OMA

Pierre Lassonde Pavilion
Project Text and Credits

–

Project: Expansion of the Musée national des beaux-arts du Québec (MNBAQ)
Client: Musée national des beaux-arts du Québec
Status: Competition 2010. Completion: June 2016
Site: Parc des Champs-de-Bataille, Québec City, Canada

Program: 14,900 m^2 (160,382.27 f^2) museum expansion
including three stacked galleries of decreasing size:

- Contemporary Exhibitions: 5.5 m (18') high, 1,294 m^2 (14,000 f^2)
- Permanent Contemporary collection:5 m (16.4') high, 912 m^2 (9,800 f^2)
- Design and Inuit Galleries:5 m high, 535 m^2 (5760 f^2)
- Grand Hall: 5.5 m (18') high lower part, 12.6 m (41') high higher part, 831 m^2 (9,000 f^2)
- Grand Stair: 79 steps / 3 pieces, 15 m (49.2') long, 37 elements of curved glass
- Tunnel: 130.6 m (428.48') long (5.1 m (16.72') in elevation change)
- Auditorium (no of seats): 256
- Boutique: 26 3 m^2 (2830.91 f^2)
- Cafe: 140 m^2 (1506.95 f^2)
- Green Roof: 3,327 m^2 (35,811.53 f^2) with 90,000 plants / 5 kinds of succulents
- Courtyard: 460 m^2 (4951.4 f^2)

Height: 21.8 m (71.5') (26.5 m including the cube) 4 floors (3 above grade)
Grand Hall cantilever: 20 m long / 12.5 m tall (floor to ceiling)

Material:

- 8,500 m^3 of concrete
- 1,090.000 kg of steel
- 1,195 panels of exterior glass
- Three kinds of glass cover 95% of the exterior: 53.3% opaque / 26.15% transparent / 20.35% translucent
- Glass panel sizes MR2: 1640mm x 2530mm
- Glass panel sizes MR3: 1640mm x 3330mm
- Glass panel sizes MR6: 1650mm x 1965mm

Grid spacing: Varies 3500mm, 4000mm, 5000mm, 6000mm (11'-20')

Credits
Lead Design Architect: OMA (New York)
Partner-in-Charge: Shohei Shigematsu
Associate-in-Charge: Jason Long
Project Architect: Luke Willis, Ceren Bingol
Team: Patrick Hobgood, Rami Abou-Khalil, Richard Sharam, Tsuyoshi Nakamoto, Sandy Yum, Sara Ines Ruas, Ted Lin, Markus von Dellingshausen, Andy Westner, Jackie Woon Bae, Carly Dean with Sue Lettieri, Michael Jefferson, Mathieu, Lemieux Blanchard, Martin Raub, Demar Jones, Cass Nakashima, Rachel Robinson

180 Varick Street - Suite 1328
New York, NY 10014 - USA
t +1 212 337 0770 - f +1 212 337 0771
ny-office@oma.com - www.oma.com

OMA

Associate Architect: Provencher_Roy Architectes (Montreal)
Team: Michel Roy, Claude Provencher, Pascal Lessard, Jonathan Audet, Réal Baril, Anik Bastien-Thouin, Mélanie Caron, Véronique De Bellefeuille, Konstantin Demin, Danielle Dewar, Daniel Legault, Layla MacLeod, Sonia Mailloux, Guillaume Martel-Trudel, Céline Coralie Mertenat, Katell Meuric, Fanette Montmartin, Franck Murat, Audrey Piché Mandeville.

Structure: SNC Lavalin
MEP: Bouthillette Parizeau / Teknika HBA
Code: Technorm
Acoustics: Legault & Davidson
Vertical Transport: Exim
Cost Control: CHP Inc.

Lighting: Buro Happold
Façade Design: FRONT
Façade Engineering: Patenaude Trempe, Inc., Albert Eskenazi, CPA structural Glass
Auditorium: Trizart Alliance
Local Advisor (Competition): Luc Lévesque
Contractor: EBC

180 Varick Street - Suite 1328
New York, NY 10014 - USA
t +1 212 337 0770 - f +1 212 337 0771
ny-office@oma.com - www.oma.com

OMA

The Pierre Lassonde Pavilion—the Musée national des beaux-arts du Québec's fourth building is interconnected yet disparate—is a subtly ambitious, even stealthy, addition to the city. Rather than creating an iconic imposition, it forms new links between the park and the city, and brings coherence to the MNBAQ.

