

Legislation Text

#### File #: 2021-0346, Version: 1

#### Clerk 09/09/2021

AN ORDINANCE relating to building and construction standards; amending Ordinance 14111, Section 3, as amended, and K.C.C. 16.02.100, Ordinance 14111, Section 4, as amended, and K.C.C. 16.02.110, Ordinance 10608, Section 3, as amended, and K.C.C. 16.02.130, Ordinance 14914, Section 8, and K.C.C. 16.02.140, Ordinance 14914, Section 9, as amended, and K.C.C. 16.02.150, Ordinance 15802, Section 5, as amended, and K.C.C. 16.02.152, Ordinance 14914, Section 10, and K.C.C. 16.02.160, Ordinance 12560, Section 55, as amended, and K.C.C. 16.02.170, Ordinance 12560, Section 10, as amended, and K.C.C. 16.02.240, Ordinance 11622, Section 3, as amended, and K.C.C. 16.02.260, Ordinance 12560, Section 18, as amended, and K.C.C. 16.02.290, Ordinance 12560, Section 20, as amended, and K.C.C. 16.02.340, Ordinance 12560, Section 25, as amended, and K.C.C. 16.02.400, Ordinance 12560, Section 26, as amended, and K.C.C. 16.02.410, Ordinance 14914, Section 55, as amended, and K.C.C. 16.02.420, Ordinance 14914, Section 57, as amended, and K.C.C. 16.02.440, Ordinance 12560, Section 30, as amended, and K.C.C. 16.02.470, Ordinance 14914, Section 78, as amended, and K.C.C. 16.02.550, Ordinance 14914, Section 81, as amended, and K.C.C. 16.02.570, Ordinance 14914, Section 90, as amended, and K.C.C. 16.03.020, Ordinance 3647, Section 3, as amended, and K.C.C. 16.03.040, Ordinance 11923, Section 1, as amended,

and K.C.C. 16.03.060, Ordinance 12560, Section 43, as amended, and K.C.C. 16.04.250, Ordinance 14914, Section 133, as amended, and K.C.C. 16.04.260, Ordinance 12560, Section 44, as amended, and K.C.C. 16.04.270, Ordinance 12560, Section 45, as amended, and K.C.C. 16.04.290, Ordinance 14914, Section 141, and K.C.C. 16.04.300, Ordinance 12560, Section 47, as amended, and K.C.C. 16.04.310, Ordinance 14111, Section 55, as amended, and K.C.C. 16.04.330, Ordinance 15802, Section 23, as amended, and K.C.C. 16.04.344, Ordinance 15802, Section 24, as amended, and K.C.C. 16.04.346, Ordinance 15802, Section 25, as amended, and K.C.C. 16.04.348, Ordinance 14914, Section 155, as amended, and K.C.C. 16.04.360, Ordinance 14914, Section 156, as amended, and K.C.C. 16.04.370, Ordinance 14914, Section 157, as amended, and K.C.C. 16.04.380, Ordinance 14914, Section 158, as amended, and K.C.C. 16.04.390, Ordinance 14914, Section 159 and K.C.C. 16.04.400, Ordinance 14914, Section 163, and K.C.C. 16.04.430 Ordinance 14914, Section 164 as amended, and K.C.C. 16.04.440, Ordinance 14914, Section 165, and K.C.C. 16.04.450, Ordinance 14914, Section 168, and K.C.C. 16.04.480, Ordinance 12560, Section 54, as amended and K.C.C. 16.04.490 Ordinance 12560, Section 67, as amended, and K.C.C 16.04.550, Ordinance 12560, Section 68, as amended, and K.C.C. 16.04.560, Ordinance 12560, Section 74, as amended, and K.C.C. 16.04.620, Ordinance 12560, Section 89, as amended, and K.C.C. 16.04.770, Ordinance 12560, Section 97, as amended, and K.C.C. 16.04.850, Ordinance 12380, Section 1, and K.C.C. 16.04.930, Ordinance 12380, Section 2, and K.C.C. 16.04.940, Ordinance 12380, Section 3, as amended, and K.C.C. 16.04.950, Ordinance 12380, Section 4, as amended, and K.C.C. 16.04.960, Ordinance

12380, Section 5, as amended, and K.C.C. 16.04.970, Ordinance 7853, Section 1, as amended, and K.C.C. 16.04.980, Ordinance 14914, Section 272, as amended, and K.C.C. 16.05.040. Ordinance 15802, Section 78, and K.C.C. 16.05.065. Ordinance 14914, Section 275, as amended, and K.C.C. 16.05.070, Ordinance 14914, Section 276, as amended, and K.C.C. 16.05.080 Ordinance 12560, Section 74, as amended, and K.C.C. 16.05.130, Ordinance 8766, Section 6, as amended, and K.C.C. 16.08.050, Ordinance 12560, Section 110, as amended, and K.C.C. 16.14.110, Ordinance 12560, Section 116, as amended, and K.C.C. 16.14.120, Ordinance 14914, Section 359, and K.C.C. 16.14.200, Ordinance 14914, Section 367, and K.C.C. 16.14.250, Ordinance 12560, Section 124, as amended, and K.C.C. 16.14.410, Ordinance 12560, Section 121, as amended, and K.C.C. 16.14.430, Ordinance 14914, Section 407, and K.C.C. 16.14.480, Ordinance 14914, Section 408, and K.C.C. 16.14.490, Ordinance 6746, Section 5, as amended, and K.C.C. 16.32.030, Ordinance 6746, Section 10, as amended, and K.C.C. 16.32.080, Ordinance 15802, Section 122, and K.C.C. 16.32.195, Ordinance 15802, Section 123, and K.C.C. 16.32.205, Ordinance 15802, Section 124, as amended, and K.C.C. 16.32.215, Ordinance 15802, Section 126, and K.C.C. 16.32.235, Ordinance 15802, Section 128, and K.C.C. 16.32.255, Ordinance 15802, Section 130, and K.C.C. 16.32.275, Ordinance 15802, Section 131, as amended, and K.C.C. 16.32.285, Ordinance 15802, Section 132, and K.C.C. 16.32.295, Ordinance 15802, Section 133, and K.C.C. 16.32.306, Ordinance 15802, Section 137, and K.C.C. 16.32.345, Ordinance 15802, Section 138, and K.C.C. 16.32.355, Ordinance 2097, Section 1, as amended, and K.C.C. 17.04.010, Ordinance 12560, Section 148, as amended, and K.C.C. 17.04.200,

Ordinance 2097 (part), as amended, and K.C.C. 17.04.210, Ordinance 12560, Section 154, as amended, and K.C.C. 17.04.230, Ordinance 12560, Section 151, as amended, and K.C.C. 17.04.270, Ordinance 17837, Section 75, and K.C.C. 17.04.295, Ordinance 14915, Section 25, and K.C.C. 17.04.310, Ordinance 14915, Section 26, and K.C.C. 17.04.320, Ordinance 14915, Section 27, and K.C.C. 17.04.330, Ordinance 12560, Section 165, as amended, and K.C.C. 17.04.380, Ordinance 7980, Section 1, as amended, and K.C.C. 17.04.420, Ordinance 14915, Section 56, and K.C.C. 17.04.450, Ordinance 12560, Section 171, as amended, and K.C.C. 17.04.520, Ordinance 14111, Section 215, as amended, and K.C.C. 17.04.540, Ordinance 12560, Section 174, as amended, and K.C.C. 17.04.560, Ordinance 14111, Section 211, and K.C.C. 17.04.590, Ordinance 5828, Section 3, and K.C.C. 17.08.020, Ordinance 5828, Section 4, as amended, and K.C.C. 17.08.030, Ordinance 19276, Section 9, and K.C.C. 17.XX.XXX, Ordinance 12196, Section 11, as amended, and K.C.C. 20.20.040, Ordinance 4461, Section 2, as amended, and K.C.C. 20.22.040, Ordinance 4461, Section 2, as amended, and K.C.C. 20.22.040, Ordinance 13129, Section 6, and K.C.C. 21A.27.060, Ordinance 10870, Section 523, as amended, and K.C.C. 21A.28.130, Ordinance 13332, Section 16, as amended, and K.C.C. 27.10.010 and Ordinance 13332, Section 39, as amended, and K.C.C. 27.10.310, adding new sections to K.C.C. chapter 16.02, adding new sections to K.C.C. chapter 16.03, adding a new section to K.C.C. chapter 16.14, adding new sections to K.C.C. chapter 16.32, adding new sections to K.C.C. chapter 17.04, adding a new chapter to K.C.C. Title 16 and repealing Ordinance 14914, Section 13, as amended, and K.C.C. 16.02.180, Ordinance 12560, Section 14, as amended, and

K.C.C. 16.02.380, Ordinance 12560, Section 9, as amended, and K.C.C. 16.02.560, Ordinance 17837, Section 40, and K.C.C. 16.03.165, Ordinance 14914, Section 114, and K.C.C. 16.03.220, Ordinance 15802, Section 21, and K.C.C. 16.04.305, Ordinance 14914, Section 144, as amended, and K.C.C. 16.04.320, Ordinance 14914, Section 151, as amended, and K.C.C. 16.04.340, Ordinance 15802, Section 23, and K.C.C. 16.04.342, Ordinance 15802, Section 31, as amended, and K.C.C. 16.04.455, Ordinance 14914, Section 167, as amended, and K.C.C. 16.04.470, Ordinance 15802, Section 33, as amended, and K.C.C. 16.04.472, Ordinance 15802, Section 34 and K.C.C. 16.04.475, Ordinance 15802, Section 35 and K.C.C. 16.04.478, Ordinance 12560, Section 56, as amended, and K.C.C. 16.04.500, Ordinance 14914, Section 177, and K.C.C. 16.04.510, Ordinance 15802, Section 36, and K.C.C. 16.04.515, Ordinance 14914, Section 178, as amended, and K.C.C. 16.04.520 Ordinance 14914, Section 179, and K.C.C. 16.04.530, Ordinance 14914, Section 185, and K.C.C. 16.04.540, Ordinance 15802, Section 38, and K.C.C. 16.04.545, Ordinance 12560, Section 71, as amended, and K.C.C. 16.04.590, Ordinance 12560, Section 76, as amended, and K.C.C. 16.04.640, Ordinance 12560, Section 77, as amended, and K.C.C. 16.04.650, Ordinance 12560, Section 78, as amended, and K.C.C. 16.04.660, Ordinance 12560, Section 79, as amended, and K.C.C. 16.04.670, Ordinance 12560, Section 80, as amended, and K.C.C. 16.04.680, Ordinance 12560, Section 81, as amended, and K.C.C. 16.04.690, Ordinance 12560, Section 82, as amended, and K.C.C. 16.04.700, Ordinance 12560, Section 99, as amended, and K.C.C. 16.04.870, Ordinance 3647, Section 8, and K.C.C. 16.04.910, Ordinance 14914, Section 269, as amended, and K.C.C.

16.05.010, Ordinance 14914, Section 270, and K.C.C. 16.05.020, Ordinance 14914, Section 271, as amended, and K.C.C. 16.05.030, Ordinance 14914, Section 273, as amended, and K.C.C. 16.05.050, Ordinance 14914, Section 277, as amended, and K.C.C. 16.05.090, Ordinance 15802, Section 84, and K.C.C. 16.05.102, Ordinance 15802, Section 86, and K.C.C. 16.05.104, Ordinance 11797, Section 2, as amended, and K.C.C. 16.05.106, Ordinance 2910, Section 4 (part), as amended, and K.C.C. 16.05.108, Ordinance 12560, Section 57, as amended, and K.C.C. 16.05.110, Ordinance 11797, Section 1, as amended, and K.C.C. 16.05.120, Ordinance 15802, Section 93, as amended, and K.C.C. 16.05.124, Ordinance 11797, Section 3, as amended, and K.C.C. 16.05.127, Ordinance 14238, Section 18, as amended, and K.C.C. 16.06.010, Ordinance 14238, Section 19, as amended, and K.C.C. 16.06.020, Ordinance 14238, Section 21, as amended, and K.C.C. 16.06.030, Ordinance 14914, Section 288, as amended, and K.C.C. 16.06.031, Ordinance 14914, Section 289, as amended, and K.C.C. 16.06.032, Ordinance 14914, Section 290, as amended, and K.C.C. 16.06.033, Ordinance 14914, Section 291, as amended, and K.C.C. 16.06.034, Ordinance 14914, Section 292, as amended, and K.C.C. 16.06.035, Ordinance 14914, Section 293, and K.C.C. 16.06.036, Ordinance 14914, Section 294, and K.C.C. 16.06.037, Ordinance 14914, Section 295, and K.C.C. 16.06.038, Ordinance 14238, Section 21, as amended, and K.C.C. 16.06.040, Ordinance 14238, Section 22, as amended, and K.C.C. 16.06.050, Ordinance 14238, Section 23, as amended, and K.C.C. 16.06.060, Ordinance 14238, Section 24, as amended, and K.C.C. 16.06.070, Ordinance 14238, Section 25, as amended, and K.C.C. 16.06.080, Ordinance 14111, Section 118, as amended, and K.C.C.

16.12.010, Ordinance 15802, Section 103, and K.C.C. 16.12.012, Ordinance 14111, Section 129, and K.C.C. 16.14.010, Ordinance 14914, Section 340, and K.C.C. 16.14.070, Ordinance 14914, Section 341, and K.C.C. 16.14.080, Ordinance 12560, Section 118, as amended, and K.C.C. 16.14.130, Ordinance 14914, Section 354, and K.C.C. 16.14.160, Ordinance 14914, Section 355, and K.C.C. 16.14.170, Ordinance 12560, Section 119, as amended, and K.C.C. 16.14.180, Ordinance 14914, Section 358, and K.C.C. 16.14.190, Ordinance 12560, Section 136, as amended, and K.C.C. 16.14.230, Ordinance 12560, Section 137, as amended, and K.C.C. 16.14.240, Ordinance 14914, Section 368, and K.C.C. 16.14.260, Ordinance 14914, Section 369, and K.C.C. 16.14.270, Ordinance 14238, Section 5, as amended, and K.C.C. 16.14.300, Ordinance 14238, Section 6, as amended, and K.C.C. 16.14.310, Ordinance 14238, Section 7, as amended, and K.C.C. 16.14.320, Ordinance 15802, Section 106, as amended, and K.C.C. 16.14.321, Ordinance 14238, Section 8, as amended, and K.C.C. 16.14.330, Ordinance 14238, Section 9, as amended, and K.C.C. 16.14.340, Ordinance 14238, Section 10, as amended, and K.C.C. 16.14.350, Ordinance 14238, Section 11, as amended, and K.C.C. 16.14.360, Ordinance 15802, Section 109, and K.C.C. 16.14.365, Ordinance 15802, Section 110, and K.C.C. 16.14.366, Ordinance 14238, Section 12, as amended, and K.C.C. 16.14.370, Ordinance 14238, Section 13, as amended, and K.C.C. 16.14.380, Ordinance 15802, Section 113, and K.C.C. 16.14.385, Ordinance 14238, Section 14, as amended, and K.C.C. 16.14.390, Ordinance 14238, Section 15, as amended, and K.C.C. 16.14.400, Ordinance 14914, Section 396, and K.C.C. 16.14.420, Ordinance 14914, Section 417, and K.C.C. 16.14.560, Ordinance

8330, Section 34, as amended, and K.C.C. 16.32.085, Ordinance 6746, Section 19, KCC 16.32.170, Ordinance 15802, Section 120, and K.C.C. 16.32.175, Ordinance 15802, Section 121, and K.C.C. 16.32.185, Ordinance 15802, Section 125, and K.C.C. 16.32.225, Ordinance 15802, Section 127, and K.C.C. 16.32.245, Ordinance 15802, Section 129, and K.C.C. 16.32.265, Ordinance 15802, Section 134, as amended, and K.C.C. 16.32.315, Ordinance 15802, Section 135, and K.C.C. 16.32.326, Ordinance 15802, Section 136, and K.C.C. 16.32.335, Ordinance 12560, Section 150, as amended, and K.C.C. 17.04.300, Ordinance 14111, Section 201, as amended, and K.C.C. 17.04.430, Ordinance 12560, Section 170, as amended, and K.C.C. 17.04.440, Ordinance 14111, Section 202, as amended, and K.C.C. 17.04.460, Ordinance 14111, Section 203, as amended, and K.C.C. 17.04.470, Ordinance 14111, Section 205, as amended, and K.C.C. 17.04.480, Ordinance 14111, Section 213, as amended, and K.C.C. 17.04.490, Ordinance 14111, Section 206, as amended, and K.C.C. 17.04.500, Ordinance 14111, Section 210, as amended, and K.C.C. 17.04.510, Ordinance 15803, Section 26, as amended, and K.C.C. 17.04.522, Ordinance 6328, Section 4, as amended, and K.C.C. 17.04.530, Ordinance 14915, Section 79, as amended, and K.C.C. 17.04.550, Ordinance 17837, Section 82, and K.C.C. 17.04.565, Ordinance 14111, Section 220, as amended, and K.C.C. 17.04.570, Ordinance 12560, Section 175, as amended, and K.C.C. 17.04.580, Ordinance 15803, Section 8, as amended, and K.C.C. 17.04.583, Ordinance 14238, Section 29, as amended, and K.C.C. 17.04.600, Ordinance 14238, Section 30, as amended, and K.C.C. 17.04.610, Ordinance 14238, Section 31, as amended, and K.C.C. 17.04.620, Ordinance 8726, Section 1, as amended, and K.C.C. 17.04.630,

Ordinance 5828, Section 2, and K.C.C. 17.08.010, Ordinance 5828, Section 5, as amended, and K.C.C. 17.08.040, Ordinance 5828, Section 6, and K.C.C.
17.08.050, Ordinance 5828, Section 7, and K.C.C. 17.08.060, Ordinance 5828, Section 8, and K.C.C. 17.08.070, Ordinance 5828, Section 9, and K.C.C.
17.08.080, Ordinance 3087, Section 10, and K.C.C. 17.08.110, Ordinance 3087, Section 11, and K.C.C. 17.08.120, Ordinance 5828, Section 14, and K.C.C.
17.08.150 and Ordinance 7080, Section 2, and K.C.C. 17.08.160.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. Ordinance 14111, Section 3, as amended, and K.C.C. 16.02.100 are hereby amended to read as follows:

This chapter applies to the chapters in this title regarding the International Building Code (K.C.C. chapter 16.04), the International Residential Code (K.C.C. chapter 16.05), the International Energy Conservation Code (K.C.C. chapter 16.XX (the new chapter established by section 65 of this ordinance)), the International Mechanical Code, the International Existing Building Code, the International Property Maintenance Code (K.C.C. chapter 16.14), the ((International Mechanical Code (K.C.C. chapter 16.12)) Uniform Plumbing Code (K.C.C. chapter 16.32) and the King County Building Security Code (K.C.C. chapter 16.10).

SECTION 2. Ordinance 14111, Section 4, as amended, and K.C.C. 16.02.110 are hereby amended to read as follows:

<u>A.</u> The ((International Building Code, 2012 Edition, with Appendix C and E, as amended in chapter 51-50 WAC, Appendix Z, as adopted by this title, and the International Residential Code for One- and Two Family Dwellings 2012 Edition, with Appendix G, H and K, 2012 Edition, as amended in chapter 51-51 WAC, as)) <u>following codes</u> published by or jointly with the International Code Council, Inc., together with amendments, additions, exceptions and deletions adopted in this chapter by reference, together with the State Building Code Act, chapter 19.27 RCW, and with King County modifications that are adopted and codified in this chapter, are adopted as the King County building codes and may be cited as such and are referred to in this chapter as "this code."

1. The International Building Code, 2018 Edition, effective February 1, 2021, together with Appendix C (Group U - Agricultural buildings), as amended in chapter 51-50 WAC, and Appendix Z (Sea-Tac sound reduction standards), as adopted by this title, and referred to in this title as "the International Building Code" or, when used in a citation, "IBC";

2. The International Residential Code, 2018 edition, effective February 1, 2021, except for Chapter 11 and Chapters 25 through 43, together with Appendices F (Radon control methods), H (Patio covers), K (Sound transmission) and T [RE] (Solar-ready provisions-detached one- and two-family dwellings and townhouses), as amended in chapter 51-51 WAC, and referred to in this title as the "International Residential Code" or, when used in a citation, "IRC";

3. The International Energy Conservation Code, Commercial, 2018 edition, effective February 1, 2021, together with Appendices A (Default heat loss coefficients), B (Default internal load values and schedules), C (Exterior design conditions) and Appendix D (Calculation of HVAC total system performance ratio), as amended in chapter 51-11C WAC; and the International Energy Conservation Code, Residential, 2018 edition, effective February 1, 2021, together with Appendix A (Default heat loss coefficients), B (Optional energy efficiency measures) and Appendix C (Exterior design conditions), as amended in chapter 51-11R WAC, and referred to in this title as the "International Energy Conservation Code" or, when used in a citation, "IECC";

4. The International Mechanical Code, 2018 Edition, effective February 1, 2021, together with Appendix A (Chimney connector pass-through), as amended in chapter 51-52 WAC, and hereinafter referred to as the "International Mechanical Code" or, when used in a citation, "IMC";

5. The International Existing Building Code, 2018 Edition, effective February 1, 2021, with Appendix A (Guidelines for the Seismic Retrofit of Existing Buildings), as amended in WAC 51-50-480000, and referred to in this title as the "International Existing Building Code" or, when used in a citation, "IEBC"; and

6. The International Property Maintenance Code, 2018 Edition, effective February 1, 2021, and referred to in this title as the "International Property Maintenance Code" or, when used in a citation, "IPMC."

<u>B.</u> This code also may be further clarified and implemented with administrative rules adopted in accordance with K.C.C. chapter 2.98.

SECTION 3. Ordinance 10608, Section 3, as amended, and K.C.C. 16.02.130 are hereby amended to read as follows:

((The)) King County modifications to the ((2012)) 2018 editions of the International Building Code, the International Residential Code ((for One- and Two-Family Dwellings)), the International Energy Conservation Code, the International Mechanical Code, the International Existing Building Code, the International Property Maintenance Code ((, and the Security Code)) and the Uniform Plumbing Code are adopted as part of the code.

SECTION 4. Ordinance 14914, Section 8, and K.C.C. 16.02.140 are hereby amended to read as follows:

Chapter 1 of the International Residential Code ((for One- and Two-Family Dwellings)) is not adopted and Chapter 1 of the International Building Code as amended and supplemented in this chapter is substituted.

<u>NEW SECTION. SECTION 5.</u> There is hereby added to K.C.C. chapter 16.02 a new section to read as follows:

Chapter 1 of the International Energy Conservation Code is not adopted and Chapter 1 of the International Building Code as amended and supplemented in this chapter is substituted.

## **EXCEPTIONS:**

A. Mixed residential and commercial buildings (IECC C101.4.1);

B. Compliance (IECC C101.5);

- C. Building documentation and close out submittal requirements (IECC C103.6);
- D. Record documents (IECC C103.6.1);
- E. Building operations and maintenance information (IECC C103.6.2);
- F. Manuals (IECC C103.6.2.1);

G. Compliance documentation (IECC C103.6.3);

H. Systems operation training (IECC 103.6.4); and

I. International Energy Conservation Code Sections as amended and supplemented in this title.

<u>NEW SECTION. SECTION 6.</u> There is hereby added to K.C.C. chapter 16.02 a new section to read as follows:

Chapter 1 of the International Existing Building Code is not adopted and Chapter 1 of the International Building Code as amended and supplemented in this chapter is substituted.

SECTION 7. Ordinance 14914, Section 9, as amended, and K.C.C. 16.02.150 are hereby amended to read as follows:

Section 101.1 of the International Building Code is not adopted and the following is substituted:

These regulations shall be known as the Building Codes of King County. These codes are the International Building Code (IBC), the International Residential Code ((for One- and Two-Family Dwellings)) (IRC) ((and)), the International Energy Conservation Code (IECC), the International Mechanical Code (IMC), the International Existing Building Code (IEBC), the International Property Maintenance Code (IPMC), the Uniform Plumbing Code, the King County Building Security Code (K.C.C. chapter 16.10) and the International Fire Code (IFC), as adopted in K.C.C. Title 17.

SECTION 8. Ordinance 15802, Section 5, as amended, and K.C.C. 16.02.152 are hereby amended to read as follows:

Section 101.2 of the International Building Code is not adopted and the following is substituted: ((Scope (IBC 101.2).)) Scope (IBC 101.2). The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

## **EXCEPTIONS:**

1. The provisions of the International Residential Code ((for One- and Two-Family Dwellings)) shall apply to <u>the following:</u>

<u>1.1</u> (( $\mathfrak{t}$ ))<u>T</u>he construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and ((multiple single-family dwellings ()) townhouses (())), not more than three stories in height <u>above grade plane</u> with a separate means of egress and their accessory structures, including adult family homes, foster family care homes and family day care homes licensed by the Washington state (( $\mathfrak{d}$ ))<u>D</u>epartment of (( $\mathfrak{s}$ ))<u>S</u>ocial and (( $\mathfrak{h}$ ))<u>H</u>ealth (( $\mathfrak{s}$ ))<u>S</u> ervices.

<u>1.</u>2. ((The provisions of the International Residential Code for One- and Two-Family Dwellings shall apply to d))Detached residential accessory structures that are used for home occupations and home industries that include offices, mercantile, food preparation for off-site consumption, personal care salons and similar uses, if the home occupation or home industry is subordinate to the primary residential use of the site and the total cumulative floor area devoted to the home occupation or home industry in ((any)) each detached accessory structure on-site is less than or equal to 500 square feet (46.4m2).

1.3. Live/work units located in townhouses and complying with the requirements of IBC 419. Fire suppression required by IBC 419.5 when constructed under the International Residential Code shall conform to Appendix U - Dwelling unit fire sprinkler systems, as adopted in chapter 51-51 WAC.

1.4. Owner-occupied lodging houses with one or two guestrooms.

<u>1.5. Owner-occupied lodging homes with three to five guestrooms where equipped with a fire</u> sprinkler system in accordance with Appendix U - Dwelling unit fire sprinkler systems, as adopted in chapter 51-51 WAC.

((3-.)) <u>2</u>. The provisions of the International Mechanical Code shall regulate the design, installation, maintenance, alteration and inspection of mechanical systems that are permanently installed and ((utilized))) <u>used</u> to provide control of the environmental conditions and related processes within buildings. This code shall also regulate those mechanical systems, system components, equipment and appliances specifically addressed ((herein)) in this section. The installation of fuel gas distribution piping and equipment, fuel gas-fired appliances and fuel gas-fired appliance venting systems shall be regulated by the International Fuel Gas Code and WAC 51-52-0101.

<u>NEW SECTION. SECTION 9.</u> There is hereby added to K.C.C. chapter 16.02 a new section to read as follows:

Section 101.4.1 of the International Building Code is not adopted.

SECTION 10. Ordinance 14914, Section 10, and K.C.C. 16.02.160 are hereby amended to read as follows:

Section 102.4 of the International Building Code is not adopted and the following is substituted:

**Referenced Codes and Standards (IBC 102.4).** The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as <u>further regulated in IBC 102.4.1 and 102.4.2</u>. Where differences occur between provisions of this code and referenced code and standards, the provisions of this code shall apply.

**EXCEPTION:** Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and manufacturer's instructions shall apply.

SECTION 11. Ordinance 12560, Section 55, as amended, and K.C.C. 16.02.170 are hereby amended to read as follows:

Section 102 of the International Building Code is supplemented with the following:

# Moved buildings ((and temporary buildings)) (IBC ((102.7.2)) 102.6.3).

 Buildings or structures moved into or within the jurisdiction shall comply with the provisions for new buildings or structures of the International Building Code, chapter 51-50 WAC, the International Residential Code ((for One- and Two-Family Dwellings)), chapter 51-51 WAC, the International Mechanical Code, chapter 51-52 WAC, the International Fire Code, chapter 51-54A WAC, the Uniform Plumbing Code and Standards, chapter 51-56 WAC, the International Energy Conservation Code, Commercial, chapter 51-11C WAC and the International Energy Conservation Code, Residential, chapter 51-11R WAC.

**EXCEPTION:** ((Group R3)) <u>Detached one- and two-family dwellings</u>, buildings or structures are not required to comply if:

1.1. The original occupancy classification is not changed, and

<u>1.2</u>. The original building is not substantially remodeled or rehabilitated. For the purposes of this section a building shall be considered to be substantially remodeled when the costs of remodeling exceed ((60)) <u>50</u> percent of the value of the building exclusive of the costs relating to preparation, construction, demolition or renovation of foundations.

No person shall move within or into the unincorporated areas of King County, or cause to be moved, any building or structure without first obtaining, in addition to the building permit, a relocation investigation permit from the building official. The purpose of this relocation investigation permit is to determine ((prior to)), before relocation, the deficiencies in the building. Before a structure is relocated to a proposed site, a building permit shall be obtained.

2. The building official shall not approve for moving nor issue a building permit for a building or structure which constitutes a public nuisance or endangers the public health, safety((,)) or general welfare, and in the building official's opinion it is physically impractical to restore such building or structure to make it comply with this code.

3. A fee shall be charged for relocation investigations and site inspection services. A building permit fee shall also be charged for all structures which are approved for relocation. Fees for permits and services

provided under this section shall be paid to the department of local services, permitting division, ((as set forth)) in accordance with K.C.C. Title 27, ((Building and Constructions)) Development Permit Fees. ((As a condition of securing the building permit, the owner of the building or structure shall deposit cash or its equivalent with the building official, or in an approved irrevocable escrow, in an amount up to \$5000.00.))

4. Relocation investigation fees do not apply to structures having acceptable current inspections, such as factory\_built units.

((4.1 If the building official denies a building permit for the relocation of a structure, the applicant may request, within 10 days of the date of mailing or other issuance of the denial notice, that building official refer the building permit application to the building code advisory board. The advisory board shall review the application and make a recommendation to the building official, who may reconsider the denial in light of the advisory board's recommendation.))

SECTION 12. Ordinance 12560, Section 10, as amended, and K.C.C. 16.02.240 are hereby amended to read as follows:

Section 105.2 of the International Building Code is not adopted and the following is substituted:

**Work exempt from permit (IBC 105.2).** A building permit shall not be required for the following: Building:

1. One-story detached one and two family residential accessory buildings used as tool and storage sheds, playhouses, ((tree supported)) tree-supported structures used for play and similar uses, not including garages or other buildings used for vehicular storage, ((provided)) if:

<u>1.1</u> (( $\mathfrak{t}$ ))<u>T</u>he floor area does not exceed 200 square feet (11.15 m2) ((<del>provided that the roof overhang does</del>));

<u>1.2 Roof eave projections are not closer than three feet to any portion of an adjacent building and do</u> not exceed twenty-four inches measured horizontally from the exterior wall; and

1.3 The building is separated a minimum of five feet from all other buildings.

2. One-story detached <u>commercial</u> agricultural and forestry accessory buildings used as animal shelters or ((sheds)) for the storage of tools, animal feed, animal bedding, seeds, seedlings or similar materials or products, not including office, sleeping or resting quarters(( $_{7}$ )) <u>or</u> garages ((or buildings used for vehicle storage, provided)), <u>if:</u>

<u>2.1.</u> (( $\mathfrak{t}$ ))<u>T</u>he floor area does not exceed ((200)) <u>400</u> square feet (((<u>11.15</u>)) <u>37.16</u> m2) ((<del>provided that</del> the roof overhang does</del>));

2.2. Roof eave projections are not closer than three feet to any portion of an adjacent building and do not exceed twenty-four inches measured horizontally from the exterior wall;

2.3. The building is separated a minimum of five feet from other buildings;

and

2.4. The building does not have an installed heating system and is not connected to water, sanitary sewer or septic service.

3. Fences not over 6 feet (1.829 m) high.

4. Retaining walls that are not over 4 feet (1.219 m) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids.

5. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18,927 l) and the ratio of height to diameter or width does not exceed 2 to 1.

6. Sidewalks<u>, decks</u> and driveways not more than 30 inches (.762 m) above grade and not over any basement or story below and that are not part of an accessible route.

7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.

8. Temporary motion picture, television and theater stage sets and scenery.

9. Prefabricated swimming pools accessory to a ((Group R, Division 3 Occupancy)) detached one- or two-family dwelling as applicable in ((Section)) IBC 101.2, that are installed entirely above ground and are either less than 24 inches (610 mm) deep and do not exceed 5,000 gallons (18,925 l) or are installed for

temporary use of less than three months in a twelve month period.

10. ((Shade cloth structures constructed for nursery or agricultural purposes, and not including service systems)) Temporary growing structures and temporary worker housing as exempted by WAC 51-50-007.

11. Swings and other playground equipment.

12. Window awnings <u>for detached one- and two-family dwellings</u> supported by an exterior wall that do not project more than 54 inches (1,372 mm) from the exterior wall and do not require additional support ((of Group R3, as applicable in Section 101.2, and Group U Occupancies)).

