

ORDINANCE NO. **10589**

1 AN ORDINANCE adopting the 1991 Uniform Plumbing
 2 Code and State and local amendments thereto;
 3 abolishing the Plumbing Advisory Board and providing
 4 for more consumer representation on the plumbing
 5 Board of Appeals; establishing a fee for appeals
 6 thereto; amending Ordinance 6746 Section 5 as
 7 last amended by Ordinance 9151 and K.C.C. 16.32.030;
 8 Sections 6, 12, 23, 31, 33, 34, 35, and 39 of
 9 Ordinance 6746 and K.C.C. 16.32.040, 16.32.100,
 10 16.32.210, 16.32.290, 16.32.310, 16.32.320, 16.32.330,
 11 16.32.370 and Ordinance 7136 Section 2 and K.C.C. 16.32.360
 12 and repealing Section 2 of Ordinance 7120 and Sections
 13 22, 24, 25, 28, and 29 of Ordinance 6746 and K.C.C. 16.32.160,
 14 16.32.180, 16.32.220, 16.32.230, 16.32.260, and 16.32.270;
 15 and adding new sections.
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19 BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

20 **SECTION 1.** Ordinance 6746, Section 5 as last amended by Ordinance 9151 Section 1, and
 21 K.C.C. 16.32.030 are hereby amended as follows:
 22

23 Adoption of Uniform Plumbing Code. The Uniform Plumbing Code, Chapters 1 through 10, with
 24 Appendices "A" through "D", ~~((1988))~~ 1991 Edition, IAPMO Installation Standards ~~((1988))~~ 1991
 25 Edition, ~~((2-82))~~ 2-90, ~~((3-87))~~ 3-89, ~~((4-82))~~ 4-90, ~~((5-87))~~ 5-90, ~~((6-82))~~ 6-89, ~~((7-83))~~ 7-90, ~~((8-86))~~
 26 8-89, ~~((9-87))~~ 9-90, ~~((10-86))~~ 10-90, 11-87, ~~((12-85))~~ 12-90, 13-84, ~~((17-82))~~ 17-90, 18-85, ~~((20-~~
 27 85)) 20-90, ~~((21-80))~~ 21-89, ~~((22-84))~~ 22-90, ~~((23-84))~~ 23-90, ~~((24-85))~~ 24-90, ~~((25-85))~~ 25-90 and
 28 Chapter 22 of the ~~((1988))~~ 1991 Uniform ~~((Plumbing))~~ Mechanical Code all published by the
 29 International Association of Plumbing and Mechanical Officials are hereby adopted and together with
 30 the provisions of this chapter shall constitute the official Plumbing Code of King County. This chapter
 31 shall have precedence over documents adopted by reference.

32 **SECTION 2.** Ordinance 6746, Section 6 and K.C.C. 16.32.040 are hereby amended as follows:

33 Administrative authority. The administrative authority is the Seattle-King County Director of Public
 34 Health or his authorized representative who shall administer and enforce the provisions of the plumbing
 35 and mechanical code (Chapter 22 of the 1982 Uniform Mechanical Code) as adopted or amended
 36 except as provided herein. The water purveyor shall administer and enforce provisions relating to the
 37 inspection and approval of water meters and where applicable, the building supply piping. ~~((There may
 38 be a joint enforcement and administration between the Director of Public Health and the water
 39 purveyor for installation and approval of backflow prevention devices installed in the building supply
 40 and water distributing piping in a building where cross connections exist or are likely to occur. The
 41 administrative authority may adopt such rules and regulations consistent with this code as he may
 42 deem necessary for its enforcement.))~~

43 **SECTION 3.** Ordinance 6746, Section 12 and K.C.C. 16.32.100 are hereby amended as follows:

44 Permit Application.

1 Applications for permits shall be made on forms provided by the administrative authority for such
2 purpose and shall give a description of the work proposed to be done, the name of the contractor and
3 permit applicant, and the location, ownership, and occupancy upon which such work is to be done.
4 The administrative authority may require to be furnished plans, specifications or drawings and may
5 require such that other information as he shall deem necessary for the administration and enforcement
6 of this code.

7 If the administrative authority determines that the plans, specifications, drawings, descriptions,
8 and other information furnished by the applicant are in compliance with this code and that the applicant
9 is licensed to perform the work to be permitted, he shall issue the permit applied for upon payment of
10 the prescribed fee.

