



February 15, 2011

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**Adoption of 2011 Oregon Electrical  
Specialty Code & low-rise residential  
electrical provisions**

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**Opportunity for public input:**

Those who would like to provide testimony may attend a public hearing on February 15, 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. February 18, 2011.

**Live broadcast via the internet:**

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

**Purpose of the rule:**

These proposed rules adopt the 2011 Oregon Electrical Specialty Code (OESC) including the low-rise residential electrical provisions of the 2011 Oregon Residential Specialty Code. The 2011 OESC is based upon the 2011 edition of the NFPA 70, National Electrical Code (NEC) and Oregon amendments. The proposed rules also make various housekeeping changes that provide clarity and consistency among the division's rules.

The 2011 OESC is scheduled to become effective April 1, 2011. The electrical provisions of the 2011 ORSC are scheduled to become effective July 1, 2011.

**Citation:**

Adopt, Amend & Repeal: 918-251, 918-305 & 918-480

To view the proposed amendments to the code, click the following:

[Matrix of code changes](#) and [Table 1-E](#)

**History:**

The current electrical code in Oregon is the 2008 OESC, which is based on the 2008 edition of the NFPA 70, NEC with Oregon amendments. The proposed rules bring the electrical code requirements in Oregon up to date by adopting the 2011 edition of the NEC with Oregon amendments.

The division, in consultation with the Electrical and Elevator Board, established October 12, 2010 through November 29, 2010 as the timetable for accepting proposed code amendments for the 2011 OESC. A code change committee was formed to review the proposed code changes. The committee met five times between October and December 2010. Recommendations made by the committee were considered by the Electrical and Elevator Board at the board's January 13, 2011 meeting. Subsequently, the Residential and Manufactured Structures Board reviewed the proposed low-rise residential electrical provisions.

**Contact:**

If you have questions or need further information, please contact Hearing Officer Dennis Clements at 503-378-4459, or [dennis.l.clements@state.or.us](mailto:dennis.l.clements@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**

**Adopts 2011 Oregon Electrical Specialty Code & low-rise electrical provisions of 2011 Oregon Residential Specialty Code**

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

February 15, 2011	9:30 a.m.	1535 Edgewater Street NW, Salem, OR 97304	Dennis Clements
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:** OAR 918-251, 918-305 & 918-480

**AMEND:** OAR 918-251, 918-305 & 918-480

**REPEAL:** OAR 918-251, 918-305 & 918-480

**RENUMBER:**

**AMEND & RENUMBER:**

Stat. Auth.: ORS 183.335, 455.030, 455.110, 455.610 & 479.730

Other Auth.:

Stats. Implemented: ORS 183.335, 455.030, 455.110, 455.610 & 479.730

**RULE SUMMARY**

These proposed rules adopt the 2011 Oregon Electrical Specialty Code based upon 2011 edition of the NFPA 70, National Electrical Code with Oregon specific amendments. These proposed rules also adopt the low-rise residential electrical provisions for the 2011 Oregon Residential Specialty Code. Additionally, the proposed rules include some non-substantive housekeeping changes to administrative rule that 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.

February 18, 2011 at 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 15<sup>th</sup> 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 2011 Oregon Electrical Specialty Code & low-rise electrical provisions of 2011 Oregon Residential Specialty Code**

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

**In the Matter of:** Adopting, amending, and repealing OAR 918-251, 918-305 & 918-480

**Statutory Authority:** ORS 183.335, 455.030, 455.110, 455.610 & 479.730

**Other Authority:**

**Stats. Implemented:** ORS 183.335, 455.030, 455.110, 455.610 & 479.730

**Need for the Rule(s):** ORS 455.030 and 455.110 require the division to adopt a state building code to govern the construction, reconstruction, alteration, and repair of buildings and other structures. The law further requires the building code to establish uniform performance standards providing reasonable safeguards for health, safety, welfare, comfort, and security of the residents of Oregon who are occupants and users of buildings and to provide for the use of modern methods, materials, and maximum energy conservation. The division, with the approval of the Electrical and Elevator Board, may amend such codes provided it conforms, insofar as it is practicable, to model building codes generally accepted and in use throughout the United States.

Under ORS 479.730 the division, with the approval of the Electrical and Elevator Board, adopts rules setting minimum safety standards for workmanship and materials in various classifications of electrical installations, known as the Oregon Electrical Specialty Code. ORS 455.610 requires the division, with the approval of the Residential and Manufactured Structures Board, to adopt and amend as necessary, a low-rise residential code "that contains all the requirements, including electrical provisions, related to the construction of residential dwellings three stories or less above grade." The low-rise electrical provisions of the Oregon Residential Specialty Code are adopted in the Oregon Electrical Specialty Code.

The current Oregon Electrical Specialty Code is based upon the 2008 edition of the NFPA 70, National Electrical Code (NEC) with Oregon amendments and contains electrical provisions for low-rise residential structures. These proposed rules are needed to update the electrical code by adopting the 2011 edition of the NEC with Oregon amendments, which also updates the low-rise electrical provisions of the Oregon Residential Specialty Code.

**Documents Relied Upon, and where they are available:** Draft rules, minutes from the Oregon Electrical Specialty Code Committee October through December 2010, minutes from the January 13, 2011 Electrical and Elevator Board meeting, minutes from the January 18, 2011 Residential and Manufactured Structures Board.

**Fiscal and Economic Impact:** The division has determined that the adopted code will have some fiscal and economic impact on state agencies, units of local government, small businesses, and members of the public from the purchase of 2011 edition of the NEC code book and training associated with new code provisions. The cost of the code book is approximately \$85. The division licenses approximately 3,400 electrical contractors, 19,300 electrical installers, and 680 electrical inspectors. Many of these electrical businesses are small businesses impacted by changes to the Oregon Electrical Specialty Code. The overall impact of this cost cannot be determined at this time because it is unknown how many copies of the code book will be purchased, since NFPA makes the NEC code book available online at no cost, and what the associated costs for attending training will be.

The 2011 Electrical Specialty Code Committee discussed the fiscal and economic impact of each code change proposal. Based on the information available at this time, the division has determined that state agencies, units of local government and members of the public who inspect, construct, remodel, alter or repair buildings and other structures will see some cost increases, but some of those costs may be offset by certain cost savings as a result of other proposed code changes. Below are the substantive changes with fiscal impacts:

- Arc-Fault Circuit Interrupters (AFCI) are currently required in the bedrooms of residential dwellings. Under this code, AFCI's must be installed in other areas of residential dwellings, which will cost approximately \$75-100 for a typical residential dwelling.
- Code amendments for lighting switches controlling lighting loads may result in increased cost of approximately \$50 per typical residential dwelling if these types of switches are used.

