2009 FOCUS on 7 INC Number 11 **Belgium Q8 Service** Station In symbiosis with its environment **Taiwan** Wufeng Earthquake Museum Echoing the ruins around it Canada **Halifax College Generous volumes** Portugal **Hotel and Casino** in Chaves



Editorial

Over the years since it was first published, the highly visual layout of FOCUS ON ZINC has become the magazine's hallmark. As of now, two equally striking elements will become features of the magazine.

Firstly, the magazine has been redesigned in the new colours of our brand. VMZINC has proven to be a reference in the building industry, with a level of recognition that is even greater than we had imagined. However, the highly positive values that people in the building sector associate with our brand were no longer conveyed by the shapes and colours of our former logo. This is why we decided to rejuvenate our brand, and this issue of FOCUS ON ZINC is one of our first publications to sport proudly the new logo and visual identity, designed to convey our company values and vision.

Our values of innovation, sound industrial competence, aesthetics, specification support, development of solutions and constant enhancement of our offer through engineering are clearly visible in the brief accounts describing each of the projects presented in this issue.

Another equally fundamental value is clearly highlighted in this issue: the systematic inclusion of Sustainable Development considerations in all our projects. Examples including low energy consumption, acoustic performance, external thermal insulation, buildings that have received awards for environmental performance, etc. are present in many of the projects described in this issue, underlining this strategy and the active contribution of zinc in achieving the environmental objectives set by architects. As in every issue of FOCUS ON ZINC, you will also read about the longevity and recyclability of our products, and their harmonious integration into the surrounding environment of the various buildings presented.

While we are proud to present the elegance of the buildings to which our products have contributed, the technical challenges met and the support provided to all involved, we are equally proud to contribute actively to environmentally friendly construction and to a positive vision of the future of the building industry.

Pascal Reymondet Executive Vice Président

FOCUS ON ZINC

N° 11 - September 2009. FOCUS ON ZINC is the international architecure review from VMZINC®. It is published in Czech, Danish, Dutch, English, French, German, Hungarian, Italian, Polish, Portuguese and Spanish.

Publication Director

Christopher SMITH.

Project Manager

Isabelle FERRERO.

Editorial Committee

Michel de CALUWE, Paule CELMA, Tugay DINDAR, Isabelle FERRERO, Heidi KOHSEL, Uwe NAGEL, Barbara NORDBERG, Luis ROMAO, Christopher SMITH, Laura TERRICABRAS.

Editorial Contribution

Jean-Marc BRUJAILLE, Jenny GILBERT, Barbara NORDBERG, Christopher SMITH.

Design

GRAPHIC PLUS

Printing

Imprimerie VINCENT

© Copyright Umicore France September 2009. Any total or partial reproduction of this document is subject to prior written authorisation from UMICORE France.



Contents



Belgium Q8 Service station

02-03



Spain Building

14-15



AustraliaConvention Centre

26-27



Spain La Barceloneta Market

04-05



PortugalPrivate House

16-17



Hungary Private House

28-29



FranceVELUX France
Headquarters

06-07



ItalySports Centre

18-19



Belgium Hospital

30-31



Taiwan Wufeng Earthquake Museum

08-09



FranceRetirement Home

20-21



Denmark Golf Club

32-33



Great BritainFaculty of Medicine

10-11



Germany School Buildings

22-23



Portugal Hotel and Casino

34-35



DenmarkCollective Housing

12-13



Canada Halifax College

24-25



China Villas

36-37

Belgium

Green symbiosis

Commercial buildings

Q8 Service station, Aische-en-Refail

Architect(s)

Bureau d'architecture Emile Verhaegen SA

Contractor

Ballast Nedam

Technique(s)

VMZ Standing seam used with VMZ Zinc Plus

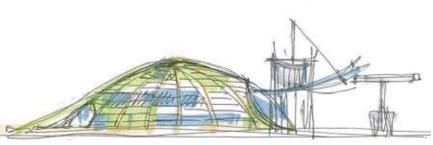
Aspect(s)
QUARTZ-ZINC®

Surface in zinc 1,000 m² The Aische-en-Refail service station, located near Namur on the E411 motorway allows motorists to take a break that is green in more ways than one. During their rest break, motorists will see a building in symbiosis with its environment, characterised by environmentally friendly construction solutions. The most visible signs of these are the dome crowned with the green of the stonecrops planted on its roofing, the pools and the climbing plants at the base of the building. The design team favoured thick insulation and energy-efficient glazing that is more than just symbolic in its contribution to the building's highly effective insulation. The architect explored several ways of saving energy. To optimise and control solar heat and light energy, large picture windows were fitted with solar protection. Photovoltaic panels installed on

the canopies of the petrol station provide part of the electricity necessary for the washrooms and for heating. With low energy and water consumption (thanks to its "green" roofing, rainwater is collected and used for the washrooms), the building needed not only to be comfortable but also durable. "To respect the environment, we chose natural, recyclable materials: plants, wood, steel and zinc - a durable, 100% recyclable material that brings a high level of added value to the building", explains Pierre Hinkeltz, the architect.

















Photos: Jump Picture - Fabien Devaert, Belgium. Drawings: Bureau d'architecture Émile Verhaegen, Belgium.

