New and Underutilized Technology: Duct Sealants

The following information outlines key deployment considerations for duct sealants within the Federal sector. This information spans:

Benefits

Aerosol sealant is injected into the ductwork to seal leaks. This can save energy and costs associated with heating, cooling, and fan operation depending on building type.

Application

Condensing boilers are appropriate for most building applications.

Key Factors for Deployment

Sealing ductwork should be a standard energy conservation measure evaluated during design, construction, major renovation, or other HVAC projects.

Ranking Criteria

Federal energy savings, cost-effectiveness, and probability of success are ranked 0-5 with 0 representing the lowest ranking and 5 representing the highest ranking. The weighted score is ranked 0-100 with 0 representing the lowest ranking and 100 representing the highest ranking.

Federal Energy Savings	Cost Effectiveness	Probability of Success	Weighted Score
1.6	5.0	4.3	63

Resources

The following resources are available:

- Improved Duct Sealing: ASHRAE article on duct sealing technologies and best practices.
- Sacramento Municipal Utility District (SMUD) Aroseal Duct Sealing Program: Overview of the SMUD duct sealant program and how repairing leaky ducts can save money and prolong equipment life.
- Aerosol Duct Sealing: National Association of Home Builders Research Center overview on aerosol duct sealing.
- Aerosol Duct Sealing Calculator: Upper Peninsula Power Company screening tool to calculate payback periods for aerosol duct sealing.
- Flex Your Power – Ducts/Duct Sealing: Online resource covering duct sealing technologies and best practices.