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Bill Potter, Building Official

Inspector's Checklist

2010 Oregon Manufactured Dwelling Installation Specialty Code

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Department of Land Development Services

Building Department

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2011 Columbia County Manufactured Dwelling Inspector's Checklist

Purpose

In response to Oregon administrative rule OAR 918-098-1900, which requires building inspectors to cite Oregon Speciality Code sections, Oregon Administrative rules (OAR'S) or statues (ORS'S) whenever a re-inspection is required, Columbia County Inspector's Checklist was created. It is a handy time saving reference guide to manufactured dwelling installations. Code sections covering common code issues found at building inspections. It is arranged in alphabetical order by code items and by topical headings. Additional line spaces have been provided for inspector's notes to be added if desired. It is right hand formatted and bold printed for easy field use.

The checklist may also be useful to contractors and the general public. Customers should note that items listed are not all the possible code issues that might be found at building inspections. Also items listed are situational as to being required for each individual project.

The checklist is based on the 2010 Oregon Manufactured Dwelling Installation Specialty Code

Please note that other Oregon codes referenced in this code were effective when this Code was adopted in 2010, and these codes will continue to be referenced until the next code cycle for the OMDISC is adopted , or an interpretive ruling is issued. See Appendix "A", page 66.

Columbia County Inspector's Checklist was conceived and prepared by Frank Scheer, Building Inspector, Columbia County.

This document was designed to be a dynamic tool that will be updated and added to as codes change and new conditions arise. It is not copyrighted, so other inspectors are encouraged to use, change, and work with it as needed.

Columbia County does not guarantee the accuracy of, or have any responsibility or liability for consequences resulting from the use or misuse of this document.

2011 Columbia County Manufactured Dwelling Inspector's Checklist

ADMINISTRATION (Please note that 2008 Oregon Residential Codes are still referenced in this code in 2011 after the time that the 2011 codes went in effect)	2010 OREGON OMDISC
All buildings and structures shall be designed (when engineering is required) to the 2010 State Building Code (OSSC)	10-1.1
Other structures (when prescriptive design) to be constructed to this code and the 2008 Oregon Residential Speciality Code (ORSC)	10-3.1
Authority to disconnect service utilities	1-8.3
Building Official authorized to make inspections	1-3.4
Building Official authorized to render interpretation of this code	1-3.1
Changes in construction when not approved	1-5.7
Connection of service utilities	Section 1-8
When construction documents are required	Section 1-5
Approved construction documents to be on work site	1-5.5.1
Construction document information for flood hazard areas	1-5.3.1
Insignia of compliance (not in this code, but when by jurisdiction or lenders) ORS 446.170	
Installer Certification Tags OAR 918-515-0300 thru 0310	1-7.1.3 (12)
Inspection requests, access, ready	1-7.4

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ADMINISTRATION	2010 OREGON OMDISC
Installation permit includes (27 items listed)	1-4.10
Manufacturer's installation instructions on work site at time of inspection	1-5.3
Permits required (general)	Section 1-4
Posting of permit card	1-4.9
Purpose of this code	1-1.3
Ramanda construction details	10-3.5
Referenced codes and standards	1-2.3, Appendix A, Page 66
Right of entry	1-3.5
Stop work orders	Section 1-11
Suspension or revocation of permit	1-4.8
When engineering required	1-5.1
Work done beyond inspection approval	1-7.5

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SITING OF MANUFACTURED DWELLINGS	2010 OREGON OMDISC
Concrete / rebar requirements	Section 3-6.2
Engineered fill	3-3.5.2
Flood hazard areas and as referenced in Section 324 of the 2008 ORSC	3-4.1.1
Fire separation distances (Where outside of or inside a mfg home park)	Section 11-2, Table 11-2.3
Footing / slab under factory built porches, decks to allow drainage	3-6.1 (12) Sect 4-9, Fig 4-9.2
Foundation construction details	Section 3-4
Foundations / retaining wall footings to be below frost line	3-2.1.3, Table 3-2.1
Grading and drainage of site	3-3.3, Figure 3-3.3
Soil bearing capacity	3-3.5, Table 3-3.5
Suitability of site	3-3.1
6 x 12 footing with 2 # 4 rebar needed for cmu, or masonry skirting, wood structural skirting, or foundation and retaining walls	4-7.1, 4-8.2, Figs 3-6-2(a), 4-3.2 (a-c), 4-4.2, 4-8.2
Concrete encased grounding electrodes "UFER" , not in this code.	2008 OSEC Article 250.52

