

The Museum of Modern Art

Building Project Description

The Museum of Modern Art has completed a renovation and expansion designed by Diller Scofidio + Renfro, in collaboration with Gensler, that has increased gallery space by 30%, provides visitors with a more welcoming and comfortable experience, and better connects the Museum to the urban fabric of midtown Manhattan. Launched in 2014, the first phase of renovations on the east end was completed in 2017, and the second phase of expansion on the west end is now complete and opens to the public on October 21, 2019.

The overall expansion yields a net increase in MoMA's gallery space of one third, to approximately 165,000 square feet, allowing the Museum to exhibit significantly more art in new and interdisciplinary ways. The design optimized current spaces to be more flexible and technologically sophisticated, expanded and opened up the main lobby into a light-filled, double-height space that connects seamlessly between West 53rd and 54th Streets, and created a multitude of circulation routes with more areas for visitors to pause and reflect. The state-of-the-art Studio in the heart of the Museum and an innovative second-floor Creativity Lab invite visitors to connect with art that explores new ideas about the present, past, and future. The flagship Museum store has been lowered one level and made visible to the street through a dramatic glass wall and a new sixth-floor café includes an outdoor terrace facing 53rd Street. The clear glass façade, new street-level galleries, and a ground floor free and open to all offer increased transparency and bring art closer to people on the streets of midtown Manhattan.

The architectural expression is a restrained conversation between the existing palette and new materials within The Museum of Modern Art. The design taps into the historic DNA of the building, relating disparate elements through a series of strategic interventions that reflect aspects of twentieth-century modernism: purity of material expression, abstraction of space, and thinness. Synthesis is achieved with a minimalist use of materials which correlates with the existing building fabric.

Location	11 West 53 Street, between Fifth and Sixth Avenues
Architects	Diller Scofidio + Renfro in collaboration with Gensler
Renovation and Construction Cost	\$50 million for renovation and \$400 million for expansion/new construction
Building Milestones	1929: The Museum of Modern Art is founded 1939: Goodwin-Stone Building opened 1964: Philip Johnson Extension completed 1984: Cesar Pelli Extension completed 2004: Yoshio Taniguchi Extension completed 2014: Diller Scofidio + Renfro in collaboration with Gensler, commissioned for the expansion of MoMA 2016: Expansion groundbreaking 2017: Phase 1 Renovation completed 2019: Diller Scofidio + Renfro in collaboration with Gensler Expansion completed

MoMA

Sustainability

Targeting LEED Platinum

Museum net dimensions

Total existing Museum	606,000 square feet
Total after expansion	708,000 square feet
Total existing gallery space	128,000 square feet
Total gallery space after expansion	166,000 square feet
Total new and renovated galleries	47,000 square feet
Existing public space	83,000 square feet
Post-expansion public space	104,000 square feet

LOBBY AND TICKETING (Level +1)

A new custom entry canopy welcomes visitors into a double height space from 53rd street with an uninterrupted view between 53rd and 54th street, liberated by reconfiguring ticketing and coat check off this central axis. This primary entrance is complimented by a secondary entrance in the east lobby, which features a dedicated film desk and reception and coat check for members. Visitors can access the retail store and ground level galleries through two entrances in the west lobby. The open lobby is equipped to host installations of art, on a ground floor free and open to all.

Materials

Walls: American Black Walnut wood veneer panels (Ticketing), Blackened Steel Panels, White Gypsum Board

Floors: Green Vermont slate (West Lobby), Edge Grain White Oak wood, Black Terrazzo (East Lobby)

Ceilings: Acoustic Plaster Micro-perforated American Black Walnut Wood Veneer Panels, Black Laminate MDF Panels

Fixed Ticketing Desks: Blackened steel, designed by DS+R with Gensler

Fixed West Connector Bench Seating: Absolute black granite, designed by DS+R with Gensler

53rd Street Entrance Canopy: Bead Blast Stainless Steel Plate, designed by DS+R with Gensler

FLAGSHIP MUSEUM STORE (LEVEL -1)

The **5,950 square foot flagship Museum store** is located at the Cellar Level, open to the Lobby above. This allows the reconfigured lobby to be visually connected to the street. Clear street-level glazing allows views into the store from the exterior sidewalk above. The lowered elevation provides a high degree of visibility without interfering with the lobby and art spaces beyond. Museum visitors can look down into the store from the Night Entry, West Connector Lounge, and Blade Stair in

passing. There is a dedicated street entrance, bridge, glass elevator and stair enabling shoppers to bypass museum patrons if desired.

