



July 1, 2011

**Adoption of 2011 Oregon Residential
Specialty Code**

Purpose of the rule:

These rules adopt the 2011 Oregon Residential Specialty Code (ORSC). The 2011 ORSC consists of the following: structural and mechanical provisions from the 2009 edition of the International Residential Code with Oregon amendment; low-rise plumbing provisions in the 2011 Oregon Plumbing Specialty Code, which is based upon the 2009 Uniform Plumbing Code with Oregon amendments; low-rise electrical provisions in the 2011 Oregon Electrical Specialty Code, which is based upon the 2011 NFPA 70, National Electrical Code with Oregon amendments; and Appendix N, which is applicable to low-rise residential apartments and located in the 2010 Oregon Structural Specialty Code.

These rules also include some non-substantive housekeeping changes to administrative rule that provide clarity and consistency among the Division's rules. Additionally, these rules include a 90-day transition period allowing builders and owners to submit plans and designs to either the 2011 Oregon Residential Specialty Code or the 2008 Oregon Residential Specialty Code.

These rules and the code become effective July 1, 2011.

Citation:

Amending 918-480 and Repealing 918-001-0006

View the [2011 Oregon Residential Specialty Code](#).

Code books may be purchased from vendors listed on the division's website at www.bcd.oregon.gov/codestandards.html.

Contact:

If you have question or need additional information, please contact:

Richard Rogers, Structural Program Chief at Richard.Rogers@state.or.us or 503-378-4472

Mike Ewert, Residential/Mechanical Code Specialist at Mike.D.Ewert@state.or.us or 503-373-7529

Dennis Clements, Electrical Program Chief at Dennis.L.Clements@state.or.us or 503-378-4459

Terry Swisher, Plumbing Program Chief at Terry.L.Swisher@state.or.us or 503-373-7488



Highlighted changes in the 2011 ORSC:

Structural:

- Fire-resistive requirements now located in Section R302, including townhouse requirements formerly found in Section 317. Several tradeoff provisions were added for the installation of fire sprinkler systems.
- New provisions were added to incorporate statutory requirements for carbon monoxide alarms from House Bill 3450 (2009), and radon gas mitigation standards from Senate Bill 1025 (2010).
- Much of Chapter 4 was reorganized, including the addition of several prescriptive code sections dealing with precast concrete.
- A new section was added in Chapter 5 dealing with fire protection of floor assemblies.
- Substantial changes were made in Chapter 6, including eliminating most Oregon amendments and adopting model code changes regarding wall bracing.
- Chapter 11 enhanced to incorporate statutory requirements Senate Bill 79 (2009) for additional cost saving energy provisions.
- Appendix T added as an optional fire sprinkler system installation standard.

Mechanical:

- Maximum length of dryer exhaust ducts increased from 24 feet to 35 feet.
- Chapter 14 now includes a section intended to enhance safety relating to locking access port caps on refrigeration line-sets.
- Chapter 17 substantially amended. Users must now refer to referenced standard for the combustion air requirements for oil burning appliances.

Plumbing:

- A new code provision in Section 411.5 allows shower rooms without a curb or threshold at the door entrance. This is a common design that model code did not allow.
- A new amendment in Section 704.2 eliminates the requirement for a special fixture fitting when connecting two fixture traps at the same level, and allows a sanitary tee to be used when the barrel of the fitting is two pipe sizes larger than the trap arm connection.
- New code language in Section 908.2 allows horizontal wet venting of drainage systems.

Electrical:

- Delayed implementation of expanding the requirements for Arc Fault Circuit Interrupters (AFCI) in areas other than bedrooms of dwelling units.
- Exempts peninsular countertop space less than 42 inches from the requirements for a receptacle in the end of the cabinet.
- Clarifies that reinforcing bar or rod must be stubbed up in the vicinity of the service, and that remote sections of foundation do not require connection of a concrete encased electrode to the system.
- Delayed implementation of a requirement for AFCI devices for receptacle replacement activities until the next specialty code adoption cycle, because the devices are not readily available.
- Removed the new requirement for fire alarm circuit disconnecting means to be accessible only to qualified personnel.

