



FAQ : 2011 ENTERPRISE GREEN COMMUNITIES CRITERIA

GENERAL QUESTIONS

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

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

http://enterprisecommunity.force.com/greenportal/ENT_PlanningProject

A pdf version of the Criteria can be found at:

<http://www.enterprisecommunity.com/servlet/servlet.FileDownload?file=00Pa000000FxxwNEAR>

Q : Have there been any updates or clarifications to the 2011 Criteria since it was released?

A : Yes. All updates can be found at the following link: <http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/criteria>

Q : Do you award different levels of Certification?

A : No, there is only one level of Enterprise Green Communities Certification awarded. In order to achieve Certification, all projects must comply with the mandatory measures applicable to that construction type. New Construction projects must achieve an additional 35 optional points, and Substantial and Moderate Rehab projects must achieve 30 optional points.

Q : Is it possible for us to do a "batch" Certification, rather than registering projects individually?

A : Multiple buildings can be clustered as one project if the project, location, construction type, and the scope of work has only minor deviations for each building, but is substantially the same. Projects submitted as clusters will be reviewed on a case by case basis by the Certification review staff.

To submit a cluster of buildings as one project, enter information for each specific building directly into the online portal. You will no longer need to submit a clustering form.

TECHNICAL ASSISTANCE

Q : Is hiring an Enterprise Green Communities Technical Assistance (TA) Provider mandatory?

A : Hiring a TA provider is not mandatory. However, it may be helpful. Many project teams have found that hiring a Green TA advisor with specific knowledge of the Criteria helps to ensure that green features are incorporated in design, construction and operations. Enterprise maintains a registry of qualified Green TA Providers, which is searchable by state, region, and relevant green building expertise, and can be found at: <http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/resources/technical-assistance-providers-database>

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

A : TA providers determine their fees individually, based on project and scope of work.

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

A : Under some measures, including 5.1a – 5.1d, there is built in third-party verification required under the Criteria. For example, all projects that are required to comply with ENERGY STAR per 5.1a must obtain the verification required by the ENERGY STAR program to comply with Green Communities.

Additionally, Enterprise will conduct third-party Verification on a certain percentage of projects that apply for Certification. Each quarter, Enterprise selects a group of projects to participate in the additional Verification. All developments that apply for Certification may be subject to Verification by Enterprise.

Q : Where can I find information on becoming an Enterprise Green Communities TA provider?

A : Enterprise issues an annual request for qualifications (RFQ) for additional green TA providers. Please email greencommunities@enterprisecommunity.org to request to be included on the next RFQ announcement.

PROJECT/CONSTRUCTION CLASSIFICATION

Q : I have a project that involves the renovation of a historic building to multifamily housing and am unsure if it falls under the substantial or moderate rehab type, based on the definition in the Criteria.

A : Any adaptive reuse project most likely falls under substantial rehab. Moderate rehabs typically have a limited scope of work and do not fully replace any major systems or include major reconfigurations of space. With a change in use to residential there will likely be enough major systems work to classify the project as substantial rehabilitation by our Criteria.

Q : When a project includes both new and renovated units (which is very typical in PHA projects these days, since residents are asking to keep at least one “historic” building), should we submit two projects or follow the development characteristics of the majority?

A : We would prefer that projects submit separately based on scope of work, unless only a small portion of the project differs. We will review this on a case by case basis, so if there are any projects you have coming up, we would be happy to look at them before you submit, or you can submit as one project and we can review it then and determine if it should be broken up.

Q : Our affordable housing project includes the replacement of one accessory building. As part of the rehab, we will be demolishing the existing free-standing accessory building and constructing a new one (no residential units will be included in this new building). Do we submit the new accessory building as part of our Prebuild (Step 1) process, or do we leave it completely out of the submission?

A : Green Communities Certification is only available to those buildings with residential units, so the accessory building will not be part of the Certification.

Q : Our project includes substantial rehab, moderate rehab, and new construction scattered site homes. Optional points are available for moderate rehabilitation projects. Despite the fact that our project has all three construction types (moderate rehab, substantial rehab, and new construction) are we able to collect optional points for the entire project?

A : When this situation occurs, we require that each construction type is entered as a separate project. When your project information is input this way, we can ensure that the units classified as substantial rehab are held to the requirements for substantial rehab projects, the units classified as moderate rehab are held to the requirements geared towards moderate rehab, and the new construction units are held towards the standards required for new construction projects.

