

2020 Enterprise Green Communities Criteria Checklist: NYC Overlay April 6, 2020

1. INTEGRATIVE DESIGN

YES NO MAYBE **M**

1.1 Integrative Design – Project Priorities Survey

Complete the Project Priorities Survey, which can be found in the Appendix.

NYC OVERLAY: In addition to the above, all projects are REQUIRED to replace section 5, Climate and Environmental Resilience, of the Project Priorities Survey with the “Exposure Screening Tool” on pages 31-32 of the NYC Climate Resiliency Design Guidelines v3.0 (or most current version of the CRDG). Use that Exposure Screening Tool to determine whether your property has a low, medium, or high exposure rating for Heat, Precipitation, and Sea Level Rise. Projects are encouraged, but not required to perform the Next Steps outlined in the tool.

Projects are encouraged to analyze and select design strategies and criteria that mitigate risk from pertinent climate hazards with the methodology, datasets and assumptions established within the most current version of the CRDG.

NYC Climate Resiliency Design Guidelines:

www1.nyc.gov/assets/otr/pdf/NYC_Climate_Resiliency_Design_Guidelines_v3-0.pdf

YES NO MAYBE **M** **1-2**

1.2 Integrative Design – Charrettes & Coordination Meetings

Develop an integrative design process that moves the outputs of the Project Priorities Survey into action through a series of collaborative meetings. Prioritize multi-benefit strategies. Assign responsibility within your design and development teams for accountability.

NYC OVERLAY: Points are available for consulting with the NYC Accelerator during pre-development or schematic design: (1) point for consultation and (2) points for incorporating actionable strategies determined in the consultation.

NYC Accelerator: <https://retrofitaccelerator.cityofnewyork.us/>

YES NO MAYBE **M**

1.3 Integrative Design – Documentation

Include Enterprise Green Communities Criteria information in your contract documents and construction specifications (Division 1 Section 01 81 13 Sustainable Design Requirements) as necessary for the construction team to understand the requirements and how they will be verified. Ensure, and indicate, that the drawings and specifications have been generated to be compliant and meet certification goals.

YES NO MAYBE **M**

1.4 Integrative Design—Construction Management

Create, implement, and document your contractor/subcontractor education plan to ensure that all persons working on-site fully understand their role in achieving the project objectives. Include a summary of the Project Priorities Survey (Criterion 1.1), the sustainability goals, and anticipated roles of each party in regards to the performance expected of the project. Attach and reference this training plan to Division 1 Section 01 81 13 Sustainable Design Requirements. Include timeline estimates for performance testing and verification schedules in the overall construction schedule. As relevant, review requirements for Criterion 8.1, 8.2, and 8.3, and begin populating these documents with relevant information from design and construction.

YES NO MAYBE **12 or 15**

1.5 Design for Health and Well-Being: Health Action Plan

Follow Steps 1-6 (12 points and 3 extra points for Step 7) of the Health Action Plan framework per the full criterion. This includes: 1) Commit to embedding health into the project lifecycle 2) Partner with a project health professional 3) Collect and analyze community health data 4) Engage with community stakeholders to prioritize health data and strategies 5) Identify strategies to address those health issues 6) Create an implementation plan 7) Create a monitoring plan.

NYC OVERLAY: For projects following this optional criterion, see NYC Community Health Profiles (www1.nyc.gov/site/doh/data/data-publications/profiles.page) for neighborhood-specific health data during Step 3, Data Collection.

YES NO MAYBE **10**

1.6 Resilient Communities: Multi-Hazard / Vulnerability Assessment

Conduct a four-part assessment (social, physical, functional, strategy) to identify critical risk factors of your property and implement at least two sets of strategies to enable the project to adapt to, and mitigate, climate related or seismic risks. See full criterion for more guidance.

NYC OVERLAY: Projects that score a medium- or high- risk exposure rating in Heat, Precipitation, or Sea Level Rise from the Project Priorities Survey (Criterion 1.1) through the CRDG Exposure Screening Tool are highly encouraged to comply with this criterion. Refer to the Design Strategies Checklist (Appendix 4 in CRDG version 3.0) to inform strategies.

www1.nyc.gov/assets/orr/pdf/NYC_Climate_Resiliency_Design_Guidelines_v3-0.pdf

YES NO MAYBE **8**

1.7 Resilient Communities: Strengthening Cultural Resilience

Integrate community and resident participation in the development processes so that the built environment honors cultural identities, resident voices, and community histories.

Option 1: Complete a Cultural Resilience Assessment

OR

Option 2: Convene a Cultural Advisory Group

2. LOCATION + NEIGHBORHOOD FABRIC

YES NO MAYBE **M**

2.1 Sensitive Site Protection

All projects must:

1. Protect floodplain functions (e.g., storage, habitat, water quality) by limiting new development within the 100-year floodplain of all types of watercourses.
2. Conserve and protect aquatic ecosystems including wetlands and deepwater habitats that provide critical ecosystem functions for fish, other wildlife, and people.
3. Protect ecosystem function by avoiding the development of areas that contain habitat for plant and animal species identified as threatened or endangered.
4. Conserve the most productive agricultural soils by protecting prime farmland, unique farmland, and farmland of statewide or local importance.

If your site contains any of these ecologically sensitive features, follow the specific Requirements under that subheading.

YES NO MAYBE **M**

2.2 Connections to Existing Development and Infrastructure *(Mandatory for New Construction projects that do not qualify as Rural / Tribal / Small Town)*

Locate the project on a site with access to existing roads, water, sewers and other infrastructure and within or contiguous to (having at least 25% of the perimeter bordering) existing development. Connect the project to the existing pedestrian network. For sites over 5 acres, provide connections to the adjacent street network at least every 800 feet. Tie all planned bike paths to existing bike paths.

NYC OVERLAY: All projects are required to meet this criterion but no documentation is required; assumed as-of-right for NYC properties.

YES NO MAYBE **M**

2.3 Compact Development *(Mandatory for New Construction)*

At a minimum, build to the residential density (dwelling units/acre) of the census block group where the project is located. In Rural/Tribal/Small Town locations that do not have zoning requirements: Build to a minimum net density of 5 units per acre for single-family houses; 10 units per acre for multifamily buildings, single and two-story; and 15 units per acre for multifamily buildings greater than two-stories.

