

ASHRAE 62.2-2013 Whole Building Ventilation Calculations

New and Existing Homes

[Clear Entries](#)

Basic Building Data

Select State or Province

Select City

Enter Square footage

Enter # of Bedrooms

Select # of Floors

Infiltration Credit	Start	Finish
Enter Blower Door CFM ₅₀		

Appendix A Existing Building Calculations		
Kitchen	Start	Finish
Window?		
Enter Fan CFM		
Bath 1		
Window?		
Enter Fan CFM		
Bath 2		
Is there a 2nd Bath?		
Window		
Enter Fan CFM		
Bath 3		
Is there a 3rd Bath?		
Window		
Enter Fan CFM		
Ventilation "Deficit" CFM		

	Start	Finish
Exist. Adjusted Whole Bldg CFM	#N/A	#N/A
New Bldg Whole Bldg CFM	#N/A	#N/A

(Note for new homes Local Exhaust ventilation must be added)

ACH ₅₀	No CFM50	No CFM50
ACH _{Natural}	No CFM50	No CFM50

Target CFM ₅₀ (0.35 ACH)	#N/A
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About this sheet

This sheet is designed to determine the volume of airflow required to meet the ASHRAE 62.2-2013 whole building ventilation requirement.

There is a tab at the bottom of the page that links to a Report Sheet that can be completed and signed to document the system.

The "Exist. Adjusted Whole Bldg CFM" cells display the ventilation requirements for existing buildings adjusted for existing fans, windows and infiltration credit.

The "Whole Bldg CFM (New Bldg)" displays the CFM required for new buildings, adjusted with the infiltration credit. Note that for new buildings, local exhaust ventilation must also be installed.

It displays required ventilation when the building is tightened, calculates the ACH_{50} , $ACH_{natural}$ and the Target CFM50 for .35 $ACH_{natural}$.

Ceiling height assumed to be 8 feet.

Note that the calculations are based on ASHRAE's TMY 3 weather data, and the number of stories of the building.

If Macros are active, select "Clear Entries" to clear all the entry fields.

Using the Sheet

Select the closest State or Province.

Select the closest Weather Station.

Enter the square footage of the house.

Enter the number of bedrooms.

Select the number of floors.

Enter the Blower Door CFM_{50} (if it is known) in the "Start" cell.

Existing Building Adjustment

NOTE: Calculations assume that if there is no entry for a window or fan in the kitchen, the Existing building calculations are not being used.

The "Finish" column allows you to adjust the fan sizes to achieve a '0' cfm deficit.

Select "Yes" or "No" for a window in the kitchen.

Enter the measured fan CFM in the kitchen.

Select "Yes" or "No" for a window in the bathroom.

Enter the measured fan CFM in the bathroom.

Select "Yes" or "No" for second bathroom, etc.

Note that for intermittent control, click the Intermittent Control tab.

Click on the Report Control tab for a printable report version of the data.

Whole Building Ventilation Intermittent Control

All information with PINK fill is generated automatically.

Enter the total cycle time (total On plus Off time).

Enter the cfm fan to be used, sheet will calculate required ON time
or

Enter the desired fractional on time (half time would be .5)
and the sheet will calculate the cfm of the fan required.



House is in:	,	0
Square feet:	0	
# of Bedrooms:	0	
# of Stories:	0	

Continuous Whole Building Ventilation Required

	Start	Finish
Existing Bldg	#N/A	#N/A
New Building	#N/A	#N/A

For Intermittent Operation

Enter Total cycle Time Time On + Time Off: Hour(s)

Existing House	Start	Finish
Enter installed fan CFM:		
Minutes on:	#N/A	#N/A
Minutes off:	#N/A	#N/A
OR	Start	Finish
Enter desired fractional on-time:		
Fan cfm Required:	#N/A	#N/A
Minutes on:	0	0
Minutes off:	120	120

New House	Start	Finish
Enter installed fan CFM:	80	
Minutes on:	#N/A	#N/A
Minutes off:	#N/A	#N/A
OR	Start	Finish
Enter desired fractional on-time:		
Fan cfm Required:	#N/A	#N/A
Minutes on:	0	0
Minutes off:	120	120

#N/A

Project Name:

Project Address:

Project City:

Project State:

Project Zip:

Floor area: Square feet

of Bedrooms:

Combustion CFM Threshold: cfm

If the sum of highest flow rate of the two largest fans exceeds this number, make-up air must be supplied to any atmospherically vented appliance.

Whole Building Ventilation Type:

	Continuous	Intermittent
Control (check):	<input type="text"/>	<input type="text"/>
Closest Weather Station:	<input type="text" value="0"/>	
Target CFM ₅₀ (0.35 ACH)	#N/A	

Blower Door (CFM ₅₀):	Start	Finish
	<input type="text" value="0"/>	<input type="text" value="0"/>
ACH ₅₀	No CFM50	No CFM50
ACH _n	No CFM50	No CFM50

Whole Building CFM Required	New	Existing
	#N/A	#N/A
	#N/A	#N/A

Measured Flow (enter):

These calculations were made to determine the correct ventilation flow rate based on the ASHRAE 62.2-2013 Standard. I attest that the results are correct and accurate to the best of my knowledge and ability.

Signed:

For:

Date: