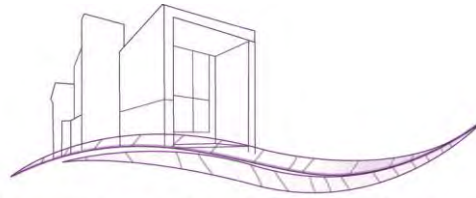


CAMPUS
ARCHIZINC
by VMZINC



The sustainable building contest for architecture students

PRESS INFORMATION OCTOBER 2015

**3RD CAMPUS ARCHIZINC
SUSTAINABLE BUILDING CONTEST
ORGANISED BY VMZINC[®] :**

PRESENTATION OF THE WINNERS

www.campus-archizinc.com



VMZINC
passionate about zinc

On 2 October 2015 in Paris, the 3rd edition of **VMZINC ARCHIZINC CAMPUS competition**, which is organised every two years for students in European architecture schools, **unveiled four winners**: two Prizes and, for the first time, two Special Prizes (Special Prize for Innovation and Special Prize for Creative Methodology). **The competition tests students on the issue of densification and how to build sustainably in an urban context.** It is associated with the French Federation of Timber for the Building Industry (FIBC), to demonstrate the pertinence of combining titanium zinc and wood in architecture.

This contest aims to raise awareness of zinc and its environmental characteristics among the upcoming generation of architects, as well as drawing their attention to the role of architecture in sustainable development. *"This type of competition must make it possible to prepare students to use environmental constraints as a source of opportunity and as an aesthetic element"*, says Cécile Roland, Environmental Applications Manager with VMZINC.

CAMPUS ARCHIZINC awarded prizes to the four winners, selected for the quality of their architectural and environmental responses on the theme of **"Urban densification: the city on the city, building upwards"**. The international jury of architects and academics wanted the winners to reflect the variety of urban and environmental contexts in order to demonstrate the multitude of creations possible in terms of roof extensions. *"There is no single way to build upwards, there are as many ways as there are contexts!"* says Philippe Simon, architect and Jury member.

■ CHALLENGES OF THE PROGRAMME

In the city of their choice, with a population of more than 100,000, the European students were asked to choose an existing building (or group of buildings) capable of supporting a 1 or 2 storey roof extension housing one or several single family apartments with a view to dealing with urban densification.

The prerequisites for these roof extensions:

- Use a lightweight timber structure (frame, supporting elements and bracing of the construction)
- Enhance the use of zinc (all forms of cladding and applications available in the VMZINC offer) and wood on the envelope (cladding with various types of texture and aspects available locally).

Distinct volumes could be proposed, as long as they were interconnected by vertical or horizontal covered passages. In some cases, terraces with unlimited surfaces could be envisaged, in or around the volumes of the apartments.

■ A MEASURABLE AND DETAILED STRATEGY

The subject of urban densification conveys an environmental objective in itself, on condition that the proposition results from an eco-design approach aiming to preserve the existing building, encouraging diversity, sustainably respecting the exterior environment and the health and comfort of occupants.

A coherent environmental strategy suited to the project context had to be developed and detailed by each team of students. To do this, VMZINC provided the teams with an Excel eco-design tool*. Using simple characteristic data, this tool assesses the environmental performances of a project via 6 key indicators (compactness, surfaces of openings, level of insulation and thermal losses, solar heat gains in summer and winter and grey energy of materials).

* Excel tool developed by VMZINC® and INDDIGO for the 1st Edition of the competition in 2010.

■ FOUR WINNERS

In all, 45 submissions from 96 students in 18 European architecture schools in 4 different countries (Belgium, France, Italy, Spain) participated in ARCHIZINC CAMPUS 2014 – 2015.

The jury of international experts considered *“the level of submissions of this third edition was of a very high quality. The architectural propositions presented translate appropriate reflection on the concept of urban integration.”* The Jury awarded:

- ✓ **The First Prize of 2,500 €** to a team of three Italian students from the **Universita Degli Studi in Padua,**
- ✓ **The second prize of 1,500 €** to a team of two French students from the **INSA in Strasbourg.**

Two special prizes, each for the first time awarding 500 €, were given:

- ✓ **«SPECIAL PRIZE FOR INNOVATION»** to a French student from the **ENSA in Montpellier**
- ✓ **«SPECIAL PRIZE FOR CREATIVE METHODOLOGIE** to a team of three Spanish students from the **ETSAM in Madrid**

A brochure devoted to ARCHIZINC CAMPUS, published in English and French and which will be broadly distributed in the months following the awards ceremony, details the winning projects.

