

#30

SWISSPEARL ARCHITECTURE



SWISS
pearl®

#30

SWISSPEARL ARCHITECTURE
TABLE OF CONTENTS

- 2 **COLLIN COLLEGE
TECHNICAL CAMPUS,
ALLEN, USA**
Perkins & Will
- 17 **A WORD FROM OUR CEO**
Harry Bosshardt
- 18 **KNOW-HOW**
Vibrant Colors for a Lasting Impression
- 24 **FACES BEHIND**
We are Swisspearl
- 32 **MAKING-OF**
A Strong Piece of Design: Trash Cube
- 36 **PRODUCT**
Swisspearl Largo Reflex
- 38 **CLIMBING WALL, IRELAND**
Hugh Kelly Architects
- 44 **BRIDGE HOUSE, CANADA**
Vallely Architecture
- 50 **SINGLE-FAMILY HOUSE, NORWAY**
Sunniva Rosenberg Arkitektur
- 56 **OFFICE BUILDING, SWEDEN**
Arkitektstudion AB
- 60 **LOUISIANA CHILDREN'S MUSEUM, USA**
Mithun Architects
- 68 **MONTROSE PRIMARY SCHOOL GYMNASIUM,
AUSTRALIA**
H2o Architects
- 72 **BERGI MUSIC AND ART SCHOOL, LATVIA**
Ozola & Bula Architects
- 76 **AMNIS STUDENT ACCOMMODATION, IRELAND**
DTA Architects
- 82 **ROWAN UNIVERSITY, SCIENCE AND
EDUCATION BUILDING, USA**
HOK
- 86 **LAKES EDGE HOUSE, NEW ZEALAND**
Dravitzki Brown
- 90 **HERBA HOUSE, POLAND**
Jakub Sucharski
- 96 **WIKI HOUSE, MONGOLIA**
Badral Bayaraa
- 100 **FLASH 1: CARBONA APARTMENTS, HUNGARY**
- 101 **FLASH 2: FORBES OFFICE BUILDING, USA**



PERKINS & WILL

Teaching 21st Century Technology

Collin College Technical Campus
Allen, Texas, USA

How a US technical campus is successfully inspiring a future generation, meeting ecological challenges, and supporting equality in the trades through practical planning.

Text by John Hill





The population of Collins County, northeast of Dallas, has more than doubled this century, growing from nearly half a million residents in 2000 to more than one million in 2020. These numbers make it the fastest growing county in Texas, but it is also one of the richest counties in the whole country and as such is experiencing a subtle gentrification, with higher-income families moving in and lower-income people unable to stay. Cognizant of this trend and the inability of local businesses to fill jobs geared to people with trades degrees rather than business degrees, county residents in 2017 voted in favor of a 600-million-dollar bond that would allow Collin College to expand three of the community college's campuses and to build four new campuses. One of the latter is Collin College Technical Campus (CCTC), a 33,445-square-meter complex on 13 hectares in the town of Allen. Designed for a capacity of 7,100 students, CCTC opened its doors in September 2020, offering programs in carpentry, plumbing, industrial automation, vocational nursing, and automotive technology, among many others, while also partnering with the Allen Independent School District (ISD) allowing high school students to earn a trade certification and high school diploma at the same time.

The campus is located on a greenfield site south of Highway 121, a developing commercial spine known as the "121 Corridor," forming the northern edge of Allen. A residential area directly south of the site led architects Vandana Nayak, Devin Eichler, and the rest of the Perkins & Will team to design a building that breaks down the vertical scale of the building. Basically, the campus is arranged as four linear "bars" that write an "E" on the landscape when seen from above: the academic bar is the vertical, while the horizontal bars are the three trades.

The parallel trade bars are devoted to automotive on the north, construction in the middle, and HVAC, welding, robotics, and other programs on the south. The two-story bars feature double-height labs on the south and stacked floors of classrooms, corridors, and ancillary spaces on the north, all beneath an open-span structure that allows for flexible interiors and the potential to insert floors in the future. Each bar is matched by an outdoor space directly south of it, providing exterior "work yards." The bars are linked by bridges that traverse the yards and give college recruiters, in concert with corri-

dors overlooking lab spaces, a loop around campus while touring prospective students. The bars and yards sit atop a parking garage.

The three trades bars connect to the academic bar via open-air and enclosed bridges that traverse the outdoor spine that provides a social "mixing" space and a bioswale for treating rainwater runoff from the whole campus. Parallel to this spine is the three-story academic bar that houses administrative functions in the middle level, academic spaces (library, health sciences, classrooms, etc.) on the top floor, and the Allen ISD classrooms on the lowest level. This bar is more than 182 meters long but only about 24 meters wide on the north and south ends. The combination of berms at the lowest level and sizable top-floor cantilevers sheltering generous terraces on the ends means the academic bar, when seen from the highway or the nearby houses, appears as a one-story volume clad in Swisspearl panels.

With tilt-up panels enclosing the three trade bars as a cost-saving and efficiency measure brought on by the contractor, and with zoning restrictions in Allen dictating some sort of masonry on the exterior, Perkins & Will chose Swisspearl fiber cement panels for the non-glazed portions of the facades on the first and third floors of the academic bar (the middle level is wrapped entirely in glass). Carat panels in Sapphire 7060 with matching rivets cover the long sides of the first floor: facing west at the drop-off/pick-up for high school students and east

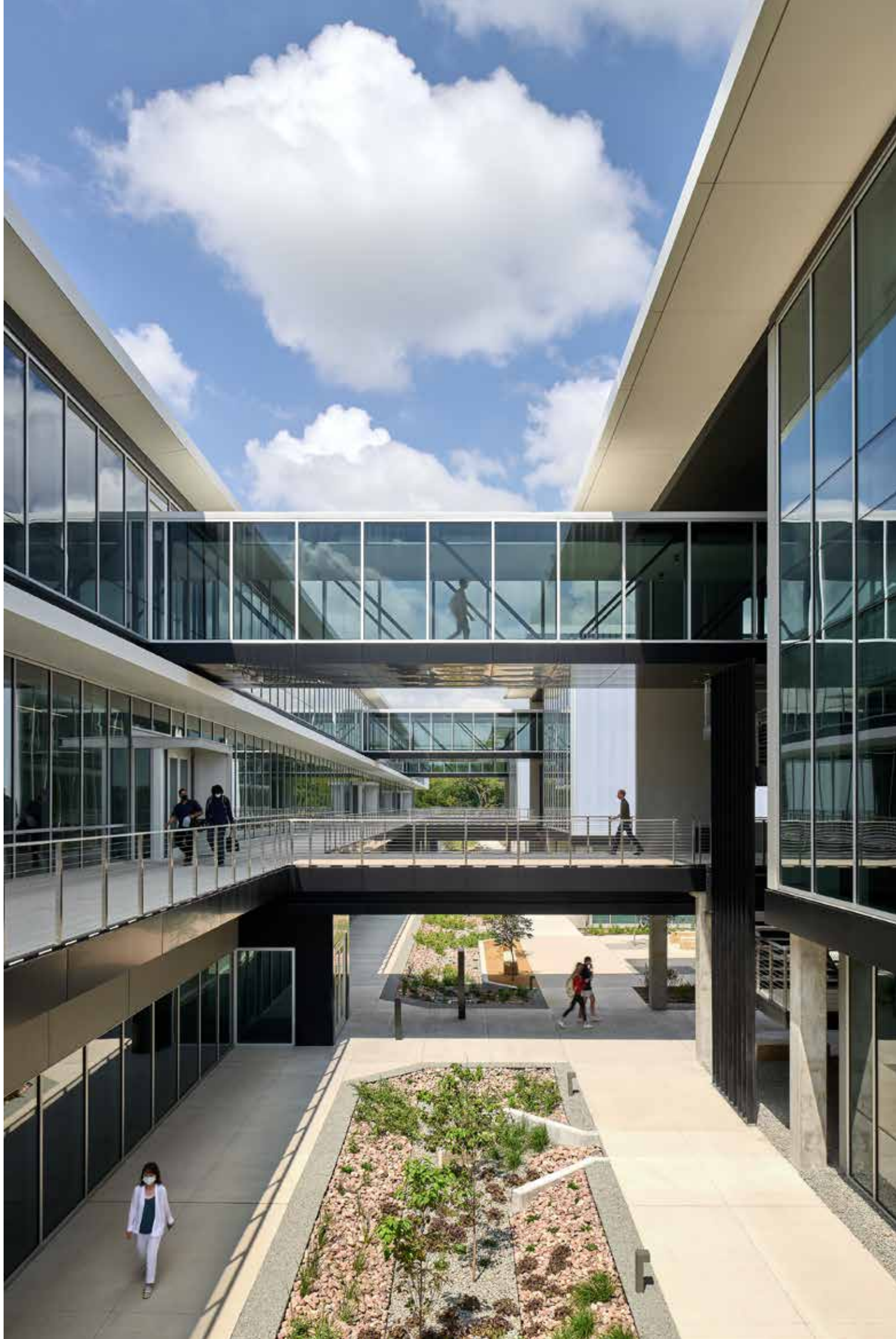
For the top floor they opted for lighter panels, also with matching rivets, to achieve a monolithic appearance when seen from a distance.

toward the outdoor spine. The color selection makes the base of the building appear to be "sliced from the earth," per Eichler. For the top floor the lighter Carat panels in Onyx 7099, also with matching rivets, achieve a monolithic appearance when seen from a distance. The panels—1250 millimeters wide and up to 3050 millimeters high—cover the narrow, predominantly solid north and south ends. Swisspearl panels also wrap the top and bottom edge bands that extend hundreds of meters along the east and west sides of the top floor and help shade the expanses of glass. Soffit and sill panels were specified with coating 7099 R, to maintain a consistent appearance and also provide UV resistance. Just as the whole campus "elevates the trades," in Nayak's words, these facades elevate the use of Swisspearl panels in this prominent part of Collin County.



The building's individual elements are connected by bridges on all levels. Mixed among them are green courtyards, which ensure a pleasant microclimate in between buildings. The large-scale glazing adds plenty of light to the interior. The facades are shaded by cantilevers clad in Swisspearl panels.







The nearly 200-meter-long glass bar of the main building is enclosed by bright Swiss-pearl panels. It protrudes on both sides and seems to float above the landscape. The base of the building appears to be cut out of the ground.



LOCATION: 2550 Bending Branch Way, Allen, TX, USA
CLIENT: Collin College, Allen, TX
ARCHITECTS: Perkins & Will, Dallas, TX
BUILDING PERIOD: 2018–2020
FAÇADE CONSTRUCTION: Baker Drywall, Mesquite, TX
FAÇADE MATERIAL: Swisspearl Largo Carat Sapphire 7060, Onyx 7099 (R)

“We wanted nature to bring itself into the project to create a moment of relief.”

Devin Eichler



Vandana Nayak



Devin Eichler

What makes CCTC unique?

Vandana Nayak: Community colleges have always provided training for “middle” jobs, but in recent times community colleges have functioned more as academic transfer colleges. After grade 12, students can attend community college for a couple of years for an associate’s degree, and then transfer to a college for a bachelor’s degree. Less common is the integration of community-specific trades, so that students obtain practical experience, get their trades certificates, and enter careers. There had been a shift toward academic campuses but now it’s back to trades.

How does CCTC compare to other vocational colleges and other Perkins & Will educational projects?

VN: We’re starting to see architecture that elevates the profession, elevates the excitement of entering a trade school. When you come into CCTC it doesn’t feel like a back-of-house garage. Trade schools had been predominantly visited by men but when you elevate the trades and create a space that is daylight, welcoming, and open, you have a better enrollment of men and women—better gender equality. We saw that happen at Kawartha College, designed by Perkins & Will in Toronto. Collin College was inspired by that; they wanted women interested in trades to be drawn to this college.

How does the partnership with Allen ISD work and how did it affect the design of the building?

VN: They were interested in the opportunity for students to get their associates

degrees, trade certification, and high school diplomas at the same time. Architecturally it was interesting because we had finished conceptualizing our building and were in design development when Allen ISD brought 12 million dollars to the table. It was a challenge to both integrate the high school kids and separate them, to give them their own space as well as opportunities the college offers. Therefore they have their own home on the first floor of the academic bar; they take core classes there and then move upstairs to go to the trade classes.

Why did you conceptualize the college as an “Educational Village” and how does the final building capture that concept?

Devin Eichler: We wanted nature to bring itself into the project as a way of creating a moment of relief from the high-intensity, hands-on programs. We wanted to juxtapose the academic bar on one side and the trades programs on the other, with green areas acting as the thread weaving them together. Students cross between the traditional-style classrooms and hands-on programs, interacting with nature and also interacting with people from different trades. Dallas is a warm, humid climate, so we wanted the central spine to be a shaded, comfortable space for these interactions.

VN: When it rains, we see people walk onto the bridges and watch the rain run into the swale, watch it swell and recede. In a day or two they see the plants—desert plants meant for the bioswale—start to bloom. They love it.

The school has been open less than a year, and at reduced capacity due to the pandemic. How else have you seen these outdoor spaces used?

VN: From 2017 to ribbon cutting in 2020, we designed and built CCTC, and then—the pandemic. Because of it there was more interest in being outside. Now, different programs happen in these outdoor spaces, such as Cars and Coffee on Saturday mornings, when you can have coffee and talk about these beautiful old cars parked there. These programs bring the community to their campus.

DE: And those events involve the students as well, so if you're working in the automotive industry and have an event like Cars and Coffee, it becomes a networking opportunity for students. There is also a small conference center, and underneath the cantilevers are covered spaces for public events that look toward the neighborhood and really connect with the community.

Interview by John Hill

Perkins & Will

Founded in Chicago in 1935 by Lawrence Perkins and Philip Will, Perkins & Will has evolved into a global architecture firm with 24 offices and 2,000 employees. Since the trailblazing Crow Island School designed with Eliel and Eero Saarinen in suburban Chicago in 1940, Perkins & Will has been known for educational projects ranging from early learning centers and grade schools to high schools and universities.

One of three Perkins & Will offices in Texas, "Big D" is the name of the Dallas studio, which occupies part of Dallas High School in downtown. Built in 1907, but closed in 1995, the four-story building was renovated into offices two decades later, with Perkins & Will as main tenant. There the team designed CCTC, among many other types of buildings located in the Dallas-Fort Worth area.

CREATE (Campus for Research Excellence and Technological Enterprise) (Singapore, 2013)

Singapore National Research Foundation's four-building, 67,260-square-meter campus hosts interdisciplinary research centers from numerous universities, providing them with environmentally sustainable lab facilities.

Singing Hills Recreation Center (Dallas, Texas, 2021)

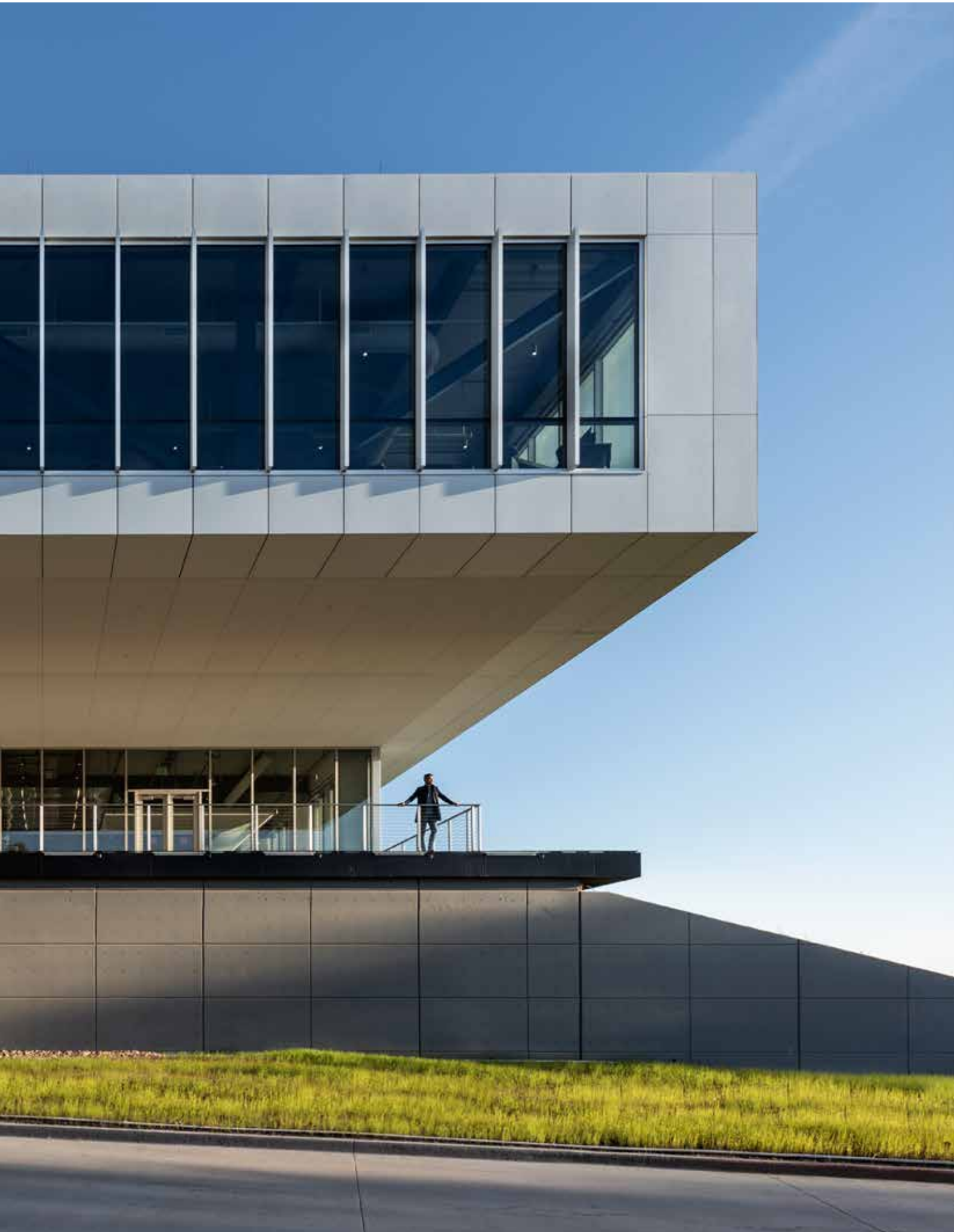
This 21,370-square-meter building in southern Dallas houses a basketball court, community facilities, and a senior center behind large glass walls and beneath a single folded roof lined with southern pine.

