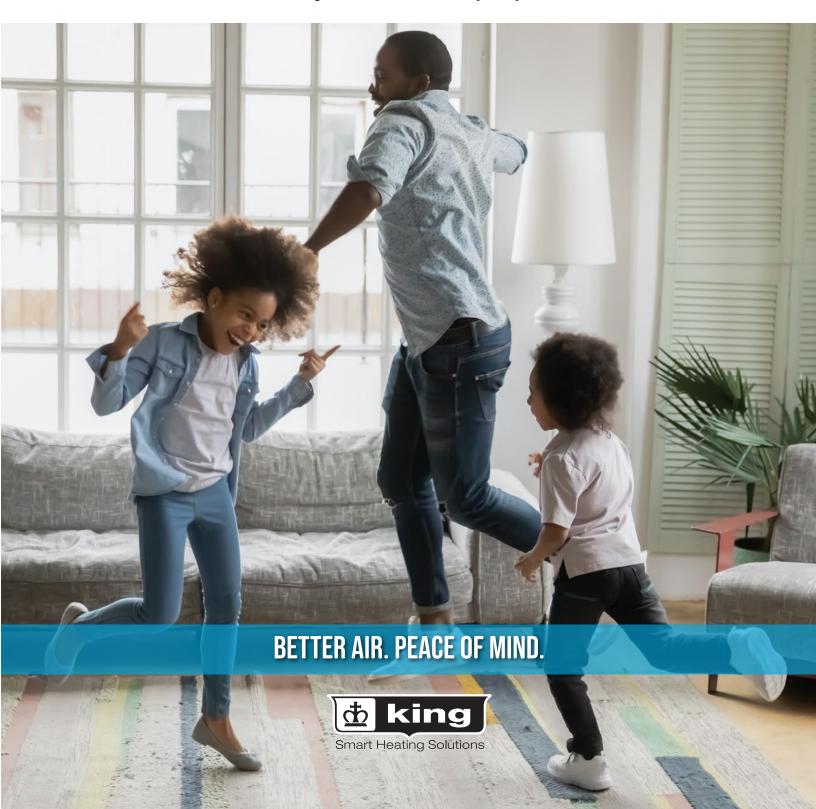


## **MAKE UP AIR SOLUTIONS**

Residential - Light Commercial - Heavy-Duty Commercial





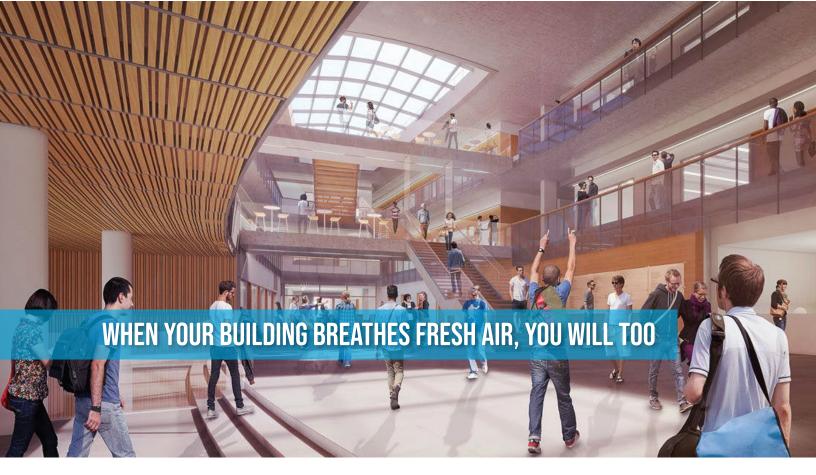
According to the EPA (epa.gov), indoor air quality is five times worse than outdoor air quality. Fresh, clean air is essential to good health. But with today's airtight construction techniques, excess humidity and airborne pollutants can easily get trapped in indoor air. This can result in serious consequences for the structure of your home or business and for the health of its occupants.

## **GO ABOVE THE MINIMUM STANDARDS**

The American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE), who sets the standards for ventilation rates now recommends flushing spaces with fresh air two hours before and after occupancies. This includes operating the exhaust fans as well as outside for maximizing fresh air.

Under most current codes, a building should replace all inside air with outside air about once every hour, or what's called an "air exchange rate" of one. ASHRAE is now recommending upping that to 3 times an hour.

IS THE SIMPLEST WAY TO SHOW CUSTOMERS
AND EMPLOYEES YOU'RE TAKING ACTION & KEEPING THE SPACE SAFE,
PRODUCTIVE, AND ENERGEY-EFFICIENT. 33





Airborne Contamination transmission is one of the main spread routes for a number of infectious diseases according to the CDC. They now recommend increasing the percentage of outdoor air that circulates into the system to cut down on recycled contaminated air. This outside air dilutes or removes contaminants in the space faster.



Particulates from dust, allergens, pet dander, and more can contribute to poor indoor air quality up to 100 times dirtier than outside air. With a properly ventilated building, you create a more enjoyable, comfortable and healthier environment.



Moisture that is not properly ventilated can cause mildew and mold formation, which can potentially lead to structural problems and health problems.