NYC OVERLAY: All projects are required to meet this criterion but no documentation is required; assumed as-of-right for NYC properties.

YES NO MAYBE **5 or 7**

2.4 Compact Development

Exceed the residential density (dwelling units/acre) of the census block group in which your project is located. Exceed by 2x for [5 points]; exceed by 3x for [7 points]. In rural/tribal/small towns that do not have zoning requirements, build to a minimum net density of 7.5 units per acre for single-family houses; 12 units per acre for multifamily buildings, single and two-story; and 20 units per acre for multifamily buildings greater than two stories. [5 points]

YES NO MAYBE **M**

2.5 Proximity to Services *(Mandatory for New Construction)*

Locate the project within a 0.5-mile walk distance of at least four, or a 1-mile walk distance of at least seven, of the listed services. For projects that qualify as Rural/Tribal/Small Town, locate the project within 5 miles of at least four of the listed services.

NYC OVERLAY: All projects are required to meet this criterion but no documentation is required; assumed as-of-right for NYC properties.

YES NO MAYBE **M**

2.6 Preservation of and Access to Open Space for Rural/Tribal/Small Towns

(Mandatory for New Construction Rural/Tribal/Small Towns)

Option 1: Locate the project within a 0.25-mile walk distance of dedicated public open space that is a minimum of 0.75 acres; at least 80% of which un-paved.

OR

Option 2: Set aside a minimum of 10% (minimum of 0.25 acres) of the total project acreage as open and accessible to all residents; at least 80% of which un-paved.

YES NO MAYBE **6 max**

2.7 Preservation of and Access to Open Space

Option 1: Locate the project within a 0.25-mile walk distance of dedicated open space that is a minimum of 0.75 acres; at least 80% of which un-paved.

OR

Set aside a percentage of permanent open space for use by all residents; at least 80% of which un-paved. 20% [4 points]; 35% [4 points]; 45% + written statement of preservation/conservation policy [6 points].

YES NO MAYBE **M / 2,6,8**

2.8 Access to Transit *(Mandatory for New Construction projects that do not qualify as Rural/Tribal/Small Towns; Optional for all other project types)*

New Construction, not Rural/Tribal/Small Towns

Mandatory: Locate projects within a 0.5-mile walk distance of transit services (bus, rail and/or ferry), constituting at least 45 or more transit rides per weekday, with some type of weekend service.

Optional, 2 points: Locate the project along dedicated bike trails or lanes (Class I, II, or IV) that lead to high-quality transit services (100 trips per day) within 3 miles.

Rehabilitation, not Rural/Tribal/Small Towns

Optional, 2, 6, or 8 points: Locate projects within a 0.5-mile walk distance of public transit services (bus, rail and/or ferry), constituting at least 45 or more transit rides per weekday, with some type of weekend service. (6 points) Locate the project along dedicated bike trails or lanes (Class I, II, or IV) that lead to high-quality transit services (100 trips per day) within 3 miles. [2 points].

New Construction and Rehabilitation, Rural/Tribal/Small Towns

Optional, 6 points: Locate the project within 0.5 mile walk distance of public transit services with at least 45 rides per weekday and some weekend service, OR, Install at least two charging stations for electric vehicles, OR, Locate the project within 5 miles of one of the following transit options: 1) vehicle share program; 2) dial-a-ride program; 3) employer vanpool; 4) park-and-ride; or 5) public-private regional transportation.

NYC OVERLAY: All projects are required to meet the component of this criterion regarding distance between project and transit services, but no documentation is required; assumed as-of-right for NYC properties.

Points are still available for projects that demonstrate that they also qualify for the bike lanes component of the criterion.

And, points are available for New Construction or Rehabilitation projects that demonstrate that they have received approval for a reduction in parking minimums for the project.

<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	2–8	2.9 Improving Connectivity to the Community Improve access to community amenities through at least one of the options incentivizing biking mobility or improving access to transit.
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	5 max	2.10 Passive Solar Heating/Cooling Design and build with passive solar design, orientation and shading that meet the guidelines specified. NYC OVERLAY: New Construction projects may also achieve points for this criterion through the window shading option described in the criterion. 1 point is also available for projects that demonstrate that more than 50% of non-roof paved areas are shaded with either plant material or structures.
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	6	2.11 Adaptive Reuse of Buildings Rehabilitate and adapt an existing structure that was not previously used as housing. Design the project to adapt, renovate, or reuse at least 50% of the existing structure and envelope.
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	6	2.12 Access to Fresh, Local Foods Provide residents and staff with access to fresh, local foods, through <i>Option 1:</i> Neighborhood Farms and Gardens; <i>Option 2:</i> Community-Supported Agriculture; or <i>Option 3:</i> Proximity to Farmers Markets. NYC OVERLAY: If selecting <i>Option 3</i> , projects may comply by being within the proximity from a Farmers Market as described in the criterion or from a market or grocery that meets the definition of FRESH. For more information on FRESH, see https://edc.nyc/program/food-retail-expansion-support-health-fresh
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	8	2.13 Advanced Certification: Site Planning, Design, and Management Locate building(s) within a community that is certified in LEED for Neighborhood Development, LEED for Cities and Communities, Living Community Challenge, or SITES.
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	6 max	2.14 Local Economic Development and Community Wealth Creation Demonstrate that local preference for construction employment and subcontractor hiring was part of your bidding process, and how it functioned during construction [2 points] OR demonstrate that you achieved at least 20% local employment [3 points] OR provide physical space for small business, nonprofits, and /or skills and workforce education [3 points]. NYC OVERLAY: Projects financed by HPD and receiving more than \$2 million in City subsidy meet Option 1 as-of-right. HPD also encourages, for all projects, participation in the M/WBE Building Opportunity Initiative: www1.nyc.gov/site/hpd/developers/building-opportunity-initiative.page Note that for Option 3: Physical Space, project teams can work with local development corporations to receive tax credits from the Department of Finance for integrating support of non-profits as part of efforts to secure funding.
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	M	2.15a Access to Broadband: Broadband Ready (Mandatory for New Construction and Substantial Rehab Projects in Rural/Tribal/Small Town Locations) Incorporate broadband infrastructure so that when broadband service comes to a community, the property can be easily connected. Include a network of mini-ducts or conduit throughout the building extending from the expected communications access point to each network termination point in the building.
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	6	2.15b Access to Broadband: Connectivity (Optional for NYC Overlay and Rural/Tribal/Small Town) Ensure all units and common spaces in the property have broadband internet access with at least a speed of 25/3 mbs. NYC OVERLAY: NYC Overlay projects may either earn 6 points by following the full criterion as written or may earn 3 points for providing broadband internet access with at least a speed of 25/3 mbs in all project common amenity areas (including lobbies and community rooms but not required to include corridors and stairwells and exterior areas), available to residents and staff.

