



# ASHRAE 62.2 VENTILATION SOLUTIONS



Learn More

MODEL	CFM	SONES	ENERGY STAR	CALGREEN	ASHRAE 62.2
D4S	40-120	<0.3	YES	Other Rooms	Whole Building/Local
D4D	40-120	<0.3	YES	Other Rooms	Whole Building/Local
D4SG	40-120	<0.3	YES	Other Rooms	Whole Building/Local
D4DG	40-120	<0.3	YES	Other Rooms	Whole Building/Local
D4SGH	40-120	<0.3	YES	Other Rooms	Whole Building/Local
D4DGH	40-120	<0.3	YES	Other Rooms	Whole Building/Local
D4SH	40-120	<0.3	YES	Other Rooms	Whole Building/Local
D4DH	40-120	<0.3	YES	Other Rooms	Whole Building/Local
DL4S	30-130	0.3	YES	Other Rooms	Whole Building/Local
DL4D	30-130	0.3	YES	Other Rooms	Whole Building/Local
DL4SG	30-130	0.3	YES	Other Rooms	Whole Building/Local
DL4DG	30-130	0.3	YES	Other Rooms	Whole Building/Local
DL4SGH	30-130	0.3	YES	Other Rooms	Whole Building/Local
DL4DGH	30-130	0.3	YES	Other Rooms	Whole Building/Local
DL4SH	30-130	0.3	YES	Other Rooms	Whole Building/Local
DL4DH	30-130	0.3	YES	Other Rooms	Whole Building/Local
E80S	80	<0.3	YES	Other Rooms	Whole Building/Local
E80D	80/30	<0.3	YES	Other Rooms	Whole Building/Local
E110S	110	<0.3	YES	Other Rooms	Whole Building/Local
E110D	110/50	<0.3	YES	Other Rooms	Whole Building/Local
E130S	130	<0.3	YES	Other Rooms	Whole Building/Local
E130D	130/50	<0.3	YES	Other Rooms	Whole Building/Local
E80SG	80	<0.3	YES	Other Rooms	Whole Building/Local
E80DG	80/30	<0.3	YES	Other Rooms	Whole Building/Local
E130SG	130	<0.3	YES	Other Rooms	Whole Building/Local
E130DG	130/50	<0.3	YES	Other Rooms	Whole Building/Local
E80SGH	80	<0.3	YES	Bathrooms	Whole Building/Local
E80DGH	80/30	<0.3	YES	Bathrooms	Whole Building/Local
E130SGH	130	<0.3	YES	Bathrooms	Whole Building/Local
E130DGH	130/50	<0.3	YES	Bathrooms	Whole Building/Local
E80SH	80	<0.3	YES	Bathrooms	Whole Building/Local
E80DH	80/30	<0.3	YES	Bathrooms	Whole Building/Local
E130SH	130	<0.3	YES	Bathrooms	Whole Building/Local
E130DH	130/50	<0.3	YES	Bathrooms	Whole Building/Local
EL80S	80	<0.3	YES	Other Rooms	Whole Building/Local
EL80D	80/30	<0.3	YES	Other Rooms	Whole Building/Local
EL130S	130	<0.3	YES	Other Rooms	Whole Building/Local
EL130D	130/50	<0.3	YES	Other Rooms	Whole Building/Local
EL80SG	80	<0.3	YES	Other Rooms	Whole Building/Local
EL80DG	80/30	<0.3	YES	Other Rooms	Whole Building/Local
EL130SG	130	<0.3	YES	Other Rooms	Whole Building/Local
EL130DG	130/50	<0.3	YES	Other Rooms	Whole Building/Local
EL80SGH	80	<0.3	YES	Bathrooms	Whole Building/Local
EL80DGH	80/30	<0.3	YES	Bathrooms	Whole Building/Local
EL130SGH	130	<0.3	YES	Bathrooms	Whole Building/Local
EL130DGH	130/50	<0.3	YES	Bathrooms	Whole Building/Local
EL80SH	80	<0.3	YES	Bathrooms	Whole Building/Local
EL80DH	80/30	<0.3	YES	Bathrooms	Whole Building/Local
EL130SH	130	<0.3	YES	Bathrooms	Whole Building/Local
EL130DH	130/50	<0.3	YES	Bathrooms	Whole Building/Local
EVD	30-150	<0.3	YES	Other Rooms	Whole Building/Local
EVDG	30-150	<0.3	YES	Other Rooms	Whole Building/Local
EVDGH	30-150	<0.3	YES	Bathrooms	Whole Building/Local
EVDH	30-150	<0.3	YES	Bathrooms	Whole Building/Local
EVDL	30-150	<0.3	YES	Other Rooms	Whole Building/Local
EVDLG	30-150	<0.3	YES	Other Rooms	Whole Building/Local
EVDLGH	30-150	<0.3	YES	Bathrooms	Whole Building/Local
EVDLDH	30-150	<0.3	YES	Bathrooms	Whole Building/Local
AK80LS6	80	0.5	YES	Other Rooms	Whole Building/Local
AK90LS6	90	0.8	YES	Other Rooms	Whole Building/Local
AK100LS6	100	1.0	YES	Other Rooms	Whole Building/Local
AK110LS6	110	1.4	YES	Other Rooms	Local
AK150LS	150	0.8	YES	Other Rooms	Whole Building/Local
AK200LS	200	1.2	YES	Other Rooms	Local
AK280LS	280	3.0	YES	Other Rooms	Local