SECTION 1 : INTEGRATIVE DESIGN

1.2 UNIVERSAL 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.

SECTION 2 : LOCATION + NEIGHBORHOOD FABRIC

Q : Where can I find the Center for Neighborhood Technology’s Housing and Transportation Affordability Index locator tool?

A : The Center for Neighborhood Technology’s Housing and Transportation Affordability Index locator tool is found at: <http://www.htaindex.org>

Q : Is the 1.5 multiplying factor associated with the location pathway constant for all projects ?
A : No. 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 Center for Neighborhood Technology's Housing and Transportation Affordability Index locator tool (www.htaindex.org). Note that the 1.5 multiplier is not used for the Rural/Tribal/Small Towns pathway.

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

A : No, the location pathway only dictates criteria in Section 2: Location + Neighborhood Fabric.

Q : Why does the Criteria specify the types of units for rural/tribal/small towns (detached houses / townhomes / apartments) but not for Urban and Suburban locations ?

A : We are distinguishing rural projects by their USDA designation rather than by their surrounding net residential density (as urban and suburban projects are designated) and have built in more flexibility for this pathway by providing density parameters for each distinct project type.

Q : How do I find out if my project's town is considered rural or suburban? We are located in what seems to be the suburbs of a large city, but have a low density based on the CNT tool.

A : To be a rural location, you have to be one of the following:

1. Classified as rural by Section 520 of the Housing Act of 1949
2. Eligible for funding under USDA Rural Housing Services
3. Located on Native American Reservation
4. Located in colonias communities as defined by HUD in TX, NM, AZ or CA.

If your site is contained within an MSA of a larger city, it would make it ineligible to be rural under point one, and should be classified as suburban.

2.2 CONNECTIONS TO EXISTING DEVELOPMENT AND INFRASTRUCTURE

Q : If there are no existing public sidewalks around or near your site, how do you comply with this criterion?

A : If there are no public sidewalks to connect, you are only required to build in sidewalks within your development.

2.3 + 2.4 COMPACT DEVELOPMENT

Q : What if the local zoning code will not allow you to achieve the required density?

A : If the local zoning does not permit you to build to the mandatory density requirements under 2.3 Compact Development, Enterprise Green Communities requires you to build to the maximum density allowed by the local building code and to submit a formal waiver request to describe the situation in full and document the deviation in your project.

Q : In the 2011 Criteria, do unbuildable areas include local ordinance required setbacks? On the one hand setbacks are nominally unbuildable but local government could issue a variance. On the other hand, would a deed restriction on the setback area be satisfactory?

A : Setbacks are considered non-buildable and should be deducted from the buildable area of the site. If the development group is granted a setback variance, that area would then need to be considered buildable.

As for deed restrictions, the same general principle would apply- if there were language about setbacks in a deed restriction, Green Communities would recognize that portion of the site unbuildable. If the development group attempted to get around that deed restriction and was granted such a request, that area would be considered buildable and the calculations on density would need to be revised.

Q : On renovation projects where we are not adding density, but the existing development complies with the credit, can we claim 5 or 6 points?

A : If the existing development already complies with this optional criterion, then yes, the project can claim optional points under Criteria 2.4 (5 or 6 optional points as noted by location type). If the project did not

meet the density requirements, they would need to add additional units to meet the thresholds set forth in Criteria 2.4.

2.7 PRESERVATION OF AND ACCESS TO OPEN SPACE

Q : Under 2.7, to achieve 3 points, how long must the period of preservation remain in effect?

A : The minimum acceptable length of preservation 15 years, based on the typical life of project ownership.

2.8 ACCESS TO PUBLIC TRANSPORTATION

Q : Under 2.8 Public Transportation: Do you allow counting of rides similar to LEED, which counts both directions that pass through the qualifying stop to get a total count?

A : Yes - we will accept counting each direction in alignment with the LEED standard.

2.12 ACCESS TO FRESH, LOCAL FOODS

Q : How can I demonstrate project compliance with the Criterion 2.12 (Access to Fresh, Local Foods)?

A : Criteria 2.12 (Access to Fresh, Local Foods) has three compliance paths:

Option 1: Prebuild: indicate on a site plan the area of the site that has been set aside for planting and provide a calculation of the area. Option 1 requires that 50 sqft is set aside in this area for each dwelling unit. Postbuild: provide photos of the completed area.

Option 2: Prebuild: provide documentation of a contract or communications with a local CSA group to show that the process of securing this service is finalized or in process. Postbuild: provide a finalized contract with the CSA group.

