

The Art of Science



A

When it opened in April 2023, it was greeted with very real relief. Considering the construction method used to build the latest addition to Manhattan's 154-year-old American Museum of Natural History, some New Yorkers had worried that its walls of fake rock might look like a sad zoo or a very slow ride at Disneyland. Coming in at just under half a billion dollars, however, the Richard Gilder Center for Science, Education, and Innovation, designed by American architecture and urban design practice Studio Gang, is worth every penny.

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Images by Iwan Baan



B

The 230,000-square-foot Richard Gilder Center for Science, Education, and Innovation adds a fully accessible entrance to the western side of the American Museum of Natural History. It also creates more than 30 visual and physical bridges between ten of the museum's 20 buildings, substituting continuous loops for dead ends, an ideal metaphor for a world-class scientific and educational institution. With its voluptuously rugged facade clad in the same Milford pink granite as the original Central Park West entrance, it shelters a generously day-lit, five-story atrium crafted from shotcrete. Liquid but load bearing, this concrete, usually used to build infrastructure, was sprayed onto digitally modeled and custom-bent rebar cages — think chicken wire under papier-mâché, with a form inspired by the way water and wind carve rock and ice. The method eliminated the waste of formwork and gives the interiors seamless vaulting that resembles geologic formations hollowed, smoothed, and sculpted by the elements over eons.



C

Previous spread

- A Opened in 2023, the Richard Gilder Center for Science, Education, and Innovation at New York's American Museum of Natural History was designed by Studio Gang as an organic space that connects many of the museum's structures
- B A view from the center's Kenneth C. Griffin Exploration Atrium shows the architectural promenade created by the layered design

This spread

- C Some locals worried that the shotcrete may look like an unattractive fake rock wall, but the center's design has been received well
- D The center draws exhibition and educational spaces as well as back-of-house activities into the public eye, conveying the idea of collective learning
- E The center connects ten of the museum's more than 20 buildings across its four-block footprint
- F The facade is clad in the same Milford pink granite as the museum's original Central Park West entrance

That look makes visitors feel as if discovery is just around the next softly hewn corner and sparks the same type of curiosity for exploration that the museum is meant to inspire.

From the central atrium, across bridges, over sculpted surfaces, and through vaulted portals, circulation is much improved. It's possible to find and reach new exhibition, education, and research spaces, including an insectarium and butterfly vivarium, floor-to-ceiling showcases of millions of specimens, high-tech projections, classrooms, and labs. The architecture draws essential back-of-house activities and collections into public view for the first time. Visitors don't just see the museum as a place, they see it as a place created by the work of people, a layered experience that multiplies the learning.

The atrium's verticality helps to lower its energy consumption, circulating natural light and air deep inside. A high-performance, stone-clad envelope, deep-set, rounded windows (with bird-safe fritted glass), and trees also help to passively cool the building. Unexpectedly, even though the new building is cavernous, it feels more porous, light, and lightweight than its leaden, orthogonal, classical siblings in the four-block campus around it. Amidst them, it seems to swell instead of being squeezed.

For the *New York Times*, Michael Kimmelman described the new center as "a poetic, joyful, theatrical work of public architecture and a highly sophisticated flight of sculptural fantasy." But Studio Gang founder Jeanne Gang has made it clear that she views that flight in the service of science education at a moment when science and education are both under attack. Walking through Gilder might be compared to studying for exams by riding Disney's Matterhorn. All museums are experiential — that's the point. But this one feels thrillingly so.



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