MODEL	CFM	SONES	ENERGY STAR	CALGREEN	ASHRAE 62.2
AK80LS	80	0.6	YES	Other Rooms	Whole Building/Local
AK110LS	110	1.5	YES	Other Rooms	Local
AK80LS-1	80	1.0	YES	Other Rooms	Whole Building/Local
AK50S	50	0.5	YES	Other Rooms	Whole Building/Local
AK80	80	1.5	YES	Other Rooms	Local
AK90	90	1.5	YES	Other Rooms	Local
AK110PN	100	2.0	YES	Other Rooms	Local
AK100D	100/50	2.0 / 0.4	YES	Other Rooms	Whole Building/Local
AK80H	80	1.0	YES	Bathrooms	Whole Building/Local
AK100H	100	2.0	YES	Bathrooms	Local
AK80LS6H	80	0.5	YES	Bathrooms	Whole Building/Local
AK100LS6H	100	1.0	YES	Bathrooms	Whole Building/Local
LEDAK50	50	0.3	YES	Other Rooms	Whole Building/Local
LEDAK80	80	1.0	YES	Other Rooms	Whole Building/Local
LEDAK100	100	2.0	YES	Other Rooms	Local
LEDAK100D4	100/50	2.0 / 0.4	YES	Other Rooms	Whole Building/Local
LEDAK80H	80	1.0	YES	Bathrooms	Whole Building/Local
LEDAK100H	100	2.0	YES	Bathrooms	Local
BFQ50	50	0.6	YES	Other Rooms	Whole Building/Local
BFQ75	70	1.5	YES	Other Rooms	Local
BFQ50W	50	0.8	YES	Other Rooms	Whole Building/Local
BFQ70W	70	1.5	YES	Other Rooms	Local
BFQF50	50	0.8	YES	Other Rooms	Whole Building/Local
BFQF70	70	2.0	YES	Other Rooms	Local
AK100L	100	2.5	NO	NO	Local
ASLC50	50	3.0	NO	NO	Local
ASLC90	90	2.5	NO	NO	Local
AKLC701	70	2.5	NO	NO	Local
AKLC702	70	2.5	NO	NO	Local
AKLC703	70	2.5	NO	NO	Local
AKLC70SLN	70	2.5	NO	NO	Local
AKLC70SLW	70	2.5	NO	NO	Local
AKLC70DW	70	2.5	NO	NO	Local
AKLC70RCB	70	2.5	NO	NO	Local
AKLC70DRSB	70	2.5	NO	NO	Local
AKLC70SNS	70	2.5	NO	NO	Local
BFQ80	80	2.0	NO	NO	Local
BFQ90	90	2.5	NO	NO	Local
AS54	50	3.0	NO	NO	Local
AK400	420	1.5	NO	NO	Local
AK500	520	2.5	NO	NO	Local
FRAK110	110	2.0	NO	NO	Local
FRAK130	130	2.5	NO	NO	Local
FRAK50S	50	0.6	YES	Other Rooms	Whole Building/Local
FRAK80	80	1.0	YES	Other Rooms	Whole Building/Local
FRAK90	90	1.5	YES	Other Rooms	Local
FRAK100	100	2.0	YES	Other Rooms	Local
FRAK100D	100/50	2.0 / 0.8	YES	Other Rooms	Whole Building/Local
FRAK80H	80	1.0	YES	Bathrooms	Whole Building/Local
FRAK90H	90	1.5	YES	Bathrooms	Local
FRAK100H	100	2.0	YES	Bathrooms	Local
ECV30SS	250	4.0	YES	Other Rooms	Whole Building/Local
ECV36SS	250	4.0	YES	Other Rooms	Whole Building/Local
ECQ248	250	4.0	YES	Other Rooms	Whole Building/Local
ECQ308	250	4.0	YES	Other Rooms	Whole Building/Local
ECQ368	250	4.0	YES	Other Rooms	Whole Building/Local
ECQ243	250	4.0	YES	Other Rooms	Whole Building/Local
ECQ303	250	4.0	YES	Other Rooms	Whole Building/Local
ECQ363	250	4.0	YES	Other Rooms	Whole Building/Local
ECQ246	250	4.0	YES	Other Rooms	Whole Building/Local
ECQ306	250	4.0	YES	Other Rooms	Whole Building/Local
ECQ366	250	4.0	YES	Other Rooms	Whole Building/Local
QFAM	40-120	-	NO	NO	Fresh Air
FAS	40-120	-	NO	NO	Fresh Air

Whole Building/Local refers to sound ratings for ventilation fans under ASHRAE 62.2. This standard requires continuously and intermittently operated fans to be rated 1 sone or less.



