Effective Date: July 2, 2016

2/11/2016
4/6/2016

19-O-16

AN ORDINANCE

Amending City Code Section 4-2-2, "Amendments" and City Code Section 4-5-3, "Amendments" Related to the City of Evanston's Adopted Plumbing Code

NOW BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EVANSTON, COOK COUNTY, ILLINOIS:

SECTION 1: That Section 4-2-2 of the Evanston City Code of 2012, as amended, is hereby amended to include the following:

2901 General: Delete

2902.1 Minimum Number of Fixtures and Table: Delete

2902.1 Minimum Number of Required Plumbing Fixtures: Delete

2902.1.1 Fixture Calculations: Delete

2902.2: Separate Facilities: Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. When this requirement is met by the installation of single-user restrooms for both sexes, those restrooms shall be used by any person regardless of gender identity. Restrooms shall not have more than one water closet and one lavatory and the option of one urinal.

2902.3 Employee and public toilet facilities: Delete

2902.3.2 Location of toilet facilities in occupancies other than malls: Delete

2902.3.3 Location of toilet facilities in malls: Delete

2902.5 Drinking fountain locations: Delete

SECTION 2: That Section 4-5-3 of the Evanston City Code of 2012, as amended, is hereby amended to read as follows:

4-5-3. – AMENDMENTS.

The 2014 Illinois Plumbing Code adopted hereby shall read as follows with respect to these Sections.

Subsection 890.340(f)

f) Copper Water Tube. Joints in copper tubing shall be made with case bronze or wrought copper pressure fittings, properly soldered or brazed, or by means of compression or flared joints as provided in Sections 890.320(d), (e), (h) and (p)(2). Flared joints and compression fittings shall not be installed underground except for water services, water meter yokes, and stop box connections. Soldered and braised fittings shall not be installed below grade.

Section 890.610 General Requirements – Material and Design

a) Quality of Fixtures: Plumbing fixtures shall comply with approved designs, be constructed from approved materials, have smooth, impervious surfaces and be free of defects and concealed fouling surfaces. (See Appendix A: table A "Approved Materials and Standards for Plumbing Fixtures" and "Approved Standards for Plumbing Appliances/Appurtances/Devices.")

b) Used plumbing material, equipment and fixtures for plumbing installations shall comply with this Part.

c) Any plumbing equipment condemned by the Department because of wear, damage, defects or sanitary hazards shall not be used in a plumbing system.

d) All new and replacement plumbing fixtures and irrigation controllers installed after the effective date of this ordinance shall bear the Watersense label as designated by the U.S. Environmental Protection Agency Watersense Program when such labeled fixtures are available.

Section 890.680 Lavatories

a) Waste Outlets. Wastes shall have a strainer or stopper and have a waste outlet at least 1 ¼ inches in diameter.

b) Lavatory Faucets. All lavatory faucets shall have air gaps as specified in Appendix A. table C.

c) When metering faucets are located on lavatories in public restrooms, they shall be adjusted to remain open for a minimum of 10 seconds and shall comply with the water consumption requirements of ASME/ANSI 112.18.1. Metering faucets shall be designed for hot and cold, tempered and cold, or tempered water only.

d) Fixture Calculation. Eighteen lineal inches of wash sink or 18 inches of a circular basin, when provided with water outlets for the space, shall be considered equivalent to one lavatory. (See Appendix F.Illustration B.)

e) Water Temperature. All lavatory faucets for public use shall be provided with an automatic safety water mixing device to prevent sudden unanticipated changes in water temperature or excessive water temperatures. The automatic safety water mixing device shall comply with ASSE 1070 or 1017 in accordance with Section 890.210, and shall be adjusted to a maximum setting of 110 degrees Fahrenheit, at the time of installation. Exception: Units constructed in accordance with Section 890.1220(a)(9)(B) may be used in lieu of an automatic safety water mixing device to provide hot or tempered water to public lavatories.

f) All lavatories for public use in new construction or remodeling shall be equipped with metering or self-closing faucets.

