

# **Code Amendment Proposal Application**

## **Department of Consumer and Business Services Building Codes Division**

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oregon.gov/bcd

Read the entire code amendment proposal application before completing this form. Please complete all parts before submitting your proposal and refer to the provided checklist.

APPLICANT INFORMATION				
Name: Dan Kirschner			Date: <b>9-5-2025</b>	
Representing: (If applicable) NW Gas Assocation		Work 1	Work phone: (503) 880-7269	
Mailing address: 1914 Willamette Falls Dr		Cell 1	Cell phone: (503) 880-7269	
City: West Linn	State: OR		ZIP: 97068	
Email address: dkirschner@nwga.org				
PROPOSAL INFORMATION				
Specialty code: Oregon Residential Specialty Code, Chapter 11				
Code section(s): N1101.2.1				
Briefly explain See attached the subject of your proposal:				
INSTRUCTIO	NS AND CHECKLIS	Ī		

Fill in all the information above and submit this page, signed and dated, with the required supplementary information for Parts I, II, III, and IV described on Page 2 of this application. This application may be submitted by mail to the mailing address above, or by email to BCD.PTSPtech@oregon.gov.

#### Summary checklist for the applicant:

Code amendment language is attached in the proper format. Part I

Amendment proposal requirements for amending the code have been reviewed. Part II

Part III Amendment proposal criteria questions have been answered and are attached.

Part IV If applicable, additional ORSC energy efficiency amendment proposal information is attached.

**Note:** One application is required for each code section you are proposing to amend. If this proposal requires changes in other sections of the code for alignment, include those changes as part of this application.

APPLICANT SIGNATURE			
ELECTRONIC SIGNATURE: DAN KIRSCHNER, CEO	9-5-2025		
Signature:	Date:		

Copyright notice: By signing this Code Amendment Proposal Application, I understand and acknowledge that the work contained in this application is original, or if not original, I have the right to copy the work. By signing this work, I understand that any rights I may have in this work, including any form of derivative works and compilations, are assigned to the Department of Consumer and Business Services Building Codes Division. I also understand that I do not retain or acquire any rights once this work is used in a Department of Consumer and Business Services Building Codes Division publication.

440-2652(3/25/COM) Page | 1 **N1101.2.1 Alterations and repairs.** *Alterations* and *repairs* affecting energy conservation measures shall conform to the requirements specified in this chapter.

Where *alterations* or *repairs* affect components of existing *conditioned spaces* regulated in this chapter, those components shall comply with this chapter.

#### Exceptions:

- The minimum existing component requirements as specified in Table N1101.2 shall be used to the maximum extent technically practical due to existing constraints, which may include but are not limited to the available cavity depth, matching existing features and similar constraints
- 2. The requirements of N1105.8 shall not be required.

### Existing construction (replacements and additions)

• Initial Installation Cost – A similar proposal in Washington State cited a California study estimating a \$2,259 increase in upfront cost when replacing a 2.5-ton A/C unit with a comparable heat pump

Reference: TN256432-2 20240516T134811 2025 Single-Family Heat Pump Replacements Report (1).pdf (Table-11).

• Homeowner Financial Burden – A/C system failures are typically unexpected, requiring urgent replacement. Asking homeowners to pay an additional \$2,000–\$3,000 for a heat pump instead of a standard A/C unit just so they can get cooling back is financially unrealistic for many families. Our analysis shows that HPs cost more to operate than gas furnaces for heating, driving up the cost of ownership, compounding equity issues. For example, a 95% AFUE furnace is estimated to cost about \$630 for space heating over the course of the heating season while a 9.5 HSPF (8.5 HSPF2) HP is estimated to cost about \$790 (using nwncompare.com for a newer 2,138 square foot, detached single family home with a crawlspace foundation, central ducted heating system in Portland, OR – with a blend of PGE and PAC electricity rates per kWh.) [Energy cost reference:

https://www.aga.org/news/news-releases/doe-announces-natural-gas-affordability-jumps-to-3-5-times-more-affordable-than-electricity; Heat pump cost effectiveness reference: https://nwcouncil.app.box.com/v/ResSFMHConvCDHP-8-1]

• **Performance Limitations** – Heat pumps generally deliver lower-temperature heat compared to gas furnaces. In older homes—often 30 to 100+ years old—with poor

insulation and leaky ductwork, heat pumps may struggle to meet heating demands. Significant weatherization upgrades may be necessary to make a HP retrofit effective, adding further cost. Field data indicate that HPs perform below nameplate / laboratory efficiency, compounding both the cost of ownership and emissions concerns. (https://www.energytrust.org/wp-content/uploads/2021/09/Summary-Memo-of-Recurve-Ducted-Heat-Pump-Upgrade-Impacts-Final.pdf; see similar comment below. RTF presentation by David Boop, "Air Source Heat Pump Measures" https://rtf.nwcouncil.org/calendar/rtf-meeting-2025-03-18/)

