



# Manufactured Home Update

Oregon Department of Consumer & Business Services ■ Building Codes Division

January 2005

## Tracking duties shifting to BCD on schedule

By Albert Endres

The transition of responsibilities from the Department of Motor Vehicles to Building Codes for tracking manufactured-home ownership, licensing, and trip permits becomes effective May 1, 2005.

We are well on the way to making the transition. The computer system is operational and internal testing is under way. Training will start in January. The rules associated with the new statute are under-going review.

We have had several meetings with stakeholders and some public meetings to explain the changes. There is significant interest in what the transition will mean to users.

The primary difference is that most transactions will be completed electronically using the new computer-based system. If you prefer, you can still file changes in person, but instead of going to DMV to do it, your first point of contact will be the tax assessor's office in the county in which the manufactured home is sited.

If you are a transporter, trip permits will no longer be purchased in bulk. Instead, transporters will file for permits electronically or go to the county office to purchase permits in person. Keep in mind that these changes will take effect May 1.

If the seller has entered the home information, the permit will be granted electronically; if not, a permit will not be issued.

Remember that the new law also affects dealers or individuals acting as dealers. If you are a subcontractor who sometimes sells homes in subdivisions, you will need to be a licensed dealer. If you are a park owner who occasionally sells a repossessed or abandoned home or you sell new homes in your park, you will need a limited license.

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A very important thing to consider is that if you are a dealer who sets spec homes in parks or other locations, the homes are subject to taxation. You'll need a supplemental license and a dealer license for spec homes to be considered inventory and not subject to taxation by the county.

Please be aware that those who need to be licensed and those involved in transporting, selling, or financing a home will need to become BCD system users or go to county offices to conduct transactions.

Watch for announcements about computer-system training and further discussion of requirements. We will provide training as long as there is a need. If you have any questions about the transition, please send e-mail to [albert.g.endres@state.or.us](mailto:albert.g.endres@state.or.us). ■

# Statewide licensing classes set for 2005

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As you all know, any individual engaged in the business of installation of manufactured dwellings or assisting in the installation of manufactured dwellings (including skirting) must be licensed with the Building Codes Division. In addition, individuals who perform inspections of manufactured-dwelling installations for local jurisdictions must be certified by BCD.

To become licensed as a manufactured dwelling installer, limited installer, or certified manufactured home installation inspector, you must attend a two-day class and pass a written examination (limited installers need not take the examination). Individuals seeking to become licensed as limited skirting installers need only attend the first day of the two-day class.

## To become licensed or certified

You must submit an application for an installer license (\$55 fee) or an inspector certification form (\$22 fee).

The applications are available from the Building Codes Division:

Oregon Building Codes Division  
P.O. Box 14470  
Salem, OR 97309-0404

The required installation class is provided by the Oregon Manufactured Housing Association. To register, send the registration form on Page 3 and \$140 to:

Oregon Manufactured Housing Association  
2255 State St.  
Salem, OR 97301

The class registration form and the \$140 registration fee must be received by OMHA seven working days before the class. Cutoff dates are listed on the schedule. Registration after the deadline is \$155. Registration fee includes a code manual and lunches.

This year, we will tour Fleetwood Homes during the Woodburn class, Palm Harbor Homes during the Albany class, Fuqua Homes during the Bend class, Marlette Homes during the Hermiston class, and Homebuilders Northwest during the Salem class.

## Class schedule

### Woodburn

February 9 and 10  
Registration cutoff: February 1  
Best Western Woodburn Inn  
2887 Newberg Highway  
**Factory Tour** – Fleetwood Homes of Oregon

### Albany

April 6 and 7  
Registration cutoff: March 29  
Palm Harbor Training Facility  
3737 Palm Harbor Road  
**Factory Tour** – Palm Harbor Homes

### Bend

June 8 and 9  
Registration cutoff: May 31  
Shilo Inn  
3105 O.B. Riley Road  
**Factory Tour** – Fuqua Homes

### Hermiston

July 20 and 21  
Registration cutoff: July 12  
Hermiston Oxford Suites  
1050 N. 1st St.  
**Factory Tour** – Marlette Homes

### Medford

October 5 and 6  
Registration cutoff: September 26  
Rogue Regency  
2345 Crater Lake Highway  
(I-5 Exit 30)  
No Tour

### Salem

December 7 and 8  
Registration cutoff: November 29  
New Kings Inn  
Off I-5 at Market Street Exit  
**Factory Tour** – Homebuilders Northwest

To register for classes, use the form on Page 3. ■



# Opportunities for gas-pipe-sizing trouble

By Gary Hart

We recognize that there is still some confusion about the method of determining the correct pipe sizing for the gas-supply system. Some of the confusion comes from requested changes to standard designs.

