



Prioritizing Healthier Indoor Air, Salon Installs ERVs as an Energy Efficient and Cost Effective Ventilation Strategy

AT A GLANCE

OVERVIEW:

- ♦ Project: Renaissance Salon/Day Spa in Fond du Lac, WI
- ♦ Building type: Salon/Day Spa
- ♦ RenewAire ERVs installed:
 - 1 EV450IN
 - 1 EV200
 - 1 HE900IN

RESULTS:

- ♦ Healthier, cleaner indoor air
- ♦ Energy savings of nearly 1.5 tons (cooling) and 56,000 btu/hr (heating)

CHALLENGES

- ♦ Provide clean, healthy indoor air for salon staff and their clients
- ♦ Find a cost-effective ventilation strategy that complies with stringent codes
- ♦ Improved health and productivity of employees through increased ventilation

OVERVIEW

While all [poorly ventilated buildings can cause occupant sickness](#), salons and day spas can present additional health risks to their owners and employees due to the variety and amount of chemicals used every day. Salons and day spas often have some of the [most toxic and dirty indoor air quality \(IAQ\)](#). Cosmetic products and processes emit all kinds of carcinogenic air pollutants like benzene, formaldehyde, and acetaldehyde, as well as other pollutants like toluene, ethylbenzene, and xylene. For both salon staff and their clients, [poor IAQ can have detrimental effects](#) on their health, wellness, productivity, and cognitive function.

THE SOLUTION

To provide healthier environments for staff and client, building codes often require salons and day spas to [increase the ventilation rate](#) indoors via their HVAC systems (0.5-1.0 cfm of ventilation per square foot of space is a common baseline for salons and spas). By bringing in more air into the space, the [indoor air contaminants](#) are either [diluted or expelled out](#). However, since this strategy typically increases energy use, finding a cost-effective ventilation system is paramount. For the team at Renaissance Salon/Day Spa in Fond du Lac, WI; this meant installing [RenewAire energy recovery ventilators \(ERVs\)](#).

What makes RenewAire ERVs particularly unique is that they recycle energy in contrast to traditional HVAC systems. Our ERVs recycle energy by reusing the otherwise-wasted energy and humidity from exhaust air to temper incoming outdoor air. This can [save up to 65% on ventilation energy costs](#) by lowering demand/load on mechanical cooling/heating equipment.

THE RESULT

By installing a RenewAire EV200 ERV along with an EV450IN and HE900IN, the Renaissance team experienced significant energy savings. The ERVs brought in 900 CFM of fresh outdoor air and during the winter months, the salon saved 56,000 btu/hr in heating loads. Similarly, the day spa found that in the summer, they saved 1.5 tons on their cooling load!

RenewAire ERVs
used in salons and spas: