Canada
Research institute
Extension plays on contrasts

South Korea
Church
Standing the test of time

France
Collective housing
New complex roofed in zinc and thatch

Sweden
Rocket school
Stars in the sky
Dear readers,

The past few issues of Focus on Zinc, especially last year’s Archizinc Trophy N0. 5, confirmed a significant increase in the use of our material worldwide. VMZINC products and systems are now being installed on all 5 continents in all climates.

It is a pleasure for us to observe how architects outside Europe are discovering our material and enthusiastically experimenting with it. They are making it their own and using the vocabulary of local architecture and practices, to create original installations that are sometimes very different from usual techniques: stretched, folded, pleated, cut or perforated, their zinc surfaces boldly combine colours and materials. Architects want zinc to be visible and are applying it prominently on facades.

These new approaches enrich our material and strengthen its position as a noble material for architecture.

In this issue you will discover exceptional projects and programmes of varying dimensions. You will see that, although zinc is traditionally an urban material, it can be used to roof gracefully the nave of a Korean temple in the middle of the countryside, or for the envelope of a house enclosed in a former industrial building.

Zinc is also suited to differences of scale, and according to the technique used can elegantly clad the envelope of a modest private house, a shopping centre, a concert hall or a wine cooperative.

Finally, in reference to the title of this magazine, we decided to conclude this edition for the first time with a focus on construction details from some exceptional projects. These details are highlighted as examples to illustrate that with zinc, architects can create complex details on their buildings.

We hope you enjoy reading this thirteenth issue, over 60,000 copies of which will be distributed worldwide.

Franck Martinelli
VMZINC Commercial Director
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Koblenz is a small mediaeval town in western Germany that takes its name from its geographic location. Koblenz derives from the Latin confluentia, confluence, in this case the meeting of the Rhine and the Moselle. The new headquarters of RTI Sports - a distributor of sports articles for mountain biking, trials and other sports - is located on the banks of the Moselle. The plot is part of an industrial zone separated from the historic town centre by the river. In this suburban context, the architects from the 2BxL studio (Behet, Bondzio and Lin) attempted to recreate the industrial characteristics of the town centre while remaining minimalist. This two-storey building is like a black cube perched on wooden piles, which were necessary to protect the premises from flooding. The layout of the building is similar to that of an office block: interior spaces are laid out around a central services hub, a circular corridor leads to the various rooms: meeting rooms, individual and shared offices. The repetitivity of the programme is not visible on the facade: tall wide windows, like those in an artist's studio, alternate with small windows, typical of an apartment building. The hybrid shape enables the building to blend into this technology park while asserting a strong identity. The final distinguishing feature: a skin of dark grey zinc, selected for its durability and the fact that it is elegant yet discreet. An appropriate attitude for a company that adopted the slogan “less is more”. The accuracy of this slogan, first used by famous architect Mies van der Rohe, is illustrated yet again in this building.

Photos: Jörg Seiler, Germany.
Drawing: Behet-Bondzio-Lin Architekten, Germany.

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Photos: Jörg Seiler, Germany.
Drawing: Behet-Bondzio-Lin Architekten, Germany.
Belgium

The beauty of ruins

Extending the old with the new: for centuries, architecture was all about re-use, until abundance of materials made recycling and recovery obsolete.

Although sustainable development today encourages recycling of materials and buildings, re-use is not always a given and the first obstacle is the condition of the objects to be re-used. It seemed a difficult task to give new life to this derelict farm building on the outskirts of the Belgian town of Grimbergen.

The Urban Plan granted permission to build four new houses on this plot occupied by an old barn and a small outbuilding, both in very poor repair. But the owner, who was attached to the beauty of this miniature ruin, asked the architect to retain the existing walls and build a single house.

