



Manufactured Home Update

Oregon Department of Consumer & Business Services ■ Building Codes Division

October 2005

Beginning Jan. 1, 2006: statewide surcharge is 8%

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

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

The 8 percent surcharge includes:

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

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

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MD&P review sidelined, for now

By Albert Endres

Many of you remember that the Manufactured Dwelling and Parks Specialty Code took effect April 1, 2002.

You might also have noted that the code is on a three-year review cycle, that three years have passed, and there has been no review. It's not that we forgot — there are reasons why we didn't perform the review, and they form a good case for delaying the review. The following three facts contributed to our reasoning:

1. So far, the MD&P is OK

After three years of use, we are not aware of any glaring or unforgiving errors or oversights in the current code.

Questionable items have been corrected through notification and interpretation and everyone seems to have worked around the few issues of contention that have come up.

Continued on Page 3

Life with LOIS:

Attending to the little things can make a big difference

Since May 2005, LOIS has been in operation and steadily improving as users become more aware of its benefits. The Building Codes Division Manufactured Home Ownership Program is excited about its partnership with dealers; together we are streamlining and expediting the process of recording manufactured structure transactions, making this system beneficial for everyone.

Here are some criteria to remember when completing transactions in the LOIS System.

Searching for a manufactured structure

LOIS allows searches in any or all of the following criteria

- Home ID
- HUD number
- Serial number
- X-plate (license number from DMV)
- Owner name
- Site address.

Home ID is the quickest way to locate a home in the system. Use all the forms of ID you have available; you can broaden the search by entering more data.

LOIS also allows the use of the percentage sign (%) as a wild card. This helps the user search more accurately when information is limited. Use the % to replace any information you don't know. Example: Enter the HUD number "ORE 123456" as "%123456" or even "%456." (Make sure when you enter a HUD label number there is a space between the ORE and the numbers.)

After the search is completed and the home list comes up, click on the home you are looking for and click the select button. If the home does not appear, click on the search button on the menu bar and try to search for the home using the % in place of different characters.

In order to prevent duplicate home entries in the LOIS system, it is very important to obtain as much information as possible while attempting to search for a home. There are more than 200,000 homes in the LOIS system, and most can be located with a thorough search.

For further searching tips select the "Help" tab in the menu transactions section.

Manufacturers have been very helpful in using the LOIS System to log in new homes. In some cases, dealers have entered the same home and this has resulted in duplicate entries for the same structure. If you've tried several of the search methods above and still can't locate the home, contact the manufacturer to see if the home has been entered into the LOIS System.

If you see a "dealer holds interest" flag

When recording a sale or transfer, if a dealer holds the interest on a manufactured structure, as when waiting for payment, the dealer is to check the "dealer holds interest" box in LOIS. The "dealer holds interest" flag defaults to "on" if there are no other owners and a dealer is identified. The "dealer holds interest" flag is set to "off" *only* if an owner has been identified.

Setting the "dealer holds interest" flag to "off" triggers a transaction fee and document generation, and ownership transfer to the owner/secured parties. *Only the dealer of record, BCD, counties and escrow agents can set the "dealer holds interest" flag to "off," thereby releasing interest in the home.*

Trip permits

Remember, for new homes dealers are required to purchase trip permits and can do so on the LOIS system. This can be done with a credit card.

Exempt code

Select "Pending county exemption" only if it is the homeowner's intent to have the home become exempt. Pursuant to the provisions of ORS 446.626 (5)(b), the Building Codes Division will do a followup within 25 days if the structure has not been recorded in the county deeds records.

Help when you need it

BCD offers training to dealers who want to learn more about working in LOIS. For information on the system, help in signing up as a system user, and other information about LOIS, contact Sherri Mitchell, (503) 373-1309; or Stefanie Coons, (503) 373-1249. To receive quick updates and the latest information, send your e-mail address to stefanie.l.coons@state.or.us.

In addition, you can find complete information about using the LOIS System, including, forms, fees, and frequently asked questions, at www.cbs.state.or.us/external/bcd/lois/. ■

Check these potential trouble spots before installing endwall siding

By Tom Nicolai

Endwall siding is installed on most manufactured homes after they have been delivered and installed at their permanent locations, and this is almost always the case with lap siding.

