

## Energy Regulations

Currently, the Massachusetts State Building Code uses the 2009 International Energy Conservation Code with some amendments to regulate energy use in projects that require a building permit. This regulation affects everything from lighting to boiler efficiency, but the meat of the regulation as it pertains to residential units is the thermal envelope. In FCCIP towns, Ashfield, Buckland, Conway, Gill, Leverett, Rowe, and Shutesbury have adopted the STRETCH Energy Code. There has been some confusion as to the requirements, especially for renovations and additions.

### **IECC Requirements for New Construction(1-2 family):**

- Choose a compliance method::
  - Meet the prescriptive insulation and fenestration values of Table 402.13
  - Use rescheck or resnet software compliance tools.
  - Provide a HERS compliance report and certificate with a rating of 75 or less along with an Energy Star Thermal Enclosure Checklist
  - Show by simulated performance that the house energy cost of the house will is equivalent to the standard referenced design.
- For air sealing and insulation either:
  - Provide an [air-barrier and insulation checklist](#) to Building Official(for FCCIP towns at Framing Inspection) or
  - Perform a blower door test per section 402.4.2.1
- In the field:
  - Seal all ductwork.
  - Insulate and test for tightness all ductwork outside of conditioned spaces.
  - Install programmable thermostats.
  - Seal all recessed lighting between conditioned and unconditioned spaces.
  - Insulate all hot water system piping(R-2 min)
  - Install a minimum of 50% high efficiency lamps in permanently installed fixtures.
  - Post a permanent certificate at the electrical panel, showing insulation, fenestration, and mechanical efficiency values.

### **IECC Requirements for Additions, alterations, renovations and repairs(1-2family):**

- **Additions:** An addition must comply with the requirements for new construction, either by itself. or as a combined unit with the existing house.
- **Renovations:**
  - Unaltered portions of existing building need not comply.
  - Existing cavities need not comply with prescriptive requirements as long as cavity is filled with insulation.
  - When re-roofing an un-insulated roof, and the sheathing is exposed, the roof must be insulated.

- Any non-conditioned space that changes to conditioned space must be brought to full compliance.