

March 26, 2026

Legislative Committee on Administrative Rules  
re: RBES & CBES Amendments

Dear Members of the Committee,

I recently retired from the firm I co-founded with my partner Michael Wisniewski over forty years ago. Prior to that, I worked for another Burlington firm for nearly nine years, so my experience in the practice of architecture in Vermont exceeds fifty years, and my interests in energy conservation and building durability, and of course design, have been integral parts of my practice all of that time. I continue to stay involved in the profession, and remain very interested and follow our energy and building code updates very closely.

Very early in my career, during what we then called "the energy crisis" in the mid-70s, someone smarter than me came up with the idea that we could improve our exterior wall R-value by 50% by switching from 2x4 walls to 2x6, and if we also switched our stud spacing from 16" to 24", we could build those walls with pretty much the same amount of wood, so the net cost to increase our wall insulation was hardly measurable - a few cents/SF to go from 3.5" to 5.5" of fiberglass. Our knowledge of building science and building durability have advanced dramatically since then, and Vermont has been a leader in energy code advancement over the last thirty years or more; however, it remains true that for some builders and buildings, what we thought was such an advancement in construction in the mid-70s remains the modus operandi of 2026, as I have personally observed one duplex and two single family homes built in the last two years that were built this way.

I'm writing to you today - somewhat reluctantly - to encourage you to adopt the two-pronged approach (essentially the Governor's EO) for compliance with an energy code, but not based upon the cost issues that the EO associates with 2024 code compliance. I'm reluctant because I think we need to continue to advance our goals of reducing energy consumption, but at the same time I think the 2024 code versions have certain flaws. When the 2024 rules first came before LCAR in May-June of 2024, I and others testified that it was premature to endorse those codes for various reasons: technical problems with some suggested standards; the estimates of the costs to implement them were inaccurate; the actual codes were not readily available (only very confusing underlined/strikethrough versions were available); and the software required to prove compliance with them was not developed. It took over a year (until August of 2025) for the RBES (REScheck) software to become available, and as of today, the CBES (COMcheck) software is not yet available. This software is critical to the process of proving compliance with the code. Another important point in our testimony before you in 2024, and which remains true today, is that our energy codes are not enforced in any meaningful way, but for perhaps a few communities which do so. Enforcement is only by the honor system of builders, designers and architects submitting signed certificates. Our research indicated that many of these certificates are never even submitted as required by law. One would expect CBES enforcement to fall under the Division of Fire Safety (or those municipalities with enforcement agreements with DFS), but none of DFS inspectors are trained to do so, and therefore only require the certificate to be filed. Even in Burlington, compliance for both RBES and CBES is determined solely through issuance of certificates, without any inspection review. RBES enforcement is the same - no inspections anywhere in the state, and best case scenario is that local zoning or building (if there is one) officials will require the certificate prior to issuing a Certificate of Occupancy. AIA-VT has estimated that residential (single family homes) energy code compliance is far below 50%, maybe as low as 10% of new homes being built. Commercial buildings are a notable exception to this (estimated at nearly 90% compliance), largely because the majority of commercial buildings are designed by professionals who are not only required to do so to comply with licensing mandates, but who are also leaders in the field of energy efficient construction.

I suggest that you accept the two-pronged approach (use 2020 or 2024) while we work towards real meaningful energy code compliance. Patting ourselves on the back for having some of the most advanced energy codes while the actual implementation of those codes is woefully inadequate should be an embarrassment to all of us. Points to consider:

- Since the 2024 RBES can be verified via REScheck, it's feasible to continue to use it; however, and this is one of the points we raised in 2024, one of the suggested wall types that is considered acceptable includes stud cavity insulation and R5 continuous insulation (CI) over the outside of the exterior walls. Accepted building science tells us that in our climate, to prevent moisture problems in those walls, we need to use minimum R12 CI. Educated builders will know this, and advocate for it - but those without the building science background could be building walls that meet code but will likely fail over time. At the same time, using the 2020 version does not mandate mechanical ventilation, which is a significant benefit as we build tighter homes; once again, educated builders will know this, and advocate for it. For these reasons, I believe AIA-VT's advice to its members, and to builders and designers in general, is the best path forward at this time: prove compliance with 2020 (because we can) while exceeding it and doing one's best to comply with or exceed 2024.
- As mentioned above, COMcheck for 2024 CBES is not yet available, making it more difficult for architects and engineers to prove that their designs comply with the code. Not being able to prove compliance is a very untenable situation in which to place design professionals. Therefore, I believe AIA-VT's advice to its members, and to general contractors and owners in general, is the best path forward at this time: prove compliance with 2020 (because the software is available) while encouraging our clients to exceed it while doing one's best to comply with or exceed 2024 requirements.
- Finally, while we must figure out ways to increase energy code compliance with our new construction, we also have to consider ways to reduce energy consumption of our existing homes and commercial buildings (beginning with robust weatherization), which are likely to be the biggest users of energy compared to new construction. H.718 is currently winding its way through the house, and forms the framework to begin to address the lack of enforcement of energy codes and the complete lack of any building codes for single family homes in our State. I encourage you to support this bill in the House and then in the Senate if approved by the House.

One option we could consider, as we evaluate the 2024 version and subsequent energy code updates, is whether we allocate resources to customize our energy codes in lieu of using the standard nationally developed codes by the International Code Council (ICC). I have no idea what the actual cost to customize our codes is, but certainly there is Public Service Department staff time, consultant time, customization of the REScheck and COMcheck software, and a significant amount of time by design professionals, builders, developers and other vested interest groups in reviewing and advising the real world implications of code provisions. It might be possible for this energy to be expended in better code education and training to get all stakeholders on board with the building science behind the codes, and the best ways to build to meet those requirements. My guess is that even if the national codes are a smidgeon less strict than our customized VT codes are, if we dramatically increase our compliance rate, we will net out using less energy overall. Improving energy code compliance is a critical component of meeting our overall statewide energy goals.

In conclusion, I think there are two very important outcomes at stake: 1) correct the technical and proof of compliance procedures of the 2024 codes and 2) begin the very important process of energy and building code enforcement for single-family home construction in our State. If we believe we are or should be building structures to be durable, safe and energy efficient for at least a fifty year lifespan, to not achieve these two outcomes is a disservice to all Vermonters.

Sincerely,



Bob Duncan, RA, AIA