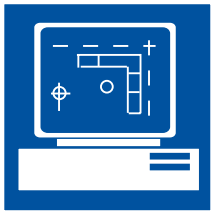
CODE LINK
STATE OF OREGON • BUILDING CODES DIVISION
JANUARY-FEBRUARY 2002

CodeComp for Windows arrives

by Alan Seymour, Oregon Office of Energy



BCD has approved and released the Windows CodeComp, version 4.0.

The Building Codes Structures Board approved updates to Interpretive Ruling 95-8, Simplified Trade-off Approach (STA), which allowed for improvements to Oregon's Code-Comp computer software to demonstrate compliance with STA. It has a Windows environment and graphic-user interface. Eley and Associates of California developed this software for the Oregon Office of Energy.

The new CodeComp software incorporates DOE 2.1e as the calculation engine. CodeComp accounts for ventilation-air and air economizers (if serving more than 70 percent of a space). The program-user interface is similar to another product developed by Eley called ENVSTD. ENVSTD is the official computer software of the American Society of Heating Refrigeration and Air-conditioning Engineers (ASHRAE). It can be used for building envelope trade-offs that comply with ASHRAE Standard 90.1. Eley is also the author of VisualDoe, a complex building simulation tool that incorporates DOE 2.1 as the calculation engine.

Beta testers report that this tool is more user-friendly and relatively intuitive when compared to its DOS predecessor. You can download a

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CodeComp . . . continued

copy of CodeComp from the Office of Energy's Web site, http://www.energy.state.or.us/code/cdpub.htm. The Office of Energy will have both the old DOS program and new versions available for a six-month transition period. Make sure you connect your computer to the Internet and run the "CodeComp Update" program after installing the program for the first time. You should run this update occasionally, as it will automatically update CodeComp.

You may also download a copy of either Chapter 13 of the Oregon Structural Specialty Code or Appendix Chapter C of the Oregon One- and Two-Family Dwelling Specialty Code from the same Web page.

If you have questions or comments, call Alan Seymour, (503) 378-5873, or Mike Rosenberg, (503) 373-7809, at the Oregon Office of Energy. Mike is the technical lead for CodeComp and Whole Building Approach. ■

Non-residential energy code changes effective October 1, 2001

by Alan Seymour, Oregon Office of Energy

Most of the non-residential energy code changes effective on October 1, 2001, were clarifications or editorial. However, there was one significant change related to shading coefficient (SC) requirements for glass in all conditioned non-residential buildings. The requirement that allowed an exemption for SC when glazing was for merchandise display has been deleted.

This change was made for the following reasons: While glazing used for merchandise-display glazing could be exempt from SC requirements, it was not exempt from U-factor requirements ("overall" U-0.54 for climate zone 1). Most glass installed in commercial storefront applications is installed within standard aluminum (no thermal break) framing.

In order to meet prescriptive U-0.54 window requirements (climate zone 1), this meant complying with "prescriptive" description in code (Tables 13-D and 13-E). For climate zone 1, this description includes the following: double pane with a half-inch airspace and low-*e* coating *or* an "overall" window U-factor of 0.54. In order to achieve an "overall" U-factor of 0.54 in a standard aluminum-framed window; a center-of-glass U-factor of 0.37 or less would be required, and it cannot be achieved without low-*e* coating (low emissivity). When these code requirements were developed, low-*e* coatings were considered "clear" glazing. So, unless the "overall" U-factor of a window was not U-0.54 or less, it would need low-*e* coating, even though it was exempt from SC requirements.

Many improvements have been made in the spectral qualities of glass since non-residential energy code requirements were established. High visible-light transmittance (VLT) translates to a glass you can easily see through. Glass technology has improved so that nearly all glass manufacturers now make insulated glazing units with a high VLT *and* low SC (to reduce cooling loads). Therefore, the need for this exception no longer existed. ■

Senate Bill 932 administrative rules

Senate Bill 932, passed during the 2001 legislative session, has resulted in rules that will provide licensing for limited-renewable-energy contractors and technicians.

Temporary rules became effective January 1 and are available on our Web site, www.oregonbcd.org. Permanent rules will be effective April 1. ■

Interpretive rulings signed

Interpretive Ruling 01-1, One- and Two-Family Dwelling Fire Sprinkler Systems, was approved by the Building Codes Structures Board and the Plumbing Board and signed by the administrator in October. The ruling approves the National Fire Protection Association 13D, 1999 edition, as an alternate method for a voluntarily installed complete or partial fire sprinkler system in a one- or two-family dwelling.

Interpretive Ruling 01-4, One-Year Trial Approval of No-Flush Urinals for Oregon Parks and Recreation Facilities, was approved by the Plumbing Board and the administrator in November. This is a temporary approval of non-flushing urinals listed to the ANSI Z124.9-1994 standard or the IAPMO Interim Guide Criteria (IGC) 161-2000 for a one-year trial period for installation in park and recreation facilities under the control and maintenance of the Oregon Parks and Recreation Department.

The complete text of these rulings is posted on our Web site, www.oregonbcd.org. ■

Clarification of the non-residential energy code

by Alan Seymour, Oregon Office of Energy

There has been some confusion regarding the non-residential energy code changes that became effective on October 1, 2000. The following may clarify recent BCD technical advisories related to HVAC-performance requirements.

Oregon updated its non-residential HVAC requirements to the latest standards specified in ASHRAE Standard 90.1-1999. These new performance requirements went into the *Oregon Structural Specialty Code* (OSSC) amendments, effective October 1, 2000.

ASHRAE 90.1-1999 had an effective date associated with new requirements of October 29, 2001. Because Oregon could not legally supercede certain federally regulated equipment-efficiency requirements, BCD issued a technical advisory.

