

New York City Overlay of the Enterprise Green Communities Criteria

(rev. August 1, 2016)

This document summarizes modifications and clarifications to the 2015 Enterprise Green Communities Criteria and Certification process for projects in New York City. For detailed technical guidance, please refer to the full 2015 Enterprise Green Communities Criteria: <http://www.enterprisecommunity.org/green>

Projects following this pathway must apply the New York City Overlay guidance as outlined in the checklist below and:

- Meet all mandatory measures applicable for the construction type,
- Achieve at least 35 optional points if new construction; achieve at least 30 optional points if rehabilitation,
- Submit for the PreBuild and PostBuild steps of Certification,
- And for those projects financed by HPD, the project architect, general contractor, and developer must attend a “Green Communities Healthy Homes Training” conducted by the New York City Department of Health and Mental Hygiene (DOHMH)

At all times, projects are encouraged to go beyond this minimum set of criteria to meet the development goals of the project. To demonstrate that the above has been achieved, follow the process below.

Process

Enterprise Green Communities Certification is a two-step process (PreBuild and PostBuild) housed within the online Green Communities Certification Portal (www.enterprisecommunity.org/green).

For those projects financed by HPD, prior to completing the PreBuild application for Green Communities Certification, the project architect, general contractor, and developer must attend a “Green Communities Healthy Homes Training” conducted by DOHMH. This is a free two hour seminar which focuses on best practices in healthy housing topics for NYC buildings, including Integrated Pest Management, Active Design, and Smoke Free Housing. DOHMH will issue a certificate of completion to each participant at the conclusion of the training; this certificate of completion will be valid for those individual training participants for a period of three years. For each project submitted to HPD, the project architect, general contractor, and developer must submit a copy of their certificate of training completion to HPD’s Director of Sustainability, along with the “Notification of Application Submission” form. Once all required documentation is submitted, HPD’s Director of Sustainability will issue a Confirmation Letter for the project to the project team. The HPD Confirmation Letter will be required to complete your PreBuild application in the online Green Communities Certification Portal.

For all projects, PreBuild application submittals are due through the online Green Communities Certification Portal at least 30 days before start of construction. A \$1,250 fee will be assessed through the online portal for the initial PreBuild review. For projects financed by HPD, the project team must upload the Confirmation Letter received from the HPD Director of Sustainability as part of their PreBuild submission.

PostBuild application submittals for all projects are due within 60 days of construction completion (within 60 days of the project receiving its certificate of occupancy). A \$300 fee will be assessed through the online portal for the initial PostBuild review.

Once submitted, PreBuild and PostBuild applications will be reviewed within 30 days. After the review period, project teams will either receive a request for additional information or a notice that their application was approved. Note that if additional information is requested and the project team subsequently resubmits for the PreBuild or PostBuild step, these applications will also be subject to a 30 day review period. Requests for expedited reviews may be available. Expedited submittals will be reviewed in 10 business days or less. Each expedited review request that is granted will be assessed an additional \$250 fee.



M = MANDATORY
= OPTIONAL POINTS

1. INTEGRATIVE DESIGN

YES NO MAYBE M

1.1a Goal Setting

Develop an integrative design process that works best for your project team and intentions. At minimum, document:

1. A statement of the overall green development goals of the project and the expected intended outcomes from addressing those goals.
2. A summary of the integrative process that was used to select the green building strategies, systems and materials that will be incorporated into the project.
3. A description of how progress and success against these goals will be measured throughout the completion of design, construction and operation to ensure that the green features are included and correctly installed.

YES NO MAYBE M

1.1b Criteria Documentation

Create design and construction documentation to include information on implementation of appropriate Enterprise Green Communities Criteria.

YES NO MAYBE 9

1.1c Designing for Project Performance

Identify how the expected performance of your project compares to the actual performance of other projects in your portfolio and/or community.

NYC Overlay:

Note that the metrics used to evaluate performance must be consistent from project to project in order to ensure accuracy. Square footage of conditioned space that will be used to define BTU/SF/HDD, for instance, should be defined per Local Law 84's definition of gross floor area and derived either from measurements or from architectural plans rather than from the Department of Finance gross square footage figures.

YES NO MAYBE M

1.2a Resident Health and Well-Being: Design for Health

Identify potential resident health factors and design your project to address resident health and well-being by using the matrix provided on pages 22 and 23.

YES NO MAYBE 12

1.2b Resident Health and Well-Being: Health Action Plan

At pre-design and continuing throughout the project life cycle, collaborate with public health professionals and community stakeholders to assess, identify, implement and monitor achievable actions to enhance health-promoting features of the project and minimize features that could present health risks. Specifically, create a Health Action Plan and integrate the selected interventions and a plan for monitoring and evaluating progress per the full criterion.

