

Earn LEED EBOM Points Using Walchem's WebMaster®ONE Controller

In today's economic and social environment, it's imperative to seek new ways to reduce costs, minimize environmental impact, and move towards sustainability. Reduction of water and chemical use is a priority for most facilities, and LEED certification is a priority for many facility managers. Walchem's WebMasterONE controller can help accomplish these goals through the use of its specialized control algorithms, and integrated communications and data handling features.

Sustainability through:

- Water Conservation
- Chemical Reduction
- Energy Conservation

Available LEED EBOM Credits:

- WE Credits 1.1 and 1.2 1-2 points
- WE Credits 4.1 – 4.2 1-2 points



Optimize your cooling tower water-recycling program by monitoring, delivering and maintaining maximum cycles of concentration. Remote monitoring and operations incorporating Walchem's ppm algorithm provides reduced chemical feed, conservation of water and optimized energy efficiency.

- Regardless of the quality of the makeup water, Walchem's WebMasterONE maintains optimum cycles of concentration through continuous water recycling while maintaining clean heat transfer surfaces to maximize energy efficiency
- LEED EBOM compliance is derived through Walchem's WebMasterONE real time remote measurement and verification
- Specified ranges of compliance are maintained through instantaneous alerts
- Sustainable operations and troubleshooting are facilitated through datalogging and trending
- Walchem's part per million (ppm) algorithm controls chemical injection to the cooling tower recycled water to preserve heat transfer and reduce corrosion potential with minimal chemical usage

The algorithm maintains a programmed level of residual chemical based on the specific aspects of the makeup water, as well as cycles of concentration.

Ongoing operations with Walchem's WebMasterONE:

- Optimize cycles of concentration
- Optimize conservation of chemicals and minimization of chemical overfeed
- Optimize heat transfer surfaces for maximum heat transfer and ultimate energy efficiency



LEED EBOM CREDITS:

Water Performance Measurement

Walchem's WebMasterONE is available with up to twelve digital (discrete) inputs and eight analog inputs for monitoring, datalogging, and reporting on a wide range of external devices.

WE Credits 1.1 and 1.2 SCORE 1-2 points

WE Credit 1.1 (1 point) Metering:

Have in place permanently installed water meters that measures the total potable water use for the entire building and associated grounds. Meter data must be recorded on a regular basis and compiled into monthly and annual summaries. Applicants are also encouraged to meter gray water or reclaimed water supplied to the building.

WE Credit 1.2 (1 point) Sub Metering:

Meet the requirements for WE Credit 1.1 and have in place permanently installed metering for one or more of the following water subsystems:

Cooling Tower Water Management

WE Credits 4.1 – 4.2

WE Credit 4.1 (1 point): Chemical Management:

Develop and implement a water management plan for the cooling tower that addresses chemical treatment, bleed off, biological control and staff training as it relates to cooling tower maintenance.

Improve water efficiency by installing and/or maintaining a conductivity meter and automatic controls to adjust the bleed rate and maintain proper concentration at all times.

WE Credit 4.2 (1 point): Nonpotable Water Source Use:

Use make-up water that consists of at least 50% non-potable water, such as harvested rainwater, harvested stormwater, air conditioner condensate, swimming pool filter backwash water, cooling tower blowdown, pass-through (once-through) cooling water, recycled treated waste water for toilet and urinal flushing, foundation drain water, municipally reclaimed water or any other appropriate on-site water source that is not naturally occurring groundwater or surface water. Have a measurement program in place that verifies makeup water quantities used from nonpotable sources. Meters must be calibrated within the manufacturers recommended interval if the building owner, management organization or tenant owns the meter.

Irrigation

Meter water systems serving at least 80% of the irrigated landscape area on the grounds. The percentage of irrigated landscape area served must be calculated as the total metered irrigated landscape area divided by the total irrigated landscape area. All landscaping areas fully covered with xeriscaping or native vegetation that requires no routine irrigation must be excluded from the calculation entirely.

Indoor plumbing fixtures and fittings

Meter water systems serving at least 80% of the indoor plumbing fixtures and fittings described in WE Prerequisite 1, either directly or deducting all other measured water use from the measured total water consumption of the building and grounds.

Cooling towers

Meter replacement water use of all cooling towers serving the facility.

Domestic hot water

Meter water use of at least 80% of the installed domestic hot water heating capacity.

Other process water

Meter at least 80% of expected daily water consumption for process type end uses, such as humidification systems, dishwashers, clothes washers, pools, and other system

W A L C H E M

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