

State of Washington

Washington State Building Code Council

(name of governing body)

(agency name, if applicable)

Resolution No. _____

Administrative Order No. 88-11

Washington State Building Code Council

(1) Be it resolved by the _____ acting at Angle Lake Fire Hall, 2929 S. 200th Street, Seattle, WA (place)

that it does adopt the annexed rules relating to:

Update of the State Building Code by adoption and amendment of the 1988 editions of the following codes:

- 1. Uniform Building Code and Uniform Building Code Standards
2. Uniform Mechanical Code
3. Uniform Fire Code and Uniform Fire Code Standards
4. Uniform Plumbing Code and Uniform Plumbing Code Standards

(2) ALTERNATIVE A. Use only for Adoption of Permanent Rules.

This action is taken pursuant to Notice No. WSR 88-14-077 and WSR 88-20-070 filed with the code reviser on 7-1-88 & 10-5-88. These rules shall take effect: [] thirty days after they are filed with the code reviser pursuant to RCW 34.04.040(2). [X] at a later date, such date being July 1, 1989.

(2) ALTERNATIVE B. Use only for Adoption of Emergency Rules.

We, _____, find that an emergency exists and that this order is necessary for the preservation of the public health, safety, or general welfare and that observance of the requirements of notice and opportunity to present views on the proposed action would be contrary to public interest. A statement of the facts constituting the emergency is:

These rules are therefore adopted as emergency rules to take effect upon filing with the code reviser.

(3) Pursuant to the requirements of RCW 34.04.026 that "every agency shall incorporate the most specific, but in no case omit all, of the following language alternatives when adopting or amending rules" fill in statement (a), (b), or (c) as appropriate:

[] (a) This rule is promulgated pursuant to RCW _____ and is intended to administratively implement that statute.

[X] (b) This rule is promulgated pursuant to RCW 19.27.074 which directs that the Washington State Building Code Council (agency)

has authority to implement the provisions of RCW 19.27 (name of act or RCW citation)

[] (c) This rule is promulgated under the general rule-making authority of the _____ (agency)

as authorized in RCW _____

(4) The undersigned hereby declares that the agency has complied with the provisions of the Open Public Meetings Act (chapter 42.30 RCW), the Administrative Procedure Act (chapter 34.04 RCW), and the State Register Act (chapter 34.08 RCW) in the adoption of these rules.

(5) This order, after being first recorded in the order register of this governing body, is herewith transmitted to the Code Reviser for filing pursuant to chapter 34.04 RCW and chapter 1-12 WAC.

APPROVED AND ADOPTED November 18, 1988

DEC 1 1988

By Lynn Carmichael

Chair State Building Code Council Title

CODE REVISER'S OFFICE WSR 88 24 018

Chapter 51-16 WAC

STATE BUILDING CODE UPDATE AND AMENDMENT--ADOPTION OF THE ((1985))
1988 EDITIONS OF THE UNIFORM CODES

AMENDATORY SECTION (Amending Order 85-13, filed 11/26/85, effective 6/11/86)

WAC 51-16-010 AUTHORITY. These rules are adopted under the authority of ((section--27--chapter-3607--laws-of-1985)) chapter 19.27 RCW.

AMENDATORY SECTION (Amending Order 85-13, filed 11/26/85, effective 6/11/86)

WAC 51-16-020 PURPOSE. The purpose of these rules is to implement the provisions of chapter ((3607--laws-of-1985)) 19.27 RCW, which provides that the state building code council shall maintain the State Building Code in a status which is consistent with the purpose as set forth in ((section-6-of-the-act)) RCW 19.27.020. In maintaining the codes the council shall regularly review updated versions of the codes adopted under the act, and other pertinent information, and shall amend the codes as deemed appropriate by the council.

AMENDATORY SECTION (Amending Order 85-13, filed 11/26/85, effective 6/11/86)

WAC 51-16-030 UNIFORM BUILDING CODE AND UNIFORM BUILDING CODE STANDARDS. The ((1985)) 1988 edition of the Uniform Building Code, and the ((1985)) 1988 edition of the Uniform Building Code Standards as published by the International Conference of Building Officials is hereby adopted by reference with the following additions, deletions and exceptions:

(1) The following definition shall be added to section 420, chapter 4 of the Uniform Building Code:

SINGLE FAMILY RESIDENTIAL BUILDING is a dwelling containing only one dwelling unit.