- All associated power, communications, data, and video circuits for remote pumping systems at motor fuel dispensing facilities must have a remote shut-off that simultaneously disconnects all power to the remote pumps. This requirement will cost approximately \$100.
- Certain ground fault protection and certain wiring practices in health care facilities have been changed, which results in approximately \$50 increase per instance.
- A proposed exception was added to the “equipotential plane” requirement for livestock confinement areas (large cow barns) that, if used, would result in savings of \$1 per square foot.

The fiscal impact of these changes cannot be determined at this time because it is dependent on the specifics of a particular building, such as design variables, construction methods, building type, and materials. The Electrical and Elevator Board and the Residential and Manufactured Structures Board made the specific finding that the added cost is necessary for the health and safety of the occupants and 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 the adopted code will have some fiscal and economic impact on state agencies, units of local government, small businesses, and members of the public from the purchase of 2011 edition of the NEC code book, and training and compliance associated with new code provisions. The cost of the NEC code book is approximately \$85.

Costs of compliance to the public, as specified in the fiscal and economic impact section above, result in approximately \$125 increase for a new residential dwelling. Other costs of compliance include new motor fuel dispensing facilities and new health care facilities, which have additional costs as result of proposed code changes. The cost of compliance of these changes can not be determined at this time because it is dependent on the specifics of a particular building, such as design variables, construction methods, building type, and materials.

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: Small businesses that are subject to these rules include various types of residential and commercial electrical contractors, designers, engineers, architects, and others associated with the construction industry. The division licenses approximately 3,400 electrical contractors, 19,300 electrical installers, and 680 electrical inspectors. Many of these electrical contractors are small businesses impacted by changes to the Oregon Electrical Specialty Code. The overall impact of this cost cannot be determined at this time because it is unknown how many copies of the code book will be purchased, since NFPA makes the NEC code book available online at no cost, and what the associated costs for attending training will be. Electrical contracting businesses are primarily small and medium sized businesses: approximately 90 percent employ fewer than 20 workers, 80 percent fewer than 10, and nearly 75 percent employ fewer than five workers.

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 or recordkeeping requirements.

c. Equipment, supplies, labor and increased administration required for compliance: The proposed changes will require certain types of equipment or supplies to be installed different that what is required today. For example, a standard circuit breaker or receptacle will be replaced by an AFCI breaker or receptacle under these rules. These rules do not require additional labor or increased administration in order for a small business to comply with these requirements.

**How were small businesses involved in the development of this rule?** Small businesses were represented on the 2011 Oregon Electrical Specialty Code Committee, on the Electrical and Elevator Board, and on the Residential and Manufactured Structures Board.

**Administrative Rule Advisory Committee consulted?: Yes**

If not, why?:

	Patrick Allen
Signature	Printed name
	Date

# HOUSING COST IMPACT STATEMENT

FOR ESTIMATING THE EFFECT OF A PROPOSED RULE OR ORDINANCE ON THE COST OF DEVELOPING  
A \*TYPICAL 1,200 SQ FT DETACHED SINGLE FAMILY DWELLING ON A 6,000 SQ FT PARCEL OF LAND.  
(ORS 183.534)  
FOR ADMINISTRATIVE RULES

AGENCY NAME: Consumer & Business Services  
Building Codes Division

PERMANENT:

HEARING DATE: February 15, 2011

ADDRESS: 1535 Edgewater Street NW

CITY/STATE: Salem, OR

TEMPORARY:

EFFECTIVE DATE: July 1, 2011

PHONE: 503-378-4133

## BELOW PLEASE PROVIDE A DESCRIPTION OF THE ESTIMATED SAVINGS OR ADDITIONAL COSTS THAT WILL RESULT FROM THIS PROPOSED CHANGE.

PROVIDE A BRIEF EXPLANATION OF HOW THE COST OR SAVINGS ESTIMATE WAS DETERMINED.  
IDENTIFY HOW CHANGE IMPACTS COSTS IN CATEGORIES SPECIFIED

### Description of proposed change: (Please attach any draft or permanent rule or ordinance)

These proposed rules adopt the low-rise residential electrical provisions for the 2011 Oregon Residential Specialty Code.

### Description of the need for, and objectives of the rule:

ORS 455.020 and 455.110 requires the division to adopt a state building code to govern the construction, reconstruction, alteration and repair of buildings and other structures. The law further requires the building code to contain uniform performance standards providing reasonable safeguards for health, safety, welfare, comfort and security of the residents of Oregon who are occupants and users of buildings, and to provide for the use of modern methods, materials and maximum energy conservation. The division, with the approval of the appropriate board, may amend such codes provided it conforms, insofar as it is practicable, to model building codes generally accepted and in use throughout the United States.

ORS 455.610 requires the division, with the approval of the Residential and Manufactured Structures Board, to adopt and amend as necessary, a low-rise code "that contains all the requirements, including electrical provisions, related to the construction of residential dwellings three stories or less above grade." The low-rise electrical provisions of the Oregon Residential Specialty Code are adopted in the Oregon Electrical Specialty Code.

The current Oregon Electrical Specialty Code is based upon the 2008 edition of the NFPA 70, National Electrical Code (NEC) with Oregon amendments and contains electrical provisions for low-rise residential structures. This proposed rule is needed to update the electrical code by adopting the 2011 edition of the NEC with Oregon amendments, which also updates the low-rise electrical provisions of the Oregon Residential Specialty Code.

### List of rules adopted or amended:

Adopt, Amend & Repeal OAR 918-480.

### Materials and labor costs increase or savings:

Arc-Fault Circuit Interrupters (AFCI) are currently required in the bedrooms of residential dwellings. Under this code, AFCI's must be installed in other areas of residential dwellings, which will cost approximately \$75-100 for a typical residential dwelling.

Code amendments for lighting switches controlling lighting loads may result in increased cost of approximately \$50 per typical residential dwelling if these types of switches are used.

An accurate cost cannot be quantified at this time because it is dependent on the specifics of a particular building, such as design variables, construction methods, building type, and materials.

### Estimated administrative construction or other costs increase or savings:

The proposed rules do not impose any additional administrative requirements.

### Land costs increase or savings: N/A

### Other costs increase or savings: None.

\*Typical single story 3 bedrooms, 1 ½ bathrooms, attached garage (calculated separately) on land with good soil conditions with no unusual geological hazards.