11 A. Owner's Permit. Nothing contained in this Code shall prohibit any bona fide owner from
12 installing plumbing or making alterations or repairs in his own (~~residence or accessory~~) building, as
13 permitted under the following terms and conditions, but this exemption shall not apply to any person
14 who constructs an improvement on his/her own property with the intention and for the purpose of
15 selling the improved property:

16 1. Such owner shall apply in person, secure a permit, and pay the required fee as set forth in the
17 Schedule of Fees in this Code. 2. Such owner shall do the work in the manner required by this Code
18 subject to inspection and approval by the Administrative Authority. It is unlawful for any person having
19 an owner's permit to allow any other person, including a licensed plumber, to do any work under such
20 owner's permit.

21 B. Existing Permits. Any work authorized by a permit in effect on the effective date of this Code
22 shall be performed pursuant to the laws and ordinances under which such permit was issued, and any
23 conflicting requirement of this Code shall not apply to such work.

24 **SECTION 4.** The following are hereby repealed:

25 Ordinance 7120 and K.C.C. 16.32.160 (Plumbing advisory board);

26 Ordinance 6746, Section 22 and K.C.C. 16.32.180 (Water saver toilet tanks);

27 Ordinance 6746, Section 24 and K.C.C. 16.32.220 (Double Check Valve Assembly - Approved);

28 Ordinance 6746, Section 25 and K.C.C. 16.32.230 (Finish Plumbing);

29 Ordinance 6746, Section 28 and K.C.C. 16.32.260 (Pressure Vacuum Breaker Assembly -
30 Approved);

31 Ordinance 6746, Section 29 and K.C.C. 16.32.270 (Reduced Pressure Principle Backflow
32 Preventor - Approved).

1 **SECTION 5.** Ordinance 6746 Section 19 and K.C.C. 16.32.170 are amended as follows:

2 Board of Appeals. A. A board of appeals shall be established and shall consist of ~~((the five (5)))~~
3 6 voting members ((of the plumbing advisory board)); one member representing journeyman plumbers,
4 plumbing contractors, professional mechanical engineers and ((sanitary engineers)) building owners and
5 two members representing the public. The administrative authority shall serve as ~~((an ex-officio))~~ a
6 non-voting member of the board. The board of appeals shall elect a chairman and a secretary who
7 shall serve at the pleasure of the board.

8 B. The board of appeals shall determine whether a correct interpretation of the code has been
9 made by the administrative authority in any case which results in an appeal. ~~((The))~~ Any party
10 aggrieved by the action of the administrative authority shall file a written petition for appeal to the
11 board, accompanied by a non-refundable twenty-five dollar (\$25) fee. Appeals shall be heard at
12 reasonable times at the convenience of the board, but not later than thirty (30) days after receipt of
13 such petition. The appellant shall be entitled to appear in person before the board, to be represented
14 by an attorney, and to introduce evidence in support of such petition. The appellant shall cause to be
15 made at his own expense any test or research required by the board for the substantiation of any
16 claims(s) made by the appellant.

17 C. Decisions of the board shall be in writing; shall be distributed to the administrative authority
18 and the appellant; and shall apply only to the case being heard. Either the appellant or the
19 administrative authority may appeal the decision of the board to the King County hearing examiner.
20 The board may make recommendations to the administrative authority for changes in the code where
21 an appeal heard by the board may indicate the need for a code change.

22 **SECTION 6.** Ordinance 6746 Section 23 and K.C.C. 16.32.210 are amended as follows:

23 16.32.210 Section 105. Section 105, of the Uniform Plumbing Code is amended by adding
24 definition "(d-1) Domestic Water Heater" to read as follows:

25 (d-1) Domestic Water Heater. A domestic water heater is a tank with a self-contained heating unit
26 which stores potable hot water for residential or commercial use with a nominal water containing
27 capacity of one-hundred twenty (120) gallons or less, having a heating input of two-hundred thousand
28 (200,000) Btu's per hour or less used for hot water supply at pressure of one-hundred sixty pounds
29 per square inch (160 psi) or less and at operating temperatures of two-hundred ten degrees Fahrenheit
30 ~~((200 ° F))~~ (210 ° F) or less.

31 **SECTION 7.** Ordinance 6746, Section 31 and K.C.C. 16.32.290, Section 308, Improper Location,
32 of the Uniform Plumbing Code is amended as follows:

33 (a) General. Piping, fixtures or equipment shall not be so located as to interfere with the normal
34 use thereof or with the normal operation and use of windows, doors or other required facilities.

1 (b) Elevators. Pipes or ducts conveying gases, vapors or liquids and not used in connection with
 2 the operation of the elevator shall not be installed or replaced in any hoistway, elevator machine room
 3 or elevator machinery space.

4 Exceptions to Subsection (b) are as follows:

5 (1) Steam and hot water pipes may be installed in hoistways, machine rooms and machinery
 6 spaces for the purpose of heating these areas only, subject to the following:

7 (A) Heating pipes shall convey only low pressure steam (fifteen (15) pounds per square inch
 8 or less) or hot water at pressures of one hundred sixty (160*) pounds per square inch or
 9 less and temperatures of two hundred fifty (250*) degrees Fahrenheit or less.

10 (B) All risers and return pipes shall be located outside the hoistway.

11 (C) Traps and shut-off valves shall provided in accessible locations outside these spaces.

12 (2) Ducts for heating, cooling, ventilating and venting these spaces only may be installed in the
 13 machine room and machinery space.

14 (3) Pipes for sprinklers only may be installed in these spaces subject to the following:

15 (A) All risers and returns shall be located outside these spaces.

16 (B) Branch lines in hoistway shall supply sprinklers at not more than one floor level.

17 (C) Shut-off valves shall be provided in accessible locations outside these spaces.

18 (4) Piping for pit and sump pumps may be installed.

19 **NEW SECTION. SECTION 8.** There is added to K.C.C. 16.32 a new section to read as follows:

20 16.32.292, Section 310 of the Uniform Plumbing Code is replaced by the following:

21 Section 310, Prohibited Fittings and Practices

22 (a) No double hub fitting, single or double tee branch, single or double tapped tee branch, side
 23 inlet quarter bend, running thread, band, or saddle shall be used as a drainage fitting, except that a
 24 double hub sanitary tapped tee may be used on a vertical line as a fixture connection.

25 (b) No drainage or vent piping shall be drilled and tapped for the purpose of making connections
 26 thereto, and no cast iron soil pipe shall be threaded.

27 (c) No waste connection shall be made to a closet bend or stub of a water closet or similar
 28 fixture.

29 (d) Except as hereinafter provided in Sections 613, 614, and 615, no vent pipe shall be used as
 30 a soil or waste pipe, nor shall any soil or waste pipe be used as a vent.

31 (e) No fitting, fixture and piping connection, appliance, device or method of installation which
 32 obstructs or retards the flow of water, wastes, sewage or air in the drainage or venting systems in an
 33 amount greater than the normal frictional resistance to flow, shall be used unless it is indicated as
 34 acceptable in this Code or is approved by the Administrative Authority as having a desirable and

1 acceptable function and of ultimate benefit to the proper and continuing functioning of the plumbing
2 system. The enlargement of a three (3) inch (76.2 mm) closet bend or stub to four (4) inches (101.6
3 mm) shall not be considered an obstruction.

4 (f) Except for necessary valves, where intermembering or mixing of dissimilar metals occur, the
5 point of connection shall be confined to exposed or accessible locations.

6 (g) All valves, pipes, and fittings shall be installed in correct relationship to the direction of flow.

7 **NEW SECTION. SECTION 9.** There is added to K.C.C. 16.32 a new section to read as follows:

8 16.32.297 Section 315 of the Uniform Plumbing Code is replaced by the following:

9 Section 315. Protection of Piping Materials and Structures.

10 (a) All piping passing under or through walls shall be protected from breakage. All piping passing
11 through or under cinders or other corrosive materials shall be protected from external corrosion in an
12 approved manner. Approved provisions shall be made for expansion of hot water piping. Voids around
13 piping passing through concrete floors on the ground shall be appropriately sealed.

14 (b) All piping in connection with a plumbing system shall be so installed that piping or connections
15 will not be subject to undue strains or stresses, and provisions shall be made for expansion,
16 contraction, and structural settlement. No piping shall be directly embedded in concrete or masonry
17 walls or footings. No structural member shall be seriously weakened or impaired by cutting, notching,
18 or otherwise.

19 (c) All trenches deeper than the footing of any building or structure and paralleling the same must
20 be at least forty-five (45) degrees therefrom, unless permission be otherwise granted by the
21 Administrative Authority.

22 (d) No building sewer or other drainage piping or part thereof, constructed of materials other than
23 those approved for use under or within a building, shall be installed under or within two (2) feet (.6 m)
24 of any building or structure, or less than one (1) foot (.3 m) below the surface of the ground.

25 (e) Piping subject to undue corrosion, erosion, or mechanical damage shall be protected in an
26 approved manner.

27 (f) No water, soil, or waste pipe shall be installed or permitted outside of a building or in an
28 exterior wall unless, where necessary, adequate provision is made to protect such pipe from freezing.
29 All hot and cold water pipes installed outside the conditioned space shall be insulated to a minimum
30 R-3.

31 **NEW SECTION. SECTION 10.** There is added to K.C.C. 16.32 a new section to read as follows:

32 16.32.305, Section 401 Materials of the Uniform Plumbing Code is replaced by the following:

1 (a) Drainage piping shall be cast iron, galvanized steel, galvanized wrought iron, lead, copper,
2 brass, Schedule 40 ABS, DWV, Schedule 40 PVC DWV, extra strength vitrified clay pipe, or other
3 approved materials having a smooth and uniform bore, except that:

4 (1) No galvanized wrought iron or galvanized steel pipe shall be used underground and shall be
5 kept at least six (6) inches (152.4 mm) above ground.

6 (2) No vitrified clay pipe or fittings shall be used above ground or where pressurized by a pump
7 or ejector. They shall be kept at least twelve (12) inches (.3 m) below ground.

8 (b) Drainage fittings shall be of cast iron, malleable iron, lead, brass, copper, ABS, PVC, vitrified
9 clay, or other approved materials having a smooth interior waterway of the same diameter as the piping
10 served and all such fittings shall be compatible with the type of pipe used.

11 (1) Fittings on screwed pipe shall be of the recessed drainage type. Burred ends shall be reamed
12 to the full bore of the pipe.

13 (2) The threads of drainage fittings shall be tapped so as to allow one-fourth (1/4) inch per foot
14 (20.9 mm/m) grade.

15 **SECTION 11.** Ordinance 6746, Section 33 and K.C.C. Section 16.32.310 is hereby repealed.

16 **SECTION 12.** Ordinance 6746, Section 34 and K.C.C. Section 16.32.320 is amended as follows:

17 Section 410 - Rainwater Leaders

18 (a) Rainwater Leaders are pipes within a building which drain storm water from roofs or other
19 similar areas of such building. Rainwater leaders shall discharge outside such building and shall not
20 discharge into the sanitary drainage system within a building conveying domestic sewage.

21 (b) Materials. Pipe used in rainwater leaders shall be approved cast iron, or galvanized steel, ((~~lead~~))
22 ABS, PVC, copper or brass, having a smooth and uniform bore. No galvanized steel pipe shall be used
23 underground, and such pipe shall be kept at least six (6) inches above ground. Burred ends shall be
24 reamed to the full bore of the pipe. ((~~A.B.S. or P.V.C. may be used in accordance with limitations~~
25 ~~provided in this Code relating to approvals for plastic pipe and fittings.~~))

26 (c) Fittings. Fittings used in rainwater leaders shall be approved cast iron, or malleable iron, lead,
27 copper, or brass, or other material approved by the Administrative Authority having a smooth interior
28 way of the same diameter as the piping served. Such fittings shall conform to the type of pipe used,
29 and such threaded fittings shall be of the recessed drainage type. Short sweep fittings may be used
30 in rainwater leaders.

31 (d) Roof Drains. Roof drains shall be approved cast iron, or malleable iron, lead, copper, brass,
32 or other approved materials.

33 (e) Prohibited Uses. Rainwater leaders shall not be used as soil, waste or vent pipes, and soil,
34 waste or vent pipes shall not be used as rainwater leaders.

1 (f) Traps. Rainwater leaders which terminate less than three (3) feet above or ten (10) feet from,
 2 any window, door, opening, air intake, exhaust vent or vent shaft, or less than three (3) feet from line
 3 of any property which may be built upon, shall be equipped with traps, but are not required to be
 4 vented. Cleanouts are not required in rainwater leaders.

5 (g) Capacity. The combined capacity of rainwater leaders serving any building shall be not less
 6 than as calculated by approved engineering procedure or as set forth in Table 4-4.

7 (h) Testing. All rainwater leaders shall be tested.

8
 9 Table No. 4-4
 10 RAINWATER LEADERS

Roof or Other Area Served (Square Feet)	Size of Rainwater Leader (Inches)
1 - 1050	2
1051 - 3150	3
3151 - 6450	4
6451 - 10800	5
10801 - 18000	6
18001 - 37500	8
<u>37501 - 58800</u>	<u>10</u>
<u>58801 - 95400</u>	<u>12</u>

22
 23 (1) If Table 4-4 does not provide a practical solution for sizing rainwater leaders, refer to Appendix
 24 D Rainwater Systems in this Code for more comprehensive engineering design information relating to
 25 installation of rainwater systems. Use two inch (2") column.