YES NO MAYBE M

1.3a Resilient Communities: Design for Resilience *(New Construction and Substantial Rehab only)*

Given your project building type, location and expected resident population, identify a project characteristic that would most likely impact your project's ability to withstand an unexpected weather event or loss of power. Select at least one criterion from the given list that would help mitigate that impact, and incorporate this within your project plans and design. Include a short narrative providing your rationale for selecting this criterion above the others.

YES NO MAYBE 15

1.3b Resilient Communities: Multi-Hazard Risk / Vulnerability Assessment

Carry out a Vulnerabilities Assessment and implement building elements designed to enable the project to adapt to, and mitigate, climate impacts given the project location, building/construction type and resident population.

SUBTOTAL OPTIONAL POINTS



M = MANDATORY
= OPTIONAL POINTS

2. LOCATION + NEIGHBORHOOD FABRIC

New Construction: All new construction projects must earn optional points under Criterion 2.8 Access to Public Transportation, **OR** earn 8 optional points through selecting one or more of the following:

- 2.7 Preservation of and Access to Open Space
- 2.9 Improving Connectivity to the Community
- 2.12 Access to Fresh, Local Foods
- 2.13 LEED for Neighborhood Development Certification
- 2.14 Local Economic Development and Community Wealth Creation

YES NO MAYBE **M**

2.1 Sensitive Site Protection

Do not locate new projects, including buildings, built structures, roads or parking areas, on portions of sites that meet any of the following provisions:

1. Land within 100 feet of wetlands, including isolated wetlands or streams. Maintain or establish riparian buffer using native vegetation where possible. Bike and foot paths are allowed if at least 25 feet from the wetlands boundary.
2. Land on slope greater than 15%.
3. Land with prime soils, unique soils or soils of state significance per USDA designations.
4. Public parkland.
5. Land that is specifically identified as an existing habitat for any species on federal or state threatened or endangered lists.
6. Land that is within the Special Flood Hazard Areas (SFHA) as identified by FEMA on the Flood Insurance Rate Map.

YES NO MAYBE **M**

2.2 Connections to Existing Development and Infrastructure *(Except for projects located on rural or tribal lands, in colonias communities, or in communities with populations of less than 10,000)*

Locate the project on a site with access to existing roads, water, sewers and other infrastructure within or contiguous to (having at least 25% of the perimeter bordering) existing development. Connect the project to the pedestrian grid.

YES NO MAYBE **M**

2.3 Compact Development

At a minimum, build to the residential density (dwelling units / acre) of the census block group in which your project is located.

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].

YES NO MAYBE **M**

2.5 Proximity to Services

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.

YES NO MAYBE **M**

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

Set aside a minimum of 10% (minimum of 0.25 acre) of the total project acreage as non-paved open space for use by all residents **OR** locate the project within a 0.25-mile walk distance of dedicated public non-paved open space that is a minimum of 0.75 acres.

YES NO MAYBE **6 max**

2.7 Preservation of and Access to Open Space

Set aside a percentage of non-paved open space for use by all residents. 20% [2 points]; 30% [4 points]; 40% + written statement of preservation / conservation policy for set-aside land [6 points].



M = MANDATORY
= OPTIONAL POINTS

LOCATION + NEIGHBORHOOD FABRIC (continued)

- YES NO MAYBE **8 or 10** **2.8 Access to Public Transportation**
Locate projects within a 0.5-mile walk distance of transit services combined (bus, rail and /or ferry), constituting at least 60 or more transit rides per weekday, with some type of weekend ride option.
[8 points]
- For projects that qualify as Rural /Tribal /Small Town, locate the project within a 5-mile distance of at least 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. *[8 points]*
- For an additional 2 points:* Locate the project along dedicated bike trails or lanes that lead to transit services or stations (bus, rail and ferry) within 3 miles.
-
- YES NO MAYBE **2 to 8** **2.9 Improving Connectivity to the Community**
Improve access to community amenities through at least one of the transit, auto or biking mobility measures listed.
-
- YES NO MAYBE **5 max** **2.10 Passive Solar Heating /Cooling**
Design and build with passive solar design, orientation and shading that meet specified guidelines.
-
- YES NO MAYBE **4** **2.11 Brownfield Site or Adaptive Reuse Building**
Rehabilitate an existing structure that was not previously used as housing or locate the project on a brownfield site.
-
- YES NO MAYBE **6** **2.12 Access to Fresh, Local Foods**
Pursue one of three options to provide residents and staff with access to fresh, local foods, including neighborhood farms and gardens, community-supported agriculture, or proximity to farmers markets.
-
- YES NO MAYBE **4** **2.13 LEED for Neighborhood Development Certification**
Locate building(s) in a Stage 2 Pre-Certified or Stage 3 Certified Neighborhood Development.
-
- YES NO 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 *[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]*.

