

Plus, the 2020 AIA Honors

architectmagazine.com
The Journal of The American
Institute of Architects

Design on the Front Line

Architecture confronts the coronavirus



A Contents

Volume 109, number 5, May 2020.

On the cover: Sanchit Mehta from the University of Southern California.

This page: NewYork-Presbyterian staff with PPE donated by Skidmore, Owings & Merrill.

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150 The Rules Have Changed

The coronavirus is imposing a new reality, with profound ramifications for the built environment, professional practice, and design education—seemingly every aspect of work and life. Faced with the horrific costs of blood and treasure worldwide, the architecture community has rushed to adapt and provide aid, without ceasing to work toward a healthier, more sustainable future.

AIA 2020 HONORS

189 2020 AIA Honors

This year's winners reflect on their careers, the future of the profession, and the challenges posed by the current moment, from climate change to the pandemic.

AIA Gold Medal

AIA Architecture Firm Award

Edward C. Kemper Award

AIA/ACSA Topaz Medallion

Whitney M. Young Jr. Award

Thomas Jefferson Award for Public Architecture

Collaborative Achievement Awards

Typology: FDNY Rescue Company 2, by Studio Gang

TEXT BY CLAY RISEN

Early in the process of designing a new home for Brooklyn's Rescue Company 2, one of the New York City Fire Department (FDNY)'s six elite emergency response teams, Jeanne Gang, FAIA, and her office came to a surprising realization: The urban rescue workers they were dealing with knew almost as much about architecture as they did. "They have to go into all sorts of buildings, often without light," says Gang, whose Chicago-based firm won a competition to design the facility in 2015. "They have this mental picture of all these different styles in their head." That intimate relationship between client and design informed almost every aspect of the building, which was commissioned as part of New York's Project Excellence program and opened in 2019.

The architects asked themselves: How do you build a better firehouse? Gang and her team had done extensive research into, and designed, civic buildings, but they had never designed a firehouse before. They began the design process with lengthy interviews with the firefighters themselves—the architects even went out on an emergency call. "They were so anxious to let us know what they do," Gang says.

The firefighters' top priority for a new facility was that it allow them to conduct training. The city's rescue companies respond to a wide range of emergencies, from burning buildings to overturned boats, and each crewmember has to master a range of skills, from scuba diving to climbing down the side of



The main truck bays take up the bulk of the first floor.

Project Credits

Project: FDNY Rescue Company 2, Brooklyn, N.Y.
Client: FDNY; New York City Department of Design and Construction
Architect: Studio Gang, Chicago and New York · Jeanne Gang, FAIA (founding principal, partner); Weston Walker, AIA (design principal, partner); William Emmick, AIA (principal of design management)
Structural Engineer: Thornton Tomasetti
MEP/FP Engineer and Façade Consultant: ADS Engineers
Civil Engineer: Langan

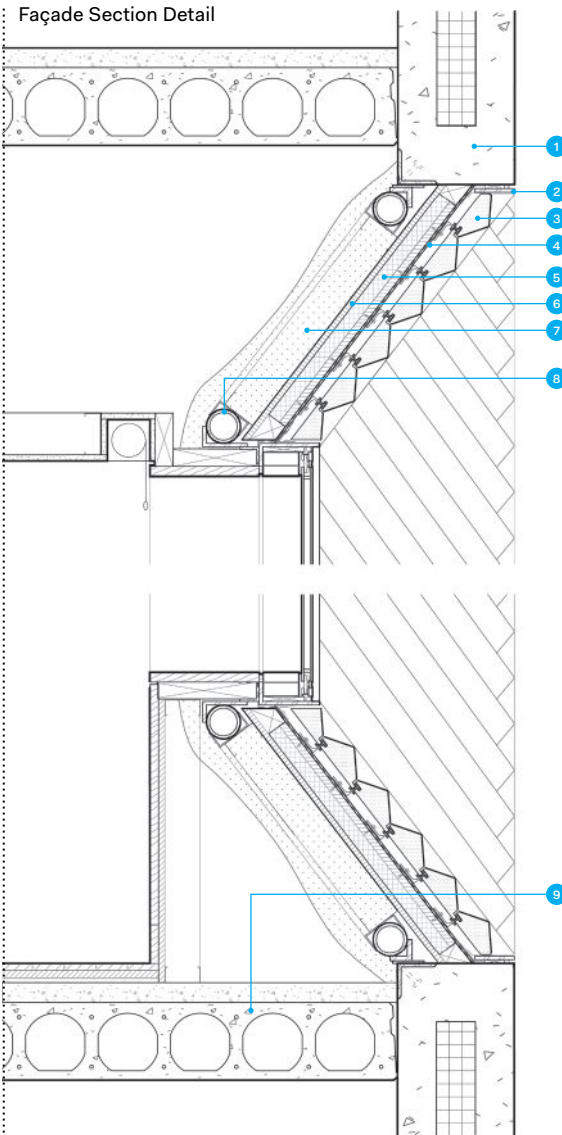
Construction Manager: The LiRo Group
General Contractor: ZHL Group
Landscape Architect: SCAPE
Lighting Designer: Domingo Gonzalez Associates
Wayfinding: Once-Future Office
Geothermal Consultant: P.W. Grosser Consulting
Cost Estimator: Toscano Clements Taylor
Expeditors: KM Associates of New York
Size: 20,000 square feet
Cost: \$32 million

Typology:
Studio Gang

a building. The company's previous firehouse was cramped, antiquated, and the firefighters had to practice where they could—either traveling to northern Manhattan to the city's main training site, or improvising closer to home with empty shipping containers.

Because the new building's usable floor area was limited to just over 20,000 square feet, barely enough space for the crew and its equipment, Studio Gang had to get creative to integrate training facilities as well. And so the firm designed two firehouses in one. The two-story structure does all the work of a standard firehouse. It can hold up to four apparatuses (or, to lay folk, trucks) and house five firefighters and an officer—there's a kitchen and even a pair of classic brass fire poles. But the building is also a Swiss Army knife of training tools. Practically every corner plays double duty. A two-story central atrium brings fresh air and natural light into the truck bay, but its walls are fitted with various window shapes so firefighters can practice rappelling. A trench in the floor opens to simulate a construction-site collapse. Doors at both front and back make it easy to clear out the garage for training drills.

Even the exterior walls, made from precast concrete panels, have tie-offs along their parapets to give the 32-member crew opportunities to develop rope skills. "This little toolbox is about taking an ordinary building and creating opportunities with it," Gang says.



1. Insulated precast panel
2. Steel plate frame
3. Terra cotta baguette
4. Air and moisture barrier
5. Insulation and sheathing panel
6. Fiberglass-mat gypsum wallboard
7. Spray cellulose insulation
8. Steel tube frame
9. 8" hollow-core precast plank

0 6 12"





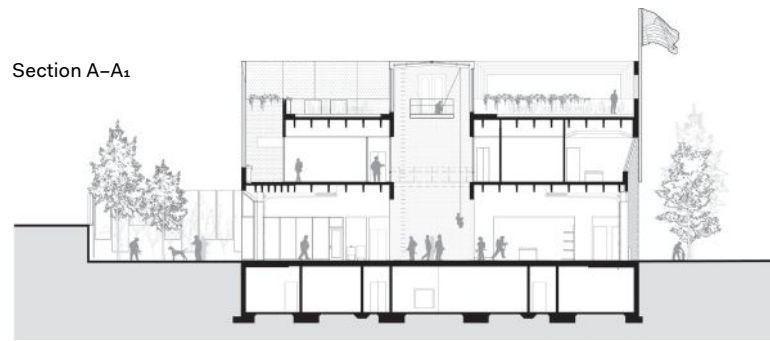
Red "baguettes" from Boston Valley Terra Cotta frame the windows, doors, and voids of Rescue Company 2.

Typology: Studio Gang

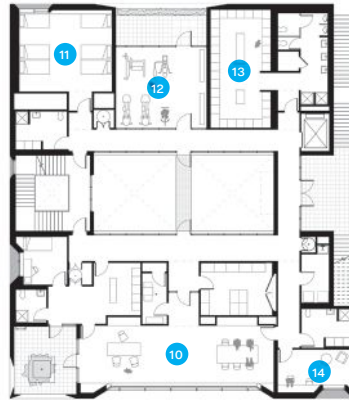
In addition to making the facility doubly useful, Studio Gang made it sustainable—a key mandate of the city's design excellence program. The firehouse sports a green roof, a solar hot-water system, and a geothermal HVAC system. Rainwater is collected in reservoirs for later use; what isn't collected flows into the ground through permeable concrete surrounding the structure.

Gang may describe the building as a tool, but she also wanted to make sure it was a home. The kitchen and an attached lounge provide communal recreation space, but they are located next to the garage in case the firefighters get a call during a meal. Company and FDNY memorabilia adorns the walls, and just inside the front door is a memorial that recognizes the many fellow Brooklyn firefighters who died responding to the Sept. 11 attacks.

She also wanted to make sure that it was a part of its community. Firehouses are typically a neighborhood anchor, and Rescue 2 is no different: Located in Brownsville, a lower-income area in central Brooklyn, it sits on a former brownfield site, next to a massive new affordable housing complex. The concrete exterior is punctuated by bright-red terra cotta "baguettes," which surround and accent windows. There's even a street-level bench built into the wall, inviting passersby to engage with the building. "It was important to keep it functional, but to give it a civic presence at the same time," Gang says.



Second-Floor Plan



First-Floor Plan





- 1. Truck bay
- 2. Training tower
- 3. Kitchen
- 4. Lounge
- 5. Bunker gear
- 6. Conference
- 7. Tool storage
- 8. Lumber storage
- 9. Decontamination area
- 10. Office
- 11. Dormitory
- 12. Gym
- 13. Locker room
- 14. Study room



TOM HARRIS

The east façade, seen here from the adjacent neighborhood basketball court, is primarily composed of insulated precast panels from the High Concrete Group.

Typology:
Studio Gang

The voids incorporated into the top of the structure frame an exterior staircase and terraces, and serve as a functional metaphor: They offer spaces for training, while also referencing the fact that firefighters often cut openings into burning buildings so they can rescue occupants and allow smoke to vent.





Typology:
Studio Gang



Right: The east wall in the training tower has integrated tie-offs to allow the firefighters to practice climbing and rappelling. Scuff Master paint ensures durability and TGP fire-rated glazing admits daylight.

Opposite: The truck bay shows off the cast-in-place structure, with concrete from Long Island Concrete.