Fleming College Kawartha Trades and Technology Centre (Peterborough, Ontario, 2014)

This 8080-square-meter building houses Fleming's trades and apprentice programs. It is anchored by the "Skills Arena" and its three-story "Kube," where students grasp the different components of a construction project.



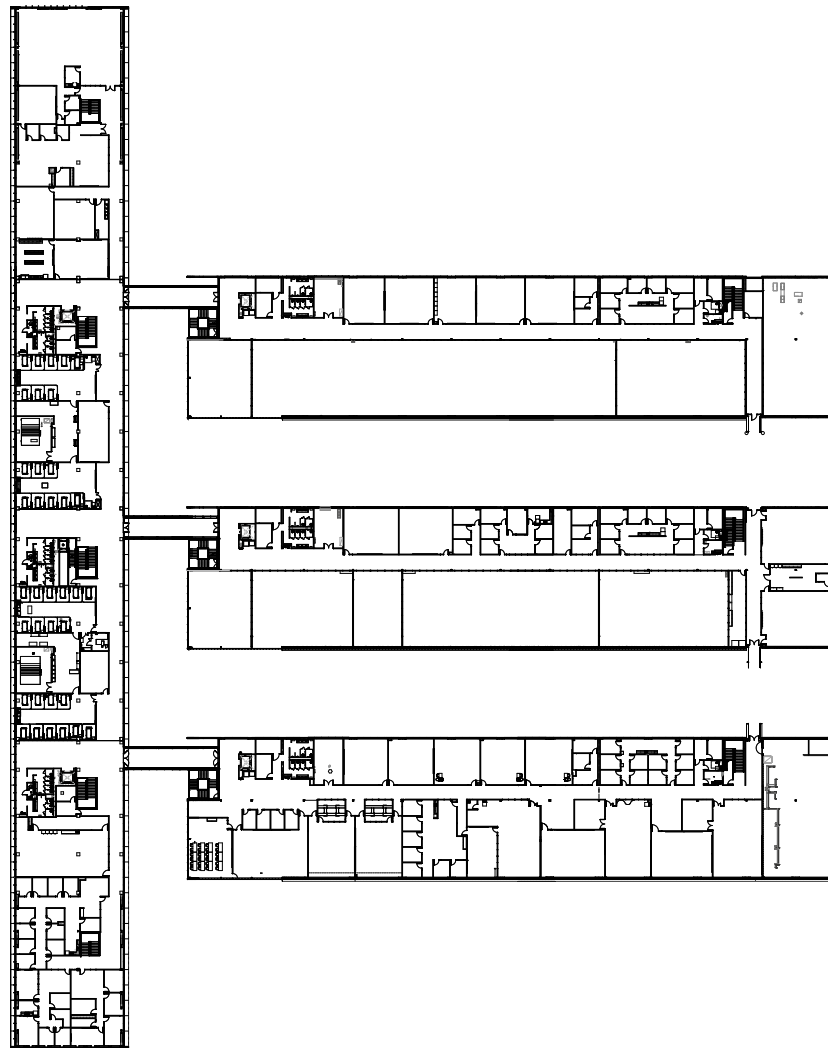






The campus is located on the greenfield between Highway 121 and a residential area on the northern side of Allen. The four wings of the building are arranged as linear beams in such a way that they form the letter E against the landscape.

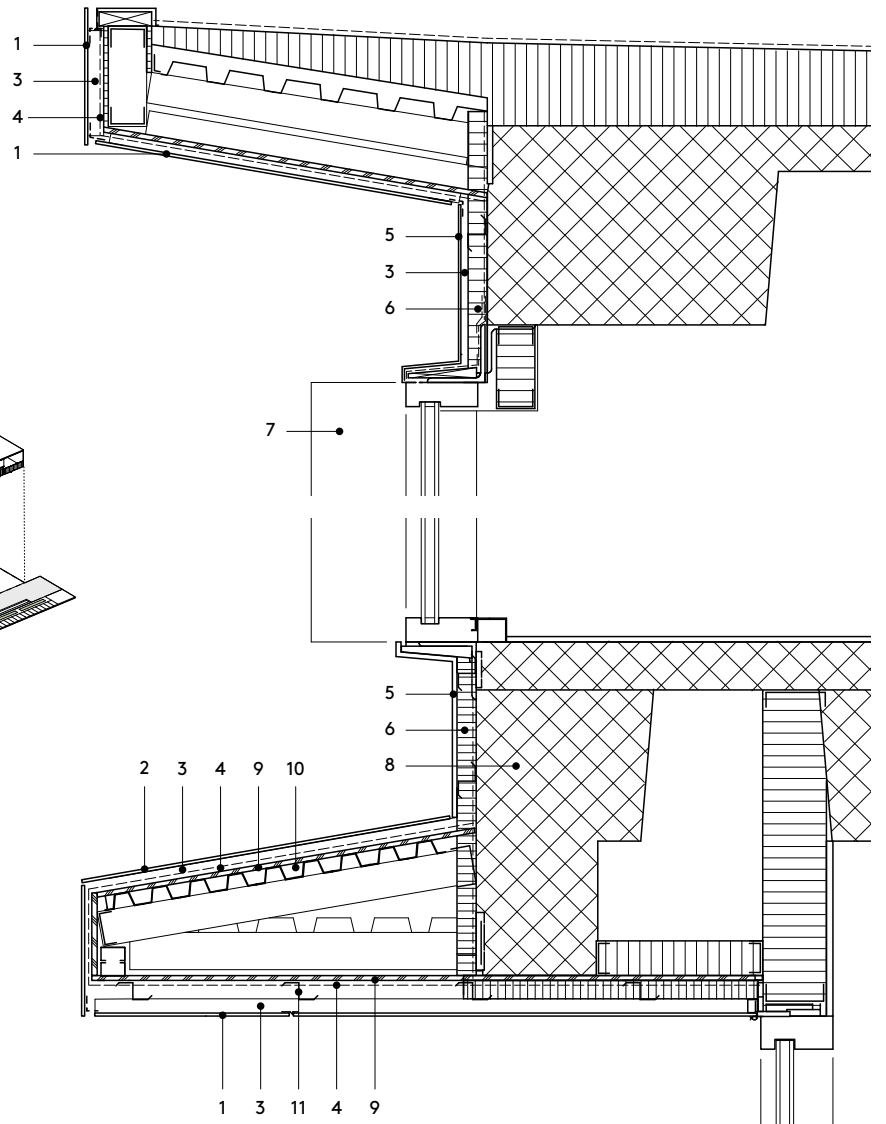
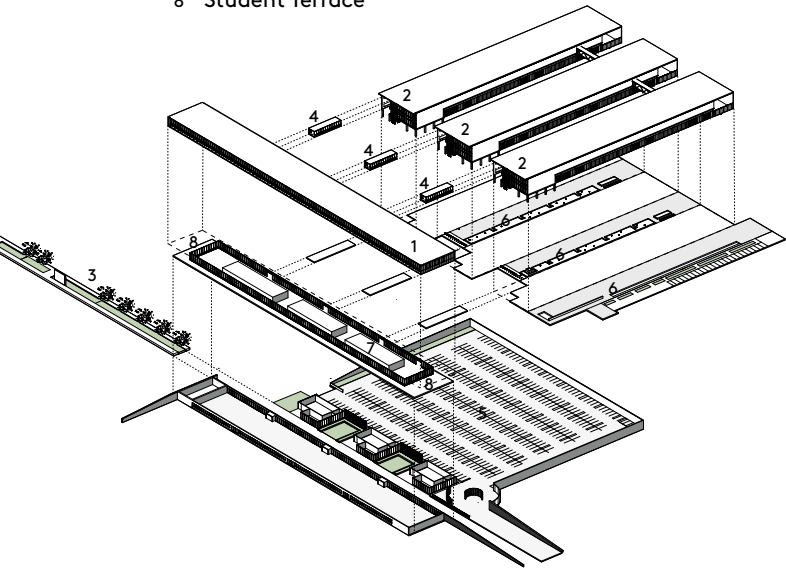
The vertical bar houses the academic wing and presents the backbone of the campus. The three tracts of the building are grouped at right angles to the vertical wing and house the workshops of the technical trades' education program.



SECOND FLOOR 1:1500

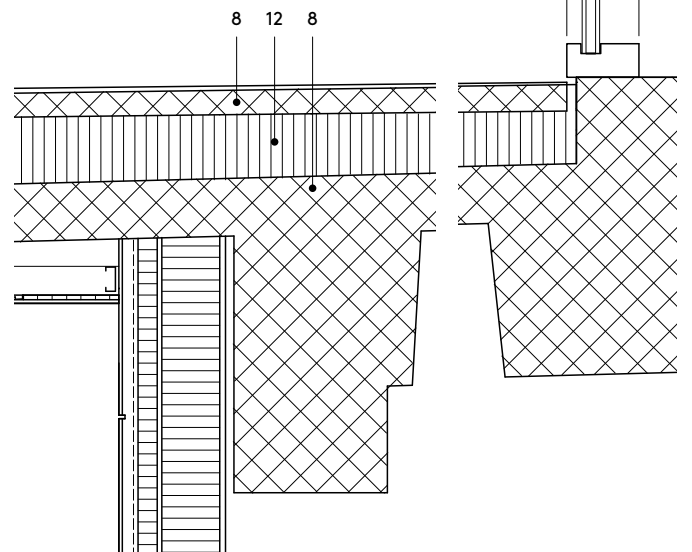
EXPLOSION

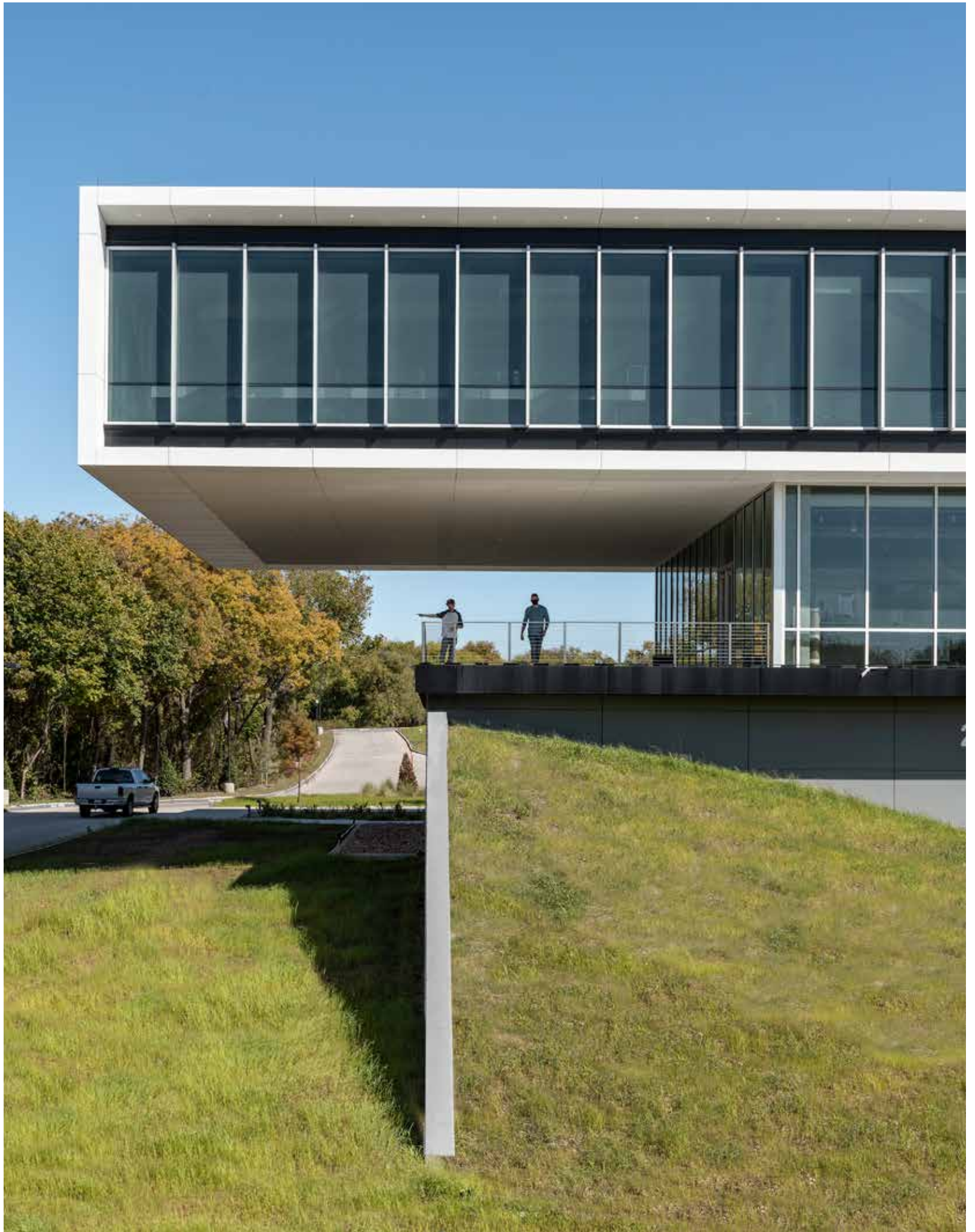
- 1 Academic Bar
- 2 Trades Bar
- 3 Bio swale
- 4 Connectors
- 5 Parking
- 6 Work Yards
- 7 Administration
- 8 Student Terrace



VERTICAL SECTION 1:20

- 1 Swisspearl Largo 8 mm
- 2 Swisspearl Largo 8 mm, R-color
- 3 ventilation cavity, sub framing
- 4 moisture barrier
- 5 metal cladding
- 6 thermal insulation, Z-girts
- 7 sun control louer
- 8 concrete
- 9 roofing system
- 10 metal roof deck
- 11 Z-girts
- 12 thermal insulation





A WORD FROM OUR CEO



For many years, Swisspearl magazine has taken you on a journey with us around the globe, presenting outstanding Swisspearl projects in different regions of the world and offering insight into our world of fiber cement.

Our façades combine aesthetics, functionality, and sustainability on different continents; accordingly, the material requirements are demanding and diverse. As an outer shell, the façade protects a building against climatic influences. It has to withstand enormous temperature fluctuations, humidity, and dryness. Yet above all, the building's exterior is also the face of the house. It reflects contextual and regional features of the building culture.

In this issue, focus is on the Collin College Technical Campus in Allen, Texas. The impressive facility was recently opened and is designed to accommodate 7,100 students. The nearly 200-meter-long stretch of the main building, clad with Swisspearl panels, protrudes on both sides, which lends it a lightness despite its size and makes it appear to float above the landscape.

From such large structures to tiny houses like the one in Mongolia—from buildings in the urban context to those in remote areas—unmistakable Swisspearl façades can be found on houses everywhere—and yet, each one is unique.

Swisspearl is robust and diverse at the same time. It can be used on a large scale, but can also present itself in a very delicate way. It can be colorful and playful, or serious and straightforward, but in any case, it is precise and adaptable to the respective situation.

This is also ensured by our employees who, with their know-how and consistently high-quality production standards, make sure that Swisspearl lives up to its name every single day. I would like to take this opportunity to express my special thanks for this. For the 30th issue of our magazine, we present 30 employees who represent everyone who contributes to Swisspearl's success—each in his or her own way.

Harry Bosshardt, CEO Swisspearl Group

Vibrant Colors for a Lasting Impression

Swisspearl offers a broad palette for buildings around the globe.

Text: Marcy Goldberg

The mystery of colors fascinates us from a young age. Mixing paints to make new colors out of red, yellow, and blue, or watching sunbeams and crystals create rainbows, becomes the stuff of childhood memories long before we have even heard of chemistry or optics. Over the course of history, certain hues have become near-universal symbols: like the yellow danger sign, or the white wedding dress. At the same time, colors also develop particular associations within a specific culture. In some countries, bridal gowns are red. And are black clothes a symbol of mourning, or cocktail-party chic? The choice of colors is both an aesthetic and an emotional phenomenon, and psychologists continue to research the effects of color schemes on behavior.

But alongside questions of mood and style, there is also a functional aspect to color.

When used in construction, some colors are literally warmer or cooler than others, some better suited to particular weather conditions, some more resistant to wear and tear. There are practical reasons why different geographic regions have developed distinctive color schemes. The white walls of the stone houses found all around the sunny Mediterranean reflect the heat instead of absorbing it. The traditional deep red paint on wooden buildings in snowy Scandinavia creates a cheering view even in winter, when the days are so short. This is why Swisspearl treats color research as both an art and a science. We strive to develop products that meet the needs of clients all over the globe, from the point of view of design, structural requirements, and local tastes and trends.



