

CODE LINK

STATE OF OREGON • BUILDING CODES DIVISION

JULY/AUGUST 2000

Agricultural buildings

By Ravi Mahajan



Appendix Chapter 3, Division II, of the 1998 Oregon Structural Specialty Code (OSSC) provides the regulations affecting agricultural buildings. While reproducing the ORS 455.315 language (statute regulating farm agricultural buildings) for the appendix, an omission was made. The statute requirement that a structure not be open to the public was left out in the last printing of the OSSC. This mistake is being corrected in the printing of amendments effective October 1. This mistake has caused confusion regarding the definition of agricultural buildings and when they are exempt from OSSC requirements.

There are two types of agricultural buildings: “Non-farm” agricultural buildings and “farm” agricultural buildings. Non-farm agricultural buildings are defined as structures that are not located on farmland, but their occupancy is related to farm activities. An example of such a building is a grass seed co-op built on non-farm land but that is used for farm-related activity. Non-farm agricultural buildings are regulated by OSSC Appendix, Chapter 3, Division II provisions and may be classified as a Group U, Division 1 occupancy.

Farm agricultural buildings include structures that are:

- located on a farm
- used for farm-related activity (as defined in the OSSC)

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Tri-County Service Center opened July 1



Building-construction-industry representatives, area contractors, and local government officials and staff attended an open house at the Tri-County Service Center June 14.

The Tri-County Service Center is an office of the Department of Consumer and Business Services' Building Codes Division. It was created by the 1999 legislature to improve services for those seeking permitting and licensing approvals on construction projects in the tri-county area of Multnomah, Washington and Clackamas Counties. The 13-member Tri-County Building Industry Service Board, which represents all segments of the construction industry and local government, sponsored the event.

The Tri-County Service Center is a resource for contractors and building departments that will standardize and streamline building-department procedures including permitting, inspecting, forms, etc.

On July 1, the minor-label permitting program, previously administered by 27 local jurisdictions, was consolidated at the service center. Minor labels are inexpensive permits for simple electrical and plumbing installations. Rather than having to buy different labels from up to 27 jurisdictions, contractors can buy a supply of labels at the Tri-County Service Center. These labels may be used anywhere in the tri-county area. The Tri-County Service Center arranges for an inspection of one of every 10 installations with the jurisdiction in which the installation was made.

"This program will drastically reduce the paperwork and the headaches usually associ-

ated with simple permits for installing water heaters or electric circuits," said Sue Blatner, director of community affairs for George Morlan Plumbing.

Tim Gauthier, of the National Electrical Contractors Association, concurs. "I believe that the new program will not only simplify the minor label process, but will also encourage more contractors to purchase the permits," he said.

Information about the Tri-County Service Center's progress toward standardizing permitting applications and procedures is available on the Building Codes Division World Wide Web site, www.cbs.state.or.us/external/bcd/index.html. Visitors to the Web site can print permit application forms, find a list of building inspectors in each jurisdiction, link to tri-county building departments, and send questions to the Tri-County Service Center.

A task force was recently appointed to study and make recommendations regarding the Tri-County Board's involvement in the certification and training of inspectors. The first meeting of the task force was June 7. Further meetings will be announced. For more information, contact the Tri-County Service Center.

The Tri-County Service Center is located at 123 NE 3rd Avenue, Suite 440, one block north of the Burnside Bridge in the Conference Plaza. The phone number is (503) 872-6731. The center is staffed by Joan Stevens-Schwenger, manager; Marion Peterson, board coordinator/recorder; Bob Brown, training coordinator; and Leslie Werst, office specialist. ■

New hourly inspection surcharge takes effect



On July 1, BCD and local jurisdictions began collecting surcharge amounts for hourly inspection fees, implementing 1999 legislation.

Historically, surcharges were imposed on inspection permit fees to offset certain costs of those programs. However, these surcharges were not consistently applied to hourly inspection fees. Senate Bill 587 enacted changes to clarify the seven-percent

surcharges found in ORS 455.210 and 455.220 that apply to hourly inspection fees.

Hourly inspections were not included in the one percent Tri-County Building Industry Service Center surcharge created by SB 512. That surcharge applies only to permit fees.

Questions should be directed to Nancy Klagge, (503) 373-7731. ■

Agricultural buildings, *continued*



- not open to the public (omitted in re-producing ORS 455.315 language)
- not classified as a dwelling unit
- not occupied by 10 or more persons at any time (unless for growing plants)
- not regulated by the State Fire Marshal
- not regulated by the National Flood Insurance Act of 1968

For a structure to be classified as a farm agricultural building, all of the above conditions must be met. Farm agricultural buildings are generally exempt from OSSC and structural-permit requirements. However, an incorporated city may regulate such farm agricultural buildings in their jurisdictional area according to ORS 455.315(3). Local planning or land-use departments generally have zoning clas-

sifications for each lot within their jurisdiction, so permission from those authorities may be necessary to determine farm-land status. The OSSC also provides a definition of “farm” for building code application. The building official must make a decision in each case to determine whether or not the structure is on a farm (as defined by ORS). Before accepting a sign-off from local planning departments, the building official must make sure that planning departments understand the term as it is defined in the OSSC. For example, an existing farm may be located on property not zoned exclusive farm use (EFU). If the planning department’s criteria do not conform to the OSSC definition, the building official may require the applicant to provide additional information to support farm agricultural building status. ■

Jury awards \$1.75 million in construction defect trial



Twenty-four Yorba Linda, California, homeowners who claimed the concrete foundations of their homes were damaged by sulfates have been awarded \$1.75 million by an Orange County Superior Court jury in the first such construction-defect trial in the U.S.

