

CODE LINK

STATE OF OREGON • BUILDING CODES DIVISION

FALL 2005

Legislative update

By Mark Long, administrator



A thriving construction industry means a healthy economy; jobs for contractors, tradespersons, home builders, commercial contractors, and design professionals; and new homes and businesses for our citizens. This session, the legislature passed a number of measures that will benefit Oregon's economy.

For the past few years, the Building Codes Division has been working closely with the construction industry to streamline regulations, provide consistent code requirements across the state; adopt nationally recognized codes and keep Oregon-specific amendments to a minimum; provide better customer service through online permitting, licensing and registration; and ensure more accountability through higher standards for inspectors and licensees and better enforcement tools.

The new legislation brings with it some 35 opportunities for rulemaking during the biennium — opportunities for the division's partners, stakeholders, and customers to work together to improve consistency, accountability, and customer service for the industry by easing unnecessary regulatory burdens; expanding time- and money-saving services like online permitting; and providing building codes administration, oversight, and enforcement to several regions of the state.

- Confirmation of executive appointment 4
- Rules streamline building official and inspector certification..... 5
- E-permitting usage growing..... 8
- Construction claims task force appointed 9
- Plumbing and heating contractors need to know when to get a boiler permit 10
- BCD files permanent rules 12
- Code changes requirements for backflow preventers for carbonators and beverage dispensing equipment14
- Code errata..... 15
- Interpretations and alternate rulings..... 19
- Tri-County code forum Q&A..... 22
- Compliance report 23
- BCD board meeting dates 27
- Tri-County code forum dates..... 27
- Notice of surcharge changes..... 28

Continued on Page 2



The 2005 legislative session was long, but our positive working relationship with the Construction Industry Policy Advisory Committee (CIPAC) and other stakeholders allowed us to achieve positive results for consumers, workers, industry, and local governments. This session, as in most sessions, issues brought to the legislature needed consensus to move forward. That said, it was clear that the legislature also wanted solutions to problems and for the division to proactively respond to stakeholder concerns. CIPAC was asked to review a number of bills and every CIPAC consensus product passed.

The following briefly outlines the significant measures affecting the building industry that passed this session, organized by our goals of providing regulatory streamlining, consistent administration and application of code, improved accountability, and customer service. For more information, check the [division's Web site](#).

Regulatory streamlining

House Bill 2005: Consolidated licensing pilot project

Effective: May 25, 2005

HB 2005 is designed to streamline Oregon's business regulations to stimulate economic growth. It allows BCD to establish a pilot program allowing state agencies to combine license processing, and authorizes DCBS to implement combined license processing projects.

House Bill 2179: Emerging technologies

Effective: January 1, 2006

Before the passage of this bill, approval of products used in construction varied by program area and could take anywhere from several months to several years. HB 2179 allows BCD to approve the use of "emerging technologies" — defined as products of a unique type or products having a unique

scope — in a short period of time. These approvals have limits. First, the department must consult with the chairperson of an affected advisory board before allowing the use of an emerging technology. Second, the scope of the approval only extends to a single site. In making a decision, the department must also consider any appropriate national and international standards.

House Bill 2180: Inspection of elevators

This regulatory streamlining bill allows BCD to prioritize the inspection of elevators by adjusting, through administrative rule, the frequency of inspections for various types of elevators. Prior to the passage of this bill, Oregon law required annual inspections for all types of elevators. Thus, inspections on a 12-inch wheelchair lift occurred as often as inspections on a 12-story elevator.

House Bill 2181: Consistent licensing and enforcement

Another regulatory streamlining bill, HB 2181 allows for consistent administration of licensing and enforcement laws across all BCD program areas, provides for greater flexibility in license application and renewal, and removes unnecessary certification requirements for inspectors.

House Bill 2352: Recreational vehicle insignia of compliance

Effective: March 11, 2005

Oregon laws previously required all recreational vehicles — even used vehicles offered for sale, lease, or rent — to display an insignia of compliance verifying that the vehicle met minimum safety standards. Under this bill, if a used recreational vehicle was registered by ODOT and Motor Vehicles Services, no additional inspections are required.

House Bill 2596: Noncomplex electrical installations

Before the passage of this bill, only supervising electricians could design and lay out electrical installations for customers of their employers. This bill allows BCD to identify license types that may design and layout non-complex electrical installations without the stamp of a registered engineer.

Consistency

House Bill 2303: Specialty code compatibility; electrical product certification

Effective: January 1, 2006

This amended bill addresses two concerns. Oregon law requires “compatibility” between the Low-Rise Residential Dwelling Code, the mechanical specialty code, and the structural specialty code. However, DCBS had no statutory means to ensure compatibility among the codes. Secondly, DCBS authority over electrical products encompassed a wide range of consumer products already regulated by other state and federal entities. With this new law, BCD, after consultation with appropriate boards, may now amend the mechanical and structural specialty codes to be compatible with the Low-Rise Residential Dwelling Code. The bill also clarifies the scope of regulated electrical products to include only those products that require a permit to install.

House Bill 2328: Local regulation of liquid petroleum gas storage

Effective: January 1, 2006

HB 2328 brings consistent statewide regulation of LP tanks by prohibiting local jurisdictions from regulating the siting, installation, maintenance, or removal of LP tanks except in certain circumstances and declaring that the siting of LP tanks is not a land-use decision.

House Bill 2525: Wineries; accessibility options

The adoption of the International Building Code altered the requirements a winery needed to meet under the state building code. This bill defines the term “winery” for the purposes of the state building code and encourages developers of residential housing to provide purchasers with a list of available features that enhance accessibility for persons with disabilities.

Senate Bill 421: Regional building code administration

This bill addresses consistency in administering the state building code, resolving disputes between local jurisdictions and the public, and enforcement and oversight of the state building code by authorizing the division to assign employees to regions to promote the consistent application of code, and provide dispute resolution, oversight, and enforcement of the specialty codes. SB 421 expands the 1 percent surcharge currently collected in the Tri-County region on permit fees and hourly charges to all jurisdictions to defray the costs of implementing the bill.

Accountability

House Bill 2078: Task force on construction claims

HB 2078 creates a nine-member Task Force on Construction Claims consisting of representatives from government, industry, insurance, and the general public. The task force’s primary mission is to study the relationship among construction claims, industry practices, construction defects, consumer protection, and state requirements on the construction industry and report to the legislature in 2007.

Continued on Page 4



House Bill 3016: Fee adoption by local jurisdictions

Under current law, local jurisdictions must notify the division prior to the adoption of local fees. This bill requires local jurisdictions to send the division notice of fee changes at the same time they send notice to their citizens under existing local government financial administration statutes.

House Bill 3273: Disqualification, reissuance of licenses

This bill strengthens the division's enforcement ability by allowing it or an advisory board to disqualify a person from carrying a license if the person was previously assessed a civil penalty or was part of a corporate entity that was penalized. The disqualification of licenses may run up to a maximum of five years.

Customer Service

House Bill 3092: Plumbing and electrical plan review for complex structures

Under this bill, jurisdictions that elect to provide electrical and/or plumbing plan review can only require plan review for "complex" structures. A local jurisdiction cannot require plan review for electrical and plumbing installations not considered "complex." However, a person may voluntarily request plumbing or electrical plan review on a complex structure from an inspecting jurisdiction for a fee.

House Bill 3097: E-government; statewide code administration/enforcement

Oregon law authorized BCD to create an e-permitting program in the tri-county area (Washington, Multnomah, and Clackamas counties) and to identify and investigate the resources necessary for electronic access to building code information and services, to sunset on January 31, 2005. HB 3097 allows the division to continue exploring the availability and resources necessary for e-permitting and to expand the scope of the e-permitting program statewide.

House Bill 3304: Local alternate inspection, plan review and fee methodologies

This bill adds flexibility to existing law by allowing local jurisdictions, including those in the tri-county area, to apply to the division to establish alternative permit and inspection programs. These alternate programs include new approaches to issuing permits, conducting plan reviews, and applying fee methodologies. Existing requirements for tri-county uniformity remain unchanged. ■

Confirmation of executive appointment



**Oregon State Plumbing Board
(ORS 693.115)**

Kathryn Mattimore, Portland

(Fire and casualty underwriter)

Unexpired four-year term

Confirmed 05/18/05

Term: 06/01/05-06/30/08

Succeeds Mary Leverette

Rules streamline building official and inspector certification



Consistency, customer service, accountability. New rules that redefine Oregon inspector certification embody BCD's guiding principles and sets in motion a new process that not only recognizes national standards and certification to help ensure the consistent application of code, but also puts in place higher accountability measures for the state's building officials, inspectors and plans examiners.