26 **NEW SECTION. SECTION 13.** There is added to K.C.C. a new section to read as follows:

27 16.32.325, Materials of the Uniform Plumbing Code is added to read as follows:

28 (a) Vent pipe shall be cast iron, galvanized steel, galvanized wrought iron, lead, copper, brass,
 29 Schedule 40 ABS DWV, Schedule 40 PVC DWV or other approved materials having a smooth and
 30 uniform bore except that:

31 (1) No galvanized wrought iron or galvanized steel pipe shall be used underground and shall be
 32 kept at least six (6) inches above ground.

33 (b) Vent fittings shall be cast iron, galvanized malleable iron or galvanized steel, lead, copper,
 34 brass, ABS, PVC, or other approved materials, except that no galvanized malleable iron or galvanized
 35 steel fittings shall be used underground and shall be kept at least six (6) inches (152.4 mm) above
 36 ground.

37 (c) Changes in direction of vent piping shall be made by the appropriate use of approved fittings
 38 and no such pipe shall be strained or bent. Burred ends shall be reamed to the full bore of the pipe.

39 **SECTION 14.** Ordinance 6746, Section 35 and K.C.C. 16.32.330 are amended as follows:

40 Section 608 Appliances, of the Uniform Plumbing Code is amended by adding subsections (e), (f)
 41 and (g) to read as follows:

1 ~~((d))~~ (e) Commercial dishwashers shall be connected to the building drainage system with an
2 indirect waste pipe air-gaped to a floor sink or as defined in Chapter 1 - Definitions in this Code.

3 ~~((e))~~ (f) Drainage piping for residential dishwashers required in new construction shall be installed
4 as a part of the roughing-in plumbing system.

5 ~~((f))~~ (g) Approved countertop and in-sink air-gap fittings are acceptable for residential remodel
6 dishwasher installations, when installed in accordance with the plumbing Code as amended. (Refer
7 to Subsection ~~((e))~~ (f) above for new construction.)

8 **SECTION 15.** Ordinance 7136, Section 2 and K.C.C. 16.32.360 Section 803 of the Uniform
9 Plumbing code is amended as follows:

10 ~~((A. Amending subsection (e), Copper Water Tube, to read as follows:~~

11 ~~(e) Joints in copper tubing shall be made by the appropriate use of approved fittings properly
12 soldered or brazed together, or by means of approved compression fittings as provided in Subsection
13 (d) or (e) of Section 802. Solder shall meet ASTM Specification B 32-76 and shall have a maximum
14 lead content of no more than 0.20%.~~

15 ~~B.))~~ Adding new subsection ~~((g))~~ (i) to read as follows:

16 ~~((g))~~(i) Insulated Couplings - When connecting piping of dissimilar conductive materials, an
17 approved dielectric fitting may be used to diminish the possible damage due to electrolysis. This
18 section shall take effect on April 1, 1985. (Ordinance 7136 § 2, 1985).

19 **SECTION 16.** Ordinance 6746, Section 39 and K.C.C. Section 16.32.370 is amended as follows:

20 Section 910, Plumbing Fixtures Required, of the Uniform Plumbing Code is amended to read as
21 follows:

22 (a) Plumbing Fixtures Required. (a) Each building shall be provided with sanitary facilities as
23 prescribed by the Administrative Authority.

24 An amended list of minimum plumbing facilities for various occupancies is set forth in Appendix
25 C of this Code.

26 (b) Water Efficiency Standards.

27 (1) Standards for waterclosets. The guideline for maximum water use allowed in gallons per
28 flush (gpf) for any of the following waterclosets is the following:

29 <u>Tank-type toilets</u>	<u>3.5 gpf</u>
30 <u>Flushometer-valve toilets</u>	<u>3.5 gpf</u>
31 <u>Flushometer-tank toilets</u>	<u>3.5 gpf</u>
32 <u>Electromechanical hydraulic toilets</u>	<u>3.5 gpf</u>

33 (2) Standard for urinals. The guideline for maximum water use allowed for any urinal is 3.0
34 gallons per flush.

1 (3) Standard for showerheads. The guideline for maximum water use allowed for any
 2 showerhead is 3.0 gallons per minute.

3 (4) Standards for faucets. The guideline for maximum water use allowed in gallons per
 4 minute (gpm) for any of the following faucets and replacement aerators is the following:

<u>Bathroom faucets</u>	<u>3.0 gpm</u>
<u>Lavatory faucets</u>	<u>3.0 gpm</u>
<u>Kitchen faucets</u>	<u>3.0 gpm</u>
<u>Replacement aerators</u>	<u>3.0 gpm</u>

9 (5) No urinal or watercloset that operates on a continuous flow or continuous flush basis shall
 10 be permitted.

