Building Division
Planning and Economic Development
300 Dufferin Avenue 2nd floor
London, ON N6A 4L9
Telephone: 519.661.4555
Website: london.ca

Application of Part 11 for Additional Residential Units

Part 11 of the Ontario Building Code specifies Compensating Construction and Compliance Alternatives that can be used as substitutes for Part 9 requirements.

Where a house is less than 5 years old, OBC 9.40 allows you to use the Compliance Alternatives.

Clarification of 15 Minute Fire Separation

For houses greater than 5 years OR less than 5 years and the original building permit is closed

- Compliance alternative allows for the reduction of the horizontal fire resistance rating to 15 minutes. This is for houses greater than 5 years old.
- SB-2 section 6.2 references the HUD archaic fire test method. And section 6.3 states this information can be applied to new construction.
- 4.1 (b) in the ministry guideline states that 15-minute fire resistance rating can be achieved by 1 layer of regular ½" drywall.

Egress Options

In a house, three options for egress from a secondary dwelling unit are acceptable as per Compliance Alternative C136 in Table 11.5.1.1.C. of the Ontario Building Code:

Option A – an exit door, including a sliding door, that opens directly to the exterior that has direct access to ground level.

Option B – an exit door that is accessible to both dwelling units (the exit is not through the other dwelling units or service room). Note: an egress window is required to be provided in the second dwelling unit that has an unobstructed open portion of 0.35m^2 with no dimension less than 380mm.

Option C – egress from the secondary dwelling unit leads through the other dwelling unit. Note: a secondary means of escape is required that meets the requirements of Compliance Alternative C136(c), C136(c)(i) and C136(c)(ii) or the building is sprinklered, C136(c)(iii).

Building Division
Planning and Economic Development
300 Dufferin Avenue 2nd floor
London, ON N6A 4L9
Telephone: 519.661.4555
Website: london.ca

Additional Requirements

- An Electrical Safety Authority (ESA) permit is required when electrical work is being completed.
- A landing is required at the principal entrance to the secondary dwelling if the distance from the door sill to grade is over 200mm.
- Emergency lighting is required to be provided in a shared egress when the exit is accessible to both units.
- All penetrations through fire separations are required to be fire stopped with an approved fire stop device (material to meet CAN/ULC S115 testing) OR drywall to be “tight fit” around penetration.
- A maximum 5” diameter duct is allowable to penetrate the ceiling drywall. If over 5”, a damper or lined floor joist space with drywall is required. Plumbing penetrations 3” or greater require fire stop collar.
- Foam insulation to be protected as per OBC 9.10.17.10.
- Any doors between units must have a minimum 20-minute fire protection rating with a self-closing device.
- Each unit shall have access to common laundry facilities or have connections within each unit for the connection of laundry appliances.

Building Division
Planning and Economic Development
300 Dufferin Avenue 2nd floor
London, ON N6A 4L9
Telephone: 519.661.4555
Website: london.ca

Building Design Requirements

REQUIREMENTS	BUILDING CONDITION	
	A Less than 5 years and original house permit has been closed	**B** Greater than 5 years or more
FLOOR FIRE SEPARATION (continuous)		
Permitted Floor Fire Resistance Rating (FRR)	30 minutes – for all common spaces AND when interconnected smoke alarms are not provided between both suites.	
	15 minutes – when interconnected smoke alarms are provided between both suites.	
Permitted Floor Sound Rating (STC)	Not required	
	*Better building practice would have FRR of 45 minutes, STC rating of 51	
WALL FIRE SEPARATION (continuous)		
Permitted Wall Fire Resistance Rating (FRR)	30 minutes	
Permitted Door Fire Protection Rating (FPR) (Note: door requires a self-closing device)	20 minutes	
Permitted Wall Sound Rating (STC)	Not required	
	*Better building practice would have FRR of 45 minutes, STC rating of 51	
SUPPORTING STRUCTURE		
Permitted Fire Resistance Rating (FRR) for load bearing wall, exterior walls, beams, and columns	Same as Floor FRR	
HVAC SYSTEMS		
Duct type Smoke Detector	Must be installed in return air duct system and will completely turn off fuel and electrical supply to the heating system upon activation if existing furnace serves both dwelling units.	

