



# 2011 ENTERPRISE GREEN COMMUNITIES CRITERIA OVERVIEW

The Enterprise Green Communities Criteria are a framework for comprehensive green building practices, which are applicable for all affordable housing development types, in any location in the country.

Enterprise is pleased to announce that it will release the 2011 Enterprise Green Communities Criteria in February. The Criteria are a framework for comprehensive green building practices, which are applicable for all affordable housing development types, in any location in the country. Since the inception of its Green Communities initiative in 2004, Enterprise has updated the Criteria on a regular, three-year interval. The Criteria respond to technological advances, evaluation outcomes, environmental, industry and policy trends and input from developers and policymakers on specific criterion.

**Enterprise continues to rely on the following set of guiding principles in the evolution of the Criteria and other Enterprise Green Communities programmatic elements:**

- Achievable for all affordable housing development types (new construction, substantial and moderate rehab; single family, and low to high-rise multifamily);
- Cost-effective and proven green development approaches;
- Deliver significant health, economic and environmental benefits;
- Technically sound and rigorous performance standards that are comparable to other national and regional green residential programs;
- Measurable and verifiable (whether through paper or field review).

The drafting of the 2011 Criteria has been a multi-phased process, with significant and valuable input from Enterprise partners. In summer 2010, a group of technical experts in green affordable housing strategies conducted research and provided recommendations to Enterprise staff on suggested revisions during the three-month drafting phase. In August, Enterprise moved the draft 2011 Criteria into a comment period, at which time Enterprise engaged local developers and policymakers to solicit feedback on the Criteria. During this same time, the Enterprise Green Communities staff also sought feedback from national partners on its Criteria advisory group, including the U.S. Green Building Council and Habitat for Humanity. The 320 comments received have informed the final version of the 2011 Criteria, which will be publicly available by February 2011 on the Enterprise Green Communities website at [www.greencommunitiesonline.org](http://www.greencommunitiesonline.org).

## 2011 Updates

The descriptions that follow provide a brief overview of the major updates in each category of the 2011 Criteria.

### INTEGRATIVE DESIGN

The 2011 Criteria include a new optional measure in this category for Universal Design. To achieve optional points for Universal Design, project teams must design a certain percentage of units to meet accessibility guidelines per ICC/ANSI A117.1.

### LOCATION + NEIGHBORHOOD FABRIC

In regards to location type, the 2011 Criteria update includes a revised Location + Neighborhood Fabric category with mandatory and optional measures focused around smart growth principles that are most appropriate for three different location types—urban/small city, suburban/mid-size town or rural/tribal/small town. Some mandatory and optional measures are applicable to all projects, regardless of location. Others are applicable only for projects in a particular location classification. The Location + Neighborhood Fabric category also includes three new optional measures for all project types: Preservation of and Access to Open Space; Access to Fresh, Local Foods; and LEED for Neighborhood Development certification.

### SITE IMPROVEMENTS

This category includes a new mandatory measure for Low-Impact Development, which is applicable only to new construction projects located on greenfield sites. Such projects must comply with a set of low-impact design and development criteria. This category also incorporates an additional tier of optional points for Surface Stormwater Management for projects that can retain, infiltrate, and/or harvest all stormwater as calculated for a one-year storm event.

### WATER CONSERVATION

This category includes a new optional measure for Water Reuse. To achieve optional points under this measure, project teams must harvest, treat, and reuse rainwater and/or greywater to meet at least 10% of project's total water needs.

### ENERGY EFFICIENCY

Under the Energy Efficiency category, the whole-building energy performance requirements have been updated to reflect revised national voluntary programs and standards, including the U.S. EPA's ENERGY STAR for New Homes and its High-Rise Multifamily Program. The table below shows the energy performance levels by construction type that are required for the 2011 Criteria compared to the 2008 Enterprise Green Communities Criteria.

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**ENERGY PERFORMANCE REQUIREMENTS**