Developing new color technologies

As a company with Swiss origins, we also know how greatly building situations can vary over even very small distances. We work with the best available raw materials and cutting-edge processes to create products suited to the whole range of climatic conditions: whether dry or wet, hot or cold, valley or mountaintop. As a result, the range of colors we provide for our façade and rooftop panels are not only highly attractive, but also functionally suited to the needs of the building location.

Thanks to our investment in staff, training, and technology, our research laboratory team is constantly engaged in developing new color technologies that are pleasing to the eye, sustainably produced, and long-lasting.





Swisspearl's panels are produced in both colored and natural versions. For the colored ones, pigments are added to the fiber cement mixture at the start of the manufacturing process. Coatings are added in a two-step process: first an undercoat is applied, and then a finish is sprayed or poured onto the surface.





Testing, analyzing, selecting

We conduct ongoing tests to develop the most robust pigments and coatings able to withstand even the harshest and most extreme conditions. We work at finding out which materials are best at reflecting or absorbing UV light, at resisting heavy rains and winds, at helping to insulate the exterior in order to maintain good energy conditions within. We also work together with clients and certification boards to ensure that our products meet local standards and regulations. The views on the following pages offer a glimpse into the range of possibilities offered by Swisspearl's know-how.





Norway

Colors in the landscape

From the rugged Swiss Alps to the rain-soaked Vancouver coast, from the sandy terrain of the United Arab Emirates to the stony cliffs of Greenland, these buildings withstand local weather conditions, creating a comfortable ambiance while making a remarkable impression in the local landscape. They also show how functional elements can also be used in highly decorative ways, whether by varying materials or playing creatively with color combinations. Behold the rainbow of Swisspearl products.



Australia



Switzerland



Turkey

We are Swisspearl

For our 30th issue of Swisspearl Architecture Magazine we present thirty of our company's employees who work every day to make sure that you can count on Swisspearl for your building needs throughout the most diverse regions of the world. Every step is important to us, from production to coating, precision cutting, professional transportation, administrative and technical support, to competent on-site consultation. In this way, we guarantee that our high-quality material satisfies the highest demands wherever it is implemented.

These thirty people, together with another 1,170 employees, stand for quality, precision, development, and commitment. For you and for us.



Barbaros Yilmaz
Employee Color Storage Facilities

→ *Passionate snowboarder with Turkish roots who loves the Glarus mountains and explores the world by bike.*



Harry Harisberger
Country Manager USA and Canada

→ *Courageous ambassador for values and quality for whom no adventure is too great and no path too long.*



Marlies Gebs
Head of Transport Disposition

→ *Dutiful folk dancer with strong roots in the Glarus mountains who stays focused and avoids distractions.*



Samuel Cimirro
Employee Logistics

→ *Cheerful family man with a strong mind who prefers a takeout dinner instead of cooking after a long day at work.*



Julia Kessler
Sales / Assistant Product Management
Garden and Design

→ *Careful downhill biker who is drawn to travel in sunny places and likes the cold winter in Switzerland only on boards.*



Hansruedi Leuzinger
Technical Advisor Export

→ *Quiet forecaster with technical understanding and a social soul.*



Fabrizio Treveri
Employee Administration Tools/
Technical sales

→ *Benevolent muscle man and loving grandfather with whom everything is in good hands.*



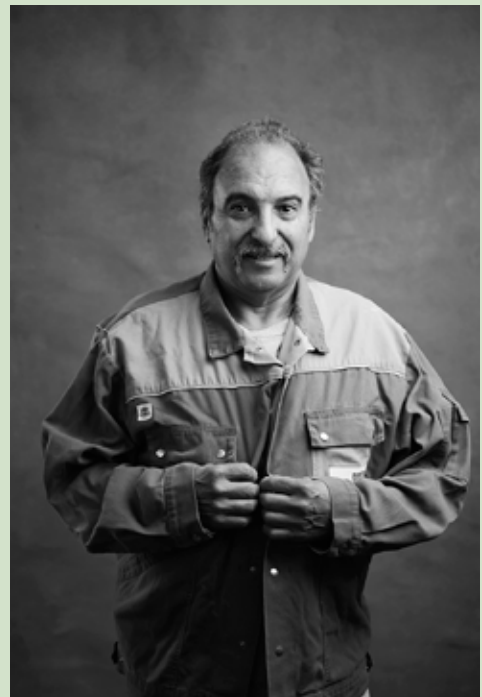
Cajetan Desbonnes Menzi
Goods Receiving Manager

→ *Lively cyclist with a green thumb and loyal soul.*



Christoph Wunderlin
Senior Laboratory Technician R+D
Coating Technology

→ *Patient sound optimizer who conquers the skies with a model airplane.*



Antonio Luis Blevé
Employee Production

→ *Sympathetic gardener who loves Italian music and who patiently cares for his grandchildren, and also remembers to feed the goldfish in the pond.*



Sandra Rossi-Winteler
Office Manager Export

→ *Humorous amateur cook
who demonstrates her organizational
skills every day.*



Stefan Bernet
Master Slate Finishing

→ *Passionate singer in a choir
and conscientious alpinist who
never loses sight of his goal.*



Andrea Schnellmann
Manager Staff Restaurant

→ *Attentive menu magician who manages to
keep a cool head even in hectic times and goes
fishing to maintain her balance.*



Nina Speich
Graphic Design and International Junior
Marketing Project Manager

→ *Enthusiastic alpinist who finds suitable
solutions using her creative expertise.*



Benjamin Bundi
Head of Controlling

→ *Fun-loving family man and nature-loving outdoor athlete who keeps a cool head even in dicey situations.*



Xaver Bühler
Employee Dispatch

→ *Quiet connoisseur and rustic music lover with an amusing Youtube channel whose heart beats for his family, dog, cat, and nine rabbits.*



Nicole Richtfeld
Colorist / Color Lab Technician

→ *Cheerful car lover who appreciates socializing and good food.*



Jasihen Balachandran
Apprentice IT

→ *Self-reflective robotics tinkerer who is a fair-minded youth soccer coach in his spare time.*



Emanuele Dirago
Employee Panel Finishing

→ *Chatty soccer player
who loves culture and Italian food.*



Susanna Agne

Regional Manager CIS, Eastern Europe, Turkey

→ *Determined frontwoman who always carries her
paintbrushes along with her as she performs her
duties and contributes as a caring team player.*



Georg Tabacek

Project Manager R+D Coating Technology

→ *Athletic and companionable bookworm
who likes to travel and is open to new things.*



Melanie Weber

Logistics / Vocational Trainer

→ *Dutiful gardening enthusiast
who enjoys socializing with friends and
responsibly caring for learners.*



Armin Klarer
CNC Machinist and Cutter

→ *Reliable machinist who approaches challenges with a solutions-oriented mindset.*



Nadija Opardija
Employee Order Processing Export

→ *Ambitious inline skater who spends her free time with friends and family.*



Patrick Grosschedl
Lead Buyer

→ *Dog coach and independent person with a reliable character who gives his best not only on the job, but also on the theater stage.*



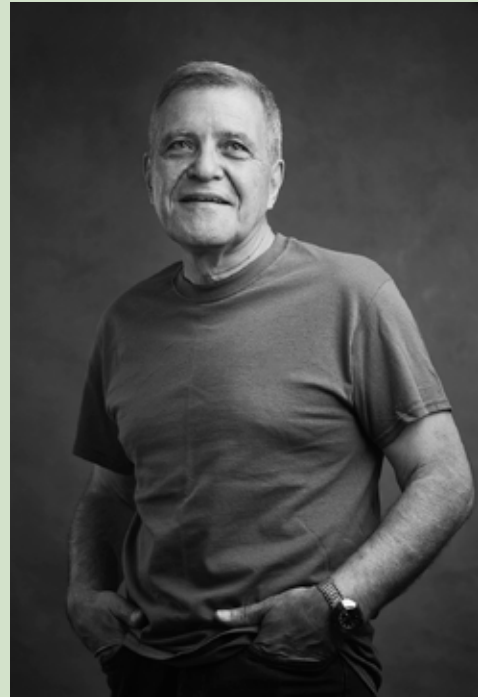
Manuela Matter
Master Cropping/Trimming, Head of Company Paramedic, Member of Employee Committee

→ *Enthusiastic gemstone polisher who is involved in her community and finds her peace while immersed in the colorful world of the aquarium.*



Jakobus van der Vrande
Allrounder Raw material preparation/processing

→ *Hardworking heavy metal guitarist with a soft spot for Salvador Dalí and the Middle Ages.*



Markus Schneider
Allrounder

→ *Sincere and helpful cat lover who enjoys French life while traveling in the Alsace and the Atlantic coast.*



Tobias Hänni
Employee Facility Management and Vocational Trainer

→ *Crazy drummer whose creativity is exercised by gazing through the camera lens.*



Milorad Stefanovic
Master Services (Raw material preparation/processing and Sewage Treatment Plant)

→ *Humorous family man who loves history and geography and can relax wonderfully on walks.*

A Strong Piece of Design

Text: Michèle Rüegg Hormes

When a natural, malleable raw material meets the desire for sustainability and the creative will of a designer, the best ideas can emerge. When such ideas also fall on fertile ground, a path is made for something very special: a strong piece of design, each one unique and universally applicable.

In the Swisspearl factory in the picturesque, western Swiss town of Payerne, Swisspearl barrels are still handcrafted every day to give them an unmistakable character. The fiber cement mats, which can be formed in a liquid state, are cut to size, carefully placed in the vessel moulds, joined together, tapped firmly, and dried. This process always leaves valuable raw material scraps behind to be disposed of. Thanks to a convincing idea, up to two tons of moulding remains can now be processed into a design object.

The idea originated with the French designer Nicolas Le Moigne after a tour of the hand-crafting plant in Payerne. Inspired by the remnants lying around, he developed a cubic form by pressing these scraps together to form a simple, yet dense brick: the Trash Cube.

The production of the Trash Cube is integrated directly into the existing work

process. The workers place the pieces and strips of material cut off during the production of the planters and furniture in a still damp, therefore malleable state directly into the Trash Cube mold, close them, and let them dry overnight. The next morning, the mold can already be removed and the individual properties of each piece become visible.

Each Trash Cube is unmistakably unique, a massive body of pressed and folded pieces of material, a sculptural rough diamond that seems indiscriminately coated with an austere outer form. The material—wild and docile at the same time—becomes a manifesto.

The top and bottom sides are smooth and functional; in between, the material shows itself as unified and powerful in its

liveliness and plasticity; coming into its own when played upon by light and shadow.

Its unique yet universal shape makes it the perfect all-rounder—whether stool, table, or sculpture which, thanks to sustainable and durable material, finds its place both indoors and outdoors—as a strong piece of design.

Trash Cube

Design: Nicolas Le Moigne (2011)

Material: Fiber cement (cement, limestone meal, reinforcement fibers, air, water)

Weight: 48 kg

Dimensions: 31 × 31 × 36 cm (L × W × H)

Colour: Natural grey



Swisspearl develops unique and innovative furniture, lighting, and planters in cooperation with renowned designers who insist on a high aesthetic appeal and excellent quality.

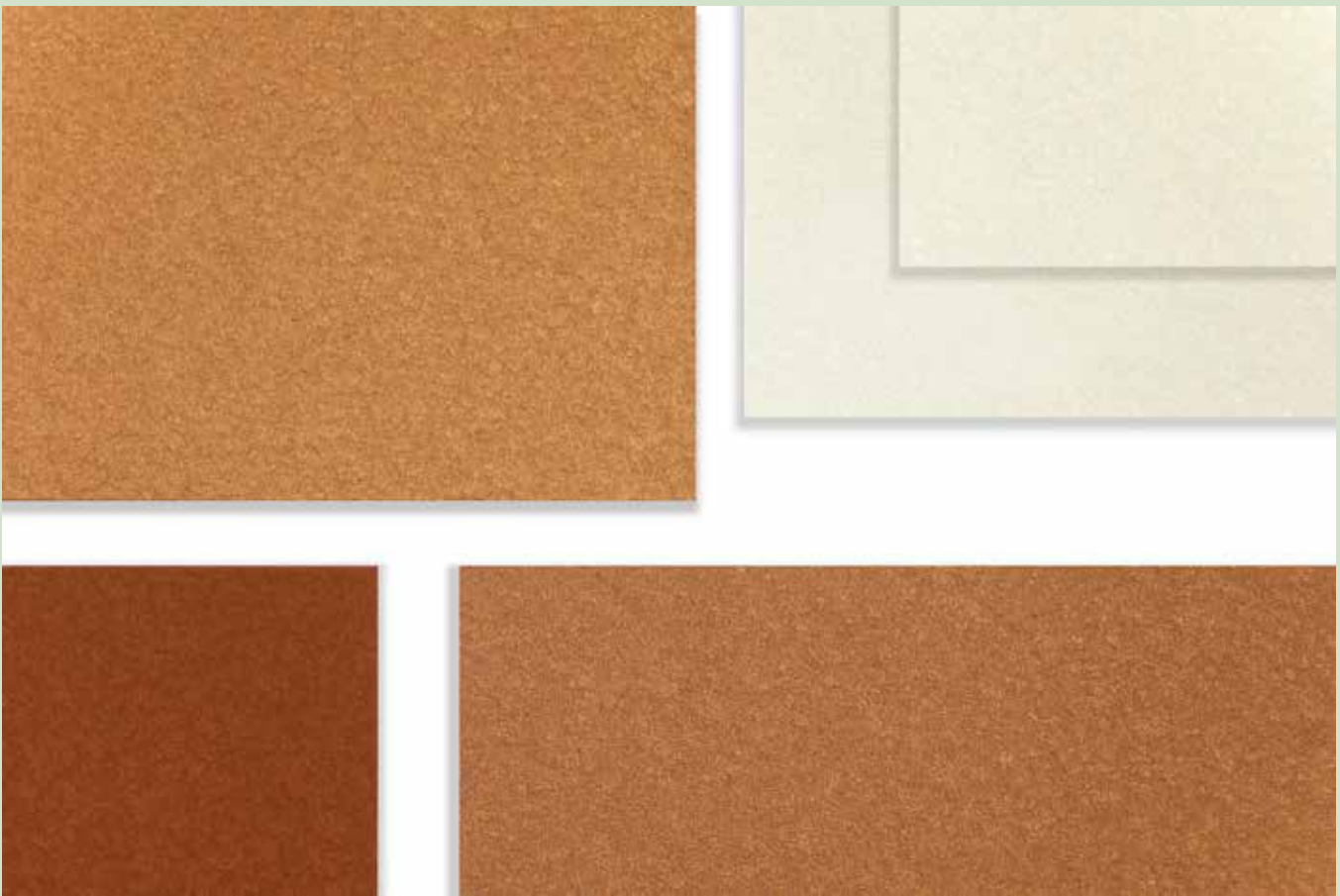
For all design objects created in the hand molding facility, wooden molds are developed and produced. In addition to the existing collection, the Payerne production plant also caters to special customer requirements.





PRODUCT

Swisspearl Largo Reflex: Metallic, shimmering, and reflective



Every house has a face. That is why Swisspearl strongly values its high-quality and large selection of façades. We are committed to further developing our selection in order to bring you a wide range of fiber cement-based façades.

Reflex, for example, is a fiber cement board that has been thoroughly dyed throughout and coated with a shimmering and reflective surface. The metallic effects lend the material an expressive look and achieve exciting color nuances, depending on the viewing angle and light irradiation.

Yet the shimmering surface is not only an expression of aesthetics; it also has a remarkably functional aspect. This is because the reflective layer ensures that the panels are shielded from strong sunlight and thus heat up less. The coating also supports the natural insulation value of the fiber cement board, and the material is noticeably less stressed even at higher temperatures.

In terms of size, cut, and color selection, Reflex offers multifaceted and diverse options to set aesthetic accents in interior and exterior designs. Special colors are available on request.

Dimensions: up to 3050 x 1250 mm
Material thickness: 8 and 12 mm
Colors: twelve standard colors

Link: www.swisspearl.com/products/facades/swisspearl-largo-reflex/

SELECTED BUILDINGS

Every year, a great number of building projects are carried out with Swisspearl products.

On the following pages, we present fourteen particularly remarkable buildings.



Climbing Spaces

University of Limerick Climbing Wall, Limerick, Ireland

The University of Limerick Climbing Centre is the premier indoor climbing facility in Ireland and caters for Ireland's fastest growing sport. Through engaging workshops with the clients and end users, Hugh Kelly Architects developed the project brief and concept design, pushing the boundaries of the project.

The University of Limerick Climbing Wall Centre is a 210-square-meter extension to the UL Sports Arena. The building form echoes rock faces and crevices commonly found in the natural world. Externally, the building rises to over twenty meters above ground level and drops dramatically to eight meters over the lower climbing zone. The smooth texture of the cladding, and feature flashings with glass crevices add to the abstract concept of rock shards.