(2) The following definition shall be added to section 414, chapter 4 of the Uniform Building Code:

MULTIFAMILY RESIDENTIAL BUILDING is a common wall dwelling or apartment house that consists of four or fewer dwelling units that do not exceed two stories in height and that are less than five thousand square feet in total area.

((3)-The-following-paragraph-shall-be-added-to--section--1202(b)-of-the-Uniform-Building-Code:

Residential--structures--containing--four--or--fewer--dwelling--units--shall--be--provided--with--one--hour--fire--resistive--occupancy-separations-between-units))

(3) Chapter 9 of the 1988 edition of the Uniform Building Code is hereby not adopted and chapter 9 of the 1985 edition of the Uniform Building Code is hereby adopted in its place.

The changes made between the 1985 edition of the Uniform Building Code and the 1988 edition of the Uniform Building Code for the purposes of integrating chapter 9 of the Uniform Building Code into other sections of the 1988 edition of the Uniform Building Code are also not adopted.

The sections and tables listed below contain changes to the 1988 edition of the Uniform Building Code made for this purpose.

Definitions:

Sec. 404, Control Area (added) page 22
Sec. 404, Corrosive (added) page 22
Sec. 406, Emergency Control Station (changed) page 23
Sec. 409, Handling (added) page 25
Sec. 409, Health Hazard (added) page 25
Sec. 409, Highly Toxic Material (added) page 25
Sec. 410, Irritant (added) page 26
Sec. 413, Liquid Storage Room (changed) page 27
Sec. 413, Liquid Storage Warehouse (changed) page 27
Sec. 420, Sensitizer (added) page 29
Sec. 422, Use (specifics added) page 30

Code Body Changes:

Sec. 503 (a), page 32 & 33
Sec. 506 (c), page 38
Sec. 507, page 38 & 39
Table No. 5-A, page 43, 44 & 45
Table No. 5-B, page 46
Table No. 5-C, page 47
Table No. 5-D, page 48
Sec. 702 (b), page 55 & 56
Sec. 802 (d), page 63
Sec. 3309 (a), page 648
Sec. 3320, page 657
Sec. 3802 (f), page 682
Sec. 5207 (a), page 784
Appendix Table No. 11-B page 832

(4) Section 2312(h) 2.I. Diaphragms. (iv) of the Uniform Building Code is hereby amended to read as follows:

(iv) Where wood diaphragms are used to laterally support concrete or masonry walls, the anchorage shall conform to Section 2312(h) 2. H above. In Seismic Zones Nos. 2, 3 and 4 anchorage shall not be accomplished by use of toe nails or nails subject to withdrawal, nor shall wood ledgers or framing be used in cross-grain bending or cross-grain tension, and the continuous ties required by paragraph (iii) above shall be in addition to the diaphragm sheathing.

(5) Uniform Building Code Section 2722(f) 6 item 1 of the exception is hereby amended to read as follows:

EXCEPTION: This requirement need not apply in any of the following cases, provided the compactness limitations for beams given in Section 2722 (f) 3 shall apply to columns as well:

1. For columns with f_a less than $9.4F_y$ for all load combinations, except for loads specified in Section 2722(d) 1.

Such columns shall have allowable stresses reduced 25 percent when one end frames into a joint not complying with Formula 22.3, and 50 percent when both ends frame into joints not complying with Formula 22.3.

(6) Uniform Building Code Section 2722(f) 7. is hereby amended to read as follows:

7. Trusses in SMRSF. Trusses may be used as horizontal members in SMRSF if the sum of the truss seismic force flexural strength exceeds the column seismic force flexural strength immediately above and below the truss by a factor of at least 1.25. For this determination the strengths of the members shall be reduced by the gravity load effects. In buildings of more than one story, the column axial stress shall not exceed $0.4F_y$ and the ratio of the unbraced column height to the least radius of gyration shall not exceed 60. Columns shall have allowable stresses reduced 25 percent when one end frames into a truss, and 50 percent when both ends frame into trusses. The connection of the truss chords to the column shall develop the lesser of the following:

- A. The strength of the truss chord.
- B. The chord force necessary to develop 125 percent of the flexural strength of the column.

