

Altieri

BARNES FOUNDATION

ARCHITECT: **Tod Williams Billie Tsien Architects | Partners**

Location: Philadelphia, Pennsylvania

Size: 93,000 sq. ft.

Services: MEP/FP

Completed: 2012

Cost: \$90,000,000

Award: LEED® Platinum 2012

The Barnes Foundation is home to one of the world's greatest collections of impressionist, post-impressionist, and early modern paintings. The Foundation's mission is to promote "the advancement of education and the appreciation of the fine arts and horticulture." Originally located in Merion, PA, the new Barnes Foundation building is state-of-the-art and provides expanded facilities for educational programs as well as special exhibitions and visitor amenities. Dr. Albert C. Barnes' original art collection is presented within a 12,000 sq. ft. gallery that replicates the scale, proportion, and configuration of the original Merion galleries.

Our work involved comprehensive systems design to state-of-the-art standards. The building is fully climate-controlled with year-round humidity control for all areas of the building. The central ventilation air processing system is provided with energy recovery that filters and precisely controls the amount of raw outdoor air provided into the building based on demand for ventilation. Electrical service taken from a new utility transformer includes a 480volt distribution to serve the mechanical equipment, elevators, and large equipment throughout the building, and is supplemented by a 70kW roof-mounted photovoltaic system to utilize all available on-site power production. A 400kW diesel-fueled emergency generator serves life safety and standby loads. During a utility outage, the HVAC systems will maintain design space conditions in the museum collection areas. On-site fuel storage will allow for over 60 hours of continuous operation at full load.



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