RAND

Montessori School of Manhattan

Mechanical, Electrical, Plumbing, and Fire Protection Design

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.

ENGINEER

RAND Engineering & Architecture, PC
New York, NY

ARCHITECT

Lewis and Gould
New York, NY

Ductwork, lighting, and a wet-type sprinkler system were part of Rand's design for the school's build-out.

CONTRACTOR

Accord Contracting
$2,000,000 construction cost

SCOPE OF WORK

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.
- Hot water heaters in pantries supply all required hot water for both floors.

The Montessori School of Manhattan has 10 classrooms, 4 offices, 2 pantries, an art room, and this exercise room.

- Drainage for perimeter classroom sinks, located away from system core, provided by dedicated self-contained ejector pumps.
- New wet-type sprinkler system for fire protection.

Classroom sinks have self-contained ejector pumps for better drainage.