Having removed the roof, the architects from the MarS studio inserted a metal structure behind the brick walls in order to install the new facades and floors. The entrance was placed in an empty space between the barn and the outbuilding, framing a view of the field to the rear of the house. The former entrance is now a large window that creates transparency between the front and the rear of the house. The new horizontally installed sine wave zinc cladding is reminiscent of the old farm sheds in corrugated galvanized steel and creates a clear distinction between the new and the old. The link between the two buildings recalls the symbiotic relationship between certain shellfish and their shells at the bottom of the ocean.

Could the MarS Architecten have been inspired by the strategy of the Hermit Crab?
Architecture and quantum physics are not incompatible: the Perimeter Institute for Theoretical Physics in Waterloo demonstrates this. The research institute, which specialises in the most sophisticated physical theories and has been located on the local university campus since 1998, has just doubled its surface area, providing its researchers with an extension that has already received several awards. Designed by the Teeple studio, it plays on contrasts. The first phase of the Perimeter Institute was designed by Saucier & Perrotte architects and features a line of cubic volumes tracing a border between the town and the surrounding landscape. The rear facade overlooks a small lake and serves as the main facade. The new phase is dedicated to Nobel Prize winner Stephen Hawking, and its distinctive feature is its jagged shape. It resembles the natural, organic form of a meteor or a rock, or the chaos of a cloud of atomic particles. The breaks in the facade layout and the positioning of the windows in rows with varying sill and lintel heights give the building a dynamic, unstable appearance. On the side facing the gardens, the architecture is more rectilinear in style. The large windows create continuity between the new and old sections of the institute. After the agitation visible on the facade and the large fissure of the entrance, the neutrality of the interiors and the view over the gardens create a calm atmosphere conducive to research work. The use of materials cultivates a logic of ambiguity. Zinc, which was already used on the existing facades, unites the two entities. This unity is contradicted by the gold colour of the windows, which did not feature in the first phase of the Institute. Gold and zinc are also the 30th and 79th elements in Mendeleev’s Periodic Table of Elements, a detail that even researchers with absolutely no interest in architecture cannot fail to notice.
Standing the test of time

The island of Jeju, a block of Korean territory located in the strait that connects with the Sea of Japan, sums up Jun Itami’s career. A Korean national born in Tokyo in 1937, this architect spent most of his career in the land of the rising sun. In later life, he decided to return to his roots in an effort to solve his identity issues: in Korea people thought he was a Japanese architect and vice versa…

At the age of 61, he opened a studio in Seoul. He designed several remarkable projects, including a good number in Jeju, before he died in 2011.

He designed a series of high quality residences on the island, providing accommodation for tourists attracted by the beauty of this site shaped by volcanic activity. He also designed three buildings that can be classified somewhere between architecture and sculpture, constructions installed in nature and built around emptiness: a wind museum, a water museum and a stone museum, where the elements and materials take on a religious significance.

Building the Jeju church placed the architect in direct contact with the sacred. The simple volume of the building, which faces towards the horizon, is reminiscent of a nave, like the upturned ships said to have housed the first churches. The church walls are glass, the roof is entirely covered in triangular shingles made of stainless steel and zinc (QUARTZ-ZINC® and ANTHRA-ZINC®), chosen above all for its elegance and malleability. Its flexibility made it possible to make flat flashings in complex configurations: six joints converge at the tip of each triangle. But apart from this technical imperative, zinc was perfect for Itami, who always preferred natural materials for his projects: wood, terracotta, metal, and stone. Itami was influenced by the artists of the Mono-Ha movement, who sought to create artistic effects by combining and superimposing raw materials. This approach that was coupled with the architect’s aesthetic preoccupation with patina. Ageing of materials, such as the self-protective coating that forms on zinc over time, is borrowed from sabi, which literally means a change in material. Figuratively, the term designates a calm, melancholic atmosphere creating the impression that time has taken its toll on objects. The church in Jeju seems to be calmly waiting for the years to pass.
Italy

Industrial finesse

Since the Santa Margherita winery was created in 1935 by Count Gaetano Marzotto, a prominent figure in local industry, wine-making and innovation have remained the two cornerstones of its activity.