"Moving to national standards, adding high-priority training requirements, and requiring all inspectors and plans examiners to enforce state code standards and cite the code citation on violation notices will increase the consistent application of building standards and provide the predictable, consistent service our stakeholders want," said Mark Long, BCD administrator.

Nearly a year ago, BCD and the OBOA began serious discussions about the certification rules. Six months later OBOA returned with proposals that, over the course of the next six months, BCD refined and translated into rule language.

Beginning July 1, while existing Oregon certifications remain valid, those who want to work as building officials or structural plans examiners and inspectors must have an International Code Council certification (based on training and testing focused on the International Building Code, and the International Residential Codes that Oregon has adopted by rule), an Oregon Inspectors Certification (a new requirement and test administered by BCD that examines Oregon-specific requirements), and meet an experience requirement. New accountability measures call for inspectors and plans examiners to enforce building code statutes, rules, and interpretations, cite the code section when writing a citation, and take mandated special-issue training covering new technologies or specific problem areas.

"The newly adopted certification rules in Oregon will have significant and positive impacts on building officials, and the building and mechanical inspectors and plans examiners in Oregon," said Guy Sperb, OBOA president. "It's been a pleasure to work with the division through this process."

Rule highlights

Existing certifications:

Certifications for building officials, inspectors, and plans examiners, now referred to as "Oregon code certifications" issued prior to July 1, 2005, (or those obtained during the phase-in period until January 1, 2006) remain valid; individuals who have them may continue to work and need not take further action.

New requirements of certified individuals:

- **Code enforcement** — Building officials, inspectors, and plans examiners are required to enforce building code statutes, rules, specialty codes, statewide code interpretations, and allow the alternate method rulings.
- **Additional training** — The division may require building officials, inspectors, and plans examiners to take high-priority training on new technology or specific issues.
- **Tracking CE credits** — Building officials, inspectors, and plans examiners must maintain their own records of continuing education, which may be audited by the division at any time.
- **Write it, cite it** — Beginning January 1, 2006, all inspectors and plans examiners issuing corrective notices must cite the applicable codes, rules, or statutes whenever re-inspections are required.

Continued on Page 6

Rules streamline building official and inspector certification



Changes that apply to residential inspectors and plans examiners:

- **Scope of Residential Work** — Persons certified as one- and two-family or residential plans examiners and inspectors may now review plans or conduct inspections for townhouses and row houses, but not apartments.
- To work as a building official or structural/mechanical inspector or plans examiner, an individual must:
 - Obtain an Oregon inspector’s certification
 - Have the appropriate ICC certification for the scope of work
 - Possess two years of construction-related experience and education or its equivalent

Transitional process for building officials:

Between July 1, 2005, and December 31, 2005, persons who want to work as building officials must either:

- Obtain the Oregon building official certification from BCD
- or
- Obtain the Oregon inspector certification (OIC). (To work as a building official individuals must possess the OIC, the legal/management portion of the International Codes Council (ICC) certified building official certification and meet the experience requirements. These prerequisites are verified by the individual’s employer).

After December 31, 2005, applicants must follow the second option – apply for the OIC and obtain ICC certification.

Grace period — Individuals who obtain the OIC may perform the duties of a building official, provided they also obtain the legal/management portion of the ICC certified building official certification within six months of hire.

Employer duties — Building officials are responsible for verifying work experience and national certification before hiring an inspector or plans examiner. They must also maintain continuing education records of inspectors and plans examiners employed by the municipality.

Q&A

I am already certified, but I want to apply for another certification. What do I do?

Additional certifications are treated as a new certification regardless of certifications currently held; therefore, anyone intending to add a (structural) building inspector, mechanical inspector, or plans examiner certification must follow the process outlined above for new applicants. (This does not apply to building officials, electrical inspectors, and plumbing inspectors at this time.)

I am currently certified. Do I need to do anything?

No. Individuals who hold valid Oregon Code Certifications may continue to perform work under current certifications. One- and two-family inspectors and plans examiners may now inspect row houses and town houses in addition to one- and two-family dwellings.

I am currently enrolled in an in-training program. How does this affect my certification?

Upon completion of training, any individual enrolled in an in-training, cross-training, or approved educational program prior to July 1, 2005, may either apply for an Oregon code certification as planned or Oregon inspector certification. Individuals using this avenue must also have the appropriate certification from the International Code Council (ICC) and requisite experience to work as an inspector or plans examiner in Oregon.

Building inspection programs that have a division-approved in-training program may continue the program for trainees who enrolled in the program prior to July 1, 2005.

What are the requirements to work as a building official, inspector, or plans examiner in Oregon?

Every person who performs building official duties, building code inspections, or plan reviews must possess either an Oregon Code Certification as defined below or an Oregon Inspector Certification and the current appropriate International Code Council certification and a minimum of two years of qualifying construction or inspection-related experience and training.

What is an Oregon Code Certification (OCC)?

In general, the term “Oregon Code Certification” refers to all of division-issued certifications, including A-level, B-level, and one- and two-family certifications issued prior to July 1, 2005. The complete list includes building official; fire and life safety plans examiner; A-level structural plans examiner; recreational vehicle inspector certification; manufactured structure construction inspector; park and camp inspector; manufactured structure installation inspector; A-level structural and mechanical inspector; B-level structural plans examiner; B-level structural and mechanical inspector; and one- and two-family dwelling plans examiner; one- and two-family dwelling structural inspector; one- and two-family dwelling electrical inspector; one- and two-family dwelling plumbing inspector; and one- and two-family dwelling mechanical inspector.

If I currently have an Oregon Code Certification, is my certification still valid?

Yes. Current certifications remain valid and no action need be taken. Oregon Code Certifications will no longer be issued for structural/mechanical inspectors and plans examiners except for a limited number of applicants who are in training programs.

What other changes are planned for the certification program?

The division is exploring the opportunity for persons holding an Oregon Code Certification related to residential or commercial structures or both to transition those certifications to a nationally recognized ICC certification.

Beginning October 1, 2005, new applicants for the following Oregon Code Certifications (OCC) must also have an Oregon Inspector Certification (OIC) in order to work in Oregon:

- Electrical inspector
- Plumbing inspector
- Residential electrical inspector
- Residential plumbing inspector
- Manufactured home installation inspector
- Limited plumbing inspector-building sewer
- Park and camp inspector

What is the purpose of an Oregon inspector certification (OIC)?

The OIC demonstrates that a person has passed a division-approved examination that covers Oregon laws relating to state building codes including, but not limited to, architectural barriers, administrative procedures, and Oregon amendments to the specialty codes. ■

E-permitting usage growing



While the first permit was the only permit for a week or so, contractors in the Portland tri-county area are quickly discovering the advantages of using BuildingPermits.Oregon.gov to apply and pay for multiple permits from multiple jurisdictions from one convenient Web site.

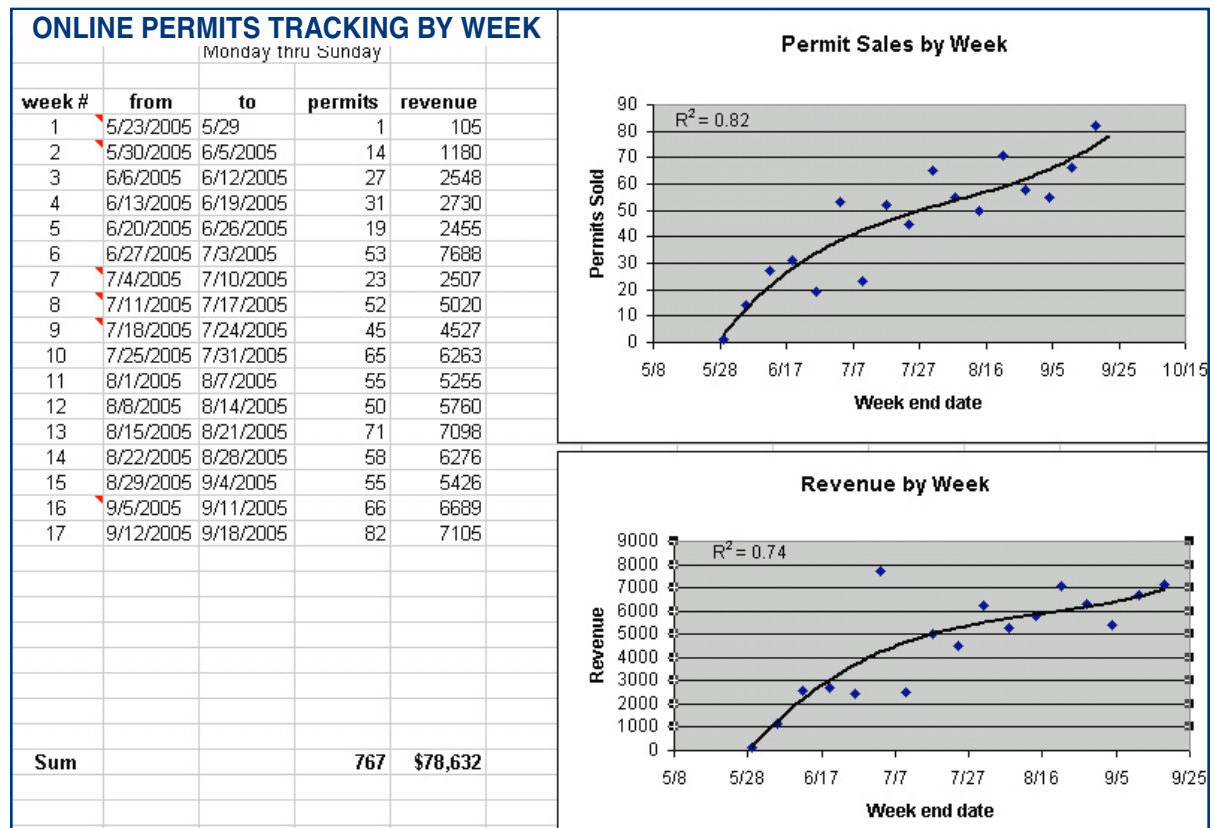
“I love this site,” said Glenn Grossman from Westside Electric. “It’s what the industry has been asking for a long time. E-permitting is so easy, and saves a ton of time.”

