

**WASHINGTON STATE
BUILDING CODE**

**CHAPTER 51-51 WAC
First Edition**

**INTERNATIONAL RESIDENTIAL CODE
2003 Edition**



Washington State Building Code Council

Effective July 1, 2004

Copies of the State Building Codes and
complete copies of the 2003 International Residential Code
as published by the International Code Council
may be obtained from:

Washington Association of Building Officials
Post Office Box 7310
Olympia, Washington 98507-7310
(360) 586-6725 www.wabo.org
or toll free in Washington State at (888) 664-9515

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International Residential Code
Chapter 51-51 WAC
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WSR 04-01-109

Preface

Authority: The International Residential Code (Chapter 51-51 WAC) is adopted by the Washington State Building Code Council pursuant to Chapters 19.27 and 70.92 RCW. These codes were first adopted by reference by the Washington State Legislature in 1974. In 1985, the Legislature delegated the responsibility of adoption and amendment of these codes to the State Building Code Council.

Code Precedence: The State Building Code Act, Chapter 19.27 RCW, establishes the following order of precedence among the documents adopted as parts of the State Building Code:

- International Building Code, Standards and amendments -WAC 51-50;
- International Residential Code, Standards and amendments – WAC 51-51;
- International Mechanical Code, Standards and amendments - WAC 51-52;
- International Fire Code, Standards and amendments - WAC 51-54;
- Uniform Plumbing Code, Standards and amendments - WAC 51-56, 51-57.

Where there is a conflict between codes, an earlier named code takes precedence over a later named code. In the case of conflict between the duct insulation requirements of the International Mechanical Code and the duct insulation requirements of the Energy Code, the Energy Code, or where applicable, a local jurisdiction's energy code, shall govern.

Where, in any specific case, different sections of this Code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

Organization and Numbering: These rules are written to allow compatible use with the International Residential Code. All sections which are amended, deleted, or added are referenced.

Enforcement: The State Building Code Act requires that each local jurisdiction enforce the State Building Code within its jurisdiction. Any jurisdiction can contract with another jurisdiction or an inspection agency to provide the mandated enforcement activities.

Amendments to the State Building Code:

The State Building Code Council has adopted review procedures and approval criteria for local amendments. These procedures and criteria are found in Chapter 51-04 WAC. The Council has exempted from its review any amendments to the administrative provisions of the various codes.

Forms for proposing statewide amendments to the State Building Code are available from the State Building Code Council staff.

- A. **Amendments of Statewide Application:** On a yearly basis the State Building Code Council will consider proposals to amend the State Building Code. Unless directed by the State Legislature, federal mandates or court order, the Council will not enter formal rulemaking until 2006 as part of its consideration of adoption of the 2006 series of codes.

Proposals to amend the State Building Code shall be made on forms provided by the Building Code Council.

Code Change Proposal Submittal Deadline: March 1st of each year.

- B. **Local Amendments:** Any jurisdiction may amend the State Building Code provided the amendments do not reduce the minimum performance standards of the codes. There are two areas where local amendments are limited or prohibited:

Prohibited Amendments: Residential provisions of the State Energy Code (WAC 51-11), the Ventilation and Indoor Air Quality Code (WAC 51-13); any provision of the International Building Code or International Residential Code affecting accessibility; and standards specifically adopted in Chapters 19.27 and 19.27A RCW cannot be amended by any local jurisdiction.

Residential Amendments: Amendments by local jurisdictions which affect the construction of single family and multi-family residential buildings must be reviewed and approved by the State Building Code Council before such amendments can be enforced. The State Building Code Act provides the following definition:

Multi-family residential building: means common wall residential buildings that consist of four or fewer units, that do not exceed two stories in height, that are less than 5,000 square feet in area, and that have a one-hour fire-resistive occupancy separation between units.

Application forms for Council review of local amendments are available from the State Building Code Council Staff.

Washington State Building Code Council
Post Office Box 42525
Olympia, Washington 98504-2525
www.sbccc.wa.gov
(360) 725-2966 Fax (360) 586-9383
e-mail: sbccc@cted.wa.gov

Printing Format: This version of the rules is published as a series of insert or replacement pages. Each page provides instructions for installing them in the model code book. Amendments to the model code which are new or revised from the previous edition of this code are indicated by a line in the margin next to the revised portions.