The wine production facilities are now the core of a small working class town in the heart of the Veneto countryside. Following along the lines of industrial localities like Crespi d’Adda, a rural area in Lombardy where, in 1877, a whole village was built around its weaving mill, Marzotto, a paternalistic boss, had housing, schools and recreational facilities built close to the winery for his workers.

Over time, the winery expanded. As with all organic growth at industrial sites, where functionalism and the imperatives of the process guide the construction of new buildings, problems of architectural coherence were encountered. The Westway studio was selected to give architectural coherency to this heterogeneous site, destined to boost wine tourism in the area.

The recent enthusiasm for gastronomy, associated with a sophisticated lifestyle, is positive for the high-end image of the winery. Integrating luxury into an industrial site was part of Westway’s brief.

An overhang that is 6.5 metres high and 40 metres long defines the structure of the project with an area sheltered from the rain that forms a link between a bottle storage area, offices and the area dedicated to wine making. The strong assertive design of this building is highlighted and strengthened by the red PIGMENTO® zinc panels used for the cladding, an immediate reference to the wine. The panels create horizontal designs along the upturn of the roof, which on the short side of the building becomes the frame for a section of translucent wall created by hundreds of stacked bottles.

Back-lit at nightfall, these bottles illuminate the renovated complex.
Photos: Pier Mario Ruggeri, Italy
Drawing: Westway Architects, Italy
France

Of zinc and thatch

The hamlet of “Le clos des fées” features 20 housing units. This is hardly on the scale of a metropolis, but for Paluel, a small town of 500 inhabitants, it represents a whole new quarter. The complex is built on the outskirts of the town, on a former agricultural plot with sea and countryside views. Made up essentially of private houses, it is an alternative to stereotypical housing estates.

The general layout gives priority to public spaces: road traffic is confined to the edge of the plot, with pedestrian streets and small squares occupying more central positions. Landscaping contributes greatly to the quality of the project, which is like a residential park. By preserving a large area of planted land, natural drainage of rainwater was ensured. A section of the park features sculptures honouring the miracle of electricity, making obvious allusion to the production of electrical energy that is so important in Paluel, which has been home to a nuclear power station since 1986.

As well as private houses, there is one collective housing unit, two holiday cottages and gardening activity areas: the site is close to gardens that are visited by tourists from all over the world.

The various buildings were constructed using traditional techniques but with contemporary installations. This is visible in the hybrid roofing of the accommodation, a gable roof with one slope in light coloured preweathered zinc and the other in thatch. The architects from the COBE studio used mostly thatch for the roofs facing north towards the sea. The roofs facing south, towards the village, are covered in zinc. This choice was dictated by exposure to the sun rather than to harsh weather.

The accommodation is equipped with appliances powered by renewable energy. Zinc is used where protrusions from the roof - domestic hot water collectors, exhaust ducts for wood-burning stoves - require a material that is perfectly waterproof.

France

Collective housing
Le clos des fées eco-village, Paluel
Architect(s)
COBE Architecture
Contractor
Goujon Vallée
Technique(s)
VMZ Standing seam
Aspect(s)
QUARTZ-ZINC®
Surface in zinc
2,500 m²
Kiruna is a town with a singular destiny. Its eighteen thousand inhabitants live in the northernmost town in Sweden, in the heart of Lapland, 145 kilometres north of the Arctic Circle. In 1900, the presence of iron ore and gold justified the creation of a town in this isolated inhospitable territory with an extremely harsh climate.

But although the ground in Kiruna is often covered in ice, the sky is full of stars. In parallel to the mining activity that devours its subsoil, the town has the ambition to become a gateway to space travel. Rockets and sounding balloons are launched nearby. Airbus has just decided to conduct extreme cold testing here for some of its planes. And Spaceport Sweden may set up its first commercial space flights from here.

