

PHASE 3: THE BATTERY

Philadelphia, PA

DEVELOPER | Onion Flats

ARCHITECT | Onion Flats Architecture

CONTRACTOR | JIG Inc

STRUCTURAL ENGINEER | Larsen & Landis

HVAC ENGINEER | Steve Finkleman, Kitchen and Associates

CPHC | Tim McDonald

BUILDING ENVELOPE | Build SMART

Zero energy multifamily comes to Philly

The solar pv array canopy shades the landscaped roof for the community. This extremely energy efficient market-rate multifamily project has broken through the cost barrier with practically airtight Build SMART E-Wall Exterior Envelope Assemblies and the J-Form Insulating Foundation System. Very tight urban jobsite. Accelerated construction. Affordable 1-bedroom micro-unit apartments with utilities included in the rent. The project is designed to use 80% less energy than a similar code compliant building. Super comfortable, quiet interior environment. The project was majority leased before construction was complete.

"With the Build SMART System, everybody is an expert, everybody can build high performance buildings. That's how we change the scale, that's how we change the industry."

-Tim McDonald, Onion Flats, President & CEO





BUILD BETTER. BUILD FASTER. BUILD SMART.

AWARDS | 2018 PHIUS Passive House Projects Competition, Groundbreaker Award: Green Building United, ULI Philadelphia Willard Rouse Award of Excellence, PHIUS Multifamily Project of the Year Award, Design Philadelphia 2018

PERFORMANCE TARGET | Passive House, Zero-Energy

COST/SF | \$169

SIZE | 25 units, 16,782 square feet

COMPLETION DATE | July 2017

CERTIFICATIONS | Passive House U.S. PHIUS+2015

AIR TIGHTNESS | 0.46 cfm50/ft2

EXTERIOR WALLS | E-Wall: R-31, 2x6 3 1/2" Exterior Insulation

WINDOWS AND DOORS | Klearwall

VENTILATION | Ventacity

HEATING & COOLING | Geothermal water-to-refrigerant LG VRF System

PHOTOVOLTAICS | Celantano Solar, 77 kW PV canopy array

