

HANAC Corona Senior Residence Certified as Passive House

The affordable [HANAC Corona Senior Residence](#) was officially certified as a Passive House on October 14, 2020 by the [Passive House Institute](#). The 68-unit building, designed by [Think! Architecture and Design](#), has been fully occupied since May 2019. The Association for Energy Affordability, Inc. was HANAC's passive house consultant.

The last stretch to satisfy the stringent standards of Passive House certification was achieved through the combined efforts of HANAC, AEA, general contractor Bruno Frustaci, the NYC School Construction Authority Design and construction team, and the [Passive House Academy \(PHA\)](#) (the Passive House certifiers). In March 2020, just before the closure of NYC due to the COVID-19 pandemic, the teams assembled in the building to ensure that ventilation in the pre-kindergarten program occupying the ground space, which is part of the Passive House, would conform to the design values.



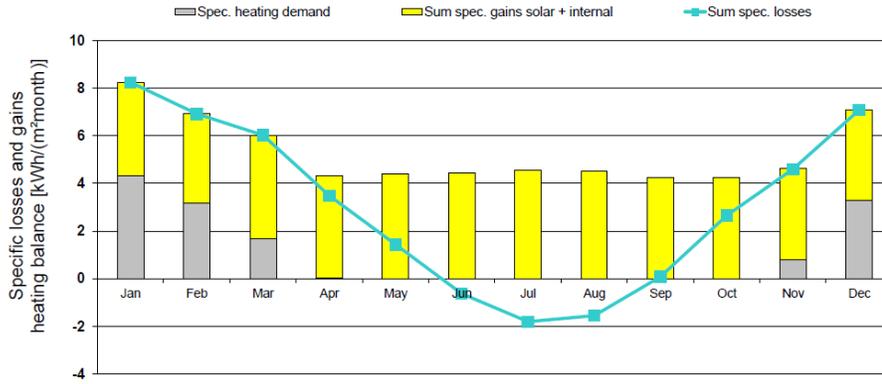
Throughout 2020, we all learned how good ventilation equipped with high filtration media was crucial for the health and wellbeing of occupants, during pandemics and regular times alike.

The Passive House final model showed that due to its Passive House features – robust insulation and airtightness, high-performance windows, high-efficiency heating and cooling, energy recovery ventilation, and mitigated thermal bridging – the project would need heating only five months per year and cooling for only three months. Even during these months, the demand would be much lower than in a typical code-compliant building, reducing costs to the low-income senior tenants and the building owner, and contributing to the city's aggressive climate goals.

Prior to its Passive House certification, the HANAC Corona Senior Residence had already earned the [NAHB 2019 Pillar of the Industry Award](#) for “Best in Green Affordable Multifamily Community” from the National Association of Home Builders. The building was a 2020 finalist for the [ULI New York “Excellence in Affordable Housing” award](#) from the Urban Land Institute. The building was also certified as meeting the Enterprise Green Communities criteria.

Analysis of the building's actual energy use and utility data will assist us to continue to optimize and improve. Estimates based on the first few months of operation indicate that the building will easily meet the 2025 and 2030 Local Law 97 Carbon Emission quotas, and likely meet the 2035 quota, as well.

Specific energy for heating (monthly method)



Useful cooling demand

