

AN ORDINANCE
ADOPTING THE STATE OF ILLINOIS PLUMBING CODE AS THE
PLUMBING CODE OF THE CITY OF ELGIN

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ELGIN, ILLINOIS:

Section 1. That Chapter 16.20 entitled "Plumbing Code" of the Elgin Municipal Code, 1976, as amended, be and is hereby repealed.

Section 2. That Chapter 16.20 entitled "Plumbing Code" be and is hereby added to the Elgin Municipal Code, 1976, as amended, to read as follows:

Chapter 16.20
PLUMBING CODE

Sections:

- 16.20.010 Short Title.
- 16.20.020 Adopted.
- 16.20.030 Permits, fees and inspections.
- 16.20.040 Definitions.
- 16.20.050 Street work permit.
- 16.20.060 State of Illinois Plumbing Code Amendments.
- 16.20.070 National Fuel Gas Code.
- 16.20.080 Conflicts with other provisions.

16.20.010: SHORT TITLE.

The ordinance codified in this chapter shall be known and cited as the Plumbing Code for the City of Elgin and will be referred to in this chapter as "this code."

16.20.020: ADOPTED.

The regulations of the State of Illinois Plumbing Code, 77 Ill. Adm. Code 890.110 *et seq.*, as amended, published by the Illinois Department of Public Health, are adopted as the regulations governing the practice of plumbing in the city with such amendments as are hereinafter set forth in this chapter 16.20, except as such matters as are otherwise provided for in other ordinances or statutes. Unless specifically approved in the State of Illinois Plumbing Code, a product or device approved by the state does not automatically become approved in the City of Elgin, and any such product or device is required to go through the City's local approval process.

All plumbing for new construction is required to conform to the most current version of the State of Illinois Plumbing Code, as amended by this Chapter 16.20 of the Elgin Municipal Code, 1976, as amended.

16.20.030: PERMITS, FEES AND INSPECTIONS.

A plumbing permit is required for all new plumbing work, including, but not limited to, repiping and the replacement of water heaters and installation and/or repiping of water softeners. Permit fees shall be in accordance with Chapter 16.48 of the Elgin Municipal Code, 1976, as amended. Inspections are required prior to concealing any work, underground or within the walls or ceilings, and a final inspection is required prior to and occupancy or re-occupancy.

16.20.040: DEFINITIONS.

The following words and phrases used in this code shall have and include the several meanings given in this section:

BUILDING OFFICIAL: The director of the Department of Code Administration and Development Services or his designated appointee.

HEALTH DEPARTMENT: The health division of the Department of Code Administration and Development Services.

LICENSED PLUMBING CONTRACTOR: A person who has a certificate of registration in effect that has been issued in accordance with the State of Illinois Plumbing License Law, 225 ILCS 320/0.01 *et seq.*, and Chapter 16.02 of the Elgin Municipal Code, 1976, as amended, and who is engaged in the business of plumbing as a sole proprietorship or as an officer of a firm, partnership, corporation or company.

PLUMBING INSPECTOR: Such person duly licensed by the State of Illinois as a licensed plumber and appointed as an agent of the building official and authorized by the building official to enforce the provisions of this code and other city ordinances.

PRIVATE STORM WATER DISPOSAL SYSTEM: The system of pipes, catch basins, dry wells, foundation and drain appurtenances intercepting surface water and underground storm water not discharging into the public right of way.

WATER DISTRIBUTION PIPING: All piping from the water meter location and terminating at the fixture (e.g., tub faucet, sink faucet, toilet, etc.).

16.20.050: STREET WORK PERMIT.

In addition to any permits required under this chapter, a street work permit shall be obtained from the City's engineering division. Further, any liability insurance required as a condition to the issuance of such a permit shall be filed with the City for any work performed in the public right of way.

16.20.060: STATE OF ILLINOIS PLUMBING CODE AMENDMENTS.

The following provisions of the State of Illinois Plumbing Code shall be amended and revised as follows:

A. Section 890.320 Type of Joints shall be amended to read as follows:

Subsection (k) Bituminized Fiber Pipe Joints, is deleted in its entirety.

Subsection (l)(2) Joints and Fittings in Plastic Pipe for potable water service, is amended as follows:

Subsections (l)(2)(A), (l)(2)(B) and (l)(2)(C), inclusive, are deleted in their entirety.

