LEED BD+C: New Construction | v2009

Appliance and process water use reduction

WEpc18 | Possible 1 point

Glossary

Intent

Pilot Credit Closed
This pilot credit is closed to new registrations

To reduce the burden on water supply and wastewater systems by increasing the water efficiency of appliances and water-consuming processes.

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. *

Appliance and process water use

Install appliances, equipment, and processes within the project scope that meet the requirements listed in the tables below .

Table 2. Standards for appliances

Appliance	Requirement
Residential clothes washers	ENERGY STAR or performance equivalent
Commercial clothes washers	CEE Tier 3A
Residential dishwashers (standard and compact)	ENERGY STAR or performance equivalent
Prerinse spray valves	≤ 1.3 gpm (4.9 lpm)
Ice machine	ENERGY STAR or performance equivalent and use either air-cooled or closed-loop cooling, such as chilled or condenser water system

gpm = gallons per minute
lpm = liters per minute

Table 3. Standards for processes

Process	Requirement
Heat rejection and cooling	No once-through cooling with potable water for any equipment or appliances that reject heat
Cooling towers and evaporative condensers	Equip with: ▫ makeup water meters ▫ conductivity controllers and overflow alarms ▫ efficient drift eliminators that reduce drift to maximum of 0.002% of recirculated water volume for counterflow towers and 0.005% of recirculated water flow for cross-flow towers

Submittals

General

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:

NC, CS, Schools, Retail NC, CI, Retail CI, Healthcare:

1. Provide a schedule indicating ALL process water equipment. Indicate which types of equipment that are being installed on the project are applicable to the credit and the quantity of equipment which is to be installed. For Healthcare, Schools, Retail and Hospitality projects, include the items in Tables 3& 4 as well.
2. Provide a floor plan indicating the location of all process water equipment.
3. Submit one-line diagrams of all piping systems associated with the referenced equipment, inclusive of design flow rates for both supply and effluent.

4. Provide approved manufacturer's information (i.e. cut sheets, shop drawings, submittals) for each piece of equipment applicable to this credit, indicating at a minimum water usage, capacity of equipment, and energy star rating (if applicable).

EBOM:
Provide a copy of the purchasing policy, which must include:

1. detail on its physical and programmatic scope;
2. duration of applicability;
3. responsible parties (by individual name or title);
4. sustainability goals and objectives;
5. procedures and strategies for implementation;
6. specific metrics by which performance will be measured; and
7. a quality assurance process to evaluate and verify successful implementation of the policy.

AND
Provide the following:

- a log of all existing equipment covered by the credit
- a maintenance plan and log to ensure that the equipment is being properly maintained (and not leaking)
- documentation that at least 20% of all installed equipment and 100% of purchases during the performance period meet the requirements.

Additional questions:

1. Did your project include any other appliances or process water items that should be included in the credit?
2. Were you able to find suitable products at a reasonable cost at the flow rates required?

Changes:

- Changes made for 2nd Public Comment (08/01/2011):
  Added Healthcare to the applicable rating system types
  Restructured EBOM requirements based on new EBOM structure for LEED 2012 and aligned purchasing agreement language with other EBOM purchasing credits.
  Separate submittal requirements for NC vs. EBOM
  Added Ice Machine requirement (ENERGY STAR) originally in the Appliance & Process Water credit from LEED 2012.
  Clarified Discharge Water Temperature Tempering requirement is based on the water leaving the appliance (rather than the tank) to reduce maintenance concerns.
- Changes made for 3rd Public Comment (03/01/2012):
  Updated requirements based on changes for 3rd public comments.
  Separated Tables 3&4 addressing food service and specialty process water items not usually included in a commercial office building. These requirements only apply to Healthcare, Schools, Retail and Hospitality projects.
  Removed some process and appliance requirements for EBOM
- Changes made for 5th Public Comment (01/15/2013):
  Updated metrics to align with 5th Public Comment changes to LEED v4
- Changes made based on feedback (03/15/2013):
  Modified EBOM requirements to include purchasing logs and inventory of current equipment
  Clarified that projects without any applicable equipment are ineligible