

**Commissioning – Commercial  
LEED-CI Office Renovation  
Citigroup  
111 Wall Street,  
17<sup>th</sup> & 18<sup>th</sup> Floors  
New York, New York**

**Program**

USGBC LEED-CI

**Scope of Services**

Fundamental Commissioning

**Facility Size**

74,000 sq. ft.

**Facility Type**

Commercial Offices

**Project Results**

Achieved LEED-NC v2.1 Certification

EME commissioned the renovation of two full floors at 111 Wall Street for Citigroup and Cushman & Wakefield, the building managers. The project included 74,000 sq.ft. of commercial office space. Construction was completed into two phases with approximately 10,000 sq. ft. built as training space and the remaining area designed for general office purposes supporting Citigroup's legal department.

Mechanical systems include fourteen fan coil units that serve the training area. The remaining space is served by the base building air handling units. An energy recovery unit with variable speed drives on the supply and exhaust fans provides fresh air for ventilation to each space. Outside air to each zone is modulated by a designated variable air volume box controlled by a space CO<sub>2</sub> sensor. Air from the building is exhausted in proportion to the energy recovery unit's supply fan. Occupancy sensors for lighting control were installed in the training areas and private office spaces. Temperature activated exhaust fans were installed in the electrical rooms to prevent these spaces from overheating. Airflow stations with automatic damper controls were installed in the floor's base building supply ductwork



**Ceiling Mounted Air Flow Dampers**

to guarantee that the required air is provided to the space and to allow for future airflow modulation should the base building air handling units be retrofitted. Leak detection and high temperature alarms report back to the building management system (BMS). Fan coil unit occupancy schedules are additionally defined at the BMS.

EME performed Fundamental Commissioning services to meet the requirements set forth by the US Green Building Council for LEED certification. EME followed the recommended commissioning process established in ASHRAE Guidelines 0 and 1. This included tasks such as coordinating the creation of Owner's Project Requirements (OPR) and Basis of Design (BOD) documents, issuing construction checklists and testing procedures, overseeing the completion of construction and test data reports, ensuring training and record documentation requirements were achieved and assisting in the resolution of outstanding issues in the Issues Log throughout the construction process.