PART 7 PLUMBING

A HIGHLIGHT OF THE 2024 ONTARIO BUILDING CODE CHANGES

The items listed below are highlights related to the changes made with the introduction of the 2024 Ontario Building Code. This document is meant for reference purposes only and may be paraphrased.

NOTE: There are numerous clerical changes in this Part where information has been combined or moved. The term 'Nominal Pipe Size' has been substituted throughout Part 7 for all pipe size references. The provisions appear to have been clarified/simplified in most cases for easier understanding. Tables have also been added where there were none before, and other Tables have been expanded.

GENERAL (DIV B 7.1):

- 7.1.4.1. – Seismic Design. Refers to Part 4 to accommodate for seismic forces.

MATERIALS AND EQUIPMENT (DIV B 7.2):

- 7.2.1.6. – Working pressure of a Water Service Pipe. Must not be less than the maximum water main pressure at the point of connection. Most water mains around the Town are between 75-80 psi. This is typically not an issue however a quick check of the rating on the pipe material being used would confirm.
- 7.2.2.2. – Conformance to Standards. ASME A112.4.2/CSA B45.16 Personal Hygiene Devices for Water Closets.
- 7.2.3.1. – Traps. No longer a requirement to add a cleanout downstream of lavatory or laundry trap that is concealed. A cleanout is still required at the bottom of a trap OR a trap that can be partially dismantled for cleaning purposes is to be used.
- 7.2.5.7. – PVC Pipe and Fittings. New sentence 3. PVC water pipe and fittings in sentence 1 and 2 shall not be used in a hot water system.
- 7.2.5.15. – Polyethylene of Raised Temperature Tube and Fittings. New Table indicates where this is permitted to be used, only for Potable Water Systems.
- 7.2.5.16. – Cellular Core PVC Pipe and Fittings – Standards and restriction on use in buildings containing only 1 or 2 dwelling units and to row houses that do not exceed 3 stories.
- 7.2.7.4 – Copper Tube. Prohibits the use of copper for a fixture drain or vent pipe below the flood level rim of all urinals, as opposed to certain types of urinals
- 7.2.10.6. – Water Flow Rates at Fixtures – moved from 7.6.
- 7.2.10.7. – Water Temperature Control – moved from 7.6.

PIPING (DIV B 7.3):

- 7.3.4.5. – Support for Horizontal Piping. Now provides a table for horizontal pipe support. The table does not appear to change distances between supports. The table is more user friendly. Additional support conditions have been added to the table. Added requirement to support ABS and PVC pipe

as close as possible to the p-trap, at the end of branches or fixture drains and at changes in direction and elevation.

DRAINAGE SYSTEMS (DIV B 7.4):