Spain

Verve and vitality

Public Buildings

La Barceloneta Market, Barcelona

Architect(s)

Josep Miàs MiAS Arquitectes

Contractor

Cubiertas Muñoz

Technique(s)

VMZ Single lock standing seam

Aspect(s)

QUARTZ-ZINC®, ANTHRA-ZINC®

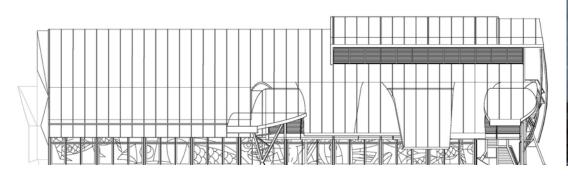
Surface in zinc 6,000 m²

Every city has districts with deep-rooted historic, human and poetic interest. The Barceloneta district is one of these and it made its mark on Catalan architect Josep Miàs at a time when "laundry hung from windows, the streets were lined with small shops and workshops" and he himself was a local student. Years later, faced with the task of renovating the area's 19th century covered market, the architect wanted to pay homage to the spirit of the place and the vitality of its inhabitants. This vital spirit is embodied by the eruptive, oceanic metaphors conveyed by the restructured part of the building, which is grafted onto the regular, simple, functional

style of the original construction. The roof rises up like blocks of rugged minerals, its blades sweeping down towards the city. "The imprisoned building is twisting and turning, but finally tamed", comments Josep Miàs, as he points out the capacity of zinc to adorn all kinds of structures and the richness expressed by the combination of QUARTZ-ZINC® and ANTHRA-ZINC®.















Photos: Paul Kozlowski, France. Drawings: MiAS Arquitectes, Spain.

France

An exercise in style

Commercial buildings

Extension to VELUX France Headquarters, Morangis

Architect(s)

A.R.T. Réalisations Jacques de Fontgalland Architecte DPLG, Manager Fabrice de Noblet Architecte DESA, Project Manager

Contractor Ioly SA

Joly SA (Saint-Marcel)

Technique(s)

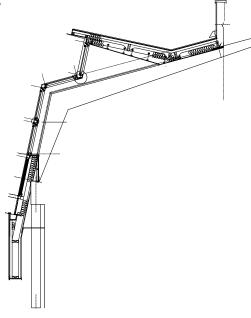
VMZ Double lock standing seam

Aspect(s)
QUARTZ-ZINC®

Surface in zinc

Just a stone's throw away from VELUX France's head office in Morangis, the company's new showroom, training centre and offices are, unsurprisingly, a stylistic composition to the glory of the roof window. All models in the range are displayed here in a building style that combines the familiar with the atypical: familiar in that it is modelled on the typically Parisian lower-slope/upper-slope Mansard roof; atypical in that the QUARTZ-ZINC® roofing stretches right down to the ground. Without reference to "low energy building", the architect embarked here upon a twofold demonstration: firstly to underline the capacity of zinc to adapt to the most stringent installation requirements (complex layout, positioning windows in the same plane

as roofing, façade installation, dormer windows, sawtooth roofing, etc.) and secondly to stress the total compatibility of zinc with external thermal insulation. Beneath its huge cloak and for a token additional cost, the showroom's level of primary energy consumption is lower than 50 kWhep per m² per year, thus complying with the thermal regulation target set by the French regulation four years ahead of time.











Photos: Paul Kozlowski, France. Drawings: A.R.T. Réalisations, France.



Taiwan

Memory and prevention

Public Buildings

921 Earthquake Museum of Taiwan, Wufeng

Architect(s)

Jay W. Chiu (A+B Design Group)

Contractor

Chungan Wellsun Co. Ltd

Technique(s)

VMZ Double lock standing seam used with VMZ Zinc Plus

System(s) VMZ Structural Roofing®

Aspect(s)

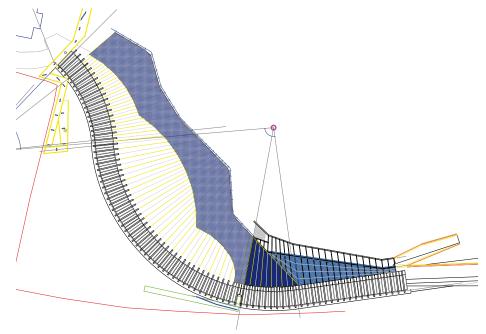
QUARTZ-ZINC® Surface in zinc

1,000 m²

On 21 September 1999, a violent earthquake shook the centre of the island of Taiwan, causing widespread human and material damage. Ten years later, this catastrophe is still uppermost in peoples' minds. In order to allow people to remember and to understand, the Earthquake Museum was erected on the very site of the epicentre. On the campus of Kuangfu college, where the sports grounds are still torn apart by a 2.5 metre fault and where the old, partly ruined buildings have been left on the site, the museum offers visitors an opportunity to contemplate on these remains and an introduction to seismology. The building itself seems to echo the surrounding ruins: the concrete shell of the main building forms a long gallery, which makes a large break in the ground over which the roofing, somewhat twisted in appearance, seems to have been flung down by the elements. The installation

of standing seam in QUARTZ-ZINC® highlights the architect's vision in a lateral approach to the building, but the choice of material was also dictated by technical requirements. The high level of hygrometry led to the choice of VMZ Zinc Plus to prevent condensation and of a watertight membrane inserted between the deck and the roofing. This building features several specific details related to seismic risks and the frequency of typhoons in the region: the QUARTZ-ZINC® used here is thicker than usual, and both the centre distance of the standing seam and the minimum distance between fixing clips are smaller than usual.



