3. SITE IMPROVEMENTS

YES NO MAYBE **M**

3.1 Environmental Remediation

Determine whether there are any hazardous materials present on the site through one of the four methods listed. Mitigate any contaminants found.

NYC OVERLAY, HPD FINANCED PROJECTS ONLY: New Construction, Third Party Transfer, and Participation Loan Program projects require Phase 1 Environmental Assessments and are considered in compliance with this criterion without further documentation. All other projects must comply with the applicable environmental assessment requirements of the HPD programs. Projects not producing Phase 1 reports must submit a memo outlining the assessment and remediation measures taken.

YES NO MAYBE **M**

3.2 Minimization of Disturbance during Staging and Construction

(For sites >1 acre, implement EPA's National Pollutant Discharge Elimination System)

Stormwater Discharges from Construction Activities guidance, or local requirements, whichever is more stringent. For sites with an area ≤1, follow guidance in full criterion.

YES NO MAYBE **M**

3.3 Ecosystem Services/Landscape (Mandatory, if providing landscaping)

If providing plantings, all must be native or climate-appropriate (adapted) to the region and appropriate to the site's soil and microclimate. Do not introduce any invasive. Plant, seed, or xeriscape all disturbed areas.

YES NO MAYBE **M**

3.4 Surface Stormwater Management (Mandatory for New Construction projects. Mandatory for Substantial Rehab and Moderate Rehab projects if land disturbed is ≥ 5,000 ft²)

Treat or retain on-site precipitation equivalent to the 60th percentile precipitation event. Where not feasible due to geotechnical issues, soil conditions, or the size of the site, treat or retain the maximum volume possible.

NYC OVERLAY: All projects are required to meet this criterion but no documentation is required; assumed as-of-right for NYC properties.

Note that in 2021, there will be new NYC requirements for Municipal Separate Storm Sewer System (MS4)/Combined Sewer System (CSS) for new or redeveloped sites that disturb ≥ 20,000 ft² of soil or increase impervious surfaces.

YES NO MAYBE **10 max**

3.5 Surface Stormwater Management

Through on-site infiltration, evapotranspiration, and rainwater harvesting, retain precipitation volume from 70th percentile precipitation event [6 points], 80th percentile precipitation event [8 points], or 90th percentile precipitation event [10 points].

NYC OVERLAY: Only one option, worth 6 points, is available, for those projects that retain at least 1 inch of stormwater from contributing area.

YES NO MAYBE **M**

3.6 Efficient Irrigation and Water Reuse (Mandatory if permanent irrigation is utilized)

If irrigation is utilized, install an efficient irrigation system per the requirements listed.

YES NO MAYBE

3.7 Efficient Irrigation and Water Reuse (Optional, if irrigation is utilized)

Meet the requirements of Criterion 3.6 AND:

4 **Option 1:** Install an efficient irrigation system equipped with a WaterSense-labeled weather-based irrigation controller (WBIC)

OR

6 **Option 2:** at least 50% of the site's irrigation satisfied by water use from the sources listed.

4. WATER

YES NO MAYBE **M**

4.1 Water-Conserving Fixtures

Reduce total indoor water consumption by at least 20% compared to baseline indoor water consumption chart. Any new toilet, showerhead, and/or lav faucet must be WaterSense certified. For all single-family homes and all dwelling units in buildings three stories or fewer, the supply pressure may not exceed 60 psi.

YES NO MAYBE **6 max**

4.2 Advanced Water Conservation

Reduce total indoor water consumption by at least 30% compared to baseline indoor water consumption chart. Any new toilet, showerhead, and/or lavatory faucet must be WaterSense certified.

NYC OVERLAY: Projects are REQUIRED to comply with this criterion

YES NO MAYBE **M / 11 max**

4.3 Water Quality

Mandatory for Substantial Rehabs of buildings built before 1986.

Optional for all other building types (3 points): Replace lead service lines.

Mandatory for multifamily buildings with either a cooling tower, a centralized hot water system, or 10+ stories: Develop a Legionella water management program.

Optional (8 points): Test and remediate as indicated for lead, nitrates, arsenic, and coliform bacteria.

NYC OVERLAY: New York State has a lead service line replacement program which can be of assistance for properties following the lead service line requirement.

Compliance with Local Law 77 of 2015, which addresses cooling towers and Legionella [Administrative Code section 28-317] aligns with the Legionella water management program requirements in this criterion; no documentation is required for compliance with this portion of the criterion.

NYC projects are still eligible for optional points for testing water quality as indicated.

YES NO MAYBE **4**

4.4 Monitoring Water Consumption and Leaks

Conduct pressure-loss tests and visual inspections to determine if there are leaks; fix any leaks found. **AND** Install an advanced water monitoring and leak detection system capable of identifying and shutting water off during anomalous water events. **OR** Install a device to separately monitor water consumption of each cold branch off the apartment line riser for each dwelling unit or each cold water riser and the domestic hot water cold water feed for each building or each toilet that allows remote monitor readings; common laundry facilities; boiler makeup water; outdoor water consumption; and water consumption in any non-residential space.

NYC OVERLAY: Projects are REQUIRED to comply with this criterion. For projects with remote monitors, ensure that data contract is turned over to building management at completion of project.

YES NO MAYBE **4**

4.5 Efficient Plumbing Layout and Design

Store no more than 0.5 gallon of water in any piping/manifold between the fixture and the water heating source or recirculation line. No more than 0.6 gallon of water shall be collected from the fixture before a 10-degree F rise in temperature is observed. Recirculation systems must be demand-initiated.

