



# Additional Residential Unit (ARU) - Ontario Building Code 2024

## Minimum Requirements for basement residential units

### Before you start:

This document outlines basic Ontario Building Code (OBC) requirements for adding a basement residential unit in existing residential dwellings. Refer to the OBC for more information or contact the Township of Zorra Building Department. Homeowners are encouraged to consult with design professionals such as licensed architects, professional engineers or BCIN qualified designers to ensure their project follows all applicable laws and regulations.

First and foremost, determining the age of your building may lead to more lenient requirements under Part 11 (renovations) of the OBC. To use Part 11 of the OBC, your building shall be at least five years of age or older.

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# Design layout

## Minimum ceiling heights

*(Division B 9.5.3.)*

- Minimum 1.95m in basement secondary suite.
- Minimum 1.85m under beams and ducting in basement secondary suite.

## Minimum areas for rooms and spaces

*(Division B 9.5.3A-E)*

Location	Minimum Sizes
Combined living, dining, kitchen & bedroom spaces	Minimum 13.5m <sup>2</sup> where the combined space contains sleeping accommodation for not more than 2 persons.
Kitchen	Minimum 4.2m <sup>2</sup> , except where basement unit only contains a single bedroom, the minimum area may be reduced to 3.7m <sup>2</sup> .
Living room	Minimum 13.5m <sup>2</sup> , except where the basement unit only contains a single bedroom, the minimum area in combination with other spaces may be reduced to 11m <sup>2</sup> .
Dining room	Minimum 7m <sup>2</sup> not in combination with other spaces. Minimum 3.25m <sup>2</sup> in combination with other spaces.
Main bedroom	Minimum 9.8m <sup>2</sup> where closet is not provided or minimum 8.8m <sup>2</sup> where closet is provided.
Other bedrooms	Minimum 7m <sup>2</sup> where closet is not provided or minimum 6m <sup>2</sup> where closet is provided.
Combination bedrooms	Minimum 4.2m <sup>2</sup> in combination with other spaces.

## Minimum window areas for natural light with electric lighting

*(Division B Tables 9.7.2.3. & 11.5.1.1.-C C110)*

Location	Building less than 5 years since occupancy	Building more than 5 years since occupancy
Laundry, recreation & unfinished rooms	Windows not required	Windows not required
Bathroom	Windows not required	Windows not required
Kitchen	Windows not required	Windows not required
Living & dining rooms	Minimum 10% area served	Minimum 5% area served
Bedrooms & other finished rooms not mentioned above	Minimum 5% area served	Minimum 2.5% area served

## Minimum door sizes

*(Division B Table 9.5.5.1.)*

At entrance to	Minimum width	Minimum height
Secondary suite or vestibule	810mm	1980mm
Stairs to floor level that contains finished space	810mm	1980mm
Utility rooms	810mm	1980mm
Bedrooms	760mm	1980mm
Closets & bathrooms	610mm	1980mm
Other rooms not mentioned above	760mm	1980mm

# Egress/Exiting

## Egress from basement secondary suite (Division B 9.9.9)

Condition	
Dedicated exit (Internal stairs to Exterior door at grade)	Single exit permitted. Internal stairs forming part of the basement secondary suite must be separated from the upper dwelling unit with continuous smoke-tight barrier or fire separation. Refer to <b>Fire Protection</b> .
Dedicated exit (Exterior walk-up stair)	Single exit permitted. Refer to <b>fire protection of exits</b> .
Dedicated exit (Basement walk-out)	Single exit permitted. Keyed mechanism must be provided for any existing sliding doors serving as exit for basement accessory suite so that door is capable of being locked from both inside & outside.
Common/shared interior egress facility/corridor	Single exit permitted. Common/shared internal egress facility/corridor must be separated from upper dwelling unit with continuous smoke-tight barrier or fire separation. Refer to <b>Fire Protection</b> .

## Fire protection of exits (Division B 9.9.4.4.)

Condition	
Unenclosed exterior exit stair	Where an unenclosed exterior exit stair with more than 3 risers provides the only means of egress for the basement secondary suite, openings from the upper dwelling unit within 3m horizontally and less than 5m vertically above the exit stair shall be protected with wired glass in fixed steel frames or glass block to prevent risk of fire compromising the exit stair.