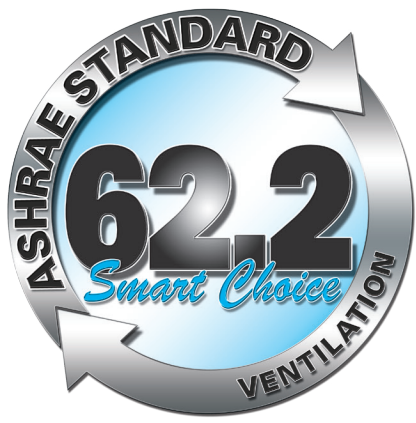
## TOTAL HOME VENTILATION



www.airkinglimited.com

Specifications subject to change without notice

www.airkinglimited.com



## ASHRAE 62.2

ASHRAE 62.2 is a minimum national standard that provides methods for achieving acceptable Indoor Air Quality (IAQ) in typical residences. The standard has three main components:

## Whole Building Ventilation

Diluting the air in the main living spaces to remove unavoidable contaminants from people, pets, cleaning, and other household pollutants. The whole building fan provides multiple air exchanges within the dwelling each day. The operation can be continuous or intermittent (cycled by a timer) if 1 sone or less. The whole building fan flow rate is determined based on the floor space and the number of bedrooms:

**Ventilation calculation\*:** (Total sq. ft. of home/100) + ((# of bedrooms+1) x 7.5 cfm)  
 For best fan selection round the min ventilation # up to the nearest 0 - ex. 45 CFM should be rounded up to 50 CFM

**Infiltration Credit:** Whole building ventilation rate can be reduced by using an infiltration credit which is based on the blower door leakage and the height and location of the house. An online calculator is available at: [www.residentialenergydynamics.com](http://www.residentialenergydynamics.com)

### Product Selection Considerations:

**Single Speed Fans:** A single speed fan located in a central location that runs continuously at the required CFM provides a simple and easy way of solving for ASHRAE 62.2. The Air King BFQ50 and AK80LS-1 provide low cost, energy efficient solutions. For quieter options, the Air King E series and D series provide almost silent operation.

**Dual Speed Fans:** A dual speed fan provides both local and whole building exhaust in one fan. The fan will run continuously to provide the needed ventilation, but also has a high speed when needed. Air King offers both exhaust fans and range hoods with these functions. The Air King ECV and ECQ range hoods provide a 2 in 1 solution for whole building and kitchen ventilation. Air King dual speed E series and D series provide almost silent operation.



**Location:** Location of the whole building fan can be important to the effectiveness of the system. Having a fan located in the master bathroom will technically comply with the standard, but in reality there are much better ways. The issue is when the bathroom door is closed, it cuts off the air flow to the rest of the house and makes it harder to draw from. A centrally located fan that is open to the rest of the home is much better. In an open concept design, the kitchen is typically an ideal location for the whole building ventilation.



