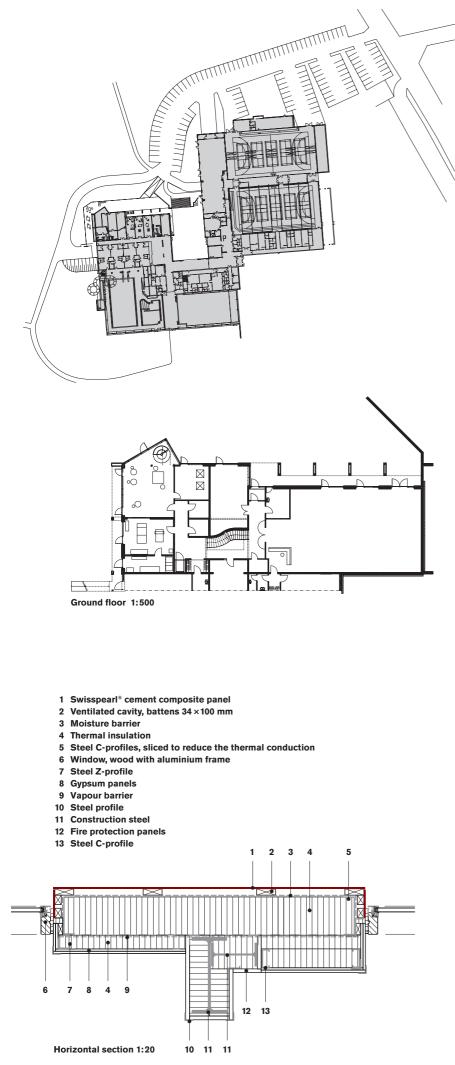


# Leisure Centre Extension, Skærbæk, Denmark SPARE SPACE



A plain two-storey building supplies a leisure centre in Denmark's countryside with plenty of new activity space. The architects were careful to integrate the extension in the existing structure as well as in the natural surroundings.





"We try to make quality our trademark," claims the website of the Danish architectural company Rudolf Lolk A/S. Founded in the early 1950s, the company now owns an impressive portfolio of almost 3,000 projects, ranging from small sheds to summer houses, large commercial projects and buildings for Denmark's famous Legoland. Last year the company, which is located in the city of Esbjerg in Jutland – Denmark's continental region in the Southwest of the country – finished another project in the area. Skærbæk is a small rural village famous for its local museum and an attractive leisure centre, the Skærbæk Fritidscenter. The latter commissioned Lolk architects to add a new building to their site. The new part was intended to provide space for additional workshops, exhibition space and wellness facilities.

Lolk architects opted for an unobtrusive, functional building that marks something new while fitting into its surroundings. "We wanted to adapt the expression of the other buildings," says executive architect Jakob Krogh-Jensen. "They were built in yellow bricks and dark metal sheets. So for the new volume we chose dark Swisspearl panels that fitted in with both materials." Concrete walls form the basis of the building. A prefabricated concrete deck separates the lower and upper floors of the two-storey extension, while a load-bearing steel frame supports the upper volume as well as the wings and protruding roof. All exterior surfaces are clad in anthracite-coloured Swisspearl panels.

Each of the two floors offers more than 500 square metres of new activity space. On the lower level, the planners arranged several workshops as well as a fitness and wellness tract. On the upper floor, there are additional workshops, exhibition space and a restaurant serving local food. "Our goal was to set up a creative melting pot where visitors can take part in artistic and physical activities in a friendly environment," says Jakob Krogh-Jensen. Equally important was the connection to the outdoor space. So the rooms downstairs all have openings to the grounds, while the large restaurant and exhibition space has large windows and a common loggia. *Mirko Beetschen* 

Location Storegade 46–48, Skærbæk, Denmark Client Skærbæk Fritidscenter Architects Arkitektfirmaet Rudolf Lolk A/S, Esbjerg Building period 2008–2008 Façade and roof construction Gånsager Tømrer & Snedkerforretning, Skærbæk Façade material SWISSPEARL® CARAT, Black Opal 7021