In the course of the 15-week trial, jurors heard extensive testimony from experts from the U.S., Canada, and Great Britain regarding the effects of sulfates on concrete. The award averaged about \$73,000 per home.

The jury's decision was against Brighton Homes, developer of Brighton Estates, in which the homeowners live; Arnel Development Corporation; James Mock, Inc., the subcontractor responsible for the concrete used in the homes; and Owl Rock Products, the supplier of much of the concrete.

The Brighton decision is the first in the history of construction-defect litigation involving sulfate damage to homes, according to Kenneth Kasdan of Kasdan, Simonds, McIntyre, Epstein & Martin, the firm that represented all homeowner plaintiffs. The jury verdict found Brighton Homes and Arnel Development liable based on breach of implied warranty, strict liability in tort, and negligence. Brighton and Arnel were held liable for the full amount of the damage award. The jury found that all defendants in the case were liable based on negligence.

Kasdan said the trial underscores the responsibility of a builder to comply with the Uniform Building Code and the duty of developers, subcontractors, and suppliers to pro-

vide durable, lasting materials. All previous sulfate-related cases have been settled out of court, most with confidentiality restrictions limiting media coverage and disclosure of their results.

Kasdan said the defective concrete in the Brighton case stemmed from a combination of errors, including a mix design that resulted in too much water being added to the concrete at the batch plant. This was magnified by the contractors adding extra water to the concrete mix at the project site to ease placing of the material. Kasdan pointed out that the developer and subcontractors were concerned with production speed, not quality, and cut corners as a result. These factors all worked together to undermine the code-required water-to-cement ratio, which is critical to creating sulfate-resistant concrete. Kasdan also said that sulfate attack of concrete is a defect problem that appears to be widespread in Orange County and throughout coastal California.

Kasdan noted that while the Brighton Estates homes suffered numerous construction defects — damages for most of which had been previously settled out of court — the sulfate damage was by far the biggest problem. The jury award also involved alleged expansive soil conditions that resulted in the shifting and cracking of the foundations, slabs, walls, and other improvements during settling, causing damage to the homes. The suit claimed the soil was not properly graded and compacted by the developer. ■

New appeal process



An alternative building-code appeal process was created with the adoption of Senate Bill 587, effective July 1.

Section 23 of the bill authorized a process whereby a person aggrieved by a decision made by a building official may appeal the decision directly to the Building Codes Division specialty code chief inspector.

Permanent rules implementing this program became effective July 1. The rules require the aggrieved person to select either the local appeals process (in which the request would be heard by the local appeals board and potentially appealed to the appropriate state advisory board) or the revised process, which includes appealing directly to the specialty-code chief inspector and potentially to the appropriate advisory board.

The program chief inspectors appointed as of June 1 include: Gary Wilson, chief electrical inspector; Terry Swisher, chief plumbing inspector; Mike Ewert, chief One- and Two-Family Dwelling Code inspector; and Peggy Collins, chief of building codes administration.

Permanent or temporary appointments will be made for structural, mechanical, and fire/life safety chiefs as position recruitments are completed.

Questions regarding this change in the appeals process may be referred to Peggy Collins, (503) 373-1258, peggy.a.collins@state.or.us, or Mark Long, policy and technical services manager, (503) 373-1227, mark.s.long@state.or.us or. ■

Interpretive rulings signed



The following plumbing product approvals have been approved by the Plumbing Board and the division administrator:

- 00-8 Marv's Fiberglass, Inc., fiberglass baptistry
- 00-9 TRIC trenchless polyethylene pipe for sewer laterals

Copies were sent to building officials and can be found on our Web site, www.cbs.state.or.us/bcd. ■

Manufactured structures and parks Q & A

By Patrick Lewis



Question

When a manufactured-dwelling foundation system is designed by a registered engineer in order to elevate it above the base flood elevation, does the installation still have to be made by a licensed manufactured dwelling installer?

Answer

ORS 446.395 requires those who install manufactured dwellings to be licensed. OAR 918-515-0010 lists 10 exemptions from the licensing requirements but does not include any exemptions for manufactured dwellings installed on engineered foundations. However, ORS 446.003(22) allows Oregon-licensed architects or engineers to act as installers in performing or supervising the installation of a manufactured dwelling. While the architect or engineer does not have to be licensed, others assisting with the installation *must be licensed* as limited installers or temporary limited installers.

Question

Can recreational vehicles be placed in mobile home or manufactured dwelling parks?

Answer

ORS 446.003(27) defines manufactured dwelling park as “any place where four or more manufactured dwellings are located within 500 feet of one another on a lot, tract, or parcel of land under the same ownership...” Because manufactured dwelling parks are limited to manufactured dwellings, recreational vehicles are not permitted. ORS 446.003(32) defines mobile home park as “any place where four or more manufactured structures are located within 500 feet of one another on a lot, tract, or parcel of land under the same ownership...” Because the definition

of manufactured structure includes recreational vehicles and manufactured dwellings, both would be permitted in a mobile home park. However, if two or more recreational vehicles were in the mobile home park, the park would have to be approved as a combination park.

Question

Can an installer install adjustable outriggers in place of perimeter piers on a manufactured dwelling?

