COLUMBIA | Manhattanville

ARCHITECTURAL FACT SHEET

Lenfest Center for the Arts Columbia University Manhattanville Campus



Project Description

The Lenfest Center for the Arts was designed by Renzo Piano Building Workshop as Columbia University's first presentation platform for its distinguished School of the Arts. It houses the new, more publicly accessible facilities of The Miriam and Ira D. Wallach Art Gallery; the Katharina Otto-Bernstein Screening Room for film; a flexible performance space for theater, music, dance and cross-disciplinary productions; and a flexible presentation space for readings, lectures, exhibitions and symposia. Like the rest of Columbia's new Manhattanville campus, the building is intended to be both a University-wide facility, drawing together students and faculty in all disciplines and professions, and a resource that is open to and engaged with the surrounding West Harlem community.

LOCATION AND RELATIONSHIP TO THE CAMPUS

The Lenfest Center for the Arts is one of the three buildings that define the southeastern quadrant of the new 17-acre Manhattanville campus. The Lenfest Center is located between Broadway and 12th Avenue, immediately west of the campus's new Jerome L. Greene Science Center (opening in spring 2017), and just north of 129th Street, from which it is set back behind the plaza known as the Small Square. Completing this initial ensemble of campus buildings

is the University Forum (opening in 2018), which occupies the triangular corner at West 125th Street and Broadway.

Like all other new buildings that will be developed for the Manhattanville campus, the Lenfest Center, the Jerome L. Greene Science Center and the University Forum are glass-enclosed and open to the public at street level. Above street level, the predominant skin of the Lenfest Center is metal panel; of the Jerome L. Greene Science Center, glass; and of the University Forum, prefabricated concrete and glass. The contrasting materials serve the different functions of the three initial buildings while also establishing the architectural palette for the campus.

DESIGN

Renzo Piano Building Workshop

ARCHITECTS OF RECORD

Davis Brody Bond LLP, Executive Architects Body Lawson Associates, Associate Architects

PROJECT SIZE

60,000 square feet

- 51,000 square feet above grade (eight floors)
- 9,000 feet below grade (one floor)
- Building footprint: 9,473 square feet
- Building height: 117 feet

KEY DATES

Planning initiated: 2003

City Council approval of Manhattanville campus plan: 2007

Beginning of site work: 2008

Manhattanville campus dedication: October 24, 2016 Opening of the Lenfest Center for the Arts: Spring 2017

FLOOR-BY-FLOOR PROGRAM

All four program areas (Screening Room, performance space,

Wallach Art Gallery and presentation space) are given double-height spaces.

- **Street Level:** Grand lobby, ticket desk, security checkpoint and elevator lobby
- Level 2: Katharina Otto-Bernstein Screening Room (150 seats, 50' long x 40' wide x 17' high), support spaces, offices and green room
- Level 3: Upper area of the Screening Room, four production support offices, workstation room and storage
- Level 4: Flexible performance space (99 seats with variable configuration, 54'4" long x 47'4" wide x 18'9" high), a wet prep area and storage rooms
- Level 5: Upper area of the performance space (with balcony seating), dressing rooms, kitchenette, green room, control and dimmer rooms and mechanical and IT/security rooms
- Level 6: The Miriam and Ira D. Wallach Art Gallery (93'2" long x 40'10" wide x 19'8" high), wet and dry preparation rooms
- Level 7: Wallach Art Gallery offices and workstations
- Level 8: Flexible presentation space (93'2" long x 47'1" wide x 17'2" high), catering support area, storage rooms immediately adjacent to the space (Capacity of the presentation space is 203 seated for reading/lecture configurations, 260 for standing-only events, or 144 seated at 24 tables of six)
- **Below Grade:** Ticket office, staff room, offices, theater laundry, workshop, warming pantry and building support

PRINCIPAL DESIGN FEATURES

• Street Level Transparency

At street level, the façade of the Lenfest Center, except for the north façade, is a completely transparent custom-glazed curtain wall, to foster activity and connection within the campus and community. Suspended glass awnings, framed within exterior steel columns, project above the doors at the south façade of the building (facing 125th Street). The development of the streetscape through reverse setbacks, sidewalk widening and the Small Square also promote a connection to the community and make for a more walkable campus.

Column-Free Space

To achieve large, column-free, open spaces and higher ceilings than are possible with standard steel I-beams, the Lenfest Center uses castellated beams. Vertical loads are then transferred to large columns, horizontal and diagonal steel braces and custom steel-cast node structures on the exterior of the building. These column-like structures are visible on the northwest and northeast sides of the building.

• Façade

Levels 2 and 3: Quarter-inch painted metal panel rain screen. Insulated sandwich panels at the north, south, east and west façades featuring punched windows of varying sizes. Because Levels 2 and 3 house the Screening Room, there is no large expanse of windows. Levels 4 to 8: Painted metal panel. Large expanses of double-height windows delineate the three program areas on these levels: performance space, Wallach Art Gallery and presentation space. Level 4 features punched windows on the north, south and east façades. Levels 5 to 8 feature punched windows on all façades.