Materials

Walls: American Black Walnut wood veneer panels

Floor: Northern White Oak Edge Grain Wood

Ceilings: Micro-perforated American Black Walnut Wood Veneer Panels, Black Laminate MDF Panels, Walnut wood veneer coffered ceiling on shaped MDF substrate

Display Fixtures: Blackened Stainless Steel and Stainless Steel with sold surface shelving, designed by DS+R

STREET-LEVEL GALLERY, PROJECTS GALLERY (Level +1)

The **3,900 square foot street-level galleries**, including the dedicated Projects Gallery, are free and open to all on the expanded ground floor. The double-height Projects Gallery (26'- 6") is responsive to variable media and scale, integrating roll-up shades for projections and black out shades to enable variable lighting control for projections. The custom designed LED light fixtures can be reconfigured within the light track system. They provide an even wall-wash of light, ideally suited for mixed-media installations.

Materials

Walls: White painted Gypsum and Blackened steel portals

Floor: 8" wide solid Northern White Oak Planks

Ceilings: White painted Gypsum

PAULA AND JAMES CROWN CREATIVITY LAB (Level +2)

The **1,600 square foot Crown Creativity Lab**, designed by Gensler, on the second floor is an experimental, creative space programmed by the Education Department to explore ideas, questions, and art processes. The use of wood and soft materials creates a warm and engaging space. The choice of plywood creates a playful environment, and the lighting illuminates the space, as seen from the lobby. A large pivoting wall for projections and pinups, as well as full height storage walls, support MoMA's dynamic educational programs.

Materials

Walls: Douglas fir plywood

Moveable Wall: Aluminum cladding, Gypsum, and plywood

Floor: Resilient flooring

Ceilings: Douglas fir plywood

DAVID GEFFEN WING, JERRY SPEYER AND KATHERINE FARLEY BUILDING (Level +2, +4, +5)

Thanks to the redesigned circulation, the new western expansion of the Museum will be dedicated almost entirely to the display of art. The more than 40,000 square feet of gallery space being added in the western portion of the building will enable MoMA to realize a long-held aspiration: to present significantly more of its collection through a series of fluid, interconnected narratives of modern and contemporary art across all mediums. The existing galleries on the second, fourth, and fifth floors have been expanded westward through the new David Geffen Wing inside the 53W53

building designed by Jean Nouvel, adding approximately 11,500 sf per floor. The 30 percent increase in gallery space includes the Jerry Speyer and Katherine Farley Building, a stack of vertically interlocking galleries of varying heights, some naturally lit, some equipped for performance and film. The new galleries can accommodate over double the typical load capacity of existing galleries, measuring 250 pounds per square foot with provisions for 13,000 pound point loads throughout the galleries. The subtle shifts in palette marking the passage between old and new galleries include increasing 4-inch wide wooded plank flooring to 8-inch wide planks and blackened steel portals inspired by the Taniguchi-designed stainless steel portals.

Materials

Walls: Painted Gypsum board walls

Floor: 8" Wide Solid Northern White Oak Planks

Ceilings: Painted Gypsum board

MARIE-JOSÉE AND HENRY KRAVIS STUDIO (Level +4, +5)

The **2,000 square foot** state-of-the-art Marie-Josée and Henry Kravis Studio is the world's first dedicated space for performance, process, and time-based art centrally integrated within the galleries of a major museum. Here, performance, dance, music, and sound works connect to the stories of modern and contemporary art in the surrounding collection galleries, through vestibule doors on the fourth floor and an overlook window on the fifth floor flex gallery.

The 31-foot, double-height black box space can accommodate a range of seating and staging scenarios with a maximum seating capacity of 105 and a 20' deep stage. Demountable seating risers can be deployed, or stored, to accommodate an open floor plan. The space can accommodate variable acoustics requirements, with a Sound Transmission Class Rating of 60, on par with major concert halls. While performances can be daylight, the studio is also equipped with solar shading, black out curtains, and theatrical lighting. A walkable, suspended tension ceiling grid further enhances the studio's flexibility.

Materials

Walls: Acoustically isolated painted Gypsum board walls

Floor: Acoustically Isolated Douglas Fir End Grain Block with Black Stain on Resilient Channels "Dance Floor"

Ceiling: Painted Perforated Gypsum Board and Acoustic Diffusers

THE CAROLL AND MILTON PETRIE TERRACE SIXTH FLOOR CAFÉ (Level +6)

The **3,600 square foot café** provides a location for casual refreshments and dining, as well as an opportunity for site-specific art installation on the Museum's highest floor. Furniture can be stacked or removed for special events. The indoor café can accommodate an 85-person seating capacity, while a terrace facing 53rd street accommodates a 55-person seating capacity.

