



Brooklyn Prospect International Elementary School

Brooklyn Prospect, previously Our Lady of Victory School, completed an interior renovation to house their new international elementary school. EP Engineering provided updated MEP systems, which included updated classrooms and new supports spaces and offices. The main goal of this renovation was to create an optimal temperature environment for learning while minimizing costs and have the school open for the following school year.

LOCATION

272 Macon Street
Brooklyn, NY

BUILDING SIZE

43,000 SF

CHALLENGES

- Prior to the renovation, the building's heating, ventilation, and air conditioning (HVAC) for the 1st and 2nd floors was provided by (3) rooftop units (RTUs) on the 2nd floor setback roof with supplemental heating provided by steam radiators. With the goal of minimizing costs in mind, it was decided to replace the ductwork for (2) 50T RTUs while utilizing existing through wall penetrations, and maintain and refurbish (1) 40T RTU, inclusive of ductwork

ACHIEVEMENTS

- The cellar and 3rd floors were provided with radiators for heating. The existing steam radiator piping was installed at lower elevations throughout the cellar. Through careful coordination, the piping was raised to accommodate proposed ceiling heights and insulated to provide further comfort for occupants. In the cellar, the steam radiators were removed. (1) 12T heat recovery VRF system provides heating and cooling for the cellar with ventilation via an outside air intake system and natural ventilation. On the 3rd floor, the perimeter steam radiators were refurbished in addition to installing (1) 18T heat recovery VRF system.
- (2) new exhaust systems were installed to service the updated bathrooms throughout the building. Toilet exhaust ductwork was routed throughout the building via existing shafts and penetrations to terminate at roof mounted fans.

