

**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;
- (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.

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

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 the 2007 **Oregon Mechanical Specialty Code** is the 2006 Edition 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, ORS 455.030 & ORS 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

918-440-0015**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 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 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.:

Stats. Implemented: ORS 469.700

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

918-440-0040**Amendments to the Oregon Mechanical Specialty Code**

The **Mechanical Specialty Code** is adopted and amended pursuant to chapter 918, division 8. Amendments adopted for inclusion into the **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

918-440-0050**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) Amend **Table 1-A** Mechanical Permit fees as follows:

(3) 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

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

918-440-0500**Purpose and Scope**

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

Stat. Auth.: ORS 455.355

Stats. Implemented: ORS 455.355

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

Table 1-A Mechanical Permit Fees

Permit Issuance

- (1) For the issuance of each permit \$13.00
- (2) For issuing supplemental permit \$ 3.90

Permit Issuance

- (1) For the installation or relocation of each forced-air gravity-type furnace or burner, including ducts and vents attached to such appliances, up to and including 100,000 Btu/h (29.3 kW) \$ 7.80
- (2) For the installation or relocation of each forced-air or gravity-type furnace or burner, including ducts and vents attached to such appliance over 100,000 Btu/h (29.3 kW) \$ 9.75
- (3) For the installation or relocation of each floor furnace, including vent. \$ 7.80
- (4) For the installation or relocation of each suspended heater, recessed wall heater or floor-mounted unit heater \$ 7.80
- (5) For the installation, relocation or replacement of each appliance vent installed and not included in an appliance permit. \$ 3.90
- (6) For the repair of, alteration of, or addition to each heating appliance, refrigeration unit, or cooling system, including installation of controls regulated by this code. \$ 7.80
- (7) For the installation or relocation of each boiler or compressor to and including three horsepower (10.6 kW), or each absorption system to and including 100,000 Btu/h (29.3 kW)..... \$ 7.80
- (8) For the installation or relocation of each boiler or compressor over three horsepower (10.6 kW), to and including 15 horsepower (52.7 kW), or each absorption system over 1000,000 Btu/h (29.3 kW) to and including 500,000 But/h (146.6. kW)..... \$14.30
- (9) For the installation or relocation of each boiler or compressor over 15 horsepower (105.5kW), or for each absorption system over 500,000 Btu/h (146.6 kw) to and including 1,000,000 Btu/h (512.9kW) \$19.50
- (10) For the installation or relocation of each boiler or compressor over 30 horsepower (105.5 kW) to and including 50 horsepower (176 kW), or for each absorption system over 1,000,000 Btu/h (293.1 kW) to and including 1,750,000 Btu/h (512.9 kW).. \$29.25
- (11) For the installation or relocation of each boiler or refrigeration compressor over 50 horsepower (176 kW), or each absorption system over 1,750,000 Btu/h (512.9 kW) \$48.75
- (12) For each air-handling unit to and including 10,000 cubic feet per minute (4720 L/s), including ducts attached thereto \$ 5.85
- (13) For each air-handling unit exceeding 10,000 cfm (4720 L/s) \$ 9.75
- (14) For each evaporative cooler other than portable type..... \$ 5.85
- (15) For each ventilation fan connected to a single duct \$ 3.90
- (16) For each ventilation system which is not a portion of heating or air-conditioning system authorized by a permit \$ 5.85
- (17) For the installation of each hood which is served by mechanical exhaust,

- including the ducts for such hood \$ 5.85
- (18) For the installation or relocation of each domestic-type incinerator \$ 9.75
- (19) For the installation or relocation of each commercial or industrial-type incinerator \$39.00
- (20) For each appliance or piece of equipment regulated by this code, but not classed in other appliance categories or for which no other fee is listed in this code \$ 5.85
- (21) When Chapter 13 is applicable (see Section 103), permit fees for fuel-gas piping shall be as follows:
 - For each gas-piping system of one to four outlets \$ 2.60
 - For each gas-piping system of five or more outlets, per outlet. \$.65

Other Inspections and Fees:

- (1) Inspections outside normal business hours (minimum charge 2 hours)\$19.50/ hour
- (2) Reinspection fees assessed under provisions of Section 116.6. \$19.50/ each
- (3) Inspections for which no fee is specifically indicated (minimum charge ½ hour)\$19.50/ hour
- (4) Additional plan reviews required by changes, additions, or revision to approved plans (minimum charge 1/2 hour) \$19.50/ hour