YES NO MAYBE **6 max**

4.6 Non-Potable Water Reuse

Harvest, treat, and reuse rainwater and/or greywater to meet a portion of the project's non-potable water needs: 10% reuse [3 points]; 20% reuse [4 points]; 30% reuse [5 points]; 40% reuse [6 points].

YES NO MAYBE **8**

4.7 Access to Potable Water During Emergencies

Provide residents with ready access to potable water in the event of an emergency that disrupts normal access to potable water, including disruptions related to power outages that prevent pumping water to upper floors of multifamily buildings or pumping of water from on-site wells, per one of the three options listed.

NYC OVERLAY: NYC Plumbing Code 614 states, "Buildings that supply potable water from the public water main for dwelling units and sleeping units in Occupancy Groups I-1, R-1, R-2, and R-3 with the assistance of pumps shall provide additional fixtures that in an emergency when such pumps are inoperable are capable of supplying potable water from the public water main to the building utilizing only the available pressure from the public water main. Such fixtures shall comply with Sections 614.1.1 through 614.1.5."

Buildings supplying potable water with the assistance of pumps as described in NYC Plumbing Code 614 meet Option 1 of Criterion 4.7 as-of-right; no documentation is required.

5. OPERATING ENERGY

YES NO MAYBE **M**

5.1a Building Performance Standard (*Mandatory, New Construction*)

Certify all buildings with residential units in the project through either ENERGY STAR Multifamily New Construction (MFNC), ENERGY STAR Manufactured Homes, and/or ENERGY STAR Certified Homes as relevant. **AND** Provide projected operating energy use intensity and projected operating building emissions intensity.

NYC OVERLAY: All projects are encouraged to analyze their EUI/GHG projections relative to Local Law 97 of 2019 targets for reference

YES NO MAYBE **M**

5.1b Building Performance Standard (*Mandatory, Rehab*)

Provide projected operating energy use intensity and projected operating building emissions intensity. **AND** Conduct commissioning for compartmentalization, insulation installation, and HVAC systems as indicated. **AND** one of the following options:

- **ERI:** ≤ HERS 80 for each dwelling unit; exception for some Rehabs built before 1980.
- **ASHRAE:** Energy performance of the completed building equivalent to, or better than, ASHRAE 90.1-2013 using an energy model created by a qualified energy services provider according to Appendix G 90.1-2016.

NYC OVERLAY: All projects are encouraged to analyze their EUI/GHG projections relative to Local Law 97 of 2019 targets for reference.

YES NO MAYBE **12 max**

5.2a Moving to Zero Energy: Additional Reductions in Energy Use

Not available for projects using prescriptive path for Criterion 5.1a or for projects following Criterion 5.2b or 5.4. Projects in CZ 1-4A following this criterion must also comply with Criterion 7.8 Dehumidification.

Design and construct a building that is projected to be more efficient than what is required by Criterion 5.1a/b. Achieve HERS score of 5 lower than required by Criterion 5.1a/b if following ERI path for compliance **OR** 5% greater efficiency than required if following ASHRAE path for 5.1a/b compliance [5 points].

Additional 1 point for each additional 2-point decrease in HERS score required by Criterion 5.1a/b if following ERI path for compliance **OR** for 1% greater efficiency if following ASHRAE path for 5.1a/b, up to a maximum of 12 optional points.

NYC OVERLAY: Projects are strongly encouraged to comply with this criterion to the maximum extent feasible.

YES NO MAYBE **12-15**

5.2b Moving to Zero Energy: Near Zero Certification (*A Qualifying Option for Enterprise Green Communities Certification Plus*)

Not available for projects following Criterion 5.2a or 5.4.

Projects in CZ 1-4A following this criterion must also comply with Criterion 7.8 Dehumidification.

Certify the project in a program that requires advanced levels of building envelope performance such as DOE Zero Energy Ready Home (12 points) and/or PHI Classic or PHIUS+ (15 points).

NYC OVERLAY: Projects are encouraged to comply with this criterion. Projects meeting this criterion are more likely to meet future carbon targets. Note that financial incentives associated with NYSERDA programs may be available for projects in compliance with this criterion.

YES NO MAYBE **3-6**

5.3a Moving to Zero Energy: Photovoltaic/Solar Hot Water Ready

Not available for projects following Criterion 5.4.

Orient, design, engineer, wire and /or plumb the development through the Photovoltaic Ready pathway (3 points) and/or Solar Hot Water Ready Pathway (3 points) to accommodate installation of photovoltaic (PV) or solar hot water system in the future.

NYC OVERLAY: Projects not installing solar per Criterion 5.3b are strongly encouraged to comply with this optional criterion.

YES NO MAYBE **8 max**

5.3b Moving to Zero Energy: Renewable Energy

Not available for projects following Criterion 5.4.

Install a renewable energy source to provide a specified percentage of the project's estimated source energy demand. See full criterion for allowable sources. Option 1 (4-8 points) for percentage of total project energy consumption provided by renewable energy. Option 2 (1-5 points) for percentage of common area meter energy consumption provided by renewable energy

NYC OVERLAY: All HPD-financed projects are REQUIRED to submit an HPD Solar Approval Form and to either install solar to the extent determined by HPD's Solar Feasibility Analysis and as approved by HPD, install a green roof over 90% of the project's sustainable roofing zone, or comply with LL92/94.

If the project has a solar array and it offsets less energy consumption than included on the points chart, 1 point will be granted to the project if at least 90% of the project's "sustainable roofing zone" includes solar.

YES NO MAYBE **24**

5.4 Achieving Zero Energy (A Qualifying Option for Enterprise Green Communities Certification Plus)

Not available for projects following Criterion 5.2a, 5.2b, 5.3a, or 5.3b.

Projects in CZ 1-4A following this criterion must also comply with Criterion 7.8 Dehumidification.

