ASHRAE 62.1 MVR Calculation Worksheet

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| Select the appropriate n-factor based on climate zone map and table (see below): |  |  |
| Enter blower door reading: |  |  |
| 1. Divide blower door reading by n-factor to get CFM natural: |  | 1 |
| 2. Calculate: |  |  |  |  |  |
| a. | #Occupants \* 15 CFM[[1]](#footnote-1): |  | # People |  \* 15 = |  | 2a |
| b. | (Bedrooms + 1) \* 15 CFM: |  | # Bedrooms + 1 |  \* 15 = |  | 2b |
| c. | ((Volume \* .35)/60)): |  | Volume of House | \* .35/60 = |  | 2c |
|  |  |  |  |  |  |  |
| If the result of #1 is greater than the highest of 2a, 2b, and 2c, STOP. No additional ventilation is needed.If #1 is not greater than the highest of 2a, 2b, or 2c, go to step 3.  |
| 3. Enter the highest of 2a, 2b and 2c. |  | 3 |
| 4. Subtract #1 from #3 to get the MVR. This must be made up with mechanical ventilation. |  | 4 |
| 5. Enter existing mechanical exhaust ventilation (Operable only): |  |  |
|  |  |  | Bathroom |  |  |  |
|  |  |  | Kitchen |  |  |  |
|  |  |  | Other |  |  |  |
|  |  |  | Other |  |  |  |
|  |  Total existing mechanical exhaust ventilation: |  | 5 |
| If #5 is less than #4, add mechanical exhaust ventilation equal to the difference. |
| If #5 is GREATER than #4, add passive intake vents to balance existing exhaust. |

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| **N Factor** |
| **Climate Zone** | **# of Stories >** | **1** | **1.5** | **2** | **3** |
| 1 | Well-shielded | 18.6 | 16.7 | 14.9 | 13.0 |
| Normal | 15.5 | 14.0 | 12.4 | 10.9 |
| Exposed | 14.0 | 12.6 | 11.2 | 9.8 |
| 2 | Well-shielded | 22.2 | 20.0 | 17.8 | 15.5 |
| Normal | 18.5 | 16.7 | 14.8 | 13.0 |
| Exposed | 16.7 | 15.0 | 13.3 | 11.7 |
| 3 | Well-shielded | 25.8 | 23.2 | 20.6 | 18.1 |
| Normal | 21.5 | 19.4 | 17.2 | 15.1 |
| Exposed | 19.4 | 17.4 | 15.5 | 13.5 |
| 4 | Well-shielded | 29.4 | 26.5 | 23.5 | 20.6 |
| Normal | 24.5 | 22.1 | 19.6 | 17.2 |
| Exposed | 22.1 | 19.8 | 17.6 | 15.4 |



1. Minimum of 75 CFM answer. [↑](#footnote-ref-1)