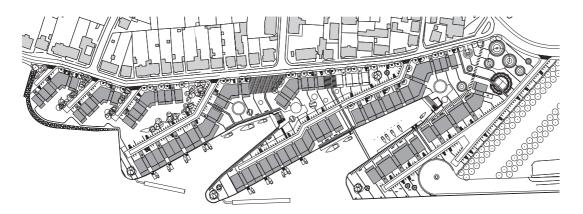


"THE OWNER'S WISH WAS TO CREATE A MULTIFUNCTIONAL BUILDING THAT ADAPTED TO THE EXISTING STRUCTURE AND THE NATURAL SURROUNDINGS." JAKOB KROGH-JENSEN FROM THE ARKITEKTFIRMAET RUDOLF LOLK A/S





Residential Building on the Harbour Pier, Korsør, Denmark A New Identity for the Edge of the Town



When the Storebælt Bridge – one of the world's longest bridges – was opened on 14 July 1998, the inland Danish travelling distances became considerably shorter. Life in the neighbouring port of Korsør underwent a complete change all at once. Public transport between the islands Seeland and Fünen was cancelled the day after the bridge was opened. Previously, the ferries and trains had determined the development of the town. Now, however, the loading bridges and railway station were closed down and the railway track area that ran through the middle of the town was converted into a city park.

The piers of the now quiet and tranquil port are currently being used as sites for new housing premises. The Copenhagen Holscher Architects Office first developed the master plan and is now carrying out the construction of the new housing development by stages. The buildings are arranged in a series of angled rows. The four- to fivestorey buildings along the piers mediate between the scales of the town and the port. Lower buildings are planned to be constructed facing the town. The façades combine several different materials: black Swisspearl panels, untreated wooden slats, hot-galvanised lead and warm yellow exposed brick – all natural-looking materials, for which the Danes have a predilection. The architects played with various formats and gave the buildings different textures, and each building has a different combination of materials. The alternating haptics and the impression made by the façade materials give the large-scale development the appearance of variety and unity at one and the same time.

The apartments are generously glazed, and the rooms are arranged in a flowing rhythm around the central sani-



The Danes have a predilection for untreated materials such as black cement composite panels, unadulterated wood and exposed brick.

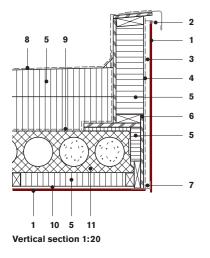


tary installations. The houses are surrounded by public spaces and promenades, and a relaxed, urban residential district replaces the former bustling activity. The town on the water, whose harbour has achieved a new significance, has acquired a new identity. The reference to the piers endows the development with a historically evolved atmospheric density, and the view of the Storebælt Bridge recalls the reason for the changes that have taken place in the town. *Michael Hanak* 

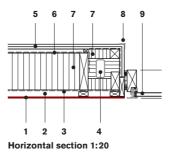




Alternately combined façade materials lend the development variety and unity at one and the same time.



- 1 Swisspearl® cement composite
- panel 8 mm 2 Water deflection pro
- Water deflection profile
   Ventilation cavity, batten 25 × 50 mm
- 4 Moisture barrier 9 mm
- 5 Thermal insulation
- 6 Plywood, water resistent
- 7 Ventilation profile 40 × 100 mm
- 8 Asphalt roofing
- 9 Vapour barrier
- 10 Battens 12 × 100 mm
- 11 Concrete slab, prefabricated