PREPARERS NAME: Richard J. Baumann

EMAIL ADDRESS: Richard.J.Baumann@state.or.us

**2011 Oregon Electrical Specialty Code Adoption &  
Low-Rise Residential Electrical Provisions  
Draft Rule  
2/15/11**

**918-251-0000**

**Reasonable Notice to Interested Parties**

Before the adoption, amendment or repeal of any rule relating to the ~~Oregon State~~ Electrical Safety Law or to other responsibilities under ORS 479.510 to 479.990, the Building Codes Division shall must give notice of the proposed adoption, amendment or repeal intended action:

(1) In the Secretary of State's Bulletin referred to in ORS ~~183.360~~ 183.335 at least 21 days before the effective date;

(2) By mailing a copy of the notice to notifying persons and organizations on the interested parties mailing list established under ORS 183.335(7); (8) and OAR 918-001-0210.

(3) By mailing a copy of the notice to the following organizations:

- (a) National Electrical Contractors Association, Portland;
- (b) Associated Oregon Industries;
- (c) League of Oregon Cities;
- (d) Association of Oregon Counties;
- (e) Associated General Contractors;
- (f) Workers' Compensation Division;
- (g) Homebuilders' Association of Metropolitan Portland;
- (h) Oregon Building Industry Association;
- (i) Professional Engineers of Oregon;
- (j) International Brotherhood of Electrical Workers Local 48 — Portland;
- (k) International Brotherhood of Electrical Workers Local 280 — Salem;
- (l) International Brotherhood of Electrical Workers Local 659 — Medford;
- (m) National Electrical Contractors Association, Eugene;
- (n) Independent Electrical Contractors of Oregon;
- (o) Building Owners and Managers Association;
- (p) ETL Testing Laboratories;
- (q) Underwriters' Laboratories;
- (r) Electro Test Inc.;
- (s) The Capitol Press Room; and
- (t) Associated Press.

Stat. Auth.: ORS 183.341(4) 183.335

Stats. Implemented: ORS 183.341(4) 183.335

Hist.: DC 56, f. & ef. 11-20-76; DC 4-1984, f. & ef. 1-17-84; Renumbered from 814-022-0000; BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96; Renumbered from 918-250-0000; BCD 16-1997, f. 9-30-97, cert. ef. 10-1-97

## **918-251-0010**

### **Compliance with ORS 183.330**

~~(1) This rule is required by ORS 183.330.~~

~~(2)(a) General Office. The general office of the Building Codes Division is at 1535 Edgewater NW, mailing address Post Office Box 14470, Salem, Oregon 97309-0404. The Website address is <http://www.bcd.oregon.gov>. The general telephone number is (503) 378-4133; FAX (503) 378-2322. General requests for information or documents should be directed to this office.~~

~~(b) Electrical Inspection. The electrical inspection section of the Building Codes Division is managed by the Field Services Manager who reports to the Building Codes Division Administrator. The inspection staff is located in field locations throughout the state.~~

~~(A) Inspection requests should be directed to the closest field office; or~~

~~(B) General office;~~

~~(3) Electrical Code Interpretation and Enforcement. Electrical code development, formal interpretations and enforcement are handled in the general office.~~

~~(a) Requests to place items on the Electrical and Elevator Board agenda and requests for adoption or amendment of electrical rules should be directed to the Chief Electrical Inspector at the general office.~~

~~(b) Requests for electrical code interpretation shall be directed to the Chief Electrical Inspector.~~

~~(4) Miscellaneous Fees. Requests and payment of fees for placement on the Electrical and Elevator Board meeting notice list or the electrical rule making notice list should be directed to the Building Codes Division general office.~~

Stat. Auth.: ORS 183.330

Stats. Implemented: ORS 183.330

Hist.: BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96; BCD 23-2000, f. 9-29-00, cert. ef. 10-1-00

## **Hearings and Adjudicatory Procedures**

### **918-251-0020**

#### **Attorney General Model Rules of Procedure**

~~The Attorney General's Model Rules of Procedure, as adopted or amended by the division in OAR 918-001-0010, apply in all contested cases.~~

~~[ED. NOTE: The full text of the Attorney General's Model Rules of Procedure is available from the office of the Attorney General or agency.]~~

Stat. Auth.: ORS 183.341

Stats. Implemented: ORS 183.341

Hist.: DC 20-1986, f. & ef. 12-4-86; Renumbered from 814-022-0422; BCA 32-1993, f. 12-14-93, cert. ef. 1-1-94; BCD 12-1994, f. & cert. ef. 4-29-94; BCD 5-1996, f. & cert. ef. 3-29-96; BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96; Renumbered from 918-270-0050

## **Adoption of Rules and Codes**

### **918-251-0050**

## Amendments

~~The administrator shall obtain board approval before commencing rulemaking on any proposed new rules, rule changes or repeals.~~

Stat. Auth.: ORS 479.730(5)

Stats. Implemented: ORS 455.030 & 479.730

Hist.: DC 11-1978, f. 4-3-78, ef. 7-1-78; DC 10-1982, f. & ef. 3-1-82; Renumbered from 814-022-0410; BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96; Renumbered from 918-270-0020

## 918-251-0060

### Electrical Specialty Code Change Procedures

~~(1) ORS 455.030 governs procedures for proposing Electrical Specialty Code changes.~~

~~(2) Time lines and other procedures for code changes are in OAR 918-008-0030.~~

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

Stat. Auth.: ORS 479.530

Stats. Implemented: ORS 455.030

Hist.: BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96

### ~~Cross Reference to Statutory Definitions~~

## 918-251-0080

### Reference to Statutory Definitions

~~Statutory definitions for the Electrical Safety Law are in ORS 479.530.~~

Stat. Auth.: ORS 479.530

Stats. Implemented: ORS 479.530

Hist.: BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96

## DIVISION 305 ELECTRICAL CODES AND STANDARDS

### The Oregon Electrical Specialty Code — In General

## 918-305-0005

### Interpretations

All electrical interpretations dated prior to April 1, ~~2008~~ 2011, issued by the Building Codes Division, ~~Electrical Safety Section~~, are withdrawn.

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

**918-305-0100**

**Code Adoption of Oregon Electrical Specialty Code**

(1) Effective April 1, 2011, the 2011 Oregon Electrical Specialty Code shall consist of the following, adopted by this reference:

(a) 2011 Edition of the NFPA 70-2008, National Electrical Code (NEC), 2008 Edition, effective April 1, 2008, subject to the amendments adopted and further amended by the division in OAR 918-305-0105 to 918-305-0320. See Table 1-E;

(b) 2007 Edition of the IEEE C2-2002 2007, National Electrical Safety Code (NESC), 2002 Edition; and

(c) The electrical provisions of the Oregon Elevator Specialty Code adopted by the Electrical and Elevator Board in OAR 918-400-0455.

(2) In the event of a conflict between the NEC and NESC requirements, the NEC requirement, as amended in subsection (1)(a) of this rule, shall apply.

