

BEST OF
2007
AWARDS

New Museum of Contemporary Art

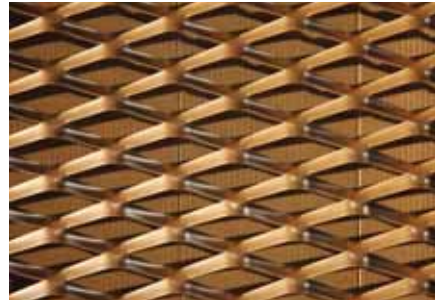
PROJECT OF THE YEAR:
Cultural Institutions/Theaters/Museums

The New Museum of Contemporary Art will observe its 30th anniversary in 2007, and in celebration, the institution erected a new 60,000-sq-ft, 7-story, 175-ft tall facility at 235 Bowery Street.

The structure of the New Museum of Contemporary Art is composed of six boxes—each representing a key element of the museum's programs—shifted off an axis and set on top of each other. The building yields cantilevers and setbacks, allowing daylight to filter into the interior through a series of skylights. The complex design called for no interior columns, hidden mechanicals and extended ceilings between 18 and 22 ft.

The mechanicals were woven through the steel and then run through the structure of the building. Part of the mechanical design can be seen on the 2nd, 3rd and 4th floor gallery spaces where the fire protection sprinkler piping is located inside the HVAC ductwork. The duct has a removable bottom panel which allowed for the installation of the sprinkler system. Upon completion, 500 tons of steel were used in the construction of the New Museum of Contemporary Art.

"It is so unusual and really makes a



statement. It has an innovative use of materials and construction," a juror said.

The façade of the building is its most unique element, featuring an anodized aluminum mesh punctuated by windows and skylights. "The design did not allow for any diagonals across the skylights, so we had to figure out a way to transfer forces across the skylight [to secure the structure]. It was difficult, but we achieved it with moment frames," said Kevin Poulin of Simpson Gumpertz & Heger, the executive structural engineers and exterior wall consultants. "We also created a 3D model to make sure we had >>

Key Players

Owner: New Museum of Contemporary Art

Owner's Representative: Plaza Construction Corporation and Zubatkin Associates

Construction Manager: F.J. Sciamè Construction Co. Inc.

Design Architect: Sejima + Nishizawa/SANAA

Executive Architect: Gensler Architecture Design and Planning Worldwide

MEP Engineer: ARUP

Executive Structural Engineer: Simpson Gumpertz & Heger Inc.

Excavation/Foundation Contractor: Civetta Cousins JV

Glazing Contractor: Competition Architectural Metals, Inc

HVAC Contractor: Trystate Mechanical

Steel Contractor: Steelco

Concrete Contractor: Harbor Island

Electrician: Dooley Electric Company Inc.

results that made sense to us and we understood how the structure would behave.”

“Integrating the structural, mechanical and facade systems to allow for an absolute maximization of building program was a great challenge, but we achieved it successfully,” said Maddy Burke-Vigeland, Gensler principal and project director for the New Museum.

The mesh was milled in Belgium and polished, expanded and anodized in England and had to be installed in sections because scaffolding could not be secured to the building. Each section required two layers of waterproofing material and was then clipped into a painted aluminum liner panel.

“It was a unique and complicated design,” said Mark LaSalle of MG McGrath Architectural Sheet Metal, the project’s facade contractor. “Getting it all to come

together was part of the challenge. Coming up with something that would work with the building codes and be acceptable to everyone involved on a system that’s never been done before was challenging.”

Among the array of challenges, the foundation contractor, Civetta Cousins JV, had to shore the two neighboring buildings to make room for the New Museum of Contemporary Art. After the excavation, the team poured a mat foundation, which allowed for the load of the building to be distributed evenly at three feet deep over the underlying fine grain soil. The slab was poured over 1,100-cu-yds. in a ten hour period.

The interior of the building features three floors for column-free exhibition space, a 180-seat theater, classrooms, an educational center and rooftop terraces for event space. The museum will also

house a library, café, the New Museum Store and a glass-walled lobby gallery lit by daylight from an above setback. It also has lighting tracks that allow for outlets anywhere along the ceiling.

It opened its doors on December 1, 2007 and visitors can experience the design by Tokyo-based architects, Sejima + Nishizawa/SANAA, in conjunction with Gensler of New York, through 30 hours of free, continuous admission sponsored by Target.

“This is a project of huge architectural significance-and with SANAA as design architect it has been much anticipated,” said Burke-Vigeland. “The project required a truly collaborative team to achieve this cutting-edge design in a cost effective way.”

The \$38 million project broke ground in December 2005 and was completed in October 2007. <<