Materials

Walls: Artisanal Plaster, Black Laminate MDF panels

Floor: 8" wide solid Northern White Oak Planks, seating area stained black

Fixed Bar and Drink Rail: Grand Antique marble designed by DS+R

Back countertop and shelving: Stainless steel counters and shelves with additional glass shelving

IMPROVED CIRCULATION FEATURES

The **53rd Street entrance canopy** is a thin 42' plane weighing 95,500 pounds, which appears to slice through the glass facade and float above the main entrance doors. The canopy is comprised of steel plates and concealed ribs, suspended on steel rods. The canopy cantilevers 26' beyond the facade of the building, out to the sidewalk to mark the main entry point for visitors.

The **east-west connector** on the ground level lobby is an open network that seamlessly links new galleries to the renovated east side of the building.

A **gallery loop** of distinct galleries with varying heights and layouts supports curatorial flexibility and cohesion in the display of art. These new circulation routes link new and existing galleries on the second, fourth, and fifth floors that have been expanded westward into the new David Geffen Wing and Jerry Speyer and Katherine Farley Building.

Vertical Circulation

Completed during the first phase of renovation, the historic **Bauhaus stair** was extended to the ground level to restore and enhance access to the second and third-floor galleries.

The **retail stair** provides direct access into the flagship Museum store from 53rd Street. The blackened stainless steel stair was designed as an offset beam, in which structural loads are transferred at the landing. As a result, the stair provides its own built in structure.

The **blade stair** marks the threshold to the new expansion of the museum and acts as a palette cleanser. The stair is a vibrant urban sculpture, combining a monumental physical presence with intangible structural lightness. This stair's minimal expression was achieved through a number of structural innovations – a six-inch thin vertical spine hangs from the roof structure to structurally support the stairs and landings, leaving the structure free of any lateral bracing. The stair is constructed with bead-blast stainless steel panels with solid northern oak treads and risers. Glass balustrades on the seven-foot wide risers are cantilevered and held in place with pins to express the intersection of the two materials, a detail and dimension that echoes the renovated Bauhaus stair where the stair is embedded into the terrazzo. Bird's-eye Maple with acoustic micro-perforations lines the blade stair atrium.

The **6th floor stair** connects levels five and six, distinguished from the blade stair to mark a transition between gallery floors and the café. The blackened stainless steel stair cantilevers off the atrium wall, free of any additional structural supports.

FAÇADE

The 53rd Street façade is conscious of the Museum's architectural history in the existing Goodwin and Stone, Johnson, and Taniguchi buildings but shaped by the new demands of its adjoining spaces behind. The Studio and the Daylight Gallery share a frameless suspended glass wall with a black dot frit outer surface to delicately modulate daylight and reflection. The Studio features an additional interior glass wall with metal mesh interlayer, as the inner wall of the box-in-box, acoustically isolated construction 3' behind to control outside sound migration and further filter daylight and view. The façade of the public spaces – the lobby, the suspended blade stair, the Street Level gallery and the retail space below – employ frameless glass panels that are structurally

clamped to function as glass beams both vertically and horizontally to maximize visibility from the street to activities inside the museum. Four of the Street Level Gallery façade panels can open up to the sidewalk to facilitate loading and unloading work to the Projects Room Gallery.

DESIGN & CONSTRUCTION TEAM

Architect	Diller Scofidio + Renfro in collaboration with Gensler
Director, Real Estate Expansion, MoMA	Jean Savitsky
Construction manager	Turner Construction Company
Retail consultant	Lumsden Design
Lighting designer— public spaces	Tillotson Design Associates
Lighting designer— gallery spaces	Renfro Design Group
MEP/FP/IT	Jaros Baum & Bolles (JB&B)
Structural	Severud Associates
Façade	Heintges Consulting Architects & Engineers P.C.
Sustainability	Atelier Ten
Security	DVS Security
Acoustics/Audio-Visual	Cerami Associates
Vertical Transportation	Van Deusen Associates (VDA)
Theater Planning & Design	Fisher Dachs Associates (FDA)
Theater Audiovisual	Boyce Nemece Designs
Waterproofing	Vidaris
Foodservice	Cini-Little International, Inc
Signage/Wayfinding	Gensler/Wkshps
Steel Fabricator—blade stair	Dante Tisi, DAMTSA
Steel Fabricator—retail stair, counters	M Cohen
Steel Fabricator—canopy	Frener+Reifer, Germany
Millwork	MillerBlaker