



**Volume One / Issue 4
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PRODUCT

In This Issue...

PRODUCT

Carrier's Cobra ... Your All-In-One IAQ Solution

CASE STUDY

Carrier Scores High at School with 40% Energy Cost Savings Using MoistureMi\$er™ and DDC

Carrier's Cobra ... Your All-In-One IAQ Solution

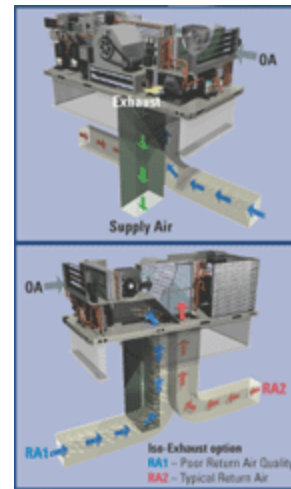
With COBRA, Carrier's new high efficiency rooftop unit, you'll be able to meet one of the most difficult challenges faced by today's building owners and managers: balancing the needs for good indoor air quality, adequate ventilation, occupant comfort and energy conservation.

Developed with IAQ in mind, COBRA features an exclusive Iso-Exhaust option that allows you to exhaust poor quality return air directly outside without contaminating supply air. In addition, the energy from the previously unused exhaust air is now reclaimed and used to precondition the outdoor air, reducing the load on the evaporator coil and providing better comfort for occupants. This factory installed energy recovery capability optimizes efficiency and increases total latent capacity of the system, while offering installation and maintenance ease typical of a packaged unit.

COBRA utilizes Carrier's high efficiency 48/50HJ004-014 rooftop units and provides 3 to 12.5 tons cooling capacity with the capability to condition up to 600, 1000, 2000 or 3000 cfm of outdoor air. When used in combination with Carrier's MoistureMi\$er™ dehumidification option, COBRA provides a total dehumidification system in a single unitary rooftop package unit — to maintain acceptable humidity levels and ensure a comfortable environment in most conditions. By applying proven and reliable heat pump technology, Carrier has designed this refrigerant-based energy recovery solution for ease of maintenance, as well as simple installation, providing a cost-effective addition to your energy management strategy.

COBRA is perfect for a wide variety of new construction applications, including schools, restaurants, retail and health club facilities. And it fits on Carrier's standard roof curbs, allowing it to be used for retrofit projects. UL approved, manufactured and factory-tested to Carrier's high standards, COBRA will simplify job site installation, ease maintenance, improve IAQ and enhance the capability of your rooftop — delivering money-saving benefits and worry-free energy management.

To learn more about the advantages of the Carrier COBRA for your application, call 1.800.CARRIER or [visit the Cobra web page.](#)



The COBRA energy recovery unit offers an exclusive Iso-Exhaust option that allows separate air streams to enter the unit, eliminating contamination concerns. Poor quality air (RA1) is exhausted outside and its energy is reclaimed to precondition ventilation air. The preconditioned air is then mixed with the typical return air (RA2), and further conditioned to meet the building loads, providing a comfortable and safe environment.

Next Issue...

PRODUCT

CCNWeb — Experience the freedom of web access to completely control and manage your Carrier Comfort Network.

CASE STUDY

Discover how Carrier's Controls Technology meets Architectural Art in New York City's newest landmark — the AOL Time Warner Center on Columbus Circle.

CASE STUDY

Carrier Scores High at School with 40% Energy Cost Savings Using MoistureMi\$er™ and DDC



Okeechobee High School, Okeechobee, FL was retrofitting its 20,000 sq. ft. building and needed a system that would provide a healthy and comfortable learning environment, while operating efficiently. This meant equipment capable of eliminating the building's humidity problems, improving indoor air quality (IAQ) and reducing the noise levels that were interfering with classroom teaching. At the same time the system had to be cost-effective.

"Okeechobee High School had a noisy, outdated air conditioning system that simply wasn't doing the job. It couldn't keep up with the heat load in the classrooms," said Dale Barrett, Okeechobee Director of Operations. "The humidity levels were intolerable and the ceiling tiles were sagging to the point of falling down. We were also concerned about unwanted growth of mildew and mold spores." Another concern was protecting delicate computer equipment in the computer science and business classrooms.

Energy costs were reduced 40% with a system combining Carrier's high efficiency rooftop air conditioning units, MoistureMi\$er™ dehumidification packages and programmable direct digital control (DDC) thermostats. The humidity problem was completely eliminated, resulting in student and teacher comfort, protection of computer equipment and a halt to structural damage. And the system's quiet operation dramatically reduced noise levels so that teachers no longer had to turn the air conditioning off to be heard. All of this with a payback in less than 36 months.

The 33-ton installation consisted of four six-ton units, one five-ton unit and one four-ton unit, with Carrier programmable direct digital control thermostats for precise temperature control and occupied and unoccupied scheduling for energy conservation. The new units achieve a seasonal energy efficiency ratio (SEER) rating of 13, compared to less than 9 SEER for the old units, delivering improved comfort with fewer operating hours, thereby using less energy.

Teachers report excellent results. Computer science teacher Cathy Norvell commented, "The perfect classroom temperature is when students don't even think about it. Now, they work steadily. As a whole, students are now more focused and productive in their classes in this building."

"You can't even hear these units running," added Barrett. "Now teachers don't have to choose between comfort and being heard."

Barrett is extremely satisfied with the efficiency of

Carrier's MoistureMi\$er™ dehumidification package. And the energy savings are an added bonus. "We're saving a minimum of 40% in energy costs compared to the older units. The school even received a \$4,500 rebate from Florida Power & Light for the energy efficiency improvements. "The new air conditioning system is exceeding our expectations."

To learn more about the Okeechobee High School, [download the full case study](#).

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