13. Moveable cases, counters and partitions not over 5 feet 9 inches (228.6 m) high.

14. ((Re-roofing)) <u>Reroofing</u> of existing <u>one- and two-family residential</u> buildings.

**EXCEPTION:** When replacement roofing adds more than 5 pounds per square foot cumulative dead load to the weight of the original roofing a permit shall be required.

15. Submerged, freestanding mechanical boat lifts associated with single-family residential piers and recreational watercraft not exceeding 25 feet in length or 15 feet in width with no portion exceeding a height of 10 feet above the ordinary high water mark as defined in K.C.C. 21A.06.825.

16. Work located primarily in a public way, public utility towers and poles.

17. Mechanical equipment not specifically regulated in this code.

18. Antenna and dishes that fall under FCC Antenna Rule 47 C.F.R including masts under twelve feet above the roof line and dishes up to one meter in diameter.

19. Roof-mounted photo-voltaic solar panels ((from)) for one and two family dwellings that have a total dead load not exceeding ((three)) four pounds per square foot and are mounted no more than 18 inches above the roof or highest roof point on which they are mounted.

20. Ground mounted wind turbines for one and two family dwellings for which any portion of the unit does not exceed twelve feet in height.

Gas:

1. Portable heating, cooking or clothes drying appliances.

2. Replacement of any minor part that does not alter approval of equipment or make such equipment

unsafe.

Mechanical:

1. Portable heating appliance.

2. Portable ventilation appliances and equipment.

3. Portable cooling unit.

4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.

5. Replacement of any part that does not alter its approval or make it unsafe.

6. Portable evaporative cooler.

7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of one horsepower (746 W) or less.

8. Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Unless otherwise exempted, separate plumbing, electrical and mechanical permits ((will)) shall be required for the above-exempted items.

Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

SECTION 13. Ordinance 11622, Section 3, as amended, and K.C.C. 16.02.260 are hereby amended to read as follows:

Section 105.3 of the International Building Code is not adopted and the following is substituted:

# **Application for permit - Complete applications (IBC 105.3).**

((A.)) 1. For the purposes of determining the application of time periods and procedures adopted by

K.C.C. Title 20, applications for permits authorized by K.C.C. chapter 16.04 shall be considered complete as of the date of submittal upon determination by the department that the materials submitted contain the following, in addition to the complete application requirements of K.C.C. 20.20.040. Every application shall:

<u>1.</u>1. Identify and describe the work to be covered by the permit for which application is made.

<u>1.</u>2. Indicate the use or occupancy of which the proposed work is intended.

<u>1.</u>3. Be accompanied by plans, diagrams, computations and specifications and other data as required in IBC ((Section 106.1)) <u>107.1</u>.

<u>1.</u>4. State the valuation of any new building or structure or any addition, remodeling or alteration to an existing building.

1.5. Give such other data and information as may be required by the building official.

<u>1.6.</u> Identify <u>on</u> the site plan (( $\Theta$ f)) all easements, deed restrictions(( $_{\overline{7}}$ )) or other encumbrances restricting the use of the property, and provide details as required in IBC 107.2.6 and as otherwise required by <u>the department</u>.

SECTION 14. Ordinance 12560, Section 18, as amended, and K.C.C. 16.02.290 are hereby amended to read as follows:

Section 105.5 of the International Building Code is not adopted and the following is substituted:

**Expiration (IBC 105.5).** Every permit approved by the building official under ((the provisions of)) the (( $\bigcirc$ )) code shall expire by limitation and become null and void ((one)) two years from the date of its issue.

**EXCEPTION:** Building permits issued by the building official to correct a code violation, or mechanical permits issued independent of a building permit, shall expire by limitation and become null and void one year from the date of its issue.

Issued permits may be extended for one year periods subject to the following conditions:

 An application for a permit extension together with the applicable fee is submitted to the department at least seven (7), but no more than sixty (60), calendar days ((prior to)) before the date the original permit

becomes null and void. Once the permit extension application is submitted <u>and if that extension is not denied</u>, work may continue past the expiration date of the original permit((<del>, provided that the extension application is not denied</del>)). If the extension application is denied, all work must stop until a valid permit is obtained.

2. The permit shall not be extended ((I))if:

<u>2.1.</u> ((e))<u>C</u>onstruction of a building or structure has not substantially ((commenced)) <u>begun</u>, as determined by the building official, within two years from the date of the first issued permit; and

<u>2.2.</u> (( $\mathfrak{t}$ ))<u>T</u>he building ((and)) <u>or</u> the structure is no longer authorized by the zoning code or other applicable law((, then the permit shall not be extended)).

3. An applicant may request a total of two permit extensions ((provided there)) if are no substantial changes in the approved plans and specifications.

4. The building official may extend a building permit beyond the second extension only to allow completion of a building, structure or mechanical system authorized by the original permit and substantially constructed. If substantial work, as determined by the building official, has not ((commenced)) begun on a building ((and/)) or structure authorized in the original permit, then a new permit ((will)) shall be required for construction to proceed.

5. The staff of the department may revise a permit at the permittee's request but such a revision does not constitute a renewal or otherwise extend the life of the permit.

SECTION 15. Ordinance 12560, Section 20, as amended, and K.C.C. 16.02.340 are hereby amended to read as follows:

Section 107.3.3 of the International Building Code is not adopted and the following is substituted:

# Pre-issuance construction authorization (PICA) - Permission to proceed (IBC ((106.3.3)) 107.3.3).

If the applicant for a permit or approval required by this code desires to ((commence)) <u>begin</u> work before obtaining the required permit or approval, the building official( $(\tau)$ ) may allow the applicant to proceed if:

1. The building official determines that the work would not endanger or harm the property; ((and if))

2. The building official determines that allowing the work to proceed would not violate the requirements of the state environmental policy act; and ((if))

3. The applicant first deposits cash or its equivalent with the building official, or in an irrevocable escrow approved by the building official, in an amount determined by the building official to be sufficient to restore the building and site, and to perform the corrective work described ((below)) in K.C.C. 16.02.350.

SECTION 16. Ordinance 12560, Section 25, as amended, and K.C.C. 16.02.400 are hereby amended to read as follows:

Section ((108 and all subsections thereto)) 109 of the International Building Code ((are)) is not adopted and the following is substituted:

Fees (IBC ((108)) 109). Fees shall be assessed according to K.C.C. Title 27.

SECTION 17. Ordinance 12560, Section 26, as amended, and K.C.C. 16.02.410 are hereby amended to read as follows:

Section 110.1 of the International Building Code is supplemented with the following:

**Inspection record card (IBC 110.1.1).** Work requiring a permit shall not ((be commenced))) begin until the permit holder or an agent of the permit holder shall have posted or otherwise made available an inspection record card in a conspicuous place on the premises and in a position such as to allow the building official to conveniently make the required entries thereon regarding inspection of the work. This card shall be maintained available in such a position by the permit holder until the Certificate of Occupancy has been issued. ((For R-3 and U occupancies and structures built under the International Residential Code for One- and Two-Family Dwellings, this card shall serve as the certificate of occupancy. If more than two units are located on the same lot, the Certificate of Occupancy shall be used.)) The validated hard copy of the building permit application given to the applicant at the time of the permit issuance shall serve as the inspection record card. This validated hard copy of the building permit application shall thereafter be referred to as the building permit.

SECTION 18. Ordinance 14914, Section 55, as amended, and K.C.C. 16.02.420 are hereby amended to

read as follows:

Section 110.3.3 of the International Building Code is not adopted and the following is substituted:

**Lowest floor elevation (IBC 110.3.3).** In flood hazard areas, upon placement of the lowest floor, including the basement, and ((prior to)) <u>before</u> further vertical construction, the elevation certification required in ((section 1612.5)) <u>IBC</u> 1612.4 and in K.C.C. chapter 21A.24 shall be submitted to the building official.

SECTION 19. Ordinance 14914, Section 57, as amended, and K.C.C. 16.02.440 are hereby amended to read as follows:

Section ((110.3.7)) <u>110.3.8</u> of the International Building Code is not adopted and the following is substituted:

Energy efficiency inspections (IBC ((110.3.7)) <u>110.3.8</u>). Energy efficiency inspections shall be in accordance with the International Energy Conservation Code, as adopted and amended by chapters 51-11<u>C and 51-11R WAC, and as amended in this title.</u>

SECTION 20. Ordinance 12560, Section 30, as amended, and K.C.C. 16.02.470 are hereby amended to read as follows:

Section 111.2 of the International Building Code is not adopted and the following is substituted:

Certificates issued (IBC 111.2). The building official may issue either a certificate of occupancy or a certificate of shell completion. <u>The inspection record card specified in K.C.C. 16.02.410 shall serve as the certificate of occupancy for structures built under the International Residential Code.</u>

SECTION 21. Ordinance 14914, Section 78, as amended, and K.C.C. 16.02.550 are hereby amended to read as follows:

((Sections 112.1 and 112.2)) Section 112 of the International Building Code ((are)) is not adopted.

SECTION 22. Ordinance 14914, Section 81, as amended, and K.C.C. 16.02.570 are hereby amended to read as follows:

Section 113((-3)) of the International Building Code is not adopted.

SECTION 23. Ordinance 14914, Section 90, as amended, and K.C.C. 16.03.020 are hereby amended to read as follows:

The following definitions in ((s))Section 202 of the International Building Code are not adopted:

A. Base flood;

- B. Coastal High-Hazard Area;
- C. Design flood;
- ((C.)) <u>D.</u> Dry floodproofing;
- ((<del>D.</del>)) <u>E.</u> Existing ((construction)) structure;
- $((\underline{E}.)) \underline{F}.$  Flood hazard area;
- ((F. Flood hazard area subject to high velocity wave action;))
- G. Flood insurance rate map (FIRM);
- H. Flood insurance study;
- I. Floodway;
- J. ((High-Rise Building;)) Historic Buildings;
- K. ((Nonbuilding structure;)) Special Flood Hazard Area; and
- L. ((Start of construction; and
- M.)) Substantial improvement.

SECTION 24. Ordinance 3647, Section 3, as amended, and K.C.C. 16.03.040 are hereby amended to

# read as follows:

Whenever the following words appear in the code, they are to be changed as follows:

A. Building official or code official to the department of local services permitting division manager or

# designee;

- B. Name of jurisdiction to unincorporated King County;
- C. The department of building and safety to King County department of local services, permitting

division; and

D. Design flood elevation to base flood elevation((;

E. Mobile home to manufactured home)).

<u>NEW SECTION. SECTION 25.</u> There is hereby added to K.C.C. chapter 16.03 a new section to read as follows:

Air admittance valve: a device that:

A. Allows air to enter the plumbing drainage system in one direction to protect fixture traps from siphonage when negative pressures develop;

B. Prevents sewer gases from entering the interior building atmosphere during static pressure or positive pressure conditions in the plumbing waste system; and

C. Is listed to ASSE 1051 or ASSE 1050.

<u>NEW SECTION. SECTION 26.</u> There is hereby added to K.C.C. chapter 16.03 a new section to read as follows:

Boiler: any heating appliance or equipment that:

A. Heats potable water and supplies such water to the potable hot water distribution system; and

B. Exceeds a pressure of 160 pounds per square inch (1103 kPa), volume of 120 gallons (454 L) or a heat input of 200,000 Btu per hour (58 kW).

SECTION 27. Ordinance 11923, Section 1, as amended, and K.C.C. 16.03.060 are hereby amended to read as follows:

Condominium: real property, including but not limited to residential buildings and mobile home parks, portions of which are designated for separate ownership and the remainder of which is designated for common ownership solely by the owners of those portions. Real property is not a condominium unless the undivided interests in the common elements are vested in the condominium unit owners and unless a declaration and a survey map and plans have been recorded ((pursuant to)) in accordance with the Horizontal Property Regimes

Act((<del>, chapter 64.34 RCW,</del> )) in chapter 64.32 RCW or the Condominium Act((<sub>5</sub>)) in chapter 64.34 RCW.

<u>NEW SECTION. SECTION 28.</u> There is hereby added to K.C.C. chapter 16.03 a new section to read as follows:

Water heater: any heating appliance or equipment that:

A. Heats potable water and supplies such water to the potable hot water distribution system; and

B. Does not exceed pressure of 160 pounds per square inch (1103 kPa), volume of 120 gallons (454 L) and a heat input of 200,000 Btu per hour (58 kW).

SECTION 29. Ordinance 12560, Section 43, as amended, and K.C.C. 16.04.250 are hereby amended to read as follows:

Section ((501.2)) <u>502.1</u> of the International Building Code is not adopted and the following is substituted:

**Premises identification (IBC ((501.2))** <u>502.1</u>). Approved numbers or addresses shall be provided for all new buildings in such a position as to be plainly visible and legible from the street or road fronting the property as specified in ((King County Code 16.08)) K.C.C. 16.08.050.

SECTION 30. Ordinance 14914, Section 133, as amended, and K.C.C. 16.04.260 are hereby amended to read as follows:

Section 503.1 of the International Building Code is supplemented with the following:

**Portable classrooms - Fire hydrants and access (IBC ((503.1.4))** <u>503.1.5</u>). The location of portable classrooms on a site with existing buildings shall be approved by the ((F)) fire ((M)) marshal with respect to hydrant locations, access roads and available water for fire fighting purposes.

SECTION 31. Ordinance 12560, Section 44, as amended, and K.C.C. 16.04.270 are hereby amended to read as follows:

Section 503.1 of the International Building Code is supplemented with the following:

Portable classrooms - Location (IBC ((503.1.5)) 503.1.6). Portable classrooms located within 60 feet

of any permanent buildings shall be located with a minimum clear space of 20 feet from any other portable classrooms and from the permanent buildings.

## **EXCEPTIONS:**

1. Portable classrooms located in close proximity to each other, and more than 60 feet from permanent buildings, may be considered as portions of one building with no minimum clearance or protection between them. The aggregate area of a cluster of portable classrooms considered as one building must meet the area limits specified in ((Section)) IBC 503.

2. Portable classrooms located more than 20 feet from main buildings with exterior wall protection that is continuous through the crawlspace or skirted area may be located as follows:

2.1. When either of two portables has exterior wall protection rated for not less than one hour, with no openings or openings that comply with the area limits of ((Section)) <u>IBC</u> 705.8, the minimum clear space shall be 10 feet from any other portable.

2.2. When both of two portables have exterior wall protection rated for not less than one hour with no openings, the minimum clear space shall be 5 feet from any other portable.

3. Portable classrooms may be placed within 60 feet of any building ((provided that)) if the buildings comply with area limitations in ((Section)) IBC 503 as ((may be)) modified by ((Section)) IBC 506. Calculations substantiating compliance of existing and proposed buildings with ((Section)) IBC 503 as modified by ((Section)) IBC 506 ((will)) shall be required as part of the permit application documents.

SECTION 32. Ordinance 12560, Section 45, as amended, and K.C.C. 16.04.290 are hereby amended to read as follows:

Section 901.1 of the International Building Code is not adopted and the following is substituted:

Scope (IBC 901.1). ((This chapter specifies where f))Fire protection and life safety systems ((are

required and applies to the design, installation and operation of fire protection systems)) shall comply with the

International Fire Code as amended by K.C.C. Title 17.

## ((1. ADDITIONAL REQUIREMENTS.

1.1. The Fire Marshal or designee retains the authority under section 903.2.13.1 of the International Fire Code to impose additional conditions, including but not limited to increased setbacks, use of fire retardant materials or standpipes where determined necessary to mitigate identified fire protection impacts.

1.2. This chapter applies to all buildings or structures whose county assessed value has increased by more than 50% within a five year period due to the added value of alterations and repairs. When the first permit application is submitted to alter or repair an existing building, the county assessed value of the building at the time the complete application is submitted shall be considered the base county assessed value for the following five year period.

1.3. Any additions to an existing building or structure shall be considered new construction and subject the entire structure to the provisions of this chapter.

1.4. All condominiums shall have the following wording in the recorded Declaration of Covenants and a copy of the document shall be provided to the fire code official or designee:

1.4.1 In the event that any unit should be equipped with a sprinkler system, nothing shall be hung from the sprinklers comprising a part of the system nor shall any such sprinklers be painted, covered, or otherwise changed, tampered with or altered.

1.4.2. Prior to any alteration, amendment, modification or change thereof, the owners or their agents will submit such alteration, amendment, modification or change to the fire marshal or designee for approval and agrees to comply with all applicable sprinkler requirements.))

SECTION 33. Ordinance 14914, Section 141, and K.C.C. 16.04.300 are hereby amended to read as follows:

Section 903.1 of the International Building Code is not adopted and the following is substituted:

General (IBC 903.1). Automatic sprinkler systems shall comply with ((this section. For provisions for special hazards and hazardous materials, Section 901.4.3 of the International Fire Code applies)) the

International Fire Code as amended by K.C.C. Title 17.

SECTION 34. Ordinance 12560, Section 47, as amended, and K.C.C. 16.04.310 are hereby amended to read as follows:

Section 903.2 of the International Building Code is not adopted and the following is substituted:

Where required (IBC 903.2). Sprinklers ((are required as follows:

1. For residential units and their accessory structures built under the International Residential Code, sprinklers shall be installed in accordance with Section 903.2.13.

2. For all other occupancies, an automatic sprinkler system shall be installed in locations in accordance with Sections 903.2.1 through 903.2.12.

EXCEPTION: Spaces or areas in telecommunications buildings used exclusively for

telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 or not less than 2-hour horizontal assemblies constructed in accordance with Section 711, or both.

3. Sprinklers are also required in occupancies requiring 2,000 gallons per minute or more fire flow, or where the total floor area included within the surrounding exterior walls on all floor levels including basements exceeds 10,000 square feet)) shall comply with the International Fire Code as amended by K.C.C. Title 17.

SECTION 35. Ordinance 14111, Section 55, as amended, and K.C.C. 16.04.330 are hereby amended to read as follows:

Section 903.2 of the International Building Code is supplemented with the following:

All occupancies (IBC 903.2.13). An automatic sprinkler system shall be installed in ((residential units and accessory)) the habitable space of structures built under the International Residential Code ((as follows:

1. If the gross floor area exceeds 2,500 square feet (including attached garages) without adequate fire

flow except as cited in K.C.C. 17.08.030;

2. If there is no approved fire department access as defined in the road standards of K.C.C. Title 14.

3. If 2,000 gallons per minute or more fire flow is required, or where the total floor area included within the surrounding exterior walls on all floor levels including basements exceeds 10,000 square feet. For townhouses each unit is considered a separate building.

EXCEPTIONS: Attached decks, exterior porches and carports open on two sides; or

4. Where special hazards or unusual conditions exists in addition to the normal hazard of the space due to the design, size, volume or use of the space, the Fire Marshal is authorized to require additional safeguards suitable for the protection of the hazard or condition involved. Additional safeguards can consist of automatic fire alarm system, automatic sprinkler or water spray system, standpipe and hose, fixed or portable fire extinguishers, or other special fire extinguishing systems. Where such systems are provided, they shall be designed and installed in accordance with the applicable International Fire Code Standards)) and shall comply with the International Fire Code as amended by K.C.C. Title 17.

SECTION 36. Ordinance 15802, Section 23, as amended, and K.C.C. 16.04.344 are hereby amended to read as follows:

Section ((1008.1.4)) <u>1010.1.4</u> of the International Building Code is not adopted and following is substituted:

Special Doors (IBC ((1008.1.4)) <u>1010.1.4</u>) Special doors and security grilles shall comply with the requirements of ((sections 1008.1.4.1)) IBC 1010.1.4.1 through ((1008.1.4.5)) <u>1010.1.4.6</u>.

SECTION 37. Ordinance 15802, Section 24, as amended, and K.C.C. 16.04.346 are hereby amended to read as follows:

Section ((1008.1.4)) <u>1010.1.4</u> of the International Building Code is supplemented with the following:

Mini-storage facility storage room doors (IBC ((1008.1.4.5)) 1010.1.4.6). The access doors to storage rooms in mini-storage facilities shall meet the provisions of ((1008.1.2)) IBC 1010.1.2 and ((1008.1.9))

<u>1010.1.9</u>.

**EXCEPTION:** If the storage room has less than 300 square feet of floor area, the access doors are not required to meet the provisions of ((1008.1.2)) <u>IBC 1010.1.2</u> and ((1008.1.9)) <u>1010.1.9</u> under the following circumstances:

1. If the facility has any storage room with 300 square feet or less of floor area, at least one storage room shall comply with ((1008.1.2)) IBC 1010.1.2 and ((1008.1.9)) 1010.1.9; and

2. For every 10 storage rooms with 300 square feet or less of floor area, the facility has at least one additional storage room with a door that complies with ((1008.1.2)) IBC 1010.1.2 and ((1008.1.9)) 1010.1.9.

SECTION 38. Ordinance 15802, Section 25, as amended, and K.C.C. 16.04.348 are hereby amended to read as follows:

Section ((1009)) <u>1011</u> of the International Building Code is supplemented with the following:

**Stairways to mechanical rooms (IBC ((1009.18))** <u>1011.17)</u>. Platforms and rooms, used only to attend equipment, that are less than 300 square feet in area or have less than 5 feet headroom are exempted from the requirement of ((sections 1009.1 to 1009.17)) IBC 1011.1 through 1011.16.

SECTION 39. Ordinance 14914, Section 155, as amended, and K.C.C. 16.04.360 are hereby amended to read as follows:

Section ((1203.3.2)) <u>1202.4.1</u> of the International Building Code ((is not adopted and the following is substituted)) is supplemented with the following:

<u>Under Floor Ventilation -</u> Exception((s)) (IBC ((<del>1203.3.2</del>)) <u>1202.4.1.3</u>). The following ((are)) exception((s)) <u>applies</u> to ((section 1203.3 and 1203.3.1)) <u>IBC 1202.4</u>:

((1. Where warranted by climatic conditions, ventilation openings to the outdoors are not required if ventilation openings to the interior are provided.

2. The total area of ventilation openings is permitted to be reduced to 1/1500 of the under-floor area where the ground surface is treated with an approved vapor retarder material and the required openings are

placed so as to provide cross ventilation of the space.

3. Ventilation openings are not required where continuously operated mechanical ventilation is provided at a rate of one cubic foot per minute for each fifty square feet of crawl-space floor area and the ground surface is covered with an approved vapor retarder.

4.)) Ventilation openings are not required when the ground surface is covered with an approved vapor retarder, the perimeter walls are insulated and the space is conditioned in accordance with the International Energy Conservation Code((, Commercial chapter 51-11C WAC and International Energy Conservation Code, Residential, chapter 51-11R WAC)).

SECTION 40. Ordinance 14914, Section 156, as amended, and K.C.C. 16.04.370 are hereby amended to read as follows:

Section ((1207)) <u>1206</u> of the International Building Code is supplemented with the following:

**Sea-Tac sound reduction standards (IBC ((1207.4))** <u>1206.4</u>). All buildings or structures constructed or placed in use for human occupancy on sites in the vicinity of ((Sea-Tac)) <u>Seattle-Tacoma</u> International Airport which have been included within ((or enclosed by)) the Port of Seattle Noise Remedy ((Program boundaries)) <u>Boundary</u> shall comply with the provisions in supplemental <u>IBC</u> Appendix Z as adopted by King County.

SECTION 41. Ordinance 14914, Section 157, as amended, and K.C.C. 16.04.380 are hereby amended to read as follows:

Section ((1403.5)) <u>1402.6</u> of the International Building Code is not adopted and the following is substituted:

**Performance requirements - Flood resistance (IBC ((1403.5))** <u>1402.6</u>). For buildings in flood hazard areas as established in K.C.C. chapter 21A.24, exterior walls extending below the base flood elevation shall comply with K.C.C. chapter 21A.24.

SECTION 42. Ordinance 14914, Section 158, as amended, and K.C.C. 16.04.390 are hereby amended

to read as follows:

Section ((1403.6)) <u>1402.7</u> of the International Building Code is not adopted <u>and the following is</u> <u>substituted:</u>

# <u>Performance requirements - Flood resistance for coastal high-hazard areas (IBC 1402.7).</u> Highvelocity wave action area standards shall be in accordance with K.C.C. chapter 21A.24.

SECTION 43. Ordinance 14914, Section 159 and K.C.C. 16.04.400 are hereby amended to read as follows:

Section ((1603.1.6)) <u>1603.1.7</u> of the International Building Code is not adopted.

SECTION 44. Ordinance 14914, Section 163, and K.C.C. 16.04.430 are hereby amended to read as

## follows:

Section ((1612.4)) <u>1612.2</u> of the International Building Code is not adopted.

SECTION 45. Ordinance 14914, Section 164, as amended, and K.C.C. 16.04.440 are hereby amended to read as follows:

Section ((1612.5)) <u>1612.4</u> of the International Building Code is not adopted and the following is substituted:

**Flood hazard documentation (IBC ((1612.5))** <u>1612.4</u>). For construction in flood hazard areas the applicant shall provide actual as-built elevation certification by a professional civil engineer or land surveyor licensed by the state of Washington.

SECTION 46. Ordinance 14914, Section 165, and K.C.C. 16.04.450 are hereby amended to read as follows:

Section ((1803.4)) 1804.5 of the International Building Code is not adopted and the following is substituted:

**Grading and fill in floodways (IBC ((1803.4))** <u>1804.5</u>). Excavation, grading and fill in floodways shall be in accordance with K.C.C. chapter 21A.24.

SECTION 47. Ordinance 14914, Section 168, and K.C.C. 16.04.480 are hereby amended to read as follows:

Section ((1807.1.2.1)) <u>1805.1.2.1</u> of the International Building Code is not adopted and the following is substituted:

**Flood hazard areas (IBC ((1807.1.2.1))** <u>1805.1.2.1</u>). For buildings and structures in flood hazard areas as established in K.C.C. chapter 21A.24, the finished ground level of an under-floor space such as a crawl space shall be equal to or higher than the outside finished grade level.

SECTION 48. Ordinance 12560, Section 54, as amended and K.C.C. 16.04.490 are hereby amended to read as follows:

Section 2902.1 of the International Building Code ((<del>, as amended by chapter 51-50 WAC,</del>)) is not adopted and the following is substituted:

**Minimum number of fixtures (IBC 2902.1).** The number of plumbing fixtures within a building shall not be less than ((set forth)) in ((Section)) <u>IBC</u> 2902. Fixtures located within gender-neutral toilet and bathing rooms shall be included in determining the number of fixtures provided in an occupancy. The director of public health <u>- Seattle & King County</u> is authorized <u>to determine the number of plumbing fixtures within a building and</u> to enforce this section.

SECTION 49. Ordinance 12560, Section 67, as amended, and K.C.C. 16.04.550 are hereby amended to read as follows:

The International Building Code is supplemented ((by)) with the following appendix:

Purpose (IBC AZ 101). The purpose of these sections is to safeguard life, health, property and public welfare by establishing minimum requirements regulating the design, construction, and((/or setting on site)) siting of buildings for human occupancy ((in)) within the ((vicinity of Sea-Tac)) Seattle-Tacoma International Airport's ((as identified on the maps referenced in the April 24, 1985 Federal Register, Volume 50, No. 79))

<u>Noise Remedy Boundary as established by the Port of Seattle</u> pursuant to the 2013 Part 150 Noise Compatibility Study. <u>These sections are not intended to abridge any safety</u> or health requirements required under any other applicable codes or ordinances.

SECTION 50. Ordinance 12560, Section 68, as amended, and K.C.C. 16.04.560 are hereby amended to read as follows:

The International Building Code is supplemented ((by)) with the following appendix:

Scope (IBC AZ 102). The provisions of this chapter shall apply to all buildings or structures constructed or placed in use for human occupancy on sites ((with))in the vicinity of Seattle-Tacoma International Airport which have been included within ((or enclosed by)) the Port of Seattle Noise Remedy (( Program boundaries)) Boundary;

1. Structures relocated shall comply with all requirements of this chapter, and((,))

2. Manufactured or mobile homes located in mobile home parks shall be exempt from these requirements.

This chapter is intended to supplement the provisions of the International Residential Code, the International Mechanical Code, the Washington state Energy Code, and the International Building Code. In the case of conflict between the chapter and any other applicable codes the more restrictive requirements shall be met.

SECTION 51. Ordinance 12560, Section 74, as amended, and K.C.C. 16.04.620 are hereby amended to read as follows:

The International Building Code is supplemented ((by)) with the following appendix:

**Sea-Tac noise program area (IBC AZ 108).** Noise determined construction requirements detailed in this chapter shall be applied to new construction and additions of all structures, except for not normally inhabited portions of warehouses, storage buildings and similar structures as determined by the director, within the designated ((program)) areas of the Port of Seattle's Noise Remedy ((Program)) Boundary. ((The applicable

program areas are the Neighborhood Reinforcement Area and the Cost Share Insulation Area.)) Specific construction requirements ((for these two areas)) are:

(((a) Neighborhood Reinforcement Area:

1)) <u>1.</u> Bedrooms ((must)) <u>shall</u> comply with <u>IBC</u> AZ 125 which is designed to achieve a noise reduction of 35 (( $\frac{db}{dB}$ )) <u>dB</u>.

((2)) <u>2</u>. All other living and working areas ((must)) <u>shall</u> comply with <u>IBC</u> AZ 117 which is designed to achieve a noise reduction level of 30 dB.

(((b) Cost-Share Insulations Area:

1) Bedrooms must comply with AZ 117 which is designed to achieve a noise reduction of 30 dB.

2) All other living and working areas must comply with AZ 110 which is designed to achieve a noise reduction level of 25 dB.))

SECTION 52. Ordinance 12560, Section 89, as amended, and K.C.C. 16.04.770 are hereby amended to read as follows:

The International Building Code is supplemented ((by)) with the following appendix:

Floors 30 dB compliance (IBC AZ 123). The floor of the lowest occupied rooms shall be slab on fill, below grade((5)) or over a fully enclosed basement or crawl space. All door and window openings in the fully enclosed basement shall be tightly fitted.

**EXCEPTION:** Floors over fully enclosed garages or over carports shall have a laboratory sound transmission class rating of at least STC-35. The floor over the garage or carport shall be insulated to not less than R-19, but not less than that specified by the Washington state energy code and enclosed with one layer of 5/8" type 'X' GWB on the garage or carport side or any equivalent approved garage or dwelling separation assembly in conformance with ((<del>IRC s)</del>) <u>International Residential Code Section ((<del>R309.2</del>)) <u>R302.6</u>.</u>

SECTION 53. Ordinance 12560, Section 97, as amended, and K.C.C. 16.04.850 are hereby amended to read as follows:

The International Building Code is supplemented ((by)) with the following appendix:

Floors 35 dB compliance (IBC AZ 131). The floor of the lowest occupied rooms shall be slab on fill or below grade or over a fully enclosed basement or crawl space. All door and window openings in the fully enclosed basement shall be tightly fitted.

**EXCEPTION:** Floors over fully enclosed garages or over carports shall have a laboratory sound transmission class rating of at least STC-40. The floor over the garage or carport shall be insulated to not less than R-19, but not less than that specified by the Washington state energy code and enclosed with two layers of 5/8" type 'X' GWB on the garage or carport side or any equivalent approved garage/dwelling separation assembly in conformance with ((IRC s)) International Residential Code Section ((R309.2)) R302.6.

SECTION 54. Ordinance 12380, Section 1, and K.C.C. 16.04.930 are hereby amended to read as follows:

A. The purpose of this section is to establish standards for the location, review and installation of <u>manufactured or</u> mobile homes (and accessory structures) as well as factory-built commercial structures and coaches.

B. These standards shall apply to all <u>manufactured or</u> mobile homes (and accessory structures) or factory-built commercial structures and coaches to be installed after August 4, 1996.

SECTION 55. Ordinance 12380, Section 2, and K.C.C. 16.04.940 are hereby amended to read as follows:

A <u>manufactured or</u> mobile home with an insignia of approval by the Washington ((S))<u>s</u>tate Department of Labor and Industries (((DLI))) (L&I) or the U.S. Department of Housing and Urban Development (HUD) may locate on any legal lot on which a dwelling unit is permitted by <u>K.C.C.</u> Title 21A and within any legally approved mobile home park. ((However, a))<u>A manufactured or</u> mobile home without such insignia shall not be relocated to or within King County ((except as provided in K.C.C. 16.04.950.B)).

SECTION 56. Ordinance 12380, Section 3, as amended, and K.C.C. 16.04.950 are hereby amended to

read as follows:

All manufactured or mobile homes shall comply with the following requirements:

((A. "Insignia" Mobile Homes)) <u>1. Manufactured or</u> ((M))mobile homes approved by ((DLI)) <u>Washington state Department of Labor and Industries (L&I)</u> or <u>the U.S. Department of Housing and Urban</u> <u>Development (HUD)</u> shall have the appropriate insignia indicating such approval affixed to the unit, in accordance with chapter 43.22 RCW.