BuildingPermits.Oregon.gov usage has increased pretty steadily since the system was unveiled at the end of May. That first partial week it was used to purchase one permit. By the third week of September the system had sold 767 permits with a value of \$78,632.

The greatest volume of permits sold has been for the City of Portland, followed by Washington County.

By far, the bulk of the permits sold have been for electrical work with just a handful for mechanical and plumbing installations. This probably isn’t surprising, given that the system is designed to provide simple, over-the-counter permits for routine jobs where permit issuance doesn’t require face-to-face interaction, and those kinds of electrical installations are especially common. Almost all of the permits sold have been for alteration/addition/replacement (as opposed to new construction), with a heavy majority of those being for one- and two-family dwellings.

Recently passed SB 3097 allows the state to continue the tri-county pilot program and to expand e-permitting statewide. Right now, the system includes just six Portland-area jurisdictions. The goal is to add more tri-county jurisdictions as they are ready to join and then to add other regions of the state. The division is also continuing to work with industry partners to improve awareness of the system and promote its use. ■



Construction claims task force appointed



Nine Oregonians have been appointed to serve on a state task force that will study the relationship between construction liability claims and construction industry practices, construction defects, consumer protection, and state-mandated liability insurance requirements for contractors.

The nine members:

Tom Skaar**Portland**

Pacific Western Homes, Inc., representing single-family dwelling contractors

Steven Malany.....**Gresham**

P & C Construction Company, representing commercial multi-family dwelling contractors

Laura Schauer**Portland**

O'Brien Constructors, LLC, representing commercial structure contractors

Bill Nesmith.....**Salem**

Representing Oregon Department of Energy

David DeHarrport, Beaverton

Four D Construction, representing the state's Residential Structures Board

Jon Fahr **Bend**

Palmer Homes Inc., representing residential construction designers

Elsie Jones.....**Portland**

Jones Kendall Sauer, Inc., representing insurance agents

Jim Vavreck.....**Portland**

Vice president for commercial underwriting, Liberty Northwest Insurance Corporation, representing insurers that offer contractor liability coverage

Eric Grasberger**Portland**

Attorney, Stoel Rives, LLP, representing the public

The task force was mandated by House Bill 2078, which the 2005 Legislature approved in July. Rising construction liability claims, often attributed to new building products and contractor performance issues, have resulted in stiff premium increases for contractor liability insurance in recent years. Contractors complain that coverage is difficult to find and very expensive. Consumers complain that water damage, mold, and other problems require expensive repairs.

The task force's mission is to make recommendations to the 2007 Legislature to reduce the number of liability claims stemming from construction issues while assuring appropriate protection of Oregon consumers and affordable insurance for contractors. Recommendations could include changes to contractor education, quality control, and building code requirements.

To learn more or to sign up for e-mail notification of task force developments, visit the Web site: <http://egov.oregon.gov/DCBS/CCTF/>

The director of the Department of Consumer & Business Services (DCBS) appointed five task force members and the administrator of the Construction Contractors Board (CCB) appointed three. One member is a representative of the Department of Energy.

"The Construction Claims Task Force will bring together the expertise and perspectives we need at the table to address these issues," said DCBS Director Cory Streisinger. "Both industry and consumers will benefit if this group can bring a strong, problem-solving focus to its work and establish a common understanding of the facts."

"The success of the task force is dependent upon its efforts to fully analyze and quantify the problems at hand," CCB Administrator Craig Smith said. "They must develop solutions that result in improving the quality of structures built in Oregon, while maintaining the lowest reasonable cost to consumers and ensuring a healthy business environment by maintaining a regulatory structure that supports and encourages small businesses."

The CCB is a state agency licensing more than 40,000 contractors. Anyone who is paid to repair, improve or build a home must be licensed by the CCB. Consumers can verify a contractor's license at www.ccb.state.or.us or by calling (503) 378-4621. ■

Plumbing and heating contractors need to know when to get a boiler permit



Sometimes laws and regulations can seem overwhelming to contractors, which is understandable, because they have to deal with many state, federal, and local laws.

It can be even more difficult when you are dealing with an installation you have little experience with: You read the laws and still don't know exactly what is expected of you or your business.

This is particularly true for plumbing and heating contractors making water-heater installations and determining the difference between a boiler and a water heater. In reality, all water heaters are boilers. The difference is that certain water heaters are exempt by statute from boiler laws and are properly referred to as "exempt domestic water heaters." One further complication is that it is not uncommon for the domestic water heater to also be used for hydronic heating.

Domestic water heaters, which are exempt from the boiler laws, are regulated under the Oregon Mechanical Specialty Code and require a mechanical permit for installation. If a unit is electric, it will also require an electrical permit and licensed electrician. Mechanical installers are not required to have a specialty trade license and the installing business is required to be registered as a construction contractor with the Oregon Construction Contractors Board. This is the same for commercial, industrial, or residential installations. No license is required to set a boiler in place. Mechanical and electrical permits are issued by the jurisdiction having authority, as are other building construction permits.

Boilers that heat potable water, but that are not exempt domestic water heaters, may be required to have a mechanical permit, electrical permit, plumbing permit, and a boiler permit. The mechanical, electrical, and plumbing permits are issued by the local jurisdiction. The boiler permits are only issued by the Building Codes Division. Mechanical permits cover the installation of the fuel supply piping and the exhaust gas venting, if applicable. Be aware that many local mechanical permits list boiler installation. However, this is not the boiler permit issued by BCD. Obviously, an electric boiler may not require a mechanical permit. Plumbing permits will cover the make-up water connection and backflow device. Electrical permits will cover power and electrical control connections to the electrical system of the building.

An exempt domestic water heater is designed for heating potable water, equipped with an approved pressure-temperature relief valve; it contains only water and does not exceed any of the following:

- 120-gallon capacity
- Water temperature of 210° F
- Pressure of 150 psi
- Heat input of 200,000 BTU per hour

If the water heater exceeds any of these provisions, it is not exempt and *does* require a boiler permit for installation. Only a licensed boiler business may acquire a boiler permit, and the installer is required to have the appropriate license to make the installation. If the

water heater does not exceed any of these provisions, it is exempt from the boiler permit requirement, but it will require a plumbing permit. The installation may also require electrical and mechanical permits. The installer is required to have a plumbing license for the plumbing work and an electrical license when electrical work is performed. No license is required to perform the mechanical work.

Non-exempt domestic water heaters require a boiler permit for installation. However, a licensed journeyman plumber is not required to have a boiler license (when employed by a licensed boiler contractor) to install or replace by non-welded means a potable water domestic water heater not used for space heating, provided it does not exceed any of the following:

- 180-gallon capacity
 - Water temperature of 210° F
 - Pressure of 150 psi
 - Heat input of 750,000 BTU per hour
- Journeyman plumbers may not construct, repair, or alter these vessels without appropriate license and permits. If the installation exceeds the provisions stated above, the installer must have appropriate boiler licenses and a permit to proceed with the installation.