Effective Date: These rules were adopted by the State Building Code Council on November 21, 2003. The rules are effective throughout the state on July 1, 2004. (This version of the code is based on WAC 51-51 as published in WSR 04-01-109. It is subject to review by the State Legislature during the 2004 session.)

Building Permit Fees: The activities of the State Building Code Council are supported by permit fees collected by each city and county. Section 19.27.085 of the State Building Code Act requires that a fee of \$4.50 be imposed on each building permit issued by each city and county. In addition, a fee of \$2.00 per unit shall be imposed for each dwelling unit after the first unit, on each building containing more than one residential unit. For the purpose of this fee, WAC 365-110-035 defines building permits as any permit to construct, enlarge, alter, repair, move, improve, remove, convert or demolish any building or structure regulated by the Building Code. Exempt from the fee are plumbing, electrical, mechanical permits, permits issued to install a mobile/manufactured home, commercial coach or factory built structure, or permits issued pursuant to the International Fire Code.

Each city and county shall remit moneys collected to the state treasury quarterly. No remittance is required until a minimum of \$50.00 has accumulated.

These permit fees are the amounts current in January 2004. Such fees may be changed by the State Legislature.

Opinions: Only at the request of local enforcement official, the State Building Code Council may issue interpretations/opinions of those provisions of the State Building Code created by the Council, or provisions of the model codes amended by the Council. Final interpretation authority for any specific permit resides with the local enforcement official.

Table of Contents

Section		Page
WAC 51-51-001	Authority	A
WAC 51-51-002	Purpose	A
WAC 51-51-003	International Residential Code	A
WAC 51-51-007	Exceptions	A
WAC 51-51-008	Implementation	A
WAC 51-51-0100	Chapter 1 Administration	
WAC 51-51-0202	Section 101 – Title, Scope and Purpose	1
WAC 51-51-0204	Section 102 – Applicability	1
WAC 51-51-0200	Chapter 2 Definitions	
WAC 51-51-0202	Section 202 – Definitions	11
WAC 51-51-0300	Chapter 3 Building Planning	
WAC 51-51-0303	Section 303 – Light, Ventilation and Heating	45
WAC 51-51-0311	Section 311 – Means of Egress	50
WAC 51-51-0313	Section 313 – Smoke Alarms	53
WAC 51-51-0324	Section 324 – Adult Family Homes	60
WAC 51-51-0325	Section 325 – Family Child Day Care Homes	60
WAC 51-51-1000	Chapter 10 Chimneys and Fireplaces	
WAC 51-51-1004	Section 1004 – Factory-built Fireplaces	271
Chapter 11 is not adopted		
WAC 51-51-2000	Chapter 20 Boilers and Water Heaters	
WAC 51-51-2001	Section 2001 – Boilers	321
WAC 51-51-2002	Section 2002 – Operating and Safety Controls	321
WAC 51-51-2003	Section 2003 – Expansion Tanks	321
WAC 51-51-2400	Chapter 24 Fuel Gas	
WAC 51-51-2401	Section 2401 – General	331
WAC 51-51-2415	Section 2415 – Piping System Installation	351
Chapters 25 through 42 are not adopted		
WAC 51-51-4300	Chapter 43 Referenced Standards	
WAC 51-51-4300	Washington State Building Code Standard 31-2 Standard Test Method for Particulate Emissions from Fireplaces	524

**CHAPTER 51-51 WAC
STATE BUILDING CODE ADOPTION AND AMENDMENT
OF THE 2003 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE**

WAC 51-51-001 AUTHORITY

These rules are adopted under the authority of Chapter 19.27 RCW.

WAC 51-51-002 PURPOSE

The purpose of these rules is to implement the provisions of Chapter 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 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.

WAC 51-51-003 INTERNATIONAL RESIDENTIAL CODE

The 2003 edition of the International Residential Code published by the International Code Council is hereby adopted by reference with the following additions, deletions and exceptions: Provided that chapters 11 and 25 through 42 of this code are not adopted.

WAC 51-51-007 EXCEPTIONS

The exceptions and amendments to the International Residential Code contained in the provisions of Chapter 19.27 RCW shall apply in case of conflict with any of the provisions of these rules.