SUBTOTAL OPTIONAL POINTS

3. SITE IMPROVEMENTS

- YES NO MAYBE **M** **3.1 Environmental Remediation**
Conduct an environmental site assessment to determine whether any hazardous materials are present on-site; mitigate any found.
- NYC Overlay, for HPD financed projects only:
New Construction, Third Party Transfer, and Participation Loan Program projects require Phase 1 Environmental Assessments. All other projects should comply with the applicable environmental assessment requirements of the HPD programs. Projects not producing Phase 1 reports should submit a memo outlining the assessment and remediation measures taken.
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- YES NO MAYBE **M** **3.2 Erosion and Sedimentation Control** *(Except for infill sites with buildable area smaller than one acre)*
Implement EPA's Best Management Practices for Construction Site Stormwater Runoff Control, or local requirements, whichever is more stringent.



M = MANDATORY
= OPTIONAL POINTS

SITE IMPROVEMENTS (continued)

YES NO MAYBE **M**

3.3 Low-Impact Development

Projects located on greenfields must meet the list of low-impact development criteria.

YES NO MAYBE **M**

3.4 Landscaping

If providing plantings, all should be native or adapted to the region, appropriate to the site's soil and microclimate, and none of the new plants is an invasive species. Reseed or xeriscape all disturbed areas.

NYC Overlay:

See "Resources" in full 2015 Criteria for databases of native and adapted plants.

YES NO MAYBE **M**

3.5a Efficient Irrigation and Water Reuse

If irrigation is used, install an efficient irrigation or water reuse system per the guidelines.

YES NO MAYBE **4 or 8**

3.5b Efficient Irrigation and Water Reuse

Install an efficient irrigation system equipped with a WaterSense-labeled weather-based irrigation controller (WBIC) OR at least 50% of the site's irrigation should be satisfied by reusing water.

YES NO MAYBE **4 or 8**

3.6 Surface Stormwater Management

Retain, infiltrate and /or harvest the first 1.0 inch of rain that falls [4 points] OR as calculated for a 24-hour period of a one-year (1) storm event, so that no stormwater is discharged to drains / inlets. [8 points] For both options, permanently label all storm drains and inlets.

YES NO MAYBE **1**

3.7 Reducing Heat-Island Effect: Paving

Use light-colored, high-albedo materials and/or an open-grid pavement, with a minimum solar reflectance of 0.3, over at least 50% of the site's hardscaped area.

SUBTOTAL OPTIONAL POINTS

4. WATER CONSERVATION

YES NO MAYBE **M**

4.1 Water-Conserving Fixtures

Install water-conserving fixtures in all units and any common facilities with the following specifications. *Toilets:* WaterSense-labeled and 1.28 gpf; *Urinals:* WaterSense-labeled and 0.5 gpf; *Showerheads:* WaterSense-labeled and 2.0 gpm; *Kitchen faucets:* 2.0 gpm; *Lav faucets:* WaterSense-labeled and 1.5 gpm

AND for all single-family homes and all dwelling units in buildings three stories or fewer, the static service pressure must not exceed 60 psi.

YES NO MAYBE **6 max**

4.2 Advanced Water Conservation

Reduce water consumption either by installing water-conserving fixtures in all units and all common space bathrooms with the following specifications: *Toilets:* WaterSense-labeled and 1.1 gpf [1 point]; *Showerheads:* WaterSense-labeled and 1.5 gpm [1 point]; *Kitchen faucets:* 1.5 gpm and *lav faucets:* WaterSense-labeled and 1.0 gpm [1 point]

OR

Reduce total indoor water consumption by at least 30% compared to the baseline indoor water consumption chart, through a combination of your choosing. [6 points maximum]

NYC Overlay:

Projects are **REQUIRED** to achieve at least 3 points through this criterion.



M = MANDATORY

= OPTIONAL POINTS

WATER CONSERVATION (continued)

 YES NO MAYBE 4

4.3 Leaks and Water Metering

Conduct pressure-loss tests and visual inspections to determine if there are any leaks; fix any leaks found; and meter or submeter each dwelling unit with a technology capable of tracking water use. Separately meter outdoor water consumption.