Achieve Zero Energy performance through one of the following options:

Option 1: Certify each building in the project to DOE Zero Energy Ready Home program or PHI Plus AND either install renewables and/or procure renewable energy, which in sum will produce as much, or more, energy in a given year than the project is modeled to consume. OR

Option 2: Certify each building in the project in a program that requires zero energy performance such as PHIUS+ Source Zero, PHI Plus, PHI Premium, ILFI's Zero Energy Petal, Zero Carbon Petal, or Living Building Certification.

NYC OVERLAY: Financial incentives associated with NYSERDA programs may be available for projects in compliance with this criterion.

YES NO MAYBE **5 max**

5.5a Moving to Zero Carbon: All-Electric Ready

(Not available for projects following Criterion 5.5b)

Ensure the project has adequate electric service and has been designed and wired to allow for a seamless switch to electricity as a fuel source in the future for the following uses: space heating [1 point], space cooling [1 point], water heating (DHW) [1 point], clothes dryers [1 point], equipment for cooking [1 point].

YES NO MAYBE **6-15**

5.5b Moving to Zero Carbon: All Electric

Not available for projects following Criterion 5.5a

No combustion equipment used as part of the building project; the project is all-electric.

NYC OVERLAY: Projects may earn 15 points through the full criterion as written above.

OR, projects may earn 6 points for limiting combustion equipment solely to domestic hot water heating. Combustion-fueled emergency backup power sources are allowed.

Compliance with this criterion may aid in your project's compliance with future carbon targets.

YES NO MAYBE **M**

5.6 Sizing of Heating and Cooling Equipment (Mandatory for Substantial and Moderate Rehabs that include replacement of heating and cooling equipment. Not relevant for projects following 5.1a, 5.2b, or 5.4)

Size and select heating and cooling equipment in accordance with ACCA manuals J and S OR in accordance with the ASHRAE Handbook of Fundamentals

YES NO MAYBE **M**

5.7 ENERGY STAR Appliances (Mandatory for Substantial and Moderate Rehabs providing appliances. Not relevant for projects following 5.1a, 5.2b, or 5.4)

Install ENERGY STAR clothes washers, dishwashers, and refrigerators. If appliances will not be installed or replaced at this time, specify that at the time of installation or replacement, ENERGY STAR models must be used via Criterion 8.1 and Criterion 8.4.

YES NO MAYBE **M**

5.8 Lighting (Mandatory for all lighting within New Construction and Substantial Rehab projects. Mandatory for new lighting in Moderate Rehab projects)

Follow the guidance for high-efficacy permanently installed lighting and other characteristics for recessed light fixtures, occupancy sensors, lighting power density, and exterior lighting.

YES NO MAYBE **2-8**

5.9 Resilient Energy Systems: Floodproofing

Not relevant for Rehabilitation projects in Special Flood Hazard Areas

Conduct floodproofing of lower floors, including perimeter floodproofing (barriers/shields). Design and install building systems as specified by the full criterion so that the operation of those systems will not be grossly affected in case of a flood.

NYC OVERLAY: All NYC projects located within the FEMA 100-year flood zone are already required to comply with NYC Building Code Appendix G: Flood-Resistant Construction. Points can be achieved through this optional criterion for all projects within current and future flood zones by going above and beyond building code to mitigate future flood risk. Rather than following the national criterion, see available options below.

To determine if Appendix G is applicable, please refer to the NYC Building Code. See Climate Resiliency Design Guidelines (CRDG) for guidance on how to identify future flood risk and to calculate the appropriate sea-level-rise-adjusted Design Flood Elevation (DFE).

For projects in the current flood zone:

Comply with Appendix G, but use the sea-level-rise-adjusted design flood elevation DFE based on the project's useful life and as defined in the CRDG. This means locating all residential uses, mechanicals, and services critical to building function above the sea-level-rise-adjusted DFE. (8 points)

OR

Comply with Appendix G, and also locate mechanicals, services critical to building function, and at least one point of egress above the sea-level-rise-adjusted DFE based on the project's useful life and as defined in the CRDG. (6 points)

OR

Provide additional flood mitigation features on the site including deployable flood barriers (e.g. stop logs, flood doors/gates, inflatable barriers) or natural systems-based approaches (e.g. living shorelines, restored wetlands, landscape berms). (4 points)

For projects in future flood zones, based on the project's useful life and as defined by the CRDG:

Locate residential uses, mechanicals, services critical to building function, and at least one point of egress above the sea-level-rise-adjusted DFE based on the project's useful life and as defined in the CRDG. (8 points)

OR

Locate mechanicals, services critical to building function, and at least one point of egress above the sea-level-rise-adjusted DFE, based on the project's useful life and as defined in the CRDG. (6 points)

OR

Provide additional flood mitigation features on the site, including deployable flood barriers (e.g. stop logs, flood doors/gates, inflatable barriers) or natural systems-based approaches (e.g. living shorelines, restored wetlands, landscape berms). (4 points)

OR

Substantial or Moderate Rehabs only: Install backflow prevents/backwater valves or encapsulate mechanical equipment in place. (2 points)

YES NO MAYBE **4-8**

5.10 Resilient Energy Systems: Critical Loads

Provide emergency power to serve at least three critical energy loads as described by the full criterion.
Option 1: Islandable photovoltaic system **OR** *Option 2:* Efficient generator.

NYC OVERLAY: Projects, particularly those servicing vulnerable populations, are encouraged to comply with this criterion. Projects may receive 4 points if, for at least one community room in the property that is easily accessed by residents, they provide emergency backup power for cooling, heating, internet access, refrigeration for medicines, charging stations, and minimum electric loads for lighting. Projects may receive 8 points if they comply with the full criterion as written, including preparing to serve critical loads in the project's community rooms, if the project has such a facility.

6. MATERIALS

YES NO MAYBE **8 max**

6.1 Ingredient Transparency for Material Health

Install products that have publicly disclosed inventories characterized and screened to 1,000 ppm or better:

- 1 point per 5 installed Declare or HPD products from at least three different product categories
- 1 point per 2 installed Declare or HPD products in any of these categories: adhesives, sealants, windows
- 1 point per each product with third-party verified HPD or third party verified Declare Label
- 2 points per each product with third-party verified HPD or third party verified Declare Label in any of these categories: adhesives, sealants, windows

YES NO MAYBE **3 max**

6.2 Recycled Content and Ingredient Transparency

Use building products that feature, and disclose, their recycled content. The building product must make up 75% by weight or cost of a project category for the project and be composed of at least 25% post-consumer recycled content.

