From:	Amelia Godfrey ███████████████
Sent:	Monday, November 4, 2019 4:47 PM
To:	McMillan, Chris 6-9196; Martinez, Sara 6-4144
Cc:	Catherine Gunter
Subject:	EarthCraft Comments to the South Carolina QAP
Attachments:	SC QAP Draft letter.pdf; EarthCraft Multifamily and LEED Comparison.pdf; EarthCraft vs Enterprise_v6.pdf

Dear Mr. McMillan and Ms. Martinez,

Please see the attached letter from EarthCraft regarding the draft South Carolina QAP and accompanying supplemental documentation. We appreciate the opportunity to provide comments. A print letter has been sent to your attention as well.

Thank you,

Amelia Godfrey
Program Manager, Marketplace Solutions
████████████

‮ Southface

Love the work we're doing and want to help us do more?
Support Southface

EarthCraft Multifamily

Program Requirements

All projects must meet minimum requirements for site development, building durability, construction resources, building energy efficiency and indoor air quality. Significant requirements include:

- Meeting 2012 IRC requirements for flashing and drainage
- Combustion safety considerations for any gas appliances
- Meeting the IECC adopted by the local jurisdiction
- Providing ventilation to meet ASHRAE 62.2 standards
- Providing Energy Star and WaterSense labeled appliances

Projects may also choose between two pathways for achieving certification:

Option One: complete energy modeling meeting RESNET standards for all residential units. Energy modeling must show that units achieve a HERS Index of ≤ Energy Star v3 for each unit type.

Option Two: complete the EarthCraft Multifamily Prescriptive pathway. This check-list requires above-code insulation, windows, air sealing and HVAC equipment.

LEED Homes Mid-Rise v4

Program Requirements

All projects must meet minimum requirements for site development, water efficiency, energy efficiency, construction resource use, indoor air quality, and energy modeling. Significant requirements include:

- Use of a home size adjustment factor
- Meet Energy Star for Homes requirements
- Energy modeling required for low-rise projects to meet Energy Star v3
- Energy modeling required for mid-rise projects for 5% improvement over ASHRAE 90.1-2010
- Provide ventilation to meet ASHRAE 62.2 standards

A minimum of 40 points are required to achieve certification. These points may be obtained from optional point items within sections of the worksheet.

LEED v4 Building Design & Construction

Program Requirements

Called LEED Certified™. Projects must meet all minimum program requirements and obtain a minimum of 40 points from optional credits. Significant requirements include:

- Whole building energy simulation demonstrating an improvement of 5% over ASHRAE 90.1 2010
- Fundamental Commissioning by an accredited third party
- Create and implement a site erosion and sediment control plan that conforms to EPA CGP
- Outdoor and indoor water use reduction
- Building level metering of energy and water usage
- Meet the requirements for ventilation and monitoring per ASHRAE 62.1 – 2010

A minimum of 40 points are required to achieve certification. These points may be obtained from optional point items within sections of the worksheet.

EarthCraft Multifamily	LEED Homes Mid-Rise v4	LEED v4 Building Design & Construction
Certified Level In addition to meeting the minimum program requirements, projects must obtain a minimum of 100 points on the EarthCraft Multifamily worksheet. These points may be obtained from any section; there are no minimum point requirements for each section.	**Silver Level** In addition to meeting the minimum program requirements, projects must obtain a minimum of 50 points on the LEED Homes v4 worksheet.	**Silver Level** Projects must meet all minimum program requirements and obtain 50-59 points from optional items. Minimum program requirements for energy and water performance match EarthCraft Certified for commercial buildings, but LEED Projects must show an energy savings of 5% minimum compared to a code building using an energy model.
Gold Level In addition to meeting the minimum program requirements, projects must obtain a minimum of 150 points on the EarthCraft Multifamily worksheet. Additional requirements exist for HVAC systems, the building envelope and construction resources.	**Gold Level** In addition to meeting the minimum program requirements, projects must obtain a minimum of 60 points on the LEED Homes v4 worksheet.	**Gold Level** Projects must meet all minimum program requirements and obtain 60-79 points from optional items.
Platinum Level In addition to meeting the minimum program requirements, projects must obtain a minimum of 200 points on the EarthCraft Multifamily worksheet. Additional requirements exist for HVAC systems, the building envelope and construction resources.	**Platinum Level** In addition to meeting the minimum program requirements, projects must obtain a minimum of 80 points on the LEED Homes v4 worksheet.	**Platinum Level** Projects must meet all minimum program requirements and obtain 80+ points from optional items.