Option 3: Prebuild: indicate the location of the farmer's market or neighborhood farm or garden on the context map. You should also include the name of the market and a website if applicable in the Intended Methods.

For all options, note any additional details in the Intended Methods.

Q : Our dedicated garden space consists of about 1,700 square feet with direct placement of plants in soil (not raised beds). In designing raised beds, this diminishes the actual planting space as we leave "walkways". Does the square footage requirement apply to the actual planting area or the entire dedicated space?

A : The 50 sqft refers to the whole dedicated space. So with paths, the planting area per resident could be smaller than 50 sqft.

SECTION 3 : SITE IMPROVEMENTS

3.4 LANDSCAPING

Q : We're unclear how "50% of the area that is eligible for landscaping" is defined. Would it simply include all space that doesn't have a building/garage/sidewalk/driveway? Is there sod that meets this requirement?

A : The calculation for Criteria 3.4 is as simple as you described. Take the entire site area, and deduct the building footprint, and any hardscaped areas (driveways, pavers, sidewalks, etc). 50% of the remaining square footage must be covered (or planted) with native or adaptive species. More information on some appropriate landscaping/plants, consult the Native Plant Information Network (www.wildflower.org/explore). Other resources are listed in the 2011 Green Communities Criteria on page 46.

Q : Is the 50% native species requirement applicable to groundcover (as well as plants and trees)?

A : Yes, the 50% native species also includes groundcover.

3.6 SURFACE STORM WATER MANAGEMENT

Q : Option 1 states to retain, infiltrate, or harvest the first 1/2 inch of rainfall across the entire site. For our calculation purposes, can we assume that pervious areas will naturally infiltrate so that we would only need to increase infiltration or capture run-off from the impervious areas?

A : Yes, you can assume that pervious areas would absorb water. You should work with your civil engineer to do soil testing and see what the absorption rate of the soil is to design a proper system.

Q : Is rainwater management intended for all impervious cover on the site (including hardscape) or just for building footprints?

A : This criterion refers to the whole of the building site. It requires measures and calculations that indicate that the first 1/2 inch of rainfall in a 24-hour period would be captured on site, i.e., not run off in to a storm sewer system.

SECTION 4 : WATER CONSERVATION

4.1 WATER CONSERVING FIXTURES

Q : Would toilet retrofit kits meet this requirement for a moderate rehab project?

A : Yes, under the 2011 Criteria we will allow retrofit kits to be installed to meet the criteria. Maintenance manuals should specify that when a toilet needs to be replaced that it be replaced to 1.28 gpf or better.

Q : How do you calculate the flush volume for a dual flush toilet? We are looking at using a 1.1/1.6 system.

A : To calculate if it would qualify use a ratio of 2:1 for low-volume flush : high-volume flush. Then average it by dividing by three for the final number. For this example it would be $[(1.1 \times 2) + (1.6)] / 3 = 1.26$ average gpf.

4.2 ADVANCED WATER CONSERVING FIXTURES

Q : If my project integrates all optional criteria for all types of water fixtures, can the project claim the maximum number of points under Criteria 4.2 Advanced Water-Conserving Appliances and Fixtures?

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.

SECTION 5 : ENERGY EFFICIENCY

Q : Is energy modeling required?

A : All Green Communities projects require energy modeling. For more information please see our Certification website at <http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/certification> and review the Criterion 5.1a – 5.1d.

5.1 BUILDING PERFORMANCE STANDARD

Q : Which version of ENERGY STAR should my building comply with?

A : We defer to the state by state guidance given nationally by the EPA, please refer to the EPA timelines at: http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_v3_regional_specs

Q : If registering a new construction single-family project for Green Communities 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 Home Energy Rating System (HERS) rater?

A : Applications that do not include the Energy Performance Report Form appropriate for the project type and construction type will be considered incomplete. Prior to construction, project teams must submit their initial energy model to ensure Green Communities has the appropriate documents to review the project for Prebuild (Step 1) Approval. 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 are exempt from submitting an energy performance report. However, the project would need to submit a signed letter stating their intent to follow the ENERGY STAR prescriptive path.

Q : We have a project that is interested in pursuing Green Communities certification. It consists of 20 townhomes that will be located on ~5 sites within the same general area. These are [PHA] homes, so they must be competitively bid. The new ENERGY STAR v3 requirement to work with an HVAC contractor that has the required credential may prohibit us from achieving certification as there is only one certified contractor in the my region. Can this requirement be waived so that we can competitively bid that HVAC work and still pursue Green Communities Certification? If not, what might our options be?

