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**
ACHNatural	**No CFM50**	**No CFM50**

Calculated "N" Factor	**#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}, $ACH_{natural}$, calculates the 'N' factor, and

the Target CFM_{50} for .35 $ACH_{natural}$. Ceiling height assumed to be 8 feet.

Note that the "N" factors 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 Conrtol tab for a printable report version of the data.