About the Programs

EarthCraft Multifamily

EarthCraft is a builder-focused green building certification program for low-, mid-, and high-rise buildings. Addresses climate, energy, and water issues unique to the Southeastern United States. EarthCraft serves as a blueprint for high performance and sustainable homes, multifamily developments, communities, and light-commercial buildings.

Point Criteria
Projects must meet all minimum program requirements. Projects work towards Certified (100 points), Gold (150 points), or Platinum (200 points) certification.

Minimum Program Requirements
Called EarthCraft Multifamily Certified. Program requirements include:

1. Site Planning
2. Construction Waste Management
3. Resource Efficiency
4. Durability and Moisture Management
5. Indoor Air Quality
6. High Performance Building Envelope
7. Energy Efficient Systems
8. Water Efficiency
9. Education and Operations
10. Innovation

Enterprise Green Communities

Enterprise Green Communities is a green building certification program for affordable housing. Works to improve the health and well-being of people with low-income by ensuring that affordable housing is healthy, has low cost utility bills, and more opportunities through connections to transportation and health care services.

Point Criteria
Projects must meet all (40) minimum program requirements which are based on construction type. Projects must obtain a minimum point amount for New Construction (35 points), Moderate Rehab (30 points), or Substantial Rehab (30 points).

Minimum Program Requirements
Called Enterprise Green Communities Certified. A key feature of the minimum program requirements is an integrated design process to address chronic health concerns, natural disaster risks, and energy efficient construction. Program requirements are grouped into the following eight categories:

1. Integrative Design
2. Location + Neighborhood Fabric
3. Site Improvements
4. Water Conservation
5. Energy Efficiency
6. Materials
7. Healthy Living Environment

Points Breakdown

earthcraft

New Construction

In addition to meeting the minimum program requirements, energy compliance through energy modeling or a prescriptive checklist is required for Certified projects. Energy modeling is required for Gold and Platinum certification levels.

Projects must obtain a minimum of 100 points (Certified), 150 points (Gold), or 200 points (Platinum) on the EarthCraft Multifamily worksheet. These points may be obtained from any section; there are no minimum point requirements for each section.

Gold and Platinum New Construction units must certify ENERGY STAR for New Homes or Multifamily High Rise.

Renovation

In addition to meeting the minimum program requirements, a wall cavity assessment, pre-renovation basement, energy compliance, and energy modeling is required at the Certified, Gold, and Platinum certification levels.

Projects must obtain a minimum of 100 points (Certified), 150 points (Gold), or 200 points (Platinum) on the EarthCraft Multifamily worksheet. These points may be obtained from any section; there are no minimum point requirements for each section.

Enterprise green communities℠

New Construction

Projects must achieve compliance with the mandatory Criteria measures applicable to the construction type. In addition to meeting the minimum program requirements, New Construction projects must obtain a minimum of 35 points on the 2015 Enterprise Green Communities Criteria Checklist and earn the ENERGY STAR for Homes certification. Projects must certify with Enterprise Green Communities at Design Phase and on Final Construction Completion

Rehabilitation

Moderate and Substantial Rehabilitation

Projects must achieve compliance with the mandatory Criteria measures. In addition, projects must achieve building efficiency goals and determine project scope to include mandatory program requirements. Moderate and Substantial Rehab projects must obtain a minimum of 30 points on the 2015 Enterprise Green Communities Criteria Checklist. Projects must certify with Enterprise Green Communities at Design Phase and on Final Construction Completion.