



CITY OF HENDERSON
Department of Building & Fire Safety

KITCHEN HOOD TEST DATA

Form containing fields for Date, Permit No., Street Address, General Contractor, Sub-Contractor, Address, Phone, and License #.

HOOD LOCATION PLAN SHEET NO.
TESTING EQUIPMENT TYPE
TYPE OF HOOD: Type I
LIST ALL EQUIPMENT UNDER HOOD:

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

REQUIRED QUANTITY OF AIR: (See UMC 2003 for appropriate formula)
(Hood Width) Ft x (Hood Length) ft x (Formula) = (Hood Exhaust) CFM

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

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

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

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

ACTUAL DUCT SIZE:

Rectangular Duct

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

Round Duct

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

ACTUAL GREASE DUCT AIR VELOCITY:

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

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.

2000 Southern Nevada Uniform Mechanical Code Amendments - 509.11 (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.

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

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

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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