



Adding a Second Unit in an Existing House

Guide to Successful Inspections



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Introduction

You have decided to add a second unit to an existing house. Your building permit has been issued and you are eager to start construction. Before you begin, whether you are a homeowner or experienced contractor, this guide will assist you during the construction and inspection process covering common questions and deficiencies to inform you and set you up for successful inspections.

Disclaimer: This document is provided for convenience only to assist in the construction and inspection process and should not be relied upon as a substitute for construction, engineering, architectural or legal advice. It does not supersede the Ontario Building Code or other applicable laws, approved permit drawings, and may not be applicable to certain site conditions. The City of Kitchener does not assume responsibility for errors or oversights resulting from use of this document.

Prior to Construction

1. Review your approved permit drawings including all notes and referenced attachments.
2. Schedule a pre-construction inspection (optional but highly recommended). You may also e-mail or call your inspector to discuss any questions you may have regarding the construction process, inspection process, or any site-specific challenges.
3. Have a colour copy of the drawings printed full size and on site for reference.
4. Hire qualified and licensed contractors.
5. The construction on site must be completed as shown on the approved permit drawings. Changes to the design will require revised drawings to be submitted and may require further review and approval and additional fees may be applied.

Typical Inspections

1. **Pre-construction inspection** - Intended for any questions you or your contractor may have before beginning the work.
2. **Underground plumbing rough-in inspection** – This inspection takes place before covering any underground / under slab plumbing work with stone and concrete. This inspection may be grouped with the above ground plumbing rough-in inspection if desired, provided it is left visible for inspection.
3. **Framing Inspection / Above Ground Plumbing Rough-in inspection / HVAC Rough in** - This typically includes the partition and any structural framing, the above ground plumbing rough-in, and HVAC. The fire separation prep work including drywall boxing of the floor joist cavities (see next section) should be completed at this stage. Electrical work is also to be completed at this stage however you need to contact the Electrical Safety Authority for a separate inspection.
4. **Insulation / Fire Separation** - Inspection of all insulation and includes the vapour barrier. At this time we will be also looking at some fire separation prep work that will not be visible at future inspections.
5. **Occupancy inspection / Final Plumbing / Final HVAC / Fire Separation** - The occupancy inspection often includes all remaining inspections including the final plumbing, HVAC final, and fire separations, as well as any outdoor caulking, window wells including stone in window well. All reports are required at this stage including the Electrical Safety Authority letter, smoke duct detector form (if applicable), sprinkler system certificate (if applicable), and any other applicable reports.
6. **Final inspection** - If minor exterior items which weren't required for occupancy were incomplete at the occupancy inspection, the final inspection would be required. Once the final inspection has been signed off by the building inspector, a final clearance letter will be automatically e-mailed to the applicant, and a cheque to return the permit rebate (deposit) will be mailed to the payor.

Fire Separations and Sound Control

For fire safety you will need a fire separation between your second unit, any common areas, and the rest of the house. A fire separation acts as a physical barrier to slow the spread of fire from one part of the house to the other. The fire separation must be continuous and include protected openings if necessary (e.g. fire dampers) in order to work properly.

When adding a second unit, the Building Code requires either a 30 minute or 15 minute fire separation between units, and also between units and common areas. Upgrades may be required to existing walls and floors/ceilings to achieve these fire separations. Review your approved permit drawings to determine the rating required for walls and floors for your project.

Refer to the Table Below to determine the construction requirements based on the fire-resistance rating of the assembly based on the type of assembly, as well as the applicable smoke alarm requirements

	30 Minute Fire Separation	15 Minute Fire Separation
Walls (Vertical Assembly)	1 layer of 1/2" regular drywall on both sides of studs	1 layer of 1/2" regular drywall on both sides of studs
Floors/Ceilings (Horizontal Assembly)	1 layer of 5/8" Type X drywall, or 1/2" Type C drywall on underside of floor joists	1 layer of 1/2" regular drywall on underside of floor joists
Smoke Alarm Requirements	Smoke alarms are not required to be interconnected between the two dwelling units in the house, however other requirements may be applicable and require interconnection of alarms ^(see note 1) .	Smoke alarms are required to be interconnected between the two dwelling units and common spaces ^(see note 1) .

Notes:

⁽¹⁾ See the smoke alarm section of this guide for further information regarding smoke alarm requirements.

Sound Control (Div. B, Section 9.11.)

Noise and vibration travelling between units is a common problem for people that live in multi-unit residential buildings, including houses with second units. Although not required by minimum Building Code when adding a second unit to an existing house, it is a good idea to build extra noise protection in the walls, floors and ceilings that divide your second unit from the remainder of the house. There are many different ways to construct a wall or floor so that it has greater noise protection, including additional insulation, metal resilient channels, extra layers of drywall, etc.

Fire Doors (Div.B, SubSection 9.10.13.)

Where a door will be located in a wall that is a fire separation it shall be a fire door. The fire door shall have a minimum 20 minute rating. The factory applied rating label can be found on the hinge side of the door.

Sample fire door labels:



In addition, fire doors must have a self-closing device strong enough to swing the door closed and latch.



Top mount self-closer



Spring loaded hinge self-closer

Fire Stopping (Div.B, Article 9.10.9.6.)

When a fire separation is required to be penetrated by services such as electrical wires and plumbing pipes the penetration shall be tightly fitted or fire stopped to maintain the integrity of the separation.

Standard **fire** caulking may be used to fill the annular space around non-combustible penetrations, such as steel gas pipes, copper plumbing, etc.



Small combustible service penetrations, such as ABS or PVC pipe, PEX waterlines, electrical wire, etc., must be sealed with an **intumescent** fire caulking which expands to seal the penetration when the pipe burns or melts away.

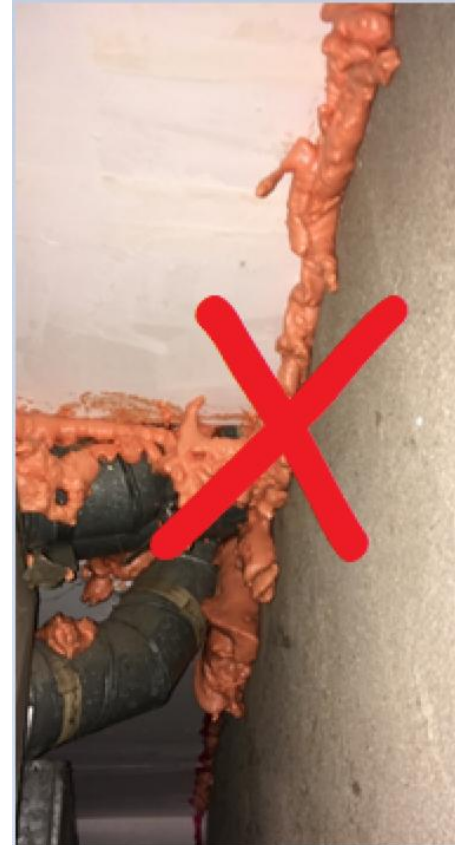


Larger combustible penetrations may exceed the size limitations of fire caulking products and an approved fire stop device such as a collar / donut must be used.



Fire stopping foam may seem like an easy solution to firestopping penetrations, however caution should be used prior to purchasing and installation. Most fire stop foams are not tested or approved for use as fire stopping in fire separations. The fire stopping product used must meet CAN/ULC-S115.

Please review with your Building Inspector to ensure any foam fire stopping products you wish to use will pass inspection.



Regardless of the fire stopping product used, all fire stopping must be installed as per the manufacturers specifications including size of penetration, annular space around the penetration, backing, and application. Fire stopping products must have been tested to meet the CAN/ULC-S115 standard.

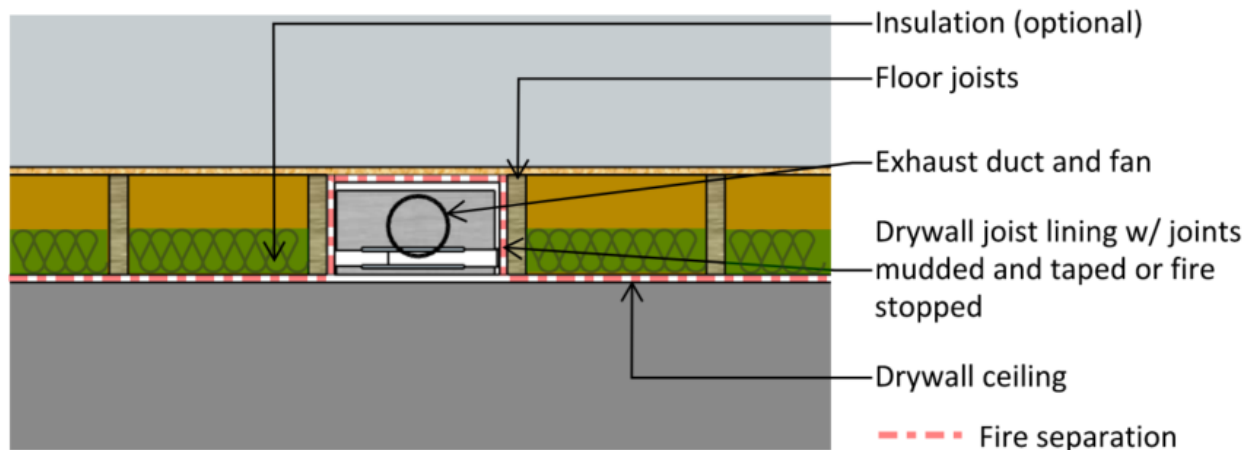
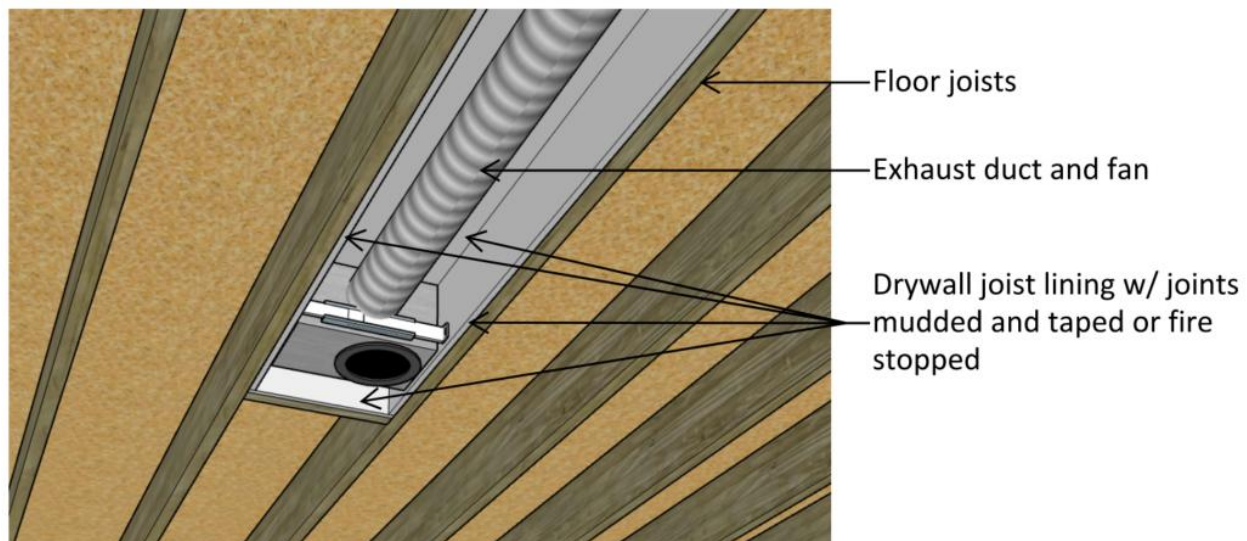
Continuity of the Fire Separation (Div. B, Article 9.10.9.2.)