11 (c) Exceptions. Except where designed and installed for use by the physically handicapped,
 12 lavatory faucets located in restrooms intended for use by the general public must be equipped with a
 13 metering valve designed to close by spring or water pressure when left unattended (self-closing).

14 **SECTION 17.** 16.37.420 Appendix C is hereby repealed.

15 **NEW SECTION. SECTION 18.** 16.32.421 Appendix C of the Uniform Plumbing Code is replaced
 16 by the following:
 17

APPENDIX C - CHAPTER 22 MINIMUM PLUMBING FACILITIES

Each building shall be provided with sanitary facilities, including provisions for the physically handicapped as prescribed by the Department having jurisdiction. In the absence of such requirements, this Appendix--which provides a guideline for the minimum facilities for the various types of occupancies (see Section 910, Plumbing Fixtures Required, of the Uniform Plumbing Code) may be used. For handicapped requirements ANSI A117.1-1961 (R1971), Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, may be used.

The number of occupants shall be that determined by minimum exiting requirements.

Type of Building or Occupancy	Water Closets (Fixtures per Person)		Urinals ¹⁰ (Fixtures per Person)	Lavatories (Fixtures per Person)		Bathtubs or Showers (Fixtures per Person)	Drinking Fountains ^{3,13} (Fixtures per Person)
	Male	Female ¹⁴		Male	Female		
Assembly Places- Theaters, Auditoriums, Convention Halls, etc.--for permanent employee use	1:1-15 2:16-35 3:36-55 Over 55, add 1 fixture for each additional 40 persons.	1:1-15 3:16-35 4:36-55	0:1-9 1:10-50 Add one fixture for each additional 50 males.	1 per 40 1 per 40			
Assembly Places- Theatres, Auditoriums, Convention Halls, etc.--for public use	1:1-100 2:101-200 3:201-400 Over 400, add one fixture for each additional 500 males and 2 for each 300 females.	3:1-50 4:51-100 8:101-200 11:201-400	1:1-100 2:101-200 3:201-400 4:401-600 Over 600, add 1 fixture for each additional 500 males.	1:1-200 2:201-400 3:401-750 Over 750, add one fixture for each additional 500 persons.			1 per 75 ¹²
Dormitories ⁹ School or Labor	1 per 10 Add 1 fixture for each additional 25 males (over 10) and 1 for each additional 20 females (over 8).	1 per 8	1 per 25 Over 150, add 1 fixture for each additional 50 males.	1 per 12 1 per 12 Over 12 add one fixture for each additional 20 males and 1 for each 15 additional females.	1 per 8 For females, add 1 bathtub per 30. Over 150, add 1 per 20.		1 per 75 ¹²
Dormitories for staff use	1:1-15 2:16-35 3:36-55 Over 55, add 1 fixture for each additional 40 persons.	1:1-15 3:16-35 4:36-55	1 per 50	1 per 40 1 per 40			1 per 8
Dwellings ⁶ Single Dwelling Multiple Dwelling or Apartment House	1 per dwelling 1 per dwelling or apartment unit			1 per dwelling 1 per dwelling or apartment unit	1 per dwelling 1 per dwelling or apartment unit		