Raket Skolan - the rocket school - is an educational building that makes a clear allusion to space exploration, highlighting the scientific vocation of this Arctic town. The windows of the main facade are coloured circles reminiscent of rocket nozzles ready for takeoff. The cladding in ANTHRA-ZINC® is capable of resisting the harsh climate and emphasises the effect of these windows, alluding to the heat shield in American space shuttles.

Although the zinc is reminiscent of the ore extracted from the town’s subsoil, the idea of mobility conveyed by this architectural rocket raises a typically Kirunian problem. The town is ravaged by mining galleries and could collapse. A schedule to move the town has been agreed: it should be complete by 2099. A deadline that should allow the “rocket” school to turn on its engines and head for a new launch ramp!
Photos: Bosse Lind, Sweden.
Jeweller Alex Monroe’s new premises are surprisingly compact: a jewellery studio, a store, a storage area and offices all share a surface area of 120 m² over five floors. This building would look at home in a Japanese city. Deborah Saunt and David Hill from DSDHA architects compare it to a Pencil Biru (literally, pencil-shaped office). Micro towers erected on tiny plots like this are a familiar sight in large Japanese cities. But this is not Tokyo, it’s Snowsfields, a protected area of London. The outline of the Shard, the skyscraper designed by Renzo Piano, looms on the horizon. The vertical mass of Guy’s Hospital is also nearby. Although this jewellery store is modest in size, its highly crafted facade, with its series of vertical lines, emphasises its height and creates an echo of the area’s imposing buildings. At the top of the building, a terrace concealed by guard-rails provides a full view of the sky, as on the roof terrace of a tower block.

Before moving to Snowsfields, Alex Monroe shared premises with DSDHA. The jeweller asked his office-mates to design his new headquarters on a triangular plot positioned between a building and a rear courtyard. The layout blends harmoniously with the surroundings: aligned with the existing building, the new building forms a figurehead that completes these historic buildings. The ambition of the project is inversely proportionate to its size: the building is a showcase for a rapidly expanding brand.

The client wanted the same openness to the exterior as in his previous offices. The architect used a structure of pre-fabricated timber panels, allowing large openings in minimal wall thickness. These windows are barely visible from the street: they vanish behind the pleated lines of the facade. Square-section blades covered in PIGMENTO® red create a filter between private and public spaces. They echo the pleated motif of the facades. The crafting of the zinc is like the equivalent of jewellery for building, striving for a rare elegance and celebrating the return of craftsmanship to the area.

**United Kingdom**

**The silversmith and the architect**

**Commercial Buildings**

Jewellery Store, London

**Architect(s)**
John Zhang - DSDHA

**Contractor**
Roles Broderick Roofing Ltd.

**Technique(s)**
Locally produced bespoke panel

**Aspect(s)**
PIGMENTO® red

**Surface in zinc**
120 m²

![Image](image-url)
Lasting continuity

The Hongo campus of the University of Tokyo is like a city within the city. After the 1923 earthquake, it was completely rebuilt in a neo-gothic style. In the 1970s, architect Hisao Kohyama was made responsible for the entire site and tried to reconcile preserving the site’s identity with the development requirements as an internationally renowned university.

Ito International Research Centre, named after the donator, is one of the latest buildings designed by Kohyama on the university campus. It is frequented by Japanese and international researchers working on international relations.

In the urban landscape of Tokyo, the Ito centre has a distinctly European style. Its U-shaped layout creates an Italian-style square and its zinc roof makes it look a little like a Haussmann building. Although the architect made sketches of all the buildings around the square, he was only commissioned to design those in the centre and the left wing. The apparent simplicity of the architecture is deceptive and conceals a highly complex program that reveals itself on a visit to the building. The Indian red sandstone colonnades on the ground floor create a terrace around the building, called engawa in traditional Japanese architecture. The brick facades contribute to the integration of the new building into a complex made up of constructions that are mainly clad in terracotta tiles similar in size to bricks. But its use as a cladding and not as a structural material, the long unaligned windows and the use of an overhang make this a distinctly contemporary building.

