

## Purpose

This guideline has been created to aid in the understanding of Kitchen Renovations, how and where the Building Code applies, and when a Building Permit is required.



## Code Reference

Current National Building Code – Alberta Edition (NBC-AE), Division B, Articles:

- 9.10.22. Fire Protection for Gas, Propane, and Electric Cooktops and Ovens
- 9.32.3.7. Supplemental Exhaust
- 9.32.3.8. Protection Against Depressurization



## Summary

The requirements within this Guideline are applicable to kitchen renovations occurring within a residential dwelling unit.



## Interpretation

### 1) Is a Building Permit Required?

As per the Alberta Safety Codes Act - Permit Regulation, a Building Permit is required for the renovation of or addition to a building where health and safety is at risk. A kitchen renovation which involves the replacement/installation of cabinets (even when in the same location), or which adds or replaces a hood fan, have specific requirements/clearances required under the Code which affect health and safety. A Building Permit is required for a kitchen renovation involving either of these items.

A Building Permit is not required when replacing countertops only, painting, or replacing the fridge, cooktop (stove), sink, dishwasher or other appliances not noted above etc.

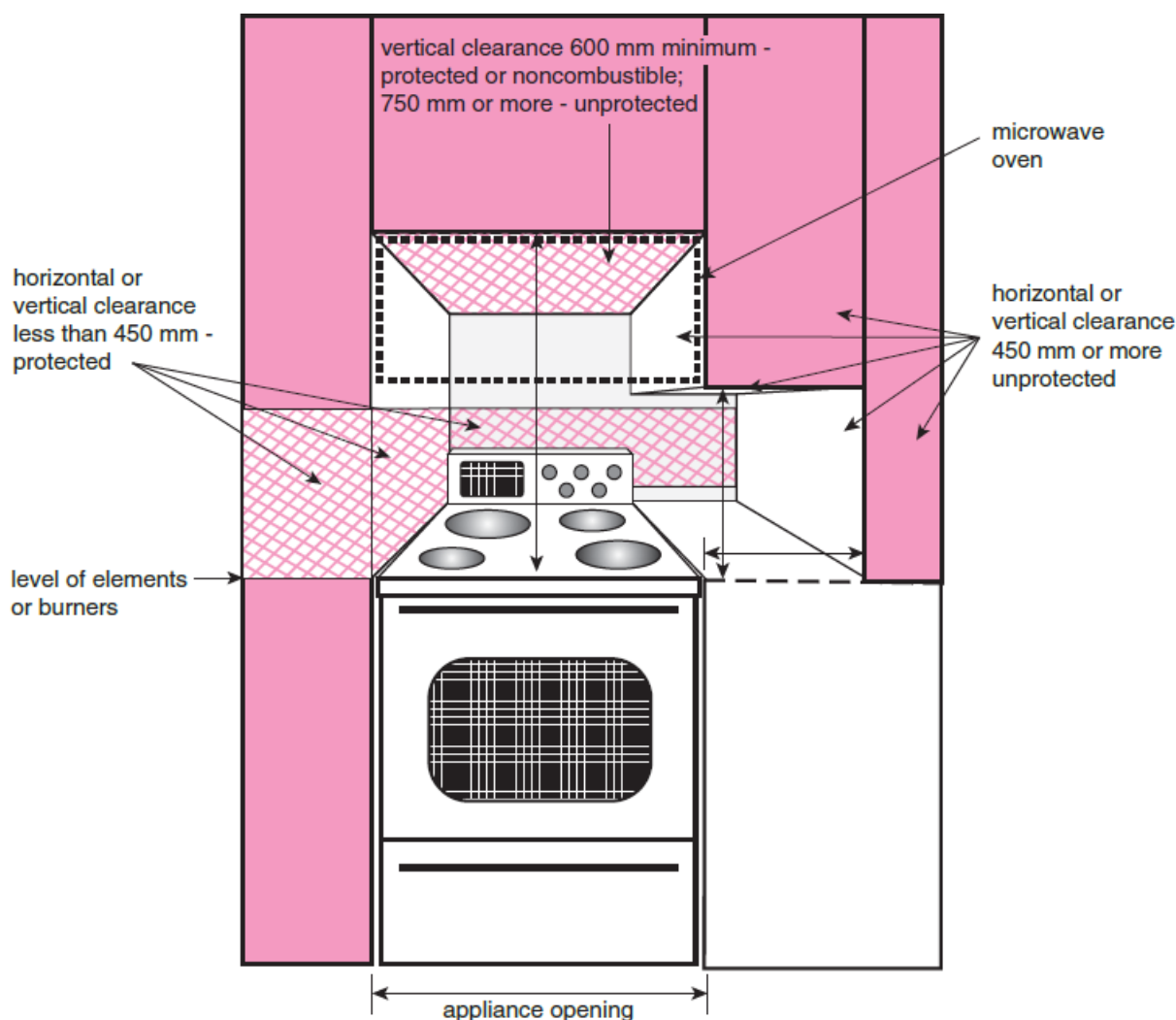
Plumbing, Gas and/or Electrical permits are required for any work that has been completed in these disciplines.

