



| v3 - LEED 2008

## Minimum indoor plumbing fixture and fitting efficiency

WEp1 | Required

Glossary

### Intent

To reduce indoor fixture and fitting water use within buildings to reduce the burdens on potable water supply and wastewater systems.

### Requirements

Reduce potable water usage of indoor plumbing fixtures and fittings to a level equal to or below the LEED for Existing Buildings: O&M baseline, calculated assuming 100% of the building's indoor plumbing fixtures and fittings meet the Uniform Plumbing Codes (UPC) 2006 or International Plumbing Codes (IPC) 2006 fixture and fitting performance requirements. Fixtures and fittings included in the calculations for this credit are water closets, urinals, showerheads, faucets, faucet replacement aerators and metering faucets.

The LEED for Existing Buildings: O&M baseline water usage is set depending on the year of substantial completion of the building's indoor plumbing system. Substantial completion is defined as either initial building construction or the last plumbing renovation of all or part of the building that included 100% retrofit of all plumbing fixtures and fittings as part of the renovation. Set the baseline as follows:

- ° For a plumbing system substantially completed in 1994 or later throughout the building, the baseline is 120% of the water usage that would result if all fixtures met the codes cited above.
- ° For a plumbing system substantially completed before 1994 throughout the building, the baseline is 160% of the water usage that would result if all fixtures met the codes cited above.

If indoor plumbing systems were substantially completed at different times for different parts of the building because the plumbing renovations occurred at different times, set a whole-building average baseline by prorating between the above limits. Prorate based on the proportion of plumbing fixtures installed during the plumbing renovations in each date period, as explained in the LEED for Existing Buildings: Operations & Maintenance Reference Guide. Pre-1994 buildings that have had only minor fixture retrofits (aerators, showerheads, flushing valves) but no plumbing renovations after 1993 may use the 160% baseline for the whole building.

Demonstrate fixture and fitting performance through calculations to compare the water use of the as-installed fixtures and fittings with the use of UPC- or IPC-compliant fixtures and fittings, as explained in the LEED for Existing Buildings: Operations & Maintenance Reference Guide.

Develop and implement a policy requiring economic assessment of conversion to high-performance plumbing fixtures and fittings as part of any future indoor plumbing renovation. The assessment must account for potential water supply and disposal cost savings and maintenance cost savings.

*Potable water* is defined as water that is suitable for drinking and is supplied from wells or municipal water systems.