((B. "Noninsignia" Mobile Homes. Mobile homes without an insignia of approval in accordance with subsection A of this section are subject to the following provisions:

1. Mobile homes currently located within King County may remain in their current location. However, prior to the relocation of such mobile home to another portion of King County, the owner shall provide evidence that the mobile home was located within King County before January 21, 1980. A "noninsignia" mobile home currently located outside of King County may be relocated to King County only when subject to forced relocation in accordance with RCW 59.21.105.

2. Prior to installing a noninsignia mobile home, the mobile home shall be inspected and approved by the department. The inspection shall review consistency with the following livability standards, but shall not be considered a warranty that the mobile home is safe or livable:

a. the unit must have safe, operable heating facilities.

b. the unit must be equipped with a water closet, lavatory, bathtub or shower, and kitchen sink; be provided with hot and cold running water; and all facilities shall be installed and maintained in a safe and sanitary condition.

c. the structure must be weather-protected so as to provide shelter for the occupants against the elements and to exclude dampness.

d. all openable windows and doors must be in operable condition to provide for adequate natural ventilation and emergency exit.

e. at least one operable smoke detector shall be installed within the unit.

f. the unit shall be structurally sound with no apparent unsafe condition in floors, walls, ceilings and roofs.

g. the unit must be well maintained, free of debris and infestation of insects, vermin or rodents.

C.)) 2. All manufactured or mobile homes are subject to the following ((installation)) requirements:

<u>2.</u>1. ((Support systems and stabilizing devices shall be designed and installed in accordance with the provisions of WAC 296-150B-200)) Manufactured or mobile homes shall be installed consistent with chapter 296-150 WAC and in accordance with the manufacturers installation requirements as approved by Washington state Department of Labor and Industries (L&I).

<u>2.2.</u> Electrical connections shall be inspected and approved by the Washington ((S))<u>s</u>tate Department of Labor and Industries (L&I).

2.3. Manufactured or mobile homes supported on piers shall be fully skirted.

2.4. Manufactured or mobile homes located outside of a mobile home park shall be subject to the setback and lot coverage provisions of the zone in which the mobile home is located.

 $((\underline{D}, ))$  <u>3.</u> Accessory Structures.

<u>3.1.</u> Accessory structures shall be subject to the provisions of the International Building Code or the International Residential Code, as applicable, as adopted in King County and a building permit shall be required before construction or installation.

<u>3.2.</u> Separation between accessory structures and other structures shall be ((as set forth)) in <u>accordance with K.C.C. 21A.14.170 or 21A.14.180</u>. However, if the accessory structure is a carport constructed of combustible materials, the carport roof area shall not extend over or otherwise cover any bedroom windows and no other accessory structures other than decks, porches, stairs or ramps shall be permitted under the carport roof area.

SECTION 57. Ordinance 12380, Section 4, as amended, and K.C.C. 16.04.960 are hereby amended to

read as follows:

((A-)) <u>1</u>. Installation of a <u>manufactured or</u> mobile home shall require ((the approval of a mobile home))) <u>a building</u> permit by the department ((<del>pursuant to</del>)) <u>in accordance with</u> the permit process and procedures <u>in</u> <u>K.C.C. chapter 16.02 and</u> for type 1 permits outlined in K.C.C. <u>chapter</u> 20.20. ((The permit shall expire one year after date of issuance. A permit may be renewed for a maximum of one year upon request of the applicant, provided such requests are made within fifteen days of the date of expiration of the original permit. Mobile homes shall not be permanently occupied for more than forty-five days prior to issuance of a certificate of occupancy by the department.

B.)) <u>2</u>. The following ((must)) <u>shall</u> be submitted with a((n)) <u>building permit</u> application for a <u>manufactured or</u> mobile home ((permit, except that when the mobile home is to be located in an approved mobile home park, subsection B.1.d., 1.e., 1.h., 1.i. and 3 shall not apply:

1. Two copies of a site plan drawn to scale, showing:

a. north arrow and scale,

b. location and dimensions of all property lines or leased areas, and easements,

c. proposed location of mobile home and/or accessory structure(s) on the site or space,

d. distances from the mobile home and accessory structure(s) to property lines,

e. approximate surface elevation at each corner of the site,

f. location of parking spaces,

g. name or number of street on which site or space is located,

h. location of septic tank and drainfield, if sewers are not available,

i. location of well or other water source, if public water supply is not available;)):

2.1. A description of the manufactured or mobile home, including:

a. model number,

b. Washington ((S))state ((and/))or ((H.U.D.)) U.S. Department of Housing and Urban Development

(HUD) ID number or both,

c. name of manufacturer and year of manufacture;

((3.)) 2.2. Two copies of plans showing <u>that the</u> proposed foundation system, if more than one-fourth of the floor area of the <u>manufactured or</u> mobile home, as measured from the bottom of the main frame members, will be more than three feet above the existing ground level, or when any supporting piers exceed sixty inches in height;

((4.)) <u>2.3.</u> A ((State Contractors or Mobile Home Dealers Registration Card, or photocopy of same and )) Certified Manufactured Home Installers number.

((C. An accessory structure in excess of 200 square feet of floor area including roof overhang shall require the approval of a building permit by the department pursuant to the permit process and procedures for type 1 permits outlined in K.C.C. chapter 20.20. An application for a building permit for an accessory structure shall include site plans drawn consistent with the provisions of subsection B.1. If an application for a building permit for an accessory structure is submitted together with an application for a mobile home permit and if the accessory structure is less than 600 square feet in area, the fee for the accessory structure shall be waived.))

SECTION 58. Ordinance 12380, Section 5, as amended, and K.C.C. 16.04.970 are hereby amended to read as follows:

 $((A_{\cdot}))$  <u>1</u>. Factory-built commercial structures and coaches shall be located, installed and used in the same manner as conventional commercial structures, except to the extent that construction standards are regulated by the Washington ((S))<u>s</u>tate Department of Labor and Industries or the U.S. Department of Housing and Urban Development.

 $((B_{-}))$  <u>2.</u> Factory-built commercial structures and commercial coaches shall be installed subject to the following:

<u>2.1.</u> A building permit ((<del>must</del>)) <u>shall</u> be obtained for any factory-built commercial structure or commercial coach ((<del>pursuant to</del>)) <u>in accordance with</u> the permit process and procedures for type 1 permits

outlined in K.C.C. chapter 20.20.

2.2. The following criteria must be satisfied for the permanent installation of a factory-built commercial structure or commercial coach before a building permit can be issued:

a. The appropriate insignia of the Washington ((S))<u>s</u>tate Department of Labor and Industries ((of)) <u>or</u> the U.S. Department of Housing and Urban Development ((must)) <u>shall</u> be affixed to the unit. If the unit is lacking the appropriate insignia, it must satisfy the structural, mechanical, electrical and plumbing requirements of the International Building, Mechanical and other applicable codes as adopted in King County for conventional commercial structures.

b. The foundation, entry/exit stairs or ramps, and all accessory structures shall be designed and installed in accordance with the provisions of the International Building Code as adopted in King County.

c. Occupancy of the structure shall not be permitted before inspection and approval.

2.3. The temporary installation of factory-built commercial structures and commercial coaches may be permitted for a period not to exceed one year. The support system recommended by the manufacturer, or designed by a professional structural engineer registered by the state, may be substituted for a foundation designed in accordance with the provisions of the International Building Code as adopted in King County, subject to the approval of the department.

<u>2.4</u>. Factory-built construction office trailers may be placed without an additional permit as long as the site is covered by a valid building permit.

SECTION 59. Ordinance 7853, Section 1, as amended, and K.C.C. 16.04.980 are hereby amended to read as follows:

((A.)) <u>1. Authority.</u> The director is authorized <u>and directed</u> to enforce the provisions of this chapter and any rules and regulations promulgated thereunder, ((<del>pursuant to</del>)) <u>in accordance with</u> the enforcement and penalty provisions of K.C.C. Title 23.

EXCEPTION: The director of ((the department of)) public health - Seattle & King County is

authorized to enforce ((International Building Code Section 2902.1 and Table 29-A chapter 51-50 WAC and)) the fuel gas piping requirements in the International Fuel Gas Code, <u>WAC 51-52-0101</u> and Chapter 24 of the International Residential Code.

 $((B_{-}))$  <u>2</u>. General. All construction or work for which a permit is required shall be subject to inspection by the director.

((C. Authority. The director is authorized and directed to enforce this chapter))

3. Administration. The director is authorized to promulgate, adopt, <u>maintain</u> and issue ((those)) rules and regulations necessary to the effective and efficient administration of this chapter((<del>, such rules and regulations to be adopted and maintained</del>)) in accordance with the provisions for the rules of county agencies((<del>, )</del>)) <u>in</u> K.C.C. chapter 2.98.

 $((D_{-}))$  <u>4</u>. Plan Reviews and Inspections. All buildings constructed under ((the provisions of)) this chapter are subject to a final inspection for compliance with this chapter. The director has the authority to establish rules and procedures for accepting at the director's option an affidavit of substantial compliance with this chapter in lieu of plan reviews ((and/)) or inspections.

SECTION 60. Ordinance 14914, Section 272, as amended, and K.C.C. 16.05.040 are hereby amended to read as follows:

Table R301.2(1) of the International Residential Code is not adopted and the following is substituted:

# Table R301.2(1)

# CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA FOR KING COUNTY

			Subject to damage f								
Ground snow load	Wind speed (mph)	Seismic design category		Frost l depth		Decay		Ice-shield required	hazards	8	Mean annual temp.
Varies <sub>1</sub>	(( <del>85</del> )) <u>110</u>	D1 or D2 <sub>2</sub>		12" < 1,000f elev. <sub>3</sub>	Mod.	0	25	No	Varies <sub>4</sub>	100 to 250	50

Footnotes:

1. Snow loads shall be determined in accordance with King County public rules. The minimum roof

design snow load shall be 25 pounds per square feet.

2. Seismic design category shall be D1 for areas of unincorporated King County to the east of the Snoqualmie River as it traverses from the King County-Snohomish County line to the city limits of Snoqualmie, east of the ((town)) city of Snoqualmie, east of the Snoqualmie Parkway and the Echo Lake-Snoqualmie Cut-off SE as they run from the city limits of the ((town)) city of Snoqualmie to State ((Highway)) Route 18 and to the south or east of State ((Highway)) Route 18. All other portions of unincorporated King County shall be seismic design category D2.

3. The frost line depth shall be considered to be 12 inches for sites up to an elevation of 1000 feet above sea level, 18 inches for sites ((greater)) more than 1000 feet and up to an elevation of 2000 feet above sea level or 24 inches for sites ((greater)) more than 2000 feet above sea level. Frost depth may be otherwise determined by specific site analysis, but shall not be less than 12 inches.

Flood hazard within King County varies. See the flood hazard code provisions of K.C.C. chapter
 21A.24.

SECTION 61. Ordinance 15802, Section 78, and K.C.C. 16.05.065 are hereby amended to read as follows:

Section ((R310.5)) <u>R310.2.4</u> of the International Residential Code is not adopted and the following is substituted:

Emergency escape windows under decks and porches (IRC ((R310.5)) <u>R310.2.4</u>) Emergency escape windows are allowed to be installed under decks, porches, roof overhangs, awnings(( $_{7}$ )) or similar projections ((provided)) <u>if</u> the location allows the emergency escape window to be fully opened and provides a path not less than 36 inches (914mm) in height and not less than 36 inches (914 mm) in width with a maximum unobstructed travel length directly to a yard or court based on 3:1, length to height ratio or as approved by the building official. This distance shall be measured from the edge of the window or if served by a window well from the edge of that window well. **EXCEPTION:** When the vertical height is 6'8" (2,032 mm) or ((greater)) more, the travel distance or length is unlimited.

SECTION 62. Ordinance 14914, Section 275, as amended, and K.C.C. 16.05.070 are hereby amended to read as follows:

Section ((R324)) <u>R322</u> of the International Residential Code is not adopted and the following is substituted:

**Building planning - Flood-resistant construction (IRC ((R324))** <u>R322</u>). Flood-resistant construction ((will)) shall comply with the flood hazard standards in K.C.C. chapter 21A.24.

SECTION 63. Ordinance 14914, Section 276, as amended, and K.C.C. 16.05.080 are hereby amended to read as follows:

Chapter 3 of the International Residential Code is supplemented with the following:

Automatic fire sprinkler((s)) systems (IRC ((R325)) R313). Automatic fire sprinklers shall be

provided as required by International Fire Code Section 903.2((.10.4 of the International Fire Code)).

SECTION 64. Ordinance 12560, Section 74, as amended, and K.C.C. 16.05.130 are hereby amended to read as follows:

Appendix K of the International Residential Code is supplemented with the following:

# Appendix K - Sound transmission - Sea-Tac noise program area (IRC ((AK101.1)) AK101.2). All

buildings or structures constructed or placed in use for human occupancy on sites ((with))in the vicinity of Seattle-Tacoma International Airport that have been included within ((or enclosed by)) the Port of Seattle's Noise Remedy ((Program boundaries)) <u>Boundary</u> shall comply with the provisions in the International Building Code Appendix Z.

SECTION 65. Sections 66 through 120 of this ordinance should constitute a new chapter in K.C.C. Title 16.

<u>NEW SECTION. SECTION 66.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

**Scope (IECC C101.2).** The International Energy Conservation Code (IECC) applies to commercial buildings and their buildings sites and associated systems and equipment unless the code states otherwise. References in this code to Group R shall include Group I-1, Condition 2 assisted living facilities licensed by Washington state under chapter 388-78A WAC and Group I-1, Condition 2 residential treatment facilities licensed by Washington state under chapter 246-337 WAC. Building areas that contain Group R sleeping units, regardless of the number of stories in height, are required to comply with the commercial sections of the energy code.

**EXCEPTION:** The provisions of this code do not apply to temporary growing structures used solely for the commercial production of horticultural plants such as ornamental plants, flowers, vegetables and fruits. A temporary growing structure is not considered a building for the purposes of this code. However, the installation of other than listed, portable mechanical equipment or listed, portable lighting fixtures is not allowed.

<u>NEW SECTION. SECTION 67.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Intent (IECC C101.3). This code shall regulate the design and construction of buildings for the use and conservation of energy and the reduction of carbon emissions over the life of each building. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve this objective. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.

<u>NEW SECTION. SECTION 68.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

International Energy Conservation Code definitions not adopted. The following definitions in

Section 202 of the International Energy Conservation Code are not adopted:

A. Conditioned space;

B. Continuous insulation; and

C. Mass transfer deck slab edge.

<u>NEW SECTION. SECTION 69.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

The following definitions apply to this chapter and supplement the definitions contained in the International codes as adopted, amended and supplemented by this title. Where definitions in this section differ from the definitions in the International codes as amended and supplemented by K.C.C. chapter 16.03, the following definitions shall control:

A. AAMA: the American Architectural Manufacturers Association.

B. Affordable housing: buildings that:

1. Are owned by a public housing authority for the purpose of providing affordable housing;

2. Are owned by a government agency or nonprofit organization and operated as a shelter, including temporary and emergency shelter facilities providing day and warming centers that do not provide overnight accommodation, for people receiving support services from county-recognized government assistance programs for homelessness; or

3. Are subject to a regulatory agreement, covenant or other legal instrument recorded on the property title for a minimum of 40 years that:

a. Restricts at least 51 percent of the units to be occupied by and affordable to households earning no more than 60 percent of area median income; or

b. Restricts initial and subsequent sales of at least 51 percent of the residential units to households with incomes no more than 80 percent of area median income.

C. ASHRAE: the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

D. ASTM: the American Society for Testing and Materials.

E. Automatic control device: a device capable of automatically turning electrical loads off and on without manual intervention.

F. Btu: British thermal units.

G. Conditioned space: an area, room or space enclosed within the building thermal envelope and that is directly or indirectly heated or cooled. Spaces are indirectly heated or cooled where they communicate through openings with conditioned spaces, where they are separated from conditioned spaces by uninsulated walls, floors or ceilings, or where they contain uninsulated ducts, piping or other sources of heating or cooling. Elevator shafts, stair enclosures, enclosed corridors connecting conditioned spaces and enclosed spaces through which conditioned air is transferred at a rate exceeding three air changes per hour are considered conditioned spaces for the purposes of the building thermal envelope requirements.

H. Continuous insulation: insulating material that is continuous across all structural members without metal thermal bridges other than fasteners that have a total cross-sectional area not more than 0.04 percent (0.12 percent where all metal thermal bridges are stainless steel) of the envelope surface through which they penetrate, and service openings. It is installed on the interior or exterior or is integral to any opaque surface of the building envelope.

- I. Controlled receptacle: an electrical receptacle that is controlled by an automatic control device.
- J. CSA: the CSA group.
- K. DOAS: dedicated outdoor air system.
- L. Fossil fuel: a substance used to generate energy as defined in K.C.C. 21A.06.532C.
- M. HPWH: heat pump water heater.
- N. HVAC: heating, ventilation and air conditioning.
- O. LLLC: luminaire-level lighting controls.
- P. Mass transfer deck slab: a concrete slab designed to transfer structural load from the building

perimeter wall or column line above, laterally to an offset wall or column line below, and which has conditioned or semi-heated space on the inside of the upper wall and exterior or unconditioned space on the outside of the upper wall, such as the transition from an above-grade structure to a below-grade structure or the transition from a tower to a podium. The area of the slab edge shall be defined as the thickness of the slab multiplied by the length of the edge condition. A cantilevered concrete balcony does not constitute a mass transfer deck slab.

Q. Multi-pass: a heat pump water heater control strategy requiring multiple passes of water through the heat pump to reach the final target storage water temperature.

R. NAECA: the National Appliance Energy Conservation Act of 1987.

S. NFRC: the National Fenestration Rating Council.

T. Single-pass: a heat pump water heater control strategy using variable flow or variable capacity to deliver water from the heat pump at the final target storage water temperature in a single pass through the heat exchanger with variable incoming water temperatures.

U. Solar zone: a clear area or areas reserved solely for current or future installation of photovoltaic or solar hot water systems.

V. Temperature maintenance: the system used to maintain the temperature of the building domestic hot water delivery system, typically by circulation and reheating or by a heat trace system.

W. TSPR: total system performance ratio.

X. VAV: variable air volume.

<u>NEW SECTION. SECTION 70.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C402.1.3 of the International Energy Conservation Code is supplemented with the following:

# Insulation Component R-value method - applications for Table C402.1.3 (IECC C402.1.3.1).

Where the total area of through-wall mechanical equipment is more than 1 percent of the opaque above-grade

wall area in IECC Table C402.1.3, use of the R-value method is not allowed. See IECC C402.1.4.2.

NEW SECTION. SECTION 71. There is hereby added to the chapter established in section 65 of this

ordinance a new section to read as follows:

Table C402.1.4 of the International Energy Conservation Code is not adopted and the following is substituted:

# **TABLE C402.1.4**

# **OPAQUE THERMAL ENVELOPE ASSEMBLY MAXIMUM REQUIREMENTS, U-FACTOR**

	CLIMATE ZONE 5	CLIMATE ZONE 5 AND MARINE 4		
	All Other	Group R		
Roofs				
Insulation entirely above deck	U-0.027	U-0.027		
Metal buildings	U-0.027	U-0.027		
Attic and other	U-0.021	U-0.021		
Joist or single rafter	U-0.027	U-0.027		
Walls, Above Grade		1		
Mass <sup>g,b</sup>	U-0.057	U-0.057		
Mass transfer deck slab edge <sup>d</sup>	U-0.20	U-0.20		
Slab penetrating thermal envelope wall <sup>h</sup>	U-0.10	U-0.10		
Metal building <sup>b</sup>	U-0.052	U-0.052		
Steel framed <sup>b</sup>	U-0.055	U-0.055		
Wood framed and other <sup>b</sup>	U-0.051	U-0.051		
Walls, Below Grade		1		
Below-grade wall <sup>g</sup>	U-0.070	U-0.070		
Floors		1		
Mass <sup>e</sup>	U-0.031	U-0.031		
Joist/framing	U-0.029 steel joist U- 0.025 wood joist	U-0.029 steel joist U- 0.025 wood joist		
Concrete column or wall penetrating thermal envelope floor <sup>i</sup>	U-0.55	U-0.55		
Concrete slab floor directly above an electrical utility vault	N.R.	N.R.		
Slab-on-Grade Floors		-		
Unheated slabs	F-0.54	F-0.54		
Heated slabs <sup>c</sup>	F-0.55	F-0.55		

# METHOD<sup>a, f</sup>

Opaque Doors				
Swinging door	U-0.37	U-0.37		
Nonswinging door	U-0.34	U-0.34		
Garage door <14% glazing	U-0.31	U-0.31		

Footnotes:

a. Use of opaque assembly U-factors, C-factors, and F-factors from IECC Appendix A is required unless otherwise allowed by IECC C402.1.4.

b. Through-wall mechanical equipment subject to IECC C402.1.4.2 shall be calculated at the U-factor defined in IECC C402.1.4.2. The area-weighted U-value of the wall, including through-wall mechanical equipment, shall not exceed the value in the table.

c. Heated slab F-factors shall be determined specifically for heated slabs. Unheated slab factors shall not be used.

d. A mass transfer deck, due to its configuration, is not insulated. The table value (U-0.20) shall be used as the baseline value for component performance or total building performance path calculations. For the proposed value, the appropriate value from the top line of IECC Table A104.3.7.2 shall be used.

e. "Mass floors" shall include floors weighing not less than:

(1) 1.35 pounds per square foot of floor surface area; or

(2) 2.25 pounds per square foot of floor surface area where the material weight is not more than 120 pounds per cubic foot.

f. Opaque assembly U-factors based on designs tested in accordance with ASTM C1363 is allowed. The R-value of continuous insulation is allowed to be added or subtracted from the original test design.

g. Peripheral edges of intermediate concrete floors are included in the above grade mass wall category and therefore must be insulated as above grade mass walls unless they meet the definition of a mass transfer deck slab edge. The area of the peripheral edges of concrete floors shall be defined as the thickness of the slab multiplied by the perimeter length of the edge condition. See IECC Table A103.3.7.2 for typical default U-

factors for above grade slab edges and footnote c for typical conditions of above grade slab edges.

h. Intermediate concrete floor slabs penetrating the building thermal envelope shall comply with IECC C402.2.9. The area of such penetrating concrete floor slabs shall be defined as the thickness of the slab multiplied by the length of the penetration. The "exposed concrete" row in IECC Table A103.3.7.2 shall be used for typical default U-factors for the penetrating concrete slab.

i. Value applies to concrete columns and concrete walls that interrupt mass floor insulation, but not to perimeter walls or columns separating interior conditioned space from exterior space.

<u>NEW SECTION. SECTION 72</u>. There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C402.1.4 of the International Energy Conservation Code is supplemented with the following:

Thermal resistance of mechanical equipment penetrations (IECC C402.1.4.2). When the total area of penetrations from through-wall mechanical equipment or equipment listed in IECC Table C403.3.2(3) exceeds 1 percent of the opaque above-grade wall area, the mechanical equipment penetration area shall be calculated as a separate wall assembly with a default U-factor of 0.5. Mechanical system ducts and louvers, included those for supply, exhaust and relief, and for condenser air intake and outlet, are not considered to be mechanical equipment for the purposes of this section.

**EXCEPTION:** Where mechanical equipment has been tested in accordance with approved testing standards, the mechanical equipment penetration area may be calculated as a separate wall assembly using the U-factor determined by such test.

<u>NEW SECTION. SECTION 73.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C402.2 of the International Energy Conservation Code is supplemented with the following:

**Above-grade exterior concrete slabs (IECC C402.2.9).** Above-grade concrete slabs that penetrate the building thermal envelope, including but not limited to decks and balconies, shall each include a minimum R-

10 thermal break, aligned with the primary insulating layer in the adjoining wall assemblies. Stainless steel reinforcing bars may penetrate the thermal break; carbon steel reinforcing bars shall not penetrate the thermal break. If the total building performance path or the component performance alternative in IECC C402.1.5 is used and the thermal break required by this section is not provided where concrete slabs penetrate the building thermal envelope, the sectional area of the penetration shall be assigned the default U-factors from the "exposed concrete" row of IECC Table A103.3.7.2.

**EXCEPTION**: Mass transfer deck slab edges.

<u>NEW SECTION. SECTION 74.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C402.2 of the International Energy Conservation Code is supplemented with the following:

**Vertical fenestration intersection with opaque walls (IECC C402.2.10).** Vertical fenestration shall comply with the following as applicable:

1. Where wall assemblies include continuous insulation, the exterior glazing layer of vertical fenestration and any required thermal break in the frame shall each be aligned within 2 inches laterally of either face of the continuous insulation layer.

2. Where wall assemblies do not include continuous insulation, the exterior glazing layer of vertical fenestration and any required thermal break in the frame shall each be aligned within the thickness of the wall insulation layer and not more than 2 inches laterally from the exterior face of the outermost insulation layer.

3. Where the exterior face of the vertical fenestration frame does not extend to the exterior face of the opaque wall rough opening, the exposed exterior portion of the rough opening shall be covered with either a material having an R-value not less than R-3, or with minimum 1.5-inch thickness wood.

<u>NEW SECTION. SECTION 75.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C402.4 of the International Energy Conservation Code is not adopted and the following is

substituted:

Fenestration - prescriptive (IECC C402.4). Fenestration shall comply with IECC C402.4 through

C402.4.4 and IECC Table C402.4. Daylight responsive controls shall comply with this section and IECC

C405.2.4.

EXCEPTION: For prescriptive envelope compliance, single-pane glazing is allowed for security

purposes and for revolving doors, not to exceed one percent of the gross exterior wall area. Where IECC

C402.1.5, component performance alternative, is used, the single glazing shall be included in the percentage of

the total glazing area, U-factor and SHGC requirements.

### **Table C402.4**

### **Building Envelope Fenestration Maximum U-factor and SHGC Requirements**

CLIMATE ZONES	s 5 AND MAI	RINE 4		
	8.2/A440, vei	rated in accordance with tical curtain walls and site		
Fixed <sup>b</sup> U-factor	U-0.34			
Operable <sup>c</sup> U-factor	U-0.36			
Entrance doors <sup>d</sup>				
U-factor	U-0.60			
U-factor for all oth	er vertical fe	nestration		
Fixed U-factor	U-0.26			
Operable <sup>c</sup> U-factor	U-0.28			
SHGC for all verti	cal fenestrati	on		
<b>Orientation</b> <sup>e,f</sup>	SEW	Ν		
PF < 0.2	0.38	0.51		
$0.2 \le \mathrm{PF} < 0.5$	0.46	0.56		
$PF \ge 0.5$	0.61 0.61			
Skylights	1	I		
U-factor	U-0.45			
SHGC	0.32			

Footnotes:

a. U-factor and SHGC shall be rated in accordance with NFRC 100. This category includes curtain

wall, storefront, ribbon wall, window wall and similar site-assembled systems. This category does not include punched-opening manufactured windows except for "Class AW" windows as designated by AAMA.

b. "Fixed" includes curtain wall, storefront, picture windows and other fixed windows.

c. "Operable" includes openable fenestration products other than "entrance doors."

d. "Entrance door" includes glazed swinging entrance doors and automatic glazed sliding entrance

doors. Other doors which are not entrance doors, including manually operated sliding glass doors, are considered "operable."

e. "N" indicates vertical fenestration oriented within 30 degrees of true north. "SEW" indicates orientations other than "N."

f. Fenestration that is entirely within the conditioned space or is between conditioned and other enclosed space is exempt from solar heat gain coefficient requirements and not included in the SHGC calculation.

<u>NEW SECTION. SECTION 76.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C402.4.1.1.2 of the International Energy Conservation Code is not adopted and the following is substituted:

High-performance fenestration (IECC C402.4.1.1.2). The following requirements shall be met:

1. All vertical fenestration in the building shall comply with the following maximum U-factors:

1.1. U-factor for Class AW windows rated in accordance with AAMA/CSA101/I.S.2/A440, vertical curtain walls and site-built fenestration products (fixed) = 0.30.

1.2. U-factor for Class AW windows rated in accordance with AAMA/CSA101/I.S.2/A440, vertical curtain walls and site-built fenestration products (operable) = 0.36.

1.3. Entrance doors = 0.60.

1.4. U-factor for all other vertical fenestration, fixed = 0.22.

1.5. U-factor for all other vertical fenestration, operable = 0.24.

2. The SHGC of the vertical fenestration shall be no more than 0.90 times the maximum SHGC values listed in IECC Table C402.4.

An area-weighted average may satisfy the U-factor requirement for each fenestration product category listed in subsection 1 of this section. Individual fenestration products from different fenestration product categories shall not be combined in calculating the area-weighted average U-factor.

<u>NEW SECTION. SECTION 77.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C402.4.2.1 of the International Energy Conservation Code is not adopted and the following is substituted:

**Lighting controls in daylight zones under skylights calculations and lighting controls in daylight zones under skylights (IECC C402.4.2.1).** Where IECC 405.2.3.1 is cited in IECC 402.4.2, IECC 405.2.4 shall be used instead. Daylight responsive controls complying with IECC C405.2.4 shall be provided to control all electric lights within toplit zones.

<u>NEW SECTION. SECTION 78.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C403.1.1 of the International Energy Conservation Code is supplemented with the following:

**HVAC TSPR - medical office and residential applications (C403.1.1.1).** Systems serving medical offices, and the dwelling units and residential common areas within R-2 multifamily, shall comply with 403.1.1.

**EXCEPTION.** Buildings or areas of medical office buildings that comply fully with ASHRAE Standard 170, including but not limited to surgical centers, or that are required by other applicable codes or standards to provide 24/7 air handling units that operate 24 hours per day, 7 days per week.

<u>NEW SECTION. SECTION 79.</u> There is hereby added to the chapter established in section 65 of this

ordinance a new section to read as follows:

Section C403.1. of the International Energy Conservation Code is supplemented with the following:

Use of electric resistance and fossil fuel-fired HVAC heating equipment (IECC C403.1.4). HVAC heating energy shall not be provided by electric resistance or fossil fuel combustion appliances. For the purposes of this section, electric resistance HVAC heating appliances include but are not limited to electric baseboard, electric resistance fan coil and VAV electric resistance terminal reheat units and electric resistance boilers. For the purposes of this section, fossil fuel combustion HVAC heating appliances include but are not limited to appliances burning natural gas, heating oil, propane or other fossil fuels.

## **EXCEPTIONS.**

1. Pasteurization. Electric resistance heat controls are allowed to reset the supply water temperature of hydronic heating systems that serve service water heating heat exchangers during pasteurization cycles of the service hot water storage volume. The hydronic heating system supply water temperature shall be configured to be 145° F or lower during the pasteurization cycle.

2. Low heating capacity. Buildings or areas of buildings, other than dwelling units or sleeping units, that meet the interior temperature requirements of International Building Code Chapter 12 with a total installed HVAC heating capacity no more than 8.5 Btu/h (2.5 Watts) per square foot of conditioned space may be heated using electric resistance appliances. For the purposes of this exception, overhead or wall-mounted radiant heating panels installed in an unheated or semi-heated space, insulated in compliance with IECC C402.2.8 and controlled by occupant sensing devices in compliance with IECC C403.11.1 shall not be part of the HVAC heating energy calculation.

3. Dwelling or sleeping units. Dwelling or sleeping units having an installed HVAC heating capacity no more than 750 Watts in any separate habitable room with exterior fenestration may be heated using electric resistance appliances.

3.1 Corner rooms. A room within a dwelling or sleeping unit that has two primary walls facing

different cardinal directions, each with exterior fenestration, is permitted to have an installed HVAC heating capacity no more than 1000 watts. Bay windows and other minor offsets are not considered primary walls.

4. Small buildings. Buildings with less than 2,500 square feet of conditioned floor area may be heated using electric resistance appliances.

5. Defrost. Heat pumps may use electric resistance as the first stage of heating when a defrost cycle is required and is in operation.

6. Air-to-air heat pumps. Buildings may use electric resistance auxiliary heating to supplement heat pump heating for air-to-air heat pumps with that meet the following conditions:

6.1. Internal electric resistance heaters have controls that prevent supplemental heater operation when the heating load can be met by the heat pump alone during both steady-state operation and setback recovery.

6.2. The heat pump controls are configured to use the compressor to provide heating down to an outdoor air temperature of 17° F or lower;

6.3. The heat pump complies with the following:

a. Controlled by IECC C403.1.1.a digital or electronic thermostat designed for heat pump use that energizes the supplemental heat only when the heat pump has insufficient capacity to maintain set point or to warm up the space at a sufficient rate;

b. Controlled by a multistage space thermostat and an outdoor air thermostat wired to energize supplemental heat only on the last stage of the space thermostat and when outdoor air temperature is less than 32° F; or

c. The minimum efficiency of the heat pump is regulated by NAECA, its rating meets the requirements shown in IECC Table C403.3.2(2), and its rating includes all usage of internal electric resistance heating.

6.4 The heat pump rated heating capacity is sized to meet the heating load at an outdoor air temperature of 32° F or lower and has a rated heating capacity at 47° F no less than 2 times more than

supplemental electric resistance heating capacity, or uses the smallest available factory-available internal electric resistance heater.

