



Construction
Code
Services

Minneapolis
City of Lakes

Mechanical Review Checklist For Commercial Food Establishments

August 17, 2009

***CONSTRUCTION PLANS:** **Two (2) sets of Construction plans.**

Submittal documents. Plans, specifications, engineering calculations and other data are required prepared by an engineer when a change in load occurs. *Examples -added occupancy, change in cooking equipment, relocation of ventilation equipment, changes in building uses.*

Exceptions: The building official may waive the submittal documents if the nature of the work applied for is not necessary to obtain compliance with existing codes and standards. *Examples-repairs and replacement of existing equipment with like or less hazardous types or tenant remodels that don't affect ventilation needs.*

Submittal document informational requirements:

1. Floor plan drawn to scale including all floors to be affected and altered by mechanical changes. Show property lines when exterior building penetrations are required for ductwork.
2. Identify the make, capacity and location of new heating, ventilation, and air conditioning equipment used along with any accessories to them. Show piping or ductwork that is added or altered.
3. Show how maximum occupancy outside air requirements meet each application according to ASHRAE Standard 62 2001 (Addendum n)

Application	P/1000ft ²	CFM/P
Dinning Rm.	70	10
Cafeteria, Fast food	100	9
Bar, Cocktail Lounges	100	9
Kitchens, (cooking)	20	15

Any reductions in the above outside air requirements must meet the exceptions listed in ASHRAE 62. Procedures must be followed and calculations provided.

4. Identify all new equipment involved in a food heating process. Equipment exhaust rates shall be determined by the Minnesota Commercial Kitchen Guidelines. Equipment requiring exhaust ventilation to be placed under the proper type of hoods according to Minnesota State Mechanical Code Section 507.
5. Specify type of hoods and rate of air exhausted. Type 1 hoods that are unlisted must ventilate in accordance with the State Mechanical Code capacity requirement. If the hood is listed to UL Standard 710, its ventilation rate can be reduced to the listed amount. Type 2 hoods are for heat and steam removal only.
6. Show when hoods or grease ducts penetrate a ceiling, floor or wall. Indicate the type of shaft enclosure or an approved duct wrap system per required tested standards and how it terminates outside the building. Grease duct cleanouts shall be placed in locations necessary to maintain the equipment. Ducts shall slope to approved grease collection points. Concealed grease ducts require pressure testing per state mechanical code standards.
7. Exhaust terminations shall be through the roof or approved by building official. Contaminates that affect adjoining properties may require scrubbers or cleaning systems. Exhaust shall not be directed onto public walkways or within 10 feet of a building or lot line.
8. Show how tempered make-up air is supplied to the room in an amount equal to the amount of air exhausted. Diffusers must meet necessary clearance from hood. If building ventilation systems are used to provide make-up air, it must be in accordance with the manufactures listing and must not effect the air quality other tenants served by the system. Provide interlock diagrams.
9. Fire-extinguishing equipment for the protection of grease removal devices, hood exhaust plenums, and exhaust duct systems shall be provided.
10. Roof access is adequate for inspection, servicing and maintenance per Inspection Department policy. (See Minneapolis Web Site for requirements)