Photos: Paul Kozlowski, France. Drawings: Daryl Jackson architects, Australia.

United Kingdom

Research and serenity

Public Buildings

Centre for the Physics of Medicine, Cambridge

Architect(s)

Design Team RH Partnership

Contractor TR Freeman Ltd

Technique(s)

VMZ Double lock standing seam used with VMZ Zinc Plus

System(s)
VMZ Flat lock panel

Aspect(s)
ANTHRA-ZINC®

Surface 1.000 m² The boundaries between physics and biology no longer apply in the same way that they once did in the last century. There is now more and more overlap between the two, the time having come for dialogue. For the University of Cambridge, provision has been made for scientists from both fields to research and discuss work together. The new Centre for the Physics of Medicine was designed by British architects BDP and built on the University's developing science and technology West Cambridge campus. Opened in 2008, it is the first phase of a larger scale project, the simple exterior housing three floors of laboratory and teaching facilities, as well as offices and accommodation. It has become the workplace for researchers from the departments of physics, biochemistry, chemical engineering and clinical medicine.

The concrete structure boldly displays the designer's belief in the principles of modern construction, and a huge glass wall equipped with sunscreens on the building's western facade, almost blank facades to the north, and scarce openings to the east were designed to provide natural lighting in the teaching rooms. The ANTHRA-ZINC® cladding, chosen for the material's durability and the lasting surface finish, will give the building long-term weather protection.



















Denmark

Harmonious tones

Collective Housing

Slotsbryggen, Nykøbing Falster

Architect(s)Holscher Arkitekter AS

Contractor

Th. Jensen A/S

Technique(s)

VMZ Double lock standing seam

Aspect(s)
QUARTZ-ZINC®

Surface in zinc 1,987 m² Collective housing does not necessarily mean repetition and monotony. In this complex, built on the banks of a canal, a modular technique made it possible for each future resident to define the apartment of their dreams. Before building began, each purchaser was given an almost free rein to determine the surface, layout, window positions and balcony size for their apartment. It was then up to the developer and the architect to combine all the different requirements by judiciously distributing surface areas, luxury apartments and social housing units to come up with a project that was feasible and coherent. Apart from the technical imperatives and volumetric constraints of the complex, efforts were focussed on the aesthetic design of the facade, where, from one floor to another, neither the position nor the size of the windows is the same.

According to architect Holscher, the QUARTZ-ZINC® standing seam cladding gives a harmonious tone and rhythm to the complex and provides a vector for the "calm, coherent expression" aimed for by the design team. "But durability, the weathering of surface aspect and the natural elegance that increases over time also swung the balance in favour of zinc".



















Photos: Martin Tørsleff, Denmark. Drawings: Holscher Arkitekter AS, Denmark.

Spain

Making the difference

Commercial buildings

Edifico de 24 talleres, Madrid

Architect(s)

Alberto Sánchez-Cabezudo, Antonio Lloveras, David Benítez

Contractor

Quinta Metálica, s.l.

Technique(s)

VMZ Double lock standing seam

Aspect(s)

ANTHRA-ZINC®

Surface in zinc 3,200 m²

"Being seen in order to be purchased or rented": this basic commercial principle underlies the design of the activity centre built in a residential district in the southern suburbs of Madrid. In order to stand out in a uniform landscape of brightly coloured ceramic, this complex of 24 studios is covered in a more modern, darker skin of ANTHRA-ZINC®, brightened up by coloured glazing. "It's another way", explains architect Alberto Sánchez-Cabezudo, "of asserting the centre's industrial vocation by reverting to well

established codes, even if these studios designed for tertiary activities, architecture agencies and photographers are more of an "industrial toy" than a factory".

Photos: Paul Kozlowski, France.

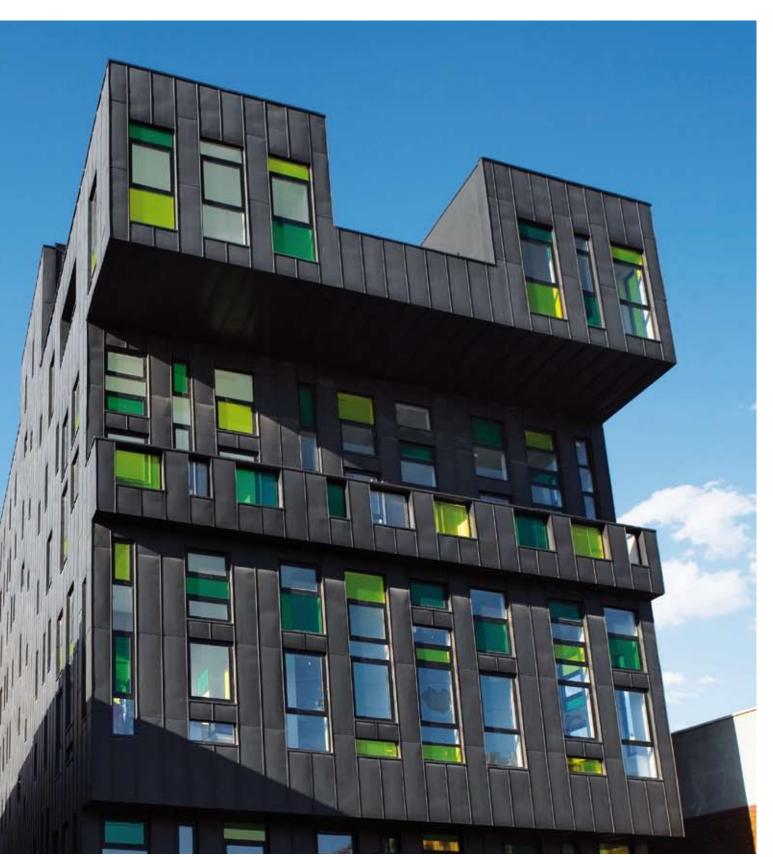
Drawings: Alberto Sánchez-Cabezudo, Antonio Lloveras, David Benítez, Spain.