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 upon filing by the

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 (503) 373-7438
Rules Coordinator Address Telephone

to become effective July 1, 2011. Rulemaking Notice was published in the January, 2011 Oregon Bulletin.**

RULE CAPTION

Adopt the 2011 Oregon Residential Specialty Code

Not more than 15 words that reasonably identify 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: 918-480-0001, 918-480-0005, 918-480-0010, 918-480-0020, 918-480-0030, 918-480-0110, 918-480-0120, 918-480-0130, 918-480-0140, & 918-480-0150

REPEAL: OAR 918-001-0006

RENUMBER:

AMEND & RENUMBER:

Stat. Auth.: ORS 183.335, 455.020, 455.030, 455.055, 455.110, 455.380, 455.525, 455.610 & 455.628

Other Auth.: Ch. 750 2009 Oregon Laws & Ch. 83 2010 Oregon Laws

Stats. Implemented: ORS 183.335, 455.020, 455.055, 455.210, 455.525, 455.610 & 455.628

RULE SUMMARY

These rules adopt the 2011 Oregon Residential Specialty Code. The 2011 Oregon Residential Specialty Code consists of the following: structural and mechanical provisions from the 2009 edition of the International Residential Code with Oregon amendments; low-rise plumbing provisions in the 2011 Oregon Plumbing Specialty Code, which is based upon the 2009 Uniform Plumbing Code with Oregon amendments; low-rise electrical provisions in the 2011 Oregon Electrical Specialty Code, which is based upon the 2011 NFPA 70, National Electrical Code with Oregon amendments; and Appendix N, which is applicable to low-rise residential apartments and located in the 2010 Oregon Structural Specialty Code. These rules also include some non-substantive housekeeping changes to administrative rule that provide clarity and consistency among the Division's rules. Additionally, these rules include a 90-day transition period allowing builders and owners to submit plans and designs to either the 2011 Oregon Residential Specialty Code or the 2008 Oregon Residential Specialty Code.

Authorized Signer

Patrick Allen

Printed name

Date

918-480-0001

Reasonable Notice to Interested Parties

Prior to the adoption, amendment or repeal of any rule relating to the **Oregon Residential Specialty Code**, the Building Codes Division must give notice of 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 notifying persons and organizations on the interested parties mailing list established under ORS 183.335(8) and 918-001-0210.

Stat. Auth.: ORS 183.335

Stats. Implemented: ORS 183.335

Hist.: BCD 19-1998, f. 9-30-98, cert. ef. 10-1-98;

BCD 13-2011, f. 5-13-11, cert. ef. 7-1-11

918-480-0002

Specialty Code Name Change

All references in OAR chapter 918 to the **Oregon One- and Two-Family Dwelling Specialty Code** mean the **Oregon Residential Specialty Code**.

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

Stat. Auth.: ORS 455.610

Stats. Implemented: ORS 455.610

Hist.: BCD 20-2004, f. 9-30-04, cert. ef. 10-1-04;

BCD 13-2011, f. 5-13-11, cert. ef. 7-1-11

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:

(a) 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**.

(b) 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.

(c) 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.

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

(3) 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.

(4) For the purposes of implementing a phase-in period for the **2011 Oregon Residential Specialty Code**, the **2008 Oregon Residential Specialty Code** is adopted for a period of 90-days beginning July 1, 2011 and ending September 30, 2011.

(5) During the 90-day phase-in period established in subsection (4), all building departments in the state are required to accept plans for low-rise residential dwellings designed to either the **2011 Oregon Residential Specialty Code** or to the **2008 Oregon Residential Specialty Code**.

