

Altieri

The Museum of Modern Art

Design Architect: Taniguchi and Associates

Executive Architect: Kohn Pederson Fox (KPF)

Location: New York, New York

Completed: 2004

Size: 700,000 sf

Services: MEP/FP

The Museum of Modern Art is considered by many to be one of the largest and most influential museums of modern art in the world. It houses the world's preeminent collection of 20th century art. The current location was designed by modernist architects Philip L. Goodwin and Edward Durell Stone, and opened in 1939. The museum began its expansion and renovation in 1996 by retaining Cooper, Robertson & Partners, Altieri, and others to provide a program for the proposed expansion which would nearly double the existing museum. When Taniguchi and KPF were retained to execute the program, Altieri was retained to provide engineering design services.

The entire mechanical and electrical infrastructure was renewed. A new central chiller plant totaling 3600 tons was installed. Plant operators have been able to control plant operation to minimize electric costs as the load profile of the building has changed. New gallery climate control was provided throughout. System features included new adjustable constant volume reheat air handling systems, twinned to provide for standby operation during scheduled maintenance or in the event of equipment failure. Outside air is pretreated prior to introduction into gallery air supply. Contaminants are removed from the gallery air supply through a total of four passes of particulate filters and five passes of gas phase filters. The Museum's building automation system maintains precise temperature and humidity control, monitors and records system performance, and automatically adjusts the system over time to minimize fan, cooling, and reheat energy consumption. In addition, all aspects of the Museum's electrical and sprinkler systems were modernized. Construction began in the spring of 2000. The Museum closed for 18 months in early 2003. The expanded Museum opened in November of 2004, commemorating its 75th anniversary.