**Situation 1.** The standard gas furnace has a Btu rating of 56k, but the replacement furnace has a rating of 90k. This may create a possibility for the appliance connector to be undersized. A 2-foot-long  $\frac{3}{8}$ -inch I.D. flex connector has a maximum capacity of 85k.

**Situation 2.** An optional gas fireplace is installed in the first section of a triple-wide unit, which may significantly increase the column used to calculate Btu capacity for each piping section (length in feet from inlet to the furthest appliance outlet). Remember that this is not a sliding scale. Once the column is determined, the total Btu each pipe section is capable of supplying is based on the same column. There are guidelines available that provide an example for gas-supply-system sizing requirements.

**Situation 3.** A gas system was constructed for standard gas furnace, range, and water heater (total Btu input of about 142k), but the order calls for a larger furnace, optional dryer, and a fireplace (up to 235k Btu input).

**Situation 4.** Customer requests that the gas inlet be relocated from the standard location.

**Situation 5.** A customer requests that you run a pipe under the porch for a gas barbecue. 3280.705(1)(2)(ii) outlines the requirements for providing a gas outlet to supply an exterior appliance. Requirements include an approved quick-disconnect device to be installed with a shutoff valve. A tag permanently attached to the outside exterior wall indicating the type of gas and the Btu capacity of the outlet. Btu ratings for gas barbecues can range from 20K to over 100K. Remember that all gas systems must be approved by the manufacturer's design-approval agency.

Remember to keep those threads protected and debris out of the piping during installation. Happy piping! If you have questions about this article, please call Gary Hart, (503) 373-7403. ■

# Gas pipe and proper threading

By Craig Browning

During recent plant inspections, gas-pipe over-threading has become an issue. The question is what is the approximate length of thread cutting and how many threads should be cut per iron pipe size.

First of all, the pipe and fittings shall be clear and free from cutting burrs and defects in structure or threading and shall be thoroughly brushed, reamed, and chip-and-scale blown. The specifications for threading metallic pipe are in the table in the next column.

When these specifications are followed, chances of failure are greatly reduced. Remember that just because the gas line has passed a pressure test, it does not mean the piping assembly is in conformance.

Any defects in piping or fittings should not be repaired; instead, the pipe or fittings must be replaced.

Iron pipe size	Approx. length of threaded portion	Approx. no. of threads to be cut
$\frac{1}{2}$	$\frac{3}{4}$	10
$\frac{3}{4}$	$\frac{3}{4}$	10
1	$\frac{7}{8}$	10
$1\frac{1}{4}$	1	11
$1\frac{1}{2}$	1	11

Remember, if you can see a half inch of threads protruding past the fitting, chances are the pipe is over-threaded.

If you have questions about this, please call me, (503) 373-7403. ■

# Watch your options for code compliance and safety

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By Tom Nicolai

These days, it seems that when anybody purchases a home, they either want to omit something from the standard floor plan or add something to it. Whether changing doors, windows, sliding glass doors, cabinets, electrical lights, receptacles, or some combination thereof, be careful that the home still complies with code.

While conducting a recent dealer lot inspection, I came across two cases in which changes to the master bathroom caused the GFCI receptacle to be moved. The prospective homebuyers wanted the countertops lengthened, one to accommodate an extra sink and the other to add an extra bank of drawers.

When the countertops were lengthened, the GFCI receptacles were moved to the lengthened end.

What was not taken into consideration was that the receptacle was now within reach of the tub and shower space. The HUD code 3280.806(e) states that receptacle outlets shall not be installed within reach (30 inches) of a shower or bathtub space. The idea is to ensure that occupants of the tub or shower have to step out of or away from the shower or bath space to plug anything into the receptacle, thus eliminating the possibility of shock.

So, while it is normal to change a home to fit one's lifestyle, it is important to make sure the changes don't affect the home's safety and codes. ■

# Cement board skirting reminder

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By Mark Campion

James Hardie products are not approved for contact with the ground surface. If you are using this product for skirting, it must be at least 5 ½ inches from the ground. (See in the Manufactured Dwelling and Park Specialty Code, Page 56, 3-9.2 subpart f).

Although code language in this section is a little confusing, it is intended to prevent cement-board products not certified for ground contact from being placed incorrectly. Remember, unless certified for ground contact, skirting must be at least 5 ½ inches

from the ground or three inches from poured-in-place concrete or tightly locked pre-cast pavers.

**Skirting contractors:** If you are using other cement-board products that are certified for ground contact, follow product-installation instructions and keep a copy of the manufacturer's instructions on hand in case you are questioned by the local jurisdictional authority.