A : We have issued an "exemption" for certain projects with regards to this issue: <http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/criteria>. We do not want to create an undue burden on projects to be able to meet our criteria. We would request that you issue an RFP that requires all of the items of implementation of ESv3, but does not require the credential, to a competitive set of HVAC contractors, including the one credentialed contractor in the region.

When you receive responses, if the credentialed contractor is out of reach, we would ask that you submit a formal waiver through our online Certification portal and email the RFP responses to us at certificaiton@enterprisecommunity.org as documentation for your waiver request.

Q : I'm looking into the energy modeling software programs listed in the 2011 Green Communities Criteria, specifically EnergyPro. Is this something most people can figure out, or do most people hire out to get this accomplished?

A : Most project teams hire a Home Energy Rater or energy modeling company to complete the model for them. We have a list of Technical Assistance providers if you are looking for someone in your area that your team can work with: <http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/resources/technical-assistance-providers-database>. You are not required to work with one of these people, but these are professionals who have applied to be on our Technical Assistance Providers Registry and whose credentials we have verified.

Q : The current Energy Performance Report compares use data or energy cost data. Energy use savings and energy cost savings may be slightly different with any given project. Which should our project use?

A : The project team can use either cost or energy to show compliance per AHSRAE Appendix G.

Q : How do California buildings comply with energy requirements? CA has Title 24 part 6. Have equivalencies been determined, or do projects need to submit Title 24 documents plus in addition to other documentation?

A : For 5.1a (single family and low-rise) projects must certify the requirements of the ENERGY STAR California program.

For 5.1b (multifamily buildings 4 stories or greater) projects must exceed by 15% the version of Title 24 under which the project is permitted.

For 5.1c (single family and low-rise rehab) projects must document that they are meeting a HERS 85

For 5.1d (multifamily buildings 4 stories or greater rehab) projects must meet the version of Title 24 under which the project is permitted.

Q : We are applying for Green Communities Certification as a multifamily high-rise, going through the multifamily high-rise process with ENERGY STAR. At this point, we plan to follow the prescriptive method of ENERGY STAR, in lieu of the energy model method. What should we upload (if anything) in place of the Energy Performance Report required with the design submittal?

A : In place of the Energy Performance Report please include a letter explaining that your project will be following the prescriptive path, which version of ENERGY STAR you will be using, and please note the prescriptive path in your Intended Methods.

Q : For Green Communities Certification, do you need to a HERS certificate for each unique floor plan within the project or subdivision? If our project is 120 units in 10 buildings with only 4 unique floor plans, does the project only need to submit 4 HERS scores?

A : Sampling protocols are based on RESNET standards. See chapter 6, which begins on page 81 of this PDF, 603 line items for all of the specifics:
http://www.resnet.us/standards/RESNET_Mortgage_Industry_National_HERS_Standards.pdf

Q : In the Green Communities Criteria, under Criteria 5.1c it reads "The HERS rater will be responsible for: conducting a mid-construction inspection using ENERGY STAR v3 Thermal Enclosure System Rater Checklist." Will that checklist be strictly enforced? That is a lot to account for and I think will have significant implications on the design. Some of it will be hard to accomplish because it is not new construction.

A : To finalize the energy models, the project team will need to contract with a rater to conduct blower door and duct blaster tests on the units using the RESNET sampling protocol. The units will need to achieve the leakage numbers projected in the initial models or the models will need to be revised to reflect actual conditions. We recommend that you use sections of the ENERGY STAR v3 Thermal Enclosure Checklist as guide for items in your scope of work to ensure that the project achieves the projected blower door numbers.

Q : ASHRAE 90.1-2007 doesn't clearly spell out exclusions to there requirements when it comes to retrofitting historic structures. Since the exterior is historic and exposed brick we can not add insulation to the exterior. In order to meet ASHRAE's and Enterprise Community standards would we have to retrofit all interior walls with rigid board insulation?

A : Rehab projects are required to meet the overall performance requirements of ASHRAE 90.1-2007, not necessarily the prescriptive requirements. If you are not able to add insulation, performance in upgrading other building systems may be able to compensate for the deficiency in comparison to the prescriptive methods in ASHRAE.

Q : Is TREAT on the list of approved energy modeling software programs? TREAT is widely recognized and accepted for large multifamily properties and is accepted in New York State under NYSERDA. For moderate rehabs in particular, it is a more affordable means of complying with credit 5.1d.