The provisions of this code do not apply to temporary growing structures used solely for the commercial production of horticultural plants including ornamental plants, flowers, vegetables, and fruits. "Temporary growing structure" means a structure that has the sides and roof covered with polyethylene, polyvinyl, or similar flexible synthetic material and is used to provide plants with either frost protection or increased heat retention. A temporary growing structure is not considered a building for purposes of this code.

The provisions of this code do not apply to the construction, alteration, or repair of temporary worker housing except as provided by rule adopted under chapter 70.114A RCW or chapter 37, Laws of 1998 (SB 6168). "Temporary worker housing" means a place, area, or piece of land where sleeping places or housing sites are provided by an employer for his or her employees or by another person, including a temporary worker housing operator, who is providing such accommodations for employees, for temporary, seasonal occupancy, and includes "labor camps" under RCW 70.54.110.

Codes referenced which are not adopted through RCW 19.27.031 or RCW 19.27A shall not apply unless specifically adopted by the authority having jurisdiction.

The standards for liquefied petroleum gas installations shall be NFPA 58 (Liquefied Petroleum Gas Code) and NFPA 54 (National Fuel Gas Code). All other fuel gas installations shall be regulated by the International Mechanical Code and International Fuel Gas Code.

WAC 51-51-008 IMPLEMENTATION

The International Residential Code adopted under Chapter 51-51 WAC shall become effective in all counties and cities of this state on July 1, 2004.

R101.2 Scope. The provisions of the *International Residential Code for One- and Two-Family Dwellings* shall apply to the 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 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 Department of Social and Health Services.

R102.7.2 Moved Buildings. Buildings or structures moved into or within a jurisdiction shall comply with the provisions of this code, the International Building Code (WAC 51-50), the International Mechanical Code (WAC 51-52), the International Fire Code (WAC 51-54), the Uniform Plumbing Code and Standards (WAC 51-56 and 51-57), the Washington State Energy Code (WAC 51-11) and the Washington State Ventilation and Indoor Air Quality Code (WAC 51-13) for new buildings or structures.

Exception: Group R-3 buildings or structures are not required to comply if:

1. The original occupancy classification is not changed; and
2. 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 percent of the value of the building exclusive of the costs relating to preparation, construction, demolition or renovation of foundations.

ADULT FAMILY HOME means a dwelling in which a person or persons provide personal care, special care, room and board to more than one but not more than six adults who are not related by blood or marriage to the person or persons providing the services.

CHILD DAY CARE, shall, for the purposes of these regulations, mean the care of children during any period of a 24 hour day.

CHILD DAY CARE HOME, FAMILY is a child day care facility, licensed by the state, located in the dwelling of the person or persons under whose direct care and supervision the child is placed, for the care of twelve or fewer children, including children who reside at the home.

UNUSUALLY TIGHT CONSTRUCTION. Construction meeting the following requirements:

1. Walls exposed to the outside atmosphere having a continuous water vapor retarder with a rating of 1 perm ($57 \text{ ng/s}\cdot\text{m}^2\cdot\text{Pa}$) or less with openings gasketed or sealed;
2. Openable windows and doors meeting the air leakage requirements of the *International Energy Conservation Code*, Section 502.1.4; and
3. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines, and at other openings; or
4. Buildings built in compliance with the 1986 or later editions of the Washington State Energy Code WAC 51-11, Northwest Energy Code, or Super Good Cents weatherization standards or equivalent.

R303.8.1 Definitions. For the purposes of this section only, the following definitions apply.

DESIGNATED AREAS are those areas designated by a county to be an urban growth area in Chapter 36.70A RCW and those areas designated by the US Environmental Protection Agency as being in nonattainment for particulate matter.

SUBSTANTIALLY REMODELED means any alteration or restoration of a building exceeding 60 percent of the appraised value of such building within a 12 month period. For the purpose of this section, the appraised value is the estimated cost to replace the building and structure in kind, based on current replacement costs.

R303.8.2 Primary heating source. Primary heating sources in all new and substantially remodeled buildings in designated areas shall not be dependent upon wood stoves.