The fire separation required between the two units and common spaces is required to be a continuous barrier. Some penetrations are too large or complex to be properly fire stopped.

Common examples are:

- Laundry exhaust
- Kitchen range hood exhaust
- Bathroom exhaust
- Plastic backed pot lights

In these instances, a drywall box is required in the floor joist cavity above the element to maintain the continuity of the floor / ceiling fire separation in the fire separation which are not able to be fire stopped. (See diagrams and photos on next page)





Access Panels (Div. B, Article 9.10.9.3.)

Where building services contain shut offs or valves that require access, such as hose bibs, and are located within the fire separation, fire rated access panels may be used. The access panel will have a self-closing device to ensure it does not stay open.

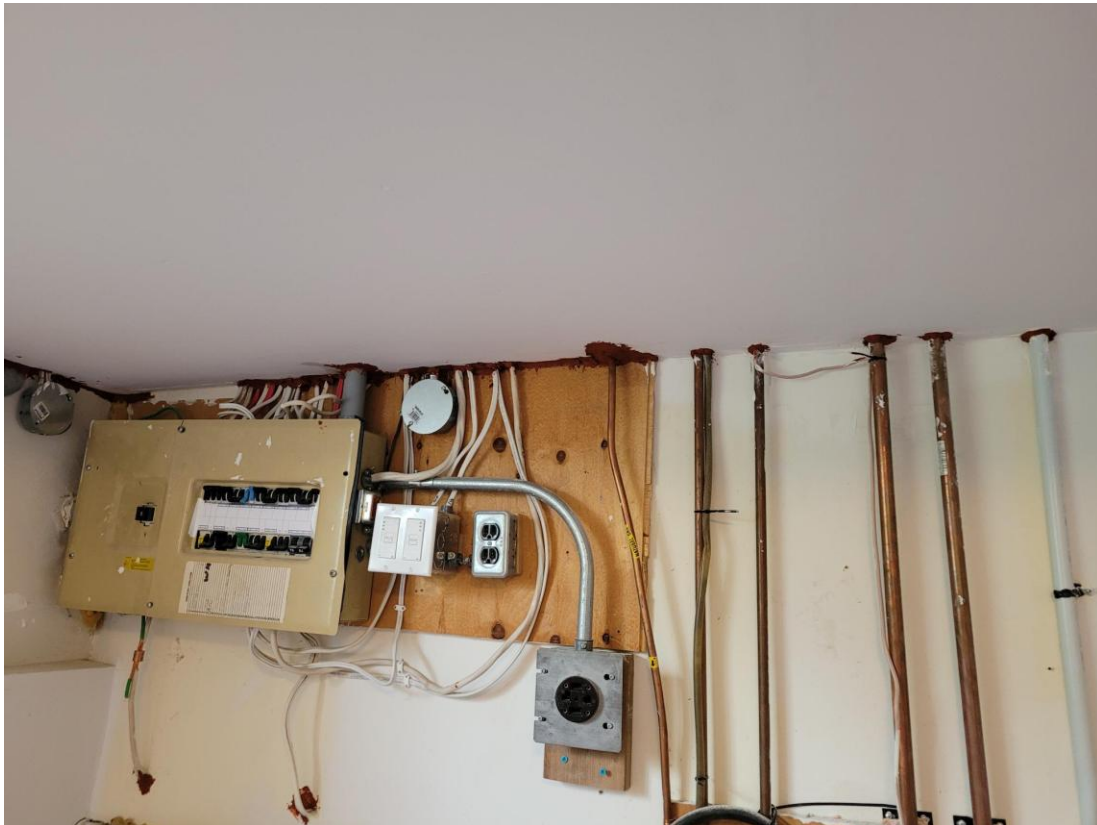


Alternatively, the joist space may be lined with a drywall box as previously described. This method would allow for a non-fire rated access panel to be installed.



Service Rooms (Div. B, Article 9.10.10.3. & 9.10.9.14.)

The fire separation in service rooms, such as the furnace room, must also have a complete fire separation which is smoke tight and properly fire stopped, unless a sprinkler system is installed.



Sprinkler Systems (City of Kitchener Building Division Policy)

Some service rooms you may not be able to adequately install a drywall ceiling to maintain the required fire separation due to the complexity of the services within the room. In these cases, we allow the installation of sprinkler heads in the service room in lieu of the ceiling fire separation, provided;

- the sprinkler system is designed and installed in accordance with the requirements of the NFPA 13D performance standard, and
- shall be installed in accordance with one of the following two options;

Option # 1 – Full Flow Through System

Option 1 – Full Flow Through System	1) The sprinkler connection is made upstream (i.e. before) the water meter as a <u>full flow through system</u> and in accordance with the Kitchener Utilities Residential Fire Suppression – Standard detail (See Figure 1). Additionally, the installer shall install a main shut off valve with minimum 1/8" diameter hole or similar to allow for a wire and tag to be installed by the Building Inspector to lock the shut off in the open position. (See Figure 3). 2) All sprinkler piping, fitting and parts shall be of potable water system materials, in conformance with NSF/ANSI 61 – Drinking Water System Components – Health Effects. In addition, all piping and fittings for sprinkler system shall be either combustible piping meeting the requirements of ULC/ORD-C199P (ex. AquaPEX) or be copper piping. 3) Sprinkler pipe sizing must be verified by the licensed sprinkler contractor, to ensure adequate water flow. Water service line shall be designed hydraulically to supply both domestic and fire flow requirements. 4) The sprinkler installation must be designed, installed, and certified by a licensed sprinkler contractor. Final certification letter, including verification of sufficient water flow, shall be submitted to the building inspector.
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Option #2 – Stand-Alone System

Option 2 – Stand-Alone System

- 1) The sprinkler line shall be installed/branched in the water supply line upstream (i.e. before) the water meter as a stand-alone system (See [Figure 2](#) for sample system arrangement).
 - a) The sprinkler line shall be clearly marked with a sticker indicating that the line is a dedicated sprinkler line and no other connections are permitted. (Building Inspector to install sticker(s) as required).
Sample Sticker:

DEDICATED SPRINKLER LINE
NO OTHER CONNECTIONS PERMITTED
 - b) A double check valve (DCVA) backflow preventor assembly shall be installed on sprinkler line, location/install to be confirmed by Building Inspector on site.
 - c) Other than the double check valve assembly and the main shut off, no valves (i.e.: shut-off) will be permitted on any portion of the sprinkler line. The installer shall install a main shut off valve with minimum 1/8" diameter hole or similar to allow for a wire and tag to be installed by the Building Inspector to lock the shut off in the open position. (See [Figure 3](#)).
- 2) All piping and fittings for sprinkler system shall be either black steel or Blazemaster (or equivalent) CPVC piping, no other combustible piping will be permitted.
- 3) Sprinkler pipe sizing must be verified by the licensed sprinkler contractor, to ensure adequate water flow. Water service line shall be designed hydraulically to supply both domestic and fire flow requirements.
- 4) The double check valve assembly shall be tested when it is first installed and annually thereafter, in accordance with CAN/CSA B64.5, and City of Kitchener By-Law 2002-135. **Installer to inform the property owner of the annual testing requirements.**
- 5) The sprinkler installation must be designed, installed, and certified by a licensed sprinkler contractor. Final certification letter, including verification of sufficient water flow, shall be submitted to the building inspector.