[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; BCD 13-2011, f. 5-13-11, cert. ef. 7-1-11

918-480-0010

Amendments to the Oregon Residential Specialty Code

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

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

Stat. Auth.: ORS 455.020, 455.110, 455.525 & 455.610

Stats. Implemented: ORS 455.610

Hist.: BCA 18-1993, f. 8-24-93, cert. ef. 8-29-93; BCA 28-1993, f. 10-22-93, cert. ef. 1-1-94; BCA 29-1993, f. 11-24-93, cert. ef. 12-1-93; BCD 6-1995, f. 3-31-95, cert. ef. 4-1-95; BCD 3-1996, f. 2-2-96, cert. ef. 4-1-96; BCD 22-1996(Temp), f. 10-1-96, cert. ef. 10-4-96; BCD 5-1997, f. 3-21-97, cert. ef. 4-1-97; Administrative Reformatting 1-19-98; BCD 3-1998, f. 1-29-98, cert. ef. 4-1-98; BCD 19-1998, f. 9-30-98, cert. ef. 10-1-98; BCD 3-2000, f. 1-14-00 cert. ef. 4-1-00; BCD 19-2000(Temp), f.& cert. ef. 8-15-00 thru 2-10-01; BCD 32-2000, f. 12-27-00, cert. ef. 1-1-01; BCD 3-2001, f. 2-9-01, cert. ef. 3-1-01; BCD 2-2002, f. 3-5-02, cert. ef. 4-1-02; BCD 22-2002(Temp), f. 9-13-02 cert. ef. 10-1-02 thru 3-29-03; BCD 30-2002, f. 12-6-02, cert. ef. 1-1-03; BCD 1-2003(Temp), f. & cert. ef. 1-10-03 thru 3-31-03; 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 9-2006, f. 6-30-06, cert. ef. 7-1-06; BCD 1-2007, f. 2-15-07, cert. ef. 4-1-07; BCD 5-2008, f. 2-22-08, cert. ef. 4-1-08; BCD 13-2008(Temp), f. & cert. ef. 7-3-08 thru 12-30-08; BCD 21-2008, f. 9-30-08, cert. ef. 10-1-08; BCD 24-2008(Temp), f. & cert. ef. 10-6-08 thru 4-1-09; BCD 1-2009, f. 1-30-09, cert. ef. 2-1-09; BCD 8-2009, f. 9-30-09, cert. ef. 10-1-09; BCD 5-2010, f. 5-14-10, cert. ef. 7-1-10; BCD 1-2011, f. 2-15-11, cert. ef. 4-1-11; BCD 10-2011(Temp), f. & cert. ef. 4-15-11 thru 9-30-11; BCD 13-2011, f. 5-13-11, cert.ef. 7-1-11

918-480-0020

One- and Two-Family Dwelling Permit Fees

(1) Effective July 1, 1999, the Building Codes Division fees for administration of the **Oregon Residential Specialty Code** are found in **Table 1-A**. These fees are based on 130 percent of the **Uniform Building Code** and **Uniform Mechanical Code** as published by the International Conference of Building Officials, as authorized in ORS 455.210.

(2) Table 1-A Structural Permit Fees can be found at the end of division 480.

(3) Table 1-A Mechanical Permit Fees can be found at the end of division 480.

[Publications: Publications referenced are available for review at 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 33-2002, f. 12-20-02 cert. ef. 4-1-03; BCD 15-2004, f. 9-10-04, cert. ef. 10-1-04; BCD 13-2011, f. 5-13-11, cert.ef. 7-1-11

918-480-0030

Phased Project and Deferred Submittal Fees

When requested to review and approve plans for phased construction or deferred plan submittals under the **Oregon Residential Specialty Code**, the following fees in addition to the applicable plan review and permit fees apply:

(1) Phased Permits. There is an application fee of \$50 for each separate phase of the project. In addition, the plan review fee is increased in an amount equal to 10 percent of the building permit fee calculated according to OAR 918-480-0020 using the value of the particular phase of the project, not to exceed an additional \$1,500 for each phase.

(2) Deferred Submittals. The fee for processing and reviewing deferred plan submittals is an amount equal to 65 percent of the building permit fee calculated according to OAR 918-480-0020 using the value of the particular deferred portion or portions of the project. This fee is in addition to the project plan review fee based on total project value.

