# Mass Save® Energy Code Technical Support Training Offerings Commercial Energy Code Training



To schedule a training session with your group, email: <a href="mailto:energycodesma@psdconsulting.com">energycodesma@psdconsulting.com</a> All courses have been approved for continuing education for MA code officials and CSL licensees.

## Course 1: The 2025 Commercial Stretch Code (180 min.)

The latest version of the Massachusetts Commercial Stretch Energy Code (225 CMR 23) went into effect on July 1, 2023, was updated on February 14, 2025, and is in line with the 10th Edition of the Massachusetts State Building Code (780 CMR). The objective of this training program is to provide information to code enforcement officials, contractors, and design professionals regarding changes between the 2018 and 2021 IECC, the stretch code, and the new Municipal Opt-in Specialized Code. The newest version of the Stretch Energy Code brings several significant modifications, including alternative approaches for compliance, requirements for addressing thermal bridging, air leakage testing, adherence to ASHRAE standards, application to R-Use buildings, and the inclusion of the Opt-in Specialized Code. The 3-hour course will offer a comprehensive overview of these subjects and more. Furthermore, it will cover additional topics such as the 2021 IECC requirements for constructing air barriers, commissioning mechanical and lighting systems, and implementing "additional efficiency packages" requirements.

#### Module 1.1: Overview (60 min.)

The latest version of the Massachusetts Commercial Stretch Energy Code (225 CMR 23) went into effect on July 1, 2023, was updated on February 14, 2025, and is in line with the 10th Edition of the Massachusetts State Building Code (780 CMR). The objective of this abbreviated 1-hour training program is to provide code enforcement officials, contractors, and design professionals with an overview of the base energy code, stretch energy code, and the new Municipal Opt-in Specialized Code.

## Module 1.2: Key Changes (60 min.)

The latest version of the Massachusetts Commercial Stretch Energy Code (225 CMR 23) went into effect on July 1, 2023, was updated on February 14, 2025, and is in line with the 10th Edition of the Massachusetts State Building Code (780 CMR). This 1-hour training program will highlight key changes to the base energy code and stretch energy code and provide a review of the new Municipal Opt-in Specialized Code. Additional items discussed will include new requirements such as Thermal Bridging and Derating of Exterior Wall Insulation and new compliance paths like "TEDI" and Relative Performance.

## Module 1.3: Solar Ready & EV (60 min.)

The latest version of the Massachusetts Commercial Stretch Energy Code (225 CMR 23) went into effect on July 1, 2023, was updated on February 14, 2025, and is in line with the 10th Edition of the Massachusetts State Building Code (780 CMR). During this 1-hour course, we will discuss the Massachusetts Energy Code requirements for Solar- and EV-ready provisions. Topics include Potential Solar Zone Area, Zero Energy Buildings, and Electric Vehicle Supply Equipment.

#### Course 2: Commercial Building Thermal Envelope (No Macro Course Built)

#### Module 2.1: Air Barriers & Thermal Bridging (60 min.)

This course will cover Massachusetts energy code requirements for commercial building air barriers, including those found in the 2021 IECC. The course will clarify these requirements for better specification by designers and easier review by code enforcement officials. The course is organized around examples that show needed air barrier construction details, air barrier materials, and provides an introduction into thermal bridging and testing-based compliance options. This introductory course will provide background for a subsequent and more advanced air barrier strategy module including new blower testing guidelines and thermal bridging requirements.

**ENERGY CODE SUPPORT HOTLINE: 855-757-9717** 

WE ARE MASS SAVE\*:













#### Module 2.2: Derating and Thermal Bridging (60 min.)

This course is designed to introduce thermal bridging issues found in commercial construction. Drawing from the Massachusetts Energy Code, building science best practices, and published reference materials. Participants will have access to the latest industry standards, manufacturer's guidelines, and expert insights to ensure a comprehensive understanding of building codes and durability principles.

## Module 2.3: Air Sealing & Air Leakage Testing (60 min.)

This specialized course is tailored for professionals in the construction and building compliance sector seeking in-depth knowledge of the air sealing and air leakage testing requirements specific to the commercial provisions of the Massachusetts Stretch Energy Code. Participants will explore the intricacies of code compliance, focusing on key elements related to air barrier systems and air leakage testing for commercial buildings.