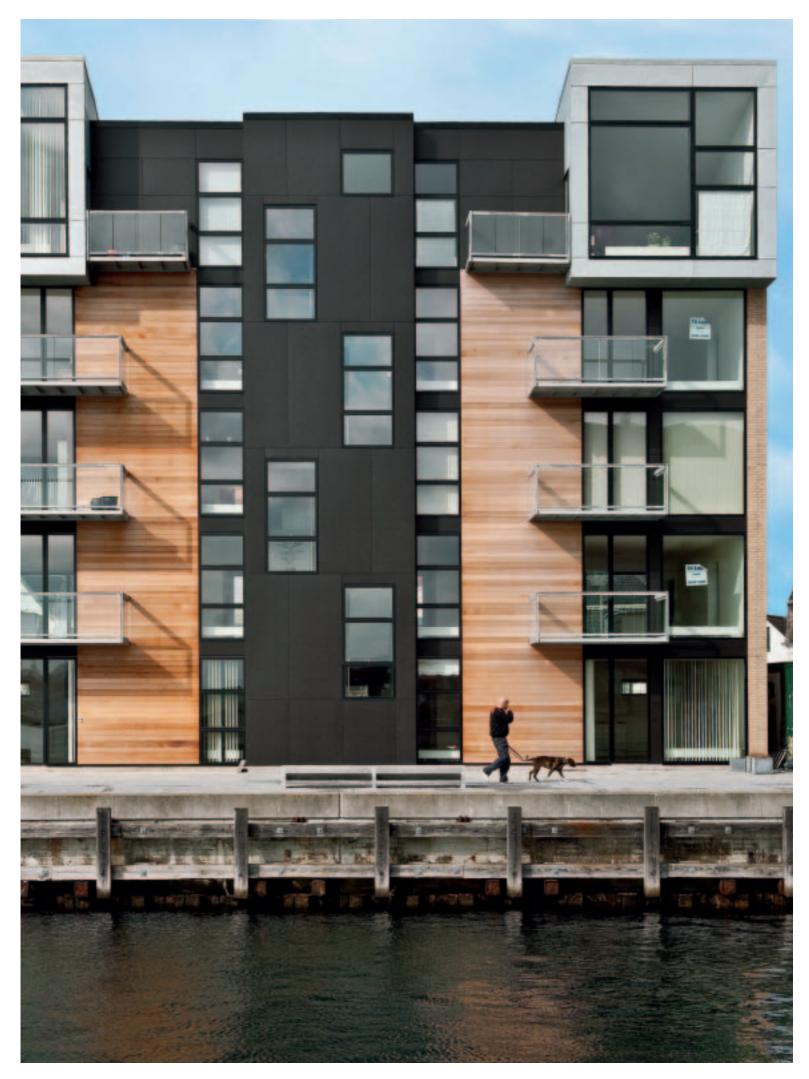


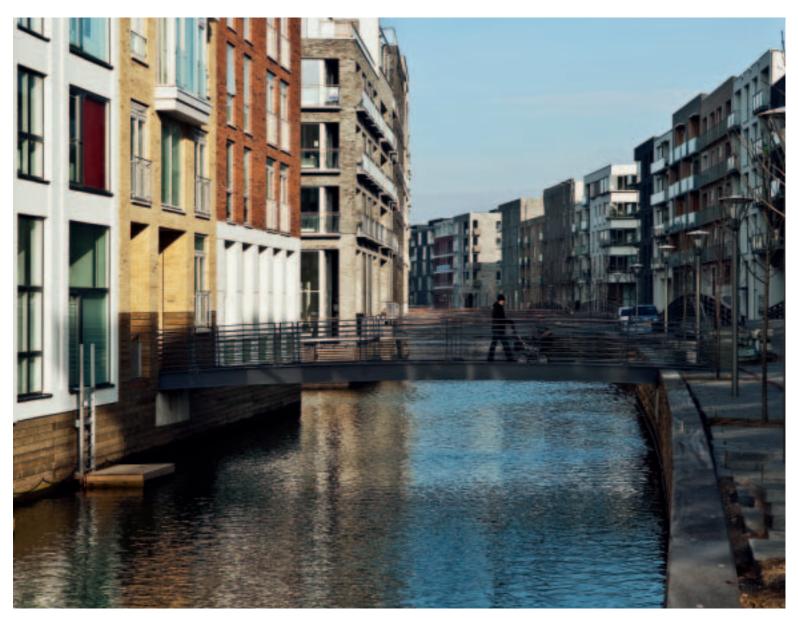
- Swisspearl\* cement composite panel 8 mm
   Ventilation cavity, batten 25 × 50 mm
- 3 Moisture barrier 9 mm
- 4 Structural steel profile
- 5 Gypsum board, double-ply
- 6 Vapour barrier
- 7 Thermal insulation
- 8 Corner protection
- 9 Window, wood with aluminium frame

# "THE BUILDINGS ARE LOCATED ALONG THE EXISTING EDGE OF THE TOWN. THEY CREATE A SPATIAL TRANSITION FROM THE HISTORIC CITY CENTRE AND THE LARGE PORT AREA AND REINFORCE KORSØR'S IDENTITY AS A WATERSIDE TOWN." HOLSCHER ARKITEKTER

