# **The Unico System**®

Small-Duct Central Heating & Air Conditioning

## **Retrofit Renovation** Case Study: Forest Heights, NY

#### **PARTNERS**

#### **UNICO Contractor**

Sunrise Heating & Cooling Scott Kelly 529 Central Park Avenue Scarsdale, NY 10583 (914) 965-9609 www.sunriseheatandcool.com



Exterior of the home

The Unico System is designed to fit. It's ideal for heating or cooling buildings with:

- Electric Heat
- Hot Water Heat
- Chilled Water Loops
- Steam Heat
- Radiant Floor Heat
- Inadequate or No Ductwork
- Limited Space
- Inadequate Cooling on Upper Levels
- **Baseboard Heat**
- Radiator Heat

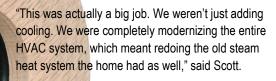
#### Overview

This beautiful colonial style home perfectly represents the type of area where it resides, the Forest Heights neighborhood in New Rochelle, NY. This historic neighborhood is part of affluent Westchester County outside New York City. This home in particular was built in 1910.

In those days, air conditioning in homes was still about 40 years from becoming commonplace. This presents a bit of a headache in today's modern world when people choose to buy and live in these expansive, historic homes but installing air conditioning can be cost prohibitive and/or compromise the home's original architecture as soffits and enclosures must be added to route duct work through the home, which was the case was in this situation.

The homeowners were not only thinking of adding air conditioning, but completely updating the heating system as well. Scott Kelly of Sunrise Heating & Cooling suggested the Unico System and the homeowners agreed. Scott got started immediately.

### Strategy



His team began by completely removing all of the old radiators and piping throughout the home. The old hot water boiler was also removed and replaced with a brand new 85% efficient hot water boiler, storage tank and outdoor reset controls, which were put in place so that the boiler only produces the exact amount of heat needed. The boiler system was then connected to the Unico System hot water coil.

For the cooling, the Unico System was installed with the E.C. motor and software, allowing Scott to easily zone the system and control the airflow. Scott added, "The home has three floors, yet with the Unico System, we were able to efficiently zone the entire home with just one 5-ton unit." Scott installed the 5ton cooling coil and E.C. blower and also the 5-ton hot water coil in the attic.

The Unico System's small ducts were also able to weave in and out of little hidden spaces and Scott's team got them all in without damaging the original interior of the home. Scott continued, "We always find a way to make it work when we use the Unico System."

#### Results

"The end result is quite remarkable. The home now has an entirely new and updated HVAC system with no damage to the home itself. Scott indicated that after a year of operation the system has been working flawlessly and that it's been efficiently heating and cooling the entire home even with the blower running on low speed over 70% of the time.

Scott concludes, "All of these factors make for very happy customers. They got the new system and we didn't have to alter the house. The system has been working great and we couldn't be happier either."



The Unico System ECM Software being configured via laptop

