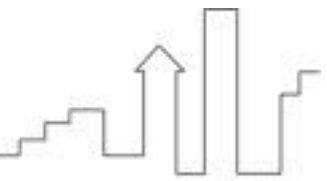# Zero Energy Ready Affordable Retirement Residence

New Retirement Residence Achieves Passive House Certification

Emerald Hills Retirement Residence Verona, PA

This 52- unit retirement residence achieved Zero Energy Ready by pursuing Passive House Certification (PHIUS). In addition to energy efficiency, Emerald Hills 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

Photovoltaic Arrays
- Secures the path to zero energy

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

• Blower door results of 0.017 CFM_{50}, one of the lowest levels known to be reported.

New Construction

Affordable Multifamily

57,924 square feet

$13,8 million

Project Team

AUROS Group

Avon Design Group

Thoughtful Balance

Staengl Engineering

Sota Construction

Project Reference

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