



Owner: DePaul Properties | Completion Date: Ongoing

Project Description

A 150-unit multifamily project in Buffalo, NY, DePaul's Pan American Square is designed as a cutting-edge carbon neutral all electric project. The project is being designed to Passive House (PHIUS) 2018 Standards, as well as Energy Star Multifamily New Construction, DOE Zero Energy Ready, EPA Indoor AirPLUS and HCR Clean Energy Incentive requirements. The project will use heat pump systems, shared energy recovery ventilation, central heat pump water heating, triple pane windows, along with passive house levels of insulation and air tightness.

Project Information

Square Footage	161,486 sf
Number of Units	150
Stories	4
Certifications	PHIUS+ 2018 Source Zero, EPA Energy Star and Indoor AirPlus, DOE Zero Energy Ready Homes, HCR Clean Energy Incentive
SCI Role	Phius CPHC & Verifier, HERS Rater, Energy and Green Building Consultant

Technical Details

Walls	2" (R-9) Huber Zip-R sheathing, 2x6 wood studs with R-21 mineral wool batt insulation and smart vapor retarder. Using a panelized wall assembly.
Windows	Kohltech 2020 Supreme. Triple pane U-0.14.5. Curtain Wall by GlasCurtain with Thermaframe. Triple pane U-0.15
Air Barrier	The exterior ZIP sheathing will create an enhanced air, water, moisture and thermal barrier. Sealed with liquid flashing at all seams and joints.
Roof	Flat Roof with R-40 Minimum. 7" polyiso on sloping wood trusses.
Slab	R-8 with 2" EPS at the perimeter and under the slab.
Heating/ Cooling	Ducted split air source heat pump systems per apartment, Fujitsu Systems with 20 SEER, 12 HSPF
Ventilation	Energy Recovery Ventilation Systems shared between 2-3 apartments, Renewaite Units ~ 80% recovery efficiency. Central ventilation Swegon Gold RX ~ 84% recovery efficiency.
Hot Water	LG Hydro Kit with one electric tank and two storage tanks per building.
Solar Electric	997,000 kWh/yr. off-site community solar subscription with a 20-year contract term.
Additional Features	This project includes a commercial kitchen serving three meals per day. It features all electric appliances and heat recovery as well as direct exhaust ventilation.