### Acceptable solution in lieu of above requirement

Building less than 5 years since occupancy	Building more than 5 years since occupancy
<p>Additional means of egress to be provided through an '<b>escape window</b>' remotely located away from the unenclosed exit stair in the basement unit where:</p> <ul style="list-style-type: none"> <li>• Its sill height is not more than 1m above or below grade.</li> <li>• It's openable from the inside without tools.</li> <li>• It has a minimum unobstructed openable portion of 0.38m<sup>2</sup> with no dimensions less than 460mm.</li> <li>• Its interior sill height is not more than 900mm above finished floor or fixed steps.</li> <li>• Minimum clearance of not less than 1000mm is provided in front of the window on the exterior side</li> <li>• Smoke alarms throughout the building are interconnected &amp; comply with OBC Div. B 9.10.19.</li> </ul> <p>Min. 45 minutes fire separation between dwelling units. Refer to 'Standard Details' available online at <a href="http://www.oshawa.ca/living-here/building-andrenovating/building-permit-documents/">www.oshawa.ca/living-here/building-andrenovating/building-permit-documents/</a></p>	<p>Additional means of egress to be provided through an '<b>escape window</b>' remotely located away from the unenclosed exit stair in the basement unit where:</p> <ul style="list-style-type: none"> <li>• Its sill height is not more than 1m above or below grade.</li> <li>• It's openable from the inside without tools.</li> <li>• It has a minimum unobstructed openable portion of 0.38m<sup>2</sup> with no dimensions less than 460mm.</li> <li>• Its interior sill height is not more than 900mm above finished floor or fixed steps.</li> <li>• Minimum clearance of not less than 1000mm is provided in front of the window on the exterior side</li> <li>• Smoke alarms throughout the building are interconnected &amp; comply with OBC Div. B 9.10.19.</li> </ul>

## Egress from bedrooms (Division B 9.9.10.1.)

Except where a door on basement level provides direct access to the exterior in conditions such as an exterior walk-up stair or a basement walk-out, an **'egress window'** shall be provided in the basement secondary suite that:

- Can be opened from the inside without tools.
- Provides minimum unobstructed openable portion of 0.35m<sup>2</sup> with no dimensions less than 380mm.
- Maintains the required opening described in the above sentence without need for additional support.

Where the 'egress window' opens into a window well, minimum 550mm clearance shall be provided in front of the window.

Please note that an **'egress window'** is not the same as an **'escape window'**. Verify which is applicable in the context of code requirements & incorporate into design as needed.

## Required landings (Division B 9.8.6.2.)

Condition	
Doors located directly between dwelling units & common/shared interior egress facility/corridor	Where a door between dwelling units and common spaces is located at the top or bottom of a stair, a landing is required between the door and the first step. These doors are not considered 'within' either unit. They form part of the required continuous smoke-tight barrier or fire separation and are required to be fire-rated as well as equipped with a self-closing device. The requirements of the self-closing device may impose a risk of falling as door action will push occupants into the stair. Refer to 'Standard Details' available online at <a href="http://www.oshawa.ca/living-here/building-andrenovating/building-permit-documents/">www.oshawa.ca/living-here/building-andrenovating/building-permit-documents/</a>

### Acceptable solution in lieu of above requirement

Building less than 5 years since occupancy	Building more than 5 years since occupancy
Not applicable.	<p>A landing may be omitted at the top of the stair if:</p> <ul style="list-style-type: none"> <li>• Stair does not constitute the required exit for the upper dwelling unit.</li> <li>• Door swings away from the stair entering the basement.</li> <li>• Stair from door to landing contain no more than 3 risers.</li> <li>• Emergency lighting as per OBC Division B 9.9.12.3. is provided in the stairway.</li> </ul>

# Fire Protection

## Separation of residential suites (Division B 9.10.9.16. and Table 11.5.1.1.-C C156)

Except where the building with a basement secondary suite is sprinklered, separation between dwelling units as well as dwelling units & common areas shall be provided in the form of a continuous smoke-tight Barrier or a fire separation. Please note that each approach must be taken for all building components and not interchangeable with one another.

Refer to **separation of public corridors** for scenarios containing any common/shared interior egress facilities/corridors.

