

Manufactured Home Update

Oregon Department of Consumer & Business Services ■ Building Codes Division

July 2003

Anchoring rules differ for wind, flood, quake

By Albert Endres

Apparently, judging from calls we've received about anchoring systems, requirements for the different geographical areas are not clear. It seems the words "anchoring systems" are being used improperly. In Oregon, we have three basic anchoring requirements: wind, flood, and seismic (earthquake). The requirements and the systems are not necessarily interchangeable.

A seismic bracing system engineered to protect a home against seismic forces may offer very little — if any — wind or flood resistance. Wind anchors may have little value as earthquake bracing.

Even if a system is designed to accommodate both wind and seismic loads, installation requirements for each may be different under the Oregon Manufactured Dwelling and Park Standard.

As an example, Section 3-2.3.3(c) states that a multi-section home in a high-wind area requires tie-downs if more than 25 percent of the piers under the main frame exceed 24 inches.

A similar home in the same area that happened to be in seismic zone 2b (as identified in Section 3-2.5.1) would not need bracing against seismic activity unless more than 25 percent of the piers exceeded three feet in height.

As you can see, it would be easy for BCD or a jurisdiction to fall into the trap of answering no to callers' questions about whether they need to tie down their homes in seismic zone 2b. Callers then interpret the "official" answer to be that no tie-downs are necessary when, in reality, the home still needs tie-downs for wind.

If you have any questions about this, please call me at (503) 378-5975. ■

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HUD changes process for label replacement

By Tom Nicolai

In the January 2003 Manufactured Home Update, I wrote an article on the steps to replace lost HUD labels. That program has changed. On April 11, our office was notified by IBTS, a HUD contractor that handles the labels, that BCD could no longer issue replacement labels.

We have been instructed to refer requests for replacement labels to the HUD Manufactured Housing Program, (202) 708-6423, or the Web site, www.hud.gov.

You may continue to contact this office when you need information concerning the HUD label numbers, manufacturer of the home, serial number, or date of manufacture. If you run into difficulty going through the HUD system, call this office for assistance.

For additional assistance or information on this matter, please contact Tom Nicolai, (503) 378-3955, or send e-mail to tom.e.nicolai@state.or.us. ■

Manufacturers, SAAs meet to create similar standards for complaint response

By Tom Nicolai

On Thursday, April 17, service managers and SAA representatives from Oregon and Washington met at the Fleetwood Washington plant in Woodland, to discuss requirements and processes for handling consumer-assistance cases.

The intent was to create a similar and consistent complaint-response procedure between the states' SAAs and manufacturers.

Discussions included learning more about the regulations and procedures used by all parties, the requirements expected from all parties and a similar and consistent method for processing both complaints and Subpart "I" issues. The groundwork was laid for resolving future issues.

Attendees: Phil Signor, Fleetwood Corp.; Murray Morris and Dulcy Hilchey of Golden West Homes; Rick Torgerson of Skyline Homes; Gary Wilson and Steve Matus of Champion Homes; Sky Slivkoff of Liberty Homes; Tom Shimp of Marlette Homes; Tisha Busey of Valley Manufactured Housing; Robert Swett of Palm Harbor; Teri Ramsauer, Josie Young, and Brad Jackson from the State of Washington CTED office of Manufactured Housing; and Albert Endres and Tom Nicolai from Oregon Building Codes Division.

Special thanks to Van Pope, general manager of Fleetwood Washington, for allowing us to hold this meeting at Fleetwood's Woodland facility. ■

Manufactured-home statistics updated

By Mark Campion

During every bi-annual visit to dealers, I ask how many of the staff are in sales and how much experience they have. Here is an update:

In 2002, there were approximately 267 men and women selling new manufactured dwellings at store-front retailers or an average 3.3 people per store with an average 6.6 years of experience.

By June 2003, total sales staff had declined to 235, or 3.1 people per store. Sales experience in the industry had increased to 7.1 years.

Those numbers reflect the continued flat sales in our industry: slightly fewer dealers in the industry, with leaner sales staff.

Last year, I started asking dealers about two characteristics of their sales: how many homes are going into parks and how many homes are financed by FHA.

In 2002, 10 percent of all new homes went into parks. This year, it is up slightly, to 11 percent.

FHA financing was at just 13 percent last year. It has increased significantly to 20 percent of all new homes.

