

## Four Myths Surrounding Demand Control Kitchen Ventilation Systems

Kitchen ventilation systems are an important part of any commercial kitchen. They help to remove smoke, steam, and cooking odors from the air, keeping the kitchen and front of house smelling fresh. However, there are several myths that surround commercial kitchen ventilation systems. Understanding the truth can help businesses, food consultants, specifying engineers, and facilities professionals to make informed decisions when purchasing and using them for their commercial kitchens.

### ***Myth #1: Commercial kitchen hoods only need to be as wide as the cooktop.***

This is not true. A range hood should be at least as wide as the cooktop, but ideally it should be wider. A hood that is too narrow will not effectively capture smoke and steam from the entire cooktop. Additionally, it should be at least 30 inches above the cooktop or range to be effective. By verifying that the commercial kitchen hood is wider than your cooktop, you can ensure better affluent capture from the exhaust fan and secure a cleaner and safer environment for staff and customers.

### ***Myth #2: A high-CFM (cubic feet per minute) commercial kitchen hood is always better.***

While it is true that a high-CFM hood will move more air, it is not always necessary to



*A commercial kitchen cooking over an open flame.*

have a high-CFM hood. The CFM needed for a hood is dependent on the size of the kitchen and the type of cooking that is done. A larger kitchen or one where a lot of frying or sautéing is done will need a higher CFM hood. However, if the kitchen is small and only occasional light cooking is done, a lower CFM hood may be sufficient. In fact, if a hood pulls exhaust too much CFM relative to the supply air, this can cause the kitchen air pressure to be too negative. Commercial kitchens are designed to have a slightly negative pressure. Too much negative air pressure can cause a variety of other issues for the HVAC systems, kitchen comfort, and even capture issues at the hood.

### ***Myth #3: A commercial kitchen hood needs to run at full speed continuously.***

This is a misconception. A range hood does not need to run at full speed in order to optimize your commercial kitchen's performance. Running a hood continuously can be a waste of energy and can also cause the hood's filters to become clogged quicker. By understanding your kitchen's cooking demand, you can better utilize the exhaust fans to speed up when your cooking demand increases and slow down when the cooking demand lessens. This practice will help maximize the energy usage of your commercial kitchen while allowing your commercial kitchen to run at optimal performance.

***Myth #4: A commercial kitchen hood without controls is just as good as DCKV***

While commercial kitchens hoods have exhaust fans and can be turned off and on, they do not monitor cooking demands. Most commercial hoods cannot differentiate between smoke and steam. By using demand control kitchen ventilation, like Intelli-Hood, commercial kitchens can maximize their exhaust performance based



on real-time cooking demand. This allows for the fans to adjust automatically when needed, reducing energy waste and ensuring a more comfortable experience cooking environment.

