



**AIA**  
Vermont

**Organization**

**AIA Vermont, A Chapter of the American Institute of Architects**

**Speakers:**

**Carol Miklos, Executive Director, AIA Vermont**

**William Badger, Principal, Badger and Associates and Architect  
Member, AIA Vermont**

**Date:**

**February 8, 2018**

## Key Points:

- *Presently, oversight of handyman and homebuilder businesses in Vermont is solely business registration through the Vermont Secretary of State and through the Home Improvement Fraud Registry maintained by the Vermont Attorney General.*
- *Homeowners have no reliable method for evaluating the knowledge or training of individuals in the home improvement/homebuilding category and face difficulty finding recourse after defects are found in residential construction.*
- *The Vermont Attorney General has compiled 600+ homeowner complaints totaling over \$1 million in the last eight years.*
- *The Vermont Attorney General has asked the Office of Professional Regulation to conduct a sunrise review of the Vermont home improvement and construction industry to determine if there is real harm to the public.*
- *The sunrise report is due early 2018.*
- *To better protect homeowners, 25 of 50 states require homebuilders to be licensed; several other states require some forms of registration and/or certification.*

## Registration, Certification and/or Licensure of Home Improvement Contractors

While carefully written contracts and full insurance coverage are standard in Vermont's commercial construction industry, such protection in the single family home improvement and building arena is spotty at best. Single-family homeowners are thus at risk for harm, sometimes years after a construction project is complete. AIAVT joins other professional organizations, including HBRA-VT, to urge the State of Vermont to regulate home improvement and construction contractors. This brief is focused on smaller entities, not the larger ones that do have appropriate contracts and insurances.

### Action Sought

AIAVT urges the Legislature to enact a statute that would provide oversight of the residential construction professions by the Vermont Secretary of State. We support a tiered system (see definitions of tiers below), with simple registration for handymen and certification in specialties (e.g., electrical work, lead/asbestos abatement, and energy-efficiency retrofits) for those undertaking more significant projects. We further support increased education for homeowners.

### Explanation and Justification

AIAVT members have witnessed and remediated collapsed basement slabs, undersized foundations, poorly flashed windows, and other residential construction defects that have caused substantial harm to homeowners. These defects are sometimes discovered years after completion, for instance when a house is sold or renovated. One contributing factor is unclear requirements for single family home construction in most of Vermont. Another factor is the lack of knowledge among homeowners about the wisdom of having defensible contracts and asking for contractors' proof of necessary insurance. While these are substantial concerns, the largest issue standing in the way of homeowner protection in Vermont is that there is no reliable way for consumers to determine if a particular individual has a solid reputation and is educated and up-to-date in relevant project requirements and specialties. Further, without the need to demonstrate proof of knowledge, there is little incentive for homebuilders to obtain training regarding framing, insulation, ventilation, and other critical building categories and systems. Though there is one certification and database in Vermont that is relevant to home renovators and builders—administered by Efficiency Vermont—it covers training only as applies to energy efficiency-related services.

### Definitions

1. **Handyman Services**—minor nonstructural, nonelectrical, nonmechanical work, usually for projects costing less than \$5,000.
2. **Home Improvement**—the addition to or alteration, conversion, improvement, modernization, remodeling, repair, or replacement of a building or part of a building that is used or designed to be used as a residence and involves one or more building systems: foundation, structure, envelope (i.e., roof, windows/doors, and exterior walls), mechanical, electrical, or plumbing.
3. **Home Construction**—the erection of a new building intended for use as a single family home.
4. **Contractor Services**—contractual agreement to provide materials and or labor to perform a service or do a job.

# DRAFT



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Code review of structure in southern Vermont

Site visit November 2016

At the request of the client references to specific names and locations have been removed.

The building is a wood framed, two-story structure with a walk out basement. It was apparently divided into two apartments sometime in the past and the basement is currently being converted into a third unit.

The town has zoning regulations. No posted zoning permit was noted for the work being done. A permit is required.

The State of Vermont regulates wastewater discharge. Any change in the number of bedrooms in a dwelling unit or apartment building requires a state wastewater permit. A permit application must be submitted by a designer, licensed by the state, for the revised or new septic system. A town zoning permit would also require a state wastewater permit if additional bedrooms were to be built.

The State of Vermont Department of Public Safety, Division of Fire Safety, regulates public buildings in the state. Single family, owner occupied residences and some agricultural buildings are exempted from state oversight, rental properties are not. One and two family dwellings are a use group with specific requirements in the code (NFPA 101/2015) and apartment buildings are another. The addition of the basement unit moves the building from a two family dwelling to an apartment building. With some small scale exceptions, public building design work and plans for submittal to the state are required to be prepared by a licensed professional (architect or engineer).

