

## 2017 Oregon Residential Specialty Code First Printing—Errata

~~Strikethrough~~ text represents deleted language.

Underlined text represents added language.

### CHAPTER 1—SCOPE AND ADMINISTRATION

#### R101.2

##### Scope. ...

4. Residential aircraft hangars as defined in Section R202.
5. Live/work units located in one- and two-family dwellings and townhouses and complying with the requirements of Section 419 of the *Building Code* shall be permitted to be constructed in accordance with the *Residential Code*. Fire suppression required by Section 419.5 of the *Building Code* where constructed under this code shall conform to Section 903.3.1.3 of the *Building Code*. ...

#### R105.1

**Required.** Any owner or owner's authorized agent who intends to construct, enlarge, alter, repair, move, ~~demolish~~ or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the *building official* and obtain the required *permit*.

#### R105.2

##### Work exempt from permit. ...

3. Retaining walls that do not support a regulated building, or do not retain material which, if not restrained, could impact a regulated building. ...

#### R106.1

##### Submittal documents. ...

2. Plans, calculations and specifications, diagrams and other data prepared and designed by an architect or an engineer licensed by the state to practice as such are not required for the following work, provided the building official determines that the work is not of a highly technical nature or there is unreasonable potential risk to life and/or safety of the structure:
  - 2.1. The erection, enlargement or alteration of any building, or any appurtenance thereto, where the resulting building has a ground area of 4,000 square feet (372 m<sup>2</sup>) or less and is not more than 20 feet (6096 mm) in height from the top surface of the lowest floor to the highest interior overhead finish (ORS 671.030).
  - 2.2. A single-family dwelling, a farm agricultural building, nonfarm agricultural building, or accessory building to a single-family dwelling.
  - 2.3. Alterations or repairs that do not involve structural parts of the building.

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## CHAPTER 3—BUILDING PLANNING

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**Table R301.2(1) Climatic and Geographic Design Criteria...**

Tillamook Umatilla S.45.5°N N.45.5°N; Union	b. Refer to Figure R301.2(4) for mapped Ultimate Design Wind Speeds. Wind exposure category shall be determined on a site-specific basis in accordance with Section <a href="#">R301.2.1.3</a> . ...  e. <a href="#">Minimum roof snow load is 50 psf.</a>
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**R301.2.2.1.1 Alternate determination of seismic design category.** The seismic design categories and corresponding short-period design spectral response accelerations, SDS shown in Figure R301.2(2) are based on soil Site Class D, as defined in Section [1613.2.2](#) of the Building Code. If soil conditions are other than Site Class D, the short- period design spectral response accelerations, SDS, for a site can be determined in accordance with Section [1613.2](#) of the Building Code. The value of SDS determined in accordance with Section [1613.2](#) of the Building Code is permitted to be used to set the seismic design category in accordance with Table R301.2.2.1.1.

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**R302.2 Townhouses. ...**

2. A common “modified” 2-hour fire-resistance-rated firewall centered over the common property line as shown in Figures R302.2(c) and R302.2(d). Plumbing or mechanical equipment ducts or vents are not permitted in the cavity of the “modified” 2-hour wall. Electrical installations shall be installed in accordance with the *Electrical Code*. Penetrations of electrical outlet boxes shall be in accordance with Section [R302.4](#).
  3. A common 2-hour fire-resistance-rated wall. Plumbing or mechanical equipment ducts or vents are not permitted in the cavity of the common 2-hour wall. Electrical installations shall be installed in accordance with the *Electrical Code*. Penetrations of electrical outlet boxes shall be in accordance with Section [R302.4](#). ...
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**R302.2.1.3 Fire-resistance-rated separation for porch covers. ...**

- [1.](#) In the case where one porch cover is adjacent to another porch cover, and both are within 3 feet (914 mm) of the common property line, a single 1-hour fire-resistant privacy wall shall be provided for each porch cover. The privacy walls shall extend out to the furthest point where the porch covers are adjacent.
  - [2.](#) In the case where one porch cover abuts another adjacent porch cover at a common property line, either two 1-hour fire-resistance-rated walls or a “modified” 2-hour fire-resistance-rated common *townhouse* separation wall shall be provided. The *townhouse* separation wall shall extend out to the furthest point where both porch covers are adjacent.
  - [3.](#) In the case where a porch cover is within 3 feet of the common property line and there is no adjacent porch cover, a 1-hour fire-resistance-rated exterior wall shall be provided. The exterior wall shall extend out to the furthest point of the porch cover. ...
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**Fig. R302.2.1.4 Covered Porch at Common Property Line**