Where it's impractical to fully provide horizontal fire separation or continuous smoke-tight barrier above the existing furnace room, a flow-through sprinkler system shall be provided in the furnace room, and any exposed joist cavities above shall be packed with Rockwool® insulation or equivalent over the furnace room.

Building component	Building less than 5 years since occupancy	Building more than 5 years since occupancy
Wall assembly	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on both sides. <i>OR</i> Vertical fire separation having a fireresistance rating of no less than <b>30 minutes</b> .	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on both sides. <i>OR</i> Vertical fire separation having a fireresistance rating of no less than <b>30 minutes</b> .
Floor assembly	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on the underside of floorceiling framing. <i>OR</i> Horizontal fire separation having a fire-resistance rating of no less than <b>30 minutes</b> . Please note that regular gypsum board is not accepted as having any fire-resistance rating.	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on the underside of floor-ceiling framing. <i>OR</i> Horizontal fire separation having a fireresistance rating of no less than <b>30 minutes</b> . Please note that regular gypsum board is not accepted as having any fire-resistance rating.
Stairway between dwelling units	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on the underside of stair framing. <i>OR</i> 1 layer of 15.9mm type 'X' gypsum board as membrane fire separation.	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on the underside of stair framing. <i>OR</i> 1 layer of 15.9mm type 'X' gypsum board as membrane fire separation.

**Separation of public corridors**  
(Division B 9.0.9.17. and Table 11.5.1.1.-C C156)

<b>Building component</b>	<b>Building less than 5 years since occupancy</b>	<b>Building more than 5 years since occupancy</b>
Wall assembly	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on both sides. <i>OR</i> Vertical fire separation having a fireresistance rating of no less than <b>30 minutes</b> .	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on both sides. <i>OR</i> Vertical fire separation having a fireresistance rating of no less than <b>30 minutes</b> .
Floor assembly	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on the underside of floorceiling framing. <i>OR</i> Horizontal fire separation having a fire-resistance rating of no less than <b>30 minutes</b> . Please note that regular gypsum board is not accepted as having any fire-resistance rating.	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on the underside of floorceiling framing. <i>OR</i> Horizontal fire separation having a fireresistance rating of no less than <b>30 minutes</b> . Please note that regular gypsum board is not accepted as having any fire-resistance rating.
Stairway between public corridor & remainder of the building	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on the underside of stair framing. <i>OR</i> 1 layer of 15.9mm type 'X' gypsum board as membrane fire separation.	Continuous smoke-tight barrier of not less than 15.9mm type 'X' gypsum board on the underside of stair framing. <i>OR</i> 1 layer of 15.9mm type 'X' gypsum board as membrane fire separation.

**Protection of loadbearing elements**  
(Division 9.10.8.3.)

Light-frame walls, columns, arches and beams as well as loadbearing steel elements that support floors between dwelling units including their common spaces shall be protected by no less than 15.9mm type 'X' gypsum board or be constructed with a fire-resistance rating of no less than that required for the supported assembly.

**Fire-protection ratings for closures**  
(Division B Table 9.10.3.1.)

<b>Type of separation</b>	<b>Required fire-resistance rating of fire separation</b>	<b>Required fire-protection rating of closure</b>
Continuous smoke-tight barrier	Not applicable	While a rating is not applicable, doors in smoke-tight barrier shall be solidcore, wood doors at least 45mm in thickness and shall be equipped with a self-closing device.
Fire Separation	30 minutes or 45 minutes	<b>20 minutes</b>
	1 hour	<b>45 minutes</b>

**Required smoke alarms**  
(Division B 9.10.19.1. and 9.10.19.3.)

Smoke alarms shall be installed:

- On each storey including basement.
- In each sleeping room.
- In hallways or areas between sleeping rooms & remainder of the storey.
- In each common/shared area.

## Interconnection of smoke alarms

*(Division B 9.10.19.5.)*

Smoke Alarms in a building with a basement secondary suite shall be wirelessly interconnected or interconnected by hard-wiring so that activation of any one smoke alarm will cause all smoke alarms within the building to sound.