Failure to follow these requirements can lead to civil penalties or longer hold-ups to project completion. If you have questions specific to a planned installation, call the state boiler inspector in your area. For your convenience, our boiler program staff are listed:

Mike Graham..... interim chief inspector
Benton, Lincoln, Linn, and Polk counties
(503) 559-0843, Fax: (503) 378-4101

Clay Rhodes.....assistant chief inspector
Statewide
(503) 803-5553, Fax: (503) 378-4101

Mike Butters.....deputy inspector
Clatsop, Columbia, Tillamook, Yamhill, and Washington counties
(971) 237-2344, Fax: (503) 852-9592

Bob Graham.....deputy inspector
Coos, Curry, Lane, and Douglas counties
(541) 915-4505, Fax: (541) 937-4334

Bob Hostetler.....deputy inspector
North and east Multnomah County
(503) 618-1209, Fax: (503) 618-1209

Jerry Klug.....deputy inspector
Central Oregon, Jackson and Josephine counties
(541) 954-0908, Fax: (541) 475-7418

Tom League.....deputy inspector
Eastern and north central Oregon
(541) 551-2374, Fax: (541) 564-1081

Nick Limin.....deputy inspector
Shop inspections — southwest Multnomah and east Washington counties
(503) 880-6813, Fax: (503) 651-1321

Gene Burton.....deputy inspector
Clackamas, Marion and Southwest Multnomah counties
(503) 559-4604, Fax: (503) 685-9291

Fran Thomas..... permit information
Statewide
(503) 373-7538, Fax: (503) 378-4101 ■

BCD files permanent rules



This summer saw a flurry of rulewriting and rule hearing activity. For more information and to keep up-to-date on the division's rulewriting activities, check the "Public Notices" section of the division's [Web site](#).

[Electrical continuing education and code change hours rule changes](#)

Effective date: August 15

Purpose of the rule(s): OAR 918-283-0005 allows the division to carry over to the next licensing cycle certain code-change credits for certain licensees and eliminates continuing-education requirements for limited electrical contractors.

Current rule does not allow code-change credits to be carried over once licensees renew their licenses. During certain license cycles, it is possible for a licensee to obtain code-change credit for two code-change cycles within the same licensing cycle.

Contact: [Laurie Skillman](#), (503) 373-1288

[Amending Chapter 13 of the 2004 Oregon Structural Specialty Code](#)

Citation: Amends OAR Chapter 918-460-0015, amendments to the Structural Specialty Code

Effective date: July 1, 2005

Purpose of the rule: This rulemaking amends Chapter 13 of the 2004 Oregon Structural Specialty Code (2004 OSSC) to add additional allowances to adjust lighting needs for projects that are of a unique type or scope.

Contact: [Richard Rogers](#), (503) 378-4472

[Oregon Boiler and Pressure Vessel Specialty Code adoption](#)

Citation: Amends OAR 918-225-0240, 918-225-0430, 918-225-0560, and 918-225-0660

Effective date: July 1, 2005

Purpose of the rules: These rules adopt the most current editions of the codes and standards that make up the Oregon Boiler and Pressure Vessel Specialty Code. The boiler code consists of the American Society

of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, the ASME Code for Pressure Piping and the National Board Inspection Code (NBIC).

Adoption of the most current editions of these codes and standards provides improved protection for people and property in Oregon from the hazard of fires and explosions caused by boilers and pressure vessels. These codes and standards are nationally recognized for the construction, installation, alteration, and repair of boilers, pressure vessels, and pressure piping. About every three years, the division reviews the current edition of these codes and standards for adoption in Oregon. The adoption of a state-wide boiler and pressure vessel code helps ensure that construction and inspection standards are predictable and consistent throughout Oregon.

Contact: [Mike D. Graham](#), (503) 373-7499

[Statewide code interpretation, alternate-method rulings, and code appeals](#)

Citations: Adopts rules in OAR Chapter 918, Division 8 and repeals 918-251-0030, 918-251-0040, 918-308-0110, 918-400-0230, 918-690-0340 and 918-690-0350

Effective date: July 1, 2005

Purpose of the rules: This rulemaking establishes a process for uniform and consistent statewide code interpretations, alternate-method rulings, and specialty-code appeals that are applicable in all BCD program areas, except the Boiler Program. This rulemaking clarifies existing requirements for division-issued code interpretations and alternate-method rulings and establishes processes and procedures for any person aggrieved by the decision of a municipal building-inspection program regarding the application of the state building code.

Contact: [Twyla J. Knowles](#), (503) 378-5217

[Licensing for third-party specialty-code inspectors or plan reviewers](#)

Citation: Amends Chapter 918, division 090 rules.

Effective date: July 1, 2005

Purpose of the rule: This rulemaking clarifies the licensing requirements for licensed specialty code inspectors or plan reviewers and simplifies the application process by consolidating all the license requirements into one process. Licensed specialty-code inspectors' and plan reviewers' scope of work is determined by the type of certification and the amount of verified experience documented on the license application.

Contact: Richard Rogers, (503) 378-4472

[Building official, inspector and plans examiner certification requirements](#)

Citation: This rulemaking makes a number of changes to OAR Chapter 918, Division 20, Division 98, Division 281, and Division 695.

Effective date: July 1, 2005

Purpose of the rule: These rules implement a new certification system for building officials, plans examiners and certain inspectors. While the rules do not do not change the status of any individual currently certified as a building official, plans examiner, or inspector, the new system requires new applicants to obtain an Oregon Inspector Certification (OIC). To work as building officials, plans examiners and certain inspectors, individuals must possess an OIC, have at least two years of construction-related education or experience (or combination) and a related International Codes Council (ICC) certification.

Contact: Richard Rogers, (503) 378-4472

[Eliminating manufactured-dwelling-industry-training hitch fee](#)

Effective date: July 1

Citation: Amends OAR Chapter 918-500-0100, general manufacturer, dealer, and license fee rules.

Purpose of the rule: This rulemaking eliminates the manufactured-dwelling-industry-training hitch fee from rule.

Contact: Albert Endres, (503) 378-5975

[Amending requirements for Limited Journeyman Stage Electrician license](#)

Effective date: June 15, 2005

Citation: Amends OAR 918-282-0230

Purpose of the rule: This rule reduces the minimum number of electrical-related training hours for a limited journeyman stage electrician license and allows individuals enrolled in an approved training program for limited journeyman stage electrician to apply for and take the examination for limited journeyman stage electrician.

Contact: BCD.ElectricalLicense@state.or.us, or (503) 378-3115

[Class B Limited Energy Technician licensing requirements](#)

Effective date: June 10, 2005, to December 6, 2005

Citation: Temporarily amends OAR 918-282-0365 licensing requirements for Class B Limited Energy Technicians.

Purpose of the rules: This rule clarifies licensing requirements and aligns the work processes and minimum hours in the rules with the apprenticeship program. These changes eliminate confusion-caused delays in processing equivalent-experience applications. Currently, some license applicants are not allowed to take the Class B licensing examination despite having sufficient hours of lawful experience.

Contact: Lindsey Nunes, (503) 378-4162 ■

Code changes requirements for backflow preventers for carbonators and beverage dispensing equipment



With the adoption of the 2005 Oregon Plumbing Specialty Code came a code change regarding the appropriate backflow protection for the potable water supply connection to carbonators. Past code provisions permitted only connection with a listed reduced-pressure-principle backflow preventer. The new code language is model Uniform Plumbing Code text without Oregon amendments. Under revised Section 603.4.13, either an airgap or a vented backflow preventer is acceptable. The code allows the backflow preventer to be installed within the carbonated beverage dispenser and does not require a separate external backflow device. Carbonated beverage dispensers are required to bear a label certifying that the internal backflow device is provided and has been tested to the approved standard. If such a label is not present or an airgap is not incorporated into the dispenser, an external device is required on the water supply connection to the carbonated beverage dispenser. Glass fillers, espresso and non-carbonated beverage dispensers are not required to have additional backflow protection when connected to the potable water supply. The airgap at the outlet is considered adequate protection.

Approved backflow preventers for carbonated beverage dispensers must meet the ASSE 1022 or 1032 standard. The plumbing board has approved both vented and unvented beverage dispensing backflow devices for beverage dispensing equipment. The ASSE 1032 standard is for non-vented backflow devices and is listed in Table 14-1 of the

plumbing code. The plumbing board approved in August the ASSE 1022 standard for vented backflow devices for carbonated beverage dispensers (post-mix type). The backflow preventers have inlet and outlet connections of ¼-inch, ⅜-inch and ½-inch nominal pipe size. The installation instructions with the device provide venting recommendations to the installer. Copper tubing is not to be used downstream of the device.

Why do we require backflow protection for a food item? Post-mix carbonators take in potable water and mix it with carbon dioxide (CO²) under pressure. Water can absorb a large volume of CO², which is what makes the fizz in the soft drink. This fizzy water is then mixed (post-mix) with syrup to produce “soda” or “pop,” depending on where you were raised. Because making carbonated water involves increased pressure, there is a potential for backpressure into the drinking water system. If the pressure is not maintained in the carbonator, the water will not absorb the CO² and the drink will be flat. Therefore, the backflow device both prevents backpressure and makes carbonated water.