# Course 5: Existing Buildings (No Macro Course Built)

#### Module 5.1: Overview (60 min.)

Commercial renovation projects continue to dominate permit request applications across the Commonwealth and hold tremendous opportunity for energy savings via energy code compliance; yet confusion abounds as to how the Stretch Energy Code applies to renovating these existing buildings.

This presentation will distinguish the differences between additions, alteration and repairs while also providing an overview of how the Stretch Energy Code applies to these renovation projects.

# Module 5.2: Additions (60 min.)

Commercial renovation projects continue to dominate permit request applications across the Commonwealth and hold tremendous opportunity for energy savings via energy code compliance; yet confusion abounds as to how the Stretch Energy Code applies to renovating additions.

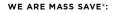
This presentation will address how to determine what constitutes an addition, while also providing an overview of how the Stretch Energy Code applies specifically to commercial additions, including the different requirements for both "large" and "small" additions.

## Module 5.3: Alterations (60 min.)

Commercial renovation projects continue to dominate permit request applications across the Commonwealth and hold tremendous opportunity for energy savings via energy code compliance; yet confusion abounds as to how the Stretch Energy Code applies to renovating alterations.

This presentation will address how to determine what constitutes an alteration, while also providing an overview of how the Stretch Energy Code applies specifically to commercial alterations, including the use of the Component Performance Alternative.

**ENERGY CODE SUPPORT HOTLINE: 855-757-9717** 















## Course 6: Building Systems Commissioning: Saving Money & Meeting Code (60 min.)

Building commissioning reduces energy bills, improves comfort, reduces CO<sub>2</sub> and other emissions. According to data from US Energy Information Administration (EIA), in 2018 commercial buildings accounted for over 18% of the energy consumed in the US, with over half that energy dedicated to heating, cooling, and lighting. While most building owners and builders understand the importance of high-efficacy lighting and efficient HVAC systems, the importance of building system commissioning is less widely appreciated. Studies have shown that the operating efficiency of commercial buildings improves by as much as 13% with commissioning. This course will provide an overview of mechanical systems and lighting commissioning including the benefits to building owners and occupants, the general commissioning process, and a review of energy code requirements and associated documentation. The course will also identify the roles that building owners, builders, code officials, and commissioning agents play in the commissioning process and highlight relevant industry standards and certifications.

## Course 7: COMcheck (60 min.)

The Massachusetts energy code continues to require that new commercial building energy code projects have COMcheck reports as part of the permit application. This is a tool for jurisdictions to gather much of the relevant energy code information, including a plan review checklist. This also assures that the authority having jurisdiction has a project-specific list of compliance elements for verification during plan reviews and inspections. This course will familiarize Massachusetts commercial building stakeholders with the US-DOE COMcheck software. By attending this course, you will be able to identify construction specifications needed to complete a compliant COMcheck calculation and you will learn how to enter building envelope, lighting, and mechanical components into the software. We will also discuss how to create COMcheck compliance reports and ensure they are accurate with respect to the building plans.

## Course 8: Commercial Performance Compliance Paths (Karpman Courses)

## Module 8.1: Targeted & Relative Performance Compliance Paths (Part 1) (60 min.)

#### Module 8.2: Targeted & Relative Performance Compliance Paths (Part 2) (60 min.)

Under the new Massachusetts Stretch Code, 225 CMR 23, new commercial buildings over 20,000 square feet must use a performance path for compliance. This two-part training series focuses on the two most common performance-based compliance options, Targeted Performance and Relative Performance. The Targeted Performance path requires projects to use energy modeling to demonstrate compliance with the heating and cooling Thermal Energy Demand Intensity (TEDI) targets. The Relative Performance path is based on ASHRAE 90.1 Appendix G Performance Rating Method with Massachusetts amendments. This training will go over the energy modeling requirements of both compliance options, requirements other than energy modeling that projects must meet, documentation that must be submitted to code officials, and special rules for retrofits, additions, and core-and-shell projects.

**ENERGY CODE SUPPORT HOTLINE: 855-757-9717** 

