LOW-IMPACT CODE CHANGES

The table below lists approximately 150 Building Code change proposals that have been identified as Low-Impact Existing Variations. Making changes to these requirements in Ontario's Building Code would support Ontario's commitment to increase cross-country Building Code harmonization and better reflect the language and approach of the National Construction Codes. The nature of the proposed changes are straightforward and address issues such as: providing additional clarity, or removing duplication of requirements that are already addressed in referenced standards. The proposed changes are expected to have minimal impact on building design and construction practices.

The first three columns of the tables list Ontario's current Building Code requirements, while the fourth column is a "red-lined" version of the proposed changes, comparing the text of the current Ontario requirements with the proposed requirement based on the corresponding National Construction Code requirements. The red strikethroughs indicate text that is being deleted and the green underlines indicate new text that is being added into the requirements. The fifth column lists the proposed requirements shown in the fourth column in plain text.

It is important to note that these tables contain only the Sentences that are proposed to be changed, all other Sentences will remain unchanged. Furthermore, only the changes captured in the fifth column will be proceeding and all cross-references maintained, unless otherwise marked in the fourth and fifth columns. This may result in Ontario's Articles and Sentences numbering to remain different, though the requirements themselves may be the same.

Please provide your comments and feedback using the following link: https://forms.office.com/r/2tgFLg9WFQ. If you wish to submit any attachments in support of your comments, please email buildingcode.consultation@ontario.ca with the Sentence or Article in the subject area of the email.

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For any materials you would like to attach, please send them with the corresponding Sentence number in the subject field to buildingcode.consultation@ontario.ca

CODE CHANGE POSTING – DIVISION A COMPLIANCE, OBJECTIVES AND FUNCTIONAL STATEMENTS

Current Ontario Code Sentence	Ontario Code Section Title	Current Ontario Code Provision	Proposed New Ontario Code Provision {with the Tracked Changes}	Proposed New Ontario Code Provision {without the Tracked Changes}
N/A	Section 1.1. Organization and Application	N/A	Parts 1, 2 and 3 of Division A apply to all buildings covered in this Code.	Parts 1, 2 and 3 of Division A apply to all buildings covered in this Code.
N/A	Section 1.1. Organization and Application	N/A	Division C apply to all buildings covered in this Code.	Division C apply to all buildings covered in this Code.

For any materials you would like to attach, please send them with the corresponding Sentence number in the subject field to buildingcode.consultation@ontario.ca

CODE CHANGE POSTING – PART 3 FIRE PROTECTION, OCCUPANT SAFETY AND ACCESSIBILITY

Current Ontario Code Sentence	Current Ontario Code Article Title	Current Ontario Code Provision	Proposed New Ontario Code Provision {with the Tracked Changes}	Proposed New Ontario Code Provision {without the Tracked Changes}
3.1.4.1.(1)	3.1.4.1. Combustible Materials Permitted	Except as required by this Part, a building permitted to be of combustible construction is permitted to be constructed of combustible materials, with or without noncombustible components.	Except as required by this Part, aA building permitted to be of combustible construction is permitted to be constructed of combustible materials, with or without noncombustible components.	A building permitted to be of combustible construction is permitted to be constructed of combustible materials, with or without noncombustible components.
3.1.5.8.(2)	3.1.5.8. Combustible Flooring Elements	Wood members more than 50 mm but not more than 375 mm high applied directly to or set into a noncombustible floor slab are permitted for the construction of a raised platform in a building required to be of noncombustible construction provided the concealed spaces created are divided into compartments by fire blocks	Wood members more than 50 mm but not more than 375300 mm high applied directly to or set into a noncombustible floor slab are permitted for the construction of a raised platform in a building required to be of noncombustible construction provided the concealed spaces created are divided into compartments by fire blocks	Wood members more than 50 mm but not more than 300 mm high applied directly to or set into a noncombustible floor slab are permitted for the construction of a raised platform in a building required to be of noncombustible construction provided the concealed spaces created are divided into compartments by fire blocks

		in conformance with Sentence 3.1.11.3.(2).	in conformance with Sentence 3.1.11.3.(2).	in conformance with Sentence 3.1.11.3.(2).
3.1.5.18.(1)	3.1.5.18. Wires and Cables	Except as permitted by Sentence (2) and Articles 3.1.5.19. and 3.1.5.21., optical fibre cables and electrical wires and cables with combustible insulation, jackets or sheathes are permitted in a building required to be of noncombustible construction, provided, (a) the wires and cables exhibit a vertical char of not more than 1.5 m when tested in conformance with the Vertical Flame Test - Cables in Cable trough in Clause 4.11.4. of CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables", (FT4 Rating), (b) the wires and cables are located in, (i) totally enclosed noncombustible raceways, (ii) concealed spaces in walls, (iii) concrete slabs, (iv) a service room separated from the remainder of the building by a fire separation having a fire-resistance rating not less than 1 h, or (v) totally enclosed nonmetallic raceways conforming to Clause 3.1.5.20.(1)(b), or the wires and cables are communication cables used at the	Except as permitted required by Sentence (2), Articles 3.1.5.19. and 3.1.5.21., optical fibre cables and electrical wires and cables with combustible insulation, jackets or sheathes are permitted in a building required to be of noncombustible construction, provided, (a) the wires and cables exhibit a vertical char of not more than 1.5 m when tested in conformance with the Vertical Flame Test - Cables in Cable trough Trays (FT4 rating) in Clause 4.11.4. of CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables", (FT4 Rating), (b) -the wires and cables are located in, (i) totally enclosed noncombustible raceways, (ii) concealed spaces in masonry walls, (iii) concealed from the remainder of the building by a fire separation having a fire-resistance rating not less than 1 h, or (v) totally enclosed nonmetallic raceways conforming to Clause 3.1.5.20.(1)(b) the wires and cables are	Except as required by Sentence (2), Articles 3.1.5.19. and 3.1.5.21., optical fibre cables and electrical wires and cables with combustible insulation, jackets or sheathes are permitted in a building required to be of noncombustible construction, provided (a) the wires and cables exhibit a vertical char of not more than 1.5 m when tested in conformance with the Vertical Flame Test - Cables in Cable Trays (FT4 rating) in CSA C22.2 No. 0.3. Test Methods for Electrical Wires and Cables (b) the wires and cables are located in (i) totally enclosed noncombustible raceways (ii) masonry walls, (iii) concrete slabs, (iv) a service room separated from the remainder of the building by a fire separation having a fire-resistance rating not less than 1 h, or (v) totally enclosed nonmetallic raceways conforming to Clause 3.1.5.20.(1)(b) the wires and cables are communication cables used at the

		service entry to a building and are not more than 3 m long.	communication cables used at the service entry to a building and are not more than 3 m long.	service entry to a building and are not more than 3 m long.
3.1.8.5.(3)	3.1.8.5. Installation of Closures	Except as otherwise specified in this Part, every smoke damper used as a closure in a required fire separation shall be installed in conformance with NFPA 105, "Smoke Door Assemblies and Other Opening Protectives".	Except as otherwise specified in this Part, every smoke damper or combination smoke/fire damper used as a closure in a required fire separation shall be installed in conformance with NFPA 105, "Smoke Door Assemblies and Other Opening Protectives".	Except as otherwise specified in this Part, every smoke damper or combination smoke/fire damper used as a closure in a required fire separation shall be installed in conformance with NFPA 105, "Smoke Door Assemblies and Other Opening Protectives".
3.1.13.6.(6)	3.1.13.6. Corridors	The flame-spread rating limits specified in Sentence (5) do not apply to a corridor in which the flame-spread rating is not more than 150 provided the floor area is sprinklered.	The Where the floor area is sprinklered throughout, the flame-spread rating limits specified in Sentence (5) do not applyof the interior ceiling finish of corridors and occupancies referred to a corridor in which the flame-spread rating isin Sentences (1) and (4) shall be not more than 150 provided the floor area is sprinklered.	Where the floor area is sprinklered throughout, the flame-spread rating of the interior ceiling finish of corridors and occupancies referred to in Sentences (1) and (4) shall be not more than 150.
3.2.2.13.(1)	3.2.2.13. Occupancy on Roof	A portion of a roof that supports an occupancy shall be constructed in conformance with the fire separation	A portion of a roof that supports an occupancy shall be constructed in conformance with the fire separation requirements of Articles 3.2.2.20. to 3.2.2.83. for floor assemblies, and not	A portion of a roof that supports an occupancy shall be constructed in conformance with the fire separation requirements of Articles 3.2.2.20. to 3.2.2.83. for floor assemblies, and not

		requirements of Articles 3.2.2.20. to 3.2.2.83. for floor assemblies.	the fire-resistance rating for roof assemblies.	the fire-resistance rating for roof assemblies.
3.2.2.36.(2)	3.2.2.36. Group B, Division 1, Any Height, Any Area, Sprinklered	Except as permitted by Article 3.2.2.16., the building referred to in Sentence (1) shall be of noncombustible construction, and, (a) except as permitted by Sentence 3.2.2.7.(1), the building shall be sprinklered, (b) floor assemblies shall be fire separations with a fire-resistance rating not less than 2 h, (c) mezzanines shall have a fire-resistance rating not less 1 h, and (d) loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.	Except as permitted by Article 3.2.2.16., the building referred to in Sentence (1) shall be of noncombustible construction, and, (a) except as permitted by Sentence 3.2.2.7.(1), the building shall be sprinklered, throughout, (b) floor assemblies shall be fire separations with a fire-resistance rating not less than 2 h, (c) mezzanines shall have a fire-resistance rating not less than 1 h, and (d) loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.	Except as permitted by Article 3.2.2.16., the building referred to in Sentence (1) shall be of noncombustible construction, and (a) except as permitted by Sentence 3.2.2.7.(1), the building shall be sprinklered throughout, (b) floor assemblies shall be fire separations with a fire-resistance rating not less than 2 h, (c) mezzanines shall have a fire-resistance rating not less than 1 h, and (d) loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.
3.2.4.4.(1)	3.2.4.4. Description of Fire Alarm Systems	A single stage fire alarm system shall, upon the operation of any manual pull station or fire detector, cause an alarm signal to sound on all audible signal devices in the system.	A single stage fire alarm system shall, upon the operation of any manual pull station, waterflow detecting device, or fire detector, cause an alarm signal to sound on all audible signal devices in the system.	A single stage fire alarm system shall, upon the operation of any manual pull station, waterflow detecting device, or fire detector, cause an alarm signal to sound on all audible signal devices in the system.
3.2.4.4.(3)	3.2.4.4. Description of	A two stage fire alarm system is permitted to be zone coded so that,	A two stage fire alarm system is permitted to be zone coded so that,	A two stage fire alarm system is permitted to be zone coded so that,

	Fire Alarm Systems	upon the operation of any manual pull station or fire detector, (a) a coded alert signal is sounded indicating the zone of alarm initiation, (b) the coded alert signal is repeated in its entirety no fewer than four times, and (c) a continuous alert signal is sounded upon completion of the coded signals referred to in Clause (b) and Sentence (4).	upon the operation of any manual pull station, waterflow detecting device, or fire detector, (a) a coded alert signal is sounded indicating the zone of alarm initiation, (b) the coded alert signal is repeated in its entirety no fewernot less than four times, and (c) a continuous alert signal is sounded upon completion of the coded signals referred to in Clause (b) and Sentence (4).	upon the operation of any manual pull station, waterflow detecting device, or fire detector, (a) a coded alert signal is sounded indicating the zone of alarm initiation, (b) the coded alert signal is repeated in its entirety not less than four times, and (c) a continuous alert signal is sounded upon completion of the coded signals referred to in Clause (b) and Sentence (4).
3.2.4.4.(4)	3.2.4.4. Description of Fire Alarm Systems	If a second manual pull station or fire detector is operated in a fire alarm system with zone coding as permitted by Sentence (3), in a zone other than that for which the first alert signal was sounded, the coded alert signal for the first zone shall be completed before the coded alert signal for the second zone is repeated no fewer than four times.	If a second manual pull-station, waterflow detecting device, or fire detector is operated in a fire alarm system with zone coding as permitted by Sentence (3), in a zone other than that for which the first alert signal was sounded, the coded alert signal for the first zone shall be completed before the coded alert signal for the second zone is repeated no fewernot less than four times.	If a second manual station, waterflow detecting device, or fire detector is operated in a fire alarm system with zone coding as permitted by Sentence (3), in a zone other than that for which the first alert signal was sounded, the coded alert signal for the first zone shall be completed before the coded alert signal for the second zone is repeated not less than four times.
3.2.4.8.(3)	3.2.4.8. Signals to Fire Department	If a fire alarm system is required to be installed and a two stage system is provided, the system shall be designed to notify the fire department, in	If a A two-stage fire alarm system is required to be installed and a two stage system is provided, the system shall be designed to notify the fire department, in	A two-stage fire alarm system shall be designed to notify the fire department, in conformance with Sentence (4), that an alert signal has been initiated.

3.2.4.20.(7)	3.2.4.20. Audibility of Alarm Systems (See Appendix A.)	conformance with Sentence (4), that an alert signal has been initiated. Fire alarm audible signal devices shall be supplemented by visual signal devices in any floor area in which, (a) the ambient noise level is more than 87 dBA, or (b) the occupants of the floor area, (i) use ear protective devices, (ii) are located within an audiometric booth, or (iii) are located within sound insulated enclosures.	Visual signal devices Fire alarm audible signal devices shall be supplemented by visual signal devices in any floor area in which, installed in addition to alarm signals (a) in buildings or portions thereof intended for use primarily by persons with a hearing impairment, (b) in assemblyoccupancy_occupancies in which music and other sounds associated with performances could exceed 100 dBA, (c) in any floor area in which the ambient noise level is more than 87 dBA, and (d) in any floor area in which the occupants (i) use ear protection devices, (ii) are located within an audiometric booth, or (iii) are located within sound-insulating enclosures.	Visual signal devices shall be installed in addition to alarm signals (a) in buildings or portions thereof intended for use primarily by persons with a hearing impairment, (b) in assembly occupancies in which music and other sounds associated with performances could exceed 100 dBA, (c) in any floor area in which the ambient noise level is more than 87 dBA, and (d) in any floor area in which the occupants (i) use ear protection devices, (ii) are located in an audiometric booth, or (iii) are located in sound-insulating enclosures
3.2.4.20.(8)	3.2.4.20. Audibility of Alarm Systems (See Appendix A.)	Sentence (7) shall also apply in an assembly occupancy in which music and other sounds associated with performances could exceed 100 dBA.	[See the changes in Sentence 3.2.4.20.(7)]	[See the changes in Sentence 3.2.4.20.(7)]

3.2.4.23.(6)	3.2.4.23. Two- Way Voice Communication Systems	The voice communication system referred to in Sentence (1) shall be installed so that emergency communication devices are located in each floor area near exit stair shafts.	The voicetwo-way communication system referred to in Sentence (Clause (1)(a) shall be installed so that emergency communication devices telephones are located in each floor area near exit stair shafts.	The two-way communication system referred to in Clause (1)(a) shall be installed so that emergency telephones are located in each floor area near exit stair shafts.
3.2.4.23.(7)	3.2.4.23. Two- Way Voice Communication Systems	A voice communication system referred to in Sentence (1) that is installed in a building that is not intended to be staffed, at times when the building will be occupied, with persons trained to provide instructions over the system shall include a pre-recorded message.	A voice communication system referred to in Sentence (1) that is installed in a building that Where the facility is not intended to be staffed, at times when the building will be occupied, equipped with persons staff trained to provide instructions over the system shall include loudspeakers, a pre-recorded message shall be provided.	Where the facility is not equipped with staff trained to provide instructions over the loudspeakers, a pre-recorded message shall be provided.
3.2.4.24.(3)	3.2.4.24. One- Way Voice Communication Systems	A voice communication system required by Sentence (1) that is installed in a building that is not intended to be staffed, at times when the building will be occupied, with persons trained to provide instructions over loudspeakers described in Sentence (2) shall include a pre-recorded message.	A voice communication system required by Sentence (1) that is installed in a building that Where the facility is not intended to be staffed, at times when the building will be occupied, equipped with persons staff trained to provide instructions over the loudspeakers described in Sentence (2) shall include,	Where the facility is not equipped with staff trained to provide instructions over the loudspeakers, a pre-recorded message shall be provided.

			a pre-recorded message shall be provided.	
3.3.1.22.(1)	3.3.1.22. Obstructions	No obstruction shall be permitted in any occupancy that would restrict the width of a normal means of egress from any part of a floor area to less than 750 mm unless an unobstructed alternative means of egress is provided adjacent to, accessible from, and plainly visible from the obstructed means of egress.	No obstruction shall be permitted in any occupancy that would restrict the width of a normal means of egress from any part of a floor area to less than 750 mm unless an unobstructed alternative means of egress is provided adjacent to, accessible from, and plainly visible from the obstructed means of egress.	No obstruction shall be permitted in any occupancy that would restrict the width of a normal means of egress from any part of a floor area to less than 750 mm unless an alternative means of egress is provided adjacent to, accessible from, and plainly visible from the obstructed means of egress.
3.3.1.13.(2)	3.3.1.13. Ramps and Stairways	Ramps and stairways that do not conform to the requirements of Sentence (1) and are intended only for occasional use for servicing equipment and machinery are permitted, (a) to serve service rooms and service spaces, and (b) in industrial occupancies.	Ramps and stairways that do not conform to the requirements of serve service rooms, service spaces or industrial occupancies need not comply with Sentence (1) and are intended only for occasional use for servicing equipment and machinery are permitted, (a) to serve service rooms and service spaces, and (b) in industrial occupancies., and they do not serve as exits.	Ramps and stairways that serve service rooms, service spaces or industrial occupancies need not comply with Sentence (1) and are intended only for occasional use for servicing equipment and machinery, and they do not serve as exits.

