PLUMBING CONTRACTOR MEMO

The City of Kingston is providing this memo to clarify provisions within the scope of the Ontario Building Code, and expectations around permit application submission requirements and associated construction to support licensed plumbing contractors.

Designer Requirements

Plumbing drawings shall be provided for all plumbing system installations to which Part 7 of the Code applies and are to be designed by a qualified designer that holds the plumbing all buildings qualification, or be designed by a professional engineer.

New construction, alterations or additions to House (single family, semi-detached or row house), as well as construction of site services including surface drainage, and plumbing located underground either outside a building or under a building are exempt from designer qualifications.

Minor plumbing alterations to existing buildings may be exempt where it can be demonstrated that the work is minor in nature and will not have an adverse effect on the plumbing system. For example, adding a new commercial sink.

Frost protection

Where plumbing is installed less than 1.2m below grade, it shall be protected from freezing as per 7.3.5.4 OBC using the formula under Appendix A, and be designed by a qualified designer or a Professional Engineer.

Air Admittance Valves

Air admittance valves are permitted under 7.5.9.1 and 7.5.9.2 under specific conditions. Individual vents may terminate with a connection to an air admittance valve where,

1. Used to vent fixtures in buildings undergoing renovation, and installations where connection to a vent is not practical.
2. Located above the flood level rim of the fixture it serves, within the maximum developed length permitted for the vent, not less than 150 mm above insulation materials, and installed in a location not subject to back pressure.
3. Only vent fixtures located on the same storey, and be connected to the horizontal fixture drain.

Air Admittance valves shall meet the following installation conditions under 7.5.9.3,

1. Not installed in mechanical plenums, or where they may be exposed to freezing temperatures.
2. Installed in accordance with the manufacturer’s installation instructions and BMEC (not permitted to be installed in an attic).
3. Rated for the size of vent pipe to which they are connected.
4. Accessible and located in a space that permits air movement.
5. The system shall have at least one vent that terminates to open air.

Examples of not practical in an existing building undergoing renovation where newly proposed plumbing vent extensions will extend into the building include:

1. Where the installation requires extensive removal of walls and ceilings to access the existing vent. (where the vent is on the same storey and can be accessed with minimal drywall removal, this would be practical)
2. Removal of existing cabinets which would be too costly to restore back to the original state.
3. Existing walls or ceilings required to be removed would be significantly cumbersome to replace.

It is the responsibility of the applicant to provide satisfactory proof to the Building and Plumbing Inspector that installing a vent would not be practical for consideration of air admittance valve installations.

Backflow Valves Plumbing vs Sprinkler

Plumbing and Sprinkler Protection installers are both restricted trades, and both may be certified according to the CSA B64.10, 2011 to install backflow preventers. When installing backflow preventers on a sprinkler system, installers must have a thorough understanding of water pressure, water supplies and their interconnectedness with fire pumps, and how backflow preventers affect each system. As well as an understanding of hydraulic calculations for systems and their relationship with available water supply to meet the exact pressure and flow requirements.

1. Plumbing includes any piping, fittings, valves, equipment and fixtures in a building that supplies or disposes of potable water for any domestic or industrial purpose. Licensed Plumber installations include piping of the water supply up to and including the backflow preventer.
2. Sprinkler and Fire Protection is piping systems for supplying water or other materials for fire protection purposes. Sprinkler and Fire Fitter installations include piping for the sprinkler and fire protection system, and may include the installation of the backflow preventer.

Backwater Valves

A backwater valve may be installed in a building drain provided that it does not serve more than one dwelling unit. Where the building serves more than one dwelling unit, a backwater valve is permitted to be installed on a branch that is only serving one unit.