(7) The following section shall be added to the Uniform Building Code:

Section 3801(e) when sprinklers are installed in an insulated ceiling cavity not meeting exceptions of UBC Standard 38-1 or where blocked by ducts or other similar obstructions, a space 6 inches or greater in depth with not less than 12 inches clearance from ducts or other similar obstructions shall be provided under all sprinklers.

(8) Section 3802(h) of the Uniform Building Code is hereby amended to read as follows:

(h) Group R Division 1 Occupancies. An automatic sprinkler system shall be installed throughout every apartment house three or more stories in height or containing more than 15 dwelling units and every hotel three or more stories in height or containing 20 or more guest rooms. Residential or quick response standard sprinkler heads shall be used in the dwelling unit and guest room portions of the building. The sprinkler system shall comply with the requirements of Washington State Building Code Standard No. 38-3W.

(9) Section 5103 of the Uniform Building Code is hereby not adopted in order to eliminate conflict with chapter 296-81 WAC as adopted by the Washington state department of labor and industries pursuant to chapter 70.87 RCW.

(10) Section 5105 of the Uniform Building Code shall be amended to read as follows:

Elevator Machine Room Floors

Section 5105. Elevator hoistways shall not be vented through an elevator machine room unless such venting is accomplished by an approved duct system installed through the elevator machine room. Cable slots entering the machine room shall--be--sleeved--beneath--the--machine--room--floor--and--extend--to--not--less--than--12--inches--below--the--shaft--vent--to--must be installed in a manner that inhibits the passage of smoke into the machine room.

(11) A New Standard No. 38-3W shall be added to Chapter 38 of the Uniform Building Code Standards as follows:

WASHINGTON STATE BUILDING CODE STANDARD NO. 38-3W

INSTALLATION OF SPRINKLER SYSTEMS IN
RESIDENTIAL OCCUPANCIES

Sec. 38.301W. Except for the limitations, deletions, modifications or amendments set forth in Section 38.302W of this standard, the installation of sprinkler systems in residential occupancies of four stories or less when required by the Uniform Building Code shall be in accordance with the "Standard for the Installation of Sprinkler Systems in Residential Occupancies, NFPA 13R-1988", published by the National Fire Protection Association, copyright 1988, Batterymarch Park, Quincy, Massachusetts 02269, as if set out at length herein.

Sec. 38.302W. The National Fire Protection Association standard adopted by section 38.301W applies to the selection, installation, inspection, maintenance and testing of residential sprinkler systems, except as follows:

1. Table 1-5.1 is amended to read as follows:

Table 1-5.1

<u>Materials and Dimensions</u>	<u>Standard</u>
<u>Spec. for Black and Hot-Dipped Zinc Coated (Galvanized) Welded and Seamless Steel Pipe for Fire Protection Use</u>	<u>ASTM A795</u>
<u>Specification for Welded and Seamless Steel Pipe</u>	<u>ASTM A53</u>
<u>Wrought-Steel Pipe</u>	<u>ANSI B36.10</u>
<u>Specification for Electric-Resistance Welded Steel Pipe</u>	<u>ASTM A135</u>
<u>Copper Tube (Drawn, Seamless)</u>	
<u>Specification for Seamless Copper Tube</u>	<u>ASTM B88</u>
<u>Specification for General Requirements for Wrought Seamless Copper and Copper-Alloy Tube</u>	<u>ASTM B251</u>
<u>Brazing Filler Metal (Classification BCuP-3 or BCuP-4)</u>	<u>AWS A5.8</u>
<u>Specification for Solder Metal, 9-5 (Tin-Antimony-Grade 95TA)</u>	<u>ASTM B32</u>
<u>Specifications for CPVC Pipe</u>	<u>ASTM F437</u> <u>ASTM F438</u> <u>ASTM F439</u> <u>ASTM F442</u>
<u>Specification for Polybutylene Tube</u>	<u>ASTM D 3309</u>