Answer

The Oregon Manufactured Dwelling Standard does not address adjustable outriggers specifically, but does not preclude them, either. Any product or system can be submitted to the local jurisdiction for approval as an alternate method or material. Because adjustable outriggers are designed to transfer the perimeter loads to the main frame (I-beams), the pier supports under the main frames would need to be increased in size, capacity, or spacing for adjustable outriggers. If the adjustable outriggers do not align with existing chassis cross members, the main frame may have to be reinforced to withstand the side loads applied to the bottom of the I-beam by the adjustable outrigger. Because each manufactured dwelling manufacturer has a unique design and method of load distribution, the adjustable outriggers would need to be engineered for each manufactured dwelling by an Oregon-registered professional engineer and submitted to each jurisdiction for approval. ■

Heaters recalled

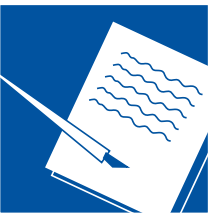


In February, the U.S. Consumer Product Safety Commission ordered recall of 11 models of Cadet and Encore in-wall electrical heaters because they could overheat and catch fire. The models affected, FW, FX, LX, TK, ZA, Z, RA, RK, RLX, RX, and ZC, were manufactured from 1983 through January 1999. As of the end of April, the company had

received replacement orders for 138,000 heater units. As many as 900,000 heaters are estimated to still be in use.

For more information, contact the company at www.cadetco.com or call (800) 567-2613. ■

Third-party plan review and inspection licensing delayed



Implementation of the SB 587 licensing program for third-party plan reviewers and inspectors has been delayed as a result of comments received during public rule-making. Revised rules based on testimony will be effective October 1, 2000.

Anyone interested in becoming licensed should contact Louann Rahmig, rules

coordinator (louann.p.rahmig@state.or.us), or (503) 373-7438, to be added to the interested-parties list. Licensed individuals must also carry appropriate code certification. Certification information can be obtained from Vicky Narkon, vicky.j.narkon@state.or.us, (503) 373-1248. ■

Staff Advisories, *continued from page 10*

A2. No. The code does not provide any reduction to these requirements when the basement has exits directly to grade. It is possible to consider this an alternate method under Section 104.2.8, which would require you to determine the alternate is at least equivalent to code requirement(s) for fire resistance, safety, etc.

Summary:

The key issue in this case is the question of whether OSSC Section 508, which is a general provision, may be used to override the specific requirements of Section

303.2.2.2 and 904.2.3.2. It is the opinion of ICBO and the division that this is not the intent of the code. The general provisions of Section 508 should not be used to reduce the requirements of these or other specific requirements of the code. In some situations, it may be appropriate for the building official to grant alternate methods of construction when equivalent fire and life safety are provided.

The advisory applies to current code and conditions described in the question. Applications for similar situations may have different determinations. ■

Staff advisories issued



The Policy and Technical Services Section recently issued the following advisory interpretations:

Program: Structural

Subject: Accessible number of units in self-service storage facilities

Source: 1998 Oregon Structural Specialty Code (OSSC)

Reference: OSSC Section 1106.1.12, IBC 2000 final draft Section 1107.5

Date of issue: April 18, 2000

Prepared by: Ravindra K. Mahajan, P.E.
Facilities engineer
(503) 373-1354

Question:

In self-storage facilities, are all of the storage units in the facility required to be accessible?

Determination:

In a self-service storage facility containing 200 or fewer self-storage units, at least five percent, but not less than one of each type, shall be accessible. Where the self-service storage facility contains more than 200 units, not less than 10 spaces plus two percent of the spaces in excess of 200 shall be accessible. Accessible self-storage units may be located in a single building of a multi-building self-storage facility.

Analysis:

OSSC Section 1106.1.12 requires that all affected buildings in Group S Occupancies shall be accessible except for Group S-6 Occupancies (mausoleums and columbariums). ADA design assistance manual recommends five percent as a standard for requiring the accessibility of building components or elements. IBC 2000 final draft Section 1107.5 requires five percent of the storage units to be accessible if the total number of the units do not exceed 200 and requires only two percent of the units exceeding 200 to be accessible.

Some jurisdictions have been enforcing ADA-recommended percent criteria in requiring accessibility whereas other jurisdictions are requiring each and every storage unit in such facilities to be accessible per the OSSC. There have been several requests from the design community and from developers to amend the existing OSSC requirements to bring them in line with the ADA-recommended percentages. A code change to OSSC Section 1106.1.12, which is identical to the IBC 2000 language, was recommended for approval by the Structural Code Committee. The Building Codes Structures Board has approved this code change for adoption effective October 1, 2000. The text of this change is reproduced here for the convenience of users. The proposed new language is underlined.

1106.1.12 Group S Occupancies. All affected buildings in Group S Occupancies shall be accessible as provided in this chapter.

EXCEPTIONS:

1. Group S, Division 6 Occupancies.
2. Where a self-service storage facility contains 200 or fewer individual self-storage spaces, 5 percent, but not less than one, of the individual spaces shall be accessible. Where a self-service storage facility contains more than 200 individual spaces, not less than 10 spaces plus 2 percent of the individual spaces in excess of 200 shall be accessible. Accessible individual self-service storage spaces shall be dispersed throughout the various classes of spaces provided. Where more classes of spaces are provided than the number of required accessible spaces, the number of accessible spaces shall not be required to exceed the number determined above. Accessible spaces may be located in a single building of a multi-building facility.

