



Township of
Leeds and the
Thousand Islands

Division B Part 6 Heating, Ventilating and Air Conditioning Changes

Highlighted Areas

Ventilation Systems

Ventilation, Insulation and
Fire Safety

Fire Safety Systems

Heating and Air Conditioning
Restructuring

Division B Part 6 – Ventilation Systems

6.3.1.2. Crawl Spaces and Attic or Roof Spaces – Revised crawlspaces and required ventilation

6.3.1.3.(1) Ventilation of Storage and Repair Garage - Revised

- changed to 5 or more requiring mechanical ventilation to align with part 9 changes
- Clause 1(a) no longer prescribes 900-1800mm from floor when measuring the concentration limit of carbon monoxide.

6.3.2.2.(1) Drain Pans - Revised

- Modified to clarify drain pans required for all HVAC systems that generate condensate or introduce liquid water into the airstream in ducts

6.3.2.3.(1) Materials in Air Duct Systems - Revised - Provides fire safety provisions in ducts construction

- References Article 3.6.5.1. for the fire safety requirements of materials used to construct ducts, duct connectors, associate fittings and plenums.

6.3.2.5.(1) Duct Coverings, Linings, Adhesives and Insulation – Revised -References part 3

- References Article 3.6.5.4. for the fire safety characteristics of coverings, linings and associated adhesives and insulation used in air ducts, plenums and other parts of air duct systems.

6.3.2.9. Supply, Return, Intake and Exhaust Air Openings, formerly 6.2.3.12.

- **Revised Sentence (3)** Outdoor air intakes shall be located so that they are separated a minimum distance from sources of contaminants in accordance with table 6.2.3.12. installed not less than 0.3 m above roofs, landscape grades or other surfaces, taking into account anticipated snow accumulation levels.

6.3.2.15. (new sentences 1-11) and 6.3.2.16 (new sentences 2-6) - revised to minimize health effects

- Requires evaporative heat rejection equipment to incorporate a means to disperse entrained water droplets and comply with the manufacturer's specifications for the design discharge velocity. (6.3.2.15.(1))
- Continuous water circulation required in all parts of the system that are normally wetted during operation. When not operating, these systems are also required to incorporate a method to prevent water stagnation. (6.3.2.15.(2)) and 6.3.2.16.(2)
- Systems and components are to be constructed of corrosion-resistant, non-porous materials that do not promote the proliferation of disease-causing micro-organisms. 6.3.2.15.(3) and 6.3.2.16.(3) and (5)
- Specifies distance between air discharge locations and certain outdoor spaces and building components. 6.3.2.15.(5)
 - (a) 2.15 m above sidewalks and driveways,
 - (b) 7.6 m from outdoor air intakes,
 - (c) 3 m horizontally or vertically from exterior doors and operable windows, and
 - (d) 3 m horizontally or vertically from occupiable outdoor spaces, excluding maintenance spaces.
- Requires air intakes to incorporate measures to minimize entrainment of organic matter. 6.3.2.15.(7)
- Make-up water connections are required to be equipped with backflow prevention devices 6.3.2.15.(8) and 6.3.2.16.(6)
- Requires drains, overflows and blowdowns to be connected to the building's drainage system. 6.3.2.15.(10)

- Systems and equipment for **controlling the proliferation of disease-causing micro-organisms** shall include means for drainage, dilution, cleaning, and application of chemicals for the control of scale, corrosion and biological contamination. 6.3.2.15.(9)
- Provided with **access openings**, service platforms, fixed ladders and fall-restraint connections **to allow inspection**, maintenance and testing. 6.3.2.15.(11) and 6.3.2.15.(4)
- Associated sumps include auxiliary drains to prevent the overflow of water into ductwork, and be **installed so that they can be flushed, drained, cleaned and disinfected**. 6.3.2.16.(4)

Division B Part 6 – Ventilation, Insulation and Fire Safety

6.3.3.1. Chimneys and Ventilation Systems – combustion products from appliances be discharged away to avoid contamination

- **New Sentence (2)** Except as provided in Article 6.2.1.5., vented products of combustion, other than those referred to in Sentence (1), shall be **discharged away from the building**, so as not to reenter it, **to a distance not less than**
 - (a) 2.15 m above sidewalks and driveways,
 - (b) 3 m from outdoor air intakes,
 - (c) 3 m horizontally or vertically from doors and operable windows, and
 - (d) 3 m horizontally or vertically from occupiable outdoor spaces, excluding maintenance spaces.