A : We will accept TREAT to be used to model new construction and rehab multifamily buildings if they are using the NYSERDA program as an alternative pathway for the 2011 Criteria Building Performance Standard (5.1c and 5.1d). If the project is using the ENERGY STAR MFHR program the project will need to have the use of TREAT modeling approved by the EPA MFHR office.

5.2 ADDITIONAL REDUCTIONS IN ENERGY USE

Q : Green Communities Criteria 5.2a states that "1 point for each additional 1 point decrease in the targeted HERS index as outlined in Criterion 5.1a" will be awarded. What is the "targeted HERS index"?

A : The additional reductions in energy use that can be claimed under Criteria 5.2 of the 2011 Green Communities Criteria are based on the baseline criteria for the version of ENERGY STAR that your project is using. Under ENERGY STAR v3, this baseline would be the Target Index based on the Reference Home Design.

Q : Criteria 5.2 states that "Projects that use a prescriptive path for Criteria 5.1a will not be able to obtain points under this credit." Does this mean that if we are using the prescriptive path for ENERGY STAR, we will not be able to obtain any additional points for Criteria 5.2 regardless of the HERS rating of our project? Because the line item is listed under "Recommendations," does this mean that the line item is not necessarily a requirement?

A : If you are using a prescriptive path for ENERGY STAR your project cannot obtain any additional points under Criteria 5.2 because it will not receive a HERS score (i.e. you will not be completing any energy modeling).

5.4 ENERGY STAR APPLIANCES

Q : Does EPA WaterSense provide information regarding dishwashers?

A : EPA WaterSense is specifically related to residential fixtures; ENERGY STAR-labeled dishwashers and other appliances can be found: http://www.energystar.gov/index.cfm?c=products.pr_find_es_products

5.5 EFFICIENT LIGHTING

Q : For New Construction single-family and multifamily low-rise projects, the criterion indicates that 60% of fixtures and 100% of ceiling fans need to be ENERGY STAR qualified: Does the pin-type base requirement apply to this 60% (unless they're in uninhabited space) or does this socket type requirement apply to the other 40% of fixtures that don't have to be ENERGY STAR? Are LEDs allowed?

A : New Construction single-family or multifamily projects of 1-3 stories should follow ENERGY STAR Advanced Lighting Package (ALP) which has requirements for 60% of fixtures and 100% of ceiling fans. The ENERGY STAR ALP can be found at:

http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.AL_P_Builder. Under the ENERGY STAR ALP, 60%, bulbs/lamps are required to be pin based.

If a project wanted to install all LED, or a substantial amount of LED lighting to meet the requirement, we would require the project to submit a waiver request with documentation on the fixtures they would be installing. The waiver would likely be approved; however Green Communities will need to review the waiver request before approving this deviation from the ENERGY STAR ALP. There are pin based LEDs, but they are not the typical lamp for these types of fixtures, so Green Communities does not require that all LEDs be pin based.

Q : For New Construction multifamily projects greater than 4 stories, the criterion indicates that 80% of fixtures need to be ENERGY STAR qualified: Does the pin-type base requirement apply to this 80% (unless they're in uninhabited space) or does this socket type requirement apply to the other 20% of fixtures that don't have to be ENERGY STAR? Are LEDs allowed?

A : New Construction multifamily projects of 4 stories or greater should follow ENERGY STAR MFHR Prescriptive Path for lighting, which has requirements for 80% of lighting. This information can be found at http://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/mfhr/ENERGY_STAR_MFHR_Prescriptive_Path_V1.0.pdf?4cf7-c7b4

If a project wanted to install all LED, or a substantial amount of LED lighting to meet the requirement, we would require the project submit a waiver request with documentation on the fixtures they would be installing. The waiver would likely be approved. Green Communities will need to review the waiver request before approving this deviation from the Criteria. There are pin based LEDs, but they are not the typical lamp for these types of fixtures, so Green Communities does not require that all LEDs be pin based.

Q : The criterion states that if being replaced, new fixtures and ceiling fans need to meet or exceed ENERGY STAR efficiency levels. Does this mean they do not necessarily have to be ES qualified; and when being replaced, do these need to be fixtures with pin-type sockets?

A : Substantial and moderate rehab projects should follow the guidance of the New Construction projects up to the same required levels (see responses above).

If a project wanted to install all LED, or a substantial amount of LED lighting to meet the requirement, we would require the project to submit a waiver request with documentation on the fixtures they would be installing. The waiver would likely be (but not necessarily be) approved, but we will need to review it and track those types of requests through that mechanism. There are pin based LEDs, but they are not the typical lamp for these types of fixtures, so we would not require as of now that all LEDs be pin based.

