



Effective: Sept. 20, 2018

(Ref.: ORS 455.500)

2018 Oregon Reach Code

Under Oregon Revised Statute (ORS) 455.500, the division, after consultation with the appropriate advisory board, shall establish a Reach Code. The Oregon Reach Code is an optional set of standards providing a choice for builders, consumers, contractors, and others. Customers can choose to build to the codes adopted as the State Building Code or to build to this optional Reach Code.

When adopting this code, the division considers economic and technical feasibility, and any published codes that are newly developed for construction. The Oregon Reach Code is not limited to energy provisions and may include other subject matters. This code is an optional tool for local builders and local government and is not applicable in areas of state administration.

The 2018 Oregon Reach Code consists of two parts. Part I includes optional energy standards for commercial and residential buildings. Part II includes optional provisions for tiny houses, 400 square feet or less in floor area, not including loft areas.

Part I—Commercial Energy provisions

Adopted code: *2018 International Energy Conservation Code (IECC) with Oregon Reach Code modifications*

Commentary: For structures covered under the *Oregon Structural Specialty Code (OSSC)*, the 2018 IECC represents an improvement to the 2014 OSSC/2014 OEESC. The 2018 IECC is a contemporary code that advances energy efficiency through a timely evaluation and recognition of the latest advancements in construction techniques, emerging technologies and science related to the built environment. The 2018 IECC is recognized by the U.S. Department of Energy as the most current national energy efficiency construction code.

Part I—Residential Energy Provisions

Adopted code: *2017 Oregon Residential Specialty Code (ORSC)*, including Chapter 11, with *Oregon Reach Code* modifications

Commentary: For residential structures covered under the ORSC, the 2017 ORSC exceeds national standards that are technically and economically feasible for residential structures.

Part II—Tiny Houses

Adopted code: *2018 International Residential Code (IRC)*, including Appendix Q for Tiny Houses, with *Oregon Reach Code* modifications

Commentary: The 2018 IRC, including Appendix Q, provides minimum standards for the construction of tiny houses, 400 square feet or less in floor area, not including loft areas.

In addition to an energy provision modification (requiring all LED lighting), this code establishes a new occupancy classification for the tiny house on wheels product. Many wheeled-type structures are constructed using recreational vehicle-type products that are not typically allowed for permanent dwelling use. The exemption of product certification requirements under the electrical and plumbing statutes allows the *Oregon Reach Code* to provide a solution for contractors wanting to incorporate these products. This code:

- Provides another tool for tiny house builders.
- Provides flexibility for local government to address housing needs.
- Includes standards for both tiny houses on wheels and permanent tiny houses.

2018 Oregon Reach Code, Part I

COMMERCIAL ENERGY EFFICIENCY

The *2018 Oregon Reach Code, Part I, Commercial Energy Provisions*, consists of the following:

- *2018 International Energy Conservation Code (IECC)*—Commercial Provisions
- Oregon specific modifications as shown below

Chapter 1 [CE] of the 2018 IECC is deleted in its entirety and replaced with the following:

Scope and Application

SECTION 101 GENERAL

101.1 Title. Chapter 1 of these regulations shall be known as the *Oregon Reach Code, Part I – commercial energy provisions*, hereinafter referred to as “this code.”

101.2 Scope. The provisions of this code shall apply to the design, construction, *addition, alteration, replacement, repair*, equipment, and site orientation, of every *building* or *structure* or any appurtenances connected or attached to such *buildings* or *structures* and to the site on which the *building* is located. Occupancy classifications shall be determined in accordance with the *Building Code*.

This code shall not apply to the following:

1. Where an owner or designer has not opted to build under this code.
2. Any Group R, residential occupancies constructed under the *Residential Code*.
3. Equipment or systems that are used primarily for industrial or manufacturing processes.

101.2.1 Appendices. Provisions in the appendices shall not apply.

101.3 Intent. This code shall be an optional set of construction standards and methods that are economically and technically feasible, to regulate the design and construction of buildings for the effective use of energy and the employment of renewable energy technologies. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve the effective use of energy, and to reduce the negative potential impacts of the built environment. This code is intended to be used as an alternate compliance method for Chapter 13 of the

Building Code. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes and ordinances.