2. Table 1-5.5 is amended to read as follows:

Table 1-5.5

<u>Materials and Dimensions</u>	<u>Standard</u>
<u>Cast Iron</u>	
<u>Cast Iron Threaded Fittings</u> <u>Class 125 and 250</u>	<u>ANSI B16.4</u>
<u>Cast Iron Pipe Flanges and</u> <u>Flanged Fittings</u>	
	<u>ANSI B16.1</u>
<u>Malleable Iron</u>	
<u>Malleable Iron Threaded Fittings</u> <u>Class 150 and 300</u>	<u>ANSI B16.3</u>
<u>Steel</u>	
<u>Factory-made Threaded Fittings</u> <u>Class 150 and 300</u>	<u>ANSI B16.9</u>
<u>Buttwelding ends for Pipe, Valves</u> <u>Flanges and Fittings</u>	
	<u>ANSI B16.25</u>
<u>Spec. for Piping Fittings of Wrought</u> <u>Carbon Steel and Alloy Steel for</u> <u>Moderate and Elevated Temperatures</u>	
	<u>ASTM A234</u>
<u>Pipe Flanges and Flanged Fittings,</u> <u>Steel Nickel Alloy and Other</u> <u>Special Alloys</u>	
	<u>ANSI B16.5</u>
<u>Forged Steel Fittings, Socket</u> <u>Welded and Threaded</u>	
	<u>ANSI B16.11</u>
<u>Copper</u>	
<u>Wrought Copper and Copper Alloy-Solder-</u> <u>Joint Pressure Fittings</u>	<u>ANSI B16.22</u>
<u>Cast Copper Alloy Solder-joint</u> <u>Pressure fittings</u>	
	<u>ANSI B16.18</u>
<u>Plastic Fittings for CPVC Pipe</u>	
	<u>ASTM F437</u>
	<u>ASTM F438</u>
	<u>ASTM F439</u>
	<u>ASTM F442</u>
<u>Plastic Fittings for Polybutylene tube</u>	
	<u>ASTM D 3309</u>

EXCEPTION: In the case of conflict between the ventilation requirements of sections 605, section 705, section 905 and section 1205 of this code and the ventilation requirements of chapter 51-12 WAC, the Washington State Energy Code, or where applicable, a local jurisdiction's energy code, the provisions of such energy codes shall govern.

AMENDATORY SECTION (Amending Order 85-13, filed 11/26/85, effective 6/11/86)

WAC 51-16-040 UNIFORM MECHANICAL CODE. The ((1985)) 1988 edition of the Uniform Mechanical Code, including chapter 22, Fuel Gas Piping, Appendix B, published by the International Conference of Building Officials and the International Association of Plumbing and Mechanical Officials is hereby adopted by reference with the following exception:

In the case of conflict between the duct insulation requirements of section 1005 of this code and the duct insulation requirements of chapter 51-12 WAC the Washington State Energy Code, or where applicable, a local jurisdiction's energy code, the provisions of such energy codes shall govern.

AMENDATORY SECTION (Amending Order 85-13, filed 11/26/85, effective 6/11/86)

WAC 51-16-050 UNIFORM FIRE CODE AND UNIFORM FIRE CODE STANDARDS. The ((1985)) 1988 edition of the Uniform Fire Code and the ((1985)) 1988 edition of the Uniform Fire Code Standards published by the International Conference of Building Officials, and the Western Fire Chiefs Association is hereby adopted by reference.

(1) Section 10.306(h) of the Uniform Fire Code is hereby amended to read as follows:

(h) Group R Division 1 Occupancies. An automatic sprinkler system shall be installed throughout every apartment house three or more stories in height or containing more than 15 dwelling units and every hotel three or more stories in height or containing 20 or more guest rooms. Residential or quick response standard sprinkler heads shall be used in the dwelling unit and guest room portions of the building. The sprinkler system shall comply with the requirements of Washington State Building Code Standard No. 38-3W.

(2) Article 80 of the 1988 edition of the Uniform Fire Code is hereby not adopted and Article 80 of the 1985 edition of the Uniform Fire Code is hereby adopted in its place.

The changes made between the 1985 edition of the Uniform Fire Code and the 1988 edition of the Uniform Fire Code for the purposes of integrating Article 80 into other sections of the 1988 edition of the Uniform Fire Code are also not adopted.

The sections and tables listed below contain changes to the 1988 edition of the Uniform Fire Code made for this purpose.

Standards:

Sec. 2.304 (b), page 9

Permits:

Sec. 4.108

c.6. Compressed Gases, page 15

h.1. Hazardous materials, page 16 & 17

h.2. Highly toxic pesticides, page 18

Definitions:

Sec. 9.105

CFR, page 23

Carcinogen, page 23

Sec. 9.117.

