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

**Select Compliance Path (C401.2):**

1. **ASHRAE Standard 90.1 or Massachusetts Stretch Code (select one below):**
   - [ ] Prescriptive: Provide plans and specifications demonstrating compliance with all measures of 90.1-2016 Section 5, 6.7,8,9.
   - [ ] Energy Cost Budget (Chapter 11): Provide plans and specifications demonstrating compliance with all 90.1-2016 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 90.1-2016 Section 11 of 90.1 2016.
   - [ ] Massachusetts Stretch Code: 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.

2. **IECC Prescriptive Path:** Provide plans and specifications demonstrating compliance with all measures of Sections C402 through C405, C406, and C408.

3. **IECC Performance Path:** Provide plans and specifications demonstrating compliance with all measures of Sections C402.3, C405, C407, C408. (select one option below)
   - [ ] Option 1: Energy Rating Index for Multifamily up to 5 stories
   - [ ] Option 2: Passive House (PHIUS+18 or PHI)

**Requirements for Chosen Compliance Path:**

### Compliance Path # 1: ASHRAE Standard 90.1-2016/MA Stretch Code

**Prescriptive Path and Energy Cost Budget (Chapter 11):**
- [ ] Attach COMcheck Report (Code = ASHRAE 90.1)
- [ ] Meet C402.3 Rooftop Solar Ready & C405.10 EV- Ready
- [ ] Indicate C406 Options Below

**Section C406 – Must Include Three (3) options**
- [ ] 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
- [ ] C406.8 Enhanced Env. Perf.
- [ ] C406.9 Reduced Air Infiltration
- [ ] C406.10 Renewable Space Heating
- [ ] C406.11 Type IV Heavy Timber Const.

**Performance Path: Energy Cost Budget (Chapter 11) or Appendix G:**
- [ ] A statement indicating that the proposed design complies with Chapter 11 or Appendix G
- [ ] A site-specific energy analysis report
- [ ] The name of the individual performing the analysis and generating the report
- [ ] The name and version of the compliance software tool

**Massachusetts Stretch Code:**
- [ ] 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 and show to be 10% better than 90.1-2013 Appendix G.
Compliance Path #2: IECC Prescriptive

- Attach COMcheck Report (Code = 2018 IECC)
- Meets C402 through C405
- Meet C402.3 Rooftop Solar Ready & C405.10 EV Ready
- Indicate C406 Options Below

Section C406 – Must Include Three (3) options
- 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
- C406.8 Enhanced Env. Perf.
- C406.9 Reduced Air Infiltration
- C406.10 Renewable Space Heating
- C406.11 Type IV Heavy Timber Const.

Compliance Path #3: IECC Performance

- Attach COMcheck Report (Code = 2018 IECC)
- Meet C402.3 Rooftop Solar Ready & C405.10 EV-Ready
- Meets C405, C407, C408

Multifamily ERI -based compliance in accordance with C407.1.1:

Compliance report for permitting shall comply with C407.5.1 and C407.6 and include:
- HERS compliance report with score of 55 or lower for each finished residential unit, attested to be ‘based on plans’.
- A site-specific description of unit’s energy features
- The name of the individual performing the analysis and generating the report
- The name and version of the compliance software tool

Passive House Institute US or Passive House Institute compliance with C407.1.2

Compliance report for permitting shall comply with C407.5.2 and C407.6 and include:
- A WUFI or PHPP compliance report showing proposed design complies with PHI/PHIUS+2018 performance requirements, and evidence of precertification approval from PHIUS or PHI.
- Statement that WUFI or PHPP results are based on plans.
- Certified Passive House consultant verifies compliance.

Construction Document Location:

Required Construction Details
Indicate primary locations within the construction documentation of the following information:

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

<table>
<thead>
<tr>
<th>Other Compliance Items</th>
<th>Drawing Page(s)</th>
<th>Specification(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar Ready roof zone in accordance with Appendix CA.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EV Ready Spaces locations in accordance with C405.10</td>
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<tr>
<td>COMcheck Reports (Mandatory, all Projects)</td>
<td></td>
<td></td>
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</tbody>
</table>

- Commissioning Plan - Preliminary Commissioning Plan from commissioning agent