

Animal Shelter Gets Breath of Fresh Air.

BACKGROUND

The Monadnock Region Humane Society, home to over 180 cats and dogs, had continued problems with air quality in its animal shelter.

Cats are very susceptible to airborne infections and require large amounts of fresh air. Dogs on the other hand are not as susceptible to respiratory diseases, however odor control is critical. Clearly, the greater the amount of outdoor fresh air the better off are the animals and the employees who tend to the animals.

Fresh air can be provided quite easily with typical supply and exhaust blowers, but in Swanzey, New Hampshire where the heating season is quite long the cost to heat the ventilation air became such a monthly problem they looked for a better solution.

To design their new heating and ventilating system, the shelter enlisted the services of Design Day Mechanicals, Inc., of New Ipswich NH.

ENERGY EFFICIENT VENTILATION INSTALLED

The solution— Two rooftop Energy Recovery Ventilation units employing Airxchange technology were installed to provide 2000 CFM of outdoor air continuously to the building. The units would not only provide fresh air but recover 80% of the heat being exhausted out of the building.

Two existing roof exhausters were removed, the roof opening enlarged and the rooftop units with accessory roof curbs mounted in place. Ductwork was modified to tie into existing ducts. Where possible return air registers were located near the floor and filters installed behind them. Local filters will trap dog and cat hair and are located for easy periodic replacement .

The use of Airxchange energy recovery ventilation systems resulted in better control of the indoor air quality and temperature, and substantially lower heating bills.