The advisory recommended that local building departments allow industry to use pre-October 1, 2000 -OSSC standards until October 29, 2001. As of October 29, 2001, the new performance requirements are in effect. ■

Staff advisory issued

Program: Structural

Subject: Expansive, Compressible or Shifting Soils

Source: 2000 edition of Oregon One- and Two-Family Dwelling Specialty Code (OTFDC)

Reference: Section 401.5

Date issued: October 5, 2001

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

Question

What is the prescriptive depth and width for expansive soils that needs to be removed before the stable moisture content of the soil is reached and the foundations can be constructed?

Determination

There is no prescriptive depth and width removal requirement for expansive soils. These are determined based on site-specific soil conditions and are dependent on the water content in the soil at the site in question. A soil investigation needs to be done by the appropriate professional to determine the depth and width of the expansive soil that needs to be removed or mitigated to achieve the stable moisture state and dimensional stability of the soil.

Analysis

Expansive soils are those that when exposed to water absorb the water and significantly increase in volume. Expansive soils are primarily clays comprising extremely small plate-like particles that have extremely large specific surface areas (m^2/g) and inherent electrical charges. Because of higher specific surface area and high charge density, clay particles are able to assimilate water into their structure.

Three common types of clay soils are kaolinite, illite, and montmorillonite (smectite). Traditionally, kaolinite soils are relatively inactive and have a negligible to moderate swelling potential. Illite clays are moderately expansive, and montmorillonite clays are highly expansive and, in their pure form, can swell to more than 15 times their original volume when going from the dry state to a fully saturated state. Montmorillonite soils are never found in pure form, but occur as mixtures with more stable clays, sands, and silts. Thus, under the worst of circumstances, the maximum volume expansion that is expected to occur in the field is 30 to 50 percent. Such volume changes in soils can have disastrous effects on structures.

Of all the factors that influence expansion of clay soils, the three most important factors are:

- climatic factors
- depth of the active zone
- human activities

The most significant climatic factors are precipitation rates and evaporation/transpiration rates. Transpiration rates are controlled by the vegetation covering a site.

The active zone is the region of soil near the surface in which water content varies due to precipitation and evapo-transpiration. The deeper the active zone, the larger the region over which soil expansion can occur.

There are several human activities that can increase the water content of the soil deposits near constructed facilities, some of which are irrigation of landscaping near foundations, removal of vegetation, placing slabs directly on the grade (thereby reducing the evaporation rate), and improper channeling of the runoff water.

Atterberg limit tests are the most-popular procedure for gathering information on the expansive nature and mechanical behavior of clay soils. Atterberg limit tests measure the liquid limit and plasticity index of the soils. Generally, a plastic index of less than 25 is considered to denote a low expansive potential of the soil, whereas a plastic index greater than 35 indicates a high expansive potential. Similarly, a value of less than 50 for liquid limit indicates a low expansion potential, and a value greater than 60 for liquid limit indicates a high expansion potential.

Given the possibility for costly damage, it is critical to determine if a construction site has expansive soils and, if so, how deep and wide is the active zone of the soil. Generally, jurisdictions can use soil survey reports by the Natural Resource Conservation Service and other data to see if the construction site under question has soils with moderate or high shrink/swell potential. If it is determined that the construction site has shrink/swell soils, it is logical (and Section 401.5 of the OTFDC requires it) to find out the depth of the active zone for exercising the option of removing soil down to the depth of the active zone. Alternatively, other soil-stabilization procedures and/or alternate methods of constructing foundations may be necessary. The appropriate course of action depends on local site and soil conditions and should be handled by professionals trained to handle such situations. ■

Arc-fault circuit-interrupter requirement in NEC postponed

by John W. Powell

At the Electrical and Elevator Board meeting November 15, the board approved a temporary rule to postpone all aspects of the arc-fault circuit-interrupter requirements in Article 210 of the National Electrical Code.

NEC Section 210-12(b) requires all branch circuits that supply 125-volt, single-phase, 15- and 20-ampere receptacle outlets installed in dwelling unit bedrooms to be protected by an arc-fault interrupter effective January 1, 2002. By temporary rule, this requirement has been postponed to April 1, 2002. A work group representing the Electrical and Elevator Board and the Building Codes Structures Board has been formed to discuss and make a recommendation to the respective boards concerning the adoption of this code requirement into the One- and Two-Family Dwelling Code and implementation of the requirement to all affected structures.

If you have questions, please contact John W. Powell, (503) 373-1353, acting chief electrical inspector. ■

Shower stall requirements you need to know

by Terry Swisher, chief plumbing inspector

Shower installations can frustrate plumbers, plumbing suppliers, carpenters, tilers, homeowners, inspectors, and the entire building department when they don't meet the provisions of the plumbing code. The following information can make life much easier when you're dealing with showers.

Shower stalls may be purchased as a unit, such as a fiberglass shower or built-in-place such as a tile shower. Shower stalls are unique in the plumbing code, as they must be constructed of approved products and must meet plumbing-code dimensional standards in order to be approved. Also, shower installations may involve several tradespeople besides the plumber — homeowners, tilers or masons, sheetrockers, carpenters, and even electricians. The first problem is that not all of these people have the same information about the plumbing code requirements. The plumbing inspection covers the work done by each tradesperson; however, the correction notice, if required, usually goes to the plumber.

