

Building or Remodeling in Truro?

Like all technology, building technology is rapidly evolving.

Cape Light Compact now has **incentives for renovations and additions**:

"Support for renovations and additions is open to all residential customers residing in Cape Cod or Martha's Vineyard and applies to single-family and multi-family homes that are three stories or less. For customers qualifying for this program path, there are several eligible savings opportunities: for instance, if you were completing a kitchen remodel, you may receive incentives for more efficient lighting, window upgrades, or improved insulation.

"One of the appeals of this program is that incentives are allocated on a pay-for-performance basis. In other words, the more energy your upgrades save, the greater the incentive you receive."

Contact Cape Light Compact: 508-375-6644 or info@capelightcompact.org or go to bit.ly/3aJxz3H

Incentives for new construction: Builders and Contractors, you may be eligible for direct incentives for new construction through Cape Light Compact. For information, go to: Cape Light Compact "Pay-for-Savings" bit.ly/3tASe2C

No matter what the heating source, a tighter building envelope, the home's shell, will save money by reducing the heat load.

Homeowners: Ask your architect or builder about a low energy usage intensity (EUI) building system before you finalize your plans. Two such systems are shown in 12 Steps to net Zero at Zero Net Energy Project bit.ly/36QGvmM and Passive House* at bit.ly/3xWnXp0

The following criteria are common to most very low EUI building systems. They:

- Ensure that the building envelope is extremely airtight, preventing infiltration of outside air and loss of conditioned air.
- Employ continuous insulation throughout its entire envelope without any thermal bridging. Note: Thermal bridging of the rafter framing appears as a grid on the roof where heat "leaks" through the framing in the photo on the next page. Steel Framing is shown, wood thermal bridging is similar but less pronounced.
- Employ high-performance windows (double or triple-paned windows depending on climate and building type) and doors. Solar gain is managed to exploit the sun's energy for heating purposes in the heating season and to minimize overheating during the cooling season

**Passive House is one of the pathways that satisfies the current Massachusetts Stretch Code. Truro adopted the stretch code in 2011 when Truro became a Green Community.*



Thermal Bridging Truro Central School December 2020

- Use some form of balanced heat-and-moisture-recovery ventilation.
- Use a minimal heating and cooling system.

The Massachusetts Department and Energy Resources' Engineers suggest there is a 10-to-15-year payback on this type of construction. The US Green Building Council of Massachusetts states in [Zero Energy Buildings in Massachusetts: Saving Money from the start](https://www.usgbc.org/resources/publications/zero-energy-buildings-in-massachusetts-saving-money-from-the-start) at bit.ly/37jAqiO

“Zero Energy Ready buildings upfront costs of 0 – 7%, and at zero energy, all types break even in eight years or less when there are no additional upfront costs.”

Concerned about Climate Change? Consider a heat pump for heating and cooling as well as domestic hot water instead of fossil fuel. Plan ahead for the end of the current system's service life, then upgrade.

The reduced load (energy needed) of a tight well-built building as described above enables one to heat and cool with less equipment and cheaper energy bills.

Ask a Builder, Architect, or a qualified HVAC contractor.

“Electrification of space and water heating is a low-risk, cost-effective strategy for decarbonizing the majority of the Commonwealth's building stock.”

[Massachusetts 2050 Decarbonization Roadmap](https://www.mass.gov/info-details/massachusetts-2050-decarbonization-roadmap) bit.ly/2LTSeK0

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