7. Air-to-water heat pumps, up to 2,000 MBH. Buildings may use electric resistance auxiliary heating to supplement heat pump heating for hydronic heating systems that have air-to-water heat pump heating capacity no more than 2000 kBtu/hr at 47° F, and that meet the following conditions:

7.1. Controls for the auxiliary electric resistance heating are configured to lock out the supplemental heat when the outside air temperature is above 32° F, unless the hot water supply temperature setpoint to the building heat coils cannot be maintained for 20 minutes;

7.2. The heat pump controls are configured to use the compressor as the first stage of heating down to an outdoor temperature of 17° F or lower except during startup or defrost operation; and

7.3. The heat pump rated heating capacity at 47° F is no less than 2 times more than supplemental electric resistance heating capacity.

8. Air-to-water heat pumps, up to 3,000 MBH. Buildings may use electric resistance auxiliary heating to supplement heat pump heating for hydronic heating systems that have air-to-water heat pump heating capacity more than 2000 kBtu/hr and no more than 3000 kBtu/hr at 47° F, and that meet the following conditions:

8.1. Controls for the auxiliary electric resistance heating are configured to lock out the supplemental heat when the outside air temperature is above 36° F, unless the hot water supply temperature setpoint to the building heat coils cannot be maintained for 20 minutes;

8.2. The heat pump controls are configured to use the compressor as the first stage of heating down to an outdoor temperature of 17° F or lower except during startup or defrost operation; and

8.3. The heat pump rated heating capacity at 47° F is no less than 1.75 times more than supplemental electric resistance heating capacity.

9. Air-to-water heat pumps, over 3,000 MBH. Buildings may use electric resistance auxiliary heating

to supplement heat pump heating for hydronic heating systems that have air-to-water heat pump heating capacity more than 3000 kBtu/hr at 47° F, and that meet the following conditions:

9.1. Controls for the auxiliary electric resistance heating are configured to lock out the supplemental heat when the outside air temperature is above 40° F, unless the hot water supply temperature setpoint to the building heat coils cannot be maintained for 20 minutes;

9.2. The heat pump controls are configured to use the compressor as the first stage of heating down to an outdoor temperature of 17° F or lower except during startup or defrost operation; and

9.3. The heat pump rated heating capacity at 47° F is no less than 2 times more than supplemental electric resistance heating capacity.

10. Ground source heat pumps. Buildings may use electric resistance auxiliary heating to supplement heat pump heating for hydronic heating systems with ground source heat pump equipment that meets the following conditions:

10.1. Controls for the auxiliary resistance heating are configured to lock out the supplemental heat when the outdoor air temperature is above 32° F, unless the hot water supply temperature setpoint to the building heat coils cannot be maintained for 20 minutes;

10.2. The heat pump controls are configured to use the compressor as the first stage of heating down to an outdoor temperature of 17° F or lower; and

10.3. The heat pump rated heating capacity at 32° F entering water conditions is no less than 2 times more than supplemental electric resistance heating capacity.

11. Small systems. Buildings in which electric resistance or fossil fuel appliances, including decorative appliances, in total either provide less than 5 percent of the total building HVAC system heating capacity or serve less than 5 percent of the conditioned floor area.

12. Specific conditions. Portions of buildings that require fossil fuel or electric resistance space heating for specific conditions approved by the code official for research, health care, process or other specific needs

that cannot practicably be served by heat pump or other space heating systems. This does not constitute a blanket exception for any occupancy type.

13. Kitchen exhaust. Make-up air for commercial kitchen exhaust systems required to be tempered by International Mechanical Code Section 508.1.1 may be heated using electric resistance appliances.

14. District energy. Steam or hot water district energy systems that use fossil fuels as their primary source of heat energy, that serve multiple buildings, and that were already in existence before the effective date of this ordinance, including more energy-efficient upgrades to such existing systems, may serve as the primary heating energy source.

15. Heat tape. Heat tape is allowed where it protects water-filled equipment and piping located outside of the building thermal envelope if it is configured and controlled to be automatically turned off when the outside air temperature is above 40° F.

16. Temporary systems. Temporary electric resistance heating systems are allowed where serving future tenant spaces that are unfinished and unoccupied if the heating equipment is sized and controlled to achieve interior space temperatures no higher than 40° F.

17. Emergency generators. Emergency generators are permitted to use fossil fuels.

<u>NEW SECTION. SECTION 80.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C403.3.5.1 of the International Energy Conservation Code is not adopted and the following is substituted:

**Energy recovery ventilation with DOAS (IECC C403.3.5.1).** The DOAS shall include energy recovery ventilation. The energy recovery system shall have a 60 percent enthalpy recovery effectiveness in accordance with IECC C403.7.6. For DOAS having a total fan system motor nameplate hp less than 5 hp, total combined fan power shall not exceed 1 W/cfm of outdoor air. For DOAS having a total fan system motor hp more than or equal to 5 hp, refer to fan power limitations of IECC C403.8.1. This fan power restriction applies

to each dedicated outdoor air unit in the permitted project, but does not include the fan power associated with the zonal heating or cooling equipment or both. The airflow rate thresholds for energy recovery requirements in IECC Tables C403.7.6.1(1) and C403.7.6.1(2) do not apply.

# **EXCEPTIONS:**

1. Occupied spaces with the following characteristics:

1.1. complying with IECC C403.7.6;

1.2. served by equipment less than 5000 cfm;

1.3. with an average occupant load 15 people or more per 1000 square feet (93 m2) of floor area (as established in International Mechanical Code Table 403.3.1.1);

1.4. that include demand control ventilation configured to reduce outdoor air by at least 50 percent below design minimum ventilation rates when the actual occupancy of the space served by the system is less than the design occupancy; and

1.5. smaller than 650 square feet.

2. Systems installed for the sole purpose of providing makeup air for systems exhausting toxic,

flammable, paint or corrosive fumes or dust, dryer exhaust or commercial kitchen hoods used for collecting and removing grease vapors and smoke.

3. The energy recovery systems for R-1 and R-2 occupancies are permitted to provide 60 percent minimum sensible heat recovery effectiveness in lieu of 60 percent enthalpy recovery effectiveness. The return/exhaust air stream temperature for heat recovery device selection shall be 70° F or as determined by an approved calculation procedure.

<u>NEW SECTION. SECTION 81.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C403.4.1.1 of the International Energy Conservation Code is not adopted and the following is substituted:

**Heat pump supplementary heat (IECC C403.4.1.1).** Heat pumps equipped with internal electric resistance heaters shall have controls that prevent supplemental heater operation when the heating load can be met by the heat pump alone during both steady-state operation and setback recovery. Supplemental heater operation is permitted during outdoor coil defrost cycles. Heat pumps equipped with supplementary heaters shall comply with all conditions of IECC C403.1.4.

**EXCEPTION.** Heat pumps whose minimum efficiency is regulated by NAECA and whose ratings meet the requirements shown in IECC Table C403.3.2(2) and include all usage of internal electric resistance heating.

<u>NEW SECTION. SECTION 82.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C403.7.1 of the International Energy Conservation Code is not adopted and the following is substituted:

**Demand control ventilation (IECC C403.7.1)**. Demand control ventilation (DCV) shall be provided for spaces larger than 500 square feet (46.5 m ) and with an average occupant load of 15 people or more per 1,000 square feet (93 m ) of floor area, as established in International Mechanical Code Table 403.3.1.1, and served by systems with one or more of the following:

- 1. An air-side economizer;
- 2. Automatic modulating control of the outdoor air damper; or
- 3. A design outdoor airflow more than 3,000 cfm (1416 L/s).

# **EXCEPTIONS:**

1. Systems with energy recovery complying with IECC C403.7.4.

2. Multiple-zone systems without direct digital control of individual zones communicating with a central control panel.

3. Multiple-zone systems with a design outdoor airflow less than 750 cfm (354 L/s).

4. Spaces, including but not limited to dining areas, where more than 75 percent of the space design outdoor airflow is transfer air required for makeup air supplying an adjacent commercial kitchen.

5. Ventilation provided only for process loads.

6. Spaces with one of the following occupancy categories, as defined by the International Mechanical Code: Correctional cells, daycare sickrooms, science labs, barbers, beauty and nail salons and bowling alley seating.

7. Dormitory sleeping units.

<u>NEW SECTION. SECTION 83.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C403.7.6 of the International Energy Conservation Code is not adopted and the following is substituted:

Energy recovery ventilation systems (IECC C403.7.6). Any system with minimum outside air requirements at design conditions more than 5,000 cfm or any system where the system's supply airflow rate exceeds the value listed in IECC Tables C403.7.6(1) and C403.7.6(2), based on the climate zone and percentage of outdoor airflow rate at design conditions, shall include an energy recovery system. IECC Table C403.7.6(1) shall be used for all ventilation systems that operate less than 8,000 hours per year, and IECC Table C403.7.6 (2) shall be used for all ventilation systems that operate 8,000 hours or more per year. The energy recovery system shall have the capability to provide a change in the enthalpy of the outdoor air supply of not less than 60 percent of the difference between the outdoor air and return air enthalpies, at design conditions. Where an air economizer is required, the energy recovery system shall include a bypass of the energy recovery media for both the outdoor air and exhaust air or return air dampers and controls which permit operation of the air economizer as required by IECC C403.5. Where a single room or space is supplied by multiple units, the aggregate ventilation (cfm) of those units shall be used in applying this requirement. The return/exhaust air stream temperature for heat recovery device selection shall be 70° F (21° C) at 30 percent relative humidity, or

as calculated by the registered design professional.

## **EXCEPTIONS:**

1. The energy recovery systems for occupancy type I-2 hospitals, medical office buildings and buildings that primarily consist of technical laboratory spaces may provide a change of enthalpy of the outdoor air and return air of not less than 50 percent of the difference between the outdoor air and return air enthalpies, at design conditions. These occupancies may also use exception 3.

2. The energy recovery systems for R-1 and R-2 occupancies shall have a 60 percent minimum sensible heat recovery effectiveness, in lieu of 60 percent enthalpy recovery effectiveness. The return/exhaust air stream temperature for heat recovery device selection shall be 70° F (21° C), or as calculated by the registered design professional.

3. An energy recovery ventilation system shall not be required under the following conditions:

3.1. Where energy recovery systems are restricted by International Mechanical Code Section 514 to sensible energy, recovery shall comply with the following:

a. Kitchen exhaust systems where they comply with IECC C403.7.7.1;

b. Laboratory fume hood systems where they comply with Exception 2 of IECC C403.7.6; or

c. Other sensible energy recovery systems with the capability to provide a change in dry bulb temperature of the outdoor air supply of not less than 50 percent of the difference between the outdoor air and the return air dry bulb temperatures, at design conditions.

2. Laboratory fume hood systems that include at least one of the following features and also comply with IECC C403.7.7.2:

2.1. Variable-air-volume hood exhaust and room supply systems capable of reducing exhaust and makeup air volume to 50 percent or less of design values; or

2.2. Direct makeup (auxiliary) air supply equal to at least 75 percent of the exhaust rate, heated no warmer than  $2^{\circ}$  F (1.1° C) above room set point, cooled to no cooler than  $3^{\circ}$  F (1.7° C) below room set point,

no humidification added, and no simultaneous heating and cooling used for dehumidification control.

3. Systems serving spaces that are heated to less than  $60^{\circ}$  F (15.5° C) and are not cooled.

4. Where more than 60 percent of the outdoor air heating energy is provided from site-recovered energy.

5. Systems exhausting toxic, flammable, paint or corrosive fumes or dust.

6. Cooling energy recovery in Climate Zones 3C, 4C, 5B, 5C, 6B, 7 and 8.

7. Systems requiring dehumidification that use energy recovery in series with the cooling coil.

8. Multi-zone systems where the supply airflow rate is less than the values specified in IECC Tables

C403.7.6(1) and C403.7.6(2) for the corresponding percent of outdoor air. Where a value of NR is listed, energy recovery shall not be required.

9. Equipment which meets the requirements of IECC C403.9.2.4.

10. Systems serving Group R-1 and R-3 dwelling or sleeping units where the largest source of air exhausted at a single location at the building exterior is less than 25 percent of the design outdoor air flow rate.

<u>NEW SECTION. SECTION 84.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C403.10 of the International Energy Conservation Code is supplemented with the following:

**Insulation of refrigerant piping (C403.10.4).** Refrigerant piping, other than piping factory installed in HVAC equipment, shall have minimum 1/2-inch insulation within conditioned spaces and 1-inch insulation outside of conditioned spaces, at a conductivity rating of 0.21 to 0.26 Btu x in/(h x ft2 x  $^{\circ}$  F) with a mean temperature rating of 75 $^{\circ}$  F.

<u>NEW SECTION. SECTION 85.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C403 of the International Energy Conservation Code is supplemented with the following:

Commercial food service (C403.14). The following types of equipment within the scope of the

applicable Energy Star program shall comply with the applicable energy-

efficiency and water-efficiency criteria required to achieve the Energy Star label:

- 1. Commercial fryers.
- 2. Commercial hot food holding cabinets.
- 3. Commercial steam cookers.
- 4. Commercial dishwashers.

<u>NEW SECTION. SECTION 86.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Sections C404.2.1 and C404.2.2 of the International Energy Conservation Code are not adopted and the following is substituted:

Service water heating system type (C404.2.1 and C404.2.2). In buildings with central service water heating systems serving four or more Group R-1 or R-2 dwelling or sleeping units, and in any other building that has a heated water circulation system or a combined water heating capacity greater than 15 kW (51,195 Btu/h) under a single permit, the primary service water heating equipment shall not use fossil fuel combustion or electric resistance. Service hot water shall be provided by an air-source HPWH system meeting the requirements of this section, or a ground-source heat pump water heating system. Supplemental service water heating equipment is permitted to use electric resistance in compliance with IECC C404.2.3.2.

## **EXCEPTIONS:**

1. Unitary heat pump water heaters located in conditioned space are permitted where they are sized to meet all calculated service water heating demand using the heat pump compressor, and not supplementary heat.

2. A service water heating system in a tenant space under a separate permit with a total heating capacity no greater than 15 kW (51,195 Btu/h) is permitted to be electric resistance.

3. Point of use instantaneous electric water heaters serving fixtures no more than 8 feet of developed pipe length from the water heater are permitted and do not contribute to the building combined water heating

capacity calculation.

4. Solar thermal, wastewater heat recovery, other approved waste heat recovery, water-source heat pump system utilizing waste heat, and combinations thereof, are permitted to offset all or any portion of the required HPWH capacity where such systems comply with this code and the Plumbing Code.

5. Systems meeting the requirements of the Northwest Energy Efficiency Alliance (NEEA) Advanced Water Heater Specifications for central service water heating systems.

<u>NEW SECTION. SECTION 87.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C404.2.3 of the International Energy Conservation Code is supplemented with the following:

**System Design (C404.2.3.1).** The system proposed to meet IECC C404.2.3 shall conform to the following design requirements:

1. Primary heat pump system sizing: The system shall include a primary service minimum output at 40° F outdoor air temperature that provides sufficient hot water for occupancy uses as calculated using the equipment manufacturer's selection criteria or another approved methodology. Air source heat pumps shall be sized to deliver no less than 50 percent of the calculated demand for hot water production during the peak demand period when entering air temperature is 24° F.

**EXCEPTION**. 50 percent sizing at 24° F is not required for heat pumps located in a below-grade enclosed parking structure or other ventilated and unconditioned space that is not anticipated to fall below 40° F at any time.

2. Primary hot water storage sizing. The system shall provide sufficient hot water, as calculated using an approved methodology, to satisfy peak demand period requirements.

3. The service water heating system shall be configured to conform to the following:

3.1. For single-pass HPWHs, temperature maintenance heating provided for reheating return water

from the building's heated water circulation system shall be physically decoupled from the primary service water heating system storage tank(s) in a manner that prevents destratification of the primary system storage tanks. Temperature maintenance heating is permitted to be provided by electric resistance or a separate dedicated heat pump system; or

3.2. For multi-pass HPWHs, recirculated temperature maintenance water is permitted to be returned to the primary water storage tanks for reheating.

4. Mixing valve: A thermostatic mixing valve capable of supplying hot water to the building at the user temperature set point shall be provided, in compliance with requirements of the Uniform Plumbing Code and the HPWH manufacturer's installation guidelines. The mixing valve shall be sized and rated to deliver tempered water in a range from the minimum flow of the temperature maintenance recirculation system up to the maximum demand for the fixtures served.

<u>NEW SECTION. SECTION 88.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C404.2.3 of the International Energy Conservation Code is supplemented with the following:

**Supplemental Water Heaters (C404.2.3.2).** Total supplemental electric resistance water heating equipment shall not have an output capacity more than the primary water heating equipment at 40° F entering air temperature. Supplemental electric resistance heating is permitted for the following uses:

1. Temperature maintenance of heated-water circulation systems, physically separate from the primary service water heating system. Temperature maintenance heating capacity shall be no more than the primary water heating capacity at 40° F.

2. Defrost of compressor coils.

3. Heat tracing of piping for freeze protection or for temperature maintenance in lieu of recirculation of hot water.

4. Backup or low ambient temperature conditions if:

4.1. The supplemental heating capacity is no more than the primary service water heating capacity at 40° F;

4.2. During normal operations the supplemental heating is controlled to operate only when the entering air temperature at the air-source HPWH is below 40° F, and the primary HPWH compressor continues to operate together with the supplemental heating when the entering air temperature is between 17° F and 40° F; and

4.3. The primary water heating equipment cannot satisfy the system load due to equipment failure or entering air temperature below 40° F.

5. Supplemental heating downstream from a multi-pass HPWH system.

6. Stand-alone electric water heaters serving single zones not served by the central water heating system.

<u>NEW SECTION. SECTION 89.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C404.6 of the International Energy Conservation Code is supplemented with the following:

**Storage tank insulation(C404.6.1).** Unfired storage tanks used to store service hot water at temperatures above 130° F shall be wrapped with an insulating product, installed in accordance with the insulation manufacturer's instructions and providing a minimum of R-2 additional insulation for every 10° F increase in stored water temperature above 130° F. Such additional insulation is also permitted to be integral to the tank. The insulation is permitted to be discontinuous at structural supports.

<u>NEW SECTION. SECTION 90.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C404.7.1.2 of the International Energy Conservation Code is supplemented with the following:

**Multiple riser systems - thermostatic balancing valve (IECC C404.7.1.2.1).** For heated water circulation systems that have multiple risers and use a variable flow circulation pump, each riser shall have a self-actuating thermostatic balancing valve.

<u>NEW SECTION. SECTION 91.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C404.7.1 of the International Energy Conservation Code is supplemented with the following:

**Electronic thermostatic mixing valve (IECC C404.7.1.3).** Where a heated water circulation system uses an electronic thermostatic mixing valve (TMV) to control the temperature of hot water supplied to the building, the thermostatic mixing valve (TMV) shall be configured so that it either reverts closed to fully cold, or maintains its current valve position upon power failure or cessation of circulation flow.

<u>NEW SECTION. SECTION 92.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C404.7.3 of the International Energy Conservation Code is supplemented with the following:

**Pipe insulation (IECC C404.7.3.1).** For heated water circulation systems, both supply and return pipe insulation shall be at minimum one inch thicker than that required by IECC Table C403.10.3.

**EXCEPTION**: Where piping is centered within a wall, ceiling or floor framing cavity with a depth at least four inches more than the diameter of the pipe and that is completely filled with batt or blown-in insulation, additional pipe insulation is not required.

<u>NEW SECTION. SECTION 93.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C404.8 of the International Energy Conservation Code is not adopted and the following is substituted:

**Demand recirculation controls (C404.8).** Demand recirculation water systems are not permitted. <u>NEW SECTION. SECTION 94.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C405.2 of the International Energy Conservation Code is not adopted and the following is substituted:

**Lighting controls (IECC C405.2).** Lighting systems shall be provided with controls that comply with the following:

1. Lighting controls as specified in IECC C405.2.1 through C405.2.7. Any contiguous open office area larger than 5,000 square feet shall have its general lighting controlled by:

1.1. An enhanced digital lighting control system conforming to the requirements of IECC C406.4; or

1.2. LLLC conforming to the requirements in subsection 2. of this section; or

2. LLLC for all areas and lighting controls specified in IECC C405.2.1, C405.2.3 and C405.2.5. The LLLC luminaires shall be independently configured to:

2.1. Monitor occupant activity to brighten or dim lighting when occupied or unoccupied, respectively;

2.2. Monitor ambient light, both electric and daylight, and brighten or dim artificial light to maintain desired light level. A maximum of 8 fixtures may be controlled together to maintain uniform light levels within a single daylight zone; and

2.3. For each control strategy, be capable of configuration and re-configuration of performance parameters including bright and dim set points, timeouts, dimming fade rates, sensor sensitivity adjustments and wireless zoning configuration.

**EXCEPTIONS:** Except for specific application controls required by IECC C405.2.5, lighting controls are not required for the following:

1. Areas designated as security or emergency areas that are required to be continuously lighted.

2. Means of egress illumination serving the exit access that does not exceed 0.01 watts per square foot of building area.

3. Emergency egress lighting that is normally off.

4. Industrial or manufacturing process areas required for production and safety. <u>NEW SECTION.</u>

<u>SECTION 95.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Table C405.4.2(1) of the International Energy Conservation Code is not adopted and the following is substituted:

# Table C405.4.2(1)

### Interior Lighting Power Allowances-Building Area Method

Building Area Type	LPD (w/ft <sup>2</sup> )
Automotive facility	0.58
Convention center	0.58
Court house	0.71
Dining: Bar lounge/leisure	0.71
Dining: Cafeteria/fast food	0.65
Dining: Family	0.64
Dormitory <sup>a,b</sup>	0.41
Exercise center	0.60
Fire station <sup>a</sup>	0.49
Gymnasium	0.68
Health care clinic	0.63
Hospital <sup>a</sup>	0.84
Hotel/motel <sup>a,b</sup>	0.50
Library	0.75
Manufacturing facility	0.74
Motion picture theater	0.40
Multifamily <sup>c</sup>	0.37
Museum	0.50
Office	0.58
Parking garage	0.13
Penitentiary	0.65
Performing arts theater	0.76
Police station	0.60
Post office	0.59
Religious building	0.60
Retail	0.76

School/university	0.63
Sports arena	0.54
Town hall	0.62
Transportation	0.45
Warehouse	0.36
Workshop	0.82

Footnotes:

a. Where sleeping units are excluded from lighting power calculations by application of IECC R404.1,

neither the area of the sleeping units nor the wattage of lighting in the sleeping units shall be counted.

b. Where dwelling units are excluded from lighting power calculations by application of IECC R404.1,

neither the area of the dwelling units nor the wattage of lighting in the dwelling units shall be counted.

c. Dwelling units are excluded. Neither the area of the dwelling units nor the wattage of lighting in the dwelling units shall be counted.

<u>NEW SECTION. SECTION 96.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Table C405.4.2(2) of the International Energy Conservation Code is not adopted and the following is substituted:

### Table C405.4.2(2)

### Interior Lighting Power Allowances-Space-by-Space Method

Common Space-by-Space Types <sup>a</sup>	LPD (w/ft <sup>2</sup> )
Atrium - Less than 20 feet in height	0.35
Atrium - 20 to 40 feet in height	0.43
Atrium - Above 40 feet in height	0.54
Audience/seating area - Permanent In an auditorium In a gymnasium In a motion picture theater In a penitentiary In a performing arts theater In a religious building In a sports arena Otherwise	0.55 0.21 0.24 0.67 1.04 0.65 0.30 0.21
Banking activity area	0.55
Breakroom (see Lounge/breakroom)	
Classroom/lecture hall/training room In a penitentiary Otherwise	0.89 0.64
Computer room, data center	0.85

Conference/meeting/multipurpose	0.87
Confinement cell	0.63
Copy/print room	0.28
Corridor In a facility for the visually impaired (and not used	0.71 0.71 0.37 0.37
primarily by the staff) <sup>b</sup> In a hospital In a manufacturing facility Otherwise <sup>c,f</sup>	
Courtroom <sup>c</sup>	1.08
Dining area In a penitentiary In a facility for the visually impaired (and not used primarily by the staff) <sup>b</sup> In a bar/lounge or leisure dining <sup>n</sup> In cafeteria or fast food dining In a family dining area <sup>n</sup> Otherwise	0.42 1.27 0.77 0.36 0.54 0.39
Electrical/mechanical	0.39
Emergency vehicle garage	0.47
Food preparation	0.98
Guest room <sup>a,b</sup>	0.37
Laboratory In or as a classroom Otherwise	1.00 1.20
Laundry/washing area	0.48
Loading dock, interior	0.79
Lobby <sup>c</sup> In a facility for the visually impaired (and not used primarily by the staff) <sup>b</sup> For an elevator In a hotel In a motion picture theater In a performing arts theater Otherwise	1.69 0.59 0.46 0.21 1.13 0.76
Locker room	0.47
Lounge /breakroom <sup>n</sup> In a health care facility Otherwise	0.42 0.53
Office Enclosed $\leq 250$ Enclosed $\geq 250$ Open plan	0.67 0.59 0.55
Parking area, interior	0.14
Pharmacy area	1.66
Restroom In a facility for the visually impaired (and not used primarily by the staff) <sup>b</sup> Otherwise <sup>n</sup>	1.26 0.57
Sales area	0.95
Seating area, general	0.21
Stairwell <sup>n</sup>	0.44
Storage room $< 50 \text{ ft}^2 50\text{-}100 \text{ ft}^2$ All of the storage <sup>b</sup>	0.46 0.34 0.34
Vehicular maintenance	0.54
	1.13

# Building Specific Space-by-Space Types<sup>a</sup>

Building Specific Space-by-Space Types <sup>a</sup>	LPD <sup>d</sup> (w/ft <sup>2</sup> )
Automotive - (See Vehicular maintenance, above)	
Convention center - Exhibit space	0.55
Dormitory living quarters <sup>a,b</sup>	0.45

Facility for the visually impaired <sup>b</sup> In a chapel (and not used	0.70 1.77
primarily by the staff) <sup>b</sup> In a recreation room (and not used primarily by the staff) <sup>b</sup>	
Fire stations - Sleeping quarters <sup>g</sup>	0.21
Gymnasium/fitness center In an exercise area In a playing area	0.83 0.77
Health care facility In an exam/treatment room In an imaging	1.40 0.94 0.62 0.92 1.17 2.26 0.68 0.91 1.25
room In a medical supply room In a nursery In a nurse's	
station In an operating room In a patient room <sup>g</sup> In a physical	
therapy room In a recovery room	
Library <sup>f</sup> In a reading area <sup>n</sup> In the stacks	0.86 0.99
Manufacturing facility In a detailed manufacturing area In an	0.72 0.68 1.28 1.12 0.77
equipment room In an extra high bay area (more than 50-foot	
floor-to-ceiling height) In a high bay area (25 - 50-foot floor-to-	
ceiling height) In a low bay area (< 25-foot floor-to-ceiling height)	
Museum In a general exhibition area In a restoration room	0.28 0.99
Performing arts theater dressing/fitting room	0.37
Post office - Sorting area	0.69
Religious building In a fellowship hall <sup>n</sup> In a worship pulpit/choir area <sup>n</sup>	0.49 0.77
Retail In a dressing/fitting room In a mall concourse	0.46 0.74
Sports arena-Playing area For a Class 1 facility <sup>i</sup> For a Class 2	2.94 2.01 1.30 0.86
facility <sup>j</sup> For a Class 3 facility <sup>k</sup> For a Class 4 facility <sup>l</sup>	
Transportation In a baggage/carousel area In an airport	0.35 0.23 0.46
concourse At a terminal ticket counter <sup>n</sup>	
Warehouse-Storage area For medium to bulky palletized items For smaller, hand-carried items	0.30 0.62

For SI: 1 foot = 304.8 mm, 1 watt per square foot =  $11 \text{ W/m}^2$ .

Footnotes:

a. If both a common space type and a building area specific space type are listed, the building area

specific space type shall apply.

b. A facility for the visually impaired is a facility that is licensed or will be licensed by local or state

authorities for senior long-term care, adult daycare, senior support or people with special visual needs.

c. For spaces in which lighting is specified to be installed in addition to, and controlled separately from,

the general lighting for the purpose of highlighting art or exhibits if the additional lighting power shall not

exceed 0.5  $W/ft^2$  of such spaces.

d. For scientific laboratories, additional lighting power allowance of 0.35 W/ft<sup>2</sup> for specialized task work - lighting that provides for small-scale, cognitive or fast performance visual tasks, lighting required for operating specialized equipment associated with pharmaceutical or laboratorial activities or both.

e. For offices, additional lighting power allowance of 0.20 W/ft<sup>2</sup> for portable lighting, which includes under shelf or furniture-mounted supplemental task lighting qualifies when controlled by a time clock or an occupancy sensor.

f. For corridors, additional lighting power allowance of 0.25 W/ft<sup>2</sup> display lighting and decorative lighting where provided for aesthetic purposes. Decorative lighting fixtures in corridors may also provide general lighting. This additional allowance is not permitted to be used together with the allowance in footnote c for highlighting art or exhibits.

g. Where sleeping units are excluded from lighting power calculations by application of IECC R404.1, neither the area of the sleeping units nor the wattage of lighting in the sleeping units shall be counted.

h. Where dwelling units are excluded from lighting power calculations by application of IECC R404.1, neither the area of the dwelling units nor the wattage of lighting in the dwelling units shall be counted.

i. Class I facilities consist of professional facilities; and semiprofessional, collegiate or club facilities with seating for 5,000 or more spectators.

j. Class II facilities consist of collegiate and semiprofessional facilities with seating for fewer than 5,000 spectators; club facilities with seating between 2,000 and 5,000 spectators; and amateur league and high school facilities with seating for more than 2,000 spectators.

k. Class III facilities consist of club, amateur league and high school facilities with seating for 2,000 or fewer spectators.

l. Class IV facilities consist of elementary school and recreational facilities; and amateur league and high school facilities without provisions for spectators.

m. For classrooms, additional lighting power allowance of 4.50 W/lineal foot of white or chalk boards

for directional lighting dedicated to white or chalk boards.

n. Additional lighting power allowance of 0.30 W/ft<sup>2</sup> for ornamental lighting. Qualifying ornamental lighting includes luminaires such as chandeliers, sconces, lanterns, neon and cold cathode, light emitting diodes, theatrical projectors, moving lights and light color panels when any of those lights are used in a decorative manner that does not serve as display lighting or general lighting. Ornamental lighting shall be controlled separately from general lighting.

<u>NEW SECTION. SECTION 97.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C405.5.3 of the International Energy Conservation Code is supplemented with the following:

**Exterior lighting power allowance - covered parking garages (IECC C405.5.3.2).** Covered parking garage lighting is not considered exterior lighting for the purposes of this calculation.

<u>NEW SECTION. SECTION 98.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C405.7 of the International Energy Conservation Code is supplemented with the following:

**Electric receptacles at dwelling unit gas appliances (C405.7.1).** Where dwelling unit appliances are served by natural gas, an electrical receptacle and circuit shall be provided at each gas appliance with sufficient capacity to serve a future electric appliance in the same location. The receptacle for each gas appliance shall be located within 12 inches of the appliance and without obstructions between the appliance and the outlet. The receptacles and circuits shall be included in the electrical service load calculation and shall meet the following requirements:

1. Each gas range, cooktop or oven location shall be served by a dedicated 240/208-voltage, 40amperage receptacle connected to the dwelling unit electric panel with a 3-conductor branch circuit and a minimum included load of 9600 volt-amps (VA) for 240-voltage systems or 8000 VA for 208-voltage systems.

2. Each gas clothes dryer location shall be served by a dedicated 240/208-voltage, 30-amperage

receptacle connected to the dwelling unit electric panel with a 3-conductor branch circuit and a minimum included load of 5000 volt-amps (VA).

3. Each gas domestic water heater location shall be served by a dedicated 240/208 voltage, 30amperage outlet connected to the dwelling unit electrical panel with a 3-conductor branch circuit and a minimum included load of 4500 volt-amps (VA).

**EXCEPTION:** An electric receptacle is not required for a gas fireplace.

<u>NEW SECTION. SECTION 99.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C406.1 of the International Energy Conservation Code is not adopted and the following is substituted:

Additional energy efficiency credit requirements (C406.1). New buildings and changes in space conditioning, change of occupancy and building additions in accordance with IECC Chapter 5 shall comply with sufficient packages from IECC Table C406.1 so as to achieve a minimum number of eight credits. Each area may apply for different packages if all areas in the building comply with the requirement for eight credits. Areas included in the same permit within mixed use buildings may demonstrate compliance by an area weighted average number of credits by building occupancy achieving a minimum number of eight credits.

# **EXCEPTIONS:**

1. Low energy spaces in accordance with IECC C402.1.1.1 and equipment buildings in accordance with IECC C402.1.2 shall comply with sufficient packages from IECC Table C406.1 to achieve a minimum number of four credits.

