

Municipal Guide for Vermont Energy Codes and Above-Code Programs

Energy Code 
Assistance Center

Toll-free 855-887-0673

Energy Code Assistance Center

Municipal Guide for Vermont Energy Codes and Above-Code Programs October 2016

PART ONE: INTRODUCTION AND OVERVIEW

About this Guide

This guide offers local officials an easy-to-use resource that will:

- Provide background information on building Energy Code requirements;
- Explain the code process from application through documented compliance;
- Describe the benefits of meeting and exceeding Vermont's Energy Codes, including lower energy costs;
- Outline the support available from Efficiency Vermont for builders and homeowners—both to simply meet the minimum requirements of the codes and to receive technical and financial assistance to exceed the codes; and
- Make it easier to carry out the tasks associated with towns' responsibilities for meeting the Codes, as described in Act 89 and passed by the Vermont Legislature in 2013.¹

The guide also provides suggestions for how zoning administrators, town energy committees, planning commissions, design review boards, and similar local bodies can call attention to the benefits of energy-efficient construction by raising awareness of how to comply with the Energy Code and how to participate in above-code programs.

Please see Attachment A: "Q&A on Vermont Building Energy Code" for detailed responses to specific questions related to the Energy Code.

Background

Vermont has Energy Code requirements that apply to all residential new construction and certain renovation projects that take place in homes containing no more than three stories. These requirements are known as the Residential Building Energy Standard (RBES).² In addition, the Commercial Building Energy Standards (CBES) set requirements for all new commercial construction (new buildings, additions, alterations, renovations, and repairs) that take place in multifamily housing with four stories

¹ An Act Relating to Reducing Energy Costs and Greenhouse Gas Emissions, June 17, 2013. See in particular Sec. 6, 21 VSA §266, Residential Building Energy Standards; Stretch Code, at <http://www.leg.state.vt.us/DOCS/2014/ACTS/ACT089.PDF>.

² http://publicservice.vermont.gov/energy_efficiency/rbes

or more, and all commercial structures.³ For both residential and commercial projects, this guide addresses code requirements primarily as they apply to new construction.

Since the late 1990s, the Vermont Legislature has increasingly emphasized the importance of reducing the State's reliance on energy sources that have adverse impacts on both the economy and the environment. Part of this emphasis has taken the form of the RBES and CBES energy efficiency codes. However, in most of Vermont's cities and towns, there is no effective compliance mechanism. To date, most compliance has been documented through voluntary certifications and through energy ratings conducted by Efficiency Vermont, at the builder's request. To promote energy efficiency, Act 250 also typically requires RBES/CBES certification or better.⁴

Efficiency Vermont provides information and technical support at no cost to town officials, builders, architects, engineers, and homeowners, including details about the requirements contained in RBES and CBES and about strategies for ensuring compliance. Information is available toll-free through Efficiency Vermont's Energy Code Assistance Center at 855-887-0673 and by going to:

Residential Building Energy Standards (RBES): http://publicservice.vermont.gov/energy_efficiency/rbes

Commercial Building Energy Standards (CBES): http://publicservice.vermont.gov/energy_efficiency/cbes

Efficiency Vermont services: <https://www.efficiencyvermont.com/services/renovation-construction>

Why Build to Code and Above?

- Building to RBES and CBES is the law.
- Buildings that are constructed to meet RBES and CBES deliver lower energy bills for their owners and occupants than buildings that don't meet these codes. RBES and CBES save money for the occupants from the first day of use and minimize the potential impacts of future energy cost increases. Further, buildings that are built to above-code specifications can be significantly more efficient than code, and cost even less to operate.
- Code-compliant buildings have less impact on the environment than non-compliant buildings because they require less energy to operate, and thus generate less pollution.
- Dollars spent on constructing more efficient buildings keep money circulating in the local economy and create a ripple effect, since those businesses and their employers in turn spend money locally.
- It makes good economic sense to build in energy efficiency at the time of construction. This protects building owners against future energy cost increases and saves them from potentially invasive and costly efficiency upgrades in the future. It is far easier and less expensive to build in energy efficiency at the time of construction than it is to make buildings more efficient in the future.

³ http://publicservice.vermont.gov/energy_efficiency/cbes

⁴ Act 250 is Vermont's Land Use and Development Act. For more information, visit the Natural Resources Board website: <http://www.nrb.state.vt.us/>.

Buildings that are significantly more efficient than code will provide greater benefits than those that simply meet code. In most cases, any additional upfront costs for building more efficient buildings are more than offset by the reduced energy costs the building occupants will pay. In other words, energy efficiency is an excellent investment. Efficiency Vermont offers technical assistance and financial incentives to help homes and commercial buildings achieve above-code performance.

