A37 Small Project Climate Resiliency Checklist

Please use the Developer Portal to complete and submit the Checklist *AND* include a PDF copy of the completed Checklist Report downloaded from the Portal in the filing document. The Portal allows the project team to iteratively work on the Checklist until submitted. Subsequent updates can be made to the same Checklist and re-submitted. Provide a PDF copy of any updated Checklist Reports to the Planning Department.

This version is for informational use only and is NOT FOR FILING

Building Information

Question	Response	Comment
Building Name *(auto filled)*		
Related Project *(auto filled)*		
Building Street Address *(auto filled)*		
Select the type of Filing [Initial/SPRA, Design/Building Permit, Construction Completion] *		
Filing Contact Name *(auto filled)*		
Filing Contact Email *(auto filled)*		

Team

Enter the names of the companies/organizations on the project team.

Question	Response	Comment
Owner/Developer *(auto filled)*		
Architect *		
Landscape Architect *		
Mechanical Engineer *		
Sustainability		
Building Performance Modeler		
Civil Engineer		
Permitting		
Construction Management		

Proposed Building Design

Question	Response	Comment
Site Area (SF)		
Building Gross Square Feet *(auto filled)*		
Building Gross Floor Area *(auto filled)*		

Info Tool Tip - Building Gross Floor Area: sum of all building areas ***excluding*** parking garage, basement, attic,

mechanical, storage, and similar non-conditioned spaces.

Building Height (Ft) *(auto filled)*

Building Height (Stories) *(auto filled)*

Building Envelope

When reporting U values, report total effective assembly U value including supports and structural elements.

Note: for any data (number) requests that are not applicable to this project, please enter a value of 0.

Question	Response	Comment
Roof U Value *		
Foundation Wall U Value *		
Exposed Floor U Value *		
Slab on Grade U Value *		
Building Infiltration Rate *		
Window to Wall Ratio (%) *		
Opaque Curtain Wall / Spandrel U Value *		
Opaque Framed Wall U Value *		
Vision Glazing/Window Type 1 U Value *		
Vision Glazing/Window Type 1 SHGC		
Vision Glazing/Window Type 2 U Value		
Vision Glazing/Window Type 2 SHGC		
Doors - U Value *		

Building Systems

Question	Response	Comment
Briefly describe the Space Heating/Cooling systems *		
Briefly describe the Domestic Hot Water Heating systems *		
Briefly describe any Energy Recovery Ventilation systems *		

Green Building Ratings & Certifications

Question	Response	Comment
Any / Additional third-party ratings and certifications?		

Modeled Carbon Emissions Performance

Using preliminary and predictive building performance modeling tools and BERDO 2035 Energy Emission Factors, report annual building energy use by energy type and calculate related totals and Carbon Emission Intensities (pCEI) for each building Use Type. Multiple Use Types sharing common systems should use a common energy intensity and pCEI. Small Second and Third Largest Uses not individually modeled should utilize a Use Type specific standard energy intensity to estimate annual

energy uses. The energy intensity standard should be noted and included in the Comment.

The A37 Carbon Emissions Calculator is provided to assist Project Teams with calculations and forecasting the resultant carbon emissions over time.

BERDO 2035 Emission Factors:
Grid Electricity: 0.0978 kg CO2e / kWh (includes Massachusetts Renewable Portfolio Standard)
Natural Gas 53.11 kg CO2e / MBtu.

Question	Response	Comment
For any "District Energy / Other" energy use, provide the Emission Factor (kg CO2e / MBtu)?		
Energy Code Compliance Pathway [Prescriptive, Targeted Performance/TEDI, Relative Performance/ASHRAE, Passive House/Phius or PHI, HERS] *		
Is the proposed project subject to the July 1, 2025, Zoning Article 37 Net Zero Carbon emissions standard? [Yes/No] *		

Largest Use

Note: For any data (number) requests that are not applicable, please enter a value of 0.

Question	Response	Comment
Building's Largest Use Type *		
Largest Use – Gross Floor Area * Info Tool Tip - Use Gross Floor Area: sum of use related areas excluding parking garage, basement, attic, mechanical, storage, and similar non-conditioned spaces.		
Largest Use - Annual Electric (kWh/yr) *		
Largest Use - Annual Gas (MBtu/yr) *		
Largest Use – Annual District Energy /Other (MBtu/yr) *		
Largest Use - Energy Amount Totals (MBtu/yr) *		
Largest Use - Energy Use Intensity (kBtu/sf-yr) *		
Largest Use – pCEI totals (kg CO2e/sf-yr) *		
Does the building have a Second Largest use that you would like to record pCEI performance for? [Y/N] *		

Second Largest Use

Note: For any data (number) requests that are not applicable, please enter a value of 0.