YES NO MAYBE **8 max**

6.3 Chemical Hazard Optimization

Install products that have third-party verification of optimization to 100 ppm or better per the options listed within the full criterion.

YES NO MAYBE **M**

6.4 Healthier Material Selection

Select all interior paints, coatings, primers, and wallpaper; interior adhesives and sealants; flooring; insulation; and composite wood as specified. Optional points also available.

YES NO MAYBE **12 max**

6.5 Environmentally Responsible Material Selection

Select concrete, steel, or insulation with a publicly disclosed EPD (3 points), install a green or cool roof (3 points), use reflective paving (3 points), and/or use FSC certified wood (3 points). Refer to criterion for specifics.

NYC OVERLAY: Projects are encouraged to comply with the first component of this criterion [Select concrete, steel, or insulation with a publicly disclosed EPD (3 points)]

Projects are encouraged to comply with the second component of this criterion [Install a green or cool roof (3 points)]. However, points are only available for the green roof aspect, not the cool roof aspect. Note that projects complying with this option will be eligible to waive the solar requirement of the NYC Overlay requiring solar installation—see Criterion 5.3b.

Projects are encouraged to comply with the third component of this criterion [Use reflective paving (3 points)]. Points are also available for the fourth component of this criterion [FSC certified wood installation (3 points)].

YES NO MAYBE **M**

6.6 Bath, Kitchen, Laundry Surfaces (Mandatory for New Construction and Substantial Rehab. Moderate Rehabs that do not include work in the shower and tub areas are exempt from the shower and tub enclosure requirement.)

Use materials that have durable, cleanable surfaces throughout bathrooms, kitchens and laundry rooms.

Use moisture-resistant backing materials per ASTM # D 6329 or 3273 behind tub/shower enclosures, apart from one-piece fiberglass enclosures which are exempt.

YES NO MAYBE **4 max**

6.7 Regional Materials

Use products that were extracted, processed, and manufactured within 500 miles of the project for a minimum of 90%, based on weight or on cost, of the amount of the product category installed. Select any or all of these options (every two compliant materials can qualify for 1 point):

- Framing
- Cladding (e.g. siding, masonry, roofing)
- Flooring
- Concrete/cement and aggregate
- Drywall/interior sheathing

YES NO MAYBE **M**

6.8 Managing Moisture: Foundations (Mandatory for all New Construction projects and all Rehab projects with either basement and/or crawl space foundations)

Install capillary breaks and vapor retarders that meet specified criteria appropriate for the foundation type.

YES NO MAYBE **M**

6.9 Managing Moisture: Roofing and Wall Systems (Mandatory for all Rehab projects that include deficiencies in or include replacing particular assemblies called out below. New Construction projects are considered compliant per Criterion 5.1)

Provide water drainage away from walls, window, and roofs by implementing the list of techniques.

YES NO MAYBE **M / 6 max**

6.10 Construction Waste Management

Develop and implement a waste management plan that reduces non-hazardous construction and demolition waste through recycling, salvaging, or diversion strategies through one of the three options. Achieve optional points by going above and beyond the requirement.

NYC OVERLAY: Projects are encouraged to utilize the Department of Sanitation's donateNYC website to post donations of unwanted but usable building materials and to donate materials to donateNYC partners such as BIGReuse and Rebuilding Together NYC. Also refer to these resources for waste salvage: www.bigreuse.org/ and <https://rebuildingtogethernyc.org/>

YES NO MAYBE **2**

6.11 Recycling Storage

For projects with municipal recycling infrastructure and/or haulers, provide separate bins for the collection of trash and recycling for each dwelling unit and all shared community rooms. **OR** For projects without that infrastructure, advocate to the local waste hauler or municipality for regular collection of recyclables.

NYC OVERLAY: Projects are REQUIRED to comply with this criterion and must also either allocate space for collection of organics or allocate additional space for the collection of cardboard or allocate space for at least one future recycling stream in all waste collection areas. This allocation of extra space must be clearly marked on plans and may either be in each dwelling unit, in each trash room, or outdoors.

Projects are encouraged to refer to the Zero Waste Design Guidelines for best design practices: <https://www.zerowastedesign.org/>

New Construction projects are encouraged to consult with the Department of Sanitation on space allocation for waste management. DSNY recommends a waste management plan for buildings with over 150 units and containerized waste collection for buildings with over 300 units.

7. HEALTHY LIVING ENVIRONMENT

YES NO MAYBE **M**

7.1 Radon Mitigation (Mandatory for New Construction and Substantial Rehab)

For New Construction in EPA Zone 1 areas, install passive radon-resistant features below the slab and a vertical vent pipe with junction box within 10 feet of an electrical outlet in case an active system should prove necessary in the future. For Substantial Rehab projects in EPA Zone 1, test before and after the retrofit and mitigate per the specified protocols.

YES NO MAYBE **M**

7.2 Reduce Lead Hazards in Pre-1978 Buildings (*Mandatory, Substantial Rehab of Buildings Constructed Before 1978*)

Conduct lead risk assessment or inspection to identify lead hazards. Control identified lead hazards using lead abatement or interim controls, using lead-safe work practices that minimize and contain dust.

NYC OVERLAY: Refer to Local Law 1 of 2004 for work practice requirements.

YES NO MAYBE **M**

7.3 Combustion Equipment

For new construction and rehab projects specify power-vented or direct-vent equipment when installing any new combustion appliance for space or water heating that will be located within the conditioned space. If there are any combustion appliances within the conditioned space, install one hard-wired carbon monoxide (CO) alarm with battery backup function for each sleeping zone, placed per NFPA 720.

Also in Rehabs, if there is any combustion equipment located within the conditioned space for space or water heating that is not power-vented or direct-vent and that is not scheduled for replacement, conduct combustion safety testing prior to and after the retrofit; remediate as indicated.