For the architect, the new centre had to be more than just a building, it had to be a gateway to the campus, a new meeting place for the public, researchers and students.

The central square fills this role perfectly. Exclusively natural materials that age well over time were chosen to ensure sustainability of the building, according to Arata Ayai, the architect in charge of the project at the Kohyama Atelier.

The Ito Centre was built to last a century: an eternity in a city where the average life expectancy of buildings is just over twenty years!
Photos: Shigeo Ogawa, Japan.
Drawing: Kohyama Atelier, Japan.
A strange object surprisingly emerges from a housing estate in the canton of San Gallo, in Switzerland. Is it a sculpture? Or is it the ultimate fragment of a larger construction that has partly disappeared?

This cube in red PIGMENTO® is all the more intriguing as it appears to be a silent block with no windows, structured by joints with highly visible relief. The project came about because the owner wanted to convert his garage. When consulted, architect David Macullo proposed a roof extension that would enable him to use the remaining building permit for the plot to create an unlikely combination: a spa above a garage. The programme gives pride of place to introversion and privacy: the owners can enjoy total seclusion from the outside world as no windows face the neighbouring houses. The only view is of the sky. Wood cladding installed on the interior walls of the spa gives it a warm, cosy dimension. The material was cut in such a way as to highlight the relationship with the body: baseboards and slats have a human, domestic size.

The zinc block has hybrid functions and is deliberately mysterious. A large number of protruding joints conceal the garage door entirely until it is opened. For the architect, the red colour of the PIGMENTO® gives the zinc an unusual appearance, that of a raw material taken straight from the earth. It introduces colour into this otherwise monochrome residential setting, yet complements the dominant greenery of the neighbourhood. The vertical and horizontal joints blur the scale of this small extension, and at the same time create a dynamic play of shadows that burrow into or erase the surface of the block, according to sunlight.

The object does not reject its industrial dimension: “Its design is reminiscent of the many factories in this canton, and seems to share their DNA and pay tribute to the energy of the local population”, explains Davide Macullo. In other words, a monument disguised as a spa.

**Switzerland**

**A domestic monument**

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<td>Surface in zinc</td>
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France

A craftsman’s roof

Over the last twenty years, the city of Nantes has firmly established itself as one of the major scenes of French architecture. The city’s redevelopment, especially on the Ile de Nantes, focused on an old industrial area of over three square kilometres. Compared to that programme, the “Carrousel des Olivettes” project is modest. It involved the construction of forty housing units that are part of a redevelopment programme in an area close to the centre where cottage industries, craft trades and storage of foodstuffs are the main activities. The In Situ studio had designed “La Cour des Arts”, the first phase of the area’s redevelopment, where they created a public walkway in an old bus depot transformed into a sort of 19th century arcade leading to a park at the heart of the plot. The architectural vocabulary mingles materials and reflects the spirit of the place. “Combining materials in the right way is the most complicated task for the architect”, says Patrick Beillevaire, associate and co-founder of the In Situ studio. “We wanted to work in this register, which also allowed us to remind people of the area’s various past histories.”

The “Carrousel des Olivettes” mingles colours and materials using the same disparate architectural style as the “Cour des Arts”. At its summit we can see a strange object that is sometimes compared to a metal yurt. “The building is close to a very busy road, which is difficult to reconcile with the idea of quiet surroundings associated with housing. I wanted to make a roof that would make people think of the softness of a comfortable ottoman”, says Patrick Beillevaire. “The Compagnons du Tour de France(1) had their offices on the ground floor of the building that previously occupied the plot. I wanted the idea of skilled craftsmanship to be present in the creation of this roof. The form was obtained by deforming a double curve. To build it, we had to assemble heat-formed rafter frames, as in ship-building. The zinc workers made the shingles. The skills of the roofer, plasterer and locksmith were frequently called upon during construction” concludes Beillevaire. Zinc was perfect for the multiple intersections and changes in slope generated by this unusual volume. This work was like haute couture roofing for the contractor, who installed a roof that pays tribute to the dexterity of the Compagnons(1) from the building trade, while at the same time serving as an urban signal.