The Easiest Way to Ensure Code Compliance

The best way to ensure that a home or commercial building will meet code is to take advantage of Efficiency Vermont's technical assistance and financial incentives. Efficiency Vermont helps owners, design professionals, and builders install efficiency measures that enable the building to exceed code, thus assuring compliance and providing additional benefits from more energy-efficient spaces.

Efficiency Vermont is operated by a private nonprofit organization, the Vermont Energy Investment Corporation, under an energy efficiency utility appointment issued by the Vermont Public Service Board. Efficiency Vermont provides technical assistance, rebates, and other financial incentives to help Vermont households and businesses reduce their energy costs with energy-efficient equipment, lighting, and approaches to construction and major renovation. Efficiency Vermont's technical and code experts provide services to builders, homeowners, and others free of charge, saving them a lot of time in understanding code requirements. Efficiency Vermont also makes financial incentives available when builders agree to build to certain efficiency levels that go above code requirements. Efficiency Vermont's technical team helps designers, builders, and homeowners understand both the code requirements and the suitable opportunities for going above code for the home or building they are constructing.

PART 2: CODE REQUIREMENTS AND OPPORTUNITIES

Residential Building Energy Standards

The Vermont Residential Energy Code—officially called the “Residential Building Energy Standards” (RBES) and generally referred to as simply the Residential Energy Code— was passed by the Vermont legislature in May 1997. It is a minimum standard of energy efficiency that has applied to virtually all new residential construction in Vermont since July 1, 1998 with updates in 2006, 2011, and 2015. The 2015 RBES, based on Vermont amendments to the 2015 International Energy Conservation Code (IECC), became effective on March 1, 2015. Vermont statute requires that the energy code is updated on a three year cycle.

All new homes built in Vermont must meet RBES. Enrollees participating in Efficiency Vermont's Residential New Construction service receive personalized technical support to achieve and exceed Energy Code requirements. Upon successful completion of program requirements, enrollees receive a completed copy of the Energy Code certificate (to be signed by the builder), recognition as Efficiency Vermont Certified, and applicable financial incentives.

RBES applies to:

- New single-family homes (including modular and log homes)
- New multifamily homes (buildings three stories or less)
- Additions, alterations, renovations, and repairs (only applies to the portion of the home being worked on)

RBES has two requirements:

- A technical requirement (that is, minimum standards for energy-efficient building components and construction practices)
- A certification requirement for reporting compliance.

RBES is one of the few codes in the country in which the builder self-certifies compliance. The law stipulates that it is the builder's responsibility to understand the RBES, to build to the minimum technical efficiency standards, and then to certify (on a one-page form) that the building complies with the law. No plan reviews or final inspections are involved, unless required by a municipality. The Energy Code includes an exemption for owner-builders for meeting Energy Code; however, owner-builders must complete and submit a disclosure statement specifying that the Energy Code has not been met.

The process can be summarized as follows:

1. Builder or homeowner determines whether a project needs to comply with the Energy Code;
2. Builder or homeowner follows the guidelines for building to the Energy Code, including minimum ventilation and combustion safety requirements;
3. Builder fills out and posts the required compliance certificate in the home, and files copies with the municipality and the Department of Public Service (DPS).

In order to comply with the Residential Energy Code, a home, as built, must meet all of the basic requirements and the performance requirements, via one of the compliance methods described in the RBES Handbook:

Fast-Track Method	This prescriptive-based approach is the compliance method that allows the builder or owner to incorporate a prescribed set of features with minimal calculations.
REScheck Software Method	This performance-based approach utilizes software (REScheck) that allows for more flexibility in how the builder/owner achieves code compliance. REScheck software must be installed on a builder's or owner's computer. (http://www.energycodes.gov/rescheck)
Home Energy Rating Method	This comprehensive, performance-based approach gives the highest degree of flexibility for code compliance by accounting for a broader range of measures, including air tightness, efficient domestic hot water heating, and solar orientation. A Home Energy Rating (HERS) is

provided as a service through Efficiency Vermont's Residential New Construction program.

With the 2015 RBES update, a Stretch Code was established that has increased energy efficiency standards over the baseline residential energy code. All projects permitted through Act 250 on December 1, 2015 and later are required to meet Stretch Code criteria. Stretch Code is also an option for towns wishing to have a higher efficiency baseline than the standard energy code.

For assistance in understanding and complying with RBES, call 855-887-0673. Detailed information on the RBES compliance requirements and process can be obtained by downloading the *Residential Building Energy Code Handbook* at http://publicservice.vermont.gov/energy_efficiency/rbes.