YES NO MAYBE **M**

7.4 Garage Isolation

- Provide a continuous air barrier between the conditioned space and any garage space to prevent the migration of any contaminants into the living space. Visually inspect common walls and ceilings between attached garages and living spaces to ensure that they are air-sealed before insulation is installed.
- Do not install ductwork or air handling equipment for the conditioned space in a garage.
- Fix all connecting doors between conditioned space and garage with gaskets or make airtight.
- Install one hard-wired carbon monoxide (CO) alarm with battery backup function for each sleeping zone of the project, placed per National Fire Protection Association (NFPA) 72 unless the garage is mechanically ventilated or an open parking structure.

YES NO MAYBE **M**

7.5 Integrated Pest Management

Seal all wall, floor, and joint penetrations with low-VOC caulking or other appropriate nontoxic sealing methods to prevent pest entry.

NYC OVERLAY: All projects are encouraged to design garbage and recycling areas for easy cleaning and pest prevention. Refer to NYC Department of Health and Mental Hygiene Rat Academy resources <https://www1.nyc.gov/site/doh/health/health-topics/rodent-academy.page> and the San Francisco “Pest Prevention by Design: Authoritative Guidelines for Designing Pests Out of Structures,” Principles 17.1 and 17.2.

Before starting Substantial Rehab projects, projects are encouraged to engage with building maintenance staff and residents to identify and correct existing problems with trash collection and storage areas (e.g. inadequate space in trash rooms; narrow stairs; improper signage; unsafe access to exterior trash bins; etc.) (Reference Criterion 1.2)

YES NO MAYBE **M / 10**

7.6 Smoke-Free Policy (*Mandatory and Optional 10 Points*)

Mandatory: Implement and enforce a smoke-free policy in all common area and within a 25-foot perimeter around the exterior of all residential buildings. Lease language must prohibit smoking in these locations and provide a graduated enforcement policy. Make the smoke-free policy readily available.

Optional: Expand the policy above to include all indoor spaces in the property.

NYC OVERLAY: Properties, except those serving 100% permanent supportive housing residents, are **REQUIRED** to expand the policy to include all indoor spaces in the property. For guidance, please see “Resources” in the full 2020 Criteria, which includes the NYC Department of Health and Mental Hygiene’s Smoke-Free Housing Resources.

YES NO MAYBE **M / 12 max**

7.7 Ventilation (*Mandatory, New Construction and Substantial Rehab. Optional, Moderate Rehab*)

For each dwelling unit in full accordance with ASHRAE 62.2-2010, install:

- A local mechanical exhaust system in each bathroom [3 points if Moderate Rehab]
- A local mechanical exhaust system in each kitchen [3 points if Moderate Rehab]
- A whole-house mechanical ventilation system [3 points if Moderate Rehab]

- Verify these flow rates are either within +/- 15 CFM or +/- 15% of design value.

For each multifamily building of four or more stories, in full accordance with ASHRAE 62.1-2010, install:

- A mechanical ventilation system for all hallways and common spaces [3 points if Moderate Rehab]

For all project types, in addition to the above requirements:

- All systems and ductwork must be installed per manufacturer's recommendations
- All individual bathroom fans must be ENERGY STAR-labeled and wired for adequate run-time.

If using central ventilation systems with rooftop fans, each fan must be direct-drive and variable-speed with speed controller mounted near the fan. Fans with design CFM 300-2000 must also have an ECM motor.

NYC OVERLAY: All new construction and substantial rehab projects with mechanical exhaust ventilation are REQUIRED to specify properly sealed ductwork and specify a means of exhaust balancing. Constant Airflow Regulators are recommended. All substantial rehab projects with existing central exhaust ventilation systems are REQUIRED to specify cleaning, sealing, balancing, and right-sizing roof-top fans. All moderate rehab projects with existing central exhaust ventilation systems are REQUIRED to calculate cost/benefit of cleaning, sealing, balancing, and right-sizing roof-top fans. All projects are encouraged to incorporate performance-based ventilation specifications in their construction documents.

It is recommended that projects also consider natural ventilation. Note that window limiters are not required in units without children 10 years old or younger (Local Law 57 of 2011): project teams should provide tenants living in dwelling units without children the option of removing window limiters as part of the annual window guard notice.

In addition to the above, 1 point will be given to projects that provide window screens on all operable windows and 1 point for providing ENERGY STAR ceiling fans in all residential units.

YES NO MAYBE **M OR 5**

7.8 Dehumidification (Mandatory for properties in Climate Zones 1A, 2A, 3A and 4A following Criterion 5.2a, 5.2b or 5.4. Optional for all other properties)

Option 1: Design, select, and install supplemental dehumidification equipment to keep relative humidity <60%.

OR

Option 2: Equip all dwelling units with dedicated space, drain, and electrical hook-ups for permanent supplemental dehumidification systems to be installed if needed and install interior RH monitoring equipment as described.

YES NO MAYBE **3**

7.9 Construction Pollution Management

Option 1: Earn the EPA Indoor airPlus label OR

Option 2: In all dwelling units, seal all heating, cooling, and ventilation return and supply ducts and returns throughout construction to prevent construction debris from entering. Flush all dwelling units after completion of construction and prior to occupancy either for either 48 hours or with at least 14,000 ft3 per ft2 of floor area, then, replace all air handling equipment filters.

NYC OVERLAY: Projects are REQUIRED to comply with this criterion.

YES NO MAYBE **3**

7.10 Noise Reduction

Option 1: Test and demonstrate that noise levels in bedrooms meet 30 dB LAeq (continuous) and 45 dB LAmx, (single sound) OR

Option 2: Provide a noise abatement plan specific to the site covering general noise mitigation techniques in accordance with 24 CFR 51B. OR

Option 3: Ensure all exterior wall and party wall penetrations are sealed with acoustical sealant, all party walls and floor/ceiling assemblies have an STC rating of at least 55, and exterior windows and doors in projects near a significant exterior noise source have an STC rating of at least 35.

YES NO MAYBE **8**

7.11 Active Design: Promoting Physical Activity *(All projects must comply with at least one of either 7.11, 7.12, or 7.13. No points are available for one criterion, but points are available for projects that meet two or three of these criteria.)*

Option 1: Encouraging Everyday Stair Usage. (Buildings that include stairs as the only means to travel from one floor to another are not eligible for this option). Provide a staircase that is accessible and visible from the main lobby and is visible within a 25-foot walking distance from any point in the lobby per the specifications listed. Place point-of-decision signage. **OR**

Option 2: Activity Spaces. Provide on-site dedicated recreation space with exercise or play opportunities for adults and/or children that is open and accessible to all residents; see criterion for specifics.