Group H Occupancies, pages 36 & 37

Organic Peroxide, page 39

Oxidizer, page 39

Sec. 9.118.

Peroxide-Forming Chemical, page 39
Primary Containment, page 40
Proprietary Information, page 40
Pyrophoric, page 40

Sec. 9.121.

Secondary Containment, page 41
Segregated Storage, page 41
Sensitizer, page 41

Sec. 9.122.

Toxic Material, page 43

Sec. 9.123.

Unauthorized Discharge, page 44
Unstable (Reactive) Liquid, page 44

Sec. 9.125.

Water-Reactive Materials, page 45

Appendices:

II-E Hazardous Materials Management Plan &
Hazardous Materials Inventory State-
ment, page 419
VI-A Hazardous Materials Classifications,
page 436

AMENDATORY SECTION (Amending Order 86-19, filed 11/26/86, effective 4/27/87)

WAC 51-16-060 UNIFORM PLUMBING CODE AND UNIFORM PLUMBING CODE STANDARDS. The ((1985)) 1988 edition of the Uniform Plumbing Code and the ((1985)) 1988 Uniform Plumbing Code Standards, published by the International Association of Plumbing and Mechanical Officials(([-])) is hereby adopted by reference: PROVIDED That chapters 11 and 12 of this code are not adopted(([-])); PROVIDED FURTHER, That ((any--pipe; pipefitting;--solder;--or--flux--used--in--the--installation--or--repair--of--any plumbing--in--a--residential--or--nonresidential--facility--providing--water for--human--consumption--shall--be--lead--free.--This--prohibition--shall--not apply--to--leaded--joints--necessary--for--the--repair--of--cast--iron--pipes. The--term--lead--free:

(1)--When--used--with--respect--to--solders--and--flux--refers--to--solders and--flux--containing--not--more--than--two--tenths--of--one--percent--lead;--and
 (2)--When--used--with--respect--to--pipes--and--pipe--fittings--refers--to pipes--and--pipefittings--containing--not--more--than--eight--percent--lead)) those requirements of the Uniform Plumbing Code relating to venting of appliances as found in Chapter 13 are not adopted.

AMENDATORY SECTION (Amending Order 85-13, filed 11/26/85, effective 6/11/86)

WAC 51-16-070 EXCEPTIONS. The exceptions and amendments to the uniform codes contained in the provisions of chapter 19.27 RCW ((as amended by chapter 360, laws of 1985)) shall apply in case of conflict with any of the provisions of these rules.

In case of conflict between the codes adopted under these rules and the provisions of chapter 51-10 WAC, the Washington state regulations for barrier-free facilities, the provisions of chapter 51-10 WAC shall govern.

AMENDATORY SECTION (Amending Order 85-13, filed 11/26/85, effective 6/11/86)

WAC 51-16-080 IMPLEMENTATION. The uniform codes adopted by WAC 51-16-030 through 51-16-060 of this chapter shall become effective in all counties and cities of this state (~~((ninety-days-following-the-final-day-of-the-regular-legislative-session--of--1986))~~) on July 1, 1989, unless local amendments have been approved by the state building code council.

AMENDATORY SECTION (Amending Order 85-13, filed 11/26/85, effective 6/11/86)

WAC 51-16-090 (~~((TIMEFRAME-FOR))~~) SUBMITTAL OF PROPOSED CITY OR COUNTY AMENDMENTS. All proposed city or county amendments to the State Building Code required to be submitted to the council under the provisions of (~~((section--2--(1)(b)--of--chapter--360--Laws--of--1985))~~) RCW 19.27.060 and 19.27.074 shall be submitted to the council for review (~~((not--less--than--90--days--prior--to--the--proposed--effective--date--of--such--amendments))~~) under procedures established by the council. The council shall approve or deny all local amendments based on their consistency with the minimum performance standards and objectives of chapter (~~((360--Laws--of--1985))~~) 19.27 RCW.

NEW SECTION

WAC 51-16-100 REVIEW OF CITY AND COUNTY AMENDMENTS PREVIOUSLY APPROVED BY THE COUNCIL. The council will review all amendments to the 1985 editions of the codes approved by the council pursuant to RCW 19.27.074 and 19.27.060. The council will declare null and void any amendments which have become obsolete, unnecessary, or in conflict due to changes in the language of the 1988 editions of the codes as adopted under these rules.