

CITY & COUNTY OF DENVER COMMUNITY PLANNING & DEVELOPMENT BUILDING PERMIT POLICY		
Subject: DMC KITCHEN HOOD EXHAUST SYSTEM SUBMITTAL REQUIREMENTS		
Approved: Eric Browning, PE, Building Official		
Number: DMC 506, 507, 508	Revised Date: February 28, 2023	Page: 1 of 3

References: Denver Mechanical Code (DMC) Section 506 Commercial Kitchen Hood Ventilation System Ducts and Exhaust Equipment, DMC Section 507 Commercial Kitchen Hoods, DMC Section 508 Commercial Kitchen Makeup Air, Denver Building Code Administration Section 133.1 and 133.2

Scope: This policy is intended to clarify the requirements for approval of kitchen exhaust systems with respect to licensed design professionals, kitchen consultants, and equipment vendors.

Application Requirements: Applications for mechanical permits for kitchen hood exhaust systems must include sealed drawings, details, equipment schedules, and specifications (construction documents) addressing DMC Sections 506, 507, and 508 and depict a complete system installation including hoods, duct, fans, and any other related components and appurtenances. A single licensed professional primary engineer shall be responsible for designing and specifying a complete engineered system addressing project specific conditions and shall be the primary correspondent. Design, specification, and correspondence shall not be divided between multiple design professionals. The requirements indicated below are minimum requirements to be addressed in the sealed documents. Additional detail or information may be required.

1. Kitchen hoods:

- a. Floor plans shall show the hood outline to scale and tagged to a kitchen hood schedule.
 - b. Kitchen hood schedules shall contain identification keys, manufacturer, model no., dimensions of the hood, total exhaust rate, and operating weight.
 - c. For Type I hoods:
 - i. UL 710 listing shall be scheduled if applicable.
 - ii. For compensating hoods schedule minimum exhaust flow and maximum makeup airflow per DMC 508.2.
 - iii. Kitchen hood details shall address DMC 507.2.6, 507.2.7, and 507.4 with respect to project specific conditions.
 - iv. Where unlisted Type I hoods are provided, sealed drawings shall be provided addressing DMC 507.5.
 - v. Provide controls and a sequence operation showing compliance with DMC 507.1.1.
 - vi. Comply with Denver Energy Code (DEC) C403.7.5.
- For Type II hoods compliance with DMC 507.4 or 507.5.5 shall be indicated.

2. UL710B factory-built recirculating systems:

- a. Floor plans shall show the appliance outline to scale and tagged to a schedule on sealed drawings.
- b. Appliance schedules shall contain identification keys, manufacturer, and model no. UL710B listing shall be noted.
- c. Provide appliance manufacturer's data sheets clearly indicating UL710B listing and installation requirements.

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3. Cooking appliances without hoods:

- a. Cooking appliances where a Type II hood is not required. Provide general kitchen exhaust in the proximity of the appliance per DMC 507.3.
- b. UL710B factory-built recirculating systems. Provide general kitchen exhaust in the proximity of the appliance per DMC 507.1 Exception 2.
- c. . The exhaust location(s) shall be approved by the authority having jurisdiction.

4. Kitchen exhaust fans:

- a. Provide a roof plan showing the outlines of all roof-mounted exhaust fans to scale. Wall mounted exhaust fans shall be shown on a scaled plan corresponding to the level it is installed. All exhaust fans shall be keyed to an equipment schedule. Exhaust fan discharge shall comply with clearances indicated in DMC 506.3.13 and/or 506.4.2. All mechanical air intakes and operable openings in proximity to the exhaust fans shall be shown on the roof plan.
- b. An exhaust fan schedule shall contain identification keys, manufacturer, model no., exhaust air flow rate, external static pressure, horsepower, and operating weight. UL 762 listing shall be noted if applicable. Exhaust fan details shall address dimensional requirements indicated in DMC 506.3.13, 506.5.4, and 506.5.5.

5. Pollution control units (grease scrubbers):

- a. Floor plans shall show the outline of pollution control units, to scale, on the floor plan corresponding to the level it is located.
- b. The pollution control unit schedule shall contain identification keys, manufacturer, model no., exhaust air flow rate, external static pressure, horsepower, and operating weight.
- c. Comply with DMC 506.3.13.2 and 506.5.2

6. Grease ducts:

- a. Floor plans shall show the grease duct drawn to scale including all routing. The grease duct shall be clearly identified as a grease duct on the drawings with sizes indicated.
- b. All sections of DMC 506.3 with respect to connections, support, clearances, and venting shall be detailed.
- c. A single grease duct enclosure design shall be submitted detailing compliance with DMC 506.3.11, with no alternates indicated.
 - i. Rated enclosures shall be drawn to scale, noted, and referenced from both architectural and mechanical floor plans including inner dimension and rating.
 - ii. Grease wrap shall be specified by manufacturer and model no. and an installation detail shall be provided.
 - iii. Factory-built grease duct enclosure assemblies shall be clearly specified and labeled.

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7. Coordination

- a. Where the primary engineer addresses equipment or ductwork that is existing (as in a remodel) or specified by another professional (such as under core and shell or landlord work) the primary engineer shall include at a minimum the performance data for remodels and for concurrent work the manufacturer, model no., and relevant performance data. It is appropriate to note this work as “Installed by separate contractor”, “Provided by landlord under separate permit”, “Existing”, and etc. All permit applications are considered by the Denver building department to be standalone projects and shall include all information to depict a complete design whether another project is in simultaneous review or has been recently completed.
- b. Where work is required to be addressed by another trade, such as a rated shaft enclosing a grease duct, the work shall be shown and clearly coordinated between architectural and mechanical drawings including scale, dimensions, rating, and sheet number and detail references.

8. Manufacturer’s shop, vendor equipment, and kitchen designer drawings

- a. Vendor hood shop drawings and fabrication details are not considered construction documents and are not required to be submitted for listed Type I hoods.
- b. Sealing of hood vendor “shop” drawings is generally inappropriate. This information is typically not project specific and shall be the responsibility of the primary engineer to coordinate project specific conditions with the vendor drawings through the construction documents. If the hood vendor drawings are sealed, the primary engineer shall ensure that all schedules, details, and notes accommodate project specific conditions and shall address and remove any notes that indicate further coordination by other design professionals to meet current Denver Building Code or Denver Fire Code requirements.

END OF DOCUMENT