



Mechanical Drawings Checklist for Commercial Buildings

- 1- A scope of work is necessary for every project submitted for permit.
- 2- A complete code analysis, including building type, use group, number of stories, suppression type, code edition and number of occupants must be included with all submitted mechanical drawings.
- 3- The scale must be noted on plans, either 1/8-inch or 1/4-inch.
- 4- Submitted mechanical drawings must include the ductwork layout and sizes, complete schedules depicting unit cooling tonnage, heating MBH, total CFM and the quantity of outdoor air for all new equipment installed. Details should include the quantity and type of units being installed, i.e. fuel-fired or electric.
- 5- All MEP drawings shall be signed and sealed by professional engineers and include contact information for that engineer.
- 6- An energy envelope calculation form must be completed and included for all new buildings.
- 7- Smoke detectors on both supply and return ducts for any HVAC unit greater than 2000 CFM or for combined units totaling over 2000 CFM sharing the same return.
- 8- A manufacturer's cut sheet depicting allotted dryer duct length for any domestic clothes dryers with an exhaust duct run greater than 25 feet.
- 9- An outdoor air schedule or calculation in accordance with table 403.3 (IMC2003) must be included with any renovation, new construction, or existing HVAC system with a change use or modifications to the original intent of operation.
- 10- Where type I commercial kitchen hoods are being installed, drawings and details from a kitchen consultant must be included. An air balance schedule showing makeup and exhaust air must also be included. Appliances such as rotisserie ovens must be shown along with their UL listing and type of fuel (solid, electric or gas).
- 11- Any shaft penetrations must be protected by an approved combination fire/smoke damper.
- 12- Schedules must provided for expansion tanks, fuel tanks, walk-in coolers or freezers showing the gallon capacity of all tanks and horsepower of tonnage of walk-in box refrigeration capacity.
- 13- When fire dampers are used to protect penetrations, notes should also be included for those dampers. Notes should include the damper type, UL listing information and whether the damper is dynamic or static.
- 14- Installations where a grease duct is required to be protected within a rated shaft, a grease duct wrap of equal rating installed in accordance with the manufacturer's installation instructions may be substituted for a conventional rated shaft.