

# New York Pavilion

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## Project Summary

The New York Pavilion is a modern, energy-efficient hub blending aesthetics with sustainability. Serving as a learning and exhibition center, it offers spaces for education, recreation, and work, while fostering engagement with architecture and nature.



## Passive Design

New York Pavilion fully utilizes the **open view** and the proximity to sea at lower Manhattan by exclusively using curtain walls and reserving **large terrace space**.

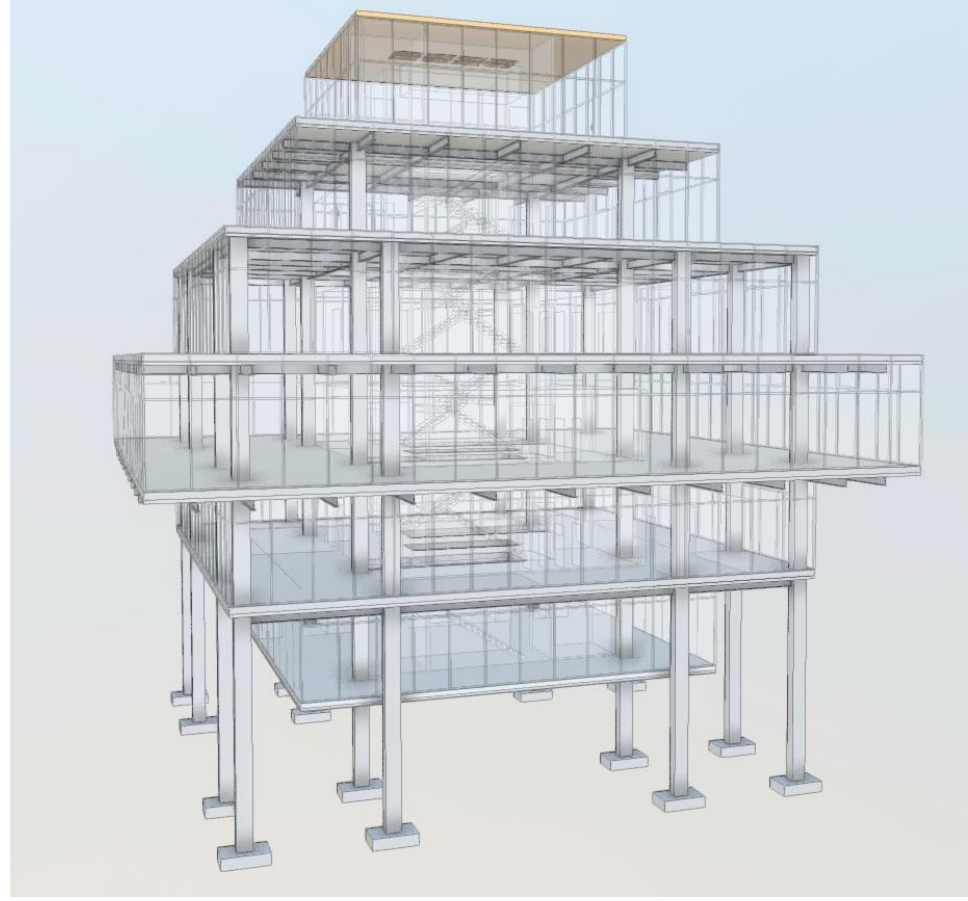
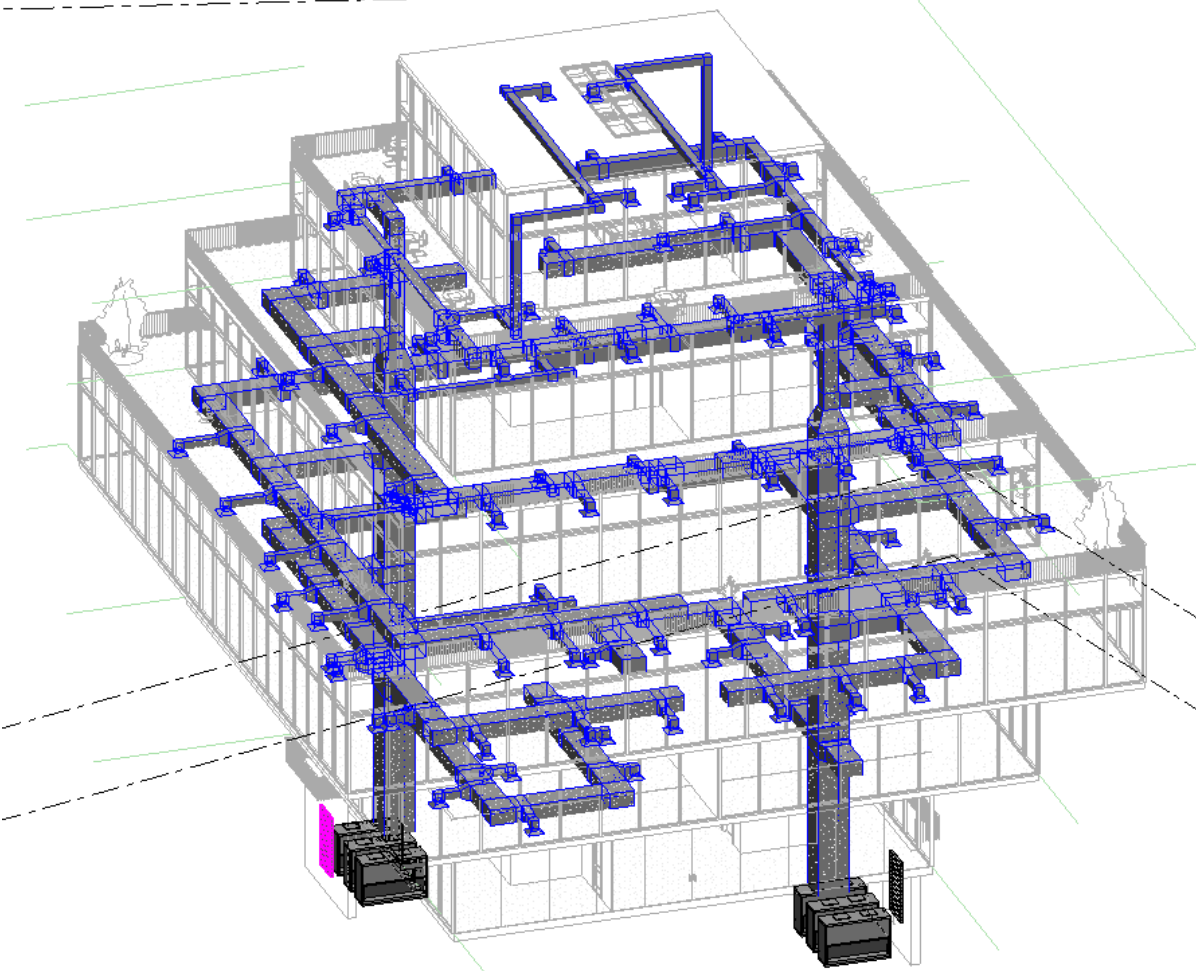
The orientation and facade design also ensures **sufficient daylight**, and maximally utilizes the project area provided. Additionally, the structural and mechanical systems are all designed to ensure this aesthetic goal is met.