1. A French organisation of craftsmen and artisans dating from the Middle Ages
Photos: Paul Kozlowski, France.
The Netherlands

Major and minor

A double-sloped roof placed on top of a cube: these few words sum up what seems to correspond best to the concept of a house in the western world. The stereotype is so deeply rooted in the collective subconscious that, rather than trying to replace it with a “modern” alternative, contemporary architects have tried to take ownership of it in order to put their own personal mark on it. This was the approach taken by the Shift studio in Best. It’s true that this project concerns the refurbishment of a dental surgery and not a housing programme. But this medical facility re-uses and extends a brick house built in the 1920s. All the new parts, which can be identified by their zinc skin, are a reinterpretation of the famous “icon house”.

The waiting room, offices and staff rooms are accommodated in the existing house. The extension houses the medical areas of the project. It was designed as the natural extension to the house, its “service quarters”, as suggested by the change in dimension and material. Four dispensaries are aligned beneath the volume of a barn, the roof and facade of which are clad in light grey zinc. The material is used in traditional and contemporary configurations. It is applied in the usual way on the roof. Here, the pitch of the roof is perforated by four windows that allow patients reclining in the dental chair to escape to the sky while the dentist is working on their teeth. A rectangular window provides the dispensaries with views of the surrounding landscapes. On the rear facade, the large window is like a huge glazed box with a zinc frame.
Photos: Rene de Wit - Architectuurfotografe, The Netherlands.
France

The red dove

SMAC stands for Scènes de Musiques Actuelles in French. In France there are several such Centres for Modern Music, which serve as showcases for all musical genres except classical and lyrical. Jazz, rap, rock, soul, reggae and all other types of modern music have pride of place in the SMAC, which are more intimate in size: between 300 and 1,000 places as opposed to 5,000 to 8,000 for the larger venues.

In the last ten years, numerous towns have created SMAC venues, which are often recognisable by their deliberately innovative architecture.

The SMAC venue in Nîmes is no exception. The facility, which was given the name Paloma (“dove” in Spanish) displays its striking forms next to the runways of the local airfield. The singularity of this sculpture-building responds to the suburban context and to the programme. The aligned prisms seem to collide with each other, expressing the vitality and creative energy emanating from the venue. They create an overhang that shelters spectators queuing for tickets and introduce asymmetries that conceal the spaces reserved for musicians and other staff - stage door, unloading of equipment, etc.

From the road to Avignon, the view of the building changes constantly. As drivers advance, the folds and volumes seem to be moving. The PIGMENTO® red zinc accentuates the exceptional appearance of the building.

It clads all the facets of this giant origami perfectly, interrupted on the esplanade side by a huge window in ETFE, a translucent plastic material made of air-filled cushions.

A metal mesh appears at either end of the building. Acting as a substructure for the zinc cladding, it seems to indicate that the red envelope forms a skin or a sheath that is splitting apart: a “Mad Max” style décor that is perfect for this dynamic programme!

Public buildings
Concert Hall, Nîmes

Architect(s)
Tetrarc Nantes

Contractor
SOP 34 in St Georges d’Orques

Technique(s)
VMZ Standing seam

Aspect(s)
PIGMENTO® red

Surface in zinc
2,000 m²

Photos: Paul Kozlowski, France.
Spain

A make-over for a department store

There was a time when department stores were glass palaces that changed into giant lanterns at nightfall. A century later, these stores have blended into the renovated urban landscape. Their glass facades have become opaque, to answer the constantly increasing need for space to display articles. The need for space is omnipresent and sometimes makes department stores expand their premises either by adding a floor or an extension.