3.4.2.3.(1)	3.4.2.3. Distance Between Exits	Except as provided in Sentence (2), the least distance between two required exits from a floor area shall be, (a) one-half the maximum diagonal dimension of the floor area, but need not be more than 9 m for a floor area having a public corridor, or (b) one-half the maximum diagonal dimension of the floor area, but not less than 9 m for all other floor areas.	Except as provided in Sentence (2), the least distance between two required two exits from a floor area shall be; (a) one-half the maximum diagonal dimension of the floor area, but need not be more than 9 m for a floor area having a public corridor, or (b) one-half the maximum diagonal dimension of the floor area, but not less than 9 m for all other floor areas.	Except as provided in Sentence 2), the least distance between two exits from a floor area shall be (a) one half the maximum diagonal dimension of the floor area, but need not be more than 9 m for a floor area having a public corridor, or (b) one half the maximum diagonal dimension of the floor area, but not less than 9 m for all other floor areas.
3.4.2.3.(4)	3.4.2.3. Distance Between Exits	The distance between exterior doors leading from two or more exit stairs serving the same floor area shall be, (a) not less than 9 m, or (b) not less than 6 m, where, (i) the building is sprinklered, and (ii) the exterior doors are located within 15 m of a street.	The distance between two exterior doors leading from two or more discharges of exit stairs serving the same floor area shall be, (a) not less than 9 m, or (b) not less than 6 m, where, (i) the building is sprinklered throughout, and (ii) the two exterior doors discharges are located within 15 m of a street.	The distance between two exterior discharges of exit stairs serving the same floor area shall be, (a) not less than 9 m, or (b) not less than 6 m, where, (i) the building is sprinklered throughout, and (ii) the two exterior discharges are located within 15 m of a street.
3.4.2.5.(1)	3.4.2.5. Location of Exits	Except as permitted by Sentences (2), 3.2.8.4.(4) and 3.3.2.4.(13) to (16), if more than one exit is required from a floor area, the exits shall be located so that the travel distance to at least one exit shall be not more than, (a) 25 m in a	Except as permitted by Sentences (2), 3.2.8.4.(4) and 3.3.2.4.(13) to (16), if more than one exit is required from a floor area, the exits shall be located so that the travel distance to at least one exit shall be not more than, (a) 25 m in a	Except as permitted by Sentences (2), 3.2.8.4.(4) and 3.3.2.4.(13) to (16), if more than one exit is required from a floor area, the exits shall be located so that the travel distance to at least one exit shall be not more than (a) 25 m in a

		high hazard industrial occupancy, (b) 40 m in a business and personal services occupancy, (c) 45 m in a floor area that contains an occupancy other than a high hazard industrial occupancy, provided it is sprinklered, (d) 105 m in any floor area, served by a public corridor, in which rooms and suites are not separated from the remainder of the floor area by a fire separation, provided, (i) the public corridor is not less than 9 m wide, (ii) the ceiling height in the public corridor is not less than 4 m above all floor surfaces, (iii) the building is sprinklered, and (iv) not more than one-half of the required egress doorways from a room or suite open into the public corridor if the room or suite is required to have more than one egress doorway, (e) 60 m in any storage garage that conforms to the requirements of Article 3.2.2.83., and (f) 30 m in any floor area other than those referred to in Clauses (a) to (e).	high-hazard industrial occupancy, (b) 40 m in a business and personal services occupancy, (c) 45 m in a floor area that contains an occupancy other than a high-hazard industrial occupancy, provided it is sprinklered throughout, (d) 105 m in any floor area, served by a public corridor, in which rooms and suites are not separated from the remainder of the floor area by a fire separation, provided; (i) the public corridor is not less than 9 m wide, (ii) the ceiling height in the public corridor is not less than 4 m above all floor surfaces, (iii) the building is sprinklered throughout, and (iv) not more than one-half of the required egress doorways from a room or suite open into the public corridor if the room or suite is required to have more than one egress doorway, (e) 60 m in any storage garage that conforms to the requirements of Article 3.2.2.83., and (f) 30 m in any floor area other than those referred to in Clauses (a) to (e).	high-hazard industrial occupancy, (b) 40 m in a business and personal services occupancy, (c) 45 m in a floor area that contains an occupancy other than a high-hazard industrial occupancy, provided it is sprinklered throughout, (d) 105 m in any floor area, served by a public corridor, in which rooms and suites are not separated from the remainder of the floor area by a fire separation, provided (i) the public corridor is not less than 9 m wide, (ii) the ceiling height in the public corridor is not less than 4 m above all floor surfaces, (iii) the building is sprinklered throughout, and (iv) not more than one half of the required egress doorways from a room or suite open into the public corridor if the room or suite is required to have more than one egress doorway, (e) 60 m in any storage garage that conforms to the requirements of Article 3.2.2.83., and (f) 30 m in any floor area other than those referred to in Clauses (a) to (e).
3.4.5.1.(2)	3.4.5.1. Exit Signage	Except as provided by Sentence (7), every exit sign shall, be visible on	Except as provided by Sentence (7), every exit sign shall be visible on	Except as provided by Sentence (7), every exit sign shall be visible on

	<u></u>		<u></u>	<u>, </u>
		approach to the exit, consist of a green pictogram and white graphic symbol meeting the visibility specifications referred to in ISO 3864 1, "Graphical Symbols - Safety Colours and Safety Signs - Part 1: Design Principles for Safety Signs and Safety Markings", and conform to ISO 7010, "Graphical Symbols - Safety Colours and Safety Signs - Registered Safety Signs" for the following symbols: E001 emergency exit left, E002 emergency exit right, E005 90-degree directional arrow, and E006 45-degree directional arrow.	approach to the exit, consist of a green pictogram and white graphicor lightly tinted graphical symbol meeting the visibilitycolour specifications referred to in ISO 3864 1, "Graphical Symbols - Safety Colours and Safety Signs - Part 1: Design Principles for Safety Signs and Safety Markings", and conform to ISO 7010, "Graphical Symbols - Safety Colours and Safety Signs - Registered Safety Signs" for the following symbols: E001 emergency exit left, E002 emergency exit right, E005 90-degree directional arrow, and E006 45-degree directional arrow.	approach to the exit, consist of a green and white or lightly tinted graphical symbol meeting the colour specifications referred to in ISO 3864 1, "Graphical Symbols - Safety Colours and Safety Signs - Part 1: Design Principles for Safety Signs and Safety Markings", and conform to ISO 7010, "Graphical Symbols - Safety Colours and Safety Signs - Registered Safety Signs" for the following symbols: E001 emergency exit left, E002 emergency exit right, E005 90-degree directional arrow, and E006 45-degree directional arrow.
3.4.5.1.(7)	3.4.5.1. Exit Signage	Where no exit is visible from a public corridor, from a corridor used by the public in a Group A or B major occupancy or from principal routes serving an open floor area having an occupant load of more than 150, an exit sign conforming to Clauses (2)(b) and (c) with an arrow or other indicator pointing at the direction of egress shall be provided.	Where no exit is visible from a public corridor, from a corridor used by the public in a Group A or B major occupancy, or from principal routes serving an open floor area having an occupant load of more than 150, an exit sign conforming to Clauses (2)(b) and (c) with an arrow or other indicator pointing atpointer indicating the direction of egress shall be provided.	Where no exit is visible from a public corridor, from a corridor used by the public in a Group A or B major occupancy, or from principal routes serving an open floor area having an occupant load of more than 150, an exit sign conforming to Clauses 2)(b) and (c) with an arrow or pointer indicating the direction of egress shall be provided.

For any materials you would like to attach, please send them with the corresponding Sentence number in the subject field to buildingcode.consultation@ontario.ca

CODE CHANGE POSTING – PART 4 STRUCTURAL DESIGN

Current Ontario Code Sentence	Current Ontario Code Article Title	Current Ontario Code Provision	Proposed New Ontario Code Provision {with the Tracked Changes}	Proposed New Ontario Code Provision {without the Tracked Changes}
4.1.8.18.(1)	4.1.8.18. Elements of Structures, Non-Structural Components	Except as provided in Sentences (2), (7) and (16), elements and components of buildings described in Table 4.1.8.18. and their connections to the structure shall be designed to accommodate the building deflections calculated in accordance with Article 4.1.8.13. and the element or component deflections calculated in accordance with Sentence (9), and shall be designed for a lateral force, V _P , applied through the centre of mass of the element or component that is equal to: $V_p = 0.3F_aS_a(0.2) I_ES_pW_p$	Except as provided in Sentences (2), (7) and (16), elements and components of buildings described in Table 4.1.8.18. and their connections to the structure shall be designed to accommodate the building deflections calculated in accordance with Article 4.1.8.13. and the element or component deflections calculated in accordance with Sentence (9), and shall be designed for a lateral force, V _P , applied through, distributed according to the centredistribution of mass of the element or component that is equal to:	Except as provided in Sentences (2), (7) and (16), elements and components of buildings described in Table 4.1.8.18. and their connections to the structure shall be designed to accommodate the building deflections calculated in accordance with Article 4.1.8.13. and the element or component deflections calculated in accordance with Sentence (9), and shall be designed for a lateral force, V _P , distributed according to the distribution of mass: $V_p = 0.3F_aS_a(0.2) \ I_ES_pW_p$

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where, F_a = as defined in Sentence 4.1.8.4.(7), $S_a(0.2)$ = spectral response acceleration value at 0.2 s, as defined in Sentence 4.1.8.4.(1), I_E = importance factor for the building, as defined in Article 4.1.8.5., $S_p = C_p A_r A_x / R_p$ (the maximum value of Sp shall be taken as 4.0 and the minimum value of S_p shall be taken as 0.7), where, C_p = element or component factor from Table 4.1.8.18., A_r = element or component force amplification factor from Table 4.1.8.18., A_x = height factor (1 + 2 h_x / h_n), R_p = element or component response modification factor from Table 4.1.8.18., and W_p = weight of the component or element.

where, F_a = as defined in Sentence 4.1.8.4.(7), $S_a(0.2) = spectral response$ acceleration value at 0.2 s, as defined in Sentence 4.1.8.4.(1), $I_E = importance$ factor for the building, as defined in Article 4.1.8.5., $S_p = C_p A_r A_x / R_p$ (the maximum value of Sp shall be taken as 4.0 and the minimum value of S_p shall be taken as 0.7), where, C_p = element or component factor from Table 4.1.8.18... A_r = element or component force amplification factor from Table 4.1.8.18., A_x = height factor (1 + 2 h_x / h_n), R_p = element or component response modification factor from Table 4.1.8.18... and W_p = weight of the component or element.

where, F_a = as defined in Sentence 4.1.8.4.(7), $S_a(0.2)$ = spectral response acceleration value at 0.2 s, as defined in Sentence 4.1.8.4.(1), $I_E = importance$ factor for the building, as defined in Article 4.1.8.5., $S_p = C_p A_r A_x / R_p$ (the maximum value of S_D shall be taken as 4.0 and the minimum value of Sp shall be taken as 0.7), where, C_p = element or component factor from Table 4.1.8.18... A_r = element or component force amplification factor from Table 4.1.8.18., A_x = height factor (1 + 2 h_x / h_n), R_p = element or component response modification factor from Table 4.1.8.18... and W_p = weight of the component or element.

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CODE CHANGE POSTING – PART 5 ENVIRONMENTAL SEPARATION

Current Ontario Code Sentence	Current Ontario Code Article Title	Current Ontario Code Provision	Proposed New Ontario Code Provision {with the Tracked Changes}	Proposed New Ontario Code Provision {without the Tracked Changes}
5.3.1.2.(1)	5.3.1.2. Properties to Resist Heat Transfer or Dissipate Heat	Materials and components installed to provide the required resistance to heat transfer or the means implemented to dissipate heat shall,(a) provide sufficient resistance or dissipation, (i) to minimize surface condensation on the warm side of the component or assembly, (ii) in conjunction with other materials and components in the assembly, to minimize condensation within the component or assembly, (iii) in conjunction with systems installed for space conditioning, to meet the interior design thermal conditions for the intended occupancy, and (iv) to minimize ice damming on sloped roofs, and (b) take into account the conditions on either side of the environmental separator.	Materials Taking into account the conditions on either side of the environmental separator, materials and components installed to provide the required resistance to heat transfer or the means implemented to dissipate heat shall, (a) provide sufficient resistance or dissipation, (ia) to minimize surface condensation on the warm side of the component or assembly, (iib) in conjunction with other materials and components in the assembly, to minimize condensation within the component or assembly, (iiic) in conjunction with systems installed for space conditioning, to meet the interior design thermal conditions for the intended occupancy, and (ivd) to minimize ice damming on sloped roofs, and (b) take into account the conditions	Taking into account the conditions on either side of the environmental separator, materials and components installed to provide the required resistance to heat transfer or the means implemented to dissipate heat shall provide sufficient resistance or dissipation, (a) to minimize surface condensation on the warm side of the component or assembly, (b) in conjunction with other materials and components in the assembly, to minimize condensation within the component or assembly, (c) in conjunction with systems installed for space conditioning, to meet the interior design thermal conditions for the intended occupancy, and (d) to minimize ice damming on sloped roofs

			on either side of the environmental separator.	
5.4.1.1.(1)	5.4.1.1. Required Resistance to Air Leakage	Where a building component or assembly separates interior conditioned space from exterior space, interior space from the ground, or environmentally dissimilar interior spaces, the properties and position of the materials and components in those components or assemblies shall be such that they control air leakage or permit venting to the exterior so as (a) to provide acceptable conditions for the building occupants, (b) maintain appropriate conditions for the intended use of the building, (c) minimize the accumulation of condensation in and penetration of precipitation into the building component or assembly, (d) control heat transfer to roofs where ice damming can occur, and (e) not compromise the operation of building services.	Where a building component or assembly separates interior conditioned space from exterior space, interior space from the ground, or environmentally dissimilar interior spaces, the properties and position of the materials and components in those components or assemblies shall be such that they control air leakage or permit venting to the exterior so as (a) to provide acceptable conditions for the building occupants, (b) maintain appropriate conditions for the intended use of the building, _(c) minimize the accumulation of condensation in and the penetration of precipitation into the building component or assembly, (d) control heat transfer to roofs where ice damming can occur, (e) minimize the ingress of airborne radon from the ground with an aim to controlling the indoor radon concentration to an acceptable level, and (ef) not compromise the operation of building services.	Where a building component or assembly separates interior conditioned space from exterior space, interior space from the ground, or environmentally dissimilar interior spaces, the properties and position of the materials and components in those components or assemblies shall be such that they control air leakage or permit venting to the exterior so as (a) to provide acceptable conditions for the building occupants, (b) maintain appropriate conditions for the intended use of the building, (c) minimize the accumulation of condensation in and the penetration of precipitation into the building component or assembly, (d) control heat transfer to roofs where ice damming can occur, (e) minimize the ingress of airborne radon from the ground with an aim to controlling the indoor radon concentration to an acceptable level, and (f) not compromise the operation of building services.

5.7.1.1.(1)	5.7.1.1. Application	This Subsection applies to the location of buildings, the grading of building sites, the directing of surface water away from building assemblies and the provision of means for drainage.	This Subsection applies to the location of buildings, the grading of building sites, the directing of surface water away from building assemblies, and the provision of means for drainage.	This Subsection applies to the location of buildings, the grading of building sites, the directing of water away from building assemblies, and the provision of means for drainage.
5.7.3.2.(1)	5.7.3.2. Required Protection	Except as provided in Sentence (2) and Article 5.7.3.4., building assemblies described in Article 5.7.3.1. shall be protected by waterproofing in accordance with Article 5.7.3.3. so as to minimize the ingress of ground water into the building or the accumulation of ground water against the building.	Except as provided in Sentence (2) and Article 5.7.3.4., building assemblies described in Article 5.7.3.1. shall be protected by waterproofing in accordance with Article 5.7.3.3. so as to minimize the ingress of ground water into the building or the accumulation of ground water against the building.	Except as provided in Sentence (2) and Article 5.7.3.4., building assemblies described in Article 5.7.3.1. shall be protected by waterproofing in accordance with Article 5.7.3.3. so as to minimize the ingress of water into the building or the accumulation of water against the building.

