



DEPARTMENT OF ENVIRONMENTAL HEALTH
CONSUMER PROTECTION DIVISION

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Exhaust Ventilation Systems

To be completed by hood manufacturer, contractor, or mechanical engineer for each hood and submitted with the building plans.
For clarification of requirements, refer to the current edition of the California Mechanical Code (CMC), Chapter 5.

Facility name: _____ Date: _____

Site address: _____

Hood information submitted by: _____ Phone: _____

1. Submit a separate form for each hood. For multiple hoods, identify each hood by name or number.
2. Submit three (3) sets of plans, drawn to scale (i.e., 1/2 inch per foot), including:
 - a) Front and side elevations for each system with exhaust and make-up air duct details.
 - b) Floor plan showing the hood, make-up air registers and cooking equipment or dishwasher.
3. Submit one set of specification sheets with the performance curve for blower(s), filters and make-up air unit(s).

Hood (check applicable categories)

Type I Type II Hood name or number: _____

UL® listed exhaust hood Canopy* Compensating* Backshelf Other: _____

Manufacturer and model number of the UL® listed exhaust hood: _____

*Provide a 6-inch overhang beyond the cooking equipment on all open sides.

No exposed horizontal piping within the hood canopy.

Size of Hood

Length: _____ x width: _____ (inside dimensions) Type of metal: _____

Gauge: _____ Distance from lowest edge of hood to: cooking surface: _____; floor: _____

Formula used for determining air flow:

Manufacturer's Listing Formula (CFM X's linear foot): _____ = _____ Minimum CFM

Design formula (CFM X's linear foot): _____ = _____ Actual CFM proposed

Custom hood formula from CMC (CFM X's linear foot):

200L, 250L, 300L, 400L, 500L, 550L, 600L, 700L = _____

(Formula used is dependent on equipment type and style of hood (wall, island, backshelf, etc. See CMC).

Equipment exhausted by hood: _____

Exhaust Duct

Duct size: _____ Area of duct: _____ sq. ft.

Number of ducts: _____ (1 duct per each 12 ft. of hood if custom, 14 feet if listed) Type of metal: _____

Gauge: _____ Exhaust duct velocity: _____ FPM (CFM ÷ sq. ft. of duct)

Duct exhaust must have a velocity between 500-2500 feet per minute (FPM).

Grease Filters (Provide Engineering Data Sheets/cut sheets for all filters)

Manufacturer _____ Model _____
 Rating _____ CFM at _____ sp (static pressure)
 Dimensions _____ in. x _____ in. Functional surface area per filter _____ sq. ft.
 Are all the filters the same size? Yes No Size of filters used _____
 Number of filters used _____ Total filter area _____ sq. ft.
 Number of blanks _____ Size of blanks _____ in. x _____ in.
 Minimum distance between the lowest edge of the grease filters and the cooking surface _____ in.
 Average FPM design (flow rate) at the filter surface $[Q (cfm) \div A (sq. ft.) = V (fpm)]$ _____ FPM

Static Pressure

Hood

Make-up

Hood Schematic (Elevation)

| | | | | |
|----------------------------|---|----------------|----------|----------------|
| Filters ¹ | + | _____ sp | | |
| Entrance loss ² | + | _____ sp | | |
| Duct length ³ | + | _____ sp | _____ sp | |
| Elbows ⁴ | + | _____ sp | _____ sp | |
| Exit loss ⁵ | + | _____ sp | _____ sp | |
| | = | _____ total sp | = | _____ total sp |



Exhaust Fan/Blower (Provide Engineering Data Sheets for all exhaust and make-up air blowers)

Manufacturer _____ Model _____
 Exhaust _____ CFM at _____ sp Blower _____ RPM Horsepower _____
 Is the unit UL® listed under UL762 standard? Yes No

Makeup Air Fan/Blower (The exhaust and makeup air systems must be connected by an electrical interlocking switch)

Manufacturer _____ Model _____
 CFM _____ at _____ sp Duct size _____ Duct area _____ sq. ft.
 Make-up air diffuser Type _____ Number _____ Mfr. & Model _____

Average FPM design (flow rate) at the diffuser surface $[Q (cfm) \div A (sq. ft.) = V (fpm)]$ _____ FPM
 (Note: 400 – 500 FPM is the average FPM design flow rate at the register surface $[Q \div A = V]$ and is the recommended maximum for each diffuser)

Does the unit supply the required make-up air? Yes No

Is the make-up air intake on the roof at least 10 feet from the exhaust blower? Yes No

Hood(s) must be tested before the final construction inspection. The hood designer or building contractor may elect to have that test performed by a licensed testing company or contractor. A written report of that test must be submitted to this Department 48 hours before the final construction inspection.

Comments: _____

The above information has been reviewed by _____, REHS Date _____

 1 From hood manufacturer
 2 From hood manufacturer
 3 From mechanical engineer
 4 From mechanical engineer
 5 From mechanical engineer