Zero Energy Ready Affordable Retirement Residence

Retirement Residences Achieves Passive House Certification

Edgewood Center Retirement Residence Pittsburgh, PA

This 52- unit retirement residence, consisting of affordable and market rate housing, achieved Passive House Certification (PHI). Edgewood Center represents the first affordable housing in Allegheny County within a retail center. In addition to energy efficiency, Edgewood Center also benefits from natural, hygienic ventilation that is a benefit of using Passive House design, construction, and commissioning.



Credit: Avon Design Group

Owner's Project Goals

a.m Rodriguez accepted the challenge of pursuing ultra-low energy and healthy indoor air quality as part of the Passive House standard. They also achieved Enterprise Green Communities certification. As the Passive House/Zero Energy Ready consultant, AUROS Group used an Owner's Project Requirements (OPR) tool to align all team members to performance metrics.

Metrics

- EUI of 14kBtu/SF/year

Sustainability Programs

- Passive House certification
- Enterprise Green Communities certification

Future Photovoltaic Arrays

- Secures the path to zero energy

New Construction

Affordable Multifamily 56, 500 square feet \$14.4 million

Project Team

AUROS Group

Avon Design Group Staengl Engineering Franjo Construction

Project Highlights

As experts in building performance modeling and simulation, AUROS Group provided the design team the necessary building performance targets to the design team to deliver the Zero Energy Ready performance at the lowest possible cost. The developer had digital evidence of predicted performance prior to investing one dollar on construction costs. Due to the early involvement and full alignment of the project team, the project was able to achieve noteworthy results:

- Passive House pre-certification in one attempt
- Mid-construction blower door results of 0.1559 ACH₅₀

First commercial application of Ephoca, an Italian manufacturer of an all-in-one heat pump with energy recovery unit.

Project Reference

Victor Rodriguez

a.m. Rodriguez Associates v.rodriguez@cmshousing.com



243 East Main Street Carnegie, PA 15106

beth.eckenrode@aurosgroup.com

www.aurosgroup.com