Commercial Building Energy Standards

The CBES, also known as the *Commercial Energy Code*, defines the minimum efficiency requirements for all commercial buildings in Vermont. The *Vermont Commercial Building Energy Standards* applies to all new commercial construction: new buildings, additions, alterations, renovations, and repairs. The 2015 CBES, based on Vermont amendments to the 2015 International Energy Conservation Code (IECC), became effective on March 1, 2015. Vermont statute requires that the energy code is updated on a three year cycle. The CBES allows the use of an alternate compliance path by following ASHRAE/IESNA Standard 90.1, but certain requirements listed in the CBES must still be met.

Hard copies of the CBES are available from the Energy Code Assistance Center and an electronic copy is available on the International Code Council (ICC) website <http://codes.iccsafe.org/Vermont.html>. Note that there is not a separate "code handbook" for CBES as there is for RBES. The CBES Code Book is the principal reference document for the Commercial Energy Code.

21 V.S.A. §268 requires certification that both the design AND the construction of a commercial building are in compliance with the CBES. The design must be certified by the primary designer; if a licensed professional engineer or a licensed architect is not involved in designing the project, the builder issues the certification. The construction of a commercial building is to be certified as compliant with CBES by the party having primary responsibility for coordinating the construction of the building. This is typically the general contractor or construction manager. In the absence of such a party, the owner must certify compliance. The completed CBES certificate must be completed and posted in the building, and a copy of the certificate with two accompanying affidavits must also be filed with the Department of Public Service (DPS).

For assistance in understanding and complying with CBES or to request a copy of the Commercial Energy Code, designers, builders, or owners may call the Energy Code Assistance Center at 855-887-0673. For more information, including access to CBES certificates and compliance software, go to: http://publicservice.vermont.gov/energy_efficiency/cbes.

Act 89 Requirements

RBES and CBES are the law in Vermont. They are not optional for the buildings to which they apply. Act 89, passed in 2013, strengthens the provisions of RBES and CBES by providing guidance to town officials for local support and enforcement. Specifically, Act 89 requires town officials to provide information about the Energy Codes at the time a permit application is submitted. The Act also stipulates provisions for town officials to obtain a signed Energy Code Certificate prior to the issuance of a building's Certificate of Occupancy. Act 89 also enabled the Department of Public Service to establish a well-defined Stretch Code, which it did for RBES in 2015, and, in the form of Stretch Guidelines for CBES in 2016. With those stretch standards now in place, local municipalities have the option to adopt one or both (RBES Stretch Code, CBES Stretch Guidelines) for buildings in their jurisdictions.

Act 89 places requirements on municipalities related to Energy Codes. This guide does not provide legal advice on these requirements. However, the law does stipulate that town officials must provide information on the RBES and CBES requirements:

When an application for a municipal land use permit seeks approval of a structure, the administrative officer shall provide the applicant with a copy of the applicable building energy standards...⁵

To assist town officials in meeting this requirement, the Energy Code Assistance Center provides copies of the CBES and the *RBES Handbook*.⁶ As an alternative, municipalities can provide permit applicants with online access to the CBES code book or the RBES Handbook (as referenced earlier in this document). Efficiency Vermont will also provide towns with brochures containing information on how to request energy efficiency and thermal efficiency services for buildings, thus minimizing any additional work required by town officials in providing information about above-code programs.

Act 89

Main provisions in Act 89 relating to the Energy Code:

- Town officials must provide RBES and CBES information when a building or zoning permit is applied for.
- Any building that requires a Certificate of Occupancy must be certified for CBES or RBES compliance before the CO is issued.
- Municipalities have the option of adopting the Stretch Code to increase the energy efficiency of local construction if and when the Department of Public Service Commissioner adopts such a code.

⁵ Act 89, p.31

⁶ Act 89 specifies that the *Residential Building Energy Code Handbook* can be provided in lieu of the full Code. The *Handbook* is available at http://publicservice.vermont.gov/energy_efficiency/rbes

It is important to note that Energy Code compliance certificates are required of all commercial buildings,⁷ any residential buildings that are considered to be “public” buildings,⁸ and any residential buildings in towns that require a Certificate of Occupancy. Act 89 states:

(2) Condition precedent. Provision of a (RBES) certificate as required...shall be a condition precedent to:

“(A) issuance by the Commissioner of Public Safety or a municipal official acting under 20 V.S.A. § 2736 of any final occupancy permit required by the rules of the Commissioner of Public Safety for use or occupancy of residential construction commencing on or after July 1, 2013 that is also a public building as defined in 20 V.S.A. § 2730(a); and

(B) issuance by a municipality of a certificate of occupancy for residential construction commencing on or after July 1, 2013, if the municipality requires such a certificate under 24 V.S.A. chapter 117.⁹

Although Efficiency Vermont does not have any role in code enforcement or in assuring that RBES and CBES certificates are filed prior to issuing Certificates of Occupancy, it can assist towns in understanding the Energy Code certification process. Efficiency Vermont also provides support and assistance to builders, designers, and homeowners to make them aware of the specific requirements and how to assure that projects will meet the applicable code requirements.