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CODE CHANGE POSTING – PART 6 HEATING, VENTILATING AND AIR-CONDITIONING

Current Ontario Code Sentence	Current Ontario Code Article Title	Current Ontario Code Provision	Proposed New Ontario Code Provision {with the Tracked Changes}	Proposed New Ontario Code Provision {without the Tracked Changes}
6.2.2.6.(2)	6.2.2.6. Commercial Cooking Equipment	Fire protection systems for high efficiency, high temperature commercial cooking equipment using vegetable oil or animal fat shall conform to,(a) ANSI/UL 300, "Fire Extinguishing Systems for Protection of Commercial Cooking Equipment", or (b) ULC/ORD-C1254.6, "Fire Testing of Restaurant Cooking Area Fire Extinguishing System Units".	Fire protection systems for high efficiency, high temperature commercial cooking equipment referred to in Sentence (1) using vegetable oil or animal fat shall conform to, (a) ANSI/UL 300, "Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment", or (b) ULC/ORD-C1254.6, "Fire Testing of Restaurant Cooking Area Fire Extinguishing System Units".	Fire protection systems for commercial cooking equipment referred to in Sentence (1) using vegetable oil or animal fat shall conform to, (a) ANSI/UL 300, Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment", or (b) ULC/ORD-C1254.6, "Fire Testing of Restaurant Cooking Area Fire Extinguishing System Units".
6.2.3.5.(1)	6.2.3.5. Underground Ducts	Underground ducts shall,(a) be constructed and installed with a slope to provide interior drainage to all low points, (b) not be connected directly to a sewer, and (c) be installed and constructed of materials in conformance	Underground ducts shall,(a) be constructed and installed with a slope to provide interior drainage from and access to all low points, (b) not be connected directly to a sewer, and (c) be installed and constructed of materials	Underground ducts shall,(a) be constructed and installed to provide interior drainage from and access to all low points, (b) not be connected directly to a sewer, and (c) be installed and constructed of materials recommended

		with ASHRAE Handbooks, SMACNA Manuals and the HRAI Digest.	in conformance with recommended by ASHRAE Handbooks, and SMACNA Standards and HRAI Manuals and the HRAI Digest.	by ASHRAE and SMACNA Standards and HRAI Manuals
6.2.3.13.(2)	6.2.3.13. Filters and Odour Removal Equipment	When electrostatic-type filters are used, they shall be installed so as to ensure that the electric circuit is automatically de-energized when filter access doors are opened and, in dwelling units, when the system circulating fan is not operating.	When electrostatic-type filters are used, they shall be installed so as to ensure that the electric circuit is automatically de-energized when filter access doors are opened andor, in dwelling units, when the system circulatingfurnace circulation fan is not operating.	When electrostatic-type filters are used, they shall be installed so as to ensure that the electric circuit is automatically de-energized when filter access doors are opened or, in dwelling units, when the furnace circulation fan is not operating.
6.2.3.14.(1)	6.2.3.14. Evaporative Cooling Towers, Evaporative Fluid Coolers	Discharge from evaporative cooling towers to ventilation air intakes shall comply with CAN/CSA-Z317.2, "Special Requirements for Heating, Ventilation, and Air Conditioning (HVAC) Systems in Health Care Facilities".	Discharge from evaporative cooling towers to ventilation air intakes shall comply with a) Sentence 6.3.2.12.(2), and b) CAN/CSA-Z317.2, Special Requirements for Heating, Ventilation, and Air Conditioning (HVAC) Systems in Health Care Facilities".	Discharge from evaporative cooling towers to ventilation air intakes shall comply with a) Sentence 6.3.2.12.(2), and b) CAN/CSA-Z317.2, Special Requirements for Heating, Ventilation, and Air Conditioning (HVAC) Systems in Health Care Facilities".

6.2.9.2.(3)	6.2.9.2. Insulation and Coverings	Except as provided in Sentence (7), where combustible insulation is used on piping in a horizontal or vertical service space, the insulation and coverings on such pipes shall have a flame-spread rating throughout the material of not more than 25 in buildings of noncombustible construction and not more than 75 in buildings of combustible construction.	Except as provided inpermitted by Sentence (7), where combustible insulation is used on piping in a horizontal service space or a vertical service space, the insulation and coverings on such pipes that piping shall have a flame-spread rating throughout, on any exposed surface and on any surface that would be exposed by cutting through the material of any direction, a) not more than 25 in buildingsa building required to be of noncombustible construction and, or b) not more than 75 in buildingsa building permitted to be of combustible construction.	Except as permitted by Sentence (7), where combustible insulation is used on piping in a horizontal service space or a vertical service space, the insulation and coverings on that piping shall have a flame-spread rating, on any exposed surface and on any surface that would be exposed by cutting through the material in any direction, a) not more than 25 in a building required to be of noncombustible construction, or b) not more than 75 in a building permitted to be of combustible construction.
6.2.13.1.(1)	6.2.13.1. Application	This Subsection applies to laboratories intended as a location where flammable liquids and combustible liquids are used in normal laboratory operations in quantities or in a manner that create a fire or explosion hazard.	This Subsection applies to laboratories intended as a location where dangerous goods, including flammable liquids and combustible liquids, are used in normal laboratory operations in quantities or in a manner that createcreates a fire or explosion hazard.	This Subsection applies to laboratories where dangerous goods, including flammable liquids and combustible liquids, are used in normal laboratory operations in quantities or in a manner that creates a fire or explosion hazard.

6.2.13.2.(1)	6.2.13.2. General Ventilation	A laboratory shall be provided with continuous mechanical ventilation designed to ensure that flammable vapours,(a) do not accumulate in the laboratory, (b) are prevented from migrating to other parts of the building, (c) do not accumulate in the ventilation system, (d) are exhausted to the outdoors, and (e) are not returned to the building.	A laboratory shall be provided with continuous mechanical ventilation designed to ensure that flammable dangerous goods vapours and particles, (a) do not accumulate in the laboratory, (b) are prevented from migrating to other parts of the building, (c) do not accumulate in the ventilation system, (d) are exhausted to the outdoors, and (e) are not returned to the building.	A laboratory shall be provided with continuous mechanical ventilation designed to ensure that dangerous goods vapours and particles, (a) do not accumulate in the laboratory, (b) are prevented from migrating to other parts of the building, (c) do not accumulate in the ventilation system, (d) are exhausted to the outdoors, and (e) are not returned to the building.
6.2.13.4.(1)	6.2.13.4. Enclosure Exhaust Ventilation	The ventilation system for a power-ventilated enclosure referred to in Article 6.2.13.3. shall,(a) conform to NFPA 91, "Exhaust Systems for Air Conveying of Vapors, Gases, Mists and Noncombustible Particulate Solids", (b) provide continuous exhaust ventilation at an air velocity sufficient to prevent the accumulation of combustible or reactive deposits in the power-ventilated enclosure and its exhaust duct system, (c) confine flammable vapours and particles to the area where they are generated and exhaust them to the	The ventilation system for a power-ventilated enclosure referred to in Article 6.2.13.3. shall,(a) conform to NFPA 91, "Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids", (b) provide continuous exhaust ventilation at an air velocity sufficient to prevent the accumulation of combustible or reactive deposits in the power-ventilated enclosure and its exhaust duct system, (c) confine flammable dangerous goods vapours and particles to the area where they are generated and exhaust them to	The ventilation system for a power-ventilated enclosure referred to in Article 6.2.13.3. shall,(a) conform to NFPA 91, "Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids", (b) provide continuous exhaust ventilation at an air velocity sufficient to prevent the accumulation of combustible or reactive deposits in the power-ventilated enclosure and its exhaust duct system, (c) confine dangerous goods vapours and particles to the area where they are generated and exhaust them to the

		outdoors, (d) not return the exhausted air to the building, and (e) be provided with well identified control switches that are, (i) located outside the powerventilated enclosure, and (ii) readily accessible in case of an emergency.	the outdoors, (d) not return the exhausted air to the building, and (e) be provided with well identified control switches that are, (i) located outside of the power-ventilated enclosure, and (ii) readily accessible in case of an emergency.	outdoors, (d) not return the exhausted air to the building, and (e) be provided with well identified control switches that are, (i) located outside of the power-ventilated enclosure, and (ii) readily accessible in case of an emergency.
6.2.13.5.(2)	6.2.13.5. Enclosure Construction	Combustible materials are permitted in the power-ventilated enclosure described in Sentence (1) and its exhaust duct system if,(a) such materials are required by the corrosive or reactive properties of the chemicals or liquids being used, and (b) their flame-spread rating is not more than 25.	Combustible materials are permitted in the power-ventilated enclosuresystems described in Clause (1)(a) and its exhaust duct system if, (a) such materials are required by the corrosive or reactive properties of the chemicals or liquidsdangerous goods being used, and (b) their flame-spread rating is not more than 25.	Combustible materials are permitted in systems described in Clause (1)(a) if, (a) such materials are required by the corrosive or reactive properties of the dangerous goods being used, and (b) their flame-spread rating is not more than 25.

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CODE CHANGE POSTING – PART 7 PLUMBING

Current Ontario Code Sentence	Current Ontario Code Article Title	Current Ontario Code Provision	Proposed New Ontario Code Provision {with the Tracked Changes}	Proposed New Ontario Code Provision {without the Tracked Changes}
7.1.2.1.(1)	7.1.2.1. Application	Except as provided in Sentence (2), this Part applies to the design and construction of plumbing.	Except as provided in Sentence (2), this Part applies to the designand, construction, extension, alteration, renewal or repair of plumbing systems.	Except as provided in Sentence (2), this Part applies to the design, construction, extension, alteration, renewal or repair of plumbing systems.
7.1.5.1.(1)	7.1.5.1. Sanitary Drainage Systems	Every sanitary drainage system shall be connected to a public sanitary sewer, a public combined sewer or a private sewage disposal system.	EveryExcept where supplying systems that are covered in Section 7.7., sanitary drainage systemsystems shall be connected to a public sanitary sewer, a public combined sewer or a private sewage disposal system.	Except where supplying systems that are covered in Section 7.7., sanitary drainage systems shall be connected to a public sanitary sewer, a public combined sewer or a private sewage disposal system.

7.1.5.2.(1)	7.1.5.2. Storm Drainage Systems	Every storm drainage system shall be connected to a public storm sewage works, a public combined sewage works or a designated storm water disposal location but shall not be connected to a sanitary sewage works.	EveryExcept as provided in Section 7.77., storm drainage systemsystems shall be connected to a public storm sewage workssewer, a public combined sewage workssewer or a designated storm water disposal location but shall not be connected to a sanitary sewage works.	Except as provided in Section 7.7., storm drainage systems shall be connected to a public storm sewer, a public combined sewer or a designated storm water disposal location.
7.1.5.3.(1)	7.1.5.3. Water Distribution Systems	Except as provided in Sentence (2), every water distribution system shall be connected,(a) to a watermain that is part of a municipal drinking water system, or (b) to a drinking water system, if a watermain described in Clause (a) is not available.	Except as provided in Sentence (2), every water distribution systemsystems shall be connected, (a) to a watermain that is part of a municipal drinkingpublic water system, main or (b) to a drinkingpotable private water system, if a watermain described in Clause (a) is not available supply system.	Except as provided in Sentence (2) water distribution systems shall be connected to a public water main or a potable private water supply system.

7.1.5.4.(1)	7.1.5.4. Separate Services	Except as provided in Sentences (2) and (3), piping in any building shall be connected to the public services separately from piping of any other building.	Except as provided in Sentences (2) and (3), piping in any building shall be connected to the public services shall be connected separately from piping of any other building, except that an ancillary building on the same property may be served by the same service.	Except as provided in Sentence (3), piping in any building connected to the public services shall be connected separately from piping of any other building, except that an ancillary building on the same property may be served by the same service.
7.1.5.4.(2)	7.1.5.4. Separate Services	An ancillary building on the same property as the main building may be served by the same service.	An ancillary building on the same property as the main building may be served by the same service.N/A	N/A
7.2.1.3.(1)	7.2.1.3. Identification and Certification	Every length of pipe and every fitting shall have cast, stamped or indelibly marked on it the maker's name or mark and the weight or class or quality of the product, or it shall be marked in accordance with the relevant standard, and such markings shall be visible after installation.	Every length of pipe and every fitting shall (a) have cast, stamped or indelibly marked on it the maker's maker's name or mark and the weight or class or quality of the product, or it shall (b) be marked in accordance with the relevant standard, and such markings shall be visible after installation.	Every length of pipe and every fitting shall (a) have cast, stamped or indelibly marked on it the maker's name or mark and the weight or class or quality of the product, or (b) be marked in accordance with the relevant standard.

7.2.3.1.(5)	7.2.3.1. Traps	A drum trap shall not be installed in a drainage system.	A drum trap shall not be installed inused as a drainage system. fixture trap unless required to serve as an interceptor and access for servicing is provided.	A drum trap shall not be used as a fixture trap unless required to serve as an interceptor and access for servicing is provided.
7.2.4.2.(1)	7.2.4.2. Sanitary T Fittings	r provided above the connection.		A double sanitary T fitting shall not be used to connect the trap arms of (a) back outlet water closets installed back-to-back, or (b) 2 urinals where no cleanout fitting is provided above the connection.
7.2.5.4.(2)	7.2.5.4. Vitrified Clay Pipe and Fittings	Couplings and joints for vitrified clay pipe shall be certified to CSA A60.3-M, "Vitrified Clay Pipe Joints".	Couplings and joints for vitrified clay pipe shall be certified conform to CSA A60.3-M, "Vitrified Clay Pipe Joints".	Couplings and joints for vitrified clay pipe shall conform to CSA A60.3-M, "Vitrified Clay Pipe Joints".
7.2.5.7.(1)	7.2.5.7. Crosslinked Polyethylene Pipe and Fittings	Crosslinked polyethylene pipe and its associated fittings used in hot and cold potable water systems shall be certified to CSA B137.5, "Crosslinked Polyethylene (PEX) Tubing Systems for Pressure Applications".	Crosslinked polyethylene pipe and its associated manufacturer-approved fittings used in hot and cold potable water systems shall be certified conform to CSA B137.5, "Crosslinked"	Crosslinked polyethylene pipe and manufacturer-approved fittings used in hot and cold potable water systems shall conform to CSA B137.5, "Crosslinked Polyethylene (PEX) Tubing Systems for Pressure Applications".

			Polyethylene (PEX) Tubing Systems for Pressure Applications".	
7.2.5.8.(1)	7.2.5.8. PVC Pipe and Fittings	PVC water pipe, fittings and solvent cement shall be certified to CSA B137.3, "Rigid Polyvinylchloride (PVC) Pipe and Fittings for Pressure Applications" or CSA B137.2, "Polyvinylchloride (PVC) Injection-Moulded Gasketed Fittings for Pressure Applications", and have a minimum pressure rating of 1 100 kPa.	1) PVC water pipe, fittings and solvent cement shall be certified to CSA B137.3, "Rigid Polyvinylchloride (PVC) Pipe and Fittings for Pressure Applications" or CSA B137.2, "Polyvinylchloride (PVC) Injection-Moulded Gasketed Fittings for Pressure Applications", and have a minimum pressure rating of 1 100 kPa. 2) PVC water pipe and fittings in Sentence (1) shall not be used in a hot water system. 1) PVC water pipe, fittings and solvent cement shall (a) conform to CSA B137.3, "Rigid polyvinylchloride (PVC) pipe and fittings for pressure applications," and (b) have a pressure rating of not less than 1 100 kPa.	 1) PVC water pipe, fittings and solvent cement shall (a) conform to CSA B137.3, "Rigid polyvinylchloride (PVC) pipe and fittings for pressure applications," and (b) have a pressure rating of not less than 1 100 kPa. 2) PVC water pipe fittings shall conform to (a) ASTM D2466, "Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40," or (b) ASTM D2467, "Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80."

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	2) PVC water pipe fittings shall conform to (a) ASTM D2466, "Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40," or	3) PVC injection-moulded gasketed fittings shall conform to CSA B137.2, "Polyvinylchloride (PVC) injection-moulded gasketed fittings for pressure
	(b) ASTM D2467, "Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80."	applications."4) PVC water pipe and fittings referred to in Sentences (1), (2) and (3) shall not be
	3) PVC injection-moulded gasketed fittings shall conform to CSA B137.2, "Polyvinylchloride (PVC) injection-moulded gasketed fittings for pressure applications."	used in a hot water system.
	4) PVC water pipe and fittings referred to in Sentences (1), (2) and (3) shall not be used in a hot water system.	