Type of Building or Occupancy	Water Closets (Fixtures per Person)	Urinals ¹⁰ (Fixtures per Person)	Lavatories (Fixtures per Person)	Bathtubs or Showers (Fixtures per Person)	Drinking Fountains ^{3,13} (Fixtures per Person)
Penal Institutions- For employee use	Male Female 1:1-15 1:1-15 2:16-35 3:16-35 3:36-55 4:36-55 Over 55, add 1 fixture for each additional 40 persons.	0:1-9 1:10-50 Add one fixture for each additional 50 males.	Male Female 1 per 40 1 per 40		1 per 75 ¹²
Penal Institutions- For prison use	Cell 1 per cell Exercise room 1 per exercise room	1 per exercise room	1 per cell 1 per exercise room		1 per cell block floor 1 per exercise room
Food service¹¹ establishments; taverns; cocktail bars; restaurants⁹	Male Female 1:1-60 1:1-30 1 for each 1 for each additional additional 60 30	1:1-30 2:31-90 1 for each additional 60	Male Female 1:60 1:60		
Schools-For staff use	Male Female 1:1-15 1:1-15 2:16-35 2:16-35 3:36-55 3:36-55 Over 55, add 1 fixture for each additional 40 persons	1 per 50	Male Female 1 per 40 1 per 40		
Schools-For student use	Male Female 1:1-20 1:1-20 2:21-50 2:21-50 Over 50, add 1 fixture for each additional 50 persons		Male Female 1:1-25 1:1-25 2:26-50 2:26-50 Over 50, add 1 fixture for each additional 50 persons		1 per 75 ¹²
Nursery					
Elementary	Male Female 1 per 30 1 per 25	1 per 75	Male Female 1 per 35 1 per 35		1 per 75 ¹²
Secondary	Male Female 1 per 40 1 per 30	1 per 35	Male Female 1 per 40 1 per 40		1 per 75 ¹²
Others (Colleges, Universities, Adult Centers, etc.)	Male Female 1 per 40 1 per 30	1 per 35	Male Female 1 per 40 1 per 40		1 per 75 ¹²
Worship Places Educational and Activities Unit	Male Female ¹⁴ 1 per 125 1 per 75 2:126-250 2:76-125 3:126-250	1 per 125	1 per 2 water closets		1 per 75 ¹²
Worship Places Principal Assembly Place	Male Female ¹⁴ 1 per 150 1 per 75 2:151-300 2: -150 3:151-300	1 per 150	1 per 2 water closets		1 per 75 ¹²

Type of Building or Occupancy ²	Water Closets (Fixtures per Person)	Urinals ¹⁰ (Fixtures per Person)	Lavatories (Fixtures per Person)	Bathtubs or Showers (Fixtures per Person)	Drinking Fountains ^{3,13} (Fixtures per Person)
Hospital Waiting rooms	1 per room		1 per room		1 per 75 ¹²
Hospital for employee use	Male Female 1:1-15 1:1-15 2:16-35 3:16-35 3:36-55 4:36-55 Over 55, add 1 fixture for each additional 40 persons.	0:1-9 1:10-50 Add one fixture for each additional 50 males.	Male Female 1 per 40 1 per 40		
Hospitals Individual Room	1 per room		1 per room	1 per room	1 per 75 ¹²
Ward Room	1 per 8 patients		1 per 10 patients	1 per 20 patients	
Industrial ⁶ Warehouses, Workshops, foundries and similar establishments (for employee use)	Male Female 1:1-10 1:1-10 2:11-25 2:11-25 3:26-50 3:26-50 4:51-75 4:51-75 5:76-100 5:76-100 Over 100, add 1 fixture for each additional 30 persons		Up to 100, 1 per 10 persons Over 100, 1 per 15 persons ^{7,8}	1 shower for each 15 persons exposed to excessive heat or to skin contamination with poisonous, infectious, or irritating material	1 per 75 ¹²
Institutional- Other than Hospitals or Penal Institutions (on each occupied floor)	Male Female ¹⁴ 1 per 25 1 per 20	0:1-9 1:10-50 Add one fixture for each additional 50 males.	Male Female 1 per 10 1 per 10	1 per 8	1 per 75 ¹²
Institutional- Other than Hospitals or Penal Institutions (on each occupied floor) For employee use	Male Female ¹⁴ 1:1-15 1:1-15 2:16-35 3:16-35 3:36-55 4:36-55 Over 55, add 1 fixture for each additional 40 persons	0:1-9 1:10-50 Add one fixture for each additional 50 males.	Male Female 1 per 40 1 per 40	1 per 8	1 per 75 ¹²
Office or Public Buildings	Male Female ¹⁴ 1:1-100 3:1-50 2:101-200 4:51-100 3:201-400 8:101-200 11:201-400 Over 400, add one fixture for each additional 500 males and 2 for each 300 females.	1:1-100 2:101-200 3:201-400 4:401-600 Over 600, add 1 fixture for each additional 300 males.	Male Female 1:1-200 1:1-200 2:201-400 2:201-400 3:401-750 3:401-750 Over 750, add one fixture fore each additional 500 persons.		1 per 75 ¹²
Office or Public buildings- For employee use	Male Female ¹⁴ 1:1-15 1:1-15 2:16-35 3:16-35 3:36-55 4:36-55	Over 55, add 1 fixture for each additional 40 persons.	0:1-9 1:10-50	Add one fixture for each additional 50 males.	Male Female 1 per 40 1 per 40

Whenever urinals are provided, one (1) water closet less than the number specified may be provided for each urinal installed, except the number of water closets in such cases shall not be reduced to less than two-thirds (2/3) of the minimum specified.

