

RenewAire Case Study: Norridge Health Care

Norridge Health Care Solves Ventilation Puzzle with RenewAire

After being in operation for many years Norridge Health Care and Rehabilitation Center in Norridge, Illinois had storage requirements that included 6 separate rooms for various supplies and equipment. Local code requirements called for 3 air changes per hour and 350 CFM per room. The rooms are located on opposite sides of the building and on three separate floors. Needless to say the proper ventilation of these rooms presented quite a puzzle for Cooling Equipment of Elk Grove Village, Illinois.



Code required units to be placed 15' from any other exhaust. Cooling Equipment utilized insulated and sealed duct for return and supply.

Dave Apostol, Sales Manager for Cooling Equipment looked at several options and consulted with their architect and Engineers from RenewAire. The idea of straight exhaust and make up air was quickly ruled out because of the expense required to bring in and heat the air to provide comfortable ambient levels.

Cooling Equipment recommended the installation of 2 ERV450RT RenewAire Units. Each unit accommodates 3 storage rooms. Ductwork for the project was minimal and existing building chase, supply and return were utilized. A low limit cut out was added to each unit that shuts down the unit when mixed return air falls below 60 degrees. According to Dave, this will occur only in the most frigid conditions. The RenewAire units bring fresh air into the storage rooms through an exchange core made of highly engineered resin plates. Through this core heat and moisture are transferred to the stale air through the exhaust.

During the summer, cooler exhaust air flowing thru the plate tempers fresh air. Likewise during the winter, colder outside air is tempered by the warm air being exhausted thru the exchanger. "The unit recaptures heat otherwise lost in exhaust air while controlling humidity extremes. This greatly reduces the demand on heating equipment and lowers both initial cost and energy bills", says Dave.

"With the help of RenewAire we were able to include operating savings in our proposal that provided a payback of only 3 years verse going with a traditional exhaust and make-up air system. The most impressive point of the RenewAire units was the solid cabinets and ease of installation. Handles are sturdy, and allow access to all components of the system. We were readily able to convince our customer that these units are built to last."

For more information on RenewAire Energy Recovery units contact Gustave A. Larson, the distributor for RenewAire in Chicago or visit their website at www.RenewAire.com.



Dave Apostol of Cooling Equipment confers with representatives of Norridge Health Care facility and RenewAire on the installation of 2 EV450RT units.



Second unit also required the unit to be mounted on curb and duct transition for supply and return.