COMMERCIAL NEW CONSTRUCTION
Massachusetts Energy Code 9th Edition
Checklist of Required Documentation
(To be completed by the permit applicant)

Applicant Name ____________________________________ Applicant Phone ____________________________

Project Address ___________________________________ _____________________________________________________

Type of Construction:
☐ New Construction ☐ Addition ☐ Alteration ☐ Change of Occupancy

Stretch Code communities only:
- **R-use Buildings.** In all R-use buildings, of four stories or less above grade plane with one or more dwelling units, each dwelling unit shall comply with section N1106 (R406) of 780 CMR 51.00: *Massachusetts Residential Code* (Residential Code). Choose Compliance Path #4 below.
- **Large Area and High Energy Use Buildings.** All buildings over 100,000 ft², and new supermarkets, laboratories and conditioned warehouses over 40,000 ft² must demonstrate energy use per square foot at least 10% below the energy requirements of ASHRAE 90.1-2013 Appendix G. Choose Compliance Path #1 below and select Performance Rating (Appendix G).

Select Compliance Path (C401.2):

#1: ASHRAE Standard 90.1-2013 (select one):
- ☐ Prescriptive: Provide plans and specifications demonstrating compliance with all measures of Section 5, 6,7,8,9.
- ☐ Energy Cost Budget (Chapter 11): Provide plans and specifications demonstrating compliance with all mandatory measures of Section 5 and all measures in 6,7,8,9.
- ☐ Performance Rating (Appendix G): Provide plans and specifications demonstrating compliance with all mandatory requirements. Provide energy model documentation including inputs and outputs of the energy model and a summary report. Energy model must be based on Section 11.

#2: IECC Prescriptive Path: Provide plans and specifications demonstrating compliance with all measures of Sections C402 through C405. COMcheck may be used for tradeoffs.

#3: IECC Performance Path: Provide plans and specifications demonstrating compliance with all measures of Sections C402.5, C403.2, C404, C405.2, C405.3, C405.5, C405.6, and C407. Provide energy model documentation including inputs and outputs of the energy model and a summary report. The building energy cost shall be equal to or less than 85 percent of the standard reference design building.

#4: 780 CMR 51.00: Massachusetts Residential Code (Residential Buildings up to 5 stories only)
- ☐ RESNET HERS Rating ☐ ENERGY STAR Homes ☐ Passive House (PHIUS)

Compliance Path # 1: ASHRAE Standard 90.1-2013

For Prescriptive Path and Chapter 11:
- ☐ Attach COMcheck Report (Code = ASHRAE 90.1) ☐ Meet C402.3 Rooftop Solar Readiness* ☐ Indicate C406 Option(s) Below

Section 406 (for ASHRAE compliance paths, one option must be C406.3)
- ☐ Two Options (Mass Save Territory) ☐ One Option (non-Mass Save Territory)
- ☐ C406.2 More Efficient HVAC ☐ C406.3 Reduced LPD ☐ C406.4 Enhanced Lighting Controls
- ☐ C406.5 Renewable Energy ☐ C406.6 DOAS ☐ C406.7 High Efficiency SHW

For Chapter 11 and Appendix G:

Compliance report for permitting must include:
1. A statement indicating that the proposed design complies with Chapter 11 or Appendix G
2. A site-specific energy analysis report
3. The name of the individual performing the analysis and generating the report
4. The name and version of the compliance software tool
### Compliance Path #2: IECC Prescriptive

- **Check** Attach COMcheck Report (Code = 2015 IECC)
- **Check** Meet C402.3 Rooftop Solar Readiness*
- **Check** Indicate C406 Option(s) Below

#### Section 406

- **Check** Mass Save Territory (select two options)
- **Check** Non-Mass Save Territory (select one option)
- **Check** C406.2 More Efficient HVAC
- **Check** C406.3 Reduced LPD
- **Check** C406.4 Enhanced Lighting Controls
- **Check** C406.5 Renewable Energy
- **Check** C406.6 DOAS
- **Check** C406.7 High Efficiency SHW

