



October 20, 2009

**Adoption of 2010 Oregon Mechanical
Specialty Code**

Opportunity for public input:

Those who would like to provide testimony may attend a public hearing on October 20, 2009 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. October 23, 2009.

Live broadcast via the internet:

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

Purpose of the rule:

These proposed rules adopt the 2010 Oregon Mechanical Specialty Code (OMSC). The 2010 OMSC consists of the 2009 editions of the International Mechanical Code and International Fuel Gas Code, and Oregon amendments. The proposed rules also make non-substantive housekeeping changes to rules in division 440 in order to improve consistency and clarity of the rules.

This proposed rule and code would become effective April 1, 2010.

Citation:

Amend: OAR 918-440

To view the proposed amended code language click the following:

[Proposed amendments to the Oregon Mechanical Specialty Code](#)

[Matrix of code changes](#)

History:

The current mechanical code in Oregon is the 2007 Oregon Mechanical Specialty Code (OMSC), which is based on the 2006 editions of the International Mechanical Code (IMC) and the International Fuel Gas Code (IFGC) with Oregon amendments. The proposed rules bring the mechanical code requirements in Oregon up to date by adopting the most 2009 of the IMC and IFGC with Oregon amendments.

The Oregon Building Codes Division in consultation with the Mechanical Board opened the mechanical code adoption and amendment process and established a timetable for receiving proposed code amendments from April 6 – May 21, 2009. The board, through its appointed technical advisory committee, reviewed the IMC, IFGC, and Oregon amendments. At its August 5, 2009 meeting, the board recommended that the division adopt the 2009 editions of the IMC, IFGC, and Oregon amendments as the 2010 OMSC, and to move forward with rulemaking.

Contact:

If you have questions or need further information, please contact Micheal D. Ewert at mike.d.ewert@state.or.us, or 503-373-7529.



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
Shauna M. Parker	PO Box 14470, Salem, OR 97309
Rules Coordinator	(503) 373-7438
	Address Telephone

RULE CAPTION

Adopts the 2010 Oregon Mechanical Specialty Code

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

October 20, 2009	9:30 a.m.	1535 Edgewater Street NW, Salem, OR 97304	Mike Ewert
Hearing Date	Time	Location	Hearings Officer

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

RULEMAKING ACTION

Secure approval of new rule numbers (Adopted or Renumbered rules) with the Administrative Rules Unit prior to filing.

ADOPT: 918-440

AMEND: 918-440

REPEAL:

RENUMBER:

AMEND & RENUMBER:

Stat. Auth.: ORS 183.335, 455.020, 455.030, 455.110, 455.210, 455.355, 455.720, 469.700, & 469.740

Other Auth.:

Stats. Implemented: ORS 183.335, 455.020, 455.110, 455.210, 455.355, 455.720, 469.700, & 469.740

RULE SUMMARY

The proposed rules adopt the 2009 Editions of the International Mechanical Code and the International Fuel Gas Code with Oregon amendments and shall be known as the 2010 Oregon Mechanical Specialty Code. The proposed rules also include housekeeping changes that improve readability and provide clarity and consistency among the division's rules.

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.

Friday, October 23, 2009 by 5:00 p.m.

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

Patrick Allen		
Signature	Printed name	Date

*Hearing Notices published in the Oregon Bulletin must be submitted by 5:00 pm on the 15th day of the preceding month unless this deadline falls on a weekend or legal holiday, upon which the deadline is 5:00 pm the preceding workday. ARC 920-2005

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

Adopts the 2010 Oregon Mechanical Specialty Code

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

In the Matter of: Adopting 918-440 and Amending 918-440

Statutory Authority: ORS 183.335, 455.020, 455.030, 455.110, 455.210, 455.355, 455.720, 469.700, & 469.740

Other Authority:

Stats. Implemented: ORS 183.335, 455.020, 455.110, 455.210, 455.355, 455.720, 469.700, & 469.740

Need for the Rule(s): ORS 455.020 and 455.110 require the division to adopt a uniform state building code that conforms to model building codes generally accepted and in use to govern the "construction, reconstruction, alteration and repair of buildings and other structures" and the "installation and use of mechanical, heating and ventilating devices and equipment" in buildings and other structures.

The current Oregon Mechanical Specialty Code is based on the 2006 Editions of the International Mechanical Code (IMC) and the International Fuel Gas Code (IFGC). The proposed rules bring the code requirements up to date by adopting the 2009 editions of the IMC and IFGC with Oregon specific amendments.