2. Building additions that have less than 1,000 square feet of conditioned floor area shall comply with sufficient packages from IECC Table C406.1 to achieve a minimum number of four credits.

# **TABLE C406.1**

# **EFFICIENCY PACKAGE CREDITS**

Code Section	Commercial Building Occupancy					
	Group R-1	Group R-2	Group B	Group E	Group M	All Other
	Additional Efficiency Credits					
1. More efficient HVAC performance in accordance with IECC C406.2	2.0	3.0	3.0	2.0	1.0	2.0
2. Reduced lighting power: Option 1 in accordance with IECC C406.3.1	1.0	1.0	2.0	2.0	3.0	2.0
B. Reduced lighting power: Option 2 in accordance with IECC C406.3.2 <sup>a</sup>	2.0	3.0	4.0	4.0	6.0	4.0
4. Enhanced lighting controls in accordance with IECC C406.4	NA	NA	1.0	1.0	1.0	1.0
5. On-site supply of renewable energy in accordance with IECC C406.5	3.0	3.0	3.0	3.0	3.0	3.0
5.1. 1/3 of renewable energy required by ECC C406.5	1.0	1.0	1.0	1.0	1.0	1.0
5.2. 2/3 of renewable energy required by ECC C406.5	2.0	2.0	2.0	2.0	2.0	2.0
6. Dedicated outdoor air system in accordance with IECC C406.6 <sup>b</sup>	4.0	2.0 <sup>d</sup>	4.0	NA	NA	4.0
7. High performance dedicated outdoor air system in accordance with IECC C406.7	4.0	4.0	4.0	4.0	4.0	4.0
8. High-efficiency service water heating in accordance with IECC C406.8.1 and C406.8.2	NA	NA	NA	NA	NA	NA
<ul> <li>High performance service water heating n accordance with IECC C406.9</li> </ul>	5.0	5.0	3.0 <sup>f</sup>	NA	NA	3.0 <sup>e</sup>
0. Enhanced envelope performance in ccordance with IECC C406.10 <sup>c</sup>	3.0	6.0	3.0	3.0	3.0	4.0
1. Reduced air infiltration in accordance vith IECC C406.11 °	1.0	2.0	1.0	1.0	1.0	1.0

Footnotes:

a. Projects using this option may not use Item 2. of IECC Table C406.1.

b. This option is not available to buildings subject to the prescriptive requirements of IECC C403.3.5 or

C403.6.

c. Buildings or building areas that are exempt from thermal envelope requirements in accordance with

IECC C402.1.1 and C402.1.2 do not qualify for this package.

d. 4.0 credits, instead of 2.0 credits, may be applied to areas of R-2 occupancy buildings other than

dwelling units, including corridors, lobbies and tenant amenity spaces, where those areas comply with the

requirements for this credit.

e. Buildings, building additions, building area, occupancy type or tenant spaces with a service hot water

load of 10 percent or more of total building energy loads, as demonstrated through an energy analysis

complying with IECC C407, or a minimum service water energy use of 15,000 Btu per square foot per year, as demonstrated through an alternate service hot water load calculation method approved by the code official, are permitted to apply this credit.

f. In Group B occupancies, the high-performance service water heating credit applies only to research and production laboratory spaces, and adjacent circulation serving those laboratory spaces, but not to associated office or other space uses.

<u>NEW SECTION. SECTION 100.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C406.1.1 of the International Energy Conservation Code is not adopted and the following is substituted:

Tenant spaces (IECC 406.1.1). Initial tenant improvements shall comply with IECC C406.1.1.1,

C406.1.1.2 and sufficient packages from IECC Table C406.1 to achieve a minimum number of 8 credits when the space is fully built out. In buildings with multiple tenant spaces, each tenant space may apply for different packages if all areas in the building comply with the requirement for eight credits when the space is fully builtout. This provision only applies to the initial buildout of a tenant space. For the purposes of this section, tenant space means any conditioned area within a new building that is constructed for first occupancy under a separate permit from the shell and core permits.

<u>NEW SECTION. SECTION 101.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C406.2 of the International Energy Conservation Code is not adopted and the following is substituted:

**More efficient HVAC equipment and fan performance (C406.2).** No less than 90 percent of the total HVAC capacity serving the total conditioned floor area of the entire building, building addition, building area, occupancy type or tenant space in accordance with IECC C406.1.1, shall comply with IECC C406.2.1

through C406.2.3. In addition, systems required to comply with IECC C403.1.1, HVAC total system performance ratio shall exceed the HVAC TSPR of the standard reference design by 10 percent. This credit shall not be used for low energy or semi-heated space conditioning categories.

<u>NEW SECTION. SECTION 102</u>. There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C406.2.1 of the International Energy Conservation Code is not adopted and the following is substituted:

**HVAC system selection (IECC C406.2.1).** Equipment installed shall be types that are listed in IECC Tables C403.3.2(1) through C403.3.2(12) or a combination thereof. Electric resistance heating shall not meet this requirement. No HVAC systems incorporating fossil fuel-fired equipment, or heat from district energy systems that are primarily heated by fossil fuel combustion, shall use this credit.

<u>NEW SECTION. SECTION 103.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C406.4 of the International Energy Conservation Code is not adopted and the following is substituted:

**Enhanced digital lighting controls (IECC C406.4).** Not less than 90 percent of the total installed interior lighting power within the whole building, building addition or tenant space shall comply with IECC C406.4.1. Open office areas subject to IECC C405.2 (1) shall not take credit for this option. Lighting control functions shall comply with IECC C406.1, with control functions commissioned in accordance with IECC C408.1 and C408.3.

<u>NEW SECTION. SECTION 104.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C406.5 of the International Energy Conservation Code is not adopted and the following is substituted:

**On-site renewable energy (IECC C406.5).** In addition to the renewable energy required by IECC C412 and to renewable energy used to comply with any other requirement of this code, a whole building, building addition, building area, occupancy type or tenant space shall be provided with on-site renewable energy systems with a rated peak renewable energy generating capacity of no less than 0.25 watts (or 0.85 Btu/h) per square foot of conditioned floor area based on the total conditioned floor area of the whole building, building addition or tenant space. The on-site renewable energy provided to comply with this option shall be separate from on-site renewables provided to comply with IECC C406.8 or used to qualify for any exception in this code.

<u>NEW SECTION. SECTION 105.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C406.6 of the International Energy Conservation Code is supplemented with the following:

### Dedicated outdoor air system (DOAS) - No fossil fuel-fired HVAC may use this credit (IECC

**C406.6.1).** HVAC systems incorporating fossil fuel-fired equipment, or heat from district energy systems that are primarily heated by fossil fuel combustion, shall not use this credit.

<u>NEW SECTION. SECTION 106.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C406.7 of the International Energy Conservation Code is supplemented with the following:

High performance dedicated outdoor air system (DOAS) - No fossil fuel-fired HVAC may use this credit (IECC C406.7.1). HVAC systems incorporating fossil fuel-fired equipment, or heat from district energy systems that are primarily heated by fossil fuel combustion, shall not use this credit.

<u>NEW SECTION. SECTION 107.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C406.8 of the International Energy Conservation Code is not adopted, and the following is substituted:

**Reduced energy use in service water heating (IECC C406.8).** Buildings with service hot water heating equipment that serves the whole building, building addition or tenant space shall comply with IECC C406.8.1 and C406.8.2. Service water heating systems incorporating fossil fuel-fired equipment, or heat from district energy systems that are primarily heated by fossil fuel combustion, shall not use this credit. On-site renewable energy water-heating systems proposed for this credit shall only qualify where those systems are in addition to the renewable energy required by IECC C412 and any renewable energy used to comply with other requirements of this code.

<u>NEW SECTION. SECTION 108</u>. There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C406.9 of the International Energy Conservation Code is not adopted, and the following is substituted:

**High performance service water heating in hotel and multifamily buildings. (IECC C406.9).** For a whole building, building area, occupancy type, building addition or tenant space with not less than 90 percent of the conditioned floor area being Group R-1 or R-2 occupancy, not less than 90 percent of the annual building service hot water energy use shall be provided by a heat pump system meeting the requirements of IECC C404.2.3 and:

1. The refrigerant used in the heat pump system shall have a global warming potential (GWP) no more than 675.

2. Electric resistance heating capacity shall not be provided, except for:

2.1. Circulating system temperature maintenance and heat tracing of service hot water supply and return piping; or

2.2. On-demand electric resistance water heaters for hand washing facilities are allowed in public toilet rooms.

NEW SECTION. SECTION 109. There is hereby added to the chapter established in section 65 of this

ordinance a new section to read as follows:

Section C406.10 of the International Energy Conservation Code is not adopted, and the following is substituted:

**Enhanced envelope performance. (IECC C406.10).** The Proposed Total UA of the thermal envelope of the whole building, building area, occupancy type or building addition shall be 15 percent lower than the Allowable Total UA for an area of identical configuration and fenestration area in accordance with IECC C402.1.5 and Equation 4-2. Where exception 3 for IECC C412 is also being used, the Proposed Total UA shall be 30 percent lower than the Allowable Total UA as defined in IECC C402.1.5.

<u>NEW SECTION. SECTION 110</u>. There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C406.12 of the International Energy Conservation Code is not adopted.

<u>NEW SECTION. SECTION 111.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C407.3 of the International Energy Conservation Code is not adopted and the following is substituted:

**Performance-based compliance (IECC C407.3).** Compliance with this section requires compliance with ASHRAE Standard 90.1 Appendix G, Performance Rating Method, in accordance with ASHRAE Standard 90.1 Section 4.2.1 with the following modifications:

1. The mandatory requirements of ASHRAE Standard 90.1 Section G1.2.1a are not required to be met.

 The reduction in annual carbon emissions of the proposed building design associated with on-site renewable energy shall not be more than 3 percent of the total carbon emissions of the baseline building design.
 This limitation only applies to onsite renewable energy provided in excess of the renewable energy required by IECC C412.

2.1. The equation PCI + [(PBPnre - PBP)/BBP] - 0.05 < PCIt in ASHRAE 90.1 Section 4.2.1.1 shall

be modified to read PCI + [(PBPnre - PBP)/BBP] - 0.03 < PCIt.

2.2. "PBPnre" means the proposed building performance without credit for reduced annual energy emissions from on-site renewable energy generation system capacity in excess of that installed to satisfy the requirements of IECC C412.

3. References to energy cost in ASHRAE Standard 90.1 Section 4.2.1.1 and ASHRAE Standard 90.1 Appendix G shall be replaced by carbon emissions calculated by multiplying site energy consumption by the carbon emission factor from IECC Table C407.3(1).

4. The building performance factors in ASHRAE Standard 90.1 Table C4.2.1.1 shall be replaced with those in IECC Table C407.3(2).

5. Schedules and plug and process loads shall be modeled using the default values listed in IECC Appendix B or in the ASHRAE Standard 90.1 User's Manual and shall be assumed to be identical in the proposed design and baseline building design.

**EXCEPTION:** Alternative schedules and plug and process loads shall be permitted where approved by the code official.

6. ASHRAE Standard 90.1 Section G1.3.2.d documentation requirements shall be replaced by a list showing compliance with the mandatory provisions of IECC Table C407.2.

7. ASHRAE Standard 90.1 Section G1.3.2.e documentation requirements shall be replaced by a list of proposed design aspects that are less stringent than the prescriptive requirements of the Energy Code.

8. References to undesigned future building components in the Proposed Building Performance column of ASHRAE Standard 90.1 Table G3.1 shall be modified to reference the corresponding Energy Code sections in lieu of ASHRAE Standard 90.1 requirements, in the following ASHRAE Standard 90.1 table sections:

8.1. Table G3.1.1.c.

8.2. Table G3.1.6.c.

8.3. Table G3.1.11.c.

8.4. Table G3.1.12.b.

9. HVAC systems, subclauses c and d of ASHRAE Standard 90.1 Table G3.1, shall meet the following requirements:

9.1. For yet-to-be-designed systems in office, retail, library, education, and multifamily buildings and occupancies subject to the TSPR requirements of IECC C403.1.1, the system type and efficiency parameters shall meet but not exceed those shown in IECC Appendix D, Table D602.11 Standard Reference Design HVAC Systems.

9.2. For all other buildings and occupancies, the system type shall be the same as the system modeled in the baseline design and shall comply with, but not exceed, IECC C403 requirements in lieu of ASHRAE Standard 90.1.

9.3. For HVAC systems serving future tenant spaces, where the current building permit applies to only a portion of an HVAC system, and future components will receive HVAC services from systems included in the current building permit, those future components shall be modeled as the type required to complete the HVAC system portions under the current permit and shall meet, but not exceed, IECC C403 requirements.

<u>NEW SECTION. SECTION 112.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C407.3.1 of the International Energy Conservation Code is not adopted and the following is substituted:

**Limits on substandard building envelopes (IECC C407.3.1).** The Proposed Total UA of the proposed building shall be no more than 10 percent higher than the Allowed Total UA as defined in IECC C402.1.5. Where either IECC C402.4.1.1.1 or C402.4.1.1.2 is used to establish the maximum allowable fenestration area for compliance with this section, all of the requirements of the selected section shall be met.

NEW SECTION. SECTION 113. There is hereby added to the chapter established in section 65 of this

ordinance a new section to read as follows:

Table C407.3.2(2) of the International Energy Conservation Code is not adopted and the following is

substituted:

### Table C407.3(2)

Building Area Type	<b>Building Performance Factor</b>
Multifamily	0.52
Healthcare/hospital	0.49
Hotel/motel	0.58
Office	0.51
Restaurant	0.63
Retail	0.43
School	0.32
Warehouse	0.43
All others	0.49

### Building Performance Factors (BPF) to be used for Compliance with Section C407.3

<u>NEW SECTION. SECTION 114.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C411.1 of the International Energy Conservation Code is not adopted and the following is substituted:

**Solar readiness - general (IECC C411.1).** In addition to the requirements of IECC C412, a solar zone shall be provided on buildings that are 20 stories or less in height above grade plan. The solar zone shall be located on the roof of the building or on another structure elsewhere on the site. The solar zone shall be in accordance with IECC C411.2 through C411.8 and the International Fire Code.

**EXCEPTIONS:** A solar zone is not required where the solar exposure of the building's roof area is less than 75 percent of that of an unshaded area, as defined in IECC C411.5, in the same location, as measured by the following:

- 1. Incident solar radiation expressed in kWh/ft<sup>2</sup>-yr using typical meteorological year (TMY) data;
- 2. Annual sunlight exposure expressed in cumulative hours per year using typical meteorological year

(TMY) data; or

3. Shadow studies indicating that the roof area is more than 25 percent in shadow, on September 21 at 10 a.m., 11 a.m., 12 p.m., 1 p.m. and 2 p.m. solar time.

<u>NEW SECTION. SECTION 115.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C411.2 of the International Energy Conservation Code is supplemented with the following:

**Minimum area - mechanical equipment (C411.2.1).** When calculating the minimum area of the solar zone as a percentage roof area, areas that will be occupied by mechanical equipment should be subtracted from the horizontally-projected gross roof area.

<u>NEW SECTION. SECTION 116.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section C411.8 of the International Energy Conservation Code is supplemented with the following:

**Photovoltaic interconnection - roof penetration (IECC C411.8.1).** A minimum 2-inch diameter roof penetration sleeve shall be provided, with threaded caps above and below the roof deck and minimum R-10 insulation wrapping the lower portion, within each 2,500 square foot section of the required solar zone area.

<u>NEW SECTION. SECTION 117.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Chapter 4 of the International Energy Conservation Code is supplemented with the following:

**On-site renewable energy systems (IECC C412).** Each new building or addition larger than 5,000 square feet of gross conditioned floor area shall include a renewable energy generation system consisting of not less than 0.25 watts rated peak photovoltaic energy production per square foot of conditioned space.

### **EXCEPTIONS**:

1. Increased additional energy credits. Where 3.0 additional energy credits from IECC Table C406.1 are provided in addition to those required by other sections of this code, the on-site renewable energy

generation system is not required.

1.1. Where 1.0 additional energy credits is provided in addition to those required by other sections of this code, applicants may reduce the size of the on-site renewable energy generation system by 1/3.

1.2. Where 2.0 additional energy credits are provided in addition to those required by other sections of this code, applicants may reduce the size of the on-site renewable energy generation system by 2/3.

1.3 Where approved by the building code official, interpolation between exceptions 1, 1.1 and 1.2 is permitted.

2. Reduced building performance factor. For projects utilizing the IECC C407 "Total Building Performance" compliance path, the on-site renewable energy generation system is not required where the building performance factor (BPF) is not less than 3 percent lower than the maximum building performance factor (BPF) permitted cumulatively by all other sections of this code.

2.1. Where the building performance factor (BPF) is not less than 1 percent lower than the building performance factor (BPF) required cumulatively by other sections of this code, the size of the on-site renewable energy generation system may be reduced by 1/3.

2.2. Where the building performance factor (BPF) is not less than 2 percent lower than the building performance factor (BPF) required cumulatively by other sections of this code, the size of the on-site renewable energy generation system may be reduced by 2/3.

3. Transfer to an affordable housing project. Where approved by the department, all or part of the required on-site renewable energy generation system may be replaced by construction of a system that is 50 percent of the required system size when located on an existing affordable housing project within unincorporated King County, or 75 percent of the required system size when located on a new construction affordable housing project within King County. Documentation demonstrating that the renewable energy generation system has been installed on the affordable housing project site, the system is fully operational, and ownership has been transferred to the owner of the affordable housing project, shall be submitted before

issuance of the certificate of occupancy.

3.1. Such a transfer shall only be available if an affordable housing project is available to accept the renewable energy system. There is no assurance that such a project location will be available. It is the owner's responsibility to locate and coordinate with the affordable housing project, and to ensure installation is completed in a timely manner.

3.2. It is the owner's responsibility to locate and coordinate with the affordable housing project, and to ensure that the installation is completed in a timely manner.

4. Transfer to a Washington state agency program. Where approved by the department, all or part of the required renewable energy generation system may be replaced by a contribution of \$2.50 for each required watt of installed capacity to a solar energy fund managed by a Washington state agency that will provide solar energy installations for affordable housing projects. Documentation demonstrating that the contribution has been received by the state agency shall be submitted before issuance of the certificate of occupancy.

4.1. Such a transfer shall only be available if a solar energy fund for affordable housing is created by the Housing Trust Fund, Washington state Housing Finance Commission, or another state agency program for which the project is qualified to participate. There is no assurance that such a program will be available.

5. The building official may approve an alternative method to meet this requirement if the owner's engineer or architect can demonstrate, to the satisfaction of the building official, that the alternative method will provide equal or greater solar performance as required by this section.

6. Affordable housing. The on-site renewable energy generation system is not required for affordable housing projects.

<u>NEW SECTION. SECTION 118.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section 502.1 of the International Energy Conservation Code is supplemented with the following:

Additions - efficiency package (C502.1.1). Additions smaller than 500 square feet of conditioned floor area are not required to comply with IECC C406.

<u>NEW SECTION. SECTION 119.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section 503.4 of the International Energy Conservation Code is supplemented with the following:

New and replacement HVAC heating system equipment (IECC C503.4.6). For a substantial improvement as defined in K.C.C. chapter 21A.06, or where a building's central HVAC heating system equipment is augmented or replaced, the building shall comply with IECC C403.1.4. For the purposes of this section, central HVAC heating system means a heating system that provides heating to multiple spaces or multiple dwelling or sleeping units, as opposed to a distributed heating system such as baseboard heating or a Packaged Terminal Heat Pump (PTHP) that provides heating to only a single space. A central heating system may include multiple pieces of heating equipment.

**EXCEPTION.** HVAC replacements:

1. Where only one heating appliance is failing and is replaced by another having the same or lesser heating capacity and the same or higher efficiency;

2. No other alterations are made to the central HVAC system; and

3. Where this exception has not been used within the same building in the previous two year period.

<u>NEW SECTION. SECTION 120.</u> There is hereby added to the chapter established in section 65 of this ordinance a new section to read as follows:

Section 505.1 of the International Energy Conservation Code is supplemented with the following:

**Change of occupancy or Use - General - energy star equipment (IECC 505.1.1).** Where the building or space is altered to become a bakery, commercial kitchen or commercial laundry, and the proposed design uses only all-electric Energy Star-rated process equipment and code compliant all-electric HVAC

equipment, improvements to the building envelope immediately adjoining the spaces containing that use shall not be required. For the purposes of this exception, fossil fuel burning equipment shall not be used or installed within the building or space undergoing the change of occupancy.

SECTION 121. Ordinance 8766, Section 6, as amended, and K.C.C. 16.08.050 are hereby amended to read as follows:

<u>Approved numbers or addresses shall be provided for all new and existing buildings in such a position</u> as to be plainly visible and legible from the street or road fronting the property and in conformance with this <u>section.</u>

A. The owner, occupant((5)) or renter of any addressed building or other structure shall maintain the address numbers in a conspicuous place over or near the principal entrance or entrances. If ((said)) the entrance (((s))) cannot be easily seen from the nearest adjoining street, the address numbers shall be placed in such other conspicuous place on ((said)) the building or structure as is necessary for visually locating such address numbers from the nearest adjoining street.

B. If the addressed building or structure cannot be easily seen or is ((greater)) more than 50 feet from the nearest adjoining street, the address numbers shall be placed on a portion of the site that is clearly visible and no ((greater)) more than 20 feet from the street.

- C. The address numbers shall:
- <u>1.</u>  $((b))\underline{B}e$  easily legible figures((,)):
- 2. Comply with the following size requirements:

Distance from Right of Way	Minimum Letter Size
<u>0-25 feet</u>	3 inches
<u>26-50 feet</u>	4 inches
51-100 feet	6 inches
<u>101-150 feet</u>	8 inches
<u>151-200 feet</u>	10 inches
Over 200 feet	12 inches

<u>3. Be</u> not less than three inches high if a residential use or individual multi((-))family unit, nor less than five inches high if a commercial use((. Numbers shall));

<u>4.</u> ((e))<u>C</u>ontrast with the color of the structure upon which they are placed((5)); and

<u>5.</u>  $((\text{shall e}))\underline{E}$  ither be illuminated during periods of darkness((,)) or be reflective, so they are easily seen at night.

SECTION 122. Ordinance 12560, Section 110, as amended, and K.C.C. 16.14.110 are hereby amended to read as follows:

Section ((106.2)) <u>106.1</u> of the International Property Maintenance Code is supplemented with the following:

**Substandard buildings (IPMC ((106.2))** <u>106.1.1</u>). All buildings, portions thereof or premises which are determined by the code official not to be in compliance with this Code are hereby declared to be a public nuisance and shall be abated by repair, rehabilitation, demolition(( $_{5}$ )) or removal in accordance with the procedures specified in K.C.C. Title 23.

SECTION 123. Ordinance 12560, Section 116, as amended, and K.C.C. 16.14.120 are hereby amended to read as follows:

Section 107((.+)) of the International Property Maintenance Code is not adopted and the following is substituted:

((Commencement of proceedings)) <u>Notices and orders</u> (IPMC 107((.1))). When the code official has inspected or caused to be inspected a building or premises and has found, ((and)) determined ((that)) or otherwise has reasonable grounds to believe that such building is a substandard building, premises are not in compliance or that such building or premises are in a dangerous condition, the code official may ((commence))) begin proceedings to cause the repair, vacation(( $_{5}$ )) or demolition of the buildings or premises and issue a notice and order ((pursuant to)) in accordance with the procedures specified in K.C.C. Title 23.

The following standards shall be followed by the code official, and by the hearing examiner if an appeal

is taken, in ordering the repair, vacation, abatement or demolition of a substandard or dangerous building or structure or a nuisance:

1. If a building or structure is declared substandard or dangerous under this code, it shall be repaired in accordance with the current code or demolished at the option of the owner.

2. If a nuisance is declared under this code, it shall be abated in accordance with the current code or removed at the option of the owner.

3. If the substandard or dangerous building or structure or the nuisance is in such condition as to make it immediately dangerous to the life, limb, property or safety of the public or its occupants, it shall be ordered to be vacated and secured from entry.

SECTION 124. Ordinance 14914, Section 359, and K.C.C. 16.14.200 are hereby amended to read as follows:

Section 108.2 of the International Property Maintenance Code is not adopted and the following is substituted:

**Closing of vacant structures (IPMC 108.2).** If the structure is vacant and unfit for human habitation and occupancy, and is not in danger of structural collapse, the code official is authorized to post a placard of condemnation on the premises and order the structure closed up so as not to be an attractive nuisance. Upon failure of the owner <u>or the owner's agent</u> to close up the premises within the time specified enforcement action may be taken using the procedures of K.C.C. Title 23.

SECTION 125. Ordinance 14914, Section 367, and K.C.C. 16.14.250 are hereby amended to read as follows:

Section 109.1 of the International Property Maintenance Code is not adopted and the following is substituted:

Imminent danger (IPMC 109.1). ((When, in the opinion of the code official, there is imminent danger

of failure or collapse of a building or structure which endangers life, or when any structure or part of a structure has fallen and life is endangered by the occupation of the structure, or when there is actual or potential danger to the building occupants or those in the proximity of any structure because of explosives, explosive fumes or vapors or the presence of toxic fumes, gases or materials, or operation of defective or dangerous equipment, t))<u>T</u> he code official is hereby authorized and empowered to order and require the occupants to vacate the premises <u>of a building or structure ((forthwith)) immediately when, in the opinion of the code official:</u>

1. there is imminent danger of failure or collapse of a building or structure which endangers life;

2. any structure or part of a structure has fallen and life is endangered by the occupation of the

structure; or

3. there is actual or potential danger to the building occupants or those in the proximity of any structure because of:

3.1. explosives, explosive fumes or vapors;

3.2. the presence of toxic fumes, gases or materials; or

3.3. operation of defective or dangerous equipment.

The code official shall ((eause to be posted)) shall post at each entrance to such structure or premises a notice as provided in ((Section 108.4)) K.C.C. 16.14.220. ((It shall be unlawful for any)) No person ((to)) may enter such structure except for the purpose of securing the structure or premises, making the required repairs, removing the hazardous condition or of demolishing the same.

SECTION 126. Ordinance 12560, Section 124, as amended, and K.C.C. 16.14.410 are hereby amended to read as follows:

Section ((110.1)) 110 of the International Property Maintenance Code is not adopted and is substituted with the following:

General (IPMC ((110.1)) 110). Demolition shall be in accordance with K.C.C. Title 23.

SECTION 127. Ordinance 12560, Section 121, as amended, and K.C.C. 16.14.430 are hereby amended

to read as follows:

Section ((111.1))  $\underline{111}$  of the International Property Maintenance Code is not adopted and is substituted with the following:

Application for appeal (IPMC ((111.1)) <u>111</u>). Appeals shall be in accordance with K.C.C. Titles 20 and 23.

<u>NEW SECTION. SECTION 128.</u> There is hereby added to K.C.C. chapter 16.14 a new section to read as follows:

Section 112 of the International Property Maintenance Code is not adopted and the following is substituted:

Stop work order (IPMC 112). Stop work orders shall be in accordance with K.C.C. Title 23.

SECTION 129. Ordinance 14914, Section 407, and K.C.C. 16.14.480 are hereby amended to read as follows:

Section 303.2 of the International Property Maintenance Code is not adopted and the following is substituted:

Enclosures (IPMC 303.2). ((Private swimming pools, hot tubs and spas, containing water more than twenty four inches (610 mm) in depth shall be completely surrounded by a fence or barrier at least sixty inches (1,524 mm) in height above the finished ground level measured on the side of the barrier away from the pool. Gates and doors in such areas shall be self-closing and self-latching. Where the self-latching devices is less than fifty-four inches (1,372 mm) above the bottom of the gate, the release mechanism shall be located on the pool side of the gate. Self-closing and self-latching gates shall be maintained such that the gate will positively close and latch when released from an open position of six inches (152 mm) from the gatepost. No existing g pool enclosure shall be removed, replaced or changed in a manner that reduces its effectiveness as a safety barrier.)) Swimming pool enclosures shall comply with the International Building Code Section 3109, as adopted and amended by the state of Washington.

SECTION 130. Ordinance 14914, Section 408, and K.C.C. 16.14.490 are hereby amended to read as follows:

Section 304.3 of the International Property Maintenance Code is not adopted and the following is substituted:

**Premises identification. (IPMC 304.3).** Approved numbers or addresses shall be provided for all new buildings in such a position as to be plainly visible and legible from the street or road fronting the property as specified by the department <u>and as required by K.C.C. 16.08.050</u>.

SECTION 131. Ordinance 6746, Section 5, as amended, and K.C.C. 16.32.030 are hereby amended to read as follows:

A. Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, ((14)) <u>15</u>, 16((5)) and 17 and Appendix A (Recommended Rules for Sizing the Water Supply System), B (Explanatory Notes on Combination Waste and Vent Systems), ((and)) I (Installation Standard for PEX Tubing Systems for Hot- and Cold-Water Distribution) and M (Peak <u>Water Demand Calculator</u>) of the Uniform Plumbing Code, ((2012)) <u>2018</u> Edition, as published by or jointly with the International Association of Plumbing and Mechanical Officials and as amended in chapter 51-56 WAC((5)) and the gas piping provisions of the International Fuel Gas Code, ((2012)) <u>2018</u> Edition, the National Fuel Gas Code, ((2012)) <u>2018</u> Edition (((2012))) <u>2018</u> ANSI Z223.1/NFPA 54), the Liquefied Petroleum Gas Code, ((2014))) <u>2017</u> Edition (((2014))) <u>2017</u> NFPA 58) as amended in chapter 51-52 WAC((5)) and International Residential Code, ((2012)) <u>2018</u> Edition, as amended in chapter 51-51 WAC, are hereby adopted and together with King County amendments, additions and deletions adopted in this chapter are adopted as the King County Plumbing Code and may be cited as such and referred to in this chapter as "this code." This code shall have precedence over documents adopted by reference.

B. This code also may be further clarified and implemented by administrative rules adopted in accordance with K.C.C. chapter 2.98.

<u>NEW SECTION. SECTION 132.</u> There is hereby added to K.C.C. chapter 16.32 a new section to read as follows:

Section 102.1 of the Uniform Plumbing Code is not adopted and the following is substituted:

**Conflicts between codes (UPC 102.1).** In instances where this code, applicable standards or the manufacturer's installation instructions conflict, the more stringent provisions shall prevail. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall prevail.

<u>NEW SECTION. SECTION 133.</u> There is hereby added to K.C.C. chapter 16.32 a new section to read as follows:

Section 104.3.2 of the Uniform Plumbing Code is not adopted and the following is substituted:

**Plan Review Fees (UPC 104.3.2).** Where a plan or other data is required to be submitted in accordance with UPC 104.3.1, a plan review fee shall be charged at a rate equal to the cost of performing the service in addition to the permit fees specified in K.C.C. 16.32.080.

SECTION 134. Ordinance 6746, Section 10, as amended, and K.C.C. 16.32.080 are hereby amended to read as follows:

Section 104.5 of the Uniform Plumbing Code is not adopted and the following is substituted:

((A.)) <u>Fees (UPC 104.5).</u> An applicant for a permit to do work under this code shall pay for each plumbing permit <u>and for each gas piping permit</u>, at the time of issuance, a fee in accordance with the following schedule, and at the rate provided for each permit classification shown in the schedule:

### **SCHEDULE OF FEES**

Plumbing permit fees for fixtures or traps, including water, drainage and vent piping, other than backflow devices and assemblies, for which a separate permit shall 1 obtained at the rates in this schedule:

One fixture or tra\$140.00 Two to three fixt\$210.00

Four to six fixtur\$298.00 Seven to ten fixt\$333.00 More than ten fix\$333.00 base fee for ten fixtures or traps plus \$8.00 for each additional fixture or trap Plumbing permit fees for backflov devices or assemblies: One device or as((130.00)) \$140.00 Two to three dev\$210.00 Four to six devic\$298.00 Seven to ten dev \$333.00 More than ten de\$333.00 base fee for ten devices or assemblies plus \$8.00 for each additional device or assembly Gas piping permit fees for outlets One to four outle\$140.00 Five to six outlet\$175.00 Seven to nine ou\$210.00 Ten outlets \$245.00 More than ten ou\$245.00 base fee for ten outlets plus \$10.00 for each additional outlet ((B.)) For the purpose of this section(( $_{7}$ )):

<u>1.</u> "fixture" means an appliance that is connected with water, drain or vent pipe, but a sillcock faucet or hose bibb is not considered a fixture. A sanitary plumbing outlet on or to which a plumbing fixture or appliance

may be set or attached is a fixture; and

2. "outlet" means the point at which a fuel-gas appliance connects to the gas piping system, or a

medical gas or medical vacuum connection is installed.