Portugal

Permuting materials

Individual Housing

Private house, Lisbon

Architect(s)

Arquitecto Pedro Martins

Contractor

Umicore Portugal, S.A.

Technique(s)

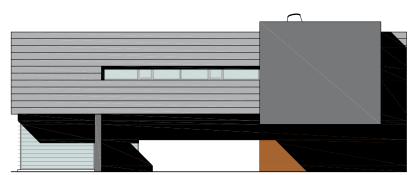
VMZ Single lock standing seam

System(s)
DELTA VMZINC

Aspect(s)
QUARTZ-ZINC®

Surface in zinc 134 m² To each level its own function, to each function its own materials, and for the house as a whole located in the city close to the sea - a mixture of elegance and durability. It is difficult, in this house built in Lisbon, to single out one guiding principle. And yet, just one glance at the facade confirms the strength of design and of the end result. Wood, black marble and QUARTZ-ZINC®, all the components of the building are immediately visible in the façade, and their combination is superbly balanced. Once through the front door, wood is everywhere - on the walls, floors and ceilings in the "living areas" on the ground floor. The "cooler" black marble and QUARTZ-ZINC® materials are set aside for the upper floor, where they "involve no physical contact", but give structure to a horizontal volume that is much larger than the lower level.

"The small surface area of the plot determined the layout of the house from the outset", explains architect Pedro Martins, "and gave us the idea of creating a heavier box for the upper floor, placed on the lighter, transparent volume of the ground floor." Everything was thought out in this house, right down to the last detail, including the comfort of its occupants. Hidden away from prying eyes and from the glare of direct sunlight, large glass patio doors open onto the garden, with its patio and swimming pool.

















Photos: Paul Kozlowski, France. Drawings: Arquitecto Pedro Martins, Portugal.

Italy

Striking contrasts

Public Buildings

Virgin Active Fitness Club, Mestre

Architect(s)

Studio Architetto Mar -Architect Giovanna Mar

Contractor

Monetti Group

Technique(s)

VMZ Single lock standing seam

Aspect(s) ANTHRA-ZINC®

Surface in zinc 2,600 m²

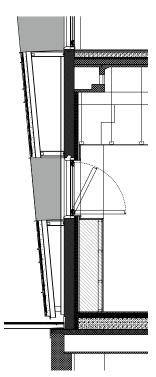
On the road to the contemplative city of Venice, Mestre is an industrial town passed without a second glance by the crowds of tourists en route to its illustrious neighbour. Wrongly so, because creativity and fantasy can be expressed anywhere. Beneath its industrial appearance, this building located in Terraglio, a very busy zone on the outskirts of Mestre, houses neither workshops nor machines, but the sports facilities and swimming pool of the town's new fitness club. It is in fact the first instalment of the programme designed by Venetian architect Giovanna Mar, which, when completed, will include six buildings with different heights, surface areas and purposes: a hotel, a restaurant, a theatre, offices and commercial premises. ANTHRA-ZINC® was chosen not only for its durability and resistance to a polluted, saline atmosphere, but also for its

expressiveness. The layout of the standing seam and the way the upper part of the building flares outwards highlight the dominant horizontality of the volume, making the building look as though it is crouching down on the ground - an impression that will be heightened by the auditorium - and will be strikingly contrasted by the verticality (seven floors) and glass facades of the future hotel.





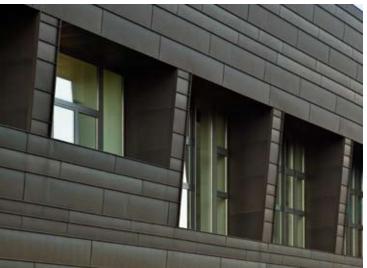


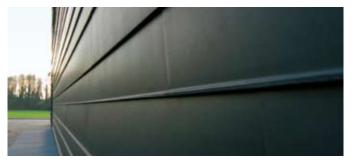












1 4 5 2 3

Photos: Pier Mario Ruggeri (1,2,3), Studio Architetto Mar (4,5), Italy. Drawings: Studio Architetto Mar, Italy.

