
SENATE BILL 6353

State of Washington 58th Legislature 2004 Regular Session

By Senators Mulliken, T. Sheldon and McAuliffe

Read first time 01/19/2004. Referred to Committee on Land Use & Planning.

1 AN ACT Relating to adopting state building and energy codes; and
2 amending RCW 19.27.031 and 19.27A.020.

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

4 **Sec. 1.** RCW 19.27.031 and 2003 c 291 s 2 are each amended to read
5 as follows:

6 Except as otherwise provided in this chapter, there shall be in
7 effect in all counties and cities the state building code which shall
8 consist of the following codes which are hereby adopted by reference:

9 (1)(a) The International Building Code, published by the
10 International Code Council(~~{,}~~), Inc.;

11 (b) The International Residential Code, published by the
12 International Code Council, Inc.;

13 (2) The International Mechanical Code, published by the
14 International Code Council(~~{,}~~), Inc. (~~(, except that the standards~~
15 ~~for liquified petroleum gas installations shall be NFPA 58 (Storage and~~
16 ~~Handling of Liquified Petroleum Gases) and ANSI Z223.1/NFPA 54~~
17 ~~(National Fuel Gas Code))~~);

18 (3) The International Fuel Gas Code, published by the International
19 Code Council, Inc.;

1 (4) The International Fire Code, published by the International
2 Code Council(~~(+,+)~~), Inc., including those standards of the National
3 Fire Protection Association specifically referenced in the
4 International Fire Code: PROVIDED, That, notwithstanding any wording
5 in this code, participants in religious ceremonies shall not be
6 precluded from carrying hand-held candles;

7 (~~(+4)~~) (5) Except as provided in RCW 19.27.170, the (~~Uniform~~
8 ~~Plumbing Code and Uniform Plumbing Code Standards, published by the~~
9 ~~International Association of Plumbing and Mechanical Officials:~~
10 ~~PROVIDED, That any provisions of such code affecting sewers or fuel gas~~
11 ~~pipng are not adopted~~) International Plumbing Code, published by the
12 International Code Council, Inc.; and

13 (~~(+5)~~) (6) The rules adopted by the council establishing standards
14 for making buildings and facilities accessible to and usable by the
15 physically disabled or elderly persons as provided in RCW 70.92.100
16 through 70.92.160.

17 In case of conflict among the codes enumerated in subsections (1),
18 (2), (~~(+3), and~~) (4), and (5) of this section, the first named code
19 shall govern over those following.

20 The codes enumerated in this section shall be adopted by the
21 council as provided in RCW 19.27.074. The council shall solicit input
22 from first responders to ensure that fire fighter safety issues are
23 addressed during the code adoption process.

24 The council may issue opinions relating to the codes at the request
25 of a local official charged with the duty to enforce the enumerated
26 codes.

27 **Sec. 2.** RCW 19.27A.020 and 1998 c 245 s 8 are each amended to read
28 as follows:

29 (~~(+1)~~) No later than (~~January 1, 1991, the state building code~~
30 ~~council shall adopt rules to be known as the Washington state energy~~
31 ~~code as part of the state building code.~~

32 (2) ~~The council shall follow the legislature's standards set forth~~
33 ~~in this section to adopt rules to be known as the Washington state~~
34 ~~energy code. The Washington state energy code shall be designed to~~
35 ~~require new buildings to meet a certain level of energy efficiency, but~~
36 ~~allow flexibility in building design, construction, and heating~~
37 ~~equipment efficiencies within that framework. The Washington state~~

1 energy code shall be designed to allow space heating equipment
2 efficiency to offset or substitute for building envelope thermal
3 performance.

4 (3) The Washington state energy code shall take into account
5 regional climatic conditions. Climate zone 1 shall include all
6 counties not included in climate zone 2. Climate zone 2 includes:
7 Adams, Chelan, Douglas, Ferry, Grant, Kittitas, Lincoln, Okanogan, Pend
8 Oreille, Spokane, Stevens, and Whitman counties.