Comparing the 2008 and 2011 Enterprise Green Communities Criteria

|  | <b>2008<br/>CRITERIA<br/>REQUIREMENT</b> | <b>2008<br/>PERFORMANCE<br/>LEVEL</b>         | <b>2011<br/>CRITERIA<br/>REQUIREMENT</b>          | <b>2011<br/>PERFORMANCE<br/>LEVEL</b> |
|--|--|---|---|---------------------------------------|
| <b>NEW CONSTRUCTION</b>                |  |   |   |                                       |
| Single-Family and Low-Rise Multifamily | ENERGY STAR for Homes (Version 2)        | 15% better than 2006 IECC                     | ENERGY STAR for Homes (Version 2.5 or 3)          | 15% better than 2009 IECC             |
| Mid- and High-Rise Multifamily         | 15% better than ASHRAE 90.1-2004         | 15% better than ASHRAE 90.1-2004              | ENERGY STAR for Multifamily Program               | 15% better than ASHRAE 90.1-2007      |
| <b>SUBSTANTIAL REHABILITATION</b>      |  |   |   |                                       |
| Single-Family and Low-Rise Multifamily | 15% improvement over existing conditions | Variable (depends on building starting point) | HERS Index of 85                                  | 15% better than 2006 IECC             |
| Mid- and High-Rise Multifamily         | 15% improvement over existing conditions | Variable (depends on building starting point) | Energy performance equivalent to ASHRAE 90.1-2007 | ASHRAE 90.1-2007                      |
| <b>MODERATE REHABILITATION</b>         |  |   |   |                                       |
| Single-Family and Low-Rise Multifamily | 15% improvement over existing conditions | Variable (depends on building starting point) | HERS Index of 85                                  | 15% better than 2006 IECC             |
| Mid- and High-Rise Multifamily         | 15% improvement over existing conditions | Variable (depends on building starting point) | Energy performance equivalent to ASHRAE 90.1-2007 | ASHRAE 90.1-2007                      |

For additional information related to the 2011 Enterprise Green Communities Criteria, please contact Enterprise at [greencommunities@enterprisecommunity.org](mailto:greencommunities@enterprisecommunity.org) or visit us online at [www.greencommunitiesonline.org](http://www.greencommunitiesonline.org).

**MATERIALS BENEFICIAL TO THE ENVIRONMENT**

For the first time since the inception of the Enterprise Green Communities Criteria, the 2011 Criteria include the first mandatory measure in this category—Construction Waste Management. Project teams must commit to recycling or salvaging at least 25 percent of non-hazardous construction and demolition debris. The 2011 Criteria also includes optional points for additional percentage reductions in construction waste. Additionally, the Materials category includes a new optional measure for Recycling Storage for multifamily projects.

**HEALTHY LIVING ENVIRONMENTS**

Under this category, Enterprise Green Communities updated the local exhaust and whole building ventilation requirements. For local exhaust, the 2011 Criteria include specific cubic feet per minute (cfm) requirements for both intermittent and continuous bathroom and kitchen fans, per ASHRAE 62.2-2010. There is also guidance for rooftop fans used in central ventilation systems. Additionally, the whole building ventilation measure applicable to mid- and high rise multifamily projects has been revised so that projects must meet 62.2-2010 for the units and 62.1-2010 for common spaces and hallways.

**OPERATIONS + MAINTENANCE**

The 2011 Criteria includes an additional optional measure in this category for Project Data Collection and Monitoring system(s). Project teams that select these optional points must commit to collecting and monitoring project performance data on energy, water, and if possible, healthy living environments for a minimum of five years. For submetered buildings, project teams must provide data for a percentage of units, based on project size.



Frequently Asked Questions  
2011 Enterprise Green Communities Criteria  
Updated 12/16/11

**General**

Q: Where can I locate the 2011 Enterprise Green Communities Criteria on the Enterprise website?

A: The 2011 Criteria can be found at the following link:

[www.EnterpriseCommunity.org/greencriteria](http://www.EnterpriseCommunity.org/greencriteria)

Q: I have no experience with Green Communities, but I am a LEED AP. Where can I find more information on the differences between these programs?

A: Please see the “Comparison of National Residential Green Building Programs” at the following link: [www.EnterpriseCommunity.org/greencriteria](http://www.EnterpriseCommunity.org/greencriteria)

This document provides a brief summary of the scope of Enterprise Green Communities, USGBC’s LEED Rating Systems relevant to the affordable housing industry, and the National Association of Home Builders’ (NAHB) National Green Building Standard.

Q: Are the Criteria reviewed and applied consistently by the various State Housing Agencies in conjunction with their respective QAP's?

A: To date, 19 HFAs have adopted the Enterprise Green Communities Criteria in full, either as a threshold or incentive item. For information about the green affordable housing policy in your state, please see the following web page: [www.EnterpriseCommunity.org/greenpolicy](http://www.EnterpriseCommunity.org/greenpolicy)

Q: Does Enterprise offer grant funding to assist with the potential greening options?

A: Currently, Enterprise offers two small grants: 1) Pre-Construction Charrette Grants and 2) Post-Construction Sustainability Training Grants. More information on these two resources can be found online at [www.EnterpriseCommunity.org/greenresources](http://www.EnterpriseCommunity.org/greenresources) under Financing.

Q: How do I get information on becoming an Enterprise Green Communities TA provider?

A: Enterprise issues an annual RFQ for additional Green TA providers. Please email the mailbox at [greencommunities@enterprisecommunity.org](mailto:greencommunities@enterprisecommunity.org) to request to be included on the next RFQ announcement (second quarter of 2011).

