Code Amendment Proposal Application

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: Steve Strawn		Date: 08/17/2022
Representing (if applicable): JELD-WEN Inc		Work phone: 5037324425
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PROPOSAL INFORMATION

Specialty code: Oregon Residential Specialty Code

Code section(s): N1101 Table N1101.1(1)

Briefly explain the subject of your proposal: Modify footnote j and add new footnot n to Table N1101.1(1) to better clarify the requrements for glass door glazing area and adding footnote n for consistancy with the IECC.

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 BCD.PTSPtech@oregon.gov.

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: 08/19/2022

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Table N1101.1(1)

BUILDING COMPONENT
Windows[j,n]

Modify footnote j and add new footnote n to Table N1101.1(1) Prescriptive Envelope Requirements

j. ~~Sliding g~~Glass doors **with** ~~over 10 ft²~~ **> 50%** glazing shall comply with window performance requirements. (the remainder of the footnote unchanged)

n. A maximum U-factor of 0.32 shall apply in Marine Climate Zone 4 and Climate Zones 5 to vertical fenestration products installed in buildings located above 3,500 feet in elevation above sea level.

Reason: Footnote "j" is modified to cover a fully glazed exterior door whether it is a side hinged door or sliding door system. The building component, Exterior doors with >2.5ft^2 glazing, are permitted to have a maximum U-Factor of 0.40. A standard full lite 36 x 80 side hinged door typically has less than 50% glazing area. However, a double leaf "French door" assembly that is 72 X 80, with the same glazed area in each door panel, will have roughly 18ft^2 glazing area of the 40 ft^2 total door area. This proposed change corrects the inequity and still requires sliding glass doors with the larger glazing areas to perform to the same U-Factor requirements as windows.

The new footnote "n" provides an exception to the maximum U-Factor. Where windows (and doors in compliance with footnote "j") employing insulating glass units (IGU) are installed above 3,500 feet in elevation, the IGU cannot be completely sealed to retain gas content. Capillary tubes are essential to equalize the IGU cavity pressure for the higher elevations, the use of which would effectively allow the gas content to escape. Inert gas content between layers of an insulating glass unit is necessary to meet the energy performance code requirements for fenestration. Overall, this proposal will allow reasonable options for fenestrations in high-altitude building sites throughout Oregon while retaining the long-term durability of the insulating glass units employed in doors and windows. This footnote option was adopted into the 2021 IECC and has been retained for the proposed 2024 IECC. The IECC footnote however has set the bar at 4,000 ft elevation and we believe 3,500 ft more appropriate.

Cost impact: There is no additional cost of construction that would result from this proposed amendment.