

WINTERGREEN

WinterGreen is a monthly publication from **Steven Winter Associates** designed to keep you updated on the latest news and information regarding energy efficiency, sustainability, and high performance buildings.

A MESSAGE TO OUR READERS

Happy New Year! We wanted to take a moment to let you know that WinterGreen will now be SWA's primary newsletter, designed for readers in the markets we serve. This monthly publication will discuss the latest SWA news, energy and sustainability research, accessibility updates, certification milestones, industry announcements, and much more. If you formerly subscribed to PartyWalls, you will now be receiving the WinterGreen newsletter in its place. Thanks for reading!

WALKING THE TALK

As two of SWA's residential building consultants, Maureen Mahle and Steve Klocke provide green building advice to their clients on a daily basis. After buying a 98-year-old house in Norwalk, CT, they put themselves in a position to start "walking the talk."

The opportunities for improving home performance are nearly endless on the hillside property the new owners have affectionately dubbed "The Fiscal Cliff". Luckily Steve is a HERS Rater, so after creating an as-built energy model and seeking contractor quotes, the couple was able to identify the improvements with the highest return on investment (ROI). Replacing the oil boiler and gas storage water heater with a new high-efficiency condensing gas boiler was at the top of the list with a projected payback period of five years. The system design and installation were completed by trusted SWA collaborator High Performance Energy Solutions, LLC. The condensing boiler works particularly nicely with radiant heating installed in the kitchen (previously unheated) and renovated bathroom. A Nest thermostat has proven to be very effective at combatting the temperature swings inherent in high-mass radiator systems found in the rest of the house.



The Fiscal Cliff

Maureen and Steve then focused on the low-hanging fruit elsewhere. A local Home Energy Services (HES) crew managed to reduce the home's infiltration by 30% by with basic air sealing techniques, and replaced all of the pre-existing incandescent bulbs with CFLs.

The couple's long term plan and budget includes insulation, siding and window replacement, and stormwater management strategies along with a few structural repairs. LEED for Homes Gold certification is a distant goal. The good news is that with reasonable effort and cost, the home's comfort and efficiency have already improved drastically. Stay tuned for more updates!

Working on your own home remodel or renovation project? There are many good resources for researching energy efficient and sustainable strategies. Consider the newly released *No Regrets Remodeling* Second Edition from *Home Energy Magazine* (the long-standing source of technical expertise in high performance housing). The online tool from REGREEN Residential Remodeling Program, developed by the American Society of Interior Designers and the U.S. Green Building Council, allows you to target a specific scope of work, such as replacing the bathroom fixtures, and displays green strategies appropriate to that scope. For more information regarding this topic, contact Maureen Mahle at mmahle@swinter.com.

MULTIFAMILY ENERGY PERFORMANCE— BENCHMARKING

Municipalities throughout the US and in countries worldwide are establishing new benchmarking legislation and regulations requiring the provision of the raw data that will lead to more efficient and effective sustainability measures in buildings. Local Law 84 in New York City established in 2009, is an annual building benchmarking requirement with public disclosure for buildings over 50,000 SF. Implementation of LL84 allows energy usage characteristics to become part of the real estate valuation process and provides a market-driven incentive for improving energy efficiency.

Establishing rigorous energy usage baselines also improves energy savings estimates in audits and opens the door to underwriting financing for proposed retrofit savings.

A single benchmarking score is useful for starting the conversation on which buildings should be targeted for improvement, but should be combined with a review of base building systems, heating intensity, electricity intensity, domestic hot water usage, and knowledge of the normal bounds on any indices for the specific building type. The antagonistic effects of over- and under-performing individual systems can mask savings opportunities and lead to similar energy use intensities (EUIs) in dissimilar buildings. Multi-layered benchmarking makes use of the data being collected at each building and provides a strong indicator of where auditors should look for savings opportunities in a building. Using a building science-driven approach to benchmarking provides the best opportunity for using utility data to inform decision making.

Read the full article: http://www.swinter.com/Collateral/Documents/English-US/Home_Energy_Benchmarking.pdf

For more information, please contact Nicole Ceci at nceci@swinter.com.

MOVING BEYOND COMPLIANCE: LL84 BENCHMARKING FOR MULTIFAMILY

SWA and WegoWise have announced a partnership, created to offer an expanded benchmarking service for multifamily buildings at a competitive rate. The partnering organizations have benchmarked over 160 million square feet of multifamily space in NYC.

The new service combines utility data analysis and auditing services to help New York property owners comply with Local Law 84 energy disclosure mandates. Through data visualizations, owners can compare buildings within a portfolio, as well as to others with similar building profiles, to see how their energy consumption stacks up. This service can help identify potential high-impact building retrofits, creating the opportunity to achieve dramatic savings.

Learn More

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A typical NYC prewar multifamily building with steam heat.



A typical NYC postwar multifamily building with hydronic heat.