



STATE OF WASHINGTON  
**STATE BUILDING CODE COUNCIL**

**1. State Building Code to be Amended:**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> International Building Code | <input type="checkbox"/> International Mechanical Code        |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code     | <input type="checkbox"/> International Fuel Gas Code          |
| <input type="checkbox"/> International Existing Building Code   | <input type="checkbox"/> NFPA 54 National Fuel Gas Code       |
| <input type="checkbox"/> International Residential Code         | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input type="checkbox"/> International Fire Code                | <input type="checkbox"/> Wildland Urban Interface Code        |
| <input type="checkbox"/> Uniform Plumbing Code                  |   |

For the Washington State Energy Code, please see specialized [energy code forms](#)

**Section(s):**

IBC Section 1705.12.6 (2018 Edition)

**Title:**

Plumbing, Mechanical and Electrical Components.

**2. Proponent Name: Tacoma Fire Department**

**Proponent: Christopher Seaman**

**Title: Engineer**

**Date: 4/9/2018**

**3. Designated Contact Person:**

**Name: Christopher Seaman**

**Title: Engineer**

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**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. (Examples on the SBCC [website](#))

**Code(s) IBC      Section(s) 1705.12.6**

Enforceable code language must be used; see an example [by clicking here](#).  
Amend section to read as follows:

1705.12.6 Plumbing, mechanical and electrical components.

Periodic special inspection of plumbing, mechanical and electrical components shall be required for the following:

1. Anchorage of electrical equipment for emergency and standby power systems in structures assigned to Seismic Design Category C, D, E or F.
2. Anchorage of other electrical equipment in structures assigned to Seismic Design Category E or F.
3. Installation and anchorage of piping systems designed to carry hazardous materials and their associated mechanical units in structures assigned to Seismic Design Category C, D, E or F.
4. Installation and anchorage of ductwork designed to carry hazardous materials in structures assigned to Seismic Design Category C, D, E or F.
5. Installation and anchorage of vibration isolation systems in structures assigned to Seismic Design Category C, D, E or F where the approved construction documents require a nominal clearance of 1/4 inch (6.4 mm) or less between the equipment support frame and restraint.
6. Installation of mechanical and electrical equipment, including duct work, piping systems and their structural supports, where automatic fire sprinkler systems are installed in risk category IV structures assigned to Seismic Design Category C, D, E or F to verify one of the following:

6.1. Minimum clearances have been provided as required by Section 13.2.3 ASCE/SEI 7.

6.2. A nominal clearance of not less than 3 inches (76 mm) has been provided between fire protection sprinkler system drops and sprigs and: structural members not used collectively or independently to support the sprinklers; equipment attached to the building structure; and other systems' piping.

Where flexible sprinkler hose fittings are used, special inspection of minimum clearances is not required.

**5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.** The proposed amendment limits a new requirement for periodic special inspection of clearances to fire sprinkler drops and sprigs to systems installed in risk category IV structures. Section 1705.12.6(6) is new and without amendment it will increase the cost of construction of any structure with a fire sprinkler system as the developer would be required to hire a special inspection agency when work is done in any structure with a fire sprinkler system. Increases in the cost of construction may have negative impacts on development and the installation of voluntary fire sprinkler systems. As all multifamily structures are

provided fire sprinkler systems, additional construction costs may also negatively affect housing affordability. The proposed amendment does not change the requirements to provide sufficient clearances around fire sprinkler systems to avoid damage during seismic events as the clearance requirement is found in the referenced fire sprinkler standard. Inspector's representing the authority having jurisdiction routinely inspect for the required clearance. For those structures that are expected to be immediately occupied after a seismic event such as hospitals, fire stations, and police stations the additional cost of periodic special inspection is justified. The proposed amendment retains the requirement for periodic special inspection for risk category IV structures.

**6. Specify what criteria this proposal meets.** You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment is needed to address a specific state policy or statute.
- 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

Explain: The new IBC language requires that developers/owners hire special inspectors at rates ranging between \$60 and \$70 per hour on any structure with a fire sprinkler system.

Using information from inspections performed on a recent project by City of Tacoma inspectors it should be expected that the special inspector be able to inspect 10,000 square feet in an hour. The average dwelling unit size on that same project was 750 square feet. For the project benchmarked it is assumed that 12 hours of inspection time (\$840) would be required for a 110,000 square foot apartment building with 139 dwelling units. This rounds to a \$.01/square foot increase or \$6.04/dwelling unit added cost.

List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application: No additional plan review time or inspection time will be required.

Please send your completed proposal to: [sbcc@des.wa.gov](mailto:sbcc@des.wa.gov)

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