## Facade

The building envelop utilizes triple glazing glass, insulated wood rafter roof, and thermally efficient concrete floors to ensure **high energy efficiency and durability**. With large area of solar panel covering and efficient HVAC system, the building can achieve 22.8 EUI, meeting the Architecture 2030 benchmark and is significantly lower than average NY buildings.

## Goals and Strategies

- **Energy Efficiency:** Roof and level 5 terrace area for solar panel installation. Maximum daylight utilization with curtain walls facade and central atrium.
- **Environment Friendly Construction:** Design with standard grids and sizes to improve construction efficiency. Use pre-fabricated curtain wall panels and locally available materials for fast construction and minimum noise.
- **Integration of Modern Aesthetics and Nature:** The building's innovative form enhances its visual appeal and uniqueness while also maximizing outdoor access and offering expansive viewing opportunities.

Structural	HVAC	Plumbing
<ul style="list-style-type: none"><li>• Make use of elevators and stairs for structural wall support, with extra columns added.</li><li>• Exterior columns and beams to support overhang of level 2, 3.</li></ul> 	<ul style="list-style-type: none"><li>• Respond to New York's climate with heating and cooling throughout the building, delivered through ducts.</li><li>• For efficient HVAC control, east and west areas have their own duct systems, with air handlers at basement.</li></ul> 	<ul style="list-style-type: none"><li>• Cold, hot, and sanitary water running up to level 5, split into west and east parts.</li><li>• Restrooms at the same location for most levels, ensuring minimum routing and high efficiency.</li></ul> 