



Building Industry Association of Washington  
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Washington State Building Code Council  
Attn: Stoyan Bumbalov  
1500 Jefferson St SE  
Olympia, WA 98501

February 25, 2022

Dear State Building Code Council,

The Building Industry Association of Washington (BIAW) gives a voice to 8,000-members that represent builders, remodelers, skilled trades professionals and their associates who help Washington families enjoy the American dream of owning a home. One barrier to homeownership is high rent premiums that do not provide Washingtonians the ability to save for a down payment on a home. I'm writing to you today in opposition to the code changes listed below for the 2023 Washington Commercial Energy Code.

If implemented, these codes will further increase the cost of constructing multi-family units, thus increasing the cost of rent for individuals who live in these units, and hurts their ability to ever enter homeownership.

#### **C402.5.3 – Building thermal envelope testing**

Air leakage rate now must not exceed 0.25 cfm per square foot rate. This adds cost to the construction of multi-family buildings.

According to Department of Energy, costs could be as high as:

- \$600 per project (\$0.12 per square foot) - 5,000 & below square feet
- \$25,000 per project (\$0.50 per square foot) - 5,000-50,000 square feet
- \$15,000 per project (\$0.15 per square foot) - 50,000-100,000 square feet

#### **C403.1.1 and Appendix D – Space Heating Proposal**

Heat pump systems are generally more expensive to purchase and install compared to other heating options. Difficulty in installing can lead to issues during the equipment's lifespan. Range of options to service MF units range from \$8,000–22,000 per apartment (according to a June 2021 presentation given by Seattle City Light and Seattle Department of Construction & Inspectors). Further, there is no regard for electric grid reliability or reliability of the equipment.

#### **C404.2.1, C404.7, C503.59 – Heat pump water heating**

Heat pump water heaters are a major financial investment compared to similar products. The US Department Energy reports it adds \$500 per apartment unit and they found that none of the six locations in their heat pump water heating study achieved a 10-year simple payback. Additionally, heat pump water heaters take a long time to produce large volumes of water which can be a problem in winter and for larger apartment buildings.



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**C405.7.1 – Electrical Receptacles at gas appliances**

\$250 added per receptacle installed, with added cost for additional electrical panel upgrades to ensure ability to maintain electrical load demand. If utility-side upgrades are required, it can easily be in excess of \$20,000.

**C406 – Additional Efficiency**

Increases number for energy efficient credits required to be compliant. Depending on credits selected, this could increase the cost of constructing multi-family buildings which will increase rents paid by future tenants.

**C406 – Options Added to Credits: Heat pump dryers and low-flow shower heads**

Heat pump dryers are double the cost of a traditional dryer and take longer to dry clothing. Low-flow shower heads are known for delivering cooler water and has a slower rate of response to changing temperature of water when showering. These shower heads also deliver lower water pressure which saves water but won't necessarily save on energy usage if the person showering has to spend more time in the shower.

**C411 – Renewable energy**

Requires on-site renewable energy generation for buildings over 10,000 square feet of gross conditioned floor area. Any costs added to the construction of multi-family building will be passed onto the future renter in rental premiums.

In addition to our opposition noted above, we would like to voice our support to the following code change:

**C407 – Total building performance**

Provides flexibility to developers in meeting construction requirements under the new iteration of the Commercial Energy Code.

We hope that the State Building Code Council will balance the need to become more energy efficient with the need to house our fellow Washingtonians. We have a very real housing affordability – and rental affordability – crisis. Adding more cost to multi-family construction also further increases our homelessness crisis in the state. We urge exclusion of the proposals listed above into the adopted 2023 Washington Commercial Energy Code.

Thank you for your consideration and the opportunity to weigh-in on the code development process.

Sincerely,

Andrea Smith  
Building Code and Policy Manager  
Building Industry Association of Washington