There are some very simple and important steps that should be taken prior to installing the siding.

First, remove the shipping plastic. The home already has the underlayment material installed, if required, as well as the vapor barrier material. Installing siding over the plastic could cause moisture buildup and cause the siding to warp.

Next, make sure each side of the home is lined up flush at the marriage line to prevent any unnecessary bulging in the siding. This should have been done when the home was installed but rechecking it only takes a minute and will prevent numerous problems later.

If the home does not have any underlayment sheathing installed on the endwalls, check the endwall studs from one side to the other, making sure none are bowed and all are installed with the stud crowns facing the same direction. This will help prevent the siding from appearing extremely wavy. (There may be some waviness in the siding even if there is underlayment installed.)

Reviewing these steps prior to installing the close-up siding will help reduce the chances of being called back to repair or remove and reinstall the siding.

If something incorrect is found while reviewing these steps, contact the appropriate parties immediately to have the problem fixed *prior* to installing the siding. ■

Look at local regs, MD&P for flood-related rules

By Mark Campion

In Section 3-2.4 of the MD&P, a flood-hazard area is defined as including floodways, adjacent flood plains, and other hazards such as flood-related erosion areas, areas of slide hazards, and coastal high-hazard zones.

Subsection 3-2.4.5, "Flood Resistant Anchoring," seems to imply that any of the four listed methods may be used to set a home at the discretion of the

homeowner, dealer, and installer (see subparts a through d).

In fact, the local jurisdiction may require that only an engineered foundation system designed by an Oregon professional engineer or architect will be acceptable. However, the local requirements may be no greater than the requirements for other types of single-family construction in the same area. ■

MD&P review *continued from Page 1*

2. The transfer from DMV to BCD was a priority project

Another reason we elected not to devote the time and effort to a code review was that the staff has focused on the preparation for the transfer of the ownership and dealer licensing program from DMV to Building Codes on May 1, 2005.

3. HUD is working on a national standard

The third major reason for delaying the review is that the Department of Housing and Urban Development (HUD) has been charged with creating a national installation and licensing standard, which is to become effective Jan. 1, 2006. So far we do not have all the details of what those requirements will be; until we know, it is prudent to wait to see if we need to modify our code. ■

RV Corner: VIN tracks RVs, park trailers

By Brian Lamb

Recreational vehicles, including park trailers, are tracked by the Motor Vehicles Department of ODOT by means of their vehicle identification (VIN) numbers. VINs consist of a 17-character number/letter combination assigned by the manufacturer of the RV or the motor home's chassis.

Manufacturers of the vehicles are required to apply VINs if the vehicles are to be offered for resale or used by the manufacturer for commercial use. A VIN is not required on vehicles the owners have built themselves for their personal use; however, some kind of serial number may be required to register such a vehicle with the DMV.

Truck campers are not on their own axles, so they don't require VINs.

A VIN looks like a jumbled mess, but each character has a meaning.

The elements of the VIN

To start with, the first three characters are assigned by the Society of Automotive Engineers and are known as the world manufacturer identifier. Call SAE, (724) 776-4841, extension 8511, for your vehicle's WMI.

The rest of the characters are assigned by the manufacturer. The fourth one represents the type of recreational vehicle — a park model, a fifth-wheel, or a travel trailer.

The fifth character tells whether it's a high, medium or low type of vehicle.

