

How to size a fan for the home:

- 1) Determine the total cubic feet of air in the living area of the residence. (Multiply square footage by ceiling height).
- 2) Divide the fans CFM (cubic foot of air movement per minute) into the total cubic feet of the home to determine the amount of time to perform one air exchange.

For Example:

A 1,200 square foot home with 8 foot ceilings has 9,600 cubic feet of air. The Tamarack whole house fan model HV1000 moves 1,150 CFM per minute.

Divide 1,150 into 9,600 = 8.34. This is the estimated minutes to perform one air exchange. Divide 60 (the number of minutes in an hour) by 8.34 to determine the approximate number of air changes per hour the fan will provide. The answer is 7.19 so; the estimated number of air exchanges that this fan will perform is 7 per hour.

Every fans cfm is different, you decide as the consumer the number of air exchanges you prefer. Here at Tamarack, we recommend a minimum of 4 per hour.

How to size attic venting:

When you choose a fan, divide that fans cfm by 750. This number determines the amount of square footage of **net free** air required to properly vent. To allow for any restrictions created by screening and louvers multiply that number by 2. This number is the minimum square footage of venting required for the fan to exhaust properly. One can choose a combination of ridge and or gable venting to make up the square footage. We do not recommend soffit as the only method of exhaust.

For Example:

The HV1000 moves 1,150 cfm. Using the above example: 1,150 divided by 750 equals 1.54. 1.54 multiplied by 2 equals 3.08 square feet.