Note: It is appropriate to accept this text as a method of complying with the intent of OSSC Section 1106.1.12 and ADA.)



Program: Structural
Subject: Compressed insulation in pre-engineered metal buildings
Source: 1998 Oregon Structural Specialty Code (OSSC)

Reference: Section 1312.1.1

Date of issue: April 18, 2000

Prepared by: Ravindra K. Mahajan P.E.
Facilities engineer
(503) 373-1354

Steven M. Baker
Oregon Office of Energy
(503) 373-7804

Question:

Is compressing insulation around purlins, girts, and other framing members acceptable in pre-engineered metal buildings?

Determination:

Yes, providing the insulation is installed according to the metal building manufacturer's specifications, and the prescriptive requirements for R-value of roof and/or wall insulation are met.

Analysis:

In pre-engineered metal buildings, insulation is commonly compressed at the purlins or

girts. Insulation in pre-engineered metal buildings should be installed according to the manufacturer's specifications and must meet the prescriptive requirements of the R-values for wall and roof insulation. Care must be taken to make sure that there are no cuts or punctures in the vapor barrier, because even the smallest cut can lead to condensation build-up in the insulation that degrades the insulation and increases the chance of rust on metal components.

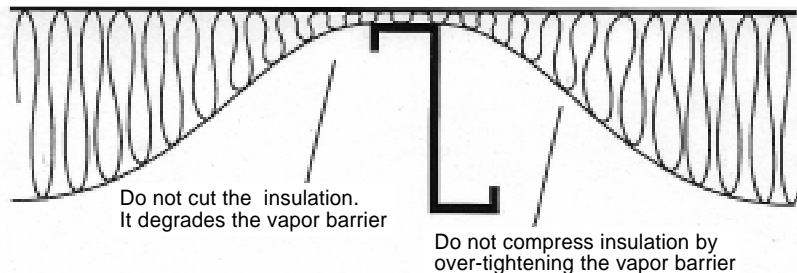
Ensure that the insulation is uncompressed throughout the distance between the purlins or girts except where it is compressed by the roof members. The Oregon nonresidential energy code prescriptive path requires the following insulation values for the walls and roofs:

Climate Zone 1:

- Walls – R-13 or an overall U-factor of 0.13 or less
- Roofs – R-19 or an overall U-factor of 0.05 or less

Climate Zone 2:

- Walls – R-19 or an overall U-factor of 0.09 or less
- Roofs – R-19 or an overall U-factor of 0.05 or less



"Staff advisories" continued on Page 10



Program: Structural Code

Subject: A Occupancies Located in Basements - Specific vs. General Requirements

Source: 1998 Oregon Structural Specialty Code (OSSC)

Reference: Sections 303.2.2.2, 508 and 904.2.3.2

Date of issue: June 6, 2000

Prepared by: Peggy A. Collins
Building official
(503) 373-1258

Question:

Does OSSC Section 508 allow substitution of a fire-sprinkler system throughout for the specific requirements of Sections 303.2.2.2 and 904.2.3.2, which require one-hour fire-resistive construction of the basement, one-hour separation between the basement and the first story, and basement fire sprinklers, when both the basement and first story contain an A-3 Occupancy?

Determination:

No. The requirements of Section 303.2.2.2 and 904.2.3.2 are specific requirements for A-3 and A occupancies. According to Section 101.3, *“Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.”*

Analysis:

The division was recently asked about the applicability of Section 508 and the substitution of fire sprinklers for fire-resistive construction in A Occupancies located in a basement. In researching this, the division requested an interpretation from ICBO, which has responded with the following:

Q1. I am reviewing a Group A, Division 3 church consisting of a single story with a basement of Type V Non-rated construction. The first story area is 3,600 square feet. Because the basement exceeds 1,500 square feet, it must be equipped with an automatic sprinkler system in accordance with Section 904.2.3.2. Section 303.2.2.2 requires a basement housing a Group A, Division 3 Occupancy to be not less than one-hour fire-resistive construction. In addition, it requires the first story to be separated from the basement by not less than one-hour fire-resistive construction. If the building is provided with an approved automatic sprinkler system throughout, does Section 508 allow substitution of this sprinkler system for these one-hour fire-resistive construction requirements?

A1. No. Generally speaking, under Section 508, the automatic sprinkler system may be used to substitute for the one-hour construction required by Table 6-A. It is our opinion, however, that the requirements of Section 303.2.2.2 are specific to the Group A, Division 3 occupancy rather than the type of construction of the building. Therefore, in accordance with Section 101.3, the more specific requirements of Section 303.2.2.2 would still apply and the substitution is not permitted for these items.

Because the project in question included a daylight basement with more than the required number of exits, the division asked a second question that was paraphrased by ICBO:

Q2. Does the fact that the basement is a daylight basement with exits directly to grade affect the answer to Question One?

“Staff advisories” continued on Page 7

Compliance Report

The Building Codes Division is responsible for the enforcement of Manufactured Dwellings and Structures, Plumbing, Structural/Mechanical, Electrical and Boiler/Pressure Vessel Specialty Codes to protect the health and safety of the people of Oregon.

The Electrical and Elevator Board found the following violations of the Oregon Electrical Safety Law in April 2000.