Q : Under Green Communities Criteria 5.5c, should all outdoor lighting (exterior building and exterior site) be included?

A : We require all exterior lighting that the builder constructs and the owner pays for meet the efficiency requirements. If a certain bulb or fixture style is not certified under ENERGY STAR or doesn't meet the LED requirements of 45 lumens/watt, we require that they follow the lighting guidance under ASHRAE 90.1-2010. Also, all lighting affixed to building must be full cut off (unless emergency lighting) with motion sensors and daylight sensors, to reduce light pollution.

Q : Lighting that is provided on a public right of way may not meet the requirements under Criteria 5.5c. Does the project need to change those fixtures to demonstrate compliance with Criteria 5.5c if they are not under the control of the project?

A : Exterior lighting that is located in the public right of way that is not installed by the developer and does not have a utility bill that is paid for by the owner, does not have to meet the requirements of Criteria 5.5c. The developer will not be responsible for the exterior lighting in areas beyond their project.

SECTION 6 : MATERIALS BENEFICIAL TO THE ENVIRONMENT

6.2 LOW/NO VOC ADHESIVES AND SEALANTS

Q : Are the low-VOC levels cited in Criteria 6.1, 6.2 and 7.1 required for interior and exterior applications? LEED for Homes only requires that adhesives, sealants and paints used INSIDE the building envelope comply with low-VOC requirements. That is, anything on the outside of the building can have any level of VOC content. Is Enterprise the same?

A : Green Communities and LEED requirements are in alignment with regards to these criteria. The low-VOC levels in Criteria 6.1, 6.2, and 7.1 are only required within the building envelope, though we certainly encourage project teams to specify adhesives, sealants and paints with the lowest VOC content possible.

Q : If a composite door does not comply California 93120, but is pre-finished off site to seal all exposed edges and faces, does the sealant still need to comply with 6.2?

A : Yes, we do require that the off-site sealants comply with the VOC limits outlined in Criteria 6.2.

Q : Is there a requirement in the Green Communities Criteria for low-VOC for wood stains?

A : Stains and sealants should comply with Criteria 6.2. We have an example of a partial listing in the Criteria, but a full list of limits and definitions can be found at the Bay Area Air Quality Management District under Regulation 8, Rule 51 at: <http://hank.baaqmd.gov/dst/regulations/rg0851.pdf> or the South Coast Air Quality Management District under Rule 1113 at: <http://www.aqmd.gov/rules/reg/reg11/r1113.pdf>

6.6 RECYCLED CONTENT MATERIAL

Q : Is recycled content in sheetrock eligible for credit as recycled content under Criteria 6.6?

A : Yes; you can earn points for using recycled content sheetrock even though it is not specifically listed.

6.7 REGIONAL MATERIAL SELECTION

Q : Can you provide a calculation to help projects meet Criteria 6.7 Regional Material Selection?

A : Take a building component (e.g. framing materials, concrete, drywall, and flooring materials) and make sure that 50 % of that material is extracted, processed, and manufactured within 500 miles, based on cost.

For example, if all of the lumber used in the project is regional, project teams can claim 1 optional point. If the project includes two types of framing lumber, then divide the lumber into two components (based on the amount that is regionally located), sum the total cost of all the lumber, and then determine what percentage of the regionally located material is of the total cost. If this percentage is greater than 50, your project can claim 1 optional point.

SECTION 7 : HEALTHY LIVING ENVIRONMENT

7.1 COMPOSITE WOOD PRODUCTS THAT EMIT LOW/NO FORMALDEHYDE

Q : Under Criteria 7.1, all composite wood products including plywood, OSB, MDF, and cabinetry must be certified compliant with California 93120. However, 93120 only requires that particleboard, MDF, hardwood plywood, and finish grade made from these products are below Phase 2 requirement to be certified as California 93120 compliant. Are the other products listed (OSB and all plywood including softwood plywood) additional requirements of Green Communities? Or are we only required to follow the requirements outlined in California 93120?

A : For materials not outlined in CA 93120, sealants in compliance with Criteria 6.2 should be applied to any composite wood products that are located inside of the thermal envelope of the building.

Q : Which VOC threshold is pertinent for sealing exposed MDF/particleboard edges as required by Criteria 7.1? Could you please clarify which threshold we should be comparing proposed sealants against? There don't seem to be any options that are a good fit for this use.