The center provides climbers with surfaces similar to the experience of climbing within a gorge. Three-dimensional models, animations, and virtual reality headsets allowed the students to experience the developing design in real time. Every single climbing wall panel was shaped, angled, and scrutinized by the Outdoor Pursuit Club to ensure that the optimum climbing experience would be realized. Hugh Kelly researched best practice in climbing wall centers of excellence that were being built around the world in preparation for the 2021 Olympics. By thinking outside the box, the architects pro-

vided the space to rethink the essence of the indoor climbing experience. The traditional mono climbing wall experience in a nondescript industrial shed was transformed into a 360-degree, purpose-built building with climbing walls that can offer everything from the ideal first climbing experience all the way up to international standard climbing that can push even elite climbers to the limits.

A steel portal frame structure, industrial shed low-tech construction and lightweight Swisspearl cladding were used to create the dynamic building form. It is accentuated by feature joints breaking up the building mass into fissures of stone shards enclosing the angular form, which reflects the function within. The Swisspearl cladding provides sustainable advantages with 95 percent of the product being made up of natural raw materials. With a lifetime of over 40 years, Swisspearl also improves both the ecological and economical outcomes of the building envelope.



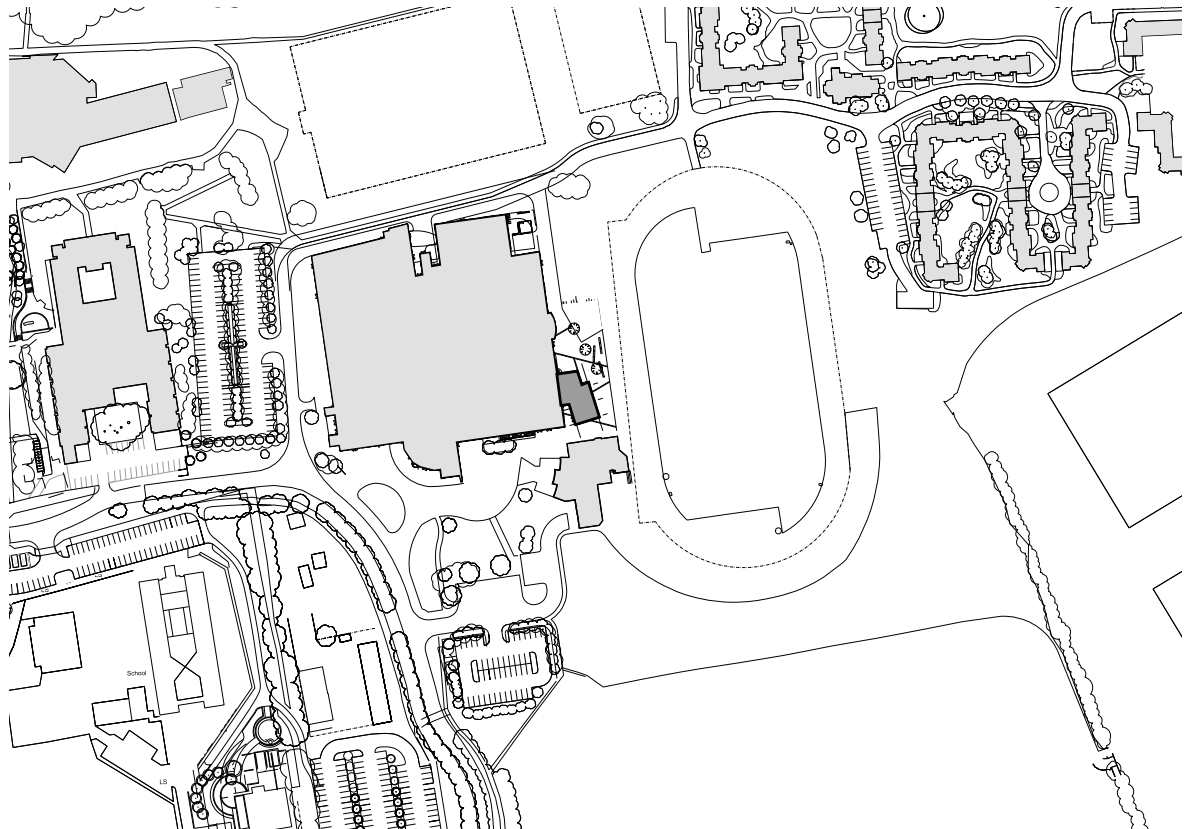
During the planning and construction of this building, the façade had to be precisely planned and professionally implemented in every detail. Extreme precision was the highest value guiding both the cutting and assembly of these Swisspearl panels.





The building makes a strong impression with its unique form, modelled on the face of a rock. With its successful combination of materials, the extensions take on elements of the existing red-brick building complex and add new features to them. Bricks of a darker shade along the base as well as bright, diagonally laid Swisspearl panels with glass openings give the building a powerful and dynamic ambient.

LOCATION: Plassey Park Road, University of Limerick, Ireland
CLIENT: University of Limerick
ARCHITECTS: Hugh Kelly Architects, Limerick
BUILDING PERIOD: 2020
FAÇADE CONSTRUCTION: BCL Contracts, Limerick
MATERIAL: Swisspearl Largo Incora IN 100







Floating between the Trees

Bridge House, North Vancouver, Canada

Situated in North Vancouver's Pemberton Heights, Bridge House pays homage to the tenets of modern architecture while incorporating distinctly regional elements of exposed wood and timber to create a clean, contemporary West Coast aesthetic.

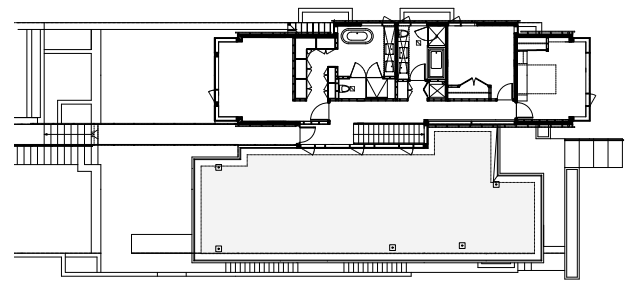
Bridge House's name is derived from the dramatic bridge that extends from the backyard to the house. The concept of the bridge arose from the initial meeting with the client and architect as they walked around the site and discussed how to navigate a backyard that was almost a full level higher than the front yard. The home would be entered at the lower level, yet they still wanted to access the rear yard from this lower level. A bridge element proved to be the solution.

Bridge House is configured on a simple, open plan with kitchen, living, and dining areas situated on the main level and facing out to a large patio that has been carved out of the existing higher yard to the rear. Instead of isolating the upper tier of the garden, a bridge was created in order to gain access from both levels. It carries into and through the home becoming the central stair and the spine of circulation within the house.

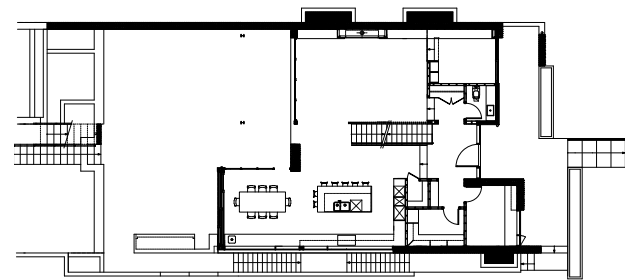
The finishes on the exterior design extend to the inside to create a seamless transition between inside and out. The material palette is

simple and effective with the combination of wood, concrete, Swisspearl fiber cement panels, and steel to complete a contemporary West Coast aesthetic. Timber is used throughout with a dramatic wood screen wrapping around the ceiling and walls of the living area and extending to the outside. Charcoal-colored Swisspearl panels are used both on the interior and exterior as a neutral, dark element juxtaposed with the transparent glazed façades. The dark panels animate the interior spaces and mirror the dramatic dark palette of the exterior façade. Clerestory lighting above the sliding doors of the main bedroom on the upper floor create the impression of a floating roof, which is structurally supported by two steel I-beams.

Bridge House manages to straddle the seemingly incongruous worlds of a bustling metropolis and rugged mountain landscape. The open façades and floating lines with the backdrop of massive old pines create an impression of lightness, almost like a tree-house perched on the site.



SECOND FLOOR



FIRST FLOOR 1:400

LOCATION: North Vancouver, BC, Canada

CLIENT: private

ARCHITECTS: Valley Architecture, North Vancouver, BC

BUILDING PERIOD: 2018–2019

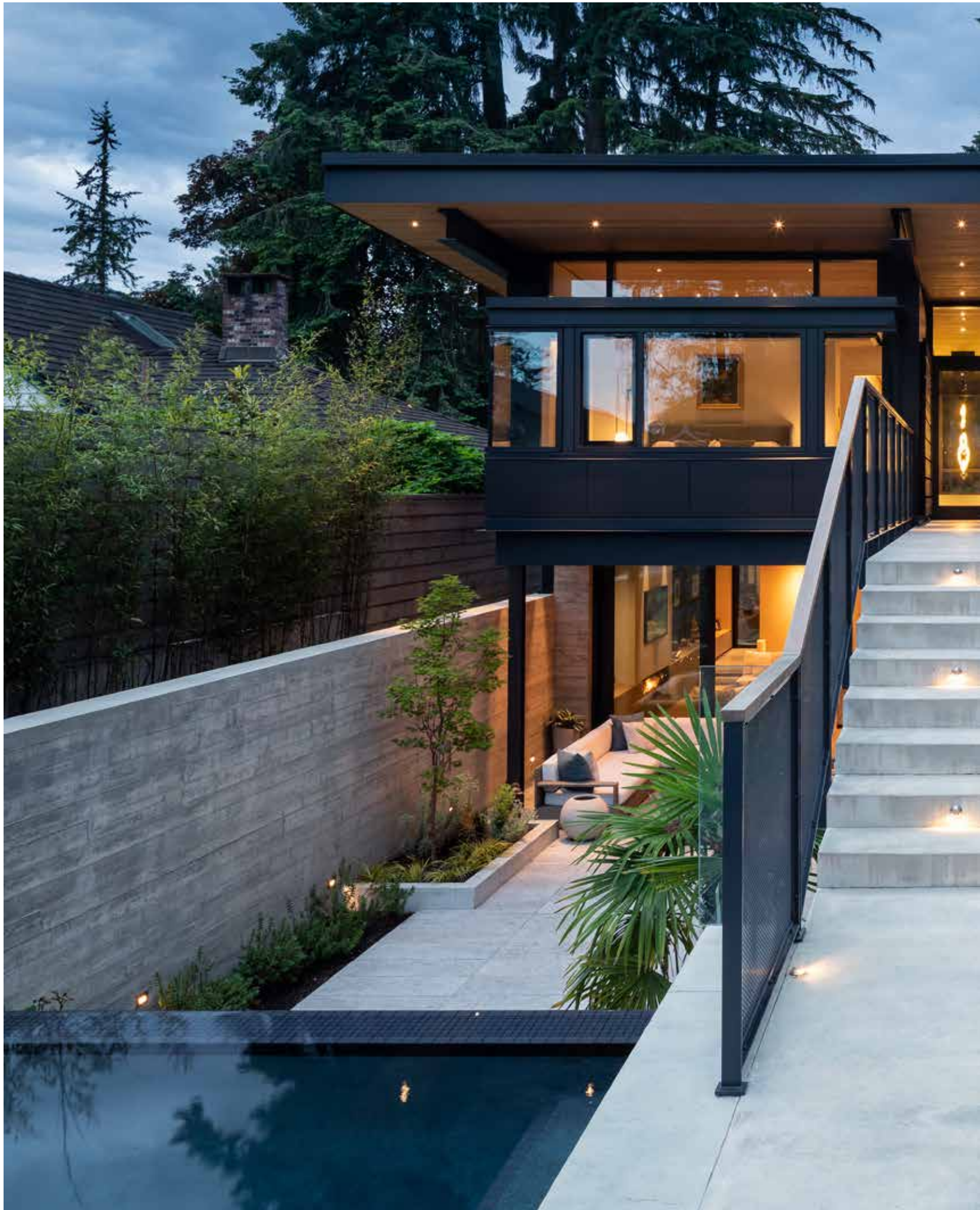
FAÇADE CONSTRUCTION: Meister Construction Ltd., North Vancouver, BC

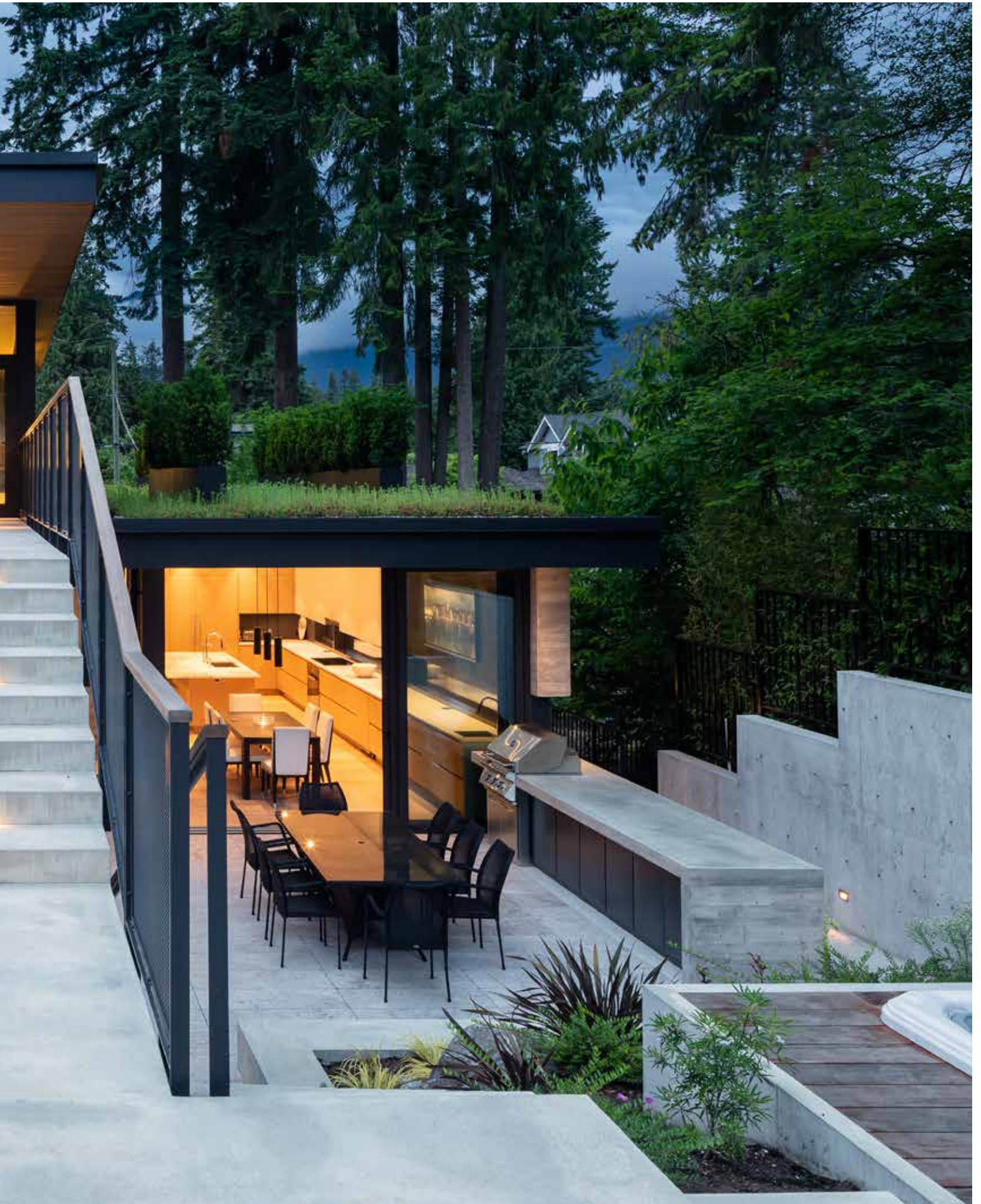
MATERIAL: Swisspearl Largo Carat Black Opal 7024

The materials of the façade and exterior spaces—wood, cement, Swisspearl panels, and steel—have been skillfully extended into the interior and thus enable a smooth transition between interior and exterior spaces.

The striking bridge not only gives the house its name; it also ties the higher part of the rear garden together with the house, continuing inside as the access axis between the levels and thus forms the backbone of the house.









Juxtaposing Old and New

Single-Family House, Lillesand, Norway

In designing the extension to the existing house, architect Sunniva Rosenberg acknowledged the neighboring buildings, the surrounding rocky landscape, and indigenous tall pine trees, integrating them into the overall design to create a harmonious ensemble. The new extension connects the house to the garden.

L15 House is located in Lillesand, a small town close to the Norwegian coastline in the south of Norway. Sunniva Rosenberg's extension accommodates an open-plan dining, kitchen, and living area as well as an outdoor dining area overlooking the garden. The angular plan layout optimizes the site and opens up in three directions. By positioning the extension parallel to the road, orientated towards the existing house, an outdoor space is created to the southwest that is sheltered from the sun and wind as well as affording privacy.

One of Rosenberg's aims was to create a site-adapted contemporary extension combining good craftsmanship and durable materials; a building that has been built sustainably for the long-term. The architects have used the best building traditions from the past in combination with materials from the present. Rather than imitating the architecture of the existing house that dates back to the 1980s, Rosenberg chose to design a reduced, box-like wooden construction clad with large, dark-grey Swiss-

pearl panels and floor-to-ceiling glazed openings that contrasts strongly, while not dominating or competing with it.

Another aim was to preserve the spruce and pine trees and the cultivated garden that the owner has created over several decades. By cantilevering the extension above the bedrock and keeping the large rhododendron plants, which create a windshield, the landscape has been respected. Generous sliding glass doors open up to the flowering bushes and bring nature into the space. Neutral colors ensure that it remains the main focus.

