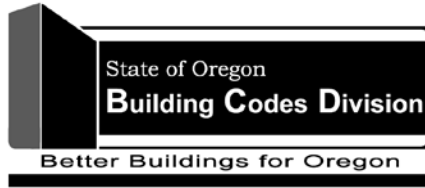


September 21, 2011**Amends 2011 Oregon Reach Code**

Opportunity for public input:

Those who would like to provide testimony may attend a public hearing on September 21, 2011 at 9:30 a.m. The hearing will be located at the Building Codes Division, Conference Room A. Written comments may also be submitted to the contact below. The last day to submit written comments is 5:00 p.m. September 23, 2011.

Live broadcast via the internet:

To view the public hearing live, click on "[View live meeting](#)"

Purpose of the rule:

These proposed rules amend the 2011 Oregon Reach Code (ORC). The proposed rules adopt the residential provisions of the ORC, provisions for vegetative roofs for commercial buildings, and amendments to the minimum boiler efficiencies table.

Citation:

Amend OAR 918-465-0040 & 918-465-0070

These proposed amendments would become effective October 1, 2011.

History:

The ORC established in Senate Bill 79 (2009), required the Division to adopt a set of statewide optional standards and methods designed to increase energy efficiency in commercial and residential structures over the mandatory codes for builders that choose to incorporate them. The commercial provisions of the ORC became effective July 1, 2011.

The Oregon Reach Code Advisory Committee has completed its work on the residential provisions of the ORC. The committee reviewed code change proposals and provided input for the Division to consider prior to forwarding the proposed code changes to the Construction Industry Energy Board.

The Construction Industry Energy Board reviewed the proposed amendments to the 2011 ORC and recommended that the Division adopt the amendments and move forward with rulemaking. The board determined that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.

Contact:

If you have questions or need further information, please contact Hearing Officer Aeron Teverbaugh at 503-373-1354, or Aeron.Teverbaugh@state.or.us.



Secretary of State
NOTICE OF PROPOSED RULEMAKING HEARING*

A Statement of Need and Fiscal Impact accompanies this form.

Department of Consumer and Business Services, Building Codes Division	918
Agency and Division	Administrative Rules Chapter Number
Stephanie Snyder	PO Box 14470, Salem, OR 97309
Rules Coordinator	Address
	(503) 373-7438
	Telephone

RULE CAPTION

Amends the 2011 Oregon Reach Code
Not more than 15 words that reasonably identify the subject matter of the agency's intended action.

September 21, 2011	9:30 a.m.	1535 Edgewater Street NW, Salem, OR 97304	Aeron Teverbaugh
Hearing Date	Time	Location	Hearings Officer

Auxiliary aids for persons with disabilities are available upon advance request.

RULEMAKING ACTION

ADOPT:

AMEND: 918-465-0040 & 918-465-0070

REPEAL:

RENUMBER:

AMEND & RENUMBER:

Stat. Auth.: ORS 183.335, 455.020, 455.210, 455.496 & 455.500

Other Auth.:

Stats. Implemented: ORS 183.335, 455.020, 455.210 & 455.500

RULE SUMMARY

The proposed rules implement a portion of Senate Bill 79 (2009) requiring the director of the Department of Consumer and Business Services to adopt a code separate from the state building code that is a set of optional construction standards designed to increase the energy efficiency of buildings above the mandatory state building code. The Building Code Division previously adopted the second public version of the International Green Construction Code (IGCC) with significant Oregon specific amendments including provisions from the 2012 International Energy Conservation Code and ASHRAE 90.1, as the commercial provisions of the Oregon Reach Code (ORC). The proposed rule amends the Oregon Reach Code to include residential provisions. The residential provisions are largely based off the 2011 Oregon Residential Specialty Code with amendments to provide options for selective measures and also a modeling path.

The proposed rules also amend the Oregon Reach Code to establish standards and allow builders to install vegetative roofs on commercial Reach Code buildings. In addition, the proposed rule contains amendments to the minimum boiler efficiencies table, reducing the required efficiencies for gas fueled hot water boilers.

The Agency requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing the negative economic impact of the rule on business.

September 23, 2011 by 5 p.m.

Last Day for Public Comment (Last day to submit written comments to the Rules Coordinator)

	Patrick Allen	
Signature	Printed name	Date

STATEMENT OF NEED AND FISCAL IMPACT

A Notice of Proposed Rulemaking Hearing or a Notice of Proposed Rulemaking accompanies this form.

