
BE IT ORDAINED BY THE COUNCIL OF THE CITY OF TOPEKA, KANSAS:

Section 1. City of Topeka Code § 26-251, Required, is hereby amended to read as follows:

Required.

It shall be unlawful for any person to conduct, carry on or engage in the business of mechanical, electrical, plumbing or gas fitting or the installation of water softeners/conditioners, lawn irrigation systems without first obtaining a contractor's license.

Section 2. City of Topeka Code § 26-254, Application and examination, is hereby amended to read as follows:
Application and examination.

(a) Each initial application for examination for journeyman or master license shall be made on forms provided by the building code enforcement division and shall be accompanied by an administrative fee of $20.00 for regularly scheduled examinations. Examinations shall be scheduled bimonthly. Applications for examination shall be made to the board at least four weeks prior to the scheduled examination date. In addition, each applicant for initial examination shall be responsible for paying Block and Associates the testing agency "Experior", directly for the cost of the exam where the board has adopted and approved the Block Experior exam.

(b) Examinations for an unlimited mechanical journeyman and unlimited mechanical master shall be the Block Experior exam, by Block and Associates Experior, Gainesville, Florida. Limited exams for the mechanical trade shall be prepared or approved by the mechanical board.

(c) The minimum passing score shall be 75 percent for any of the trade examinations.

(d) Fees for the licenses shall be as set out in section 30-62.

(e) Water softener/conditioner contractors and those employed to install or service softener/conditioning equipment shall be required to take an examination prepared and approved by the water softener committee, plumbing board of appeals and the city building inspection development services division. Examinations for both masters and journeymen shall be given by the city plumbing inspection department and scored by the water quality association Experior, Gainesville, Florida, with a minimum passing score of
75 percent. The fee for these exams shall be $50.00 for the master's exam and $50.00 for the journeyman's.

(f) Lawn irrigation contractors and those employed to install, repair or service lawn sprinkler systems shall be required to take an examination approved by the Development Services Division and given by Experior. Lawn Irrigation Contractors and their employees who will be replacing, repairing or testing backflow prevention devices will be required to obtain a certification from the State of Kansas in backflow prevention. This certification is required to be renewed every three (3) years.

Section 3. City of Topeka Code § 26-256, Same—Master, is hereby amended to read as follows:

Same—Master.

(a) The requirements to become a licensed master in the plumbing, electrical and mechanical trades shall be a minimum of three (3) years experience as a licensed journeyman within the trade and pass the master's examination or have seven (7) years experience owning/operating a shop and appear before the board to have his experience and knowledge reviewed. If the board determines after such review that the individual has the necessary experience and knowledge, the individual may take the master's examination. For the purpose of the mechanical trade only, a licensed master shall have a minimum of two (2) years experience as a licensed journeyman within the trade and pass the masters examination or have four (4) years experience owning/operating a shop and appear before the mechanical board to have their experience and knowledge reviewed. If the board determines after such review that the individual has the necessary experience and knowledge, the individual may take the masters examination. The requirements to
become a licensed master in the water softener/conditioner trade shall be a minimum of one (1) year of experience as a licensed journeyman within the trade and pass the masters' examination. The City shall grant a master's license for those working in the water softener/conditioner field in the capacity of shop owner or manager for a period of five years before January 6, 1998. To become a licensed master in the lawn irrigation trade, a person must work as a journeyman for two (2) years within the trade and pass the master's examination. The City shall grant a master's license for those working in the lawn irrigation field in the capacity of a shop owner or manager for a period of five (5) years before July 1, 2000. A master license holder shall be responsible to oversee all work activity to assure compliance with applicable codes and must have direct contact with the job site.

(b) Any owner of a licensed electrical contracting company as of one (1) year prior to the effective date of the ordinance from which this article derives will be issued a master electrician license and shall be responsible for all requirements of a master outlined in this division. Work experience shall be verified by past and current employers on forms provided by the building code enforcement division Development Services Division.

(c) The principal partners of a contracting company formed by a partnership, as defined by state law, shall be licensed as masters, provided these partners fulfill the requirements of that license. If a principal partner is not a licensed journeyman as of the effective date of the ordinance from which this article derives, he shall be issued a nonworking master license.
(d) No licenses shall be issued pursuant to the provisions of subsections (b) and (c) of this section effective November 1, 1991, provided that the license applicant was otherwise qualified as of January 1, 1991.

(e) For the purposes of the mechanical trade only, a master’s license is categorized as follows:

1. Comprehensive, all items covered by the code.

A contractor employing a mechanical master with a noncomprehensive license shall be limited to that work which falls within the master’s category. A mechanical contractor may employ more than one mechanical master.

Section 4. City of Topeka Code § 26-257, Same – Journeyman, is hereby amended to read as follows:

Same -- Journeyman.

(a) The requirements to become a licensed journeyman in the plumbing, electrical and mechanical trades shall include, a minimum of four (4) years’ experience working within the trade in conjunction with training of a school approved by the appropriate board or a minimum of five (5) years’ experience working within the trade and pass the journeyman’s examination. For the purpose of the mechanical trade only, a licensed journeyman shall have a minimum of two (2) years experience working within the trade in conjunction with training of a school approved by the board or a minimum of three (3) years experience working within the trade. The requirements to become a licensed journeyman in the water softener/conditioner trade shall be a minimum six (6) months experience in the trade and pass the journeyman’s examination.
journeyman's license for those working in the water softener/conditioner field in the capacity of an installer or service technician for a period of five years before January 6, 1998. To become a licensed journeyman in the lawn irrigation trade a person must work as an apprentice for one (1) year within the trade and pass the journeyman's examination.

The City shall grant a journeyman's license for those working in the lawn irrigation field in the capacity of an installer or service technician for a period of two (2) years before July 1, 2000. Work experience shall be verified by previous and current employers on forms provided by the building code enforcement division.

(b) For the purposes of the mechanical trade only, a journeyman license is categorized as follows:

(1) Comprehensive, all items covered by the code.

(2) Solid fuel burning appliances.

Section 5. City of Topeka Code § 26-258, Same – Apprentice, is hereby amended to read as follows:

Same--Apprentice.

An apprentice is an individual who is registered with the Development Services Division as working within the licensed trades of electrical, mechanical, plumbing and lawn irrigation. The working ratio for licensed journeyman or master to registered apprentice shall be one (1) to one (1), except the mechanical and lawn irrigation trades, wherein the ratio shall be one (1) licensed journeyman or master to two (2) registered apprentices.

Section 6. City of Topeka Code § 26-259, When licenses and registrations expire, is hereby amended to read as follows:
When licenses and registrations expire.

All licenses and registrations shall expire the last working day before December 15.

All licenses may be renewed for a period of 90 days after expiration. Failure to renew within 90 days shall cause the license to be null and void. Thereafter, renewal of license shall be considered and treated as an application for a new license and subject to all applicable provisions. Failure by an individual to renew his/her license(s) by the aforementioned date will result in a fee double that of the standard fee for reinstatement of the delinquent license(s).

Section 7. City of Topeka Code § 26-261, Display of contractor's and electrician's licenses, is hereby amended to read as follows:

Display of all trade contractor's, and electrician's master's and journeyman's licenses.

All plumbing, mechanical, electrical and water softener/conditioner, lawn irrigation contractors licensed pursuant to this division shall display or post the required license in their place of business, and All electricians master and journeyman tradepersons shall carry their licenses on their persons and exhibit the license on the demand of the electrical inspector, his assistants or any officer of the city.

Section 8. City of Topeka Code § 26-406, Administrative authority designated, is hereby amended to read as follows:

Administrative authority designated.

Whenever the term "administrative authority" is used in this article it shall be construed to mean the code enforcement director Development Services Division Director and shall include any authorized representatives.
Section 9. City of Topeka Code § 26-409, Uniform Plumbing Code – Adopted, is hereby amended to read as follows:

Uniform Plumbing Code--Adopted.


(b) The following appendixes are hereby adopted as part of this article:

Appendix A--Recommended Rules for Sizing the Water Supply System
Appendix B--Explanatory Notes on Combination Waste and Vent Systems
Appendix C--Sizing of Category I Venting Systems
Appendix D--Sizing Stormwater Drainage Systems
Appendix E--Manufactured/Mobile Home Parks and Recreational Vehicle Parks
Appendix G--Graywater Systems for Single Family Dwellings
Appendix H--Recommended Procedures for Design, Construction and Installation of Commercial Kitchen Grease Interceptors
Appendix I-- Installation Standards
Appendix J-- Reclaimed Water Systems for Non-Residential Buildings
Appendix K--Private Sewage Disposal Systems

Section 10. City of Topeka Code § 26-410, Same—Copies on file in clerk’s office, is hereby amended to read as follows:
Same--Copies on file in clerk's office.

At least one (1) copy of the Uniform Plumbing Code as adopted shall be on file with the city clerk to be available for inspection by the public at all reasonable business hours.

The police department, municipal court and all administrative departments of the city charged with the duty of enforcement of this article shall be supplied, at the cost of the city, such a number of copies of the code as may be deemed expedient by the code enforcement director development services director.

Section 11. City of Topeka Code § 26-421.1, Section 101.4.1.4, of the Uniform Plumbing Code, 2000 Edition, Conflicts between codes, is hereby amended to read as follows:

Conflicts between codes.

Conflicts between codes. When the requirements within the jurisdiction of this plumbing code conflict with the requirements of any other code, the more restrictive code shall prevail.

Section 12. City of Topeka Code § 26-422, Section 101.5.6 of the Uniform Plumbing Code, 2000 Edition, Moved buildings, is hereby amended to read as follows:

Moved buildings.

Moved buildings. Plumbing systems, which are part of buildings or structures moved into this jurisdiction, shall comply with the provisions of this code for new installations. All plumbing systems shall be completely tested as prescribed elsewhere in this code, except that walls or floors need not be removed during the test when other equivalent means of inspection acceptable to the administrative authority are provided.
structures moved within this jurisdiction shall comply with the provisions of the Housing
Code, City of Topeka Code § 82-31 et seq. as may be amended.

Section 13. City of Topeka Code § 26-423, Section 103.1.2 of the Uniform
Plumbing Code, 2000 Edition, Work not requiring a permit, is hereby amended to read as
follows:

Work not requiring a permit.

Work not requiring a permit. No permit shall be required in the following types of
repair work:

(a) Minor repairs of leaks in drain, waste and vent piping. Should it become
necessary to replace sections of piping exceeding five (5) feet in length, it shall be
considered as "new work" and a permit shall be procured and inspections made as
required as per the Uniform Plumbing Code.

(b) Opening of drains and sewers.

(c) Repair of leaks in water piping and valves. Should it become necessary to
replace sections of piping exceeding five (5) feet in length, a permit shall be procured and
inspection made.

(d) Replacement of faucets and plumbing fixtures common to all bathrooms and
residential kitchens.

Section 14. Section 103.4 of the Uniform Plumbing Code, 2000 Edition, Fees, is
hereby repealed.

Section 15. City of Topeka Code § 26-424, Table 1-1 of the Uniform Plumbing
Code, 2000 Edition, Schedule of fees, is hereby amended to read as follows:
Schedule of fees.

Any work in which a building permit was issued—No fee.

Flat fee—On work which did not involve a building permit.

  $20.00 .... Residential
  $50.00 .... Commercial

Any Plumbing work commenced without a permit for which a permit is required, shall be assessed an enhanced fee ten (10) times the flat fee amount.

Unlicensed Individuals doing plumbing work requiring a permit, shall be assessed an enhanced fee ten (10) times the flat fee amount.

Section 16. City of Topeka Code § 26-425, Table 14-1 of the Uniform Plumbing Code, 2000 Edition, Plumbing material standards, is hereby amended to read as follows:

Plumbing material standards.

The following is hereby deleted from Uniform Plumbing Code, Chapter 14, Table 14-1, Plumbing Material Standards:

Plastic, PB
Polybutylene (PB) plastic pipe based on outside diameter
Polybutylene piping
Metal insert fittings for Polybutylene (PB) tubing

Chapter 14 Table 14-1, is amended with the addition of the following language:

Equipment used to soften or condition the potable water in a structure, shall be tested and listed by an agency recognized by the International Association of Plumbing and Mechanical Officials.
Section 17.  City of Topeka Code § 26-425.1, Chapter 2, is hereby amended to read as follows:

Chapter 2.

Uniform Plumbing Code, 1997 2000 Edition, Chapter 2, Definitions, is hereby amended by the addition of the following language:

Lawn Irrigation Contractor. Person in the business of installing or servicing lawn irrigation systems. This includes the extension, alteration, or maintenance of residential, commercial or industrial lawn irrigation systems.

Toilet facility. A restroom consisting of one water closet and one lavatory.

Water softening/conditioning unit. An appliance or fixture that does not become a fixed part of a structure, designed to treat water as to remove mineral, chemical or bacterial content. These units shall be tested and listed by an agency recognized by the International Association of Plumbing and Mechanical Officials.

Water softening/conditioning contractor. Person in the business of installing or servicing water softening/conditioning units. This includes the extension, alteration, exchanging or maintenance of residential, commercial and industrial water conditioning units.

Section 18. City of Topeka Code § 26-425.2, Section 313.9, Piping protection, is hereby repealed.

Section 19. City of Topeka Code § 26-426, Section 315.4 of the Uniform Plumbing Code, 2000 Edition, Excavations, is hereby amended to read as follows:
Excavations.

All excavations shall be completely backfilled as soon after inspection as possible. To ensure adequate bedding of piping and to prevent damage to such piping, trenches shall be backfilled in thin layers to twelve (12) inches above the top of the piping with clear earth which shall not contain stones, boulders, cinderfill or other materials which would damage or break the piping or cause corrosive action. Mechanical devices such as bulldozers, graders, etc., may then be used to complete backfill to grade. Fill shall be properly compacted under sidewalks, parking lots, driveways and similar situations. Mounding of sewers without compaction is an acceptable practice in open yards. Approved material for pipe bedding of plumbing groundwork and sanitary sewers shall be U.D. 1 or 1/4 inch washed rock or material of similar size. Sand is not an approved material.

Section 20. Uniform Plumbing Code, 2000 edition, Section 316.1.6 of the Uniform Plumbing Code, 2000 Edition, Solvent cement plastic pipe joints, is hereby amended to read as follows:

Solvent Cement Plastic Pipe Joints.

One step cements for non-pressure PVC, Drain, Waste and Vent piping that comply with the requirements in ASTM D2564-96(a), ASTM F493-92 and ASTM F656-96(a) may be used without the use of primer.

Section 21. City of Topeka Code § 26-426.1, Section 4-2.6, metered faucets, is hereby repealed.

Section 22. City of Topeka Code § 26-427, Section 405.2 of the Uniform Plumbing Code, 2000 Edition, Connections, is hereby amended to read as follows:
Connections.

Connections. Fixtures having concealed slip joint connections shall be provided with a framed area no less than 12" x 18" to be used for access. This area may be covered with wallboard, paneling, or other interior wall finishes.

Section 23. City of Topeka Code § 26-428, Section 412.1 of the Uniform Plumbing Code, 2000 Edition, Floor drains, is hereby amended to read as follows:

Floor drains.

Floor drains shall be considered plumbing fixtures and each such drain shall be provided with an approved type strainer having a waterway equivalent to the area of the tailpiece. Floor drains, floor receptors, and shower drains shall be of an approved type, vented property and suitably flanged to provide a watertight joint in the floor.

Special provisions: In group "R" occupancies, individual floor drains shall not be required to be vented, unless the length of the trap arm exceeds fifteen (15) feet from a vented line. In all other occupancies, individual floor drains shall not be required to be vented unless the length of the trap arm exceeds 15 feet from a vented line with a maximum of four (4) unvented floor drains per building waste system. When combination waste and vent systems are being utilized, this provision shall not apply.

Section 24. City of Topeka Code § 26-428.1, Section 412.2.3 of the Uniform Plumbing Code, 2000 Edition, Floor drains in laundry rooms, is hereby repealed.

Section 25. City of Topeka Code § 26-428.2, Table 4-1 of the Uniform Plumbing Code, 2000 Edition, Minimum number of required fixtures, is hereby amended to read as follows:
Minimum number of required plumbing fixtures.

Minimum number of required fixtures shall be governed by the Uniform Building Code, 1997 edition, Volume 1, Appendix Chapter 29 and City of Topeka Code § 26-160.

Section 26. City of Topeka Code § 26-429, Water heater pans, Section 510.7 of the Uniform Plumbing Code, 2000 Edition, is hereby amended by the addition of the following language:

Water heater pans.

When a water heater is located in an attic, attic-ceiling assembly, floor-ceiling assembly, or floor-subfloor assembly where damage may result from a leaking water heater, a watertight pan of corrosion-resistant materials shall be installed beneath the water heater with a minimum three-quarter (3/4) inch (20 mm) diameter drain to an approved location.

The pans shall be made of plastic or other non-corrosive material. Galvanized steel pans shall be lined with plastic or other material to prevent corrosion of the pan. The minimum size of the pan shall be 24 inches square or 24 inches in diameter with a minimum two-inch lip.

Section 27. Section 510.8 of the Uniform Plumbing Code, 2000 Edition, Relief valve discharge, is hereby specifically repealed.

Section 28. City of Topeka Code § 26-429.1, Table 5-2 of the Uniform Plumbing Code, 2000 Edition, is hereby amended to read as follows:

Table 5-4 5-2.

Table 5-4 5-2, is hereby amended by the addition of the following language:
<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Building of Ordinary Tightness</strong></td>
<td><strong>Building of Unusually Tight Construction</strong></td>
</tr>
<tr>
<td>2. Part of air from inside building</td>
<td>5. Provide opening for one vertical duct or one horizontal duct in the enclosure; 1 sq. in. per 3,000 Btu/h input rating.*</td>
</tr>
<tr>
<td>Provide one opening or one vertical duct or one horizontal duct in the enclosure; 1 sq. in. per 3,000 Btu/h input rating.*</td>
<td></td>
</tr>
</tbody>
</table>

*Exception: When all air is taken from the outdoors for an appliance with a minimum clearance of one (1) inch (25 mm) on the sides and back and six (6) inches (152 mm) on the front, one opening shall be permitted and located within the upper twelve (12) inches (305 mm) of the enclosure.

**Section 29.** City of Topeka Code § 26-430, Section 603.3.4 of the Uniform Plumbing Code, 2000 Edition, Backflow testing access, is hereby amended to read as follows:

**Section 603.3.3 603.3.4 Backflow testing access.**

Access and clearance shall be provided for the required testing, maintenance and repair. Access and clearance shall require a minimum of one (1) foot between the lowest portion of the assembly and grade, floor or platform. Administrative approval is required before backflow devices are installed at an elevation of six (6) feet or more above the floor or grade.

**Section 30.** Section 603.4.13 of the Uniform Plumbing Code, 2000 Edition, Potable water supply to carbonators, is hereby amended to read as follows:
Potable water supply to carbonators shall be protected by a listed reduced pressure principle backflow preventer as approved by the Administrative Authority for the specific use.

Section 31. City of Topeka Code § 26-431, Table 6-4, Number of fixture units, is hereby amended to read as follows:

**Number of fixture units.**

Table 6-4, Number of Fixture Units, is hereby amended by the addition of the following language:

<table>
<thead>
<tr>
<th></th>
<th>Private Use</th>
<th>Public Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clotheswashers (each pair of faucets)</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Lawn Sprinkler, (each head)</strong></td>
<td>1-0</td>
<td>1-0</td>
</tr>
</tbody>
</table>

8. The water supply for lawn sprinkler systems, which includes the main water service, shall be sized by the gallons per minute (GPM) required per head using Appendix A.

Section 32. City of Topeka Code § 26-432, Section 605.2 of the Uniform Plumbing Code, 2000 Edition, Building control valve, is hereby amended with the addition of the following language:

**Building control valve**

*Building control valve.* All buildings shall have an accessible fullway valve immediately inside the structure or basement controlling all outlets within the structure. This valve maybe enclosed if the access panel can be removed without use of tools.
Section 33. City of Topeka Code § 26-432.1, Section 605.5 of the Uniform Plumbing Code, 2000 Edition, Water control valves, is hereby amended by the addition of the following language:

**Water control valves.**

Bypass valves installed on water softeners shall be a fullway type with working parts of non-corrosive materials.

Section 34. City of Topeka Code § 26-432.2, Section 606.1.2 of the Uniform Plumbing Code, 2000 Edition, Mechanical joints, is hereby amended with the addition of the following language:

**Mechanical joints.**

Mechanical joints for cast iron water pipe shall conform to nationally recognized standards. Compression mechanical joints for copper water services shall be constructed of brass, have rubber or brass compression ring and a brass retaining screw and shall meet ASTM B62 specifications.

Section 35. City of Topeka Code § 26-433, Section 608.2 of the Uniform Plumbing Code, 2000 Edition, Excessive water pressure, is hereby amended to read as follows:

Section 4007(b)608.2, **Excessive water pressure.**

Where local water pressure is in excess of eighty-five 85 pounds per square inch, an approved type pressure regulator preceded by an adequate strainer shall be installed and the pressure reduced to sixty-five 65 eight-five 85 pounds per square inch or less. For potable water services up to and including one and one-half 1 1/2 inch (38.1 mm) regulators, provisions shall be made to prevent pressure on the building side of the regulator from exceeding main supply pressure. Approved regulators with integral bypass are acceptable.
Each such regulator and strainer shall be accessibly located and shall have the strainer readily accessible for cleaning without removing the regulator or strainer body or disconnecting the supply piping. All pipe size determinations shall be based on eighty 80 percent of the reduced pressure.

Section 36. City of Topeka Code § 26-433.1, Section 608.7 of the Uniform Plumbing Code, 2000 Edition, Vacuum relief, is hereby specifically repealed.

Section 37. City of Topeka Code § 26-433.2, Section 610.2 of the Uniform Plumbing Code, 2000 Edition, Water softener installations, is hereby amended with the addition of the following language:

Water softener installations.