Act 89 includes provisions that enables municipalities to adopt a Stretch Code that provides a construction efficiency standard that is higher than the baseline Energy Code. Act 89 defines a Stretch code as “... a building energy code for residential buildings that achieves greater energy savings than the RBES ...”¹⁰ The Act goes on to say that the “... Commissioner may adopt a stretch code by rule.”¹¹ The Stretch Code was integrated into the 2015 code update.

While Act 89 did not require a commercial stretch code to be established, the Department of Public Service has created a CBES Stretch Guidelines document for use with the 2015 CBES as a more stringent standard than the base code. The Natural Resources Board (NRB) has adopted the Stretch Guidelines as a requirement for commercial projects seeking an Act 250 permit. Similar to the residential Stretch

⁷ Vermont law already required documentation of CBES compliance for commercial buildings before a Certificate of Occupancy could be issued. Act 89 extends that requirement to residential buildings.

⁸ Public buildings primarily are those used for public purposes: workplaces, buildings that are owned by public entities such as schools and firehouses, and any residential property that is rented for either a short term or a long term. Complete information is available at <http://legislature.vermont.gov/statutes/section/20/173/02730>

⁹ Act 89, pp. 25-26.

¹⁰ Act 89, p. 23.

¹¹ *Commissioner* refers to the Commissioner of the Department of Public Service, per 21 V.S.A § 266.

Code, the commercial Stretch Guidelines may be adopted by municipalities seeking to enact a higher energy standard than required by the State.

The CBES Stretch Guidelines are available on the CBES website (http://publicservice.vermont.gov/energy_efficiency/cbes). The NRB website (<http://www.nrb.state.vt.us/>) also hosts the CBES Stretch Guidelines (<http://www.nrb.state.vt.us/policies/cbesstretch.pdf>) and the Act 250 Criterion 9F (energy conservation) compliance procedures (<http://www.nrb.state.vt.us/policies/9fprocedure.pdf>).

How Can Efficiency Vermont Help?

Residential New Construction

Efficiency Vermont offers homebuilders technical assistance on meeting and exceeding RBES requirements. Efficiency Vermont can put builders and homeowners in touch with experts who can discuss their projects with them, and explain the various Efficiency Vermont options available.

For single family and multifamily projects, Efficiency Vermont offers comprehensive technical assistance and financial incentives to help the owner and builder create the best building most cost-effectively. An Energy Consultant will be assigned to the project to provide customized technical assistance, code support, certification, and financial incentives to meet the needs of the specific project.

Efficiency Vermont is rate-payer funded, therefore there is no additional cost to participate in services. To find out more, call 888-921-5990 or visit www.efficiencyvermont.com.

Commercial New Construction

Efficiency Vermont can work with commercial project teams to incorporate energy efficiency throughout the design, construction, and operation phases of their projects. Contacting a Project Intake Coordinator at pics@efficiencyvermont.com or 855-317-2254 is the first step for building owners or builders to take. Projects that follow a Whole-Building Approach through either the High Performance (10-20% energy savings) or Net Zero (30-45% energy savings) tiers and whose builders invite Efficiency Vermont to a kick-off or early design meeting are eligible for the highest level of technical and financial assistance.

A general overview of Efficiency Vermont commercial new construction services is available at: <https://www.efficiencyvermont.com/services/renovation-construction/commercial-new-construction>

PART 3: OPTIONS FOR MUNICIPALITIES TO INCREASE ENERGY EFFICIENCY OF LOCAL CONSTRUCTION

Introduction

Town Energy Committees and local Planning Commissions are implementing a wide variety of activities, from helping reduce energy consumption in municipal buildings and street lighting to working with residents to improve the efficiency of their homes. This Guide presents several suggestions and recommendations for municipalities to promote increased compliance with the Energy Code and participation in Efficiency Vermont's above-code programs. The recommended actions below are presented in order of increasing level of effort by the municipality.

Options for Municipalities

The following options will help increase energy efficiency in local construction:

Educate new homeowners and owners of homes that are undergoing rehabilitation:

Municipalities can provide valuable information to their communities on Code requirements and on above-code programs. Efficiency Vermont can make information available to municipalities to distribute to new homeowners and builders. Town offices can request an Efficiency Vermont poster that raises community awareness about the Energy Code (see sample poster at right).