Off-gassing from construction materials, carpeting, adhesives and synthetic materials—as well as solvents from common household cleaners—can accumulate in tightly built buildings. Look to King for continuous ventilation solutions that meet ASHRAE 62.2.



Fresh air is essential in every room of our homes and buildings. King fresh air systems are the centerpiece of today's tightly constructed, energy-efficient homes, providing an efficient method of providing a continuous supply of fresh air to improve indoor air quality and overall building comfort.

Most essential to providing fresh air to your building is properly managing incoming and outgoing air for your climate conditions, seasons, and temperature. If not managed efficiently, indoor air quality, energy bills and overall building comfort can suffer.

## KING FRESH AIR SOLUTIONS CAN HELP



### **CONTROL INDOOR AIR POLLUTION**

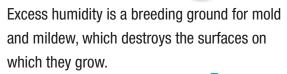
Replacing stale air with fresh, outdoor air removes and dilutes dangerous concentrations of VOCs (volatile organic compounds).



### **CONTROL COMFORT**

A fresh air system helps exchange odors caused by pets, cooking and everyday activities with fresh, clean-smelling outdoor air.







#### **SAVE ENERGY**

By preheating incoming air, air that is too cold never enters the building, which keeps your HVAC System operating efficiently.

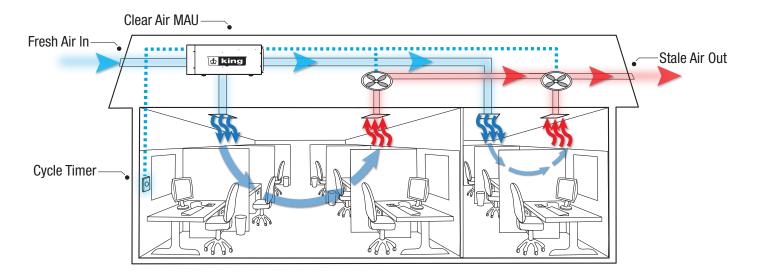


Designed to "make up" the air in your interior space that has been removed due to process exhaust fans. The building ventilation and the make-up air system work together to ensure the building pressure is maintained, while eliminating temperature fluctuations and a number of air quality issues. Without Make Up Air, depressurization occurs lowering the pressure indoors with respect to the outside. This negative pressure can cause various problems in a house, such hindering the natural draft from vented combustion appliances and lead to backdrafting, which in turn can result in combustion gases spilling into the indoor airspace, such as carbon monoxide.



700 - 1770 CFM @ 0.2" Static Pressure 3.8kW to 34.5kW Models, 1-3 Phase Dimensions: 41" Width x 23.75" Length x 20" Depth

MORE THAN 5 OF THE POSSIBLE BENEFIT OF FRESH AIR IS ACHIEVED BY INCREASING AIR CHANGES PER HOUR (ACH) FROM 2 ACH TO 4 ACH

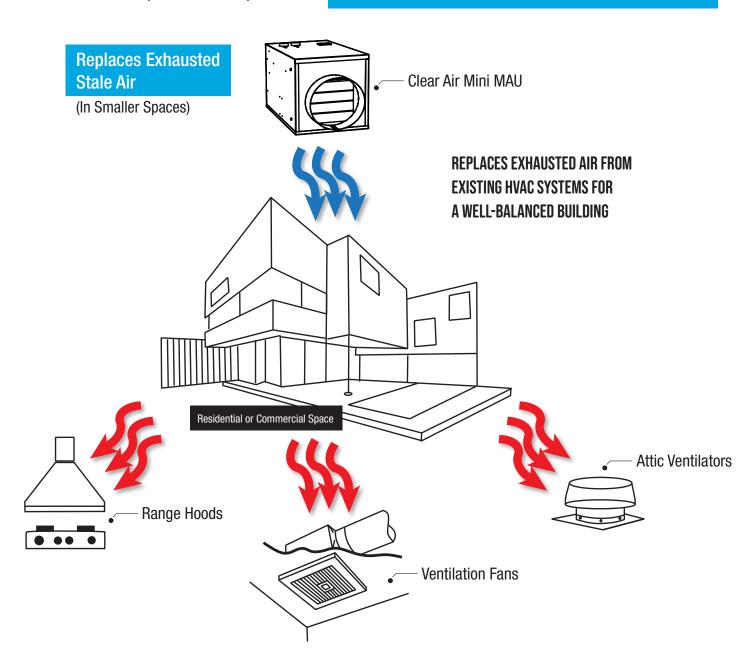






Compact Make-Up Air Unit

171 – 806 CFM @ 0.0" Static Pressure 2kW to 12kW Models, 1-3 Phase Dimensions: 41" Width x 23.75" Length x 20" Depth



# LATEST RECOMMENDATIONS TO INCREASE AIR EXCHANGE RATE PER HOUR BY 150% MINIMUM

**Preheat Incoming Air for Large HVAC Systems to Meet Increased Air Exchanged Requirements\*** 



## **MAKE UP AIR SOLUTIONS**

Residential - Light Commercial - Heavy-Duty Commercial

King Electrical Manufacturing Company

9131 10th Avenue South, Seattle, WA 98108 phone 206.763.0400 fax 206.763.7738