active house



Highlights

2018: exciting projects ahead!

Happy 2018 to all the Active House Alliance friends! We are preparing an exciting year full of projects and activities for you! So make sure to mark them on your agenda:

23 February 2018: Active House Seminar and Active House General Assembly

During the prestigious Batibouw, the biggest Belgian trade fair for construction and renovation for professionals and the general public, which will take place from 22 February to 4 March in the Brussels Expo, the Active House Alliance organizes a seminar on how can buildings create value through values?

The seminar is held during the 2 days where only professionals have access to the fair, and is open to everyone working in the construction sector or real estate industry; Architects, designers, constructors, home builders welcomed.

Get insights into smart building monitoring and the Active House specification parameters and secure your place by registering here. Check here to see the full agenda.

During the morning of the same day, the Active House Alliance will also organize its annual General Assembly.

Spring 2018: Active House label award competition

Also this year the Active House label award competition will be back! The application process of this third edition will open in spring! Stay tuned via newsletters and on the Active House website for more information in the coming months!

Have a look at the winners of the 2017 Active House label award competition here!

Fall 2018: Active House Symposium:

On 7.-8. November, the Active House Alliance welcomes you to the 6th international symposium. This year it will be held on the campus of Politecnico di Milano, in Lecco, north of Milan. The symposium will feature:

- Updates on latest trends on holistic approaches for healthy and sustainable buildings
- Key notes from visionary front runners on how to (e)valuate and program with users in mind
- · Comfort Economy tools and developer viewpoints on energy-efficiency priorities, insights and knowledge from building industry experts, and a great opportunity to share ideas and projects, in a networking atmosphere

Check here for further information and upcoming agenda!

Catch the atmosphere of the 2017 Symposium here, and view the presentations on SlideShare here and watch the interviews here and here!

For all updates on all these activities, follow us on our twitter account.



Active House seminar – draft agenda revealed

How can buildings create value through values?

- arranged by the Active House Alliance during Batibouw professionals day 2.

Place: Batibouw, Brussels Expo, Place de Belgique 1 - 1020 Brussels - Belgium

Conference room 5602 in Hall 5 Time: Friday 23 February 10-13

Ticket: https://www.eventbrite.com/e/active-house-seminar-tickets-40491501170

Programme*:

- 10.00 Welcome by Lone Feifer Secretary General of the Active House Alliance
- 10.15 Launch of the Comfort Economy Wheel by Vinay Venkatramen CEO of LeapCraft
- 10.45 European launch of Home Performance Labelling by Rory Bergin, Partner, Sustainable Futures, HTA Design LLP
- 11.05 IoT opportunities for the future by NN, position, Schneider Electric
- 11.30 Break & Signature session AktivPlus Society & Active House Alliance
- 12.00 AktivPlus Society presentation of tools & projects by Joost Hartwig, Chairman of the Board,
- 12.20 Active House Builders publication by Oliver Rapf, CEO of Building Performance Institute Europe
- 12.40 Systemic & affordable renovations Social Housing case examples
- 13.00 End of seminar
- * Programme and timings may be subject to changes; # of seats are limited, please book your seat

Active House Award 'Future kindergartens' 2017 ceremony with the winners

The award competition was announced in Czech Republic and Slovakia and it was open to students and

doctoral students who could have submitted either a work for a study course or a work carried beside the college learning programme.

The purpose of the competition was to encourage student work in the field of sustainable buildings with excellent indoor climate to think creatively and submit their ideas; the winners received their award during a ceremony in December. This was organized by VELUX Česká republika, s.r.o. and Slovakia.









Projects

New Active House labelled project in Italy: discover C-ASA

Politecnico di Milano. Developed in 2015 within the Year-Zero Workshop in Lecco of ASA, the Advanced School of Architecture of Politecnico di Milano, it is the new POLIMI Sport office box.



The building is the result of the first ASA workshop in the Lecco Campus, coordinated by prof. Manuela Grecchi, where 27 students, selected among the best university students of Politecnico di Milano from the Architecture courses, were asked to develop the concept for a new modular unit to be installed into the Politecnico Campus. The main request of the project brief was to design a modular unit for study or other functions that could be installed around the campuses of Politecnico. Another challenging aspect to be taken into account during the preliminary design was the possibility to partially supply the energy need for heating, cooling and lighting by the onsite energy production through the exploitation of the natural resources.