6.5.1.1. Insulation and Coverings – Amended Sentence (3) to reduce max temp from 70 to 52 degrees where subject to human contact

- Exposed piping or equipment subject to human contact shall be insulated so that the temperature of the exposed surface does not exceed 52°C.

6.9.1.1. Fire Safety Requirements – New sentences (1) and (2) reference part 3 with some fire safety characteristics

- **Sentence (1)** The fire safety characteristics of heating, ventilating and air conditioning systems shall comply with Subsection 3.6.5.
- **Sentence (2)** Characteristics referred to in Sentence (1) include but are not limited to
 - (a) use of combustible materials in duct systems,
 - (b) flame-spread ratings and smoke-developed ratings of duct and pipe materials and coverings,
 - (c) installation of equipment relative to property lines, and
 - (d) requirements for fire dampers and fire stop flaps.

Division B Part 6 – Fire Safety Systems

6.9.3.1 Carbon Monoxide Alarms, - expands to care occupancies and other parts of residential occupancies

- **Sentence (1)** Article 6.9.3.2. applies to every building that
 - (a) contains a residential occupancy, a care occupancy with individual suites, or a care occupancy containing sleeping rooms not within a suite, and contains a fuel-burning appliance or a storage garage, or
 - (b) contains a residential occupancy and is served by a forced-air fuel-burning appliance not contained within the building.

~~This Subsection applies to every building that, (a) contains a residential occupancy, and (b) contains a fuel burning appliance or a storage garage~~
- **Sentence (2)** Clarifies Articles 6.9.3.3. and 6.9.3.4. apply to every building

6.9.3.2. Location of Carbon Monoxide Alarms, – Expands to care occupancies in addition to residential occupancies

- **Sentence (1)** A carbon monoxide alarm shall be installed in a suite of residential occupancy or care occupancy where,
 - (a) a fuel-burning appliance or a flue is installed in the suite,
 - (b) a forced-air fuel-burning appliance provides heated air directly to the suite,
 - (c) a fuel-burning appliance or a flue is located in a room, suite or area that shares a common wall or floor or ceiling assembly with the suite, or
 - (d) a storage garage shares a common wall or floor or ceiling assembly with the suite.~~Where a fuel burning appliance is installed in a suite of residential occupancy, a carbon monoxide alarm shall be installed adjacent to each sleeping area in the suite.~~
- **Sentence (2)** specifies carbon monoxide alarms must be installed in a suite of residential occupancy or care occupancy, adjacent to each sleeping room and on each storey without a sleeping room, except in combined living and sleeping areas
- **Sentence (3)** specifies carbon monoxide alarms in combined living and sleeping areas in a suite of residential occupancy or care occupancy shall be installed in the combined living and sleeping area

6.9.3.2. Location of Carbon Monoxide Alarms, - where required and located

- **New Sentence (4)** In addition to the carbon monoxide alarms required to be installed in a suite of residential occupancy or care occupancy in accordance with Sentence (2), a carbon monoxide alarm shall be installed in each sleeping room within the suite where the sleeping room
 - (a) contains a fuel-burning appliance or a flue, or
 - (b) shares a common wall or floor or ceiling assembly with
 - (i) a room, suite or area that is located outside the suite and contains a fuel-burning appliance or a flue, or
 - (ii) a storage garage.
- **New Sentence (5)** Carbon monoxide alarms shall be installed in public corridors serving suites of residential occupancy where the corridor is directly heated by a forced-air fuel-burning appliance.

Placement:

- **New Sentence (6)** Where carbon monoxide alarms are required to be installed in a public corridor, the carbon monoxide alarms shall be installed such that
 - (a) there is at least one carbon monoxide alarm in each portion of a divided corridor, and
 - (b) each carbon monoxide alarm in an undivided portion of a corridor is spaced not more than 25 m apart.