### 2) Cooktop Clearances - Specific minimum clearances between a cooktop (stove) and the surrounding cabinetry are required within the Code. The following clearances are required to be provided around a cooktop.

- a) Vertical Clearance – Framing and cabinetry directly above a cooktop (stove) shall not be less than 750mm (30”) above the cooktop burners or elements. This clearance can be reduced to 600mm (24”) if the framing and cabinetry is noncombustible, or are

protected by a metal hood that projects not less than 125mm (5") beyond the framing and cabinetry.

- b) Clearances Around – Combustible framing and cabinetry must maintain a minimum clearance of 450mm (18") from the cooktop, or be protected by gypsum board a minimum of 9.5mm (3/8") thick, or any material providing a fire-resistance rating of not less than 10 min and a flame-spread rating of not more than 25.
- c) Microwave Oven – The clearance between the bottom of a microwave oven and the cooktop burners is not specified in the Code. The manufacturer's installation instructions will identify the specific clearance required for the unit.



- 3) Hood Fan (Supplemental Exhaust) – Under the current Building Code, a kitchen is required to be provided with a supplemental exhaust fan (hood fan) with a minimum capacity of 50 L/s (106 cfm). Please contact a Safety Codes Officer within Rocky View County Building Services to discuss alternatives if required.
  - a) Depressurization – Where a hood fan is installed within a house, the fan exhausts air from the house that is typically not being replaced by a supply fan. For this reason, where the

kitchen hood fan exhausts air in excess of 300 cfm, (and the house does not have direct vent or mechanically vented appliances such as a medium or high efficient furnace and hot water tank), depressurization of the building can occur, causing appliances to spill combustion products into the house.

Please note-Due to higher CFM hood fans being used these days and home construction being even more airtight, it is recommended to consult with your HVAC contractor on depressurization for optimal comfort and efficiency.

- b) **Make-Up Air** – To counteract the effects of depressurization, when a hood fan providing more than 300 cfm is installed within a home, make-up air is required to be installed. This make-up air should provide supply air to the home equaling (or not greater than 10%) that which is being exhausted and be interconnected with the hood fan so that the two operate simultaneously.
- c) **Permit Application Requirements** – When changing or adding a hood fan, the following information is required for the permit application.
  - i) **Replacing Like for Like** – When replacing a hood fan, and the new hood fan provides the same cfm as the existing hood fan, confirmation of the cfm for both the existing and new hood fan is required. This may be difficult to confirm, if the existing hood fan is older. If this is the case, the new hood fan should not be more than 300 cfm, or make up air must be provided in the home.
  - ii) **Hood fan with more than 300 cfm** – When upgrading a hood fan to one with a cfm output more than 300 cfm, make-up air must be provided. This will ensure depressurization of the home does not create concerns with the building envelope as it draws air into the home. Specifications of the makeup air unit being provided must be included in the permit application.
- 4) **Structural Changes** –
  - a) Where a wall or portion of a wall is being removed, there is the possibility that the wall may provide structural support as a load-bearing wall. Existing walls should not be removed without a structural review being completed by a Professional Engineer. Where structural changes are being proposed, the Engineer must provide stamped drawings or a stamped letter identifying the changes being made and any remedial actions required, such as new beams, support columns and new pad footings.
  - b) Where a window or door opening has being added or relocated on an exterior wall, these changes require the addition of headers within the wall system. Plans for the structural work are to be provided for the building permit.



## **Reference**

Approval Date

- October 2024

Last Review Date

- October 2024