Documents Relied Upon, and where they are available: Oregon Mechanical Specialty Code; Committee meeting minutes from May 14, June 3, and June 17, 2009; Mechanical Board meeting minutes from August 5, 2009; and draft rules are available from the division's rules coordinator located at 1535 Edgewater Street NW, Salem, OR 97304 and are posted on the division's Web site at: <http://www.bcd.oregon.gov/rules.html>.

Fiscal and Economic Impact: The division has determined that the proposed rules will have minimal fiscal and economic impact on state agencies, units of local government, small businesses, and members of the public. The Mechanical Code Adoption Committee reviewed the fiscal impacts of each code change proposal. The Mechanical Board also 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 division has determined that these proposed rules will have some fiscal impact, in terms of training costs and the purchase costs of new code books on the division, local building departments, licensees, and the small businesses described below. It is also estimated that there will be slight to moderate cost increases for members of the public as a result of new code provisions relating to ventilation requirements.

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: Mechanical contracting businesses and engineering consulting firms, as well as designers and mechanical contractors doing HVAC projects may experience minimal cost in training and implementing changes to the new code. The division is unable to determine how many of these types of businesses are considered "small businesses" with 50 or fewer employees subject to these rules.

b. Projected reporting, recordkeeping and other administrative activities required for compliance, including costs of professional services:

The proposed rules do not impose any additional reporting, recordkeeping, or other administrative activities in order to comply.

c. Equipment, supplies, labor and increased administration required for compliance:

No new equipment, supplies, labor, or increased administration is anticipated for compliance with the proposed rules.

How were small businesses involved in the development of this rule? Small businesses were represented on the 2010 Oregon Mechanical Specialty Code Adoption Committee and the Mechanical Board, both of whom reviewed the proposed rules.

Administrative Rule Advisory Committee consulted?: Yes

If not, why?:

Patrick Allen

Signature

Printed name

Date

Administrative Rules Unit, Archives Division, Secretary of State, 800 Summer Street NE, Salem, Oregon 97310. ARC 925-2007

Draft Rules: 9-8-09

**DIVISION 440
MECHANICAL SPECIALTY CODE**

918-440-0000

Reasonable Notice to Interested Parties: Mechanical Specialty Code

Prior to the adoption, amendment, or repeal of any rule relating to the **Oregon Mechanical Specialty Code**, the Building Codes Division shall give notice of the proposed action:

- (1) In the Secretary of State's Bulletin referred to in ORS 183.360 at least 21 days prior to the effective date; **and**
- (2) By mailing a copy of the notice to persons on the mailing list established pursuant to ORS 183.335 and OAR 918-001-0210; ~~and~~
- ~~(3) To the Capitol Press Room.~~

Stat. Auth.: ORS 183.335

Stats. Implemented: ORS 183.335

Hist.: DC 63, f. & ef. 12-5-75; Renumbered from 814-027-0000; BCD 19-1998, f. 9-30-98, cert. ef. 10-1-98

918-440-0010

Adopted Oregon Mechanical Specialty Code

Effective April 1, ~~2007~~**2010** the ~~2007~~**2010** **Oregon Mechanical Specialty Code** is the ~~2006~~**2009** Editions of the International Mechanical Code, and International Fuel Gas Code as published by the International Code Council and amended by the Building Codes Division.

[Publications: Publications referenced are available for review at the division. See division web site for information on where to purchase publications.]

Stat. Auth.: ORS 455.020, 455.030 & 455.110

Stats. Implemented: ORS 455.110

Hist.: DC 35, f. 6-5-74, ef. 6-25-74; DC 52(Temp), f. & ef. 7-3-75 thru 10-31-73; DC 62, f. 11-20-75, ef. 1-1-76; DC 68, f. 3-3-76, ef. 4-1-76; DC 75, f. 5-21-76, ef. 8-1-76; DC 85, f. 8-19-76, ef. 10-1-76; DC 22-1978, f. 9-1-78, ef. 10-1-78; DC 8-1979, f. 4-30-79, ef. 5-1-79/8-1-79/1-1-80; DC 14-1979, f. 12-27-79, ef. 1-1-80; DC 6-1980, f. 6-5-80, ef. 7-1-80; DC 11-1981, f. & ef. 7-20-81; DC 13-1981, f. 10-30-81; ef. 11-1-81; DC 14-1983, f. 6-23-83, ef. 8-1-83; DC 26-1984, f. 8-31-84, ef. 9-15-84; DC 10-1986, f. 6-30-86, ef. 7-1-86; DC 5-1987(Temp), f. & ef. 3-26-87; BCA 3-1987, f. & ef. 8-4-87; BCA 7-1987, f. & ef. 9-3-87; Renumbered from 814-027-0005; BCA 34-1989, f. 12-21-89, ef. 1-1-90; BCA 32-1991(Temp), f. & cert. ef. 9-30-91; BCA 6-1992, f. 3-24-92, cert. ef. 3-27-92; BCA 27-1992, f. 12-29-92, cert. ef. 1-1-93; BCD 2-1995, f. & cert. ef. 2-9-95; BCD 2-1996, f. 2-2-96, cert. ef. 4-1-96; BCD 5-1999, f. 6-17-99, cert. ef. 10-1-99; BCD 18-2002, f. 7-26-02, cert. ef. 10-1-02; BCD 10-2004, f. 8-6-04 cert. ef. 10-1-04; BCD 1-2007, f. 2-15-07, cert. ef. 4-1-07