7.2.5.8.(2)	7.2.5.8. PVC Pipe and Fittings	PVC water pipe and fittings in Sentence (1) shall not be used in a hot water system.	[See the changes in Sentence 7.2.5.8.(1)]	[See the changes in Sentence 7.2.5.8.(1)]
7.2.5.9.(1)	7.2.5.9. CPVC Pipe, Fittings and Solvent Cements	CPVC hot and cold water pipe, fittings and solvent cements shall be certified to CSA B137.6, "Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing and Fittings for Hot and Cold Water Distribution Systems".	CPVC hot and cold water pipe, fittings and solvent cements shall be certified conform to- CSA B137.6, "Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing and Fittings for Hot and Cold Water Distribution Systems".	CPVC hot and cold water pipe, fittings and solvent cements shall conform to CSA B137.6, "Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing and Fittings for Hot and Cold Water Distribution Systems".
7.2.5.12.(1)	7.2.5.12. Plastic Pipe, Fittings and Solvent Cement Used in Buildings (See Appendix A.)	Plastic pipe, fittings and solvent cement used inside or under a building in a sanitary drainage system or venting system shall be certified to,(a) ASTM F628, "Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe With a Cellular Core", (b) CAN/CSA-B181.1, "Acrylonitrile-Butadiene-Styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings", or (c) CAN/CSA-B181.2, "Polyvinylchloride (PVC) and Chlorinated Polyvinylchloride (CPVC)	Plastic pipe, fittings and solvent cement used inside or under a building in a sanitary drainage system or venting system shall be certified conform to,(_(a) ASTM F628, "Standard Specification for Acrylonitrile-Butadiene-Styrene- (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe With a Cellular Core", (," (b) CAN/CSA-B181.1, ""Acrylonitrile-Butadiene-Styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings", or (c) CAN/CSA-B181.2, "Polyvinylchloride (PVC) and Chlorinated Polyvinylchloride	Plastic pipe, fittings and solvent cement used inside or under a building in a drainage or venting system shall conform to (a) ASTM F628, "Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe With a Cellular Core," (b) CSA B181.1, "Acrylonitrile-Butadiene-Styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings", or (c) CSA-B181.2, "Polyvinylchloride (PVC) and Chlorinated Polyvinylchloride

		Drain, Waste, and Vent Pipe and Pipe Fittings".	(CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings".	(CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings".
7.2.6.1.(1)	7.2.6.1. Cast Iron Frames, Covers, Drainage and Vent Pipe and Fittings	Drainage piping, vent piping and fittings made of cast iron shall be certified to CAN/CSA-B70, "Cast Iron Soil Pipe, Fittings and Means of Joining".	Drainage piping, vent piping and fittings made of cast iron shall be certified conform to CAN/ CSA-B70, "Cast Iron Soil Pipe, Fittings and Means of Joining".	Drainage piping, vent piping and fittings made of cast iron shall conform to CSA B70, "Cast Iron Soil Pipe, Fittings and Means of Joining".
7.2.6.8.(1)	7.2.6.8. Corrugated Steel Pipe and Couplings	Corrugated steel pipe and couplings shall be certified to CAN/CSA-G401, "Corrugated Steel Pipe Products".	Corrugated steel pipe and couplings shall be certified conform to CAN/CSA-G401, "Corrugated Steel Pipe Products".	Corrugated steel pipe and couplings shall conform to CAN/CSA-G401, "Corrugated Steel Pipe Products".
7.2.7.4.(1)	7.2.7.4. Copper Tube	Copper tube in a plumbing system shall,(a) be certified to ASTM B88, "Seamless Copper Water Tube", or (b) comply with ASTM B306, "Copper Drainage Tube (DWV)".	Copper tube in a plumbing system shall, (a) be certified conform to (a) ASTM B88, "Standard Specification for Seamless Copper Water Tube", or (b) comply with ASTM B306, "Standard Specification for Copper Drainage Tube (DWV)".	Copper tube shall conform to (a) ASTM B88, "Standard Specification for Seamless Copper Water Tube or (b) ASTM B306, "Standard Specification for Copper Drainage Tube (DWV)".

7.2.10.1.(1)	7.2.10.1. Floor Flanges	Brass floor flanges shall be certified to CSA B158.1, "Cast Brass Solder Joint Drainage, Waste and Vent Fittings".	Brass floor flanges shall be certified conform to CSA B158.1, "Cast Brass Solder Joint Drainage, Waste and Vent Fittings".	Brass floor flanges shall conform to CSA B158.1, "Cast Brass Solder Joint Drainage, Waste and Vent Fittings".
7.2.10.4.(1)	7.2.10.4. Mechanical Couplings	Groove and shoulder type mechanical pipe couplings shall conform to CSA B242, "Groove and Shoulder Type Mechanical Pipe Couplings".	Groove_ and shouldertype mechanical pipe couplings for pressure applications shall conform to CSA B242, "Groove_ and ShoulderType Mechanical Pipe Couplings".	Groove_ and shoulder-type mechanical couplings for pressure applications shall conform to CSA B242, "Groove- and Shoulder-Type Mechanical Pipe Couplings".

7.2.10.10.(1)	7.2.10.10. Back- Siphonage Preventers and Backflow Preventers	Except as provided in Sentence (2), back-siphonage preventers and backflow preventers shall be certified to,(a) CSA B64.0, "Definitions, General Requirements and Test Methods for Vacuum Breakers and Backflow Preventers", (b) CSA B64.1.1, "Atmospheric Vacuum Breakers (AVB)", (c) CSA B64.1.2, "Pressure Vacuum Breakers (PVB)", (d) CSA B64.1.3, "Spill-resistant Pressure Vacuum Breakers (SRPVB)", (e) CSA B64.1.4, "Vacuum Breaker, Air Space Type (ASVB)", (f) CSA B64.2, "Hose Connection Vacuum Breakers (HCVB) with Manual Draining Feature", (h) CSA B64.2.1.1, "Hose Connection Dual Check Vacuum Breakers (HCDVB)", (i) CSA B64.2.2, "Hose Connection Vacuum Breakers (HCDVB)", (i) CSA B64.2.2, "Hose Connection Dual Check Vacuum Breakers (HCDVB)", (i) CSA B64.3.1, "Dual Check Valve Backflow Preventers with Atmospheric Port (DCAP)", (k) CSA B64.3.1, "Dual Check Valve Backflow Preventers with Atmospheric Port for Carbonators (DCAPC)", (I) CSA B64.4,	Except as provided in Sentence (2), back-siphonage preventers and backflow- preventers shall be certified conform to;((a) CSA B64.0, "_"Definitions, General Requirements and Test Methods for Vacuum Breakers and Backflow Preventers", (b) CSA B64.1.1, "Atmospheric Vacuum Breakers (AVB)", (c) CSA B64.1.2, "Pressure Vacuum Breakers (PVB)", (d) CSA B64.1.3, "Spill-resistant Pressure Vacuum Breakers (SRPVB)", (e) CSA B64.1.4, "Vacuum Breaker, Air Space Type (ASVB)", (2, "Hose connection vacuum breakers (HCVB)," (f) CSA B64.2, "Hose Connection Vacuum Breakers (HCVB)", (g) CSA B64.2.1, ".1, "Hose Connection Vacuum Breakers (HCVB) with Manual Draining Feature", (manual draining feature,"	Except as provided in Sentence (2), back-siphonage preventers and backflow preventers shall conform to (a) CSA B64.0, "Definitions, General Requirements and Test Methods for Vacuum Breakers and Backflow Preventers", (b) CSA B64.1.1, "Atmospheric Vacuum Breakers (AVB)", (c) CSA B64.1.2, "Pressure Vacuum Breakers (PVB)", (d) CSA B64.1.3, "Spill-resistant Pressure Vacuum Breakers (SRPVB)", (e) CSA B64.2, "Hose connection vacuum breakers (HCVB)," (f) CSA B64.2.1, "Hose connection vacuum breakers (HCVB) with manual draining feature," (g) CSA B64.2.2, "Hose connection vacuum breakers (HCVB) with automatic draining feature,"
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"Reduced Pressure F	. , ,	
Backflow Preventers'		·
"Double Check Valve	e (DCVA) Backflow automatic	port (DCAP),"
Preventers", (n) CSA		
Check Valve (DuC) E	Backflow <u>draining feature,"</u>	(i) CSA B64.4, "Reduced pressure
Preventers", (o) CSA	B64.7, "Laboratory	principle (RP) backflow preventers,"
Faucet Vacuum Brea	akers (LFVB)", (p)	
CSA B64.8, "Dual Ch	neck Valve	- , , , , , , , , , , , , , , , , , , ,
Backflow Preventers		flow principle backflow preventers for fire
Vent (DuCV)", or (q)		
"Selection and Install		protection systems (RPF),"
Preventers".	and of Edding.	
Trovolliolo .	(i) CSA B64. 2.2, "Hose Conn	
	Vacuum Breakers (HCVB) wi	th (DCVA) backflow preventers,"
	Automatic Draining Feature",	(4,
	"Reduced pressure principle ((I) CSA B64.5.1, "Double check valve
	backflow preventers,"	backflow preventers for fire protection
		systems (DCVAF),"
	(j) CSA B64. 3, "Dual Check V	/alve
	Backflow Preventers with Atm	mospheric (m) CSA B64.6, "Dual check valve
	Port (DCAP)", (4.1, "Reduced	pressure (DuC) backflow preventers,"
	principle backflow preventers	for fire
		(n) CSA B64.6.1, "Dual check valve
	protection systems (RPF),"	backflow preventers for fire protection
		systems (DuCF),"
	(k) CSA B64. 3.1, "Dual Chec l	k Valve
	Backflow Preventers with Atm	ospheric (o) CSA B64.7, "Laboratory faucet
	Port for Carbonators (DCAPC	vacuum breakers (LFVB),"
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	"Double check valve (DCVA) backflow	(p) CSA B64.8, "Dual check valve
	preventers,"	backflow preventers with intermediate
		vent (DuCV)," or
	(I) CSA B64.4, "Reduced Pressure	<i>'</i>
	Principle (RP) Backflow Preventers",	(q) CSA B64.9, "Single check valve
	(5.1, "Double check valve backflow	backflow preventers for fire protection
	preventers for fire protection systems	systems (SCVAF)."
	(DCVAF),"	-,
	<u>(150 (7)),</u>	
	(m) CSA B64. 5, "Double Check Valve	
	(DCVA) Backflow Preventers", (6, "Dual	
	check valve (DuC) backflow preventers,"	
	check valve (Ddo) backnow preventers,	
	(n) CSA B64.6 , "Dual Check Valve	
	(DuC) Backflow Preventers", (.1, "Dual	
	check valve backflow preventers for fire	
	protection systems (DuCF),"	
	(o) CSA B64.7, <u>"</u> Laboratory Faucet	
	Vacuum Breakers faucet vacuum	
	breakers (LFVB)", (),"	
	(n) CCA DCA Q ""Dual Chack \/alica	
	(p) CSA B64.8, <u>"</u> Dual Check Valve	
	Backflow Preventerscheck valve	
	backflow preventers with Intermediate	
	Vent intermediate vent (DuCV)",)," or (
	(q) CSA B64. 10, "Selection and	
	Installation of Backflow Preventers".9,	

	"Single check valve backflow preventers for fire protection systems (SCVAF)."	

7.2.10.10.(2)	7.2.10.10. Back- Siphonage Preventers and Backflow Preventers	Back-siphonage preventers (anti-siphon fill valves) for tank type water closets shall be certified to CSA B125.3, "Plumbing Fittings".	Back-siphonage preventers (anti-siphon fill valves) for tank-type water closets (anti-siphon fill valves) shall be certified conform to ASSE 1002/ASME A112.1002/CSA B125.3, "Plumbing Fittings".12, "Anti-siphon fill valves for water closet tanks."	Back-siphonage preventers for tank- type water closets (anti-siphon fill valves) shall conform to ASSE 1002/ASME A112.1002/CSA B125.12, "Anti-siphon fill valves for water closet tanks."
7.3.3.11.(2)	7.3.3.11. Indirect Connections	The size of the air break shall be at least 25 mm.	The size of the air break shall be at least equal the NPS of the fixture drain, branch or pipe that terminates above the directly connected fixture, and it shall be not less than 25 mm.	The size of the air break shall at least equal the NPS of the fixture drain, branch or pipe that terminates above the directly connected fixture, and it shall be not less than 25 mm.
7.3.5.1.(1)	7.3.5.1. Backfill of Pipe Trench	Where piping is installed underground, the backfill shall be carefully placed and tamped to a height of 300 mm over the top of the pipe and shall be free of stones, boulders, cinders and frozen earth.	Where Underground piping is installed underground, shall be protected (a) in the absence of the pipe manufacturer's instructions for backfill shall be carefully, by backfill that is (i) placed and tamped compacted to a height of 300 mm over the top of the pipe, and shall be	Underground piping shall be protected (a) in the absence of the pipe manufacturer's instructions for backfill, by backfill that is (i) placed and compacted to a height of 300 mm over the top of the pipe, and (ii) free of stones, boulders, cinders and frozen earth or other material capable of damaging the piping, or

			(ii) free of stones, boulders, cinders and frozen earth or other material capable of damaging the piping, or (b) by concrete that is at least 75 mm thick and at least 200 mm wider than the pipe.	(b) by concrete that is at least 75 mm thick and at least 200 mm wider than the pipe.
7.3.6.1.(1)	7.3.6.1. Tests and Inspection of Drainage or Venting Systems	Except in the case of an external leader, after a section of drainage system or a venting system has been roughed in, and before any fixture is installed or piping is covered, a water or an air test shall be conducted.	Except in the case of an external leader, after a section of <u>a</u> drainage system or a venting system has been roughed in, and before any fixture is installed or piping is- covered, a water <u>pressure test</u> or an air <u>pressure</u> test shall be conducted.	Except in the case of an external leader, after a section of a drainage system or a venting system has been roughed in, and before any fixture is installed or piping is covered, a water pressure test or an air pressure test shall be conducted.
7.3.6.5.(1)	7.3.6.5. Air Tests	Where an air test is made, it shall be conducted in accordance with the manufacturer's instructions for the piping materials, and,(a) air shall be forced into the system until a gauge pressure of 35 kPa is created, and (b) this pressure shall be maintained for at least 15 min without a drop in pressure.	Where an air test is made, it Air pressure tests shall be conducted in accordance with the manufacturer's manufacturer's instructions for the each piping materials material, and, (a) air shall be forced into the system until a gauge pressure of 35 kPa is created, and (fb) this pressure shall be	Air pressure tests shall be conducted in accordance with the manufacturer's instructions for each piping material, and (a) air shall be forced into the system until a pressure of 35 kPa is created, and (b) this pressure shall be maintained for at least 15 min without a drop in pressure.

			maintained for at least 15 min without a drop in pressure.	
7.3.6.7.(2)	7.3.6.7. Ball Tests	The diameter of the ball shall be not less than 50 mm where the size of the pipe is 4 in. or more.	The diameter of the ball shall be not less than-50 (a) 50 mm where the size of the pipe is NPS 3 or more, or (b) 25 mm where the size of the pipe is 4 in. or more less than NPS 3.	The diameter of the ball shall be not less than (a) 50 mm where the size of the pipe is NPS 3 or more, or (b) 25 mm where the size of the pipe is less than NPS 3.
7.3.7.2.(1)	7.3.7.2. Tests of Potable Water Systems	Every potable water system shall be capable of, (a) withstanding without leakage a water pressure that is at least 1 000 kPa for at least 1 h, or (b) withstanding for at least 2 h without a drop in pressure an air pressure that is at least 700 kPa.	EveryExcept as required in Sentence (2), potable water systems shall be capable of,(able to withstand (a) withstanding without leakageleaking, a water pressure that is at least 1 000 kPa for at least 1 hequal to the maximum in-service pressure, or (b) withstandingan air pressure of not less than 700 kPa for at least 2 h	Except as required in Sentence (2), potable water systems shall be able to withstand (a) without leaking, a water pressure that is at least equal to the maximum inservice pressure, or (b) an air pressure of not less than 700 kPa for at least 2 h without a drop in pressure.

			without a drop in- pressure-an air pressure that is at least 700 kPa.	
7.4.1.1.(1)	7.4.1.1. Application of Drainage Systems	This Section applies to sanitary drainage systems and storm drainage systems.	This Section applies to sanitary drainage systems and storm drainage systems, combined building drains or combined building sewers.	This Section applies to sanitary drainage systems, storm drainage systems, combined building drains or combined building sewers.
7.4.3.5.(1)	7.4.3.5. Macerating Toilet System	A maceration toilet system shall only be installed, (a) where no connection to a gravity sanitary drainage system is available, and (b) in accordance with the manufacturer's instructions.	A maceration macerating toilet system shall only be installed, (a) where no connection to a-gravity sanitary drainage system is available, and (b) in accordance with the manufacturer's instructions.	A macerating toilet system shall only be installed where no connection to a gravity sanitary drainage system is available.