(3) The electrical code requirements for residential dwellings are adopted under the Oregon Residential Specialty Code in OAR chapter 918, division 480.

(4) (3) As used in this rule:

- (a) "ANSI" is the American National Standards Institute;
- (b) "ASME" is the American Society of Mechanical Engineers;
- (c) "IEEE" is the Institute of Electrical and Electronics Engineers; and
- (d) "NFPA" is the National Fire Protection Association.

**NOTE: Table 1-E is printed at the end of Division 305 and is available on the division's website at <http://www.bcd.oregon.gov/rules.html#oar>**

[Publications: Publications referenced are available for review from the agency. See division website for information on purchasing publications.]

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730 Hist.: DC 13-1987, f. & ef. 5-1-87; Renumbered from 814-022-0600; BCA 17-1990, f. 6-27-90, cert. ef. 7-1-90; BCA 12-1993, f. 6-23-93, cert. ef. 7-1-93; BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96; Renumbered from 918-290-0010; BCD 1-2000, f. 1-6-00, cert. ef. 4-1-00; BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

**Amendments to the NEC**

**918-305-0105**

**Amend Article 90 -- Introduction Amendments to the Oregon Electrical Specialty Code**

(1) **Section 90.4 Enforcement.** Amended as follows: **The Oregon Electrical Specialty Code is adopted and amended pursuant to OAR chapter 918, division 8. Amendments adopted**

**for inclusion into the Oregon Electrical Specialty Code are placed in this rule, showing the section reference and a descriptive caption.**

(a) ~~Amend 90.4~~ by inserting the following after the second paragraph: "Requests for special permission shall be made in writing to the authority having jurisdiction. Special permission must be granted in writing by the authority having jurisdiction and shall be obtained prior to the start of the electrical installation."

(A) ~~Insert the following after Section 90.4: "Section 90.4(A) Where the 2008 NEC requires electrical products to be "listed" or "labeled", the words "listed or "labeled" shall have the same meaning as "certified electrical product" under ORS 479.530.~~

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

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

**918-305-0110**

**Amend Article 100 – Definitions**

~~Amend Article 100 by adding the following definition: "Fire protection system means approved devices, equipment and systems or combinations of systems used to detect a fire, activate an alarm, extinguish a fire, control or manage smoke and products of a fire or any combination thereof."~~

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96; BCD 1-2000, f. 1-6-00, cert. ef. 4-1-00; BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 29-2005, f. 12-30-05, cert. ef. 1-1-06; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

**918-305-0120**

**Amend Article 110 -- Requirements for Electrical Installations**

(1) ~~Insert the following after Section 110.8 Wiring Methods:~~

(a) ~~For the purpose of this article, "schools" are buildings used for education purposes, excluding administrative offices, dormitories or detached utility buildings not used for education or training.~~

(b) ~~Except where a specific wiring method is required by code, raceway systems, type MI, MC and AC cable or manufactured metallic wiring assemblies shall be the wiring method in the following:~~

(A) ~~Schools, universities, colleges, child care centers and correctional facilities as defined by the Oregon Structural Specialty Code;~~

(B) ~~Hospitals as defined in NEC Article 517 ; and~~

(C) ~~Group I-2 Occupancies and Group E Occupancies as defined in Chapter 3 of the adopted Oregon Structural Specialty Code; and~~

(D) ~~SR Occupancies classified as SR 2 as defined in Appendix SR of the adopted Oregon Structural Specialty Code.~~

(2) ~~The requirements of subsection (1)(b) of this rule do not apply to:~~

- (a) ~~Spaces in a retail center used for adult training or educational purposes;~~
- (b) ~~SR Occupancies classified as SR 1, SR 3 or SR 4 as defined in Appendix SR or R occupancies classified in Chapter 3 of the adopted **Oregon Structural Specialty Code**;~~
- (c) ~~Foster homes providing family type care only;~~
- (d) ~~Class 2 and 3 systems installed in conformity with Articles 725, 727, 760, 770, 780 and Chapter 8 of the 2008 NEC; and~~
- (e) ~~Power limited fire protection alarm systems.~~

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

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: DC 13-1987, f. & ef. 5-1-87; Renumbered from 814-022-0620; BCA 17-1990, f. & cert. ef. 6-27-90; BCA 12-1993, f. 6-23-93, cert. ef. 7-1-93; BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96, Renumbered from 918-290-0030; BCD 1-2000, f. 1-6-00, cert. ef. 4-1-00; BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 29-2005, f. 12-30-05, cert. ef. 1-1-06; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

## 918-305-0130

### Amend Article 210 -- Branch Circuits

The following provisions of Articles 210 through 225 are amended:

(1) ~~Section 210.8 Ground Fault Circuit Interrupter Protection for Personnel. Amended as follows:~~

(a) ~~Amend 210.8(A) by inserting the following exception: "Exception: A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground fault circuit interrupter protection."~~

(A) ~~Amend Section 210.8(A) by inserting the following: "FPN: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems."~~

(b) ~~Amend 210.8(A)(2) by inserting the following:~~

(A) ~~"Exception No. 1 to (2): A single receptacle for each appliance within a dedicated space that, in normal use, is not easily moved from one place to another, that is cord and plug connected, and the receptacle is labeled as "not GFCI protected."~~

(B) ~~"Exception No. 2 to (2): Receptacle ground fault protection shall not be required for a dedicated branch circuit serving a single receptacle for sewage or sump pumps."~~

(C) ~~"Receptacles installed under the exceptions to 210.8(A)(2) shall not be considered as meeting the requirements of 210.52(G)."~~

(e) ~~Amend 210.8(A)(4) by inserting the following: "Exception to (4): Receptacle ground fault protection shall not be required for a dedicated branch circuit serving a single receptacle for sewage or sump pumps."~~

(d) ~~Delete the Fine Print Note and exception to 210.8(A)(5) and replace exception with the following:~~

(A) ~~"Exception No. 1 to (5): A single receptacle for each appliance within a dedicated space that, in normal use, is not easily moved from one place to another, that is cord and plug connected, and the receptacle is labeled as 'not GFCI protected.'"~~

(B) ~~"Exception No 2 to (5): Receptacle ground fault protection shall not be required for a dedicated branch circuit serving a single receptacle for sewage or sump pumps."~~

(e) ~~Amend Section 210.8(A)(7) by inserting:~~

(A) "or other sinks" after the clause "laundry utility and wet bar sinks" in the first sentence of 210.8(A)(7).

(B) "Exception to (7): A single receptacle for each appliance within a dedicated space that, in normal use, is not easily moved from one place to another, that is cord and plug connected, and the receptacle is labeled as 'not GFCI protected.'"

