

SS Credit 6.2

Heat Island Reduction: Roof

1 Point

Intent

Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat.

Requirements

Option A

- Have in place over the performance period ENERGY STAR®-compliant, high-reflectance and high emissivity roofing material that has a minimum emissivity of 0.9 when tested in accordance with ASTM 408 for a minimum of 75% of the roof surface.
- Provide records and results of quarterly inspections over the performance period to determine that these features are being maintained.

Option B

- Install/maintain a “green” (vegetated) roof for at least 50% of the roof area.
- Provide records and results of quarterly inspections over the performance period to determine that these features are being maintained.

Combinations of roofing materials that meet the requirements of Option A and Option B can be used providing they collectively cover the designated area. See the LEED-EB Reference Guide for guidance on calculating achievement of credit requirements based on using a combination of Option A and B roofing materials.

Submittals – Initial LEED-EB Certification

Option A

- Provide documentation demonstrating that roofing meets roofing material requirements of Option A. Documentation must include a roof plan, photographs and measurements of reflectance and emissivity. Manufacturer measurements are acceptable if the materials have been in place less than five years. If the materials have been in place more that five years, current measurements must be provided.
- Include area calculations demonstrating that the roofing material covers a minimum of 75% of the total roof area.
- Provide records and results of quarterly inspections over the performance period to determine that these features are being maintained.

Option B

- Provide documentation demonstrating that the requirements of Option B are met.
- Provide photographs and a roof plan documenting the installation/maintenance of a green vegetated roof system. Include a description of the green roof system being used and the types of vegetation being grown in the green roof. Include area calculations demonstrating that the roof system covering a minimum or 50% of the total roof area.

- ❑ Provide records and results of quarterly inspections over the performance period to determine that these features are being maintained.

Submittals – LEED-EB Re-Certification

Provide an update of previous filings:

- ❑ If no change in the policies or techniques used to earn this credit has occurred, provide records and results of quarterly inspections over the performance period to determine that the specific features used to earn this credit are being maintained.

OR

- ❑ If the policy or technique used to earn this credit in previous LEED-EB Certifications has changed, in addition to the documentation required for each specific compliance path, provide records and results of quarterly inspections over the performance period to determine that the roofing area continues to meet the requirements of Options A or B.

Potential Technologies & Strategies

Visit the ENERGY STAR Web site, www.energystar.gov, to research compliant products. Consider installing high-albedo and vegetated roofs to reduce heat absorption.