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

Stat. Auth.: ORS 455.020

Stats. Implemented: ORS 455.020

Hist.: BCD 26-2001, f. 12-28-01, cert. ef. 1-1-02; BCD 13-2011, f. 5-13-11, cert.ef. 7-1-11

918-480-0100

Purpose and Scope

(1) The building official may allow an alternate to the minimum requirements of **Oregon Residential Specialty Code** as authorized by ORS 455.610, which may include, but is not limited to, installation of an automatic fire sprinkler system, where it is determined the fire apparatus means of approach to a property or the fire fighting water supply serving a property, does not meet the local standards adopted in accordance with the

applicable fire code and state building code requirements. The rule applies only to dwellings and habitable rooms within accessory structures built under the **Oregon Residential Specialty Code** unless otherwise stated in the land use approvals for accessory structures built under this code.

(2) These rules are not intended to automatically require construction elements that are not otherwise required by the **Oregon Residential Specialty Code**.

(3) A request for an alternate under these rules may be approved only where the property is included in an area:

(a) Where there is an established and recognized provider of fire protection services; and

(b) Where there are local standards adopted in accordance with applicable fire code and state building code requirements identified for fire fighting water supply or fire apparatus access roads that include any or all of the following: public access roads, shared private access roads and private driveways.

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

Stat. Auth.: ORS 455.610

Stats. Implemented: ORS 455.610

Hist.: BCD 20-2002, f. 8-1-02, cert. ef. 10-1-02;

BCD 13-2011, f. 5-13-11, cert.ef. 7-1-11

918-480-0110

Definitions

For the purpose of these rules:

(1) "Fire Apparatus Means of Approach" may include a public access road, a shared private access road or a private driveway.

(2) "Private Driveway" means a private road giving fire apparatus access from a public access road or shared private access road to a building or buildings on a single property.

Stat. Auth.: ORS 455.610

Stats. Implemented: ORS 455.610

Hist.: BCD 20-2002, f. 8-1-02, cert. ef. 10-1-02;

BCD 13-2011, f. 5-13-11, cert.ef. 7-1-11

918-480-0120

Approval of an Alternate Method of Construction

The building official must ensure the following criteria have been met when allowing the use of an approved alternate method of fire protection under the scope of these rules:

(1) The alternate must be at the request of the applicant;

(2) For lots of record created on or after January 1, 2002, the building official must confirm

the fire official having authority has, in accordance with the adopted fire code:

(a) Approved the alternate to adopted fire apparatus access road, private driveway or fire fighting water supply standards during the land use approval process; and

(b) The approved alternate has been recorded on the property deed as a requirement for future construction.

(3) For lots of record created before January 1, 2002, the building official must, prior to authorizing an alternate allowing the development of a parcel that could not otherwise be developed because it cannot meet adopted fire access road, private driveway or fire fighting water supply standards, consult with the fire official having authority to approve an alternate to fire access and water supply standards under the adopted fire code;

(4) Providing the requirements of this rule are met, the local building official is authorized to enforce the conditions of an approved alternate method of construction when it is part of the building construction; and

(5) When the approved alternate is a fire sprinkler system, the minimum standard for installation within one- and two-family dwellings must be the **NFPA 13-D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes** as adopted by reference in the **Oregon Residential Specialty Code**.

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

Stat. Auth.: ORS 455.610

Stats. Implemented: ORS 455.610

Hist.: BCD 20-2002, f. 8-1-02, cert. ef. 10-1-02;

BCD 13-2011, f. 5-13-11, cert.ef. 7-1-11

918-480-0130

Conventional Light Frame Construction

As per ORS 455.628, construction documents designed, prepared and sealed by an Oregon licensed architect or engineer, who has a valid Oregon Inspector Certification, and is also certified in the state of Oregon as one and two family dwelling plans examiners or is certified by the International Code Council as a Residential Building Inspector, are not required to obtain plan review for conventional light frame construction for detached one and two family dwellings. For the purpose of this rule, "Conventional Light Frame Construction" is defined as a type of construction that complies with the requirements under the latest edition of the **Oregon Residential Specialty Code** and subject to the following limitations:

(1) Buildings must be designed such that its vertical and horizontal structural elements are primarily formed by a system of repetitive wood or light gage steel framing members as allowed by the **Oregon Residential Specialty Code**;

(2) Buildings must be subject to the maximum height and story limitations as specified in the **Oregon Residential Specialty Code**;

(3) Bearing wall floor-to-floor heights may not exceed those specified in the **Oregon Residential Specialty Code**;

(4) All design loads, including wind and seismic loading may not be less than those allowed by the **Oregon Residential Specialty Code**;

(5) Site topography and site geotechnical limitations may not exceed those allowed by the **Oregon Residential Specialty Code**; and

(6) Buildings subject to the irregular building limitations as specified in the **Oregon Residential Specialty Code**.