9 (4) The Washington state energy code for residential buildings
10 shall require:

11 (a) New residential buildings that are space heated with electric
12 resistance heating systems to achieve energy use equivalent to that
13 used in typical buildings constructed with:

14 (i) Ceilings insulated to a level of R 38. The code shall contain
15 an exception which permits single rafter or joist vaulted ceilings
16 insulated to a level of R 30 (R value includes insulation only);

17 (ii) In zone 1, walls insulated to a level of R 19 (R value
18 includes insulation only), or constructed with two by four members,
19 R 13 insulation batts, R 3.2 insulated sheathing, and other normal
20 assembly components; in zone 2 walls insulated to a level of R 24 (R
21 value includes insulation only), or constructed with two by six
22 members, R 22 insulation batts, R 3.2 insulated sheathing, and other
23 normal construction assembly components; for the purpose of determining
24 equivalent thermal performance, the wall U value shall be 0.058 in zone
25 1 and 0.044 in zone 2;

26 (iii) Below grade walls, insulated on the interior side, to a level
27 of R 19 or, if insulated on the exterior side, to a level of R 10 in
28 zone 1 and R 12 in zone 2 (R value includes insulation only);

29 (iv) Floors over unheated spaces insulated to a level of R 30 (R
30 value includes insulation only);

31 (v) Slab on grade floors insulated to a level of R 10 at the
32 perimeter;

33 (vi) Double glazed windows with values not more than U 0.4;

34 (vii) In zone 1 the glazing area may be up to twenty one percent of
35 floor area and in zone 2 the glazing area may be up to seventeen
36 percent of floor area where consideration of the thermal resistance
37 values for other building components and solar heat gains through the
38 glazing result in thermal performance equivalent to that achieved with

1 thermal resistance values for other components determined in accordance
2 with the equivalent thermal performance criteria of (a) of this
3 subsection and glazing area equal to fifteen percent of the floor area.
4 Throughout the state for the purposes of determining equivalent thermal
5 performance, the maximum glazing area shall be fifteen percent of the
6 floor area; and

7 (viii) Exterior doors insulated to a level of R-5; or an exterior
8 wood door with a thermal resistance value of less than R-5 and values
9 for other components determined in accordance with the equivalent
10 thermal performance criteria of (a) of this subsection.

11 (b) New residential buildings which are space heated with all other
12 forms of space heating to achieve energy use equivalent to that used in
13 typical buildings constructed with:

14 (i) Ceilings insulated to a level of R-30 in zone 1 and R-38 in
15 zone 2 the code shall contain an exception which permits single rafter
16 or joist vaulted ceilings insulated to a level of R-30 (R value
17 includes insulation only);

18 (ii) Walls insulated to a level of R-19 (R value includes
19 insulation only), or constructed with two by four members, R-13
20 insulation batts, R-3.2 insulated sheathing, and other normal assembly
21 components;

22 (iii) Below grade walls, insulated on the interior side, to a level
23 of R-19 or, if insulated on the exterior side, to a level of R-10 in
24 zone 1 and R-12 in zone 2 (R value includes insulation only);

25 (iv) Floors over unheated spaces insulated to a level of R-19 in
26 zone 1 and R-30 in zone 2 (R value includes insulation only);

27 (v) Slab on grade floors insulated to a level of R-10 at the
28 perimeter;

29 (vi) Heat pumps with a minimum heating season performance factor
30 (HSPF) of 6.8 or with all other energy sources with a minimum annual
31 fuel utilization efficiency (AFUE) of seventy eight percent;

32 (vii) Double glazed windows with values not more than U-0.65 in
33 zone 1 and U-0.60 in zone 2. The state building code council, in
34 consultation with the department of community, trade, and economic
35 development, shall review these U values, and, if economically
36 justified for consumers, shall amend the Washington state energy code
37 to improve the U values by December 1, 1993. The amendment shall not
38 take effect until July 1, 1994; and