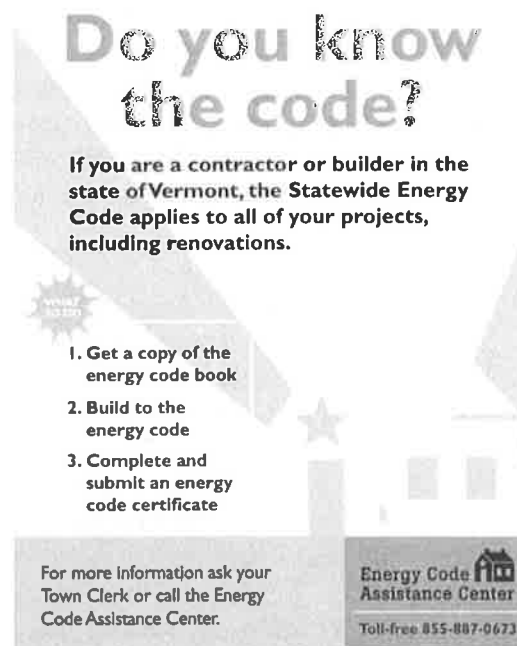
Provide relevant language on the town website:

One easy way to help raise awareness about both RBES and CBES is to provide information on town websites about the Code. Sample language that can be considered:

The Vermont's building Energy Codes—the Vermont Residential Building Energy Standards (VT-RBES) and Vermont Commercial Building Energy Standards (VT-CBES)—are minimum standards of energy efficiency that apply to all new residential construction, renovations, alterations, and repairs in Vermont.

The Energy Code Assistance Center provides toll-free assistance at 1-855-887-0673. Information is also available at the Department of Public Service website:

- VT-RBES: http://publicservice.vermont.gov/energy_efficiency/rbes
- VT-CBES: http://publicservice.vermont.gov/energy_efficiency/cbes



Efficiency Vermont offers technical assistance and incentives for projects that seek to meet a level of energy efficiency above the Energy Code. Call 888-921-5990 or visit www.efficiencyvermont.com/services/renovation-construction to learn more.

Advocate and promote RBES, CBES, and above-code construction: Finding local residents who have experience in constructing energy-efficient homes and asking them to provide testimonials can encourage others to incorporate energy efficiency into their projects. Simply finding a few people who would be willing to talk with neighbors and having their names available through the town offices is one such strategy. Additionally, Efficiency Vermont maintains a list of contractors who have built above-code homes at <https://www.efficiencyvermont.com/contractors>.

Provide technical assistance: Although Efficiency Vermont provides technical assistance at no charge in many situations, local individuals who are knowledgeable on code requirements and above-code programs can provide valuable on-the-ground assistance. Zoning administrators, Planning Commission members, and Town Energy Committee members can assist new homeowners on how to comply with code and above-code construction. Local volunteer experts could even provide site visits to help coach builders who are new to efficient construction practices.

Incorporate RBES, CBES, and above-code into building permit process or fees: Towns that require building permits can consider adding language on the permits that contains a sign-off line indicating acknowledgment of the requirement and agreement to comply with RBES or CBES, as applicable. Understandably, towns might not be able to consider additional compliance options beyond that required by Act 89, but even the simple inclusion of this language can have an effect by reinforcing the expectation of compliance. Dorset, for example, provides the following language in its zoning permit application:

"I swear under the pains and penalties of perjury that the statements contained in this application are true to the best of my knowledge and belief. I also agree that development will be in accordance with current Town of Dorset Zoning Bylaws, The VT Residential Building Energy Standards, and other applicable ordinances unless otherwise approved."

Towns can also consider modest financial benefits linked to higher levels of efficiency. For instance, towns could enact a tiered permit fee structure, where building to higher efficiency levels results in a lower permit fee.

Adopt Stretch Codes, per Act 89: The RBES Stretch Code and the CBES Stretch Guidelines are optional standards that municipalities can now choose to adopt. The effect will be more stringent energy efficiency standards for construction within the local community. The State will provide information on what local communities need to do to adopt the Stretch Codes/Guidelines.

Call attention to RBES and CBES requirements that address renovation projects: Although the Energy Codes include renovation and rehabilitation projects, in reality these projects have not received the attention that new construction has. Raising the bar on energy code compliance in renovation projects is nonetheless an important component of achieving greater energy efficiency in buildings. There is much more renovation and rehabilitation construction than new construction. Towns can consider new and creative ways to call attention to the requirements for renovations. This will likely

increase energy efficiency of communities, and can involve building permit requirements, inspections, and Stretch Codes. Towns could also work with building owners to hold building tours and open houses to highlight the energy upgrades that are being done as part of renovation and rehabilitation projects.