(2) Section 210.12 Arc Fault Circuit Interrupter Protection. Amended as follows:

(a) Amend Section 210.12(B) to read: "(B) Dwelling Units. All 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit bedrooms shall be protected by a listed arc fault circuit interrupter, combination type, installed to provide protection of the branch circuit."

(b) Amend Section 210.12(B) by adding the following: "Exception No. 3: Electrical outlets dedicated for the use of single station smoke alarms (interconnected or not), nurse call, or medical equipment shall not be required to have AFCI protection."

(3) Section 210.52 Dwelling Unit Receptacle Outlets. Amended as follows:

(a) Amend Section 210.52 by adding: "(I) Alcoves. In dwelling units, alcoves shall have at least one receptacle installed. These outlets shall be in addition to the required hall outlets. As used in this subsection an Alcove is an area extending from, and returning to, the common wall of hallways, foyers, entries, and landings with a depth of not less than 2 ft. or more and a length of not less than 3 ft."

(b) Amend Figure 210.52(C)(1) Determination of Area Behind a Range, or Counter Mounted Cooking Unit or Sink. Amend figure to read: "Space exempt from the wall line if  $X < 900\text{mm}$  (36 in.)."

(4) Section 225.36 Suitable for Service Equipment. Amend 225.36 by adding the following: "Exception No. 2: In single light pole installations that have the connections to the light pole circuit made in a location accessible only to qualified persons, certified in-line fuse holders shall be allowed, subject to special permission."

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96; BCD 15-2001(Temp), f. & cert. ef. 11-26-01 thru 5-24-02; BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 29-2005, f. 12-30-05, cert. ef. 1-1-06; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

## **918-305-0150**

### **Amend Article 230 -- Services**

(1) Section 230.40 Number of Service Entrance Conductor Sets. Amend 230.40 Exception No. 3 by adding: "When there are continuous metallic paths bonded to the grounding system in the buildings involved, a disconnect, a separate grounded conductor and equipment grounding conductor shall be installed to meet the provisions of Article 225."

(2) Section 230.43 Wiring Methods for 600 Volts, Nominal, or Less. Amend 230.43 by adding the following to the end of the first paragraph: "Exception: Items (13) and (15) are limited to traffic control devices and highway lighting poles."

(3) Section 230.70 General. Amend 230.70(A)(1) by adding the following: "Exception: In existing installations where only the service panel or meter base is changed and the existing service conductors meet the ampacity requirements, or the existing conduit is of sufficient size to install new conductors, the panel may remain at the present location providing all requirements

of Sections 110.26 and 240.24 are met. This exception does not require a main disconnect located nearest the point of entry."

(4) Section 230.95 Ground Fault Protection of Equipment. Amend 230.95(C) to read: "The ground fault protection system shall be performance tested when first installed on the site. The test shall be conducted in accordance with instructions provided with the equipment. This test shall be performed by persons having proper training and experience required to perform and evaluate the results of such performance testing. A written record of this test shall be made available to the authority having jurisdiction. This report shall be signed by the person(s) performing this test."

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

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: DC 13-1987, f. & ef. 5-1-87; BCA 13-1989, f. & cert. ef. 5-24-89; Renumbered from 814-022-0630; BCA 17-1990, f. & cert. ef. 6-27-90; BCA 12-1993, f. 6-23-93, cert. ef. 7-1-93; BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96, Renumbered from 918-290-0040; BCD 1-2000, f. 1-6-00, cert. ef. 4-1-00; BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 29-2005, f. 12-30-05, cert. ef. 1-1-06; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

## **918-305-0160**

### **Amend Article 250 – Grounding**

(1) Section 250.24 Grounding Service-Supplied Alternating Current Systems. Amended as follows:

(a) Amend 250.24(A)(1) by inserting the following: "Exception: When the electric utility has installed a ground fault protection system ahead of the customer's service equipment, no bonding or electrical connection from the grounding electrode system shall be made to the grounded service conductor on the load side of the utility ground fault sensing device. The neutral or grounded service conductor, however, shall be grounded on the line side of the first ground fault sensor in a manner otherwise required at the customer's service equipment. The grounding electrode conductor shall be run to an equipment grounding bus or terminal at the service equipment as long as the equipment grounding conductor and the grounded neutral conductor are not connected to each other at this point. The on-site ground fault test required by Section 230.95 shall not be performed prior to the above installation requirements. Warning signs shall be installed."

(b) Amend Section 250.24(B) by inserting the following after Exception No. 2: "Exception No. 3. When the electric utility has installed a ground fault protection system ahead of the customer's service equipment and if the operation of the ground fault system relies on the absence of the main bonding jumper at the service equipment but includes an otherwise satisfactory main bonding jumper as a part of its sensing device, the main bonding jumper shall not be installed at the service equipment which would otherwise bond the grounded service conductor to the equipment ground. The on-site ground fault test required by Section 230.95 shall not be performed prior to the above installation requirements. Warning signs shall be installed."

(2) Section 250.32 Buildings or Structures Supplied by a Feeder(s) or Branch Circuits(s). Amended as follows:

(a) Amend the first sentence of 250.32(A) to read: "Building(s) or structure(s) supplied by feeder(s) or branch circuits(s) shall have a grounding electrode or grounding electrode system installed in accordance with 250.50."

(b) Amend 250.32(B) to read: "Grounded Systems. For a grounded system at the separate building or structure, the connection to the grounding electrode and grounding or bonding equipment, structures, or frames required to be grounded or bonded shall comply with either 250.32(B)(1) or (B)(2) of the 2005 OESC."

(c) Amend 250.32(D) to read as follows: "Where one or more disconnecting means supply one or more additional buildings or structures under single management, and where these disconnecting means are located remote from those buildings or structures in accordance with the provisions of 225.32, Exceptions Nos. 1 and 2, all of the conditions of the 2005 OESC Section 250.32(D) shall be met."

(3) Section 250.52 Grounding Electrodes. Amended as follows:

(a) Amend 250.52(A)(3) by inserting the following: "In new construction with steel reinforced concrete footings, a concrete-encased grounding electrode connected to the grounding electrode system is required. The installation shall meet the requirements of Section 250.50. When a concrete-encased electrode system is used, a minimum size of 1/2-inch reinforcing bar or rod shall be stubbed up at least 12 inches above the floor plate line or floor level, whichever is the highest, near the service entrance panel location."

(b) Amend 250.52(B)(2) by inserting the following: "(3) In existing electrical installations, when a service change or upgrade occurs, an existing metal underground water pipe shall not be used unless the metal underground water pipe has been verified as suitable for continued use as a grounding electrode. An existing metal underground water pipe shall be bonded to the new grounding electrode system as required by 250.104(A)."

