



Department of Planning

GUIDANCE NOTE

GN 0008 - January 2020

MECHANICAL & FUEL GAS PLAN REVIEW SUBMISSION **COMMERCIAL and MULTI-FAMILY PROJECTS**

Purpose

The Department of Planning in an initiative to improve customer service has developed this Informational Bulletin to provide guidelines to aid the applicant with the plan review requirements for mechanical & fuel gas when submitting for a commercial and multi-family project Building Permit.

Scope

Mechanical plan reviews are based on the adopted edition of the International Mechanical Code, Fuel Gas Code, and the Cayman Islands Building Code Regulations.

To ensure a thorough plan review, Electrical drawings must contain but are not limited to, the electrical requirements, details, and specifications listed below.

Site plan

- The site plan must coordinate with the latest planning approval.
- Show location & type of equipment, appliance, and other systems.
- Show distances, access & service clearance to equipment, appliance, and other systems (per manufacturer's specification and/or application code.)
- Show protection of equipment, appliance, and other systems against physical damage in areas where applicable.
- Distance from other structures, as well as from property boundaries (i.e. AC equipment, exhaust, dampers, etc.)

General Drawings

- Provide manufacturer's specification for kitchen appliances, equipment & other systems.
- Details sheet with Symbol and Legend.
- Floor Plan (all floors)
- Wall Schedule
 - Hatching to coordinate with floor plan

- Wall construction (i.e. timber, masonry, ICF)
- Label rated walls (if applicable)
- Specification for listed assembly (if applicable)
- Location of wall penetrations
- Show all existing and proposed modifications
- Show all mechanical equipment, piping, ductwork
- Location of all outdoor air intake relative to the source of contamination
- Drawings must contain a note that smoke and carbon detectors required to be installed per NFPA 72
- Elevations
 - Show fire dampers, and point of termination for exhaust outlets, etc.
 - Distance between intake & exhaust point from building openings, equipment & appliances, as well as the distance from grade, etc.
- Sections
 - Show compliance with ventilation by providing fire rating & penetration details of shaft enclosures
 - Show all supply or return plenums.
 - Provide AHU mounting details
- Rooftop equipment
 - Show roof access
 - Show location of all rooftop equipment & elevation
 - Show service access clearance, working platforms, walkways, guardrails; the spacing of units; & elevation of units
- Fire/Smoke resistance rated assemblies & penetrations
 - Provide fire-rated wall legend coordinating with architectural
 - Location of fire/smoke rated assemblies (walls, and/or floor/ceiling and ceiling/roof)
 - Location of louvers, dampers/penetration through rated assemblies (walls, and/or floor/ceiling and ceiling/roof)
 - Specify damper/penetration types and installation standard/details
- Ventilation Calculations
 - A ventilation schedule as per the International Mechanical Code and ASHRAE
 - The schedule must include supply, return & exhaust values, as well as equipment & appliance Btu's
 - Calculation of combustion air (confined or unconfined spaces)
- Access/Service to Mechanical Systems
 - Show attic access
 - Show service access clearances
 - Show AHU catwalk & working platform
- Show condensate drains (primary & secondary/or float switch), from unit to point of discharge.
- Details on HVAC equipment including the equipment capacity (Btu/h input), controls, equipment location.

Commercial Kitchen Hoods

- Provide kitchen hood schedule reflecting make and model of units
- Show locations of hoods and all appliances under each hood
- Provide material and clearances to combustibles, etc.
- Provide elevations reflecting clearances between hoods and equipment below
- Kitchen Hood (Type I or Type II) duct material, joint seams, and penetrations.
- Identify the required Kitchen Hood duct cleanout locations
- Fire Suppression System (To be depicted on Fire Drawings)
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Ductwork

- Duct construction and installation method, flame spread/smoke development rating of materials, flexible air duct and connector listing, sealing of duct joints, seams, connections and duct support spacing
- Specify Grease Duct material; joint seams and penetrations; connections; supports; clearances; cleanouts; fire specifications etc.
- Clothes dryer duct size, material, length, exhaust & termination point.
- Bathroom exhaust duct size, material, length, exhaust & termination point

Gas appliances

- Method of supplying combustion air to all fuel-fired (gas) appliances & the location and size of the opening.
- Gas tank specifications and anchorage details
- Specification for all fuel-fired appliances
- Details on vents used to vent the product of combustion from all fuel-burning appliances including the type of venting system, the sizing criteria required for the type of vent, and the routing of the vent.
- Complete details on the gas piping system including, installation, valve location, sizing criteria, and calculations (i.e. the longest run of piping, the pressure, the pressure drop, and applicable gas piping sizing Table in IFGC).
- Smoke ventilation of atriums and pressurization of high rise stairs.

Note:

- 1) *Drawings shall be legible, dimensioned and drawn to a scale of 1/8 inch = 1 foot or 1/4 inch = 1 foot.*
- 2) *All MEP and Gas materials & equipment must be listed and certified by a National Recognized Test Laboratory, a notified body, or seek approval from the in the Cayman Islands Department of Planning (Authority Having Jurisdiction) before use or installations.*
- 3) *Detail must be specific to the project and not a generic cut and paste.*

The above information is intended to be a guide; refer to the most recent adopted codes and standards for other requirements as it pertains to your project.

For additional information, please email the Department of Planning at info@planning.gov.ky or call (345) 244-6501 or visit our website at www.planning.ky.