France

Blending into its surroundings

Public Buildings

Retirement Home, Neung-sur-Beuvron

Architect(s)

Société d'architecture Boitte (Romorantin)

Contractor

Entreprise Lacroix

Technique(s)

VMZ Double lock standing seam

Aspect(s)

PIGMENTO® green

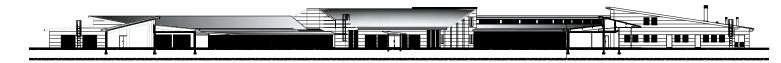
Surface in zinc 6,500 m²

Paradoxically, the importance attached to environmental integration in the design of a building is not always its most visible feature. However it is immediately obvious in this building situated at the edge of the forest, a new residence built for dependent senior citizens in Neung-sur-Beuvron in the heart of the Sologne region, where the green PIGMENTO® roofing blends harmoniously with the softwood forest that surrounds the building. "One of our main preoccupations was integrating the building into its environment ", explains architect Daniel Boitte. "That's why, when VMZINC presented this shade of preweathered zinc to us at the Batimat 2005 exhibition, we chose it without hesitation". This choice was also made for other features of the building. Visually blended into its surroundings, the establishment opens

out of itself with its hollowed scallop shape, and gives way to an interior garden with four satellites stretching towards the forest. It also integrates natural lighting, with roof windows installed on the main buildings, enhancing the 800 metre curved roof edge that is a remarkable accomplishment by the installers. Alongside these architectural features that will benefit the residents, special attention was given to energy management (insulation, ventilation, glazing, etc.) in the building. The main furnace, which burns wood shavings, is fed by the waste from a neighbouring sawmill.













Photos: Paul Kozlowski, France. Drawings: Société d'architecture Boitte (Romorantin), France.



Germany

Sustainable education

Public Buildings

Albert-Schweitzerund Geschwister-Scholl-Gymnasium,

Architect(s)

Klein + Neubürger Architekten BDA

Contractor Figge

System(s)

Locally manufactured cassettes

Aspect(s) ANTHRA-ZINC®

1,400 m²

Surface in zinc

Several old buildings in Marl, a medium-sized town north of Essen, were grouped together to house two new neighbouring high schools - Albert Schweitzer Gymnasium and Geschwister Scholl Gymnasium.

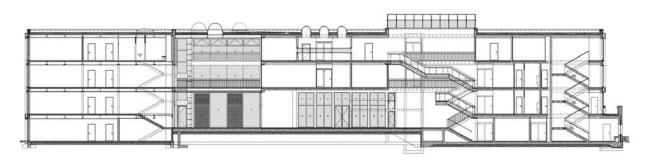
Existing buildings were renovated and enhanced with an extension to form a new central courtyard. The project, which focuses on forward-looking construction solutions, aimed to reduce operating and maintenance costs to a minimum. To achieve this it includes a whole range of up to the minute solutions. The huge walls and ceilings store heat and the centralised energy management system not only adjusts the heating, it also controls ventilation and therefore air conditioning in the building.

Photovoltaic panels installed on the flat roofing also

contribute to optimising the building's environmental performance. External thermal insulation, which is used traditionally in Germany, prevents heat loss by eliminating cold bridges. Cladding of the building in ANTHRA-ZINC® panels guarantees durability and a maintenance-free envelope.













Photos: Jörg Seiler, Germany. Drawings: Klein + Neubürger Architekten BDA, Germany.

Canada

Harbour and town

Public Buildings

Nova Scotia College of Art & Design (NSCAD Port Campus), Halifax

Architect(s)

MacKay-Lyons Sweetapple Architects Ltd

Contractor

Markland Associates Ltd

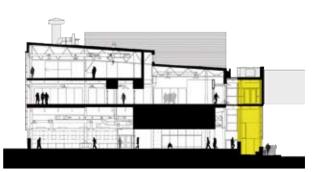
System(s)

VMZ Sine wave profile perforated

Aspect(s)
ANTHRA-ZINC®

Surface in zinc 1,400 m² A one hundred year old warehouse with a surface area of 70,000 square feet (c. 7,000 m²) right next to "Pier 21", in Halifax harbour became, in 2007, the new Nova Scotia College of Art & Design (NSCAD) campus, one of the most highly regarded visual arts universities in North America. The building's accessibility, its generous volumes and its openness to daylight - combined with a little renovation work - predestined it for subjects that need more than just ordinary premises. Subjects like foundry, metal processing, plastic work, stone sculpture, joinery, ceramics, etc. An extra floor was created, a mezzanine was integrated into the third floor and a system of mobile partitions was installed to ensure modularity. One of the main challenges facing the design team was regulating the temperature in the building, as its western facade is directly exposed to the sun. The common sense solution was to install a shading system using

a monumental loggia alongside the building. Its steel structure is equipped with huge panels clad with corrugated ANTHRA-ZINC®, chosen because it is "durable, more elegant than painted material and blends harmoniously with the corrugated aluminium cladding of the original building", indicates Eric Stotts, project manager at MacKay-Lyons Sweetapple. With an openwork design over about half its surface, it acts as a sun-screen at certain times of the day and darkens at night, streamlining the contours of the building and hinting at the extent of the spacious interiors.



Photos: Paul Kozlowski, France. Drawings: Eric Stotts, Canada.