Purchased manufactured shower stalls

These are considered plumbing fixtures in the plumbing code, and the code requires the product to be listed to the appropriate manufacturing and performance standards. Fiberglass showers must conform with the American National Standards Institute (ANSI) Z124.2-95 standard and meet the dimensional provisions of the code. It's interesting to note that the ANSI Z124.2-95 standard does not contain dimensional requirements for the shower compartment size or height. The standard addresses manufacturing materials, durability, and finish, but not size or shape. Therefore, a shower stall listed to the ANSI Z124.2-95 standard may fail to meet the minimum dimensional provisions of the code. If you installed such a stall, the plumbing inspector wouldn't approve it. Code provisions cover all kinds of showers besides fiberglass. You could build the shower stall on-site with marble or many other types of materials. However, it is necessary to set dimensions that will allow you to get in and out of the completed shower stall. Also, folks find it convenient to be able to turn around in there. The minimum dimensions in the code are intended to provide adequate entrance and egress from the shower, along with proper drainage and water containment. The minimum floor area and compartment dimensions are illustrated in Figure 1.

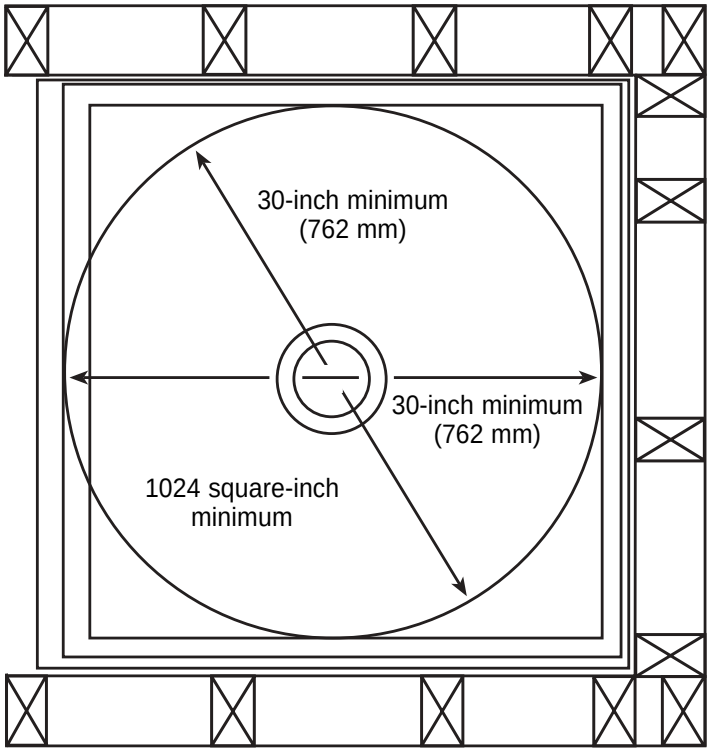
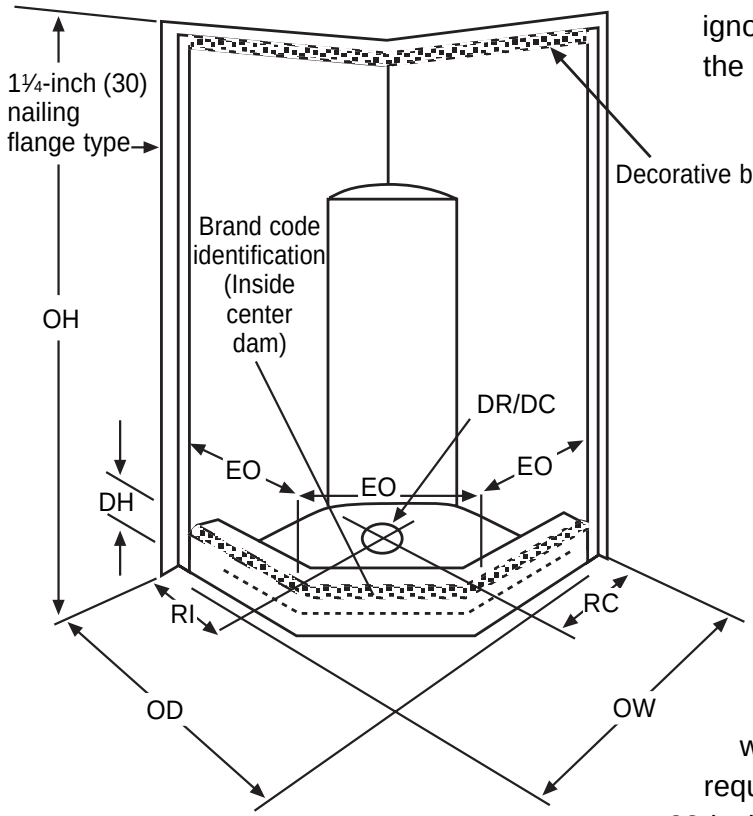


Figure 1

The view in Figure 1 is looking straight down on either a fiberglass-manufactured shower or a tiled-in-place shower. The curb you step over to enter a shower (the threshold) is required to be at least two inches and not more than nine inches in depth when measured from the top of the threshold to the top of the drain. The shower stall must be able to encompass a 30-inch circle, which can't extend from the back of the shower stall beyond the center of the threshold. The minimum floor area of the stall must be at least 1,024 square inches. If the shower stall itself is circle-shaped, the inside diameter must be about 36.25 inches to meet the minimum area requirement. The area is more difficult to determine when the shower stall is not square or rectangular, as shown in Figure 2.



Neo-angle shower
Figure 2

Determining a shower's interior dimensions

The measurements are taken at a height equal to the top of the threshold and from finished wall to finished wall, or finished wall to the centerline of the threshold. Both the 30-inch circle and the minimum area of 1,024 square inches are measured at this point and must continue up from that point to a point 70 inches above the drain without protrusions except for soap dishes, valves, shower heads, and seats. Note that the area of a 32-inch by 32-inch square is equal to the 1,024-square-inch area requirement. Be aware that many listed manufactured showers do not meet these dimensional code requirements.