Location Strandvejen 1, Korsør, Denmark Client Humlebo Korsør A/S, Odense Architects Holscher Arkitekter A/S, Copenhagen Building period 2007–2008 General contractors and façade construction MT Højgaard A/S, Søborg Façade material SWISSPEARL\* CARAT, Black Opal 7024





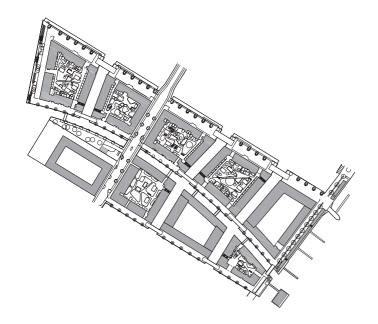


# Urban Development Sluseholmen, Copenhagen, Denmark Diversified New Canal City

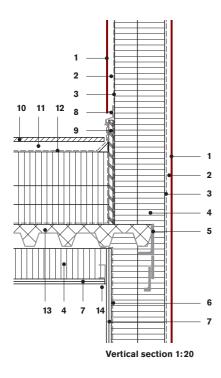
The houses are frequently located right next to the canals, while the bridges, wharfs and waterside steps allow residents to get close to the water.

An entire new section of the city is currently being built in the Danish capital of Copenhagen. The extensive port, where the industrial activity and freight ships have disappeared almost completely, is being converted and put to a different use. For the past few years, the south part of the harbour has been undergoing a huge urban transformation – comparable to changes in the port areas of Amsterdam and Hamburg. The harbour district of Sluseholmen is being newly equipped as a hole and accessed with housing and business premises.

The master plan, which was elaborated by the Dutch architect Sjoerd Soeters in collaboration with the Danish firm of Arkitema, envisages independent blocks of flats with greened inner courtyards, surrounded by canals, quays and bridges. "Amsterdam, Venice – it is not hard to see where the Sluseholmen development finds its inspira-



The intention was urban unity with architectural variety.



# Swisspearl<sup>®</sup> cement composite panel 8 mm Ventilation cavity, batten 28 × 60 mm

- 3 Moisture barrier 8 mm
- 4 Steel frame, C-profiles, thermal insulation 5 Construction steel
- 6 Vapour barrier
- 7 Gypsum panel, double-ply
- 8 Water deflection profile
- 9 Waterproof plywood 22 mm
- 10 Wooden outdoor flooring 11 Ventilation cavity, batten 45 × 45 mm
- 12 Asphalt roofing
- 13 Steel trapez panel, in-situ concrete
- 14 Acrylic sealant

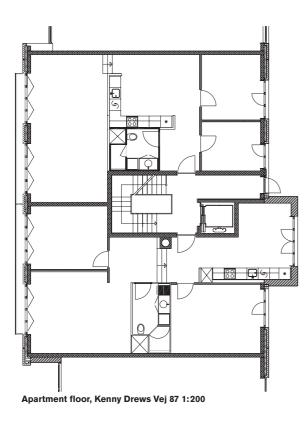




tion," the architects admit. "Water is the essential element in the canal community now taking shape in the district's old industrial and harbour areas." Sluseholmen consists of eight housing islands, with large and small town houses standing side by side and forming continuous blocks. The atmosphere varies between an intimate canalside environment and areas characterised by a large scale and open views of the surrounding harbour environment.

Besides working with the master plan, Arkitema architects where chosen as the main architect and coordinator for six of the eight small islands, and Gröning architects for the two others. The master plan stipulates defining guidelines for designing the raw houses and ground rules for proportions, choice of colours and materials. Under these conditions, 25 architectural firms designed the individual buildings. Although the whole neighbourhood had to be built all in one go, the architects tried to make the houses in rows as individual as possible - as was customary in the historically evolved cities just mentioned. Since the situation regarding the urban development and the utilisation of the buildings was firmly stipulated, the architects experimented with possibilities of facing façades. For this, exposed brick masonry was primarily used, which established the connection with tradition, but also all other possible façade claddings including cement composite to introduce a more modern aspect. Michael Hanak

# "THE RESULT IS LIVELY AND IMAGINATIVE BLOCK HOUSING THAT IS UNIQUE IN DANISH HOUSING CONSTRUCTION." ARKITEMA ARCHITECTS