NYC Overlay:

Projects are **REQUIRED** to achieve this criterion through one of the three options listed below. In NYC, annual water cost can exceed annual fuel cost in some buildings. Submonitoring water consumption can help identify and locate leaks quickly so that waste and cost is reduced drastically—a 1 gpm leak costs about \$6,700 a year in NYC.

OPTION 1 (Preferred): 4 points

Separately monitor each cold branch off the apartment line riser for each dwelling unit as well as any common project laundry facilities, the boiler makeup water, outdoor water, and water consumption in any commercial spaces.

OPTION 2: 0 points

Separately monitor each cold water riser and the domestic hot water (DHW) cold water feed for each building as well as any common project laundry facilities, the boiler makeup water, outdoor water, and water consumption in any commercial spaces.

OPTION 3: 0 points

Separately monitor the water consumption for each toilet as well as any common project laundry facilities, the boiler makeup water, outdoor water, and water consumption in any commercial spaces. Each toilet monitor must be enabled with technology that allows remote monitor readings.

IMPLEMENTATION TIPS, applicable to each OPTION

Equipment

All the monitoring system components are off the shelf. In-line meters should meet AWWA standards and include a pulse output (1 pulse per gallon is desirable). More critical is meter sizing; oversizing is common. A 2-inch riser, for example, does not require a 2-inch meter. Not only would a 2-inch meter be much more expensive, but it would miss the very low flows it is supposed to detect. Most risers up to 2 inches in diameter in 6-story or shorter buildings can be handled by a ¾-inch meter.

Some vendors package water monitors with a remote data monitoring system. Other vendors offer only monitors or only remote data monitoring systems; these may be paired. And remote data monitoring systems come in a variety of forms: some are wireless and others require that they be hard-wired. With either type, typically the water consumption data is sent from each meter/monitor to a datalogger inside the building, which passes it on to a website where it can be reviewed and downloaded. In cases where staff do not have time to review data for dozens of submeters, the website can be programmed to send out a text or email alarm when a leak is suspected. Because it is easy to set up alarms, it is not necessary to dedicate an employee or outside firm to monitor the water data, but it is desirable and should be considered. Many firms now monitor other building functions, so adding water to the list should not be difficult.

Installation

At all times, follow manufacturer installation instructions. In-line meters should be installed by a licensed plumber. When possible, use a press-fit pipe joining system instead of sweated joints for these installations. Such a system saves labor costs and permits otherwise impossible installations. Remote data-gathering systems are often installed by a controls or telecom contractor or, more expensively, by a licensed electrician.

The most crucial factor is to install every meter so it can be easily accessed for repairs or for manual reading (should that become necessary) – meters in cramped or inaccessible locations frequently end up ignored or forgotten. Experience shows that domestic water systems frequently include long pipe runs without any shutoff capability, which makes future repairs more difficult and/or disruptive. A few extra well-placed isolation valves will pay large dividends over time.

Similarly, in new construction in particular, designers should be encouraged to make the pipes more accessible than they usually are, either by exposing them or placing them behind an easily-removable access door or chase. Pipes in an easily-removable chase would be easier to repair and inspect and might even be isolatable enough to eliminate water damage from a pipe burst or joint leak. Experience also shows that basements frequently lack electrical outlets. With the increase in telecom, internet and cable TV installations and a likely rise in data-gathering systems like the one described here, strategically-located additional outlets would be quite valuable.

Cost

Installed cost will vary widely depending on meter size and location, new construction vs. retrofit, wireless vs. wired data gathering, local labor costs and other factors. The cost per installed meter, including data system, is likely to be in the range of \$500 to \$2,000 per meter. For instance, meters cost ~\$100/ea, data loggers cost ~\$200/ea and may serve up to 4 meters each, and a web-based dashboard system may cost ~\$30/month. Savings, at \$6,700/year for fixing a 1gpm leak, can exceed cost. In a 2015 pilot across 26 NYC buildings, annual savings per building exceeded \$18,000, which also exceeded the cost of installation.



M = MANDATORY
= OPTIONAL POINTS

WATER CONSERVATION (continued)

YES NO MAYBE 4

4.4 Efficient Plumbing Layout and Design

To minimize water loss from delivering hot water, the hot water delivery system shall store no more than 0.5 gallons of water in any piping/manifold between the hot water source and any hot water fixture.

YES NO MAYBE 6 max

4.5 Water Reuse

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

YES NO MAYBE 8

4.6 Access to Potable Water During Emergencies

Provide residents with 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.

