

PUSH ‘EM BACK, PUSH ‘EM BACK – AND BOOST THE PERFORMANCE OF YOUR KITCHEN EXHAUST HOOD!

Your kitchen exhaust is one of the most complex systems in your whole restaurant. Trying to corral all that hot smoky air and get it out of the building is no easy task. Turbulence, pressure drops, cross drafts, and convective currents are some of the myriad physical forces that can cause your hood to fail. But don't fret, there are some simple things you can do to give your exhaust hood a boost. In this edition of the Green Sheet we will share what is perhaps the simplest and most effective way to improve the performance of your exhaust system and all it involves is pushing your appliances around a little bit.

ART AND SCIENCE CONVERGE

It is impossible to predict all of the variables that an exhaust system will face in a kitchen. An experienced designer can create an ideal system on paper only to have it fail out in the field. For this reason, commercial kitchen ventilation or “CKV” design combines equal parts of art and engineering as well as some incantations and many gray hairs. To understand the ways that exhaust hoods fail and what can be done to make them work better, researchers at the Commercial Kitchen Ventilation Laboratory (www.archenergy.com/services/food/) are using an airflow visualization technology that actually allows them to see how the air moves around in an exhaust hood. During the course of their research, they discovered something very surprising.

LESS IS MORE

By closing the space behind appliances that are under an exhaust hood, the researchers found that the hood performed much better. In other words, simply pushing all the appliances back to the wall can stop an exhaust hood from spilling heat and grease into the kitchen. That translates into a cooler kitchen, happier staff, and potential energy savings. All you have to do is push ‘em back - now that's a simple fix!

SEE FOR YOURSELF

Interested in learning more? Want to see the flow visualization movies that the CKV researchers are creating? Visit the Food Service Technology Center website at www.fishnick.com. We have created a short online presentation that explains the “push ‘em back” concept including pictures and movies from the research lab. You'll be surprised. You'll also find other tips for improving hood performance as well as design guides and even research reports.

These energy saving tips are offered by the PG&E Food Service Technology Center (FSTC), an unbiased food service resource center located in San Ramon, CA and funded by California utility ratepayers under the auspices of the California Public Utilities Commission. For more information on the FSTC and for our schedule of free energy efficiency seminars, please visit our website at www.Fishnick.com. The FSTC is a member of the California Restaurant Association.