



Code Amendment Proposal Application

Department of Consumer & 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: Jack Watson

Date: 8/25/22

Representing (if applicable): Oregon Solar + Storage Industries Association

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State: OR

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PROPOSAL INFORMATION

Specialty code: Oregon Residential Specialty Code

Code section(s): SECTION N1107 LIGHTING AND POWER

Briefly explain the subject of your proposal: Removes the plumbing exemption in the obstructions section of the solar ready code. This exemption is not in the model code, so this amendment brings the code closer to the model solar ready code.

INSTRUCTIONS AND CHECKLIST

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

Summary checklist for the applicant:

- Part I** Code amendment language is attached in the proper format.
- Part II** Amendment proposal requirements for amending the code have been reviewed.
- 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

Signature:

Date: 8/25/22

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.

PART I- CODE AMENDMENT LANGUAGE

N1107.4.2.1 Obstructions. Solar ready zones shall be free from obstructions, including but not limited to: mechanical exhaust vents, **plumbing vents**, chimneys, and roof-mounted equipment.

~~Exception: Plumbing vents may be located in the solar ready zone.~~

PART III- CODE AMENDMENT PROPOSAL CRITERIA

Proposal

1. Describe the concept and purpose of this proposal.
 - This proposal removes an exemption for plumbing vents to be cited in solar ready zones. This language is closer in relation to the national model code for solar ready.
2. What problem in the existing Oregon code or national model code is this proposal solving? How does this amendment address the issue? If you have evidence demonstrating the problem, submit that information.
 - The language of this amendment to this ORSC proposal comes from the Oregon Reach Code. The exemption for plumbing vents effectively nullifies the solar ready zone, when installers find a plumbing vent in what should be a solar ready zone they cannot work around the vent to install solar. The obstructions section from the model code includes all vents from being placed in the solar ready zone.
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.
 - The plumbing vent exemption is not in the international model code, rather the I-code reads:
 - RA 103.4 (RB 103.4) Obstructions.
 - Solar-ready zones shall be free of obstructions including but not limited to: vents, chimneys, and roof-mounted equipment.
 - The plumbing vent exemption was not included in the model code because the purpose of the solar-ready zone is to remove all obstruction from the area so solar can be easily installed onto the residential building.

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.
 - The proposed provision would be enforced the same way that is currently enforced in the OR Reach code. No additional inspections would be required, it will keep the same amount of inspections as the code would currently require.
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 amendment is not expected to increase or decrease the costs of compliance. It has the benefit of effectively removing all obstructions from solar-ready zones thereby allowing these homes to easily install solar on their roof.

Impacted stakeholders and other specialty codes

1. It is important that proposals be shared with stakeholders that will be impacted by them. Was this proposal developed with people or organizations likely to be affected by it? Has it been reviewed or shared with people or organizations likely to be affected by it? If so, who, and if not, why not?
 - This proposal was shared extensively with distributed generation solar installers, it was also shared with the Energy Trust of Oregon. It was not shared with the plumbing community as we did not have time to send to them and solicit feedback prior to turning in the proposal. It is being sent to plumbing stakeholders concurrently with it being turned into BCD.
2. Does this proposal impact other specialty codes or statewide programs?
 - This proposal could be read to conflict with Chapter 9 of the plumbing specialty code. However it does not directly conflict with the code as it does not change how plumbing vents can terminate on the roof, it alters where plumbing vents can terminate on the roof. In this case that means that the plumbing vent would have to be located outside the solar-ready zone.

PART IV- ORSC ENERGY EFFICIENCY ADDITIONAL CODE AMENDMENT CRITERIA

The base code with division proposed code amendments and modeling information will be posted on the Oregon Residential Specialty Code adoption webpage on the division's website.

Please include information showing the modeled estimated energy savings and increased construction costs, if any, as described in items 1 and 2.

1. Modeled estimated energy savings

Modeled estimated energy savings based on the US Department of Energy's Methodology for Evaluating Cost- Effectiveness of Residential Energy Code Changes (US DOE Methodology) established for its Building Energy Codes Program (BCAP) and for a 1,200 square foot single-family home on a 6,000 square foot lot, including;

- a) a) The building components, their associated input values, and their assumptions used for developing the average baseline code results, the proposed code amendment(s), and the data sources for those building components, input values and assumptions;
- b) b) The data sources for the input values, beginning with the US DOE Methodology or other national standard(s), followed by the baseline code, then regional data, as appropriate, where national methodologies or standards do not apply; and
- c) c) Weighting factors, provided by the division, based on foundation type, fuel type, and climate zone.

2. Increased construction costs

Increased construction costs above those of the base code that would result from the proposed amendments relative to the US DOE Methodology home and for a 1,200 square foot single family home on 6,000 a square foot lot, detailed and specific enough to allow for the reproduction of the analysis, based on the following factors:

- a) a) A standard cost for different fuel types based on data provided by the division, or from the US Energy Information Agency (EIA) if not available from the division. These costs will be used in any analysis of code change proposals and the costs by fuel type will be used for the duration of the code adoption cycle;
- b) Cost of labor;
- c) Quantity of labor;
- d) Cost of materials;
- e) Quantity of materials;
- f) Overhead costs;
- g) Profit; and
- h) Factors or conditions that would make an alteration, repair, change of use, or change of occupancy, or other code upgrade triggering event in an existing building more expensive to comply with, or would otherwise make the included cost analysis unreliable. Where the code upgrade triggering event would have a fiscal impact, an estimate of that increased fiscal impact must be based on the same assumptions as the initial code proposal.

1. In regards to the modeled estimated energy savings, this proposed amendment is not expected to increase or decrease the energy savings. This small change will enable owners to easily install rooftop solar in applicable solar-ready zones.

2. In regards to increased construction costs, this proposed amendment will not increase costs. The removal of the plumbing vent exemption does not materially effect any of the factors listed under this section.