SUBTOTAL OPTIONAL POINTS

5. ENERGY EFFICIENCY

YES NO MAYBE M

5.1a Building Performance Standard *(New Construction: single-family and low-rise multifamily)*

Certify each dwelling unit in the project through the ENERGY STAR New Homes program.

NYC Overlay:

NYSERDA Low Rise Residential New Construction projects satisfy this requirement; associated incentives may be available. For more information, see www.nyserda.ny.gov/All-Programs/Programs/Low-Rise-Residential. Certification to any of the programs referenced in Criterion 5.2 (including PHIUS) also satisfy this requirement.

YES NO MAYBE M

5.1b Building Performance Standard *(New Construction: mid-rise and high-rise multifamily, with some exceptions)*

Certify the project through the ENERGY STAR Multifamily High-Rise program (MFHR) OR follow the combined MFHR and LEED Commissioning Path outlined in the criterion.

Exception: Multifamily buildings that are four or five stories, in which all dwelling units have their own heating, cooling and hot water systems, should comply with Criterion 5.1a and certify each dwelling unit per ENERGY STAR Certified New Homes.

NYC Overlay:

NYSERDA Multifamily Performance Program: New Construction Component projects satisfy this requirement; associated incentives may be available. For more information, see www.nyserda.ny.gov/All-Programs/Programs/MPP-New-Construction. Certification to any of the programs referenced in Criterion 5.2 (including PHIUS) also satisfy this requirement.



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M = MANDATORY
= OPTIONAL POINTS

ENERGY EFFICIENCY (continued)

YES NO MAYBE M

5.1c Building Performance Standard *(Substantial and Moderate Rehab: single-family and low-rise multifamily)*

For each dwelling unit, achieve a HERS Index score of 85 or less.

Exception: Substantial rehabs of buildings with walls made only of brick/masonry that are three stories or fewer and built before 1980, as well as moderate rehabs of buildings that are three stories or fewer and built before 1980, are permitted to instead achieve a HERS Index score of 100 or less for each dwelling unit.

NYC Overlay:

Note that the NYSERDA Low Rise Residential New Construction program is available for Gut Rehabilitations and would satisfy the requirements of this criterion. Associated incentives may be available. For more information, see www.nyserda.ny.gov/All-Programs/Programs/Low-Rise-Residential. Certification to any of the programs referenced in Criterion 5.2 (including PHIUS) also satisfy this requirement.

YES NO MAYBE M

5.1d Building Performance Standard *(Substantial and Moderate Rehab: mid-rise and high-rise)*

Demonstrate that the energy performance of the completed building will be equivalent to ASHRAE 90.1-2010 using an energy model created by a qualified energy services provider per Appendix G.

NYC Overlay:

NYSERDA Multifamily Performance Program: Existing Buildings projects satisfy this requirement; associated incentives may be available. For more information, see www.nyserda.ny.gov/All-Programs/Programs/MPP-Existing-Buildings. Certification to any of the programs referenced in Criterion 5.2 (including PHIUS) also satisfy this requirement.

YES NO MAYBE 5 to 12

5.2a Additional Reductions in Energy Use

Design and construct a building that is projected to be at least 5% more efficient than what is required of the project by Criteria 5.1a–d. (Projects receiving points in Criterion 5.2a may not receive points per Criterion 5.2b)

YES NO MAYBE 12

5.2b Advanced Certification: Nearing Net Zero

Certify the project in a program that requires advanced levels of building envelope performance such as PHIUS, Living Building Challenge and/or DOE Zero Energy Ready Home. (Projects receiving points in Criterion 5.2b may not receive points per Criterion 5.2a)

YES NO MAYBE M

5.3 Sizing of Heating and Cooling Equipment

Size and select heating and cooling equipment in accordance with the Air Conditioning Contractors of America (ACCA) Manuals J and S or ASHRAE handbooks.

YES NO MAYBE M

5.4 ENERGY STAR Appliances

If providing 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.

YES NO MAYBE M

5.5 Lighting

Follow the guidance for high-efficacy lighting controls and other characteristics for all permanently installed lighting fixtures in project dwelling units, common spaces and exterior

YES NO MAYBE M

5.6 Electricity Meter

New Construction and Substantial Rehab

YES NO MAYBE 6

Moderate Rehab (Except for single-room occupancy and designated supportive housing dwelling units)

Install individual or submetered electric meters for all dwelling units.



M = MANDATORY
= OPTIONAL POINTS

ENERGY EFFICIENCY (continued)

YES NO MAYBE **4**

5.7a Photovoltaic / Solar Hot Water Ready

Orient, design, engineer, wire and /or plumb the development to accommodate installation of photovoltaic (PV) or solar hot water system in the future.