Figure 1: Full Flow Through System Arrangement

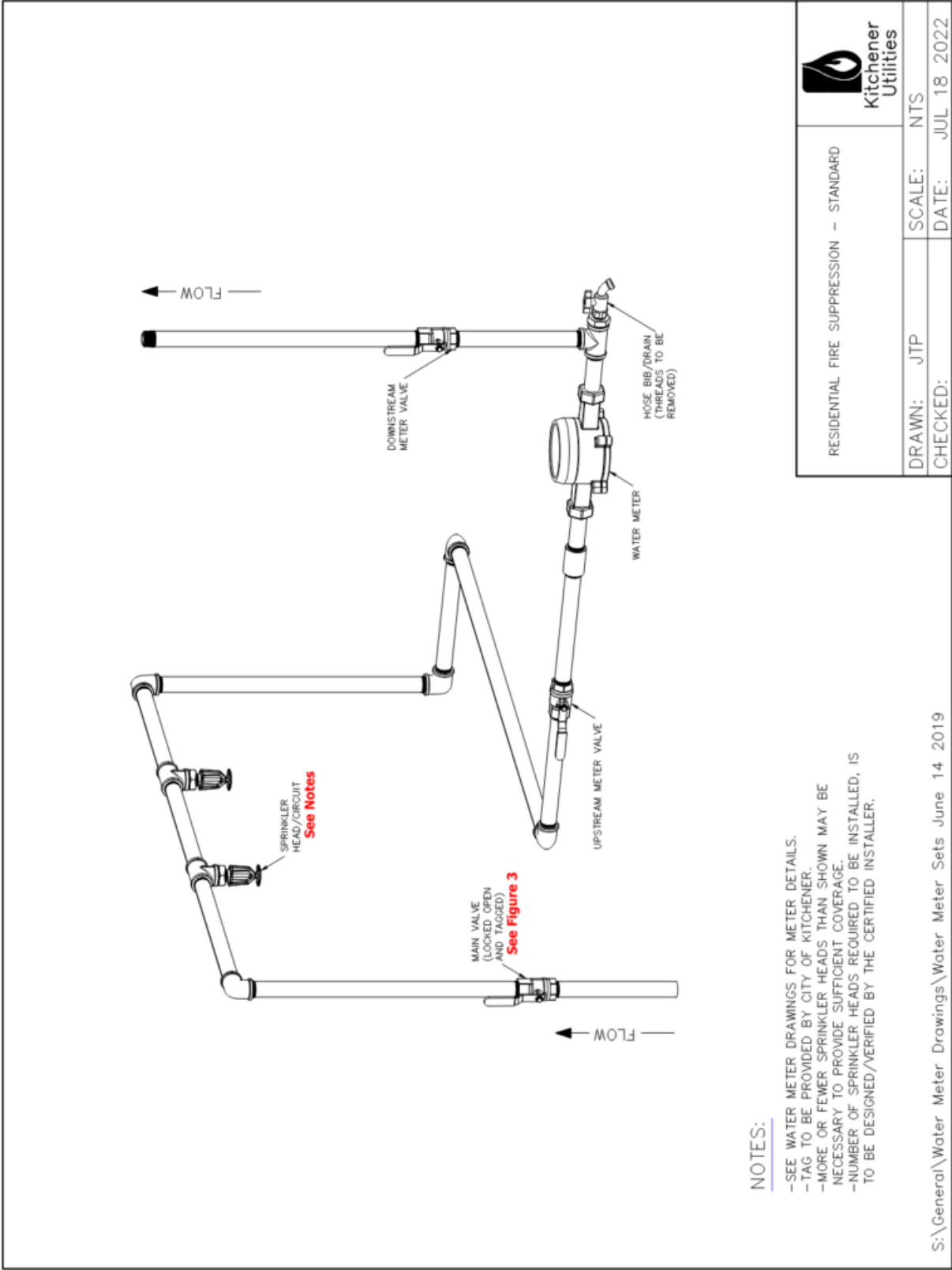


Figure 2: Stand-alone system arrangement

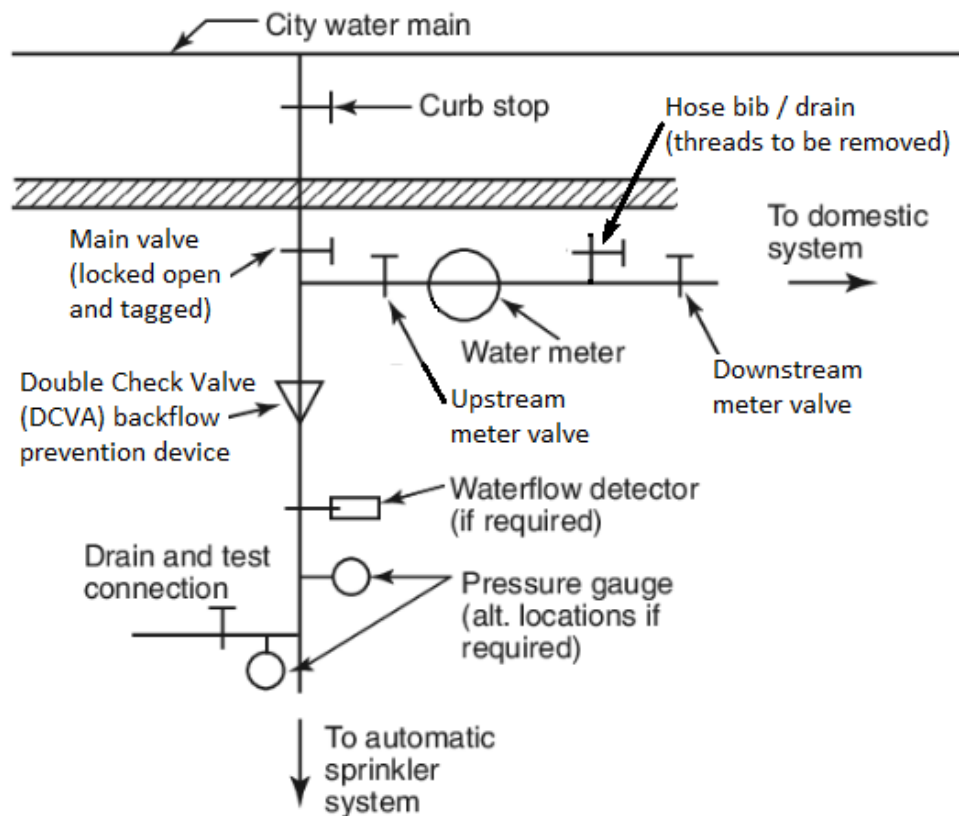


Figure 3: Main Shut Off Tag

Sample shut-off valve tag (affixed to the locked open shut off by the Building Inspector)



Sample photo of locked open and tagged shut off valve



Smoke Alarms (Div. B, SubSection 9.10.19.)

You will need smoke alarms in your second unit and they must meet the CAN/ULC S531 performance standard. A label on the alarm will indicate whether it meets this standard. Your smoke alarms must also have a flashing light (strobe) when they are activated.

Proper placement of smoke alarms is important. Refer to your approved permit drawings for marked locations, they must be located:

- On every level of a house,
- Outside sleeping areas,
- In each bedroom in the second unit,
- In common areas of the house shared by occupants of both units, such as shared entrances and laundry rooms, and
- Each bedroom in the primary unit where;
 - both dwelling units share the only exit from either of the units, or
 - a 15 minute horizontal / ceiling fire separation is permitted and installed (as previously mentioned in the fire separation section)



Interconnection of Smoke Alarms (Div. B, Article 9.10.19.5.)

Where the secondary unit requires more than one smoke alarm, the Building Code requires the smoke alarms to be wired so that the activation of one alarm will cause all alarms within the dwelling unit to sound.

Additionally, the smoke alarms will need to be interconnected between the two dwelling units where;

- both dwelling units share the only exit from either of the units, or
- a 15 minute horizontal / ceiling fire separation is permitted and installed (as previously mentioned in the fire separation section)

Some smoke alarms have a wireless interconnection feature. Wireless interconnection must not depend on wifi or electrical power to operate the interconnection between alarms.

Please review with your Building Inspector to ensure any wireless interconnected smoke alarms you wish to use will pass inspection.

Power Supply (Div. B, Article 9.10.19.4.)

All new smoke alarms installed for your project must be hardwired to the permanent power supply serving the building and be equipped with a battery back up.

CO Alarms (Div. B, SubSection 9.33.4.)

In addition to smoke alarms you may also have to install carbon monoxide (CO) alarms. They are required if your house has any appliances, such as a furnace, water heater, stove, etc., that uses natural gas, propane or other similar fuels. They are also required if your house has an attached garage or wood burning fireplace.

Carbon monoxide alarms can be either electrically powered or battery operated and must be located near bedrooms and sleeping areas in the second unit, refer to your approved permit drawings for marked locations.

It is also possible to install a combination smoke alarm and CO alarm.



Structural (Div. B, Section 9.23.)

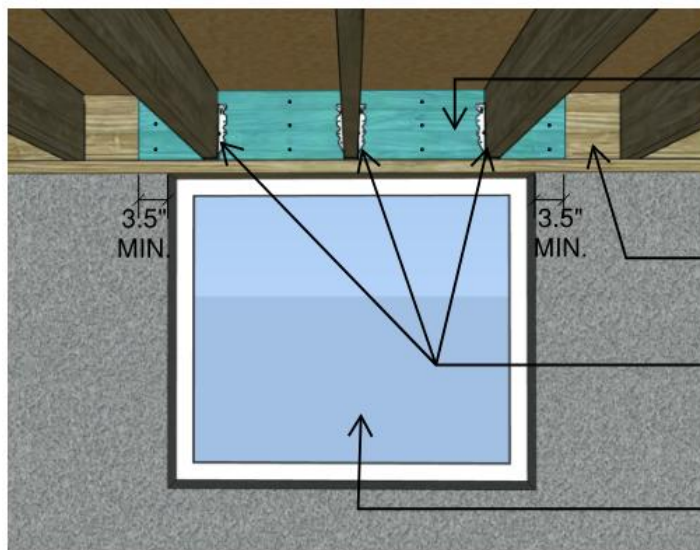
Adding or Enlarging Basement Windows

Adding or enlarging windows is common when adding a second unit to an existing basement. When adding or enlarging a basement window there are some important items to be aware of.

- Proposed windows must be installed to the size specified on the approved permit drawings.
- If located in a foundation wall, ensure the width of the window does not exceed 3'-11" for the foundation cut. Larger widths affect the structural integrity of the foundation wall and may require a Professional Engineer.

When a window is being widened, or a new window is being installed, a lintel is required over the opening in order to support the floor above. If the exterior of the house is brick or masonry an additional steel lintel may also be required. Refer to your approved permit drawings for the lintel locations and sizes.

In addition, the wood lintel supporting the floor shall extend a minimum of 3 ½" beyond the window opening on both sides. If a steel lintel is required for brick or stone veneer, it shall extend a minimum of 6" beyond the window opening on both sides.