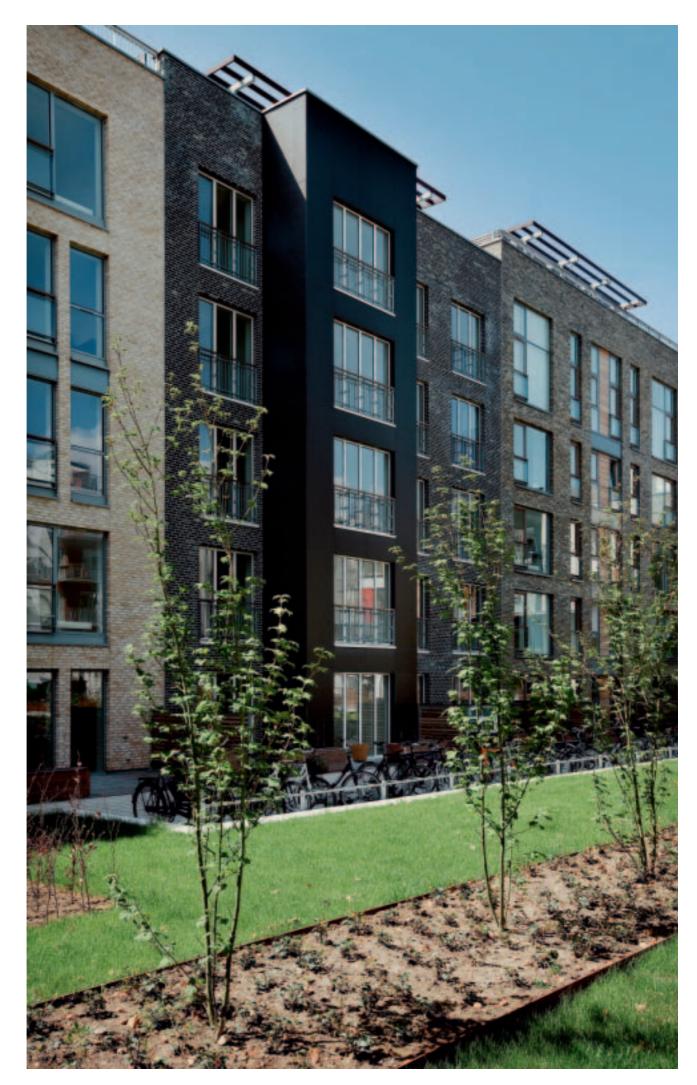


Location Sluseholmen, Copenhagen, Denmark
Client Finansgruppen A/S, JM Danmark A/S,
Nordicom A/S, Copenhagen, and Sjælsø Gruppen A/S,
Allerød (each financing two islands)
Master plan Arkitema architects, Århus and Copenhagen, and Soeters van Eldonk Ponec, Amsterdam
Architects Arkitema architects, Århus and Copenhagen, and Gröning architects, Hellerup, with a number of other Danish architects designing individual houses
Building period 2005–2008

**General contractors and façade construction** Skanska A/S, Copenhagen; KPC-Byg A/S, Brøndby; Myhlenberg A/S, Glostrup; M. T. Højgaard A/S, Søborg, and Pihl A/S, Kgs. Lyngby

**Façade material** SWISSPEARL® CARAT, Black Opal 7020, 7024 and 7025, Sapphire 7060 and 7061

The master plan stipulates defining guidelines for designing the raw houses and ground rules for proportions, choice of colours and materials.



# HOUSING – AND ITS FAÇADE MATERIALS Building one's own house is something very special, not least because the choice of façade materials underlines one's

Building one's own house is something very special, not least because the choice of façade materials underlines one's own personality. Our selection of various houses in different locations shows why clients frequently choose a ventilated façade with cement composite panels.



Building one's own house is something very special, for the architecture of the house expresses the author's personal concept of how he or she wishes to live. Everyone wants to feel comfortable and "at home" in their house, and the arrangement of the rooms, their dimensions, proportions and orientation towards the outdoor world is very important. And the fact that one's home also expresses its owner's personality makes the design of the façade and the choice of façade materials extremely important.

The design of the outer envelope of a home is subject to a variety of influences. The client stipulates his preferences and conditions, and the designing architect is obliged to take a number of preconditions into account: the specific location, the integration in the surroundings, the climate – to mention but a few of the most important factors. The contractors subsequently check the technical implementation of the design – robust construction, sufficient thermal insulation, perfect maintenance, etc. Through dialogue between the participants, and after clarification of all relevant factors, the materials for the façade are determined.