R303.8.3 Solid fuel burning devices. No used solid fuel burning device shall be installed in new or existing buildings unless such device is United States Environmental Protection Agency certified or a pellet stove either certified or exempt from certification by the United States Environmental Protection Agency.

Exception: Antique wood cook stoves and heaters manufactured prior to 1940.

R311.1 General. Stairways, ramps, exterior exit balconies, hallways and doors shall comply with this section.

Exception: Stairs or ladders within an individual dwelling unit used to gain access to areas of 200 square feet (18.6 m²) or less, and not containing the primary bathroom or kitchen.

(Insert Facing Page 50)

R311.6.3.3 Continuity. Handrails where required on ramps shall be continuous for the full length of the ramp. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1.5 inches (38 mm) between the wall and the handrails. At least one handrail shall extend in the direction of ramp run not less than 12 inches (305 mm) horizontally beyond the top and bottom of the ramp runs.

R313.3 Family child day care homes. In family child day care homes operable smoke alarms shall be located in all sleeping and napping areas. When the family child day care home has more than one story, and in family child day care homes with basements, an operable smoke alarm shall be installed on each story and in the basement. In family child day care homes where a story or basement is split into two or more levels, the smoke alarm shall be installed in the upper level, except that when the lower level contains a sleeping or napping area, an operable smoke alarm shall be located on each level. When sleeping rooms are on an upper level, the smoke alarm shall be placed at the ceiling of the upper level in close proximity to the stairway. In family child day care homes where the ceiling height of a room open to the hallway serving the bedrooms exceeds that of the hallway by 24 inches or more, smoke alarms shall be installed in the hallway and the adjacent room. Smoke alarms shall sound an alarm audible in all areas of the building.

SECTION R324 ADULT FAMILY HOMES

R324.1 General. This section shall apply to all newly constructed adult family homes and all existing single family homes being converted to adult family homes. This section shall not apply to those adult family homes licensed by the State of Washington Department of Social and Health Services prior to July 1, 2001.

R324.2 Submittal standards. In addition to those requirements in Section 106.1, the submittal shall identify the project as a Group R, Division 3 Adult Family Home Occupancy. A floor plan shall be submitted identifying the means of egress and the components in the means of egress such as stairs, ramps, platform lifts and elevators. The plans shall indicate the rooms used for clients and the sleeping room classification of each room.

R324.3 Sleeping room classification. Each sleeping room in an adult family home shall be classified as:

1. Type S - where the means of egress contains stairs, elevators or platform lifts.
2. Type NS1 - where one means of egress is at grade level or a ramp constructed in accordance with R311.6 is provided.
3. Type NS2 - where two means of egress are at grade level or ramps constructed in accordance with R311.6 are provided.

R324.4 Types of locking devices. All bedroom and bathroom doors shall be openable from the outside when locked.

Every closet shall be readily openable from the inside.

R324.5 Smoke alarm requirements. All adult family homes shall be equipped with smoke alarms installed as required in Section R313. Alarms shall be installed in such a manner so that the fire warning may be audible in all parts of the dwelling upon activation of a single device.

R324.6 Escape windows and doors. Every sleeping room shall be provided with emergency escape and rescue windows as required by Section R310.

R324.7 Fire apparatus access roads and water supply for fire protection. Adult family homes shall be served by fire apparatus access roads and water supplies meeting the requirements of the local jurisdiction.

SECTION R325 FAMILY CHILD DAY CARE HOMES

R325 Family child day care homes. For family child day care homes with more than six children, each floor level used for family child day care purposes shall be served by two remote means of egress. Exterior exit doors shall be operable from the inside without the use of keys or any special knowledge or effort.

Basements located more than 4 feet below grade level shall not be used for family child day care homes unless one of following conditions exist:

1. Stairways from the basement open directly to the exterior of the building without entering the first floor; or
2. One of the two required means of egress discharges directly to the exterior from the basement level, and a self closing door is installed at the top or bottom of the interior stair leading to the floor above; or
3. One of the two required means of egress is an operable window or door, approved for emergency escape or rescue, that opens directly to a public street, public alley, yard or exit court; or
4. A residential sprinkler system is provided throughout the entire building in accordance with National Fire Protection Association Standard 13D.