SECTION 135. Ordinance 15802, Section 122, and K.C.C. 16.32.195 are hereby amended to read as follows:

Section ((102.1)) 103.1 of the Uniform Plumbing Code ((not adopted and the following is substituted))

is supplemented with the following:

Authority Having Jurisdiction (UPC ((<del>102.1</del>)) <u>103.1.1</u>). The authority having jurisdiction is the director of ((<del>the Seattle-King County department of</del>)) public health <u>- Seattle & King County</u> or the director's authorized representative, who shall administer and enforce the provisions of this code((-)), render <u>interpretations of this code and make and enforce such rules and regulations, in accordance with K.C.C.</u> <u>chapters 2.98 and 2.100.</u>

SECTION 136. Ordinance 15802, Section 123, and K.C.C. 16.32.205 are hereby amended to read as follows:

Section ((102.2.2)) <u>103.4</u> of the Uniform Plumbing Code is not adopted and the following is substituted:

**Right of Entry (UPC ((102.2.2))** <u>103.4</u>). Upon presentation of proper credentials, the authority having jurisdiction may, with the consent of the occupant or with the consent of the owner of an unoccupied building or premises, or in accordance with a lawfully issued search warrant, enter at reasonable times a building or premises to perform a duty imposed upon the authority having jurisdiction by this code((<del>, provided that t</del>)). The authority having jurisdiction shall make entry only if such entry is consistent with the constitutions and laws of the United States and the state of Washington.

SECTION 137. Ordinance 15802, Section 124, as amended, and K.C.C. 16.32.215 are hereby amended to read as follows:

Section ((102.2.3)) <u>106.4</u> of the Uniform Plumbing Code is not adopted and the following is substituted:

# Stop Work Order and Correction Order (UPC ((<del>102.2.3</del>)) <u>106.4</u>).

A. Whenever any work is being done contrary to the provisions of this code, the authority having jurisdiction may order the work stopped by notice in writing served on any persons engaged in the doing or causing such work to be done, and any such persons shall ((forthwith)) immediately stop work until authorized by the authority having jurisdiction to proceed with the work. Service of a stop work order shall be made by one or more of the following methods:

Personal service: Personal service of a stop work order may be made on the property owner ((and/))or

on any person doing or causing the work to be done, or by leaving the stop work order at the house of usual abode of the person being served((, provided that)) if the stop work order is left with a person of suitable age and discretion who resides there.

Service by posting on the property: Service directed to the property owner ((and/))or person engaged in doing or causing such work to be done may be made by posting the stop work order in a conspicuous place on the property where the work is occurring, and concurrently mailing notice as ((provided for below)) required by this subsection, if a mailing address is available.

Service by mail: Service by mail may be made for a stop work order by mailing two copies, postage prepaid, one by ordinary first class mail and the other by certified mail, to the property owner and to any person engaged in doing or causing such work to be done, at their last known addresses, at the address of the location of the work being done, or at the address of the place of business of the person being served. The taxpayer's address as shown on the tax records of the county shall be deemed to be the proper address for the purpose of mailing such notice to the person being served. Service by mail shall be presumed effective upon the third business day following the day upon which the stop work order was placed in the mail.

B. Whenever any work is being done contrary to the provisions of this code, the authority having jurisdiction may order the violations corrected without ordering all work stopped by issuing a correction notice that identifies the violation. The correction notice may require an inspection before further construction or at the time of the next required inspection. The correction notice shall be served or posted in the same manner as a stop work order.

C. The remedies ((set forth)) in this section are in addition to those authorized elsewhere in this code.

SECTION 138. Ordinance 15802, Section 126, and K.C.C. 16.32.235 are hereby amended to read as follows:

Section ((<del>102.2.6</del>)) <u>103.2</u> of the Uniform Plumbing Code is not adopted and the following is substituted: Liability ((Claims)) (UPC ((<del>102.2.6</del>)) <u>103.2</u>). This code is enacted as an exercise of the police power

of King County to protect and preserve the public peace, health, safety and welfare, and its provisions shall be liberally construed for the accomplishment of these purposes. It is expressly the purpose of this code to provide for and promote the health, safety and welfare of the general public, and not to create or otherwise establish or designate any particular class or group of persons who ((<del>will</del>)) <u>would</u> or should be especially protected or benefited by the terms of this code.

It is the specific intent of this code to place the obligation of complying with its requirements upon the owner or occupier of premises within this code's scope, and no provision nor term used in this code is intended to impose any duty ((whatsoever)) upon the authority having jurisdiction or any of the authority having jurisdiction's officers or employees, for whom the implementation or enforcement of this code shall be discretionary and not mandatory.

Nothing in this code creates or forms the basis for any liability on the part of the authority having jurisdiction, or the authority having jurisdiction's officers, employees or agents, for any injury or damage resulting from the failure of the owner or occupier of premises to comply with the provisions of this code, or by reason or in consequence of any act or omission in connection with the implementation or enforcement of this code on the part of the authority having jurisdiction or by the authority having jurisdiction's officers, employees or agents.

Any claim or litigation arising from any conduct, acts or omissions of the authority having jurisdiction, or any of the authority having jurisdiction's officers, employees or agents, shall be subject to the provisions of K.C.C. chapter((s 4.12 and 4.13)) 2.21.

SECTION 139. Ordinance 15802, Section 128, and K.C.C. 16.32.255 are hereby amended to read as follows:

Section ((<del>102.3.2</del>)) <u>106.3</u> of the Uniform Plumbing Code is not adopted and the following is substituted: **Penalties (UPC ((<del>102.3.2</del>)) <u>106.3</u>). Any person, firm, corporation or other entity violating any provision of this code shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be**  punishable by a fine ((and/))or imprisonment, or both, in accordance with K.C.C. Title 23 or state law. Each separate day or any portion thereof, during which any violation of this code occurs or continues, shall be deemed to constitute a separate offense.

SECTION 140. Ordinance 15802, Section 130, and K.C.C. 16.32.275 are hereby amended to read as follows:

Section ((103.1.3)) <u>103.3.1</u> of the Uniform Plumbing Code is not adopted and the following is substituted:

((103.1.3)) Certification and Registration (UPC ((103.1.3)) <u>103.3.1</u>). It shall be the obligation of (( every)) <u>a</u> person who enters into contracts for the installation or repair of plumbing systems for which this code requires a permit, to comply with all applicable state or local rules and regulations concerning plumber certification and contractor registration.

SECTION 141. Ordinance 15802, Section 131, as amended, and K.C.C. 16.32.285 are hereby amended to read as follows:

Section ((103.3.3)) <u>104.4.2</u> of the Uniform Plumbing Code is not adopted and the following is substituted:

**Validity of Permit (UPC ((103.3.3))** <u>104.4.2</u>). The issuance of a permit or approval of plans and specifications shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. No permit presuming to give authority to violate or cancel the provisions of this code shall be valid.

The issuance of a permit based upon plans, specifications or other data shall not prevent the authority having jurisdiction from thereafter requiring the correction of errors contained in ((said)) the plans, specifications and other data or from preventing building operations being carried on thereunder when in violation of this code or of other ordinances of this jurisdiction.

Every plumbing permit shall be kept on the site where the work permitted is being performed and shall

not be removed until the work has been finally approved by the authority having jurisdiction.

((Every permit issued by the authority having jurisdiction under the provisions of this code shall expire by limitation and become null and void one year from date of issue. Permits expired for not more than one year may be renewed one time only for one-half the original cost or fifty dollars (\$50), whichever is less. Any person seeking renewal of a permit expired for more than one year shall pay the full amount of the original permit cost in accordance with the fee schedule.))

Plumbing work authorized by a permit in effect on or after ((July 1, 2013)) the effective date of this ordinance, shall be performed in accordance with the laws and ordinances in effect when the permit was issued, except when:

<u>A.</u>  $((\mathfrak{t}))$ <u>T</u>he authority having jurisdiction determines such work to be in fact dangerous, unsafe, insanitary(( $_{5}$ )) or a nuisance or a menace to life, health or property; or

B. A building permit has been approved before the effective date of this ordinance.

<u>NEW SECTION. SECTION 142.</u> There is hereby added to K.C.C. chapter 16.32 a new section to read as follows:

Section 104.4.3 of the Uniform Plumbing Code is not adopted and the following is substituted:

**Expiration (UPC 104.4.3).** Permits issued by the authority having jurisdiction under this code shall expire eighteen months from date of issue.

<u>NEW SECTION. SECTION 143.</u> There is hereby added to K.C.C. chapter 16.32 a new section to read as follows:

Section 104.4.4 of the Uniform Plumbing Code is not adopted and the following is substituted:

**Extensions (UPC 104.4.4).** Permits may be renewed one time only for one-half the original cost or fifty dollars (\$50), whichever is less. The renewed permit shall expire eighteen months from the original expiration date. Any person seeking renewal of a permit that has previously been renewed, shall apply for a new permit in accordance with the code and pay the full amount of the permit cost in accordance with the fee

schedule

SECTION 144. Ordinance 15802, Section 132, and K.C.C. 16.32.295 are hereby amended to read as follows:

Section ((103.3.5)) <u>104.4.5</u> of the Uniform Plumbing Code is not adopted and the following is substituted:

### Suspension, Revocation or Limitation of Permits (UPC ((103.3.5)) 104.4.5).

((A.)) <u>1.</u> In addition to other remedies provided by law, the authority having jurisdiction may, in writing, suspend, revoke or limit a permit issued under ((the provisions of)) this code if:

(((1))) <u>1.1.</u> The permit holder committed a violation of this code  $((\Theta r))_2$  other ordinances((z)) or any rules and regulations adopted by the authority having jurisdiction, in the course of performing activities subject to that permit;

(((2))) <u>1.2.</u> The permit holder interfered with the authority having jurisdiction in the performance of the authority having jurisdiction's duties relating to the permit;

(((3))) <u>1.3.</u> The permit was issued in error or on the basis of materially incorrect information supplied to the authority having jurisdiction; or

(((4))) <u>1.4.</u> Permit fees or costs were paid to the county by check and returned from a financial institution marked nonsufficient funds or canceled.

 $((B_{-}))$  <u>2</u>. The suspension, revocation or limitation shall be carried out through the notice and order provisions of K.C.C. Title 23, is effective on the date established by the notice and order and may be appealed to the King County hearing examiner in accordance with the appeal provisions of K.C.C. Title 23.

((C)) <u>3</u>. Notwithstanding any other provision of this code, the administrative authority may immediately suspend operations under a permit by issuing a stop work order in accordance with this code.

SECTION 145. Ordinance 15802, Section 133, and K.C.C. 16.32.306 are hereby amended to read as follows:

Section ((103.5.6)) <u>105.2.6</u> of the Uniform Plumbing Code is not adopted and the following is substituted:

**Reinspections (UPC ((103.5.6))** <u>105.2.6</u>). A reinspection fee may be assessed for each inspection or reinspection when part or all of the work for which inspection is called is not complete or when required corrections have not been made.

This provision is not to be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for inspection or reinspection.

Reinspection fees may be assessed when the approved plans are not readily available to the inspector, for failure to provide access on the date for which the inspection is requested, or for deviating from plans when such deviation requires but has not received the approval of the authority having jurisdiction.

To obtain reinspection, the applicant shall file an application therefor in writing upon a form furnished for that purpose and pay the reinspection fee in accordance with K.C.C. ((16.32.080)) <u>16.32.095</u>.

In instances where reinspection fees have been assessed, no additional inspection of the work ((will)) may be performed until the required fees have been paid.

<u>NEW SECTION. SECTION 146.</u> There is hereby added to K.C.C. chapter 16.32 a new section to read as follows, to follow K.C.C. 16.32.335:

Section 107 of the Uniform Plumbing Code is not adopted.

<u>NEW SECTION. SECTION 147.</u> There is hereby added to K.C.C. chapter 16.32 a new section to read as follows:

Section 501 of the Uniform Plumbing Code is supplemented with the following:

# Water Heaters Used for Space Heating (UPC 501.2).

1. Water heaters used both to supply potable hot water and provide hot water for space-heating applications shall be:

1.1. Listed and labeled for such applications by the manufacturer.

1.2. Installed in accordance with the manufacturer's instructions and this code.

1.3. Sized to prevent the space-heating load from diminishing the required potable water-heating capacity.

2. Where a combination potable water-heating and space-heating system requires water for space heating at temperatures higher than 140° F (60° C), a temperature-actuated mixing valve that conforms to ASSE 1017 shall be provided to temper the water supplied to the potable hot water distribution system to a temperature of 140° F (60° C) or less.

<u>NEW SECTION. SECTION 148.</u> There is hereby added to K.C.C. chapter 16.32 a new section to read as follows:

Section 501 of the Uniform Plumbing Code is supplemented with the following:

**Supplemental Water-Heating Devices (UPC 501.3).** Potable water heating devices that use refrigerant-to-water heat exchangers shall be approved and installed in accordance with this code and the manufacturer's instructions.

<u>NEW SECTION. SECTION 149.</u> There is hereby added to K.C.C. chapter 16.32 a new section to read as follows:

Section 604.14 of the Uniform Plumbing Code is not adopted and the following is substituted:

**Termination of Building Supply Piping (UPC 604.14).** Plastic water service piping may terminate within a building, but the connection to the potable water distribution system shall be made as near as is practical to the point of entry and shall be accessible. Barbed insert fittings with hose clamps are prohibited as a transition fitting within the building.

**EXCEPTION:** The connection to the potable water distribution system for PVC and PE piping shall be within one foot of the building perimeter point of entry.

NEW SECTION. SECTION 150. There is hereby added to K.C.C. chapter 16.32 a new section to read

as follows:

Section 709.1 of the Uniform Plumbing Code is not adopted and the following is substituted:

**709.1 General (UPC 709.1).** Plumbing fixtures shall be drained to the sanitary waste system by gravity flow.

**EXCEPTION:** Plumbing fixtures are permitted to be pumped or ejected as allowed by UPC 710.2 or approved by the authority having jurisdiction.

<u>NEW SECTION. SECTION 151.</u> There is hereby added to K.C.C. chapter 16.32 a new section to read as follows:

Chapter 9 of the Uniform Plumbing Code is supplemented with the following:

Air Admittance Valves (UPC 913.0). Individual fixtures, a branch vent, a vertical wet vent and a horizontal wet vent may terminate with a connection to an air admittance valve as follows:

1. Fixtures connected to an air admittance valve shall be located on the same floor level.

2. Air admittance valves shall conform to ASSE 1051 for single fixtures, and ASSE 1050 for multiple fixtures, and shall be installed as required in this section and the manufacturer installation guidelines.

3. Air admittance valves shall be accessible and located:

3.1. In an area that allows air to enter the valve.

3.2. A minimum of four (4) inches above the trap arm.

3.3. A minimum of six (6) inches above the flood level rim of the highest fixture being vented, where the air admittance valve serves as a vent termination for a branch vent, or vertical and horizontal wet vent.

3.4. Not less than six (6) inches above insulation materials.

3.5. Within the maximum developed length permitted for the vent as shown in UPC Table 703.2.

4. The air admittance valve shall be rated in accordance with the standard for the vent size as determined in UPC Table 703.2.

5. Not less than one plumbing vent sized as required by UPC 904.1 shall extend to the exterior of the

building as required in UPC 906.1.

6. When a horizontal branch drain uses an individual or branch type air admittance valve, a relief vent shall be installed when the horizontal branch drain is located more than four (4) branch intervals from the top of the building drain or waste stack. Installations that require a relief vent shall be:

6.1. Submitted for an installation design review before approval.

6.2. Sized in accordance with UPC 904.1.

6.3. Installed in accordance with UPC 905.0.

6.4. Extended to the outdoors or connect to a vent stack.

6.5. Permitted to serve as the vent for other fixtures.

7. Air admittance valve installations are prohibited for:

7.1. Venting sumps or tanks.

7.2. Non-neutralized chemical waste systems without a design review and approval by the authority having jurisdiction.

7.3. Any fixtures connected to a grease or fats, oils and grease (FOG) disposal system.

7.4. Location in spaces used as supply or return air plenums.

<u>NEW SECTION. SECTION 152.</u> There is hereby added to K.C.C. chapter 16.32 a new section to read as follows:

Section 1014.1 of the Uniform Plumbing Code is not adopted and the following is substituted:

**General (UPC 1014.1).** Where it is determined by the authority having jurisdiction that waste pretreatment is required, an approved type of grease interceptor(s) that complies with ASME A112.14.3, ASME A112.14.4, CSA B481, PDI G-101 or PDI G-102, and sized in accordance with UPC 1014.2.1 or 1014.3.6, shall be installed in accordance with the manufacturer's installation instructions to receive the drainage from fixtures or equipment that produce grease-laden waste located in areas of establishments where food is prepared or other establishments where grease is introduced into the drainage or sewage system in quantities that can

effect line stoppage or hinder sewage treatment or private sewage disposal systems. A combination of hydromechanical, gravity grease interceptors and engineered systems are allowed to meet this code and other applicable requirements of the authority having jurisdiction where space or existing physical constraints of existing buildings require such installations. Grease interceptors are not required for individual dwelling units or private living quarters. Water closets, urinals and other plumbing fixtures conveying human waste shall not drain into or through the grease interceptor. Grease interceptors shall comply with UPC 1014.1.1 through 1014.1.3.

**EXCEPTION:** A one-family or two-family home that has an approved commercial kitchen or prepares food for public sale shall install a grease interceptor that complies to Section 1014.0 for all fixtures that produce fats, oils and grease (FOG) waste.

<u>NEW SECTION. SECTION 153.</u> There is hereby added to K.C.C. chapter 16.32 a new section to read as follows:

Section 1014.1.3 of the Uniform Plumbing Code is not adopted and the following is substituted:

**Food Waste Disposers and Dishwashers (UPC 1014.1.3).** No food waste disposer or dishwasher shall be connected to or discharge into a grease interceptor. Commercial food waste disposers may discharge directly into the building's drainage system.

**EXCEPTION:** Food waste disposers may discharge to grease interceptors that are designed to receive the discharge of food waste or a listed food solids interceptor shall be installed at the discharge point of the food waste disposer.

SECTION 154. Ordinance 15802, Section 137, and K.C.C. 16.32.345 are hereby amended to read as follows:

Chapter 10 of the Uniform Plumbing Code is supplemented with the following:

**Parking Garage Drainage Systems (UPC 1018.1).** All <u>garage</u> floor drainage under the roof of a parking garage shall be connected to the sanitary drainage system, through the use of a sand interceptor. When

the top floor of the building is used as a roof as well as a parking area, the drainage from the roof shall be connected to the storm drainage system. Drainage from ((conventional)) plumbing fixtures shall not be interconnected with the ((floor)) garage drainage system((.-H)); however, drainage lines from car or truck washing equipment may be connected to the ((floor)) approved garage drainage system ((through an approved sand interceptor)). Garage drains shall comply with the following:

<u>1.</u> ((Floor drainage waste lines)) <u>Garage drain piping</u> shall be a minimum of three inches in size. (( Waste unit loading for three-inch or larger size floor drainage piping shall be sized in accordance with table 7-5 of this code. Floor drains or floor drain openings shall be equipped with approved strainers and need not be trapped when connected to the building drain through a properly trapped and vented sand interceptor.))

2. <u>A</u> ((∓))<u>trap((s)) shall not be ((used when the floor)) installed at the garage</u> drains ((are located in areas exposed to freezing temperatures. The waste line from floor drains entering a sand interceptor shall be above the waste line discharging from the sand interceptor to the building drain. The sand interceptor receiving the floor drains shall have a water seal of not less than six inches. Floor drain traps need not be vented individually if line venting is used through an approved indirect waste system with a properly trapped and vented sand interceptor. A line vent for floor drains shall terminate through the roof or to an approved location in the outside atmosphere. When using line venting, the terminating vents, if more than one, shall be equal in cross sectional area to the size of the waste line entering the sand interceptor or the line vent may continue full size from the sand interceptor to the point of termination)). All plans for parking garage ((floor)) drainage systems shall be submitted to the authority having jurisdiction ((<del>prior to</del>)) <u>before</u> installation for approval.

**EXCEPTION:** This section shall not apply to one-family or two-family dwellings.

<u>SECTION 155.</u> Ordinance 15802, Section 138, and K.C.C. 16.32.355 are hereby amended as follows:
 Section ((1104)) <u>1101</u>.3 of the Uniform Plumbing Code is not adopted and the following is substituted:
 **Combining Storm with Sanitary Sewage (UPC ((1104)) <u>1101</u>.3). The sanitary and storm drainage
 system of a building shall be entirely separate.** 

SECTION 156. Ordinance 2097, Section 1, as amended, and K.C.C. 17.04.010 are hereby amended to read as follows:

The International Fire Code ((2012)) 2018 Edition, together with Appendices B (Fire-flow requirements for buildings) and C (Fire hydrants location and distribution), as published by the International Code Council, as amended in chapter 51-54A WAC, effective February 1, ((2013)) 2021, and referred to in this title as the International Fire Code ("IFC"), together with amendments, additions, and deletions adopted in this chapter by reference, together with King County modifications are adopted as the ((Fire Code of)) King County Fire Code, and referred to in this chapter as "this code." Administrative rules may be adopted in accordance with K.C.C. chapter 2.98 to further clarify and implement these code requirements. The King County modifications shall be codified in this chapter.

<u>NEW SECTION. SECTION 157.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 202 of the International Fire Code is supplemented with the following:

**Definitions (IFC 202.1).** Definitions. The definitions in this section apply throughout this title unless the context clearly requires otherwise.

A. Critical fire service areas: Areas that provide vital services for the coordination or implementation of fire suppression services, such as fire command centers, fire pump rooms, interior exit stairways, exit passageways, elevator lobbies, standpipe cabinets and sprinkler sectional valve locations, and other areas required by the fire marshal.

B. Fire marshal: The King County fire marshal as designated in K.C.C. 2.16.055, or designee.

C. NFPA: The National Fire Protection Association.

D. Water main: piping used to deliver water to any fire hydrants or to one or more individual service connections.

SECTION 158. Ordinance 12560, Section 148, as amended, and K.C.C. 17.04.200 are hereby amended

to read as follows:

Section 104.1 of the International Fire Code is not adopted and the following is substituted:

**General (IFC 104.1).** The ((F))<u>f</u>ire ((M))<u>m</u>arshal is authorized to render interpretations of this code and make and enforce such rules and regulations, ((pursuant to the provisions of)) <u>in accordance with K.C.C.</u> chapters 2.98 <u>and 2.100</u>, for the prevention and control of fires and fire hazards as necessary to ((carry out))<u>execute</u> the application and the intent of this code, including but not limited to:

1. Procedures to ((assure)) ensure that building permits for structures shall conform to the requirements of this code.

2. Procedures to assure that applicable standards of this code shall be reviewed as part of the subdivision, short subdivision, urban planned development, rezone, conditional use, special use, site development permit, binding site plan and building permit processes.

3. Procedures to assure that the standard known as NFPA 13R shall be applied as a minimum standard to all R occupancies.

4. Procedures to allow for relaxation of the hydrant spacing requirements by as much as 50((% pursuant to K.C.C. chapter 17.08)) percent, except when such allowances would unreasonably reduce fire protection to the area or structures served.

((5. A minimum of one certified copy or the number required by governing law of such rules and regulations shall be filed with the clerk of the council and shall be in effect immediately thereafter and additional copies shall be kept in the King County Fire Marshal's Office for distribution to the public.))

SECTION 159. Ordinance 2097 (part), as amended, and K.C.C. 17.04.210 are hereby amended to read as follows:

Section 104.1 of the International Fire Code is supplemented with the following:

### Enforcement (IFC 104.1.1).

1. The fire marshal ((or designee)) is authorized to enforce the provisions of this ((chapter)) title, the

ordinances codified in it, and any adopted rules and regulations in accordance with the enforcement and penalty provisions of K.C.C. Title 23.

2. The fire marshal ((or designee)), any officer of the department of public safety, and the chief of the fire district or designee, is authorized to take such lawful action, including the writing and issuance of citations for civil infractions, as may be required to enforce the provisions of the fire lane ordinance codified in this title.

SECTION 160. Ordinance 12560, Section 154, as amended, and K.C.C. 17.04.230 are hereby amended to read as follows:

Section 104.1 of the International Fire Code is supplemented with the following:

### Duties of the fire marshal and fire districts (IFC 104.1.3).

1. The fire marshal shall have responsibility for administration and inspection functions to promote compliance of the fire prevention provisions of this code.

2. The  $((\mathbb{C}))$ <u>c</u>hiefs of the King County  $((\mathbb{F}))$ <u>f</u>ire  $((\mathbb{D}))$ <u>d</u>istricts ((and)), <u>municipal</u>  $((\mathbb{F}))$ <u>f</u>ire  $((\mathbb{D}))$ <u>d</u> epartments <u>and regional fire protection service authorities</u> shall have responsibility for fire suppression or extinguishing provisions of this code within their respective jurisdictions.

3. The fire marshal may, by written contract, delegate to the chiefs of the fire districts or fire departments authority for inspections of the fire prevention provisions of this code within their respective jurisdictions.

4. The fire marshal may, at the request of a fire districts or fire department, assume an advisory status in matters of operations, function, expenditure, tactics, personnel and equipment or any other function performed by the fire district or fire department.

SECTION 161. Ordinance 12560, Section 151, as amended, and K.C.C. 17.04.270 are hereby amended to read as follows:

Section 104.8 of the International Fire Code is supplemented with the following:

((Deviations)) Modifications (IFC 104.8.1). The fire marshal ((or designee)) shall have the authority

to consider deviations from the standards established for life safety/rescue access, fire detection systems and fire sprinkler systems.

((4-)) If the fire marshal finds that the deviation would not unreasonably reduce fire protection to the area or structures served, and determines that the deviation should be approved, the fire marshal shall notify the fire chief of the applicable fire district of the deviation request. The fire marshal may approve the deviation if the fire chief of the applicable fire district either concurs in writing with the fire marshal or does not respond in writing within seven working days after notification of the deviation request. The fire district chief's lack of response shall be taken as an indication that the fire chief concurs with the fire marshal's finding.

((2. If a response is received within seven days which is not in accordance with the opinion of the fire marshal or designee, the issue shall be submitted to the King County fire code appeals board.))

SECTION 162. Ordinance 17837, Section 75, and K.C.C. 17.04.295 are hereby amended to read as follows:

Section 105.7.21 of the International Fire Code is ((supplemented with)) not adopted and the following is substituted:

Solar photovoltaic power systems (IFC ((105.7.13)) <u>105.7.21</u>). A construction permit ((is required to )) shall install or modify solar photovoltaic power systems.

((Exception)) EXCEPTION: Roof-mounted photo-voltaic solar panels on one and two family dwellings that have a total dead load not exceeding ((three)) four pounds per square foot and are mounted no more than eighteen inches above the roof or highest roof point on which they are mounted.

SECTION 163. Ordinance 14915, Section 25, and K.C.C. 17.04.310 are hereby amended to read as follows:

Sections ((108.3)) 109.1, 109.2 and 109.3 of the International Fire Code ((is)) are not adopted.

SECTION 164. Ordinance 14915, Section 26, and K.C.C. 17.04.320 are hereby amended to read as

follows:

Section ((111.1)) <u>112.1</u> of the International Fire Code is not adopted and the following is substituted:

**Order (IFC ((111.1))** <u>112.1</u>). Whenever any work is being done contrary to the provisions of this code, the fire marshal may order the work stopped in accordance with K.C.C. Title 23 by notice in writing served on any persons engaged in the doing or causing such work to be done, or by posting such notice in a conspicuous place on the premises where the violation is occurring, and any such persons shall ((forthwith)) immediately stop such work until authorized by the fire marshal to proceed with the work.

Whenever any work is being done contrary to the provisions of this code, the fire marshal may order the violations corrected without ordering all work stopped by issuing a correction notice which identifies the violation. The correction notice may require reinspection ((prior to)) before further constructions or at the time of the next required inspection. The correction notice shall be served or posted in the same manner as a stop work order.

These remedies are in addition to those authorized elsewhere in the code.

SECTION 165. Ordinance 14915, Section 27, and K.C.C. 17.04.330 are hereby amended to read as follows:

Section ((111.4)) <u>112.4</u> of the International Fire Code is not adopted.

<u>NEW SECTION. SECTION 166.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 503.2 of the International Fire Code is not adopted and the following is substituted:

**Specifications (IFC 503.2).** An approved fire apparatus access road shall be a minimum of 20 feet wide and provide a minimum unobstructed height of 13 feet 6 inches.

SECTION 167. Ordinance 12560, Section 165, as amended, and K.C.C. 17.04.380 are hereby amended to read as follows:

Section 503.2.3 of the International Fire Code is not adopted and the following is substituted:

Surface (IFC 503.2.3). ((Fire apparatus access roads shall be designed and maintained to support the

imposed loads of 25 tons)) New facilities or buildings, or portions thereof, shall be accessible to fire apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface suitable for all-weather driving and capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds, or other weight as required by the ((F))fire ((M))marshal, and shall ((be provided with a surface so as to provide all-weather driving capabilities that)) comply with K.C.C. chapter 14.42((, King County Road Standards)) and the provisions of this chapter.

SECTION 168. Ordinance 7980, Section 1, as amended, and K.C.C. 17.04.420 are hereby amended to read as follows:

Sections 503.3 and 503.4 of the International Fire Code are not adopted and the following is substituted:

## Marking ((of and)), establishment and obstruction of fire lanes (IFC 503.3 and 503.4).

 $((A_{\cdot}))$  <u>1</u>. Establishment of ((F))<u>f</u>ire ((L))<u>l</u>anes. Fire lanes in conformance with this code shall be established by the ((King County)) fire marshal ((or designee,)) and shall be referred to as designated fire lanes in this section.

 $((\underline{B}, \underline{)})$  <u>2</u>. Definition of  $((\underline{F}))$  fire  $((\underline{L}))$  lanes. The area within any public right of way, easement $((\overline{s}))$  or on private property designated for the purpose of permitting fire trucks and other fire fighting or emergency equipment to use, travel upon $((\overline{s}))$  and park.

 $((C_{\cdot}))$  <u>3.</u> Marking of ((F))<u>fire</u> ((L))<u>l</u>anes. All designated fire lanes shall be clearly marked ((in the following manner)) as follows:

<u>3.1.</u> Vertical curbs (((6 inch))) shall be painted ((yellow)) red on the top and side, extending the length of the designated fire lane. The pavement adjacent to the painted curbs shall be marked with minimum 18 inch in height block lettering with a minimum 3- inch brush stroke reading: "NO PARKING - FIRE LANE." Lettering shall be ((yellow)) white and spaced at 50 foot or portion thereof intervals((, or));

<u>3.2</u>. Rolled curbs or surface without curbs shall have a ((yellow)) <u>red</u> 6(())-inch wide stripe painted extending the length of the designated fire lane. The surface adjacent to the stripe shall be marked with

minimum 18 inch in height block lettering with a minimum  $3_{-}$  inch brush stroke reading: "NO PARKING -FIRE LANE." Lettering shall be in ((yellow)) white and spaced at 50 ft. or portion thereof intervals(( $_{7}$ )); or

<u>3.3</u>. Fire lane signs shall be installed ((per the illustration)) as follows:

	((12"	
<u>-18"</u>	NO PARKING	Letter Specifications
	FIRE LANE	3" Height 3" Height
		2" Height 2" Height))
a. ((Reflective in nature.)) Signs shall be a type "R8-31" reflective sign or of an equivalent		

## reflectivity.

b. Red letters on white background with the wording:

### "NO PARKING

## FIRE LANE"

c. Signs ((to be spaced 50 feet or portion thereof apart and posted on or immediately next to the curb
)) shall be no less than 12 inches by 18 inches in size and shall be placed at a maximum center-to-center
spacing of 150 feet on both sides of the fire lane, or an additional sign may be put beneath the fire lane sign
<u>lettered as:</u>

## <u>"BOTH SIDES"</u>

d. ((Top of signs to be not less than 4 feet nor more than 6 feet from the ground.)) Signs shall be posted at a minimum height of 7 feet measured from the street or sidewalk to the bottom of the sign, unless required otherwise by this section.

e. Signs may be placed on a <u>fence or</u> building when approved by the fire marshal ((as the designee of the department of local services permitting division manager)). When signs are wall or fence mounted, they shall be posted at a minimum height of 5 feet measured from the street or sidewalk to the top of the sign.

<u>f.</u> When posts are required, they shall ((be a minimum of 2 inch galvanized steel or 4 inch x 4 inch pressure treated wood)) meet current road standards in K.C.C. chapter 14.42. Signs ((to)) shall be placed so

they face the direction of the vehicular travel.

g. Sign numbers and spacing may be modified by the King County fire marshal.

 $((\underline{D}, \underline{D}))$  <u>4</u>. Obstruction of Fire Lanes Prohibited. <u>Unless required otherwise by this chapter</u>,  $((\underline{T}))$ <u>the</u> obstruction of a designated fire lane by a parked vehicle or any other object is prohibited, shall constitute a traffic hazard as defined in state law and an immediate hazard to life and property.

 $((E_{-}))$  <u>5.</u> Alternate ((M))<u>m</u>aterials and ((M))<u>m</u>ethods. The fire marshal ((as designee of the department of local services permitting division manager)) may modify any of the provisions ((herein)) of this section where practical difficulties exist. The particulars of a modification shall be granted by the fire marshal and shall be entered into the records of the office.

