



Owner: PathStone | Completion Date: Ongoing

PathStone’s proposed Baird Road Apartments is a 76-unit apartment building for seniors as a part of a larger development in Perinton, NY. Using air source heat pumps, shared ERVs, shared heat-pump water heaters, and roof-mounted solar, the project is designed to be fossil fuel free. The project achieves Net-Zero energy through Phius 2021 Source Zero and features health and wellness benefits through EPA Energy Star and Indoor AirPLUS. Additionally, the project prioritizes the use of low carbon materials and emphasizes resiliency with the inclusion of battery storage for demand control and backup systems. The project achieves this with no up-front out-of-pocket costs to the developer, and superior long term financial benefits. SCI serving as the CPHC and Phius+ Verifier on the project and conducted all WUFI modeling to guide design decisions around all insulation and mechanical systems.

### Project Information

Square Footage	73,873 sf
Number of Units	76
Stories	2
Certifications	Phius 2021 Source Zero, EPA Energy Star and Indoor AirPlus, DOE Zero Energy Ready Homes, NYSERDA New Construction - Housing, Tier 4, LEED Gold
SCI Role	Phius CPHC & Verifier, HERS Rater, Energy and Green Building Consultant

### Technical Details

Walls	2" [R-9.6] Huber Zip-R sheathing, 2x6 wood studs with R-21 mineral wool batt insulation and smart vapor retarder. Using a locally fabricated panelized wall assembly.
Windows	Inline 325 Fixed and Casement Windows. Triple pane U-0.15
Air Barrier	The exterior ZIP sheathing will create an enhanced air, water, moisture and thermal barrier. All seams and joints sealed with liquid flashing.
Roof	Vented Attic with R-60 Blown in Cellulose
Slab	Build SMART J-Form shallow frost foundation system with R-10 slab edge insulation.
Heating/ Cooling	Ducted split air source heat pump systems per apartment, Carrier Systems with 23 SEER, 10 HSPF
Ventilation	Energy Recovery Ventilation Systems shared between 4 apartments, Renewaire ~ 80% recovery efficiency. Central ventilation Renewaire ~ 75% recovery efficiency.
Hot Water	Heat pump water heaters located in hallway closets with a single heat pump serving 4 apartments in compact distribution.
Solar Electric	Roof mounted solar PV panels with an estimated generation of 334,000 kWh/yr. Goal to offset the full usage of the building to achieve net-zero energy. Will require some additional off-site PV to achieve net-zero goal.
Additional Features	EV Charging Stations, battery backup system, low carbon materials selection such as cellulose insulation and shallow frost foundation.