Licensed individuals working in the water softening/conditioning trade, shall be allowed to install potable water lines to those devices. The length of the piping shall not exceed ten (10) feet horizontally for each connection plus the vertical drop to the fixture. Piping from the water softener/conditioner to any fixture shall be done by a licensed plumbing contractor.

Section 38. Section 610.5 of the Uniform Plumbing Code, 2000 Edition, Alternate method of sizing water piping, Appendix L, is hereby repealed.

Section 39. City of Topeka Code § 26-434, Section 610.8 of the Uniform Plumbing Code, 2000 Edition, Size of meter and building supply using Table 6-5, is hereby amended to read as follows:

Size of meter and building supply pipe using Table 6-5.

Section 640.6 610.8, size of meter and building supply pipe using Table 6-5, is hereby amended by the addition of the following language:
Size of meter and building supply pipe using Table 6-5. No building supply shall be less than three-quarter (3/4) inch (19.1 mm) in diameter. Houses or apartments that are one thousand 1,000 square feet in area or larger shall have a minimum one (1) inch (25.4 mm) water meter and service line.

In residential remodeling a maximum of twenty eight (28) fixture units will be allowed to be connected to an existing three-quarter (3/4) inch (19.1 mm) domestic water service.

Section 40. Section 703.3 of the Uniform Plumbing Code, 2000 Edition, Alternate method of sizing drainage piping, Appendix L, is hereby specifically repealed.

Section 41. City of Topeka Code § 26-435, Section 707.4 of the Uniform Plumbing Code, 2000 Edition, Urinal cleanouts, is hereby amended to read as follows:

Urinal cleanouts.

Section 707.4, Urinal cleanouts, is hereby amended by the addition of the following language.

Exception:

(5) A cleanout shall be required to be installed above the flood level rim of all urinals with integral traps.

Section 42. Section 705.1 of the Uniform Plumbing Code, 2000 Edition, Types of Joints, is hereby amended by the addition of the following language:

ETCO "T" Cone and Coupling Adapters. The use of this type of clay tile to plastic adapter is limited to sanitary sewer installations and may only be used for the connection of the building sewer to the clay tile sewer main wye or tap. The joint and connecting pipe shall be installed at no more than 22 degrees from the horizontal and shall be laid on undisturbed ground or a firm bed of 1/4" crushed rock or similar material.
Section 43. City of Topeka Code § 26-436, Section 710.1 of the Uniform Plumbing Code, 2000 Edition, Backwater valve, is hereby repealed.

Section 44. City of Topeka Code § 26-437, Section 712.2 of the Uniform Plumbing Code, 2000 Edition, Water test, is hereby amended to read as follows:

Water test.

Water test for drain, waste and vent. The water test shall be applied to the drainage and vent system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system filled with water to a point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest opening of the section under test, and each section shall be filled with water, but no section shall be tested with less than a five (5) foot (1.5 m) head of water. In testing successive sections, at least the upper five (5) feet (1.5 m) of the next preceding section shall be tested, so that no joint or pipe in the building (except the uppermost five (5) feet (1.5 m) of the system) shall be submitted to a test of less than five (5) foot (1.5 m) head of water. The water test shall be kept in the system, or in the portion under test, for at least fifteen (15) minutes before the inspection starts.

The system shall then be tight at all points.

Section 45. City of Topeka Code § 26-437.1, Section 717.0 of the Uniform Plumbing Code, 2000 Edition, Size of building sewers, is hereby amended to read as follows:
Size of building sewers.

The minimum size of any building sewer shall be determined on the basis of the total number of fixture units drained by such sewer, in accordance with Table 7-8. No building sewer shall be smaller than the building drain.

Section 46. City of Topeka Code § 26-438, Section 723.0 of the Uniform Plumbing Code, 2000 Edition, Building sewer test, is hereby amended to read as follows:

Building sewer test.

Building sewer test. Building sewers shall not be required to be tested unless in the opinion of the administrative authority the sewer is damaged or may not be water tight due to improper installation. The test required at that point shall conform to the criteria prescribed in Section 723.0 of the UPC.

Section 47. City of Topeka Code § 26-439, Section 807.4 of the Uniform Plumbing Code, 2000 Edition, Domestic dishwashers, is hereby amended to reads as follows:

Domestic dishwashers.

EXCEPTION: Domestic dishwashers may be installed without an air-gap fitting on the discharge side of the dishwashing machine provided the waste hose is securely fastened to the bottom side of the countertop.

Section 48. City of Topeka Code § 26-440, Section 905.2 of the Uniform Plumbing Code, 2000 Edition, Horizontal and special vents, is hereby amended to reads as follows:

Horizontal and special vents.

Where vents connect to a horizontal drainage pipe, each vent pipe shall have its invert taken off above the drainage center line, by way of a wye fitting downstream of the trap being served. A sanitary tee may be installed as a dry vent in a true vertical position
(not less than ninety 90 degrees from horizontal) and shall not deviate from the vertical until it is six (6) inches above the floor rim of the fixture being served.

Section 49. City of Topeka Code § 26-441, Section 905.5 of the Uniform Plumbing Code, 2000 Edition, Residential water closet vents, is hereby amended by the addition of the following language:

**Residential water closet vents.**

Special provisions: The horizontal vent for one water closet in a one- and two-family dwelling units may be used as a waste line for two lavatories.

Section 50. Section 910.7 of the Uniform Plumbing Code, 2000 edition, Combination Waste and Vent Systems, is hereby amended to read as follows:

**Combination Waste and Vent System.**

No water closet or urinal shall be installed on any such system. Other one (1), two (2), or three (3) unit fixtures remotely located from the sanitary system and adjacent to a combination waste and vent system may be connected to such system in the conventional manner by means of waste and vent pipes of regular sizes, providing that the two (2) pipe size increase required in Section 910.4 is based on the total fixture unit load connected to the system.

Note: See Appendix B of this Code for explanatory notes on the design of combination waste and vent systems.

See also Appendix L, Alternate Plumbing Systems, for sizing vent piping systems.

Section 51. City of Topeka Code § 26-442, Section 1007.0 of the Uniform Plumbing Code, 2000 Edition, Trap seal protection, is hereby amended by the addition of the following language:
Trap seal protection.

EXCEPTION: Automatic means of protecting a trap seal shall not be required when a written schedule of trap seal maintenance is submitted to and approved by the administrative authority. Failure to maintain a proper trap seal with this method will result in the installation of an automatic trap primer.

Section 52. City of Topeka Code § 26-442.1, Section 1014.1 of the Uniform Plumbing Code, 2000 Edition, Grease traps and grease interceptors, is hereby amended to read as follows:

Grease traps and grease interceptors.

When in the judgment of the administrative authority and/or water pollution control, waste pretreatment is required, an approved grease trap or interceptor complying with this section shall be installed to insure compliance with the effluent limitations on waste water strength per section 7.8 of City Ordinance No. 16388. Any new or existing establishments with a three (3)-compartment sink and/or sinks, drains and other fixtures or equipment where grease may be introduced into the drainage or sewer system in quantities that can effect line stoppage or hinder sewage treatment or private sewage disposal a grease trap shall be required. A grease trap is not required for individual dwelling units or for private living quarters. New establishments with fixtures in addition to a three (3)-compartment sink (pre-rinse sinks, garbage grinders, food prep sinks, etc.) shall be required to install a grease interceptor in accordance with Chapter 10 and Appendix H of the Uniform Plumbing Code. Existing establishments shall be required to install a grease interceptor if future data (laboratory data and/or sewer preventive maintenance data) show a need for waste pretreatment requirements regulated by the water pollution control division.
Section 53. City of Topeka Code § 26-442.2, Section 1101.9 of the Uniform Plumbing Code, 2000 Edition, Filing stations and other motor vehicle washing establishments, is hereby specifically repealed.

