## WaterSense<sup>®</sup> Works With LEED<sup>®</sup> for Homes



he U.S. Environmental Protection Agency (EPA) developed the WaterSense New Home Specification to complement the water-efficiency criteria of other green building programs. Builders constructing homes to the U.S. Green Building Council's (USGBC's) Leadership in Energy and Environmental Design (LEED) for Homes rating system, the National Green Building Standard<sup>TM</sup>, or regional, state, or local green building programs might already be meeting many elements of the WaterSense new home specification. By going a few steps further to ensure the home's water-efficient features, these green homes could also earn the WaterSense label.

Multiple third-party certifications are an attractive feature in a market where construction companies are looking to gain a competitive edge by building green. According to *McGraw-Hill Construction's Smart-Market Report*, 40 percent of builders agreed "green" makes it easier to sell homes in a down economy.

Homes built to the WaterSense new home specification meet indoor and outdoor water-efficiency criteria that could help a family of four save approximately 50,000 gallons of water and at least \$600 on utility costs each year compared to a typical home. These homes include WaterSense labeled plumbing fixtures, an efficient hot water delivery system, waterefficient landscape design, and other water- and energy-saving features. WaterSense labeled new homes are independently certified to meet EPA's water-efficiency and performance criteria.

## **LEED** for Homes

USGBC developed the LEED for Homes rating system to measure performance in eight green building categories, with points adding up in these areas toward different levels of certification.

## LEED Ratings:

- Certified: 45 to 59
   points
- Silver: 60 to 74 points
- Gold: 75 to 89 points
  Platinum: 90 to 136 points

## What Is WaterSense?

WaterSense is a voluntary partnership and labeling program for water-efficient products, new homes, and programs. The WaterSense



label is a simple way for consumers to identify water-efficient products that use at least 20 percent less water while still performing as well as or better than standard models. For quality assurance, all WaterSense labeled products are third-party certified to meet EPA's criteria for efficiency and performance. In addition to water-efficient new homes, WaterSense offers the label for toilets, bathroom faucets and faucet accessories, flushing urinals, showerheads, and certification programs for landscape irrigation professionals.



LEED criteria and the WaterSense New Home Specification overlap in several areas. In other words, homes constructed to earn LEED certification could already be meeting some WaterSense criteria. The following page shows areas where LEED and WaterSense features can overlap.

LEED for Homes	WaterSense Labeled New Home Criteria
Inside	
Install a hot water distribution system that uses a demand- controlled circulation loop or central manifold system (compact design) that stores no more than 0.5 gallons.	WaterSense requires a home's hot water delivery system to store no more than 0.5 gallons of water between the hot water source and fixtures in all plumbing system types.
Install WaterSense labeled toilets.	WaterSense requires toilets to be WaterSense labeled.
Install faucets with a flow rate of less than 1.5 gallons per minute (gpm).	WaterSense requires bathroom faucets to be WaterSense labeled, which have flow rates of 1.5 gpm or less.
Install showerheads with a flow rate of less than 2.0 gpm.	WaterSense will soon require WaterSense labeled showerheads, which have a maximum flow rate of 2.0 gpm.*
Install an ENERGY STAR <sup>®</sup> qualified dishwasher.	If a dishwasher is installed, WaterSense requires it to be ENERGY STAR qualified.
Install an ENERGY STAR qualified clothes washer with a modified energy factor of greater than or equal to 2.0 and a water factor of less than 5.5.	If a clothes washer is installed, WaterSense requires it to be ENERGY STAR qualified with a water factor less than 6.0.
Outside	
Comply with the LEED Water Budget Tool when designing the landscape. Or, Limit turf to 21 to 40 percent of designed landscape.	Use the WaterSense Water Budget Tool to design the front yard landscape (Option 1). Or, Use 40 percent turf or less to design the front yard landscape (Option 2).
<ul> <li>Design a landscape with the following features:</li> <li>All drought-tolerant turf.</li> <li>No turf in densely shaded areas.</li> <li>No turf in an area with a slope of 25 percent or more.</li> <li>Mulch or soil amendments added as appropriate.</li> <li>Compacted soil tilled to at least 6 inches.</li> </ul>	WaterSense requires a front yard landscape design with the fol- lowing features: • No turf in an area with a slope of 25 percent or greater. • No exposed soil; mulch 2 to 3 inches deep.
<ul> <li>If an irrigation system is installed, points are available for the following criteria:</li> <li>Be designed by a WaterSense irrigation partner.</li> <li>Be third-party verified.</li> <li>Achieve a distribution uniformity of 70 percent.</li> <li>Have a moisture sensor or rain delay controller.</li> <li>Activate in certain watering zones at the optimum time of the day to minimize evaporation.</li> <li>Does not overspray onto the home.</li> </ul>	<ul> <li>If an irrigation system is installed, WaterSense requires it:</li> <li>Be designed or installed and audited by a WaterSense irrigation partner.</li> <li>Achieve a distribution uniformity of at least 65 percent (sprinkler irrigation is prohibited on all areas other than turf).</li> <li>Have a rainfall shutoff device.</li> <li>Have an irrigation controller (multiple criteria apply).</li> <li>Sprays on areas of turf grass only (without overspray on hard-scape, softscape, or the home.</li> </ul>

\* EPA intends to add WaterSense labeled showerheads as a requirement to the WaterSense New Home Specification in 2012.

Please note that additional criteria must be met in order to earn the WaterSense label. This table includes only the criteria under LEED for Homes Version 7.1 that contribute to meeting WaterSense new home labeling criteria. LEED for Homes 2012 is expected to incorporate WaterSense's new home specification. To learn more about LEED for Homes, visit www.usgbc. org. For more information about WaterSense and the additional criteria necessary to meet the WaterSense New Home Specification, visit www.epa.gov/watersense.