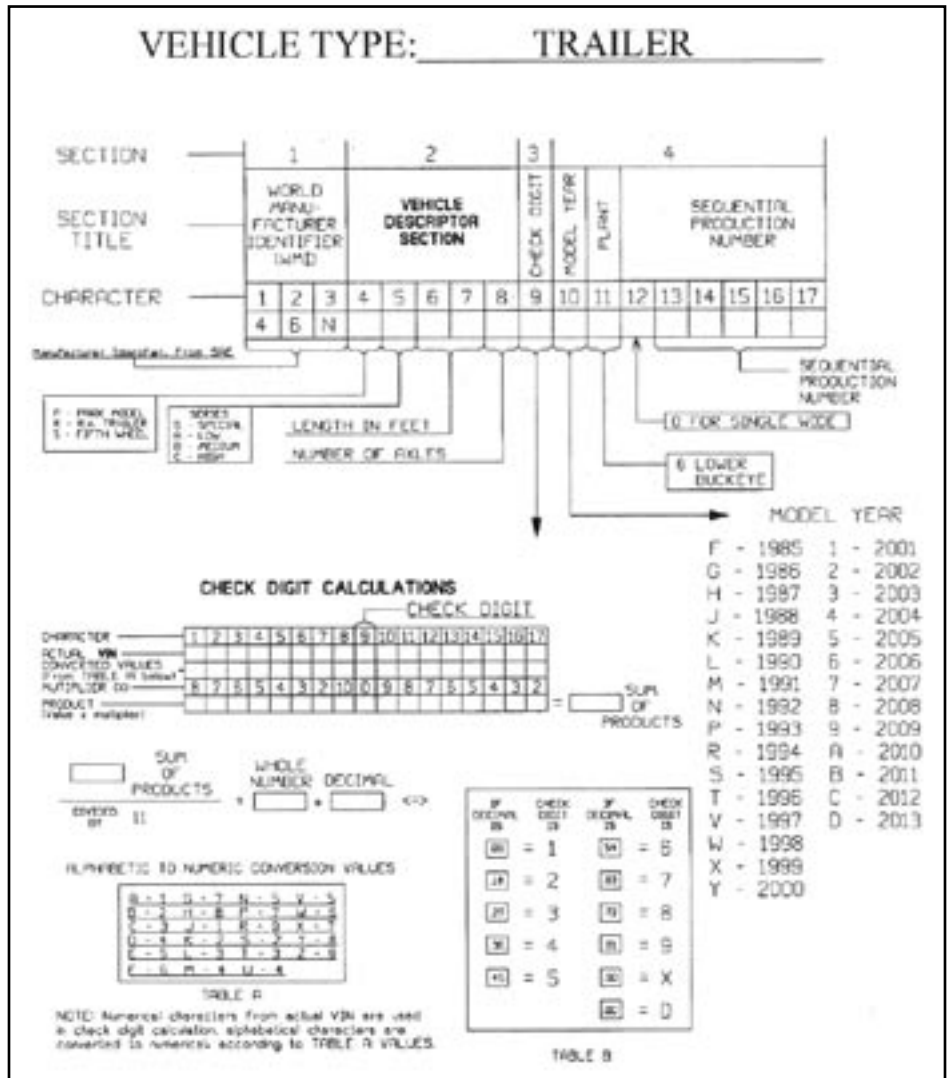
The sixth and seventh characters of the VIN identify the unit's length.

The eighth character represents the number of axles.

The ninth is what we call a "check digit," which is determined after all of the other 16 slots have been assigned, so for now the number is 0.

The 10th slot tells what year the unit was manufactured.

The 11th is the plant at which the unit was built.



You can calculate the vehicle identification number using a worksheet available from SAE.

The 12th character tells whether the unit is single width or multi-sectioned.

The 13th through the 17th characters are five-digit sequential production numbers.

Figuring the VIN

To finish the VIN, you'd need a VIN calculation sheet from SAE. When you filled in all of the 17 characters (the "check digit" being 0 at this point) you'd go to the "check digit" calculation table. Each of your VIN slots will be a number or letter. If it's a letter, convert it to a number from the alphabetic to numeric conversion chart.

By now, the VIN looks something like this: 46NPB203056012345.

Continued on Page 5

Make sure you're using the right wiring for the job

By Daniel W. Jones

Recently, an inspector observed that the low-voltage wiring being used as a power supply from a transformer to low-voltage light fixtures was not listed and labeled for such use. All low-voltage wiring for lighting systems and thermostats must meet the requirements of HUD and NEC standards. (This does not apply to speaker wire.)