NYC Overlay:

Projects are urged to implement a solar-ready design.

YES NO MAYBE **10 max**

5.7b Renewable Energy

Install photovoltaic (PV) panels or other electric-generating renewable energy source to provide a specified percentage of the project's estimated total energy demand or water heating energy demand. *(Projects may earn points through Criterion 5.7b or 5.8b, but not both.)*

	5%	10%	20%	30%	40%
Single-story / Single-family	—	—	6	8	10
2 to 3 stories	—	6	8	10	—
4 stories or more	6	8	10	—	—

YES NO MAYBE **8**

5.8a Resilient Energy Systems: Floodproofing

Conduct floodproofing, including perimeter floodproofing (barriers/shields), of lower floors. 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.

YES NO MAYBE **4 to 8**

5.8b Resilient Energy Systems: Islandable Power

Provide emergency power through an islandable photovoltaic (PV) system or an efficient and portable generator that will offer at least limited electricity for critical circuits during power outages per one of the three options listed. *(Projects may earn points through Criterion 5.7b or 5.8b, but not both.)*

SUBTOTAL OPTIONAL POINTS

6. MATERIALS

YES NO MAYBE **M**

6.1 Low / No VOC Paints, Coatings and Primers

All interior paints and primers must have VOC levels, in grams per liter, less than or equal to the thresholds established by South Coast Air Quality Management District (SCAQMD) Rule 1113.

YES NO MAYBE **M**

6.2 Low / No VOC Adhesives and Sealants

All adhesives and sealants (including caulks) must have VOC levels, in grams per liter, less than or equal to the thresholds established by the South Coast Air Quality Management District Rule 1168.

YES NO MAYBE **3 max**

6.3 Recycled Content Material

Incorporate building materials that are composed of at least 25% post-consumer recycled content or at least 50% post-industrial recycled content. *[1 point]*

Building materials that make up at least 75% of their project component each receive 1 point.



M = MANDATORY
= OPTIONAL POINTS

MATERIALS (continued)

YES NO MAYBE 4 max

6.4 Regional Materials

Use products that were extracted, processed and manufactured within 500 miles of the project for a minimum of 50%, based on cost, of the building materials' value.

Select any or all of these options (each material can qualify for 1 point):

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

YES NO MAYBE 1

6.5 Certified, Salvaged and Engineered Wood Products

For at least 25% of all structural wood products, by cost or value, commit to using either FSC-certified, salvaged products or engineered framing materials without urea formaldehyde.

YES NO MAYBE M

6.6 Composite Wood Products that Emit Low/No Formaldehyde

All composite wood products must be certified as compliant with California 93120 Phase 2 **OR**, if using a composite wood product that does not comply with California 93120 Phase 2, all exposed edges and sides must be sealed with low-VOC sealants, per Criterion 6.2.

YES NO MAYBE M

6.7a Environmentally Preferable Flooring

Do not install carpets in building entryways, laundry rooms, bathrooms, kitchens / kitchenettes, utility rooms or any rooms built on foundation slabs. Where installed, all carpet products must meet the Carpet and Rug Institute's Green Label or Green Label Plus certification for carpet, pad and carpet adhesives. Any hard surface flooring products must be either ceramic tile or solid unfinished hardwood floors, or meet the Scientific Certification System's FloorScore program criteria (including pre-finished hardwood flooring).

YES NO MAYBE 6

6.7b Environmentally Preferable Flooring: Throughout Building

Use non-vinyl, non-carpet floor coverings throughout each building in the project.

YES NO MAYBE M

6.8 Mold Prevention: Surfaces

Use materials that have durable, cleanable surfaces throughout bathrooms, kitchens and laundry rooms. Materials installed in these rooms should not be prone to deterioration due to moisture intrusion or encourage the growth of mold.

YES NO MAYBE M

6.9 Mold Prevention: Tub and Shower Enclosures

Use moisture-resistant backing materials such as cement board, fiber cement board or equivalent per ASTM #D3273 behind tub / shower enclosures. Projects using a one-piece fiberglass tub / shower enclosure are exempt from this requirement.

YES NO MAYBE 12 max

6.10 Asthmagen-Free materials

Do not install products that contain ingredients that are known to cause or trigger asthma. Key products to avoid are:

- *Insulation:* Do not use spray polyurethane foam (SPF) or formaldehyde-containing fiberglass batts. [4 points]
- *Flooring:* Do not use flexible vinyl (PVC) roll or sheet flooring or carpet-backed with vinyl with phthalates. Do not use fluid applied finish floors. [4 points]
- *Wall coverings:* Do not use wallpaper made from vinyl (PVC) with phthalates or site-applied high-performance coatings that are epoxy or polyurethane based. [4 points]
- *Composite wood:* Use only ULEF products for cabinetry, subflooring and other interior composite wood uses. [4 points]



YES NO MAYBE 5

6.11 Reduced Heat-Island Effect: Roofing

Use an ENERGY STAR–certified roofing product for 100% of the roof area **OR** install a “green” (vegetated) roof for at least 50% of the roof area and ENERGY STAR–certified roofing product for the remainder of the roof area.

NYC Overlay:
Projects are **REQUIRED** to comply with this criterion.

YES NO MAYBE M or 6 max

6.12 Construction Waste Management

Commit to following 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.

YES NO MAYBE 3

6.13 Recycling Storage

Provide separate bins for the collection of trash and recycling for each dwelling unit and all shared community rooms (if applicable).

Additionally, in multifamily buildings, provide at least one easily accessible, permanent and dedicated indoor area for the collection and storage of materials for recycling. In single-family homes, points will be accrued only if curbside recycling pickup is available.

Collected materials should include, at a minimum, paper, cardboard, glass, metals and plastics.

NYC Overlay:
Projects are **REQUIRED** to comply with this criterion

SUBTOTAL OPTIONAL POINTS

7. HEALTHY LIVING ENVIRONMENT

YES NO MAYBE M

7.1 Ventilation

New Construction and Substantial Rehab

YES NO MAYBE 12 max

Moderate Rehab

For each dwelling unit, in full accordance with ASHRAE 62.2-2010, install a local mechanical exhaust system in each bathroom [4 points], a local mechanical exhaust system in each kitchen [4 points], and a whole-house mechanical ventilation system [4 points].

For each multifamily building of four stories and more, in full accordance with ASHRAE 62.1-2010, install a mechanical ventilation system for all hallways and common spaces [3 points].

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

- All systems and associated ductwork must be installed per manufacturer’s recommendations.
- All individual bathroom fans must be ENERGY STAR labeled, wired to turn on with the light switch, and equipped with a humidistat sensor, timer or other control (e.g., occupancy sensor, delay off switch, ventilation controller).
- If using central ventilation systems with rooftop fans, each rooftop 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** 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.

We strongly recommend that project teams incorporate performance-based ventilation specifications in their construction documents.

Additional reference for ventilation retrofit:
<http://www.buildingscience.com/documents/bareports/ba-1209-multifamily-ventilation-retrofit-strategies>



HEALTHY LIVING ENVIRONMENT (continued)

YES NO MAYBE M

7.2 Clothes Dryer Exhaust

Clothes dryers must be exhausted directly to the outdoors using rigid-type ductwork (except for condensing dryers, which must be plumbed to a drain).

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.

In Substantial and Moderate 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 initial combustion safety testing per the given guidelines.

Install one hard-wired carbon monoxide (CO) alarm with battery backup function for each sleeping zone, placed per National Fire Protection Association (NFPA) 720.

YES NO MAYBE 9 or 11

7.4 Elimination of Combustion Within the Conditioned Space

No combustion equipment may be used for cooking (to include, but not limited to ranges, cooktops, stoves, ovens) as part of the building project [9 points] OR no combustion equipment may be used as part of the building project [11 points].

YES NO MAYBE M

7.5 Vapor Retarder Strategies

Install vapor barriers that meet specified criteria appropriate for the foundation type.

YES NO MAYBE M

7.6 Water Drainage *(For all New Construction projects and those Rehab projects that include replacing particular assemblies called out below)*

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

YES NO MAYBE M

7.7 Mold Prevention: Water Heaters

Provide adequate drainage for water heaters that includes drains or catch pans with drains piped to the exterior of the dwelling.

YES NO MAYBE M

7.8 Radon Mitigation

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 and mitigate per the specified protocols.

YES NO MAYBE M

7.9 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 in a garage.
- Fix all connecting doors between conditioned space and garage with gaskets or otherwise make substantially airtight with weather stripping.
- 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) 720.

YES NO MAYBE M

7.10 Integrated Pest Management

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



M = MANDATORY
= OPTIONAL POINTS

HEALTHY LIVING ENVIRONMENT (continued)

YES NO MAYBE **9**

7.11a Beyond ADA: Universal Design (*New Construction*)

Design a minimum of 15% of the dwelling units (no fewer than one) in accordance with ICC/ANSI A117.1, Type A, Fully Accessible guidelines. Design the remainder of the ground-floor units and elevator-reachable units in accordance with ICC/ANSI A117.1, Type B.