Subsection 890.810(a)(2)(C)

C) Restroom Location, Designation, and Requirements. The required number of plumbing fixtures for a restroom shall be located within the restroom area and not in the hallways or vestibule. Lavatories required by Appendix A: Table B shall be installed in restrooms at a ratio of not less than one lavatory per two water closets or urinals. (See Footnote 2, Appendix A: Table B.) All restroom facilities must comply with designation requirements set forth in Section 2902.2 of the International Building Code, adopted by City Code Section 4-2-2 of the City of Evanston.

Subsection 890.1130(g)

g) Installation of Devices or Assemblies

1) Devices of All Types. Backflow preventer assemblies and devices shall be installed to be accessible for observation, maintenance and replacement services. Backflow preventer devices or assemblies shall not be installed where they would be subject to freezing conditions, except as allowed in Section 890.1140(d).

2) All in-line backflow/back siphonage preventer assemblies shall have a full port type valve with a resilient seated shut-off valve on each side of the preventer. Relocation of the valves is not permitted.

3) A protective strainer shall be located upstream of the first check valve on all backflow/back siphonage preventers unless the device contains a built-in strainer. Fire safety systems are exempt from the strainer requirement.

4) Atmospheric vacuum breakers shall be installed with the critical level above the flooded level rim of the fixture they serve, and on the discharge side of the last control valve of the fixture. No shut-off valve or faucet shall be installed beyond the vacuum breaker.

5) No in-line double check valve backflow preventer assembly (DCV) or reduced pressure principled backflow preventer assembly (RPZ) shall be

located more than 5 feet above a floor, or be installed where it subject to freezing or flooding conditions. After installation, each DCV and RPZ shall be field tested in-line in accordance with the manufacturer's instructions by a cross-connection control device inspector before initial operation. (See subsection (b)).

6) A dual check backflow preventer with atmospheric vent assembly shall not be installed where it is subject to freezing or flooding conditions.

7) Closed water systems with hot water storage shall have a properly sized thermal expansion tank located in the cold water supply as near to the water heater as possible and with no shut-off valve or other device between the heater and the expansion tank. Exception: In existing buildings with a closed water system, a properly sized pressure relief valve may be substitute in place of a thermal expansion tank. For closed water systems created by backflow protection in manufactured housing, as required in Section 890.1140(i), a ballcock with a relief valve may be substituted for the thermal expansion tank.

8) A backflow prevention device shall be installed on each water service pipe/line to a business, commercial, or industrial facility in accordance with the Illinois Plumbing Code. This requirement applies whenever there is an installation of a water service pipe/line, or alteration, renovation, or replacement of an existing pipe/line, and for new construction. A reduced pressure principle backflow, prevention assembly (RPZ) shall be installed in the water service supplying food service, manufacturing, or production establishments.

Subsection 890.1150(a)(3)

a) 3) The minimum depth for any water service pipe shall be at least 60" deep or the maximum frost penetration of the local area, whichever is greater.

Subsection 890.1190(b)

b) The water meter shall be installed within the building within 60" of the water service entrance. The meter shall have unions on the inlet and outlet openings. A full-port valve with an open area at least that of the water service shall be provided for all meters and shall be provided with a drain valve installed on the discharge side of the meter valve when located inside of a building. (See Appendix I.Illustrations H and I.)

Subsection 890.1200(a)

a) Water Service Piping Sizing. The water service pipe from the street main (including the tap) to the water distribution system for the building shall be sized in accordance with Appendix A. Tables M, N, O, P, and Q. Water service pipe

and fittings shall be at least one inch in diameter. If flushometers or other devices requiring a high rate of water flow are used, the water service pipe shall be designed and installed to provide this additional flow.

