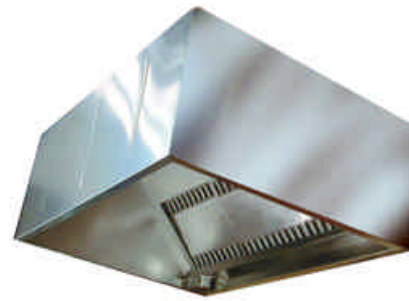


# KVS Fact Sheet

## Kitchen Ventilation Systems



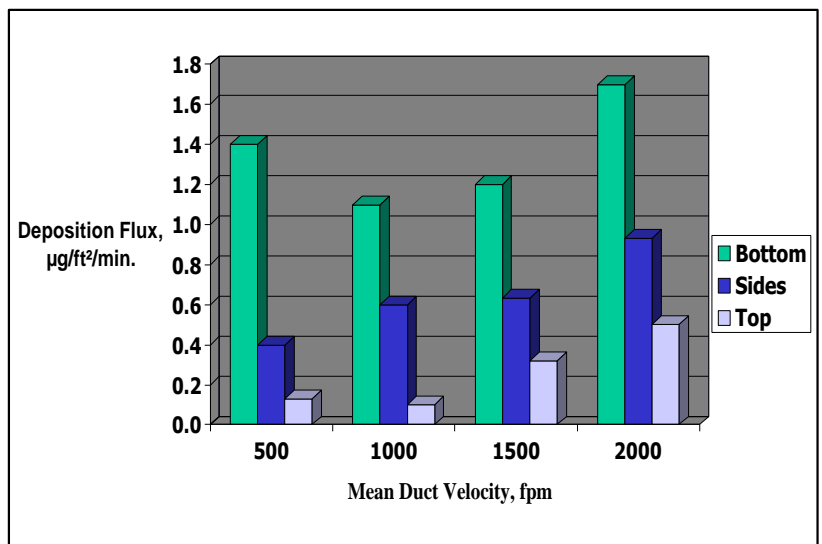
## 1500 fpm vs. 500 fpm

### What is the argument?

**NFPA 96 1998 Edition, 5-2.1** states:

“The air velocity through any duct shall not be less than 1500 ft (457.2 m) per minute.”

The 1500 ft. per minute standard was established in order to successfully move materials other than grease through an exhaust duct system. ASHRAE Research Project 1033-RP revealed high duct velocities increase grease accumulation while lower velocities keep material moving. The analysis of cooking effluent emissions suggests cooking airflow may include particle sizes where reduced exhaust velocity result in reduced grease accumulation rate in exhaust ductwork.



**Chart 1 - Lower exhaust air velocities will yield less grease in the duct.**

As a result of this research, **NFPA 96 2001 Edition, 8.2.1.1** now states:

“The air velocity through any duct shall be not less than 365.8 m/min (1200 ft/min).”

However, NFPA 96 released **Errata 96-01-01** on January 10, 2002 to correct the above statement. The errata read as followed:

“1. In section 8.2.1.1 revise to read as follows: 8.2.1.1 The air velocity through any duct shall not be less than 152.4 m/min (500 ft/min).”

### Advantages of Lower Exhaust Velocity

- Lower grease accumulation rate would reduce the fire hazard
- Reduce frequency of duct cleaning procedure
- Significant energy savings
- Retrofit possibilities and increased design flexibility
- Variable Volume