CITY	NAME	VIOLATION	CIVIL PENALTY ASSESSED
Albany	John Morgan	No electrical supervising or journeyman's license, no electrical permit	\$750
	dba American Construction and Home Inspection		
Aloha	Kenneth Mitchel Giblin	No electrical contractor's license, no electrical supervising or journeyman's license	\$1,000
	dba KMG Construction		
Banks	Precision Pump, Inc.	No electrical permit	\$250
Beaverton	Francis C. Julian	No electrical permit	\$250
	dba Infrared Technologies		
Beaverton	Frank E. Pausz	Allowed unlicensed individuals to make electrical installation (4 violations), failure to make corrections	\$2,500
	dba Bee Electric Service		
Bend	Mark P. Reynolds	No electrical contractor's license, no supervising or journeyman's license	\$1,000
	dba Reynolds Technical Services		
Colton	Gilstrap Electric Co. LLC	No electrical permit	\$250
Coos Bay	Leonard Deel	No supervising or journeyman's license, no electrical permit	\$750
	dba Coastline Signs		
Eugene	Charles Hoffman	No electrical permit, no electrical contractor's license, no supervising or journeyman's license, unsafe installation	\$1,750
	dba ABC Renovations		
Forest Grove	David Brien	No electrical permit, made unsafe electrical installation	\$750
	dba Home Heating & Cooling		
Gresham	Ioan Rusu	No electrical permit, no supervising or journeyman's license	\$750
Hillsboro	Jeff Alexander	No supervising or journeyman's license (2 violations)	\$1,000
Hubbard	Challenge Electric Co.	Failure to call for inspection	\$250
Keizer	Garry Whalen	Failure to call for final electrical inspection	\$250
Milwaukie	Alex Mauck Septic & Drainage, Inc.	No electrical contractor's license, no electrical permit (2 violations each)	\$1,500
Monmouth	Jack Waddell	No electrical permit	\$250
	dba J Brothers Electric and Jack Waddell Construction, Inc.		
Pendleton	Bruce Slocum	No electrical supervising or journeyman's license, no electrical permit	\$750
Portland	Neal Alston	No electrical contractor's license, no supervising or journeyman's license, no electrical permit	\$1,250
	dba Drain Master Plumbing		

Portland	Robert Olsen	No electrical permit	\$250
	dba Commworld of Portland		
Portland	Juliano Wilson	No electrical contractor's license, no supervising or journeyman's license, no electrical permit	\$1,250
	dba Juliano Wilson Heating & Air Conditioning		
Portland	STD, Inc.	No electrical permit	\$250
	dba Cannon Communications		
Redmond	Scott Charles Schreier	No supervising or journeyman's license	\$500
Roseburg	Douglas Sheet Metal, Inc.	No electrical permit	\$250
Roseburg	Stratton Bros., Inc.	No electrical permit, no electrical contractor's license	\$750
Salem	Westbock Pacific, LLC	No electrical contractor's license, no electrical permit	\$750
Salem	Mark E. Krautmann	Permitted unlicensed individual to make electrical installation	\$500
	dba Heritage Seedlings, Inc.		
Tigard	Francisco Bautista	No electrical supervising or journeyman's license	\$500
Tigard	Evans Electric, Inc.	Allowed unlicensed individual to make electrical installation	\$500
Wilsonville	Tualatin Electric, Inc.	Failure to call for final electrical inspection (2 violations)	\$500
Bridgeport, CT	Alimak Elevator Co.	Installed elevator without plan approval	\$250
Ridgefield, WA	Pepin Palasthira	No supervising or journeyman's license	\$500
Wilmington, DE	Homebase, Inc.	Sold an unlisted electrical product (2 violations)	\$2,000

The Electrical and Elevator Board found the following violations of the Oregon Electrical Safety Law in May 2000:

CITY	NAME	VIOLATION	CIVIL PENALTY ASSESSED
Independence	Leonel Cuellar	Allowed unlicensed individual to make electrical installation, interfered with duties of inspector (2 violations)	\$2,500
	dba Viking Electrical & Communications Contractors		
Jacksonville	Garon L. Wells	No electrical permit	\$250
	dba Garon Lee Sound		
Portland	Brian Asher	No supervising or journeyman's license	\$500
Portland	Asher Traditional Homes, Inc.	No electrical contractor's license	\$500
Portland	First Call Heating & Cooling Company	No electrical contractor's license, no electrical permit	\$750
Portland	Martin Richard Linder	No electrical supervising or journeyman's license	\$500
Portland	Ed Wilson	Allowed unlicensed individual to make electrical installation, no electrical permit	\$750
	dba Soledad Electric and Ampere Electric		
Springfield	Steven J. Ghelfi	No electrical supervising or journeyman's license	\$500