Two officers from the Division of Fire Safety performed a field inspection. They inspected it as a two unit building with two floors, noting that the basement unit could not be used as a separate apartment without approval of their office. Therefore, this review will focus on use as a two unit dwelling. Apartment requirements are more stringent.

An electrical permit is required for work in a public building and a licensed electrician must perform the work. A number of electrical issues were noted by the state inspector and he called for a licensed electrician to pull a permit and review all work already done.

The state inspectors noted the lack of proper egress windows in the basement and after the inspection, work was apparently done to add a window and connect the

two below grade rooms. However, the new egress window and well are 4" higher than permitted by code. The window must be lowered or a permanent step installed, if approved by the state.

Also noted by the state was the lack of fire separation between the second floor unit and the first at the bottom of the stairs. A 20-minute, self-closing fire door could be installed or the opening closed up with a rated wall.

The stairs to the second floor do not meet code requirements largely due to the 2" step at the bottom. The bottom landing can probably be filled in to eliminate that step. The stairs to the lower level appear to be steeper than permitted. New stairs must have a maximum riser height of 7 3/4" and maximum tread depth of 10" (not including the nosing). Treads and risers may not vary more than 3/8" over the entire stair. Apparently both sets of stairs are new and it is difficult to measure them with carpet in place, but dimensions need to be confirmed or the stairs rebuilt. A continuous handrail must be provided at each stairway.

The state inspectors noted that a 42" guard must be provided such that a 4" sphere cannot pass through it on the rear deck if it is higher than 30" above grade. The grade appears to be less than or close to 30" so some additional fill at any low spots will eliminate the need for guards.

Unvented fuel fired fireplaces are not permitted. The gas fireplace on the ground floor does not appear to have a vent and any vent would terminate under the stairs to the second floor. This needs to be corrected to meet code.

The basement mechanical room is not fire protected nor does it have a limited area sprinkler above the boiler. There is no makeup air for the boiler. There is no boiler inspection certificate. All plumbing and heating work must be done by a plumber licensed in the State of Vermont. If the plumbing work was done by unlicensed individuals, it must be inspected and approved by a licensed plumber.

Vermont has had residential building energy standards since 1997. It is the builder's responsibility to see that new construction, additions and renovations meet the requirements of the law and to fill out a form at the end of the project. Complying with the state standards can be a simple matter that good building practices will accomplish or it may require design accommodations before construction begins. Unheated spaces or existing heated spaces do not need to meet the code, but new or renovated heated spaces do. Existing walls and roofs that are opened up need to be insulated. It is unclear what, if anything was done to address the energy standards and no certificate was noted.

Various defects in workmanship were noted, but without knowledge of the owner's expectations it is difficult to classify satisfactory or unsatisfactory work. Bituthene self-adhering sheet material was observed exposed on the walk-out end of the building. Such material deteriorates with exposure to sunlight and needs to be covered. There is a metal cover over something around part of the opposite end of the building, but it is not clear what the purpose of it is, so impossible to

comment on it. The stairs to the second floor appear to be sloping away from the building, leading one to question the structural integrity of the whole affair.

The two rooms on the main floor that step down do not have any visible heat. This needs to be investigated further.

A three-unit apartment building is required to have one handicapped accessible unit. Since none of the units in this building are accessible, nor could easily be made accessible, it is best to treat the building as a two family dwelling.

December 2016

A handwritten signature in black ink, appearing to read "William C. Badger". The signature is stylized with a large, looped initial "W" and a long, sweeping horizontal stroke at the end.

William C Badger, AIA

## Albert R. Russell, Architect

*helping people improve building quality  
and resolve building issues*

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February 6, 2018

Senate Committee on Government Operations  
State of Vermont  
Montpelier, Vermont

Subject: The Need for Registration, Certification and/or Licensure  
of Home Improvement Contractors in Vermont

Dear Committee Members,

I am writing to support the recent Issue Brief prepared and submitted by AIA Vermont regarding the need for registration, certification, and/or licensure of home improvement contractors in Vermont.

My experience with Vermont residential construction dates from 1975, when I worked for a builder in Quechee.

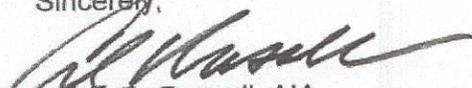
During the last 12 years, a substantial part of my work and related interest has included review of building construction defects. These defects cover a wide range of conditions. To cite just a few examples:

- an injury-causing failed replacement stair tread
- improper substitution of siding materials and installation leading to structural rot
- incomplete insulation leading to condensation and structural rot
- incomplete header construction above a replacement window in a bearing wall
- complete structural collapse due to lack of diagonal bracing or wall sheathing

The list could go on and on. These defects or building failures all had one thing in common: the builders/installers lacked the knowledge necessary to prevent these problems. These were matters of basic knowledge and caring and were not matters of sophisticated building science.