Incorporate into town planning and zoning: When contemplating updates to town plans and zoning ordinances, local officials can consider incorporating language into the town plan and zoning ordinances requiring new homes and commercial buildings to be built to code (or even higher levels of efficiency). This ties both to the idea of including code compliance language in building permits, and also to the adoption of local Stretch Codes.

Incorporate into building codes: Towns with building codes could incorporate the Energy code into the building code and into building inspections by verifying the existence of an Energy Code certificate. Building code inspectors already perform compliance inspections for other codes, and, RBES / CBES compliance inspections could also be incorporated in the process. Efficiency Vermont can provide basic training and guidance on Code requirements and above-Code programs.

Attachment A: Q & A on Vermont Building Energy Code

Procedures for Municipalities

1) Exactly what information do municipalities present to an applicant for a residential building permit? How should we provide it?

It is recommended that you provide an electronic copy of the code handbooks by email or providing the link to the online version. If they prefer a hard copy, those are available for free from the Energy Code Assistance Center. The municipality may want to have a small number of hard copies available to provide if requested. Municipalities may elect to amend their application for a zoning permit to include a check box where the zoning administrator can indicate that the code has been provided to the applicant.

2) What are municipalities required to give to an applicant for commercial construction?

A copy of the commercial energy code (CBES), available at
<http://codes.iccsafe.org/Vermont.html>.

3) Does a hard copy of the energy certificate have to be recorded with the municipality?

Yes, the law requires that the person certifying compliance (i.e. Town Clerk) ensure that the energy certificate is recorded and indexed in the town land records. 30 V.S.A. §51(f)(1)

4) Is seeing the complete certificate enough for a municipality to issue a Certificate of Occupancy (CO)? Does the municipality need to check whether it has been filed in the land records?

Simply seeing the certificate is insufficient. While the statute places the obligation on the certifying individual or entity to “assure that the certificate is recorded and indexed in the town land records” 30 V.S.A. §51(f)(1), it also states that the certificate is provided to the municipality as a condition precedent to the issuance of a Certificate of Occupancy. This

language suggests that an actual copy should be produced and should remain with the town. Furthermore, as municipalities have authority over and access to land records it is both practical as well as logical for a municipality to verify that the recordation of the certificate has occurred before issuing a certificate of occupancy. A notation on the certificate of occupancy of the Book, Page Number, and Date of the recordation of the energy code certificate would be an effective and permanent means of demonstrating that the statute has been satisfied.

5) Can I accept an email that says the certificate was completed?

No. Municipalities may elect to accept an electronic version of a completed certificate, but a certificate must be received in some recordable form. See answer to previous question for more detail.

6) If energy code compliance is NOT required, how is the municipality supposed to document that? Is there a way to certify and record that compliance is NOT required?

It is recommended that the municipality ask applicants to provide a written statement asserting that the code does not apply to their project, and why.

7) If municipalities don't require permits for remodeling jobs, how should they ensure that remodeling jobs comply with the energy codes?

Municipalities do not have any obligation to ensure compliance with energy codes. Their obligation under the law is, where applicable, to issue Certificates of Occupancy. In that situation, the municipality must be provided with the energy code certificate before the CO is issued. As noted above, it is suggested that municipalities verify the recordation of the energy code certificate prior to issuance of a CO.

In towns that do not issue certificates of occupancy, zoning administrators still must provide building energy standards material to applicants. "Regardless of whether a town has amended its by-laws to be consistent with this state law, it must issue permits in accordance with it. If a town fails to do so, it faces possible legal action, either as an appeal to the Environmental Court or as a lawsuit instituted by the Vermont Attorney General."¹²

8) Does the municipality need to track the number of certificates filed?

No.

9) Who is responsible for completing the code certificate on commercial projects?

Both the builder and the primary designer (usually the architect, but can be anyone responsible for the building design).

10) For commercial projects, if there is no architect, who is responsible for filing the code certificate?

The builder.

11) Where can a digital copy of the residential code handbook be found?

A copy of the handbook can be found at

http://publicservice.vermont.gov/energy_efficiency/rbes

¹² VLCT notice to towns regarding Act 89

12) Where can a digital copy of the commercial energy code be found?

A copy of the commercial energy code can be found at
<http://codes.iccsafe.org/Vermont.html>

13) Where can we find information about Act 89?