Please note that the FHA figures do not apply only to land/home packages. It is my understanding that FHA financing can be used for park sets in certain circumstances. ■

Retrieve HUD labels from scrapped homes

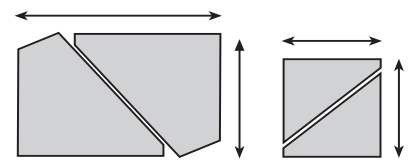
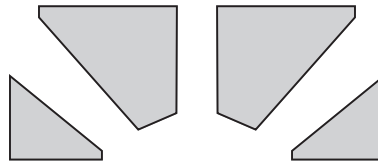
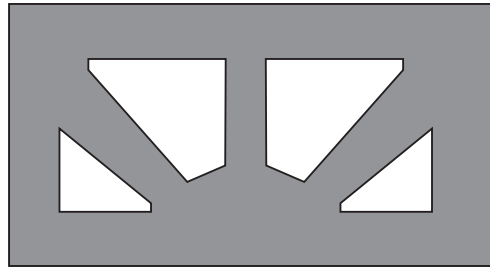
If you scrap a home that you've accepted as a trade-in, be sure to get the HUD labels from it before taking the post-salvage remnants to the landfill.

Dealers and building departments are required to retrieve and send to BCD the HUD labels on homes that are being scrapped and on those converted to storage sheds or other non-dwelling purposes.

When you send the HUD labels, include as much information about the home as you can, such as manufacturer, serial number, and address at which the home was located.

If you have any questions, please call Albert Endres, (503) 378-5975. ■

A quick and simple way to measure the openings in architectural brick



1. Lay the brick on a piece of paper and trace the openings.
2. Cut out the shapes of the openings.
3. Arrange the cutouts of the openings into groups that are as close as possible to rectangles or squares.
4. Measure the length and width of each square or rectangle and multiply the length by the width to get the area. Add together the area of each square or rectangle to get the total opening area for the brick.
5. Multiply the total opening area of the brick by the number of bricks you're using. Multiply that number by .75 to get the net ventilation area. If the net ventilation area comes to less than 1 square foot per 150 square feet of under-floor area, add more bricks.

Sizing crawlspace ventilation

By Al Rust

Section 3-10.1.2 of the Oregon Manufactured Dwelling and Park Specialty Code talks about crawlspace vents not marked for net free area of ventilation and instructs us to measure the vent opening, determine the gross ventilation area, and deduct 25 percent for screens or louvers.

This process has caused some problems among contractors and inspectors:

- Confusing this code with codes for standard site-built structures.
- Not knowing exactly what to measure.
- Not deducting for screen or other hardware.

The Manufactured Dwelling and Park Specialty Code is very clear on the ventilation requirements, which are 1 square foot of ventilation for every 150 square feet of under-floor area.

Use the chart in the book to find the required net free area for the home. In the code book it's on Page 70, Table 3-D. (See Page 6 for instructions on how to obtain electronic and paper copies of the 2002 Manufactured Dwelling and Park Specialty Code.)

Most prefabricated vents are marked, but you can ask the building-supply store for engineering information for net free-vent area. You also have the option of simply measuring the opening in the vent and deducting for the screen.

For architectural concrete block being used for ventilation, you may not be able to get the net free area information from your supplier. You will need to measure the openings and deduct for the screen. This may be somewhat tricky.

If you have problems measuring the openings, lay the block on a piece of paper, draw around the openings, arrange the pieces in a square or rectangle, figure your gross ventilation area, and deduct for the screen. (See illustration, above.)

The most common vent block we see used today is Sunburst, and we have different styles made in Oregon. The openings of the style most commonly used are 34.5 square inches by .75, which comes to 25.8, rounded down to 25 square inches.

This may be an oversimplification, but it will get you the information you need. You can use the same procedure for all other vents and blocks. ■

Inspections affect only exposed roof and wall marriage-line connections

By Albert Endres

Each month, we get a few calls from installers about the requirements for inspection of the marriage-line structural connections. Installers say they are unexpectedly being required to remove roofing or close-up boards so that inspectors can see the bolting pattern.

For starters, Section 1-18.13.2(b)(2) states that a set-up inspection includes verification of “exposed” roof and wall marriage-line structural connections. The key here is the word “exposed.”

Bolts in the ridge beam, after the ridge-cap is installed, are not “exposed.”

Bolts or screws in the marriage line of endwalls, after close-up boards are installed, are not “exposed.” There is no requirement for inspectors to check those unexposed connections.

This being said, if a jurisdiction has a policy that is disclosed during the permit process informing inspectors that connections must be left open for inspection, the installer is required to make arrangements with the inspector to allow for this inspection.

There is dual obligation in this arrangement. The jurisdiction must make the policy clear and the installer must comply.

If the installer closes up a marriage line that required inspection, the installer must open the marriage line for inspection.

If you are an installer setting a home in an area in which you do not usually operate, it is a good idea to inquire as to what type of inspection the jurisdiction requires. ■

Reporting tag use helps installer in legal action

By Albert Endres

Those of you who complain about or hate using installation tags — and who particularly dislike monthly reports and the accuracy we insist on — might want to read the following to show just how important they can be.