1. The figures shown are based upon one (1) fixture being the minimum required for the number of persons indicated or any fraction thereof.
2. Building categories not shown on this table shall be considered separately by the Administrative Authority.
3. Drinking fountains shall not be installed in toilet rooms.
4. Laundry trays. One (1) laundry tray or one (1) automatic washer standpipe for each dwelling unit or two (2) laundry trays or two (2) automatic washer standpipes, or combination thereof, for each ten (10) apartments. Kitchen sinks, one (1) for each dwelling or apartment unit.
5. Deleted.
6. As required by ANSI Z4.1-1968, Sanitation in Places of Employment.
7. Where there is exposure to skin contamination with poisonous, infectious, or irritating materials, provide one (1) lavatory for each five (5) persons.
8. Twenty-four (24) lineal inches (609.6 mm) of wash sink or eighteen (18) inches (457.2 mm) of a circular basin, when provided with water outlets for such space, shall be considered equivalent to one (1) lavatory.
9. Laundry trays, one (1) for each fifty (50) persons. Slop sinks, one (1) for each hundred (100) persons.
10. General. In applying this schedule of facilities, consideration must be given to the accessibility of fixtures. Conformity purely on a numerical basis may not result in an installation suited to the need of the individual establishment. For example, schools should be provided with toilet facilities on each floor having classrooms. Temporary workmen facilities, one (1) water closet and one (1) urinal for each thirty (30) workmen.
 - a. Surrounding materials, wall and floor space to a point two (2) feet (0.6 m) in front of urinal lip and four (4) feet (1.2 m) above the floor, and at least two (2) feet (0.6 m) to each side of the urinal shall be lined with non-absorbent materials.
 - b. Trough urinals are prohibited.
11. A restaurant is defined as a business which sells food to be consumed on the premises.
 - a. The number of occupants for a drive-in restaurant shall be considered as equal to the number of parking stalls.
 - b. Employee toilet facilities are not to be included in the above restaurant requirements. Hand washing facilities must be available in the kitchen for employees.
12. Where food is consumed indoors, water stations may be substituted for drinking fountains. Theatres, auditoriums, dormitories, offices, or public buildings for use by more than six (6) persons shall have one (1) drinking fountain for the first seventy-five (75) persons and one (1) additional fountain for each one hundred and fifty (150) persons thereafter.
13. There shall be a minimum of one (1) drinking fountain per occupied floor in schools, theatres, auditoriums, dormitories, offices or public building.
14. The total number of water closets for females shall be at least equal to the total number of water closets and urinals required for males.

1 NEW SECTION. SECTION 19. 16.32.430, Appendix D: Rainwater Systems D1 Materials of
2 the Uniform Plumbing Code is replaced by the following:

3 (a) Rainwater piping placed within the interior of a building or run within a vent or shaft
4 shall be of cast iron, galvanized steel, wrought iron, brass, copper, (~~(-lead,-)~~) Schedule 40
5 ABS DWV, Schedule 40 PVC DWV or other approved materials.

6 (b) Rainwater piping located on the exterior of a building shall be not less than 26 ga.
7 galvanized sheet metal. When the conductor is connected to a building storm drain or storm
8 sewer, a drain connection shall be extended above the finished grade and jointed at a point
9 protected from injury.

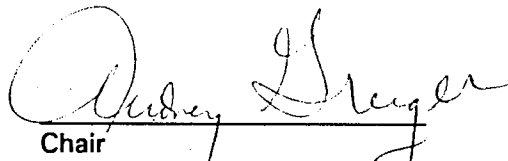
10 (c) Rainwater piping located underground within a building shall be of service weight cast
11 iron soil pipe, Type DWV copper tube, Schedule 40 ABS DWV, Schedule 40 PVC DWV, extra
12 strength vitrified clay pipe, or other approved materials.

13 (d) Rainwater piping commencing two (2) feet (.6 m) from the exterior of a building may be
14 of any approved material permitted in the Installation Requirements of this Code.


15 INTRODUCED AND READ for the first time this 20th day of July, 1992

16 PASSED this 12th day of October, 1992

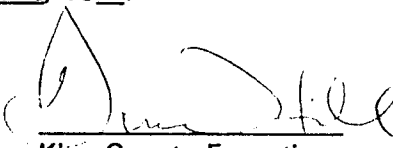
17 KING COUNTY COUNCIL
18 KING COUNTY, WASHINGTON

19 
20 Chair

21 ATTEST:

22 
23 Clerk of the Council

24 APPROVED this 23rd day of October, 1992

25 
26 King County Executive
27