A copy of the legislation is available at
<http://www.leg.state.vt.us/docs/2014/Acts/Act089.PDF>

Act 89 amends several different statutes that pertain to Building Energy Codes. Most of the provisions are contained in 30 V.S.A. § 51 and 24 V.S.A. §4449.

14) What becomes of the Owner-Builder disclosure? Does that get filed somewhere?

It is filed with the municipality and the Department of Public Service – the same as the regular code certificate. Unlike the regular code certificate, it does not need to be filed until the property is listed for sale, and it must be provided to potential buyers before entering into a purchase and sale agreement.

15) What if the municipality's zoning bylaws require a Certificate of Compliance or a Certificate of Completion? Are these the same as a Certificate of Occupancy? Do we still have to require energy code compliance certificates before we issue these?

Yes. The statutory definition of a CO includes a certificate of completion, certificate of compliance, and any other certification attesting to project completion. The Building Energy Code obligations in 30 V.S.A. § 51 relate to a certificate of occupancy as referenced in 24 V.S.A. § 4449(a)(2) and defined in 24 V.S.A. § 4303(11)(D).

16) What is the guidance on how municipal regulations can be revised to allow the zoning administrator the authority to require the code certificate?

If a municipality adopts bylaws that require a certificate of occupancy under 24 V.S.A. § 4449(a)(2) then the obligations of 30 V.S.A. § 51 also become effective. Municipalities who seek to implement Building Energy Codes through other avenues should seek the advice of their attorney on how best to proceed.

Legal Obligations of the Municipality

17) What if a code certificate isn't complete or is wrong? Do municipal officials need to determine if it is filled out correctly?

Although municipalities don't have an obligation to review code certifications for accuracy, they should reject obviously incomplete or incorrect certificates (such as not having a signature).

18) Do municipal officials need to make sure the code certificate is signed?

Yes, all certificates should be signed to be accepted.

19) Does a Zoning Administrator (ZA) need to determine "compliance" with the code or simply make sure a certificate is filed in the local land records?

The ZA only needs to verify that the certificate has been recorded and indexed, not whether its content is correct. See question 4 above.

What happens if someone doesn't file a certificate?

20) How does it relate to future property sales?

The validity of a title is not effected by the failure to issue or submit a certificate. [30 V.S.A. § 51 (i)].

21) How does it affect the municipality?

The municipality is not affected.

22) How does it affect the builder?

If the certificate was not issued by a licensed professional engineer, a licensed architect, or an accredited home energy rating organization, it was the obligation of the builder to do so. 30 V.S.A. § 51(f)(1). A person aggrieved by noncompliance with the statutory requirements has the right to initiate a legal action for damages. 30 V.S.A. § 51(g).

23) How does it affect the owner?

Whether the failure to file a certificate will have an impact on an owner is not possible to predict, as this is not determinative of whether the building was compliant with the applicable energy code. However, an owner if aggrieved by noncompliance with the statutory requirements has the right to initiate a legal action for damages. 30 V.S.A. § 51(g).

24) How does it affect the architect?

On commercial projects, the architect may be liable under 30 V.S.A. § 53(d). On residential projects, the architect has no legal obligation regarding the energy code unless they sign the code certificate. 30 V.S.A. § 51(f)(1) and 30 V.S.A. § 51(g).

25) Does the municipality face any liability issues if it fails to comply with the provisions of Act 89?

A municipality may always be held liable for failure to comply with a statutory directive.

26) What if the builder filed a certificate but actually hasn't complied with the building energy codes (i.e., the construction itself is not compliant)? Can the municipality be held liable even it complied with the requirements of Act 89, e.g., required the builder to record the energy certificate?

No, the municipality cannot be held liable. If the municipality is provided the energy certificate, and then issues a CO on that basis, it has complied with its legal obligations. If a CO has been issued based on a misleading energy certificate, then the builder may be sued by the owner for failing to comply with code provisions.

27) If the municipality issues the CO in accordance with Act 89, but the builder never properly filed the energy code compliance certificate, can the municipality be held liable?

The use of the word "file" in this question creates confusion. Pursuant to the statute there is no obligation to "file" anything. The certifying entity or individual must record the energy code certificate, and there is a municipal obligation to issue the CO. If a municipality issues a CO without having first been provided with a copy of the completed certificate, they could be held liable.

28) How can the municipality ensure that the energy code was provided to an applicant?

The building permit application could be amended to include documentation that the code was provided.

29) Is the municipality liable if the builder/owner/architect files a false certificate?

No.

Mechanics of How the Code Works

30) Which projects need to comply with the energy code?

