

# 2020 CRITERIA CHECKLIST

This checklist provides an overview of the technical requirements within the Enterprise Green Communities Criteria.

To achieve Enterprise Green Communities Certification, all projects must achieve compliance with the Criteria mandatory measures applicable to that construction type. **New Construction projects must also achieve at least 40 optional points, and Substantial and Moderate Rehab projects must also achieve at least 35 optional points.**

**These projects that also comply with Criterion 5.2b or Criterion 5.4 will be recognized with Enterprise Green Communities Certification Plus.**

## 1. INTEGRATIVE DESIGN

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### 1.1 Integrative Design: Project Priorities Survey

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

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### 1.2 Integrative Design: Charrettes and 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.

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### 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 the certification goals.

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### 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 Criteria 8.1, 8.2, and 8.3, and begin populating these documents with relevant information from design and construction.

12 or 15

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

Follow Steps 1-6 of the Health Action Plan framework per the full criterion. *[12 points with extra 3 points for Step 7]* 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; and 7) Create a monitoring plan.

10

### 1.6 Resilient Communities: Multi-Hazard Risk/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.

### 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

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### 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.

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### 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.

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### 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.

5 or 7

### 2.4 Increased 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]*

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### 2.5 Proximity to Services and Community Resources

*(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.

## M

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

*(Mandatory for New Construction Rural/Tribal/Small Town)*

**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 unpaved.

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 unpaved.

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 unpaved.

OR

**Option 2:** Set aside a percentage of permanent open space for use by all residents; at least 80% of which unpaved. 20% [2 points]; 35% [4 points]; 45% + written statement of preservation/ conservation policy [6 points].

### 2.8 Access to Transit

*(Mandatory for New Construction projects that do not qualify as Rural/Tribal/Small Town; Optional for all other project types)*

**Mandatory: New Construction, not Rural/Tribal/Small Town**

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: New Construction, not Rural/Tribal/Small Town**

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]

**Optional: Rehabilitation, not Rural/Tribal/Small Town**

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]

**Optional: New Construction and Rehabilitation, Rural/Tribal/Small Town**

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 with 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; 5) public/private regional transportation.

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.

5 max

### 2.10 Passive Solar Heating/Cooling

Design and build with passive solar design, orientation, and shading that meet the guidelines specified.

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.

6

### 2.12 Access to Fresh, Local Foods

Provide residents and staff with access to fresh, local foods through one of the following options:

Option 1: Neighborhood Farms and Gardens

Option 2: Community-Supported Agriculture

Option 3: Proximity to Farmers Market

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.

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.

OR

Demonstrate that you achieved at least 20% local employment.

OR

Provide physical space for small business, nonprofits, and/or skills and workforce education.

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### 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.

6 max

### 2.15b Access to Broadband: Connectivity

Ensure all units and common spaces in the property have broadband internet access with at least a speed of 25/3 mbs.

## 3. SITE IMPROVEMENT

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### 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.

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### 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.

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 species. Plant, seed, or xeriscape all disturbed areas.

M

### 3.4 Surface Stormwater Management

*(Mandatory for New Construction; Mandatory for Substantial and Moderate Rehab projects if land disturbed is  $\geq 5,000$  sq.ft.)*

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.

10 max

### 3.5 Surface Stormwater Management

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

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.

4 or 6

### 3.7 Efficient Irrigation and Water Reuse

*(Optional, if irrigation is utilized)*

Meet the requirements of Criterion 3.6

AND:

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

OR

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

## 4. WATER

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### 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 lavatory 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.

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.

### 4.3 Water Quality

**Mandatory/Optional:** Mandatory for Substantial Rehabs of buildings built before 1986; Optional for all other building types: Replace lead service lines *[3 points]*

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

**Optional:** Test and remediate as indicated for lead, nitrates, arsenic, and coliform bacteria

4

### 4.4 Monitoring Water Consumption and Leaks

Conduct pressure-loss tests and visual inspections to determine if there are leaks; fix leaks.

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.