Stat. Auth.: ORS 455.020, 455.030 & 455.628

Stat. Implemented.: ORS 455.628

Hist.: BCD 11-2004, f. 8-13-04, cert. ef. 10-1-04;

BCD 13-2011, f. 5-13-11, cert.ef. 7-1-11

918-480-0140

Certificates of Occupancy- Residential

(1) Prior to occupancy of a new residential dwelling or townhouse the building official must issue a certificate of occupancy in the form and format established by the Division, unless a temporary certificate of occupancy is issued by the building official.

(2) For purposes of this rule, the terms “residential dwelling” and “townhouse” have the same meaning as in Section R202 of the **Oregon Residential Specialty Code**.

(3) Before the certificate of occupancy is issued, the general contractor or owner who was issued the structural permit for construction must provide to the building official the contact information and relevant license information for the general contractor, as well as any electrical contractor, H-VAC contractor and plumbing contractor that performed work on the residential dwelling or townhouse.

(4) A building official may revoke a certificate of occupancy or a temporary certificate of occupancy when the residential dwelling or townhouse is in violation of applicable law that poses a threat to health and safety. The revocation must be in writing and state the basis for the revocation of the certificate of occupancy.

Stat. Auth.: ORS 455.055

Stat. Implemented: ORS 455.055

Hist.: BCD 3-2008, f. 2-21-08, cert. ef. 4-1-08;

BCD 13-2011, f. 5-13-11, cert.ef. 7-1-11

918-480-0150

Low Volume Window Label Program

(1) As used in this rule:

(a) “Exempt fenestration product” means a skylight or solarium that is exempt from the thermal performance standards established in the **Oregon Residential Specialty Code**.

(b) “Manufacturer” has the definition provided in Section NF1111.1 of the **Oregon Residential Specialty Code**.

(c) “Window produced in low volume” has the definition provided in Section NF1111.1 of the **Oregon Residential Specialty Code**.

(2) Manufacturers of windows produced in low volume or exempt fenestration products must participate in a labeling program administered by the Division. Participating manufacturers must:

(a) Print their own labels, subject to standards established in the **Oregon Residential Specialty Code**;

(b) Attach an appropriate label to each window produced in low volume or exempt fenestration product produced for installation in Oregon;

(c) Comply with any other applicable labeling requirements established in Section NF1114 of the **Oregon Residential Specialty Code**; and

(d) Maintain a log in which the attachment of each label is recorded.

(3) A manufacturer participating in the Division’s labeling program must obtain, from the Division, a log for recording the attachment of labels to either windows produced in low volume or exempt fenestration products. A participating manufacturer must record in its log the type of window produced in low volume or exempt fenestration product that was labeled, the label’s production number, and the date the label was attached. A copy of a manufacturer’s labeling program log for the previous year must be sent to the Division by no later than January 31st of each year. The log must also be made available to the Division upon request.

(4) Participating manufacturers may not:

(a) Sell, exchange, or transfer their labels to another manufacturer;

(b) Purchase or obtain labels produced by another manufacturer; or

(c) Produce or use labels in excess of the maximum established by Section NF1114 of the **Oregon Residential Specialty Code**.

Stat. Auth.: ORS 455.525

Stat. Implemented: ORS 455.525

Hist.: BCD 26-2008 (Temp), f. & cert. ef. 11-3-08

thru 5-1-09; BCD 36-2008, f. 12-31-08, cert. ef. 1-1-09; BCD 13-2011, f. 5-13-11, cert.ef. 7-1-11