



**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](http://www.theunifiedgroup.com).

**employee spotlight**

*Service Technician*

Detail oriented. Thoughtful. Dedicated. These are just a few words that describe some of the pieces of Nate Morse. As one of AirTight's most seasoned technicians, Nate helps raise everyone's bar to a whole new level. Originally from Rochester, New York, Nate served our country in the United States Navy and then transitioned into the HVAC field. Nate, his wife Tina,



and their teenage daughter Elizabeth, live just outside of Charlotte. Among all of the family duties he takes care of, Nate is also an avid woodcarver. So, if you ever have Nate on your site taking care of your HVAC gear, rest assured you are in the best of care! Thank you Nate, we are thrilled to serve with you.

# comfort zone

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**what's new in rooftop units**

At the recent 2008 International Air-Conditioning, Heating, Refrigerating Exposition (AHR Expo), several manufacturers rolled out new equipment, highlighting green technology, maintenance ease, and building footprints.

*Below are some of the new products on the market.*

Carrier Corp. introduced Novation heat exchanger technology on its Centurion rooftop units. According to the company, this new technology makes its rooftops smaller, lighter, and requires less refrigerant. It reduces the size of the rooftop by 10 percent and the amount of refrigeration by 57 percent.

Johnson Controls 7.5-ton rooftop unit uses R-410A refrigerant, and offers two-stage heating and two-stage cooling. It can be specified for cooling only, cooling with electric heat, and cooling with gas heat. Along with the unit is the new Light Commercial

Control System, which employs self-discovery and self-configuration, and a color touch screen that is user friendly.

Lennox International showcased its new Strategos rooftop unit, concentrating on its easy maintenance and high efficiency. The unit has efficiency ratings up to 14.3 EER, 16.1 SEER, and 16.4 IPLV. With four compressors, the unit provides four stages of cooling. According to the company, it is up to 66 percent more efficient than the most stringent requirements of the U.S. Department of Energy and ASHRAE.



At AirTight we strive to be a leader in the heating, ventilating, and air conditioning industry. AirTight is deeply committed to customer-based relationships focusing on communications, quality, and integrity. It's the only way we know how to do business.

**AirTight**

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## greenspeak

The green movement is full of catchwords that can sound confusing, if not downright foreboding. Here's a glossary of commonly used green words and phrases, adapted from the environmental website [thedailygreen.com](http://thedailygreen.com).

- **Carbon footprint** A measurement of the effect an action has on the climate in terms of the amount of greenhouse gases it produces. Greenhouse gases, such as water vapor, carbon dioxide, methane, nitrous oxide, and fluorocarbons, directly contribute to the global warming effect. On average, each American sends 20 tons (40,000 pounds) of carbon dioxide into the atmosphere each year. According to environmental scientists, the world population collectively needs to reduce their carbon footprints by 60 percent to 80 percent to stabilize greenhouse gas concentrations to halt the environmental chaos that is now beginning to occur because of global warming.
- **Carbon offsets** These are measures (like tree planting or investing in wind farms or geothermal energy markets) sold to companies and individuals to balance out

the carbon dioxide their actions have let loose into the atmosphere.

- **Carbon tax** A proposed venture that would charge a tax on carbon dioxide emissions from burning fossil fuels, including gas for driving and fuel for air travel. So far, this is just an idea proposed by various environmental advocates.
- **Energy vampires** This term refers to electric appliances such as televisions, chargers, and clock radios that use energy even when turned off. The energy they use is also called a "phantom load".
- **Fair trade** A certification code used by TransFair USA (a nonprofit certifier) that ensures products such as coffee, tea, sugar, fruit, and rice (among other things) have been grown by farmers who are paid a fair price, provided credit, and given assistance in their business with the eventual goal of economic self-sufficiency.
- **Sustainability** This concept concerns how we should live now to preserve the world's resources for the generations after us. This means using methods of farming, building, and generating electricity that don't rely on exhaustible resources—like coal or oil—and can be used endlessly in the future. ☐☐☐



## operating costs up, energy use down

According to a recent report from the International Facility Management Association (IFMA), the overall cost of running a facility is 10% higher than it was four years ago. Utility costs—including electricity, gasoline, fuel, oil, steam, water, and sewage—have jumped 19% from 2006.

What's interesting is that this is happening when energy consumption is down. Average electricity consumption has dropped from 93 kBtu per square foot to 81. This decrease in energy usage could be attributed to companies implementing energy conservation practices and equipment upgrades.

Performing simple measures such as adjusting heating and air conditioning controls, and performing preventive maintenance checks to keep equipment running efficiently, can make a measurable impact on reducing energy consumption. ☐☐☐

## "hanging out" in ballantyne, south charlotte



From time to time we are asked to do some pretty unique projects; the one described below is no exception.

A well known financial services company was ready to expand and remodel their data center. A structured cabling company was contracted to install the entire network, voice over IP, and data cabling. The IT director mentioned to the cabling contractor that they needed to install CRAC (computer room air conditioning) units; however, there really wasn't enough room on the roof to mount the remote condensers that dump the heat to the outdoors. The contractor they had been using was not helping very much to boot.

AirTight project coordinator Ryan Gunto visited the site and devised a very clever way of hanging the condensers from above via the structural steel on the roof that held up the walls of the penthouse. The structural engineer loved the design, signed off on the installation, and before you know it, the data center was cooling the IT gear and the systems were performing very well.

Great job to Jason, Ron, and everyone on the AirTight team who got this job done on time, within budget, and left a very satisfied customer!

If you ever need "out of the box" thinking, please call AirTight. We have many years of experience and never run from unique installations. We would love to help solve your challenges. ☐☐☐

## understanding the "green" trend

The world is getting "Greener". Maybe not with trees, plants, and shrubs, but definitely in the way we talk about buildings, power management, and HVAC.

For us, Green means that we will need to be keenly aware of our surroundings in regards to power and cooling, especially controlling temperatures, conserving energy, and even finding new ways to re-use the energy we already consume.

Fifteen years ago no one had heard of an ERV system. Now all new buildings of any size have one. An Energy Recovery Ventilation system is a mechanical component that pre-heats or pre-cools outside air pumped into your building. This air is required so that air quality levels remain in check. This device reduces the amount of energy required to treat outside air by conditioning it through a heat exchanger before it's brought into the building. The future is full of these types of "Smart Technologies" to help curb our power consumption.

Data centers are getting more and more dense with computing equipment. Managing the power consumption without depleting the available power is the challenge in the "IT" world. Many facilities will run out of available power before they run out of floor space, due to equipment consolidation and server virtualization efforts.

At AirTight, we encourage awareness and education. Please visit these links to learn more so you can be prepared. [www.thegreengrid.org](http://www.thegreengrid.org) / [www.ashrae.org](http://www.ashrae.org) / [www.usgbc.org](http://www.usgbc.org). ☐☐☐

## continuing the tradition of service

Many of you have been AirTight customers for a long time, some since our inception nine years ago. For others, we may be a new addition to your team. While each customer has unique requirements, you may share a common goal: Either to ensure maximum uptime in your facilities or to have a comfortable environment for your specific business.

We started AirTight with a dedication to service and a commitment to provide it 24x7/365. Moving forward you'll see some small but exciting changes at AirTight as we continue to expand. One thing that will not change is our commitment to our employees, customers, and community. Whether you're a newcomer or long-time customer, you can count on AirTight for the services on which you and your infrastructure depend. ☐☐☐

