



Heat island reduction

Possible 2 points

Intent

To minimize effects on microclimates and human and wildlife habitats by reducing heat islands.

Requirements

Ensure that at least 50% of hardscapes and roofs, but not including common roads that serve multiple buildings, on the project site meet one or more of the following requirements. Points are awarded according to Table 1.

Table 1. Points for percentage area with shading or nonabsorptive material

| Percentage of hardscape area | Points |
|------------------------------|--------|
| 50–75% | 1 |
| > 75% | 2 |

Option 1. Shading (1–2 points)

Locate trees or other plantings to provide shading of hardscapes. Shading should be calculated when the sun is directly overhead (noon on the summer solstice), based on ten years' growth after installation.

AND/OR

Option 2. Nonabsorptive materials (1–2 points)

Install light-colored, high-albedo materials or vegetation-covered hardscapes. Acceptable strategies include the following:

- using ENERGY STAR qualified roof products in appropriately sloped applications applications (or performance equivalent for projects outside the U.S.);
- installing vegetated roofing;
- using open pavers (counting only the vegetation, not the pavers) or engineered grass pavers; and
- Use paving materials with a three-year aged solar reflectance (SR) of at least 0.28. If three-year aged value information is not available, use materials with an initial SR of at least 0.33 at installation.