While the extension opens up to the existing building and garden in the south, it is closed towards the gravel road in the north. By perforating this closed façade of Swisspearl panels with small, punctured holes in a motif of an abstracted tree branch, the extension echoes the old orchard of trees. Notwithstanding the tight budget, the extension has been built with high-quality materials and precision detailing.



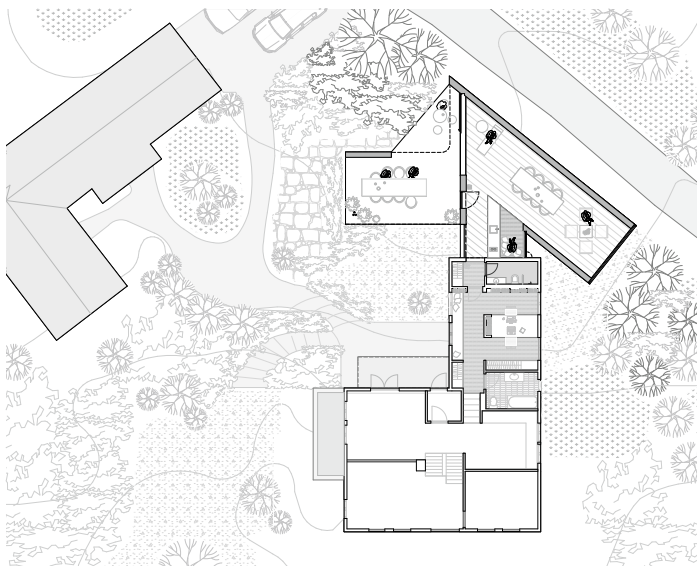


The modern extension is designed as an abstract cube with dark, perforated Swiss-pearl panels. With its minimalist style, it stands out from the existing traditional construction of the main house and at the same time, creates an exciting dynamic between old and new.





Despite the small footprint, the interior and exterior appear generous and stage interesting views looking in, out, and through the house's area. The building blends into the existing landscape as a matter of course.



FIRST FLOOR 1:400

LOCATION: Lillesand, Norway
 CLIENT: private
 ARCHITECTS: Sunniva Rosenberg Arkitektur, Oslo
 BUILDING PERIOD: 2020
 FAÇADE CONSTRUCTION: Byggmester Notto Høiland, Lillesand
 MATERIAL: Swisspearl Largo Carat Black Opal 7021 (perforated),
 Satin White Reflex 9291



11

53

Working in a Green Environment

Office Building, Gothenburg, Sweden

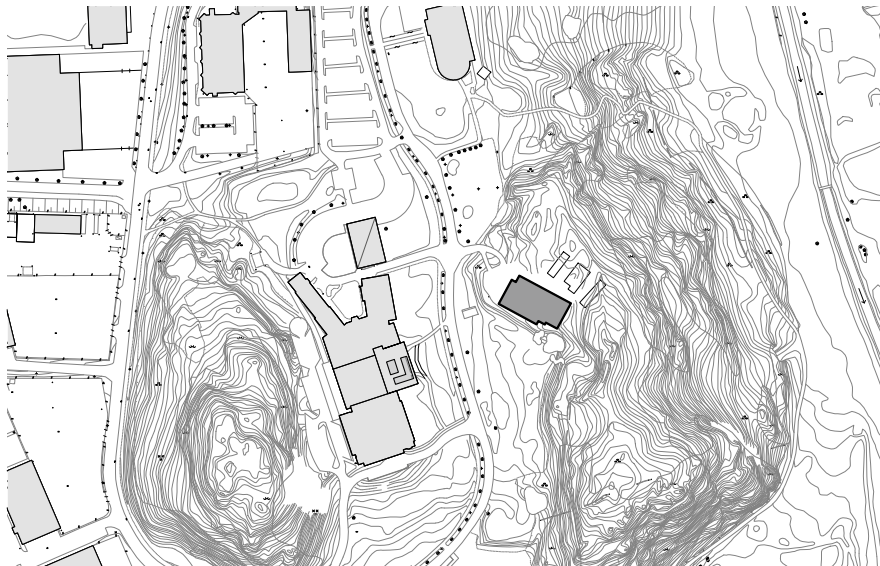
Located a mere ten minutes from central Gothenburg, alongside a small golf course, Gårda Johan Fastighets AB's new headquarters in St Jörgen Business Park was inspired by the American model, offering its tenants a wide variety of activities and opportunities for social encounters.

St Jörgen Business Park houses roughly forty mid-size and small businesses that rent their premises from Gårda Johan Fastighets AB. This amounts to a total of 70,000 square meters of office space accommodating around 700 employees. Since its establishment in the early 1980s, property owner and founder Hans Andersson has kept to his original idea of investing in and developing the green areas of the business park rather than over-exploiting the available land. Andersson "wanted to create a business park where people can work, play sports, spend time with one another, and feel good even after the end of the workday. The idea came to me in my youth, when I visited similar facilities in the United States. We have put a lot of care and effort into developing active sports and activity facilities that double as social meeting points."

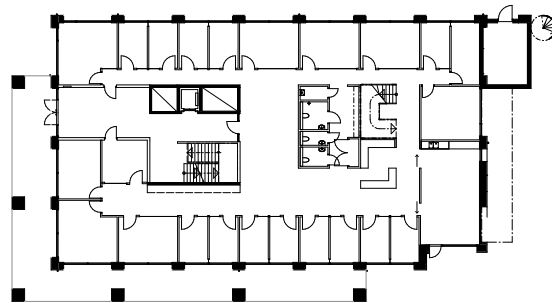
Sankt Jörgen Park Resort is Sweden's first city resort replete with a hotel, restaurants, conference facilities, a sports club, spa, tennis courts, football pitches, and golf course, opened

in January 2008. As a crown jewel, anchored on a hill with a view of the Gothenburg skyline is Gårda Johan's new triple-story headquarters. Here, all the rooms are characterized by transparency towards the surrounding nature. An important aspect was to design the building in line with the client's personal values with great care given to the design of the building as a whole and with attention to the detail and the components that make up the whole.

The ground floor has an L-shaped, covered walkway with benches that shades the lower office spaces and protects the entrance, while the upper-level setback creates an outdoor roof terrace overlooking the landscape. The main volume of the building has been clad in smooth, dark-grey Swisspearl panels, while the projecting walkway on the ground floor has been clad in timber slats that echo the forest of trees to the rear of the site. The neutrality of the cladding offsets the natural greenery surrounding the building.



The office building stands on the slope of a city resort park and is surrounded by a golf course. The three levels of the building's volume are staggered and clad in dark Swisspearl panels. On the ground floor, the house is enclosed by a covered wooden arcade in an L shape.



FIRST FLOOR 1:600

LOCATION: Knipplekullen 11, Gothenburg, Sweden
CLIENT: Gårda Johan Fastighets AB, Gothenburg
ARCHITECTS: Arkitektstudion AB, Gothenburg
BUILDING PERIOD: 2019–2020
FAÇADE CONSTRUCTION: Pentagon Bygg AB, Gothenburg
MATERIAL: Swisspearl Largo Carat Black Opal 7025



Fun and Games on the Water's Edge

Louisiana Children's Museum, New Orleans, USA

Louisiana Children's Museum presents a transformative model for children's museums that weaves together indoor and outdoor learning opportunities along with literacy, parenting, early childhood research, and environmental education activities to create a supportive environment for children and their families.

After Hurricane Katrina in 2005, Louisiana Children's Museum re-envisioned its mission to holistically address the health and development of children. The health and well-being benefits of connecting children with nature led the museum to relocate from an indoor experience in New Orleans' Warehouse District to a new campus opening out into a lagoon in the 1,300-acre City Park.

The choreography of the visitor experience is designed to connect people and nature throughout their journey—moving through groves of oak trees, across water, onto the deck, through the building and into a courtyard and sensory gardens. A cloud sculpture envelopes the entry boardwalk in mist, creating a magical water experience for visitors entering across the lagoon. The shaded arrival “porch” offers fantastic views over the landscape.

The scheme has two primary volumes: the northern “arrival building” houses a museum store, café, deck, and literacy center as well as reception and museum offices, while the south-

ern “activity building” houses exhibit and activity galleries. There is an outdoor courtyard between the two volumes, which are carefully positioned between existing oak trees. The building is raised above ground level to accommodate severe storms and withstand up to one meter of floodwaters.

Mithun design team selected Swisspearl's Carat panels in Onyx for their durability, solar reflectivity, and timeless quality. Crucially, the cladding has to withstand hurricane-force winds and vandalism. The color palette was chosen to provide a subtle reference to traditional limestone façades of public buildings within the park, and to create an optimal backdrop for the rich, changing light over the nearby lagoon. The lightness of the panels provides a projection surface for the ever-changing shadow patterns from the building louvers and water reflections from the lagoon. A combination of smooth panels and panels with a subtle pixelated pattern embossed on the surface creates a playful dance across the long elevations.







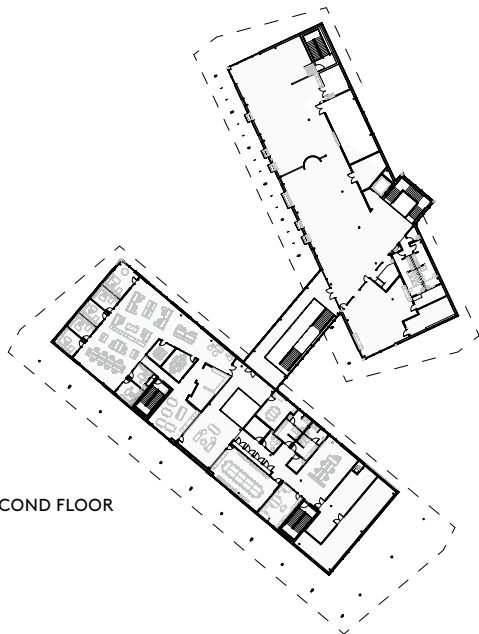
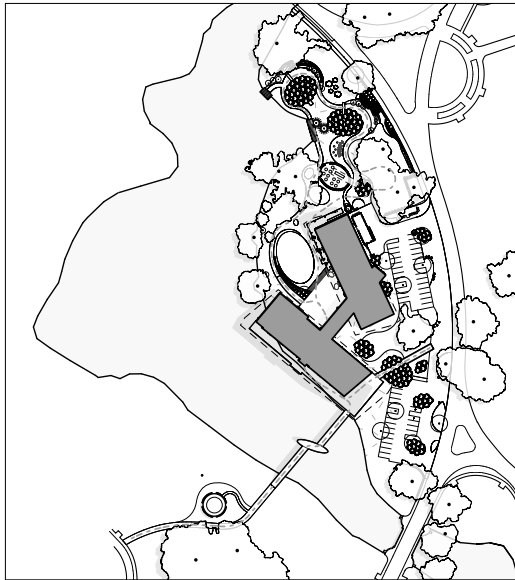
LOCATION: 15 Henry Thomas Drive, New Orleans, LA, USA
CLIENT: Louisiana Children's Museum, New Orleans, LA
ARCHITECTS: Mithun, Seattle, WA
BUILDING PERIOD: 2018–2019
FAÇADE CONSTRUCTION: Roofing Solutions LLC, Prairieville, LA
FAÇADE MATERIAL: Swisspearl Largo Carat Sapphire 7060,
Onyx 7090 (HR)



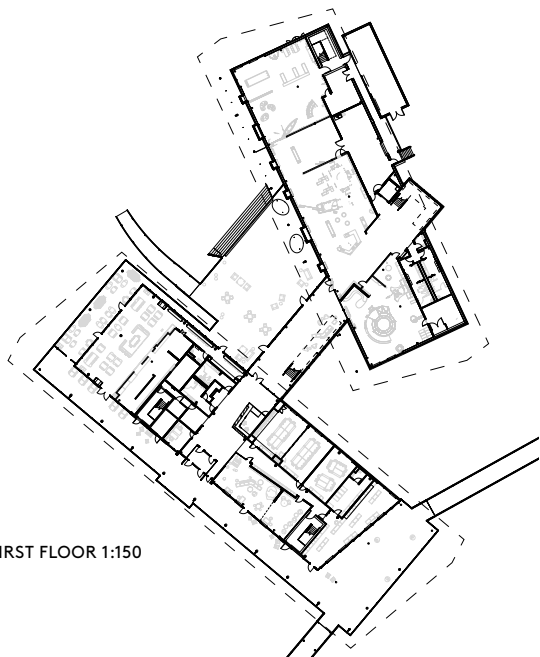


The museum building is made up of two out-spread wings with widely cantilevered roofs. In between, a park opens up revealing old oak trees that invite visitors to linger and play. The spacious, covered entrance veranda opens up to a fantastic view of the landscape.

