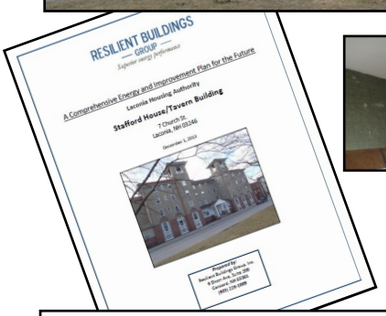

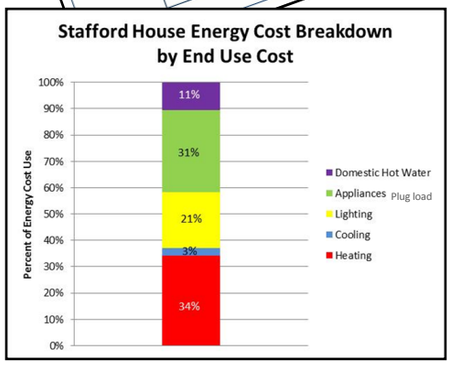

Case Study

Case Study: Laconia Housing Authority, Stafford House.

Building Type: Public Housing, 49 residential units, 36,352 SF, built in 1912.

Goal: Improve comfort, safety; reduce operations, maintenance, and energy costs.

Overview Story: The Stafford House was built in 1912 as the Laconia Tavern Hotel. Advertised as a modern upscale hotel with amenities, the 100 rooms came with or without private baths, telephones, and hardwood floors with rugs. Elevators, electric lights, and its own automobile garage made this hotel very modern. The most famous of its guests was President Eisenhower. It was operated as a hotel until the early 1970s when it was converted into apartments. LHA purchased it and converted it to independent-living apartments for low-income clients and clients with disabilities. RBG's Energy Audit found numerous issues with building envelope and HVAC systems. While replacing windows does not usually result in energy savings, in this case it made sense for safety, aesthetic, and energy reasons. LHA expects to reduce energy use by 29%, saving LHA $23,500 each year. Moreover, Renewable Energy Credits from their new PV system will bring in $3,000 each year.

Project Scope of Work:

- √ Airsealing and insulation – attic, front entry, roof, hot water heating pipes, air sealing between apartments.
- √ Windows Replacement - 149 double hung windows, triple pane, double hung, low-e, krypton filled replacement units.
- √ LED Lighting with "smart" controls in offices, stairwells, community room, laundry, and common areas
- √ Photovoltaic/Solar Electric System - 130 panels for a 34.5 kW system.
- √ Toilets - replace 4.5 gal flush units with 1.28 gal flushometer style toilets.
- √ Division of Historic Resource approved this project after RBG's RPR application.

V5-3/15

The Jordan Institute

Resilient Buildings Group is a majority-owned, for-profit subsidiary of The Jordan Institute, a non-profit energy-use reduction think tank.

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Energy-Centric

Construction Management

Ensure that your energy project is installed as designed

- √ Implement the recommendations in an Energy Audit
- √ Build and manage a team committed to your energy project
- √ Make sure that energy efficiency scope is appropriate and results in reduced energy use and operational costs
- √ Supervise all building professionals involved with the project
- √ Save energy and energy dollars
- √ Improve indoor air quality
- √ Reduce noise, odors, vibrations, drafts
- √ Reduce emergency maintenance
- √ Avoid premature equipment failure and safety issues

We are mission driven to make your building as efficient and resilient as possible.

RESILIENT BUILDINGS
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Superior energy performance





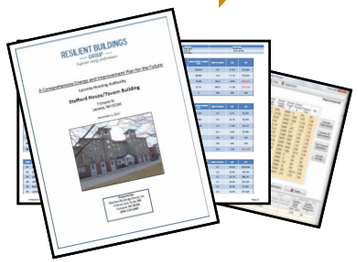
What is the difference between RBG and a conventional construction manager? We advocate for your project and are mission driven to make it as durable and efficient as possible. The Jordan Institute created RBG because of our growing concern about the lack of attention paid to implementing energy efficiency measures (EEMs) by construction managers, even when energy audits provide guidance on next steps. Repeatedly, we found that many CMs talk clients out of EEMs, thereby reducing return on investment, comfort, indoor air quality, durability, resilience, and energy savings. Our team has 70+ years of experience in energy efficiency, renewable energy, high-performance buildings, and project/construction management. We are familiar with innovative building materials and techniques, and are considered leading building-science professionals in New Hampshire. We think creatively about solutions that will work best for your building and may recommend innovative techniques or materials that will perform in a superior fashion and save you money. We are mission driven and our profits help support the non-profit Jordan Institute, encouraging them to advocate for innovative policy and program design work, which in turn provides a benefit to all of New Hampshire.

Why is Energy-Centric Construction Management important? We look at your building comprehensively, matching your motivation with viable energy projects, with an eye toward meeting the goals of the financial model. We understand that energy costs and availability are often volatile and dynamic, and that the only control over energy costs may be by conserving energy through the recommended EEMs in your energy audit. Making a building more energy efficient saves operational costs over the lifetime of the building. Improved comfort in a building that comes from reducing drafts, noisy HVAC equipment, and health and safety issues, leads to improved building occupancy, morale, and value of the building. Comprehensive EEMs are most cost effective when they are integrated into a larger construction project.

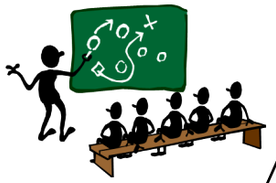
What is the process? Many building owners are unfamiliar with the construction management process which is another reason that our advocacy role on your behalf is in your interests. We will coordinate each step of the process and keep you apprised of progress, questions or concerns as they surface, and work with your budget.

Meet with client, discuss opportunities and motivators

Review Energy Audit, Financial Model, Energy Model, and next steps



Build a project team, solidify Project Scope, budget, and financing



Execute contracts

Team meetings

Supervise and verify project installation

Achieve and verify goals


High quality with an eye to safety, detail, and neatness


Plans review and recommendations


Using energy efficiency products to add resilience to a project