Another dimensional requirement of the code that often is overlooked or ignored by product manufacturers is the minimum door opening to the shower stall. This is because there are always at least three options for door openings. The options include the sliding or by-pass door, the swing door, or a shower curtain — all are allowed by code. The plumbing code simply requires the threshold to be of sufficient width to accommodate a minimum 22-inch door. Therefore, if you use a shower curtain and the threshold is at least 22 inches wide, the shower meets the code requirement. However, if you have a 22-inch-wide threshold and you install a by-pass or swing door that requires a support frame, the remaining opening will be less than 22 inches and will not meet the code requirement for the minimum door

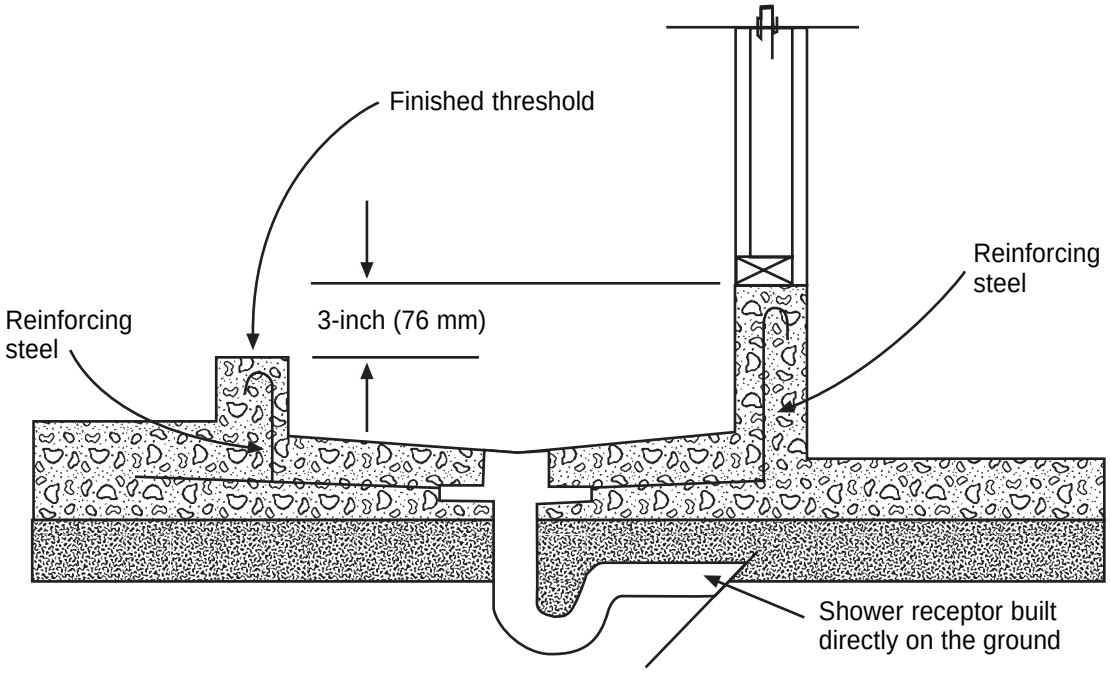
Continued on Page 8

width. This is a common problem because shower doors are often installed by someone other than the plumber, after inspection and approval.

As an example, let's say you purchase a home with a built-in fiberglass shower. The shower has a shower curtain, and you decide it should have a glass swing door. You purchase and install a door in the 22-inch-wide opening, and then the shower doesn't meet the plumbing code because the swing door opening is only 17.5 inches wide.

By-pass doors are in two parts and take up much more of the opening width. It's not unusual to find by-pass shower doors for 48-inch thresholds that do not meet the 22-inch minimum door width opening required by the plumbing code once they're installed. Many times this is noted in the fine print on technical documents by the manufacturer, but it's not something most homeowners are aware of until the plumbing inspector points it out.

All of the code provisions regarding minimum dimensions apply to built-in-place showers. These may be tile-lined or constructed of other nonabsorbent materials. There are two general types of built-in-place shower stalls: those that are built on the ground and those that are built above the ground. A shower built on a concrete slab on the ground is not required to have a shower-pan liner under the shower. The drain may be a standard floor drain poured into the concrete floor without an underfloor liner membrane. (See Figure 3.)