Department of Consumer and Business Services, Building Codes Division

918

Agency and Division

Administrative Rules Chapter Number

Amends the 2011 Oregon Reach Code

Rule Caption (Not more than 15 words that reasonably identifies the subject matter of the agency's intended action.)

In the Matter of: Amending 918-465-0040 & 918-465-0070

Statutory Authority: ORS 183.335, 455.020, 455.210, 455.496 & 455.500

Other Authority:

Stats. Implemented: ORS 183.335, 455.020, 455.210 & 455.500

Need for the Rule(s): Senate Bill 79 (2009) required the director of the Department of Consumer and Business Services to adopt a code separate from the state building code that is a set of optional construction standards designed to increase the energy efficiency of buildings above the mandatory state building code. ORS 455.500 requires the director to review generally accepted codes and standards that achieve greater energy efficiency. These construction standards apply to both commercial and residential construction. The law further requires the Division adopt standards that are technically and economically feasible, including codes and newly adopted standards for construction and the installation of products. Additionally, the residential provisions of the Oregon Reach Code (ORC) adopted under these proposed rules, must be used by the director in the establishment of a schedule and goals for continually increasing the energy efficiency of buildings in the state. The proposed residential provisions of the ORC must also provide reasonable safeguards for health, safety, welfare, comfort, and security of the residents of Oregon who are occupants and users of buildings, while furthering the use of modern methods, materials, and maximum energy conservation. The Division previously adopted commercial provisions for the ORC. The proposed rule is necessary to address residential construction. The proposed rule also addresses standards for vegetative roofs and decreasing the minimum boiler efficiency standards. The Reach Code as a voluntary code needs to be broad enough to offer options to builders and designers. The vegetative roof provisions will allow for options in addressing heat island mitigation. Decreasing the minimum boiler efficiencies is also necessary to provide options for builders and designers choosing to use the Reach Code.

Documents Relied Upon, and where they are available: Construction Industry Energy Board meeting, July 20, 2011 and August 9, 2011, Oregon Reach Code Advisory Committee meeting minutes from minutes from May 11, and May 25, 2011; and draft rules are available from the Division's rules coordinator located at 1535 Edgewater Street NW, Salem, OR 97304 and are available on the Division's website at: www.bcd.oregon.gov.

Fiscal and Economic Impact: The Division has determined that the residential provisions of the ORC adopted by the proposed rules will have some fiscal and economic impact on units of local government. However, this proposed rulemaking only adds residential provisions to the existing ORC. Because it is an optional code for builders, any impact on small businesses and members of the public will likely be deemed as worth the cost based on other considerations, such as sustainability, marketing, or public recognition. Builders that would otherwise pursue high-performance certification may see decreased costs if they utilize the ORC because of the lack of a certification cost. The impact to units of local government will likely result from a slight increase in the amount of review that building departments will be required to perform for buildings designed and constructed under the ORC.

Builders pursuing the ORC will likely be impacted by increased insulation requirements, higher fenestration ratings, and high-efficiency mechanical systems. Builders have options on how to approach building under the Reach Code. Depending on the specific code provision, and the structure to which it is applied, these impacts may result in increased construction costs. These costs will likely be offset by reduced energy usage for residential owners and tenants over 5 to 10 years. The increased energy efficiency provisions will likely result in additional construction costs of about .95 cents per square foot, or roughly a 1-2% increase in the overall cost of construction for the types of residential structures that opt to build under this code. There are incentives available that could reduce costs by .50 cents a square foot, bringing the increase down to less than a 1% increase in construction costs. An exact fiscal impact of these changes cannot be determined at this time because the impact is dependent upon the specifics of a particular house, including design variables, construction methods, building type, materials, and the point at which the requirements are integrated into the design of the building. The proposed rules will have additional impact on state and local governments, including building officials and inspectors, and the general public, including building owners, developers, and

contractors, in terms of training costs. Because the proposed rules integrate the residential and commercial provisions into a single code book, there will be no additional cost for a code book.

The residential provisions of the ORC are specific to increasing the energy efficiency of constructing and operating residential structures. This increased energy efficiency should have a positive impact on both utilities and home operating costs.

The proposed amendments to the commercial provisions of the Reach Code to include vegetative roofs and decrease the minimum boiler efficiencies may decrease costs for some builders under the Reach Code because it expands the number of options for meeting the requirements of the code.

Additionally, the Construction Industry Energy Board made the specific finding that the added cost, if any, is necessary to the health and safety of the occupants or the public, or is necessary to conserve scarce resources.