Q: Is there a Checklist in excel format?

A: The Certification Workbook located on the Certification web page could serve as an Excel version of the Checklist. Please see [www.EnterpriseCommunity.org/certification](http://www.EnterpriseCommunity.org/certification)

Q: Are you going to release a set of single-family rehab specs that conforms to the 2011 Criteria? And if so, when?

A: It is available now. Find it here: [www.EnterpriseCommunity.org/greentools](http://www.EnterpriseCommunity.org/greentools)



### **Enterprise Green Communities Certification**

Q: Are there different levels of Certification awarded?

A: No, there is only one level of Enterprise Green Communities Certification. To achieve Certification, all projects must achieve compliance with the Criteria mandatory measures applicable to that construction type. Additionally, New Construction projects must achieve 35 optional points, Substantial Rehab projects must achieve 30 optional points, and Moderate Rehab projects also must achieve 30 optional points.

Q: Is hiring an Enterprise Green Communities TA Provider mandatory?

A: No, hiring a TA provider is not mandatory. While it isn't necessary, it is often very helpful. Many project teams find that hiring a Green TA advisor with specific knowledge about the Criteria helps in ensuring the green features are incorporated in design, construction and operations. Enterprise maintains a registry of qualified Green TA Providers at the following website, where you can search by state or region and relevant green building expertise: <http://tasearch.greencommunitiesonline.org/>

Q: Does Enterprise require third-party verification for every project, as part of the Certification process?

A: Enterprise requires third-party verification only for a certain percentage of projects selected from the pool that come through Certification. Each quarter, Enterprise selects a group of projects that apply for Certification to participate in the additional verification. All developments that apply for Certification may be subject to verification by Enterprise.

Q: Are all projects that register on February 1, 2011 or later automatically required to comply with the 2011 Criteria or is there an overlap period between 2008 and 2011?

A: Starting on Feb. 1, all projects will be complying with the 2011 Criteria. Exceptions will be considered on a case-by-case basis.

Q: What cost if any is associated with getting certification by Enterprise Green Communities?

A: The Enterprise Green Communities Certification Process is offered at no charge to all affordable housing projects that meet the eligibility requirements.

Q: Does the Enterprise Green Communities TA Provider typically charge a fee?

A: The TA provider determines their fees individually, based on project and scope of work. However, if your project is coming through Certification and has been selected for Verification, there is no fee associated with that work.

Q: If registering a new construction single-family project for Certification and aiming to meet ENERGY STAR certification what should one provide for the Energy Performance Report Form if one has not yet hired a HERS rater?

A: Applications that do not include the Energy Performance Report Form appropriate for the project and construction type will be considered incomplete. Prior to construction, project teams would need to submit the initial energy model to ensure the project can be review for Step 1 of Certification. A preliminary energy model is an important step to ensuring the building envelope and systems are designed to meet the minimum whole-building energy performance levels required by the Criteria. If the project team is pursuing the ENERGY STAR prescriptive path, they would be exempt from submitting an energy performance report form. However, the project would still need to submit a signed letter stating their intent to follow the ENERGY STAR prescriptive path.



Q: Do we submit drawings and specs for Certification?

A: Project teams must submit site plans, context maps, and landscaping plan(s), as well as indicate within the Intended Methods Form where each Criterion is found in the project documents. The submittal of a spec book is not required. If Enterprise staff members have questions during the review, we will get in touch with your project team about necessary supplemental documentation.

## Category specific questions

### 1. Integrative Design

Q: What makes the Universal Design Criterion in the 2011 Criteria different from accessibility criteria? Are there additional requirements beyond the ANSI code?

A: We assume that projects meet ADA guidelines, but ANSI offers a more comprehensive list of features that make a project useable to residents throughout any stage of life. For this Criterion, a certain percentage of units should fulfill the ANSI requirements described in the Criterion.

### 2. Location + Neighborhood Fabric

Q: Will this location pathway determination affect any other measures my project has to meet in other categories of the Criteria?

A: No, the location pathway only dictates measures in the Location + Neighborhood Fabric category the project must meet.

Q: What is the website for the Center for Neighborhood Technology's Housing and Transportation Affordability Index locator tool?

A: <http://htaindex.cnt.org/residential-density.php>

Q: Is the 1.5 multiplying factor associated with the location pathways constant for all projects?

A: The 1.5 multiplier is used for projects that fall under the Urban/Small Cities and Suburban/Mid-Size Towns pathways, and it is applied to the residential density output of the locator tool (derived by inputting the project address). Note that the 1.5 multiplier is not used for the Rural/Tribal/Small Towns pathway.

Q: How can I demonstrate project compliance with the Access to Local, Fresh Foods criterion?