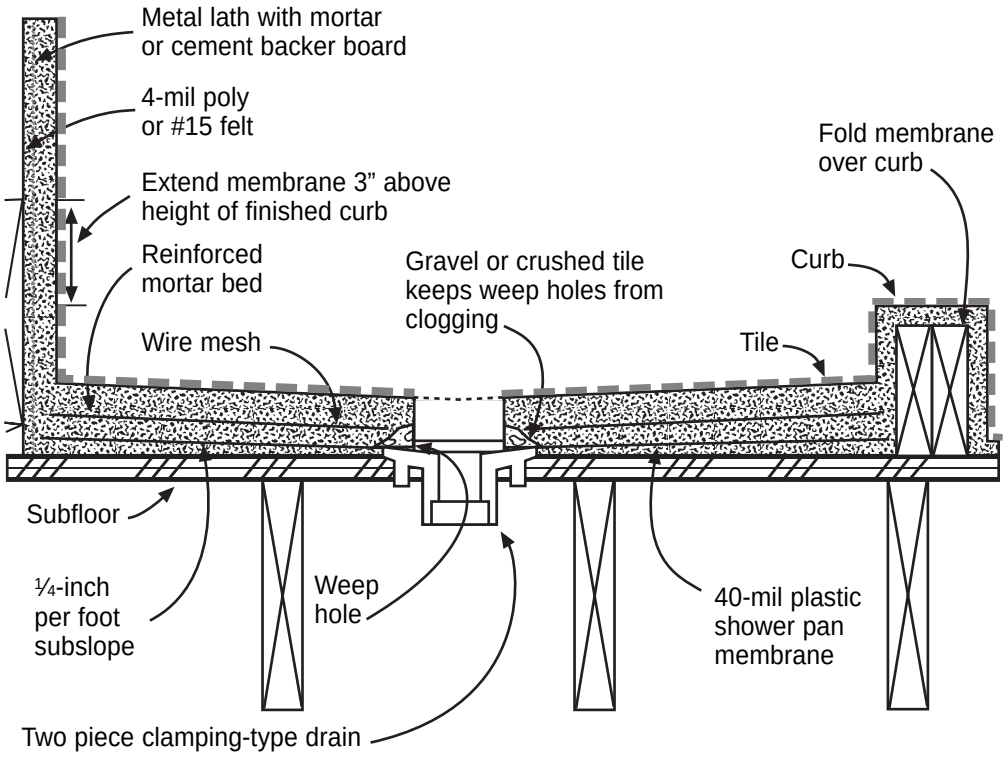


Shower built on concrete slab

Figure 3

A tile-lined shower stall constructed on wood framing is required to have a waterproof lining membrane that is sloped and connected to the shower-drain assembly.

Figure 4 shows the proper method to install a lining material on a shower receptor built above grade. Approved lining materials include four-pound-per-square-foot sheet lead, No. 24 B&S gauge sheet copper, hot-mopped 15-pound asphalt impregnated roofing felt, chlorinated polyethylene (CPE) sheet plastic membrane, and others. Most installers today use the CPE sheet-plastic lining. It's lightweight and easily installed in most applications. The material can also be solvent-cemented together for larger sizes or for preformed corners or angles. When liners are installed, a layer of galvanized expanded wire lath and concrete must be installed below the liner with a slope to the drain subassembly so that water will run to the drain weep-holes and to the trap connection. Above the drain assembly, about two inches more concrete with reinforcing wire must be floated out to create the bottom of the shower base. Over this layer, the tile or finish material may be applied with thin set to a slope of at least ¼-inch-per-foot but not more than ½-inch-per-foot. (See Figure 4.) ■



Shower base for wood frame construction

Figure 4

Code update classes

The Building Codes Division and the Oregon Manufactured Housing Association are providing 24 code update classes throughout the state. The classes are four hours long and review changes to the 2002 OMDS, now called the 2002 MD&P (Manufactured Dwelling and Park Specialty Code.) The classes will be held January through March.

Code update classes **do not** take the place of the two-day initial training required to become a licensed installer, limited installer, or certified inspector. **Failure to complete a Code Update class will result in the loss of your license** *and* will require attendance at a two-day initial training program to become re-licensed.

The registration fee is $45 to reserve a space in a code update class. Registration must reach OMHA seven days before the class date or a late fee of $10 will be added. (Except by Jan. 2, for the Jan. 8 class.)

Complete the registration form below and mail it with your registration fee to OMHA. Make a copy of your registration form, as a confirmation will not be mailed to you.

Questions? Please contact OMHA, (503) 364-2470.

Remember, failure to attend a Code Update class will result in the loss of your license. (OAR 918-515-0360 and 918-515-0380)

Check one (Klamath Falls and Newport offer morning sessions only.)

Class time		City	Date	Location	Registration cut-off
❑ 8 a.m.	❑ 1 p.m.	Ontario	Jan. 8	Holiday Inn	Jan. 2
❑ 8 a.m.	❑ 1 p.m.	Baker City	Jan. 9	Best Western Inn	Jan. 2
❑ 8 a.m.	❑ 1 p.m.	Pendleton	Jan. 10	Red Lion Hotel	Jan. 3
❑ 8 a.m.	❑ 1 p.m.	Portland	Jan. 15	Monarch Motor Hotel	Jan. 8
❑ 8 a.m.	❑ 1 p.m.	Salem	Jan. 22	New Kings Inn	Jan. 15
❑ 8 a.m.	❑ 1 p.m.	Springfield	Jan. 23	DoubleTree Hotel	Jan. 16
❑ 8 a.m.	❑ 1 p.m.	Medford	Feb. 12	Rogue Regency Inn	Feb. 5
❑ 8 a.m.	NA	Klamath Falls	Feb. 13	Shilo Inn	Feb. 6
❑ 8 a.m.	❑ 1 p.m.	Bend	Feb. 14	Shilo Inn	Feb. 7
❑ 8 a.m.	❑ 1 p.m.	Coos Bay	Feb. 20	Red Lion Hotel	Feb. 13
❑ 8 a.m.	NA	Newport	Feb. 21	Hallmark Inn	Feb. 14
❑ 8 a.m.	❑ 1 p.m.	Portland	March 12	Monarch Motor Hotel	March 5
❑ 8 a.m.	❑ 1 p.m.	Springfield	March 14	DoubleTree Hotel	March 7

Name: _____ Company: _____

Address: _____
Street City State ZIP

Phone: _____ Fax: _____

Make check payable to: Oregon Manufactured Housing Association

Number registering: _____

Enclose registration with $45 fee, and mail to: OMHA
2255 State Street
Salem, OR 97301

Amount enclosed: $ _____

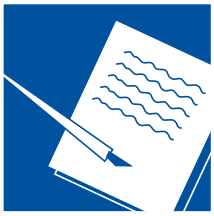
Fire protection engineering comes of age

A lecture sponsored by Oregon Center for Advanced Technology Education (OCATE), local fire professionals, and Portland State University will help facilitate a Portland-based fire protection program. James A. Milke, associate professor, Department of Fire Protection Engineering, University of Maryland, will present an overview of the fire protection engineering discipline and how to use fire protection engineering analysis to impact building design, investigations, and product research and design.