A : We require that the developer use the VOC threshold specified in Rule 1168 when sealing exposed MDF/particleboard edges as required by Criteria 7.1 – Urea Formaldehyde-free Composite Wood. In Rule 1168, please reference the section for “architectural sealants” which requires 250 grams/liter.

7.2 ENVIRONMENTALLY PREFERABLE FLOORING

Q : Does Criteria 7.2 strictly prohibit the installation of carpet on the ground level bedrooms constructed with a slab on grade foundation?

A : Enterprise Green Communities will consider waiver requests from New Construction projects, with certain populations, to use carpet because we can ensure that a vapor barrier will be installed under the slab (as required by Mandatory Criteria 7.10 in our 2011 Criteria). For Moderate and Substantial Rehab projects, carpet cannot be installed on ground connected floors without foundation work.

Any carpets, pads and adhesives installed on ground connected floors will still be required to meet the Green Label or Green Label Plus certification.

We ask that project teams submit all waiver requests through the online portal. Please be sure to specify the reasons why the waiver is being requested, clearly state where the carpet is desired, and specify any additional information you would like our technical team to review. All waivers are reviewed on a project by project basis. Any waiver request granted does not apply to future projects, as all projects must submit unique waivers.

Q : What defines a ground-connected floor?

A : This refers to any floor that directly touches the ground which may include, but is not limited to: slab-on grade, basements or below grade spaces.

Q : Does unfinished hardwood flooring have to comply with the FloorScore standards? We typically install unfinished hardwood floors and have them finished on the field.

A : Unfinished hardwood flooring does not have to have the FloorScore Certification. The application of a sealant to the floor in the field will have to comply with Criteria 6.2.

Q : Does the hardwood flooring need to be produced from wood obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship", etc.

A : Hardwood floors do not need to be FSC Certified unless you are seeking points under Criteria 6.8.

Q : We currently have a multi-family moderate rehab project where only a portion of the flooring is scoped to be replaced (approximately 50% of the all units - the remainder is in good condition, having been replaced

two years ago). Is replacing only a portion of the overall project's flooring acceptable, or would we have to replace all of the flooring in all units to meet the credit's requirements?

A : The 2011 Enterprise Green Communities Criteria states "If project scope includes provision of flooring". For your project, any flooring that falls within the scope of being replaced must meet the Green Communities Criteria. Flooring that you are not touching in the project may remain as is. So, yes as you state "replacing only a portion of the overall project's flooring" is acceptable, as long as the new flooring being installed meets Criteria 7.2.

7.3 ENVIRONMENTALLY PREFERABLE FLOORING ALTERNATIVE SOURCES

Q : Does the non-vinyl/non-carpet in all rooms also apply to common areas such as corridors and office spaces where we often use carpet to soften and control noise?

A : To earn optional points under 7.3 this measure includes common spaces as well. Projects are able to install carpet in common areas under the criteria following requirements under 7.2, but would not be able to claim additional optional points through that method.

7.6 VENTILATION

Q : Do projects experience 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 Green Communities Criteria under measures for local exhaust and whole-building ventilation systems – Criteria 7.5 and 7.6.

Q : The Green Communities Criteria 7.6a requires "a ventilation system for the dwelling unit capable of providing adequate fresh air per AHSRAE 62.2-2010". We were providing that fresh air through the furnace systems, but the new electric split systems do not have that capability. ASHRAE 62.2 states that the ventilation air can be brought in through "a mechanical exhaust system, supply system, or combination thereof." The exhaust fans will be exhausting more than the minimum ventilation rate, so the fresh air should come in through infiltration. Can the ventilation requirement in Criteria 7.6 be met through infiltration?

A : In certain climates, units that have electric split systems may use a bathroom exhaust fan running continuously as an acceptable method under ASHRAE 62.2-2010, but should be used in combination with an outside air source such as a trickle vent, especially in cases where the project is new construction and built tightly. Complete the calculation in the manual under Criteria 7.6a (Ventilation: New Construction and Substantial Rehab) to determine how much CFM needs to be taken from the space hourly and thus how much the fan should run based on the selected model. Ventilation decisions must be made with care, particularly in hot, humid climates.

7.8 COMBUSTION EQUIPMENT

Q : Under Criteria 7.8 for Combustion Equipment, we want to ensure we provide the required monitors appropriately. Each unit will have its own gas-fired heating unit. Do we need to provide one CO monitor per floor of the building, or does one CO monitor per apartment unit need to be included (and hardwired). The [STATE] code does not require CO monitors, so we will not be conflicting with those requirements.