Question	Response	Comment
Building's Second Largest Use Type *		
Second Largest Use – Gross Floor Area *		
Second Largest Use - Annual Electric (kWh/yr) *		
Second Largest Use - Annual Gas (MBtu/yr) *		
Second Largest Use – Annual District Energy / Other (MBtu/yr) *		
Second Largest Use - Energy Amount Totals (MBtu/yr) *		
Second Largest Use - Energy Use Intensity (kBtu/sf-yr) *		

Second Largest Use – pCEI totals (kg CO2e/sf-yr) *

On-site Solar PV Renewable Energy

Note: Provide estimated or proposed system information. If "None Planned", enter 0.

Question	Response	Comment
Is Solar PV proposed for the building? * [TBD, None Planned, Solar Ready, Solar Installed with Construction]		
System Size (DC) (kW)		
Annual Output (kWh/yr)		

Whole Building & Net Totals

Provide and calculate related totals and Carbon Emission Intensities (pCEI) for the Whole Building. The A37 Carbon Emissions Calculator is provided to assist Project Teams with calculations and totals.

Note: for any data / number requests that are not applicable, please enter a value of 0.

Question	Response	Comment
Total Grid Electricity Use (kWh/yr) *(auto filled)*		
Total Natural Gas Use (MBtu/yr) *(auto filled)*		
Total District Energy / Other Use (MBtu/yr) *(auto filled)*		
Total Energy Use (Mbtu/yr) *(auto filled)*		
Total Use Gross Floor Area *(auto filled)*		
Building 2035 pCEI (kg CO2e/sf-yr) *(auto filled)* Info Tool Tip - Building 2035 pCEI is auto-calculated using the weighted 2035 pCEI value for each use **not** including any Solar PV generation.		
PV Annual Output (kWh/yr) *(auto filled)*		
Net Electricity Use (kWh/yr) *(auto filled)* Info Tool Tip - Net Electricity Use is calculated using Total Grid Electricity Use less any PV Annual Output.		
Net 2035 pCEI (kg CO2e/sf-yr) *(auto filled)* Info Tool Tip - Net 2035 pCEI is auto-calculated using Net Electricity Emissions (**including** Solar PV), Total Natural Gas, and Total District Energy / Other.		
Peak Heating Load (Btu/hr-sf) *		
Peak Cooling Load (Btu/hr-sf) *		
Percent Electrification Reduction in Heating (%) *		

On-site Energy Storage

Question	Response	Comment
Is Energy Storage proposed for the building? [Y/N] *		
Energy Storage System Type [Battery Energy Storage System, Thermal] *		
Storage System Size (MW) *		
Storage System Capacity (MWh) *		

Building Performance Assistance (Utility, State and Federal)

Question	Response	Comment
Has the project team met with utility representative for project assistance? [Yes/No] *		
Have the local utilities reviewed the predictive performance model? [Yes/No] *		
Will the project receive assistance? [Yes/No/TBD] *		
How much funding assistance? *		

Resiliency & Site Design

Coastal Resiliency

Using the BPDA Zoning Viewer (http://maps.bostonredevelopmentauthority.org/zoningviewer/), assess the susceptibility of the project site to current and future flooding.

Question	Response	Comment
Is any portion of the site in a FEMA SFHA zone? [Y/N] *		
Is any portion of the site in the BPDA Coastal Flood Resilience Overlay District? [Y/N] *		
What are the building's First Floor Building Uses? *		
Please specify the building's below grade uses? *		

Site and Building - Heat Island Reduction

Note: please enter a value of 0 for any data/number requests that do not apply to your project.

Question	Response	Comment
Meeting the LEED Heat Island Reduction Credit Criteria? [Yes/No]		
Site Area (SF) *(auto filled)*		
Site (Non-roof) Landscape Area (SF) *		
Site (Non-roof) Hardscape - Area (SF) *		
Site (Non-roof) Hardscape - SRI Value *		
Roof Surfaces - Area (SF) *(auto filled)*		
Roof Surfaces - SRI Value *		
Roof Vegetated Area (SF) *		
Meeting LEED Heat Island Mitigation with Cool Walls Pilot Credit Criteria? [Y/N]		

Site and Building - Storm Water Management & Green Infrastructure

BWSC requires buildings with GSF under 100,000 SF to infiltrate 1" of rainfall multiplied by the total impervious area.

Question	Response	Comment
Are any parcels across the entire project located in a Groundwater Conservation Overlay District (GCOD)? * Info Tool Tip - for more information on the Groundwater Conservation Overlay District, please refer to Boston Zoning Code Article 32		
Site Area (SF) *(auto filled)*		

Permeable Site Surfaces - Area (SF) *

Impervious Site Surfaces - Area (SF) *

Imp. Surfaces Water fr 1" of Rain (CF) *

Roof Surfaces - Area (SF) *(auto filled)*

Roofs - Water from 1" of Rain (CF) *

TOTAL - Water from 1'' of Rain (CF) * *(auto filled)*

Rain / Storm Water Reuse - Type (brief description) *

Rain / Storm Water Reuse - Amount (CF) *

Green Infrastructure - Type (brief description) *

Green Infrastructure - Amount (CF) *

Storm Water Retention - Type (brief description) *

Volume of Storm Water to be retained (CF) *

TOTAL Retention (CF) *(auto filled)*

END