

# INDOOR AIR QUALITY SOLUTIONS

Improving comfort and productivity through innovation



**LENNOX**  
Innovation never felt so good.®

# Creating a better environment through IAQ

It's difficult to overestimate the impact of Indoor Air Quality (IAQ). According to the EPA, poor IAQ is among the top five environmental risks. Pollutants in a building's air can cause dizziness and headaches, as well as aggravate allergies and asthma. While cleaning and vacuuming can improve indoor air, cleaning alone will not solve IAQ problems.

## INDOOR AIR QUALITY AT A GLANCE:

Poor indoor air quality (IAQ) can affect the health, comfort and productivity of any organization.

Strategies to improve IAQ include monitoring air quality, eliminating sources of pollutants, ventilating the area and cleaning the building thoroughly.

The U.S. Environmental Protection Agency states that indoor air pollution may range anywhere from five times to 100 times the level of outdoor air pollution.

An HVAC system can be one of the best tools for improving your building's air quality by providing ventilation and filtration and controlling humidity.

ASHRAE recommends maintaining relative humidity levels below 60% to protect against the spread of mold and mildew, which can help control potential health and liability issues.

**Creating a better indoor environment requires controlling temperature, humidity and contaminants. Whatever your needs, Lennox has a system to help you meet those needs.**

## How improved IAQ makes a difference

Conversely, good IAQ carries numerous, valuable benefits. It helps improve the health and productivity of employees, decreases absenteeism, increases learning and student performance levels and creates a more positive customer experience.

## HVAC products to meet modern IAQ demands

Lennox® HVAC solutions can help improve IAQ, going beyond heating and cooling the space to improve humidity levels and reduce or eliminate contaminants. In addition, many of these options help reduce escalating energy costs, providing you with an efficient and effective IAQ solution.

**According to the World Health Organization, those who live in damp or moldy buildings have up to 75% more chance of suffering respiratory problems and asthma.**

Source: "Poor indoor air quality increases risk of respiratory problems," Environmental Technology, [www.envirotech-online.com](http://www.envirotech-online.com).

## Impact of Ventilation\*

### Office Worker Performance



Performance increase by **0.8%** per 10 cfm per person

### School Performance



Increases of **5–10%** by doubling ventilation

### Absenteeism



Reduced by **35%** by doubling ventilation

### Sick Building Syndrome



Decrease of **33%** in symptom prevalence rates as ventilation rate increases from 17 to 50 cfm per person

\*Source: [www.iaqscience.lbl.gov](http://www.iaqscience.lbl.gov)

# Solutions to improve and maintain ideal air quality

## Humidity control helps protect customer comfort and employee productivity

Lennox® products:	How air quality is improved:
<b>Humiditrol® dehumidification system for rooftop units</b> <ul style="list-style-type: none"> <li>Available as a factory-installed option on the Emergence® rooftop unit</li> </ul>	<ul style="list-style-type: none"> <li>Reduces humidity without overcooling rooms</li> <li>Helps prevent growth of mold and bacteria</li> <li>Controls spread of allergens</li> </ul>
<b>Humiditrol dehumidification system for split systems</b> <ul style="list-style-type: none"> <li>Available as a field-installed accessory on 3- to 5-ton S-Class® and T-Class™ split systems</li> <li>Requires a variable speed air handler or furnace and the iComfort Wifi® touchscreen thermostat*</li> </ul>	

## Fresh-air ventilation helps protect the health of customers and employees

Lennox products:	How air quality is improved:
<b>Energy Recovery Wheel (ERW)</b> <ul style="list-style-type: none"> <li>Factory-installed option in Emergence 35- to 50-ton rooftop units</li> </ul>	<ul style="list-style-type: none"> <li>Dilutes indoor air pollutants</li> <li>Helps reduce concentrations of odors and VOCs</li> <li>Fresh air can be supplied indoors according to design or occupancy levels</li> </ul>
<b>Energy Recovery System (ERS)</b> <ul style="list-style-type: none"> <li>Combines an ERW with fans and attaches to rooftop unit</li> </ul>	
<b>Smart Airflow™ System</b> <ul style="list-style-type: none"> <li>Factory installed option in Emergence 3- to 5-ton rooftop units</li> </ul>	
<b>Economizers</b>	
<b>Demand Control Ventilation</b>	

## Control irritants and maintain efficiency

Lennox products:	How air quality is improved:
<b>UVC Germicidal Light</b> <ul style="list-style-type: none"> <li>Designed to optimize the light safely across the entire coil surface</li> <li>Available as field-installed kit (factory installation available for Emergence units)</li> </ul>	<ul style="list-style-type: none"> <li>Reduces concentration of mold, bacteria and fungi on coils</li> <li>Minimizes irritants and increases comfort</li> <li>Maintains system efficiency by keeping the coils clean</li> </ul>

*Note: Hg-lamps contain mercury. Dispose of properly. Refer to [www.lamprecycle.org](http://www.lamprecycle.org) or call 1-800-9-LENNOX.*

## Filtration

Lennox products:	How air quality is improved:
<b>High-efficiency air filters</b> <ul style="list-style-type: none"> <li>MERV 8, 11, 13 and 15</li> </ul>	<ul style="list-style-type: none"> <li>Reduces concentrations of pollen, dust mites, dirt, mold spores, fungi, odors and chemicals</li> <li>Enhances comfort</li> <li>Helps protect furnishings</li> <li>Helps prevent discoloration of walls and ceilings</li> </ul>

\*Select units will also require the Electronic Interface Module

# Solutions for customized comfort

Don't just choose a Lennox® product — choose a Lennox Commercial Comfort System.

These complete packages of HVAC solutions provide tools to create a healthy and comfortable environment.



## Packaged Units

- Emergence® Rooftop Units
- Strategos® Rooftop Units
- Landmark® Rooftop Units
- Raider™ Rooftop Units



## Commercial Controls

- Systems Integration Solutions
- Commercial Thermostats
- L Connection® Network



## Solar Ready

- SunSource® Commercial Energy System



## Indoor Air Quality

- Humiditrol® Dehumidification System
- Demand Control Ventilation
- Air Filters
- UVC Lamps



## Split Systems

- S-Class® Air Conditioners/Heat Pumps
- T-Class™ Air Conditioners/Heat Pumps
- Air Handlers
- Indoor Coils



## Heating

- Unit Heaters
- Duct Furnaces
- Furnaces



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