■ STRINGENT EVALUATION CRITERIA

In order to evaluate the various projects, the Jury used four precise criteria:

- ✓ Architectural quality and quality of use (relationship with the site and existing building, articulation of the various elements of the programme, management of spaces)
- ✓ Environmental quality (insertion and integration in the site, management of rainwater, bioclimatism, thermal performance of the building and analysis of pertinence of building products),
- ✓ Levels of architectural and technical innovation, especially in the use of rolled zinc and wood,
- ✓ Quality of expression and presentation of constructive elements in the project submission.

■ UN JURY D'EXPERTS SPECIALISES DANS L'ENVIRONNEMENT

This third edition of ARCHIZINC CAMPUS was chaired by **FRANÇOISE-HÉLÈNE JOURDA**, architect and professor at the University of Vienna, who sadly passed away on 31 May last. Out of respect for Mrs. Jourda, for the immense professionalism and humanity she brought to the two previous editions of this competition, it was decided not to replace her as chairperson.

THOMAS DELMAS

**Engineer,
DAUCHEZ PAYET SARL, France**

THOMAS FERET

**Technical Engineer
FEDERATION DE L'INDUSTRIE BOIS CONSTRUCTION, France**

**ANNE-SOPHIE
PERRISSIN-FABERT**

**Director,
HQE ASSOCIATION, France**

PHILIPPE SIMON

**Architect, expert in urban roof extensions
ARCHITECTURE GALIANO-SIMON, France**

DANIEL SIRVENT

**ARCHITECT AND LECTURER,
UNIVERSITY OF ALICANTE, Spain**

GERARDO WADEL

**Architect, expert in urban roof extensions,
LA CASA POR EL TEJADO, Spain**

PROJECT DESCRIPTIONS

FIRST PRIZE

TEAM	MARCO CAMPAGNOLA, MARCO CECCHETTO AND LUIGI FORLIN
SCHOLL	UNIVERSITA DEGLI STUDI, PADUA (ITALY)
LECTURER	UMBERTO TURRINI
PROJECT NAME	FAM PROJECT (FLEXIBAL ADDITIONAL MODULES)

This project is made up of two identically sized modules with different designs. These modules can be used alone or together in various urban contexts, regardless of the city in question. Module A, the heart of the dwelling, features a central patio. Module B is open to the exterior, focusing on the outside environment.

The zinc envelope of the modules, which also features wood on the East and West facades, makes it possible to clearly define the new volumes. They are accommodated on the existing vertical structure via metal blocks supporting the weight of the roof extension. The creation of patios and skylights allows natural light into the units. The trees in the patios contribute to regulating room temperature. Effective management of thermal performance and a hydraulic heat pump contribute to occupants' comfort.

THE JURY'S ASSESSMENT

The students did not simply build upwards by adding another roof, they created a whole new shape that is a definite improvement on the original building. From an architectural point of view, the roof extension, which seems unique even though it can be reproduced industrially, blends perfectly with the existing building. An amazing feat! The architectural and functional concept is organised geometrically and was designed to be reproduced from one building to another in a repetitive manner that could become part of a larger urban planning perspective. This project is very comprehensive in terms of environmental analysis but it is also the most innovative, as the students proposed real solutions for management of flows.



PHOTOS: MARCO CAMPAGNOLA, MARCO CECCHETTO AND LUIGI FORLIN

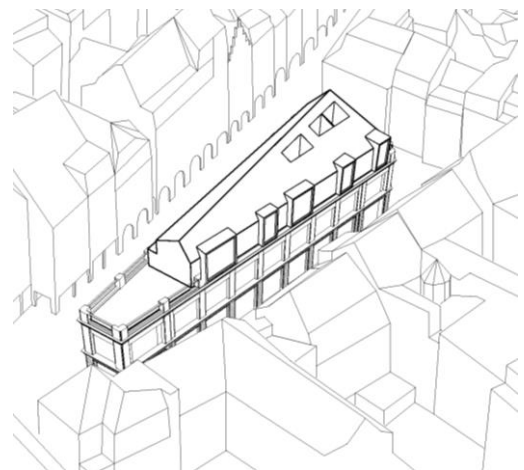
SECOND PRIZE

TEAM	LÉONOR FRANZ AND ANTOINE WEBER
SCHOOL	INSA, STRASBOURG (FRANCE)
LECTURER	JACQUES ORTH
PROJECT NAME	UN TOIT POUR LE MARCONNET (A ROOF FOR THE MARCONNET)

The Marconnet building selected by the team is located in the heart of Strasbourg's city centre, in a pedestrian zone just a stone's throw from the cathedral. The project consists of a dual challenge: create a dialogue with the highly characteristic surrounding typological context and enhance the existing building with this roof extension that contrasts sharply with the typical Alsace roofs and **their slopes and shed dormers. This new approach, designed to "fill a void", consists of a sustainable and ecological roof extension aiming to offer a particular quality of life in an urban context and to promote sociability and diversity within the project via the communal spaces.** The extremely sober roof extension crowns the building, occupying a maximum volume to accentuate its lavish mouldings and elaborate facades. A sheltered passageway, winter gardens and patios revamp the traditional typology of this neighbourhood.

THE JURY'S ASSESSMENT

Undeniably the best project in terms of choice of site, this project is an elegant contemporary reinvention of a zinc roof for a historic building. A sort of modern Mansard! The rolled zinc is pertinently (sloped ridge cap) and elegantly (converging lines, balance of volumes) used, and manages to make the roof almost invisible from street level. The new building provides a roof for an old building that had none. Retention of the terrace contributes to social integration.



PHOTOS: LÉONOR FRANZ AND ANTOINE WEBER

SPECIAL PRIZE FOR INNOVATION

TEAM	FLORIAN MERCIER
SCHOOL	ENSA, MONTPELLIER (FRANCE)
PROJECT NAME	MATRIOCHKA

One of the main streets in the future neighbourhood around the Saint Denis square and train station in Montpellier is rue Grand Saint Jean, which is set to become a pedestrian zone. The project proposed rises to two challenges: on the one hand, to inject new energy and life into an area neglected by the new urban development plan focusing on the train station, and on the other hand to preserve the architectural heritage with a view to transforming the urban environment. The old town house and its workshop were turned into a business space on the ground floor, designed to directly respond to the future street, whereas the second part is devoted to accommodation space. Zinc is used as a double skin for the entire building. Providing elegance and solar protection, it plays a modular role and makes this abstract volume a new character in the neighbourhood.

This region is subjected to extreme heat in summer and the student opted for a natural lighting strategy using the principle of indirect light. The latter enters the building via large north-facing openings for the "daytime" spaces. On the ground floor the large volume is illuminated by the atrium window (sun-screens temper the heat in summer).

THE JURY'S ASSESSMENT

This daring architectural proposition raises the question of relative habitability. This proposition is a formal response that explores new possibilities for life styles, questions architecture and queries the evolution of materials. Zinc is used not as an envelope but as a lightweight mesh. This unitary material ensures visual protection. Windows no longer exist in this project, they are hidden behind the zinc mesh! This out-of-the-ordinary personal response could suit a customised request from a house-owner providing the architect with a possibility to experiment.



PHOTOS: FLORIAN MERCIER

SPECIAL PRIZE FOR CREATIVE METHODOLOGY

TEAM	CARLOS MOLES ROMERO, ALEJANDRO ANDRES LOBO AND CARLOTA ESPIN SALCEDO
SCHOOL	ETSAM, MADRID (SPAIN)
LECTURER	JAVIER NEILA
PROJECT NAME	DENSIFY IT YOUR OWN !

The project aims to densify old neighbourhoods or urban areas with a view to the development of a bioclimatic city. The proposed procedure uses a rigorous in-depth method to analyse the site and define the most appropriate architectural type of roof extension. The questionnaire and the catalogue of constructive solutions are intended for one storey buildings, a strong choice by the team. The project was applied to the La Fortuna neighbourhood in Madrid (12,885 inhabitants) which was built in 1960. The construction of new housing units in urban roof extensions is a solution to the densification of the population predicted for the coming decade (20,000 inhabitants in total).

THE JURY'S ASSESSMENT

This project is the result of in-depth reflection of a very high level for students taking a global urban approach. The method developed by the team is not just theoretical as it is applied to 3 distinct cases. In each of these cases, the environmental and architectural questions were very well dealt with. The roof provides more than just watertightness (solar production) and the plants are not just greenwashing, they provide solar protection and act as hygrothermal buffers.



PHOTOS: CARLOS MOLES ROMERO, ALEJANDRO ANDRES LOBO AND CARLOTA ESPIN SALCEDO