The danger to drinking water is that carbonated water is acidic and can cause some piping (such as copper) to leach metal into the water. Fortunately, ingestion of large amounts of copper is not life threatening. However, it can cause acute gastrointestinal distress, vomiting, and diarrhea. Because of this, approved backflow devices are made of stainless steel, and copper piping is not permitted downstream of the device. ■

Code errata



To keep the building community up-to-date on code issues affecting projects and inspections, the division publishes code amendments and errata to ensure that the latest code information is available. This information can be found in *CodeLink* and on the division's Web site. Bookmark or subscribe to code program pages on the Web, <http://www.bcd.oregon.gov/codeprograms.html>.

2005 Oregon Residential Specialty Code Errata (As of 08/01/05)

Contact: Micheal D. Ewert
Residential Code Specialist
(503) 373-7529
mike.d.ewert@state.or.us

Strike through denotes deleted language.
Underline denotes added language.

1. Make the following corrections to Section R301.2.2.4.1 (page 3-13) as follows:

R301.2.2.2.4.1 Height limitations. Wood framed buildings shall be limited to three stories above grade or the limits given in Table R602.10.3(1) or Table R602.10.3(2). Cold-formed steel framed buildings shall be limited to two stories above grade in accordance with COFS/PM. Mezzanines as defined in Section R202 shall not be considered as stories.

2. Make the following corrections to Table R301.5 (page 3-14) as follows:

TABLE R301.5
MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS
(In pounds per square foot)

USE	LIVE LOAD
Attics with storage ^b	20
Attics without storage	10
Decks ^c	40
Exterior balconies	60
Fire escapes	40
Guardrails and handrails ^d	200
Guardrails in-fill components ^f	200 <u>50</u>
Passenger vehicle garages ^a	50 ^a
Dwelling units-	40
Stairs	40 ^e

3. Make the following corrections to Section RR323.1 (page 3-29) as follows:

R323.1 General. Buildings and structures constructed in flood hazard areas (including A or V Zones) as identified by the local jurisdiction shall be designed and constructed in accordance with the provisions contained in this section. For the purposes of Section R323, the required elevation of construction elements shall be a minimum of 1 foot (305 mm) above the design flood elevation unless increased by the local municipality under the authority of National Flood Insurance Program incorporated in 423 U.S.C. 40001-4128.

Exception: All buildings and structures in identified floodways as established identified by the local jurisdiction shall be designed and constructed as stipulated in the *Oregon Structural Specialty Code* or equivalent design methods based on nationally recognized standards.

4. Make the following corrections to Section R323.1.8 (page 3-30) as follows:

R323.1.8 Manufactured housing. New or replacement manufactured housing shall be elevated in accordance with ~~Section R323.2 and the anchor and tie-down requirements of Sections 3-2.4 AE604 and AE605~~ of the Oregon Manufactured Dwelling and Park Specialty Code ~~Appendix E shall apply~~. The foundation and anchorage of manufactured housing to be located in identified flood ways as established by the local jurisdiction in ~~Table R301.2(1)~~ shall be designed and constructed in accordance with the applicable provisions in Section 3-2.4.2 of the Oregon Manufactured Dwelling and Park Specialty Code. *International Building Code*.

Continued on Page 16



5. Make the following corrections to Section R502.3.1 & .2 (page 5-1) as follows:

R502.3.1 ~~Sleeping areas and~~ Attic joists. Table R502.3.1(1) shall be utilized to determine the maximum allowable span of floor joists that support ~~sleeping areas and~~ attics that are accessed by means of a fixed stairway provided that the design live load does not exceed 30 psf (1.44 kN/m²) and the design dead load does not exceed 10 psf (0.48 kN/m²). The allowable span of ceiling joists that support attics utilized for limited storage or no storage shall be determined in accordance with Section R802.4.

R502.3.2 Other floor joists. Table R502.3.1(2) shall be utilized to determine the maximum allowable span of floor joists that support all areas of the building, other than ~~sleeping and~~ attics, provided that the design live load does not exceed 40 psf (1.92 kN/m²) and the design dead load does not exceed 10 psf (0.48 kN/m²).

6. Make the following corrections to Table R503.2.1.1(1) (page 5-13) as follows:

Table R503.2.1.1(1)						
Span	Minimum nominal panel thickness (inches)	Maximum span (inches) ^d		Load (pounds per square foot, at maximum span)		Maximum span (inches)
		With edge support	Without edge support	Total load	Live load	
Sheathing ^e		Roof ^f				Subfloor ^j
48/24	²³ / ₃₂ , ³ / ₄₈ ³ / ₄	48	36	45	35	24

7. Make corrections to the heading of Table R602.3.1 (page 6-9) as follows:

TABLE R602.3.1 – continued
MAXIMUM ALLOWABLE LENGTH OF WOOD WALL STUDS EXPOSED TO WIND SPEEDS OF ~~110~~ 100 MPH OR LESS IN SEISMIC DESIGN CATEGORIES A, B, C, AND D₁ AND D₂

8. Make corrections to Section R602.10.1.1 (page 6-13), Exception item 1 as follows:

R602.10.1.1 Spacing. Spacing of braced wall lines in structures located in Seismic Design Categories D₁ and D₂ shall not exceed 35 feet (10,668 mm) on center in both the longitudinal and transverse directions in each story.

Exception: Spacing of braced wall lines in one or two story buildings located in Seismic Design Category D₁ and D₂, not exceeding 50 feet shall be permitted where:

1. The wall bracing provide equals or exceeds the amount of bracing required by Table R602.10.3(1) or Table R602.10.3(2) multiplied by a factor equal to the braced wall line spacing divided by 35 feet, and
2. The length-to-width ratio for the floor/wall diaphragm does not exceed 3:1.

9. Make corrections to Table R602.10.3(2) (page 6-15), footnotes “g” and “h.” The table referenced in these two footnotes should read; “Table R602.10.3(1)”

10. Make corrections to Section R602.10.2, last paragraph (page 6-16) as follows:

R602.10.2 Cripple wall bracing
 In Seismic Design Category D₂, exterior framed walls supporting three stories are not permitted. Cripple walls shall be braced in accordance with

Tables R602.10.3.(1) or R602.10.3(2).

11. Make corrections to R602.10.5 (page 6-16) as follows:

“... edges nailed. Wood structural panel sheathing at corners shall be installed in accordance with Figure R602.10.5. The bracing amounts in Table R602.10.3(1) for Method 3 shall be permitted to be multiplied by a factor of 0.9 for walls with a maximum opening height that does not exceed 85 percent of the wall height or a factor of 0.8 for walls with a maximum ...”

12. Make corrections to R602.10.7 (page 6-19) as follows:

R602.10.7 Panel joints. All vertical joints of panel sheathing shall occur over studs. Horizontal joints in braced wall panels shall occur over blocking of a minimum of 1½ inch (38 mm) thickness.

Exception: Blocking is not required behind horizontal joints in Seismic Design Categories A and B and detached dwellings in Seismic Design Category C when constructed in accordance with R602.10.3, Braced-wall-panel construction method 3 and Table R602.10.3(1), method 3, or where permitted by the manufacturer's installation requirements for the specific sheathing material.

13. Change R602.10.11.2 (page 6-20) to read as follows: (The whole section has been added to help clarify)

*R602.10.11.2 Three or more horizontally attached units. **Braced panels that are not located at the end of a braced wall line shall comply with the following provisions:***

1. *In walls sheathed in accordance with table R602.10.3(2), The end of the braced wall panel closest to the corner shall have a tie-down device fastened to the stud at the edge of the braced wall panel closest to the corner and to the foundation or an equivalent cross section of stud in the wall below. in the first of a two-story building or second of a three-story building, the tie-down device shall be capable of providing an uplift allowable design value of at least 1,800 pounds (816.5 kg). In the first of a three-story building, the tie-down device shall be capable of providing an uplift allowable design value of at least 3,000 pounds (1360.8 kg). The tie-down device shall be installed in accordance with the manufacturer's recommendations.*

The provisions in this second paragraph, and the exception (shown underlined) were intended to apply to both items 1 and 2, but was inadvertently added to item 2 during printing.)

2. In walls sheathed in accordance with Table R602.10.3(1), the end of each side of

the braced panel closest to the corner shall have a tie-down device fastened to each end stud and to the foundation or an equivalent cross section of stud in the wall below. In the first of a two-story building or second of a three-story building, the tie-down device shall be capable of providing an uplift allowable design value of at least 1,800 pounds (816.5 kg). In the first of a three-story building, the tie-down device shall be capable of providing an uplift allowable design value of at least 3,000 pounds (1360.8 kg). The tie-down device shall be installed in accordance with the manufacturer's recommendations.