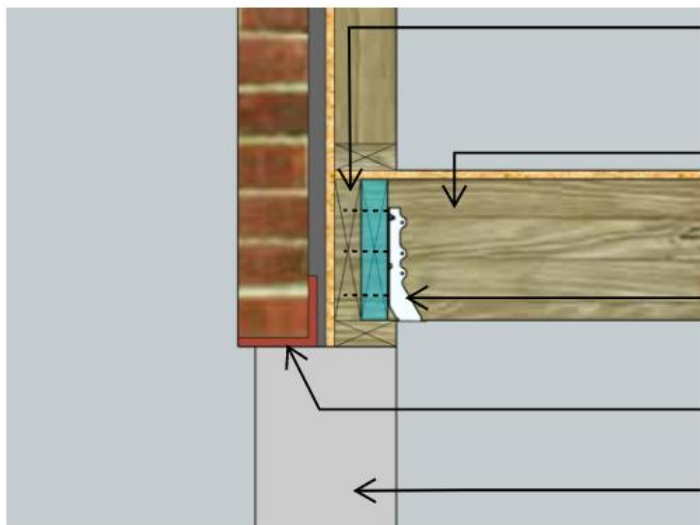


Additional ply to create 2 ply lintel
(additional plies may be required)
Nail the plies together with rows
of nails at 18" on center.

Existing continuous rim board

Existing floor joist cut back and
joist hangers attached to new lintel

Window opening



Existing continuous rim board

Additional ply to create 2 ply lintel
(additional plies may be required)
Nail the plies together with rows
of nails at 18" on center.

Existing floor joist cut back and
joist hangers attached to new lintel

Steel lintel supporting brick
(if applicable)

Window opening





Notching and Drilling of Framing Members (Div. B, 9.23.5.)

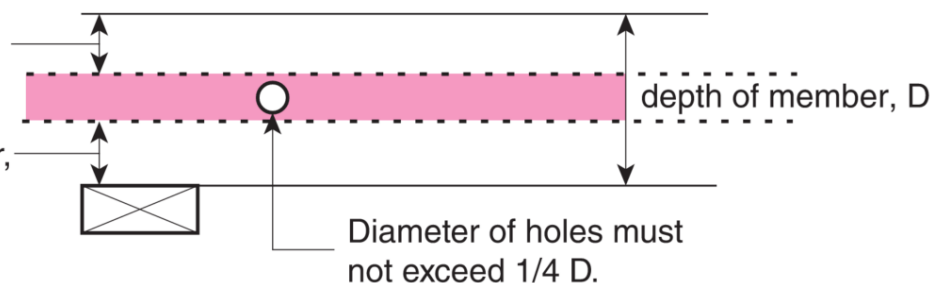
When running new services such as plumbing and electrical, it is common for framing members to be notched or drilled to conceal these services within the floor cavity. However, caution shall be used as the Building Code has limits on how structural members consisting of solid sawn dimensional lumber (i.e. a 2"x10" floor joist) can be notched or drilled in order to not compromise the structural integrity of the framing member.

Where the existing structural framing of the house is not solid sawn dimensional lumber and is a pre-engineered product such as wood i-joists, laminated veneer lumber, etc, the product manufacturers' directions must be followed for the size and location of holes and are generally not permitted to be notched.

Holes Drilled in Roof, Floor or Ceiling Framing (Div. B, Article 9.23.5.1.)

Where holes are to be drilled in solid dimensional lumber (i.e. 2x10 floor joists) the hole shall be not larger than one-quarter the depth of the framing member and shall be located not less than 50 mm from the edges.

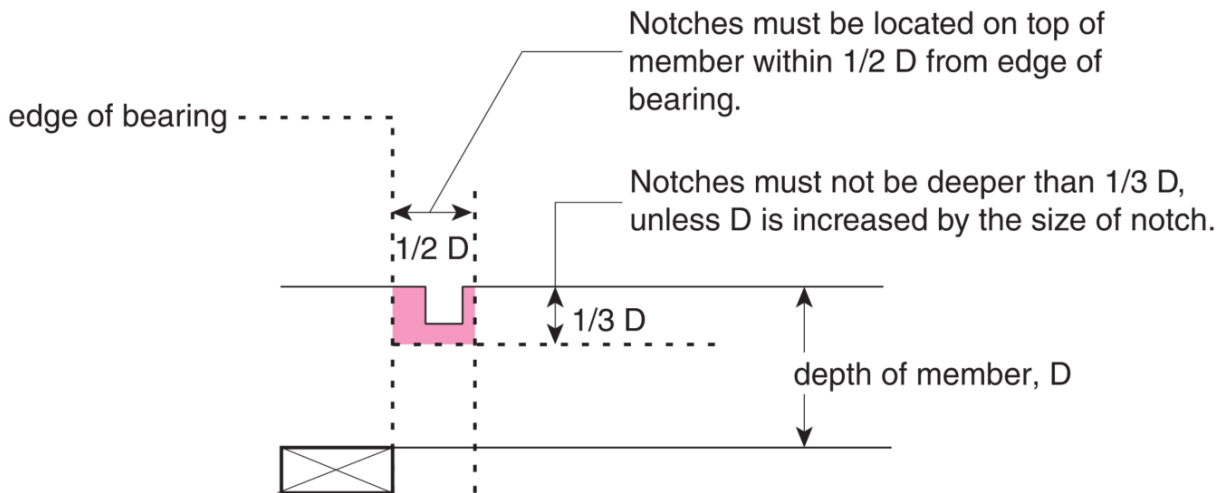
Holes must be located not less than 50 mm (2 in.) from the edges of member, unless the depth of member is increased by size of hole.



Member Size	Maximum Hole Diameter
38 x 89 mm (2 x 4 in.)	not permitted
38 x 140 mm (2 x 6 in.)	35 mm (1 3/8 in.)
38 x 184 mm (2 x 8 in.)	46 mm (1 3/4 in.)
38 x 235 mm (2 x 10 in.)	58 mm (2 1/4 in.)
38 x 286 mm (2 x 10 in.)	71 mm (2 3/4 in.)

Notching of Roof, Floor or Ceiling Framing (Div. B, Article 9.23.5.2.)

Where solid dimensional lumber is notched, the notch shall be located on the top of the member within half the joist depth from the edge of the bearing and not deeper than one-third the joist depth.



Member Size	Maximum Distance from Edge of Bearing	Maximum Depth of Notch
38 x 89 mm (2 x 4 in.)	44 mm (1 3/4 in.)	30 mm (1 1/8 in.)
38 x 140 mm (2 x 6 in.)	70 mm (2 3/4 in.)	46 mm (1 3/4 in.)
38 x 184 mm (2 x 8 in.)	92 mm (3 5/8 in.)	61 mm (2 3/8 in.)
38 x 235 mm (2 x 10 in.)	117 mm (4 5/8 in.)	78 mm (3 in.)
38 x 286 mm (2 x 12 in.)	143 mm (5 5/8 in.)	95 mm (3 3/4 in.)

Notches are NOT permitted on the underside of the framing member.

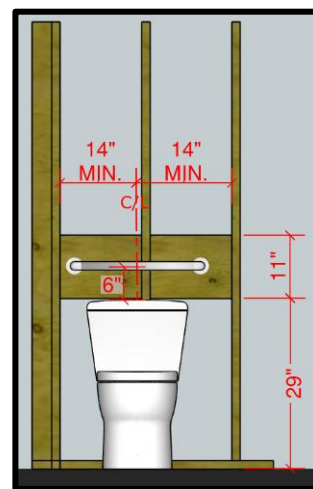
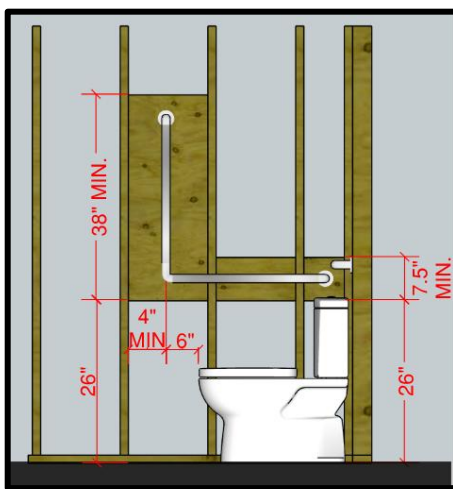


Notch at bottom of a floor joist is **not permitted**

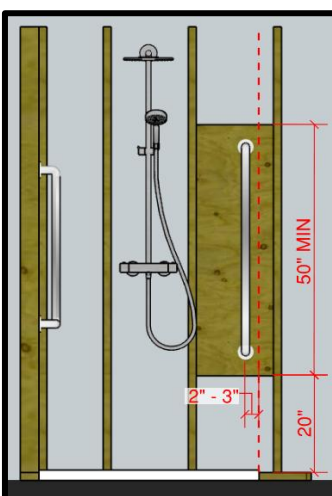
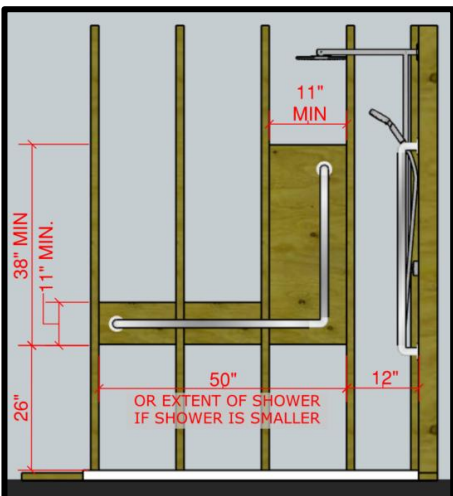
Bathroom Grab Bar Blocking (Div. B, Article 9.5.2.3.)