## Local Exhaust

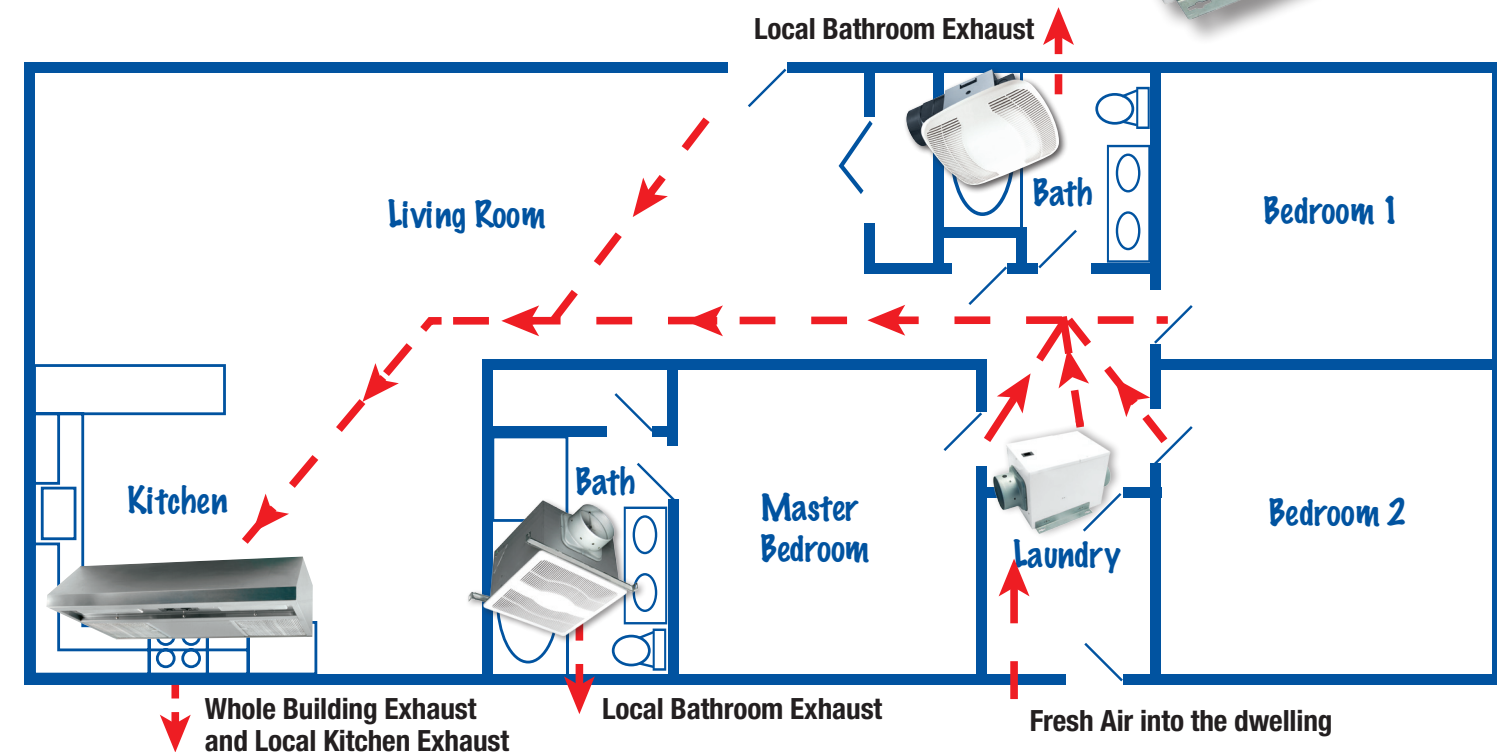
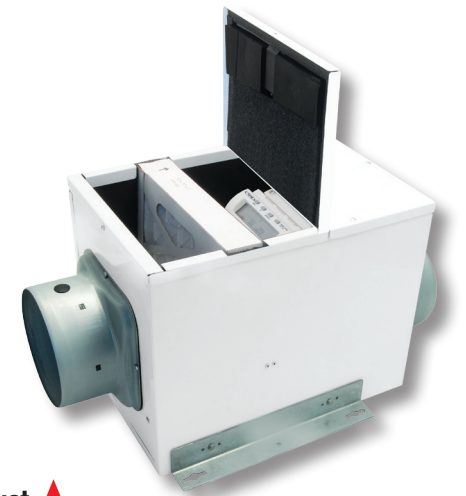
Removing high concentrations of contaminants in the rooms where they occur (kitchens, bathrooms, utility rooms, etc.). The local exhaust fans must be 3 sones or less and utilize a 4" or larger duct. Air King offers over 120 ventilation solutions that comply with ASHRAE 62.2 for local exhaust including ENERGY STAR® certified exhaust fans and range hoods, fan light combinations, fire rated fans and more.



## Fresh Air

Bringing fresh air into the building to replace the air being ventilated out. The simple way to look at this is for every 1 CFM being ventilated, you need to bring 1 CFM of fresh air into the building. For instance, if you have an exhaust fan running at 50 CFM continuously, you need to bring 50 CFM of air into the building. This can be accomplished in a few ways. One is by natural infiltration, but in tight homes, that is not an option. Another is using a mechanical solution. These range from very simple to very complicated and expensive. The Air King QFAM provides a cost effective and simple solution. The QFAM features:

- Lowest installed cost to bring in fresh air using a mechanical ventilation fan
- Mount, connect power and duct work and its ready for use
- No connection to HVAC system required
- 6" round duct connections for virtually unlimited duct length
- Dial in the desired airflow from 40 to 120 CFM
- Includes easy access test port and unit mounted airflow chart
- Nearly silent operation, homeowner may not even know it is operating
- Programmable to prevent temperature & humidity extremes
- Accepts standard 10" x 10" x 2" MERV 6 -13 rated filter through easy access filter door



\* Calculation based on ASHRAE 62.2 2010