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SET-UP INSPECTION	2010 OREGON OMDISC
Anchoring for wind forces required: details.	Section 3-2.6, Fig 3-2.6
Anchoring for earthquake forces, when required: Requirement details	Section 3-2.5.4
Chassis removal / alteration	Section 3-10
Clearance required under manufactured dwellings	3-5, Fig 3-5.1
Elevated mfg dwellings with more than 25 % of piers greater than 36 inches high, home stabilizing devices are to be designed by a registered design professional	3-7.2.4
Height limitations for seismic zones C, D1, and D2	Sections 3-2.5.1 thru 3-2.5.3
Marriage line floor attachment details	5-2.1.3
Marriage line roof ridge beam attachment details	5-2.1.1
Marriage line wall attachment details	5-2.1.2
Marriage line weather sealing for roof, walls, and floor requirements	Section 5-3
Moisture barrier shall be on ground, or over concrete in underfloor area	3-3.6
Piers (general)	Section 3-7
Pier caps over cmu block piers	3-8.1
Pier configuration for cmu block piers	3-7.5, Fig 3-7.2
Piers greater than 67 inches high to be engineered designed	3-7.2.3
Piers less than 36 inches high: details	3-7.2.1
Piers 36 to 67 inches high: details	3-7.2.2, Fig 3-7.2.2

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SET-UP INSPECTION	2010 OREGON OMDISC
Pier locations / spacing for main and perimeter piers	Section 3-9.1-2, Tab 3-7.4
Pier shim / wedge approved materials. Wedges / shims not be more than 9 inch high	Section 3-8
Recessed perimeter pier details	3-9.2, Figs 3-9.2 (a-b)
Temporary step requirements / details	Section 10-3.4
ELECTRICAL CONNECTIONS	**2010 OREGON OMDISC**
Above ground feeder conductor clearances	Table 6-2.3 (a)
Component interconnection devices	6-4.2
Crossover connections shall be 12 inches minimum above base flood elevation	6-4.1 (1)
Electrical equipment installations shall be installed in accordance with this code and where not specific to the 2008 Oregon Electrical Specialty Code (OESC)	6-1.1
Electrical crossover connections	Section 6-4
Electrical feeder sizing	6-2.2
Electrical feeder conductor types	6-2.1
Electrical service equipment must be within 30' and in line of sight of mfg dwelling	6-3.1 (4)
Installation of site installed equipment	6-5
Multi section manufactured dwelling bonding connections	6-4.4, Fig 6-4.4
Overhead electrical feeder conductor sizing	Table 6-2.1 (a)
Underground feeder conductor clearances	Table 6-2.3 (b)

PLUMBING CONNECTIONS	2010 OREGON OMDISC
Accessible full way shut off valve within 5 feet of mfg dwelling	7-2.1 (5)
Approved water supply piping materials	Table 7-2.1
Approved thermal expansion tank or other approved device to be installed when a backflow (check valve) device is installed in the mfg dwelling water supply piping	7-2.1 (8)
Building water supply to be 3/4 inch inside minimum pipe size	7-2.1 (4)
Expansion tank to be self supporting	7-2.1 (9)
Exposed water piping, shutoff valves , and regulators shall be protected from freezing	7-4.2
New approved piping materials are required	7-2.1 (1)
No portion of outside water piping to be above ground	7-3.1 (1)
Piping in trench to be supported on bed of approved materials	7-3.1 (2)
Piping to be buried a minimum of 18 inches below grade and at least 12 inches below frost line	7-3.1 (3)
Plumbing equipment installation shall be in accordance with this code and where not specific to the 2008 Oregon Plumbing Specialty Code (OPSC)	7-1.1
Pressure regulators needed for over 80 psi water pressure	7-2.1 (3)
Shutoff valve to be ball valve or full flow gate valve	7-2.1 (7)
Support for rigid or flexible piping	7-2.1 (2)
Water line crossover connections	7-4, Fig 7-4.1
Water line crossover connectors to be sized no less than water lines	7-4.1 (1)
Water line crossover connector protection from freezing	7-4.1 (2)