 $((F_{\tau}))$  <u>6.</u> Existing fire lane signs and markings.

<u>6.1</u>. Signs (minimum 9 inch by 16 inch) may be allowed to remain until there is a need for replacement and at that time a 12 inch x 18 inch sign shall be installed.

<u>6.2</u>. Markings may be allowed to remain until there is a need for repainting ((and at that time the provisions outlined in Section C, 1, 2 or 3 shall be complied with)). When markings are repainted, they shall comply with subsection 3. of this section.

((G.)) <u>7.</u> Maintenance. Fire lane markings shall be maintained at the expense of the property owner(s) as often as needed to clearly identify the designated area as being a fire lane.

 $((H_{\tau}))$  <u>8</u>. Towing notification. At each entrance to property where fire lanes have been designated, signs shall be posted in a clearly conspicuous location and shall clearly state that vehicles parked in fire lanes may be impounded, and the name, telephone number(( $_{\tau}$ )) and address of the towing firm where the vehicle may be redeemed.

 $((I_{\tau}))$  <u>9</u>. Property owner responsible. The owner, manager(( $_{\tau}$ )) or person in charge of any property upon which designated fire lanes have been established shall prevent the parking of vehicles or placement of other obstructions in such fire lanes.

 $((f_{\tau}))$  <u>10.</u> Violation - Civil infraction. Any person who fails to mark or maintain the marking of a designated fire lane as prescribed in this chapter, or who parks a vehicle in, allows the parking of a vehicle in, obstructs((;)) or allows the obstruction of a designated fire lane, commits a civil infraction to which the provisions of ((RCW)) chapter 7.80 RCW shall apply. The penalty for failing to mark or maintain the marking of a designated fire lane shall be one hundred and fifty dollars. The penalty for parking a vehicle in, allowing the parking of a vehicle in, obstructing((;)) or allowing the obstruction of a designated fire lane shall be fifty dollars.

 $((K_{\cdot}))$  <u>11.</u> Violation - Civil ((P))penalty. In addition to, or as an alternate to, the provisions of subsection ((E)) <u>10. of this section</u>, any person who fails to meet the provisions of the fire lane requirements codified in this title shall be subject to civil penalties in conformance with K.C.C. ((Chapter)) <u>Title</u> 23.

 $((\underline{L}, \underline{)})$  <u>12.</u> Impoundment. Any vehicle or object obstructing a designated fire lane is hereby declared a traffic hazard and may be abated without prior notification to its owner by impoundment ((<u>pursuant to</u>)) <u>in</u> <u>accordance with</u> the applicable state law.

<u>NEW SECTION. SECTION 169.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 503.6 of the International Fire Code is not adopted and the following is substituted.

## Security gates, bollards or other obstructions (IFC 503.6).

1. The installation of security gates, bollards or other obstructions across a fire apparatus access road shall not be allowed unless reviewed and approved by the fire marshal. The use of directional-limiting devices, such as tire spikes, is prohibited. Where security gates, bollards or other obstructions are installed, they shall have an approved means of emergency operation. The security gates, bollards or other obstructions and the emergency operation shall be maintained so that they are operational at all times.

2. Electric gate operators shall be listed in accordance with Underwriter Laboratories (UL) 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements

of American Society for Testing and Materials (ASTM) F 2200 and shall be equipped with equipment approved by the fire marshal that allows for operation of the gate by fire and police personnel from their vehicle.

3. Gates shall be at a minimum as wide as the required fire apparatus access road width. Gates, bollards or other obstructions on commercial properties shall be set back 30 feet from roadway edge of pavement. Where a fence is provided on each side of a gate for a commercial property, an access door shall be provided at an approved location with a secure key box that is approved by the fire marshal.

**EXCEPTION:** Automated gates with equipment approved by the fire marshal that allow for operation of the gate by fire and police personnel from their vehicle are not required to be set back 30 feet from the roadway edge of pavement if the roadway is not a principal or collector arterial or a street with lane markers.

<u>NEW SECTION. SECTION 170.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 504.3 of the International Fire Code is supplemented with the following:

**Roof hatches (IFC 504.3.1).** All required interior stairways that extend to the top floor in any building four or more stories in height shall have, at the highest point of the stair shaft, an approved hatch that can open to the exterior not less than 16 square feet  $(1.5m^2)$  in area and having a minimum dimension of 3 feet (610 mm).

**EXCEPTION:** A roof hatch is not required for stairways that extend to the roof with an opening onto that roof or for stairways that comply with International Building Code 1011.12.2.

<u>NEW SECTION. SECTION 171.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 504 of the International Fire Code is supplemented with the following:

**Buildings with enclosed interior courtyards (IFC 504.5).** New buildings with enclosed interior courtyards shall have a straight, direct access corridor or stairway or both from the exterior to the courtyard at a location acceptable to the fire marshal. Stairways shall comply with IFC 1011 and corridors shall comply with

IFC 1020. The access shall have a minimum width of 4 feet, or an alternative width as directed by the fire marshal, and be large enough to carry a 35-foot-long sectional ladder, with a minimum folded length of 20 feet, directly from the exterior to the courtyard without obstructions. The access door shall be marked at the street as "Direct access to courtyard."

SECTION 172. Ordinance 14915, Section 56, and K.C.C. 17.04.450 are hereby amended to read as follows:

Section 505.1 of the International Fire Code is not adopted and the following is substituted:

**Premises identification - Addresses (IFC 505.1).** Approved numbers or addresses shall be provided for all new <u>and existing</u> buildings ((in such a position as to be plainly visible and legible from the street or road fronting the property)) in accordance with K.C.C. chapter 16.08.

<u>NEW SECTION. SECTION 173.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 507.1 of the International Fire Code is supplemented with the following:

**Required water supply (IFC 507.1.1).** Underground piping shall conform to the following requirements:

1. All underground piping shall be designed, constructed and installed in accordance with NFPA 24 for private fire service mains and NFPA 13 for water-based fire protection systems. Two forms of joint restraint shall be used.

2. Piping systems under the control of a water district or city utilities department shall be installed in accordance with said Utilities Engineering Standard. The fire marshal shall be responsible for determining hydrant spacing and location connecting to these systems.

<u>NEW SECTION. SECTION 174.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.1 of the International Fire Code is not adopted and the following is substituted:

**Emergency responder radio coverage in new buildings (IFC 510.1).** New buildings shall have an approved radio coverage system for emergency responders installed in accordance with IFC 510.4 through 510.5.5 and NFPA 1221. Radio coverage is based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvements of the existing public safety communication system. An approved radio coverage system shall be provided within new buildings meeting any of the following conditions:

1. High-rise buildings;

2. The total building area is 50,000 square feet or more;

3. The total basement area is 10,000 square feet or more;

4. There are floors used for human occupancy more than 30 feet below the finished floor of the lowest level of exit discharge; or

5. Buildings or structures where the fire or police chief determines that in-building radio coverage is critical because of its unique design, location, use or occupancy.

### **EXCEPTIONS:**

1. Buildings and areas of buildings that have minimum radio coverage signal strength levels of the public safety radio operator within the building in accordance with IFC 510.4.1 without the use of a radio coverage system.

2. In facilities where emergency responder radio coverage is required and such systems, components or equipment required could have a negative impact on the normal operations of that facility, the fire marshal shall have the authority to accept an automatically activated emergency responder radio coverage system.

3. One- and two-family dwellings and townhouses.

4. Where it is determined by the fire marshal that the radio coverage system is not needed.

<u>NEW SECTION. SECTION 175.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.4.1 of the International Fire Code is not adopted and the following is substituted:

### Emergency responder communication enhancement system signal strength (IFC 510.4.1). A

building shall be considered to have acceptable emergency responder communications enhancement system coverage when the following conditions are met:

1. Emergency responder communications enhancement system signal strength measurements in 95 percent of all areas on each floor of the building meet the signal strength requirements in IFC 510.4.1.1 through 510.4.1.3; and

2. Critical fire service areas shall be provided with 99 percent floor area radio coverage.

<u>NEW SECTION. SECTION 176.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.4.1.2 of the International Fire Code is not adopted and the following is substituted:

**Minimum signal strength out of the building (IFC 510.4.1.2).** The minimum outbound signal strength shall be sufficient to provide usable voice communications throughout the coverage area as specified by the fire marshal. The outbound signal level shall be sufficient to provide not less than a DAQ of 3.4 or an equivalent SINR applicable to the technology for either analog or digital signals. A minimum signal strength of -100 dBm shall be received by the public safety radio operator when transmitted from within the building.

<u>NEW SECTION. SECTION 177.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.4.2.1 of the International Fire Code is not adopted and the following is substituted:

Amplification systems and components (510.4.2.1). Buildings and structures that cannot support the required level of radio coverage shall be equipped with systems and components to enhance the public safety radio signals and achieve the required level of radio coverage specified in IFC 510.4.1 through 510.4.1.3. Public safety communications enhancement systems utilizing radio-frequency-emitting devices and cabling shall be approved by the fire code marshal. Prior to activating rebroadcasting of public safety frequencies, all

RF-emitting devices shall obtain an executed rebroadcast agreement from the public safety radio system operator and be suitable for public safety use.

<u>NEW SECTION. SECTION 178.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.4.2.4 of the International Fire Code is not adopted and the following is substituted:

# Signal booster requirements (IFC 510.4.2.4).

 All signal booster components shall be contained in a National Electrical Manufacturer's Association (NEMA) 4-type, IP65 or IP66 waterproof cabinet or equivalent.

**EXCEPTION:** Listed battery systems that are contained in integrated battery cabinets.

2. Battery systems used for the emergency power source shall be contained in a NEMA 3R or higherrated cabinet, IP14-type waterproof cabinet or equivalent.

3. Equipment shall have FCC or other radio licensing authority certification and be suitable for public safety use before installation.

4. Where a donor antenna exists, isolation shall be maintained between the donor antenna and all inside antennas to not less than 20dB more than the system gain under all operating conditions.

5. Active RF emitting devices used in emergency responder radio coverage systems shall have built-in oscillation detection and control circuitry.

6. The installation of amplification systems or systems that operate on or provide the means to cause interference on any emergency responder radio coverage networks shall be coordinated and approved by the fire marshal and the public safety radio operator.

7. Unless otherwise approved by the fire marshal, only channelized signal boosters shall be permitted. Channelized signal boosters shall comply with operating requirements of the public safety radio operator, including the capacity of supporting a minimum of 28 channels and 800 MHz analog and digital operation including P25 Phase I frequency division multiple access (FDMA) and P25 Phase II time division multiple access (TDMA).

<u>NEW SECTION. SECTION 179.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.4.2.5 of the International Fire Code is not adopted and the following is substituted:

System monitoring (IFC 510.4.2.5). The emergency responder radio enhancement system shall include automatic supervisory and trouble signals that are monitored by a supervisory service and are annunciated by the fire alarm system in accordance with NFPA 1221. The following conditions shall be separately annunciated by the fire alarm system or, if the status of each of the following conditions is individually displayed on a dedicated panel on the radio enhancement system, a single automatic supervisory signal may be annunciated on the fire alarm system indicating deficiencies of the radio enhancement system:

- 1. Loss of normal AC power supply.
- 2. System battery charger(s) failure.
- 3. Malfunction of the donor antenna(s).
- 4. Failure of active RF-emitting device(s).
- 5. Low-battery capacity at 70-percent reduction of operating capacity.
- 6. Active system component malfunction.

7. Malfunction of the communications link between the fire alarm system and the emergency responder radio enhancement system.

<u>NEW SECTION. SECTION 180.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.5.1 of the International Fire Code is not adopted and the following is substituted:

Approval prior to installation (IFC 510.5.1). Amplification systems capable of operating on

frequencies licensed to any public safety agency by the FCC or other radio licensing authority shall not be

activated to rebroadcast without prior coordination and approval of the fire marshal and public safety radio system operator.

<u>NEW SECTION. SECTION 181.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.5.2 of the International Fire Code is not adopted and the following is substituted:

Minimum qualifications of personnel (IFC 510.5.2). The minimum qualifications of the system designer and lead installation personnel shall include the following:

1. A valid FCC-issued general radiotelephone operators license; and

2. Certification of in-building system training issued by an organization or school approved by the fire marshal, or a certificate issued by the manufacturer of the equipment being installed.

<u>NEW SECTION. SECTION 182.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.5.3 of the International Fire Code is not adopted and the following is substituted:

Acceptance Test Procedure (IFC 510.5.3). Where an emergency responder radio coverage system is required, and upon completion of installation, the building owner shall have the radio system tested to verify that two-way coverage on each floor of the building in accordance with IFC 510.4.1. The test procedure shall be conducted as follows:

1. Each floor of the building shall be divided into a grid of 20 approximately equal test areas, with a maximum test area size of 6,400 square feet. Where the floor area exceeds 128,000 square feet, the floor shall be divided into as many approximately equal test areas as needed, such that no test area exceeds the maximum square footage allowed.

2. Coverage testing of signal strength shall be conducted using a calibrated spectrum analyzer for each of the test grids. A diagram of this testing shall be created for each floor where coverage is provided, indicating

the testing grid used for the test in IFC 510.5.3(1), and including inbound signal strengths and frequencies for each test area. The diagram shall indicate all critical fire service areas.

3. Functional talk-back testing shall be conducted using two calibrated portable radios of the latest brand and model used by the agency's radio communications system or other equipment approved by the fire marshal. Testing shall use Digital Audible Quality (DAQ) metrics, where a passing result is a DAQ of 3.4 or higher. Communications between handsets shall be tested and recorded in the grid square diagram required by IFC 510.5.3(2): each grid square on each floor; between each critical fire service area and a radio outside the building; between each critical fire service area and the fire command center or fire alarm control panel; and between each landing in each stairwell and the fire command center or fire alarm control panel.

4. Failure of more than five percent of the test areas on any floor shall result in failure of the test.

**EXCEPTION**: Critical fire service areas shall be provided with 99 percent floor area coverage.

5. If two of the test areas fail the test, and to be more statistically accurate, the floor shall be permitted to be divided into 40 equal test areas. Failure of not more than two nonadjacent test areas shall not result in failure of the test. If the system fails the 40-area test, the system shall be altered to meet the 95 percent coverage requirement.

6. A test location approximately in the center of each test area shall be selected for the test, with the radio enabled to verify two-way communications to and from the outside of the building through the public agency's radio communications system. Once the test location has been selected, that location shall represent the entire test area. Failure in the selected test location shall be considered to be a failure of that test area. Additional test locations shall not be permitted.

7. The gain values of all amplifiers shall be measured, and the test measurement results shall be kept on file with the building owner so that the measurements can be verified during annual tests. If the measurement results become lost, the building owner shall be required to rerun the acceptance test to reestablish the gain

values.

8. As part of the installation, a spectrum analyzer or other suitable test equipment shall be used to ensure spurious oscillations are not being generated by the subject signal booster. This test shall be conducted at the time of installation and at subsequent annual inspections.

9. Systems incorporating Class B signal booster devices or Class B broadband fiber remote devices shall be tested using two portable radios simultaneously conducting subjective voice quality checks. One portable radio shall be positioned not more than 10 feet (3048 mm) from the indoor antenna. The second portable radio shall be positioned at a distance that represents the farthest distance from any indoor antenna. With both portable radios simultaneously keyed up on different frequencies within the same band, subjective audio testing shall be conducted and comply with DAQ levels as specified in IFC 510.4.1.1 and 510.4.1.2.

10. At the conclusion of the testing, and before issuance of the building certificate of occupancy, the building owner or owner's representative shall place a copy of the following records in the DAS enclosure or the building engineer's office. The following records shall be available to the fire marshal and maintained by the building owner for the life of the system:

a. A certification letter stating that the emergency responder radio coverage system has been installed and tested in accordance with this code, and that the system is complete and fully functional.

b. The grid square diagram created as part of testing in IFC 510.5.3(2) and 510.5.3(3).

c. Data sheets and manufacturer specifications for the emergency responder radio coverage system equipment, back up battery and charging system, if used.

d. A diagram showing device locations and wiring schematic.

e. A copy of the electrical permit.

11. At the conclusion of testing, and before issuance of the building certificate of occupancy, the building owner or owner's representative shall submit to the fire marshal a report of the acceptance test.

<u>NEW SECTION. SECTION 183.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.5 of the International Fire Code is supplemented with the following:

Wiring (IFC 510.5.6). The backbone, antenna distribution, radiating or any fiber-optic cables or other system interconnection cables shall be rated as plenum cables. The backbone cables shall be connected to the antenna distribution, radiating or copper cables using hybrid coupler devices of a value determined by the overall design. Backbone cables, and the connection between backbone cables and antenna cables, shall be routed through an enclosure that matches the building's required fire-resistance rating for shafts or interior exit stairways. Passage of the antenna distribution cable in and out of the enclosure shall be protected as a penetration under the International Building Code.

<u>NEW SECTION. SECTION 184.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.5 of the International Fire Code is supplemented with the following:

Identification Signs (IFC 510.5.7). Emergency responder radio coverage systems shall be identified by an approved sign located on or near the Fire Alarm Control Panel, or other approved location, stating "This building is equipped with an Emergency Responder Radio Coverage System. Control Equipment located in room\_\_\_\_\_." A sign stating "Emergency Responder Radio Coverage System Equipment" shall be placed on or adjacent to the door of the room containing the main system components.

<u>NEW SECTION. SECTION 185.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.6.1 of the International Fire Code is not adopted and the following is substituted:

**Testing and proof of compliance (510.6.1).** The owner of the building or owner's authorized agent shall have the emergency responder radio coverage system be inspected and tested annually or when structural changes occur, including additions or remodels that could materially change the original field performance

tests. Testing shall consist of the following:

1. In-building coverage test as required by the fire marshal and as described in IFC 510.5.3 or IFC 510.6.1.

EXCEPTION: Group R Occupancy annual testing is not required within dwelling units.

2. Signal boosters shall be tested to verify that the gain or output level is the same as it was upon initial installation and acceptance or set to optimize the performance of the system. Altering of the distributed antenna systems (DAS) output from the initial commissioning values shall require revalidation by the public safety radio operator.

3. Backup batteries and power supplies shall be tested under load of a period of one hour to verify that they will properly operate during an actual power outage. If within the one-hour test period the battery exhibits symptoms of failure, the test shall be extended for additional one-hour periods until the integrity of the battery can be determined.

4. If a fire alarm system is present in the building, a test shall be conducted to verify that the fire alarm system is properly supervising the emergency responder communication system as required in IFC 510.4.2.5. The test is performed by simulating alarms to the fire alarm control panel. The certifications in IFC 510.5.2 are sufficient for the personnel performing this testing.

5. Other active components shall be checked to verify operation within the manufacturer's specifications.

6. At the conclusion of the testing, a report, which shall verify compliance with IFC 510.6.1, shall be submitted to the fire marshal.

7. At the conclusion of testing, a record of the inspection and maintenance along with an updated grid diagram of each floor showing tested strengths in each grid square and each critical fire service area shall be added to the documentation maintained on the premises in accordance with IFC 510.5.3.

<u>NEW SECTION. SECTION 186.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.6.1 of the International Fire Code is supplemented with the following:

Alternative acceptance test procedure. (IFC 510.6.1.1). When the comprehensive test documentation required by IFC 510.5.3 is available, or the most recent five-year test results are available if the system is older than six years, the in-building coverage test required by IFC 510.6.1(1) may be conducted as follows:

1. Functional talk-back testing shall be conducted using two calibrated portable radios of the latest brand and model used by the agency's radio communications system or other equipment approved by the fire marshal. Testing shall use Digital Audible Quality (DAQ) metrics, where a passing result is a DAQ of 3.4 or higher. Communications between handsets in the following locations shall be tested: between the fire command center or fire alarm control panel and a location outside the building; and between the fire alarm control panel and each landing in each stairwell.

2. Coverage testing of signal strength shall be conducted using a calibrated spectrum analyzer for:

a. The three grid areas to be tested on each floor are the three grid areas with poorest performance in the acceptance test or the most recent annual test, whichever is more recent;

b. Each of the critical fire service areas identified in acceptance test documentation required by IFC
 510.5.3 or as modified by the fire marshal; and

c. One grid square per serving antenna.

3. The test area boundaries shall not deviate from the areas established at the time of the acceptance test or as modified by the fire marshal. The building shall be considered to have acceptable emergency responder radio coverage when the required signal strength requirements in IFC 510.4.1.1 and 510.4.1.2 are located in 95 percent of all areas on each floor of the building and 99 percent in critical fire service areas, and any non-functional serving antenna are repaired to function within normal ranges. If the documentation of the

acceptance test or most recent previous annual test results are not available or acceptable to the fire marshal, the radio coverage verification testing described in IFC 510.5.3 shall be conducted.

<u>NEW SECTION. SECTION 187.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 510.6.4 of the International Fire Code is not adopted and the following is substituted:

**Field Testing (IFC 510.6.4).** Department personnel shall have the right to enter onto the property at any reasonable time to conduct field testing to verify the required level of radio coverage or to disable a system that, due to malfunction or poor maintenance, has the potential to impact the emergency responder radio system in the region.

<u>NEW SECTION. SECTION 188.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 901.1 of the International Fire Code is not adopted and the following is substituted:

**Scope (IFC 901.1).** This chapter specifies where fire protection and life safety systems are required and applies to the design, installation, inspection, operation, testing and maintenance of fire protection systems.

### 1. ADDITIONAL REQUIREMENTS.

1.1. The fire marshal retains the authority under the IFC to impose additional conditions, including but not limited to increased setbacks, use of fire retardant materials or standpipes where determined necessary to mitigate identified fire protection impacts.

1.2. This chapter applies to all buildings or structures undergoing a substantial improvement as defined in K.C.C. chapter 21A.06.

1.3. Any additions to an existing building or structure shall be considered new construction and subject the entire structure to the provisions of this chapter.

1.4. All condominiums shall have the following wording in the recorded Declaration of Covenants and a copy of the document shall be provided to the fire marshal:

1.4.1 If any unit should be equipped with a sprinkler system, nothing shall be hung from the sprinklers comprising a part of the system nor shall any such sprinklers be painted, covered or otherwise changed, tampered with or altered.

1.4.2. Before any alteration, amendment, modification or change thereof, the owners or their agents <u>shall</u> submit such alteration, amendment, modification or change to the fire marshal for approval and agree to comply with all applicable sprinkler requirements.

SECTION 189. Ordinance 12560, Section 171, as amended, and K.C.C. 17.04.520 are hereby amended to read as follows:

Section 903.1 of the International Fire Code is not adopted and the following is substituted:

# General (IFC 903.1).

1. An automatic fire-extinguishing system shall be installed in the occupancies and locations ((as set forth)) in ((Section)) accordance with IFC 903.2.

For provisions on special hazards and hazardous materials, see ((Section)) IFC 901.4.((3))4.

2. The provisions of this section shall apply to all buildings ((whose county assessed value has increased by more than 50% within a five year period due to the added value of alterations and repairs. When the first permit application is submitted to add to, alter or repair an existing building, the county assessed value of the building at the time the complete application is submitted shall be considered the base county assessed value for the following five year period)) undergoing a substantial improvement as defined in K.C.C. chapter 21A.06.

((EXCEPTION: Structures damaged as a result of a disaster declared in accordance with K.C.C. chapter 12.52, shall comply with K.C.C. 17.04.610 and 17.04.620.))

3. Any additions to an existing structure shall be considered new construction and subject the entire structure to the provisions of this section.

EXCEPTION((S)): A one-time exemption for buildings regulated by the International Residential

Code ((One- and Two-Family Dwellings will)) shall be allowed for a single addition not to exceed 500 square feet, unless sprinklers or other fire protection systems are required by other statutes.

4. All condominiums shall have the following wording in the recorded Declaration of Covenants and a copy of the document shall be provided to the fire ((code official or designee)) <u>marshal</u>:

4.1. ((In the event that a)) If any unit should be equipped with a sprinkler system, nothing shall be hung from the sprinklers comprising a part of the system nor shall any such sprinklers be painted, covered(( $_{5}$ )) or otherwise changed, tampered with or altered.

4.2. ((Prior to)) <u>Before</u> any alteration, amendment, modification or change thereof, the owners or their agents ((will)) <u>shall</u> submit such alteration, amendment, modification or change to the ((King County)) fire marshal ((or designee)) for approval and agrees to comply with all applicable sprinkler requirements.

SECTION 190. Ordinance 14111, Section 215, as amended, and K.C.C. 17.04.540 are hereby amended to read as follows:

Section 903.2 of the International Fire Code is not adopted and the following is substituted:

Where required (IFC 903.2). Sprinklers are required as follows:

1. For residential units and their accessory structures built under the International Residential Code, sprinklers shall be installed ((as set forth)) in ((Section)) accordance with IFC 903.2.1((3))1.

2. For all other occupancies an automatic sprinkler system shall be installed in ((the)) locations ((set forth)) in ((Section)) in accordance with IFC 903.2.1 through ((Section)) 903.2.12.

**EXCEPTION:** Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, ((provided)) <u>if</u> those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with ((Section)) <u>IFC</u> 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with ((Section)) <u>IFC</u> 707 or not less than 2-hour horizontal assemblies constructed in accordance with ((Section)) <u>IFC</u> 711, or both.

((3. Sprinklers are required in all occupancies requiring 2,000 gallons per minute or more fire flow , or where the total floor area included within the surrounding exterior walls on all floor levels including basements exceeds 10,000 square feet.))

SECTION 191. Ordinance 12560, Section 174, as amended, and K.C.C. 17.04.560 are hereby amended to read as follows:

Section 903.2.11 of the International Fire Code is supplemented with the following:

### ((Residential units and accessory)) Habitable space of structures built under the IRC (IFC

**903.2.11.((7))8).** An automatic sprinkler system shall be installed in <u>the habitable space of</u> structures built under the International Residential Code (IRC) as follows:

1. ((The gross floor area exceeds 2,500 square (including attached garages) without adequate fire flow except as cited in K.C.C. 17.08.030;

2. There is no approved fire department access as defined in the King County road standards and IFC 503, as amended; or

3. If 2,000)) There is not:

<u>1.1 A minimum fire flow of 1,000</u> gallons per minute ((or more fire flow is required or where the total floor area included within the surrounding exterior walls on all floor levels including basements exceeds 10,000 square feet. For townhouses, each unit is considered a separate building)) as defined in IFC Appendix B; or

1.2 A fire hydrant within 400 feet or 600 feet of the property line as outlined in IFC 507.5.1.

EXCEPTION((S: Attached decks, exterior porches and carports open on two sides.

4. Where special hazards or unusual conditions exists in addition to the normal hazard of the space due to the design, size, volume or use of the space, the Fire Marshal is authorized to require additional safeguards suitable for the protection of the hazard or condition involved. Additional safeguards can consist of automatic fire alarm system, automatic sprinkler or water spray system, standpipe and hose, fixed or portable fire extinguishers, or other special fire-extinguishing systems. Where such systems are provided, they shall be

designed and installed in accordance with the International Fire Code.)): Structures that:

1. Are located on lots that:

1.1. are sized 35,000 square feet or larger;

1.2. are outside the Urban Growth Area; and

1.3. have a residential use as the primary land use; and

2. Whose total floor area, including basements, does not exceed 10,000 square feet; or

3. When there is no approved fire access as defined in K.C.C. Title 14 and IFC 503, as amended by this title.

<u>NEW SECTION. SECTION 192.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 903.2 of the International Fire Code is supplemented with the following:

**Specific buildings areas and hazards - Buildings exceeding 10,000 square feet (IFC 903.2.13).** An automatic sprinkler system, installed in accordance with IFC 903.2, 901.4.3 and 901.4.4 shall be provided throughout all buildings where the total floor area, including basements, exceeds 10,000 square feet. For purposes of this section, portions of buildings separated by one or more fire walls shall not be considered a separate building.

Existing buildings shall comply with this section when an addition is made to the building and the new total floor area, including basements, exceeds 10,000 square feet, or an existing building exceeding 10,000 square feet is substantially improved as defined in K.C.C. chapter 21A.06.

<u>NEW SECTION. SECTION 193.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 903.3.1 of the International Fire Code is not adopted and the following is substituted:

**Installation requirements - standards (IFC 903.3.1).** Sprinkler systems shall be designed and installed in accordance with IFC 903.3.1.1, unless otherwise permitted by IFC 903.3.1.2, 903.3.1.3 and other

chapters of this code, as applicable. In addition, sprinkler systems shall be designed with a buffer to account for water system fluctuations to include a low reservoir condition. Such buffer shall be five pounds per square inch (PSI) for static pressures less than 50 PSI and 10 PSI for static pressures above 50 PSI. Permit applicants shall independently verify site specific static pressure at the following intervals:

1. Before initiating sprinkler system;

2. Before installing sprinkler piping, including the underground supply; and

3. Before requesting a cover inspection.

<u>NEW SECTION. SECTION 194.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 903.4.3 of the International Fire Code is not adopted and the following is substituted:

Floor control valves (IFC 903.4.3). Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor. The floor control valves shall be located within stair enclosures and within six feet of floors or landings unless chains or other approved devices are readily available.

**EXCEPTION**: In buildings without stair enclosures, the location of the floor control valves shall be determined by the fire marshal.

<u>NEW SECTION. SECTION 195.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 903.5 of the International Fire Code is not adopted and the following is substituted:

**Testing and maintenance (IFC 903.5).** Sprinkler systems shall be tested and maintained in accordance with IFC 901 and the following:

1. Maintenance or testing discharges from fire sprinkler system, standpipe or fire pump shall be treated to comply with the National Pollution Discharge Elimination System requirements.

2. Water drained or otherwise discharged from a fire sprinkler system, standpipe or fire pump is

considered an illicit discharge, and shall drain to the sanitary sewer or be treated to discharge to storm drains, ditches or water bodies.

<u>NEW SECTION. SECTION 196.</u> There is hereby added to K.C.C. chapter 17.04 a new section to read as follows:

Section 905.3.1 of the International Fire Code is not adopted and the following is substituted:

**Height (IFC 905.3.1).** Class I standpipe systems shall be installed throughout buildings where any of the following conditions exist:

1. Four or more stories are above or below grade plane.

2. The floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of the fire apparatus access.

3. The floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire apparatus access.

## **EXCEPTIONS:**

1. Class II standpipes may be used for hose connections in open parking garages in accordance with IFC 905.5.

2. In determining the lowest level of fire apparatus access, the following does not apply:

2.1. Recessed loading docks for four vehicles or less.

2.2. Conditions where topography makes access from the fire apparatus to the building impractical or impossible.

SECTION 197. Ordinance 14111, Section 211, and K.C.C. 17.04.590 are hereby amended to read as follows:

Section 912.2 of the International Fire Code is supplemented with the following:

**Distance (IFC 912.2.3).** Fire ((department pumper)) <u>apparatus</u> connections shall not be located on a building unless approved by the ((F))<u>fire ((M))marshal</u>, and shall be located within 50 feet of a required fire

hydrant.

SECTION 198. Ordinance 5828, Section 3, and K.C.C. 17.08.020 are hereby amended to read as follows:

A. Subdivisions and short subdivisions are required to be provided with water mains, and fire hydrants <u>meeting IFC Appendix C</u>, consistent with county standards and <u>state ((4))D</u>epartment of ((s))Social and ((h))H ealth ((s))Services principles of water system design as a condition of final plat or short plat approval unless exempt ((pursuant to Section)) under K.C.C. 17.08.030.

B. All structures or additions thereto erected ((pursuant to)) <u>under</u> a building permit ((and/))or mobile home permit shall be served by operational water mains and fire hydrants consistent with county standards (( prior to)) <u>before:</u>

1. the ((commencement)) start or installation of combustible construction; or

2. ((prior to)) construction of a second floor if the building is noncombustible, whichever occurs first, unless exempt ((pursuant to Section)) under K.C.C. 17.08.030.

C. Mobile home parks and recreational vehicle parks shall be required to provide water mains and fire hydrants consistent with county standards as a condition of final site plan approval.

D. Permits or approvals for uses not involving a structure shall be served by water mains and fire hydrants consistent with county standards.

E. All new water mains and all additions and extensions to existing water mains shall meet the requirements of this chapter((<del>, provided that</del>)) <u>if</u> water mains which serve only uses exempt ((<del>pursuant to Section</del>)) <u>under K.C.C.</u> 17.08.030 are also exempt from the requirements of this chapter.

F. All water purveyor comprehensive plans approved ((pursuant to)) <u>under</u> K.C.C. ((C))<u>c</u>hapter 13.24 shall be consistent with ((the provisions of)) this chapter.

G. All water mains and fire hydrants shall be served by a water district or water purveyor in accordance with a current water comprehensive plan approved ((pursuant to)) <u>under K.C.C. ((C))</u>chapter 13.24, or by other

adequate means providing service levels consistent with the provisions of this  $((\mathbf{C}))$  chapter.