- 7.4.2.1. – Connections to Sanitary Drainage Systems – Laundry Appliances removed from the allowable indirect connections and now must be directly connected. This would mean a washing machine cannot be drained into a laundry or utility sink basin.
- 7.4.5.1. – Traps for Sanitary Drainage Systems. Interceptors with an effective water seal of 38mm can serve as a trap. Rules for traps would apply. Restricted to one fixture, if serving a group of fixtures requiring more than one trap, then each fixture is to be trapped and vented.
- 7.4.5.2. – Traps for Storm Drainage Systems. New sentence 2. A floor drain that drains to a storm drainage system shall be protected by a trap that is located between the floor drain and a leader, storm building drain or storm building sewer. The trap may serve all floor drains located in the same room and need not be protected by a vent pipe. The trap would need to be protected with a trap seal primer.
- 7.4.7.1. – Cleanouts for Drainage Systems. A building sewer shall not change direction or change slope between the building and the public sewer or between cleanouts. Except that piping 6” or less CAN change slope a maximum of 5 degrees every 3 meters or using fittings with a cumulative change of not more than 45 degrees.
- 7.4.7.2. – Size and Spacing of Cleanouts. Added Table for ease of use and Two-Way Rodding. Two Way Rodding can increase cleanout spacing up to 2 times. There are special fittings that would allow or simply by stacking Y fittings. There are changes to regular cleanout spacing: 3” pipe increased to 7.5 meters and piping over 4” decreased to 26 meters.
- 7.4.7.2. Size and Spacing of Cleanouts. The developed length of a building sewer between the building and the first manhole to which the building sewer connects has been increased to 75 meters.
- 7.4.9.3. Size of Fixture Outlet Pipes. New sentence 4. In an individual dwelling unit, where multiple shower heads are served by one shower receptacle, the fixture outlet pipe shall be not less than 2”. This is also found in the Table following.
- 7.4.9.3. Table Hydraulic Load of Fixtures. Added a note in appendix for a clothes washer connected to a laundry tray (however laundry appliances were removed from allowable indirect connection fixtures) and emergency floor drains would have no hydraulic load.
- 7.4.10.6. – Hydraulic Loads to Soil or Waste Pipes. Change to allow 1.5 meter or more horizontal offset in a stack to be sized by either of the following tables: Table B or Table C whichever is LESS restrictive.
- 7.4.10.6.A – Table Max Hydraulic Load Drained to Stack. (Stack-Vertical soil pipe that passes through one or more storeys) The change is the maximum fixture units drained from any one storey - 1.5” pipe capacity decreased to 2 F.U. and 2” pipe capacity decreased to 6 F.U. So although a 1.5” stack may receive 8 fixture units, the stack can only receive a maximum of 2 fixture units from any one storey.
- 7.4.10.6.B – Table Max Hydraulic Load Drained to a Branch. Now an expanded chart and a decrease in capacity of 1.5” pipe to 3 F.U. Basically a 1.5-inch branch can now only receive a maximum of 3 fixture units.

- 7.4.10.9. – Table New/Relocated Max Hydraulic Load Drained to a Storm Building Drain or Sewer or Combined Building Sewer.

VENTING SYSTEMS (DIV B 7.5):

- 7.5.2. – Wet Venting. The change was made to eliminate the rule for the highest fixture being required to connect to the vertical portion of the wet vent, upstream of any other fixtures, in the form of continuous waste and vent. This rule no longer exists.
- 7.5.5.2. – Venting of Interceptors. Removed requirement for a vent on the outlet pipe for a grease interceptor. A Vent on the inlet is still required and provides 1.5" vent for outlets up to 4" but not larger than 2" and still is to be provided with a clean out.
- 7.5.6.5. – Terminals. New sentence 4. Requiring a vent terminal to be a minimum of 1.8 meters from any property line.
- 7.5.9.2. - Air Admittance Valves. New. No longer required to be located above the Flood Level Rim, now required to be located a minimum of 100mm above the fixture drain being served. Within the maximum developed length permitted for the vent and not less then 150mm above insulation materials. Location of vent pipe rules in 7.5.6.3. would still apply.

POTABLE WATER SYSTEMS (DIV B 7.6):

- 7.6.1.3. – Control and Shut-Off Valves. New sentence 2. Pipes that convey water from a gravity tank or private water supply system shall be fitted with a shut-off valve at the source of supply.
- 7.6.1.3. – Control and Shut-Off Valves. New sentence 5. Buildings of residential occupancy with more than one dwelling unit, each suite requires a shut-off valve where the water enters the suite. This is designed so the remainder of the building is not interrupted.
- 7.6.3.4. – Table Water Pipe Sizing for Buildings Containing One or Two Dwelling Units or Row Houses with Separate Water Service Pipes. New velocity column with an increase to 21F.U. for ¾" pipe, lines up more with the appendix table.

NON-POTABLE WATER SYSTEMS (DIV B 7.7):

- 7.7. – Non-Potable Systems. Some new information and combined clauses.
- 7.7.2. – Non-Potable Rainwater Harvesting Systems. New, does not include a rain barrel not connected to a plumbing system. Permitted Appliances clothes washer, water closet, urinals, service sinks, laundry trays, primers, irrigation, hydronics and any other application where harvesting rainwater is not expected to be ingested or inhaled.

Any further questions please contact the Town of Fort Erie Building Department.