

Short Term Project for Long Term Savings

DUCTLESS MINI-SPLIT HEAT PUMPS



“ Our air source heat pumps will sense if nobody is in the room and go into economy mode...I felt really good about both getting comfort in the home but also being thoughtful about our expenses and the climate. ”

-Tom Constabile, New Rochelle

YEAR: 1937

BEDROOMS/BATHS: 5 BR/2.5 BA

STYLE: WHITE COLONIAL

HEAT SOURCE: DUCTLESS MINI SPLITS/
STEAM

SQUARE FEET: 3,000

**HIGH-TECH EFFICIENCY
& COST SAVINGS**

Short Term Project with Long Term Savings

Tom Constabile and his family moved into their New Rochelle home in 2018, drawn in by its historic charm. However, like many other older buildings in Westchester, their new home lacked central air conditioning or proper insulation, instead using a wasteful and inefficient oil heating system. When friends in the neighborhood introduced the family to Sustainable Westchester's programs, Tom knew it was time for a change.

The family has since re-insulated their house and installed air-source heat pumps on the ground floor of their house. These high-tech heat pumps use sensors to heat and cool the home as efficiently as possible, reducing the family's heating bills - and usage of fossil fuels - by a huge margin.

PROBLEMS UNCOVERED

- Air was escaping from the attic floor and ceiling, windows, and outer walls

IMPROVEMENTS COMPLETED

- Insulation in multiple parts of the house including the attic floor and the ceiling of the garage
- Addressed drafts on doorways
- Replaced some windows in the basement
- Four ductless mini-split heat pumps



BENEFITS & IMPACT

- The units are intelligent enough to sense their surroundings and adjust accordingly
- Great in the summer with air conditioning
- Used in the winter as a primary heat source and the steam system is only used as a backup during the coldest parts of the year
- The units still circulate air very efficiently so even if steam is used, they are burning a quarter of the oil they were burning before
- The winter before they had the units, their oil costs were four times what they ended up paying in electricity
- Units are easy to maintain

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