Houston Museum of American Art new york, ny

Architecture

The Houston Museum of American Art's design takes a strong and strikingly asymmetrical form, which responds to the industrial character of the neighboring loft buildings and adjacent overhead railway. The upper stories of the building will stretch toward a nearby river on the west side and step back gracefully from the elevated railway on the east side.

Lighting/Electrical

Building system voltage: 208Y/120 volts, 3 phase 75 KVA UPS system 750 KW diesel generator 75 KW gas-fired reciprocating cogeneration unit Digital network lighting control system Dual-technology occupancy/vacancy sensors Interior and exterior daylight sensors

Structural

Concrete slab on composite metal deck on steel framing

Caisson pile-supported foundation

Concrete secant wall around the perimeter of the site Framing system of long span beams with deck framing

Special steel concentric braced lateral framing system with special steel seismic detailing Cable supported lobby façade

Mechanical

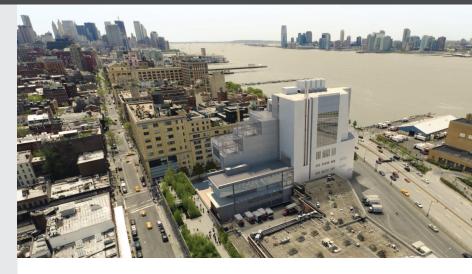
(4) Air conditioning systems located on cellar & 9th floor

Lobby facade heated and cooled by fan coil units (4-pipe) located along the glass façade wall All-air VAV system for gallery-type areas, auditorium

All-air constant volume system for lobby, restaurant

(3) Electrically driven centrifugal refrigeration machines 300 TR

(5) Cell roof-top cooling towers with 600 GPM/cell



Statistics

Size: 222,952 sf Levels: 9 stories above grade Cost: \$266 million Construction Dates: Aug 14, 2012 - Nov 28, 2014 Project Delivery: Design-Bid-Build

Project Team

Lighting Engineer: Ove Arup & Partners Construction Manager: Turner Construction, LLC

Design Architect: Renzo Piano Building Workshop Executive Architect: Cooper, Robertson & Partners MEP Engineer: Jaros, Baum & Bolles

Chang Liu

Lighting + Electrical

http://www.engr.psu.edu/ae/thesis/portfolios/2013/cwl5153/index.html