**Detail 2:** STAIRWAYS WHICH ARE **CLOSER** THAN 3 FEET TO THE PROPERTY LINE SHALL BE OF ONE-HOUR, MODIFIED HEAVY TIMBER, OR NONCOMBUSTIBLE CONSTRUCTION (SEE FIGURE R302.2.1.4).

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**Fig. R302.2.3.3(b) Unrated Cricket Less than or Equal to 30 Inches**

ROOF SHEATHING  
REQUIRED TO BE  
PROTECTED.  
REF. FIGURE [R302.2.3.3\(a\)](#)

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<b>R302.2.8</b>	<b>Dwelling unit and garage separations.</b> <i>Townhouse dwelling units</i> shall be separated from attached garages in accordance with Section <a href="#">R302.6</a> .
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<b>R302.5.2</b>	<b>Duct penetration.</b> Ducts in the garage and ducts penetrating the walls or ceilings separating the <i>dwelling</i> from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other <i>approved</i> material and shall not have openings into the garage. When a vibration isolator is used in the garage duct, it must be installed at least 18 inches (457 mm) from the penetration. Vibration isolators shall be installed in accordance with Section <a href="#">M1601.2</a> .
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<b>R303.3.1</b>	<b>Rooms with bathing or spa facilities.</b> Any room with a bathtub, shower or spa facility shall be provided with mechanical ventilation which shall be designed and installed in accordance with Section <a href="#">M1507.3</a> .
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<b>R303.3.2</b>	<b>Rooms without bathing or spa facilities. ...</b>  <b>Exception:</b> The glazed areas shall not be required where artificial light and a mechanical ventilation system are provided. The minimum ventilation rates shall be in accordance with Table <a href="#">M1507.4</a> .
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<b>R305.1</b>	<b>Minimum height. ...</b>  <b>Exceptions: ...</b>  2. Not more than 75 percent of the floor area of a bathroom or toilet room is permitted to have a sloped ceiling less than <a href="#">6 feet 8 inches (2032 mm)</a> , provided an area of 21 inches by 24 inches (534 mm by 610 mm) in front of toilets and lavatories has a minimum of 6 feet, 4 inches (1931 mm) in height, measured from the finished floor. An area of 24 inches by 30 inches (610 mm by 762 mm) in front of and inside a tub or shower shall have a minimum of 6 feet, 4 inches (1931 mm) in height, measured from the standing surface of the fixture.
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<b>R310.2.4</b>	<b>Emergency escape and rescue openings under decks, porches and similar projections.</b> Emergency escape and rescue openings shall be permitted to be installed under decks, porches and similar projections, provided that the location of the deck allows the emergency escape and rescue openings to be fully opened and provides a path not less than 36 inches (914 mm) in height to a <i>yard</i> or court.
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R324

**SECTION 324  
SOLAR ENERGY SYSTEMS**

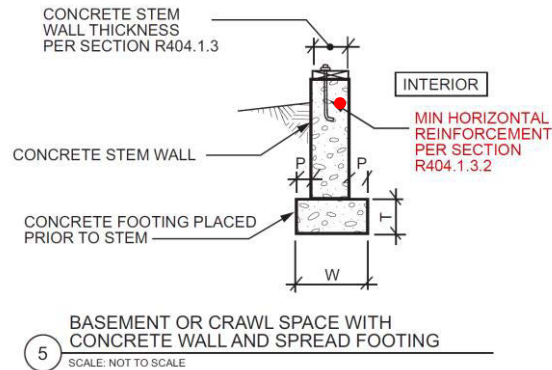
**Not adopted by the State of Oregon  
(See Chapter 23 for solar energy system provisions)**

