Clark County Department of Building & Fire Prevention

4701 West Russell Road, Las Vegas, NV 89118 ~ (702) 455-3000

Kitchen Hood Test Data

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DATE: _____

CONTRACTOR NAME & LICENSE NO: _____

PERMIT #: _____ APPLICATION #:_____

JOB NAME & ADDRESS:_____

HOOD LOCATION:_____

PLAN SHEET NO.:_____ TESTING EQUIPMENT TYPE:_____

1. TYPE OF HOOD: TYPE I

2. LIST ALL EQUIPMENT UNDER HOOD:_____

_____

3. ACTUAL HOOD SIZE:

_____ FT. X _____ FT. = _____ SQ. FT.
(Hood Width) (Hood Length) (Hood Area)

4. REQUIRED QUANTITY OF AIR (see UMC 2003 for appropriate formula)

_____ FT. X _____ FT. X _____ = _____CFM
(Hood Width) (Hood Length) (Formula) (Hood Exhaust)

5. ACTUAL QUANTITY OF AIR AS MEASURED: _____CFM
(Actual Volume)

6. ACTUAL TOTAL FILTER AREA: _____ SQ. FT.
(Filter Area)

7. FILTER AIR FLOW RATE PER SQ. FT. OF FILTER AREA:

_____ CFM - _____ SQ. FT. = _____ FPM
(CFM from No. 5) (Filter Area) (Each Filter)

8. LISTED FILTER AIR FLOW RATE: = _____ FPM PER FILTER
(As Shown on Filter)

9. ACTUAL DUCT SIZE:

_____ FT. X _____ FT. = _____ SQ. FT.
(Front Width) (Side Width) (Duct Size) (rectangular duct)

OR

0.79 x _____ FT. = _____ SQ. FT.
(Duct Diameter) (Duct Size) (round duct)

10. ACTUAL GREASE DUCT AIR VELOCITY:

_____ CFM - _____ SQ. FT. = _____ FPM
(CFM from No. 5) (Duct Size from No. 9) (Duct Velocity)

11. REQUIRED DUCT SYSTEM AIR VELOCITY FOR SHOP MADE HOODS:
   A. 1500 FPM (minimum)
      2500 FPM (maximum)
      OR
   B. MANUFACTURERS STATED VELOCITY FOR LISTED HOODS:

      _____FPM (minimum)

      _____FPM (maximum)

12. 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.

_____ _____
PERSON PERFORMING TEST

_____
TITLE & AFFILIATION

FORMULA FOR SIZING GREASE DUCT AND DETERMINING AIR VELOCITY

USING THE FOLLOWING FORMULAS, THE VELOCITY IN A GIVEN SIZE DUCT CAN BE REAIDLY 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 x Ah x f divided by Ad = V
144 x Ah x f divided by V min. = Ad (max)
144 x Ah x f divided by V max. = Ad (min)

Ah = hood area, in square feet.
Ad = duct area, in square inches
F = exhaust factor, for type of equipment (UMC section 2002-g)
V = velocity, in lineal feet per minute
V min. = 1500 lineal feet per minute
V max. = 2500 lineal feet per minute