Australia

The Star of Southbank

Public Buildings

Melbourne Convention Centre

Architect(s)

NH Architecture and Woods Bagot

Contractor

Architectural Cladding Australia Pty Ltd

Technique(s)

VMZ Double lock standing seam

System(s)

VMZ Interlocking panel

Aspect(s) ANTHRA-ZINC®

Surface in zinc 16,000 m² For the past twenty years or so, the reconfiguration seat conference

of Melbourne's Southbank district - located in the western part of the peninsula - has been focussed around public and commercial areas. In 2009, a new facility - Melbourne Convention Centre (MCC) - was completed next to a congress and exhibition centre built in the 1990s. There was no guarantee of success for the architects at NH Architecture and Woods Bagot. The design of a building that must conform to the events it accommodates - as though it were a stadium - is highly paradoxical, especially when it must also blend in with the urban

especially when it must also blend in with the urbal landscape and, architecturally speaking, set the tone for future facilities in the western part of the peninsula. Beneath the cut-out silhouette of a skillful origami, with facades and roofing clad in 16,000 m² of ANTHRA-ZINC® and a vast 5,000-

seat conference hall that divides into three smaller halls, the MCC boldly rises to the challenge. The attention given to the choice of materials, to the quality of installation and to compliance with best environmental practices earned it the highest Green Stars certification award, the "Six Green Stars*".

*Australian environmental building award.



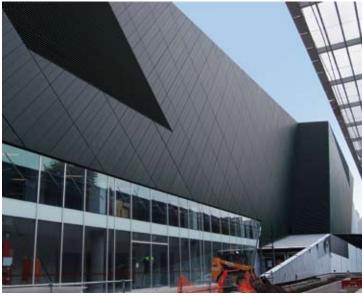












Photos: Karl Brown, Australia.

Hungary

Living in Luxury

Individual Housing

Shambala Home, **Budapest**

Architect(s)

Shambala Stúdió: Fogarasi Zsolt, Lázár Ferenc, Berta György, Gulácsi Norbert, Ilku György, Szabó D. Gábor, Bajzik Zsófia

Contractor

Szántó Fívérek és Kozma Kft

Technique(s)

VMZ Double lock standing seam

> Aspect(s) QUARTZ-ZINC®

Surface in zinc 1,500 m²

The Shambala Home website opens with a dedication to a prestigious line of jewellery watches. This is the perfect key to decipher this project that went out of its way to provide its residents with total elegance and a luxurious touch of baroque. Dominating Budapest from the top of Normafa hill, this building, set amidst a 5,500 m² park enhanced with a swimming pool, sauna and gym, is a veritable jewel. It has been designed like one too, mingling stone, wood, glass and zinc in a precious combination that is protected from prying eyes and from the sun by the huge sun-screens on its southern facade.

This treasure required the very best from the contractor in charge of installing the 1,500 m² of QUARTZ-ZINC® on the roofing and on the cladding of the glulam outer frame, the sections that outcrop from the openings, the standard part of the facades and their stone facing. This rare building features remarkably refined details, such as the wall edges folded into the curved joints - wide in places and narrow in others - the articulated gusset system used for the door lintels in the facade, or the concealed gutters. All these details contribute to the luxury of the residence and are the pride of the six members of the Szántó company who invested the very best of their skills on this project.











Photos: Darabos György, Hungary. Drawings: Shambala Stúdió, Hungary.





Belgium

Conjunction

Public Buildings

Extension of the administrative building at Gasthuisberg Hospital

Architect(s)

Stéphane Beel Architecten

Contractor

Heijmans and Stadak

Technique(s)Single flat lock

System(s) 45 cm x 45 cm diamonds

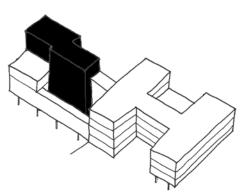
Aspect(s)

Natural Zinc

Surface in zinc 3,000 m²

When he builds, restores or extends a museum or an art centre – which he has done frequently over the past years – Ghent architect Stéphane Beel says that what's important is the art. He brings the same approach to all projects. When he designs houses he thinks about the people who will live in them, and when he designs tertiary buildings he thinks of the people who will work in them and puts his imprint on them with the same simple, rigorous organisation of space and the same atmosphere of brightness and serenity. These are the features we find in the extension to the administrative building in Gasthuisberg Hospital, on the outskirts of Louvain, which was needed further to the reorganization of its departments. The new building does not blend into

the old one, but joins onto it without changing its nature. The junction point between the two buildings, which is not very large but extends over two floors, gives new amplitude to the reception area, improving movement around the building and the distribution of offices, meeting rooms, auditoriums, etc. As a perfect complement, the new building provides more modern, larger work spaces and meeting areas. The height, layout and panelling of the volumes all contribute to this complementarity. The extension displays its innovativeness with an original cladding in natural zinc using diamond-shaped panels which subtly distinguishes it without dividing it from the preformed concrete of the original building.











Photos: Marquiz, Belgium. Drawings: Stéphane Beel Architecten, Belgium.





Denmark

A Matter of Course

Public Buildings

Storådalen Golf Club, Holstebro

Architect(s)

John Robert Knudsen

Technique(s)

VMZ Single lock standing seam

System(s)

VMZ Interlocking panel, DELTA VMZINC

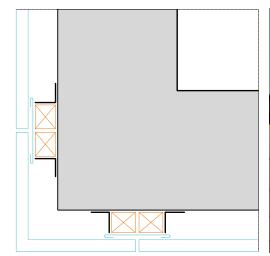
Aspect(s)

ANTHRA-ZINC®, QUARTZ-ZINC®

Surface in zinc 45 m² At the Storådalen golf course, on the west coast of Denmark, QUARTZ-ZINC® and ANTHRA-ZINC® team up with a VMZ Interlocking panel system to form a club. Pre-selected for their colour, which blends harmoniously not only with the environment but also with the local building stone, for their resistance to dampness and salinity (the sea is only about thirty kilometres away) and for their capacity to reduce, and sometimes even eliminate maintenance costs, they first had to go through a trial run. Both materials were installed using interlocking panel to clad a prototype kiosk. At the end of this first round, intended to assess both the aesthetics and the thermal and acoustic performance of the concept, the game continued on the green with the construction

of a clubhouse and a public restaurant called "Falling Water", then offices and finally the course keeper's house. The fact that all the buildings are identical in design helps to give the establishment a strong image.















