

DRY-O-TRON® DK & DKV SERIES DEHUMIDIFIERS



Ann's Choice Retirement Community

An Example of the HVAC Industry's Highest Efficiency Equipment Applications



HVAC equipment selection for new developments by Erickson carries a unique criterion: If it is the industry's latest high efficiency equipment, Erickson wants it. Warminster, Penn.— Erickson, a Baltimore, Maryland-based national developer/manager of campuses for middle-income individuals and families over the age of 62, consistently chooses technically superior, high-efficiency, and space saving equipment over price for its communities. In the long term, this strategy delivers the optimum indoor air comfort, generates continual energy savings for residents, and

unit residential buildings, Erickson's standard HVAC specification requires the more efficient water source heat pump system. At Ann's Choice, one of Erickson's communities in Warminster, the efficiency and indoor air comfort were increased by water source heat pump methodology by adding DRY-O-TRON® make-up air units by Dectron Inc., Roswell, Ga. The DRY-O-TRON® units feature reverse cycle heat pump,

At Ann's Choice, the efficiency and indoor air comfort were increased by water source heat pump methodology by adding DRY-O-TRON® make-up air units.

helps preserve the environment. In addition, the space saving aspects help offset the difference between this custom-manufactured equipment and off-the-shelf equipment.

While other developers rely on two-pipe ventilators in multiple modulating hot gas reheat and variable heat pump capacity options to deliver an additional 10% or more energy savings to the ongoing project.

This latest technology ensures that the equipment specified today for the Phase II construction

DRY-O-TRON'

CASE STUDY

will not only remain state-of-theart in 2010, when the project is completed, but also promises exponential savings considering energy costs will likely be higher.

While the separate heat pumps maintain temperature effectively, traditional off-the-shelf heat pump technology was not considered ideal for the outside air ventilation requirements.

As such, one Dectron Inc. DRY-O-TRON® DK Series dehumidifying make-up air unit is being used for each residential building. The top floor unit supplies dehumidified and preconditioned air to each floor's common areas and corridor via a vertical trunk line located in a utility chase. The corridor is slightly pressurized so that 100% outside make-up air infiltrates each unit from the corridor and exhausts through apartment bathroom vents. Make-up air is delivered at a 50% to 55% relative humidity at 72°F to 74°F supply temperature year-round.

The hot gas reheat option on each make-up air unit produces a better comfort level by helping maintain accurate set point temperature. Moreover, the make-up air strategy at Ann's Choice takes it a step further with modulating hot gas reheat, which maintains a more precise temperature and relative humidity inside the space, all while saving energy. The modulating hot gas reheat option also

operates with the reverse cycle heat pump option to provide more precise wintertime temperatures.

Although earlier designs specified HVAC units for each floor, the idea was abandoned since one large make-up air unit would save an enormous amount of space, which could then be used for additional living area per building. Moreover, only one unit would need periodic maintenance, which would also consistently save money.

Furthermore, not only is Dectron's factory-engineering of unit functions completely compatible and easily interfaceable with the automated monitoring and controlling Novar system, but the new space-saving vertical make-up air Model DKV Series will also offer additional savings in future planned buildings.

In the new 55,000 sq. ft. clubhouse, heat pumps are used in smaller spaces and two higher grade Dectron DKV Series HVAC units with dehumidification capacity serve a large auditorium with high occupancy rates. The dehumidification capabilities of the HVAC units are especially critical because the summer month humidity loads are too great for conventional air conditioning to overcome. Additionally, their first clubhouse also uses a separate Dectron DRY-O-TRON® dehumidifier custom designed for the high

humidity loads of the facility's indoor swimming pool.

Dectron Inc., an ISO-Certified company, is a global HVAC industry leader. For more than 28 years, Dectron's highly-skilled engineers and technical staff have been designing and manufacturing innovative, state-ofthe-art DRY-O-TRON® dehumidification equipment that use leading-edge technology to recycle energy, conserve pool water, and CHLORAGUARD® filter natatoriums. Dectron Inc.'s DRY-O-TRON® line of products encompasses an extensive array of custom and semi-custom systems for industrial, commercial, and residential applications.



One of the DRY-O-TRON® DKV Series units installed at Ann's Choice Retirement Community





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