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 Fahrenheit rise in temperature is observed. Recirculation systems must be demand-initiated.

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]*.

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.

## 5. OPERATING ENERGY

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### 5.1a Building Performance Standard

*(Mandatory for New Construction)*

Certify all buildings with residential units in the project through either ENERGY STAR Multifamily New Construction, 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.

## M

### 5.1b Building Performance Standard

*(Mandatory for 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 Option: HERS 80 for each dwelling unit. Exception for some Rehabs built before 1980.
- ASHRAE Option: 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.

**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.

Design and construct a building that is projected to be more efficient than what is required by Criteria 5.1a/b. Achieve HERS score of 5 lower than required by 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 Criteria 5.1a/b if following ERI path for compliance OR for 1% greater efficiency if following ASHRAE path for Criteria 5.1a/b, up to a maximum of 12 optional points.

**12-15**

### 5.2b Moving to Zero Energy: Near Zero Certification

*[Automatic Qualification 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.

Certify the project in a program that requires advanced levels of building envelope performance such as DOE ZERH *[12 points]* and/or PHI Classic or PHIUS+ *[15 points]*.

**3-6**

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

*(Not available for projects following Criterion 5.3b or 5.4.)*

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

**8 max**

### 5.3b Moving to Zero Energy: Renewable Energy

*(Not available for projects following Criterion 5.3a or 5.4)*

Install renewable energy source to provide a specified percentage of the project's estimated source energy demand. See full criterion for allowable sources.

**Option 1:** For percentage of total project energy consumption provided by renewable energy.

OR

**Option 2:** For percentage of common area meter energy consumption provided by renewable energy.

**5.4 Achieving Zero Energy****[Automatic Qualification 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. 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.

**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].

**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.

**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

**M**

**5.7 ENERGY STAR Appliances**

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.

**M**

**5.8 Lighting**

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

**8**

**5.9 Resilient Energy Systems: Floodproofing**

*(Not relevant for Rehab 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.



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 PV system

OR

Option 2: Efficient generator

## 6. MATERIALS

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

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.

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.

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.

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.

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.

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

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.

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.

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.

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.

## 7. HEALTHY LIVING ENVIRONMENT

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### 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.

M

## 7.2 Reduce Lead Hazards in Pre-1978 Buildings

*(Mandatory for 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.

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 National Fire Protection Association (NFPA) 72.

**For 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.

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 CO alarm with battery backup function for each sleeping zone of the project, placed per NFPA 72 unless the garage is mechanically ventilated or an open parking structure.

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.

## 7.6 Smoke-Free Policy

*(Mandatory and Optional)*

**Mandatory:** Implement and enforce a smoke-free policy in all common areas 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.

**M**

**12 max**

### **7.7 Ventilation**

*(Mandatory for New Construction and Substantial Rehab; Optional for 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 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.

**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

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.

**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 floor ducts and returns throughout construction to prevent construction debris from entering. Flush all dwelling units after completion of construction and prior to occupancy for either 48 hours or with at least 14,000 ft<sup>3</sup> per ft<sup>2</sup> of floor area, then replace all air handling equipment filters.

### 3

#### 7.10 Noise Reduction

**Option 1:** Test and demonstrate that noise levels in bedrooms meet 30 dB LAeq (continuous) and 45 dB LMax, (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

### 8

#### 7.11 Active Design: Promoting Physical Activity

*(All projects must comply with at least one of either Criterion 7.11, 7.12, or 7.13. Points are not available for that criterion, but, 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.

### 8

#### 7.12 Beyond ADA: Universal Design

*(All projects must comply with at least one of either Criterion 7.11, 7.12, or 7.13. Points are not available for that criterion, but, 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.

### 7.13 Healing-Centered Design

*(All projects must comply with at least one of either Criterion 7.11, 7.12, or 7.13. Points are not available for that criterion, but 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 + RESIDENT ENGAGEMENT

### 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.

### 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

### 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.

### 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.

### 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 five 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.

Mandatory Criteria: of

Optional Points: of 40 of 35