Section 54. City of Topeka Code 26-442.3, Section 1209.3, Gas meter valves and service piping, is hereby repealed.

Section 55. City of Topeka Code § 26-443, Section 1211.3 of the Uniform Plumbing Code, 2000 Edition, Welded plastic gas piping, is hereby amended to read as follows:

Section 1211.2 3 Welded plastic gas piping joints.

Welded plastic gas piping joints, is hereby amended by the addition of the following language:

All joints in approved welded plastic gas piping shall be performed by individuals who have been certified. Certification shall be that required by the material manufacturer.

Section 56. City of Topeka Code § 26-444, Section 1211.10 of the Uniform Plumbing Code, 2000 Edition, Gas compression couplings, is hereby amended by the addition of the following language:

Section 1211.10 1211.13 Gas compression couplings.

Approved "compression" type mechanical couplings may be used in exterior installation of gas lines only.

Section 57. City of Topeka Code § 26-445, Section 1210.0 of the Uniform Plumbing Code, 2000 Edition, Material for gas piping, is hereby amended to read as follows:
Section 1210.01, Material for gas piping.

All piping used for the installation, extension, alteration, or repair of any gas piping shall be standard weight wrought iron or steel (galvanized or black) and yellow brass (containing not more than seventy-five (75) percent copper). Approved PE pipe may be used in exterior buried piping systems.

CSST (Corrugated Stainless Steel Tubing) piping systems with ANSI Z223.1/NFPA 54 listing, is approved for interior gas installations. Manufacturers recommendations shall be used as the installation standards provided those standards meet the intent of Chapter 12 of the UPC. Current manufacturers standards as listed below are the required guides for the installation of CSST piping. Revised editions of these standards shall be reviewed and submitted as a change to this ordinance before implementation in the field.

Titeflex CSST Design and Installation Guide - April 1995

Wardflex CSST Design and Installation Guide No. 1-87

TracPipe CSST Design and Installation Guide - March, 1997


Provided the following amendments are made to the aforementioned Installation Guides:

a. The piping on the outlet side of "log lighter" valves for fireplaces shall be black steel pipe.

b. The sizing of combination black steel and CSST gas piping systems shall be determined by the more restrictive sizing method. Combining the two sizing systems is prohibited.
Section 58. City of Topeka Code § 26-445.1, Section 1211.16 of the Uniform Plumbing Code, 2000 Edition, Tracer wires for plastic underground gas piping, is hereby amended to read as follows:

Section 59. Section 1210.1.1 of the Uniform Plumbing Code, 2000 Edition, is hereby specifically repealed.

Section 60. Section 1211.1 of the Uniform Plumbing Code, 2000 Edition, is hereby amended by the addition of the following language:

All joints in the piping system, unless welded, shall be screwed joints, having approved standard threads. Such screwed joints shall be made up with approved pipe joint material, insoluble in the presence of fuel gas and applied to the male threads only.

Section 61. Section 1211.2 of the Uniform Plumbing Code, 2000 Edition, is hereby specifically repealed.

Section 62. Section 1211.2.1 of the Uniform Plumbing Code, 2000 Edition, is hereby specifically repealed.

Section 63. Section 1211.2.2 of the Uniform Plumbing Code, 2000 Edition, is hereby specifically repealed.

Section 64. Section 1211.8 of the Uniform Plumbing Code, 2000 Edition, is hereby specifically repealed.

Section 65. Section 1211.9 of the Uniform Plumbing Code, 2000 Edition, is hereby specifically repealed.

Section 66. Section 1211.9.1 of the Uniform Plumbing Code, 2000 Edition, is hereby specifically repealed.
Section 67. Section 1211.9.2 of the Uniform Plumbing Code, 2000 Edition, is hereby specifically repealed.

Section 68. Section 1211.9.3 of the Uniform Plumbing Code, 2000 Edition, is hereby specifically repealed.

Section 69. Section 1211.9.4 of the Uniform Plumbing Code, 2000 Edition, is hereby specifically repealed.

Section 4211.10 1211.19 Tracer wires for plastic underground gas piping.

An electrically continuous insulated number eighteen 18 AWG yellow 0.040 inch (1 mm) diameter copper tracer wire or other approved materials shall be installed parallel to the pipe and should be a minimum of six (6) inches away from the pipe. The wire should be accessible for conductive location connection at one end with the remaining end (or ends) buried and grounded by stripping a minimum of 12 twelve inches insulation. Branch lines and splices should be soldered or mechanical type connectors used and taped.

Section 70. Section 1217.1 of the Uniform Plumbing Code, 2000 Edition, Required gas piping size, is amended by deleting the reference to “Table 12-11 for copper tubing systems.”

Section 71. Section 1217.4 of the Uniform Plumbing Code, 2000 Edition, is amended by deleting the following language:

“For copper tubing systems using undiluted liquefied petroleum gas, the capacity of the tubing shall be determined by multiplying the values of Table 12-11 by the appropriate factor from Table 12-12.”

Section 72. Tables 12-11 through 12-14 of the Uniform Plumbing Code, 2000 Edition, Copper Tube Piping, is hereby deleted.
Section 73. Appendix I, of the Uniform Plumbing Code, 2000 Edition is hereby amended with the addition of the following language:

Appendix I Installation Standards

IAPMO is 9-95 PVC Building Drain, Waste and Vent Pipe and Fittings

Section 301.1.3. Solvent Cement, is hereby amended with the addition of the following language: One step cements for non-pressure PVC, Drain, Waste and Vent piping that comply with the requirements in ASTM D2564-96(a), ASTM F493-92 and ASTM F656-96(a) may be used without the use of primer.

Section 74. City of Topeka Code § 26-446, Definitions, is hereby amended to read as follows:

Definitions.

In addition to those terms defined in the plumbing code adopted by section 26-409, for the purposes of this division the following terms shall have the meanings ascribed to them in this section:

Agency means the building code enforcement division of public works which shall be vested with the responsibility for enforcement of this division.

Air gap means the unobstructed vertical distance at least twice the diameter of the supply line and no less than one inch, through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture or other device and the flood level rim of the receptacle. Air gap must be two pipe diameters, in no instance less than one inch.

Approved device means devices tested and accepted by a recognized testing laboratory approved by the state department of health and environment and the city.
AWWA - the American Water Works Association. AWWA Manual M14 shall be used as a reference in enforcement of this Code.

Backflow means the flow of water or other substances into the distribution system of a potable supply of water from any source other than its intended source.

Backsiphonage is one type of backflow.

Backflow preventer means a device or means to prevent backflow.

Backflow License - a document issued by the Development Services Division to a certified backflow tester/technician. Fees and renewal schedule will be determined by the Development Services Division.

Backsiphonage means the flowing-back of contaminated or polluted substances from a plumbing fixture or any vessel or source into the potable water supply system due to negative pressure in the system.

Contaminant means any substance that upon entering the potable water supply would render it a danger to the health or life of the consumer.

Certified tester/repair technicians are those who have successfully completed a Kansas Department of Health and Environment approved training course. The initial certification requires forty (40) hours in an accredited training session and a passing score on a written examination. A sixteen (16) hour minimum re-certification course at an accredited training session is required every three years. The Development Services Division shall license the tester/repair technicians after ascertaining the technician meets the above qualifications.