The decision about façade materials is subject to aesthetic and functional aspects. From the architectural point of view, it is important that the outer envelope harmonises with the inner spaces, and that the building forms a unified whole. But the great variety of available building materials on the market presents a wide choice, and it is the client's personal likes and preferences that influence the final decision. Personal opinions are naturally subject to outside influences. Representational buildings, regional or national traditions and current trends have an effect on the choice of materials. In the case of residential buildings, one tendency is particularly conspicuous: the incidence of combinations of various façade materials, which facilitate the differentiation between various parts of the building, as well as providing different colours and structures and thus enhancing the diversification of the design.

Naturally, all building materials have their specific advantages. Swisspearl panels are made of reinforced cement and are thus as hard as stone and very durable. The material is coloured through, a fact that can be seen on the edges of the panels. The manufacturer in Switzerland spares no pains to develop a wide choice of colours that retain their brilliance even after a longer period. Since the panels are available in a free choice of formats, the desired pattern of joints can be produced and precisely attuned to the specific building.

The design of one's own home is an extremely pleasurable undertaking. Expression, colours and patterns can be freely designed with the available façade materials. Variety and variability are important conditions for the individual appearance of one's home. *Michael Hanak* 

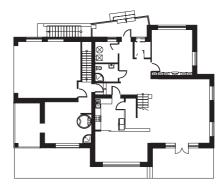
### SINGLE-FAMILY HOME, MINSK, BELARUS

Situated in a central yet quiet neighbourhood in the White Russian capital, this new modern building stands out from its neighbouring houses. The silhouette of the large residential building with a flat roof and terraces on several levels makes a laconic and stylish impression. The building volume is cubic and compact. The façades consist of three different materials: white plaster, brown timber planking and dark grey cement composite panels.

The ground floor accommodates the living spaces, whereby the living room is open to the entrance hall and the dining area. The bedrooms are located on the first floor, and a terrace is spread out over the garage and the spa. A spiral staircase leads from the terrace to the upper roof terrace. A connecting element between the two terraces is provided by a wall clad with Swisspearl. The dark grey colour and the medium-sized panel format stand out from the dominant façade area with horizontal dark larch wood planking and the plastered wall surfaces. The combination of contrasting materials lends the building a distinctive appearance on the side facing the street.

Location Jasmine Street, Minsk, Republic of Belarus Client Skorynina Ltd, Minsk Architects Agafonov Viktor, Mangasarova Nataliya, Vorobjov Vitaliy, Minsk Building period 2007–2008 General contractors and façade construction Skorynina Ltd, Minsk Façade material SWISSPEARL\* CARAT, 7020 Black Opal

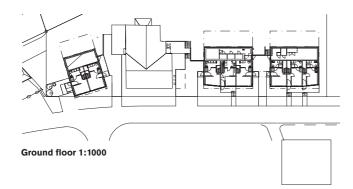




Ground floor 1:400







# VIOLAPARKEN SEMI-DETACHED HOUSES, HELSINKI, FINLAND

A group of young people in the Finish capital of Helsinki were given the opportunity of renting a plot of land near the city centre as a site for the construction of housing. The group's objective was to realise contemporary architecture at a moderate cost and without the participation of an outside developer or main contractor. This is the first project to be realised in this way in Helsinki.

Three buildings with semi-detached houses were constructed on either side of an existing older house. The row of houses benefited from the unified design of the new buildings and the reference to the integrated listed house. The dwelling, which was built in 1910, was adopted as the starting point of the planning. The position of the compact, saddle roof volume along the slope was retained, and the materials used for the new buildings were largely derived from the original structure. The old building was characterised by red exposed brickwork on the lower floor, and red painted, horizontally structured timber boarding on the upper floor. The new terrace houses are clad with wood treated with translucent black on the upper and attic floors. The ground floor, which is only completely free on the side facing the road, as well as the areas between the windows on the attic floor, are clad with light brown Swisspearl panels whose golden colour corresponds with the exposed brick.

Differentiation between the storeys in terms of colour and solidity was a decisive factor in the choice of façade materials.