B. Section 890.340 Use of Joints, subsection (h), shall be amended to read as follows:

Building Sewer Connections. An elastomeric coupling seal conforming to ASTM C 425 (1988), ASTM C 443 (1985), ASTM C 564 (1988), ASTM D 4161 (1986), ASTM F 477 (1985), or ASTM D 3139 (1989), ASTM D 3212 (1989), or ASTM D 412 (1980) tests may be used to adapt any two (2) building sewer pipes for different materials or size changes. The flexible couplings shall be attached to the pipe with stainless steel clamps or bolts. All coupling shall be of the no-shear type for repairs to existing sewers. The manufacturer's recommended method of installation shall be followed.

C. Section 890.420(a)(4) Pipe Cleanouts, shall be amended to read as follows:

A full size cleanout shall be located within five (5) feet of the building foundation, inside and outside in direct line with the building drain and sewer. The outside cleanout shall terminate level with finished grade.

D. Section 890.630 Installation, shall be amended to add subsection (j) to read as follows:

Plumbing fixtures or faucets attached to a wall or protruding through a wall shall be made watertight by either caulking or a factory supplied gasket where they contact a wall surface.

E. Section 890.1110 Quality of Water Supply, shall be amended to add subsection (a) to read as follows:

a) Backflow protection required by the City of Elgin:

- 1) In all new commercial and industrial construction, each domestic water service shall have a Reduced Pressure Principle Backflow Preventer

Assembly (RPZ) installed directly after the city water meter and on the meter by-pass (if by-pass is required).

- 2) On any remodeling of a commercial or industrial building where a plumbing permit is required, each domestic water service shall have a Reduced Pressure Backflow Preventer Assembly (RPZ) installed directly after the city water meter and on the meter by-pass (if by-pass is required).
- 3) Businesses dispensing food or beverages will be required to have a Dual Check Valve (DuC) on each piece of equipment that is supplied with water if that equipment does not have a proper air gap per the State of Illinois Plumbing Code.
- 4) All residential boilers will be required to have a Dual Check Valve (DuC) at its point of connection to the domestic water supply.
- 5) Commercial and industrial boilers, heat exchangers and cooling towers will be required to have a Reduced Pressure Principle Backflow Preventer Assembly (RPZ) at their point of connection to the domestic water supply.
- 6) All manufacturing equipment installed to the domestic water supply will be required to be inspected to see if backflow protection is required either by city ordinance, EPA regulations or the State of Illinois Plumbing Code.

- F. Section 890.1190 Water Supply Control Valves and Meter, subsection (a) shall be amended to read as follows:

A full-port shut-off valve shall be located near the curb or property line.

- G. Section 890.1190 Water Supply Control Valves and Meter, subsection (b) shall be amended to read as follows:

The utility meter must be installed inside the building, with the exception of landscaping systems. Full Port Ball Valves shall be installed on the inlet and outlet side of the water meter. All meters shall be provided with a drip valve installed between the meter discharge and the shut-off valve. All meters three inches (3") and larger will be required to have a by-pass, at least fifty percent (50%) the size of the meter, installed around the meter with a locking type ball valve installed on it. The locking valve will be on the inlet side of any devices installed on the by-pass. If a RPZ is required on the building service the by-pass will tie back in on the building side of the RPZ and will have a RPZ installed on the by-pass.

- H. Section 890.1200 Water Service Sizing, subsection (a), shall be amended to read as follows:

Water Service Pipe 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 (1) inch nominal diameter I.D. Type K copper. 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.

- I. Section 890.1200 Water Service Sizing, shall be amended to add subsection (d) to read as follows:

d) Separate Water Services.

- 1) Separate water services shall be required from the street main for each residential unit that will be separately metered.
- 2) Any services run through a porch box must be either sleeved with ductile iron sealed (watertight) sleeve or the porch box backfilled with washed gravel.

- J. Section 890.1360 Sanitary Wastes Below Sewer, subsection (a) shall be amended to read as follows:

Sanitary wastes which cannot be discharged by gravity flow shall be discharged into a gas-tight, covered and vented sump from which the waste shall be lifted and discharged into a sanitary waste drain by automatic pumping equipment. The discharge from all plumbing fixtures and floor drains below the rim elevation of the nearest downstream manhole shall be lifted and discharged by automatic pumping equipment into the sanitary waste.