918-440-0040-0012

Amendments to the Oregon Mechanical Specialty Code

The **2010 Oregon Mechanical Specialty Code** is adopted and amended pursuant to chapter 918, division 8. Amendments adopted for inclusion into the **2010 Oregon Mechanical Specialty Code** are placed in this rule, showing the section reference, a descriptive caption, and a short description of the amendment.

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

Stat. Auth.: ORS 455.030

Stats. Implemented: ORS 455.110

Hist.: BCD 32-1994, f. & cert. ef. 12-30-94; BCD 2-1996, f. 2-2-96, cert. ef. 4-1-96; BCD 5-1997, f. 3-21-97, cert. ef. 4-1-97; BCD 19-1998, f. 9-30-98, cert. ef. 10-1-98; BCD 15-1999, f. & cert. ef. 10-6-99 thru 4-2-00; BCD 5-2000, f. 3-9-00, cert. ef. 4-1-00; BCD 8-2001, f. 7-17-01, cert. ef. 10-1-01; BCD 19-2003, f. 12-15-03, cert. ef. 1-1-04; BCD 10-2004, f. 8-6-04 cert. ef. 10-1-04; BCD 9-2006, f. 6-30-06, cert. ef. 7-1-06

918-440-0015

Refrigeration Installer Certification

All persons engaged in brazing or welding related to the installation, alteration or repair of refrigeration piping systems not regulated by the Oregon Boiler and Pressure Vessel Program under OAR chapter 918, division 225, shall be certified in accordance with the requirements of this rule.

(1) The minimum requirement for persons engaged in brazing or welding of refrigeration piping systems is a current and valid certification issued upon completion of a class by a division-approved certifying organization in brazing or welding in accordance with either:

(a) Section IX, Welding and Brazing Qualifications of the American Society of Mechanical Engineers publication, 2001 ASME Boiler and Pressure Vessel Code; or

(b) American Welding Society publication AWS B2.2-91, Standard for Brazing Procedure and Performance Qualification.

(2) Refrigeration systems installed in dwelling units regulated under the ~~One and Two Family Dwelling~~ **Oregon Residential Specialty Code** are exempt from this rule.

(3) All refrigeration piping system requirements not regulated by OAR 918-225-0310, are subject to the **Oregon Mechanical Specialty Code**.

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

Stat. Auth.: ORS 455.020 & 455.720

Stats. Implemented: ORS 455.020 & 455.720

Hist.: BCD 34-2000, f. 12-27-00, cert. ef. 7-1-01; BCD 19-2003, f. 12-15-03, cert. ef. 1-1-04

Voluntary Energy Conservation

918-440-0020

Voluntary Energy Conservation Standards for Public Buildings Constructed Prior to January 1, 1978

Voluntary energy conservation standards for public buildings constructed prior to January 1, 1978, have been adopted by the Building Codes Division pursuant to ORS 469.740.

Stat. Auth.: ORS 469.740

Stats. Implemented: ORS 469.740

Hist.: DC 17-1978, f. 4-28-78, ef. 7-1-78; Renumbered from 814-027-0100; BCD 19-1998, f. 9-30-98, cert. ef. 10-1-98

918-440-0030

Energy Efficiency Rating (E.E.R.) System Single Family Residences

(1) Scope: These rules provide a voluntary energy efficiency rating system for single family residences to encourage voluntary energy conservation and the voluntary use in real estate transactions.

(2) Definitions:

(a) "E.E.R." means Energy Efficiency Rating;

(b) "Single Family Residence" means a structure designed as a residence for one family and sharing no common wall with another residence of any type.

