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February 26, 2025

The Honorable Jessica Bateman Senate Housing Committee Washington State Capitol 416 Sid Snyder Ave. SW Olympia, WA 98504

RE: Opposition to SB 5747 "Concerning an Exemption for Affordable Housing"

Dear Chair Bateman and Committee Members:

I am writing on behalf of ASHRAE, the American Society of Heating, Refrigerating, and Air Conditioning Engineers. We are a professional and technical society of more than 55,000 members dedicated to energy efficiency, indoor air quality, resiliency, and sustainability in the built environment. Through our Society's research, standards writing, publishing, certification, and continuing education, ASHRAE shapes tomorrow's global built environment today. As one of the premier subject matter experts on the built environment, and on behalf of more than 1,000 ASHRAE members in the state of Washington, I wish to convey our opposition to SB 5747.

This legislation allows for weaker energy building codes to be used for affordable housing, which burdens owners and occupants with high energy bills and causes unnecessarily high greenhouse gas emissions. While bill supporters argue that construction costs would be reduced, those costs are marginal at best and don't recognize the technological progress that result in more energy efficient building design. Essentially, this legislation would lock in decades of higher utility bills and greenhouse gas emissions.

As a technical society devoted to improving the built environment, we understand that access to healthy and comfortable buildings is critical for any thriving community. As such, we agree with the basic intent of this legislation—ensuring that Washingtonians can access affordable housing. However, there are no meaningful benefits to allowing affordable housing options to be built to

outdated standards. Further, failing to use modern codes would run counter to the state's climate goals and impose unnecessary burdens on the owners and tenants of these buildings.

Fitting with nationally recognized best practice, Washington updates its energy codes on a three-year cycle. Effective March 2024, the state currently enforces codes for commercial and residential buildings based on the 2021 International Energy Conservation Codes (IECC). The commercial code allows for an alternative compliance pathway which follows ASHRAE Standard 90.1-2019 *Energy Standard for Buildings Except Low-Rise Residential Buildings*. Incorporating expertise from a broad range of stakeholders, these are updated on a three-year cycle, and each version is more efficient than the last. Reverting to outdated energy codes would:

- Leave energy efficiency gains on the table.
- Increase operating costs and utility bills for business owners, homeowners, and tenants.
- Make WA's goal of reducing greenhouse gas emissions 95% by 2050 more difficult.
- Increase greenhouse gas emissions.

This legislation would allow for some housing to be constructed to "any of the previous four building code standards" which, at the most extreme, would allow for building to the 2009 edition of the IECC and the 2007 edition of ASHRAE Standard 90.1, codes that are over a decade out of date. A residential property built to this outdated code would be nearly 30% less energy efficient than a home built to a modern energy code. For larger structures, such as multifamily residential construction, we would expect a building constructed to the outdated standards this legislation allows to be just over 42% less energy efficient than a modern building.¹

The predictable outcome of this legislation is that affordable housing will be constructed to the weakest standard possible. This will lock in poor performance for a building's entire life and guarantee higher greenhouse gas emissions as a result. Just as importantly, it will burden the building's owners and/or tenants with higher utility bills every single month. This is troubling, since mortgage default rates are lower for energy efficient homes. Homeowners simply have more money in their pocket each month and have an easier time keeping their heads above water.²

The Department of Energy studies each code update and determines that they are cost effective. We generally see small increases in construction costs associated with code updates, but these increases are only a few hundred to a few thousand dollars per update, and they are more than

¹ U.S. Department of Energy Building Energy Codes Program. n.d. "Estimated Improvement in Residential & Commercial Energy Codes (1975-2024)." DOE Building Energy Codes Program Infographics. https://www.energycodes.gov/infographics.

² Quercia, Roberto, Robert Sahadi, and Sarah Stellberg. 2013. "Home Energy Efficiency and Mortgage Risks." Report. Institute for Market Transformation. https://imt.org/wp-content/uploads/2018/02/IMT_UNC_HomeEEMortgageRisksfinal.pdf.

offset by the energy savings that these updates deliver. Simply put: the ROI on energy codes pencils out; savings more than offset increased upfront costs.³

There are also community wide resilience improvements created by having a more energy efficient building stock in Washington. When extreme weather hits, buildings that are drawing less power help the grid stay online for everyone. If the power does go out during extreme weather, buildings constructed to a modern energy standard keep their occupants safer for longer than buildings constructed to outdated codes.⁴

Further, the proposed multi-tiered code system could lead to new conflicts with respect to the health, safety, and welfare of Washingtonians. The system, where-in a building could be built to one-of-five iterations of a code, would burden code officials and strain first responders who may not recognize subtle differences in each version. It could also exacerbate gaps between wealthy and less-wealthy communities.

As described previously, Washington currently adheres to the nationally recognized best practice for code adoption, a three-year cycle. This legislation would subvert the process, damage the state's built environment, and fail to achieve its stated goal of increasing affordable housing.

For these reasons, ASHRAE opposes WA SB 5747. If you have any questions or need additional information, please feel free to contact GovAffairs@ashrae.org. Thank you for your work to improve building performance and improve the lives of Washington residents.

Sincerely,

M. Dennis Knight

2024-2025 ASHRAE President

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³ Tyler, M, D Winarski, M Rosenberg, and B Liu. 2021. "Impacts of Model Building Energy Codes – Interim Update." PNNL-31437. Pacific Northwest National Laboratory.

https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-31437.pdf.

⁴ Franconi, Ellen, Luke Troup, Mark Weimar, Yunyang Ye, Chitra Nambiar, Jeremy Lerond, Eliza Hotchkiss, et al. 2023. "Enhancing Resilience in Buildings through Energy Efficiency Pacific Northwest National Laboratory." https://www.energycodes.gov/sites/default/files/2023-07/Efficiency_for_Building_Resilience_PNNL-32727_Rev1.pdf.