Maine Stretch Energy Code - Frequently Asked Questions (FAQ)

Q: What is a Stretch Energy Code?
A: A stretch energy code is an alternative to the base energy code (in Maine, MUBEC). Maine’s stretch energy code is promulgated by the Office of the State Fire Marshal for communities looking to achieve greater energy efficiency and cost-effectiveness in their building stock. While base energy codes are required to be adopted and enforced (in Maine, for every community >4,000 residents), stretch codes are optional for communities to adopt. If adopted, the stretch energy code becomes the only enforceable energy code in that community. Stretch energy codes are typically 10-15% more energy efficient than the base energy code and are updated in sync with the base energy code.

Q: As a Mainer, why should I care about Maine’s Stretch Code?
A: Maine’s stretch code matters to Maine businesses and residents because it further reduces costs to consumers by assuring buildings meet advanced levels of energy efficiency, thereby reducing utility bills. MUBEC, Maine’s base energy code, reduces energy costs and dependence on heating oil; stretch codes take this even further by improving cost-effectiveness, health and safety, and resilience to extreme weather. This, in turn, reduces carbon emissions, helping Maine reach its climate goals.

Q: In these tough economic times, why should my town prioritize local adoption of Maine’s stretch energy code?
A: Mainers have a right to safe, affordable, and comfortable homes and buildings. With energy costs on the rise as well as the costs for financing and insuring homes and businesses, stretch codes can stimulate the creation of jobs as demand for energy auditors and contractors who can construct and certify building performance increase. Additionally, as weather becomes more extreme and unpredictable, stretch energy codes drive the market towards more resilient and affordable housing options through lower utility costs and better barriers between indoors and outdoors. Additionally, under MUBEC, third-party private sector inspectors may also perform building construction inspections on behalf of municipalities or homeowners, further growing the job market in Maine with employment that cannot be outsourced elsewhere.

Q: Is it true that building to a stretch energy code adds to construction costs, is more complicated, and can take longer to build?
A: YES and NO. Since the 2021 IECC was just published, there is little information regarding the additional costs to construction. There are additional costs associated with construction; however, historically, these are minor and involve small adjustments in insulation levels, better sealing of window and door openings against leakage, sealing ducts, using more efficient heating/cooling equipment and more efficient lighting, including additional compliance paths and flexibility, clarifying sections that previously caused confusion – all changes that make homes and businesses more comfortable, keep utility bills lower, and are standard practice throughout most of the country. The additional work required will not noticeably add onto the time a builder takes to construct a home, provided that materials and subcontractors are managed at the start of the work and not left to the last minute before they are required on the job.
The 2021 IECC was developed through a collaborative process that included contractors, manufacturers, builders, architects, code officials, public government officials, and energy experts. While there are typically increases in energy efficiency in each new edition of the model energy code, a primary reason they are adopted regularly is to hear feedback from the industry on ease of use of the code and provide additional flexibility, clarification, and support where stakeholders indicate. In this way, the 2021 IECC likely provides more clarity and flexibility than previous versions, potentially making it less complicated than other energy codes.

A cost analysis study conducted by PNNL found that updating to the 2015 IECC (MUBEC’s energy code) would result in incremental costs of $2,629.39 per new home. However, the annual energy savings per home would be $847.77 on average, meaning the simple payback for homeowners would occur in 2.8 years. Over 30 years, the life-cycle of a home or building and a standard mortgage length, homeowners would be able to expect a life-cycle energy cost savings of $13,954.72. This is for the base energy code – for the stretch energy code, similar additional costs can be expected, but greater energy cost savings can also be expected, shortening the simple payback period and putting money in Mainers’ pockets after just a couple of years after construction of the home or building.

Q: I agree with having a base energy code, but why should I support the adoption of a stretch energy code?
A: As weather becomes more extreme and unpredictable and energy costs continue to rise, stretch energy codes provide an opportunity for communities to protect their citizens while supporting their financial flexibility. Adopting a stretch code not only improves energy efficiency; it also lowers monthly utility costs, saving home and building owners money; improves indoor air quality and comfort, benefiting home and building occupant health; and supports momentum towards advanced construction technology and methods such as electric vehicles and solar panels. Together, this benefits Mainers and the state as it works to achieve climate goals and carbon emission reductions, goals Maine cannot meet without focusing on its homes and buildings.

Q: Builders are not given adequate time to learn the newest codes, how can they be expected to build according to and comply with the stretch energy code?
A: Every state in the northeast and mid-Atlantic faces the necessity of training their building workforce whenever codes are adopted or revised. Maine has had the benefit of learning from states that have already met this challenge. The Office of the State Fire Marshal has worked to promulgate trainings during past code adoptions and is doing the same, along with the Efficiency Maine Trust, for this update. The real problem is that some in the construction industry do not take advantage of trainings and are not prepared for understanding and using either MUBEC or the stretch code.

Building codes, including energy codes, are not new to either the United States or to this part of the country. For a century, Americans of all classes, and businesses of all types, have benefited from buildings being built to minimum standards for health, safety and building integrity. It is also true that the entire construction industry in the Northeast and Mid-Atlantic has accepted and profited from these code changes in learning how to use them; indeed, many regularly go beyond state code requirements.
and build to advanced voluntary standards. This has been a shared experience throughout the region since statewide code adoptions began in 1971. In many housing markets, builders take pride in advertising that their homes are built better and to more efficient energy standards than required by state code; it has proved to be an effective market strategy.

Q: Will Maine’s stretch energy code lead to stricter regulation and stronger government control?
A: Unlikely. Once a stretch code is adopted by a community, it functions the same way MUBEC would function – as the enforceable energy code in that jurisdiction. Since there is only one energy code option promulgated statewide, the industry faces little potential for confusion regarding regulation. Stretch codes are also optional – the state cannot force a community to adopt the stretch energy code.

Q: Do mobile, modular or log homes have to meet stretch energy code requirements?
A: YES and NO. If the home or building type falls under state regulations and is being constructed in a community that has adopted the stretch code, then it must comply with its provisions. By state law, log homes are exempted from MUBEC, but modular homes must meet the MUBEC or stretch code requirements. Mobile homes must meet minimum Federal codes. However, building to the equivalent of what is required by MUBEC will bring log home owners savings year after year from the money they will not have to spend on energy to keep their homes comfortable.

Q: When building on an addition, will I have to pay for the entire home to be brought up to code?
A: NO. MUBEC does not require any portion of an existing home that is not altered by the addition to be updated to the latest requirements. Only those parts of a dwelling that must be modified to accomplish fitting the addition to the existing dwelling must be revised.

Q: If I build according to the stretch energy code, do I have to hire a third party inspector to verify compliance?
A: MAYBE. If your town adopts the stretch code and chooses to enforce the requirements through a building department with permit fees and inspections – NO. If your town opts not to establish a building department, then you would have to engage a third party inspector to verify compliance in order to get a Certificate of Occupancy. Under current law (LD 1416) towns not required to adopt MUBEC (any town under 4,000) would have no requirement to certify your home as meeting any minimum standard.

Q: Is it true that third party inspections cost up to $3000?
A: MAYBE. Third party inspectors are hired by either you or your contractor, and they will perform only what work they are contracted to do. Depending on the scope of work and the prices set by individual inspectors, the cost will vary. With too few inspections, the third party may not be able to certify the work as complete and meeting requirements. Certification will undoubtedly help you in securing financing and lowering property insurance costs. As in many situations that are only loosely regulated, you get what you pay for. It is best to discuss this with the bank and your insurance agent before you proceed.
Developed by NEEP (www.neep.org)
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