



Kitchen Ventilation Systems

## <u>Heat Gain to the Space</u>

## What is Heat Gain?

Heat gain to the space is from the heat/energy that is emitted from lights, people, sun light, cooking equipment, and etc.

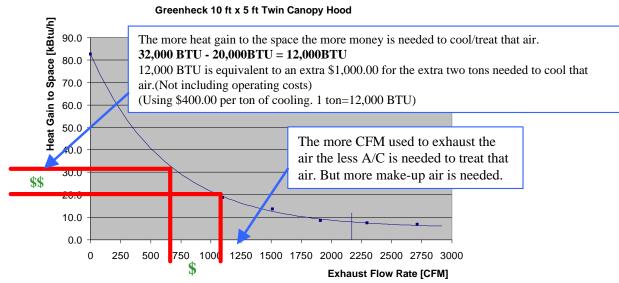
The emitted heat is absorbed into the space's air, walls, etc. Cooking equipment emits large amounts of heat into the kitchen which has to be cooled or removed from the space, or employee/patron comfort is at risk.

As CFM rises the heat gain to the space from the cooking equipment will be lower. As CFM is lowered the heat gain to the space will increase.

•More Heat Gain = More conditioned air needed to cool space

•More Exhaust = Less heat gain to the space more make-up air needed

It's a choice, cool more hot air or provide more make-up air



Greenheck understands that air costs money to move and temper. That is why we developed the Economical Operating Point (EOP). This is the point on the curve where capture and containment and operating cost are the most balanced. The EOP is determined by Greenheck to perform the best at the most economical cost. This is determined by the cooking equipment under the hood. There is a low amount of heat gain to the space but not enough to have a large increase of cooling tons. This saves the owner/operator money.