When adding a second unit to an existing house, if a new bathroom is being constructed for the secondary suite, the Building Code requires the **main** bathroom be provided with stud wall reinforcement to allow for the future installation of grab bars. This stud wall reinforcement is not required for existing bathrooms, or secondary bathrooms. Refer to your approved permit drawings and the stud wall reinforcement details below

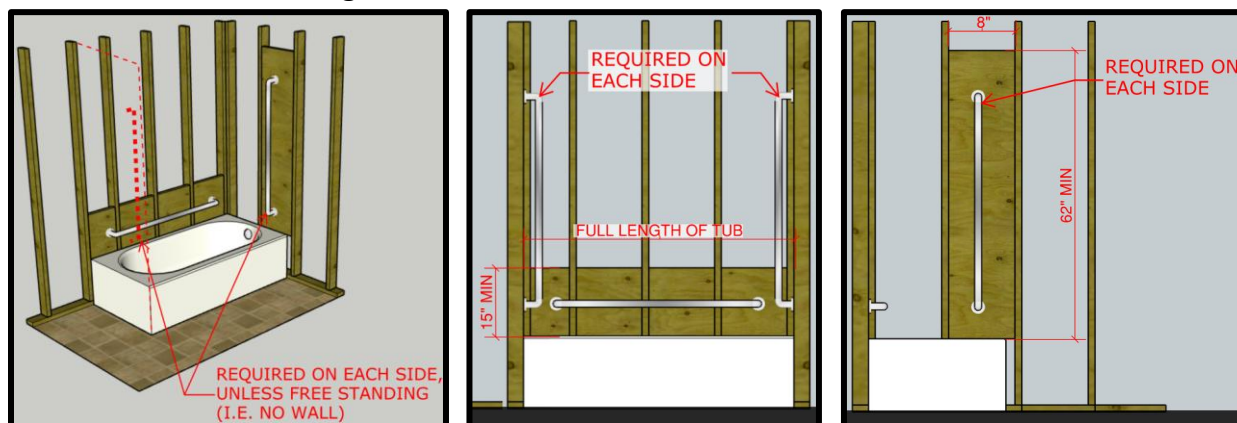
Water Closet Grab Bar Blocking



Shower Grab Bar Blocking



Bathtub Grab Bar Blocking



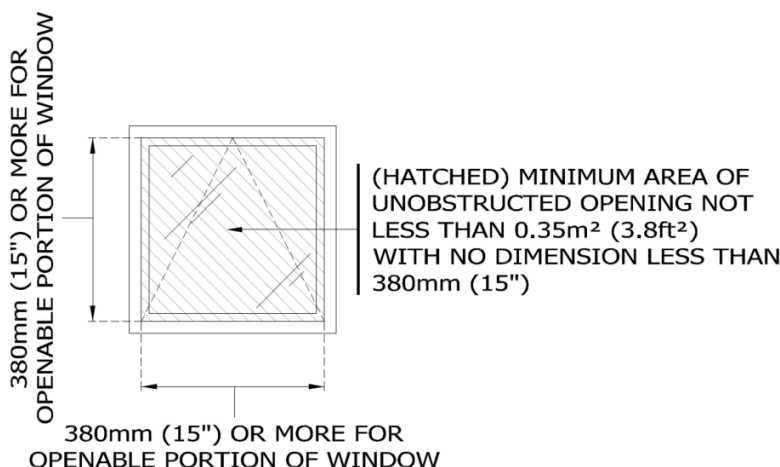
Egress Window VS. Escape Window

The Building Code has specific egress requirements for secondary suites and for floor levels contain bedrooms. Depending on how the building and units in the building are configured either an 'egress window' or a 'means of escape window' is required. These types of windows are not the same and have many different requirements. Please carefully review your approved permit drawings and the details attached in your permit package to determine which is applicable to your project.

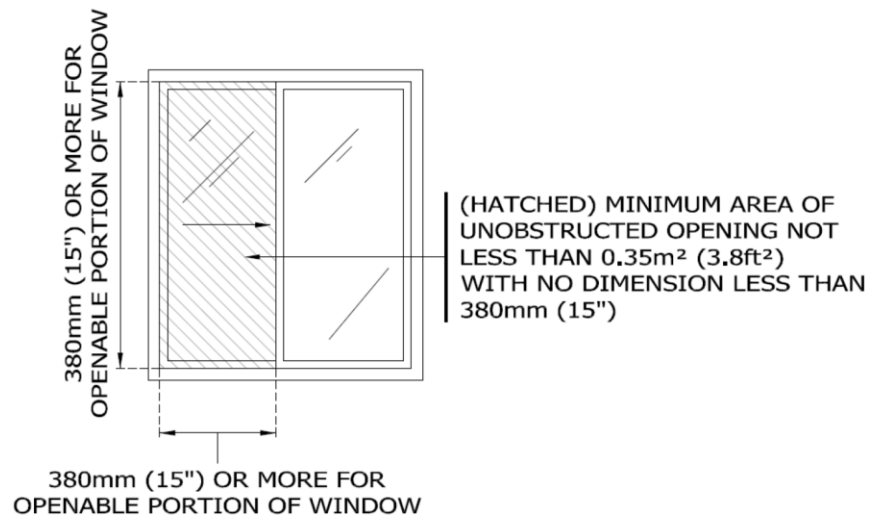
Egress Window (Div. B, Article 9.9.10.1.)

Where your approved building permit specifies that an 'egress window' is required the window shall,

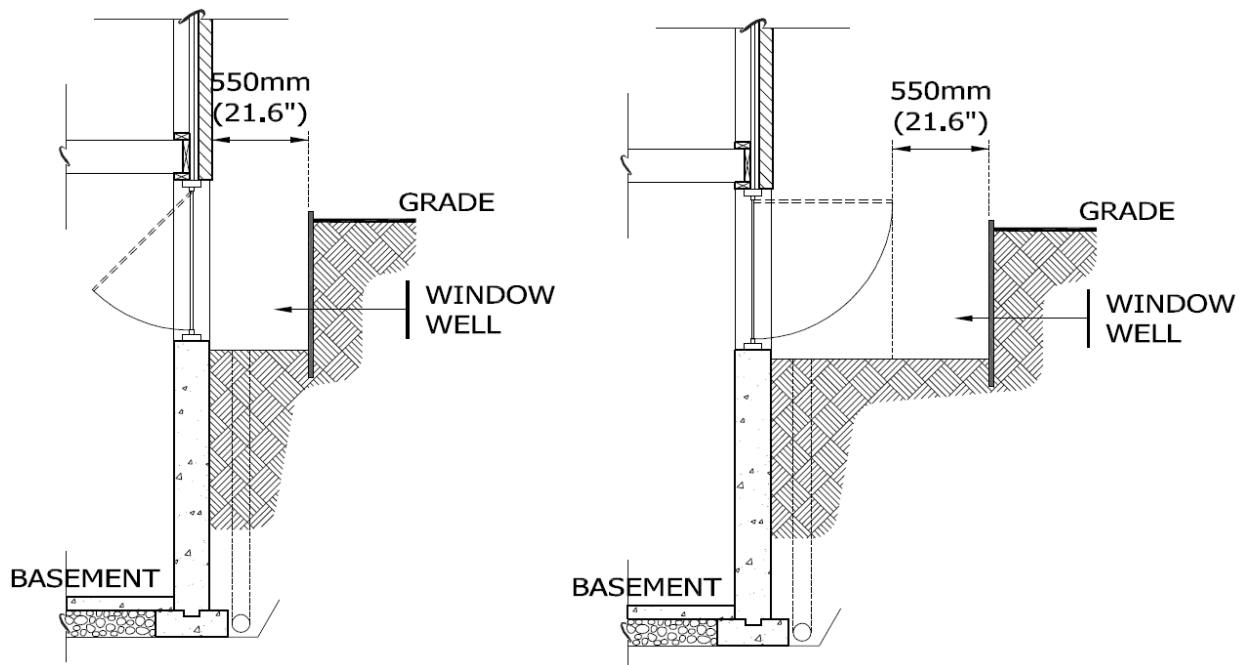
- be openable from the inside without the use of tools
- provide an unobstructed open portion having a minimum 0.35 m^2 (3.8 ft^2) with no dimension less than 380 mm (15").



- When a sliding window is used these dimensions apply to the openable portion of the window



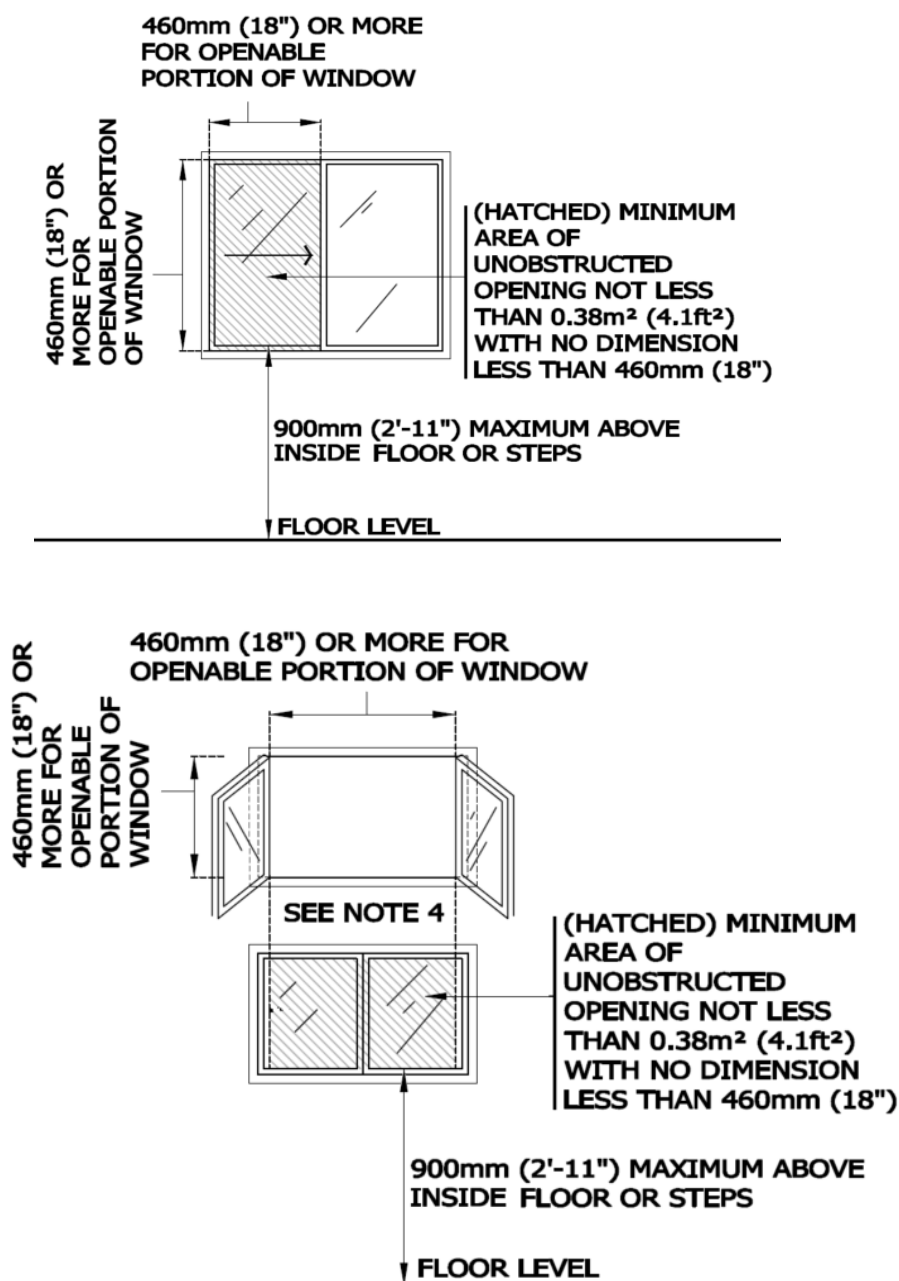
- Unless located in a basement, the window shall have a maximum sill height of 1 000 mm (3'-3") above the floor. However, in a basement it is recommended that the sill of the egress window be no higher than 1.5m above the floor or built-in furniture below the window.
- Where the window opens into a window well, a clearance of not less than 550 mm (21¹¹/₁₆") shall be provided in front of the window.



