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: ___________________________________________ Phone: ____________________

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

☐ 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)**

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model</th>
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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
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 \[Q \text{(cfm)} \div A \text{(sq. ft.)} = V \text{(fpm)}\] _______ FPM

<table>
<thead>
<tr>
<th>Static Pressure</th>
<th>Hood</th>
<th>Make-up</th>
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</thead>
<tbody>
<tr>
<td>Filters(^1) +</td>
<td>_____sp</td>
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</tr>
<tr>
<td>Entrance loss(^2) +</td>
<td>_____sp</td>
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</tr>
<tr>
<td>Duct length(^3) +</td>
<td>_____sp</td>
<td>_____sp</td>
</tr>
<tr>
<td>Elbows(^4) +</td>
<td>_____sp</td>
<td>_____sp</td>
</tr>
<tr>
<td>Exit loss(^5) +</td>
<td>_____sp</td>
<td>_____sp</td>
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\[\text{Total sp} = \text{Total sp}\]

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<thead>
<tr>
<th>Exhaust Fan/Blower (Provide Engineering Data Sheets for all exhaust and make-up air blowers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
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Is the unit UL\(^6\) listed under UL762 standard? Yes No

<table>
<thead>
<tr>
<th>Makeup Air Fan/Blower (The exhaust and makeup air systems must be connected by an electrical interlocking switch)</th>
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<tbody>
<tr>
<td>Manufacturer</td>
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Make-up air diffuser Type_________ Number_________ Mfr. & Model_________.

Average FPM design (flow rate) at the diffuser surface \[Q \text{(cfm)} \div A \text{(sq. ft.)} = V \text{(fpm)}\] \[\text{FPM}\]

(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 _______________________

Revision November 2020

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