The intricate and sensitive context of the new building generated the central questions underpinning the design: How to extend Parc des Champs-de-Bataille while inviting the city in? How to respect and preserve Saint Dominique church while creating a persuasive presence on Grande Allée? How to clarify the museum's organization while simultaneously adding to its scale? OMA's solution was to stack the required new galleries in three volumes of decreasing size to house temporary exhibitions, permanent modern and contemporary collections, and Decorative Arts and design, as well as Inuit artworks, creating a cascade ascending from the park towards the city. The building aims to weave together the city, the park and the museum as an extension of all three simultaneously.

While they step down in section, the gallery boxes step out in plan, framing the existing courtyard of the church cloister and orienting the building towards the park. The park spills into the museum (through skylights and carefully curated windows) and the museum into the park (though the extension of exhibitions to the terraces and the outdoor pop-out staircase).

The stacking creates a 12.6m-high (42 ft) Grand Hall, sheltered under a dramatic 20m (66 ft) large cantilever. The Grand Hall serves as an interface to the Grande Allée, an urban plaza for the museum's public functions, and a series of gateways into the galleries, courtyard and auditorium.

The cantilevered structure is supported by a hybrid steel truss system and accommodates galleries uninterrupted by columns. The layered façade is simultaneously structural, thermal and solar, addressing the seemingly contradictory needs of natural light and thermal insulation for Québec's harsh winter climate. The triple layered glass façade is composed of a 2D printed frit that pattern mimics the truss structure, a 3D embossed glass, and a layer of diffuser glass. In the galleries, insulated walls are located behind the translucent glass system, with a gap between that lights the building at night like a lantern in the park. The Grand Hall is enclosed by a glass curtain wall with glass fins that allow virtually unobstructed and inviting views to the Charles Baillairgé pavilion through a glass wall and ceiling. The contrast between the translucent gallery boxes and clear grand hall reinforces the reading of the building's stacking and cantilevering massing.

Complementing the quiet reflection of the gallery spaces, a chain of programs along the museum's edge—foyers, lounges, shops, bridges, gardens—offer a hybrid of activities, art and public promenades. Along the way, orchestrated views from a monumental spiral stair and an exterior pop out stair reconnect the visitor with the park, the city, and the rest of the museum. Within the boxes, mezzanines and overlooks link the temporary and permanent exhibition spaces. On top of each of the gallery boxes, roof terraces provide space for outdoor displays and activities.

New exhibition spaces are connected to the museum's existing buildings by a 130m (427 ft) long passageway, creating a permanent home for the museum's 40m (132 ft) "Hommage à Rosa Luxemburg" by Jean-Paul Riopelle. Through its sheer length and changes in elevation, the passage creates a surprising mixture of gallery spaces that lead the visitor, as if by chance, to the rest of the museum complex.

180 Varick Street - Suite 1328
New York, NY 10014 - USA
t +1 212 337 0770 - f +1 212 337 0771
ny-office@oma.com - www.oma.com

OMA

Pierre Lassonde Pavilion Facts and Figures

–

- The stacking of the galleries creates a 12.6 m (41 ft) high Grand Hall, sheltered under a dramatic 20 m (66 ft) long cantilever.
- The Grand Hall can be used for various functions including a 320-person conference or a 360-person banquet dinner.
- The glass fins of the Grand Hall double height glazing are 790 mm (2.6 ft) deep and spaced 1600 mm (5 ft) on center.
- The courtyard has a 60-person capacity, while the café can seat 90.
- The grand atrium stair is comprised of three sections, each measuring 15 meters (50 feet) in length. The sections were dropped in place with a crane before the roof was built.
- The pavilion includes 12 exhibition galleries of the museum, totaling 3,124 m^2 (33,626 f^2) of gallery space.
- The galleries are stacked in three volumes of decreasing size: temporary exhibitions (50m x 50m), the permanent modern and contemporary collections (45m x 35m) and design/Inuit exhibits (42.5m x 25m).
- OMA designed the topography-inspired landscape pattern of the green roofs. Pierre Bilodeau from CIMA in Montreal provided technical advisory on the landscape specifications.
- A total of 1,090 tons of steel was used to create the pavilion's Howe truss structure, typically used for long span bridges.
- The wood used for the gallery floors are 5" wide Canadian maple planks.
- The Pierre Lassonde Pavilion was designed by OMA New York, led by partner-in-charge Shohei Shigematsu.
- Construction for Pierre Lassonde Pavilion began in July 2013.
- The project took a total of 79 months since the competition in July 2009.
- The Pierre Lassonde Pavilion was designed and has been constructed with the goal of achieving a LEED certification.

180 Varick Street - Suite 1328
New York, NY 10014 - USA
t +1 212 337 0770 - f +1 212 337 0771
ny-office@oma.com - www.oma.com