- Potential for Higher Utility Bills Rising electricity rates may lead to increased utility costs for homeowners, which may not be fully offset by reductions in gas usage. Our analysis shows that HPs cost more to operate than gas furnaces for heating, driving up the cost of ownership, compounding equity issues. For example, a 95% AFUE furnace is estimated to cost about \$630 for space heating over the course of the heating season while a 9.5 HSPF (8.5 HSPF2) HP is estimated to cost about \$790 (using nwncompare.com for a newer 2,138 square foot, detached single family home with a crawlspace foundation, central ducted heating system in Portland, OR with a blend of PGE and PAC electricity rates per kWh.) [Energy cost reference: https://www.aga.org/news/news-releases/doe-announces-natural-gas-affordability-jumps-to-3-5-times-more-affordable-than-electricity; Heat pump cost effectiveness reference: https://nwcouncil.app.box.com/v/ResSFMHConvCDHP-8-1]
- Resource Adequacy local energy providers are very concerned about the state of our electrical grid and capacity to manage demand increases. The Pacific Northwest Utilities Conference Committee (PNUCC) published a recent report noting vulnerabilities like blackouts (<a href="https://www.pnucc.org/wp-content/uploads/Guidehouse-analysis-of-regional-energy-reports-2025.pdf">https://www.pnucc.org/wp-content/uploads/Guidehouse-analysis-of-regional-energy-reports-2025.pdf</a>). Mandating heat pumps where cooling is provided will add all-electric heating systems to the grid, along with electric resistance auxiliary heat that will operate during peak heating load periods, increasing grid vulnerability.
- Summary Retrofitting with a heat pump can cost thousands more upfront, may not deliver adequate comfort in older homes, and could result in higher monthly utility bills compared to traditional gas furnace systems.

#### Amendment proposal criteria questions

1. Describe the concept and purpose of this proposal. This adds an exception to Alterations and Repairs to not require the installation of a heat pump.

2. What problem in the existing Oregon code or national model code is this proposal solving? How does this amendment address the issue? There is currently no requirement like this in the national code for residential dwelling units; this proposal seeks to align with model codes and avoid unnecessary added costs to new construction and resource adequacy concerns. If you have evidence demonstrating the problem, submit that information. See above comments.

#### Helpful information

- a) If this proposal corrects any unforeseen or probable outcomes resulting from the application of a code section, explain how. This proposal would avoid the unnecessary added cost of installing a heat pump during Alterations or Repairs as well as avoid resource adequacy concerns.
- b) If this proposal corrects inadequate application by a code section to a method, material, or design, explain how. **N/A**
- c) If this proposal eliminates conflicting, obsolete, or duplicative code provisions or standards between Oregon adopted codes, statutes, or regulations, explain why. **N/A** d) If this proposal is for a fire or life safety matter, or is otherwise needed to protect the health, safety, welfare, comfort, and security of occupants and the public, explain why. **N/A**
- e) If this proposal is necessary to address unique geographic or climatic conditions within Oregon, explain why. **N/A**
- f) If there are alternatives to this proposal that solve the problem, explain why this proposal is the best or a necessary solution. **N/A**
- g) If this proposal provides for the use of unique or emerging technologies, or promotes advances in construction methods, devices, materials, and techniques, explain how.

#### N/A

- h) If this proposal meets any energy conservation or indoor air quality requirements, explain how. **N/A**
- i) If this proposal involves the adoption of an electrical or plumbing building product, note if the appropriate advisory board approved the product. **N/A**
- 3. Has this been proposed at the national model code level. If so, explain when it was proposed, what happened, and why it was not adopted. Provide all associated national model code hearing information and background. Requirements to install heat pumps have been proposed at the national level (ASHRAE), but these have not been adopted into the residential model codes (IECC) and Oregon traditionally mirrors model codes.

#### Implementation and fiscal impact

1. Explain how the proposed provisions would be enforced? Are additional inspections or permits required? Describe any necessary equipment, training, tests or special certifications. Adding this exception would keep enforcement and inspections as they are today.

2. What is the fiscal impact of this proposal? Provide a cost-benefit analysis and include the resources or methods you used to determine the fiscal impact. **This will prevent the increased cost of Alterations and Repairs.** 

# Helpful information

- a) If this proposal adds to the cost of construction, explain how the added cost contributes to the health and safety of occupants, or is necessary to conserve scarce resources. This would prevent the increased cost of construction.
- b) If there are any other adverse fiscal impacts or cost savings passed on to the general public, the construction industry, local and state governments, and small businesses, an interested person must describe the added or reduced cost of a proposed code amendment, and describe the adverse fiscal impact or cost savings in relation to the current Oregon specialty code. **N/A**
- c) If this proposal will affect the cost of development of a detached single-family dwelling, please indicate the cost. For the purposes of illustrating the change on the cost, please use a 6,000-squarefoot parcel and the construction of a 1,200-squarefoot, detached single-family dwelling on that parcel. The information on the cost must be sufficient to help the division in preparing a housing cost impact statement. **This will keep the cost of development from increasing as noted above.**

Impacted stakeholders and other specialty codes

1. If this proposal will affect the cost of development of a detached single-family dwelling, please indicate the cost. As noted above, the BCD proposal – if not modified – would increase the cost of development of a detached single-family dwelling.

For the purposes of illustrating the change on the cost, please use a 6,000-square-foot parcel and the construction of a 1,200-square-foot, detached single-family dwelling on that parcel. The information on the cost must be sufficient to help the division in preparing a housing cost impact statement.

2. Does this proposal impact other specialty codes or statewide programs? No.