## Heating/Ventilation

### Return-air system

*(Division B 9.33.6.13.(7.1) and Table 11.5.1.1.-C C205)*

Building system	Building less than 5 years since occupancy	Building more than 5 years since occupancy
Heating, ventilation & air conditioning	A separate HVAC system is required for the basement secondary suite as return-air from one dwelling unit shall not be recirculated to any other dwelling unit.	Existing HVAC system may be altered to serve up to 4 dwelling units, provided a duct-type smoke alarm is installed in the existing furnace supply/return air duct system which would turn off fuel-supply and electrical power to the heating system upon activation.

### Required ventilation

*(Division B 9.32.2., 9.32.3. and Table 11.5.1.1.-C C199)*

Type of required ventilation	Building less than 5 years since occupancy	Building more than 5 years since occupancy
Non-heating season & heating season ventilation	Heating season ventilation shall be provided by a mechanical ventilation system complying with: <ul style="list-style-type: none"> <li>CAN/CSA-F326-M, 'Residential Mechanical Ventilation Systems'.</li> <li>OBC Div. B 9.32.3. for dwelling units with 5 or fewer bedrooms.</li> <li>OBC Part 6.</li> </ul>	Natural ventilation may be applicable. OR Heating season ventilation shall be provided by a mechanical ventilation system complying with: <ul style="list-style-type: none"> <li>CAN/CSA-F326-M, 'Residential Mechanical Ventilation Systems'.</li> <li>OBC Div. B 9.32.3. for dwelling units with 5 or fewer bedrooms.</li> <li>OBC Part 6.</li> </ul>

### Heating season mechanical ventilation

*(Division B 9.32.3.)*

Mechanical ventilation systems under OBC Div. B 9.32.3. shall incorporate the following components:

- A principal ventilation system complying with 9.32.3.3.
- Supplemental exhaust fans complying with 9.32.3.7.
- Protection against depressurization as per 9.32.3.8.

Where the existing mechanical ventilation system is altered to serve more than 5 bedrooms in a building that has been in existence for at least 5 years with a basement secondary suite, a **Residential Mechanical Ventilation Design Summary** or **Residential Mechanical Ventilation Record** form shall be provided detailing the Principal Ventilation System design option, the required exhaust capacity & equipment specifications.

## Location of carbon monoxide alarms (Division B 9.32.3.9A.)

Where the building contains a fuel-burning appliance or a storage garage, carbon monoxide alarms shall be provided:

- Adjacent to each sleeping room in the suite.
- On each storey in the suite.
- In each sleeping room that:
  - o Contains a fuel-burning appliance.
  - o Shares a common wall or floor or ceiling assembly with:
- Furnace room.
- Storage Garage.
- Attic or crawl space to which the storage garage is also adjacent.
- In public corridors where the corridor is served by a forced-air fuel-burning appliance.

## Plumbing

### Required plumbing facilities (Division B 9.31.4.)

Required fixtures in dwelling units shall include:

- Kitchen sink.
- Lavatory.
- Bathtub or shower.
- Water closet.
- Access to laundry facilities.

### Control and shut-off valves (Division B 7.6.1.3.(5))

Shut-off Valve shall be installed where water supply enters each dwelling unit so that, when the water supply to one dwelling unit is shut off, the water supply to the other unit & the remainder of the building is not interrupted.

## Sound transmission

### Protection from airborne noise (Division B 9.11.1.1. and Table 11.5.1.1.-C C181)

	<b>Building less than 5 Years since occupancy</b>	<b>Building more than 5 years since occupancy</b>
Required protection	Dwelling units shall be separated from each other and all common areas by separating assembly that provides a Sound Transmission Class (STC) rating no less than 43.	Although no requirement is applicable, homeowners are highly encouraged to provide some measure of acoustic protection to improve quality of living. Refer to 'Standard Details' available online at <a href="http://www.oshawa.ca/livinghere/building-andrenovating/building-permitdocuments/">www.oshawa.ca/livinghere/building-andrenovating/building-permitdocuments/</a>

For more information regarding applicable building code requirements for adding a basement apartment (secondary suite), please feel free to reach out to the Township of Zorra Building Department Monday through Friday between 8:00am to 5:00pm at:

Township of Zorra  
163 Brock Street  
Thamesford  
Phone: 519-485-2490