Please upgrade your browser. This site requires a newer version to work correctly. Read more

- 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
- 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

Our "watch" feature allows you to stay current on all aspects of this specific credit. In your account, you can control what you get updated on and how you receive your notifications. Hide

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

Cooling tower water use

WEpc17 | Possible 1 point

1 result in**All** .

- Glossary

Intent

To conserve water used for cooling tower makeup while controlling microbes, corrosion, and scale in the condenser water system.

Pilot Credit Closed

This pilot credit was closed to new pilot credit registrations on 3/1/2015. It is now available in the LEED Innovation Catalog for ongoing use by project teams as an innovation point rather than a pilot credit.

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. *

For cooling towers and evaporative condensers, conduct a one-time potable water analysis, in order to optimize cooling tower cycles. Measure at least the five control parameters listed in Table 1.

Table 1. Maximum concentrations for parameters in condenser water

Parameter	Maximum level
Ca (as $CaCO_3$)	1000 ppm
Total alkalinity	1000 ppm
SiO_2	100 ppm
Cl^-	250 ppm
Conductivity	2000 µS/cm

ppm = parts per million
µS/cm = micro siemens per centimeter

Calculate the number of cooling tower cycles by dividing the maximum allowed concentration level of each parameter by the actual concentration level of each parameter found in the potable makeup water. Limit cooling tower cycles to avoid exceeding maximum values for any of these parameters.

Table 2. Points for cooling tower cycles

Cooling tower cycles	Points

Maximum number of cycles achieved without exceeding any filtration levels or affecting operation of condenser water system (up to maximum of 10 cycles)	1
Achieve a minimum 10 cycles by increasing the level of treatment in condenser or make-up water OR Achieve the number of cycles for 1 point and use a minimum 20% recycled nonpotable water	2

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

Provide the following:

1. A water analysis measuring as a minimum the five control parameters measured in ppm or mg/l.
2. Narrative describing the water treatment system and the number of cycles which the cooling tower can achieve without exceeding the control parameters. The narrative should also include the predicted acceptable corrosion rates for each pipe material within the condenser water system.

Additional questions:

none

Changes

- Changes made for 2nd Public Comment (08/01/2011):
  Separate language for EBOM projects to conform with new EBOM rating system structure
  Added Healthcare as an applicable rating system type.
  Clarification of cooling tower analysis process which requires a one time potable water analysis, following by an assessment of the maximum number of cycles appropriate to the project, along with additional measures to improve cooling tower efficiency.
- Changes made for 3rd Public Comment (03/01/2012):
  Removed CI & Retail CI from applicable rating systems
  Removed equipment requirements from EB:O&M
  Separated EBOM & BD+C submittal requirements to reflect change to EBOM requirements.
- Changes made for 5th Public Comment (1/15/2013):
  Updated tables to align with 5th Public Comment changes to LEED v4 WEc3.
  Removed additional BD+C documentation requirements that correspond to WEp2 from v4 draft.

0 commentsLeave a comment

Leave a comment Don't have an account? Create one

You must be signed in to leave a comment.

Email

Password

SIGN IN

Address
2101 L Street NW
Suite 500
Washington, DC 20037
Within the United States:
1-800-795-1747
Outside the United States:
1-202-742-3792

© 2012-2015 U.S. Green Building Council

ABOUT

- Certification
- Education
- LEED Green Associate
- USGBC
- LEED
- Membership
- Jobs
- Press
- Contact
- LEED AP
- Rating systems

RESOURCES

- LEED Credit Library
- Resource Library
- LEED Online

- Education @USGBC
- Discover LEED
- Credentials account
- Glossary
- Help
- Subscriptions
- Guide to LEED Certification

DIRECTORY

- Organizations
- People
- Projects

ARTICLES

- Advocacy and policy
- Center for Green Schools
- Education
- Industry
- International
- LEED
- Media
- Community

STORE

- Apps
- Education
- Exams
- Giving
- Membership
- Mechandise
- Publications

POLICY

- Terms
- Privacy
- Legal
- Trademark policy

PARTNER SITES

- SITES
- Greenbuild International Conference and Expo
- Green Building Information Gateway
- Green Home Guide
- Center for Green Schools
- Green Apple
- Green Business Certification Inc.
- GRESB
- WELL
- PEER