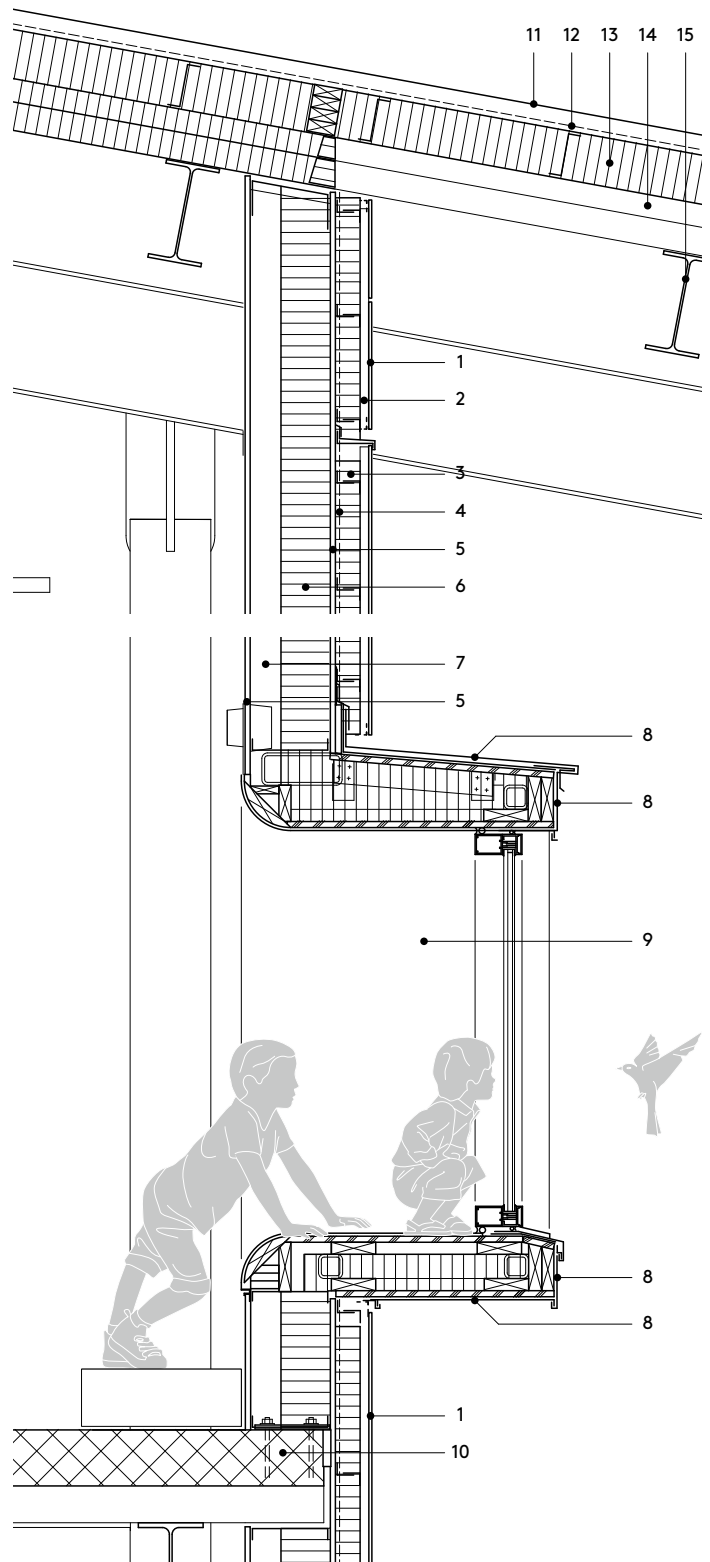




SECOND FLOOR

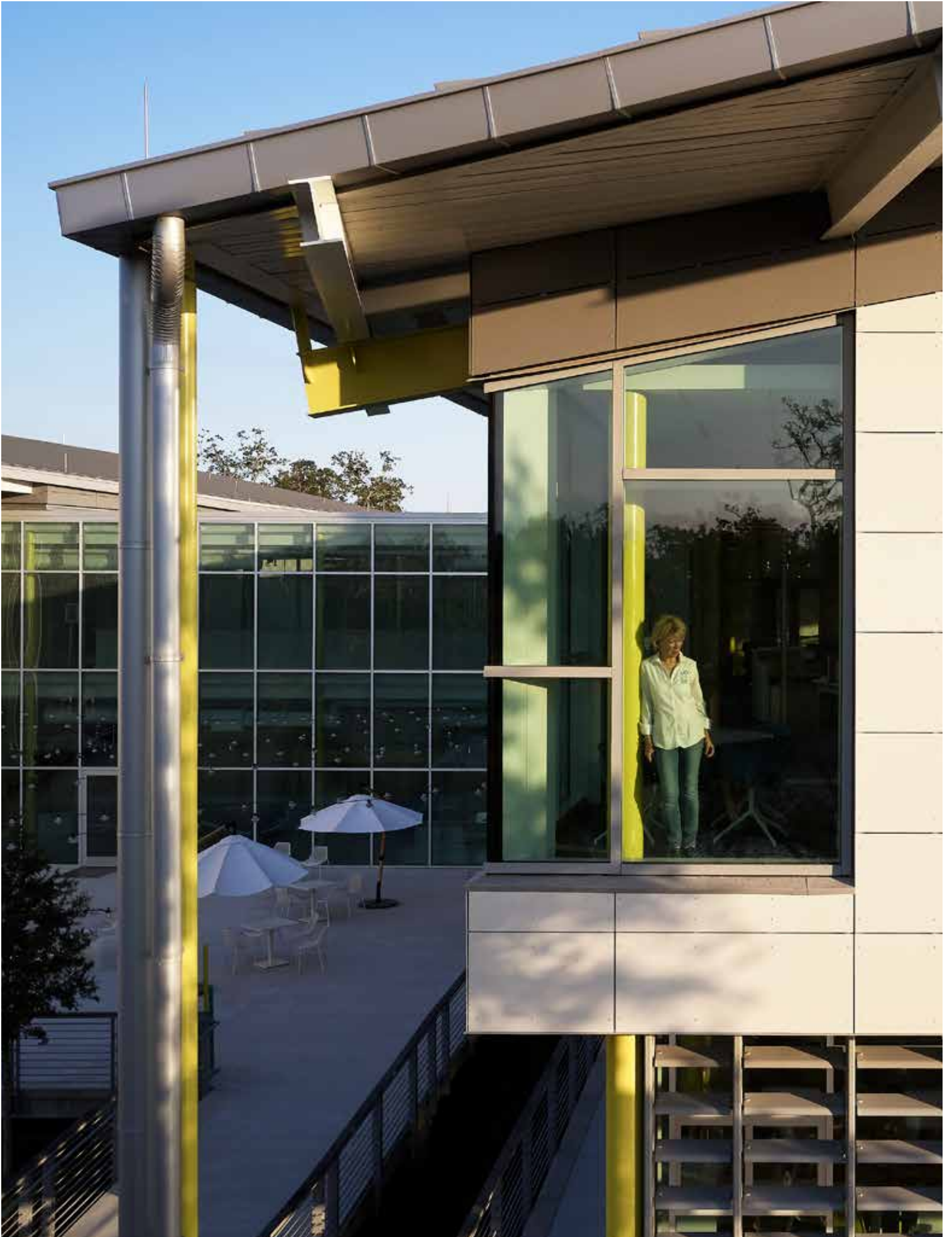


FIRST FLOOR 1:150



VERTICAL SECTION 1:20

- 1 Swisspearl Largo 8 mm
- 2 ventilation cavity
- 3 thermal insulation, mineral wool
- 4 moisture barrier
- 5 gypsum board
- 6 thermal insulation, steel stud
- 7 metal stud cavity
- 8 metal cladding
- 9 cork-lined child viewing window
- 10 composite concrete deck
- 11 metal roofing
- 12 waterproofing
- 13 thermal insulation, rigid
- 14 acoustic structural roof deck
- 15 steel framing





A Bright New School Gym

Montrose Primary School Gymnasium, Montrose, Australia

Montrose Gymnasium is situated in a peripheral suburb of Melbourne and offers a much-loved primary school on the foothills of the Dandenong mountain range and an exceptional new gym for the school and community. With its dynamic forms and colors, the new gym creates a striking new identity for the school.

The central idea of H2o architects was to respond to the character of the Dandenong foothills, the hinterland between Melbourne's expansive flat plains and the rolling hills of the Yarra Valley. The architects located the gymnasium in front of the school, where it is highly visible from the nearby main road. The large volume to the north interfaces with a framed forecourt toward the street, which is a public/private interface along the front elevation of the building.

H2o Architects eschewed a typical skillion roof in favor of an asymmetrical ridge to reference the expansive landscape. The intense, ever-changing hues of the landscape are reflected in the colorful Swisspearl cladding of the upper section of the façade with irregular, dynamic shapes in blue and orange hues that read as a single, continuous surface. The masonry plinth responds to the earthy materiality and colors of the existing campus. Ribbons of undulating windows puncture the variegated blockwork patterns along the plinth. The high west façade contrasts with the sense of enclosure

afforded by the generous shaded veranda at the front of the building.

The gym features a competition-grade basketball court with spectator seating, storage, and changing rooms. A lower-level extension to the south includes an office and colorful bathrooms. A child-friendly, commercial-grade kitchen hosts the school's new kitchen learning program and kiosk. The entry foyer of the gym can be utilized as a flexible breakout space for communal dining and informal learning.

The new building has been oriented to maximize north and south aspects and limit exposure to the east and west. Sizing and placement of windows balances the need for natural light, views, heat gain, and heat loss. Sun protection to the north is provided by translucent polycarbonate sheeting preventing direct sunlight and overheating. The use of bright colors on the exterior of the building reduces solar gain, while internally, light colors reduce the need for artificial lighting.



LOCATION: 11 Leith Road, Montrose, Australia
CLIENT: VSBA, Montrose Primary School, Montrose
ARCHITECTS: H2o, Collingwood
BUILDING PERIOD: 2020
FAÇADE CONSTRUCTION: Jointly, North Melbourne
FAÇADE MATERIAL: Swisspearl Largo Carat Topaz 7073,
Zenor 45047, 47030, 63077

The picturesque façade plays with and picks up on the hues of the landscape and the sky, thus blending into the hilly landscape. The Swisspearl panels were cut precisely to the original and assembled on site like a mosaic. By offsetting the upper, darker part of the building from the lighter base, the building volume appears smaller.





Held by Yellow Planes

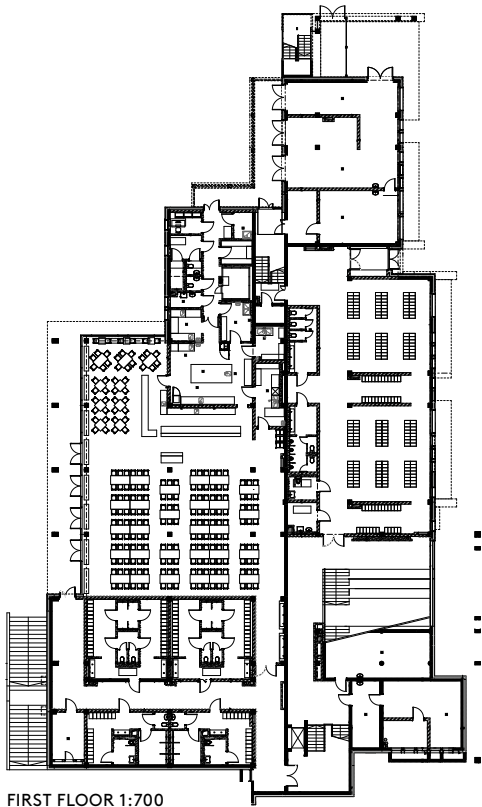
Bergi Music and Art School, Garkalnes Novads, Latvia

Located near Riga in Latvia, Ozola and Bula Architect's new Music and Art School consists of three distinct volumes that step down in response to the slope of the terrain. An outdoor stepped walkway and an indoor corridor link the three colorful volumes to one another.

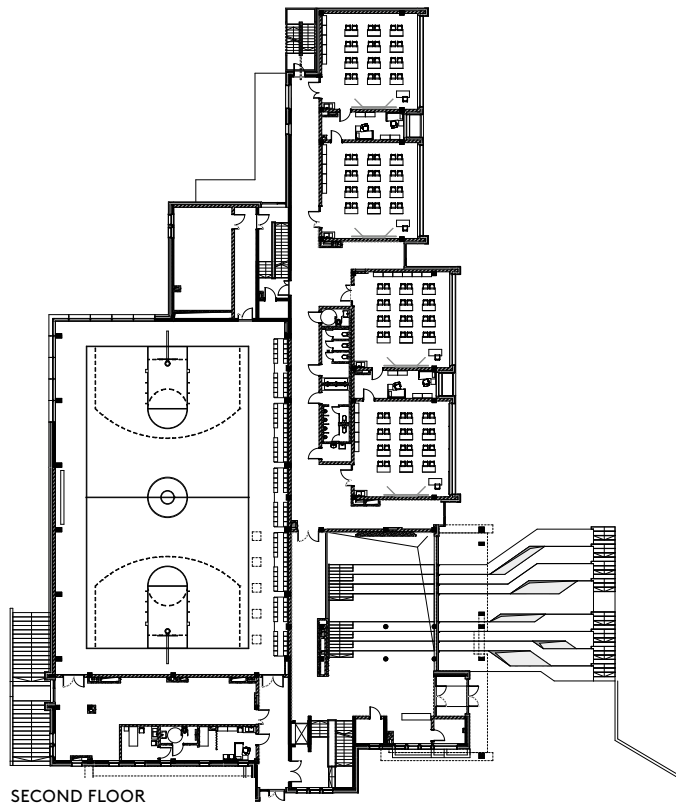
Commissioned by the Garkalnes municipality, the Bergi Music and Art School was completed in 2018. The scenic site is surrounded by green fields and a forest to the rear of the grounds. Rather than reflecting the existing buildings, the new volume speaks an utterly different architectural language. While the existing buildings have pitched roofs and are plastered in white paint with vertical fenestration, the new detached wing has flat roofs, a colorful façade, and continuous strips of horizontal glazing that run across the entire length of the distinct volumes. The narrow, yellow and light-purple strips further emphasize the horizontal subdivision of the façades. The side façades structuring the building volumes, in contrast, are all clad in light-yellow Swisspearl panels and do not have any openings, thus creating a strong sense of orientation with all the classrooms looking out across the campus grounds and the

small body of water. The two upper floors of the triple-story building cantilever slightly above a plinth of grey-tiled walls. This plinth elevates the upper levels and creates a sense of loftiness. The bright colors of the façades clad in Swisspearl panels have been chosen to reflect the verdant surrounding environment.

A long corridor links the classrooms, which are paired, toward one another. A large indoor sports hall is situated to the rear of the building. Currently, the first-phase campus has been completed, within which classrooms for the elementary-level children, a gym, and a school canteen are accommodated. As the population in this area around Riga is growing steadily, the second phase of the scheme will be built in the near future, in order to accommodate middle school and high school classrooms as well as a large public hall for social events.



FIRST FLOOR 1:700



SECOND FLOOR



The school is located on the edge of the growing region of Riga and is surrounded by dense forests. The extension, built on the sloping terrain, is divided into three building volumes, which are clearly distinguishable by their yellow compartments. The classrooms are oriented towards the small lake; the gym and cafeteria occupy the rear wing of the building.

LOCATION: Skolas iela 8, Upesciems, Garkalnes Novads, Latvia
CLIENT: Garkalne district council, Garkalne
ARCHITECTS: Ozola & Bula, Riga
BUILDING PERIOD: 2018
FAÇADE CONSTRUCTION: Ostas celtnieks, Riga
MATERIAL: Swisspearl Largo Planea special color





Swisspearl and Stone Combined

Amnis Student Accommodation, Cork, Ireland

Located on a prominent site between Western Road and the River Lee in Cork, DTA Architects' new student accommodation provides 190 student bedrooms with ensuite bathrooms in 28 cluster apartments, with reception and communal amenity facilities on ground floor.

Finding suitable accommodation for students often poses a problem due to lack of housing stock and high rental prices. DTA's new Amnis House in Cork, Ireland's second largest city in the south of the island, helps to alleviate this issue.

The U-shaped layout of the building creates a communal courtyard that frames and defines a staged spatial progression from the "hard" urban streetscape through to the contrastingly "soft" verdant riverbank. From Western Road, steps, a ramp, and lift are mediating devices between public footpath and the raised, semi-private deck. A continuous, sloped hardwood boardwalk wrapping a central spine of concrete tree planters forms an anchoring device and delivers a seamless transition from deck to the ecologically sensitive riverside environment. In response to a high-risk of flooding, the entire building has been raised above the level of Western Road, creating a new ground with a floodable under-croft; open, but screened from flood debris and, critically, maintaining flood plain capacity.

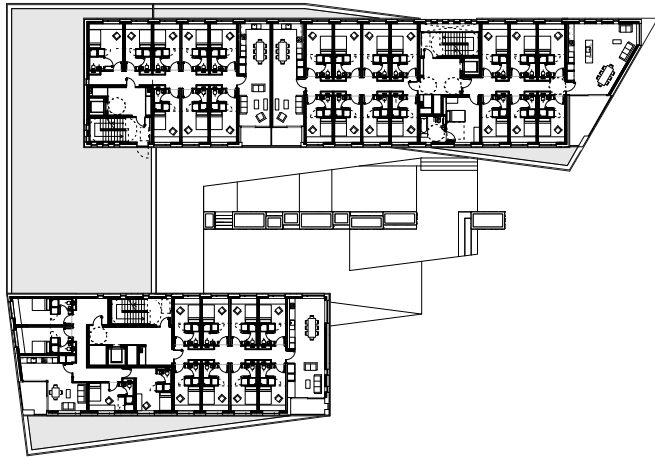
The form and massing respond to the particular scale and context of Western Road and the River Lee, while establishing the building's singular presence at an urban scale. Floor levels are clearly expressed in horizontal, light-grey granite-clad bands, with the plan configuration of the central floors offset against the orthogonal set-backs on the ground floor. The zones between these granite bands are infilled with a rainscreen façade of aluminum-frame windows alternating with Swisspearl fiber cement panels in vertical bands of ochres and greys. A pallet of six colors, composed across each façade in alternating color groupings, achieves a unified overall composition while also reducing the scale of the building and reflecting the interior layout of the individual units and common areas. The light-hearted façades create a distinctive identity appropriate to the prominent urban location and the end-user demographic, namely, young students.



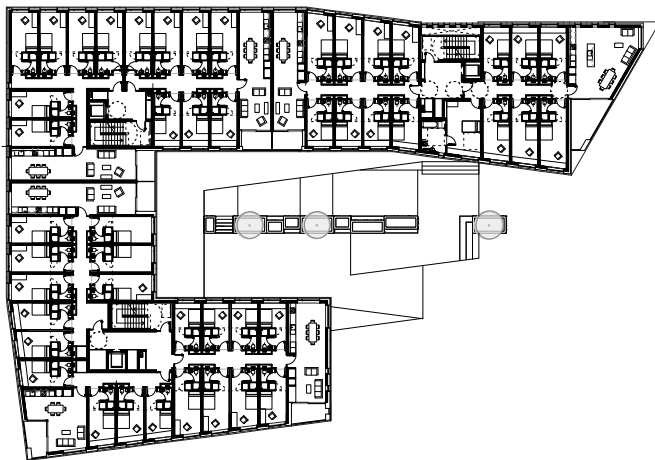


With its shape and orientation, the house responds to various conditions at the site. Towards the street it appears as a closed unit while opening up in the direction of the river and creating an attractive exterior space.