Location Saarenkatu 15, Helsinki, Finland Client BAB Helsingfors Violaparken, Helsinki Architect Stefan Ahlman, Helsinki Building period 2008–2009 Façade construction BAB Helsingfors Violaparken with the city of Helsinki Façade material SWISSPEARL® REFLEX, Mystic Brown 9271

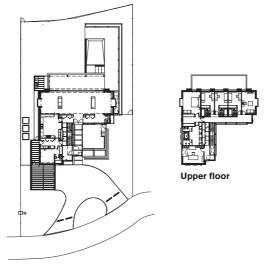


Location Ayres de Pilar, Buenos Aires, Argentina Client Santiago Alvarez Noblia, Buenos Aires Architects Santiago Alvarez Noblia & Asoc., Buenos Aires Building period 2006 Façade construction CG SA PAEZ hnos., Buenos Aires Façade material SWISSPEARL® CARAT, Onyx 7090

## CASA AYRES DE PILAR, BUENOS AIRES, ARGENTINA

The villa is surrounded by lawns and is located in a residential district of Argentina's capital Buenos Aires. The building volume describes a right angle and frames a walled and planted patio. The combination of traditional and innovative materials – timber and cement composite – creates the impression of a balance between nature and technology. This balance is a basic principle of sustainable architecture and a fundamental idea of this project. The façade is rear ventilated, a construction method that leads to significant energy saving. The basic volumetry of the building is clad with mediumsized white Swisspearl panels mounted on a metal substructure. This creates an intermediate air space that insulates the interior spaces from the heat of the sun. All the façade areas, the passages to the rooms on the patio side of the building and the front facing the terrace on the garden side are clad with lapacho tropical timber planks.

The simple shape of the building and the combination of contrasting materials create an impression of clarity and calm.



Ground floor 1:600



### SCHERRER SINGLE-FAMILY HOME, BENKEN, SWITZERLAND

The house is located on the edge of a small Swiss country community between Zürichsee and Walensee. Here, at the transition between the residential district and the agricultural zone, the architects constructed a modern flat-roofed building in such a way that the exterior space made as extensive an impression as possible. The L-shaped volume forms a kind of backbone to the residential district, and its two legs enclose a private, protected exterior space opening onto the landscape. In addition, the upper floor projects towards the slope as far as is permitted by the regulations and creates a covered entrance area. The set-back upper floor on the other side provides a continuous balcony.

Whereas, in keeping with the location of the building, the façades are almost completely closed on the side facing the neighbours, the view towards the south is entirely open. Apart from the large glazed areas, the whole house is clad with grey cement composite panels. The choice fell on small-scale right-angled stripes of 300 × 60 millimetres, applied twofold.

The façade cladding responds to the location: the horizontally structured application corresponds with the slope, and the grey panels appear to reflect the green fields.



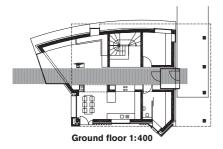




Location Obere Breitenstrasse 14, Benken (SG), Switzerland Client Peter Scherrer and Karin Zink, Benken Architects and project management Feusi + Peyer, Schmerikon Building period 2007 – 2009 Façade construction Holzbau Linth GmbH, Uznach Façade material Façade slates, Anthracite 7022







### **KRNC SINGLE-FAMILY HOME, NOVO MESTO, SLOVENIA**

The city of Novo Mesto is located in south-eastern Slovenia, halfway between Ljubljana and Zagreb, and occupies the leading position of the region. A semi-completed single-family house was offered for sale on the southern edge of the town and woodland, on a raised level overlooking the town. Young clients were enthusiastic about the location and commissioned the architects to convert the project into a contemporary villa that corresponded with the lifestyle and social status of the new clients. The result was a flat-roofed building with cubic forms, with a curvilinear wall on one side and a triangular oriel and sunken atrium on the other.

Whereas the outer walls are covered in light-coloured plaster and constructed of red brick, the whole upper floor is clad with anthracite cement composite panels, whereby the two sides of the building differ from one another in terms of the format and orientation of the panels. The side facing the wood has narrow, horizontally applied panels that are reminiscent of wooden planks. The side facing the town has large, vertically placed rectangular panels that are more in keeping with the urban context.

The strictly orthogonal cubic block of the upper floor has the appearance of a substantial roof. Its cladding with various structures contributes to the coherence of the different parts of the house.