Cross-connection means any physical connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other-
which contains water or any substance of unknown or questionable quality whereby there
may be flow from one system to the other.

**Containment** means a backflow prevention device installed at the service
connection to the property.

**Degree of Hazard** shall mean either a low hazard (pollutant) or high hazard
(contaminant). The assessment for the "Degree of Hazard" shall be derived from the
evaluation of conditions within a system.

**Double-check valve assembly** means a device consisting of two internally loaded
soft-seated check valves with positive shutoff valves on both upstream and downstream
ends, and properly located test ports, meeting the following requirements:

1. Contains two soft-seated, independently acting check valves in series.
2. Shutoff valves before and after device.
3. Adequate for nontoxic applications only.
4. Minor pressure loss.
5. Must be inspected and tested annually.
6. Repaired as necessary each year and overhauled every fifth year.

**Dual check valve** means a device consisting of two (2) internally loaded soft-seated
check valves. This device does not contain test ports and is acceptable for use only at the
meter of residential customers. **Dual check valves are not approved for installation as**
backflow prevention devices.

**Flood level rim** means the edge of the receptacle from which water overflows.

**Free water surface** means a water surface at atmospheric pressure.
Frostproof closet means a hopper with no water in the bowl and with the trap and water supply control valve located below the frostline.

High Hazard is a type of cross connection or potential cross connection involving any substance that could, if introduced into the potable water supply, cause death, illness, spread disease, or have a high probability of causing such effects.

Hold Harmless Agreement is a document filed with the Development Services Division to permit installation of lawn irrigation systems in an easement or right-of-way.

Isolation shall mean the appropriate method of backflow prevention within the consumer's potable water system at the point of use.

KDHE means the Kansas Department of Health and Environment.

Low Hazard is a type of cross connection or potential cross connection involving any substance that generally would not be a health hazard, but would constitute a nuisance, or be aesthetically objectionable, if introduced into the domestic water supply.

Plumbing means the practice, materials and fixtures used in the installation, maintenance, extension and alteration of all piping, fixtures, appliances and appurtenances.

Pollution means the presence of any foreign substance, organic, inorganic or biological, in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely affect the water (nontoxic).

Reduced-pressure zone backflow preventer. An assembly of two independently acting soft-seated approved check valves together with a hydraulically operating mechanically independent differential pressure relief valve located between the check valves and at the same time below the first check valve. The unit shall contain properly
located test cocks and resilient seated or gate valve shutoff valves at each end of the assembly. To be approved, these assemblies must be accessible for inspection and testing and be installed in an aboveground location where no part of the assembly will be submerged, and meet the following requirements:

1. Contains two specifically-designed, soft-seated, independently acting check valves with a reduced pressure zone (with relief valve) between the two checks.

2. Shutoff valves before and after the device.

3. Satisfactory for most toxic materials.

4. Significant pressure loss (ten psi or more).

5. Must be tested and inspected semiannually or annually.

6. Repaired as necessary each year and overhauled every fifth year.

Tester means a trained technician certified in the testing and repair of backflow preventers.

USEPA means the United States Environmental Protection Agency. The "Cross Connection Manual" current edition, published by the USEPA shall be used as a reference in enforcement of this Code.

USC means the current edition of the University of Southern California, Foundation for Cross Connection Control and Hydraulic Research. The USC Manual of Cross Connection Control shall be used as a reference in the enforcement of this Code.

Vacuum means any absolute pressure less than that exerted by the atmosphere.

Vacuum breaker means a device that permits entrance of air into the water supply-distribution line to prevent backsiphonage.
(1) Atmospheric:
   a. Must be installed a minimum of six inches above highest point of usage.
   b. No back pressure, only backsiphonage.
   c. Not for use under constant pressure.
   d. Shutoff valve must be located ahead of the vacuum breaker.
   e. Must be inspected annually and repaired as necessary.

(2) Pressure:
   a. Must be installed a minimum of 12 inches above highest point of usage.
   b. No back pressure, only backsiphonage.
   c. Can operate under constant pressure.
   d. Shutoff valve can be located downstream of vacuum breaker.
   e. Must be inspected and tested annually. Repaired as necessary each year.

*Water, nonpotable* means water that is not safe for human consumption or that is of questionable potability.

*Water, potable* means water free from impurities in amounts sufficient to cause disease or harmful physiological effects. Its quality shall conform to state department of health and environment requirements for public water supplies.

Section 75. City of Topeka Code § 26-448, Responsibility for enforcement, is hereby amended to read as follows:
Responsibility for enforcement.

The building code enforcement division Development Services Division shall be responsible for effectively conducting the cross connection control program of the city potable water supply. The Development Services Division may use the current version of the Uniform Plumbing Code, AWWA Manual 14, USEPA Cross Connection Control Manual and the USC Cross Connection Control and Hydraulic Research in developing responsible judgement for enforcement of this Code. If, in the judgment of the division, an approved backflow prevention device is required, the code enforcement Development Services Director or his agent designee will give notice in writing to the customer to install the proper device. The customer shall immediately install test or repair the proper device at the customer's expense. Failure to comply shall be grounds for discontinuing water service to the customer until the device is properly installed, tested, or rebuilt.

Section 76. City of Topeka Code § 26-450, Same – Prohibited, is amended to read as follows:

Same--Prohibited.

Cross connections between potable water systems and other systems or equipment containing water or other substances of unknown or questionable safety are prohibited except when and where suitable protective devices such as the reduced pressure zone backflow preventer are installed, tested and maintained to ensure proper operation on a continuing basis. The device that is installed shall be approved by the code enforcement development services director or his designee (plumbing inspector) and if controversy arises it may be appealed to the plumbing board.
Section 77. City of Topeka Code § 26-451, Interconnections, is hereby amended to read as follows:

Interconnections.

Interconnection between two (2) or more public water supplies shall be permitted only with the approval of the state Kansas department of health and environment pursuant to the provisions of K.S.A. 65-163a.

Section 78. City of Topeka Code § 26-453, Connections to boilers, is hereby amended to read as follows:

Connections to boilers.

Potable water connections to boilers feed water systems in which boiler water conditioning chemicals are or can be introduced shall be made through an air gap or through a reduced pressure zone principle backflow preventer located in the potable water line before the point where such chemicals may be introduced or a boiler without a chemical feed may be protected with a double check valve assembly. Boilers used for cooking and processing food may have a double check valve (DCV) installed on the boiler water connection. Chemicals used for treatment in cooking and food processing boilers shall be Federal Food and Drug Administration (FDA) approved for human consumption.

Section 79. City of Topeka Code § 26-454, Prohibited connections, is hereby specifically repealed.

Section 80. City of Topeka Code § 26-455, Refrigerating unit condensers and cooling jackets, is hereby specifically repealed.

Section 81. City of Topeka Code § 26-456, Water outlets, is hereby specifically repealed.
Section 82. City of Topeka Code § 26-457, Minimum required airgap, is hereby amended to read as follows:

Minimum required airgap.

The minimum airgap shall be determined as follows:

1. How measured. The minimum required airgap shall be measured vertically from the lowest end of a potable water outlet to the flood rim or line of the fixture or receptacle into which it discharges.