*See Massachusetts amendments

### Compliance Path #3: IECC Performance

- **Check** Meets C402.4, C403.2, C404, & C405
- **Check** Meet C402.3 Rooftop Solar Readiness*
- **Check** Attach COMcheck Report

#### For modeling in accordance with C407:

- Annual energy cost of proposed design not greater than 85% of annual energy cost of reference building per software calculations submitted by designer.
- Compliance report for permitting must include:
  1. A statement indicating that the proposed design complies with Section C407
  2. A site-specific energy analysis report
  3. The name of the individual performing the analysis and generating the report
  4. The name and version of the compliance software tool
  5. An inspection checklist documenting the building component characteristics of the proposed design, the results for both the standard reference design and the proposed design, and the user inputs to the compliance software to generate the results

#### Approved Alternative Energy Performance Methods (C407.6.1.1)

- **Passive House Institute US (PHIUS)**

  Compliance report for permitting shall comply with C407.6.1.2 and include:
  1. A statement indicating that the proposed design complies with the Option and has a Specific Space Heat Demand less than or equal to 10 kBtu/ft²/year
  2. The name of the Certified Passive House Consultant performing the analysis and generating the report
  3. An inspection checklist documenting the building component characteristics of the proposed design, and the user inputs to generate the results.

### Compliance Path #4: Massachusetts Residential Code

- **Check** ≤ 5 Stories or less (≤4 stories or less for stretch)
- **Check** All units are separately rated, separately metered, individually heated and cooled, and have kitchens
- **Check** Attach Residential Checklist

#### Option 1: RESNET

- Compliance report for permitting shall comply with C407.6.1.2-4 and include:
  1. A statement indicating that the proposed design complies with the Option and has a HERS score of 55 or less
  2. The name of the certified HERS Rater performing the analysis and generating the report
  3. An inspection checklist documenting the building component characteristics of the proposed design, and the user inputs to generate the results.

#### Option 2: Passive House Institute US (PHIUS)

- Compliance report for permitting shall comply with C407.6.1.2 and include:
  1. A statement indicating that the proposed design complies with the Option and has a Specific Space Heat Demand less than or equal to 10 kBtu/ft²/year
  2. The name of the Certified Passive House Consultant performing the analysis and generating the report
  3. An inspection checklist documenting the building component characteristics of the proposed design, and the user inputs to generate the results.

#### Option 3: ENERGY STAR Homes 3.1

- Compliance report for permitting shall comply with C407.6.1.2 and include:
  1. A statement indicating that the proposed design complies with the Option
  3. An inspection checklist documenting the building component characteristics of the proposed design, and the user inputs to generate the results.
## Required Construction Details

Indicate primary locations within the construction documentation of the following information:

<table>
<thead>
<tr>
<th></th>
<th>Drawing Page(s)</th>
<th>Specification(s)</th>
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<tbody>
<tr>
<td><strong>Building thermal envelope</strong></td>
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<tr>
<td>Cross section showing insulation R-values and materials for each building thermal envelope component</td>
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<tr>
<td>Cross section showing air barrier/air sealing details</td>
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<td>Fenestration U-factors and solar heat gain coefficients (SHGCs)</td>
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<td><strong>Mechanical systems</strong></td>
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<td>Design criteria</td>
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<td>Equipment types, sizes and efficiencies</td>
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<td>Controls description</td>
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<td>Pipe insulation</td>
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<td>Fan motor horsepower (hp) and controls</td>
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<td>Economizer description</td>
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<td>Duct sealing, insulation and location</td>
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<td>Service water heating systems</td>
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<td><strong>Lighting</strong></td>
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<td>Lighting fixture schedule with wattage and control narrative</td>
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<tr>
<td>Location of daylight zones of floor plans</td>
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## Commissioning Plan

- [ ] Preliminary Commissioning Plan from commissioning agent