All new construction and additions, and most renovation projects that affect the energy use of the building (unless expressly exempt). Examples include creating new conditioned space, changing the location of the thermal envelope, adding insulation, replacing windows, and some types of changes to heating and cooling systems. Work that does not need to comply includes spaces not heated or cooled, regular maintenance and repair, storm windows, and existing walls, ceilings and floors if the cavities are not exposed.

31) Do seasonal homes need to comply?

Yes, if they are heated or cooled using either electricity or fossil fuels. The code does not distinguish between year-round and seasonal homes. They are subject to the same requirements, except for hunting camps, which are specifically exempt from the code.

32) Who is required to file the code certificate?

Both the builder and architect/engineer for commercial projects; the builder for residential projects.

33) What projects qualify for the owner-builder exemption?

An owner-builder must own the building, must live in the building, and must be the individual directing the details of construction.

34) What recourse does an owner have if a previous owner-builder did not follow the code?

There is no recourse as an owner-builder does not have to follow code, although they do need to disclose the nature and extent of any non-compliance by completing an "Owner/Builder Disclosure Statement," available in the RBES Handbook.

35) Does a project need to comply with the energy code that is in effect when the application is filed or the code that is in effect when construction starts?

Residential projects need to comply with the energy code that is in effect when construction starts. For commercial projects, persons submitting an application for any local permit authorizing commercial construction, or an application for construction plan approval by the Commissioner of Public Safety pursuant to 20 V.S.A. chapter 173, before the effective date of the amended CBES shall have the option of complying with the applicable provisions of the earlier or the amended CBES. After the effective date of the original or the amended CBES, any person submitting such an application for commercial construction in an area subject to the CBES shall comply with the most recent version of the CBES.

36) What happens if the code certificate is not available at the time of closing?

Lack of a code certificate does not cloud the title, so the sale can go ahead as long as all parties are willing.

Other

37) How are the stretch codes different from the current energy codes?

Stretch codes are defined in state statute as a building energy code that achieves greater energy savings than the base energy code. The Residential Stretch Code is now required for all residential projects that go through the Act 250 process. And similarly, the Commercial Stretch Guidelines, serving as a proxy for “best available technology,” are now required to be followed by all commercial Act 250 projects. The stretch code (or Guidelines for commercial) may be voluntarily adopted by municipalities. The current base energy codes are mandatory state-wide and will continue to be so except for Act 250 projects as described above.

38) If we want to adopt a stretch code, how do we do that?

The stretch would be adopted using the same process as any other municipal regulation.

39) Should municipalities amend permit applications and/or COs to include reference to the energy codes?

Amending permit applications and/or COs is a good way to remind everyone of the requirements and to document that the municipality has fulfilled its obligation.

40) If a home or building is LEED certified, does that mean that it also meets the code?

Not necessarily. Although they both have efficiency requirements, there are some things required by the code that are not covered in the Leadership in Energy and Environmental Design (LEED) system.

41) When will the next energy code revision take place?

The required three-year update cycle would call for a revised energy code to be adopted in 2018, but the precise timing will be developed and announced as part of the DPS’s code update process expected to start in 2017.

42) How does Efficiency Vermont assist municipalities with meeting the energy code?

The Energy Code Assistance Center (ECAC), operated by Efficiency Vermont, is the central clearinghouse for information about the code. It provides printed materials and workshops, and maintains a toll-free hotline at 855-887-0673. Municipal officials are invited to call the ECAC Monday-Friday 8:00am-5:00pm.

43) What can Efficiency Vermont do to assist an applicant with meeting the code?

Perhaps the easiest way to comply with the code for new construction is to enroll the project in one of Efficiency Vermont’s above-code programs. Either the owner or the builder can enroll. For commercial projects, a member of the design team, such as the architect, can initiate the enrollment process for the owner. The services are free, and most projects

qualify for an incentive from Efficiency Vermont. Code support is provided for both residential and commercial projects.

For residential projects, participants get project-specific technical assistance, applicable incentives, and an option to receive a Home Energy Rating, along with help meeting the energy code. A technical advisor will evaluate whether the proposed project will meet the code and if not, offer options for any needed changes. Efficiency Vermont staff also fill out the energy code certificate so that it is ready for the builder's signature.

For commercial projects, the principal designer (usually the architect) and the builder are directly responsible for meeting the energy code and completing the CBES certificate. Efficiency Vermont's assigned Energy Consultant can review specific code questions or issues that the project team may have and provide general guidance about code compliance.

44) If the top of my garage is converted to an office, which code is applicable – the commercial code or the residential code?

This would likely be the residential code.

45) Does the Division of Fire Safety have any obligations regarding the energy codes?

Fire Marshals check for the CBES certificate posted on site and list a missing certificate as a deficiency.