Last month, a retired installer called the office and wanted information about who installed a particular home installed in 1997.

It seems that several years after installation, the owner of the home got hurt as a result of what was considered “a faulty installation.”

The owner filed a lawsuit against the person whose name was on the permit.

The person whose name was on the permit knew that he had not installed that manufactured home and knew he was not responsible. The trouble was, he could not prove it — and his name was on the permit.

By doing some research, we were able to determine the real installer of the home. Clearly, the installer

being sued had not installed the home. How his name got on the permit is not known.

It gets even better. It may sound like the second installer was now on the hook. Fortunately for him, he had checked off the work he had completed on his report.

The owner was suing over work that the installer had not performed; therefore, he was not the responsible party, either.

Those two first implicated may have to testify in court, but at least they have evidence supporting their innocence.

Hopefully, those of you who fuss about having to report will remember this story, because you never know when a lawsuit may come to haunt you.

Remember the importance of accuracy when it comes to serial numbers, dates, locations, and tag numbers.

If you have questions about tag reports, please call Ann McGovern, (503) 373-1257. ■

Temporary limited installer licenses help employers hiring new workers

By Albert Endres

We still get calls about the temporary limited-installer licenses — or, rather, the lack of knowledge about the license, which was created for employers in the process of hiring new employees to ensure that they can handle the job while remaining compliant with licensing laws.

The temporary limited installer license allows a person to perform all the work performed by a fully licensed installer as long as the work is done under the direct supervision of the fully licensed installer.

This temporary license costs \$10 and is good for 60 days. When the 60 days is up, you can get another temporary license. This can go on until a hiring decision is made.

Other advantages of the temporary license: It provides a record of experience for the new employee when it is time to attend class to get a full license, and an applicant can get the temporary license almost instantly.

To obtain a license, all employers need to do is apply and pay the \$10 fee. The employer gets a two-part blank license, which the new employee fills out and has notarized. The employer sends the original to Building Codes Division and the employee keeps the copy as his or her license.

You can get an application-request form on the BCD Web site, www.oregonbcd.org. Click on “Forms,”

then on “Manufactured Dwelling Program,” then click “2567 Manufactured Dwelling Limited Installer Temporary License Request.”

You can also have application-request forms mailed to you by calling Marilyn Mohler, (503) 378-3980.

If you have questions about the license, you can call Mohler, or call Albert Endres, (503) 378-5975. ■

Installer license types and what they allow you to do

Manufactured dwelling installer — Install, set up, connect, hook up, block, tie down, secure, support, install temporary steps and skirting, and make electrical, plumbing, and mechanical connections.

Limited installer — The same work as the manufactured dwelling installer but under the direct supervision of a licensed manufactured dwelling installer.

Temporary limited installer — The same work as a limited installer under the direct supervision of a licensed manufactured dwelling installer; this license expires in 60 days and does not require training prior to licensing.

Consider CMU for retaining wall

By Albert Endres

When considering what type of CMU retaining wall to construct, there is an interesting and often overlooked choice: The reference is in the Manufactured Dwelling and Park Specialty Code, Section 3-9.8. A CMU wall may be used as a retaining wall to support up to 28 inches of backfill, if constructed according to code.

Generally, these walls must have rebar in the footings, vertical rebar every 48 inches, and grouted or concrete-filled cells. Lots of labor is involved. The part that many people seem to miss is that if you use

the 8-by-8-by-16-inch ASTM-rated concrete block, you do not need to do the vertical rebar; nor do you need to fill the cells. The rebar is still required in the footing, but you can eliminate a bit of labor while omitting the vertical rebar and filling the cells.

This article does not address the cost of such a wall, but simply points out that eight-inch block does not require extra material.

If you have any questions, please call Albert Endres, (503) 378-5975. ■

Submit monthly tag reports promptly

By Ann McGovern

A big thank-you to all MDI and LSI installers who get their tag reports in each month! It is important that we keep our database accurate and up to date. Some installers prefer to submit reports only when ordering new tags.

This can cause delays in processing your order. To ensure that appropriate data is available upon request, it is essential that you provide the information required on the report in a timely manner.

Please fill out the report completely, leaving no blank spaces.

Remember that Oregon Administrative Rule 918-515-0340(1) requires all tags used during a month to be reported monthly. A report is not necessary if no installations are completed during the month.

I look forward to working with each of you. If you have questions concerning tags or reports, please call me, (503) 373-1257. ■

Fireplaces can be dangerous — so make sure they are installed properly

By Mark Campion

Our industry produces safe and durable homes. Rarely does BCD run across a problem that can potentially harm the occupants. That being said, a fireplace with glass doors is perhaps the most frequently encountered life-threatening problem that we find in the field.