The two winning proposals, "Playrope" and "The Cube", that achieved the first prizes ex-aequo from the final jury of the workshop, were melted together in C-ASA (Construction of ASA) by ATelier2 – Gallotti e Imperadori Associati and Ri-Legno, the two design studios in charge of the executive design and construction of the building.



The shape of the building is relatively simple: a cube with a floor area of about 12.5 m² and a volume of roughly 37 m³. The structure was totally realized with wood using CLT panels, which were assembled and connected on site on the existing concrete basement. Basically, the structure was designed to be modular and replicable through the aggregation of several units, able to generate spaces of various sizes. Moreover, the module was designed to be adaptable to different contexts (surroundings, climate, availability of solar energy, etc.). The internal space is flexible in order to change the internal layout on the based of the expected activities (office, study area, exhibition space, retail, etc.).

The envelope was designed according to the "fabric first" principle, adopting innovative and energy-efficient technical solutions. A lightweight dry wood-based construction system was adopted in order to ensure the rapidity of the construction and minimize the load on the basement. Moreover, a lightweight load bearing structure can be easily disconnected at the end of the building service life and reassembled for a new life in other sites. The massive CLT panels adopted to realize the walls and the flat roof, provide the thermal capacity to minimize the overheating during the summer. Moreover, a multilayer reflective insulation produced by Actis was installed internally in order to increase the capacity to store the energy during the winter. Only in the roof, considering the high exposition to the solar radiation during the summer period, an additional reflective insulation layer was installed outside, before the ventilated air gap.

A suspending ceiling with mineral insulation panels and perforated gypsum plasterboards by Knauf increases the energy performance of the roof, as well as the acoustic quality of the space. The airtightness and the vapor control is ensured by the Rothoblaas membranes, which were installed on the both sides of the timber structure. The external cladding, both for the walls and for the roof, was fully realized with zinc-titanium thin panels by Zintek, which, through a combination of two different colors, gives a shimmering aspect to the whole structure.



The shape of the building, as well as the orientation and the percentage of transparent parts, was modelled in order to optimize the energy balance during the seasons. In order to achieve a good level of comfort, a proper balance between transparent and opaque parts was necessary, ensuring the maximum inflow of natural light. The installation of wide windows and transparent door by Internorm allows an excellent level of diffuse illumination by decreasing the use of the artificial light, as well as ensuring an interesting views of the surrounding environment. Moreover, the high thermal performance certificed by Internorm, leads to a significant decreasing of the energy loss by transmission, with a significant reduction of the energy needs for heating and cooling. The shading of the interior spaces is also guaranteed by the cantilevering roof that, with a surface of 36 m², protects the exposed facades from the direct sunlight. In the middle of the roof, a wide roof window by Velux was installed in order to increase the quality of the light inside the building. The window can be totally opened and shaded during the summer months in order to activate a natural ventilation, and totally closed during the wintertime.

A solar canopy close to the building area was realized with a metallic framed structure. Nine modules of PV panels (3 kW_p) were installed on 6 m^2 of the roof and connected to the urban grid. The PV plant partially supplies the electric energy need, decreasing significantly the primary energy need of the building. The HVAC system designed by lng srl ensures the thermal comfort and the proper air change through an automatic regulation of the thermal power and the velocity of the fan on the base of the external and internal climatic conditions.

completion: 2016 architect: CONCEPT DESIGN: ASA STUDENTS; EXECUTIVE DESIGN: ATELIER2 engineer: ATELIER2 - RI-LEGNO - ING SRL developer: ACTIS SA - ALMA GIORIO - CERLOGNE PAVIMENTI - INTERNORM ITALIA SRL - KNAUF SAS - ROTHOBLAAS SRL- VANONCINI SPA - VELUX ITALIA SPA - ZINTEK SRL photo by: Francesco Pittau - Francesco Calvetti

Events



Get insights into smart buildings monitoring, tools for how to specify comfort parameters, through innovative and international cases. Active House Seminar during Batibouw; For professionals – developers, architects, planners, engineers, designers, clients and facility management.



Members



Press and communication









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