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- MRpc52 | Material multi-attribute assessment
- MRpc53 | Responsible sourcing of raw materials
- MRpc53 | Responsible sourcing of raw materials
- MRpc54 | Avoidance of chemicals of concern
- MRpc54 | Avoidance of chemicals of concern
- MRpc61 | Material disclosure and assessment
- MRpc62 | Disclosure of chemicals of concern
- MRpc63 | Whole building life cycle assessment
- MRpc69 | Construction and demolition waste management
- MRpc76 | Material ingredient reporting
- MRpc76 | Material ingredient reporting
- MRpc77 | Material ingredient optimization
- MRpc77 | Material ingredient optimization
- MRpc79 | Material ingredients product manufacturer supply chain optimization
- MRpc79 | Material ingredients product manufacturer supply chain optimization
- MRpc79 | Material ingredients product manufacturer supply chain optimization
- MRpc80 | Environmentally preferable interior finishes and furnishings
- MRpc80 | Environmentally preferable interior finishes and furnishings
- MRpc84 | MR Credit Category Pilot ACP
- MRpc87 | Verified Construction & Demolition Recycling Rates
- MRpc87 | Verified Construction & Demolition Recycling Rates
- MRpc87 | Verified Construction & Demolition Recycling Rates
- SSpc14 | Walkable project site
- SSpc14 | Walkable project site
- SSpc16 | Rainwater management
- SSpc16 | Rainwater management
- SSpc45 | Site assessment
- SSpc55 | Bird collision deterrence
- SSpc55 | Bird collision deterrence
- SSpc55 | Bird collision deterrence
- SSpc55 | Bird collision deterrence
- SSpc64 | Site improvement plan
- SSpc7 | Light pollution reduction
- SSpc7 | Light pollution reduction
- SSpc75 | Clean construction
- SSpc75 | Clean construction
- SSpc75 | Clean construction
- SSpc82 | Local food production
- SSpc82 | Local food production
- SSpc82 | Local food production
- SSpc82 | Local food production
- SSpc83 | Site development - protect or restore habitat - alternative compliance path
- SSpc83 | Site development - protect or restore habitat - alternative compliance path
- SSpc83 | Site development - protect or restore habitat - alternative compliance path
- SSpc83 | Site development - protect or restore habitat - alternative compliance path
- WEpc10 | Sustainable wastewater management
- WEpc10 | Sustainable wastewater management
- WEpc17 | Cooling tower water use
- WEpc17 | Cooling tower water use
- WEpc18 | Appliance and process water use reduction
- WEpc18 | Appliance and process water use reduction
- WEpc18 | Appliance and process water use reduction
- WEpc32 | WaterSense for new homes
- WEpc32 | WaterSense for new homes
- WEpc94 | No Cooling Tower - alternative compliance path
- WEpc94 | No Cooling Tower - alternative compliance path
- WEpc94 | No Cooling Tower - alternative compliance path

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LEED BD+C: Core and Shell | v3 - LEED 2009

Whole building life cycle assessment

MRpc63 | Possible 1 point

1 result in**All** .

- Glossary

Intent

This is a pilot credit. To use any pilot credit on your LEED project, be sure to register here. Documentation requirements and additional questions are listed below.

To increase the use of products and materials with life cycles and ingredients that improve overall environmental, economic and social performance.

Requirements

* This credit language is drawn from the LEED v4 draft. Where other point totals are noted, this pilot credit is worth 1 point in total. *

Option 4. whole-building life-cycle assessment (3 points)

For new construction (buildings or portions of buildings), conduct a life-cycle assessment of the project's structure and enclosure that demonstrates a minimum of 10% reduction, compared with a baseline building, in at least three of the six impact categories listed below, one of which must be global warming potential. No impact category assessed as part of the life-cycle assessment may increase by more than 5% compared with the baseline building.

The baseline and proposed buildings must be of comparable size, function, orientation, and operating energy performance as defined in EA Prerequisite Minimum Energy Performance. The service life of the baseline and proposed buildings must be the same and at least 60 years to fully account for maintenance and replacement. Use the same life-cycle assessment software tools and data sets to evaluate both the baseline building and the proposed building, and report all listed impact categories. Data sets must be compliant with ISO 14044.

Select at least three of the following impact categories for reduction:

- global warming potential (greenhouse gases), in CO2e;

- depletion of the stratospheric ozone layer, in kg CFC-11;
- acidification of land and water sources, in moles H+ or kg SO2;
- eutrophication, in kg nitrogen or kg phosphate;
- formation of tropospheric ozone, in kg NOx, kg O3 eq, or kg ethene; and
- depletion of nonrenewable energy resources, in MJ.

General Pilot Documentation Requirements

Register for the pilot credit

- Participate in the LEEDuser pilot credit forum
- Complete the feedback survey:

Credits 1-14

Credits 15-27

Credits 28-42

Credits 43-56

Credits 57-67

Credits 68-82

Credits 83-103

Credit specific:

The idea of this credit is to explore the holistic environmental impacts of material selection for structure and assembly. At a minimum submit summary life cycle inventory and assessment results for the materials and assemblies explored. As well as a comprehensive narrative outlining why the assemblies chosen were compared, any conclusions learned as part of the process, and any decisions made as a result of the study. If the project does not have an energy model ensure the same operational energy use is used in all assessments. The software tools approved for use in this pilot credit are the Athena Impact Estimator, GaBi, and SimaPro. If other tools are used please provide evidence that the tool meets the ISO requirements.

Additional questions:

1. What LCA database was used to conduct analysis? Why did you choose it? What did you think of the tool's usability and technical rigor?
2. Was obtaining product or brand specific LCIA data from manufactures difficult (or even possible)? Where there any other major hindrances to earning this credit?
3. Do you think it is appropriate for this to be a design phase credit? Why or why not?
4. Was the safety of alternative materials chosen a concern? Why or why not?

Changes:

- Changes as a result of 3rd Public Comment (3/1/2012):
  Former Option 1 and Option 2 completely removed.
  Credit implementation strategy modified, intent remains the same.
- Changes as a result of 5th Public Comment (1/15/2013):
  Modified to align with Building life-cycle impact reduction - Option 4

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