Reference: IMC Section 506 Commercial Kitchen Hood Ventilation System Ducts and Exhaust Equipment, IMC Section 507 Commercial Kitchen Hoods, IMC Section 508 Commercial Kitchen Makeup Air, DBC 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 IMC 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. The requirements indicated below are minimum requirements for inclusion in the sealed documents and 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. UL 710 listing shall be noted if applicable.
   c. Kitchen hood details shall address IMC 506.3.6, 507.2.6, 507.2.7, and 507.4 with respect to project specific conditions.
   d. Where unlisted Type I hoods are provided, sealed drawings shall be provided addressing IMC 507.4, 507.7.
   e. For Type II hoods IMC 507.3.1 and 507.3.3 compliance shall be indicated.

2. Kitchen exhaust fans:
   a. A roof plan shall show 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. 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.
   c. Exhaust fan details shall address dimensional requirements indicated in IMC 506.3.13, 506.4, 506.5

3. Pollution control units (grease scrubbers):
   a. Floor plans shall show the outline of the pollution control unit, to scale, on the floor plan corresponding to the level it is located.
b. A pollution control unit schedule shall contain identification keys, manufacturer, model no., exhaust air flow rate, external static pressure, horsepower, and operating weight.

c. Pollution control units and ductwork downstream of the pollution control unit are considered by the Denver building department to be part of the grease duct and shall comply with code sections pertaining to grease duct installations and terminations.

d. Where pollution control units are installed in a system where the grease duct is fire wrapped, the listing of the fire wrap may require the pollution control unit to be wrapped. Where pollution control units are not wrapped the primary engineer shall submit the listing of the wrap showing that wrap is not required for the pollution control unit.

4. 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.
   b. All sections of IMC 506.3 with respect to connections, support, clearances, and venting shall be detailed.
   c. Rated enclosures shall be draw to scale, noted, and referenced from both architectural and mechanical floor plans including inner dimension and rating.
   d. Grease wrap shall be specified by manufacturer and model no. and an installation detail shall be provided.
   e. Listed grease ducts shall be clearly specified and labeled.

5. 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 stand alone projects and shall include all information to depict a complete design whether or not 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 no. and detail no. references.

6. Manufacturer’s shop, vendor equipment, and kitchen designer drawings
   a. Hood shop drawings and fabrication details are not construction documents and are not required to be submitted for listed Type I hoods.
   b. Hood vendor drawings are not considered construction documents. Where hood vendor drawings are included with the construction documents, any specifications or details addressing building code requirements shall be clearly noted as “NOT FOR CONSTRUCTION”. 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. Sealing of hood vendor drawings is generally inappropriate. 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 design coordination by other entities to meet building code requirements.