No tie-down device is required for a one-story building, the top of a two or top of a three story building.

Exception: The required uplift capacities for tie-down devices may be reduced by 25% for braced panels installed within Seismic Design Category C except in areas exposed to Columbia River Gorge as per Figure R301.2(4).

14. Make the following corrections to Section R602.11.1 (page 6-20) to read as follows:

R602.11.1 Wall anchorage. Braced wall line sills shall be anchored to concrete or masonry foundations in accordance with Sections **R403.1.6** **R403.1.8** and R602.11. For buildings located in Seismic Design Categories D₁ and D₂, plate washers, a minimum of 3/16 inch by 2 inches by 2 inches (6.4 mm by 51 mm by 51 mm) or 2¼ inches in diameter in size, shall be provided between the foundation sill plate and the nut.

Exception: Detached One-and Two-family dwellings in Seismic Design Category ~~D~~ D₁.

15. Make the following corrections to Table R703.4 (page 7-6), footnote j as follows:

j. Three-eighths-inch plywood shall not be applied directly to studs spaced greater than 16 inches on center when long dimension is parallel to studs. One-half-inch plywood shall not ~~may~~ be applied directly to studs spaced greater than 24 inches on center. The stud spacing shall not exceed the panel span rating provided by the

Continued on Page 18



manufacturer unless the panels are installed with the face grain perpendicular to studs or over sheathing approved for that stud spacing.

16. Section G2415.14.1 (page 24-24) should read;

G2415.14.1 Limitations. Plastic pipe shall be installed outside underground only. Plastic pipe shall not be used within or under any building or **slab** building **slab** or be operated at ...”.

17. Make the following corrections to Appendix G (page G-1);

AG103.1 In-ground pools. ~~Not adopted by the State of Oregon. In-ground pools shall be designed and constructed in accordance with ANSI/NSPI-5 as listed in Section AG107.1.~~

18. Make corrections to Section AN109.4.1, in Appendix N (page N-17) as follows:

AN109.4.1 Local adoption. The provisions of **AN109.3 AN109.4.2 or AN109.4.3** apply only when specifically adopted by the local authority having jurisdiction.

19. **Appendix K** (page K-1) is adopted as part of this code, but was inadvertently left out of the printing of the code. (A printable copy of Appendix K is included.)

APPENDIX K SOUND TRANSMISSION

SECTION AK101

GENERAL

AK101.1 General. Wall and floor-ceiling assemblies separating dwelling units shall provide airborne sound insulation for walls, and both airborne and impact sound insulation for floor-ceiling assemblies.

SECTION AK102

AIRBORNE SOUND

AK102.1 General. Airborne sound insulation for wall and floor-ceiling assemblies shall meet a Sound Transmission Class (STC) rating of 45 when tested in accordance with ASTM E 90.

SECTION AK103

STRUCTURAL-BORNE SOUND

AK103.1 General. Floor/ceiling assemblies between dwelling units or between a dwelling unit and a public or service area within a structure shall have an Impact Insulation Class (IIC) rating of not less than 45 when tested in accordance with ASTM E 492.

SECTION AK104

REFERENCED STANDARDS

ASTM E90-99 Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements... AK102

ASTM E 492-90 (1996)e Specification for Laboratory Measurement of Impact Sound Transmission through Floor-ceiling Assemblies Using the Tapping Machine...AK103

International Code Council issues errata for the 2003 IBC

There are significant differences among printings of the IBC. For example, section 406.2.7 (parking garages - mixed use) of the third printing cross referenced to section 302.3.2 which would indicate that parking garages must always be separated from other occupancies. The correct reference is to 302.3, which still provides the designer with the options for compliance in dealing with mixed occupancies.

ICC issued errata for the 2003 IBC can be found at http://www.iccsafe.org/cs/codes/errata/2003ibc_erat5.pdf. Interested parties with questions about the ICC issued errata should contact the ICC directly. ■

Interpretations and alternate rulings



To further the consistent application of code statewide, all local jurisdictions must enforce division-issued statewide code interpretations and allow the use of alternate method rulings consistent with the original scope of the ruling.

Electrical

BCD Statewide Interpretation

Program: Electrical Program
Subject: Temporary Services
Source: M & W Electric
References: 2005 Oregon Electrical Specialty Code
Date of issue: July 1, 2005
Prepared by: John Powell, Chief Electrical Inspector

Question

Is it required to install ground-fault circuit interrupters (GFCIs) as part of a temporary power service for use on construction sites or for temporary demonstrations? Are “weatherproof covers” required?

Analysis

The purpose of the ground-fault circuit interrupters is to prevent a person from receiving an electrical shock due to an electrical short or excessive moisture. The GFCIs are designed to operate at a fault of 4-6 milliamps or greater. OSHA and the National Electrical Code require the use of GFCI protection for personnel at all construction sites.

Determination

Article 590.6 of the 2005 National Electrical Code requires the use of GFCI protection as part of the temporary service. The GFCI protection can be part of the temporary service through the use of GFCI breakers or receptacles. However, the use of GFCI breakers or receptacles is not mandatory if other GFCI devices are being used. Cord sets or other devices that utilize incorporated, certified

ground-fault circuit interrupters are permitted in place of devices used in the temporary service. A request to energize a temporary service cannot be denied due to the lack of GFCI devices as part of the temporary service. An inspector can request a temporary service be disconnected and/or place a phone call to OSHA to ensure compliance with Article 590.6. Additionally, the use of “weatherproof covers” is required by Article 406.8 of the 2005 National Electrical Code.

Alternate Method Ruling, No. 05-03e

August 8, 2005

Underground Splicing of Equipment Grounding Conductors for Traffic Signal Installations

Petitioner: Bill Coburn, E C Company

Applicable Specialty Code: 2005 OESC
(NEC § 110.14)

Proposed material, design or method

Connecting several equipment grounding conductors used in traffic signal and street lighting under one connector or lug.

Requested alternate method

Use an appropriately sized copper butt splice connector crimped with an approved hydraulic crimping tool.

Petitioner’s description of facts and circumstances

Current methods utilize either exothermic welding processes or the use of a split bolt. Exothermic welding in various weather situations with multiple conductors is difficult and expensive. The use of split bolts to splice conductors will work provided the split bolt is held by a vice and a large wrench is used to sufficiently torque the fitting. In the field, common practice is to use two wrenches or pliers; frequently the split bolt is not tight enough to prevent loose connections.

Continued on Page 20



Division ruling

This method applies only to copper-equipment grounding conductors used for traffic signal and street lighting. A butt splice connector rated for copper only use shall be used. The wire insulation shall be stripped to the proper length and shall extend the entire length of the connector. Two crimps shall be made equidistant from the ends of the connector using a listed hydraulic crimping tool. The inspector shall verify the effectiveness of the crimp visually and by mechanically testing the crimped wire, looking for loose connections.

Mechanical

Statewide Interpretation, No. C410 (G2421)

Program: Oregon Mechanical Specialty Code (Oregon Residential Specialty Code)

Subject: Venting of Fuel-Gas Regulators

Code Section: Sections C410.3 and C403 (G2421 and G2414)

Code Edition: 2004 Edition of the Oregon Mechanical Specialty Code. (Also applies to the 2005 Oregon Residential Specialty Code)

Date of issue: April 12, 2005

Question

What materials are allowed to be used for the venting of a line-pressure regulator? Is the use of PVC venting material allowed?

Answer

Only materials listed and approved for use in a fuel-gas system, as listed in Section C403 (G2414), can be used for fuel-gas piping, which includes the venting of line-pressure regulators. Section C403.5 (G2414.6) states plastic pipe, (plastic) tubing and (plastic) fittings can only be used outside underground and shall be listed and labeled to ASTM D2513. PVC would not be approved for the above ground venting of a line-pressure regulator in a fuel-gas system.

Residential

Statewide Interpretation, No. R101.2

Program: Oregon Residential Specialty Code

Subject: Smoke alarms in residential aircraft hangar.

Code Section: R101.2 and R313.1.

Code Edition: 2005 Edition of the Oregon Residential Specialty Code.

Date of issue: May 18, 2005

Question

To which code are residential aircraft hangars regulated, specifically pertaining to smoke alarms, the Oregon Residential Specialty Code or the Oregon Structural Specialty Code?

Analysis

The Oregon Residential Specialty Code (ORSC), Section R101.2 (1) (1.1) states “The requirements of Chapter 1 through Chapter 42 and Appendices A through S as adopted in Section R102.5 apply to: Detached one- and two-family dwellings and townhouses classified as Group R-3 and Group U Occupancies as defined in the Oregon Structural Specialty Code; and ...”.