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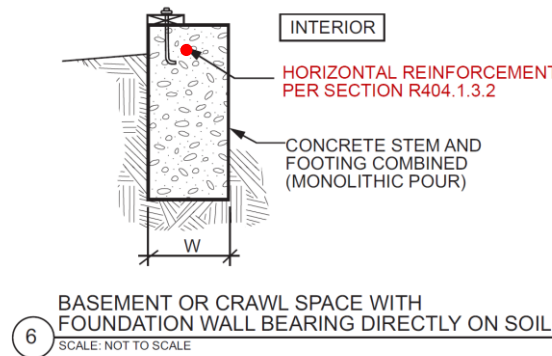
## CHAPTER 4—FOUNDATIONS

**R403.1.3** **Footing and stem wall reinforcing in Seismic Design Categories D<sub>1</sub>, and D<sub>2</sub>.** Concrete footings and stem walls located in Seismic Design Categories D<sub>1</sub> and D<sub>2</sub>, as established in Table R301.2(1), shall have minimum reinforcement in accordance with this section, [Section R404](#) and Figure R403.1.3. Reinforcement shall be installed with support and cover in accordance with Section R403.1.3.5.

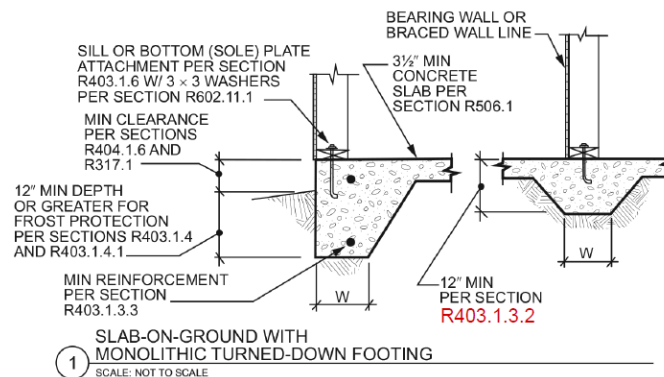
**Fig. R403.1(1)** **Plain Concrete Footings with Masonry and Concrete Stem Walls In SDC A, B, And C**  
**Detail no. 5 Basement or crawl space with concrete and spread footing.**



**Detail no. 6 Basement or crawl space with foundation wall bearing directly on soil.**



**Fig. R403.1.3** **Reinforced Concrete Footings, Masonry and Concrete Stem Walls in SDC D<sub>1</sub> And D<sub>2</sub>**  
**Detail no. 1 Slab on-ground with monolithic turned-down footing.**



**R403.3.1.2**      **Attachment to heated structure.** ...Where the frost-protected shallow foundation abuts the heated structure, the horizontal insulation and vertical wall insulation shall extend along the adjoining foundation in accordance with Figure [R403.3\(3\)](#) ...

**Table R404.1.2(1) Minimum Horizontal Reinforcement for Concrete [Foundation Walls](#)<sup>a,b</sup>**

MAXIMUM UNSUPPORTED HEIGHT OF <a href="#">FOUNDATION WALL</a> (feet)	LOCATION OF HORIZONTAL REINFORCEMENT
≤ 5	One No. 4 bar within 12 inches of the top of the wall.
> 5 to ≤ 8	<a href="#">One No. 4 bar within 12 inches of the top of the wall and on No. 4 bar near mid-height of the wall.</a>
> 8	One No. 4 bar within 12 inches of the top of the wall <del>story</del> and one No. 4 bar near third points in the wall story.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square inch = 6.895 kPa.

- Horizontal reinforcement requirements are for reinforcing bars with a minimum yield strength of 40,000 psi and concrete with a minimum concrete compressive strength of 2,500 psi.
- See Section R404.1.3.2 for minimum reinforcement required for foundation walls supporting above-grade concrete walls.

**R404.1.3.2**      **Reinforcement for foundation walls.** ... In buildings assigned to Seismic Design Category D<sub>1</sub> or D<sub>2</sub>, concrete foundation walls shall also comply with Section [R403.1.3](#) and [R404.1.4.2](#).

**R408.3**      **Unvented crawl space. ...**

- Continuously operated mechanical exhaust ventilation at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7 m<sup>2</sup>) of crawl space floor area, including an air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section [N1104.2.7](#) of this code.
- Conditioned air* supply sized to deliver at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7 m<sup>2</sup>) of under-floor area, including a return air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section [N1104.2.7](#) of this code.

**CHAPTER 5—FLOORING**

**Table R507.8**      **Deck Post Height**

<a href="#">SPECIES</a> <sup>b</sup>	DECK POST SIZE	MAXIMUM HEIGHT <sup>a</sup> (ft.)
<a href="#">Douglas Fir-Larch, Hem-fir, Spruce-Pine-Fir, Redwood, Western Cedars, Ponderosa pine, Red pine</a>	4 × 4	8'
	4 × 6	8'
	6 × 6	14'

For SI: 1 foot = 304.8 mm.

- Measured to the underside of the beam.
- [No. 2 grade.](#)

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## CHAPTER 11—ENERGY EFFICIENCY

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### Table N1101.1(1) Prescriptive Envelope Requirements<sup>a</sup>

#### Footnote j

- j. Sliding glass doors shall comply with window performance requirements. Windows exempt from testing in accordance with Section NF1111.2, Item 3 shall comply with window performance requirements if constructed with thermal break aluminum or wood, or vinyl, or fiberglass frames and double-pane glazing with low-emissivity coatings of 0.10 or less. Buildings designed to incorporate passive solar elements may include glazing with a *U*-factor greater than [0.30](#) by using Table N1104.1(1) to demonstrate equivalence to building envelope requirements.

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### Table N1101.1(2) Additional Measures

#### Envelope enhancement measures...

	Air sealing home and ducts
5	Mandatory air sealing of all wall coverings at top plate and air sealing checklist <sup>f</sup> , and Mechanical whole-building ventilation system with rates meeting <a href="#">M1507.3</a> or ASHRAE 62.2, and All ducts and air handlers contained within building envelope <sup>d</sup> or All ducts sealed with mastic <sup>b</sup>

#### Footnote g

- g. Table N1104.1(1) Standard base case design, [Proposed](#) UA shall be at least 8 percent less than the [Code](#) UA. Buildings with fenestration less than 15 percent of the total vertical wall area may adjust the Code UA to have 15 percent of the wall area as fenestration.

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**N1102** **FLOOR AREA.** The area included within the surrounding exterior walls of a building or portion thereof, exclusive of courts. The floor area of a building or portion thereof, no provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above.

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**N1104.5.2** **Intermediate framing for walls.** 1. Walls. Walls shall be framed with 2 × studs at 16 inches ([406](#) mm) on center and shall include the following, as detailed in Items 2 and 3.

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**N1104.9.1** **Vapor retarders.** A [Class II](#) vapor retarder shall be installed on the warm side (in winter) of all insulation. ...

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**N1105.3.4.1.1** **Outdoor thermostat required.** An outdoor thermostat or factory installed temperature sensor with electronic controls shall be used to lock out supplemental heat based on outdoor air temperature. The lock-out temperature shall be set at [40°F](#) ([4.4°C](#)). There shall be no compressor lock-out temperature.

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**N1105.5.1** ~~**N1105.5.1 Economizer cooling.**~~ (All of Section N1105.5.1 is replaced by the following provisions.)  
[N1105.5.1 Exhaust fans.](#) Bathroom exhaust fans shall be [Energy Star labeled](#).

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**N1114.2** **Windows products exempt from testing.** The following products are exempt from thermal performance testing as specified in Section NF1114.1. ...

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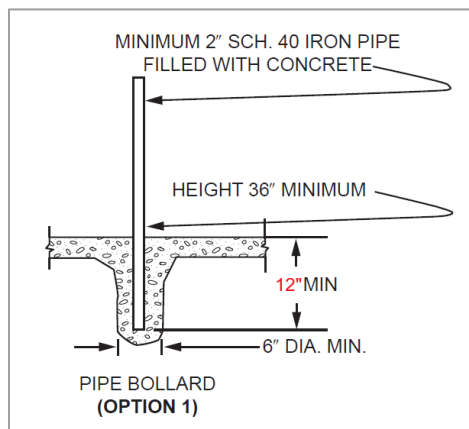
**NF1115.2.1** **Windows produced in low volume labels.** Labels for windows produced in low volume under [NF1112\(1\)](#), due to its frame and glazing configuration shall.

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## CHAPTER 13—GENERAL MECHANICAL SYSTEM REQUIREMENTS

**M1307.2 Anchorage of appliances.** Appliances designed to be fixed in position shall be fastened or anchored in an approved manner. In Seismic Design Categories D<sub>1</sub> and D<sub>2</sub>, ~~and in townhouses in Seismic Design Category C~~, water heaters and thermal storage units shall be anchored or strapped to resist horizontal displacement caused by earthquake motion. ...

**Fig. M1307.3.1 Typical Motor Vehicle Impact Protection**



**Table M1309.4 Piping Supports**

All references to footnotes 'b', 'c', 'd', or 'e' are removed... there is only one footnote for this table

## CHAPTER 15—EXHAUST SYSTEMS

**M1502.4.2 Duct installation.** Exhaust ducts shall be supported at intervals not to exceed 4 feet (1219 mm) and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Exhaust duct joints shall be sealed in accordance with Section M1601.4.1 ~~and shall be mechanically fastened~~. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.

**M1507.4.1.3 Remote fans.** Remotely installed fans that are at least 4 feet (1220 mm) away from the inlet grill are exempt from the sone rating requirements of [M1507.4.1.1](#).

## CHAPTER 23—SOLAR ENERGY SYSTEMS

### **M2301 Section M2301 [Solar Thermal](#) Energy Systems**

**M2301.1 General.** This section provides for the design, construction, installation, *alteration* and repair of *equipment* and systems using solar ~~energy to provide power through photovoltaic systems~~, nonpotable space heating or cooling, and swimming pool heating. Equipment and systems using solar energy to directly or indirectly heat potable water are regulated under the *Plumbing Code*.

**M2301.2 Installation.** The installation of solar energy systems shall comply with Sections M2301.2.1 through M2301.2.13. ~~Photovoltaic systems shall comply with Section M2302.~~

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## CHAPTER 24—FUEL GAS

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### G2416.17.1 Limitations. ...

#### Exceptions: ...

3. Plastic pipe shall be permitted under outdoor patio, walkway and driveway slabs provided that the burial depth complies with Section [G2416.12](#).

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## APPENDIX F—RADON CONTROL METHODS

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**AF103.5.2.3 Building tightness.** Dwellings shall be tested with a blower door, depressurizing the dwelling to 50 Pascals from ambient conditions and found to exhibit no more than 5.0 air changes per hour. A mechanical exhaust, supply, or combination ventilation system providing whole-building ventilation rates specified in [Table M1507.3](#) or ASHRAE 62.2 shall be installed within the dwelling unit.

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## APPENDIX E—MANUFACTURED HOUSING USED AS DWELLINGS

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### AE101.1 Ground anchors. ...

Manufactured ground anchors shall be listed and installed in accordance with the terms of their listing and the anchor manufacturer's instructions, and shall include the means of attachment of ties meeting the requirements of Section [AE102](#).

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## APPENDIX T—DWELLING UNIT FIRE SPRINKLER SYSTEMS

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**AT2904.2.3 Freezing areas.** Piping shall be protected from freezing as required by Section [312.6](#) of the *Oregon Plumbing Specialty Code*. Where sprinklers are required in areas that are subject to freezing, dry-sidewall or dry-pendent sprinklers extending from a nonfreezing area into a freezing area shall be installed.

**AT2904.8.1 Preconcealment inspection.** The following items shall be verified prior to the concealment of any sprinkler system piping: ...

8. The piping system is tested in accordance with [the Oregon Plumbing Specialty Code](#).

Table  
AT2904.6.2(2)

TABLE AT2904.6.2(2)  
MINIMUM WATER METER PRESSURE LOSS ( $PL_m$ )<sup>a</sup>

FLOW RATE (gallons per minute, gpm) <sup>b</sup>	<sup>5</sup> / <sub>8</sub> -INCH METER PRESSURE LOSS (pounds per square inch, psi)	<sup>3</sup> / <sub>4</sub> -INCH METER PRESSURE LOSS (pounds per square inch, psi)	1-INCH METER PRESSURE LOSS (pounds per square inch, psi)
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