If there are questions, please contact Mark Campion, (503) 378-4530. ■

# Use crushed rock to improve stand

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Any stand may be improved with the addition of up to 6 inches of ¾-inch minus crushed rock, which is not considered fill and doesn't require engineering. Adding six inches of crushed rock increases the soil bearing capacity of the stand to 1,250 pounds per square foot from the standard 1,000 pounds per square foot that is assumed for all soil in Oregon. Two passes over the crushed rock with a vibrating compacting machine further increases the soil bearing capacity to 1,500 pounds per square foot.

However, there is no requirement to use crushed rock. The only requirement is that a stand be scraped smooth of all grass and weeds (any organic

matter), down to undisturbed soil. Remember, undisturbed soil means no fill.

The only exception is when a local jurisdictional authority requests a soils-capacity test and a subsequent geo-technical engineering report recommends with the local jurisdiction's concurrence, that crushed rock be used to bring the stand up to the state-mandated minimum 1,000 pounds per square foot capacity. See the Manufactured Dwelling and Park Specialty Code, Pages 39 and 40, 3-4.5, Stands.

If you have questions, please contact Mark Campion, (503) 378-4530. ■

# RV Corner: A look at Oregon's industry

By Brian Lamb

Oregon can be a paradise for those who love the outdoors, with its lakes, mountains, deserts, valleys, and 300-mile Pacific coastline. Not only is Oregon a destination for RV travel, Oregon is home to 22 manufacturers of recreational vehicles and is third in national RV production, behind Indiana and California.

Oregon manufacturers produce more than seven percent of the nations RVs (Indiana 58 percent; California 11 percent), according to Recreational Vehicle Industry Association. This translates into more than 12,000 of the 320,800 units shipped to dealers across America. Coburg is home to one of the largest motor home manufacturers in the world.

Oregon produces seven types or classes of recreational vehicles, from folding trailers to travel trailers to truck campers to fifth wheels and top-of-the-line motor coaches, but most of Oregon's RVs are travel trailers.

Consumer-product sales are generally dictated by the economy, but recreational-vehicle production

and sales have stayed on an even keel for the past four or five years. BCD tracks new units shipped to Oregon by means of recreational-vehicle tags. Our RV section has seen increases in tag sales over the past three years, indicating more and more Oregonians are buying RVs.

The Family Motor Coach Association has held its national rally in Redmond twice in the past three years. The National Bounder (Fleetwood) rally in Salem last fall brought \$300,000 worth of business to the community.

BCD is involved with recreational vehicles through legislation that requires us to monitor in-state manufacturers and out-of-state manufacturers and ensure that their products conform to American National Standards Institute A119.2, which is the national code for RVs (along with National Electrical Code Chapters 551 and 552).

For further information regarding RVs, call Monte Taylor, (503) 373-7542. ■

# Quizzin' Time: Puzzle out the names of dealers

By Irene Lickiss

Well, I goofed, and I want to thank Donna Collins at Conser Homes in Albany for her help. She is a super sleuth when it comes to puzzles! I misspelled two names. I hope you guys will forgive me for my mistakes. From now on, I will be having my puzzles proofed by someone else.

This puzzle covers manufactured home dealers. Some of the names are too long and are on two lines. Other names have been shortened. This one is a challenge! Hint: There are only 32 letter squares that are not part of a name. A dealer name in the puzzle is not in the list of names; see if you can find it. You can go right to left, left to right, bottom up, top down, backward and forward. Clues are on Page 7. Have fun!

A	P	B	E	G	A	T	N	I	V	S	Y	A	W	G	N	I	M	E	H
D	F	C	M	O	I	E	O	T	D	H	T	E	E	O	T	K	A	U	F
N	R	G	E	R	B	S	R	E	D	O	I	H	S	L	S	A	I	G	E
A	X	R	R	G	M	N	T	R	O	W	C	I	T	D	E	R	T	E	M
L	W	E	A	E	U	U	H	R	O	C	R	L	E	E	B	L	N	N	O
E	E	S	L	W	L	S	W	A	W	A	E	I	R	N	U	S	A	E	H
R	I	N	D	I	O	J	E	C	K	S	T	A	N	P	R	P	S	S	T
U	V	O	C	N	C	K	S	E	A	E	N	R	L	A	I	R	E	U	E
S	N	C	O	D	L	M	T	N	O	P	I	T	I	C	A	E	L	P	E
I	A	W	A	S	H	I	N	G	T	O	N	N	V	I	R	S	B	E	W
E	E	Q	S	A	E	S	E	H	T	Y	B	O	I	F	T	T	A	R	S
L	C	R	T	R	A	T	S	M	L	E	N	G	N	I	E	I	I	S	E
C	O	L	U	M	B	I	A	G	O	R	G	E	G	C	S	G	L	A	M
A	F	F	O	R	D	A	B	L	E	E	C	R	O	W	N	E	E	L	O
T	R	E	T	N	E	C	E	M	O	H	N	O	T	S	I	M	R	E	H
U	V	W	C	A	S	C	A	D	E	F	A	C	T	O	R	Y	X	S	Y
Y	R	A	R	O	P	M	E	T	N	O	C	T	S	R	U	B	N	U	S
Z	A	A	M	E	R	I	C	A	N	H	O	M	E	F	I	N	D	E	R
E	L	Y	T	S	E	F	I	L	D	L	A	R	E	M	E	L	E	N	S
P	A	L	M	H	A	R	B	O	R	D	O	O	W	T	E	E	L	F	D