(3) Energy Efficiency Rating: The Energy Efficiency Rating (E.E.R.) is to be determined by the following steps:

(a) Determine the total energy used in the residence over the last 12 months' period in thousands of BTUs:

(A) Determine electrical energy (KWH) used (source: Electrical bills or utility company). Multiply the total KWH by 3413 BTUs equals the total electric BTUs used. (Electric KWH) x 3413 = BTUs;

(B) Determine natural gas therms used (source: Gas bills or the gas company). Multiply the therms used by 100,000 then by 0.75 (Efficiency Factor). This equals the total gas BTUs used. (Gas therm) x 100,000 x 0.75 = BTUs;

(C) Determine heating oil BTU'S by multiplying total gallons by 140,000 then by 0.75 (Efficiency Factor). This equals the total oil BTUs used. (Oil Gallons) x 140,000 x 0.75 = BTUs;

(D) Total the types of energy BTUs used in the residence to determine total BTUs used in the 12 months. (Electrical BTUs + Gas BTUs = Oil BTUs = TOTAL BTUs.);

(E) Divide total BTU'S by one thousand equals total thousand's BTUs used:

TOTAL BTUs

1,000

= TOTAL THOUSAND BTUs USED

(b) Determine the square footage of living (heated) space of the residence. (Source: House plans, measurement, or county assessor.);

(c) Divide total thousand BTUs used by the square footage of living space. The results are the E.E.R. of the residence that year:

TOTAL THOUSAND BTUs USED
TOTAL SQUARE FEET LIVING SPACE
= E.E.R.

Stat. Auth.: **469.700**

Stats. Implemented: ORS 469.700

Hist.: DC 16-1978, f. 4-28-78, ef. 7-1-78; Renumbered from 814-027-0105

Permit Fees

918-440-0050

Mechanical Permit Fees

(1) Effective July 1, 1999, the Building Codes Division fees for administration of the **Oregon Mechanical Specialty Code** are found in **Table 1-A**. These fees are based on 130 percent of Table 3-A of the 1979 edition of the Uniform Mechanical Code as published by the International Conference of Building Officials, as authorized in ORS 455.210 ~~and amended by Senate Bill 287 enacted by the 1999 Legislative Session.~~

(2)(**a**) Amend **Table 1-A** Mechanical Permit fees as follows:

(3)(**b**) Plan review fees shall be those fees specified in Section 106.5.4 of the ~~State of Oregon~~; **Mechanical Specialty Code** as adopted in OAR 918-440-0010.

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

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

Stat. Auth.: ORS 455.020 & 455.210

Stats. Implemented: ~~1999 OL, Ch. 432~~ **ORS 455.210**

Hist.: BCD 8-1999(Temp), f. & cert. ef. 7-1-99 thru 12-27-99; BCD 11-1999, f. 9-7-99, cert. ef. 10-1-99; BCD 15-1999, f. & cert. ef. 10-6-99 thru 4-2-00; BCD 5-2000, f. 3-9-00, cert. ef. 4-1-00; BCD 19-2003, f. 12-15-03, cert. ef. 1-1-04

Thermostat Requirements

918-440-0500

Purpose and Scope

(1) Scope.

(a) This rule establishes a uniform notification process for the lawful disposal of mercury thermostats by persons installing heating, ventilation or air conditioning systems.

(b) For the purposes of this rule, a "thermostat" is a device commonly used to sense and, through electrical communication with heating, cooling or ventilation equipment, control room temperature.

(2) The authority having jurisdiction shall notify heating, ventilation or air conditioning system installers at time of permit issuance of proper disposal for mercury thermostats.

(3) The written notification shall include the following language: "In accordance with ORS 455.355, the disposal of thermostats that contain mercury shall be in accordance with programs established by thermostat manufacturers, their representative or distributor, or by delivery to sites that will ensure that the mercury does not become part of the solid waste stream or wastewater."2

Stat. Auth.: ORS 455.355

Stats. Implemented: ORS 455.355

Hist.: BCD 24-2002, f. 9-13-02 cert. ef. 1-1-03

918-440-0510

Prohibits Installation of Mercury Thermostats

Effective January 1, 2006 installing a thermostat containing mercury in commercial or residential buildings is not allowed. The installation of thermostats containing mercury on industrial equipment used for safety controls is allowed. For the purpose of this rule, a thermostat is defined in OAR 918-440-0500(1)(b).

Stat. Auth.: ORS 455.355

Stats. Implemented: ORS 455.355

Hist.: BCD 21-2005, f. 9-29-05, cert. ef. 1-1-06

DRAFT