When El Corte Inglés department store in Madrid was inaugurated in the 1970s, it was already looking to expand. When the last plot on the block became free, the store decided to extend its retail surfaces in order to gain extra space for its clothing department. Although the surface gained is no larger than 280 m², the position of the plot, at the corner of two streets, makes it particularly attractive. This position made it possible to unite two perpendicular facades while giving continuity to the building.

Zinc cladding in PIGMENTO® green - compatible with one of the colours of the retail chain’s logo - gave unity to the volume.

The architects used two types of made-to-order cassettes: a smooth horizontal cassette and a ribbed cassette that gives relief to the facade. These cassettes are subtly positioned on the facades in such a way as to create a dynamic play of shadows across the walls of the building throughout the day - the sun no longer illuminates the interiors of the store but it does light up its walls. At the top of the building, a glass crown creates a link between the variations in volume dictated by urban regulations and conceals the numerous ventilation units now on the roof.

Indeed, the whole building was remodelled during the extension: its appearance was altered and entrances were redesigned to bring them into compliance with fire safety standards. It is notable that this major renovation work took place without closing the store.

Public buildings
El Corte Inglés, Madrid

Architect(s)
Enrique Bardaji Álvarez
David Ramos Viejo
Pedro Dilatada Capont

Contractor
Gismero

Technique(s)
VMZ Interlocking panel,
VMZ Perforated interlocking panel

Aspect(s)
PIGMENTO® green

Surface in zinc
6,300 m²
China

Zinc on the roof of the world

The Saint-Regis Lhasa Resort features 150 rooms at an altitude of 3,600 metres, which probably makes it one of the highest five star hotels in the world. For the moment it is the only luxury establishment in the capital of Tibet autonomous region. Its opening translates a desire to attract high end tourists interested in Tibetan culture. The architecture and layout of the hotel complex were inspired by the Buddhist monastery in Sera, built in 1419 and now a major tourist destination along with the Potala, the former palace of the Dalai-Lama, which was added to UNESCO’s list of World Heritage Sites in 1994 and can be seen from the windows of the hotel.

In a delicate political context, the Saint Regis Resort is the meeting point of several cultures. Its buildings are grouped around a pond. Ponds are very common in various parts of Asia and this one was designed by Jean Michel Gathy, a Belgian architect living in Malaysia who considers hotels without water features to be boring - which could be why we find them in the majority of his projects. The roof of the hotel is inspired by Chinese architecture and is covered in zinc, installed using the traditional Parisian roll cap technique, which is a first in this part of the world. Installation of the material at such high altitude raised the issue of resistance: the weight of the snow at certain periods of the year could damage the cladding. To solve this problem the roof was installed on a double skin, with reinforced wooden laths.
Photos: Marcel Lam, Hong Kong, China.
Drawing: Denniston Architects, Malaysia.
Belgium

The strength of the shield

It is impossible not to notice the extension to the Benedictus school in Gent. On the raised section of the motorway that leads to the city centre, even drivers in a hurry will notice these three zinc-clad spheres. The unusual form of the building is striking and generates all sorts of comparisons. Danny Vandewalle, the architect who designed the project, would be amused by mocking or positive comments made by drivers, who have no idea of the image behind the project. He explains he wanted to create the image of a shield protecting the IT rooms from three main areas of attack: rain, dust and the noise from the traffic on the neighbouring road.

The existing buildings of this nurses’ training school were extended and remodelled to accommodate the relocation of all students on a single site. During development of the project, a large number of scale and 3D models were required, both for design of the metal structure and layout of the cladding. As on a globe, the zinc skin can be broken down into parallels and meridians. The inclination of the parallels leads water to the bottom of the facade. The meridians are made up of identical elements, sized according to the width of the zinc coils and re-cut according to a slightly trapezoidal pattern.