This free lecture is 4 p.m., January 18, 2002, at Capital Center, 18640 NW Walker Road (at 185th Avenue), Beaverton. In addition to the lecture site, two-way teleconferencing will be available at the Portland State University campus. Advance registration is encouraged.

For more information, contact Portland Fire & Rescue, (503) 823-2720, or jely@fire.ci.portland.or.us.

Board appointments



Plumbing Board

Brett M. Cook was reappointed to the Plumbing Board for the term December 1, 2001, through November 30, 2005. Cook has served on the board since May 2000.

Electrical and Elevator Board

Michael G. Miner was appointed to the Electrical and Elevator Board November 16 to replace Stephen Dyrnes, whose term expired. Miner fills the electrical-equipment-supplier position. He has been the regional power distribution specialist for North Coast Electric Company in Eugene since July 1998. His background includes attending the U.S. Naval Academy and a bachelor's degree in mechanical engineering from the University of Michigan. Miner's term expires June 30, 2005.

Tri-County Building Industry Service Board

John J. Leeper was appointed to the Tri-County Building Industry Service Board effective November 1, succeeding Lisa Naito. Leeper is a Washington County commissioner who fills the elected county official position on the board. His term expires June 30, 2005. ■

Compliance Report

The Electrical and Elevator Board found the following violations of the Oregon electrical safety laws in October 2001:

CITY	NAME	VIOLATION	PENALTY
Cascade Locks	Carey Miller	No electrical permit	$1,000
Enterprise	Stephen J. Cavallaro Cavallaro Electric	No electrical permit	$1,000
Glendale	Jay Davasher	Failure to make corrections	$1,000
Gresham	Shawn Maricelli	Directing, making or controlling the making of an electrical installation without a supervising electrician license	$1,000
Hillsboro	John Issac Clubb	No electrical permit/no supervising supervising or journeyman license	$2,000
La Pine	DeWayne E. Lambert XL Electric	Failure to make corrections	$500
Milwaukie	George B. Nutter Omega Electric, Inc.	No electrical permit	$1,000
Milwaukie	James A. Grear All-Ways Electric	No electrical permit	$2,000
Mulino	Gordon Ferris GRF Electric	No electrical permit	$250
Portland	Edwin E. Golobay Sun Glow, Inc.	No electrical permit	$250
Portland	Kenneth Kramer Utility Protection Services, Inc.	No electrical permit	$250
Portland	William D. Gander President, Standard Appliance Inc.	Allowed unlicensed individual to make electrical installation	$1,000
Portland	Doug Lemon	No supervising or journeyman license	$1,000
Salem	Jeff Arndt	Failed to comply with required continuing education requirements	$100
Sweet Home	Charles William Coale	No supervising or journeyman license	$1,000
Temecula, CA	Electrical Services Corp.	No electrical contractor license/no electrical permit	$2,000
Tempe, AZ	Donald C. Fishstein Federal Communications Group, Inc.	Allowed unlicensed individual to make electrical installation	$500
Terrebonne	Charles Hegele	No electrical permit	$250
Vancouver, WA	Dean Bjur St. Johns Electric Inc.	No electrical permit	$1,000

Vancouver, WA	Tom Potter Information Systems & Supplies	Allowed unlicensed individual to make electrical installation/ no electrical contractor license/no electrical permit	$3,000
Vancouver, WA	William Halberg Prairie Electric, Inc.	No electrical permit	$2,000
Wilsonville	Michael Lama Portland General Electric	Energized electrical service without prior approval (four violations)	$4,000

The Plumbing Board found the following violations of the Oregon Plumbing Specialty Codes in October 2001:

CITY	NAME	VIOLATION	PENALTY
Aloha	Kenneth W. Handlin Handlin's Plumbing	No plumbing journeyman certificate of competency (two violations)	$3,000
Astoria	John A. Craig	No plumbing business certificate of registration/no plumbing permit	$2,000
Bend	Gary D. Knight Knight Mechanical	Allowing unlicensed individuals to make plumbing installations/ no plumbing permit	$2,000
Bend	Gary Ford Summit Plumbing Co.	Allowing unlicensed individuals to make plumbing installations	$1,000
Bend	Paul Rychlick Hoffmark, Inc.	No plumbing permit	$1,000
Black Butte Ranch	Loy Helmly President, Black Butte Ranch Corporation	No plumbing business certificate of registration	$1,000
Eugene	David L. Love President, Quality Water Inc.	No plumbing business certificate of registration	$500
Eugene	David L. Love	No plumbing journeyman certificate of competency	$500
Eugene	Peter A. Chapin President, Chapin Enterprises Inc.	Allowing unlicensed individuals to make plumbing installations	$1,000
Grants Pass	Richard Jeffrey Miovac Miovac Construction	No plumbing business certificate of registration/no plumbing journeyman certificate of competency	$1,000
Gresham	Michael W. Spicer Spirit Enterprises of Oregon, Inc.	No plumbing permit	$5,000
Kennewick, WA	Kenneth M. Murry	No plumbing journeyman certificate of competency	$1,000
Kennewick, WA	Jonathan T. Bush	No plumbing journeyman certificate of competency	$1,000
Kennewick, WA	Michael F. Murry	No plumbing journeyman certificate of competency	$500