(4) Section 250.56 Resistance of Rod, Pipe, and Plate Electrodes. Amend by inserting the following at the end of the first sentence of 250.56: "For permanent installations where the only grounding electrode is a single ground rod, pipe or plate, documented verification of 25 ohms or less shall be provided. Documented verification shall be done by a recognized method, provided by the installer, and made available for the electrical inspector."

(5) Section 250.94 Bonding for Other Systems. Amend the first sentence of 250.94 to read: "An intersystem bonding termination or exposed and supported length of # 6 bare copper conductor for connecting intersystem bonding and grounding conductors required for other systems shall be provided external to enclosures at the service equipment and at the disconnecting means for any additional buildings or structures."

(6) Section 250.118 Types of Equipment Grounding Conductors. Amend by inserting the following after 250.118(14): "Where metallic conduit is installed on roof tops, an equipment grounding conductor shall be provided within the raceway and sized per Section 250.122."

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: DC 13-1987, f. & ef. 5-1-87; Renumbered from 814-022-0660; BCA 17-1990, f. & cert. ef. 6-27-90; BCA 12-1993, f. 6-23-93, cert. ef. 7-1-93; BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96, Renumbered from 918-290-0070; BCD 1-2000, f. 1-6-00, cert. ef. 4-1-00; BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 29-2005, f. 12-30-05, cert. ef. 1-1-06; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

## **918-305-0165**

### **Amend Article 334 -- Nonmetallic-Sheathed Cable: Types NM, NMC, and NMS**

(1) Section 334.12 Uses Not Permitted. Amend 334.12(A)(2) by inserting the following exception: "Exception: Types NM, NMC, and NMS cables shall be permitted where installed in accordance with 334.15."

(2) Section 334.15 Exposed Work. Amended as follows:

(a) Amend 334.15(B) by adding the following to the end of the Section: "Exposed nonmetallic sheathed cable shall be protected where it is installed horizontally less than 8 feet above the floor. Exposed nonmetallic sheathed cable less than 8 feet above the floor that enters the top or bottom of a panelboard shall be protected from physical damage by conduit, raceway, 1/2-inch plywood or 1/2-inch drywall."

(b) Amend 334.15(C) by deleting "and crawlspaces" from the subsection heading.

(c) Amend the first sentence of 334.15(C) to read: "Where cable is run at angles with joists in unfinished basements, it shall be permissible to secure cables not smaller than two 6 AWG or three 8 AWG conductors directly to the lower edge of the joists."

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

## **918-305-0180**

### **Amend Article 394 -- Concealed Knob-and-Tube Wiring**

Section 394.12 Uses Not Permitted. Add the following to the end of Section 394.12: Exception: The provisions of Section 394.12 shall not be construed to prohibit the installation of loose or rolled thermal insulating materials in spaces containing existing knob and tube wiring, provided all the following conditions are met:

(1) The visible wiring shall be inspected by a certified electrical inspector or a general supervising electrician employed by a licensed electrical contractor.

(2) All defects found during the inspection shall be repaired prior to the installation of insulation.

(3) Repairs, alterations or extensions of or to the electrical systems shall be inspected by a certified electrical inspector.

(4) The insulation shall have a flame spread rating not to exceed 25 and a smoke density not to exceed 450 when tested in accordance with ASTM E84 91A 2005 Edition. Foamed in place insulation shall not be used with knob and tube wiring.

(5) Exposed splices or connections shall be protected from insulation by installing flame resistant, non-conducting, open top enclosures which provide three inches, but not more than four inches side clearances, and a vertical clearance of at least four inches above the final level of the insulation.

(6) All knob and tube circuits shall have overcurrent protection in compliance with the 60 degree C column of Table 310-16 of NFPA 70-2008. Overcurrent protection shall be either circuit breakers or type S fuses. The type S fuse adapters shall not accept a fuse of an ampacity greater than permitted in Section 240.53.

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

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCA 12-1993, f. 6-23-93, cert. ef. 7-1-93; BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96, Renumbered from 918-

290-0085; BCD 1-2000, f. 1-6-00, cert. ef. 4-1-00; BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 29-2005, f. 12-30-05, cert. ef. 1-1-06; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

### **918-305-0190**

#### **Amend Articles 400 -- Flexible Cords and Cables through 406 Receptacles, Cord Connectors, and Attachment Plugs (Caps)**

~~(1) Section 400.7 Uses Permitted. Amend Section 400.7 by adding the following: "(11) Listed assemblies of fixtures and controllers, approved by the Federal Aviation Administration."~~

~~(2) Section 406.11 Tamper-Resistant Receptacles in Dwelling Units. Amend 406.11 by adding the following: "Non-tamper resistant receptacles shall be permitted until October 1, 2008."~~

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: DC 13-1987, f. & ef. 5-1-87; Renumbered from 814-022-0680; BCA 17-1990, f. & cert. ef. 6-27-90; BCA 12-1993, f. 6-23-93, cert. ef. 7-1-93; BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96, Renumbered from 918-290-0090; BCD 1-2000, f. 1-6-00, cert. ef. 4-1-00; BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

### **918-305-0205**

#### **Amend Article 422 -- Appliances through 424 Fixed Electric Space-Heating Equipment**

~~(1) Section 422.34 Unit Switch(es) as Disconnection Means. Amend 422.34 by adding the following to the end of the section: "Unit switches on ranges, ovens and dishwashers shall not be considered the disconnect required by this section."~~

~~(2) Section 424.3 Branch Circuits. Amend 424.3(A) by adding the following to the end of the subsection: "New equipment may be connected to an existing circuit that does not serve fixed electric space heating equipment. The new equipment may be reconnected to that circuit, provided the equipment being installed has an ampere rating of not more than 50 percent of the branch circuit rating."~~

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: f. 8-1-02, cert. ef. 10-1-02; BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

### **918-305-0210**

#### **Amend Article 500.8 – Equipment**

~~Article 500.8(A) is amended to read: "Suitability of identified equipment" as used in Article 500.8(A) means that equipment meets the requirements of ORS 479.760.~~

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96; BCD 1-2000, f. 1-6-00, cert. ef. 4-1-00; BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

### **918-305-0250**

#### **Amend Article 620 Elevators, Dumbwaiters, Escalators, Moving Walks, Wheelchair Lifts and Stairway Chair Lifts**

(1) Section 620.1 Scope. Amend 620.1 by deleting FPN No. 1 and replacing it with the following: "FPN No.1: For further information, see the **Oregon Elevator Specialty Code** as adopted in OAR chapter 918, division 400."

(2) Section 620.2 Definitions. Amend 620.2 by adding: "Separate Branch Circuit. A circuit dedicated solely for the purpose intended without other devices, systems or equipment connected to the circuit."

