

HANAC Corona Passive House ProTour Recap

Posted by Gahl Sorkin Spanier on Monday, November 6, 2017

Over sixty energy efficiency enthusiasts, real estate developers, design professionals and contractors gathered on October 20th for a tour of the HANAC Corona Senior Residence, a 68-unit affordable Passive House under construction in Queens, NYC.

The tour was hosted by AEA and organized in collaboration with the Northeast Sustainable Energy Association ([NESEA](#)), with the invaluable help and support of [HANAC](#) (the project owner), [Bruno Frustaci Contracting](#) (the general contractor) and [Think! Architecture and Design](#).



Getting so many people to a “live” construction site and getting them out safely is not a simple task, but because so many Passive House features — air sealing, wall insulation and the heat recovery ventilation duct network – will soon be enclosed within the building envelope, it was valuable for those interested to see the project at this stage.

The tour began at AEA’s Bronx Energy Management Training Center, where Adam Romano’s [presentation](#) introduced the core

Passive House Principles and discussed how they are being applied in the context of the functional and social uses of the building and funding constraints of an affordable multifamily project. Participants were able to examine high performance ventilation equipment, windows and other elements used in Passive House construction that are installed for training purposes at AEA’s Training Center. Sponsoring manufacturers of high performance building materials, some of which are being utilized on the project, also displayed and discussed them with attendees.



Moving to the project jobsite, attendees rotated in groups among five stations corresponding to areas of particular challenge and innovation in achieving the ambitious energy goals of the project. These included a model apartment (with its installed energy recovery ventilation and variable refrigerant flow heating and cooling systems), the fifth floor laundry area, first floor early childhood education facility, building envelope, and a demonstration of rooftop strategies to reducing thermal bridging.

At the stations, each of which was staffed by AEA personnel and project team members, we were able to demonstrate some valuable, though secondary, features of Passive House components: for example, triple pane windows installed with proper air-sealing methods also provide substantial insulation from street noise.

At each station, questions arose that led to interesting conversations highlighting the trade-offs involved in making different design decisions and the need for further learning to optimize Passive House

Association for Energy Affordability, Inc.

New York
105 Bruckner Boulevard
Bronx, NY 10454
Phone 212.279.3902
Fax 718.292.1280
eastcoastinfo@aea.us.org

California
5900 Hollis Street
Suite R2, Emeryville, CA 94608
Phone 510.431.1791
westcoastinfo@aea.us.org

implementation in affordable multifamily buildings. We will address some of these questions in upcoming blogs:



- What led you to decide on a decentralized ventilation approach for the residential units?
- How are you going to test that the building is meeting the airtightness requirement ([0.033CFM/sqft@50pa](#)) during construction?
- Did you consider putting the laundry room in a different location – like the ground floor, or outside of the building enclosure? How did other design elements of the structure influence the location of the laundry facility?
- Did you consider recovering the dryer heat using a different medium like an air-to-water exchanger?
- What insulation is being applied at the adjoining buildings?
- Why was the boiler room included in the conditioned space inside the building envelope instead of stopping under the boiler room floor?