Klamath Falls	Luther H. Dearborn Gino's Market	No plumbing journeyman certificate of competency/ no plumbing permit	$2,000
Medford	Alexander Steven Goldman Precision Construction	No plumbing business certificate of registration	$1,000
Milwaukee	Hamzeh Zaghari	No plumbing journeyman certificate of competency	$1,000
Milwaukee	Bob Lyon	No plumbing journeyman certificate of competency	$1,000
Milwaukie	Steve Ferree Ferree Associates, LLC	Allowing unlicensed individuals to make plumbing installations	$1,000
Oregon City	Russell J. Lampton Lampton Landscape & Design	No permit/no plumbing business certificate of registration	$1,250
Port Orford	Frank Cali	No plumbing journeyman certificate of competency	$500
Portland	Thorben Larsen	No plumbing journeyman certificate of competency (two violations)	$1,500
Portland	Claude Davis Flournoy C&S Plumbing	No plumbing journeyman certificate of competency/no plumbing permit	$1,000
Portland	John Paul McAvalon	No plumbing journeyman certificate of competency	$250
Portland	William D Gander President, Standard Appliance Inc.	Allowing unlicensed individuals to make plumbing installations/ no plumbing permit	$2,000
Portland	Doug Lemon	No plumbing journeyman certificate of competency	$1,000
Portland	Kenneth Howe	License revoked, misrepresented work history for plumbing license	$1,000
Portland	Hilbert L. Engelter Eagle Construction	No plumbing business certificate of registration (two violations)/no plumbing journeyman certificate of competency	$3,000
Portland	William D. French Premier Heating & Air Conditioning	Allowing unlicensed individuals to make plumbing installations	$1,000
Portland	Daniel A. McDowell McDowell Welding & Pipe Fitting, Inc.	Allowing unlicensed individuals to make plumbing installations (four violations)/no plumbing permit	$2,500
Portland	Mike Wolfe President, AA Rite-Way Roofing	Allowing unlicensed individuals to make plumbing installations/ no plumbing business certificate of registration	$2,000
Salem	Ron Lindon	No plumbing journeyman certificate of competency	$1,000
Salem	Kathleen M. Sharp Sharpcor Inc.	Allowing unlicensed individuals to make plumbing installations (two violations)/no plumbing business certificate of registration	$6,000

Salem	Aaron D. McLaughlin	No plumbing journeyman certificate of competency	$1,000
Springfield	Kevin M. Olson	No plumbing journeyman certificate of competency	$1,000
Stayton	L. D. Emery Emery & Sons Construction Inc.	Allowing unlicensed individuals to make plumbing installations/ no plumbing permit	$2,000
Stayton	Rick Lee Boedigheimer	No plumbing journeyman certificate of competency	$1,000
Sunnyside, WA	Robert D. Moore	No plumbing journeyman certificate of competency	$500
The Dalles	Rich Tenold	No plumbing journeyman certificate of competency/ no plumbing permit	$2,000
Tillamook	Ronald L. Young Northwest Park Models	No plumbing business certificate of registration	$1,000
Vancouver, WA	Paul Hoerler Blue Heron Plumbing	Allowed an unlicensed individual to make a plumbing installation	$500
Vancouver, WA	Brian Jenkins	No plumbing journeyman certificate of competency	$500

The Electrical and Elevator Board found the following violations of the Oregon Electrical Safety Laws in November 2001:

CITY	NAME	VIOLATION	PENALTY
Aloha	Charles R. Garner Garner Electric Co.	Allowed unlicensed individual to make electrical installation	$3,000
Boring	Donald F. Schroeder Schroeder Enterprises aka SchroederElectric	Allowed unlicensed individual to make electrical installation (two violations)	$2,000
Fairview	Awsem Zayde Awsem Electric LLC	No electrical permit	$1,000
Fife, WA	Ray Salzer Ideal ConstructionServices LLC	Allowed unlicensed individual to make electrical installation/ no electrical contractor license/no electrical permit	$3,000
Gresham	Cathrine A. Rosskopf Franklin Electric, Inc.	Allowed unlicensed individual to make electrical installation	$1,000
Hillsboro	Royal Stearns Northwest Electrical Specialties Inc.	No electrical permit	$1,000
La Pine	Kim A. Russell	No supervising or journeyman license	$1,000
Lynnwood, WA	Gene Morgan Powercom,Inc.	No electrical contractor license/no electrical permit	$2,000
Pendleton	Kevin L. Hale Pendleton Electric Co.	Failure to call for inspection (three violations)	$750

Portland	John J. Maloney Tice Electric Co.	No electrical permit	$1,000
Portland	Dan Lundberg Schindler Elevator Corp.	Installed or altered elevator without prior plan approval	$250
Portland	Gary J. Phillips Gary's Vacuflo, Inc.	No electrical permit (three violations)	$3,000
Portland	Bryan M. Ager	No electrical permit	$1,000
Salem	Leo J. Gysin	Allowed unlicensed individual to make electrical installation/ no electrical permit	$2,000
Sherwood	Dave W. Haupt American Electric Service	No electrical permit	$1,000
South Beach	Frederick X. Schachtner Jr.	No electrical contractor license (two violations)/no electrical permit (two violations)/no supervising or journeyman license (two violations)	$6,000
St. Paul	Christopher Merten Willamette Valley Communications	No electrical contractor license/no electrical permit	$2,000
Temecula, CA	Bill Gilpin	No supervising or journeyman license	$1,000
Tigard	Robert D. Fife Willamette Electric Inc.	No electrical permit	$1,000
Weston	Robert and Caryl Jacobson	No electrical permit	$250
Wilsonville	Michael J. Overfield Tualatin Electric, Inc.	No electrical permit	$4,000

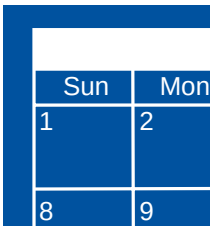
The director of the Department of Consumer and Business Services found the following violations of the Oregon Specialty Codes in November 2001:

