# LEED QUALIFICATION GUIDE - v4

Sloan is committed to global water conservation and helps our customers worldwide to meet the water and energy challenges of growing businesses, municipalities and communities.

As a member of the United States Green Building Council (USGBC) and through the use of the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, Sloan recognizes and validates the importance of best-in-class building strategies and practices of high performing green buildings. Sloan's complete line of innovative plumbing solutions can be used to help achieve water efficiency goals as well as gaining USGBC LEED v4 points and/or complying with CAL Green and other building codes.





USGBC's LEED v4 contains several updates from its predecessor LEED 2009. However the intent of the Water Efficiency (W.E.) section remains the same - to reduce a buildings consumption of potable water. The W.E. section consists of three main components: indoor water (used by fixtures, appliances, and processes), outdoor irrigation water, and total building water metering. Within this section are three prerequisites that specifically requires indoor and outdoor water reductions in addition to documenting the buildings water use. The four W.E. credits rewards a building for achieving specific potable water reduction milestones above the baseline.

LEED CREDIT	INTENT	REQUIREMENT	SLOAN SOLUTION
W.E. Prerequisite 2 – Indoor Water Use Reduction	To reduce indoor water consumption.	Reduce aggregate water consumption 20% from the baseline.	Sloan HET's & HEU's
			Sensor faucets
			1.28, 1.1 and
			Reclaimed Water flushometers
W.E. Credit 2 - Indoor Water Use Reduction (1 to 6 points possible)	To reduce indoor water consumption by greater that 20% above the base- line.	Reduce fixture and fitting water use by at least 25% and up to potentially 50%. Points are awarded based on per- cent reduction achieved.	Pint, Waterfree and Hybrid Urinals.

W.E. Prerequisite 3 - Building-Level Metering	To support water manage- ment and identify opportu- nities for additional water savings by tracking water consumption.	Install permanent water meters that measure the total potable water use for the building and associated grounds and commit to sharing the data with USGBC for a period of 5 years.	
<b>W.E. Credit 4 -</b> Water Metering (1 point)	To support water manage- ment and identify opportu- nities for additional water savings by tracking water consumption.	Install permanent water meters for two or more of the follow- ing water subsystems: Irriga- tion, Indoor plumbing fixtures and fittings, domestic hot water, boilers, reclaimed water and other process water.	SMS

### BD+C WE Prerequisite 2 (WEp2): Indoor Water Use Reduction

This prerequisite was formerly called the Water Use Reduction prerequisite in LEED 2009. LEED v4's WE Prerequisite 2 requires the aggregate indoor water consumption be reduced by 20 percent from the baseline. Table 1 identifies the baseline water consumption to be used for various fittings and fixtures when calculating a building's baseline indoor water use.

A v4 update mandates that all newly installed fittings and fixtures that are eligible for the WaterSense label, must have a WaterSense label (or a local equivalent for projects outside the U.S.). The WaterSense label ensures that the fixtures utilized in a LEED building meet both water efficient and high performance testing standards.

#### TABLE 1. BASELINE WATER CONSUMPTION OF FIXTURES AND FITTINGS.

FIXTURE OR FITTING	BASELINE IP UNITS	BASELINE SI UNITS
Water Closet (Toilet)*	16 gallons per flush	6.0 liters per flush
Urinal*	<b>10</b> gallons per flush	<b>3</b> 8 liters per flush
Public Lavatory Faucet	0.5 gallons/min. at 60 psi	19liters/min. at 415 kPa
Showerhead*	2.5 gallons/min. at 80 psi	9.5 liters/min. at 550 kPa

\*WaterSense label available for this product type.

#### **BD+C WE Prerequisite 3 (WEp3): Building Level Water Metering**

Prerequisite 3 mandates the documentation of a buildings actual potable water consumption. This data must be collected and compiled into monthly and annual reports and submitted to USGBC for a period of at least five years.

## BD+C WE Credit 2 (WEc2): Indoor Water Use Reduction

Most of this credit remains from LEED 2009 however the point structure has changed and projects can earn up to a possible six points for reducing potable water consumption by 50%. **SEE TABLE 2 BELOW.** 

#### TABLE 2. POINTS FOR REDUCING WATER USE.





## BD+C WE Credit 4 (WEp3): Building Level Water Metering

The final water efficiency credit again deals with water metering. However this credit awards projects for metering specific potable water subsystems within the building. In order to achieve the point the project must install permanent meters on two of the following potable water subsystems: irrigation, indoor plumbing fixtures and fittings, domestic hot water, boilers, reclaimed water and other process water.

Sloan's complete line of innovative plumbing solutions can be used to help you achieve specific water efficiency goals as well as attaining LEED Water Efficiency credits.