

Ductwork Sealant

Date reviewed: 10/3/16

Description of Technology

After sealing all duct registers and sealing off the HVAC unit itself, the system is turned on. The system sprays a fine mist made up of mostly vinyl acetate copolymer through the duct system, which begins to adhere where there are leaks. This seals the ductwork from inside, and reduces energy usage associated with heating and cooling.

Energy Saving Opportunity

Sector(s):

- Residential
- Commercial & Industrial

Applicability Criteria:

Buildings with forced-air HVAC

Efficiency Improvement:

Reduced duct leakage

Energy (%) Savings Potential:

Highly variable

Demand (%) Reduction Potential:

Highly variable

Strengths

- When applied correctly, Aeroseal is excellent at sealing ductwork. 75%+ reductions in duct leakage are not uncommon
- Aeroseal seals inaccessible ductwork behind walls that may otherwise require demolition
- Guaranteed for 10 years, and stress tested for 40 years in residential applications (Aeroseal, FAQ)

Weakness

- Aeroseal is a single-source product; that is, Aeroseal controls (to an extent) pricing and which vendors are allowed to install its product. If a vendor doesn't use Aeroseal products for the entire job, it won't guarantee the product.
- The cost to become an Aeroseal-licensed distributor may be prohibitively high for some contractors. Equipment can cost ~\$20k, and the per job cost of residential is \$125, and for commercial there is a \$/cfm charge.
- Aeroseal's effectiveness is highly affected by large gaps in ductwork or panned ducts. Either may result in the sealant not coagulating properly, and instead spraying out of the opening and into the general vicinity. If these panned ducts are within walls, it can be extremely difficult to fix them which may jeopardize the entire process

**Third Party Analysis/
Previous MTAC Reviews**

Joint Utility RD&D reviewed Aeroseal in 2011 and recommended the technology for consideration in Connecticut's Conservation and Load Management programs.

**Suppliers Known
to MTAC**

Aeroseal, LLC

MTAC Status

Acknowledged to have energy savings potential and recommended to individual PA for their own EE program consideration

Market Development Issues

Cost: Typically, \$2000 minimum per system

Market Risk and Barriers: Education needed for installer

Time to Market: Currently on market

Simple Pay-back: (Years) Dependent on heating system