CITY	NAME	VIOLATION	PENALTY
Albany	Charles F. Kizer Kizer Co. Inc.	No permit (two violations)	$500
Aloha	Kenneth W. Handlin Handlin's Plumbing	No permit	$1,000
Aloha	J. T. Woods Econ-O-Fab Buildings Inc.	No permit	$250
Aloha	James G. Montgomery Beaverton Fence & Decking	No permit	$250
Aloha	Brian Scott Morgan We Can Dig It Excavation	No permit	$250
Beaverton	Mike A. Humphries Apollo Air LLC	No permit	$250
Beaverton	Joseph F. Sanchez Inline Concrete Inc.	No permit	$250
Bend	Charles W. Anderson	No permit	$250

Central Point	Stephen D. Tallant Sun Country Construction and Development, Inc.	No permit	$250
Clackamas	Michael S. Blackmon Accurate Heating Inc.	No permit	$250
Condon	David Drinkwine Drinkwine Construction	No permit	$250
Conyers, GA	Ron Rose Hill Phoenix	No insignia of compliance (two violations)	$2,000
Dallas	Joseph J. Meduri Meduri Farms, Inc.	No permit	$250
Eugene	Bill Glover	No permit	$250
Gresham	Walter A. Balcom	No permit	$250
Hermiston	Randy Randall	No permit	$250
Hillsboro	Manuel Castaneda Pro Landscape, Inc.	No permit	$250
Hillsboro	Gary Koivunen Gary's Heating & Air Conditioning	No permit	$250
Klamath Falls	James Baker Henris Roofing & Supply of Klamath County, Inc.	No permit	$250
Lake Oswego	Charles Albin ABC Construction NW LLC	No permit	$250
Lake Oswego	Michael D. Hillier President, Tualatin Valley Builders Supply, Inc.	No insignia of compliance	$250
McMinnville	Jose Perez	No permit (two violations)	$500
Milton-Freewater	Tony Locke	No permit	$250
Milwaukie	North Clackamas School District	No permit	$250
Milwaukie	Ibi Yuichi Westlake Appliance Heating & Air	No permit	$250
Milwaukie	David R. Hughes	No permit	$250
Molalla	Mark Godvig North West Framing Inc.	No permit	$250
Myrtle Creek	Elizabeth A. Dewsnup B.T Construction Inc.	No permit	$250
Pendleton	Delwin Newson	No permit	$250
Port Orford	Frank Cali	No permit	$250
Portland	Mark H. Defrancisco Heat Relief Company	No permit	$250
Portland	Kevin R. Kelly First Call Heating & Cooling Company	No permit	$1,000
Portland	Ron Friedrich A-Temp Heating & Cooling, Inc.	No permit	$250

Portland	Calvin Jackson CJ Jackson Construction	No permit	$250
Portland	Hilbert L. Engelter Eagle Construction	No permit	$250
Portland	Curtis D. Dennis Sunset Landscaping, Inc.	No permit	$250
Portland	Thomas Mathew Corvi Right Angle Co.	No permit	$250
Portland	Mark W. Powell Climate Control Inc.	No permit	$500
Portland	Cliff Mather Advanced Heating & Air Conditioning	No permit	$250
Portland	William D. French Premier Heating & Air Conditioning	No permit	$1,250
Portland	Joseph J. Hanna First Light Landscaping Corp.	No permit	$250
Redmond	David J. Kuhn	No permit	$250
Roseburg	Harry Ruchaber HJR Construction	No permit (two violations)	$250
Salem	Randy D. Cook Sunburst Construction Co.	No permit	$250
Seneca	Garld Elliott	No permit	$250
Sherwood	Stephen P. Bizon Bizon Landscape Maintenance Company, Inc.	No permit (two violations)	$500
Tigard	Paul L. Jensen Able Heating & Cooling Inc.	No permit	$250
Vancouver, WA	Donald Palumbo Palumbo Custom Woodworks Inc.	No permit	$250
West Linn	Thomas S. Mickel TSM Construction	No permit	$250
Weston	Robert and Caryl Jacobson	No permit	$250
Weston	Marvin and Brenda Ford	No permit	$250

Board meeting dates



ELECTRICAL & ELEVATOR BOARD

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

- January 24
- February 28

BUILDING CODES STRUCTURES BOARD

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

- January 9 – canceled
- February 6

MANUFACTURED STRUCTURES & PARKS ADVISORY BOARD

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

- January 10

STATE PLUMBING BOARD

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

- February 15

BOARD OF BOILER RULES

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

- March 5

TRI-COUNTY BUILDING INDUSTRY SERVICE BOARD

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

- February 13
- April 10

MEETINGS ARE HELD IN THE SALEM BCD CONFERENCE ROOM AT 1535 EDGEWATER ST. NW, EXCEPT THE TRI-COUNTY SERVICE BOARD, WHICH MEETS IN PORTLAND.

CODE LINK
STATE OF OREGON • BUILDING CODES DIVISION

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Kudos to Oregon's home building industry

by Alan Seymour, Oregon Office of Energy

Thanks to everyone in the residential home building industry – from local building department staff to homebuilders, material suppliers, subcontractors and designers. You have helped Oregon gain a nationwide reputation as having one of the most effective residential energy codes in the United States. At the last US Department of Energy National Workshop on State Energy Codes, a representative from the state of Washington showcased Oregon's residential energy code and the high levels of compliance associated with those requirements. ■

CODE LINK

STATE OF OREGON • BUILDING CODES DIVISION

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

Editor
Louann Rahmig

Publication Design
Shonnie Emerson, DCBS Communications

BCD Administrator
Joseph A. Brewer III

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DEPARTMENT OF CONSUMER & BUSINESS SERVICES

Building Codes Division
1535 Edgewater St. NW
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