PUMPING CONNECTIONS	2010 OREGON OMDISC
Water distribution system testing	Section 7-5
Water system to be tested with water @ supply pressure or 80 psi air for 15 minutes without leaks	7-5.1
CPVC piping to be tested with air @ 30 psi only	7-5.1- Exception
All water leaks shall be repaired	7-5.2
DRAINAGE SYSTEMS	**2010 OREGON OMDISC**
Approved piping materials	Table 7-6.1
Building drain piping in trench shall be supported on a continuous bed of approved material	7-7.1 (2)
Building drain piping trench deeper than or parallel to nearby footings shall be set away from such footings 45 degrees at bottom of bottom of trench	7-7.1 (4), Fig 7-7.1
Building drains shall be 12 inches minimum below grade from top of pipe	7-7.1 (3)
Clean out to be installed within 5 feet of mfg home, and if underground to be 2-way clean out	7-6.3
Cleanouts inside of skirting shall have 18 inches of clearance in front for access, or 6 x 6 inch access opening in skirting for access	7-6.3, Fig 7-6.2, 4-11.1.1 (3)
Drain piping to be sloped 1/4 inch per foot, or 1/8 inch per foot if Clean out @ upper end	7-6.2 (1-2)

DRAINAGE SYSTEMS	2010 OREGON OMDISC
Drain piping supports 4 feet on center	7-6.2 (5), Fig 7-8.1
Drain piping cross over connection details	7-8, Figure 7-8.1
Drainage system testing details	Section 7-9
Drain piping / fixture leaks to be repaired	7-9.2
Flow test through each fixture	Section 7-9
Green # 18 gauge tracer wire to be buried with building drain in entire length of underground trench with one end left above finished grade next to mfg home Clean out	7-7.1 (6), Fig 7-6.2
MECHANICAL	**2010 OREGON OMDISC**
Clothes dryer vent details	9-1, Fig 9-1.1
Combustion air ducts inlets	Section 9-4
Gas appliance vents have ben installed and connected	8-3.2
Gas supply requirements not specifically covered in this code shall be accordance with the Oregon Residential Code (ORSC) Chapter 24	8.1.1
Gas supply crossover connections	Section 8-2
Range, cooktop, and oven venting to outside of mfg dwelling	Section 9-5
Solid fuel burning appliances	Section 9-3, Fig 9-3.3
Underfloor duct details	Section 8-5
Water heater drain pan to drain exterior of mfg dwelling	9-6.3 (3), Fig 9-6.3

MECHANICAL	2010 OREGON OMDISC
Water heater installation requirements	Section 9-6
6 foot listed flexible connector for home's main gas supply	3-2.5.1 thru .3, item (3)
SKIRTING REQUIREMENTS:	**2010 OREGON OMDISC**
Approved skirting materials	4-2.1
Skirting required for manufactured homes unless in flood areas	4-1.1
Skirting requirement details	Section 4-2
SKIRTING TYPES:	**2010 OREGON OMDISC**
Non structural wood skirting details. May support up to 8 inches unbalanced backfill	Section 4-5.1, Fig 4-5.1
Non structural metal / vinyl skirting details. No unbalanced fill backfill allowed	Section 4-5.2, Fig 4-5.2
Prefabricated structural skirting details. No more than 8 inches unbalanced unless approved by manufacturer's installation instructions, and no horizontal loading mfg dwelling.	Section 4-6
Masonry block, stone, brick skirting details. Needs 6 x 12 footing. May retain up to 8 inches unbalanced fill	Section 4-7, Fig 4-7.1
Cmu block retaining / skirting details. Needs 6 x 12 footing with 2 # 4 rebar. May retain up to 28 inches unbalanced backfill	Section 4-8, Fig 4-8.2
Structural wood skirting details. Needs 6 x 12 footing with 6 x 12 footing with 2 # 4 rebar. May retain up to 8 inches unbalanced backfill.	Section 4-4, Fig 4-4.2

