AirTight

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comfort zone

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indoor air quality

It's easy to take your building's air for granted, until an issue arises that draws attention to it.

These issues can include anything from tenant/employee discomfort on hot or cold days, an inordinate number of employee sick days, or a foul odor permeating your building. Acceptable indoor air quality (IAQ) is much more than providing a prescribed volume of outdoor air per person. Today's building owners and managers are concerned about maintaining and documenting IAQ, not only to avoid problems with condensate, building sickness, or noise issues, but to provide a clean and healthy working environment in the building for their employees and tenants.

Good HVAC system selection and design along with proper building operation and maintenance are the foundations of high quality indoor air.

What equipment should you select for new installations or renovations, and more importantly, what contractor will you utilize to maintain it?

Temperature, humidity, particulate count, fresh air volume and circulation are all variables of IAQ that can be monitored and controlled for your building's purpose, whether your building is an elementary school, a luxury hotel, a family restaurant, a commercial office building, or a hospital. Each building has its own unique needs and requirements.

A qualified, Unified Group contractor has the expertise to ensure that all essential aspects of your system support your IAQ requirements and help your building fulfill its purpose, however specialized it may be.

heating up cost savings

If you are in the market for a new boiler, there are several options available today that will improve your heating system's efficiency, and can potentially save you money through energy savings.

Boilers are now manufactured with different efficiency ratings. Some of the new high-efficiency boilers operate at efficiencies of up to 95%, which can produce energy savings, especially when compared to the installation of an 82% efficient boiler, and even more when compared to an existing system that may have only a 70% efficiency rating.

Another cost savings option is the installation of a programmable setback thermostat. Setting back the temperature of a system during the night or during unoccupied periods is a proven method of reducing energy consumption. Combining a high efficiency boiler and a programmable thermostat can result in even greater savings.

The U.S. Environmental Protection Agency provides a free energy savings calculator that can be used to estimate the potential savings and payback period of upgrading other boilers systems (see example). This calculator can be used to compare the energy usage of different boiler efficiencies, with and without the use of programmable thermostat, and with different full-load heating hours. Visit the EPA's website at www.energystar.gov for other energy savings calculators and ideas.



Life Cycle Cost Estimate for 1 Energy Star Qualified Oil Boiler(s)

This energy savings calculator was developed by the U.S. EPA and U.S. DOE and is provided for estimating purposes only. Actual energy savings may vary based on use and other factors.

Enter your own values in the gray boxes or use our default values.		
Choose your fuel type from the drop-down menu		
Number of Units	1	
Oil Rate ($/gal)	$1.07	
Choose your city from the drop-down menu		
	ENERGY STAR Qualified Unit	Conventional Unit
Initial Cost per Unit (estimated retail price)	$4,000	$2,700
Annual Fuel Utilization Efficiency (AFUE)	93.0	74.0
Heating Capacity of Boiler (Btu/hr)	84,000	84,000
Use with Programmable Thermostat (Yes/No)		

Annual and Life Cycle Costs and Savings for 1 Oil Boiler(s)			
	ENERGY STAR Qualified Unit (s)	1 Conventional Unit(s)	Savings with ENERGY STAR
Annual Operating Costs*			
Energy cost	$1,367	$2,046	$678
Maintenance cost	$0	$0	$0
Total	**$1,367**	**$2,046**	**$678**
Life Cycle Costs*			
Operating costs (energy and maintenance)	$18,585	$27,802	$9,220
Energy cost	$18,585	$27,802	$9,220
Maintenance cost	$0	$0	$0
Purchase price for 1 unit(s)	$4,000	$2,700	-$1,300
Total	**$22,583**	**$30,502**	**$7,920**

* Annual costs exclude the initial purchase price. All costs, except initial cost, are discounted over the products' lifetime using a real discount rate of 4%. See "Assumptions" to change factors including the discount rate.
† A simple payback period of zero years means that the payback is immediate.

Summary of Benefits for 1 Oil Boiler(s)	
Initial cost difference	$1,300
Life cycle savings	$9,220
Net life cycle savings (life cycle savings - additional cost)	$7,920
Simple payback of additional cost (years)	1..9
Life cycle energy saved (MMBtu)	1,775
Life cycle air pollution reduction (lbs of CO2)	282,793
Air pollution reduction equivalence (number of cars removed from the road for a year)	24
Air pollution reduction equivalence (acres of forest)	39
Savings as a percent of retail price	198%

life's shared experiences

Have you ever thought about what makes your relationships thrive? Experiences are one of the main ingredients, the things we go through together that form and mold our relationships. Wikipedia defines experiences as: *A collection of events and/or activities from which an individual or group may gather knowledge, opinions, and skills.* What does this have to do with HVAC? Our customers/friends who partner with AirTight experience a working relationship which allows for long-term partnering. It's the mutual observations and experiences that make a great business relationship. If you are tired of the same old adversarial "contractor-vendor" deal, consider a different relationship with quality people. AirTight is unique to the HVAC industry; we "get it" and will work hard to make the HVAC part of your world less worrisome.

the benefits of a preventive maintenance agreement

Some of us are thrust into the HVAC world with limited or no knowledge of the industry. Through experience, I have quickly come to realize the importance of having a preventive maintenance agreement. A PM agreement may seem unnecessary to some, but those who have them would tell you otherwise. The benefits far outweigh the risk of waiting until something goes wrong to repair, such as a broken compressor or another expensive part that could have been prevented. Over time, a PM agreement can help decrease the cost of your power bills due to the efficiency of a properly operating system. By maintaining your units, you reduce the risk of critical system failures that could result in worker productivity losses.

There are countless benefits to having a PM agreement, but one of the most important pieces is in the budgeting aspect. With a PM agreement, AirTight can include a plan for the future in terms of maintaining aging equipment and helping budget for equipment replacements. This plan will allow your company to budget for the future and predict the life expectancy of the units. If maintained and managed correctly, your HVAC agreement could save you enough money in the long run to help pay for replacement equipment in the future. If your company does not have a PM agreement in place, please call AirTight at 704.377.3886.

keeping up with the gates'

AirTight recently completed the remediation of a server test lab for a large corporation that is headed up by a man named Gates. The refurbishment project was part of an on-going test lab that is working on the future of High Density Blade Servers and how they affect overall data center operations.

Our company has built a reputation for being able to work in critical sites without causing disruption to the day-to-day operations of the core facility, and this job was no exception. The job was well planned and right on the money as far as the budget goes. Special thanks to the following AirTight team members, Ryan Gunto, Whit Sanders, Daniel Horton, and Eddie Sain for all of their hard work and dedication. The project was managed and co-coordinated by Russ Castilow. Great job to all of the AirTitans in the field, and to the production group in the office who supplied the help and support that is much appreciated! We make a great team.

THE **UNIFIED** GROUP

together we make the difference

We are an independent association of the country's elite HVAC commercial contractors. We help our members increase productivity, profitability and customer retention, and we also provide a network for national and regional customer business solutions. Visit us at www.theunifiedgroup.com.

employee spotlight

Jim Thomas / Service Technician

Being a huge New York Yankees fan is just one little piece of Jim Thomas. Originally from up-state New York, Jim, his wife Dee, and their two boys, Sean and Michael, live in North Charlotte. Jim has been with AirTight for several years and has grown to be a key member of our team. Having a background as a paramedic before beginning his HVAC career, Jim has a wide variety of skills to help all of our customers in many ways. We are truly proud to have Jim as an AirTitan!

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AirTight

We provide good people you can trust, in environments where trust isn't a luxury, it is essential. Our technology works to reduce your cost. We provide up to the minute status on your account along with accurate, timely invoices.

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