



# Code Amendment Proposal Application **Proposal 10**

Department of Consumer & Business Services  
Building Codes Division  
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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: Ben Rabe		Date: 2/24/2022
Representing (if applicable): New Buildings Institute		Work phone: 503-761-7339
Mailing address: 151 SW 1st Ave		Cell phone: 612-799-7125
City: Portland	State: OR	Zip: 97204
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## PROPOSAL INFORMATION

Specialty code: Oregon Reach Code
Code section(s): 3.2; 6.5.2.1; 6.5.3.7; 6.4.3.8; 11.2
Briefly explain the subject of your proposal: Key Addenda to 90.1-2019

## 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, and III listed in the following checklist. This application may be submitted by mail to the mailing address above, or by email to [BCD.PTSPtech@oregon.gov](mailto:BCD.PTSPtech@oregon.gov).

### Checklist:

- 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.

**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: 2/24/2022

**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.

# Oregon Reach Code Proposal: Key Addenda to 90.1-2019

## Part I: Code Amendment Language

Include Key [Addenda](#) to ASHRAE 90.1-2019 to the Oregon Reach Code including:

- [Addendum a](#)
- [Addendum b](#)
- [Addendum cr](#)
- [Addenda by, ck, and cp](#)

## Part II –Code Amendment Proposal Requirements

To the best of our knowledge, this proposal aligns with all statutes and rules governing the Oregon state building code.

## Part III -Code Amendment Proposal Criteria

All of these Addenda have been vetted through the thorough ASHRAE consensus committee process and will be included in the next published version of ASHRAE 90.1.

### Addendum a:

This addendum establishes minimum fan efficacy requirements for low-power ventilation fans. These fans are widely available on the market and will therefore have a negligible effect on cost.

### Addendum b:

This addendum more effectively aligns demand control ventilation (DCV) requirements with all other relevant variables to produce a cost-effective solution. The single-threshold parameters are replaced by a table where the floor area threshold requirement is based on climate zone and occupant outdoor airflow rates per 1000 ft<sup>2</sup> (100 m<sup>2</sup>) determined in accordance with ASHRAE Standard 62.1. These changes will more effectively ensure that DCV is utilized in cost-effective scenarios.

### Addendum cr:

This addendum provides a backstop between building envelope and other building systems. Studies have concluded that weaker building envelopes can permanently limit building energy performance, even as lighting and HVAC components are upgraded over time, because retrofitting the envelope is less likely and more expensive.

### Addenda by, ck, and cp:

These addenda establish a prescriptive requirement for onsite renewable energy of 0.25W/s.f. of the three largest floors of all commercial buildings. The size of the required on-site renewable energy is small (on average 4.5% of building energy use) and is a more cost-effective way to require all new commercial buildings to be solar ready.

This proposed code change will increase cost of construction modestly for commercial buildings following the prescriptive pathway of the 2021 IECC. The following table lists the required size of the photovoltaic array and cost effectiveness of that array under this proposed code amendment for a set of prototype commercial buildings following the prescriptive pathway. Analysis of the approximate total installed costs for this photovoltaic system is estimated at \$2.20/W based on analysis by NBI and partners.