



Owner: **Civico Development** | Location: **Newton, MA** | Completion Date: **Summer 2024**

## Project Description

The 145 Warren St project is a transit oriented infill project in downtown Newton, MA. Located near transit the project increases the density of housing in the area by providing Passive House certified, all-electric housing of the future. The site includes the historic renovation of an existing home in Unit 1 which will be all-electric and reduce energy use through additional insulation and air sealing. Unit 2 is a Phius Design Certified home built above the shared parking garage containing 3-bedrooms and 2.5 bathrooms. Units 3-5 are contained in a single structure at the back of the property and have obtained a single Phius Design Certification. This structure contains 3 units total with 7 total bedrooms between the units each with their own entryways and access to a shared patio space.



## Project Information

Location	Newton, MA
Square Footage	15,960 sf
No. of Units	5
Year Built	2024 Completion



## Sustainable Comfort Impact

SCI serves as the Design Architect and Certified Passive House Consultant (CPHC) on the project as well as the General Contractor and Passive House Builder in charge of all construction activities. This design/build approach has led to synergies between the final design and construction phases to ensure the Passive House program details have been implemented throughout all stages of the project. This collaboration has navigated complex issues such as the tight site conditions, connections between an existing house, an underground parking garage with steel structural elements, and new construction wood frame buildings. The project includes innovative features such as foam glass insulation below the slab, a shared heating/cooling/ERV system in the Minotair PentCare system which provides 100% efficient energy recovery ventilation while serving some of the heating and cooling load of the apartments with supplemental mini splits, and all electric hot water and appliances. SCI also acts as the Phius Verifier on the project working with Phius to ensure the construction process is completed and implemented properly, including all blower door testing at completion. The project is midway through construction targeting completion in 2024.



## Technical Details

Walls	Unit 3-5: 2.5" ZIP-R R-12 with R-21 batt, Unit 2: 4" R-24 polyiso + R-21 batt
Windows	Kohltech Supreme Casement U-0.1718, SHGC-0.612
Roof	Vaulted 9.5" spray foam with 3.5" R-21 exterior rigid board
Slab	14" Glavel foam glass R-24 under slab
Heating & Cooling	Minotair PentCare V12 + Mitsubishi ductless split supplement
Ventilation	[2] Minotair PentCare V12 systems per unit - 100% efficient ERV
Hot Water	Individual heat pump water heaters UEF-3.55
Appliances	All electric with condensing dryers
Lighting	All LED Efficient Lighting