Massing

As the building rises, the floorplates increase to accommodate the different programs, creating a progression of cantilevered masses.

PRINCIPAL PROGRAM FACILITIES

Audiovisual

Each performance venue within Lenfest has its own dedicated audiovisual system, which can operate independently of the other venues. These systems are in turn interconnected, enabling collaboration between the venues. In addition, audiovisual systems are connected to the building's converged IP network, providing full integration with Columbia University's IT campus infrastructure via both standard Internet and Internet 2.

Audiovisual systems include:

- Building-wide paging and background music and digital signage systems
- Voice and music reinforcement and sound track reproduction systems in all public venues, including the street-level lobby
- Video projection systems in all public venues and the rehearsal space
- Video scenic projection systems for the performance space
- 16mm and 35mm film and digital cinema projection systems in the Screening Room

• Skylight

The skylight canopy on the ceiling of the presentation space features custom lighting and motorized shade tracks.

PRINCIPAL STRUCTURAL AND MECHANICAL FEATURES

Foundation

The foundation is reinforced, poured concrete with a mat slab, and a drainage course with a structured slab above. The basement floor, which is below the water table, is waterproofed on the exterior face.

• Structure

The building has a steel-frame structure with metal decking. The exposed architectural and structural steel elements (columns, girders, etc.) are painted with intumescent paint within the building's occupied floors.

• Air Handling System

Custom-fabricated air handling units located strategically on each floor in individual mechanical rooms supply air for cooling or heating throughout the building via air distribution ductwork and supply diffusers.

• Humidification

Certain spaces, such as the Wallach Art Gallery, are provided with humidification units to maintain relative humidity within the ranges required for safeguarding the art.

• Lighting

Lenfest uses a combination of LED and fluorescent lighting. The main lobby, Wallach Art Gallery, Screening Room, performance space, presentation space and open work spaces are fitted for LED fixtures. The theater has state-of-the-art, integrated, microprocessor-based lighting control systems, including dimmer racks and modules specifically designed for architectural and entertainment lighting, panic control systems, emergency lighting transfer systems, relay panels and fully enclosed equipment racks.

MANHATTANVILLE CAMPUS

The largest and most ambitious capital project undertaken by Columbia University since its landmark Morningside Heights campus (McKim, Mead and White, dedicated 1896), the Manhattanville campus was proposed by University President Lee C. Bollinger in 2003. It is designed to provide the innovative academic space that will keep Columbia at the forefront of the world's research universities and fulfill its mission to address society's challenges through the creation of new knowledge. Defining Columbia's building footprint for decades to come, the 17-acre campus is intended to create a different kind of space than in the past, with facilities that encourage the University-wide, cross-disciplinary interaction that is crucial to advances in all fields, and reflective of New York's dynamism. At the same time, the open, sustainable campus is designed to deepen the connections between Columbia and its local community, so that the City and the University can enliven and strengthen each other. The Manhattanville campus plan will enable Columbia to extend beyond its beloved but enclosed Morningside Heights setting with an open, welcoming campus, embedded in New York's existing street grid without traditional gates or barriers. The long-term plan

will eventually create 6.8 million square feet of new academic space, as well as more than an acre of publicly accessible green space, land-scaped paths and street-level commercial and civic facilities open to the public.

Situated a few blocks northwest of Morningside Heights, the Manhattanville campus occupies an area from 125th Street to 133rd Street, and from either side of Broadway to 12th Avenue. The site was characterized since the late 19th century by industrial buildings, some of which will be adaptively reused amid the new construction. Distinct from the campus, but directly connected with it and financially supported by Columbia, is the West Harlem Piers Park on the Hudson River.

DESIGN AND CONSTRUCTION TEAM

Renzo Piano Building Workshop
A. Chaaya (Principal Architect) with E. Garnaoui
K. Doerr (Associate), W. Antozzi, S. Drouin (Associate), C. Ruiz,
A. Saoud, T. Zamfirescu and G. Glorialanza, C. Sun; O. Aubert, C. Colson, Y. Kyrkos (models)

Architect of Record: Davis Brody Bond LLP Associate Architect: Body Lawson Associates Structural Engineer: WSP/Parsons Brinkerhoff

Mechanical, Electrical, Plumbing and IT: Jaros Baum & Bolles

Façade: IBA

Lighting, Acoustical and Vibration: Arup

Geotechnical Engineer: Mueser Rutledge Consulting Engineers

Theater Planning and Design: Fischer Dachs Associates

Sustainability Consultant: Atelier Ten

Landscaping: Field Operations

Security Consultant: Aggleton & Associates

Cost Consultant: Davis Langdon

Civil Engineer: Stantec

Waterproofing Consultant: WJE Engineers & Architects

Vertical Transportation Consultation : Van Deusen & Associates

Code Consultant: Simpson Gumpertz & Heger Construction Manager: Lendlease US Construction