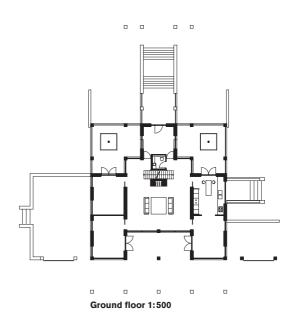
Location K Roku 138, Novo Mesto, Slovenia Client Bojan Krnc, Novo Mesto Architects Mojca Gregorski and Sandi Pirš, Ljubljana Building period 2001 – 2008 General contractors Bojan Krnc, Novo Mesto Façade construction Termika proizvodnja d.o.o., Ljubljana Façade material SWISSPEARL\* CARAT, Black Opal 7020 and Onyx 7090



## SINGLE-FAMILY HOME, GANDRUP, DENMARK

In the heart of nature, not far away from the small Danish town of Gandrup and on the banks of the Limfjord, a family realised its dream house. The architect observed the course of the sun for over a year and orientated the building's axis according to the sun's lowest point. The daylight and the view of the sea inlet were crucial for the design of the house. The building was placed on a built-up hill so that the sea could be seen from all the rooms. The design of the house bears witness to the architect's love of cubic forms and symmetrical compositions. The building's strictly geometrical arrangement corresponds to the continuous façade cladding with cement composite panels. The semi-basement floor is distinguished by its wooden planking cladding. The house is constructed of wooden frames reinforced in the inside with painted plaster panels. The dark grey, coloured through Swisspearl panels are applied in medium-sized horizontal rectangular formats with joints running bond.

Whereas this house has an abstract geometrical appearance that intentionally contrasts with the surrounding nature, the stony-looking façade panels fit well into the natural surroundings.





Location Skivervej 73, Gandrup, Denmark Client Mogens Pedersen, Gandrup Architects ARKI Nord, Vester Hassing/Vodskov Building period 2004 Façade construction local carpenters Façade material SWISSPEARL\* CARAT, Black Opal 7020







# Czech Republic -Sporty Patches of Colour

This sports hall in the Czech city of Strakonice is 29 × 45 metres in size and is used by handball players. In cross section, the hall is semicircular in shape with a maximum height of 11 metres. Accordingly, there are only two vertical walls under the barrel-vault roof: the end walls of the semicircle. Two different materials were used for these outer walls: on top, light, transparent polyurethane, at the bottom robust Swisspearl. The façade is suspended on a metal substructure. The Swisspearl panels are green in colour, and at the front of the building near the entrance is an eye-catching red area that is illuminated at night for sporting events. *Eva Bednářová* 



Sports hall, Strakonice Location Machova Street 108, Strakonice, Czech Republic Client City of Strakonice Architects Václav Martan, Strakonice Building period 2008 General contractor Protom Ltd., Strakonice Façade construction Primaizol – Stanislav Hájek, Kutná Hora Façade material SWISSPEARL\* REFLEX, Crimson 9231 and XPRESSIV, green 8050



Show room Daher & Cie, Beirut Location Zalka Highway, Beirut, Lebanon Client Daher & Cie, Beirut Architect Nicolas Haddad, Beirut Building period 2008–2009 General contractor Khalil & Nicolas Haddad, Beirut Façade construction Adib Nasrallah, Roumieh Façade material SWISSPEARL\* REFLEX, Night Blue 9242 and Blue Ice 9140

# Lebanon - A Blue Diamond

On the main road connecting Beirut with the Metn, Kesrouan and northern districts, Daher & Cie opened a new show room for the European products they market in Lebanon. The building, which was completed in 1994, has not been maintained since, and its various tenants left the façade in a pitiful state. Thus, the new user of the premises renovated part of the façade so that it reflects the image of the high quality products distributed by the firm, while the rest of the building retained its sad appearance.

The chosen material is Swisspearl in two different shades of blue. In a sunny country like Lebanon it would have been a pity not to take advantage of the pearlescent quality of the surface, which reflects and alters with the light. The fairly small façade changes its appearance according to the weather. Set in dreary surroundings, it is like a tiny diamond that attracts the attention of the passers-by and surprises them with the beauty and class of a material that enhances the building so greatly.

The orientation of the show room required a shading system obtained with louvers in the same material installed on adjustable aluminium frames. *Sabine Haddad* 

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