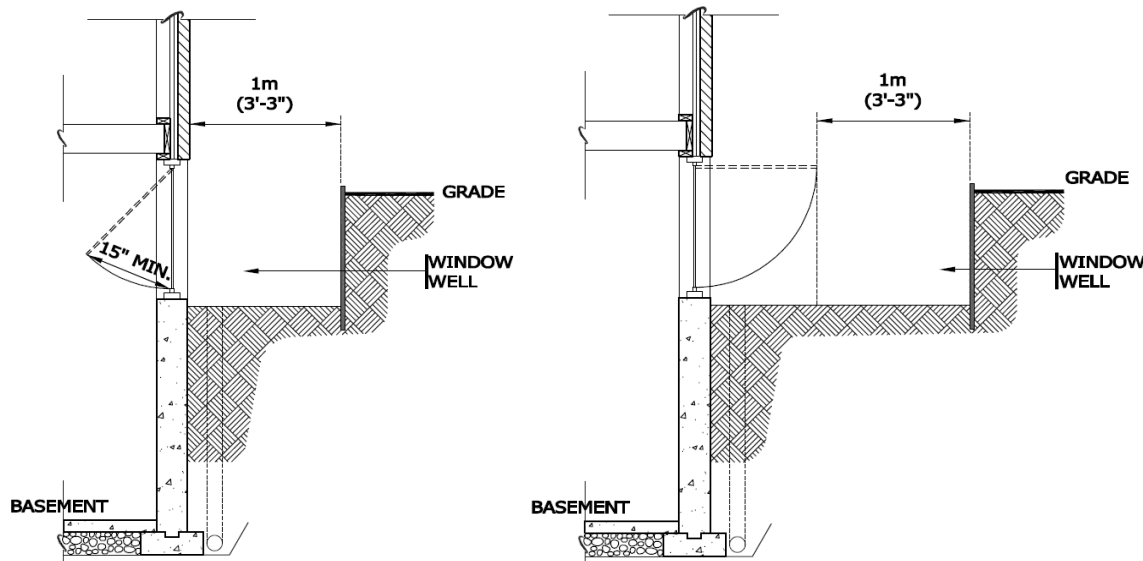
Means of Escape Window (Div. B, Subsection 9.9.9. → Part 11, CA C136(c))

Where your approved building permit specifies that a 'means of escape window' is required the window shall,

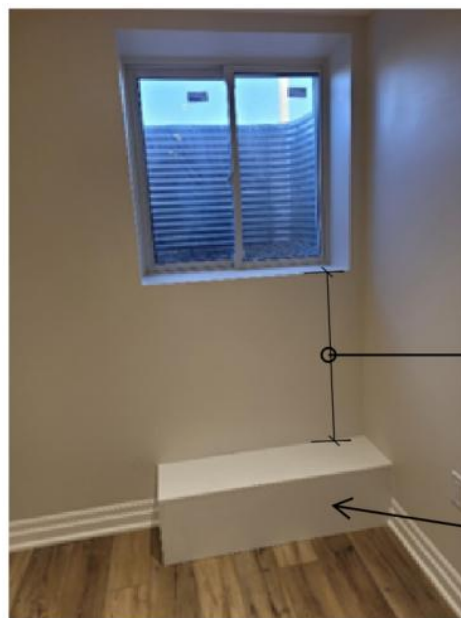
- be openable from the inside without the use of tools
- provide an unobstructed open portion having a minimum 0.38 m^2 (4.1 ft^2) with no dimension less than 460 mm (18").
- Have a sill height that does not exceed 900 mm (2'-11") above the floor or fixed steps (including when located in a basement)



- Where the window opens into a window well, a clearance of not less than 1 000 mm (3'3") shall be provided in front of the window.
- The sill height is not more than 1 000 mm (3'-3") above or below adjacent ground level



A common deficiency when installing a means of escape window is the height from the floor of the basement to the sill of the window (maximum 2'-11"). When the sill is higher than this, stairs or a similar sturdy ledge is required to be installed. Also pay special attention to the window well size required (Note: your window type can affect this as well).



Maximum
900 mm (2'-11")

Fixed stair or similar sturdy
ledge, where sill of window is
greater than 900 mm (2'-11")
above the floor level

One further requirement when a means of escape window is required is that smoke alarms must be interconnected between both units in the house.

Main Entrance Requirements

When adding an additional dwelling to a building, attention should be made to the entrance for the new dwelling unit. Particularly when the entrance is either newly constructed, or an existing doorway that was previously a secondary entrance when the building was a single dwelling. Upgrades may be necessary to meet the requirements for a primary entrance for the second dwelling unit.

Landing Requirements (Div. B, Subsection 9.8.6.)

- A level landing area of at least 860mm (2'-10") x 860mm (2'-10") is required at the main entrance for the secondary dwelling unit.
- If the entrance to the dwelling unit is accessed by a stair, the width of the landing shall be at least as wide as the stair but not less than 860 mm (2'-10").



Vision Panels / Door Viewers (Peep Holes) (Div. B, 9.7.2.1.)

The main entrance to the second dwelling unit is required to be provided with;

- a door viewer (peep hole)
- transparent glazing in the door, or
- a sidelight

Plumbing (Div. B, Section 9.31.)

Your second unit will have to meet plumbing requirements. At minimum you will need:

- A hot and cold water supply
- A sink, bathtub or shower, toilet, or a drainless composting toilet in the bathroom
- A kitchen sink
- Access to laundry facilities, which may be provided in a shared laundry room or a separate laundry area in the second unit

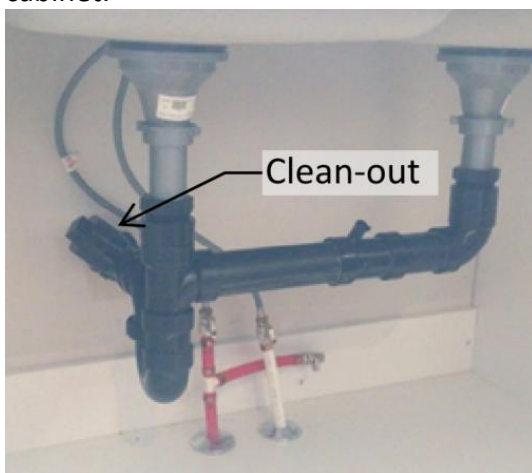
All plumbing work will need to be completed by a qualified plumber. Alternatively, the property owner may complete the plumbing work provided they reside at the property.

Second units must also have their own separate water shut-off valves. This allows plumbing work or repairs to be done in one unit without affecting water flow in the other.

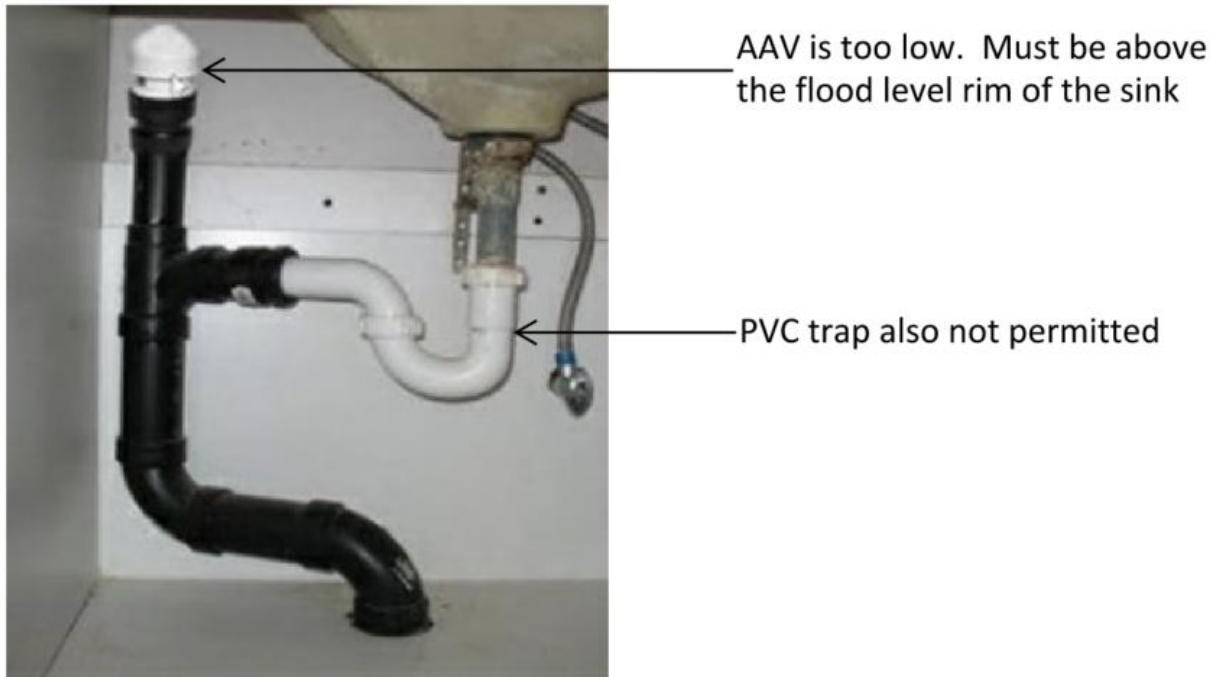
- When adding a second unit to an unfinished basement and all plumbing will be new, the main shut-offs are to be installed to completely isolate the plumbing for each dwelling unit.
- When adding a second unit to a portion of the building that is already completely or partly finished and some or all plumbing is to be added for the second unit, a main shut-off for each unit should be installed, however if this is not possible, review with your building inspector and it may be accepted to install dedicated shut offs on each new fixture.
- Where no new plumbing is required for the second unit, shut offs are not required by Building Code, however are recommended to be installed where possible.