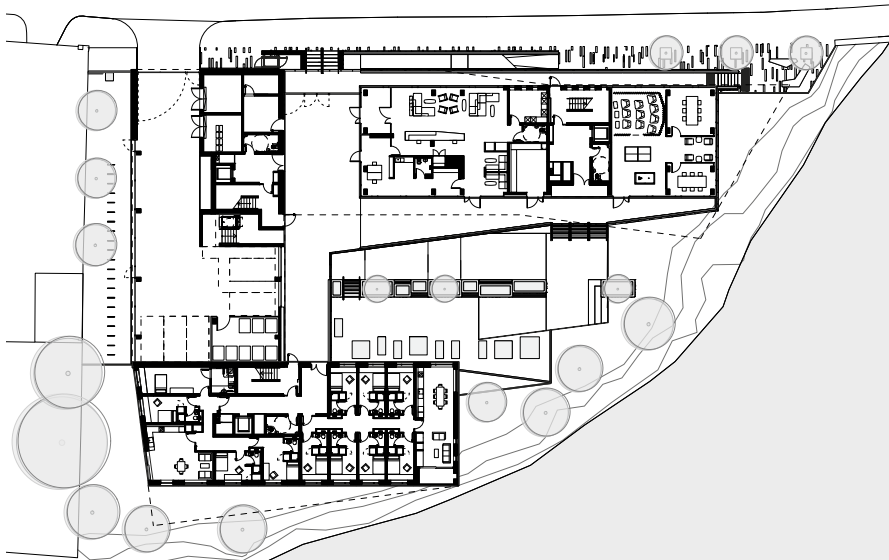




THIRD FLOOR



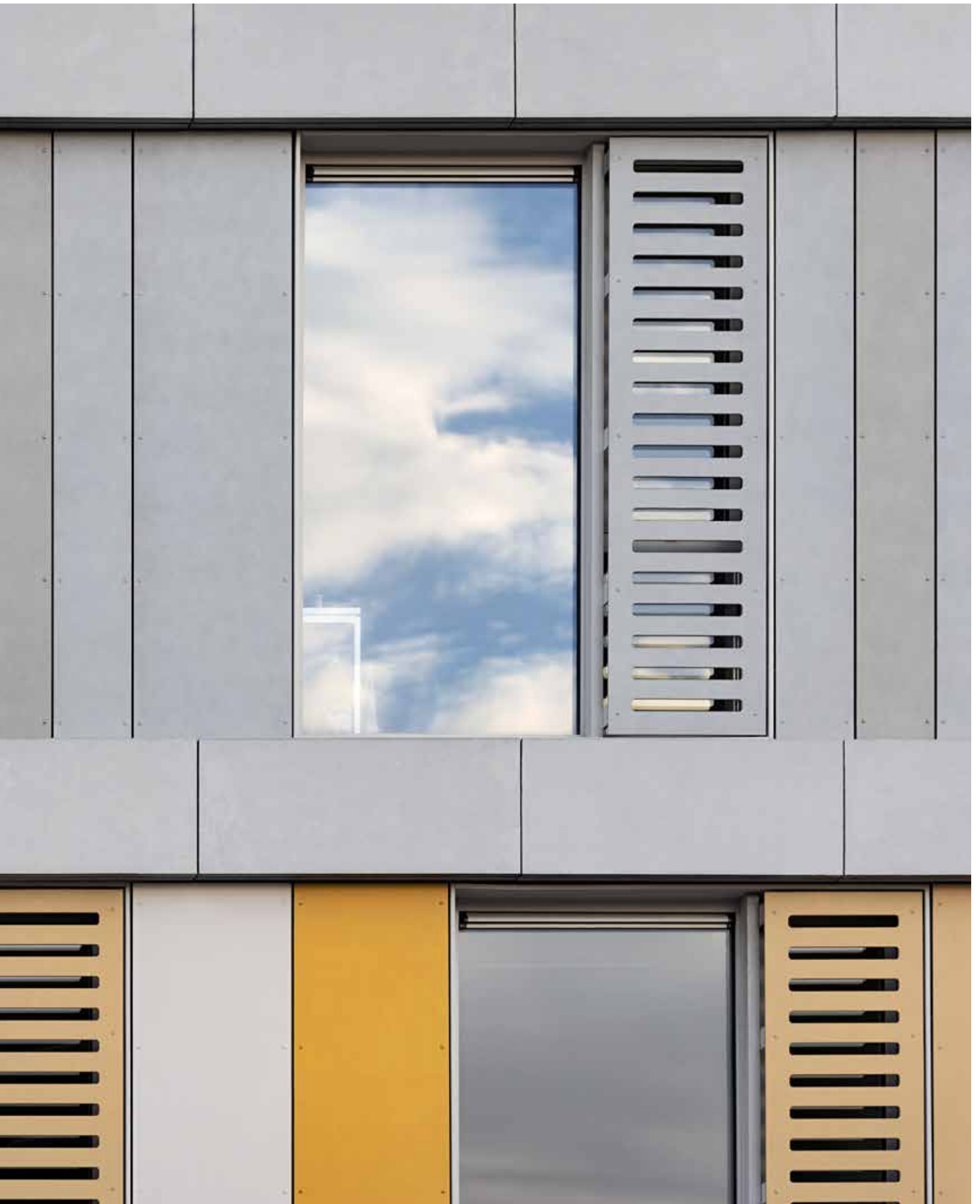
SECOND FLOOR



FIRST FLOOR 1:800

Between the granite-clad floor slabs are floor-to-ceiling Swisspearl panels in six color shades from ochre yellow to grey. The colored bands wrapped horizontally around the house give the house its own character. The windows for ventilation are safely housed next to the fixed glazing and behind the milled Swisspearl panels.

LOCATION: Western Road, Cork, Ireland
 CLIENT: Global Student Accommodation, Pembroke
 ARCHITECTS: DTA Architects, Dublin
 BUILDING PERIOD: 2019
 FAÇADE CONSTRUCTION: SIAC Roofing & Cladding, Cork
 FAÇADE MATERIAL: Swisspearl Largo Carat Sahara 7002, Onyx 7090, 7091, Nobilis Crystal 125, Reflex Platinum 9020, Gold 9272





JOINT HEALTH SCIENCES CENTER

HOK

A Collaborative Research Center

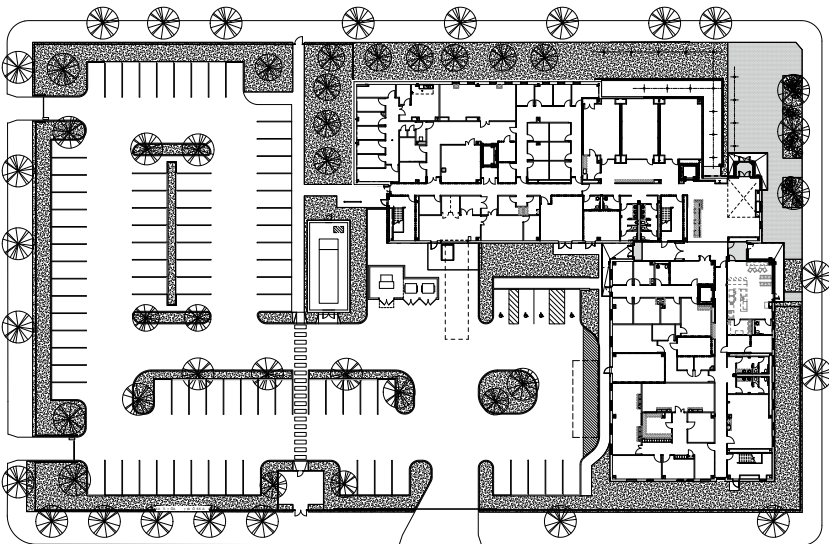
Rowan University, Science and Education Building, Camden, USA

The Joint Health Sciences Center exemplifies Camden's resurgence as a hub for medical research and education. The 9,290-square-meter facility has been designed to bring together students from different academic disciplines to share laboratories, equipment, and classrooms, exposing them to a broader educational experience.

The objectives of Camden's new Joint Health Sciences Center are first, to support initiatives that lead to the development of products and to bring those products to market; second, to attract research-based businesses, which, in turn, help build the economy of South Jersey, and finally, to develop pathways to improve the population's health programs. This multidisciplinary science and education building in Camden's "eds and meds" corridor brings together academic programs from three separate institutions in a collaborative research environment. The building is used by Rowan University, Rutgers-Camden, and Camden County College for research, education, and training as well as by the Cooper Medical School and the Joint Board of Governors administrators, who will also have a presence in the facility. The design incorporates the MESH Economy Model that collocates faculty and students from different disciplines to share equipment and facilities. This strategy saves money and spurs

collaboration. Approximately two-thirds of the space is dedicated to research, multi-purpose rooms, and offices focused on biomedical research. Communal areas include a first-floor café and a rooftop terrace with views across the city.

The building has been expressed as an ensemble of volumes clad in various materials. By subdividing the L-shaped form into separate volumes of varying heights and combining glass and Swisspearl panels, the scale of the four-story facility has been significantly reduced. A glazed volume cantilevers up towards the northeastern street corner intersection, and the light-grey Swisspearl cladding is cut at an angle on the northern elevation, thus creating a sense of dynamic. A random pattern of lighter and darker grey Swisspearl panels mounted vertically creates a playful aesthetic. The entrances of the facility have been emphasized by cantilevered slabs extending out into the pedestrian sidewalk zone.



FIRST FLOOR 1:1200

LOCATION: 201 South Broadway, Camden, NJ, USA
 CLIENT: Rowan University, Rutgers-Camden and Camden County College (Joint Ownership)
 ARCHITECTS: HOK, Philadelphia, PA
 BUILDING PERIOD: 2018–2019
 FAÇADE CONSTRUCTION: Town and Country Roofing and Siding, Inc., Bensalem, PA
 MATERIAL: Swisspearl Largo Carat Crystal 7010 (HR), Reflex Crystal 4111

The L-shaped building has two faces. On the entrance side, the building has been divided into different volumes of varying heights. The building seems to further dissolve due to the façade design with variously colored Swisspearl panels and glass. The north-facing façade is clad in light-grey Swisspearl panels. Inside, in addition to the lecture rooms are also practice and application areas, such as those found in hospitals.





DRAVITZKI BROWN

House Above the Water

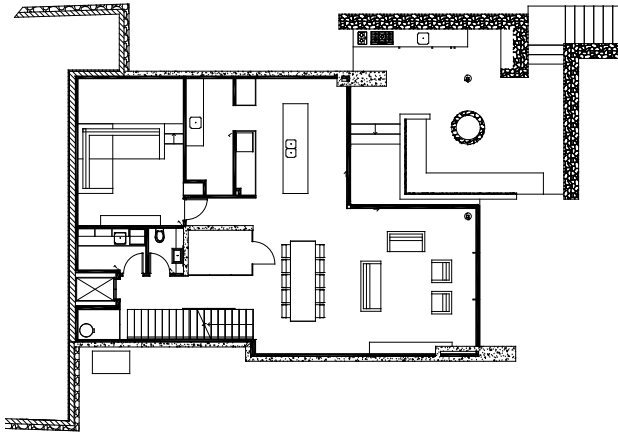
Lakes Edge House, Queenstown, New Zealand

Perched on a narrow, sloping site above Lake Wakatipu in Queenstown, New Zealand, Lakes Edge House enjoys superb views of the lake and the surrounding mountainous landscape. With its timber-clad base and dark Swisspearl-clad upper level, the house seems to hover precariously above the site.

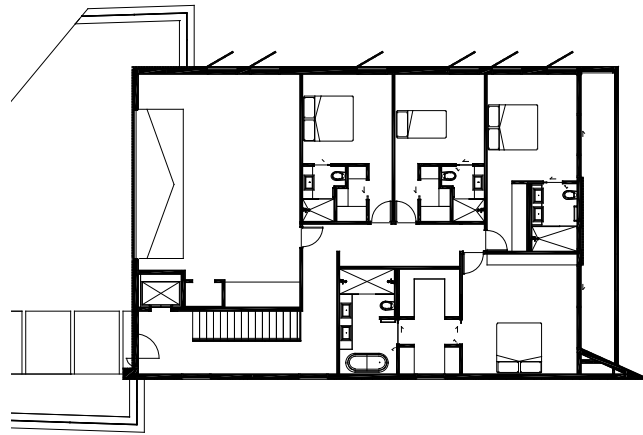
By using the topography as an asset rather than a liability, Dravitzki Brown Architects have managed to create a bold architectural statement in the landscape. Lakes Edge House is a compact double-story, single-family house accommodating three double bedrooms and a single bedroom, all with ensuite bathrooms on the upper level. This is also where the double garage and the entry hall are situated. The upper level forms a deep cantilever over the lower level, which makes the house seem to hover above the steep site. Cedar shutters in the bedrooms allow users to manipulate the façade to create openness or privacy depending on requirements. Both double bedrooms facing north open onto a sunny balcony that extends across the entire width of the plan. From the entry, one descends to the lower level where the open-plan kitchen, dining, and living areas are situated. A few steps down is an outdoor barbecue area with a circular stone fireplace and its very own draught beer. From the outdoor area, concrete steps descend all the way to the water's edge.

A wide palette of materials has been combined to create texture and give the house a haptic quality. These include: concrete, cedar, stone, and Swisspearl fiber cement panels. The concrete structure frees the façades as curtain walls in glass that open up to the magnificent lake views and make you feel a part of the natural landscape. Cedar lattice ceilings and timber veneer walls create a warm, cozy atmosphere and tie the building into the surrounding natural landscape. By creating a continuous surface of cedar from inside to outside and frameless glass on the northern end of the living room, the boundary between the interior and exterior has been blurred. The smooth, dark Swisspearl panels create a contrast of color and texture and are an appropriate choice of material to express the house's abstract nature.

Rob and Marie Wales, the owners of Lakes Edge, say that they “are thrilled at how our vision was transformed into the home we wanted—it's beautiful, meets all of our requirements, and is a joy to live in.”



FIRST FLOOR 1:300



SECOND FLOOR



LOCATION: Queenstown, New Zealand
CLIENT: private
ARCHITECTS: Dravitzki Brown, Queenstown
CONSTRUCTION PERIOD: 2019–2020
FAÇADE CONSTRUCTION: Carpentry South Ltd, Gore
FAÇADE MATERIAL: Swisspearl Largo Carat Black Opal 7024



The house sits on a narrow, sloping terrain. Due to the cantilever of the upper floor, the building seems to float above the site. The quiet façade of Swisspearl panels and glass is accentuated by the use of wood. The angled wooden slats on the upper floor protect against unwanted views and guide the gaze to the fantastic view over the lake.





JAKUB SUCHARSKI

One House, Two Faces

Herba House, Torun, Poland

Herba House has two distinct faces, closed to the street and open to the river. The “house” to the street facing northward is clad in black Swisspearl panels, while the southern part of the house consist of terraces that open out onto the riverside and cascade down the slope.

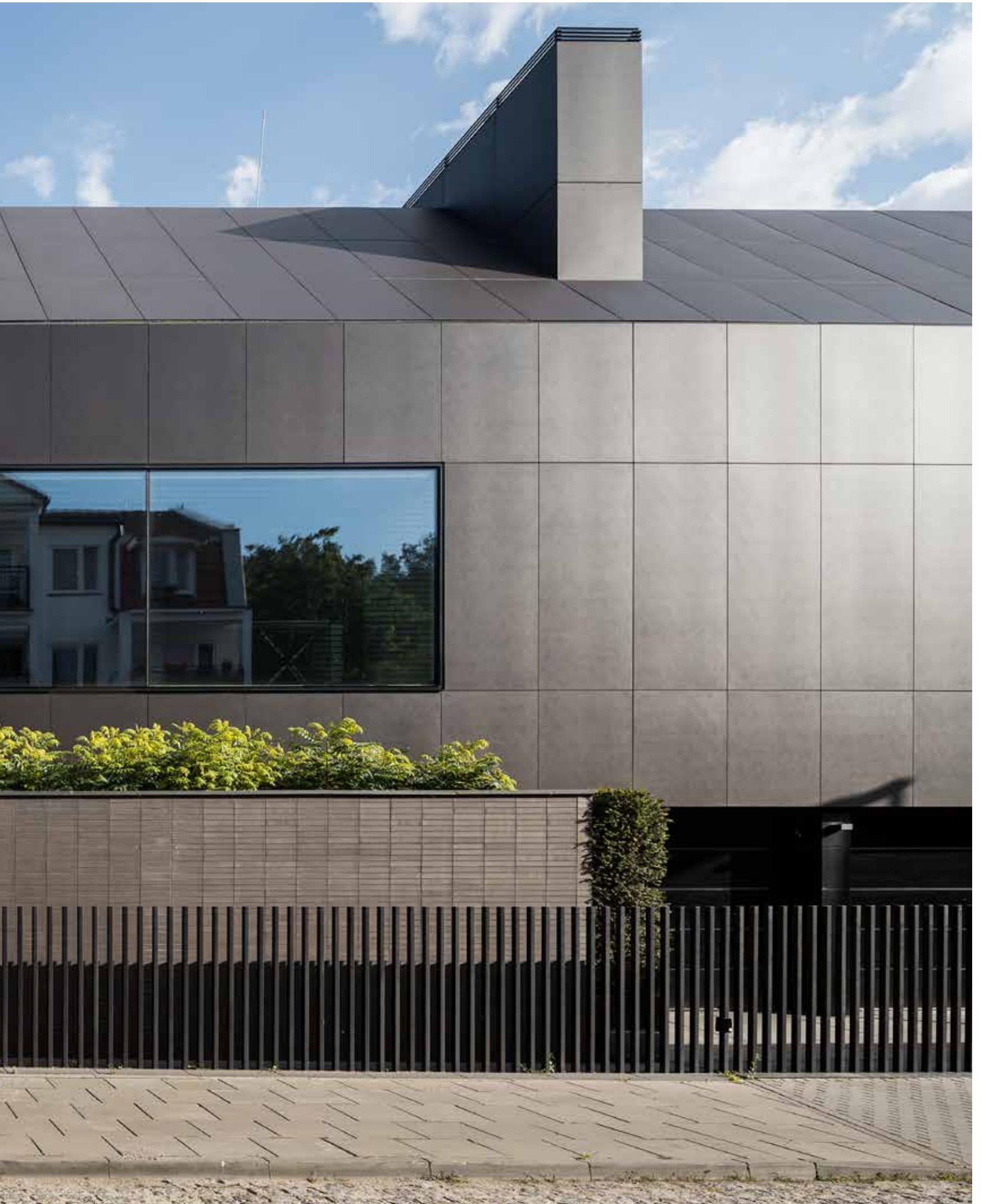
It would be easy enough not to recognize that the northern side of Herba House is the same building as the southern side. Architect Jakub Sucharski has conceived a building with two highly contrasting and distinctive faces: closed and opaque with a pitched roof to the northern street side, open and glazed with a flat roof to the southern side overlooking the river. The site is located between the river protection zone and the historic listed zone near the historical center of Torun City in northern Poland.

