RAND

Montessori School of Manhattan

Mechanical, Electrical, Plumbing, and Fire Protection Design

RAND completed the design and construction administration of all new HVAC, electrical, plumbing, and fire protection systems for the 7,300-square-foot preschool's 10 classrooms, two pantries, art room, and exercise room within a fast-tracked two-month timeframe.

PROPERTY

Two-floor, 7,300-square-foot preschool for 170 students at 2 Gold Street in Lower Manhattan.

PROJECT OVERVIEW

Design of HVAC, electrical, plumbing, and fire protection systems for the build-out of the new preschool within a tight two-month timeframe.

SCOPE OF WORK

RAND designed and administered the following work items:

HVAC

- HVAC system regulates airflow based on space usage for more efficient air distribution, allowing for smaller equipment.
- Horizontal air conditioning unit with separate condenser and evaporator sections.
- Customized ductwork incorporated into architect's tiered-ceiling design.
- New system ventilation uses in-line exhaust fans for bathrooms and pantries

Electrical

- Designed circuit plan and associated panel schedules for wiring lighting circuits and receptacles on both floors.
- Designed electrical room layout, including new circuit breaker panels and main disconnect switches tying into existing electrical distribution.
- Power and signal wiring for individually coded fire alarm system.

Plumbing

- Installed all branch line distribution piping for domestic water and sanitary drainage.
- Drainage for perimeter classroom sinks, located away from system core, provided by dedicated self-contained ejector pumps.
- Hot water heaters in pantries supply all required hot water for both floors.
- New wet-type sprinkler system for fire protection.

RAND obtained all of the necessary work permits from the New York City Department of Buildings.

ENGINEER

RAND Engineering & Architecture, DPC

ARCHITECT

Lewis and Gould

CONTRACTOR

Accord Contracting

CONSTRUCTION COST

$2 million