

Using Veris Flow Meters in LEED Certification

LEED certification credits include a number of water efficiency criteria. To satisfy the requirements for these credits and earn the corresponding LEED points, a building owner or building automation system (BAS) designer must show that their internal plumbing system is capable of continuously measuring and recording water use.

Every LEED program has water efficiency (WE) credits (see table below). Veris Industries flow monitoring devices provide an ideal solution for measuring water efficiency. We have several styles of flow sensors that provide continuous readings of water flow volume and flow rate. Any of these sensors can be connected to a Veris flow monitor, which records and displays the total flow volume and flow rate.

Successful implementation of flow monitoring for the LEED Existing Buildings criteria requires that the building owner compile monthly and annual summaries of water efficiency results. This is easily accomplished using a Veris flow meter/flow monitor pair. The monitor collects flow data for a month and retains the data for an additional month. At any time, a user can view the current water use status, as well as viewing the information for the previous month. The building owner can then record the total flow information every month in a spreadsheet or other data storage system for future reference.

To earn the New Construction points, the building owner must first determine the baseline water use for the entire building. Reduction is achieved through the installation of high-efficiency fixtures, dry sensors, and occupancy sensors. Veris flow sensors and flow monitors can be used first to establish the baseline water use, then to verify the amount of reduction after new fixtures and systems are installed. The points are awarded based on the percentage of water use reduction, not measurement capability. However, accurate quantification devices will prove the efficiency of the overall plumbing design.

Veris flow sensors are available in both insert and tee styles. Many have hot tap capability for increased application flexibility. The hardware is durable and resistant to clogging. Pulse and analog outputs are available on selected models. For assured accuracy in flow measurement, contact a Veris sales representative.

Program	Criteria	Requirement	Products Available
Existing Buildings	WE 1 Option 1 (1 point)	"Have in place permanently installed water metering 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."	<ul style="list-style-type: none"> • For residential buildings: all plastic and metal tee sensors (monitor required) • For commercial buildings: all SDI and insertion sensors (monitor required), nutating disc, and turbine meters
	WE 1 Option 2 (2 points)	"Meet the requirements for Option 1 and have in place permanently installed metering for one or more of the following water subsystems: Irrigation...Indoor plumbing fixtures and fittings...Cooling towers... Domestic hot water...Other process water."	<ul style="list-style-type: none"> • Irrigation systems: plastic tee sensors (monitor required) • Indoor plumbing: plastic/metal tee, insertion, and SDI sensors (monitor required) • Cooling towers: SDI and insertion sensors (monitor required) • Hot water: plastic/metal tee, insertion, and SDI sensors (monitor required) • For wastewater: Magnetoflow meter
New Construction	WE 3 (2-4 points)	"Employ strategies that in aggregate use less water than the water use baseline calculated for the building."	<ul style="list-style-type: none"> • For residential buildings: all plastic and metal tee sensors (monitor required) • For commercial buildings: all SDI and insertion sensors (monitor required), nutating disc, and turbine meters • For wastewater: Magnetoflow meter