1 ~~(viii) In zone 1, the maximum glazing area shall be twenty one~~
2 ~~percent of the floor area. In zone 2 the maximum glazing area shall be~~
3 ~~seventeen percent of the floor area. Throughout the state for the~~
4 ~~purposes of determining equivalent thermal performance, the maximum~~
5 ~~glazing area shall be fifteen percent of the floor area.~~

6 ~~(c) The requirements of (b)(ii) of this subsection do not apply to~~
7 ~~residences with log or solid timber walls with a minimum average~~
8 ~~thickness of three and one half inches and with space heat other than~~
9 ~~electric resistance.~~

10 ~~(d) The state building code council may approve an energy code for~~
11 ~~pilot projects of residential construction that use innovative energy~~
12 ~~efficiency technologies intended to result in savings that are greater~~
13 ~~than those realized in the levels specified in this section.~~

14 ~~(5) U values for glazing shall be determined using the area~~
15 ~~weighted average of all glazing in the building. U values for vertical~~
16 ~~glazing shall be determined, certified, and labeled in accordance with~~
17 ~~the appropriate national fenestration rating council (NFRC) standard,~~
18 ~~as determined and adopted by the state building code council.~~
19 ~~Certification of U values shall be conducted by a certified,~~
20 ~~independent agency licensed by the NFRC. The state building code~~
21 ~~council may develop and adopt alternative methods of determining,~~
22 ~~certifying, and labeling U values for vertical glazing that may be used~~
23 ~~by fenestration manufacturers if determined to be appropriate by the~~
24 ~~council. The state building code council shall review and consider the~~
25 ~~adoption of the NFRC standards for determining, certifying, and~~
26 ~~labeling U values for doors and skylights when developed and published~~
27 ~~by the NFRC. The state building code council may develop and adopt~~
28 ~~appropriate alternative methods for determining, certifying, and~~
29 ~~labeling U values for doors and skylights. U values for doors and~~
30 ~~skylights determined, certified, and labeled in accordance with the~~
31 ~~appropriate NFRC standard shall be acceptable for compliance with the~~
32 ~~state energy code. Sealed insulation glass, where used, shall conform~~
33 ~~to, or be in the process of being tested for, ASTM E 774-81 class A or~~
34 ~~better.~~

35 ~~(6) The minimum state energy code for new nonresidential buildings~~
36 ~~shall be the Washington state energy code, 1986 edition, as amended.~~

37 ~~(7)(a) Except as provided in (b) of this subsection, the Washington~~

1 ~~state energy code for residential structures shall preempt the~~
2 ~~residential energy code of each city, town, and county in the state of~~
3 ~~Washington.~~

4 ~~(b) The state energy code for residential structures does not~~
5 ~~preempt a city, town, or county's energy code for residential~~
6 ~~structures which exceeds the requirements of the state energy code and~~
7 ~~which was adopted by the city, town, or county prior to March 1, 1990.~~
8 ~~Such cities, towns, or counties may not subsequently amend their energy~~
9 ~~code for residential structures to exceed the requirements adopted~~
10 ~~prior to March 1, 1990.~~

11 ~~(8) The state building code council shall consult with the~~
12 ~~department of community, trade, and economic development as provided in~~
13 ~~RCW 34.05.310 prior to publication of proposed rules. The department~~
14 ~~of community, trade, and economic development shall review the proposed~~
15 ~~rules for consistency with the guidelines adopted in subsection (4) of~~
16 ~~this section. The director of the department of community, trade, and~~
17 ~~economic development shall recommend to the state building code council~~
18 ~~any changes necessary to conform the proposed rules to the requirements~~
19 ~~of this section)) December 1, 2004, the state building code council~~
20 ~~shall adopt the International Energy Conservation Code, published by~~
21 ~~the International Code Council, Inc.~~

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