



Code Amendment Proposal Application **OSSC 22-12**

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APPLICANT INFORMATION

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PROPOSAL INFORMATION

Specialty code:	Oregon Structural Specialty Code (OSSC)
Code section(s):	1613.4.15
Briefly explain the subject of your proposal:	Incorporate known forthcoming revision in ASCE 7-22, intended to eliminate misinterpretation of ASCE 7 12.3.3.3, into the 2022 OSSC, which will otherwise be based on ASCE 7-16.

Code Review Committee Outcomes
Nov. 9, 2021 – Tabled.
Nov. 17, 2021 – Approved as modified with edits proposed by SEAO. Revised language.

PART I – CODE AMENDMENT LANGUAGE

(New section) 1613.4.15 ASCE 7, Section 12.3.3.3. Modify ASCE 7, Section 12.3.3.3, Elements Supporting Discontinuous Walls or Frames, to read as follows:

Structural elements supporting discontinuous walls or frames of structures that have horizontal irregularity Type 4 of Table 12.3-1 or vertical irregularity Type 4 of Table 12.3-2 shall be designed to resist the seismic load effects including overstrength of Section 12.4.3.

Connections in the load path between such elements supporting discontinuous walls or frames shall also be designed to resist the seismic load effects including overstrength; there is no exception to this provision based on the type of construction. However, the connections of ~~such~~ discontinuous walls or frames to their supporting members ~~shall need only~~ be adequate to transmit the forces for which the discontinuous walls or frames were required to be designed.

PART III – CODE AMENDMENT PROPOSAL CRITERIA

Proposal

1. The purpose of this code amendment proposal is to incorporate into this code cycle a known forthcoming revision in the *ASCE 7-22 Commentary* to clarify Figure C12.3-5, which is sometimes currently misinterpreted to mean that the connections between structural elements supporting discontinuous walls or frames do not need to be designed for the seismic overstrength factor if the supported discontinuous wall is of wood light-frame construction.
2. The problem this amendment is intended to solve is that the noted figure is sometimes misinterpreted by practicing engineers due to its current lack of clarity. As the figure will not be clarified to prevent such misinterpretation until ASCE 7-22, but the 2022 OSSC will still be based on ASCE 7-16, this amendment would address the problem now, without waiting until a future code cycle that adopts ASCE 7-22.
3. N/A

Implementation and fiscal impact

1. N/A
2. N/A

Impacted stakeholders and other specialty codes

1. This proposal has been discussed with members of the Structural Engineers Association of Oregon (SEAO) Code Committee, some of whom are practicing engineers who must meet the requirement addressed in this proposal in their structural designs, and some of whom are jurisdictional reviewers who must enforce the requirement. There was not any opposition to the proposal voiced. It has also been discussed by an informal group of structural reviewers representing many jurisdictions in the Portland metropolitan area, as well as some other areas of Oregon, such as Salem and Eugene. All of these reviewers were in agreement that the intent of ASCE 7 12.3.3.3 is as stated in this proposed amendment, and that an interpretation of the noted figure in the *Commentary* otherwise would be incorrect. Finally, the author of this proposal has communicated with the Chair of the ASCE 7 Subcommittee on Seismic Loads, who has confirmed multiple times over the past two years that he agrees that the intent of ASCE 7 was not to exempt connections between elements supporting discontinuous wood light-frame shear walls from the requirement of 12.3.3.3, and he notified the author of this proposal that the figure would be revised in ASCE 7-22 to eliminate that potential misinterpretation. The draft revision to ASCE 7-22 is currently publicly available.
2. N/A

ASCE 7, Section 12.3.3.3. Modify ASCE 7, Section 12.3.3.3, *Elements Supporting Discontinuous Walls or Frames*, to read as follows:

Structural elements and their connections supporting discontinuous walls or frames of structures that have horizontal irregularity Type 4 of Table 12.3-1 or vertical irregularity Type 4 of Table 12.3-2 shall be designed to resist the seismic load effects including overstrength of Section 12.4.3. The connections of discontinuous walls or frames to the supporting members shall be adequate to transmit the forces for which the discontinuous walls or frames were required to be designed.