Applicable standards:

- **3280.802(d)** All electrical materials, devices, appliances, fittings and other equipment shall be listed or labeled by a nationally recognized testing agency and shall be connected in an approved manner when in service

- **NEC 110-3(b)** Installation and use. Listed and labeled equipment shall be used or installed in accordance with any instructions included in the listing or labeling.
- **NEC 300-15(c)** Fittings and connectors. Fittings and connectors shall be used only with the specific wiring methods for which they are designed and listed

Whether it is a new installation, repair, or future modification, the same requirements apply.

Please check the product listing or labeling for the wire requirements.

If you have any questions or concerns, please contact our office, (503) 378-5975. ■

It's time to perform winter prep

By Albert Endres

Winter is coming, and it's time for manufacturers, retailers, and installers to prepare for the coming change in the weather.

Each year we deal with issues related to winter weather. There are many things everyone can do to assure the homes are protected against the harsher elements, and any home produced, stored, or displayed during the cold, wet months should be prepared.

Here are some steps for winter prep:

- Blow out the water lines.
- Add antifreeze to the P-traps and toilets.
- Pay attention to the close-up material and patch any that's damaged.

- Offer hand tabbing of shingles if the homes are going into high-wind areas.
- Hand tab the close-up shingles on the ridge cap.
- Offer storm doors.
- Park storage homes in dry areas, on solid ground, with proper support.
- Check delivery routes for access and clearance.
- Respond to complaints of leaks quickly, before damage is severe.

Do anything else you can think of that will prevent damage to the home. ■

VIN *continued from Page 4*

The check digit calculation chart lists multiplier numbers, which never change.

Multiply each of your character slots by the multiplier number. When all 17 VIN numbers are multiplied, add the total and divide by 11. This will give you a number with a decimal at its end. This decimal corresponds to table B and gives you another whole number. This is the check digit that goes in the ninth slot in your VIN.

The Building Codes Division has taken on the manufactured-structure titling program that had been the responsibility of the DMV, as mandated by Senate Bill 486. Since the change, VIN issues have already popped up with park trailers.

This is a confusing process. If you have questions or concerns, or if you need help getting through the calculations, please call Brian Lamb, (503) 510-2732. ■

Insulation: Do it right the first time for energy savings

Our customers want energy-efficient homes. A higher percentage than ever are buying homes constructed to “Super Good Cents” or “Energy Star” specifications.

There are some issues in the plants and in field repair that need to be watched to ensure that the customers are getting the energy savings they’ve paid for. Keep an eye on these potential problems:

Floor insulation

- Blown-in floor insulation may pose opportunities for thermal shorts to occur.
- Not filling the bays between joists out far enough can create a short along the inside slope at the chassis I beam.
- Rework taking place in floor cavity means the blown-in insulation can end up in a pile on the floor, so that the proper amount of fiberglass batt insulation is not installed.
- Insulation may be pushed back, removed or not installed at exterior faucets, plumbing or electrical access areas.
- Insulation becomes wet due to a leak in the water or drain system, toilet overflow during testing procedures, or water spilled onto the floor, and migrating into the floor structure.
- An incorrect R-value of insulation, fiberglass, or cellulose being installed.

Wall insulation

- Fiberglass batt insulation not cut to fit slope of endwall framing.
- Sidewall bays that are smaller than the standard spacing have compressed insulation

installed; insulation material in these areas must be trimmed to fit for full loft.

- Gaps between cut pieces.
- Insulation compressed around electrical devices and wiring.
- Insulation compressed at bottom plate when securing the wall to floor.

Roof insulation

- Not full depth at truss over sidewall, baffles installed are compressed when using batts. Required to be 1 inch below top of truss.
- Insulation is not the correct depth; there are high and low spots throughout the cavity.
- Areas with transitions communicating with interior living space are not insulated.
- Shafts of solar tubes and skylight openings are not adequately wrapped.
- Insulation is being stepped on or debris is dropped into cavity compressing insulation.

Replace insulation if it is removed during the installation process in the factory, or repair in the field.

There is a limited area in which to inspect insulation installation for floor, walls, and roof. Once it’s covered there are limited opportunities to make corrections, so make the first time count.