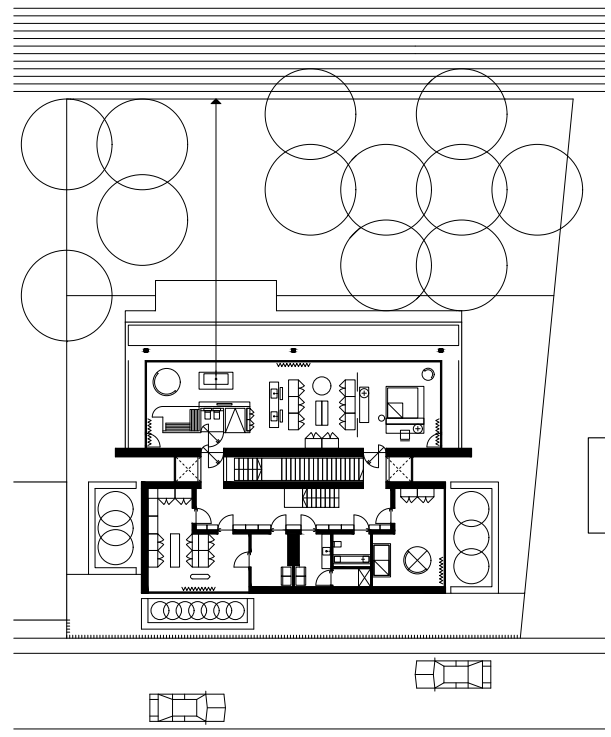
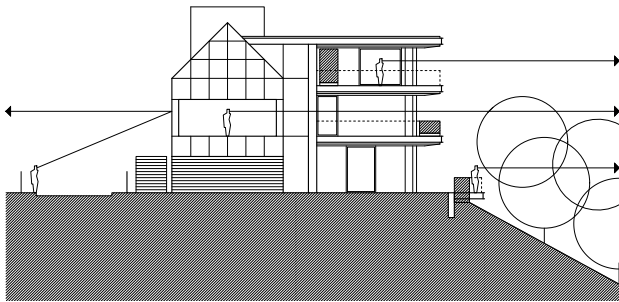
The dark pitched roof volume to the street side has been designed in deference to the local character of the streetscape. The uniform cladding in black Swisspearl fiber cement panels across the façades and roof as well as the lack of an eave overhang create an abstraction of the formal notion of a house. Located in this volume are the double garage, laundry, and technical rooms. A single, large horizontal window faces onto the street. The internal staircase between the front and the rear of the house creates a clear intermediary circulation zone and

further separates the open and closed north and south zones of the house. A vertical wall embraces the southern section of the house and creates a further physical demarcation between the distinct front and rear faces of the house.

All of the bedrooms and communal spaces, open-plan living, dining, and kitchen open out to the south facing the river, which is a conservation zone. These spaces are bathed in natural light. Sucharski sought to blur the boundaries between indoors and outdoors by specifying large glazed sliding doors opening onto wide terraces that seem to cascade down the sloping site. Furthermore, both indoors and outdoors, the floors are finished in timber, again blurring the distinction between outdoor and indoor spaces. A generous outdoor living space on the ground floor terrace cantilevers dramatically over the slope. The architect has used planting and glazed balustrades to invite the natural landscape and views into the living areas of the house.







FIRST FLOOR 1:500

LOCATION: Torun, Poland
 CLIENT: private
 ARCHITECTS: Jakub Sucharski, Poznan
 BUILDING PERIOD: 2017
 FAÇADE CONSTRUCTION: Bausan Aluminium, Torun
 MATERIAL: Swisspearl Largo Carat Black Opal 7021 (R), 7024

The street side of the house speaks a completely different language than the garden side.

Facing the street, it presents itself as an abstract building with a gable roof. The façade and roof are clad entirely in black Swisspearl panels. Towards the sloping garden, the house seems to dissolve into levels that erase the boundaries between indoor and outdoor spaces, thus blending the living space with a nature vista.





Self-Sufficient Living

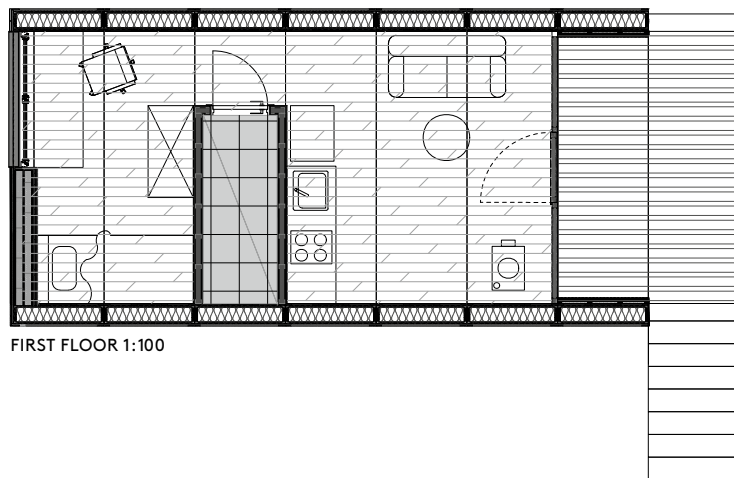
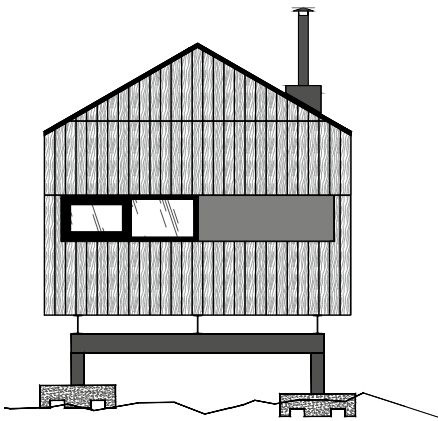
Wiki House, Gachuurt, Ulaanbaatar, Mongolia

As a society, we face huge construction challenges: we not only need to build millions of homes, schools, and other buildings, but these buildings need to be low-energy, low-carbon, and built to maximize our wellbeing. Wiki House in Mongolia has been constructed using a digitally manufactured building technology with low carbon emissions, minimizing heat loss and waste. It is also energy efficient and was easy to construct.

Gachuurt, a village east of Ulaanbaatar, is one of the coldest places on earth. The extreme seasonal changes record highs of 36 degrees Celsius and plunging temperatures of minus 42 degrees during the long winter months. But Wiki House does not need to be heated during the daytime in winter, as it is heated by sunlight and has minimum heat loss. The compact cabin is a pertinent example of an environmentally-friendly building that addresses the building industry's challenges.

A mere 27 square meters in size, it accommodates a single bedroom, bathroom, and open-plan kitchen/dining/living area that opens onto an outdoor deck overlooking the vast expanse of desolate landscape surrounding the house.

The home is built on a timber platform that is supported by three steel I-beams above the rocky terrain, and is the first house in Mongolia to use this technology. With its simple, pitched roof, the cabin reinterprets the single-story, cabin-like houses that are scattered throughout Gachuurt. For the exterior cladding, the architects chose a combination of untreated timber and red Swisspearl panels. The architects found that "the Swisspearl panels not only pair well with the color of the wood, but also blend in with the surroundings, whilst making the building stand out." Wiki House certainly creates an accent of bright color in the tawny-colored Mongolian hills.



LOCATION: Tsergiin Bulag, Gachuurt, Ulaanbaatar, Mongolia
 CLIENT: private
 ARCHITECTS: Badral Bayaraa, Ulaanbaatar
 CONSTRUCTION PERIOD: 2020
 FAÇADE CONSTRUCTION: Render LLC, Ulaanbaatar
 FAÇADE MATERIAL: Swisspearl Largo Carat Coral 7031



The small house asserts itself in the harsh climate of Mongolia. Due to its compact and well-insulated design, it defies the long winter months and does not require heating during the day even in sub-zero temperatures.

The shape of the house is based on the small, one-story houses that characterize the landscape in this area. The wooden house stands on a wooden platform with an I-beam underneath, which stands out from the stony floor. On the front side and below the eaves edge, where the façade is particularly stressed, both functional and design accents were set within the red, robust Swisspearl panels.



Flash 1

Carbona Apartments, Hévíz, Hungary

BM Építész Kft.

This apartment block in Hévíz, Hungary is an excellent example of how Swisspearl panels can be implemented in diverse ways to adorn façades. Custom-made patterns have been cut into the panels to create lively patterns. The curve of the primary body of the apartment building is emphasized by a projecting entry structure that has been clad in such perforated Swisspearl panels. The delicate round perforations in varying sizes form an organic pattern and allow rays of light to shine through the panels. Swisspearl panels have also been employed as vertical sliding shutters on the balconies of the upper floors.

LOCATION: Hévíz, Hungary

CLIENT: Preventimed XXI Kft., Budapest

ARCHITECTS: BM Építész Kft., Budapest

BUILDING PERIOD: 2020

FAÇADE CONSTRUCTION: Meilinger Kft., Győr

FAÇADE MATERIAL: Swisspearl Largo Carat Onyx 7090 (perforated)



Flash 2

Forbes Office Building, Annapolis, USA

GriD Architects

107 Forbes is a new, single-tenant office building facing Rowe Boulevard, a prominent location at the gateway to the city's historic center and West Annapolis neighborhood. The new building replaces a group of commercial buildings along Rowe Boulevard. In order to get permission for the building, it had to fit within the existing footprint and maintain a similar volume, height, and floor area. The ground floor façade is constructed from timber cladding and glass, while the upper floor is clad in thin horizontal strips of overlapping grey Swisspearl panels. Large windows bring ample light into the interior. The upper floor cantilevers over the lower level longitudinally creating the impression of a floating box.

LOCATION: 107 Forbes Street, Annapolis, MD, USA

CLIENT: MRE Capital, Annapolis, MD

ARCHITECTS: GriD Architects, Annapolis, MD

BUILDING PERIOD: 2019

FAÇADE CONSTRUCTION: Chesapeake Siding Contractors, Inc., Elkridge, MD

FAÇADE MATERIAL: Swisspearl Largo Reflex Dark Silver 9222



Impressum

The internationally distributed magazine *Swisspearl Architecture* sets Swisspearl fiber cement products within a contemporary architectural context.

Subscription

Swisspearl Architecture Magazine can be ordered, subscribed to, or downloaded: info@swisspearl.com or swisspearl.com/quicklinks/submag

Publisher

Swisspearl
CH-8867 Niederurnen
Switzerland
phone +41 (0)55 617 11 60
info@swisspearl.com
www.swisspearl.com

Advisory board

Michèle Rüegg Hormes, Advisory Council for Architecture, sparc studio
Martin Tschanz, architectural theorist and lecturer ZHAW

Editorial committee

Nina Speich
Hans-Jörg Kasper
Jürg Schönenberger
Robert Wirichs

Project Manager

Nina Speich, Glarus

Editor

Michèle Rüegg Hormes, Zurich

Editing

Anna Roos, Berne
Marion Elmer, Zurich

Translation

Lisa Rosenblatt and Charlotte Eckler, Vienna

Design

Schön & Berger, Zurich

Detail plans

Deck 4, Zurich

Printing company

Buchdruckerei Lustenau, Lustenau

English edition

ISSN 1661 – 3260

Contacts

Headquarters

Head of International Sales
Robert Wirichs
+41 79 644 60 63
robert.wirichs@swisspearl.com

Office Manager Export
Sandra Rossi-Winteler
+41 55 617 13 34
sandra.rossi@swisspearl.com

Export Marketing
Nina Speich
+41 55 617 12 66
nina.speich@swisspearl.com

Order Processing
+41 55 617 13 54
orders@swisspearl.com

Head of Transport Disposition
Marlies Gebbs
+41 55 617 13 85
marlies.gebbs@swisspearl.com

Area and Regional Managers

Africa & La Réunion
Victor Valero
+34 636 610 861
victor.valero@swisspearl.com

Asia Pacific
Robert Wirichs
+41 79 644 60 63
robert.wirichs@swisspearl.com

CIS Countries & Russia
Susanna Agne
+43 664 60011313
susanna.agne@swisspearl.com

Denmark & The Netherlands
Robert Wirichs
+41 79 644 60 63
robert.wirichs@swisspearl.com

Eastern Europe
Susanna Agne
+43 664 60011313
susanna.agne@swisspearl.com

France, Luxembourg, Belgium
Victor Valero
+34 636 610 861
victor.valero@swisspearl.com

India, Near & Middle East
Victor Valero
+34 636 610 861
victor.valero@swisspearl.com

Italy

Enea Spini
+41 79 420 22 93
enea.spini@swisspearl.ch

Mainland China, Hong Kong, Taiwan

Chen Wei
+86 186 0175 5719
wei.chen@swisspearl.com

Norway

Sigurd Sandvik
+47 99 60 90 25
sigurd.sandvik@swisspearl.com

South Eastern Europe

Janez Flere
+386 5 392 16 05
janez.flere@eternit.si

Sweden

Anders Lindén
+46 703 86 71 60
anders.linden@swisspearl.com

Turkey

Hansruedi Leuzinger
+41 79 159 79 10
hansruedi.leuzinger@swisspearl.com

USA & Canada

Harry Harisberger
+1 636 698 5505
harry.harisberger@swisspearl.com

Western Europe & Latin America

Victor Valero
+34 636 610 861
victor.valero@swisspearl.com

Technical Advisors

Asia, Middle East, France, Russia, Scandinavia
Hansruedi Leuzinger
+41 79 159 79 10
hansruedi.leuzinger@swisspearl.com

Europe, Latin America, Pacific

Victor Valero
+34 636 610 861
victor.valero@swisspearl.com

USA & Canada

technicalusa@swisspearl.com

**SWISS
pearl®**



Credits

Photos

Front cover, p. 2/3, 4 bottom, 8/9, 12–16
Steinkamp Photography,
James Steinkamp, Hinsdale, IL
p. 4 above, 6/7 Peter Molick Photography,
Houston, TX
p. 20 Theo Herzog, St. Gallen
p. 22 Andrea Badrutt, Chur
p. 23 above Ivan Brodey, Oslo
p. 23 middle Acorn Photo, Robert Frith,
Subiaco
p. 23 bottom left Jürg Hostettler, Zurich
p. 23 bottom right Meraner & Hauser, Bozen
p. 24–31 Samuel Trümpy Photography,
Ennenda
p. 33 Daniela Droz & Tonatiuh Ambrosetti
Photographes, Penthalaz
p. 34/35 Gianni Bomèn, Zurich
p. 36, 38–43 Meraner & Hauser, Bozen
p. 44–49 Ema Peter Photography, North
Vancouver, BC
p. 50–55 Architekturfotograf Rasmus
Norlander, Zurich
p. 52 bottom Sunniva Rosenberg, Oslo
p. 56–59 Bert Leandersson, Gothenburg
p. 60–67 Kevin Scott, Seattle, WA
p. 70/71 Michael Gazzola, Fitzroy
p. 72–81 Meraner & Hauser, Bozen
p. 82–85 James Ewing/JBSA, New York
p. 86–89 Dravitzki Brown Architecture,
Dalefield
p. 90–95 Jakub Certowicz, Piechowice
p. 96–99 Luubat Gansukh, Ulaanbaatar
p. 100 Meraner & Hauser, Bozen
p. 101, Back Cover Brycen Fischer, Baltimore,
MD

Legal notes

Texts, images, photos, and graphic work in this publication are protected by copyright and other intellectual property rights. Rights to the texts are owned by the authors in all cases. The contents of this publication may not be copied, distributed, altered, or made available to third parties for commercial purposes. Furthermore, some pages include images, the copyrights of which are owned by third parties.

This publication has been assembled with the greatest possible care. Nevertheless, the publisher cannot guarantee freedom from error and the complete accuracy of the information it contains. The plans have been kindly provided by the architects. The detailed plans have been reworked for greater legibility; the editors are not able to guarantee their accuracy.

Colors

Swisspearl offers a great number of different colors and surfaces. The complete current range is shown here. Next to each sample are the page numbers in the current issue where examples of its use can be found.

Carat

	Sahara 7000
	Sahara 7001
	Sahara 7002 → p. 76
	Crystal 7010 → p. 82
	Black Opal 7020
	Black Opal 7021 → p. 50, 90
	Black Opal 7024 → p. 44, 86, 90
	Black Opal 7025 → p. 56
	Coral 7030
	Coral 7031 → p. 96
	Coral 7032
	Azurite 7040
	Azurite 7041
	Jade 7050
	Sapphire 7060 → p. 2, 60
	Sapphire 7061
	Topaz 7070
	Topaz 7071
	Topaz 7073 → p. 68
	Amber 7080
	Amber 7082
	Onyx 7090 → p. 60, 76, 100
	Onyx 7091 → p. 76
	Onyx 7099 → p. 2
	Agate 7219

Gravial

	Crystal 125
	Granite 624
	Amber 723
	Anthracite 3020
	Ivory 3090
	Ivory 3099

Vintago

	VI 001
	VI 011
	VI 021
	VI 031
	VI 040
	VI 050
	VI 061
	VI 071
	VI 091
	VI 100

Vintago-Reflex

	VIR 9000
	VIR 9221
	VIR 9292

Avera

	AV 000
	AV 010
	AV 020
	AV 030
	AV 040
	AV 050
	AV 060
	AV 070
	AV 100

Reflex

	Anthracite 4021
	Anthracite 4022
	Coral 4031
	Jade 4051
	Amber 4071
	Amber 4072
	Ivory 4091
	Ivory 4092
	Crystal 4111 → p. 82
	Crystal 4112
	Granite 4161
	Granite 4162

Nobilis

	Crystal 122
	Crystal 123
	Crystal 124
	Crystal 125 → p. 76
	Anthracite 221
	Azurite 421
	Azurite 422
	Jade 521
	Jade 522
	Granite 622
	Granite 624
	Amber 721
	Amber 723

Terra

	Amber 751
	Amber 752
	Amber 753
	Amber 754
	Amber 755
	Amber 756

Planea

	Skylighth 131
	Midnight 231
	Coral 331
	Dragon 332
	Crimson 333
	Ruby 334
	Cactus 531
	Jungle 532
	Sunrise 831
	Sunset 832
	Snowflake 930
	Igloo 932
	Seashell 933