(3) Section 620.5 Working Clearances. Amend 620.5 by adding: "Where machine room doors swing inward, the arc of the door shall not encroach on those clearances required by Section 110.26(A)."

(4) Section 620.11 Insulation of Conductors. Amend 620.11(A) to read: "The conductors of the hoistway door interlocks from the hoistway riser shall be flame retardant and suitable for a temperature of not less than 200° C (392°F). Conductors shall be Type SF or equivalent except where not required by the Elevator Safety Code (ASME A17.1)."

(5) Section 620.37 Uses Permitted. Amend 620.37(A) by adding: "Conduits and raceways necessary for the connection of such devices shall only enter hoistways and machine rooms to the extent necessary to connect the device(s) attached thereto."

(6) Section 620.51 Disconnecting Means. Amended as follows:

(a) Amend 620.51(B): "When provided, this disconnecting means shall be located in the elevator control room or control space. The installation shall comply with the requirements of NFPA 72 as adopted in OAR 918-306-0005."

(b) Amend 620.51(C) by adding: "Where machine rooms are provided, the disconnecting means required by Section 520.51 shall be located within 610 mm (24 inches) of the open side of the machine room access door. Where more than one disconnect is required for a multi-car group, the disconnects shall be adjacent to each other with the first disconnect located within 610 mm (24 inches) of the open side of the machine room access door. Measurement shall be taken from the edge of the disconnect nearest the machine room door."

(A) Amend 620.51(C)(4) to read: "On platform lifts and stairway chairlifts, the disconnecting means shall be located within sight of the motor controller or lift and within 1.83 m (six feet) of the motor controller. The disconnecting means shall not be located in the runway enclosure."

(B) Amend Section 620.51(C) by adding: "(5) Residential installations. A disconnecting means shall be required to be placed within sight of the controller or lift. Where such devices are supplied with flexible cord and plug type connectors, the supply receptacle shall be switched by the disconnecting means. The disconnecting means does not require overcurrent protection, provided such protection is supplied by the branch circuit overcurrent device. In all other respects the disconnecting means shall comply with the requirements of this section."

(7) Add new section: "Section 620.86 Flexible Metal Conduit. Where flexible metal conduit is utilized between the disconnecting means specified in Section 620.51 and the elevator controller, an equipment grounding conductor shall be provided within the raceway and sized per Section 250.122 and Table 250.122."

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

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96; BCD 1-2000, f. 1-6-00, cert. ef. 4-1-00; BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

## 918-305-0265

### Amend Article 690 Solar Photovoltaic Systems

Chapter 690 of the ~~National Electrical Code~~ adopted in OAR 918-305-0100 is amended by the adoption of Oregon specific amendments. The Oregon specific amendments are published in their entirety at Table 1-E.

[ED. NOTE: Table referenced is not included in rule text. [Click here for PDF of table.](#)]

Stat. Auth.: ORS 455.496 & 479.730

Stat. Implemented: ORS 479.730

Hist.: BCD 13-2010, f. 9-30-10, cert. ef. 10-1-10

## 918-305-0270

### Amend Article 692 -- Fuel Cell Systems

Section 692.6 Listing Requirement. Amend 692.6 to read: "The fuel cell system shall be certified for its intended application prior to final approval."

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

## 918-305-0280

### Amend Chapter 7 Special Conditions

(1) Chapter 7 Special Conditions. Amend Chapter 7 by adding the following preface to the Chapter: "Building Officials and inspectors administering and enforcing the state building code under ORS 455.148 and 455.150, shall not inspect for compliance with Sections 700.27, 701.18, or 708.54, refuse to perform or finalize inspections, refuse to issue a certificate of occupancy, or use other methods to ensure compliance with Sections 700.27, 701.18, or 708.54. If requested by the Building Codes Division, the Supervising Electrician must demonstrate that the requirements of Sections 700.27, 701.18, or 708.54, as appropriate, have been met. In determining whether a system meets the requirements of Sections 700.27, 701.18, or 708.54, the division may request the local jurisdiction to perform an inspection or collect the relevant information, so that the division may review and make a determination."

(2)(a) Section 700.27 Coordination. Amend 700.27 by adding the following to the end of the first paragraph: "For the purposes of this section, supply side overcurrent protection means those protective devices on the emergency system supply side and not on the normal power supply side. The protection shall be coordinated using the higher of the normal power supply fault current levels or emergency system fault current levels."

(b) Amend 700.27 by inserting the following: "Exception No. 2: The requirements for selective coordination described in 700.27 are not required where the emergency system was installed prior to April 1, 2005. For new emergency systems that are supplied from an existing emergency system installed prior to April 1, 2005, the new portion of the emergency system must comply with NEC 700.27. The ground fault sensing function of overcurrent protective devices will only be required to selectively coordinate with the ground fault sensing functions of other protective devices."

(3)(a) Section 701.18 Coordination. Amend by adding the following after 701.18: "For the purposes of this section, supply side overcurrent protection means those protective devices on the

emergency system supply side and not on the normal power supply side. The protection shall be coordinated using the higher of the normal power supply fault current levels or emergency system fault current levels.”

(b) Amend Section 701.18 by inserting the following: “Exception No. 2: The requirements for selective coordination described in 701.18 are not required where the required standby system was installed prior to April 1, 2005. For new emergency systems that are supplied from an existing required standby system installed prior to April 1, 2005, the new portion of the required standby system must comply with NEC 701.18. The ground fault sensing function of overcurrent protective devices will only be required to selectively coordinate with the ground fault sensing functions of other protective devices.”

(4) The following provisions of Article 708 are amended:

(a) Section 708.1 Scope amended as follows:

(A) Amend 708.1 Scope to read: “The provisions of this article apply to the installation of the portions of the premises’ wiring system intended to supply, distribute, and control electricity to designated critical operations areas (DCOA) in the event of disruption to elements of the normal system. Critical operations areas and critical operations power systems are designated by the owner of the facility. A building official has no authority to designate or require designation of an area as requiring a critical operations power system. Critical operations power systems can include but are not limited to power systems, HVAC, fire alarm, security, communications, and signaling for designated critical operations areas.”

(B) Amend 708.1 by inserting the following: “FPN 9: Chapter 5 of NFPA 1600 2007, Standard on Disaster/Emergency Management and Business Continuity Programs, provides additional guidance concerning risk assessment and hazard analysis.”

(b) Amend Section 708.4 Risk Assessment by deleting Section in its entirety.

(c) Amend Section 708.5 Physical Security to read: “Electrical circuits and equipment for critical operations power systems shall be accessible to qualified personnel only.”

