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March 25, 2026

Senate Committee on Housing & Municipal Government
Rhode Island State House
82 Smith Street
Providence, RI 02903

BfP Consulting LLC Testimony in Support of Senate Bill 2122 – The Real Estate Sales Disclosure Act

Chair Bissaillon and Members of the Committee on Housing & Municipal Government:

I am writing on behalf of BfP Consulting LLC in strong support of Senate Bill 2122, the Real Estate Sales Disclosure Act. This legislation would ensure that homebuyers are informed of important building diagnostic testing results—or the absence of such testing—such as whole-building airtightness and mechanical ventilation flow rates when purchasing residential real estate.

BfP Consulting LLC is a consulting, design, and verification firm dedicated to improving health, comfort, durability, resiliency, and energy efficiency in residential new construction. Through energy modeling, building science analysis, and data review, BfP provides diagnostic transparency and verifiable results. In addition, BfP supports the advancement of Rhode Island's construction industry through education, training initiatives, and collaboration with organizations such as Passive House Rhode Island, Phius, and Passive House Massachusetts to promote high-performance building practices.

Senate Bill 2122 would require disclosure of energy audit results or, if no audit exists, information about available state or utility efficiency programs through which such audits can be obtained. It is critical that homebuyers understand the energy and health implications directly affected by airtightness and whole-house ventilation, and that they make weatherization and mechanical system decisions based on this information.

In most cases, airtightness is the primary driver of heat loss and heat gain in residential buildings. This is supported not only by BfP's internal energy modeling data, but also by studies conducted by organizations such as Lawrence Berkeley National Laboratory[1], Oak Ridge National Laboratory[2], and Rocky Mountain Institute[3]. Awareness of a home's airtightness allows buyers to make informed decisions regarding weatherization measures and the potential for reducing utility costs and carbon emissions.

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Airtightness also directly affects indoor air quality. ASHRAE Standard 62.2 requires mechanical ventilation for homes with a leakage rate of 5.00 ACH50 or less to ensure adequate indoor air quality by supplying fresh outdoor air when natural infiltration is insufficient.

From 2022 to 2025, the RISBC-2 (Rhode Island State One- and Two-Family Dwelling Code) required airtightness of 5.00 ACH50 or less (Section N1102.4.1.2), but subsequently removed the requirement for mechanical ventilation (Section 303.4). Based on U.S. Census Bureau data, this inconsistency has resulted in thousands of residential homes being at risk of poor indoor air quality.

According to Rhode Island Energy's 2017 Baseline Study[4], approximately half of tested homes met the 5.00 ACH50 or less threshold, while mechanical ventilation was present in only 6% of homes. This indicates that the risk of poor indoor air quality is present not only in newly constructed homes but also in older housing stock.

In addition, air infiltration and exfiltration can transport significant amounts of water vapor[5]. During the heating season, this can lead to condensation within building assemblies, increasing the risk of rot and mold growth. Airtightness improvements, when paired with proper mechanical ventilation, play a central role in mitigating these risks.

Understanding airtightness and having access to testing results allows homebuyers to make informed decisions regarding indoor air quality, comfort, durability, resiliency, and energy performance. Senate Bill 2122 presents an important opportunity for the State to protect homebuyers from these risks while also educating them about available resources and weatherization options.

Thank you for your consideration.

Sincerely,
Jon Erickson
Principal
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[1]Sherman, Max. "Air Tightness of US Homes: Model Development". 2006. https://eta.lbl.gov/publications/air-tightness-us-homes-model

[2]Desjarlais, Andre Omer, Shrestha, Som S, Accawi, Gina K, Kunwar, Niraj. "Online Calculator to Evaluate the Impact of Airtightness on Residential Building Energy Consumption and Moisture Transfer". 2022.
https://www.ornl.gov/publication/online-calculator-evaluate-impact-airtightness-residential-building-energy-consumption
[3]Zirnhelt, Hayes. "Airtightness in Buildings: Don't Let it Slip Through the Cracks! 2016.
https://rmi.org/airtightness-buildings-dont-let-slip-cracks/
[4]NMR Group, Inc. "Rhode Island Baseline Study of Single-Family Residential New Construction". 2017.
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[5]Lstiburek, Joseph. "Air Barriers vs. Vapor Barriers". 2000.
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