SECTION 102 APPLICABILITY

102.1 General. This code is an overlay to the other Oregon Specialty Codes. This code is not intended to be used as a stand-alone construction regulation document or to abridge or supersede safety, health or environmental requirements under other applicable codes or ordinances.

102.1.1 Code conflicts. Where there is a conflict between a general requirement and a specific requirement of this code, the specific requirement shall be applicable. Where, in any specific case, different sections of the code specify different materials, methods of construction or other requirements, the most practical and effective requirement to meet the intent of the code shall govern.

102.1.2 Innovative approaches. It is intended that the provisions of this code provide flexibility to allow and encourage the use of innovative approaches, techniques and technology to achieve compliance with the intent of the code.

102.2 Other laws. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

102.3 Application of references. References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

102.4 Reference codes and standards. The provisions of Chapter 1 of the *Building Code* shall apply. The codes and standards referenced in this code and the

Building Code shall be considered as part of the requirements of this code to the prescribed extent of such reference. It is the expressed intent of this code to require higher minimum standards relating to building energy performance than the corresponding minimum standards set by Chapter 13 of the *Building Code*, and in such cases, the higher minimum standards of this code shall take precedence.

References to the *International Building Code* or the *Building Code* shall mean the *Oregon Structural Specialty Code* as adopted by OAR 918-460-0010.

References to the *International Electrical Code*, the *NFPA 70*, or the *Electrical Code* shall mean the *Oregon Electrical Specialty Code* as adopted by OAR 918-305-0100.

References to the *International Fuel Gas Code* shall mean the *Oregon Mechanical Specialty Code, Appendix C* as adopted by OAR 918-440-0010.

References to the *International Mechanical Code*, the *International Fuel Gas Code* or the *Mechanical Code* shall mean the *Oregon Mechanical Specialty Code* as adopted by OAR 918-440-0010.

References to the *International Plumbing Code* or the *Plumbing Code* shall mean the *Oregon Plumbing Specialty Code* as adopted by OAR 918-750-0110.

References to the *International Residential Code* or the *Residential Code* shall mean the *Oregon Residential Specialty Code* as adopted by OAR 918-480-0005.

102.4.1 Conflicting provisions. Where the extent of the reference to referenced code or standard includes subject matter that is within the scope of this code or the *Building Code*, the provisions of this code or the *Building Code* as applicable, shall take precedence over the provisions in the referenced code or standard.

102.5 Partial invalidity. In the event that any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

102.6 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *Building Code*, the *International Existing Building Code as adopted by Oregon*, or as is deemed necessary by the code official for the general safety and welfare of building occupants and the public.

102.7 Mixed occupancy buildings. In mixed occupancy buildings, each portion of a building shall comply with the specific requirements of this code applicable to each specific occupancy.

Administration and Enforcement

This code is administered and enforced under the provisions and authority of Chapter 1 of the *Building Code*.

Chapter 2 [CE] of the 2018 IECC is modified by replacing or adding the following definitions:

BUILDING OFFICIAL. The officer charged with the administration and enforcement of this code, or a duly authorized representative.

CODE OFFICIAL. See "Building Official."

~~**RESIDENTIAL BUILDING.** For this code, includes detached one- and two-family dwellings, and multiple single-family dwellings (townhouses) as well as Group R-2, R-3 and R-4 buildings three stories or less in height above grade plane.~~

RESIDENTIAL BUILDING. For this code, includes Group R-3 buildings regulated under the *Residential Code*: one- and two-family dwellings and townhomes.

Chapter 4 [CE] of the 2018 IECC is modified by deleting **Section 407, Total Building Performance.**

2018 Oregon Reach Code, Part I

RESIDENTIAL ENERGY EFFICIENCY

The *2018 Oregon Reach Code, Part I, Residential Energy Provisions*, consists of the following:

- *2017 Oregon Residential Specialty Code (ORSC)*, including Chapter 11 for energy efficiency
- Oregon specific modifications as shown below

Chapter 11, Section N1101 of the 2017 ORSC is modified by the following:

N1101.1 General. The provisions of this chapter regulate the exterior envelope, as well as the design, construction and selection of heating, ventilating and air-conditioning systems, lighting and piping insulation required for the purpose of effective conservation of energy within a building or structure governed by this code.

