

MINIMUM CODE Isn't Always Enough

Minimum
Code
Ventilation



2 MINUTES



60 MINUTES

Increased
Continuous
Ventilation



2 MINUTES



60 MINUTES

**Increase Ventilation Rates Above Code
AND Reduce Ventilation Energy Costs up to 65%**

RENEWAIRE ERVs

Pictures shown are for illustration purposes only.



Read more about the role of ventilation in the fight against COVID-19: bit.ly/COVID19_WP



Cores.RenewAire.com

800.627.4499



Increase Ventilation with Energy Recovery

In the COVID-19 environment, indoor air quality (IAQ) is even more critical because a buildup of indoor virus aerosols can threaten occupants. Indoor spaces must be well ventilated to protect occupant health and safety. This is especially true with the growing adoption of air-sealing methodologies for structures of every type.

The best way to increase ventilation is to use an Energy Recovery Ventilator (ERV). An ERV uses balanced airflows and recovers otherwise-wasted total energy to precondition outdoor air coming inside:

- In summer, warm/humid outdoor air is pre-cooled/dehumidified via the total energy recovered from the outgoing cool interior air.
- In winter, cold/dry outdoor air is pre-heated/humidified via the total energy recovered from the outgoing warm interior air.

The result is less energy needed for conditioning and ventilation, which cuts costs and downsizes HVAC equipment.



HE1XRT ERV

Create Healthier & Safer Spaces

People consume about 33 pounds of air, compared to two pounds of food and four pounds of water daily. Because we breathe in so much air, IAQ has a tremendous impact on occupant health. Additionally, the EPA found that indoor air is typically 2–5 times—and occasionally 100 times—more polluted than outdoor air.

The Solution to Indoor Air Pollution is Dilution

The CDC found that the main infection route for SARS-CoV-2, the virus causing COVID-19, is exposure to respiratory

droplets (not via surface transmission). Without ventilation, airborne aerosols concentrate over time. Consequently, with adequate and continuous ventilation, aerosols and CO2 are diluted, lessening their intensity.

Cognizant Authorities Recommend Increased Ventilation

Leading organizations agree that ventilation is essential for healthier buildings, especially in the COVID-19 environment. For example, the CDC recommends using multiple mitigation strategies, including better building ventilation, to lower the risk of exposure. A few certifications for higher-performing buildings have emerged recently that prioritize occupant health and safety. IAQ ranks as a top criterion:

- The WELL Building Standard™ version 2 (WELL v2™): Created by the International WELL Building Institute, WELL v2™ certifies spaces that advance human health and wellbeing. Within this certification, the WELL v2™ Air concept aims to achieve high levels of IAQ across a building's lifetime. A critical component for reaching this goal is ventilating above minimum code. For example, exceeding outdoor air supply rates described in ASHRAE 62.1-2010 by either 30% or 60% provides 1 or 2 certification points. Another option would be demand control ventilation to max. of 900 ppm CO2 for 1 point or 750 ppm for 2 points.

- Fitwel: Created by the CDC and the U.S. General Services Administration, Fitwel certifies buildings that strengthen health and wellbeing. An IAQ policy with regular ventilation is a vital aspect.

The market now demands higher-performing buildings, and standards are evolving to keep up. One example is the forthcoming ASHRAE 62.1, Section 42 on "Enhanced Indoor Air Quality in Commercial and Institutional Buildings." It's still under review, but once approved it will recommend exceeding minimum requirements for enhancing IAQ.

For more information, visit: www.renewaire.com.

INCREASED VENTILATION BENEFITS

Better Health



Improved Cognitive Function



Increased Productivity



Reduced Viral Spread



RENEWAIRE ERV BENEFITS*

Up to 70% drop in OA Heating & Cooling Loads results in:

Cut peak demand, downsized HVAC equipment, and lower capital equipment costs. **70%**

65% reduction in ventilation energy costs year after year. **65%**

Short Payback

Competitive pricing and sizable HVAC energy savings

mean a short payback. The HE2XINH ERV's **payback is only 1.75 years.**



VISIT



#C1132 at AHR Expo

*All data pertains to a RenewAire HE2XINH ERV when compared to conventional exhaust equipment at 1,500 CFM of OA in Minnesota using DX cooling and gas heat. Future energy costs calculated based on current energy costs.