YES NO MAYBE **7 or 9**

7.11b Beyond ADA: Universal Design (*Substantial and Moderate Rehab*)

Design a minimum of 10% of the dwelling units (one, at minimum) in accordance with ICC/ANSI A117.1, Type A, Fully Accessible guidelines. [7 points]

For an additional 2 points: Design the remainder of the ground-floor units and elevator-reachable units with accessible unit entrances designed to accommodate people who use a wheelchair.

YES NO MAYBE **M**

7.12 Active Design: Promoting Physical Activity Within the Building

Situate at least one building stairway per the criterion to encourage use OR emphasize at least one strategy inside the building designed to increase frequency and duration of physical activity per the criterion.

YES NO MAYBE **10**

7.13 Active Design: Staircases and Building Circulation

A staircase must be accessible and visible from the main lobby as well as visible within a 25-foot walking distance from any edge of lobby. Ensure that no turns or obstacles prevent visibility of or accessibility to the qualifying staircase from the lobby, and that the staircase is encountered before or at the same time as the elevators.

From the corridor, accessible staircases should be made visible by: Providing transparent glazing of at least 10 square feet (1 square meter) at all stair doors or at a side light OR providing magnetic door holds on all doors leading to the stairs OR removing door enclosures/ vestibules.

NYC Overlay:

Projects are recommended to thoroughly consider implementing this criterion.

YES NO MAYBE **9**

7.14 Interior and Outdoor Activity Spaces for Children and Adults

Provide an 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.

YES NO MAYBE **M**

7.15 Reduce Lead Hazards in Pre-1978 Buildings (*Substantial Rehab*)

Conduct lead risk assessment or inspection to identify lead hazards, then control for these per EPA or state / local laws and requirements.

YES NO MAYBE **10**

7.16 Smoke-Free Building

Implement and enforce a no-smoking policy in all common and individual living areas, and within a 25-foot perimeter around the exterior of all residential projects.

NYC Overlay:

Projects are recommended to thoroughly consider implementing a smoke-free building policy. For guidance, please see "Resources" in the full 2015 Criteria, which includes the New York City Department of Health's Smoke-Free Housing Resources.

SUBTOTAL OPTIONAL POINTS



M = MANDATORY

= OPTIONAL POINTS

8. OPERATIONS, MAINTENANCE, + RESIDENT ENGAGEMENT

 YES NO MAYBE **M**
8.1 Building Operations & Maintenance (O&M) Manual and Plan *(For all multifamily projects)*

Develop a manual with thorough building operations and maintenance 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 that if your project exceeds 50,000 ft², compliance with this criterion will aid in your project's compliance with Local Law 87. Also note Current Facility Requirements (CFR) also may fit this criterion.

 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

 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.

 YES NO MAYBE **M**
8.4 Resident and Property Staff Orientation

Provide a comprehensive walk-through and orientation for all residents, property manager(s) and buildings operations staff. Use the appropriate manuals (see Criteria 8.1, 8.2, 8.3) as the base of the curriculum, and review the project's green features, operations and maintenance procedures, and emergency protocols.

 YES NO MAYBE **M**
8.5 Project Data Collection and Monitoring System: 100% Owner-Paid Utility Accounts; 15% Tenant-Paid Utility Account

For rental properties: Collect and monitor project energy and water performance data for 100% of owner-paid utilities and 15% of tenant-paid utilities for at least 5 years. This data must be maintained in a manner that allows staff to easily access and monitor it, enabling them to make informed operations and capital planning decisions. Also allow Enterprise access to this data.

For owner-occupied units: Collect and monitor energy and water performance data in a manner that allows for easy access and review and provides the ability to influence home operations. Also allow Enterprise access to this data.

NYC Overlay:

HPD's *Benchmarking Protocol* satisfies compliance with this criterion. Projects will also share data with Enterprise.

 YES NO MAYBE **7 or 11**
8.6 Project Data Collection and Monitoring System: Greater than 15% Tenant-Paid Utility Accounts

Collect and monitor project energy and water performance data for at least 5 years. This data must be maintained in a manner that allows staff to easily access and monitor it, enabling them to make informed operations and capital planning decisions. Also allow Enterprise access to this data. 16–60% of units [7 points]; 60–100% of units [11 points].

NYC Overlay:

Projects are strongly recommended to implement this measure.

SUBTOTAL OPTIONAL POINTS

TOTAL OPTIONAL POINTS