All conditioned spaces within residential buildings shall comply with Table N1101.1(1) and ~~two~~ **three** additional measures from Table N1101.1(2).

2018 Oregon Reach Code, Part II

TINY HOUSES

The *2018 Oregon Reach Code, Part II, Tiny House Provisions*, consists of:

- The *2018 International Residential Code (IRC)*, including Appendix Q for Tiny Houses
- *Oregon Reach Code* modifications.

Chapter 1 of the 2018 IRC is deleted in its entirety and replaced with the *2017 Oregon Residential Specialty Code (ORSC)* Chapter 1 with the following modifications:

SECTION R101 GENERAL

- Replace Section R101 with the following:

R101.1 Title. Chapter 1 of these regulations shall be known as the *Oregon Reach Code, Part II—Tiny House Provisions* and shall be cited as such and will be referred to herein as “this code.”

R101.2 Scope. The provisions of this code shall apply to the construction, *alteration*, enlargement, replacement, *repair*, equipment, use and occupancy of the following:

1. *Tiny houses* classified as a Group R-3 occupancy, one-family *dwelling unit* as defined in the *Oregon Residential Specialty Code* intended for permanent living.
2. *Tiny houses* on wheels classified as a Group R-5 occupancy intended for temporary or emergency use or as allowed by the *building official*.

This code shall not apply:

1. Where an owner or the owner’s authorized agent has not voluntarily opted to build under this code.
2. To any residential Group R occupancy constructed under the *Oregon Residential Specialty Code* or the *Oregon Structural Specialty Code*.
3. Any structure over 400 square feet in *building area* as defined by the *Oregon Structural Specialty Code*.

R101.2.1 Appendices. Provisions in Appendix Q of the *2018 International Residential Code* are adopted as a part of this code, all other appendices of the *2018 International Residential Code* shall not apply.

R101.3 Intent. This code shall be an optional set of construction standards and methods that are economically and technically feasible, to establish minimum standards for the design and construction of *tiny houses* incorporating effective use of energy while accommodating both *tiny houses on wheels* (THOW) and permanent (dwelling) uses.

R101.4 Local Acceptance. A local building inspection program (municipality) must recognize and accept a permit application for the construction, reconstruction, alteration, or repair of a building or structure in conformance with this code. (see ORS 455.500).

Exception: A local *building official* is not required to accept a permit application for a *tiny house* under this code if the local municipality has adopted an ordinance prohibiting *tiny house* structures, their use, installation, set-up, or any other matter consistent with planning and zoning standards adopted for that community. A local *building official* is also not required to accept a permit application for a *tiny house* under this code if the local municipality has adopted an ordinance requesting an alternate regulatory option under the provisions of ORS 455.065. These exceptions may include Group R-3 and/or R-5 *tiny houses* built under this code, consistent with the municipal ordinance. *Building officials* in the process of adopting a local ordinance or seeking rules under ORS 455.065 applicable to Group R-5 structures are not required to accept an application for an R-5 structure under this code during the period that the *building official* is seeking an ordinance to create an exception, up to six months.

SECTION R102 APPLICABILITY

- Replace Section R102.1 with the following:

R102.1 General. The use of this code is at the discretion of the permit applicant and must be accepted by the local municipality.

R102.1.1 Code conflicts. Where there is a conflict between a general requirement and a specific requirement of this code, the specific requirement shall be applicable. Where, in any specific case, different sections of the code specify different materials, methods of construction or other requirements, the most practical and effective requirement to meet the intent of the code shall govern.

R102.1.2 Innovative approaches. It is intended that the provisions of this code provide flexibility to allow and encourage the use of innovative approaches, techniques and technology to achieve compliance with the intent of the code.

R102.1.3 Separate compliance path. The use of this code constitutes a separate compliance path from the *Oregon Residential Specialty Code* in that designs must comply with this code in its entirety. Mixing of standards or cross-over applications with other codes is not allowed.

- Replace Section R102.4 with the following:

R102.4 Referenced codes and standards. The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and manufacturer's instructions shall apply.

References to the *International Building Code* or the *Building Code* shall mean the *Oregon Structural Specialty Code* as adopted by OAR 918-460-0100.

References to the *International Electrical Code*, the *NFPA 70*, or the *Electrical Code* shall mean the *Oregon Electrical Specialty Code* as adopted by OAR 918-400-0455.

References to the *International Fuel Gas Code* shall mean the *Oregon Mechanical Specialty Code, Appendix C* as adopted by OAR 918-440-0010.

References to the *International Mechanical Code* or the *Mechanical Code* shall mean the *Oregon Mechanical Specialty Code* as adopted by OAR 918-440-0010.

References to the *International Plumbing Code* or the *Plumbing Code* shall mean the *Oregon Plumbing Specialty Code* as adopted by OAR 918-750-0110.

(Remainder of R102.4 is unchanged)

SECTION R104 DUTIES AND POWERS OF THE BUILDING OFFICIAL

- Section R104.1 is replaced with the following:

R104.1 General. Consistent with the discretionary decision making powers granted to *building officials, a certified building official* may take any action, including but not limited to, waiving a requirement of this code, modifying a requirement of this code and/or accepting an alternate method to a requirement in this code for residential type structures 400 square feet or less. When waiving or accepting a modification to this code, a *building official* shall not allow a provision that would create an imminent threat to public health or safety, and may not enforce requirements that are in addition to this code when built under this code by the permit applicant.

- The following is added after Section R104.10.1:

R104.10.2 (Modifications) Subsequent placement. Modifications granted by the municipality of record shall not be binding upon a receiving municipality. The applicant must include any such modifications with the *construction documents* when applying to the receiving municipality for review.

SECTION R106 CONSTRUCTION DOCUMENTS

- Section R106.2 is replaced with the following:

R106.2 Site plan or plot plan. The *construction documents* submitted with the application for permit shall be accompanied by a site plan showing the size and location of new construction and existing structures on the site and distances from lot lines. The *building official* is authorized to waive or modify the requirements for a site plan where the application for permit is for *alteration* or repair or where otherwise warranted.

Exception: Site plans for Group R-5 *tiny houses* or park model type recreational structures are only

required at the time of application for placement in a municipality.

SECTION R107 TEMPORARY STRUCTURES AND USES

- Section R107.3 is replaced with the following:

R107.3 Temporary power. Temporary power for *tiny houses built to this code are allowed. Tiny houses* intended for temporary use, temporary “Recreation Vehicle” type electrical connections (cord and plug) complying with Article 551 of the *Electrical Code* are permissible when temporary uses are allowed by the *building official*.

R107.3.1 Temporary plumbing connections. *Tiny houses* intended for temporary use may utilize plumbing systems, fixtures, methods and materials listed for recreational vehicle-use when temporary uses are allowed by the *building official*.

SECTION R119 TINY HOUSE OCCUPANCY CLASSIFICATION

- Section R119 is replaced with the following:

R119.1 Occupancy classification. Occupancy classifications shall be determined by the *building official* as requested by the applicant in accordance with Section R119.1.1 or R119.1.2. and may be converted in accordance with Section R110.2.

R119.1.1 Group R-3 permanent one-family dwellings. Permit applicants seeking a Group R-3 occupancy classification under this code must include in their permit application submittal to the local municipality adequate information demonstrating how the structure meets minimum requirements of this code, including how it will be permanently anchored to the ground to meet minimum standards for resisting seismic and wind forces such as, construction details, calculations and other information necessary to make a determination.

Where the frame of the chassis is a structural component of the floor system, the applicant must include adequate information demonstrating that the minimum floor loads are met and that the frame is capable of providing the necessary support to carry the load of the structure including connections. No temporary type cord and hose connections as allowed in R107.3 and R107.3.1 are allowed for a Group R-3 occupancy under this code.

R119.1.2 Group R-5 wheeled residential structures, 400 sq. ft. or less. (May be referred to as a Park Model, Tiny House, or Tiny House on Wheels) Permit applicants seeking a Group R-5 occupancy classification must include in their permit application submittal to the local municipality adequate information demonstrating how the structure meets this code.

Where the frame of the chassis is a structural component of the floor system, the *building official* is not required to review this equipment for approval as a Group R-5 structure.

Group R-5 structures are structures on wheels approved by the *building official* under this code. A Group R-5 structure must be built on a chassis with cord and hose utility connections in accordance with R107.3 and R107.3.2. A Group R-5 structure is limited to: temporary living quarters for seasonal or emergency use or as allowed by the *building official*. The duration of stay may be determined by local ordinance or local administrative rule.

Exception: Group R-5 structures located in approved recreational vehicle, manufactured housing, or transitional housing parks may not be subject to limitation on use and period of stay, unless addressed through land use and planning by the local municipality. See Oregon Revised Statute (ORS) 197.493.

R119.2 Occupancy classification conversion. Group R-5 wheeled residential structures constructed in accordance with this code may be converted to a Group R-3 permanent one-family dwelling provided that upon application to the local municipality for a change of occupancy, the applicant provides adequate information demonstrating how the structure will meet the minimum requirements for connection of electrical and plumbing systems and be permanently anchored to the ground to meet minimum requirements for resisting seismic and wind forces such as, construction details, design drawings, calculations and other information necessary, including how the chassis and floor system is anchored to the proposed foundation system, and any products or equipment that may not meet the minimum requirements of the *2018 International Residential Code* including Appendix Q.

R119.2.1 Applicant responsibility. Applicants must keep all permit, inspection, certificate of occupancy and *certificate of completion* records for the life of the structure. Such records shall be presented to the *building official* upon request. The *building official* is

authorized to require any inspection necessary to assist in the conversion of a Group R-5 to a Group R-3 occupancy classification. The applicant must meet all Construction Contractor's Board, Building Codes Division, and local licensing requirements.

R119.2.2 Building Official Right of Refusal. A *building official* may refuse to accept a request for occupancy classification, conversion, *alteration* or installation where permit, inspection, certificate of occupancy and certificate of completion records and/or other documentation fail to clearly demonstrate that all applicable laws have been followed or when the local municipality has opted out of the this code pursuant to R101.4.

SECTION R120 CERTIFICATE OF COMPLETION / UNIT IDENTIFICATION

- The following section is added:

R120.1 Certificate of completion issued. Where *tiny houses* are constructed off-site, the applicant may request a "Certificate of Completion." After the *building official* inspects the *tiny house* and does not find violations of the provisions of this code, the *building official* shall, at the applicant's request, issue a certificate of completion containing the following:

1. The building permit number.
2. The name and address of the owner or the owner's authorized agent.
3. A description of that portion of the structure for which the certificate is issued.
4. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code.
5. The name of the *building official*.

6. The edition of this code under which the permit was issued.
7. If an *automatic sprinkler system* is provided and whether the sprinkler system is required.
8. Unit identification serial number.
9. Any special stipulations and conditions of the building permit.

R120.2 Revocation. The *building official* is authorized to, in writing, suspend or revoke a *certificate of completion* issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the *tiny house* or portion thereof is in violation of any of the provisions of this code.

R120.3 Unit Identification. Each *tiny house* shall have a specific identification serial number to assure continuity of regulation. The identification number shall be embossed on the chassis or other readily accessible permanent component of the tiny home.

R120.2.1 Summary Label Information. Each *tiny house* shall be provided with a summary label. The summary label shall be provided by the builder and shall include the following information:

1. Unit Identification Serial Number.
2. The year the tiny home was constructed.
3. Builder/manufacturer.
4. Jurisdiction providing approval.
5. Any special stipulations and conditions of the building approval.

R120.2.2 Summary Label - Physical Requirements. All summary labels must:

1. Be imprinted, not handwritten.
2. Be permanently affixed to the inside of the electrical panel door or other location adjacent to the electrical panel.

Chapter 11 of the 2018 IRC is deleted in its entirety and replaced with Chapter 11 of the 2017 ORSC modified by the following:

N1107.2 High-efficacy lamps. All permanently installed lighting fixtures shall contain high-efficacy **LED** lamps. ~~Screw-in compact fluorescent and LED lamps comply with this requirement.~~

The *building official* shall be notified in writing at the final inspection that the permanently installed lighting fixtures have met this requirement.

~~**Exception:** Two permanently installed lighting fixtures are not required to have high-efficacy lamps.~~

N1107.3 High-efficacy exterior lighting. All exterior lighting fixtures affixed to the exterior of the building shall contain high-efficacy **LED** lamps.

~~**Exception:** Two permanently installed lighting fixtures are not required to have high-efficacy lamps.~~