When a new kitchen sink is installed for the second unit;

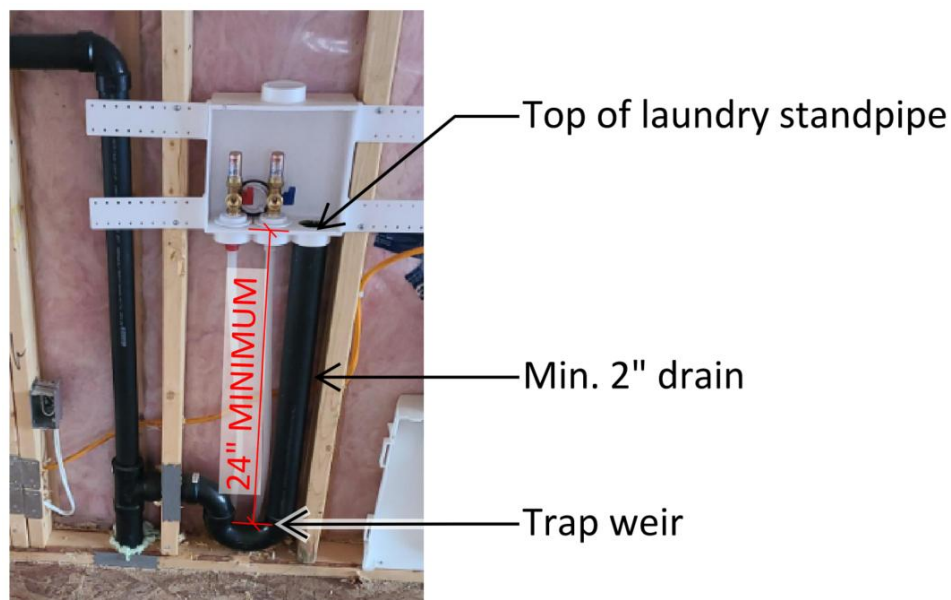
- A horizontal line clean-out is required after the trap and before exiting the cabinet.
- S-Traps are not permitted. The horizontal branch must be connected to a vent prior to dropping after the trap.



Air admittance valves (AAV), also known as cheater vents, are typically not permitted. Prior to installation, the licensed plumber must discuss with the inspector and demonstrate that there is no practical way to tie into a plumbing vent. AAV's require regular maintenance, must draw air from the room (cannot be buried in a wall), and must be installed above the flood level rim of the plumbing fixture they serve (i.e. cannot be below the counter).



Where clothes washers do not drain to a laundry tub, the vertical standpipe must be a minimum of 2' long measured from the trap weir to the top of the standpipe and must stop above the flood level rim of the clothes washer.



HVAC (Div. B, Sections 9.32. and 9.33.)

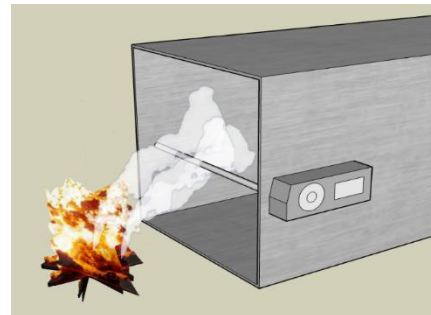
Heating Ventilation and Air Conditioning (HVAC) also needs to be considered when adding a second unit. Heating and ventilation must be provided, and air conditioning is optional. Where the type of heating system is proposed to change during the renovation (i.e. forced air gas to electric baseboard), consult Building Division staff as additional requirements may apply.

To meet the heating and ventilation requirements a supply duct is required in each room except for small closets, or small storage areas, and the furnace room (size dependent). When adding a second unit to a basement, best practice is for the supply air ducts to be near the floor level however may be acceptable in the ceiling, except if the basement is a walk-out basement the supply ducts must be dropped to floor level. All heating supply ducts are to be hard ducted.

At least one cold air return is required for each floor level. The cold air return must be dropped to floor level for basements. Basements are typically cold and installing a low wall return will draw the cold air off the floor. Unlike heating supply ducts return air ducts do not need to be hard ducted and may utilize the wall stud and floor joist cavities as the return air.

Duct-Type Smoke Detector (Div. B, 6.2.4.7.(14) and Part 11, CA C95)

The Building Code allows a house with a second unit to have a single furnace and common system of air ducts for both units. For fire safety, you will have to install a special type of smoke detector in the main supply or return air ducts. When activated, this device turns off the fuel supply and electrical power to the furnace causing it to shut down and preventing the spread of smoke from one unit to the other.



Duct-type smoke detectors must meet a specific performance standard known as UL 268A. To ensure you have the right detector and the installation is done properly, a qualified electrician or HVAC specialist will need to complete the installation. The duct-type smoke detector is not interconnected to the other smoke alarms in the building but is hardwired directly to the electrical panel.

Prior to granting occupancy, we will require the qualified installer to complete an online form / report verifying that: “Upon detection of smoke in the furnace system, the detector will shut off the furnace fuel and power supply”.

Follow the link below to the online form;

<https://form.kitchener.ca/DSD/BUILD/Duct-type-smoke-detector-report>

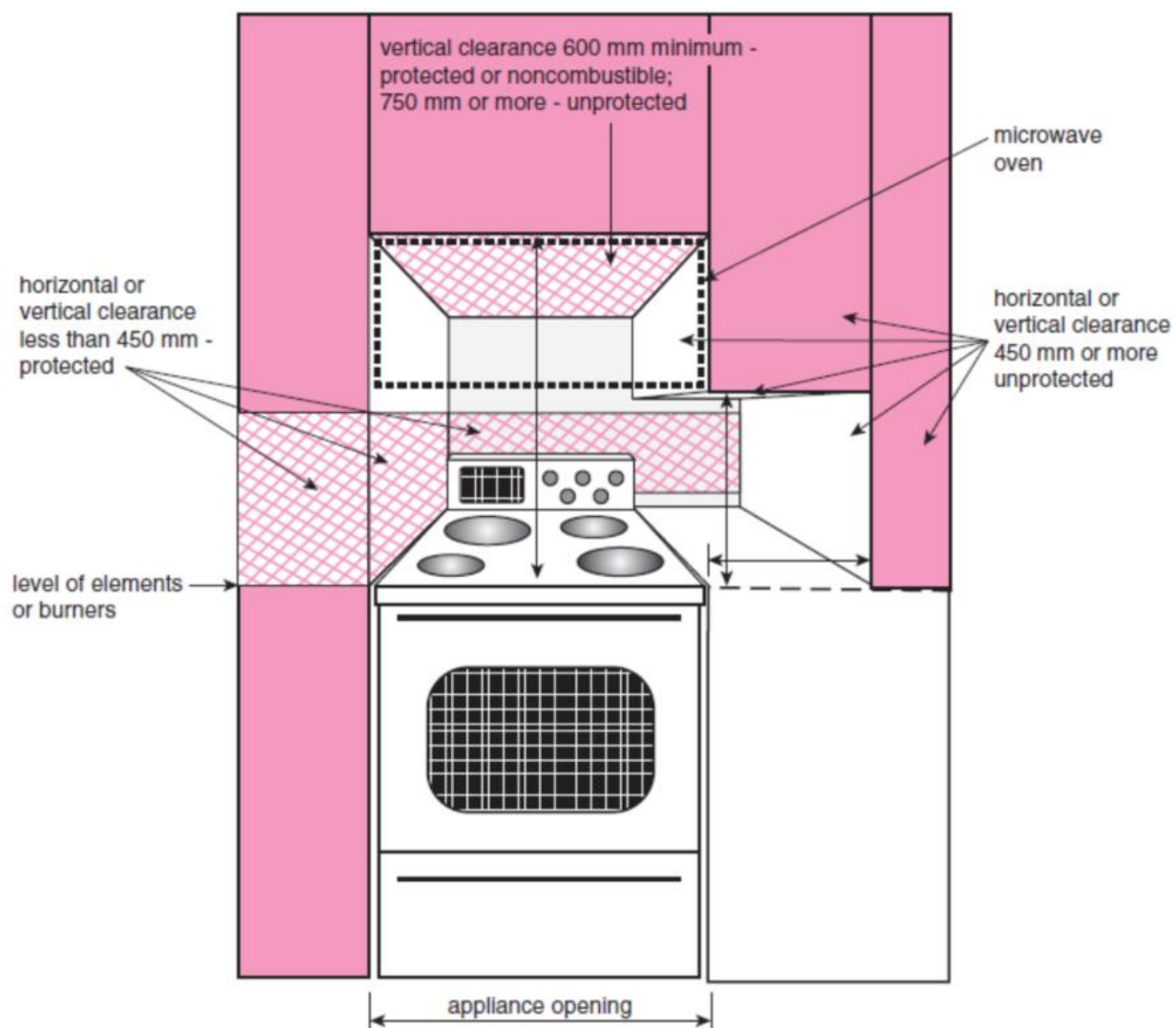
Kitchen Range Hoods (Div. B, Sentence 9.32.3.10.(6) and SubSection 9.10.22.)

