

Kevon Office Center: Benchmarking Project

The Kevon Office Center in Pennsauken, New Jersey, is owned by the Kaiserman Company and consists of two four-story building structures, containing a total of 100,000 square feet of class B leasable space. The building is being retrofitted with new glazing, which provides the EEB Hub an opportunity to measure the overall impact of this retrofitted glazing.

Project Background

Quanta Technologies Inc. was one of the 14 companies to be awarded the U.S. Department of Energy (DOE) grant from the American Recovery and Reinvestment Act in the building envelope and windows segment. The Quanta Technologies grant included a team of six companies, including JE Berkowitz of Pedricktown, New Jersey, which runs RENOVATE by Berkowitz (RbB), a commercial window retrofitting solution that satisfied the commercial requirements in the grant award for retrofit glazing systems.



The Kevon Office Center

Glazing Retrofit

RbB combines existing non-operable single-pane units and insulated glass units (IGU) manufactured by JE Berkowitz to create an energy efficient triple-pane system. The single and double-pane units are joined



The RENOVATE by Berkowitz system

together using a custom version of Super Space TriSeal from Edgetech Insulated Glass., from inside the building. It is a one-time permanent installation with no maintenance required, designed specifically for commercial retrofit applications, including office buildings, schools, hospitals, and government buildings. RbB is also ideal for historic applications because there is no change to the exterior appearance. The system is a lower-cost alternative to a complete window rip-out and replacement with minimal disruption to existing tenants. RbB is patented in the U.S. and Canada and designed and manufactured in the U.S. by RENOVATE by Berkowitz, LLC.

JE Berkowitz will take advantage of further testing for the

RbB system in full building installations, where energy efficiency will be at its prime.

Building Monitoring Approach

The building monitoring approach is to secure the whole building level power data at 15-minute intervals, available from PSGE, as well as natural gas flow rates directly from the utility's revenue meter. The project will then monitor floors 3 and 4 of the south building to get samples that will:

- Measure all heat pumps
- Measure all 277V lighting circuits



- Use GSM Obvius with cell phone connectivity for data collection
- Use wireless instrumentation for gas pulse or boiler runtime in basement

The EEB Hub will collaborate with Kaiserman, Berkowitz, Quanta Technologies and National Association of Home Builders to provide all parties with high quality information to determine the energy efficiency impact of this glazing retrofit and develop a case study of the results.