A : Since there is combustion equipment in each unit, we would require that there be one CO detector/unit. Also, be sure that all combustion equipment is direct vented or power vented so there is no risk of spilling combustion contaminants into the residence. In cases where state law conflicts with the Enterprise Green Communities requirements, projects should follow the state law requirements.

7.9 MOLD PREVENTION

Q : On renovation projects that do not intend to replace all of the bathroom walls, what would be the recommended treatment?

A : The replacement of walls in the bathroom should comply with the criteria, but EGC will not require all walls be ripped out and replaced if it not in the scope.

Q : Does a non-paper faced backing material need to be installed behind tubs and showers only? Or throughout the entire bathroom?

A : The best option is to have no paper faced products in the bathroom (fiberglass or cement board products are strongly suggested). However, if this option is cost prohibitive, we would require you to formally submit a waiver to track the deviation on your project and require non-paper-faced backing materials such as cement board, fiber cement board, or equivalent in portions of the bathroom in the following areas that are susceptible to bulk moisture damage (i.e. splash-prone and puddle-forming areas), including:

- The full area behind the tub/shower enclosure
- 4" surrounding the entire perimeter of the tub/shower enclosure,
- 4" up from where the floor meets the vertical wall throughout the entire bathroom (creating a band around the bathroom floor).

For the rest of the bathroom wall and ceiling surfaces projects can use an ASTM D 3273 compliant board with a score of 10.

7.11 RADON MITIGATION

Q : Our general contractor is asking if there are any radon and vapor barrier testing requirements per Green Communities?

A : The only testing requirement for radon (Criteria 7.11) is for Substantial Rehab projects. If your project is New Construction, then Criteria 7.10 Vapor Barrier Strategies is mandatory, and Criteria 7.11 Radon Mitigation is mandatory for projects in EPA Zones 1 & 2.

7.16 SMOKE FREE BUILDING

Q : Do you have any recommendations for how to enforce Criteria 7.16 (Smoke-Free Building)?

A : A no smoking policy should be in place, and documented in the lease agreement with residents, and the property owners and/or managers should determine what an appropriate response will be for the project. The intent is to improve the indoor air quality for all residents by eliminating toxins in the air to the greatest extent possible. In order to comply with Criteria 7.16, the entire building needs to be designated non smoking.

SECTION 8 : OPERATIONS + MAINTENANCE

8.1 BUILDING MAINTENANCE MANUAL

Q : Please confirm that draft Operations and Maintenance documents relating to the building maintenance (8.1) and resident (8.2) manuals are not required to be completed at the Prebuild Application.

A : Drafts of the O+M Manual would not be required at this step. When construction is complete, and the project submits its Postbuild Application to Enterprise Green Communities Certification, that is the time in which we would need to see your O+M Manual(s).

8.4 PROJECT DATA COLLECTION AND MONITORING SYSTEM

Q : If we don't seek optional points under Criteria 8.4, is the utility release even necessary?

A : Yes. The utility release gives us the opportunity to reach out to the utility company for up to 5 years and request the data to track how well projects are doing in energy consumption. We do require that all projects submit 100% of owner paid utilities and 15% of resident paid utilities as a condition of certification.

In the Green Communities Criteria, we wanted to take advantage of emerging programs (e.g. EPA's Portfolio Manager, EnergyScoreCards, WegoWise) to expand the impact of energy tracking. Having the data analyzed easily and quickly will allow project teams, owners and residents easier ways to understand and manage their own energy use, and potentially impact their consumption habits, reducing the energy draw of the building further. Projects that engage in their own energy tracking are awarded under Criteria 8.4.

Q : Does the utility release form provided during the Postbuild (Step 2) Certification suffice for meeting the Criteria 8.4 Data Collection and Monitoring criterion?

A : No, the utility release form is required 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.

Q : How does the reporting for utility data work?

A : Utility data includes information on energy and water usage. To meet the requirements of Criteria 8.4, we require that developers/property owners collect, monitor, and report project energy and water performance data to Green Communities for a minimum of five years. Projects are required to include a Utility Release Form in their lease documents and register for one of the following online energy and water management and benchmarking tools: EPA's Portfolio Manager, EnergyScoreCards, or Wego Wise. These tools will allow you to track your project's data on a regular basis and directly share your energy and water data with Green Communities.

For additional information related to the 2011 Enterprise Green Communities Criteria, please contact Enterprise at greencommunities@enterprisecommunity.org