- K. Section 890.1360 Sanitary Wastes Below Sewer, subsection (b) shall be amended to read as follows:

Design. Sump and pumping equipment shall be designed and installed to discharge, during the pumping cycle, all contents accumulated in the sump except for sump contents that must remain in the sump for the continued proper operation of the pumping equipment (e.g., contents needed to submerge or prime the pump) according to the manufacturer's recommendations. Sump pits shall be a minimum of eighteen (18) inches in diameter and a minimum of thirty (30) inches in depth. An ejector pump with a minimum two (2) inch discharge shall be installed in all pits discharging into the sanitary system.

- L. Section 890.1360 Sanitary Wastes Below Sewer, subsection (e) shall be amended to read as follows:

Vent Sizes. Building sump vents shall be sized in accordance with Appendix A: Table K, but shall be a minimum of two (2") inches.

M. Section 890.1380 Storm Water Drainage Within a Building, shall be amended to add subsection (a) to read as follows:

- (a) The provisions of Chapter 11, entitled "Storm Drainage" and Appendix B of the 2012 International Plumbing Code for design and installation procedures of roof drain systems shall apply, with the following amendments:

Section 1101.4 Tests, shall be amended to read as follows:

The conductors and the building storm drain shall be tested in accordance with Sections 890.1920 and 890.1930 of the State of Illinois Plumbing Code, as amended by Chapter 16.20 of the Elgin Municipal Code, 1976, as amended.

Section 1101.6 Fittings and connections, shall be amended to read as follows:

All connections and changes in direction of the storm drainage system shall be made with approved drainage-type fittings in accordance with Sections 890.1320 (i), 890.1320 (j) and 890.1320 (k) of the State of Illinois Plumbing Code, as amended by Chapter 16.20 of the Elgin Municipal Code, 1976, as amended. The fittings shall not obstruct or retard flow in the system.

Section 1101.8 Cleanouts required, shall be amended to read as follows:

Cleanouts shall be installed in the storm drainage system and shall comply with the provisions of Section 890.420 of the State of Illinois Plumbing Code, as amended by Chapter 16.20 of the Elgin Municipal Code, 1976, as amended, for sanitary drainage pipe cleanouts.

Section 1101.9 Backwater valves, shall be amended to read as follows:

Storm drainage systems shall be provided with backwater valves as required for sanitary drainage systems in accordance with Section 890.1320 (o) of the State of Illinois Plumbing Code, as amended by Chapter 16.20 of the Elgin Municipal Code, 1976, as amended.

Section 1102.2 Inside storm drainage conductors, shall be amended to read as follows:

Inside storm drainage conductors installed above ground shall conform to one of the standards listed in Appendix A, Table A (amended) of the State of Illinois Plumbing Code, as amended by Chapter 16.20 of the Elgin Municipal Code, 1976, as amended.

Section 1102.3 Underground building storm drain pipe, shall be amended to read as follows:

Under-ground building storm drain pipe shall conform to one of the standards listed in Appendix A, Table A (amended) of the State of Illinois Plumbing Code, as amended by Chapter 16.20 of the Elgin Municipal Code, 1976, as amended.

Section 1102.4 Building storm sewer pipe, shall be amended to read as follows:

Building storm *sewer* pipe shall conform to one of the standards listed in Appendix A, Table A (amended) of the State of Illinois Plumbing Code, as amended by Chapter 16.20 of the Elgin Municipal Code, 1976, as amended.

Section 1102.7 Fittings, shall be amended to read as follows:

Pipe fittings shall be approved for installation with the pipe material installed, and shall conform to the respective pipe standards or one of the standards listed in Appendix A, table A (amended) of the State of Illinois Plumbing Code, as amended by Chapter 16.20 of the Elgin Municipal Code, 1976, as amended. The fittings shall not have ledges, shoulders or reductions capable of retarding or obstructing flow in the piping. Threaded drainage pipe fittings shall be of the recessed drainage type.

Section 1113.1.2 Sump Pits, shall be amended to read as follows:

The sump pits shall not be less than 18 inches in diameter and 30 inches deep, unless otherwise approved. The pit shall be accessible and located such that all drainage flows into the pit by gravity. The sump pit shall be constructed of tile, steel, plastic, cast iron, concrete or other approved material, with a removal cover adequate to support anticipated loads in the area of use. The pit floor shall be solid and provide permanent support for the pump (see Section 890. Appendix J, Illustration K for piping layout).

