STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

September 2024
Log No. _____

1. State Building Code to be Amended:

- ☒ International Building Code
- ☐ ICC ANSI A117.1 Accessibility Code
- ☐ International Existing Building Code
- ☐ International Residential Code
- ☐ International Fire Code
- ☐ Uniform Plumbing Code
- ☐ International Mechanical Code
- ☐ International Fuel Gas Code
- ☐ NFPA 54 National Fuel Gas Code
- ☐ NFPA 58 Liquefied Petroleum Gas Code
- ☐ Wildland Urban Interface Code

For the Washington State Energy Code, please see specialized energy code forms

Section(s): **1613.4 Amendments to ASCE 7**

(e.g.: Section: R403.2)

Title: **Removal of Modification to Table 12.6-1**
(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Scott Neuman, PE, SE

Title: **Chair, Structural Engineers Association of Washington,** Earthquake Engineering Committee

Date: 9/8/2024

3. Designated Contact Person:

Name: Scott Neuman, PE, SE
Title: Senior Structural Engineer
Address: 5204 120th Ave SE. Bellevue, WA 98006

Office Phone: **None**
Cell: (206) 388-8228
E-Mail address: scotneu@gmail.com

4. **Proposed Code Amendment**. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code, additional pages may be attached.

   Clearly state if the proposal modifies an existing amendment or if a new amendment is needed. If the proposal modifies an **existing amendment**, show the modifications to the existing amendment by underlining all added language and striking through all deleted language. If a new amendment is needed, show the modifications to the **model code** by underlining all added language and striking through all deleted language.

   Code(s) _International Building Code 2024_ **Section(s)** _1613.4.2_____

   Enforceable code language must be used.
   Amend section to read as follows:

   ~~**1613.4.2 ASCE 7 Section 12.6.** Amend ASCE 7 Section 12.6 and Table 12.6-1 to read as follows:~~
   ~~**12.6 ANALYSIS PROCEDURE SELECTION**~~
   ~~**12.6.1 Analysis procedure.** The structural analysis required by Chapter 12 shall consist of one of the types permitted in Table 12.6-1, based on the structure's seismic design category, structural system, dynamic properties, and regularity, or with the approval of the authority having jurisdiction, an alternative~~
   ~~generally accepted procedure is permitted to be used. The analysis procedure selected shall be completed in accordance with the requirements of the corresponding section referenced in Table 12.6-1.~~
   ~~**Table 12.6-1**~~
   ~~**Permitted Analytical Procedures**~~

~~Seismic Design Category~~	~~Structural Characteristics~~	~~Equivalent Lateral Force Procedure, Section 12.8a~~	~~Modal Response Spectrum Analysis, Section 12.9.1, or Linear Response History Analysis, Section 12.9.2~~	~~Nonlinear Response History Procedures, Chapter 16a~~
~~B,C~~	~~All Structures~~	~~P~~	~~P~~	~~P~~
~~D,E,F~~	~~Risk Category I or II buildings not exceeding two stories above the base~~	~~P~~	~~P~~	~~P~~
	~~Structures of light frame construction~~	~~P~~	~~P~~	~~P~~
	~~Structures with no structural irregularities and not exceeding 160 ft in structural height~~	~~P~~	~~P~~	~~P~~
	~~Structures exceeding 160 ft in~~	~~P~~	~~P~~	~~P~~

	~~structural height with no structural irregularities and with T <3.5Ts~~			
	~~Structures not exceeding 160 ft in structural height and having only horizontal irregularities of Type 2, 3, 4, or 5 in Table 12.3-1 or vertical irregularities of Type 4, 5a, or 5b in Table 12.3-2~~	~~P~~	~~P~~	~~P~~
	~~All other structures ≤ 240 ft in height~~	~~NP~~	~~P~~	~~P~~
	~~All structures > 240 ft in height~~	~~NP~~	~~NP~~	~~Pc~~

~~A P: Permitter; NP: Not Permitted; Ts=SDS/SD1~~

5. **Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.** Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

Section 1613.4.2 modifies ASCE 7-16 Table 12.6-1. Table 12.6-1 has been removed from ASCE 7-22 which is the reference code adopted by IBC 2024. To be consistent with the intent of IBC 2024, the Washington State Building Code Amendment modifying the section should be removed as well.

ASCE 7-22 Section C12.6 provides commentary for why the table was removed and restrictions on analytical procedures were eased. Essentially more rigorous analytical methods were found to be not as consistent and not any more accurate than more simple analytical methods, so restrictions on the use of more simple analytical methods were lifted.

6. **Specify what criteria this proposal meets.** You may select more than one.
   - ☐ The amendment is needed to address a critical life/safety need.
   - X The amendment clarifies the intent or application of the code.
   - ☐ The amendment is needed to address a specific state policy or statute.
   - X The amendment is needed for consistency with state or federal regulations.
   - ☐ The amendment is needed to address a unique character of the state.
   - ☐ The amendment corrects errors and omissions.

7. **Is there an economic impact:** ☐ Yes ☒ No

   If no, state reason:

The proposal is for the removal of a code amendment that is no longer needed when the state adopts the ASCE-7-22 standard. This will not increase or decrease the cost of construction.

If yes, provide economic impact, costs and benefits as noted below in items a – f.

a. ***Life Cycle Cost.*** Use the OFM Life Cycle Cost **Analysis tool** to estimate the life cycle cost of the proposal using one or more typical examples. Reference these **Instructions;** use these **Inputs.** Webinars on the tool can be found **Here** and **Here**). If the tool is used, submit a copy of the excel file with your proposal submission. If preferred, you may submit an alternate life cycle cost analysis.

b. ***Construction Cost.*** Provide your best estimate of the construction cost (or cost savings) of your code change proposal.

   $Varies/square foot

   (For residential projects, also provide $Click here to enter text./ dwelling unit)

   Show calculations here, and list sources for costs/savings, or attach backup data pages

c. ***Code Enforcement.*** List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

d. ***Small Business Impact.*** Describe economic impacts to small businesses:

e. ***Housing Affordability.*** Describe economic impacts on housing affordability:

f. ***Other.*** Describe other qualitative cost and benefits to owners, to occupants, to the public, to the environment, and to other stakeholders that have not yet been discussed:

Please send your completed proposal to: sbcc@des.wa.gov

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.