NYC OVERLAY: Projects are encouraged to assess opportunities to implement Active Design. Executive Order 359, signed in 2013, requires relevant NYC agencies to review all projects undergoing major renovation and construction to assess opportunities for implementation of Active Design Strategies. See the Resources listed for this criterion, particularly Affordable Designs for Affordable Housing.

YES NO MAYBE **8**

7.12 Beyond ADA: Universal Design *(All projects must comply with at least one of either 7.11, 7.12, or 7.13. No points are available for one criterion, but points are available for projects that meet two or three of these criteria.)*

Select and implement at least one of the Options with at least three different strategies in at least 75% units.

Option 1: Create welcoming and accessible spaces that encourage equitable use and social connections

Option 2: Create spaces that are easy and intuitive to use and navigate

Option 3: Promote safety and create spaces that allow for human error

Option 4: Create spaces that can be accessed and used with minimal physical effort

Option 5: Create spaces with the appropriate size and space to allow for use, whatever the user's form of mobility, size, or posture

YES NO MAYBE **8**

7.13 Healing-Centered Design *(All projects must comply with at least one of either 7.11, 7.12, or 7.13. No points are available for one criterion, but points are available for projects that meet two or three of these criteria.)*

Select and implement at least two of the Options with at least two different strategies listed in at least 75% units.

Option 1: Provide an environment that promotes feelings of real and perceived safety

Option 2: Create flexible spaces that allow for personalization and/or manipulation to meet individual and community needs

Option 3: Connect residents and staff to a living landscape and the natural environment.

Option 4: Utilize art and culture in project design and programming and promote social connectedness

8. OPERATIONS, MAINTENANCE, AND RESIDENT ENGAGEMENT

YES NO MAYBE **M**

8.1 Building Operations & Maintenance Manual and Plan *(For all multifamily projects)*

Develop a manual with thorough building operations and maintenance (O&M) guidance and a complementary plan. The manual and plan should be developed over the course of the project design, development and construction stages, and should include sections/chapters addressing the list of topics.

NYC OVERLAY: Note Current Facility Requirements (CFR) also may fit this criterion, and, building operators may be eligible for a free 30-hour Building Operator Training offered through CUNY's Building Performance Lab or 32BJ training fund.

Include the following guidance for waste in the manual: Containerize waste containing food to the extent possible to limit rodent access. Organic waste for collection shall be in a container with a latching lid. Do not set out material in bags in tree pits and clean curb daily after set out.

YES NO MAYBE **M**

8.2 Emergency Management Manual *(For all multifamily projects)*

Provide a manual on emergency operations targeted toward operations and maintenance staff and other building-level personnel. The manual should address responses to various types of emergencies, leading with those that have the greatest probability of negatively affecting the project. The manual should provide guidance as to how to sustain the delivery of adequate housing throughout an emergency and cover a range of topics, including but not limited to:

- communication plans for staff and residents
- useful contact information for public utility and other service providers
- infrastructure and building “shutdown” procedures
- plan for regular testing of backup energy systems, if these exist

NYC OVERLAY: In addition to the four items above, projects are REQUIRED to include the location of backup power and broadband (if any) within the property and how to locate outside emergency resources. Including the following links is recommended:

- Hurricane Resources: <https://www1.nyc.gov/assets/em/html/know-your-zone/knowyourzone.html>
- Emergency Shelters and Cooling centers: Call 311 or <https://maps.nyc.gov/oem/cc/inactive.html>
- Public Wifi: <https://www.link.nyc/>

These resources may be helpful: Ready New York (<https://www1.nyc.gov/site/em/ready/ready-new-york.page>), NYC Severe Weather resources for property owners (<https://www1.nyc.gov/site/severeweather/resources/resources.page>), NYC Emergency Management Community Emergency Response Team (https://nycem.samaritan.com/custom/505/#/volunteer_home)

YES NO MAYBE **M**

8.3 Resident Manual

Provide a guide for homeowners and renters that explains the intent, benefits, use and maintenance of their home’s green features and practices. The Resident Manual should encourage green and healthy activities per the list of topics.

NYC OVERLAY: In addition to the requirements listed in the Manual, projects are REQUIRED to include information about accessibility and emergency features available to tenants (i.e. grab bars, kitchen adaptations or pull cord system). Manuals must also include guidance that tenants living in dwelling units without children may request that window limiters be removed as part of the annual window guard notice. And, include the location of backup power and broadband (if any) within the property and how to locate outside emergency resources.

The following resources will likely be helpful:

- NYC DOHMH Falls Prevention literature: "How to Prevent Falls Checklist" and "CDC: Checklist for Safety," both here: <https://www1.nyc.gov/site/doh/health/health-topics/healthy-aging-preventing-falls-in-older-adults.page>
- Hurricane Resources: <https://www1.nyc.gov/assets/em/html/know-your-zone/knowyourzone.html>
- Emergency Shelters and Cooling centers: Call 311 or <https://maps.nyc.gov/oem/cc/inactive.html>
- Public Wifi: <https://www.link.nyc/>

YES NO MAYBE **M**

8.4 Walk-Throughs and Orientations to Property Operation

Provide a comprehensive walk-through and orientation for all residents, property manager(s) and buildings operations staff.

YES NO MAYBE **M**

8.5 Energy and Water Data Collection and Monitoring

For rental properties, upload project energy and water performance data in an online utility benchmarking platform annually for at least 5 years from time of construction completion per one of the four methods provided; grant Enterprise view access for that period. For owner-occupied units, collect and monitor utility data in a manner that allows for easy access and review.

NYC OVERLAY: HPD’s Benchmarking Protocol (which all HPD-financed projects must follow for the duration of the regulatory term) satisfies compliance with this criterion if projects also grant Enterprise view access to the data. <https://www1.nyc.gov/site/hpd/developers/benchmarking-protocol.page>