The Oregon Structural Specialty Code (OSSC) defines a residential aircraft hangar: “An accessory building less than 2,000 square feet and 20 feet in height, constructed on a one- or two-family residential property where aircraft are stored. Such use will be considered as a residential accessory use incidental to a dwelling.”

The OSSC classifies a residential aircraft hangar as a Group U Occupancy.

The ORSC, Section R313.1 states in part: “... Required smoke alarms shall not be located within kitchens or **garages**, or other spaces where the temperature can fall below 40°F.”

Conclusion

A residential aircraft hangar would be considered an accessory or incidental structure



to a residential home, similar to any other U occupancy used to store cars, boats, and motor homes, and is therefore required to be constructed in accordance with the ORSC. Smoke alarms must be installed to the minimum specifications outlined in Section R313.1 of the ORSC. A residential aircraft hangar, as defined by the OSSC, is limited to 2,000 square feet in area and 20 feet in height. The hangar must be used for storage of private vehicles (aircraft) only; refueling, maintenance, or repair of aircraft (or motor vehicles) is prohibited.

**Statewide Interpretation, No. R105.2(20)
Oregon Dwelling specialty Code**

Subject: Tensioned Membrane Covered
Accessory Structures

Code Section: R105.2(20).

Code Edition: 2005 Edition of the Oregon
Residential Specialty Code.

Date of issue: July 15, 2005

Question

Does the exemption in Section R105.2(20) for rigid frame structures of 500 square feet or less, covered with a tensioned membrane, also apply to rigid framed structures covered with a thin metal membrane?

Discussion

One- or two-family dwellings three stories in height (or less) and their accessory buildings, are regulated under the scoping provisions of the Oregon Residential Specialty Code.

Section R105.2(20) exempts from permits “Framed covered accessory buildings not more than 500 square feet in area, one story in height or closer than 3 feet to the property line, where the structure is composed of a rigid framework that supports a fabric membrane.”

Answer

A metal covered structure 200 sq. ft. or less in area is exempt from a structural permit under Section R105.2(1), but larger metal covered structures are not exempt from permits. Section R105.2(20) exempts structures with a fabric covering only.

Plumbing

Plumbing Code Interpretation

Subject: Water Heater Seismic Strapping

Code Section: Oregon Plumbing Specialty Code (OPSC), Section 507.2 & Oregon Residential Specialty Code (ORSC), Section P2810.5 & Figure R301.2(2).

Code Edition: 2005 Edition

Date of issue: August 12, 2005

Question

Section 507.2(OPSC) and P2810.5(ORSC) requires seismic strapping for water heaters in various seismic zones. Before these code provisions were adopted, an interpretive ruling (No. 93-94) defined strapping materials and anchoring components. Where are these new seismic zones located and are the strapping materials and anchoring components addressed in the former interpretive ruling 93-94 still acceptable?

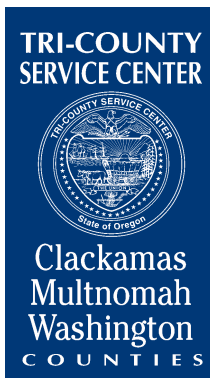
Answer

The water heater seismic strapping requirements and applicable seismic zones have changed with the adoption of the new codes. Now all water heaters under the 2005 Oregon Plumbing Specialty Code statewide must be strapped. Water heaters installed in buildings within the scope of the 2005 Oregon Residential Specialty Code are required to be strapped in all counties in the state except the following: Wasco, Jefferson, Deschutes, Crook, Sherman, Wheeler, Gilliam, Marrow, Grant, Harney, Umatilla, Union, Baker, Malheur, and Wallowa. A map of the seismic zones is published in the 2005 Oregon Residential Specialty Code, Figure R301.2(2), Page 3-4.

All water heaters required to be strapped must have at least two straps. One within the upper one-third and one within the lower one-third of the water heater’s vertical dimensions. Plumber’s tape or equivalent strapping materials are acceptable. Connectors must have washers

Continued on Page 22

Tri-County code forum Q&A



Tri-County code forums give Portland metro-area contractors, architects, engineers, inspectors and building officials the opportunity to discuss code issues. Regional code applications and acceptable installation and inspection standards for the tri-county area are discussed and agreed upon through the forums, which are led by local industry and code experts. Tri-County building officials have agreed to use the code panel's determinations for inspection standards. Those working in a jurisdiction outside of the tri-county region should contact the local building official for inspection standards. You can find more information about Tri-county code forums on the division's Web site, <http://www.bcd.oregon.gov/programs/tricounty/codeforums.html>

They're FREE!

To receive the tri-county newsletters by mail, call the Tri-County Service Center, (503) 872-6731, to order your subscription.



Aug-Oct 2005



Sept-Nov 2005



Sept-Nov 2005



Sept-Nov 2005

Interpretations and alternate rulings, continued

to ensure the connector does not pull through the strapping. The following connectors are acceptable: #12 wood screws with 1.5-inch penetration at each end and ¼-inch diameter concrete anchors of 1.5-inch minimum length.

Subject: Water Hammer Devices

Code Section: Oregon Plumbing Specialty Code (OPSC), Section 609.10 & Oregon Residential Specialty Code (ORSC), Section P2909.10.

Code Edition: 2005 Edition

Date of issue: August 12, 2005

Question

Section 609.10 OPSC and P2909.10 ORSC requires devices to absorb the hammer caused by high pressures resulting from the quick closing of quick-acting valves. What are quick-acting valves and where are these devices required by the code?

Answer

“Quick-acting valves” as used in Section 609.10 OPSC and P2909.10 ORSC means a quick-closing type of solenoid valve, which is an integral part of the water-distribution piping system of the building or a flushometer valve. These types of valves require a pressure absorbing device or air chamber to be installed in an accessible location to protect the piping system from high pressure spikes caused by the quick-closing action of the valve.

As used in the code, a “quick-acting valve,” does not include a solenoid valve which is a part of an appliance or external water-piping attachments such as used in a clothes washer, dishwasher, lawn irrigation, or ice maker. A “quick-acting valve” as used in the code does not include a singlehandled faucet, ball valve, quarter-turn valve, hand shower, kitchen faucet sprayer, or garden hose attachment. ■

Compliance report

The Board of Boiler Rules found the following violations of the Oregon Boiler Safety Laws in June 2005:

CITY	NAME	VIOLATION	PENALTY
Albany	Richard A. Robb Pacific Northern Industrial, Inc.	Employed individual without proper certification to make installation (2 violations), failure to notify inspector prior to beginning of work, installation did not meet minimum safety standards, no boiler/pressure vessel installation permit	\$6,000
Boise, ID	Craig A. Lacy, Lacy Mechanical, Inc.	Employed individual without proper certification to make installation, no boiler/pressure vessel installation permit (5 violations)	\$6,000
Boise, ID	Brian J. Watson	No boiler/pressure vessel individual certification	\$1,000
Cottage Grove	Ricky Eversole	No boiler/pressure vessel individual certification	\$1,000
Eugene	Randall ("Bo") L. Gaskill Gaskill Investments, Inc.	No boiler/pressure vessel business license, no boiler/pressure vessel installation permit	\$2,000
Portland	William D. Harmon Harman Comfort	No boiler/pressure vessel business license, no boiler/pressure vessel installation permit	\$5,000
Portland	Kimberley Denney Air Liquid America L.P., a Delaware Limited Partnership	No boiler/pressure vessel business license, no boiler/pressure vessel installation permit (3 violations)	\$9,000
Springfield	Tim P. Nelson	Welding done without supervision of appropriately qualified certified person	\$1,000
Tualatin	Art Sacher Arrow Mechanical Contractors, Inc.	Employed individual without proper certification to make installation, no boiler/pressure vessel business license, no boiler/pressure vessel installation permit (3 violations)	\$5,000

The Plumbing Board found the following violations of the Oregon Plumbing Specialty Codes in June 2005:

CITY	NAME	VIOLATION	PENALTY
Battle Ground, WA	William Goldsworth ColonialNorthwest Incorporated	No plumbing business certificate of registration	\$3,000