Photos: Martin Tørsleff, Denmark. Drawings: VMZINC® Design Assistance Office, France.

Portugal

The Colour of the Horizon

Public Buildings

Hotel and Casino, Chaves

Architect(s)

Arquitecto Rui Lacerda

Contractor

Umicore Portugal, S.A.

Technique(s)

VMZ Single and double lock standing seam

System(s)
DELTA VMZINC

Aspect(s)
QUARTZ-ZINC®

Surface in zinc 8,000 m²

Like all spas and holiday resorts, Chaves, located to the very north of Portugal, cannot count solely on the virtues of its waters and the beauty of its surroundings to attract spa patients and tourists. In 2008, to anticipate demand for quality accommodation and entertainment, the town opened a new Solverde hotel, a casino and a 600-seat auditorium. This complex aims to attract tourists from the Trás-os-Montes region - where entertainment is rather scarce - and inhabitants from other regions of Portugal and neighbouring Spain. Built on the summit of a hill on the edge of the town, the establishment provides unique views over the mountains and the valley. Seen from the town, the outline of the building fades into a grey colour that blends

perfectly into the brownish-grey backdrop of the Serra da Estrela mountain range. This environmental integration was one of the sensitive points in the project specifications. The design team found the ideal solution through the choice of materials: concrete, granite and QUARTZ-ZINC®, which was systematically used to clad the buildings adjoining the hotel.















Photos: Paul Kozlowski, France. Drawings: Arquitecto Rui Lacerda, Portugal.

China

Osmosis with the Landscape

Individual Housing

Yan Wei Villa (villas between lake and mountain), Wuxi

Architect(s)

Jackson Architecture

Contractor

Shanghai Hanchang Industrial Development Co, Ltd

Technique(s)

VMZ Single lock standing seam

Aspect(s) QUARTZ-ZINC®

Surface in zinc 8,000 m² The city of Wuxi is situated on the banks of lake Tai Hu, around a hundred kilometres west of Shanghai. The recent development of urban areas in China has led to the creation of a large number of outlying suburbs. The new Yan Wei district, made up exclusively of contemporary villas, is a perfect illustration of this trend. This programme of individual houses combines mixed materials, blocks of colour and an elegant design. QUARTZ-ZINC®, a natural material that is in perfect osmosis with the surrounding landscape, was chosen to clad the facades of the concrete structures. Natural stone was used for the retaining walls, where its raw aspect echoes the finish of the modern materials.

gives life and meaning to the project: simplicity and widespread use of natural materials.

Overlooking lake Tai Hu, the many blocks of bright colours and the structural play of the large windows give the neighbourhood the festive look of a Mediterranean harbour.





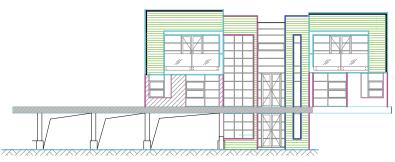












Photos: Lv Hengzhong, China. Drawings: Daryl Jackson, architects, Australia.



SUBSIDIARIES

AUSTRALIA/NEW ZEALAND

Umicore Australia Po Box 727 Crows Nest - NSW 2065 Australia Tel.: + 61 2 99 55 44 00 vmzinc.australia@umicore.com

BELGIUM/LUXEMBURG

n.v. Umicore s.a. Building Products Belaium Havendoklaan 12b - B 1800 Vilvoorde Tel.: + 32 2 712 52 11 vmzinc.benelux@umicore.com

CHINA Shandhai

Umicore Marketing Services Co. Ltd. **Building Products** Unit A1, 18/F, Zao-Fong Universe Building, No. 1800 West, Zhongshan Road, Shanghaï 200233, China Tel.: + 86 21 2411 6883 vmzinc.china@ap.umicore.com

Beijing

Umicore Marketing Services Buildina Products Room 502, Xinghua Business Centre, #11, Xinghua Lu, Heping Li, Eastern City District Beijing 100013, China Tel.: + 86 10 6424 6761 vmzinc.china@ap.umicore.com

Hong-Kong Umicore Marketing Services **Building Products** Unit A-B 19/F Manulife Tower, 169 Electric Road, North Point, Hong-Kong Tel.: + 852 2700 2260 vmzinc.hongkong@ap.umicore.com

Taiwan

Umicore Marketing Services Co. Ltd. Building Products 16F-2, No. 189, Keelung Road, Sec. 2, Taipei 11054 Taïwan, R.O.C. Tel.: + 886 2 8732 2021 vmzinc.taiwan@ap.umicore.com

CZECH REPUBLIC

Umicore Building Products CZ s.r.o. Pod Višňovkou 1661/31 140 00 Praha 4 - Krč Tel.: + 420 234 036 240 info@vmzinc.cz