7.4.4.2.(1)	7.4.4.2. Protection for Drainage System	Where a fixture discharges sewage or clear water waste that has been heated, the drainage system shall be suitable for the temperature of the sewage or clear water waste being discharged.	Where a fixture discharges sewage or clear-water waste that has been heated, the drainage system shall be suitable for theis at a temperature above 75°C, provision shall be made for cooling of the sewage or clear water waste being to 75°C or less before it is discharged to the drainage system.	Where a fixture discharges sewage or clear-water waste that is at a temperature above 75°C, provision shall be made for cooling of the waste to 75°C or less before it is discharged to the drainage system.
7.4.5.1.(4)	7.4.5.1. Traps for Sanitary Drainage Systems	Reserved	Reserved An indirectly connected fixture that can discharge only clear-water waste other than a drinking fountain need not be protected by a trap.	An indirectly connected fixture that can discharge only clear-water waste other than a drinking fountain need not be protected by a trap.
7.4.5.2.(1)	7.4.5.2. Traps for Storm Drainage Systems	Where a storm drainage system is connected to a public combined sewer, a trap shall be installed between any opening in the system and the drain or sewer, except that no trap is required if the opening is the upper end of a leader that terminates,(a) at a roof that is used only for weather protection, (b) not less than 1 000 mm above or not less than 3.5 m in any other direction from any air inlet, openable window or door, and (c)	Where a storm drainage system is connected to a combined building sewer or a public combined sewer, a trap shall be installed between any opening in the system and the drain or sewer, except that no trap is required if the opening is the upper end of- a leader that terminates, (a) at a roof that is used only for weather protection, (b) not less than 1 000 mm above or not less than 3.5 m in any other direction from any air inlet,	Where a storm drainage system is connected to a combined building sewer or a public combined sewer, a trap shall be installed between any opening in the system and the drain or sewer, except that no trap is required if the opening is the upper end of a leader that terminates a) at a roof that is used only for weather protection, (b) not less than 1 000 mm above or not less than 3.5 m in any other direction from any air inlet,

		not less than 1 800 mm from a property line.	openable window or door, and (c) not less than 1 800 mm from a property line.	openable window or door, and (c) not less than 1 800 mm from a property line.
7.4.6.3.(1)	7.4.6.3. Sumps or Tanks (See Appendix A.)	Only piping that is too low to drain into a building sewer by gravity shall be drained to a sump or receiving tank.	Only piping Piping that is too low to drain into a building sewer by gravity shall be drained to- a sump or receiving tank.	Piping that is too low to drain into a building sewer by gravity shall be drained to a sump or receiving tank.
7.4.6.3.(2)	7.4.6.3. Sumps or Tanks (See Appendix A.)	Where the sump or tank receives sanitary sewage, it shall be water and air-tight and shall be vented.	Where the sump or tank receives sanitary sewage, it shall be water_ and air-tight and shall be vented.	Where the sump or tank receives sewage, it shall be water- and air-tight and shall be vented.
7.4.6.3.(3)	7.4.6.3. Sumps or Tanks (See Appendix A.)	Equipment such as a pump or ejector that can lift the contents of the sump or tank and discharge it into the sanitary building drain or sanitary building sewer shall be installed.	Equipment such as a pump or ejector that can lift the contents of the sump or tank and discharge it into the sanitary building drain or sanitary building sewer shall be installed.	Equipment such as a pump or ejector that can lift the contents of the sump or tank and discharge it into the building drain or building sewer shall be installed.
7.4.6.3.(5)	7.4.6.3. Sumps or Tanks (See Appendix A.)	Where there is a building trap, the discharge pipe from the equipment shall be connected to the sanitary building drain downstream of the trap.	Where there is a building trap, the discharge pipe from the equipment shall be connected to the sanitary building drain downstream of the trap.	Where there is a building trap, the discharge pipe from the equipment shall be connected to the building drain downstream of the trap.

7.4.7.1.(6)	7.4.7.1. Cleanouts for Drainage Systems	Every sanitary building drain or storm building drain shall be provided with a cleanout fitting that is located as close as practical to the place where the drain leaves the building.	Every sanitary building drain or storm building drainBuilding drains shall be provided with a cleanout fitting of NPS 4 or larger that is located as close as practical to the place where the building drain leaves the building.	Building drains shall be provided with a cleanout fitting of NPS 4 or larger that is located as close as practical to the place where the building drain leaves the building.
7.4.7.1.(9)	7.4.7.1. Cleanouts for Drainage Systems	Every indirect drainage pipe carrying waste from a food receptacle shall have a cleanout access at every change of direction of more than 45°.	Every indirect drainage pipe carrying waste from a food receptacle Cleanouts shall have a cleanout access at everybe installed so that the cumulative change of in direction of is not more than 45°.90° between cleanouts in a drip pipe from a food receptacle or in a fixture drain serving a kitchen sink in a non-residential occupancy.	Cleanouts shall be installed so that the cumulative change in direction is not more than 90° between cleanouts in a drip pipe from a food receptacle or in a fixture drain serving a kitchen sink in a non-residential occupancy.
7.4.7.4.(3)	7.4.7.4. Location of Cleanouts	Reserved	Reserved There shall be no change of direction between a cleanout fitting and the trap that it serves.	There shall be no change of direction between a cleanout fitting and the trap that it serves.
7.4.7.4.(4)	7.4.7.4. Location of Cleanouts	Each change of direction of the piping between a cleanout fitting and the drainage piping or vent piping that it	Each change of direction of the The piping between a cleanout fitting and the drainage piping or vent piping that system it serves shall be	The piping between a cleanout fitting and the drainage system it serves shall not change direction by more than 45°.

		serves shall be accomplished by using 45° bends.	accomplished not change direction by using more than 45° bends.°.	
7.4.9.3.(3)	7.4.9.3. Size of Fixture Outlet Pipes	Where clothes washers do not drain to a laundry tray, the trap inlet shall be fitted with a vertical standpipe that is not less than 600 mm long measured from the trap weir and the top of the standpipe shall terminate above the flood level rim of the clothes washer it serves.	Where clothes washers do not drain to a laundry tray, the trap inlet shall be <u>not less than NPS 2 and be</u> fitted with a vertical standpipe that is not less than 600 mm long- measured from the trap weir and the top of the standpipe shall terminate terminates above the flood level rim of the clothes washer it serves.	Where clothes washers do not drain to a laundry tray, the trap inlet shall be not less than NPS 2 and be fitted with a vertical standpipe that is not less than 600 mm long measured from the trap weir and terminates above the flood level rim of the clothes washer.
7.4.10.3.(2)	7.4.10.3. Hydraulic Loads from Fixtures with Continuous or Semi- Continuous Flow	Where a fixture or equipment that produces a continuous or semicontinuous flow drains to a storm drainage system, the hydraulic load from the fixture is 900 litres for each litre per second of flow.	Where a fixture or equipment that produces a continuous or semicontinuous flow drains to a <u>combined</u> <u>sewer or to a</u> storm <u>drainage</u> <u>systemsewer</u> , the hydraulic load from the fixture is 900 <u>litresL</u> for each litre per second of flow.	Where a fixture or equipment that produces a continuous or semicontinuous flow drains to a combined sewer or to a storm sewer, the hydraulic load from the fixture is 900 L for each litre per second of flow.
7.4.10.6.(2)	7.4.10.6. Hydraulic Loads to Soil or Waste Pipes	Where the nominally horizontal offset in a soil or waste stack is 1 500 mm or more, the hydraulic load that is served by it shall conform to Table 7.4.10.8.	Where the nominally horizontal offset in a soil or waste stack is 1 500 mm or more, the hydraulic load that is served by it shall conform to Table 7.4.10.7. or	Where the nominally horizontal offset in a stack is 1 500 mm or more, the hydraulic load that is served by it shall conform to Table 7.4.10.7. or Table

			Table 7.4.10.8., whichever is the less restrictive.	7.4.10.8., whichever is the less restrictive.
7.5.5.3.(1)	7.5.5.3. Venting of Corrosive Drain Piping and Dilution Tanks	Venting systems for drain piping or dilution tanks conveying corrosive waste shall extend independently and terminate in open air.	Venting systems for drain piping, neutralizing tanks, or dilution tanks conveying corrosive waste shall extend independently and terminate in open air.outdoors.	Venting systems for drain piping, neutralizing tanks, or dilution tanks conveying corrosive waste shall extend independently and terminate outdoors.
7.5.6.2.(1)	7.5.6.2. Vent Pipe Connections (See Appendix A.)	Every vent pipe in a plumbing system shall be installed so as to be direct as possible to a vent stack or open air, as the case may be, and so that any horizontal run below the flood level of the fixture to which the vent pipe is installed is eliminated where structurally possible.	Every vent pipe in a plumbing system shall be installed so as to be direct as possible to a vent stack or open air, as the case may be, and so that any horizontal run below the flood level of the fixture to which the vent pipe is installed is eliminated where structurally possible. Vent pipes shall be installed in a nominally vertical position where it is practical to do so.	Vent pipes shall be installed in a nominally vertical position where it is practical to do so.

7.5.6.5.(1)	7.5.6.5. Terminals	Except as provided in Sentence (3), the upper end of every vent pipe that is not terminated in open air shall be connected to a venting system that terminates through a roof to open air.	Except as provided in Sentence (3), the upper end of every vent pipe that is not terminated in openoutside air shall be connected to a venting system that terminates through a roof to openoutside air.	Except as provided in Sentence (3), the upper end of every vent pipe that is not terminated in outside air shall be connected to a venting system that terminates through a roof to outside air.
7.5.6.5.(2)	7.5.6.5. Terminals	The upper end of every vent pipe that is terminated in open air, other than a vent pipe that serves an oil interceptor or a fresh air inlet, shall be extended above the roof.	The upper end of every vent pipe that is terminated in open_outside air, other than a vent pipe that serves an oil interceptor or a fresh air inlet, shall be extended above the roof.	The upper end of every vent pipe that is terminated in outside air, other than a vent pipe that serves an oil interceptor or a fresh air inlet, shall be extended above the roof.
7.5.6.5.(6)	7.5.6.5. Terminals	Where a vent pipe passes through a roof or an outside wall of a building, it shall be protected from frost closure by increasing its diameter at least one size, but not less than 3 in. in size, immediately before it penetrates the roof or the wall.	Where a vent pipe passes through a roof or an outside wall of a buildingand may be subject to frost closure, it shall be protected from frost closure by (a) increasing its diameter at least one sizeNPS, but not less than NPS 3 in. in size, immediately before it penetrates the roof or, (b) insulating the wallpipe, or (c) protecting it in some other manner.	Where a vent pipe passes through a roof and may be subject to frost closure, it shall be protected from frost closure by (a) increasing its diameter at least one NPS, but not less than NPS 3, immediately before it penetrates the roof, (b) insulating the pipe, or (c) protecting it in some other manner.

7.5.9.2.(1)	7.5.9.2. Air Admittance Valves	Air admittance valves shall only be used to vent,(a) fixtures in buildings undergoing renovation, and (b) installations where connection to a vent may not be practical.	Air admittance valves shall only be used to vent,(a) fixtures <u>located</u> in <u>buildingsisland counters</u> , (b) fixtures that <u>may be affected by frost closure of the vent due to local climatic conditions</u> , (c) <u>fixtures in one- and two-family dwellings</u> undergoing renovation, <u>and (bor (d))</u> installations where connection to a vent may not be practical.	Air admittance valves shall only be used to vent,(a) fixtures located in island counters, (b) fixtures that may be affected by frost closure of the vent due to local climatic conditions, (c) fixtures in one- and two-family dwellings undergoing renovation, or (d) installations where connection to a vent may not be practical.
7.5.9.3.(5)	7.5.9.3. Installation Conditions	Every drainage system shall have one vent that terminates to open air in conformance with Sentence 7.5.6.5.(1).	Every drainage systemDrainage systems shall have at least one vent that terminates to open airthe outdoors in- conformance with Sentence 77.5.6.5.(1).	Drainage systems shall have at least one vent that terminates to the outdoors in conformance with Sentence 7.5.6.5.(1).
7.6.1.2.(1)	7.6.1.2. Drainage	A water distribution system shall be installed so that the system can be drained or blown out with air and outlets for this purpose shall be provided.	A water distribution system shall be installed so that the system can be drained or blown out with air and outlets for this purpose shall be provided.	A water distribution system shall be installed so that the system can be drained or blown out with air.

7.6.1.6.(1)	7.6.1.6. Suites		Shut-off valves shall be installed in every suite in a building!n buildings of residential occupancy as may be necessary to ensure that contain more than one dwelling unit, a shut-off valve shall be installed where the water supply enters each dwelling unit, so that, when the water supply to one suite is shut off, the water supply to the remainder of the building is not interrupted.	In buildings of residential occupancy that contain more than one dwelling unit, a shut-off valve shall be installed where the water supply enters each dwelling unit, so that, when the water supply to one suite is shut off, the water supply to the remainder of the building is not interrupted.
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7.6.1.12.(1)	7.6.1.12. Relief Valves (See Appendix A.)	Every pressure vessel that is part of a plumbing system or connected to a plumbing system shall be equipped with a pressure relief valve designed to open when the water pressure in the tank reaches the rated working pressure of the tank, and so located that the pressure in the tank shall not exceed 1 100 kPa or one-half the maximum test pressure sustained by the tank, whichever is the lesser.	Every pressure vessel that is partIn addition to the requirements in Sentence (2), the hot water tank of a plumbing system or connected to a plumbing systemstorage-type service water heater shall be equipped with a pressure-relief valve (a) designed to open when the water pressure in the tank reaches the rated working pressure of the tank, and (b) so located that the pressure in the tank shall not exceed 1 100 kPa or one-half the maximum test the pressure sustained at the relief valve by the tank, whichever is more than 35 kPa under any condition of flow within the lesser distribution system.	In addition to the requirements in Sentence (2), the hot water tank of a storage-type service water heater shall be equipped with a pressure-relief valve (a) designed to open when the water pressure in the tank reaches the rated working pressure of the tank, and (b) so located that the pressure in the tank shall not exceed the pressure at the relief valve by more than 35 kPa under any condition of flow within the distribution system.
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7.6.1.12.(5)	7.6.1.12. Relief Valves (See Appendix A.)	Every pipe that conveys water from a temperature relief, pressure relief, or a combined temperature and pressure relief valve shall,(a) be of a size at least equal to the size of the outlet of the valve, (b) be rigid, slope downward from the valve, and, (i) terminate with an indirect connection above a floor drain, sump or other safe location, with an air break of not more than 300 mm, or (ii) terminate at a distance not less than 150 mm and not more than 300 mm from a floor and discharge vertically down, (c) have no thread at its outlet, and (d) be capable of operating at a temperature of not less than 99°C.	Every pipe Pipes that conveys convey water from a temperature-relief, pressure-relief, or a-combined temperature- and pressure-relief valve shall, (a) be of a nominal pipe size at least equal to the sizeNPS of the outlet of the valve, (b) be rigid, slope downward from the valve, and, (i) terminate with an indirect connection above a floor drain, sump, or other safe location, with an air break- of not more than 300 mm, or (ii) terminate at a distance not less than 150 mm and not more than 300 mm from a floor and discharge vertically down, (c) have no thread at itstheir outlet, and (d) be capable of operating at a temperature of not less than 99°C.	Pipes that convey water from a temperature-relief, pressure-relief or combined temperature- and pressure-relief valve shall, (a) be of a nominal pipe size at least equal to the NPS of the outlet of the valve, (b) be rigid, slope downward from the valve, and terminate with an indirect connection above a floor drain, sump, or other safe location, with an air break of not more than 300 mm, (c) have no thread at their outlet, and (d) be capable of operating at a temperature of not less than 99°C.
7.6.2.1.(1)	7.6.2.1. Connection of Systems	Connections to potable water systems shall be designed and installed so that non-potable water or substances that may render the water non-potable cannot enter the system.	1) Except as provided in Sentence (2), connections to potable water systems shall be designed and installed so that non-potable water or substances that may render the water non-potable cannot enter the system.	1) Except as provided in Sentence (2), connections to <i>potable water systems</i> shall be designed and installed so that non- <i>potable</i> water or substances that may render the water non- <i>potable</i> cannot enter the system.

2) A water treatment device or apparatus shall not be installed unless it can be demonstrated that the device or apparatus will not introduce substances into the system that may endanger health.	2) A water treatment device or apparatus shall not be installed unless it can be demonstrated that the device or apparatus will not introduce substances into the system that may endanger health.
3) Except as provided in Articles 7.6.2.4. to 7.6.2.6. and 7.6.2.11, where a backflow preventer is required by this Subsection, the backflow preventer shall be selected, installed and tested in conformance with CSA B64.10, "Selection and Installation of Backflow Preventers".	3) Except as provided in Articles 7.6.2.4. to 7.6.2.6. and 7.6.2.11, where a backflow preventer is required by this Subsection, the backflow preventer shall be selected, installed and tested in conformance with CSA B64.10, "Selection and Installation of Backflow Preventers".
(2)4) No connection shall be made between a <i>potable water system</i> supplied with water from a <i>drinking water system</i> and any other <i>potable water system</i> without the consent of the <i>water purveyor</i> .	4) No connection shall be made between a <i>potable water system</i> supplied with water from a <i>drinking water system</i> and any other <i>potable water system</i> without the consent of the <i>water purveyor</i> .

7.6.2.1.(2)	7.6.2.1. Connection of Systems	No connection shall be made between a potable water system supplied with water from a drinking water system and any other potable water system without the consent of the water purveyor.	[See the changes in Sentence 7.6.2.1.(1)]	[See the changes in Sentence 7.6.2.1.(1)]
7.6.2.3.(3)	7.6.2.3. Backflow Caused by Back Pressure	Tank type water closet valves shall be provided with a <i>back-siphonage preventer</i> in conformance with Sentence 7.2.10.10.(2).	Tank-type water closets valves shall be provided with a back-siphonage preventer in conformance with Sentence 7.2.10.10.(2).	Tank-type water closets shall be provided with a <i>back-siphonage preventer</i> in conformance with Sentence 7.2.10.10.(2).
7.6.2.2.(1)	7.6.2.2. Back- Siphonage	Every potable water system that supplies a fixture or tank that is not subject to pressures above atmospheric shall be protected against back-siphonage by a backflow preventer.	Every pPotable water system that supplies a connections to fixtures, or tanks, vats or other devices that is not subject to pressures above atmospheric and containing other than potable water shall be installed so as to prevent protected against back-siphonage by a backflow preventer in conformance with Sentence (4).	Potable water connections to fixtures, tanks, vats or other devices not subject to pressures above atmospheric and containing other than potable water shall be installed so as to prevent backsiphonage in conformance with Sentence (4).

