

## About the Home Ventilating Institute



The Home Ventilating Institute (HVI), founded in 1955, is a nonprofit association of the manufacturers of home ventilating products. Through a Certified Ratings Program, HVI provides a voluntary means for residential ventilation manufacturers to report comparable and credible product performance information based upon uniformly applied testing standards and procedures performed by independent laboratories. Today, HVI represents manufacturers from the United States, Canada, Asia, and Europe, producing the majority of the residential ventilation products sold in North America.

Whether it's a range hood, bathroom exhaust fan, or other residential ventilation product, choose only products with the 'HVI Certified' label for peace of mind, confidence, and reliability.



1000 North Rand Road, Suite 214  
Wauconda, IL 60084  
USA

Telephone: 847.526.2010

[hvi@hvi.org](mailto:hvi@hvi.org)

Fax: 847.526.3993

[www.hvi.org](http://www.hvi.org)

# RANGE HOODS

## A Consumer Guide



***With so many range hoods on the market, how do I know if the one I choose will perform as the manufacturer claims?***

The best way to trust the reported performance of the product you choose is to look for the 'HVI Certified' label. You can depend on products displaying the Home Ventilating Institute (HVI) Certified label. Through the 'HVI Certified' Ratings Program, products bearing the 'HVI Certified' label have been independently tested and certified to ensure they meet the stated ratings for airflow, sound, and energy. In addition, continued performance is ensured through the HVI Verification Program.

There are no government standards for rating range hood performance, so unless the range hood is HVI tested, certified, and verified, a manufacturer can claim anything in this unregulated market. Anything short of certified results opens the door to exaggerated performance claims, questionable test methods leading to unreliable end results, and inequitable product comparisons.



***What is a range hood?***

***What does it do?***

***Why do I need one?***

A kitchen range hood is a fan with an enclosure designed to capture and vent unwanted and unhealthy heat, odors, gases, grease, steam, and smoke. The range hood's internal fan effectively captures the rising column of air directly over the cooking surface and then exhausts the contaminants outside the home.

A range hood helps to protect your health and your home, providing a comfortable environment with clean indoor air quality. In the end, structural damage to the kitchen and health problems for the occupants may occur by not venting.





# RANGE HOODS

*What should I look for in a range hood?*



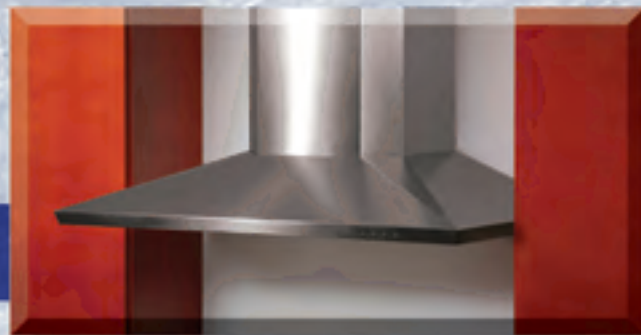
**Judge range hoods on function, form, and performance:** look for appropriate certified performance ratings to suit your needs.

## Function

A range hood's function is to capture and vent airborne contaminants out of the kitchen. Different range hoods perform this function in different ways and with varying levels of efficiency. Most kitchen range hoods are located directly over the cooking surface and have an internal fan. Alternatives include downdraft kitchen exhaust units designed to pull air across the cooking surface, as well as range hoods with remote-mounted fans. A variety of controls for range hoods are available including electronic variable speed, timers, humidistats, and dual fan-light and/or fan-heater combinations.

Width of hood against a wall	2.5 feet (30 in.)	3 feet (36 in.)	4 feet (48 in.)
HVI recommended rate	250 CFM	300 CFM	400 CFM
Minimum	100 CFM	120 CFM	160 CFM

Location of range	HVI recommended ventilation rate per linear foot of range	Minimum ventilation rate per linear foot of range
Against a wall	100 CFM	40 CFM
In an island	150 CFM	50 CFM



## Form

Styles differ in dimension and design, which, besides being an interior decorating consideration, can also have an impact on performance. Hood width should match the cooking range and the hood should be located at the manufacturer-recommended height above the cooking surface. Range hood exhaust fans may be located in the hood itself or remotely using either an inline, wall or roof mounted fan. Range hoods come in a wide variety of styles to suit any décor.

## Performance

Range hood performance is comprised of airflow, sound, power and ducting. Actual performance varies greatly among range hood models and manufacturers.

The range hood's ability to perform needs to be compatible with the cooking range's ventilation rate, as well as the type and frequency of cooking. If you cook frequently on high settings, then you need a range hood powerful enough to extract and exhaust the resulting contaminants. Adequate ducting is essential to properly exhaust the contaminants out of the house. The duct's efficiency is affected by its width, number of bends, and length.

All range hoods produce sound, measured in sones<sup>1</sup>, while operating. The level of sound produced is dependent upon the airflow and design. The sound associated with range hoods is produced by the airflow into the hood, the fan, and ducting necessary to exhaust air to the outside. To minimize sound, purchase a range hood with a low sone rating and ensure that the ductwork serving the range hood is properly sized and installed.



*Why should I choose an 'HVI Certified' product?*



**In short, peace of mind:**

- ✓ **Assurance** that the product has been tested and certified to meet specific industry standards;
- ✓ **Assurance** that the product will perform as promised, and;
- ✓ **Assurance** that, when installed properly, appropriate ventilation is achieved to maximize indoor air quality.

Inflated performance ratings are common for range hoods that are not 'HVI Certified'. Selecting range hoods with 'HVI Certified' performance ratings will ensure that ventilation expectations and building code requirements are met. HVI is the authority for testing residential ventilation products. Using sophisticated lab facilities and tried-and-true testing methodology, HVI tests and routinely verifies the performance of products that have been voluntarily submitted for rigorous examination. Once approved, the product may display the 'HVI Certified' label. Don't settle for anything less than 'HVI Certified' products.

*Where can I find more information?*



**www.hvi.org:** HVI's website offers consumers a variety of resources, including a Certified Products Directory, updated monthly, that provides a list of manufacturers and their 'HVI Certified' products.

## Fresh Ideas Ventilation Guide:

This valuable guide explains the numerous methods of residential ventilation, including range hoods, in understandable terms with details, charts, illustrations, and more. It is available in printed form by contacting HVI. It can also be downloaded from the HVI website.



<sup>1</sup>Sone – an internationally recognized unit of loudness, which simplifies reporting of sound output. The sones translate laboratory decibel readings into numbers that correspond to the way people sense loudness. Doubling the number of sones, to the normal human ear, sounds like doubling the loudness; 1 sone is equivalent to a pure tone having a frequency of 1,000 hertz at 40 decibels.