(d) Amend Section 708.6 as follows:

(A) Amend Section 708.6(A) to read: “The authority having jurisdiction shall conduct or witness a test of the completed system upon installation.”

(B) Delete 708.6(B) Tested Periodically.

(C) Delete 708.6(C) Maintenance.

(D) Delete Fine Print Note.

(E) Delete 708.6 (D) Written Record.

(F) Renumber 708.6(E) Testing Under Load as 708.6(B).

(e) Amend Section 708.8 by deleting the section in its entirety.

(f) Amend Section 708.22. Amend 708.22(B) by deleting the second paragraph.

(g) Section 708.54 Coordination is amended as follows:

(A) Amend 708.54 by adding the following to the end of Section 708.54: “For the purposes of this section, supply side overcurrent protection means those protective devices on the emergency system supply side and not on the normal power supply side. The protection shall be coordinated using the higher of the normal power supply fault current levels or emergency system fault current levels.”

(B) Amend Section 708.54 by inserting the following: “Exception: The requirements for selective coordination described in 708.54 are not required where the critical operations power system(s) was installed prior to April 1, 2005. For new critical operations power system(s) that are supplied from an existing emergency system installed prior to April 1, 2005, the new portion

of the critical operations power system(s) must comply with NEC 708.54. The ground fault sensing function of overcurrent protective devices will only be required to selectively coordinate with the ground fault sensing functions of other protective devices.”

~~(h) Amend Part V by deleting the Part and Section 708.64 Emergency Operations Plan in its entirety.~~

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08; BCD 2-2009, f. 3-31-09, cert. ef. 4-1-09

### **918-305-0290**

#### **Amend Article 725 -- Class 1, Class 2 and Class 3 Remote-Control, Signaling, and Power-Limited Circuits through 760 Fire Alarm Systems**

~~(1) Section 725.24 Mechanical Execution of Work. Amend 725.24 by replacing the last sentence with: "This installation shall also conform with 300.4 and 300.11."~~

~~(2) Section 760.24 Mechanical Execution of Work. Amend 760.24 by replacing the last sentence with "The installation shall also conform with 300.4 and 300.11."~~

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

### **918-305-0300**

#### **Amend Article 770 -- Optical Fiber Cables and Raceways**

~~Section 770.24 Mechanical Execution of Work. Amend 770.24 by replacing the last sentence with "The installation shall also conform with 300.4 and 300.11."~~

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

### **918-305-0310**

#### **Amend Article 800 -- Communications Circuits**

~~Section 800.24 Mechanical Execution of Work. Amend 800.24 by replacing the last sentence with "The installation shall also conform with 300.4 and 300.11."~~

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

### **918-305-0320**

#### **Amend Article 820 -- Community Antenna Television and Radio Distribution Systems**

~~Section 820.24 Mechanical Execution of Work. Amend 820.24 by replacing the last sentence with "The installation shall also conform with 300.4 and 300.11."~~

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 6-2008, f. 3-7-08, cert. ef. 4-1-08

## **918-480-0005**

### **Adopted Oregon Residential Specialty Code**

(1) The **Low-Rise Residential Dwelling Code**, identified in ORS 455.610, will be known as the **Oregon Residential Specialty Code**.

(2) Effective July 1, 2011, the 2011 **Oregon Residential Specialty Code** consists of the following:

(3) The **2009 Edition of the International Residential Code for One- and Two-Family Dwellings, Chapters 1 through 24 and Chapter 44, Appendices E, F, G, H, K, R, and T**, as published by the International Code Council, Inc. and as further amended by the division. **Chapters 25 through 43, Appendix A, B, C, D, I, J, L, M, N, O, P, Q, and S** are not adopted as part of the **Oregon Residential Specialty Code**.

(4) The low-rise plumbing provisions of the **Oregon Residential Specialty Code** are adopted in the **Oregon Plumbing Specialty Code**, which is based upon the **2009 Edition of the Uniform Plumbing Code**, as published by the International Association of Plumbing and Mechanical Officials and amended by the division.

**(5) The low-rise electrical provisions of the Oregon Residential Specialty Code are adopted in the Oregon Electrical Specialty Code, which is based upon the 2011 Edition of the NFPA 70, National Electrical Code and amended by the division. Oregon amendments to NFPA 70, National Electrical Code are adopted in OAR 918-305-0100, Table 1-E.**

~~(5)~~ **(6)** Low-rise multi-family dwelling construction is adopted in **Appendix N of the Oregon Structural Specialty Code**.

~~(6)~~ **(7)** Applicability of code changes to pending applications. Code requirements in effect at the time a plan review or permit application is filed controls the construction under the application unless the applicant agrees to be controlled by subsequent changes.

[Publications: Publications referenced are available for review at the division. See division website for information on purchasing publications.]

Stat. Auth.: ORS 455.020, 455.030, 455.110, 455.380 & 455.525

Stats. Implemented: ORS 455.610

Hist.: DC 11-1986, f. 6-30-86, ef. 7-1-86; DC 6-1987(Temp), f. & ef. 4-3-87; Renumbered from 814-031-0005; BCA 3-1990, f. 1-30-90, cert. ef. 4-1-90; BCA 7-1990(Temp), f. 3-23-90, cert. ef. 4-1-90; BCA 21-1990, f. 8-28-90, cert. ef. 9-24-90; BCA 30-1990, f. 12-21-90, cert. ef. 1-1-92; BCA 8-1991, f. 4-10-91, cert. ef. 7-1-91; BCA 32-1991(Temp), f. & cert. ef. 9-30-91; BCA 1-1992, f. & cert. ef. 2-6-91; BCA 4-1992(Temp), f. 3-4-92, cert. ef. 3-5-92; BCA 6-1992, f. 3-24-92, cert. ef. 3-27-92; BCA 13-1992, f. 6-29-92, cert. ef. 7-1-92; BCA 28-1992(Temp), f. 12-30-92, cert. ef. 1-1-93; BCA 3-1993(Temp), f. & cert. ef. 3-3-93; BCA 7-1993, f. 4-28-93, cert. ef. 5-1-93; BCA 10-1993(Temp), f. & cert. ef. 6-11-93; BCD 3-1996, f. 2-2-96, cert. ef. 4-1-96; BCD 19-1998, f. 9-30-98, cert. ef. 10-1-98, Renumbered from 918-480-0000; BCD 3-2000, f. 1-14-00 cert. ef. 4-1-00; BCD 33-2002, f. 12-20-02 cert. ef. 4-1-03; BCD 15-2004, f. 9-10-04, cert. ef. 10-1-04; BCD 5-2005, f. & cert. ef. 3-28-05; BCD 5-2008, f. 2-22-08, cert. ef. 4-1-08