An exhaust hood fan is required over the gas, propane, or electric cooktop. Ductwork for the fan shall be noncombustible, corrosion-resistant material, and lead directly to the outdoors without connection to other exhaust fans or ducts.

Re-circulation hood fans with charcoal filters are not generally permitted except in extenuating circumstances. **Please review with your Building Inspector if you feel you must use a re-circulation range hood to ensure it will pass inspection.**

The cooktop also requires minimum clearances to combustible elements, such as framing, finishes and cabinets.

- minimum 600 mm ($23\frac{5}{8}$ ") above the level of the heating elements or burners where a metal range hood is installed, and
- minimum 450 mm ($17\frac{3}{4}$ ") around the heating elements or burners



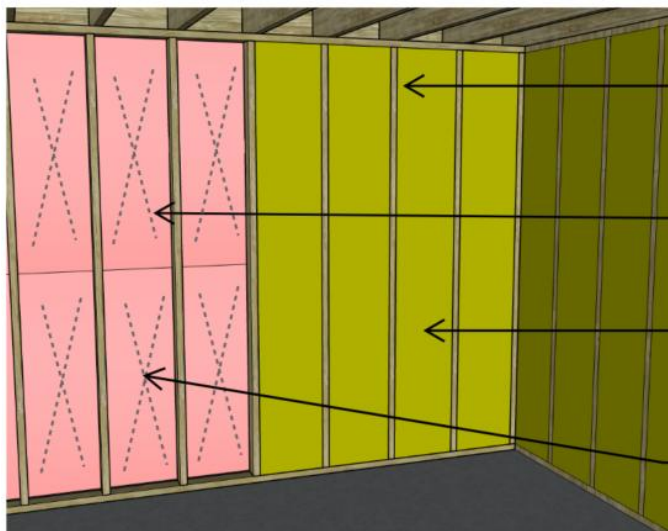
Insulation (Div. B, Section 9.25.)

When adding a second unit to an existing house the exterior walls may already be insulated however sometimes it is desired to either replace or upgrade the existing insulation. When replacing existing insulation, the R value of the new insulation shall meet or exceed the R value of the existing insulation (i.e. R12 can be replaced with R12 or greater).

Some existing foundation walls are insulated with a blanket wrap type of insulation which would be fastened directly to the foundation wall and may be full height or only near to the top of the foundation wall depending on the age of the building. If there is existing blanket wrap insulation which is proposed to remain, and new framing installed in front with additional insulation and vapour barrier is proposed, the vapour barrier on the blanket wrap must be cut to avoid a double vapour barrier which could trap moisture in the wall assembly.



← Blanket type insulation

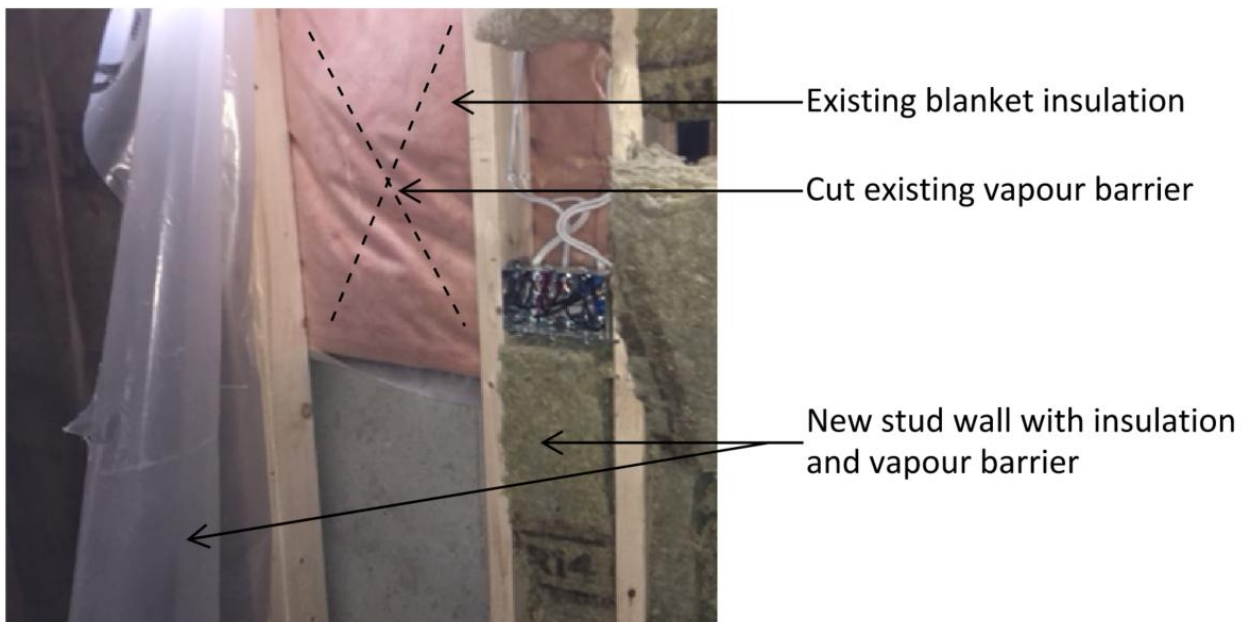
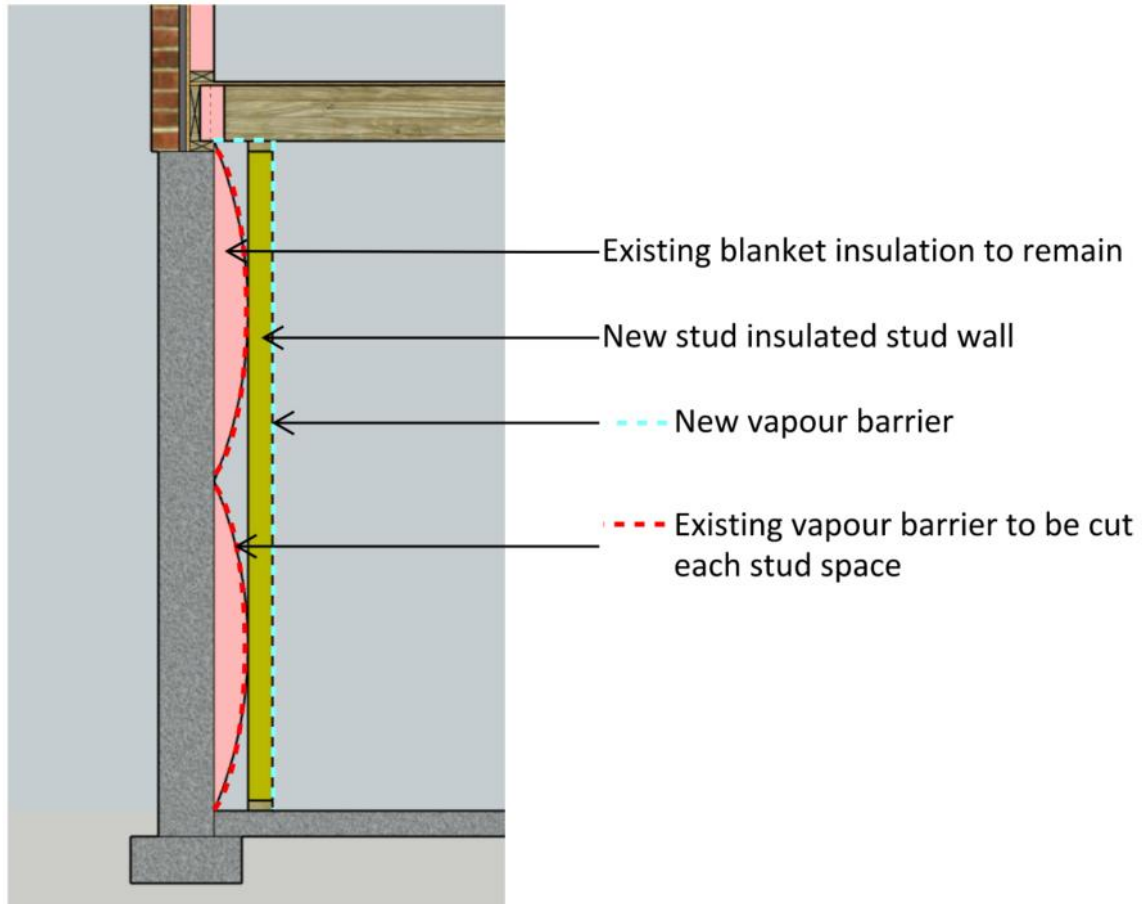


← New stud insulated stud wall in front of existing foundation wall blanket insulation

← Existing blanket insulation (behind new insulated stud wall) to remain

← New vapour barrier over new insulated stud wall

← Existing vapour barrier over blanket insulation (behind new insulated stud wall) to be cut each stud space.



The vapour barrier must extend into the rim space to the underside of the floor sheathing. It does not have to be taped or caulked into the rim. Typically, a staple in each corner is sufficient.



Any existing or proposed foamed plastic insulation, such as rigid insulation boards, or spray foam insulation, must be protected (covered) from adjacent space in the building. Suitable protection coverings include drywall, plywood, or insulation that meets the performance standard CAN/ULC-S124 (if protecting with insulation, review with building inspector prior to installation to ensure the product will be acceptable).

Ready for Success

Now that you have reviewed the common questions and deficiencies for building inspections when adding a secondary suite, this can help you make informed decisions and set you up for successful inspections.

If you have further questions relating to your project, you can reach out to your friendly City of Kitchener Building Division staff directly at;

Phone: 519-741-2312

Email: building@Kitchener.ca