

Determining Your Ventilation Needs

How much fresh air do I need?

Good air quality is based in part on the capacity of the home's ventilation system.

Usually, the HRV's or ERVs capacity is measured in CFM (Cubic feet per minute) or L/s (Liters per second) of fresh air being distributed in the living space.

The **Room Count Calculation** or the **Air Change per Hour Method** shows you how to determine your ventilation needs. (See chart on right)

Room Count Calculation Method

LIVING SPACE	NUMBER OF ROOMS	CFM (L/S)	CFM REQUIRED
Master Bedroom	_____	x 20 cfm (10 L/s)	= _____
With Basement	_____	x 20 cfm (10 L/s)	= _____
Single Bedroom	_____	x 10 cfm (5 L/s)	= _____
Living Room	_____	x 10 cfm (5 L/s)	= _____
Dinning Room	_____	x 10 cfm (5 L/s)	= _____
Family Room	_____	x 10 cfm (5 L/s)	= _____
Recreation Room	_____	x 10 cfm (5 L/s)	= _____
Kitchen	_____	x 10 cfm (5 L/s)	= _____
Bathroom	_____	x 10 cfm (5 L/s)	= _____
Laundry Room	_____	x 10 cfm (5 L/s)	= _____
Utility Room	_____	x 10 cfm (5 L/s)	= _____
Other	_____	x 10 cfm (5 L/s)	= _____
TOTAL VENTILATION REQUIREMENT (Add last column)			= _____
			1 CFM = 0.47189 L/s 1 L/s = 3.6 m3/hr

Air Change per Hour Method

TOTAL cu ft X 0.35 per hr = total

Take total and divide by 60 to get CFM

Example: A 25'x 40' House with basement

1,000 Sq. ft. x 8' high x 2 (1st floor + basement) = 16,000 cu. ft.

16,000 cu. ft. x 0.35 ACH = 5,600 cu. ft.

5,600 cu. ft. / 60 Minutes = 93.3 CFM

93.3 CFM is Your Ventilation Need.