



July 1, 2010

**Adoption of 2010 Oregon Mechanical
Specialty Code**

Purpose of the rule:

These 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 rules also make non-substantive housekeeping changes to rules in division 440 in order to improve consistency and clarity of the rules.

For the purposes of allowing a phase-in period from July 1, 2010 to September 30, 2010, building officials must allow either the use of the 2010 OMSC or the 2007 OMSC.

These rules and the code become effective July 1, 2010.

Citation:

Amend: OAR 918-440

View the [2010 Oregon Mechanical Specialty Code](#).

Code books may be purchased from vendors listed on the division's web site at <http://www.bcd.oregon.gov/codestandards.html>.

Effect of the rule:

Highlighted changes in the 2010 Oregon Mechanical Specialty Code:

- Chapter 4 dealing with occupancy ventilation.
- Chapter 5 requirements for domestic clothes dryer ducts have been extensively revised.
- Chapter 5 aligns the domestic kitchen hood requirements with the current provisions of the Oregon Residential Specialty Code.
- Chapter 7 change in direction from providing prescriptive combustion air requirements for oil and solid-fuel burning appliances.
- Chapter 11 refrigerant access ports located outdoors shall be equipped with locking-type tamper-resistant caps.
- Chapter 12 allows a number of additional options in the design and installation of hydronic piping systems.
- The fuel-gas Appendix no longer allows fuel-gas piping to penetrate through a foundation wall below grade.
- A new section clarifies the installation of LPG regulators to address the installation of LPG second stage and 2 psi regulators.

Contact:

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



Secretary of State
Certificate and Order for Filing

PERMANENT ADMINISTRATIVE RULES

I certify that the attached copies* are true, full and correct copies of the PERMANENT Rule(s) adopted on [Upon Filing] by the
Date prior to or same as filing date

Department of Consumer and Business Services, Building Codes Division 918
Agency and Division Administrative Rules Chapter Number

Dolores Wagner PO Box 14470 Salem, OR 97309 (503) 373-1258
Rules Coordinator Address Telephone

to become effective [July 1, 2010]. Rulemaking Notice was published in the [October 2009] Oregon Bulletin.**
Date upon filing or later Month and Year

RULE CAPTION

Adopts the 2010 Oregon Mechanical Specialty Code; includes housekeeping changes to division rules..

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

RULEMAKING ACTION

List each rule number separately (000-000-0000)

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

ADOPT:

AMEND: 918-440-0000, 918-440-0010, 918-440-0015, 918-440-0030, 918-440-0050, 918-440-0500 & 918-440-510

REPEAL:

RENUMBER:

AMEND & RENUMBER: 918-440-0040 to 918-440-0012

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.

Patrick Allen

Authorized Signer

Printed name

Date

*With this original, file one photocopy of certificate, one paper copy of rules listed in Rulemaking Actions, and electronic copy of rules. **The Oregon Bulletin is published the 1st of each month and updates rules found in the OAR Compilation. For publication in Bulletin, rule and notice filings 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, when filings are accepted until 5:00 pm on the preceding workday. ARC 930-2005

**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.

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

(1) Effective July 1, 2010 the **2010 Oregon Mechanical Specialty Code** is the 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.

(2) For the purposes of implementing a phase-in period for the **2010 Oregon Mechanical Specialty Code**, the **2007 Oregon Mechanical Specialty Code** is adopted for the period beginning July 1, 2010 and ending September 30, 2010.

(3) During the phase-in period established in subsection (2), all building departments in the state are required to accept plans designed to either the **2010 Oregon Mechanical Specialty Code** or to the **2007 Oregon Mechanical Specialty Code**.

[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

918-440-0012

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 **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.

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

(b) Plan review fees shall be those fees specified in Section 106.5.4 of the **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: 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."

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