		N/A	Except as provided in Sentence 2.6.2.10.(2), back-siphonage shall be prevented by the installation of	Except as provided in Sentence 2.6.2.10.(2), back-siphonage shall be prevented by the installation of
			(a) an air gap,	(a) an air gap,
			(b) an atmospheric vacuum breaker,	(b) an atmospheric vacuum breaker,
			(c) a pressure vacuum breaker,	(c) a pressure vacuum breaker,
			(d) a spill-resistant pressure vacuum breaker,	(d) a spill-resistant pressure <i>vacuum</i> breaker,
7.6.2.2.(4)	7.6.2.2. Back-		(e) a hose connection vacuum breaker,	(e) a hose connection vacuum breaker,
, ,	Siphonage		(f) a dual check valve backflow preventer with atmospheric port,	(f) a dual <i>check valve backflow preventer</i> with atmospheric port,
			(g) a double check valve assembly,	(g) a double <i>check valve</i> assembly,
			(h) a reduced pressure principle backflow preventer.	(h) a reduced pressure principle backflow preventer,
			(i) a dual check valve backflow preventer,	(i) a dual check valve backflow preventer,
			(j) a laboratory faucet type vacuum breaker, or	(j) a laboratory faucet type <i>vacuum</i> breaker, or

			(k) a dual check valve backflow preventer with vent.	(k) a dual check valve backflow preventer with vent.
7.6.2.3.(1)	7.6.2.3. Backflow Caused by Back Pressure	Except as provided in Sentence (3) and Articles 7.6.2.4. to 7.6.2.6., where a backflow preventer is required by this Subsection, the backflow preventer shall be selected, installed and tested in conformance with CSA B64.10, "Selection and Installation of Backflow Preventers".	1) (1) Except as provided in Sentence (3) and Articles 7.6.2.4. to 7.6.2.6., where a backflow preventer is required by this Subsection, the backflow preventer shall be selected, installed and tested in conformance with CSA B64.10, "Selection and Installation of Backflow Preventers". (2) Backflow preventers shall be provided in conformance with Sentence 7.2.10.10.(1).	1) Potable water connections to fixtures, tanks, vats, boilers or other devices containing other than potable water and subject to pressure above atmospheric shall be arranged to prevent backflow caused by back pressure in conformance with Sentences (2) and (3).
			(3) Tank type water closet valves shall be provided with a back-siphonage preventer in conformance with Sentence 7.2.10.10.(2).Potable water connections	2) Except as provided in Article 7.6.2.4., backflow caused by back pressure of

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to fixtures, tanks, vats, boilers or other	non-toxic substances into a potable
<u>devices</u>	water system shall be prevented by the
	installation of
containing other than potable water and	
subject to pressure above atmospheric	(a) an air gap,
shall be	
<u></u>	(b) a dual check valve backflow
arranged to prevent backflow caused by	preventer with atmospheric port,
back pressure in conformance with	processing and an arrangement process,
Sentences (2) and (3).	(c) a dual check valve backflow
Ochtenoes (2) and (0).	preventer,
	proventor,
	(d) a dual check valve backflow
2) Except as provided in Article 7.6.2.4.,	preventer with vent,
backflow caused by back pressure of	preventer with vent,
backnow caused by back pressure or	(e) a double check valve assembly, or
non-toxic substances into a potable	(e) a double check valve assembly, of
	(f) a reduced pressure principle
water system shall be prevented by the	
installation of	backflow preventer.
(a) an air gap,	
	O) De al-flace access de la la consecue af
(b) a dual check valve backflow	3) Backflow caused by back pressure of
preventer with atmospheric port,	toxic substances into a potable water
	system
(c) a dual check valve backflow	
preventer,	shall be prevented by the installation of
(d) a dual check valve backflow	(a) an air gap, or
preventer with vent,	

			(e) a double check valve assembly, or (f) a reduced pressure principle backflow preventer.	(b) a reduced pressure principle backflow preventer.
			3) Backflow caused by back pressure of toxic substances into a potable water system shall be prevented by the installation of (a) an air gap, or (b) a reduced pressure principle	
7.6.2.3.(2)	7.6.2.3. Backflow Caused by Back Pressure	Backflow preventers shall be provided in conformance with Sentence 7.2.10.10.(1).	See the changes in Sentence 7.6.2.3.(1)]	[See the changes in Sentence 7.6.2.3.(1)]

7.6.2.3.(3)	7.6.2.3. Backflow Caused by Back Pressure	Tank type water closet valves shall be provided with a <i>back-siphonage preventer</i> in conformance with Sentence 7.2.10.10.(2).	[See the changes in Sentence 7.6.2.3.(1)]	[See the changes in Sentence 7.6.2.3.(1)]
7.6.2.4.(1)	7.6.2.4. Backflow from Fire Protection Systems	A backflow preventer shall not be required in a residential full flow through fire sprinkler system, in which the pipe and fittings are constructed of potable water system materials.	1) Except as provided in Sentences (2) and (3), water supplied to shower heads or bathtubs shall be controlled by an automatic compensating valve conforming to (a) ASME A112.18.1/CSA B125.1, "Plumbing Supply Fittings," or (b) ASSE 1016/ASME A112.1016/CSA B125.16, "Performance Requirements for Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations." 2) The requirement in Sentence (1) is permitted to be waived where hot water	 1) Except as provided in Sentences (2) and (3), water supplied to shower heads or bathtubs shall be controlled by an automatic compensating valve conforming to (a) ASME A112.18.1/CSA B125.1, "Plumbing Supply Fittings," or (b) ASSE 1016/ASME A112.1016/CSA B125.16, "Performance Requirements for Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations." 2) The requirement in Sentence (1) is permitted to be waived where hot water

	supplied only to bathtubs is controlled by	supplied only to bathtubs is controlled by
	(a) an automatic compensating valve conforming to CSA B125.3, "Plumbing fittings," or	(a) an automatic compensating valve conforming to CSA B125.3, "Plumbing fittings," or
	(b) a temperature-limiting device conforming to ASSE 1070/ASME	(b) a temperature-limiting device conforming to ASSE 1070/ASME
	A112.1070/CSA B125.70, "Performance requirements for water temperature limiting devices."	A112.1070/CSA B125.70, "Performance requirements for water temperature limiting devices."
	3) The requirement in Sentence (1) is permitted to be waived where the water is supplied by a single tempered water line controlled by an automatic compensating valve conforming to CSA B125.3, "Plumbing fittings."	3) The requirement in Sentence (1) is permitted to be waived where the water is supplied by a single tempered water line controlled by an automatic compensating valve conforming to CSA B125.3, "Plumbing fittings."
	4) Except as provided in Sentence (5), the temperature of water discharging from	4) Except as provided in Sentence (5), the temperature of water discharging from

	a shower head or into a bathtub shall not exceed 49°C.	a shower head or into a bathtub shall not exceed 49°C.
	5) In health care facilities and seniors' residences, the temperature of water	5) In health care facilities and seniors' residences, the temperature of water
	discharging from a shower head or into a bathtub shall	discharging from a shower head or into a bathtub shall
	(a) not exceed 43°C, and	(a) not exceed 43°C, and
	(b) be adjusted at the shower or bathtub controls. (1) A backflow preventer shall not be required in a residential full flow through fire sprinkler system, in which the pipe and fittings are constructed of potable water system materials.	(b) be adjusted at the shower or bathtub controls.
	(2) Except as required in Sentence (4), potable water system connections to fire sprinkler and standpipe systems shall be protected against backflow caused by back-siphonage or back pressure in conformance with the following Clauses:	
	(a) Residential partial flow through fire sprinkler systems in which the pipes and fittings are constructed of potable water	

	system materials shall be protected by a
	dual check valve backflow preventer
	conforming to CSA B64.6.1, "Dual
	Check Valve Backflow Preventers for
	Fire Protection Systems (DuCF)",
	(b) Class 1 fire sprinkler/standpipe
	systems shall be protected by a single
	check valve backflow preventer
	conforming to CSA B64.9, "Single
	Check Valve Backflow Preventers for
	Fire Protection Systems (SCVAF)",
	provided that the systems do not use
	antifreeze or other additives of any kind
	and all pipes and fittings are constructed
	of potable water system materials,
	and the same of the same,
	(c) Class 1 fire sprinkler/standpipe
	systems not covered by Clause (b) as
	well as Class 2 and Class 3 fire
	sprinkler/standpipe systems shall be
	protected by a double check valve
	backflow preventer conforming to CSA
	B64.5.1, "Double Check Valve Backflow
	Preventers for Fire Protection Systems
	(DCVAF)", provided that the systems do
	not use antifreeze or other additives of
	any kind,

(d) Class 1, Class 2 or Class 3 fire
sprinkler/standpipe systems, in which
antifreeze or other additives are used,
shall be protected by a reduced
pressure principle backflow preventer
conforming to CSA B64.4.1, "Reduced
Pressure Principle Backflow Preventers
for Fire Protection Systems (RPF)",
installed on the portion of the system
that uses the additives and the balance
of the system shall be protected as
required by Clause (b) or (c),
(e) Class 4 and Class 5 fire
sprinkler/standpipe systems shall be
protected by a reduced pressure
principle backflow preventer conforming
to CSA B64.4.1, "Reduced Pressure
Principle Backflow Preventers for Fire
Protection Systems (RPF)",
(f) Class 6 fire sprinkler/standpipe
systems shall be protected,
(i) by a double check valve backflow
preventer conforming to CSA B64.5.1,
"Double Check Valve Backflow
Preventers for Fire Protection Systems
(DCVAF)", or

(ii) where a severe hazard may be caused by backflow, by a reduced	
pressure principle backflow preventer	
conforming to CSA B64.4.1, "Reduced	
Pressure Principle Backflow Preventers	
for Fire Protection Systems (RPF)", and	
(g) backflow preventers on fire sprinkler	
and standpipe systems shall be selected	
and installed in conformance with Table	
7.6.2.4.	
(3) The backflow preventer required by	
Sentence (2) shall be installed upstream	
of the fire department pumper	
connection.	
(4) Where a reduced pressure principle	
backflow preventer is required on the	
water service pipe at a service	
connection located on the same	
premises as the fire service main in	
Class 3, 4, 5 and 6 fire	
sprinkler/standpipe systems, a reduced	
pressure principle backflow preventer	
conforming to CSA B64.4.1, "Reduced	
Pressure Principle Backflow Preventers	
for Fire Protection Systems (RPF)", shall	

			also be provided on the fire service connection.	
7.6.2.4.(2)	7.6.2.4. Backflow from Fire Protection Systems	Except as required in Sentence (4), potable water system connections to fire sprinkler and standpipe systems shall be protected against backflow caused by back-siphonage or back pressure in conformance with the following Clauses: (a) Residential partial flow through fire sprinkler systems in which the pipes and fittings are constructed of potable water system materials shall be protected by a dual check valve backflow preventer conforming to CSA B64.6.1, "Dual Check Valve Backflow Preventers for Fire Protection Systems (DuCF)", (b) Class 1 fire sprinkler/standpipe systems shall be protected by a single check valve backflow preventer conforming to CSA B64.9, "Single	[See the changes in Sentence 7.6.2.4.(1)]	[See the changes in Sentence 7.6.2.4.(1)]

Check Valve Backflow Preventers for	
Fire Protection Systems (SCVAF)",	
provided that the systems do not use	
antifreeze or other additives of any kind	
and all pipes and fittings are constructed	
of potable water system materials,	
of polable valor cyclem materials,	
(c) Class 1 fire sprinkler/standpipe	
systems not covered by Clause (b) as	
well as Class 2 and Class 3 fire	
sprinkler/standpipe systems shall be	
protected by a double <i>check valve</i>	
backflow preventer conforming to CSA	
B64.5.1, "Double Check Valve Backflow	
, and the second	
Preventers for Fire Protection Systems (DCVAE)" provided that the systems do	
(DCVAF)", provided that the systems do	
not use antifreeze or other additives of	
any kind,	
(d) Class 1, Class 2 or Class 3 fire	
sprinkler/standpipe systems, in which	
antifreeze or other additives are used,	
shall be protected by a reduced	
pressure principle backflow preventer	
conforming to CSA B64.4.1, "Reduced	
Pressure Principle Backflow Preventers	
for Fire Protection Systems (RPF)",	
installed on the portion of the system	
that uses the additives and the balance	

of the	e system shall be protected as	
	ired by Clause (b) or (c),	
	(1) (1)	
(e) C	Class 4 and Class 5 fire	
	kler/standpipe systems shall be	
	ected by a reduced pressure	
	iple backflow preventer conforming	
I I I I	SA B64.4.1, "Reduced Pressure	
	ciple Backflow Preventers for Fire	
	ection Systems (RPF)",	
	, outer Cyclemic (ru r) ,	
(f) C/	lass 6 fire sprinkler/standpipe	
	ems shall be protected,	
	,	
(i) by	a double <i>check valve backflow</i>	
'''	enter conforming to CSA B64.5.1,	
	ble Check Valve Backflow	
Preve	enters for Fire Protection Systems	
	/AF)", or	
	, ,	
(ii) w	here a severe hazard may be	
cause	ed by <i>backflow</i> , by a reduced	
press	sure principle backflow preventer	
confc	orming to CSA B64.4.1, "Reduced	
Press	sure Principle Backflow Preventers	
for Fi	ire Protection Systems (RPF)", and	
1	ackflow preventers on fire sprinkler	
and s	standpipe systems shall be selected	

		and installed in conformance with Table 7.6.2.4.		
7.6.2.4.(3)	7.6.2.4. Backflow from Fire Protection Systems	The backflow preventer required by Sentence (2) shall be installed upstream of the fire department pumper connection.	[See the changes in Sentence 7.6.2.4.(1)]	[See the changes in Sentence 7.6.2.4.(1)]
7.6.2.4.(4)	7.6.2.4. Backflow from Fire Protection Systems	Where a reduced pressure principle backflow preventer is required on the water service pipe at a service connection located on the same premises as the fire service main in Class 3, 4, 5 and 6 fire sprinkler/standpipe systems, a reduced pressure principle backflow preventer conforming to CSA B64.4.1, "Reduced Pressure Principle Backflow Preventers for Fire Protection Systems (RPF)", shall also be provided on the fire service connection.	[See the changes in Sentence 7.6.2.4.(1)]	[See the changes in Sentence 7.6.2.4.(1)]

7.6.4.1.(4)	7.6.4.1. Water Supply Fittings	An automatic compensating valve serving an individual shower head shall have a manufacturer's minimum-rated water flow rate equal to or less than the shower head it serves.	An automatic compensating valve serving an individual shower head addressed in Sentence 7.2.10.6.(1) shall have a manufacturer's minimum-rated water flow rate equal to or less than the shower-head it serves.	An automatic compensating valve serving an individual shower head addressed in Sentence 7.2.10.6.(1) shall have a water flow rate equal to or less than the showerhead it serves.
7.6.5.2.(1)	7.6.5.2. Showers Water Temperature Control	Except as provided for in Sentences (2) and (3), all valves supplying fixed location shower heads, shall be individually pressure-balanced or thermostatic-mixing valves, conforming to ASME A112.18.1 / CSA B125.1, "Plumbing Supply Fittings".	(1) Except as provided for in Sentences (2) and (3), all valves supplying fixed location shower heads, shall be individually pressure-balanced or thermostatic-mixing valves, conforming to ASME A112.18.1 / CSA B125.1, "Plumbing Supply Fittings". (2) An individually pressure-balanced or thermostatic-mixing valve is not required for shower heads having a single tempered water supply that is controlled by an automatic compensating valve conforming to CSA B125.3, "Plumbing Fittings". (3) Deck-mounted, hand-held, flexible-hose spray attachments are exempt from the thermal shock requirements of Sentences (1) and (4).	1) Except as provided in Sentences (2) and (3), water supplied to shower heads or bathtubs shall be controlled by an automatic compensating valve conforming to (a) ASME A112.18.1/CSA B125.1, "Plumbing Supply Fittings," or (b) ASSE 1016/ASME A112.1016/CSA B125.16, "Performance Requirements for Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations."

(4) Pressure-balanced, thermostatic-mixing or combination pressure-balanced and thermostatic-mixing type valves shall be, (2) The requirement in Sentence permitted to be waived where supplied only to bathtubs is coby	hot water
(a) capable of limiting thermal shock, and (b) designed so that the outlet (a) an automatic compensating conforming to CSA B125.3, "P fittings," or	
temperature does not exceed 49°C or equipped with high-limit stops which shall be adjusted to a maximum hot water setting of 49°C. (b) a temperature-limiting deviction conforming to ASSE 1070/ASI A112.1070/CSA B125.70, "Pe	ME rformance
1) Except as provided in Sentences (2) and (3), water supplied to shower heads or	ature
bathtubs shall be controlled by an automatic compensating valve conforming to 3) The requirement in Sentence permitted to be waived where is supplied by a single temperal line controlled by an automatic	the water ed water
(a) ASME A112.18.1/CSA B125.1, "Plumbing Supply Fittings," or (b) ASSE 1016/ASME A112.1016/CSA	
B125.16, "Performance Requirements for Automatic Compensating Valves for	

	Individual Showers and Tub/Shower Combinations."	4) Except as provided in Sentence (5), the temperature of water discharging from
	2) The requirement in Sentence (1) is permitted to be waived where hot water supplied only to bathtubs is controlled by	a shower head or into a bathtub shall not exceed 49°C.
	(a) an automatic compensating valve conforming to CSA B125.3, "Plumbing fittings," or	5) In health care facilities and seniors' residences, the temperature of water discharging from a shower head or into a bathtub shall
	(b) a temperature-limiting device conforming to ASSE 1070/ASME	(a) not exceed 43°C, and
	A112.1070/CSA B125.70, "Performance requirements for water temperature limiting devices."	(b) be adjusted at the shower or bathtub controls.
	3) The requirement in Sentence (1) is permitted to be waived where the water is supplied by a single tempered water line controlled by an automatic compensating valve conforming to CSA B125.3, "Plumbing fittings."	