Remember, the customers are buying energy-efficient homes. They don’t expect to feel drafts around receptacles, doors, or window openings, and they certainly don’t expect to pay higher utility bills each month because there are thermal shorts. ■

Two classes remain on 2005 schedule

The Oregon Manufactured Housing Association sponsors the required installation class. To register, send the registration form and \$140 to:

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

The class registration form and fee must be received by OMHA seven business 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, and a tour of Homebuilders Northwest during the Salem class.

Classes remaining in 2005

Medford

Oct. 5-6 (registration cutoff – Sept. 26)
Rogue Regency
2345 Crater Lake Highway (I-5 Exit 30)
No factory tour

Salem

Dec. 7-8 (registration cutoff – Nov. 29)
New Kings Inn
Off I-5 at Market Street Exit
Factory tour – Homebuilders Northwest

Oregon's climate: Love it, but remember the rules for living with it

By Kurt Pugh

We had a wonderful summer, but the wet and cold are on their way. Everyone in the industry — manufacturers, toters, and dealers — needs to get ready for the change of season. Here are some things to tend to:

Lumber

Let receivers know to check incoming truckloads of lumber closely. Check the storage of lumber — is it inside or under cover, out of the weather?

Close-up

Historically, when the rain starts, so do the problems with close-up.

Start by looking at the marriage-line plastic at the peak. Sometimes the material does not cover the staples on the top course of shingles and exposed underlayment paper. These must be covered or sealed.

When the plastic is brought down to the marriage line, some plants install a 12-inch strip on the rim joist to act as a diverter. When you roll up the plastic, roll it toward the inside. If it's rolled to the outside, water can collect and wick into the floor. Make sure all close-up plastic is properly sealed.

Antifreeze

We have not had to install antifreeze for some time, but it is time to start. Remember to blow out those water lines. One manufacturer blows and vacuums out the drain lines and this is quite effective.

Transport

Transporters play a very important part in the home being delivered in the proper condition. Before you leave the plant, step back and look at the roof. Check to see if there is any debris and whether the shingles are protected at the front of the home and at the dormers.

While you are checking the lug tightness, check to see if the bottom board is rubbing the tires. (This usually happens on the sidewall side.) If it is rubbing, it must be pushed back. An inexpensive method is have the plant use scrap cement board stapled to the floor joist and set on top of the I-beam. That way it does not need to be painted.

The last thing to check is the marriage line close-up. Make sure there are no tears or holes.

On arrival

If the home is going to a holding lot, check the plastic again to make sure it made the trip intact. If it is going to a dealer, walk through the home with a representative of the dealership, checking for the above-mentioned items. If you are having problems with homes making the trip intact, contact the manufacturer and discuss the problems.

If you need further assistance, please contact this office. If we all work together we can assure that our homes get to the consumer in great shape. ■

License and certification training requirements

Anyone engaged in the business of installing or assisting in installing manufactured dwellings (including skirting) must be licensed with the Building Codes Division. In addition, manufactured-dwelling installation inspectors 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 must attend only the first day of the two-day class.

To become licensed or certified

Submit an application for an installer license (\$55 fee) or an inspector certification form (\$22 fee). Applications are available on the Building Codes Division Web site, bcd.oregon.gov, or by contacting BCD:

Oregon Building Codes Division
P.O. Box 14470
Salem, OR 97309-0404
(503) 378-1268

Top 10 complaints

So far for this year the top 10 complaints fielded by the factories and the top 10 issues BCD deals with on consumer-assistance cases are:

Factory

1. Tape and texture issues
2. Cabinet construction
3. Interior door adjustment
4. Exterior paint
5. Exterior door adjustment
6. Floor squeaks
7. Electrical issues
8. Bowed floor joist
9. Countertops
10. Ship-loose shortages

Consumer assistance

1. Cabinet construction
2. Roof leaks
3. Tape and texture
4. Skylight issues
5. Bottom-board repair
6. Floor squeaks
7. Electrical issues
8. Pier installation
9. Skirting issues
10. Roof sheathing and marriage

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If you want to be included on the *Manufactured Home Update* mailing list, contact Albert Endres, phone (503) 378-5975, e-mail albert.g.endres@state.or.us.

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