Steven Winter Associates, Inc.

WINTER GREEN

A Steven Winter Associates Publication

AUGUST 2015

VOLUME 16, ISSUE 8

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.

GREENBUILD EXPO HOME

For the second consecutive year, SWA is supporting LEED for Homes certification of the show home being featured on the expo floor at the Greenbuild International Conference & Expo. The design concept emphasized in this year's model, *2015 Greenbuild Unity Home*, is cutting-edge sustainability. SWA will provide technical consulting support as part of its contribution to the Unity Homes-led team of building experts and hand-selected product manufacturers. The goal is to develop and build a 1,700-square-foot LEED v4 Platinum, WaterSense certified, net-zero demonstration project.

2015 Greenbuild Unity Home

SWA's work on the 2014 "Greenbuild LivingHome" set the precedent for innovative performance. Built according to LEED for Homes v4 and ENERGY STAR® Homes v3 criteria, the modular home incorporated resiliency features intended to safeguard against the climate challenges of New Orleans' Lower Ninth Ward neighborhood, where the home was placed for occupancy following the conference.

The 2015 Greenbuild Unity Home will be open for guided tours during the 2015 Greenbuild International Conference and Expo at the Washington, D.C., Convention Center, November 18 to 20. SWA will be on hand to answer questions about the green building features of the home. Please contact SWA Senior VP and Director of Sustainable Housing Services Maureen Mahle for more information, and follow SWA on Twitter @_SWinter for progress updates.

HEALTHY INDOOR ENVIRONMENT

When close to 90% of our lives are spent inside, you would expect extensive measures would be taken to ensure our buildings provide healthy environments in which to live and work. Unfortunately, more often than not, tested air quality inside buildings is much worse than outside.

Here are some common causes of indoor pollution:

- Pesticide use during regular pest control treatments;
- Pollutants (asthma triggers) from cleaning products, smoking, pets, pests, fuel use, etc.;
- Inadequate ventilation;
- Mold and moisture build up from water leaks and inadequate ventilation; and,
- Carbon monoxide from appliances, heaters or other equipment.

To eliminate pollutants and other detriments to indoor air quality, the source of the hazard must be determined, as well as the pollutant pathway. Always follow the building scientist's advice to: "find the source, stop the source, seal the holes." Taking a "Band-Aid" approach to health hazards is never a complete solution.

Read the complete article on healthier indoor environments on our blog, written by Erica Brabon, Senior Consultant, Multifamily Energy Services.

NGBS GOLD CERTIFIED

86 Governor Street, developed by Ridgefield Apartments, Inc. and designed by local architects H&R Design, Inc., adds 20 quality rental units to the Ridgefield, CT housing market. Guided by Steven Winter Associates, Inc. (SWA), the residential complex achieved National Green Building Standard™ (NGBS) Gold Certification, putting the developer's commitment to sustainable principles into practice from the systems and materials specified to the extra measures taken to test and verify quality installation and performance throughout the construction process. The project also participated in Energize Connecticut's Residential New Construction Program, which incentivizes energy performance through financial rebates.

Energy conservation at 86 Governor Street begins with the high performance envelope: advanced framing, extensive air-sealing and upgraded insulation provide maximum protection against energy loss from thermal bridging and air infiltration. Specifically, Huberwood ZIP System® insulated sheathing (R6.6) wraps the four-story structure, paired with 1¼" closed cell foam and fiberglass batt in the wall cavities. The non-vented roof is sprayed at the rafters with 2½" closed cell and 6" open cell foam (R44). Heating and cooling demands are met with high-efficiency natural gas furnaces and split system air conditioners, while central boilers provide domestic hot water to the apartments. The combined effect of these measures yields a Home Energy Rating System (HERS) Index of 50, meaning the apartments are roughly 50% more energy efficient than a standard new home. Resident comfort and quality of life benefit further from the building's location in green space and close proximity to downtown Ridgefield.

For more information on NGBS Certification or the Ridgefield project, contact SWA Senior Sustainability Consultant Karla Butterfield here.

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WinterGreen is published monthly by Steven Winter Associates, Inc., 61 Washington Street, Norwalk, CT 06854. SWA is solely responsible for content and cost of publication. To receive *WinterGreen* by email, visit our subscription page here.

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