			4) Except as provided in Sentence (5), the temperature of water discharging from a shower head or into a bathtub shall not exceed 49°C.	
			5) In health care facilities and seniors' residences, the temperature of water discharging from a shower head or into a bathtub shall (a) not exceed 43°C, and (b) be adjusted at the shower or bathtub controls.	
7.6.5.2.(2)	7.6.5.2. Showers Water Temperature Control	An individually pressure-balanced or thermostatic-mixing valve is not required for shower heads having a single tempered water supply that is controlled by an automatic compensating valve conforming to CSA B125.3, "Plumbing Fittings".	[See the changes in Sentence 7.6.5.2.(1)]	[See the changes in Sentence 7.6.5.2.(1)]

7.6.5.2.(3)	7.6.5.2. Showers Water Temperature Control	Deck-mounted, hand-held, flexible-hose spray attachments are exempt from the thermal shock requirements of Sentences (1) and (4).	[See the changes in Sentence 7.6.5.2.(1)]	[See the changes in Sentence 7.6.5.2.(1)]
7.6.5.2.(4)	7.6.5.2. Showers Water Temperature Control	Pressure-balanced, thermostatic-mixing or combination pressure-balanced and thermostatic-mixing type valves shall be, (a) capable of limiting thermal shock, and (b) designed so that the outlet temperature does not exceed 49°C or equipped with high-limit stops which shall be adjusted to a maximum hot water setting of 49°C.	[See the changes in Sentence 7.6.5.2.(1)]	[See the changes in Sentence 7.6.5.2.(1)]

For any materials you would like to attach, please send them with the corresponding Sentence number in the subject field to buildingcode.consultation@ontario.ca

CODE CHANGE POSTING – PART 9 HOUSING AND SMALL BUILDINGS

Current Ontario Code Sentence	Current Ontario Code Article Title	Current Ontario Code Provision	Proposed New Ontario Code Provision {with the Tracked Changes}	Proposed New Ontario Code Provision {without the Tracked Changes}
9.4.2.1.(1)	9.4.2.1. Application	This Subsection applies to light-frame construction whose wall, floor and roof planes are generally comprised of frames of small repetitive structural members, and where,(a) the roof and wall planes are clad, sheathed or braced on at least one side, (b) the small repetitive structural members are spaced not more than 610 mm o.c., (c) the clear span of any structural member does not exceed 12.20 m, (d) the maximum deflection of the structural roof members conforms to Article 9.4.3.1., (e) the maximum total roof area, notwithstanding any separation of adjoining buildings by firewalls, is 4 550 m2, and (f) for flat roofs, there are no significant obstructions on the roof, such as parapet walls, spaced closer than the distance calculated by, Do = 10 (Ho -	This Subsection applies to light-frame construction constructions whose wall, floor and roof planes are generally comprised of frames of small repetitive structural members, and where, (a) the roof and wall planes are clad, sheathed or braced on at least one side, (b) the small repetitive structural members are spaced not more than 610600 mm o.c., (c) the clear span of any structural member does not exceed 12.20 m, (d) the maximum deflection of the structural roof members conforms to Article 9.4.3.1., (e) the maximum total roof area, notwithstanding any separation of adjoining buildings by firewalls, is 4 550 m2, and (f) for flat roofs, there are no significant obstructions on the roof, such as parapet walls, spaced closer than the distance calculated by, Do = 10 (Ho -	This Subsection applies to light-frame constructions whose wall, floor and roof planes are generally comprised of frames of small repetitive structural members, and where a) the roof and wall planes are clad, sheathed or braced on at least one side, b) the small repetitive structural members are spaced not more than 600 mm o.c., c) the clear span of any structural member does not exceed 12.20 m, d) the maximum deflection of the structural roof members conforms to Article 9.4.3.1., e) the maximum total roof area, notwithstanding any separation of adjoining buildings by firewalls, is 4 550 m2, and f) for flat roofs, there are no significant obstructions on the roof, such as parapet walls, spaced closer than the distance calculated by Do = 10 (Ho - 0.8

		0.8 Ss / γ) where, Do = minimum distance between obstructions, m, Ho = height of the obstruction above the roof, m, Ss = ground snow load, kPa, and γ = unit weight of snow, kN/m3.	0.8 Ss / γ) where, Do = minimum distance between obstructions, m, Ho = height of the obstruction above the roof, m, Ss = ground snow load, kPa, and γ = unitspecific weight of snow, kN/m3.	Ss / γ) where Do = minimum distance between obstructions, m, Ho = height of the obstruction above the roof, m, Ss = ground snow load, kPa, and γ = specific weight of snow, kN/m3.
<u>N/A</u>	<u>N/A</u>	N/A	For the purpose of wood-frame spacing, hard conversions of corresponding imperial dimensions to metric dimensions are also acceptable.	For the purpose of wood-frame spacing, hard conversions of corresponding imperial dimensions to metric dimensions are also acceptable.
9.8.1.1.(1)	9.8.1.1. General	This Section applies to the design and construction of interior and exterior stairs, steps, ramps, landings, handrails and guards.	This Section applies to the design and construction of interior and exterior stairs, steps, ramps, landings, handrails and guards.	This Section applies to the design and construction of interior and exterior stairs, steps, ramps, handrails and guards.
9.8.4.3.(1)	9.8.4.3. Dimensions for Tapered Treads (See A- 9.8.4. in Appendix	Except as provided in Sentence (2) and Articles 9.8.4.5. and 9.8.4.5A., tapered treads shall have a run that,(a) is not less than 150 mm at the narrow end of the tread, and (b) complies with the dimensions for rectangular treads specified in Table 9.8.4.1. when measured at a point 300 mm from the centre line of the inside handrail.	Except as provided in Sentence (2) and Articles 9.8.4.5. and 9.8.4.5A., tapered treads shall have a run that,(a) is not less than 150 mm at the narrow end of the tread, and (b) complies with the dimensions for rectangular treads specified stated in Table 9.8.4.1. when measured at a point 300 mm from the	Except as provided in Sentence (2) and Articles 9.8.4.5. and 9.8.4.5A., tapered treads shall have a run that a) is not less than 150 mm at the narrow end of the tread, and b) complies with the dimensions stated in Table 9.8.4.1. when measured at a point 300 mm from the centre line of the handrail at the narrow end of the tread.

			centre line of the inside handrail at the narrow end of the tread.	
9.8.4.4.(4)	9.8.4.4. Uniformity and Tolerances for Risers, Runs and Treads	Tapered treads in a flight shall have a uniform run in accordance with the tolerances described in Sentence (3) when measured at a point 300 mm from the centre line of the inside handrail.	Tapered treads in a flight shall have a uniform run in accordance with the construction tolerances described stipulated in Sentence (3) when measured at a point 300 mm from the centre line of the inside handrail as described in Sentence 9.8.7.1.(5).	Tapered treads in a flight shall have a uniform run in accordance with the construction tolerances stipulated in Sentence (3) when measured at a point 300 mm from the centre line of the handrail as described in Sentence 9.8.7.1.(5).

9.8.6.2.(1)	9.8.6.2. Required Landings	Except as provided in Sentences (2), (3) and (4) and Sentence 9.9.6.6.(2), a landing shall be provided,(a) at the top and bottom of each flight of interior and exterior stairs, including stairs in garages, (b) at the top and bottom of every ramp with a slope greater than 1 in 50, and (c) where a doorway opens onto a stair or ramp.	Except as provided in Sentences (2), (3) and) to (4) and Sentence 9.9.6.6.(2), a landing shall be provided, (a) at the top and bottom of each flight of interior and exterior stairs, including stairs in garages, (b) at the top and bottom of every ramp with a slope greater than 1 in 50, and (c) where a doorway opens onto a stair or ramp., d) where a ramp opens onto a stair, and e) where a stair opens onto a ramp.	Except as provided in Sentences (2) to (4) and Sentence 9.9.6.6.(2), a landing shall be provided a) at the top and bottom of each flight of interior and exterior stairs, including stairs in garages, b) at the top and bottom of every ramp with a slope greater than 1 in 50, c) where a doorway opens onto a stair or ramp, d) where a ramp opens onto a stair, and e) where a stair opens onto a ramp.
9.8.7.4.(2)	9.8.7.4. Height of Handrails	Except as provided in Sentence (3), Clause 3.8.3.4.(1)(e) and Sentence 9.8.4.5A.(1), handrails shall be 865 mm to 1 070 mm high.	Except as provided in Sentence (3) and Clause 3.8.3.4.(1)(e) required and Sentence 9.8.4.5A.(1), handrails shall be 865 mm to 1 070 mm high.	Except as provided in Sentence (3) and Clause 3.8.3.4.(1)(e) required handrails shall be 865 mm to 1 070 mm high.
9.9.6.1.(1)	9.9.6.1. Obstructions by Doors	Except as provided in Sentence (4), swinging doors in their swing shall conform to Sentences (2) and (3), (a) at exit doors, (b) at doors that open into or are located within a public corridor, and (c) at doors that open into or are located within another facility that provides access to exit from a suite.	Except as provided in Sentence (4), swingingobstructions created by doors in their swing shall conform to be limited in accordance with Sentences (2) and (3), (a) at exit doors, (b) at doors that open into or are located within a public corridor, and (c) at doors that open into or are located within another facility that provides access to exit from a suite.	Except as provided in Sentence (4), obstructions created by doors shall be limited in accordance with Sentences (2) and (3), (a) at exit doors, b) at doors that open into or are located within a public corridor, and c) at doors that open into or are located within another facility that provides access to exit from a suite.

9.9.10.1.(5)	9.9.10.1. Egress Windows or Doors for Bedrooms	Where a window required in Sentence (1) opens into a window well, a clearance of not less than 550 mm shall be provided in front of the window.	Where a window required in Sentence (1) opens into a window well, a clearance of not less than 550760 mm shall be provided in front of the window.	Where a window required in Sentence (1) opens into a window well, a clearance of not less than 760 mm shall be provided in front of the window.
9.10.4.2.(1)	9.10.4.2. More Than One Level of Mezzanine	Where more than 1 level of mezzanine is provided in a storey, each level additional to the first shall be considered as a storey.	Where more than 1Each level of mezzanine that is provided in a storey, each level additional topartly or wholly superimposed above the first level of mezzanine shall be considered as a storey in calculating the building height.	Each level of mezzanine that is partly or wholly superimposed above the first level of mezzanine shall be considered as a storey in calculating the building height.
9.10.16.1.(1)	9.10.16.1. Required Fire Blocks in Concealed Spaces	Concealed spaces in interior walls, ceilings, floors and crawl spaces shall be separated by fire blocks from concealed spaces in exterior walls and attic or roof spaces.	Vertical concealed spaces in interior walls and exterior walls shall be separated by fire blocks (a) one from the other, and (b) from horizontal concealed spaces. And horizontal concealed spaces in attics, roof spaces, ceilings, floors, and crawl	Vertical concealed spaces in interior walls and exterior walls shall be separated by fire blocks (a) one from the other, and (b) from horizontal concealed spaces. And horizontal concealed spaces in attics, roof spaces, ceilings, floors, and crawl

		spaces shall be separated by fire blocks (a) one from the other, and (b) from vertical concealed spaces.	spaces shall be separated by fire blocks (a) one from the other, and (b) from vertical concealed spaces.
9.10.1 9.10.16.2.(2) 9.10.16.2.(2) 9.10.1 Require Blocks i Assem	d Fire are noncombustible, or (c) the exposed construction materials within the space.	Fire blocks required described in Sentence (1) need are not be required, provided, if, (a) the insulated wall assembly contains not more than one concealed air space and the whose horizontal thickness of that air space is not more than 25 mm, (b) the exposed construction materials within the space are noncombustible, or (c) the exposed construction materials within the space, including insulation, but not including wiring, piping or similar services, have a flame-spread rating of not more than 25, or (d) the concealed wall space is filled with insulation.	Fire blocks described in Sentence (1) are not required, provided (a) the insulated wall assembly contains not more than one concealed air space whose horizontal thickness is not more than 25 mm, (b) the exposed construction materials within the space are noncombustible, (c) the exposed construction materials within the space, including insulation, but not including wiring, piping or similar services, have a flame-spread rating of not more than 25, or (d) the concealed wall space is filled with insulation.

9.10.17.10.(2)	9.10.17.10. Protection of Foamed Plastics	A walk-in cooler or freezer consisting of factory-assembled wall, floor or ceiling panels containing foamed plastics is permitted to be used, provided the panels,(a) are protected on both sides by sheet metal not less than 0.38 mm thick having a melting point not less than 650 °C, (b) do not contain an air space, and (c) have a flame-spread rating that is not more than that permitted for the room or space in which they are located or that they bound.	A walk-in cooler or freezer consisting of factory-assembled wall, floor or ceiling panels containing foamed plastics is permitted to be used, provided the panels, (a) are protected on both sides by sheet metal not less than 0.38 mm thick having a melting point not less than 650°C, (b) do not contain an air space, and (c) have a flame-spread rating, determined by subjecting a sample panel with an assembled joint typical of field installation to the applicable test described in Subsection 3.1.12., that is not more than that permitted for the room or space in which they are located or that they bound.	A walk-in cooler or freezer consisting of factory-assembled wall, floor or ceiling panels containing foamed plastics is permitted to be used, provided the panels (a) are protected on both sides by sheet metal not less than 0.38 mm thick having a melting point not less than 650°C, (b) do not contain an air space, and (c) have a flame-spread rating, determined by subjecting a sample panel with an assembled joint typical of field installation to the applicable test described in Subsection 3.1.12., that is not more than that permitted for the room or space in which they are located or that they bound.
9.10.17.10.(3)	9.10.17.10. Protection of Foamed Plastics	The flame-spread rating of panels required in Clause (2)(c) shall be determined by subjecting a sample panel with an assembled joint typical of field installation to the applicable test described in Subsection 3.1.12.	[See the changes in Sentence 9.10.17.10.(2)]	[See the changes in Sentence 9.10.17.10.(2)]

9.12.3.3.(2)	9.12.3.3. Deleterious Debris and Boulders	Except as permitted in Sentence (3), backfill shall not contain pyritic material or material that is susceptible to ice lensing in concentrations that will damage the building to a degree that would adversely affect its stability or the performance of assemblies separating dissimilar environments.	Except as permitted provided in Sentence (3), backfill shall not contain pyritic material or material that is susceptible to ice lensing in concentrations that will damage the building to a degree that would adversely affect its stability or the performance of assemblies separating dissimilar environments.	Except as provided in Sentence (3), backfill shall not contain pyritic material or material that is susceptible to ice lensing in concentrations that will damage the building to a degree that would adversely affect its stability or the performance of assemblies
9.13.2.1.(3)	9.13.2.1. Dampproofing	Floors in garages, floors in unenclosed portions of buildings and floors installed over granular fill in conformance with Article 9.16.2.1. need not be dampproofed.	Floors Dampproofing required in Sentence (2) need not be provided for a) floors in garages, b) floors in unenclosed portions of buildings and, or c) floors installed over not less than 100 mm of coarse clean granular fill in conformance with Article 9.16.2.1. need not be dampproofed. material containing not more than 10% of material that will pass a 4 mm sieve.	Dampproofing required in Sentence (2) need not be provided for a) floors in garages, b) floors in unenclosed portions of buildings, or c) floors installed over not less than 100 mm of coarse clean granular material containing not more than 10% of material that will pass a 4 mm sieve.
9.14.2.1.(1)	9.14.2.1. Foundation Wall Drainage	Unless it can be shown to be unnecessary, drainage shall be provided at the bottom of every foundation wall that contains the building interior.	Unless it can be shown to be unnecessary, drainage shall be provided at the bottom of every exterior foundation wall that contains shall be drained by drainage tile or pipe laid around the building interior exterior of	Unless it can be shown to be unnecessary, the bottom of every exterior foundation wall shall be drained by drainage tile or pipe laid around the exterior of the foundation in conformance with Subsection 9.14.3. or

			the foundation in conformance with Subsection 9.14.3. or by a layer of gravel or crushed rock in conformance with Subsection 9.14.4.	by a layer of gravel or crushed rock in conformance with Subsection 9.14.4.
9.15.4.5.(3)	9.15.4.5. Reinforcement for Flat Insulating Concrete Form Foundation	Cold joints in flat insulating concrete form foundation walls shall be reinforced with at least one 15M bar spaced not more than 600 mm o.c. and embedded not less than 300 mm on both sides of the joint.	Cold joints in flat insulating concrete form foundation walls shall be reinforced with at least no less than one 15M bar spaced at not more than 600 mm o.c. and embedded not less than 300 mm on both sides of the joint.	Cold joints in flat insulating concrete form foundation walls shall be reinforced with no less than one 15M bar spaced at not more than 600 mm o.c. and embedded 300 mm on both sides of the joint.
9.17.3.3.(1)	9.17.3.3. Paint	Exterior steel columns susceptible to corrosion shall be treated on the outside surface with at least one coat of rust-inhibitive paint.	Exterior steel columns susceptible to corrosion shall be treated on the outside surface with at least one coat of rust-inhibitive paint.	Exterior steel columns shall be treated on the outside surface with at least one coat of rust-inhibitive paint.
9.19.1.2.(4)	9.19.1.2. Vent Requirements	Except where each roof joist space referred to in Sentence (2) is separately vented, roof joist spaces shall be interconnected by installing purlins not less than 38 mm by 38 mm on the top of the roof joists.	Except where each roof-joist space referred to in Sentence (2) is separately vented, roof joist spaces shall be interconnected by installing purlins not less than 38 mm by 38 mm on the top of the roof joists.	Except where each joist space is separately vented, roof joist spaces shall be interconnected by installing purlins not less than 38 mm by 38 mm on the top of the roof joists.