SECTION 199. Ordinance 5828, Section 4, as amended, and K.C.C. 17.08.030 are hereby amended to read as follows:

A. The following permits and approvals are exempt from the ((water)) fire flow and fire hydrant requirements of this ((ehapter)) title. These exemptions do not exempt any development from compliance with the requirements of state law.

1. Subdivisions and short subdivisions located outside ((an)) the Urban Growth Area ((designated by the King County Comprehensive Plan)) and that do not contain a lot less than thirty-five thousand square feet in size.

2. Building permits for single family, duplex detached dwellings and mobile home permits for mobile homes not in mobile home parks, located outside ((an)) the Urban Growth Area ((designated by the King County Comprehensive Plan)), only if the lot is at least thirty-five thousand square feet in size.

3. (())Building permits for structures classified as Group U occupancies under the International Building Code that conform to the definition of agricultural buildings in Appendix C of the International Building Code only if the structures are located outside ((an)) <u>the</u> Urban Growth Area ((<del>designated by the King</del> <u>County Comprehensive Plan</u>)).

- 4. Building permits for structures that are:
- a. ((do not exceed)) two-thousand-five hundred square feet in floor area (excluding garage) or less;
- b. ((are)) served by a Group B water system; and
- c. ((are)) located outside ((an)) the Urban Growth Area.

5. Building permits for structures that ((exceed the)) are more than two-thousand-five hundred square feet ((limit provided for in subsection A.4.a. of this section, but comply)) in floor area (excluding garages) and complies with subsection A.4.b. and c. of this section, shall be exempt from this chapter if the fire marshal determines that the project will not create a substantial fire hazard.

B. The fire marshal shall have the authority to impose conditions including, but not limited to, increased setbacks, use of fire retardant materials or sprinkler system requirements on permits exempt under subsection A. of this section where necessary to mitigate identified fire hazards.

C. Building permits and mobile home permits and subdivisions and short subdivisions exempt under subsection A. of this section shall as a condition of approval, record a covenant running with the land which acknowledges the absence of fire hydrants and by which owners of the property and their successors are deemed to have agreed to participate in and not oppose or protest annexation to a public water district or the formation of a utility local improvement district for installation of water mains and fire hydrants consistent with applicable county standards. However, this condition shall not apply to any subdivision or short subdivision, or to any building permits and mobile home permits exempt under subsection A. of this section when the lot is five acres or larger, or the proposed subdivision, short subdivision or structure is located outside ((an)) the Urban Growth Area ((designated by the King County comprehensive plan)).

SECTION 200. Section 201 of this ordinance takes effect on the date that the minimum time period after adoption of Ordinance 19276 required by RCW 70.77.250(4) has passed.

SECTION 201. Ordinance 19276, Section 9, and K.C.C. 17.XX.XXX are hereby amended to read as follows:

A. A violation of this chapter is a misdemeanor and is punishable as prescribed by law.

B. Notwithstanding any criminal penalty provided in this chapter, a person who violates this chapter or chapter 70.77 RCW is subject to the maximum civil penalty in an amount not to exceed two hundred fifty dollars per violation. In addition, a person in violation of this chapter is responsible for any costs incurred to enforce this chapter, including bringing a civil action, court costs and reasonable attorneys' fees. All civil penalties assessed shall be enforced under K.C.C. Title 23.

C. A person commits a separate offense for each day during ((that)) which the person commits, continues or permits a violation of this chapter.

D. The civil and criminal penalties described in subsections A. through C. of this section shall not be enforced for violations of ((section 7.B. of this ordinance)) K.C.C. 17.XX.XXX.B. (Ordinance 19276, Section 7.B.) as it pertains to the use or discharge of consumer fireworks, as defined in RCW 70.77.136, until one year after ((this o))Ordinance 19276 takes effect under RCW 70.77.250. During the period in which these penalties are not being enforced, the King County sheriff's office and the fire marshal shall only issue warnings to violators of ((section 7.B. of this ordinance)) K.C.C. 17.XX.XXX.B. (Ordinance 19276, Section 7.B.) and shall provide information to violators on the county's laws governing fireworks.

SECTION 202. Ordinance 12196, Section 11, as amended, and K.C.C. 20.20.040 are hereby amended to read as follows:

A. The department shall not ((commence)) <u>begin</u> review of any application ((as provided in this chapter )) until the applicant has submitted the materials and fees specified for complete applications. Applications for land use permits requiring Type 1, 2, 3 or 4 decisions shall be considered complete as of the date of submittal upon determination by the department that the materials submitted meet the requirements of this section. Except as provided in subsection B. of this section, all land use permit applications described in K.C.C. 20.20.020.E. shall include the following:

1. An application form provided by the department and completed by the applicant that allows the applicant to file a single application form for all land use permits requested by the applicant for the development proposal at the time the application is filed;

2. Designation of who the applicant is, except that this designation shall not be required as part of a complete application for purposes of this section when a public agency or public or private utility is applying for a permit for property on which the agency or utility does not own an easement or ((right-of-way)) right of way and the following three requirements are met:

- a. the name of the agency or private or public utility is shown on the application as the applicant;
- b. the agency or private or public utility includes in the complete application an affidavit declaring

that notice of the pending application has been given to all owners of property to which the application applies, on a form provided by the department; and

c. the form designating who the applicant is submitted to the department before permit approval;

3.a. A certificate of sewer availability or site design approval for an on-site sewage system by the Seattle-King County department of public health, as required by K.C.C. Title 13; or

b. If allowed under K.C.C. 13.24.134.B. and the King County Comprehensive Plan policies for a public school located on a RA zoned site, a certificate of sewer availability and a letter from the sewer utility indicating compliance with the tightline sewer provisions in the zoning code, as required by K.C.C. chapter 13.24;

4. If the development proposal requires a source of potable water, a current certificate of water availability consistent with K.C.C. chapter 13.24 or documentation of an approved well by ((the Seattle-King County department of)) public health - Seattle & King County;

5. A fire district receipt ((pursuant to)) in accordance with K.C.C. Title 17, if required by K.C.C. chapter 21A.40;

6. A site plan, prepared in a form prescribed by the director;

7. Proof that the lot or lots to be developed are recognized as a lot under K.C.C. Title 19A;

8. A critical areas affidavit, if required by K.C.C. chapter 21A.24;

9. A completed environmental checklist, if required by K.C.C. chapter 20.44;

Payment of any development permit review fees, excluding impact fees collectible ((pursuant to))
 <u>under</u> K.C.C. Title 27;

11. A list of any permits or decisions applicable to the development proposal that have been obtained before filing the application or that are pending before the county or any other governmental entity;

Certificate of transportation concurrency from the department of local services if required by
 K.C.C. chapter 14.70. The certificate of transportation concurrency may be for less than the total number of

lots proposed by a preliminary plat application only if:

a. at least seventy-five percent of the lots proposed have a certificate of transportation concurrency at the time of application for the preliminary plat;

b. a certificate of transportation concurrency is provided for any remaining lots proposed for the preliminary plat application before the expiration of the preliminary plat and final recording of the additional lots; and

c. the applicant signs a statement that the applicant assumes the risk that the remaining lots proposed might not be granted.

13. Certificate of future connection from the appropriate purveyor for lots located within the  $((\texttt{u}))\underline{U}$ rban  $((\texttt{g}))\underline{G}$ rowth  $((\texttt{a}))\underline{A}$ rea that are proposed to be served by on-site or community sewage system and group B water systems or private well, if required by K.C.C. 13.24.136 through 13.24.140;

14. A determination if drainage review applies to the project ((pursuant to)) under K.C.C. chapter 9.04 and, if applicable, all drainage plans and documentation required by the Surface Water Design Manual adopted ((pursuant to)) under K.C.C. chapter 9.04 and to the extent known at the time of application and when determined necessary by the director, copies of any required storm water adjustments;

15. Current assessor's maps and a list of tax parcels to which public notice must be given ((as provided)) in accordance with this chapter, for land use permits requiring a Type 2, 3 or 4 decision;

16. Legal description of the site;

17. Variances obtained or required under K.C.C. Title 14 or 21A to the extent known at the date of application or when deemed necessary by the director; and

18. For site development permits only, a phasing plan and a time schedule, if the site is intended to be developed in phases or if all building permits will not be submitted within three years.

B. A permit application is complete for purposes of this section when it meets the procedural submission requirements of the department and is sufficient for continued processing even though additional

information may be required or project modifications may be undertaken subsequently. The determination of completeness shall not preclude the department from requesting additional information or studies either at the time of notice of completeness or subsequently if new or additional information is required or substantial changes in the proposed action occur, as determined by the department.

C. Additional complete application requirements for the following land use permits are in the following sections of the King County Code:

1. Clearing and grading permits, K.C.C. 16.82.060((-));

2. Construction permits, K.C.C. 16.04.052((-)); and

3. ((Mobile home permits, K.C.C. 16.04.093.

4.)) Subdivision applications, short subdivision applications and binding site plan applications, K.C.C.19A.08.150.

D. The director may;

1. Specify the requirements of the site plan required to be submitted for various permits;

2. Require additional materials not listed in this section when determined to be necessary for review of the project; and

3. Waive any of the specific submittal requirements listed ((herein)) of this section that are determined to be unnecessary for review of an application.

E. The applicant shall attest by written oath to the accuracy of all information submitted for an application.

F. Applications shall be accompanied by the payment of the applicable filing fees, if any, as established by K.C.C. Title 27.

SECTION 203. Ordinance 4461, Section 2, as amended, and K.C.C. 20.22.040 are hereby amended to read as follows:

The examiner shall issue final decisions in the following cases:

A. Appeals of orders of the ombuds under the lobbyist disclosure code, K.C.C. chapter 1.07;

B. Appeals of sanctions of the finance and business operations division in the department of executive services imposed under K.C.C. chapter 2.97;

C. Appeals of career service review committee conversion decisions for part-time and temporary employees under K.C.C. chapter 3.12A;

D. Appeals of electric vehicle recharging station penalties of the Metro transit department under K.C.C.
 4A.700.700;

E. Appeals of notice and orders of the manager of records and licensing services or the department of local services permitting division manager under K.C.C. chapter 6.01;

F. Appeals of adult entertainment license denials, suspensions and revocations under K.C.C. chapter 6.09;

G. Appeals of the fire marshal's decisions on fireworks permits under K.C.C. chapter 6.26;

H. Appeals of cable franchise nonrenewals under K.C.C. 6.27A.060 and notices and orders under K.C.C. 6.27A.240;

I. Appeals of notices and orders of the department of natural resources and parks under K.C.C. chapter 7.09;

J. Appeals of decisions of the director of the department of natural resources and parks on surface water drainage enforcement under K.C.C. chapter 9.04;

K. Appeals of decisions of the director of the department of natural resources and parks on requests for rate adjustments to surface and storm water management rates and charges under K.C.C. chapter 9.08;

L. Appeals of decisions on water quality enforcement under K.C.C. chapter 9.12;

M. Appeals of notices and orders of the manager of animal control under K.C.C. chapter 11.04;

N. Certifications by the finance and business operations division of the department of executive services involving K.C.C. chapter 12.16;

O. Appeals of orders of the office of civil rights under K.C.C. chapter 12.17, K.C.C. chapter 12.18, K.C.C chapter 12.20 and K.C.C. chapter 12.22;

P. Appeals of noise-related orders and citations of the department of local services, permitting division, under K.C.C. chapter 12.86;

Q. Appeals of utilities technical review committee determinations on water service availability under K.C.C. 13.24.090;

R. Appeals of decisions regarding mitigation payment system, commute trip reduction and intersection standards under K.C.C. Title 14;

S. Appeals of suspensions, revocations or limitations of <u>plumbing</u> permits ((or of decisions of the board of plumbing appeals)) under K.C.C. chapter 16.32;

T. Appeals of all Type 2 decisions under K.C.C. chapter 20.20, with the exception of appeals of shoreline permits, including shoreline substantial development permits, shoreline variances and shoreline conditional uses, which are appealable to the state Shoreline Hearings Board;

U. Appeals of SEPA decisions, ((as provided in)) in accordance with K.C.C. 20.44.120 and public rules adopted under K.C.C. 20.44.075;

V. Appeals of completed farm management plans under K.C.C. 21A.30.045;

W. Appeals of decisions of the interagency review committee created under K.C.C. 21A.37.070 regarding sending site applications for certification under K.C.C. chapter 21A.37;

X. Appeals of citations, notices and orders, notices of noncompliance, stop work orders issued (( <u>pursuant to</u>)) <u>in accordance with</u> K.C.C. Title 23 or Title 1.08 of the rules and regulations of the King County board of health;

Y. Appeals of notices and certifications of junk vehicles to be removed as a public nuisance ((as provided)) in accordance with K.C.C. Title 21A and K.C.C. chapter 23.10;

Z. Appeals of decisions not to issue a citation or a notice and order under K.C.C. 23.36.010.A.2;

AA. Appeals of fee waiver decisions by the department of local services, permitting division, ((as provided)) in accordance with K.C.C. 27.02.040;

BB. Appeals from decisions of the department of natural resources and parks related to permits, discharge authorizations, violations and penalties under K.C.C. 28.84.050 and 28.84.060;

CC. Appeals of transit rider suspensions under K.C.C. 28.96.430;

DD. Appeals of department of public safety seizures and intended forfeitures, when properly designated by the chief law enforcement officer of the department of public safety ((as provided)) in accordance with RCW 69.50.505; and

EE. Other applications or appeals that are prescribed by ordinance.

SECTION 204. Section 205 of this ordinance takes effect on the date that the minimum time period after adoption of Ordinance 19276 required by RCW 70.77.250(4) has passed.

SECTION 205. Ordinance 4461, Section 2, as amended, and K.C.C. 20.22.040 are hereby amended to read as follows:

The examiner shall issue final decisions in the following cases:

A. Appeals of orders of the ombuds under the lobbyist disclosure code, K.C.C. chapter 1.07;

B. Appeals of sanctions of the finance and business operations division in the department of executive services imposed under K.C.C. chapter 2.97;

C. Appeals of career service review committee conversion decisions for part-time and temporary employees under K.C.C. chapter 3.12A;

D. Appeals of electric vehicle recharging station penalties of the Metro transit department under K.C.C.4A.700.700;

E. Appeals of notice and orders of the manager of records and licensing services or the department of local services permitting division manager under K.C.C. chapter 6.01;

F. Appeals of adult entertainment license denials, suspensions and revocations under K.C.C. chapter

6.09;

G. Appeals of the fire marshal's decisions on fireworks permits under K.C.C. chapter 17.XX (the new chapter created under Ordinance 19287, Section 3);

H. Appeals of cable franchise nonrenewals under K.C.C. 6.27A.060 and notices and orders under K.C.C. 6.27A.240;

I. Appeals of notices and orders of the department of natural resources and parks under K.C.C. chapter 7.09;

J. Appeals of decisions of the director of the department of natural resources and parks on surface water drainage enforcement under K.C.C. chapter 9.04;

K. Appeals of decisions of the director of the department of natural resources and parks on requests for rate adjustments to surface and storm water management rates and charges under K.C.C. chapter 9.08;

L. Appeals of decisions on water quality enforcement under K.C.C. chapter 9.12;

M. Appeals of notices and orders of the manager of animal control under K.C.C. chapter 11.04;

N. Certifications by the finance and business operations division of the department of executive services involving K.C.C. chapter 12.16;

O. Appeals of orders of the office of civil rights under K.C.C. chapter 12.17, K.C.C. chapter 12.18, K.C.C chapter 12.20 and K.C.C. chapter 12.22;

P. Appeals of noise-related orders and citations of the department of local services, permitting division, under K.C.C. chapter 12.86;

Q. Appeals of utilities technical review committee determinations on water service availability under K.C.C. 13.24.090;

R. Appeals of decisions regarding mitigation payment system, commute trip reduction and intersection standards under K.C.C. Title 14;

S. Appeals of suspensions, revocations or limitations of plumbing permits under K.C.C. chapter 16.32;

T. Appeals of all Type 2 decisions under K.C.C. chapter 20.20, with the exception of appeals of shoreline permits, including shoreline substantial development permits, shoreline variances and shoreline conditional uses, which are appealable to the state Shoreline Hearings Board;

U. Appeals of SEPA decisions, in accordance with K.C.C. 20.44.120 and public rules adopted under K.C.C. 20.44.075;

V. Appeals of completed farm management plans under K.C.C. 21A.30.045;

W. Appeals of decisions of the interagency review committee created under K.C.C. 21A.37.070 regarding sending site applications for certification under K.C.C. chapter 21A.37;

X. Appeals of citations, notices and orders, notices of noncompliance, stop work orders issued in accordance with K.C.C. Title 23 or Title 1.08 of the rules and regulations of the King County board of health;

Y. Appeals of notices and certifications of junk vehicles to be removed as a public nuisance in accordance with K.C.C. Title 21A and K.C.C. chapter 23.10;

Z. Appeals of decisions not to issue a citation or a notice and order under K.C.C. 23.36.010.A.2;

AA. Appeals of fee waiver decisions by the department of local services, permitting division, in accordance with K.C.C. 27.02.040;

BB. Appeals from decisions of the department of natural resources and parks related to permits, discharge authorizations, violations and penalties under K.C.C. 28.84.050 and 28.84.060;

CC. Appeals of transit rider suspensions under K.C.C. 28.96.430;

DD. Appeals of department of public safety seizures and intended forfeitures, when properly designated by the chief law enforcement officer of the department of public safety in accordance with RCW 69.50.505; and

EE. Other applications or appeals that are prescribed by ordinance.

SECTION 206. Ordinance 13129, Section 6, and K.C.C. 21A.27.060 are hereby amended to read as follows:

The building permit shall become null and void if construction of the transmission support structure has not begun within one year after the effective date of permit approval or if antennas are not installed within one hundred eighty days after construction of the transmission support structure. Extensions shall be allowed only in accordance with the criteria specified for building permit extensions in K.C.C. ((16.04.05013)) 16.02.290.

SECTION 207. Ordinance 10870, Section 523, as amended, and K.C.C. 21A.28.130 are hereby amended to read as follows:

All new development shall be served by adequate fire protection as follows:

A. The site of the development proposed is served by a water supply system that provides at least minimum fire flow and (( ))a(( $_{5}$ )) road system or (( ))fire lane system that provides life safety and rescue access, and other fire protection requirements for buildings as required by K.C.C. Title<u>s</u> 16 and 17;

B. For a zone reclassification or Urban planned development, the timing of installation of required fire protection improvements shall be stated in the approving ordinance as specified in K.C.C. 20.22.250, secured with a bond or similar security, and deposited with King County; and

C. A variance request from the requirements established by K.C.C. Title 17, Fire Code, shall be reviewed ((as set forth)) in accordance with K.C.C. 17.08.090 ((or K.C.C. 17.10.040, and/))or in ((Article 2)) chapter 1 of the currently adopted edition of the International Fire Code and does not require a variance from this title unless relief is requested from a building height, setback, landscaping or other development standard ((set forth)) in K.C.C. chapters 21A.12 through 21A.30.

SECTION 208. Ordinance 13332, Section 16, as amended, and K.C.C. 27.10.010 are hereby amended to read as follows:

Plan review fees shall compensate the department for the plan review necessary to determine compliance with approved plans, adopted international codes and other county regulations. The fees shall be collected to compensate the department for the review of:

A. Commercial and residential building permit applications under K.C.C. chapters 16.04, ((16.70,

16.74,)) 16.78 and 17.04 and K.C.C. Titles 20 and 21A;

- B. Grading and clearing permit applications under K.C.C. chapter 16.82;
- C. Shoreline permit applications and exemptions under K.C.C. Title 25;
- D. State Environmental Policy Act compliance under K.C.C. chapter 20.44;
- E. Critical areas under K.C.C. chapter 21A.24;
- F. Preliminary and final subdivisions and short subdivisions under K.C.C. Title 19A;
- G. Binding site plan review under K.C.C. Title 19A;
- H. Boundary line adjustments under K.C.C. Title 19A;

I. Variance requests, conditional use permits, zone reclassification requests, special use permits and temporary use permits under K.C.C. Title 21A;

- J. Right of way use permits under K.C.C. Title 14; and
- K. Drainage review under K.C.C. Title 9.

SECTION 209. Ordinance 13332, Section 39, as amended, and K.C.C. 27.10.310 are hereby amended to read as follows:

Construction and site development inspection fees shall compensate the department for inspections necessary to determine compliance with adopted international codes and other county regulations. The fees may be based on valuation as defined in this title, fixed or both based on valuation and fixed. Fees shall be collected for reinspections and supplemental inspections, as well as being collected to compensate the department for inspection of:

A. Commercial and residential buildings, additions, and under K.C.C. chapters 16.04((<del>, 16.70, 16.74</del>)) and 16.78 and K.C.C. Titles 20 and 21A;

B. Grading and clearing sites under K.C.C. chapter 16.82;

C. Site development, including roads and drainage and erosion control under K.C.C. Titles 9 and 14 and K.C.C. chapter 16.82;

- D. Shoreline permit approvals and exemptions under K.C.C. Title 25;
- E. State Environmental Policy Act condition compliance under K.C.C. chapter 20.48;
- F. Zoning condition compliance under K.C.C. Title 21A; and
- G. Monitoring drainage and sensitive area conditions.

SECTION 210. The following are each hereby repealed:

- A. Ordinance 14914, Section 13, as amended, and K.C.C. 16.02.180;
- B. Ordinance 12560, Section 14, as amended, and K.C.C. 16.02.380;
- C. Ordinance 12560, Section 9, as amended, and K.C.C. 16.02.560;
- D. Ordinance 17837, Section 40, and K.C.C. 16.03.165;
- E. Ordinance 14914, Section 114, and K.C.C. 16.03.220;
- F. Ordinance 15802, Section 21, and K.C.C. 16.04.305;
- G. Ordinance 14914, Section 144, as amended, and K.C.C. 16.04.320;
- H. Ordinance 14914, Section 151, as amended, and K.C.C. 16.04.340;
- I. Ordinance 15802, Section 23, and K.C.C. 16.04.342;
- J. Ordinance 15802, Section 31, as amended, and K.C.C. 16.04.455;
- K. Ordinance 14914, Section 167, as amended, and K.C.C. 16.04.470;
- L. Ordinance 15802, Section 33, as amended, and K.C.C. 16.04.472;
- M. Ordinance 15802, Section 34 and K.C.C. 16.04.475;
- N. Ordinance 15802, Section 35 and K.C.C. 16.04.478;
- O. Ordinance 12560, Section 56, as amended, and K.C.C. 16.04.500;
- P. Ordinance 14914, Section 177, and K.C.C. 16.04.510;
- Q. Ordinance 15802, Section 36, and K.C.C. 16.04.515;
- R. Ordinance 14914, Section 178, as amended, and K.C.C. 16.04.520;
- S. Ordinance 14914, Section 179, and K.C.C. 16.04.530;

- T. Ordinance 14914, Section 185, and K.C.C. 16.04.540;
- U. Ordinance 15802, Section 38, and K.C.C. 16.04.545;
- V. Ordinance 12560, Section 71, as amended, and K.C.C. 16.04.590;
- W. Ordinance 12560, Section 76, as amended, and K.C.C. 16.04.640;
- X. Ordinance 12560, Section 77, as amended, and K.C.C. 16.04.650;
- Y. Ordinance 12560, Section 78, as amended, and K.C.C. 16.04.660;
- Z. Ordinance 12560, Section 79, as amended, and K.C.C. 16.04.670;
- AA. Ordinance 12560, Section 80, as amended, and K.C.C. 16.04.680;
- BB. Ordinance 12560, Section 81, as amended, and K.C.C. 16.04.690;
- CC. Ordinance 12560, Section 82, as amended, and K.C.C. 16.04.700;
- DD. Ordinance 12560, Section 99, as amended, and K.C.C. 16.04.870;
- EE. Ordinance 3647, Section 8, and K.C.C. 16.04.910;
- FF. Ordinance 14914, Section 269, as amended, and K.C.C. 16.05.010;
- GG. Ordinance 14914, Section 270, and K.C.C. 16.05.020;
- HH. Ordinance 14914, Section 271, as amended, and K.C.C. 16.05.030;
- II. Ordinance 14914, Section 273, as amended, and K.C.C. 16.05.050;
- JJ. Ordinance 14914, Section 277, as amended, and K.C.C. 16.05.090;
- KK. Ordinance 15802, Section 84, and K.C.C. 16.05.102;
- LL. Ordinance 15802, Section 86, and K.C.C. 16.05.104;
- MM. Ordinance 11797, Section 2, as amended, and K.C.C. 16.05.106;
- NN. Ordinance 2910, Section 4 (part), as amended, and K.C.C. 16.05.108;
- OO. Ordinance 12560, Section 57, as amended, and K.C.C. 16.05.110;
- PP. Ordinance 11797, Section 1, as amended, and K.C.C. 16.05.120;
- QQ. Ordinance 15802, Section 93, as amended, and K.C.C. 16.05.124;

- RR. Ordinance 11797, Section 3, as amended, and K.C.C. 16.05.127;
- SS. Ordinance 14238, Section 18, as amended, and K.C.C. 16.06.010;
- TT. Ordinance 14238, Section 19, as amended, and K.C.C. 16.06.020;
- UU. Ordinance 14238, Section 21, as amended, and K.C.C. 16.06.030;
- VV. Ordinance 14914, Section 288, as amended, and K.C.C. 16.06.031;
- WW. Ordinance 14914, Section 289, as amended, and K.C.C. 16.06.032;
- XX. Ordinance 14914, Section 290, as amended, and K.C.C. 16.06.033;
- YY. Ordinance 14914, Section 291, as amended, and K.C.C. 16.06.034;
- ZZ. Ordinance 14914, Section 292, as amended, and K.C.C. 16.06.035;
- AAA. Ordinance 14914, Section 293, and K.C.C. 16.06.036;
- BBB. Ordinance 14914, Section 294, and K.C.C. 16.06.037;
- CCC. Ordinance 14914, Section 295, and K.C.C. 16.06.038;
- DDD. Ordinance 14238, Section 21, as amended, and K.C.C. 16.06.040;
- EEE. Ordinance 14238, Section 22, as amended, and K.C.C. 16.06.050;
- FFF. Ordinance 14238, Section 23, as amended, and K.C.C. 16.06.060;
- GGG. Ordinance 14238, Section 24, as amended, and K.C.C. 16.06.070;
- HHH. Ordinance 14238, Section 25, as amended, and K.C.C. 16.06.080;
- III. Ordinance 14111, Section 118, as amended, and K.C.C. 16.12.010;
- JJJ. Ordinance 15802, Section 103, and K.C.C. 16.12.012;
- KKK. Ordinance 14111, Section 129, and K.C.C. 16.14.010;
- LLL. Ordinance 14914, Section 340, and K.C.C. 16.14.070;
- MMM. Ordinance 14914, Section 341, and K.C.C. 16.14.080;
- NNN. Ordinance 12560, Section 118, as amended, and K.C.C. 16.14.130;
- OOO. Ordinance 14914, Section 354, and K.C.C. 16.14.160;

- PPP. Ordinance 14914, Section 355, and K.C.C. 16.14.170;
- QQQ. Ordinance 12560, Section 119, as amended, and K.C.C. 16.14.180;
- RRR. Ordinance 14914, Section 358, and K.C.C. 16.14.190;
- SSS. Ordinance 12560, Section 136, as amended, and K.C.C. 16.14.230;
- TTT. Ordinance 12560, Section 137, as amended, and K.C.C. 16.14.240;
- UUU. Ordinance 14914, Section 368, and K.C.C. 16.14.260;
- VVV. Ordinance 14914, Section 369, and K.C.C. 16.14.270;
- WWW. Ordinance 14238, Section 5, as amended, and K.C.C. 16.14.300;
- XXX. Ordinance 14238, Section 6, as amended, and K.C.C. 16.14.310;
- YYY. Ordinance 14238, Section 7, as amended, and K.C.C. 16.14.320;
- ZZZ. Ordinance 15802, Section 106, as amended, and K.C.C. 16.14.321;
- AAAA. Ordinance 14238, Section 8, as amended, and K.C.C. 16.14.330;
- BBBB. Ordinance 14238, Section 9, as amended, and K.C.C. 16.14.340;
- CCCC. Ordinance 14238, Section 10, as amended, and K.C.C. 16.14.350;
- DDDD. Ordinance 14238, Section 11, as amended, and K.C.C. 16.14.360;
- EEEE. Ordinance 15802, Section 109, and K.C.C. 16.14.365;
- FFFF. Ordinance 15802, Section 110, and K.C.C. 16.14.366;
- GGGG. Ordinance 14238, Section 12, as amended, and K.C.C. 16.14.370;
- HHHH. Ordinance 14238, Section 13, as amended, and K.C.C. 16.14.380;
- IIII. Ordinance 15802, Section 113, and K.C.C. 16.14.385;
- JJJJ. Ordinance 14238, Section 14, as amended, and K.C.C. 16.14.390;
- KKKK. Ordinance 14238, Section 15, as amended, and K.C.C. 16.14.400;
- LLLL. Ordinance 14914, Section 396, and K.C.C. 16.14.420;
- MMMM. Ordinance 14914, Section 417, and K.C.C. 16.14.560;

- NNNN. Ordinance 8330, Section 34, as amended, and K.C.C. 16.32.085;
- OOOO. Ordinance 6746, Section 19, KCC 16.32.170;
- PPPP. Ordinance 15802, Section 120, and K.C.C. 16.32.175;
- QQQQ. Ordinance 15802, Section 121, and K.C.C. 16.32.185;
- RRRR. Ordinance 15802, Section 125, and K.C.C. 16.32.225;
- SSSS. Ordinance 15802, Section 127, and K.C.C. 16.32.245;
- TTTT. Ordinance 15802, Section 129, and K.C.C. 16.32.265;
- UUUU. Ordinance 15802, Section 134, as amended, and K.C.C. 16.32.315;
- VVVV. Ordinance 15802, Section 135, and K.C.C. 16.32.326;
- WWWW. Ordinance 15802, Section 136, and K.C.C. 16.32.335;
- XXXX. Ordinance 12560, Section 150, as amended, and K.C.C. 17.04.300;
- YYYY. Ordinance 14111, Section 201, as amended, and K.C.C. 17.04.430;
- ZZZZ. Ordinance 12560, Section 170, as amended, and K.C.C. 17.04.440;
- AAAAA. Ordinance 14111, Section 202, as amended, and K.C.C. 17.04.460;
- BBBBB. Ordinance 14111, Section 203, as amended, and K.C.C. 17.04.470;
- CCCCC. Ordinance 14111, Section 205, as amended, and K.C.C. 17.04.480;
- DDDDD. Ordinance 14111, Section 213, as amended, and K.C.C. 17.04.490;
- EEEEE. Ordinance 14111, Section 206, as amended, and K.C.C. 17.04.500;
- FFFFF. Ordinance 14111, Section 210, as amended, and K.C.C. 17.04.510;
- GGGGG. Ordinance 15803, Section 26, as amended, and K.C.C. 17.04.522;
- HHHHH. Ordinance 6328, Section 4, as amended, and K.C.C. 17.04.530;
- IIIII. Ordinance 14915, Section 79, as amended, and K.C.C. 17.04.550;
- JJJJJ. Ordinance 17837, Section 82, and K.C.C. 17.04.565;
- KKKKK. Ordinance 14111, Section 220, as amended, and K.C.C. 17.04.570;

LLLLL. Ordinance 12560, Section 175, as amended, and K.C.C. 17.04.580;

MMMMM. Ordinance 15803, Section 8, as amended, and K.C.C. 17.04.583;

NNNNN. Ordinance 14238, Section 29, as amended, and K.C.C. 17.04.600;

OOOOO. Ordinance 14238, Section 30, as amended, and K.C.C. 17.04.610;

PPPPP. Ordinance 14238, Section 31, as amended, and K.C.C. 17.04.620;

QQQQQ. Ordinance 8726, Section 1, as amended, and K.C.C. 17.04.630;

RRRRR. Ordinance 5828, Section 2, and K.C.C. 17.08.010;

SSSSS. Ordinance 5828, Section 5, as amended, and K.C.C. 17.08.040;

TTTTT. Ordinance 5828, Section 6, and K.C.C. 17.08.050;

UUUUU. Ordinance 5828, Section 7, and K.C.C. 17.08.060;

VVVVV. Ordinance 5828, Section 8, and K.C.C. 17.08.070;

WWWWW. Ordinance 5828, Section 9, and K.C.C. 17.08.080;

XXXXX. Ordinance 3087, Section 10, and K.C.C. 17.08.110;

YYYYY. Ordinance 3087, Section 11, and K.C.C. 17.08.120;

ZZZZZ. Ordinance 5828, Section 14, and K.C.C. 17.08.150; and

AAAAAA. Ordinance 7080, Section 2, and K.C.C. 17.08.160.

SECTION 211. This ordinance takes effect ninety days after its enactment.

SECTION 212. Severability. If any provision of this ordinance or its application

to any person or circumstance is held invalid, the remainder of the ordinance or the application of the provision to other persons or circumstances is not affected.