HUD standards and our own Super Good Cents programs result in very tight homes. Although HUD requires the air that feeds a fireplace to come from outside the building envelope (crawl space), the simple fact is that in some instances, the home's furnace and other appliances (range-hood fans, bathroom fans, and whole-house ventilation fans) can singularly or in combination overpower the natural venting of the fireplace, resulting in a dangerous backdrafting condition.

Opening a window alleviates the problem in most cases. Most fireplace operation manuals from the manufacturer will offer this solution in cases of backdrafting.

However, this is not an allowable solution according to the HUD code. All of the home's mechanical ventilation and heating systems must be able to operate without interfering with the fireplace. Manufacturers should work closely with their suppliers to ensure this occurs.

Although code allows for the installation of fireplaces, and customers' demand for them is high, retailers and factories might consider offering wood stoves as alternatives to fireplaces. Wood stoves have sealed-door systems, typically with glass panels to allow homeowners to enjoy looking at the fire.

Backdrafting is rarer in wood stoves — although it can occur when the fire is fed more fuel. In addition, a wood stove serves as a source of heat, unlike a fireplace, which is considered decorative.

We encourage manufacturers and retailers to call us for an inspection when their customers encounter a problem. ■

Contact us

Here's how you can get in touch with the writers of the articles in this issue.

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Ann McGovern	(503) 373-1273	ann.mcgovern@state.or.us
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Take care with alterations to homes

by Tom Nicolai

Alterations are, by definition in the 2002 Manufactured Dwelling and Park Specialty Code, any change, repair, conversion, replacement, modification, or removal of any equipment or installation that may affect the operation, construction, or occupancy of a manufactured home.

Alterations can be made to a manufactured dwelling at any time after the original manufacture of the home.

The time of the alterations in relation to the sale determines which codes govern the alterations and which jurisdiction inspects them.

Before or at the time of sale

An alteration before or at the time of first sale to the consumer (up to the time when all terms of the sales contract have been met) must conform to the Manufactured Home Construction and Safety Standards (HUD Code), the National Electrical Code, and the manufacturer's design approved package.

In-plant inspectors from Building Codes Division inspect alterations performed before or at the time of the first sale.

To obtain the required permit, contact Albert Endres, (503) 378-5975. Normally the dealer coordinates the inspections and approvals on site.

Exceptions to this rule include site-installed solid-fuel-burning fireplaces, wood stoves, heat pumps, and air-conditioning equipment; permits for these

should be obtained through the jurisdiction that will inspect the product to the terms of the appliance listing. Building Codes Division can help customers identify the appropriate jurisdiction.

After the initial sale

An alteration performed on a home after it's sold to the customer is a secondary alteration. Secondary alterations must conform to the Oregon One- and Two-Family Dwelling Specialty Code and the National Electrical Code.

Permits and inspections are obtained through the local jurisdiction. Again, BCD can help identify the appropriate jurisdiction.

HUD labels or state insignias do not have to be removed when alterations are done in accordance with ORS 446.155 and OAR 918-515 and 918-520 and also in accordance with the 2002 Manufactured Dwelling and Park Specialty Code, where applicable.

BCD has noted through dealer lot inspections and service record reviews that numerous alterations are being made by persons who have not obtained the required alteration permits. State law requires that changes made to a home after it leaves the manufacturing facility be inspected to ensure that alterations comply with the appropriate code.

If you have questions, contact Albert Endres, (503) 378-5975. ■

Newest code available on BCD's Web site

By Larry Iverson

The complete 2002 Manufactured Dwelling and Park Specialty Code is now available to anyone with an Internet connection.

This Web version of the code is available in PDF format and may be downloaded and viewed and printed by chapter. Just click on the chapter in the table of contents, and you go to that chapter.

The chapter files are fairly large, so they take a few minutes to download.

To get the PDF, go to the BCD Web site, www.oregonbcd.org. Click on "Ordering Codebooks," then click "Manufactured Dwelling," and "2002 Oregon Manufactured Dwelling Specialty Code." You can select which chapters you wish to download, or you can select the entire 10-megabyte code document.

You may purchase a spiral-bound paper copy of the code by calling the Oregon Manufactured Housing Association, (503) 364-2470. ■

Good installations recognized

On behalf of the manufactured housing industry in Oregon, Building Codes Division recognizes the following installation contractors and their crews for having installed homes during the January - March 2003 quarter with no nonconformances:

- Ken L. Stinnett, Springfield
- Steven L. McKinley, Siletz
- Patrick J. Maney, The Dalles

Quizzin' Corner errata

ROBERSON was inadvertently left out of the puzzle in the last issue. For those of you who had problems with it, rightly so. Irene Lickiss apologizes for this.

If anyone discovered the secret message, please call MHU's editor, Albert Endres, (503) 378-5975, and let him know what it says. Gold stars to all of you who found it! ■

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