Statement of Cost of Compliance:

1. Impact on state agencies, units of local government and the public (ORS 183.335(2)(b)(E)):

The proposed rules may have some fiscal impact on state and local governments, including building officials and inspectors in terms of training costs. The Division will provide some no-cost training. Any impact to the general public, including building owners, developers, and contractors, will be related to the choice to pursue an ORC certification. For members of the public who would otherwise pursue a high-performance certification, costs associated with utilizing the ORC should be reduced, because of the lack of a certification fee, or similar added fee.

2. Cost of compliance effect on small business (ORS 183.336):

a. Estimate the number of small businesses and types of business and industries with small businesses subject to the rule: This is an optional code, therefore no small business will be subject to its provisions unless they choose to pursue ORC certification. Small businesses that may opt to build to the code adopted under these rules include residential contractors, designers, architects, and others associated with the construction industry. There are an estimated 14,400 construction businesses in Oregon according to 2006 Census data; of those, approximately 13,700 qualify as “small businesses” with 50 or fewer employees. There may be increased costs of inspections at the jurisdictional level.

b. Projected reporting, recordkeeping and other administrative activities required for compliance, including costs of professional services: This is an optional code, therefore no small business will be subject to its provisions unless they choose to pursue ORC certification. The proposed rules do not impose any additional reporting or recordkeeping requirements. However, the need for additional professional services may increase, such as needing to purchase soft-ware where a builder chooses to model out the energy use of a residence. The exact cost of compliance cannot be determined at this time because it will vary depending on the type of construction the small business is engaged in. Some small businesses pursuing high-performance certification will see some increase in costs for these services, while others may see no impact.

c. Equipment, supplies, labor and increased administration required for compliance: This is an optional code, therefore no small business will be subject to its provisions unless they choose to pursue ORC certification. The proposed rules may require additional equipment, supplies, or labor, or increased administration in order for a small business to obtain certification under the ORC. Any additional equipment, labor or increased administration should be similar to or less than those required for other high-performance certifications.

How were small businesses involved in the development of this rule? Small businesses are represented on the Construction Industry Energy Board, who reviewed and approved the proposed rules.

Administrative Rule Advisory Committee consulted?: Yes
If not, why?:

Signature _____ Patrick Allen _____ Date _____
Printed name

**DIVISION 465
REACH CODE**

918-465-0040

Amendments to the Oregon Reach Code

The Oregon Reach Code is adopted and amended pursuant to OAR chapter 918, division 8. Amendments to the Oregon Reach Code are placed in this rule, with the section reference, a descriptive caption, and a short explanation of the amendment.

(1) Effective October 1, 2011, the following sections of the Oregon Reach Code are amended to address residential occupancies:

(a) Section 102.4.11 Residential Occupancies

(b) Section 102.4.11.1 Residential Mixed Use Occupancies

(c) Chapter 13 Residential Provisions. Chapter 13 addresses the requirements for residential construction, reconstruction, alterations and repairs proceeding under the Reach Code.

(2) Effective October 1, 2011, the following sections of the Oregon Reach Code are amended to address vegetative roofs:

(a) Table 303.1 Project Electives Checklist. Adding “Roof covering – vegetative roofs.”

(b) Section 404.3 Roof Coverings.

(c) Section 404.3.2 Vegetative Roofs. Allowing extensive or intensive vegetative roofs.

(d) Section 405.6 Vegetative Roofs. Addressing standards for installation of vegetative roofs.

(3) Effective October 1, 2011, Table 607.2.4(5) of the Oregon Reach Code is amended to address gas fueled Hot Water Boiler efficiencies:

(a) Minimum efficiency for gas fueled hot water boilers under 300,000 BTUs is 95.5% AFUE.

(b) Minimum efficiency for gas fueled hot water boilers between 300,000 BTUs and 2.5mBTUs is 94%.

DRAFT RULE

8/15/11

[Publications: Publications referenced are available for review at the agency.]

Stat. Auth.: ORS 185.335, 455.020 455.496 & 455.500

Stat. Implemented: ORS 183.335, 455.020 & 455.500

Hist.: BCD

918-465-0070

Fees for Plan Review and Permits

Fees for plan review and permits issued by the Division for construction, alteration and repair of prefabricated structures and of buildings and other structures as established by these rules and authorized by ORS 455.210, shall be determined in accordance with 918-460-0030, 918-440-0050, **918-480-0020** and 918-309-0030 through 918-309-0070 as appropriate.

[ED. NOTE: Publications referenced are available from the agency.]

Stat. Auth.: ORS 455.210

Stats. Implemented: ORS 455.210

Hist.: BCD