Common terminology for Smoke Eaters

CFM – Cubic Feet Per Minute, This is the inch measurement used to determine how much area can be processed with each machine. For example, if you calculate your room size to be 20x20x10 feet with heavy smoking (12 air changes per hour), you would need a machine to process at 800 cubic feet per minute (you can use the calculator here to go through this example). This number tells you what size machine would best suit your situation, then you select from the chart below the calculator.

CMH – Cubic Meters Per Hour, This is the metric measurement used to determine how much area can be processed with each machine. For example, if you calculate your room size to be 6x6x3 meters with heavy smoking (12 air changes per hour), you would need a machine to process at 1296 cubic meters per hour (you can use the calculator here to go through this example). This number tells you what size machine would best suit your situation, then you select from the chart below the calculator.

ACH – Air Changes Per Hour, This number is many times all of the air in the room is cleaned per hour. If you have a heavy smoking situation, like a bar or VFW, you want to use 12 air changes per hour. For lighter situations, conference rooms or mixed lunchroom, you may use 6 or 8 air changes per hour. It has been our experience that using 12 air changes per hour has given our customers the best solutions in all instances.

Carbon – When to use carbon. Nearly all of the machines available on this site have carbon filters installed to help eliminate the odors associated with smoke, but there are instances where more carbon may be necessary. The EverClear comes with 44 lbs of carbon in the Deluxe model and we would recommend the use of added carbon for bottle returns or garbage areas, where odors are a major concern.

Efficiency – This is how much of the dust particles are being filtered during the test period. Your Ultra-Allergen filters will say they are 99% efficient but they usually say for large particles. The particles that damage your lungs are smaller than one micron. The Ultra-Allergen filters are 99% efficient down to 1.0 micron, so they are doing a nice job of keeping your furnace clean, but nothing for your lungs. HEPA and electronic filters are 99.97% efficient down to 0.3 microns.

Please feel free to email us with your suggestions for more definitions. As always, you are welcome to call with any of your questions. We want our customers to be educated about their purchases, so we won't talk down to you. Hope to hear from you soon.