

CASE STUDY

Gould Property – 600 Mass Ave LEED Commissioning



SCOPE

Edison Energy was contracted by Gould Property Company for Commissioning Services to fulfill the LEED Core & Shell (Platinum) requirements for both Fundamental and Enhanced Commissioning (EA Prerequisite 1 & EA Credit 3) and M&V (EA Credit 5.1 & 5.2) for the design and construction of the Class A office building at 600 Massachusetts Avenue, Washington, DC, a 400,000-square foot building consisting of a concourse level, 10 floors of open plan office, and a penthouse.

CUSTOMER VALUE

The commissioning was performed in accordance with ASHRAE Guideline 0-2005 and ASHRAE Guideline 1.1-2007 for HVAC&R Systems, as they relate to energy, water, indoor environmental quality and durability. Construction was completed in December of 2016 for the Base Building (Core and Shell) systems, ensuring that the building fulfilled LEED sustainability standards. With the help of Edison Energy, Gould Property Company was able to ensure long term, life cycle cost value by ensuring the energy systems are all commissioned for operational excellence.

CLIENT

Gould Property Company

MARKET

Commercial

OFFERINGS

Commissioning

BUILDING INFORMATION

Square. Feet:	400,000
Square Feet of Retail Space:	20,000
Stories:	10
LEED Certification:	Platinum





HIGH PERFORMANCE HVAC SYSTEM

600 Massachusetts Ave was commissioned to include an HVAC system that is 15-20% more efficient than a typical office building.

BASE BUILDING SYSTEMS TESTED INCLUDE:

- › A single Central Chiller Plant located on the 11th Floor, Penthouse. This Chilled Water system provides chilled water to the Air Distribution Systems and Heat Recovery Systems. It also provides Commercial Condenser Water cooling for water cooled systems.
- › **The Heat Recovery System** includes, 2 - Outside Air, Air Handling Units, one serving the East side of the building, one serving the West side of the building. The OA-AHU provides Outside Air to each Air Distribution system serving each floor of the building (1st Floor thru 10th Floor, AHU's). The OA AHU units also provide exhaust air for the restrooms and common areas and help to maintain building pressure control.
- › **The Air Distribution Systems** include 18 central Air Handling Units (AHU's) which serve the East side and West sides of each floor (2nd Floor thru 10th Floor)
- › **Condenser Water System** provides tenants with the option to add water cooled HVAC systems to their leased spaces.
- › **Rainwater Harvesting System** provides filtered and UV treated water to be used for the Cooling Tower make-up water and for irrigation of the building's landscaping.
 - The Rain Water Harvesting System operation was reviewed with the Manufacturer during the site Training. Edison attended the system Startup and Training. The Rainwater system provides make-up water to the Cooling Towers (when available) and irrigation water for the building landscaping. This system is fully functional without issues.
- › **Emergency Generator/Power** was tested with the generator manufacturer and completed the 4 Hour, 100% capacity testing requirements without issue.
- › **Domestic Water System**
- › **Incremental Systems** including the Ductless Split Systems, Exhaust and Ventilation Fans were confirmed to be operational and integrated into the BAS per project requirements.

Edison Energy is an independent energy advisory and solutions integration company with the capabilities to develop and implement a broad portfolio of energy services for commercial, industrial and institutional organizations. We help customers reduce their energy costs, improve the environmental performance of their operations, ensure energy resiliency and manage exposure to energy price risk.