

LafargeHolcim Awards

Winners of the LafargeHolcim Awards 2017 for North America

Building even better with sustainable design

Chicago – October 12, 2017 – Sustainability has become a core principle of architecture and construction in North America. Winners of the LafargeHolcim Awards for Sustainable Construction presented in Chicago show how the leading edge of sustainable design means reaching far beyond “common sense”. Their approaches use proven instruments that are cleverly applied to improve the quality of life. So the world builds better.

The LafargeHolcim Awards is about more than just beautiful buildings. It stands out as the world’s most significant competition for sustainable design. The criteria of the USD 2 million competition are as challenging as the goal of sustainability itself. The competition is for projects at an advanced stage of design, not finished works. It seeks designs that go beyond current standards, showcase sustainable responses to technological, environmental, socioeconomic, and cultural issues affecting contemporary construction, and deliver new, surprising, and truly visionary solutions to the way we build.

No longer just a dream

In North America, architects, engineers, urban planners, and developers began to experiment with sustainable technologies and concepts very early on. Engineer *Dominique Corvez*, member of the independent Awards jury for North America, confirmed: “Around ten years ago, sustainable construction was commonly seen as adding solar panels to a building,” he said. “Now I can see sustainability really is a core principle of architecture.” Corvez also noted certain predominant topics among the prize winning projects in North America: They often aimed to sustainably improve the quality of life of less affluent people, or better the interconnection between nature and the built environment.

Gold: Comprehensive neighborhood planning in Detroit, USA

With its large team, *studio[Ci]* in Detroit is tackling one of the city’s greatest challenges: In a neglected district of the city, they want to create a community based on collective empowerment that functions as sustainably as possible. The community owned and managed infrastructure will include local energy and food production, water and waste management, while also strengthening civic empowerment. “Taking the pocket vacancies normally characterized as the biggest problem in Detroit, the design turns them into an opportunity to create a compelling sustainable neighborhood,” praised the jury.

Silver: Flexible sustainable housing in Vancouver, Canada

High density or low density housing is prevalent in North America – but nothing in between. *LWPAC + Intelligent City* in Vancouver is filling the gap: A flexible-use passive house employing prefab wooden elements was designed that will give residents the greatest possible freedom and could become an icon of sustainable construction. The concept is so flexible that it can be used equally well for a single building or a large development. “The proposal is able to merge sustainability with affordability, focusing not just on components but systems in its concentrated effort to strive for net zero energy,” said the jury.

Bronze: Holistically designed greenhouse in Boston, USA

Kennedy & Violich Architecture in Boston designed a greenhouse that is much more than simply a climate-controlled envelope: It houses a preeminent plant collection, supports an innovative public education curriculum that integrates sciences, humanities, and the arts, and enables studies of plant form adaptations. The approach of using local materials and labor is particularly respectful of the environment. “Sustainable design is at the very core of the structure, form, and system. The project meets sustainability metrics as a matter of course and then goes much further to achieve a virtuosity of integration,” noted the jury.

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Acknowledgement prizes: Humans, water, and nature

In the regional LafargeHolcim Awards, four projects in each region receive an Acknowledgement prize. In North America, these prizes all went to authors in the United States. A team from the *University of Arkansas Community Design Center* in Fayetteville, AR, developed an urban watershed plan to improve an entire region in Conway, AR. *LEVER Architecture* and *projectA* in Portland, OR, designed a prototype high-rise completely made of wood for their city. *Johnston Marklee* in Los Angeles plan to renovate and expand the UCLA Graduate Art Studios in Culver City, CA, exclusively using sustainable materials and methods; and *Terreform ONE* in Brooklyn, NY, developed a modular-design farm for edible insects in New York City.

Next Generation prizes: The future is in their hands

Four prizes were awarded in the increasingly popular Next Generation category for students and professionals up to 30 years. This category seeks visionary projects and bold ideas, and gives young professionals public exposure and a platform to gain recognition. The first of four Next Generation prizes in North America went to *Georgina Baronian* from Princeton University, NJ, USA. She developed a universally applicable roof design with a cooling function. Second prize was won by *Jason Heinrich* from the University of British Columbia in Vancouver, Canada, for a set of rules for establishing a sustainable urban neighborhood in the city of Vancouver. *Sarah Gunawan* from the University of Buffalo, NY, USA, received third prize in this category. She investigated the potential for people and wildlife to coexist based on an example in Markham, ON, Canada. Fourth prize went to *Peteris Lazovskis* of Harvard University in Cambridge, MA, USA. His experiments investigated climate control in buildings using the example of the Commonwealth Mental Health & Wellness Center.

From project to reality: Low-cost yet better schools in California

This is the fifth time the LafargeHolcim Awards competition is being conducted. Over the years, more than 200 projects have been awarded worldwide. More than half the winning projects have been built or are scheduled for completion soon. Thus, the LafargeHolcim Awards are not about “castles in the air” but about tangible measures that advance the science of construction. This aspect of tangible change is underscored by a prize that’s being awarded for the first time in 2017: the LafargeHolcim Building Better Recognition. It is awarded for a winning project from a previous competition cycle, one which has been realized and has stood the test of time as a particularly successful example of sustainable building.