2. Size. The minimum required airgap shall be twice the effective opening of a potable water outlet unless the outlet is a distance less than three (3) times the effective opening away from a wall or similar vertical surface, in which cases the minimum required airgap shall be three (3) times the effective opening of the outlet. In no case shall the minimum required airgap be less than shown in Table 1.

2000 UPC.

Table 1. Minimum Airgaps For Generally Used Plumbing Fixtures

<table>
<thead>
<tr>
<th>Fixture</th>
<th>When Not Affected by Near-Wall (inches)</th>
<th>When Affected by Near-Wall (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lavatories and other fixtures with effective openings not greater than one-half-inch-diameter</td>
<td>1.0</td>
<td>1.60</td>
</tr>
<tr>
<td>Sink, laundry trays, gooseneck bath faucets and other fixtures with effective openings not greater than three-fourths-inch-diameter</td>
<td>1.5</td>
<td>2.25</td>
</tr>
<tr>
<td>Over rim bath fillers and other fixtures with effective openings not greater than one-inch-diameter</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Drinking water fountains—single orifice 7/16 (0.437) inch diameter or multiple orifices having total area of 0.150 square inch (area of circle 7/16 inch diameter)</td>
<td>1.0</td>
<td>1.50</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Effective openings greater than one inch</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Side wall, ribs or similar obstructions do not affect air gaps when spaced from inside edge of spout opening a distance greater than three times the diameter of the effective opening for a single wall, or a distance greater than four times the diameter of the effective opening for two intersecting walls.

2. Vertical wall, ribs or similar obstructions extending from the water surface to or above the horizontal plane or the spout opening require a greater air gap when spaced closer to the nearest inside edge of spout opening than specified in note 1 above. The effect of three or more such vertical walls or ribs has not been determined. In such cases, the air gaps shall be measured from the top of the wall.

3. Two times the diameter of the effective opening.

4. Three times the diameter of the effective opening.

Section 83. City of Topeka Code § 26-458, Approval of devices, is hereby amended to read as follows:

Approval of devices.

Before any device for the prevention of backflow or backsiphonage is installed, it shall have first been certified by a recognized testing laboratory acceptable to KDHE.
Devices installed in a building potable water supply distribution system for protection against backflow shall be maintained in good working condition by the person responsible for the maintenance of the system. The plumbing inspector Development Services Division or any designee shall inspect such devices and if found to be defective or inoperative shall require the repair or replacement thereof. Upon installation Before the placement of a reduced-pressure principle assembly, double check valve assembly or pressure vacuum breaker backflow prevention device, the installer licensed plumber, on new installation and/or the certified backflow technician on replacements, shall inform the building code enforcement division the Development Services Division that the device is being installed.

The building code enforcement division or A certified tester/repair technician will then test the device and register it for scheduled testing. The Development Services Division shall have the right to test a device to insure that it complies with the provisions of the Code.

Section 84. City of Topeka Code § 26-459, Installation of devices; types, is hereby amended to read as follows:

Installation of devices; types.

(a) Protective devices required. The type of protective device required under this division shall be determined by the degree of hazard which exists as determined by the enforcement agency. The following are illustrative examples:

(1) Premises having auxiliary water supply shall protect the public system by either an approved airgap or an approved reduced pressure principle backflow prevention assembly.
(2) Premises having water or substances which would be non hazardous to the health and well-being of the consumers shall protect the public system with no less than an approved double-check valve assembly.

(3) Premises where material dangerous to health is handled in a manner which creates an actual or potential hazard shall protect the public system by an approved airgap or an approved reduced pressure principle backflow prevention assembly.

(4) Premises where cross connections are uncontrolled shall protect the public water supply by installing an approved airgap or an approved reduced pressure principle backflow prevention device at the service connection.

(5) Premises where because of security requirements or other prohibitions it is impossible to complete an in-plant cross connection inspection, the public system shall be protected by the installation of an approved airgap or an approved reduced pressure principle backflow prevention assembly at the service connection.

Premises which may fall into one or more of the aforementioned categories may be, but are not limited to, the following:

a. Beverage bottling plants.

b. Buildings: Hotels, apartments, public or private buildings, or other structures having actual or potential cross connections. This includes structures of four (4) stories or more and/or structures equipped with booster pumps.

c. Car wash facilities.

d. Chemical manufacturing, handling or processing plants.

e. Chemically contaminated water.
f. Dairies and cold storage facilities.

Dentist offices

Doctor's offices equipped with laboratories, surgeries or other potential cross connections

g. Film or photography processing laboratories.

h. Fire systems.

i. Hospitals, medical centers, morgues, mortuaries, autopsy facilities, clinics, or nursing and convalescent homes.

j. Irrigation systems.

k. Laundries.

l. Metal cleaning, metal plating, processing or fabricating plants.

Nursing and Convalescent homes designed for acute care

m. Oil and gas production, storage or transmission facilities.

n. Packing or food processing plants.

Paper and paper products plants.

p. Power plants.

q. Radioactive materials plants or handling facilities.

r. Restricted or classified facilities.

s. Rubber plants.

t. Sand, gravel or asphalt plants.

Schools or colleges.

v. Sewage and storm drainage facilities and reclaimed water systems.

w. Solar heating systems.
Temporary service: Fire hydrants, air valves, blow-offs and other outlets.

Waterfront marinas.

(b) Installation. Approved devices shall be installed at all fixtures and equipment where backflow or backsiphonage may occur and where a minimum airgap between the potable water outlet and the fixture or equipment floodlevel rim cannot be maintained. Backflow and backsiphonage devices of all types shall be in an accessible location. Installation in pits or any other location not properly drained shall be prohibited.

Connection to the potable water piping and initial installation of all backflow prevention devices shall be done by a licensed plumber employed by a licensed plumbing contractor. Replacement of an existing device may be done by certified backflow tester/technicians employed in the trade or craft for which the backflow preventer was installed (i.e., lawn irrigation, fire suppression, ice machine installation, etc.).

Cross-connection control devices must be installed, inspected, tested and repaired by a trained technician. All devices should be installed such that they will be accessible for regular inspection and testing.

Section 85. City of Topeka Code § 26-460, Tanks and vats below rim supply, is hereby amended to read as follows:

Tanks and vats below rim supply.

Where a potable water outlet terminates below the rim of a tank or vat, the following provisions shall apply:

(1) If the tank or vat has an overflow of diameter not less than given in table 2, the overflow pipe shall be provided with an airgap as close to the tank as possible.
(2) The potable water outlet to the tank or vat shall terminate a distance not less than one and one half (1 1/2) times the height to which water can rise in the tank above the top of the overflow. This level shall be established at the maximum flow rate of the supply to the tank or vat and with all outlets except the airgap overflow outlet closed.

(3) The distance from the outlet to the high water level shall be measured from the lowest point of the potable water supply outlet.

Table 2.1. Size of Overflow Pipes For Water Supply Tanks

<table>
<thead>
<tr>
<th>Maximum capacity of water supply line to tank</th>
<th>Diameter of overflow pipe (inches ID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0—50 gpm</td>
<td>2</td>
</tr>
<tr>
<td>51—100 gpm</td>
<td>2 1/2</td>
</tr>
<tr>
<td>101—200 gpm</td>
<td>3</td>
</tr>
<tr>
<td>201—400 gpm</td>
<td>4</td>
</tr>
<tr>
<td>401—700 gpm</td>
<td>5</td>
</tr>
<tr>
<td>701—1,000 gpm</td>
<td>6</td>
</tr>
<tr>
<td>Over 1,000 gpm</td>
<td>8</td>
</tr>
</tbody>
</table>

**Section 86.** City of Topeka Code § 26-461, Tables of fixtures, equipment and devices, is hereby amended to read as follows:

**Tables of fixtures, equipment and devices.**

(a) **Connections not subject to backpressure.** Where a water connection is not subject to back pressure, a vacuum breaker shall be installed on the discharge side of the
last valve on the line serving the fixture or equipment. A partial list of some conditions requiring protective devices of this kind are given in the following table.