9.19.1.3.(1)	9.19.1.3. Clearances	Except as provided in Sentence (2), where venting is provided to a roof joist space, not less than 63 mm of space shall be provided between the top of the insulation and the underside of the roof sheathing.	Except as provided in Sentence (2), where venting is provided to a roof joist space, not less than 63 mm of space shall be provided between the top of the insulation and the underside of the roof sheathing.	Except as provided in Sentence (2), not less than 63 mm of space shall be provided between the top of the insulation and the underside of the roof sheathing.
9.20.6.5.(2)	9.20.6.5. Parapet Walls	A parapet wall shall be solid masonry that extends from the top of the parapet wall to not less than 300 mm below the adjacent roof level.	A parapet wall Parapet walls shall be solid masonry a) with the cells of hollow or semi-solid units filled with mortar, grout, or concrete, and b) that extends from the top of the parapet wall to not less than 300 mm below the adjacent roof level.	Parapet walls shall be solid masonry a) with the cells of hollow or semi-solid units filled with mortar, grout, or concrete, and b) that extends from the top of the parapet to not less than 300 mm below the adjacent roof level.
9.20.11.3.(1)	9.20.11.3. Wood Frame Walls Intersecting Masonry Walls	Wood frame walls shall be tied to intersecting masonry walls with not less than 4.76 mm diam corrosion-resistant steel rods spaced not more than 900 mm o.c. vertically.	Wood- <u>frame</u> walls shall be <u>tiedanchored</u> to <u>intersecting</u> masonry walls <u>that they intersect</u> with not less than 4.76 mm diam corrosion-resistant steel rods spaced not more than 900 mm o.c. vertically.	Wood-frame walls shall be anchored to masonry walls that they intersect with not less than 4.76 mm diam corrosion-resistant steel rods spaced not more than 900 mm o.c. vertically.

9.20.11.3.(2)	9.20.11.3. Wood Frame Walls Intersecting Masonry Walls	Ties required in Sentence (1) shall be anchored to the wood framing at one end and shaped to provide a mechanical key at the other end to develop the strength of the tie.	TiesAnchors required in Sentence (1) shall be anchored fastened to the wood framing at one end and shaped to provide a mechanical key at the other end to develop the strength of the tieanchor.	Anchors required in Sentence (1) shall be fastened to the wood framing at one end and shaped to provide a mechanical key at the other end to develop the strength of the anchor.
9.20.11.4.(1)	9.20.11.4. Wood Frame Roof Systems	Except as permitted in Sentence (2), roof systems of wood frame construction shall be tied to exterior masonry walls by not less than 12.7 mm diam anchor bolts,(a) spaced not more than 2.4 m apart, (b) embedded not less than 90 mm into the masonry, and (c) fastened to a rafter plate of not less than 38 mm thick lumber.	Except as permitted in Sentence (2), roof systems of woodframe construction shall be tiedanchored to exterior masonry walls by not less than 12.7 mm diam anchor bolts, (, a) spaced not more than 2.4 m apart, (b) embedded not less than 90 mm into the masonry, and (c) fastened to a rafter plate of not less than 38 mm thick lumber.	Except as permitted in Sentence (2), roof systems of wood-frame construction shall be anchored to exterior masonry walls by not less than 12.7 mm diam anchor bolts, a) spaced not more than 2.4 m apart, b) embedded not less than 90 mm into the masonry, and c) fastened to a rafter plate of not less than 38 mm thick lumber.
9.20.13.9.(3)	9.20.13.9. Protection of Interior Finish	Where the insulation effectively limits the passage of water vapour and is applied by a waterproof adhesive or by mortar directly to the masonry, the requirements for sheathing paper do not apply. (See Appendix A.)	Where the insulation that effectively limits the passage of water vapour and is applied by a waterproof adhesive or by mortar directly to the parged masonry, the requirements for sheathing papermembrane in Sentence (1) do not apply.	Where insulation that effectively limits the passage of water is applied by a waterproof adhesive or mortar directly to parged masonry, the requirements for sheathing membrane in Sentence (1) do not apply.

9.21.4.7.(1)	9.21.4.7. Cleanout	Except for a chimney flue constructed to serve a masonry fireplace, a cleanout opening with a metal frame and tight-fitting metal door shall be installed near the base of the chimney flue.	Except for a chimney flue constructed to serve a masonry fireplace, aA cleanout opening with a metal frame and a tight-fitting metal door shall be installed near the base of the chimney flue.	A cleanout opening with a metal frame and a tight-fitting metal door shall be installed near the base of the chimney flue.
9.23.3.4.(2)	9.23.3.4. Nailing of Framing	Where the bottom wall plate or sole plate of an exterior wall is not nailed to joists or blocking in conformance with Table 9.23.3.4., the exterior wall may be fastened to the floor framing by,(a) having plywood, OSB or waferboard sheathing extend down over floor framing and fastened to the floor framing by nails or staples conforming to Article 9.23.3.5., or (b) tying the wall framing to the floor framing by 50 mm wide galvanized-metal strips, (i) not less than 0.41 mm in thickness, (ii) spaced not more than 1.2 m apart, and (iii) fastened at each end with at least two 63 mm nails.	Where the bottom wall plate or sole plate of an exterior wall is not nailed to floor joists, rim joists or blocking in conformance with Table 9.23.3.4., the exterior wall may is permitted to be fastened to the floor framing by, (a) having plywood, OSB or waferboard sheathing extend down over floor framing and fastened to the floor framing by nails or staples conforming to Article 9.23.3.5., or (b) tying the wall framing to the floor framing by 50 mm wide galvanized-metal strips, (i) 50 mm wide, ii) not less than 0.41 mm in thickness, (iithick, iii) spaced not more than 1.2 m apart, and (iii) fastened at each end with at least two 63 mm nails.	Where the bottom wall plate or sole plate of an exterior wall is not nailed to floor joists, rim joists or blocking in conformance with Table 9.23.3.4., the exterior wall is permitted to be fastened to the floor framing by a) having plywood, OSB or waferboard sheathing extend down over floor framing and fastened to the floor framing by nails or staples conforming to Article 9.23.3.5., or b) tying the wall framing to the floor framing by galvanized-metal strips i) 50 mm wide, ii) not less than 0.41 mm thick, iii) spaced not more than 1.2 m apart, and iv) fastened at each end with at least two 63 mm nails.

9.23.16.3.(1)	9.23.16.3. Attachment of Cladding to Sheathing	Gypsum sheathing, rigid insulation and fibreboard shall not be used for the attachment of siding materials.	Gypsum sheathing, rigid insulation and fibreboard shall not be used for the attachment of sidingcladding materials.	Gypsum sheathing, rigid insulation and fibreboard shall not be used for the attachment of cladding materials.
9.24.3.2.(4)	9.24.3.2. Fire- Rated Walls	The lower runner required in Sentence (3) shall be cut through the flanges and be bent at each end to extend upwards at least 150 mm and fastened to the adjacent studs.	The lowerupper runner required in Sentence (3) shall be cut through the flanges and be bent at each end to extend upwards at least not less than 150 mm and fastened to the adjacent studs.	The upper runner required in Sentence (3) shall be bent at each end to extend upwards not less than 150 mm and fastened to the adjacent studs.
9.25.4.1.(1)	9.25.4.1. Required Barrier to Vapour Diffusion	Thermally insulated wall, ceiling and floor assemblies shall be constructed with a vapour barrier sufficient to prevent condensation in the wall spaces, floor spaces or attic or roof spaces.	Thermally insulated wall, ceiling and floor assemblies shall be constructed with a vapour barrier sufficients as to prevent condensation in the provide a barrier to diffusion of water vapour from the interior into wall spaces, floor spaces or attic or roof spaces.	Thermally insulated wall, ceiling and floor assemblies shall be constructed with a vapour barrier so as to provide a barrier to diffusion of water vapour from the interior into wall spaces, floor spaces or attic or roof spaces.
9.27.3.3.(1)	9.27.3.3. Required Sheathing Membrane and Installation	Except as provided in Articles 9.27.3.4. to 9.27.3.6., at least one layer of sheathing membrane shall be applied beneath siding, stucco or masonry veneer.	Except as provided in Articles 9.27.3.4. to 9.27.3.6., at least one layer of sheathing membrane shall be applied beneath siding, stucco or masonry veneer.cladding.	Except as provided in Articles 9.27.3.4. to 9.27.3.6., at least one layer of sheathing membrane shall be applied beneath cladding.

9.27.7.1.(3)	9.27.7.1. Materials	Eastern white cedar shingles shall be at least B (clear) grade, except that C grade may be used for undercoursing.	Eastern white cedar shingles shall be at least B (clear) grade, except that C grade may be used for undercoursing. the lower course of double course applications.	Eastern white cedar shingles shall be at least B (clear) grade, except that C grade may be used for the lower course of double course applications.
9.27.7.3.(1)	9.27.7.3. Fasteners	Shingles or shakes shall be fastened with nails located approximately 20 mm from each edge and not less than 25, mm above the exposure line for single-course applications, or approximately 50 mm above the butt for double-course applications.	Shingles or shakes shall be fastened with nails or staples located approximately 20 mm from each edge and not less than 25, mm above the exposure line for single-course applications, or approximately 50 mm above the butt for double-course applications.	Shingles or shakes shall be fastened with nails or staples located approximately 20 mm from each edge and not less than 25 mm above the exposure line for single-course applications, or approximately 50 mm above the butt for double-course applications.

9.27.13.3.(1)	9.27.13.3. Design and Installation	The design of an exterior insulation finish system shall comply with CAN/ULC-S716.3, "Exterior Insulation and Finish Systems (EIFS)," Design Application".	The design and installation of an exterior insulation finish system EIFS on the substrate described in Sentence 9.27.13.2.(2) shall comply with a) CAN/ULC-S716.3, "2, "Exterior Insulation and Finish Systems (EIFS),"—"- Installation of EIFS Components and Water Resistive Barrier," and b) CAN/ULC-S716.3, "Exterior Insulation and Finish System (EIFS) - Design Application".	The design and installation of EIFS on the substrate described in Sentence 9.27.13.2.(2) shall comply with a) CAN/ULC-S716.2, "Exterior Insulation and Finish Systems (EIFS) - Installation of EIFS Components and Water Resistive Barrier," and b) CAN/ULC-S716.3, "Exterior Insulation and Finish System (EIFS) - Design Application".
9.27.13.3.(2)	9.27.13.3. Design and Installation	The installation of an exterior insulation finish system shall comply with CAN/ULC-S716.2, "Exterior Insulation and Finish Systems (EIFS) – Installation of EIFS Components and Water Resistive Barrier".	[See the changes in Sentence 9.27.13.3.(1)]	[See the changes in Sentence 9.27.13.3.(1)]
9.32.3.7.(10)	9.32.3.7. Ventilation Systems Not Coupled With Forced Air Heating	Provision shall be made for the free flow of air to all rooms by leaving gaps beneath doors, using louvred doors or installing grilles in doors.	Provision shall be made for the free flow of air to or from all rooms by leaving gaps beneath doors, using louvred doors or installing grilles in doors.	Provision shall be made for the free flow of air to or from all rooms by leaving gaps beneath doors, using louvred doors or installing grilles in doors.

9.32.3.10.(3)	9.32.3.10. Ducts	Where an exhaust duct passes through or is adjacent to unheated space, the duct shall be insulated to not less than RSI, 0.5.	Where an exhaust duct passes through or is adjacent toan unheated space or is not separated from an unheated space by an insulated building assembly, the duct shall be insulated to not less than RSI, 0.5.	Where an exhaust duct passes through an unheated space or is not separated from an unheated space by an insulated building assembly, the duct shall be insulated to not less than RSI 0.5.
9.32.3.11.(8)	9.32.3.11. Heat Recovery Ventilators	Free flow of condensate shall be provided in accordance with the manufacturer's recommendations or, in their absence, a condensate drain of minimum ½ inch nominal pipe size pitched in the direction of flow and complete with a trap or condensate pump with sufficient capacity shall be installed.	FreeA means for the free flow of condensate shall be provided in accordance with the manufacturer's manufacturer's recommendations or, in their absence, a condensate drain of minimum ½ at least 1/2 inch nominal pipe size pitched in the direction of flow and complete with a trap or condensate pump withof sufficient capacity shall be installed and connected to the dwelling unit's drain, waste and vent system.	A means for the free flow of condensate shall be provided in accordance with the manufacturer's recommendations or, in their absence, a condensate drain of at least 1/2 inch nominal pipe size pitched in the direction of flow and complete with a trap or condensate pump of sufficient capacity shall be installed and connected to the dwelling unit's drain, waste and vent system.

9.32.3.11.(10)	9.32.3.11. Heat Recovery Ventilators	When operating at the rate required in Article 9.32.3.4., the supply and exhaust airflow rates of the heat recovery ventilator shall be balanced so that the value of the lesser flow shall be at least 90% of the value of the greater flow, unless otherwise recommended by the manufacturer.	When With the principal ventilation fan operating at the rate required in Article 9.32.3.4., the supply and its normal operating exhaust capacity, the airflow rates of in the heat recovery ventilator outdoor air supply duct shall be balanced so that the value of the lesser measured and the flow-regulating damper required by Sentence 9.32.3.13.(2) shall be at least 90% of adjusted and permanently fixed so that the airflow in the value outdoor air supply duct is within ±10% of the greater flow, unless otherwise recommended by the manufacturer actual normal operating exhaust capacity of the principal ventilation fan.	With the principal ventilation fan operating at its normal operating exhaust capacity, the airflow in the outdoor air supply duct shall be measured and the flow-regulating damper required by Sentence 9.32.3.13.(2) shall be adjusted and permanently fixed so that the airflow in the outdoor air supply duct is within ±10% of the actual normal operating exhaust capacity of the principal ventilation fan.
9.32.3.13.(2)	9.32.3.13. Installation	Where flow-regulating dampers are required, they shall be adjustable and accessible without requiring the removal of fans, motors, or insulating materials and without the need for specialized tools.	Where flow-regulating dampers are required, <u>a)</u> they shall be adjustable and accessible without requiring the removal of fans, motors, or insulating materials and without, or the need for use of specialized tools, and b) a device on the outside of the duct or device in which	Where flow-regulating dampers are required, a) they shall be adjustable and accessible without requiring the removal of fans, motors or insulating materials, or the use of specialized tools, and b) a device on the outside of the duct or device in which they are installed shall indicate the position of the damper.

			they are installed shall indicate the position of the damper.	
9.33.4.1.(1)	9.33.4.1. Application	This Subsection applies to every building that, (a) contains a residential occupancy, and (b) contains a fuel-burning appliance or a storage garage.	This Subsection applies to every building that, (a) contains a residential occupancy, and (b)that also contains (a) a fuel-burning appliance, or (b) a storage garage.	This Subsection applies to every building that contains a residential occupancy and that also contains (a) a fuel-burning appliance, or (b) a storage garage.
9.34.2.7.(1)	9.34.2.7. Public and Service Areas	Every public or service area in buildings, including a recreational camp and a camp for housing of workers, shall have lighting outlets with fixtures controlled by a wall switch or panel to illuminate such areas.	Every public or service area in buildings, including a recreational camp and a camp for housing of workers, shall have be provided with lighting outlets with fixtures controlled by a wall switch or panel to illuminate every portion of such areas.	Every public or service area in buildings shall be provided with lighting outlets with fixtures controlled by a wall switch or panel to illuminate every portion of such areas.
9.35.3.1.(2)	9.35.3.1. Foundation Required	Detached garages of less than 55 m2 floor area and not more than 1 storey in height that are not of masonry or masonry veneer construction are permitted to be supported on,(a) wood mud sills, or (b) a concrete floor slab having a minimum thickness of not less than 100 mm.	Detached garages of less than 55 m2 floor area and not more than 1 storey in height that are not of masonry or masonry veneer construction are permitted to be supported on,(a) wood mud sills, or (b) a 100 mm thick concrete floor slab having a minimum thickness of not less than 100 mm.	Detached garages of less than 55 m2 floor area and not more than 1 storey in height that are not of masonry or masonry veneer construction are permitted to be supported on a) wood mud sills, or b) a 100 mm thick concrete floor slab.