“People often ask me why I used QUARTZ-ZINC® rather than a wall coating”, says Danny Vandewalle. “In an urban context next to a major road, a coating would have turned black in three years.”

The architect also explained the reason behind the rather eccentric spheres: “I object to the uniformity of computer-aided design in architecture. The first software programmes made it possible to draw straight lines and architecture became cubic. Today, software has become more sophisticated, and I want to demonstrate that box architecture is not the only option”, says the architect, who also intends to avert too much architectural conservatism, which is an issue in historic cities such as Gent. This project is more than just a shield, it is a manifesto for a different type of architecture!

Public buildings

Benedictus School, Gent

Architect(s)
Danny Vandewalle, Corijn en Leyman

Contractor
Platteau BVBA

Technique(s)
VMZ Standing seam

Aspect(s)
QUARTZ-ZINC® STRAT

Surface in zinc
1,500 m²
Australia

Eternal dwelling place

The Saint Mary of the Cross Mausoleum presents us with a serious and gloomy subject: the end of life. It was at the request of the Italian Diaspora who settled in Melbourne after the Second World War that the Harmer studio designed this columbarium. In this type of building, the remains of the deceased are placed in small individual cells. Columbaria are very widespread in the south of Italy, where most members of this community have their roots. This typology was perfect for the local context, the Victoria cemetery in the suburbs of the second largest city in Australia, which sorely lacks space for development. The building was erected on a small plot near the entrance to the cemetery.

The Harmer studio is no stranger to religious architecture. It designed several churches for the Italian community. The Saint Mary of the Cross Mausoleum is its third project in funerary architecture. Philip Harmer, founder of the studio, had several influences, among which Californian architect Bruce Goff and Catalonian architect Enric Miralles, who designed a cemetery in Igualada, near Barcelona. The mausoleum features similar use of pleated effects, fragmenting and animating the volume of the building while creating openings that let the light through and create specific views. Spread over two levels, the burial vaults form the hub of the building, which the architect surrounded with two galleries where visitors can gather. In the hollow of the sloped walls, the architect installed wooden benches. The materials were used with a precise objective in mind. “We used wood, stainless steel and zinc in two different colours to make the building blend into the surroundings of the cemetery. The durability of the material also seemed appropriate for a building designed to house the deceased for eternity. We hope that this combination of materials gives a feeling of comfort and hope to visitors.” Although architecture does not have the power to resuscitate the dead, it can sometimes comfort the living. This is the message conveyed by this building, which is a fine example of the current renewal of funerary architecture.

Public buildings
Saint Mary of the Cross Mausoleum

Architect(s)
Harmer Architecture

Contractor
Architectural cladding

Technique(s)
VMZ Flatlock panel

Aspect(s)
PIGMENTO® red
PIGMENTO® green

Surface in zinc
800 m²
Photos: Trevor Mein, Australia.
Drawing: Harmer Architecture, Australia.
Effective, creative, or poetic: certain assembly details used on buildings of varying types and scales deserve attention.

These examples illustrate and prove not only the immense flexibility of zinc but also the autonomy it affords architects to produce junctions and joints as they wish.

We liked the work on this modest chapel door in Lebanon, the subtle deformation of the abraded facade of a car park in Canberra, the shadow created by the relief of the red zinc Mozaïk cassettes in Bordeaux.

We were surprised by the uncompromising work on the stylized dormer windows of this building in Lisbon and the display window surrounds of this shop in Poland.

We appreciated the impeccable quality of bending of the interlocking panels on this commercial building in London, and the sobriety with which the horizontal strips of QUARTZ-ZINC® were used on this restaurant in the Netherlands.

And finally, we discovered how, in Denmark, it was possible to make the elegant envelope of a meeting room vibrate by renewing the traditional techniques used to assemble facade elements, used here like finely adjusted cyclopean black boxes.