FOUNDATION WALL USED IN PLACE OF SKIRTING Note: All require 6 X 12 footings with 2 # 4 rebar.	2010 OREGON OMDISC
Concrete foundation wall details. May be 60 inches high and retain up to 48 inches backfill	Section 4-3, Fig 4-3.2 (a)
Cmu block foundation details. May be 60 inches high and retain up to 48 inches backfill	Section 4-3, Fig 4-3.2 (b)
Pressure treated wood foundation details. May be 48 inches high and retain up to 36 inches backfill	Section 4-3, Fig 4-3.2 (c)
UNDERFLOOR SEPARATIONS	**2010 OREGON OMDISC**
No moisture barrier or on top of concrete under factory installed porches, decks, and landings to prevent moisture migration into underfloor areas. An underfloor separation enclosure is required under perimeter walls of the manufactured dwelling.	4-9.1, and 3-3.6 (4), Figure 4-9.2
UNDERFLOOR ACCESS	**2010 OREGON OMDISC**
18 x 24 inch side access through skirting or foundation wall	4-11.1.1 (1)
When access panel in skirting not easily recognizable, label access panel: access with 3/4 inch lettering	4-11.1.1 (2)
6 x 6 inch hand access opening located 12 inches reach from water shutoff valve or Clean out	4-11.1.1 (3)
Ground level access well for foundation walls need 18 x 24 inch opening through foundation wall, a 24 x 30 inch access well size, and water resistive well cover not over 50 lbs in weight	Section 4-11.1.2 Figure 4-11.1.2
Through floor access to be constructed to manufacturer's approved DAPIA plans	Section 4-11.1.3
Interior stairways, landings, handrails, guardrails, and headroom clearances to be constructed to the 2008 Oregon Residential Specialty Code (ORSC), sections 311 and 312	4-11.1.4

UNDERFLOOR VENTILATION	2010 OREGON OMDISC
Underfloor ventilation sizing 1 square foot of venting for ventilation for 1,500 square feet of underfloor area. Vents shall be placed as close as possible to corners. May be closable, details	Section 4-10
Ventilation sizing table	Table 4-10.2
FINAL INSPECTION	**2010 OREGON OMDISC**
Address posted	ORSC Section R 321.1
Attached and other structures comply with the Oregon Residential Specialty Code (ORSC)	10-3.1
Earthen backfill has 6 inches of clearance from untreated wood / siding	3-3.3 (8)
Electrical system testing for polarity / GFCI receptacles	Section 6-6
Electrical test failure items to be corrected	6-6.2
Fuel gas main supply to be connected to mfg home with listed 6 foot flexible connector	Sects 3-2.5.1 thru .3 item (3)
GFCI receptacles in and on outside of relocated homes (not in this code, but jurisdictional call)	OESC Article 550.13 B
Garages enclosing a required egress shall require an exit door form garage	Section 10-2.2
Heat pump/ AC system installation / circuit ratings	Section 9-2
Other structures shall not block required egress	10-3.2 (6)
Porches, awnings, carports, ramandas, decks, landings, stairs, and ramps to be self supporting from mfg dwelling, unless mfg dwelling is engineered for such loading, or awnings and carports only are supported with extra ½ spaced extra perimeter pier spacing under mfg dwelling	Section 10-3.2

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FINAL INSPECTION	2010 OREGON OMDISC
Smoke alarms for relocated homes ORS 479-260	11-1.2
10 year batteries required in Oregon for battery powered only smoke alarms ORS 479-297	
Temporary steps removed	Section 10-3.4