Vermont needs a system of contractor registration, certification, and/or licensure to support good building practices and improved knowledge through mandatory continuing education in the building community. Vermont has many knowledgeable and caring builders who face unfair competition from others who are free to win bids and operate without the knowledge needed to do work that will serve the health and safety needs of Vermont homeowners.

Sincerely,



Albert R. Russell, AIA

February 4, 2018

To whom it may concern,

I have been around construction sites my entire life. My father has been a builder his entire life, so there was no escaping blue-prints, estimates or his truck full of tools. He started his career as an apprentice for another carpenter and put in many years learning the trade. Even when the time came for he and my uncle started their own business, there was a system in place to be sure they were building to code. Inspectors would visit the job site and check their work at several times during the process and before they could move on to the next phase.

When I moved to Vermont 17 years ago, to work for an architect in Manchester, I was surprised to hear that there were "no residential home construction codes". I later learned about the existence of the Residential Building Energy Code, but that didn't really address any of the serious issues regarding life safety, and periodic inspections.

As I worked my way over the years to becoming an architect myself, I realized that there were builders that I could trust would do a respectable job and stand by their work and others who could not. I have worked with builders who are focused simply on their profit and others who try to bury their work in concrete or behind drywall before the architect really gets to see that there is no reinforcing or structure as specified in that architect's drawings.

One thing that is obvious in Vermont is that when the economy is booming, the number of builders swells. It seems that all you need is a business name, a hammer and a pick-up truck and you are able to join other lifetime carpenters in the state. I have seen some of these builders undercut prices, build without training and create some poor wall assemblies.

More than once in my life, I have been asked to visit a renovation site only to find shoddy work from a previous builder uncovered. I have seen painted clapboards nailed directly to sheathing without any flashing, WRB, or protection of the wood inside. I have seen buildings showing signs of rot just a few years after construction due to gaps in sheathing. I have even worked with a builder (ONCE) who decided he could leave out the insulation specified on my drawings, altogether. Lastly, I have a neighbor whose builder "ran out" on the job and never finished putting up the siding. More obvious, the black paint on the neighbor's one-year-old new roof is peeling off and exposing the bright steel underneath!

I'm sure I am not the only architect in Vermont with stories like this and I am sure there are some which have yet to be discovered. That is why I urge the Legislature to enact a statute that would provide oversight of the residential construction professions by the Vermont Secretary of State. Please protect the homeowners by better educating them about contractor registration and offer/require that the builders get the training/certification we ALL need.

Respectfully submitted,  
Alan P. Benoit, AIA



Principal Architect  
Certified Passive House Consultant  
Sustainable Design, LLC.

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802-362-4310

## **Residential Contractor Registration**

**21 December 2017**

Alan Lindsay Berry, AIA, CNU, LEED-AP

Build Safe Vermont Board Member

American Institute of Architects – Vermont Chapter – Public Policy Committee

In 2013, I joined Stevens & Associates of Brattleboro, to lead their architectural division. Our firm offers architectural and engineering services, with a focus on downtown redevelopment, historic preservation, and institutional work. Although our residential work is for the most part limited to multi-family residential as a portion of mixed use projects, I am aware of the issues surrounding the lack of residential contractor licensing in Vermont. Multiple contractors have complained to me that there is not a level playing field in their industry, and that the public is at risk.

I have worked in multiple states over my career, including thirty years in Rhode Island, where I worked first at a design/build firm focused primarily on residential projects, and for twenty-four years leading my own architectural practice concentrating on historic preservation and urban design. In the mid-1980s, contractor registration became a requirement in Rhode Island. Our design/build firm, along with other quality contractors supported registration, as a means of protecting the public from unscrupulous and unqualified contractors. Our firm completed on average, three to four dozen projects per year, with the majority of that work being single family residences. Our projects included oak and pine timber framed structures (typically featuring sips panel construction), customized Acorn passive and active solar homes (a panelized system on a timber frame), a Swedish Wooden House (Imported panelized construction), stick built custom homes and renovations. Following the states adoption of contractor registration, our company's president served on the state building commission representing contractors' interests. Contractor registration raised the quality level of home building, protected the public in financial and health safety areas, and insured that those working in the construction industry were properly insured with workers' compensation insurance and the like.

Contractor registration has served Rhode Island well. Over the years Rhode Island's licensing and registration board has come to offer continuing education courses, some offered through the RI Builders Association, and others offered by various national contractor and industry organizations. Rhode Island recently mandated continuing education for contractors. Various specialty trades are now licensed in Rhode Island, although only registration is required for general contractors and builders.

I strongly support residential contractor licensing for Vermont.