Media Contact: Brad Brenner (503) 736-0610 brad@brennerassociates.com



#### **■ CASE STUDY**

# CREATING THE LARGEST ENERGY STAR RATED COMMUNITY IN THE STATE OF NEW YORK

# 3,600 New And Existing Homes Treated With Aeroseal To Reduce Energy Loss Through Duct System Leakage

Lend Lease was on a mission: To get 3,600 new and existing homes in the Fort Drum Mountain Community ENERGY STAR® certified. To do so, they knew they had to reduce duct system leakage of each home from an average of 20-30% down to 5% or less. After several attempts with various methods of duct sealing, they found only one thing worked – Aeroseal. Today, the Fort Drum Mountain Community is the largest New York ENERGY STAR (NYSERDA) certified community in the history of New York State.

### In Brief

**Property Managers**: Lend Lease

**HVAC Contractor**: TAG Mechanical Systems

Location: Fort Drum Army Base, near

Watertown, New York

**Stats:** 2,200 existing homes; 1,400 new homes **Before Aeroseal:** average new home air duct

leakage 30%

After Aeroseal: new home air duct leakage rated at

5% or less.

**Energy savings:** with the help of Aeroseal, average gas use in each home was reduced by 47%.



Fort Drum Mountain Community Homes: 3,600 Energy Star® Certified Homes.

Lend Lease knew that saving energy costs would be a critical factor in their bottom line profits for managing the 3,600 homes under their care in the Fort Drum Mountain Community. Lend Lease called on the HVAC professionals at TAG Mechanical Systems of Syracuse New York to test for air duct leakage in each new home being built. ENERGY STAR certification demanded no more than 5 percent leakage. After each house received a failing grade, TAG was asked to fix the problem.

At first, TAG took painstaking measures to properly install and manually seal each of the new duct systems with mastic and tape. Initial tests were positive. That was in the Fall of 2005 when the weather was fair. Three months later, once the temperatures around the upper state New York community began to drop, so did the effectiveness of the newly installed duct work. The only permanent solution to properly sealing the air ducts was Aeroseal.

Over the course of the project, TAG aerosealed more than 3,600 new and existing homes, including standalone homes, apartments and multi-unit dwellings. The HVAC contractor was able to adapt the sealing process in a manner that reduce installation time and allowed them to complete on average, four to six homes per day. Best of all, each home was tested before, during and after the sealing process. This allowed Land Lease to document Aeroseal's effectiveness and ultimately gain Energy Star certification for each and every home.

## <u>Aeroseal – The Technology</u>

- Developed at Lawrence Berkeley National Laboratory in 1994.
- Research for Aeroseal was partially funded by the EPA and the U.S. Department of Energy.
- Aeroseal is the only duct sealant technology that is applied from the inside of the duct system. It is delivered as a non-toxic aerosol mist that seeks out and plugs leaks.
- Aeroseal has proven to be 95% effective at sealing air duct leaks.

#### Aeroseal – The Company

- Aeroseal LLC is a subsidiary of JMD Corporation. The company is dedicated solely to the support of its dealers and the expansion of Aeroseal technology as a primary means of residential and commercial energy conservation.
- Aeroseal is the sole owner and licensee of Aeroseal technology.
- Aeroseal technology was bought by Carrier Corporation in the late 1990s. In 2010, Mark Modera, the inventor of Aeroseal, with the support of private equity investors, bought the company from carrier to realize the full potential and benefits of the technology. This lead to the launch of Aeroseal LLC in 2011.

For more information about the Fort Drum Mountain Community application or about Aeroseal in general, contact Brad Brenner at (503) 736-0610 or email <a href="mailto:brad@brennerassociates.com">brad@brennerassociates.com</a>. You can also visit the Aeroseal website at <a href="https://www.aeroseal.com">www.aeroseal.com</a>.