



CITY OF HENDERSON
Department of Building & Fire Safety

KITCHEN HOOD TEST DATA

Date _____

Permit No. _____

Street Address _____

General Contractor _____

Phone _____

Sub-Contractor _____

Phone _____

Address _____

License # _____

HOOD LOCATION _____

PLAN SHEET NO. _____

TYPE I HOOD - TESTING EQUIPMENT TYPE _____

LIST ALL EQUIPMENT UNDER HOOD: _____

ACTUAL HOOD SIZE: _____ ft x _____ ft = _____ sq. ft.
(Hood Width) (Hood Length) (Hood Area)

REQUIRED QUANTITY OF AIR: (See UMC 2018 for appropriate formula)

_____ Ft x _____ ft x _____ = _____ CFM
(Hood Width) (Hood Length) (Formula) (Hood Exhaust)

ACTUAL QUANTITY OF AIR AS MEASURED: _____ CFM
(Actual Volume)

ACTUAL TOTAL FILTER AREA: _____ sq. ft.
(Filter Area)

ACTUAL FILTER AIR FLOW RATE PER SQ. FT. OF FILTER AREA:
_____ CFM - _____ sq. ft. = _____ FPM
(Actual Volume) (Filter Area) (Each Filter)

LISTED FILTER AIRFLOW RATE: = _____ FPM per filter
(As Shown on Filter)

ACTUAL DUCT SIZE:
Rectangular Duct

_____ Ft x _____ ft = _____ sq. ft.
(Front Width) (Side Length) (Duct Size)

Round Duct

.79 x _____ ft = _____ sq. ft.
(Duct Diameter) (Duct Size)

ACTUAL GREASE DUCT AIR VELOCITY:

_____ CFM - _____ sq. ft. = _____ FPM
(Actual Volume) (Duct Size) (Duct Velocity)

REQUIRED DUCT SYSTEM AIR VELOCITY FOR SHOP MADE HOODS:

1500 FPM (minimum)

2500 FPM (maximum)

MANUFACTURERS STATED VELOCITY FOR LISTED HOODS:

_____ (Minimum)

_____ (Maximum)

MAKEUP AIR SOURCE AND SIZE: _____
(Size of source in total CFM)

THE EXHAUST AND MAKEUP AIR SYSTEMS SHALL BE CONNECTED BY AN ELECTRICAL INTERLOCK SWITCH.

2018 Southern Nevada Uniform Mechanical Code Amendments – 511.2.2.1.1 (Performance Test) Upon completion and before final approval of the installation of ventilation system serving commercial food heat-processing equipment, a performance test, shall be performed to verify the rate of airflow and proper operation as specified in this chapter. The permittee shall furnish the necessary test equipment and devices required to perform the tests and shall provide the jurisdiction with an accurate, completed, and signed test report. The report shall be on a form supplied by the jurisdiction or on a form containing equivalent information. At the discretion of the building official, the performance test may be required to be witnessed by a Building Department representative, or at the option of the permittee, performed by an approved third-party testing agency.

Person performing test
(Please Print)

Signature

Title & Affiliation
(Please Print)

FORMULA FOR SIZING GREASE DUCT AND DETERMINING AIR VELOCITY

Using the following formulas, the velocity in a given size duct can be readily found. The minimum size allowable duct or the maximum size allowable duct may also be determined. By use of maximum velocities, shaft and duct sizes may be reduced to a minimum.

$$144 \times Ah \times f \text{ divided by } Ad = V$$

$$144 \times Ah \times f \text{ divided by } V \text{ min.} = Ad \text{ (max)}$$

$$144 \times Ah \times f \text{ divided by } V \text{ max.} = Ad \text{ (min)}$$

Ah = hood area, in square feet

Ad = duct area, in square inches

f = exhaust factor, for type of equipment (UMC section 2003-g)

V = velocity, in lineal feet per minute

V min. = 1500 lineal feet per minute

V max = 2500 lineal feet per minute