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:**

**Compliance report for permitting must include:**
- [ ] 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)
- Meets 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

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

- Compliance report for permitting shall comply with C4057.5.2 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>
</tr>
<tr>
<td>Cross section showing air barrier/air sealing details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fenestration U-factors and solar heat gain coefficients (SHGCs)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mechanical systems**

- Design criteria
- Equipment types, sizes and efficiencies
- Controls description
- Pipe insulation
- Fan motor horsepower (hp) and controls
- Economizer description
- Duct sealing, insulation and location
- Service water heating systems
- Equipment types, sizes and efficiencies
- Controls description
- Pipe insulation and location

**Lighting**

- Lighting fixture schedule with wattage and control narrative
- Location of daylight zones of floor plans

**Other Compliance Items**

- Solar Ready roof zone in accordance with Appendix CA.
- EV Ready Spaces locations in accordance with C405.10
- COMcheck Reports (Mandatory, all Projects)

- **Commissioning Plan** - Preliminary Commissioning Plan from commissioning agent