Stayton	Ted Siebert	No electrical supervising or journeyman's license	\$500
Winston	Steven Thomas dba Current Connections	No electrical contractor's license, no electrical permit	\$750
Battleground, WA	Derrick Nyberg	No electrical supervising or journeyman's license	\$500
Vancouver, WA	Steve Labrosse	No electrical supervising or journeyman's license, no electrical permit	\$750
Vancouver, WA	Jeremy Peldo	No electrical supervising or journeyman's license	\$500
Vancouver, WA	Prairie Electric, Inc.	Allowed two unlicensed individuals to make electrical installations	\$1,000
Beaverton	Steven N. Morse	No supervising or journeyman's license	\$500
Bend	H2 Oil Recovery Equipment, Inc.	No electrical contractor's license, no electrical permit	\$750
Coos Bay	Double SS Electric, Inc.	Failed to make corrections to installation	\$500
Corvallis	Middleton Heating & Sheet Metal, Inc.	No electrical contractor's license, no electrical permit	\$750
Gladstone	Brandon M. Erkenbeck	No supervising or journeyman's license	\$500
Klamath Falls	Allen Merck dba Merck Construction	No electrical contractor's license, no electrical supervising or journeyman's license, no electrical permit	\$1,250
Molalla	Raymond Harris	No electrical supervising or journeyman's license, no electrical permit	\$750
Philomath	Win Eaton dba Eaton Electric	No electrical permit	\$250
Portland	Karen S. Morrison dba Morrison & Associates	Allowed two unlicensed individuals to make electrical installations	\$1,000
Portland	Kurtis Lindley Goldworthy	No supervising or journeyman's license	\$500
Salem	Bruce R. Strom dba Paradise Pools & Ponds	No electrical contractor's license, no supervising or journeyman's license, no electrical permit	\$1,250
Salem	Michael Weiner	No electrical supervising or journeyman's license	\$500
Tigard	Alphatech Voice & Data Solutions, Inc.	Allowed two unlicensed individuals to make electrical installations	\$1,000
Yoncalla	Kopp Electric, Inc.	No electrical permit	\$250
Kalispell, MT	Robert Williams	No electrical supervising or journeyman's license, no electrical permit	\$750
Vancouver, WA	Donald L. Lavelly dba Streamline Electric Co.	Allowed an unlicensed individual to make an electrical installation	\$500

Errata for One- and Two-Family Dwelling Specialty Code as of 6/6/00



The following amendments or modifications are a compilation of errors found after the publication of the 2000 Edition of the One- and Two-Family Dwelling Specialty Code (*Dwelling Code*). Please accept our apologies for any inconvenience these code errors may have caused you or your jurisdictions. These errata are not code changes, but are corrections to the *Dwelling Code*.

Amend Section 111.6 by adding the following:

111.6 Expiration. Every permit issued by the building official under the provisions of this code shall expire by limitation and become null and void if the building or work authorized by such permit is not commenced within 180 days from the issue date of the permit, or if the building or work authorized by such permit is suspended or abandoned for a period of 180 days or more after the work has commenced. Before such work commences or is resumed, a permit extension or renewal as required by Section 111.6.1 or 111.6.2 shall be obtained.

111.6.1 Permit extension. A permittee holding an unexpired permit shall be permitted to apply for a one-time, 180-day extension, provided the permittee shows good and satisfactory reasons beyond control that the work cannot be commenced within the 180-day period from the original permit issue date. No additional fee is required for this one-time extension.

111.6.2 Permit renewal. A permit which has expired for 180 days or less shall be permitted to be renewed provided no changes have been made in the original plans and specifications for such work. The renewal fee shall be one-half the amount required for a new permit. Permits which have been expired for greater than 180 days require a new application and payment of the full permit fee.

111.6.3 Fee refunds. The building official may authorize the refunding of any fee paid thereunder in accordance with the refund policy in effect in the jurisdiction.

The letter ^d was left out of the footnotes in Table 301.2(1):

- ^a For elevations above elevations shown, see Snow Load Analysis for Oregon, published by the Structural Engineers Association of Oregon. Revised 2/78.
- ^b The wind pressure may be more accurately determined for unique local conditions by using Volume 2, Division III, Section 1615 of the Oregon Structural Specialty Code. The values in this column were calculated using exposure C. See Table 301.2(2), design load notes.
- ^c Wind design loads are determined from the Wind Probability Map in Figure 301.2(4).
- ^d See Seismic Risk map in Figure 301.2(2).
- ^e A “severe” classification is when weather conditions result in significant snowfall combined with extended periods during which there is little or no natural thawing causing de-icing salts to be used extensively.
- ^f All areas with full exposure to ocean winds shall be designed to 28 pounds per square foot.
- ^g For elevations below 500 feet, the snow load is 50 pounds per square foot. Above 500 feet, see Footnote^a.
- ^h Areas in Multnomah and Hood River counties with full exposure to Columbia River Gorge winds shall be designed to 28 pounds per square foot.
- ⁱ The frost depth below 2,500 feet in Jackson and Josephine Counties is 12 inches.
- ^j Umatilla County north of 45.5°N and east of 118.5°W is at 25 pounds per square foot.

Modify Table 301.4 by deleting the footnote letters ^f and Stairs ^g.

Change error in footnotes to Table 301.4:

- ^a Exterior.
- ^b Passenger vehicles only.
- ^c Elevated garage floors shall be capable of supporting a 2,000-pound load applied over a **6-inch-square-inch** area anywhere on the floor and shall be capable of supporting two 2,000-pound loads each applied over 6-

inch-square areas centered 5 feet apart perpendicular to the direction of vehicle entry and a second pair of 2,000-pound loads 9 feet from and aligned with the first pair of 2,000-pound loads. None of these loads need be applied closer than 2 feet from the interior end wall nor closer than 1 foot from interior side walls.

^d No storage with roof slope not over three units vertical in 12 units horizontal.

^e Limited attic storage.

^f A single concentrated load applied in any direction at any point along the top.

Correct Section 315.4 as follows:

315.4 Guardrail opening limitations. Required guardrails on open sides of raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of an object 4 inches (102 mm) or more in diameter. Horizontal spacing between the vertical members in required guardrails shall be a maximum of 4 inches (102 mm) at the nearest point between the members.