Building Division
Planning and Economic Development
300 Dufferin Avenue 2nd floor
London, ON N6A 4L9
Telephone: 519.661.4555
Website: london.ca

SMOKE & CARBON MONOXIDE ALARMS (general requirements only, additional requirements may apply)	
Interconnected between dwelling units	May be required based on Floor FRR (see above)
Required locations and general requirements	Smoke alarms are required on every floor level and in every bedroom and common areas and shared means of egress. All smoke alarms within a dwelling unit shall be interconnected and have a visual signaling component (strobe light). Carbon Monoxide alarms to be installed in hallways serving a bedroom.

Fire Separations in Furnace Rooms

Due to the difficulty of installing a continuous fire separation on the ceiling of furnace rooms serving two dwelling units, Table 11.4.3.4.A. of the Ontario Building Code allows the fire resistance rating to be waived where the spaces are sprinklered.

Where a continuous horizontal fire separation is not achievable, adding sprinkler heads in the furnace room is acceptable. The fire resistance rating of the vertical separation around the furnace room can be waived if the furnace room is sprinklered. The door to room does not need rating in this scenario, but a door closure is still required.

A minimum number of sprinkler heads are to be installed to achieve full coverage in the furnace room when a continuous fire separation cannot be achieved due to obstructions. All unprotected walls in furnace room are to be bathed. Sprinkler system piping materials shall be copper (Type L) or cross-linked polyethylene pipe fittings (PEX) certified to CAN/CSA-B137.5). Listed residential sprinklers shall be used (manufacturer spec. sheets must be retained on-site).

Calculating Window Area:

Window area required as per the Building Specific Design Requirements must be calculated by taking the rough opening size of the window and subtracting any non-glazing components. Accurate area calculations or manufacturer specifications must be provided with your building permit applications.

Building Division
Planning and Economic Development
300 Dufferin Avenue 2nd floor
London, ON N6A 4L9
Telephone: 519.661.4555
Website: london.ca

Building Design Requirements

MINIMUM WINDOW AREA		
Living and Dining Rooms	10% of area served	5% of area served
Bedrooms and other finished rooms (except kitchens and washrooms with electrical lighting)	5% of area served	2.5% of area served
CEILING HEIGHT (minimum)		
All Rooms	6'-11" over entire floor 6'-5" under beams/ducts	6'-5" over all required room areas and any locations normally used as a means of egress
Above Stairs	5'-11"	5'-11"
DOOR SIZES (minimum)	**Minimum Width**	**Minimum Height**
Dwelling Unit Entrance or Utility Room	32"	72 ½" as per property standing by-law
Bedroom of Room not mentioned elsewhere	30"	
Bathroom, and Walk-in Closets	24"	

ROOM SIZES – Separate Spaces	**Minimum area** (ft^2)	**ROOM SIZES - Combined**	**Minimum area** (ft^2)
Living Room	145	Living Room (>1 Bedroom)	145
Dining Room	75	Living Room (1 Bedroom)	118
Kitchen (>1 Bedroom)	45	Dining Room	35
Kitchen (1 Bedroom only)	40	Kitchen (>1 Bedroom)	45
Master Bedroom (with closet)	95	Kitchen (1 Bedroom)	40
Master Bedroom (without closet)	105	Bedrooms	45
Other Bedroom (with closet)	65		
Other Bedroom (without closet)	75	**ROOM SIZES - Bachelor**	**Minimum area** (ft^2)
Bathroom	Sufficient space for fixtures	Living, Dining, Kitchen, and Bedroom	145

Building Division
Planning and Economic Development
300 Dufferin Avenue 2nd floor
London, ON N6A 4L9
Telephone: 519.661.4555
Website: london.ca

Plumbing Design Requirements

- Waterlines for each suite must be kept independent and be valved.

- Sewer for detached ARUs may connect to the 4” building drain of the main dwelling, or separately to the building sewer outside of the main dwelling.

- Backwater valves may not be installed on shared building sewers.

- If the existing water service is 1/2”, it will have to be upgraded to 1”.

- Only one water meter is permitted to be installed in any building, but separate meter pits may be installed on the exterior.