DENMARK/NORWAY/SWEDEN

Umicore Building Products Scandinavia A/S Lysbrohøjen 5 - DK-8600 Silkeborg Ďanmark Tel.: + 45 86 84 80 05 vmzinc.denmark@umicore.com

FRANCE

Umicore France s.a.s. 40, Rue Jean Jaurès 93176 Bagnolet Cedex Tel.: + 33 1 49 72 42 42 vmzinc.france@umicore.com

GERMANY

Umicore Bausysteme GmbH Gladbecker Strasse 413 - 45326 Essen Tel.: + 49 201 836060 vmzinc.germany@umicore.com

GREAT BRITAIN

Umicore Marketing Services UK Ltd. Four Rivers House Fentiman Walk - Hertford, Hertforshire, SG14 1DB Tel.: + 44 1992 822288 vmzinc.uk@umicore.com

HUNGARY

Umicore Building Products Hungary Kft. Kagyló u. 4-6, Pf.: 101 H-2092 Budakeszi Tel.: + 36 23 452 452 info@vmzinchu

INDIA

Umicore India Pvt Ltd. 58/59 Bajaj Bhavan - Nariman Point 400 021 Mumbai - Maharashtra-India Tel.: + 91 22 66275656 vmzinc.india@ap.umicore.com

Umicore Building Products Italia s.r.l. Via Riccardo Lombardi 19/16 20153 Milano Tel.: + 39 02 47 99 82 23 vmzinc.italia@umicore.com

NETHERI ANDS

n.v. Umicore s.a. Building Products Havendoklaan 12b - B 1800 Vilvoorde Tel.: + 31 20 494 28 39 vmzinc.benelux@umicore.com

POLAND

Umicore Marketing Services Polska Sp z o.o. Ul. Ludwiki 4 - 01 226 Warszawa Tel.: + 48 22 632 47 61 vmzinc@vmzinc.com.pl

PORTUGAL

Umicore Portugal S.A. Travessa do Padrão 4455 524 Perafita Tel.: + 35 1 22 995 0167 geral@asturianadasminas.pt

SLOVAKIA

Umicore Building Products Slovensko, s.r.o. Pri Starom Letisku 1 SK - 831 07 Bratislava Tel.: + 421 917 496 019 info@vmzinc.cz

SPAIN

Umicore Building Products Ibérica s.l. C/Juan Gris, 4, 6ª Planta 08014 Barcelona Tel.: + 34 93 298 88 80 vmzinc@umicore.com

SWITZERLAND

Umicore Building Products Schweiz AG Industriestrasse 25 - 3178 Bösingen Tel.: + 41 317475868 info@vmzinc.ch

USA

Umicore Building Products USA Inc. Magnolia Building, Suite 104 3120 Highwoods Boulevard Raleigh, NC 27604 Tel.: + 1 919 874 7173 info@vmzinc-us.com

AGENTS

ARGENTINA KOR7IN S A C I

Pueyrredón 4233 (B1702ASY) Ciudadela Pcia Buenos Aires Tel.: + 54 11 4653 1425 korzin@datamarkets.com.ar

AUSTRIA

VMZINC Center Österreich Seitenhafenstraße 7 1020 Wien Tel · + 43 1 726 34 34 info@vmzinc.at

WFR SITES

www.vmzinc.com

Argentina: www.vmzinc.com.ar Australia: www.vmzinc.com.au Austria: www.vmzinc.at Belgium: www.vmzinc.be Canada: www.canadianbrass.ca China (Shanghai, Beijing, Hong-Kong, Taiwan): www.vmzincasia.cn Czech Republic: www.vmzinc.cz

CANADA

Canadian Brass and Copper Co. 225 Doney Crescent Concord, Ontario - LK4 1P6 Tel.: + 416 736 0767 canadianbrass@on.aibn.com

GREECE

MIPECO Trading Ltd. 55, Souliou Street 190 02 Penia (Athina) Tel.: + 30 210 664 46 11 mipeco@otenet.gr

Denmark, Norway, Sweden: www.vmzinc.dk France: www.vmzinc.fr Germany: www.vmzinc.de Great Britain: www.vmzinc.co.uk Greece: www.mipeco.gr Hungary: www.vmzinc.hu Ireland: www.vmzinc.ie Italy: www.vmzinc.it

Lebanon, Qatar: www.naggiar.net

IFRANON

NAGGIAR Trading S.A.L. Hobeika Street, 6 Saifi District 2029 6406 Beirut Tel.: + 961 1 562 652 roy.naggiar@naggiar.net

OATAR

NAGGIAR QATAR L.L.C. Al Haya Commercial Center Salwa Road P.O.Box. 22211 Doha Tel.: + 974 4 687373 / 697790 roy.naggiar@naggiar.net

Luxemburg: www.vmzinc.lu New Zeland: www.vmzinc.co.nz Netherlands: www.vmzinc.nl Poland: www.vmzinc.pl Portugal: www.vmzinc.pt Spain: www.vmzinc.es Switzerland: www.vmzinc.ch IJSA: www.vmzinc-us.com

RUSSIA

LINION 7INC 115088, Moscow Ugreshskaya street 2 Building 6, office 311 Tel.: + 7 495 665 61 90 info@union-zinc.ru

SOUTH KOREA

SUNNIE INTERNATIONAL Ltd. 395-139, Seokyo-Dong, Mapo-Ku, Seoul Tel.: + 82 2-3141-4774 sunnie@korea.com

