



YADAV
Solutions, Inc.

OUR CREDENTIALS:

- PE - NY, PA, DE, TX
- DCEP - Data Center Energy Practitioner (Specialist)
 - CEM - Certified Energy Manager
- BPI - MFBA - Certified Multi-Family Building Analyst
- CBCP - Certified Building Commissioning Professional
 - CDSM - Certified Demand Side Energy Manager
- NYC DOB Approved Energy Auditor and RCx Agent
- NYC DEP Approved Qualified Combustion Tester

OUR SERVICES:

- Local Law 87 (Energy Audit and RCx)
 - New Building Commissioning
- Property Condition Assessment Reports (PCA/IPNA)
 - Local Law 84/Local Law 133 (Benchmarking)
 - Local Law 77 (Cooling Tower Inspection)



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CASE STUDY

Saks Fifth Avenue

611 5th Avenue, NYC

Project Lead - Brendan Yadav CEM, CMBP

Team Members: Drew Ferraro,

Matthew Zeigler

Commercial Retail/Office

Project Start Date: 08/19/2016

Project Completion Date: 07/01/2017

Square Footage: 1,042,944

Number of Floors: 36

What We Did:

611 5th Ave is the main flagship store for Saks Fifth Avenue, it is a large luxury department store located in Midtown Manhattan at 611 5th Ave, New York, NY 10022. The building is a thirty six-story conditioned retail with restaurant and offices. It was built in 1924 with total surface area of approximately 1,042,944 square feet. Energy auditing and analysis of all HVAC-R systems, lighting and building envelopes were performed on all of the buildings. A sampling was taken of all of the common area retail, office and café areas as per the ASHRAE Commercial Energy Auditing Guidelines. If all recommended measures are implemented, **this facility will save 28% utility savings the first year following retrofit.**

HVAC Highlights:

Space cooling is provided from a chiller plant consisting of two (2) x 750-ton centrifugal chillers (chiller # 1 & 2) and one (1) x 450-ton rotary liquid chiller (chiller # 3). Water-side economizer, which couples condenser water directly to the chilled water system through a plate and frame heat exchanger provides low-cost/high efficiency cooling without using the chiller, when outdoor conditions permit. Chilled water is distributed to approximately (58) Variable Air Volume (VAV) Air Handling Units (AHU's) located throughout the building. BMS with GUI controls the building's HVAC systems.

Project Involvement:

Performing the energy audits and onsite measurements. Leading the project on site. Interviewing the site staff during and after audits to ensure complete accuracy of systems and inventories. Energy conservation measure creation. Working with support staff to gather utility information and to move project to completion. Utility analysis, TREAT modeling, energy conservation measure calculations. Photolog creation and report generation precluding the study.