Exceptions:

1. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway may be of such a size that a sphere 6 inches (152 mm) in diameter cannot pass through.
2. Required guardrails on open sides of stairways shall have ~~immediate~~ **intermediate** rails or ornamental closures which do not allow passage of an object 5 inches (127 mm) or more in diameter. Opening limitations for required guardrails on open sides of stairways are applicable above the second riser of the stair.

Modify Section 320.2.2 as follows:

320.2.2 Parapets. Parapets shall be provided for townhouses as an extension of the common wall.

Exceptions:

1. A parapet is not required when:

1.1. The roof decking or sheathing is of noncombustible materials or fire-retardant treated plywood conforming to Section 803.2.1.2 for a distance of 4 feet (1219 mm) on each side of the wall; **or**

One layer of 5/8-inch (15.9 mm) Type X gypsum board is installed on the roof framing directly beneath the roof decking or sheathing for a distance of 4 feet (1219 mm) on each side of the wall.

1.2. The roof is covered with a minimum Class C roof covering.

1.3. Openings in the roof shall not be located within 4 feet (1219 mm) on each side of the fire wall.

Modify Section 404.3 as follows:

404.3 Wood sill plates. Wood sill plates shall be a minimum of 2-inch by 4-inch (51 mm by 102 mm) nominal lumber. Sill plate anchorage shall be in accordance with Section 403.1:~~4~~ **5**.

Modify Section 502.3.2.1 by deleting the following:

502.3.2.1 ~~Sleeping areas and Attic joists.~~ Table 502.3.2(2) 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 pounds per square foot (psf) (1436 Pa) and the design dead load does not exceed 10 psf (479 Pa). The allowable span of ceiling joists that support attics utilized for limited storage or no storage shall be determined in accordance with Section 802.4. allowable span of ceiling joists that support attics utilized for limited storage or no storage shall be determined in accordance with Section 802.4.

Modify Section 602.10.1 by deleting the number [1] in the first sentence as follows:

602.10.1 Braced wall panels. Braced wall lines shall consist of braced wall panels which meet the requirements for location, type and amount of bracing specified in Table 602.10.4 and are in line or offset from each other by not more than 4 feet (1219 mm). Braced wall panels shall begin within 8 feet (2438 mm) from each end of a braced wall line. Braced wall lines 12 feet (3658mm) in length or less shall have not less than one braced wall panel. The construction of braced wall panels shall be in accordance with one of the following methods:

Modify footnote lettering in Table 404.1.1(1) as follows:

TABLE 404.1.1(1)
PLAIN CONCRETE AND MASONRY FOUNDATION WALLS^{a, b}

Maximum wall height (feet)	Maximum unbalanced backfill height ^e (feet)	Plain concrete minimum nominal wall thickness (inches)			Plain masonry minimum nominal wall thickness (inches) ^c		
		Soil classes ^d					
		GW, GP, SW and SP	GM, GC, SM SM-SC and ML	SC, MH, ML-CL and inorganic CL	GW, GP, SM and SP	GM, GC, SM, SM-SC, and ML	SC, MH, ML-CL and inorganic CL
5	4	6	6	6	6 solid ^f or 8	6 solid ^f or 8	6 solid ^f or 8
	5	6	6	6	6 solid ^f or 8	8	10
6	4	6	6	6	6 solid ^f or 8	6 solid ^f or 8	6 solid ^f or 8
	5	6	6	6	6 solid ^f or 8	8	10
	6	6	8 ⁱ	8 ⁱ	8	10	12
7	4	6	6	6	6 solid ^f or 8	8	8
	5	6	6	8 ⁱ	6 solid ^f or 8	10	10
	6	6	8	8	10	12	10 solid ^f
	7	8	8	10	12	10 solid ^f	12 solid ^f
8	4	6	6	6	6 solid ^f or 8	6 solid ^f or 8	8
	5	6	6	8	6 solid ^f or 8	10	12
	6	8 ⁱ	8	10	10	12	12 solid ^f
	7	8	10	10	12	12 solid ^f	Note ^g
	8	10	10	12	10 solid ^f	12 solid ^f	Note ^g
9	4	6	6	6	6 solid ^f or 8	6 solid ^f or 8	8
	5	6	8 ⁱ	8	8	10	12
	6	8	8	10	10	12	12 solid ^f
	7	8	10	10	12	12 solid ^f	Note ^g
	8	10	10	12	12 solid ^f	Note ^g	Note ^g
	9	10	12	Note ^h	Note ^g	Note ^g	Note ^g

Correct numbers in the four right-hand columns in Table 1306.1, per model code errata, as follows:

TABLE 1306.1
STANDARD INSTALLATION CLEARANCES FOR HEATING APPLIANCES^a

RESIDENTIAL - TYPE APPLIANCES		CLEARANCE (inches)			
		Above top ^b	From front	From back	From sides
Boilers and water heaters:					
	Automatic oil or combination gas and oil	6	24	6	6
	Automatic gas	6	18	6	6
	Solid	6	48	6	6
	Electric	6	18	6	6
Central furnaces:					
	Automatic oil or combination gas and oil	6	24	6	6
	Automatic gas	6	18	6	6
	Solid	18	48	18	18
	Electric	6	18	6	6
Floor furnaces:					
	Automatic oil or combination gas and oil	3	12	12	12
	Automatic gas	3	12	12	12
Room heaters: ^c					
Circulating type:	Oil or solid fuel	3	36	3	3
	Gas	3	24	12	12
Radiant or other type:	Oil or solid fuel	3	36	3	3
	Gas	3	36	18	18
	Gas with double metal or ceramic back	3	36	12	18
Fireplace stove:	Solid fuel	3	36	3	3

Correct Section 1902.2 by adding the following:

1902.2 Required area. The total unobstructed area of return ducts or openings to a warm-air furnace shall be [in accordance with the manufacturer's installation instructions, but] not less than 2 square inches (1290 mm²) for each 1,000 Btu/h (293 W) output or in accordance with the manufacturer's installation instructions. The minimum unobstructed total area of the return air ducts or openings to a central air-conditioning unit and/or heat pump shall be not less than 6 square inches (3870 mm²) for each 1,000 British thermal units per hour (Btu/h) (293W) nominal cooling output rating of the unit and/or heat pump, or in accordance with the manufacturer's installation instructions.