890 Appendix A, Table A, Approved Materials for Building Sewer

1)	Cast Iron Soil Pipe/Fittings	ASTM A 74-2009 CSA B70-2012
	Rubber Gaskets	ASTM C 564-2012 ASTM D 4161-2010 CSA B70-2012 CSA B602-2010
2)	High-Density Polyethylene (HDPE) Pipe	ASTM D 3350-2010
3)	Polyvinyl Chloride (PVC) Pipe	ASTM F 1866-2007 ASTM D 2665-2012 ASTM D 2949-2010 CSA B182.1-2011 in B1800 CSA B182.2-2011 in B1800 CSA B182.4-2011 in B1800 CSA B181.2-2011 in B1800 ASTM D 2855-2010 ASTM D 3212-2013 CSA B602-2010 ASTM F 656-2010 ASTM D 2564-2012 ASTM D 3138-2011 CSA B181.2-2011 in B1800
4)	Polypropylene Pipe[2]	ASTM 2389-2010 AWWA C901-2008 AWWA C906-2012 (Material Code PE3408)[3] (Material Codes PE2406 and PE3406)[4]
5)	Identification of Piping Systems	ASME A13.1-2007

Agency Notes:

1 Solvent cement must be handled in accordance with STM F 402-1988.

2 PVC pipe with cellular core and vitrified clay pipe are approved only for gravity drainage.

3 Dimension Ratio (DR) 17 or less.

4 Dimension Ratio (DR) 13.5 or less.

Approved Materials for Water Service Pipe

1)	Cast Iron (ductile iron) [2] Water Pipe	ASTM A 377-2008e1 CSA B70-2012
2)	Copper/Copper Alloy Tubing[2,3]	ASTM B 88-2009
3)	Polyethylene (PE) Pipe[2,7]	ASTM D 2239-2012a AWWA C901-2008 AWWA C906-2012 (Material Code PE3408) [4] Material Codes PE2406 PE3406)

Agency Notes:

1 Solvent cement must be handled in accordance with ASTM F 402-1988.
2 Water service pipe must meet the appropriate NSF standard for potable water.
3 Minimum Type K copper shall be installed underground.
4 Dimension Ratio (DR) 17 or less.
5 Dimension Ratio (DR) 13.5 or less.
6 ASME B.1.20.1-1983
7 Up to a developed distance of twenty-four (24) inches to be used only in the transition between similar types of service pipe.

Approved Materials for Water Distribution Pipe

1)	Brass Pipe[2, 6]	ASTM B 43-2009
2)	Copper/Copper Alloy Pipe[2]	ASTM B 42-2010 ASTM B 302-2012
3)	Galvanized Steel Pipe[2, 7]	ASTM A 53-2012 AWWA C606-2011

Agency Notes:

1 Solvent cement must be handled in accordance with ASTM F 402-1988.
2 Water distribution pipe must meet the appropriate NSF standard for potable water, minimum Type L copper shall be installed above grade.
3 Use for cold or tempered water only.

4 ASME B.1.20.1-1983
5 Safety color.
6 For repairs only.
7 For repairs only, except for the distribution and conveyance of distilled or deionized water.

SECTION 3: The findings and recitals contained herein are declared to be prima facie evidence of the law of the City and shall be received in evidence as provided by the Illinois Complied Statues and the courts of the State of Illinois.

SECTION 4: All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 5: This ordinance shall be in full force and effect after its passage, approval and publication in the manner provided by law.

SECTION 6: If any provision of this ordinance or application thereof to any person or circumstance is ruled unconstitutional or otherwise invalid, such invalidity shall not affect other provisions or applications of this ordinance that can be given effect without the invalid application or provision, and each invalid provision or invalid application of this ordinance is severable.

Introduced: May 23, 2016

Adopted: June 13, 2016

Approved:

June 22, 2016

Elizabeth B. Tisdahl

Elizabeth B. Tisdahl, Mayor

Attest:

Rodney Greene

Rodney Greene, City Clerk

Approved as to form:

Michelle L. Maranowski

W. Grant Farrar, Corporation Counsel

Acting City Attorney