A: Indicate the location of the farmers market or neighborhood farm or garden on the context map submitted during Step 1 of Certification, and note any additional details in the Intended Methods Form of the Certification Workbook. An example of additional details for a project proximate to a farmers market would include the frequency and duration throughout the year of the market.

Q: Is LEED for Neighborhood Development certification worth optional points in the 2011 Criteria?

A: Yes, under the 2011 Enterprise Green Communities Criteria, projects that achieve LEED-ND certification (stage 2 or stage 3) are awarded 4 optional points.

### 4. Water Conservation

Q: If my project integrates all optional criteria for all types of water fixtures, can the project get the maximum number of points?

A: Yes. If a project incorporates water efficient toilets, showerheads and faucets (both bathroom and kitchen) throughout the project, then it achieves the maximum 6 optional points under this measure.



Q: Does EPA WaterSense have info on dishwashers?

A: Information on Energy Star-labeled dishwashers (which are required to be more energy and water efficient than conventional models) can be found online at:

[http://www.energystar.gov/index.cfm?c=archives.comm\\_dishwashers](http://www.energystar.gov/index.cfm?c=archives.comm_dishwashers)

## 5. Energy Efficiency

Q: Regarding single-family and low-rise multifamily, is there a sampling protocol for the number units needed to achieve an HERS Index of 85?

A: Yes, Enterprise Green Communities accepts the RESNET sampling protocol for single family and low-rise multifamily projects, and will accept the EPA's sampling protocol for the Multifamily High Rise program once it is available. Project teams should ensure their HERS provider and rater are qualified to offer the sampling protocol through RESNET.

Q: For moderate rehab, to show compliance with baseline, does the project need to submit an energy model, or if the building code is based on 90.1-2007, can it just show that it meets code via Recheck or equivalent?

A: Projects will need to show that they comply with the Energy Performance required in the Criteria using an energy model. The building cannot use Rescheck or equivalent tool to show compliance because the project will not be following every part of the code because it is a moderate rehab. Since it will not be doing every part of the code the project will need to do additional measures beyond the basic prescriptive code.

Q: Does anybody get increased mold/moisture problems with this level of "tightness?"

A: As buildings become more tightly constructed, indoor air quality needs to be addressed using a mechanical ventilation system. This is addressed in the 2011 Criteria under measures for local exhaust and whole-building ventilation systems – Criteria 7.5a/b and 7.6a/b.

Q: Are projects ever required to do energy modeling?

A: For Enterprise Green Communities Certification, single family and low-rise multifamily buildings (<3 stories) must submit their Home Energy Rating (HERS) reports. For multifamily projects (>4 stories) you will need to submit an Energy Performance Report and the energy modeling report. More information on this can be found on the Certification page of our website at [www.EnterpriseCommunity.org/certification](http://www.EnterpriseCommunity.org/certification)

Q: If building is constructed with SIPs, do you require a blower door test, as ENERGY STAR does not?

A: Ultimately, the project will be certified by a HERS rater under the ENERGY STAR program and follow the ENERGY STAR protocols. We will accept the ENERGY STAR Certificate as submitted.

Q: Can HERS raters evaluate a building where the drywall is not replaced?

A: This type of project can't be certified by ENERGY STAR; however, an effective energy model can still be created by using diagnostic testing equipment such as infrared cameras, blower doors, duct blasters, and vent flow hoods.

## 6. Materials Beneficial to the Environment

Q: Will deconstruction or diversion of waste streams from landfills of building materials generate points?

A: Yes, under measure 6.4 Construction Waste Management, up to 5 optional points are available.



Q: How do we establish a baseline for the 25% waste reduction?

A: First you need to catalog and keep track of the total weight of all non-hazardous waste materials generated by the construction process throughout the project. This includes materials that are landfilled, diverted, recycled, reused on site, and salvaged. At the end of the project, record the total weight of non-hazardous waste material diverted from the landfill, recycled or salvaged and divide it by total weight of all non-hazardous waste material. Multiply it by 100 and it will give you the percentage of waste for the calculation.

## **8. Operations + Maintenance**

Q: How does the reporting for utility data work?

A: Utility data includes information on energy, water and, if possible, healthy living environments. Additional information can be found in Criterion 8.4 in the 2011 Criteria found online at: [www.EnterpriseCommunity.org/greencriteria](http://www.EnterpriseCommunity.org/greencriteria)

Q: Does the utility release form provided during Step 2 of Certification suffice for meeting the Data Collection and Monitoring criterion?

A: No, the utility release form is requested of all projects at the final step in the Certification process, but it alone does not achieve the optional requirements for the Criterion. The utility release form is one step in the data collection piece, but this Criterion also requires the inclusion of a monitoring system.

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