Correct Section B105.5 as follows:

B105.5 Barrier exceptions. A swimming pool with a power safety cover or a spa and hot tub with a safety cover that complies with ASTM F1346 as listed in Section B407 B106, shall be exempt from the provisions of this appendix.

Correct Section C401.7 as follows:

C401.7 Slab-on-grade floors. For slab-on-grade floors, the perimeter of the flow floor shall be insulated.

The insulation shall extend downward from the top of the slab for a minimum distance of 24 inches (610 mm) or downward to the bottom of the slab, then horizontally beneath the slab for a minimum total distance of 4 inches (640 mm).

Exception: For monolithic slabs, the insulation shall extend downward from the top of the slab to the bottom of the thickened edge.

Modify Table 1309.4 as follows:

**TABLE 1309.4
PIPING SUPPORT SPACING^a**

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
ABS pipe	4	4
Aluminum pipe and tubing	10	15
Brass pipe	10	10
Brass tubing, 1¼ -inch diameter and smaller	6	10
Brass tubing, 1½ -inch diameter and larger	10	10
Cast-iron pipe ^b	5	15
Copper or copper-alloy pipe	12	10
Copper or copper alloy tubing 1¼ -inch diameter and smaller	6	10
Copper or copper alloy tubing 1½ -inch diameter and larger	10	10
Corrugated stainless steel tubing	SEE ANSI LC-1	
CPVC pipe or tubing, 1-inch and smaller	3	5 ^c
CPVC pipe or tubing, 1¼ -inch and larger	4	6 ^c
Steel pipe	12	15
Steel tubing	8	10
Lead pipe	Continuous	4
PB pipe or tubing	2⅔ (32 inches)	4
PVC pipe	4	4

(footnotes remain the same as printed in the code)

Amend Section 602.10.1, item 5:

5. Gypsum board with minimum ½-inch (12.7 mm) thickness placed on studs spaced a maximum of 24 inches (610 mm) on center and fastened at 7 inches (178 mm) on center with nails in accordance with Table 602.3(1) 702.3.4. ■

Jerry Barbera retires



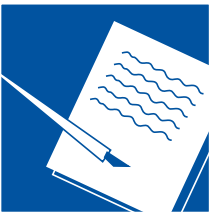
After more than 20 years of service to the International Conference of Building Officials, Jerry Barbera, senior conference services manager, has retired. Jerry started working at ICBO in 1980 after a 14-year career with the County of Los Angeles Engineering Department. In 1982 he advanced to regional manager of ICBO and moved the ICBO office to the Bellevue, Washington, area.

In the mid-1980s, Jerry managed an energy-codes-clearinghouse hot line for the Northwest. The Building Codes Division and Washington State's energy office were subcontractors for the clearinghouse hot line, and all three organizations provided written and verbal opinions on the energy codes being used in the region.

Jerry plans to remain involved in the conference and do some code consulting. He and his wife Erika plan to travel.

The Building Codes Division extends congratulations and best wishes to Jerry, with heartfelt thanks for all he has done to assist the division and local code officials through the years. ■

Board appointments



Reappointments effective July 1 for four-year terms:

Building Codes Structures Board

- Theodore Argo (architect position)
- Wendie Kellington (public member)

Electrical and Elevator Board

- Stacie Wingfield (electrical equipment manufacturing position)

State Plumbing Board

- Lewis Seagraves (mechanical engineer position)

Reappointed to the Manufactured Structures and Parks Advisory Board effective October 1, 1999, were Phillip J. Sterling (manufactured dwelling installer) and Kim Kittle (RV manufacturer). John Caul, Office of State Fire Marshal, was appointed effective April 13 to fill the fire-service position vacated by Roger Severson, who recently retired. All terms expire September 30, 2003. ■

Board meeting dates

Sun	Mon
1	2
8	9

ELECTRICAL & ELEVATOR BOARD _____

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

- July 27
- August 24

BUILDING CODES STRUCTURES BOARD _____

Meets at 9:00 a.m. on the first Wednesday of each month:

- July 12 (canceled)
- August 2

MANUFACTURED STRUCTURES & PARKS ADVISORY BOARD _____

Meets at 9:30 a.m. on the second Thursday of each quarter:

- July 20 (rescheduled) 9 a.m.

STATE PLUMBING BOARD _____

Meets at 9:00 a.m. on the third Friday of every other month:

- August 18

BOARD OF BOILER RULES _____

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

- September 12 (second Tuesday)

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

TRI-COUNTY BUILDING INDUSTRY SERVICE BOARD _____

Meets at 9:30 a.m. on the second Wednesday of each month:

- July and August meetings are canceled

THE TRI-COUNTY BOARD MEETS AT 123 NE 3rd AVE. PORTLAND.

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