Floors located more than 4 feet above grade level shall not be occupied by children in family day care homes.

Exceptions:

1. Use of toilet facilities while under supervision of an adult staff person.
2. Family child day care homes may be allowed on the second story if one of the following conditions exists:
 - 2.1 Stairways from the second story open directly to the exterior of the building without entering the first floor; or
 - 2.2 One of the two required means of egress discharges directly to the exterior from the second story level, and a self closing door is installed at the top or bottom of the interior stair leading to the floor below; or
 - 2.3 A residential sprinkler system is provided throughout the entire building in accordance with National Fire Protection Association Standard 13D.

Every sleeping or napping room in a family child day care home shall have at least one operable window for emergency rescue.

Exception: Sleeping or napping rooms having doors leading to two separate means of egress, or a door leading directly to the exterior of the building.

Rooms or spaces containing a commercial-type cooking kitchen, boiler, maintenance shop, janitor closet, laundry, woodworking shop, flammable or combustible storage, or painting operation shall be separated from the family child day care area by at least one-hour fire-resistive construction.

Exception: A fire-resistive separation shall not be required where the food preparation kitchen contains only a domestic cooking range, and the preparation of food does not result in the production of smoke or grease laden vapors.

R1004.1.1 Emission standards for factory-built

fireplaces. After January 1, 1997, no new or used factory-built fireplace shall be installed in Washington State unless it is certified and labeled in accordance with procedures and criteria specified in the Washington State Building Code Standard 31-2.

To certify an entire fireplace model line, the internal assembly shall be tested to determine its particulate matter emission performance. Retesting and recertifying is required if the design and construction specifications of the fireplace model line internal assembly change. Testing for certification shall be performed by a Washington State Department of Ecology (DOE) approved and U. S. Environmental Protection Agency (EPA) accredited laboratory.

R1004.1.2 Emission standards for certified masonry and concrete fireplaces.

After January 1, 1997, new certified masonry or concrete fireplaces installed in Washington State shall be tested and labeled in accordance with procedures and criteria specified in the Washington State Building Code Standard 31-2.

To certify an entire fireplace model line, the internal assembly shall be tested to determine its particulate matter emission performance. Retesting and recertifying is required if the design and construction specifications of the fireplace model line internal assembly change. Testing for certification shall be performed by a Washington State Department of Ecology (DOE) approved and U. S. Environmental Protection Agency (EPA) accredited laboratory.

Sections M2001-Boilers, M2002-Operating And Safety Controls, and M2003-Expansion Tanks, are not adopted.

Boilers and Unfired Pressure Vessels are regulated by Chapter 70.79 RCW and Chapter 296-104 WAC.

G2401.1 (101.2) Application. This chapter covers those fuel-gas piping systems, fuel-gas utilization equipment and related accessories, venting systems and combustion air configurations most commonly encountered in the construction of one- and two-family dwellings and structures regulated by this code.

Exceptions:

1. As an alternative to the provisions of this code, fuel-gas piping systems, fuel-gas utilization equipment and related accessories in existing buildings that are undergoing repairs, alterations, changes in occupancy or construction of additions shall be permitted to comply with the provisions of the *International Existing Building Code*.
2. The standards for liquefied petroleum gas installations shall be NFPA 58 (Liquefied Petroleum Gas Code) and ANSI Z223.1/NFPA 54 (National Fuel Gas Code).

(Remainder of section is unchanged.)

G2415.8 (404.8) Protection against corrosion. Metallic pipe or tubing exposed to corrosive action, such as soil condition or moisture, shall be protected in an approved manner, and cathodically protected in accordance with NACE RP-01-69. Zinc coatings (galvanizing) shall not be deemed adequate protection for gas piping underground. Ferrous metal exposed in exterior locations shall be protected from corrosion in a manner satisfactory to the code official. Where dissimilar metals are joined underground, an insulation coupling or fitting shall be used. Piping shall not be laid in contact with cinders.

WAC 51-51-4300 Chapter 43
Referenced Standards

Add the following standard:

Washington State Building Code Standard 31-2
Standard Test Method for Particulate
Emissions from Fireplaces

See Section R1004.1, *International Residential Code*

**Standard is located in the *International Building Code*,
Chapter 35**