# Tips for field-installing shingles

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By Kurt Pugh

We are seeing more Oregon-produced homes that require field installation of shingles. If you find shingle application is necessary, check the factory-provided installation instructions that should be in the set-up manual. There will also be instructions on the package of shingles.

The starting point is the underlayment paper. It needs to be under the drip rail at the rake ends and over the drip rail at the eaves. The way I inspect — and remember — is that, looking at the butt end of the shingle, the paper goes under; looking at the tabs, the paper goes over.

The next step is the starter course. Standard application is to trim the tabs and invert a shingle the full length of the eaves. It is important that the starter and first course of shingles do not align. There should be about a four-inch offset. If you invert the shingle properly, the tar strip should adhere to the first course. If this method is not used, the tabs of the first course need to be tarred to the starter strip.

There are two methods to secure shingles: the four-fastener method and the six-fastener high-wind method. Most factories use the six-fastener method, which is one inch from the ends and one inch on either side of the slots. The four-fastener method is one inch in from the ends and directly over the slots.

Both methods need to be installed below the tar line, and any fastener that is misplaced should be removed, tarred, and a new one installed in the correct location. On the new architectural shingles, it is important that the fastener be installed in the provided line. If it is above, it will not properly secure the underlying shingle to the deck.

Another area I'll review is valley application, which is very important. Most factories use the cut valley method. The common practice is to start with a 36-inch roll of 50-pound felt, which needs to be installed the full length of the valley and on top of the drip rail on both sides. The first course of shingles (eave side) must extend 12 inches past the valley centerline, with no joints in the valley. Extra fasteners are required at the end of this shingle. There should be no fasteners within six inches of the valley centerline. The cut portion of the valley should be trimmed two inches back from the centerline and embedded in a three-inch wide strip of tar.

These are just a few of the minimum requirements of shingle application. If you have questions, please call me, (503) 378-6065. ■

## Puzzle clues

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AMERICAN HOME FINDER

BEST

BY-THE-SEA

CASCADE FACTORY

COLUMBIA

COLUMBIA GORGE AFFORDABLE

CONSER

CROWN

EMERALD COAST

EMERALD LIFESTYLE

EUGENE SUPER SALES

GOLDEN PACIFIC

GORGE WINDS

HEMINGWAYS VINTAGE

HERMISTON HOME CENTER

HOME SWEET HOME

INTER CITY

KARL'S

LEISURELAND

LEN'S

NELMSTAR

NORTHWEST

OAKWOOD

OCEANVIEW

OREGON TRAIL

PALM HARBOR

PRESTIGE

RELIABLE

SANTIAM

SHOWCASE

SUNBURST CONTEMPORARY

SUNSET

TERRACE

URIARTE

WASHINGTON

WESTERN LIVING



Oregon Department of  
Consumer & Business Services  
**Building Codes Division**  
1535 Edgewater NE, Salem, Oregon  
*Mailing address:*  
P.O. Box 14770, Salem OR 97309-0404

## BCD has a new Web address

The Building Codes Division has changed its Web address. The new URL is ***bcd.oregon.gov***.

The old address, [www.oregonbcd.org](http://www.oregonbcd.org), will continue to work, but you should bookmark and begin using the new one.

### Get newsletters online

You can get PDF versions of current and past issues of Building Codes Division's newsletters by visiting the Web site.

To view and download the publications, go to [bcd.oregon.gov](http://bcd.oregon.gov) and click on "Publications." There you'll find links to current and past issues of *Manufactured Home Update*, *CodeLink*, and the Tri-County Services Center newsletters *News Flash*, *News Splash*, *News Connect*, *News Line* and *News Site*. ■

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