6.9.3.3. Location of Carbon Monoxide Alarms in All Buildings – Requires carbon monoxide regardless of the occupancy type

- **Sentence (1)** A carbon monoxide alarm shall be installed in service rooms or other areas of a building where the service room or other area
 - (a) contains a fuel-burning appliance used for building services or laundry drying equipment, and
 - (b) is not located within a suite of residential occupancy.

6.9.3.4. Installation and Conformance to Standards – allows battery operated and introduces visual component

- Sentence (1) has been expanded to specify the duration of operation for permanently connected carbon monoxide alarms under back-up battery mode to not less than 8-12 hours. Additionally, the wiring requirements of carbon monoxide alarms now include activation of alarms in a public corridor serving suites of residential occupancy

Exceptions:

- **Sentence (2)** where a building is **not supplied with electrical power**, carbon monoxide alarms are **permitted to be battery operated**.
- **New Sentence (3)** Except as permitted in Sentence (4), the carbon monoxide alarms required by Articles 6.9.4.2. and 6.9.4.3. shall have a **visual signaling component conforming to** the requirements in 18.5.3. (Light, Color and Pulse Characteristics) of **NFPA 72**,

Exceptions:

- **Sentence (4)** Where the building is **not supplied with electrical power**, carbon monoxide alarms **need not have a visual** signaling component.
- **Sentence (6)** The visual signaling component **need not** (a) **be integrated with the carbon monoxide alarm** provided it is interconnected to it, (b) **be on battery backup**, or (c) **have synchronized flash rates, when installed in a dwelling unit**.
- **New Sentence (5)** The **luminous intensity** for visual signaling components required by Sentence (3) that are installed in sleeping rooms or combined living and sleeping areas shall be a **minimum of 175 cd**.
- **New Sentence (7)** The carbon monoxide alarms required by Articles 6.9.3.2. and 6.9.3.3. **shall be installed**
 - **at the manufacturer’s recommended height**, or
 - in the absence of specific instructions, **on or near the ceiling**

Heating and Air Conditioning Restructuring

The following Table lists the relocation of the Articles from Part 6 to Part 3 in the 2024 OBC

2012 OBC	2024 OBC	Article Title
6.2.3.2	3.6.5.1.	Materials in Air Duct Systems
6.2.3.16.	3.6.5.2.	Vibration Isolation Connectors
6.2.3.17.	3.6.5.3.	Tape
6.2.3.4	3.6.5.4.	Coverings, Linings, Adhesives and Insulation
6.2.9.2.	3.6.5.5.	Insulation and Coverings
6.2.3.20.	3.6.5.8.	Return-Air Systems
6.2.4.10.	3.6.5.6.	Clearance of Ducts and Plenums

The following Table lists the relocation of the Articles from former Subsection 6.2.4. to 9.33.6. in the 2024 OBC

2012 OBC	2024 OBC	Article Title
6.2.4.1.	9.33.6.1.	Application
6.2.4.2.	9.33.6.2.	Material in Air Duct Systems
6.2.4.9.	9.33.6.3.	Tape
6.2.4.8.	9.33.6.4.	Coverings, Linings and Insulation
6.2.4.2.(3).	9.33.6.5.	Galvanized Steel or Aluminum Supply Ducts
6.2.4.3.	9.33.6.6.	Construction of Ducts and Plenums
6.2.4.3.	9.33.6.7.	Installation of Ducts and Plenums
6.2.4.10.	9.33.6.8.	Clearances of Ducts and Plenums
6.2.4.6.	9.33.6.9.	Adjustable Dampers and Balance Stops
6.2.4.13.	9.33.6.10	Warm-Air Supply Outlets and Return-Outlets
6.2.4.13.	9.33.6.10A.	Supply, Return, Intake and Exhaust Openings
6.2.4.4.	9.33.6.11	Warm-Air Supply Outlets
6.2.4.7.	9.33.6.12	Return-Air Inlets
6.2.4.14.	9.33.6.14	Filters and Odour Removal Equipment
6.2.4.11.	9.33.6.14A	Exhaust Ducts and Outlets