In North America, this prize went to *Gloria Lee* and *Nathan Swift* of *SwiftLeeOffice* in Pasadena, CA, USA. The two architects designed a new school building prototype for the Los Angeles Unified School District to replace several inadequate temporary structures. The project won the LafargeHolcim Awards Silver North America in 2011. Boasting excellent energy efficiency, the design has so far been implemented in three locations with great success.

Prizes help make common sense commonplace

The magnified interest among architects, engineers, urban planners, and developers proves that sustainability has become embedded as “common sense” in the construction industry. The fifth cycle of the competition attracted more than 5,000 entries from authors in 121 countries. 3,606 entries were deemed valid, and more than half of these passed the pre-screening phase. They advanced for qualitative assessment by five independent expert juries in the competition regions Europe, North America, Latin America, Middle East Africa, and Asia Pacific. The juries evaluated the projects based on the five “target issues” for sustainable construction set forth by the LafargeHolcim Foundation – principles which define sustainable construction in a holistic way. The Gold, Silver, and Bronze winners from each region will compete for the Global LafargeHolcim Awards in 2018.

For more information about the LafargeHolcim Awards 2017, the jury members, and the prize winning projects, including high-resolution images, visit www.lafargeholcim-foundation.org

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LafargeHolcim Awards winning projects North America

LafargeHolcim Awards Gold 2017 North America

Bottom-up neighborhood planning, Detroit, USA: This neighborhood-scale project reimagines empty lots as collective infrastructure for energy and food production as well as civic engagement.

By Constance C. Bodurow, studio[Ci], Detroit, USA

LafargeHolcim Awards Silver 2017 North America

Modular mid-rise housing, Vancouver, Canada: This project envisages mid-rise, mixed-use housing through a modular panel system that can adapt to create a variety of unit layouts and architectural forms.

By Oliver Lang and Cynthia Wilson, LWPAC + Intelligent City, Vancouver, Canada

LafargeHolcim Awards Bronze 2017 North America

Net-zero greenhouse for Wellesley College, Boston, USA: This project reimagines the greenhouse as a locally sourced, low-energy building linking Wellesley College to the local community.

By Sheila Kennedy and Juan Frano Violich, Kennedy & Violich Architecture, Boston, USA

LafargeHolcim Awards Acknowledgement prize 2017 North America

Modular edible insect farm, New York City, USA: This pavilion demonstrates the possibility of local insect farming as a form of protein with low-resource intensity.

By Mitchell Joachim, Terreform ONE, Brooklyn, NY, USA

LafargeHolcim Awards Acknowledgement prize 2017 North America

UCLA Warner Graduate Art Studio renovation and addition, Culver City, CA, USA: Addition to and adaptive reuse of a former wallpaper factory using elemental construction, Graduate Art Studios at UCLA.

By Sharon Johnston and Mark Lee, Johnston Marklee, Los Angeles, USA

LafargeHolcim Awards Acknowledgement prize 2017 North America

All-timber high-rise load-bearing structure, Portland, OR, USA: Pioneering design proposal entitled “framework” for the first timber high-rise in the USA.

By Thomas F. Robinson, LEVER Architecture, and Anyeley Hallova, project^, Portland, OR, USA

LafargeHolcim Awards Acknowledgement prize 2017 North America

Urban watershed framework plan, Conway, AR, USA: Planning toolkit for a watershed in Conway constructs new zones of green connectivity for flood management and water filtration.

By Stephen Luoni, University of Arkansas Community Design Center, Fayetteville, AR, USA

LafargeHolcim Awards Next Generation 1st prize 2017 North America

Prototype for a cooling roof, Princeton, NJ, USA: Research investigation on cooling large-scale structures using water on the roof as a thermal insulator and solar reflector.

By Georgina Baronian, Princeton University, Princeton, NJ, USA

LafargeHolcim Awards Next Generation 2nd prize 2017 North America

Protocol for agent-based neighborhood transformation, Vancouver, Canada: Proposal foregrounding stakeholder participation and its effects on architectural form.

By Jason Heinrich, University of British Columbia, Vancouver, Canada

LafargeHolcim Awards Next Generation 3rd prize 2017 North America

Retrofitting residential neighborhoods, Markham, ON, Canada: Invention of so-called “ecological prosthetics” as habitats for birds, bats, and raccoons in suburban neighborhoods across Ontario.

By Sarah Gunawan, University at Buffalo School of Architecture and Planning, Buffalo, NY, USA

LafargeHolcim Awards Next Generation 4th prize 2017 North America

Climate control experiments for enhanced comfort levels, Boston, USA: Climate control exploration for increased comfort levels in buildings, as alternative to contemporary HVAC systems, and for generation of space and form in architecture. *By Peteris Lazovskis, Harvard University, Cambridge, MA, USA*