- 1) A one inch (1") air gap is required for sump pump discharge into storm sewers.
- 2) Sump pits (sub soil storm water drainage) are required to be vented with a 2" minimum sized vent connecting to the radon reduction system.
- 3) All horizontal runs of the primary storm drainage piping above grade, including drain heads and roof pans, shall be insulated with ½" fiberglass insulation.

- N. Section 890.1420 Stack Vents, Vent Stacks, Main Vents, subsection (e) shall be amended to read as follows:

Building Sump Vent Sizes. Building Sub-drain Sump Vent Sizes shall be sized in accordance with Appendix A: Table K, but shall be a minimum of two inches (2").

- O. Section 890.1440 Vent Terminal Size, subsection (a), shall be amended to read as follows:

Vent Terminal Size. Each vent extension through the roof shall be a minimum of four inches (4") in diameter and no smaller than the vent in which it terminates. Vent terminals shall not be screened.

- P. Section 890.1510 Stack Venting, shall be deleted in its entirety.

- Q. Section 890 Appendix A – Plumbing Materials, Equipment, Use Restrictions and Applicable Standards, shall be amended as follows:

Table A – Approved Building Drainage/Vent Pipe, the following subsections shall be deleted in their entirety:

- 1) Acrylonitrile Butadiene Styrene (ABS) Pipe

Table A – Approved Building Drainage/Vent Pipe, Agency Notes, the following agency note shall be amended to read as follows:

Agency Note 4: PVC pipe with cellular core is approved only for gravity drainage and venting above ground. It is not approved for pressurized drain, waste or venting applications.

Table A – Approved Materials for Building Sewer, the following subsections shall be deleted in their entirety:

- 2) Asbestos Cement Pipe
- 5) Concrete Pipe

Table A – Approved Materials for Water Service Pipe, the following subsections shall be deleted in their entirety:

- 1) Acrylonitrile Butadiene Styrene (ABS) Pipe
- 2) Brass Pipe

- 4) Chlorinated Polyvinyl Chloride (CPVC) Pipe
- 7) Galvanized Steel Pipe
- 8) Poly Butylene (PB) Pipe
- 9) Polyethelene (PE) Pipe
- 10) Polyethelene (PE) Tubing
- 11) Polyvinyl Chloride (PVC) Pipe

Table A – Approved Materials for Water Distribution Pipe, the following subsections shall be deleted in their entirety:

- 2) Chlorinated Polyvinyl Chloride (CPVC) Pipe
- 5) Cross Linked Polyethylene
- 7) Poly Butylene (PB) Pipe/Tubing

Table A – Approved Materials and Standards for Plumbing Fixtures and Fixture Fittings, the following subsection should be amended as follows:

- 5) Fittings:

Plumbing Fixture Fittings
(Water stop valve bodies shall be constructed of brass, stainless steel,
Or other metallic material as approved by the Building Official).

16.20.070: NATIONAL FUEL GAS CODE.

For the purpose of establishing rules and regulations for the installation, repair and alteration of low pressure gas piping and appliances, the code known as NFPA 54 National Fuel Gas Code 2012 Edition, as adopted and amended by Chapter 16.32 of the Elgin Municipal Code, 1976, as amended, shall apply with the following amendments:

Section 5.6.3.4. Corrugated Stainless Steel, shall be amended to read as follows:

Corrugated stainless steel tubing shall be listed in accordance with ANSI LCI/CSA 6.26, “Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing,” and shall be used only where required by specific manufacturers’ installation instructions.

All interior gas piping is required to be Schedule 40 black iron pipe (ASTM A 53) from the meter to the appliance/equipment connector with the following exceptions:

An approved flexible connector may be used for appliances such as clothes dryers, cook tops and stoves provided that the connectors are UL approved and the manufacturer's instructions do not prohibit such a connection.

16.20.080: CONFLICTS WITH OTHER PROVISIONS.

When a provision of this chapter conflicts with any other provision of this code regulating the same subject matter, either as presently adopted or to be adopted or amended in the future, the more stringent or restrictive provision shall apply.

Section 3. That all ordinances or parts of ordinances in conflict with the provisions of this ordinance be and are hereby repealed.

Section 4. That this ordinance shall be in full force and effect immediately after its passage in the manner provided by law.

David J. Kaptain, Mayor

Presented: October 24, 2012

Passed:

Vote: Yeas Nays:

Recorded:

Published:

Attest:

Kimberly A. Dewis, City Clerk