

## Columbia's Manhattanville Campus Awarded LEED Gold Certification for First Two New Buildings

The Jerome L. Greene Science Center and Lenfest Center for the Arts—the first two new buildings constructed at Columbia's Manhattanville campus—have been awarded LEED® Gold certification from the U.S. Green Building Council (USGBC) under the New Construction rating system.

**New York, June 27, 2018:** LEED, which stands for Leadership in Energy and Environmental Design, is the foremost program for the design, construction and operation of green buildings.

“The LEED Gold certification for both new buildings brings to life the principles embodied in Columbia's Sustainability Plan in connection with one of the University's largest and most visible initiatives,” said David M. Greenberg, executive vice president of Columbia University Facilities and Operations. “These building designations are concrete demonstrations of the University's culture of sustainability, and they reflect the standard of environmental commitment at Manhattanville for years to come.”

The Jerome L. Greene Science Center and Lenfest Center for the Arts achieved the Gold certification through a broad spectrum of strategies, from leveraging site advantages to innovative designs to reducing energy demand, using sustainable construction techniques, selecting sustainable materials and more.

The Manhattanville campus is no stranger to LEED recognitions. The campus's environmentally sustainable design and overall project plan achieved **Stage 1 LEED Platinum certification** under the USGBC's Neighborhood Development pilot rating system, the highest designation in the rating system. It is the first such award in New York City and the first given to a campus plan anywhere in the U.S.

Among the sustainable construction and design elements of the buildings:

- The double-skin aluminum and glass façade of the Jerome L. Greene Science Center creates a high-performance envelope that acts as an insulation blanket to help keep the building warm in the winter and cool in the summer.
- Maximizing the use of natural light and thermal temperature at the Greene Science Center, solar sensors on the roof work continuously to raise or lower perimeter shades for maximum heating or cooling efficiency, and intuitive lighting controls regulate internal brightness to maximize natural light flow in the workspace and conserve energy.
- To help reduce the energy load for heating at the Greene Science Center, radiant heat is emitted from hot water, which circulates through tubing embedded in the concrete floor slab at the perimeter of each floor. In addition, air-handling units are equipped to recover heat from the exhausted air and add it to the supplied air.

- To reduce energy demand for air conditioning at the Greene Science Center, chilled water passes through chilled beams that are suspended from the ceilings at the perimeter of the floors and within the major open laboratory spaces.
- High-reflective “cool roof” materials protect against the urban heat island effect and reduce greenhouse gas emissions.
- Products used in construction were selected in part based on their low-VOC (volatile organic compound) content.
- Maximizing select products from local and regional manufacturers within 500 miles of the project site and using recycled building materials reduced waste and minimized the University’s carbon footprint when constructing the buildings.
- Encouraging alternative forms of transportation through proximity to mass transportation, shuttle bus service between campuses and transportation hubs, bicycle racks and bicycle share programs and carpool programs helps to reduce the carbon footprint of occupants traveling to and from the buildings.
- Features of the Small Square open space, such as water-efficient landscaping and the selection of native plants, light-colored paving materials to reduce the heat island effect and reclaimed wood for the fabrication of furniture and benches.

“While the LEED Gold designations should be celebrated by everyone affiliated with Columbia, the honors have added meaning to the members of our team, whose hard work and unwavering focus on sustainability helped ensure the buildings received the recognition they deserved,” said Marcelo Velez, vice president of Columbia’s Manhattanville Development Group. “Many of the buildings’ sustainability features were innovations in their own right, and I anticipate that some features will become models for scientific research buildings around the world, which are inherently high-demand energy buildings.”

In addition, construction at Manhattanville follows a model clean construction program, which includes the prioritization of electric equipment over diesel equipment, the use of the latest diesel emission control technology for on road and off-road equipment when diesel is required, a wheel-washing system for trucks that uses a high volume of recycled water and other efforts addressing air quality, noise and vibration reduction and pest management. Infrastructure improvements led to reduced wastewater overflow into the Hudson River by an estimated 1.5 million gallons per year.

Previously, interior renovations for a portion of the second floor of the Studebaker building received a LEED Silver designation for Commercial Interiors, and renovations of other spaces in the building are aiming to receive a Silver designation, at a minimum. The Studebaker building is a former car-finishing plant now retrofitted as an administrative building for Columbia University located within the Manhattanville campus.

Looking ahead to future construction in Manhattanville, Columbia University has committed to constructing all-new buildings at the campus to LEED Silver certification, at a minimum.

Also noteworthy, the Jerome L. Greene Science Center was in part funded by “**Green Bonds**” issued by the Dormitory Authority of the State of New York.