Camas, WA	Del Ray H. Olson Del Olson Construction Co.	Allowing unlicensed individuals to make plumbing installations, no plumbing business certificate of registration	\$2,000
Central Point	Leonard Hosey	No plumbing business certificate of registration, no plumbing journeyman certificate of competency	\$2,000
Hillsboro	Thomas A. Larkin PMSI, LLC	Allowing unlicensed individuals to make plumbing installations	\$1,000
Lincoln City	Paul D. Golbuff Goldy's	No plumbing business certificate of registration, no plumbing journeyman certificate of competency	\$2,000
Newberg	Tim Raugust Raugust Trucking & Excavating, Inc.	No plumbing business certificate of registration	\$1,000
Portland	Justin Merrill	No plumbing journeyman certificate of competency	\$1,000
Portland	Jim McDonald S.A. Healy Company/Impregilo Spa Incorporated	Allowing unlicensed individuals to make plumbing installations, no plumbing permit	\$1,000
The Dalles	Martin James Donnell	No plumbing journeyman certificate of competency	\$1,000

The director of the Department of Consumer and Business Services found the following violations of the Oregon Specialty Codes in June 2005:

CITY	NAME	VIOLATION	PENALTY
Albany	Richard A. Robb Pacific Northern Industrial, Inc.	Violated a final order	\$0
Camas, WA	Del Ray H. Olson Del Olson Construction Co.	No permit	\$1,000
Portland	William D. Harmon Harmon Comfort	Violated a final order	\$0
Portland	Kimberley Denney Air Liquid America L.P., a Delaware Limited Partnership	Violated a final order	\$0
Sandy	William Trimble	No manufactured dwelling installation permit (4 violations)	\$4,000

The Electrical and Elevator Board found the following violations of the Oregon Electrical Safety Laws in August 2005:

CITY	NAME	VIOLATION	PENALTY
Anaheim, CA	Sam Buckley	No supervising or journeyman license	\$1,000

Anaheim, CA	Bradley N. Howard Source Refrigeration & HVAC, Inc.	Allowed unlicensed individual to make electrical installation	\$6,000
Auburn, WA	Todd E. Cooper	No supervising or journeyman license	\$1,000
Beaverton	Kyle Kozak Kozak Enterprises, Inc.		\$1,000
Cottage Grove	Marc P. Jacob Sr.	No supervising or journeyman license	\$1,000
Cottage Grove	Marc P. Jacob Sr. USA Heating & Air Conditioning, Inc.	Allowed unlicensed individual to make electrical installation, no electrical contractor license, no electrical permit	\$3,000
Eugene	Michael J. Gomez	No supervising or journeyman license	\$1,000
Forest Grove	John Allen Rigsby	No electrical contractor license, no electrical permit, no supervising or journeyman license	\$3,000
Keizer	Tyson O. Ferrell	No electrical permit, worked outside the scope of the journeyman license by working without a general supervising electrician, provided false information on a permit application	\$3,000
Portland	John M. Nicol	No supervising or journeyman license	\$1,000
Salem	Bari Swartz	As supervising electrician, failed to ensure individuals had proper licenses to make electrical installation	\$1,000
Salem	Oron Tipton	No supervising or journeyman license	\$1,000
Salem	Globe Building & Electrical Contractors, Inc.	Allowed unlicensed individual to make electrical installation	\$1,000
Seaside	Mark Farmer	No electrical permit, no supervising or journeyman license	\$2,000
Springfield	Martin S. Thiele	No supervising or journeyman license	\$1,000
Vancouver, WA	Pat Werbowski Harry's Key Service, Inc.	Allowed unlicensed individual to make electrical installation, no electrical contractor license, no electrical permit	\$3,000
Vancouver, WA	Brandon Hayward	No supervising or journeyman license	\$1,000

Vancouver, WA	Joseph W. Pelkey Entrance Controls, Inc.	Allowed unlicensed individual to make electrical installation	\$1,000
---------------------	---	---	---------

The Plumbing Board found the following violations of the Oregon Plumbing Specialty Codes in August 2005:

CITY	NAME	VIOLATION	PENALTY
Boise, ID	Jeremy F. Scott	No plumbing journeyman certificate of competency	\$1,000
Boise, ID	Lenny P. Buss Buss Mechanical, Inc.	Allowing unlicensed individuals to make plumbing installations (2 violations)	\$2,000
Boise, ID	Elliott W. Roper	No plumbing journeyman certificate of competency	\$1,000
Cornelius	David Lorne Gardner David L. Gardner Contractor	No plumbing business certificate of registration, no plumbing journeyman certificate of competency	\$2,000
Dallas	Michael F. Daglen Handyman Repair	No plumbing business certificate of registration, no plumbing journeyman certificate of competency	\$2,000
Klamath Falls.....	Monte R. McGinnis Monte's Onsite Co.	No plumbing business certificate of registration, no plumbing journeyman certificate of competency	\$2,000
Lake Oswego	Keith G. Knutson	No plumbing business certificate of registration, no plumbing journeyman certificate of competency	\$2,000
Molalla	Matthew W. Lister	No plumbing business certificate of registration	\$1,000

The director of the Department of Consumer and Business Services found the following violations of the Oregon Specialty Codes in August 2005:

CITY	NAME	VIOLATION	PENALTY
Anaheim, CA	Bradley N. Howard..... Source Refrigeration & HVAC, Inc.	Violated a final order	\$1,750
Cornelius	David Lorne Gardner David L. Gardner Contractor	No permit..... (2 violations)	\$2,000
Klamath Falls.....	Monte R. McGinnis Monte's Onsite Co.	No permit.....	\$1,000
Lake Oswego	Keith G. Knutson	No manufactured dwelling installation permit, no manufactured dwelling installer license, no permit	\$3,000

BCD board meeting dates

Sun	Mon
1	2
8	9

ELECTRICAL & ELEVATOR BOARD

Meets at 9:30 a.m. on the fourth Thursday of every other month:

- November 17

BOARD OF BOILER RULES

Meets at 9:30 a.m. on the first Tuesday of each quarter:

- December 6

BUILDING CODES STRUCTURES BOARD

Meets at 9:30 a.m. on the first Wednesday of every other month:

- November 2

MECHANICAL BOARD

Meets at 9:30 a.m. on the first Wednesday of each quarter:

- December 7

STATE PLUMBING BOARD

Meets at 9:30 a.m. on the third Friday of every other month:

- October 21
- December 16

RESIDENTIAL STRUCTURES BOARD

Meets at 9:30 a.m. on the first Wednesday of each quarter:

- October 5

MEETINGS ARE HELD IN THE SALEM
BCD CONFERENCE ROOM AT 1535
EDGEWATER ST. NW.

Meetings may be canceled or rescheduled and meeting dates may be adjusted for holidays. Call BCD to check, (503) 378-4133.

All board meetings begin at 9:30 a.m.

Tri-County code forum dates

Sun	Mon
1	2
8	9

ELECTRICAL

Meets 4-8 p.m., Thursday

- December 8

PLUMBING

Meets 4-7 p.m., Thursday

- December 1

RESIDENTIAL STRUCTURAL

Meets 4-7 p.m., Wednesday

- November 16

COMMERCIAL STRUCTURAL

Meets 4-7 p.m. Wednesday

- December 7

CODE FORUM LOCATIONS

PLUMBING, Sunnybrook Clackamas County Auditorium, 9101 S.E. Sunnybrook Road

ELECTRICAL, MECHANICAL, RESIDENTIAL & COMMERCIAL, 501 S.E. Hawthorne, Portland

Notice of surcharge changes



Beginning Jan. 1, 2006, the state surcharge on all permit fees and hourly inspection rates will be 8 percent.*

With the passage of **SB 421, ORS 455.210, 455.220, 455.842, and 455.844** were amended to require an 8 percent state surcharge on all construction permits and hourly inspection charges (including amusement ride, boiler, elevator, manufactured dwelling, prefabricated structures, and recreational vehicle permits and hourly inspection rates). The 8 percent surcharge includes:

- 4 percent to defray state administrative costs. ORS 455.210 (4)
- 2 percent to defray state inspection costs. ORS 455.210 (5)
- 1 percent to defray state administrative costs for administering and enforcing the state code. ORS 455.210 (6)
- 1 percent to defray the costs of training and other educational programs administered by the division. ORS 455.220 (1)

*This law change does not affect the current 8 percent surcharge for permit fees and hourly inspection rates in the tri-county area. ■

440-2666 (9/05/COM)

CODE LINK

STATE OF OREGON • BUILDING CODES DIVISION

CodeLink is a publication of the Building Codes Division, Oregon Department of Consumer & Business Services.

Editors

Joan Stevens-Schwenger
Dian Cox

Publication Design

Shonnie Emerson, DCBS Communications

BCD Administrator

Mark Long



In compliance with the Americans with Disabilities Act (ADA), this publication is available in alternative formats.

Call the editor, (503) 373-7438.

Information in CodeLink may be republished without permission.

Visit our Web site,
www.bcd.oregon.gov



Building Codes Division
1535 Edgewater St. NW
PO Box 14470
Salem, OR 97309-0404



PRSR STD
US POSTAGE
PAID
SALEM OR
PERMIT NO. 81