**Cross Connections Where Protective Devices are Required and Critical Level (C-L)**

**Settings For Vacuum Breakers**

<table>
<thead>
<tr>
<th>Fixtures or equipment</th>
<th>Method of installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspirators and ejectors</td>
<td>C-L at least six inches above flood level of receptacle served.</td>
</tr>
<tr>
<td>Dental units</td>
<td>On models without built-in vacuum breakers, C-L at least six inches above flood level rim of bowl.</td>
</tr>
<tr>
<td>Commercial dish washing machine</td>
<td>C-L at least six inches above flood level of machine. Installed on both hot and cold water supply lines.</td>
</tr>
<tr>
<td>Garbage can cleaning machines</td>
<td>C-L at least six inches above flood level of machine. Installed on both hot and cold water supply lines.</td>
</tr>
<tr>
<td>Hose outlets</td>
<td>C-L at least six inches above highest point on hose line.</td>
</tr>
<tr>
<td>Commercial laundry machines</td>
<td>C-L at least six inches above flood level of machine. Installed on both hot and cold water supply lines.</td>
</tr>
<tr>
<td>Lawn sprinklers</td>
<td>C-L at least 12 inches above highest sprinkler head or discharge outlet.</td>
</tr>
<tr>
<td>Steam tables</td>
<td>C-L at least six inches above flood level rim.</td>
</tr>
<tr>
<td>Tanks and vats</td>
<td>C-L at least six inches above flood level rim or line.</td>
</tr>
<tr>
<td>Through urinals</td>
<td>C-L at least 30 inches above perforated flush pipe.</td>
</tr>
<tr>
<td>Toilet flush tanks</td>
<td>Equipment with approved ball cock, installed according to manufacturer's instructions.</td>
</tr>
<tr>
<td>Hose bibs</td>
<td>C-L at least six inches above flood level of receptacle served.</td>
</tr>
</tbody>
</table>
Boilers.

Section 87. Topeka City Code § 26-463, Maintenance requirements, is hereby amended to read as follows:

Maintenance requirements.

(a) Generally.

(1) Maintenance and repair. It shall be the responsibility of building and premises owners to maintain all backflow preventers and vacuum breakers within the building or on the premises in good working order and to make sure no piping or other arrangements have been installed for the purpose of bypassing the backflow devices. Testing and Maintenance, repair and testing of these devices shall be made by certified backflow tester technicians testers. (Certified testers are those technicians who have completed a state department of health and environment approved training course and have passed a written examination such as the American Backflow Prevention Association device testers examination.) The building code enforcement division shall certify the device testers after ascertaining the technician meets the above qualifications. The building code enforcement division The Development Services Division will also assure the proper installation of all backflow preventers and will set appropriate testing intervals, testing standards and overhaul schedules for such devices. Testing intervals shall not exceed one (1) year and overhaul intervals shall not exceed five (5) years. In cases where the degree of hazard is considered high, the Development Services Division may require the devices to be tested on a more frequent basis.

(2) Certified tester/repair technicians. All certified tester/repair technicians shall be re-certified at no less than three (3)-year intervals and registered licensed with the
All devices must be tested and/or certified by an authority acceptable to KDHE before they are installed. These authorities include the American Society of Sanitary Engineers (ASSE), American Waterworks Association (AWWA), Foundation for Cross Connection Control and Hydraulic Research, University of Southern California (FCCCHR of USC), Canadian Standards Association (CSA), Southern Building Code Congress (SBCC) or Factory Mutual (FM). Other testing or certifying authorities may be accepted by KDHE.

(b) Connections subject to backpressure. Where a potable water connection is made to a line, fixture, tank, vat, pump or other equipment with a hazard of backflow or backsiphonage where the water connection is subject to backpressure, and an airgap cannot be installed, the building inspection Development Services Division may require the use of an approved reduced pressure principle backflow preventer. A partial list of such connections is shown in the following table:

Partial List of Cross Connections Subject to Back Pressure

- Chemical lines.
- Dock water outlets.
- Individual water supplies.
- Industrial process water lines.
- Tanks and vats: Bottom inlets.
- Pumps.
- Steam lines.
- Swimming pools.
- Hose bibbs.
city. Original installation of all backflow protection devices shall be done by a licensed plumber.

(b) **Notification.** The building code enforcement Development Services Division shall notify the owner, or authorized agent of the owner, of a building or premises in which there is found a violation of this division, of such violation. The building code enforcement Development Services Division shall set a reasonable time for the owner to have the violation corrected. If the owner fails to correct the violation within the specified time, the water division shall cease delivery of water to the fixture, device, building or premises until the violation has been satisfactorily corrected.

**Section 88.** City of Topeka Code § 26-464, Automatic fire suppression systems, is hereby amended to read as follows:

**Automatic fire suppression systems.**

All new installations of automatic fire suppression systems shall be protected from backflow with an approved double check valve assembly. Any fire suppression system into which chemicals of any type (corrosive, antifreeze, etc.) can be added shall be protected at the service connection with an approved reduced pressure principle assembly. In lieu of such protection, an antifreeze loop may be individually protected with an approved reduced pressure principle assembly, in addition to proper service line protection. Existing systems must meet these standards by January 1, 1993.

**Section 89.** Original City of Topeka Code §§ 26-251, 26-254, 26-256, 26-257, 26-258, 26-259, 26-261, 26-406, 26-409, 26-410, 26-421.1, 26-422, 26-423, 26-424, 26-425, 26-425.1, 26-425.2, 26-426, 26-426.1, 26-427, 26-428, 26-428.1, 26-428.2, 26-429, 26-429.1, 26-430, 26-431, 26-432, 26-432.1, 26-432.2, 26-433, 26-433.1,
26-433.2, 26-434, 26-435, 26-437, 26-437.1, 26-438, 26-439, 26-440, 26-441, 26-442, 26-442.1, 26-442.2, 26-442.3, 26-443, 26-444, 26-445, 26-445.1, 26-446, 26-448, 26-450, 26-451, 26-453, 26-454, 26-455, 26-456, 26-355, 26-457, 26-458, 26-459, 26-460, 26-461, 26-463, and 26-464 are hereby specifically repealed; the original Uniform Plumbing Code, 2000 edition, §§ 103.4, 316.1.6, 510.8, 603.4.13, 610.5, 703.3, 705.1, 710.1, 910.7, 1210.1, 1211.1, 1211.2, 1211.2.1, 1211.2.2, 1211.8, 1211.9, 1211.9.1, 1211.9.2, 1211.9.3, and 1211.9.4, 12.17.1, 12.17.4, and Tables 12-11, 12-12, 12-13, and 12-14 are hereby specifically repealed.

Section 90. This Ordinance shall take effect and be in force from and after its passage, approval and publication in the official city newspaper.

PASSED and APPROVED by the City Council

MAY 14 2002

Harry Felker, Mayor

ATTEST:

Iris E. Walker, City Clerk

APPROVED AS TO FORM AND LEGALITY
DATE 5/14/02
TO BE CODIFIED
NOT TO BE CODIFIED