



Demonstrating a Little WaterSense

By Bill Strang, TOTO USA, and Southface

Humans have often used water in copious amounts assuming that the resource was infinite; just dip your bucket into the river to get more. But, as we all know, the reality has changed, and water will become more precious than oil in the relatively near future. Unlike oil, we cannot bio-fuel our way out of the mess. Thus arises the need to be good stewards of this valuable commodity.

On the consumption side of the water cycle, one of the largest potential options for conservation is the residential toilet, which accounts for 28 percent of all indoor water use. In 2006, the U. S. Environmental Protection Agency (EPA) initiated a new program to encourage the implementation of innovative solutions for water conservation called WaterSense. The EPA engaged the major stakeholders, ranging from state and local municipalities, advocacy groups, trade groups and manufacturers, in the process of drafting language that would address opportunities to reduce water consumption.

Through this approach, a solution was reached that not only achieved reductions, but in the case of toilets, set a realistic testing protocol that validates performance. The standard, which requires toilets to successfully flush with 1.28 gallons of water, is voluntary, not mandatory, but using products that have the WaterSense label will help builders and developers achieve three points toward EarthCraft House certification. The standard also applies to dual flush toilets that typically flush 1.6 gallons per flush (gpf) for solids and .8 or .9 gpf for liquids, thus achieving an average of 1.1 gpf. These products are called high-efficiency toilets (HETs).

In November, the EPA published a standard for faucets (11 percent of indoor water use), moving the current standard of 2.2 gallons per minute (gpm) to 1.5 gpm. These are now called high-efficiency faucets (HEFs). This also is a voluntary standard; manufacturers who register their product will be able to use the WaterSense label, and builders and developers who use this product will gain potential EarthCraft House and LEED for Homes points.

The current estimated average per capita water use for a shower is 11.6 gallons per day. The EPA is working on a standard for showers (17 percent of indoor water use) that will seek to reduce the current 2.5 gpm flow rate to something less. These products will become known as high-efficiency showers (HESs). The new WaterSense standard is anticipated in mid 2008.

The next big challenge for the EPA is to develop a standard for commercial toilets and urinals. The challenge here is to achieve water reductions while working with drain line carry challenges. The concern is that drain line carry is more troublesome in industrial applications as occasionally slopes are less than the standard two degrees. This standard is targeted for launch in the later part of 2008.

Currently all WaterSense-labeled products must be tested and certified at a third-party testing facility, and manufacturers who wish to participate must become a U.S. EPA WaterSense partner.

Just as the ENERGY STAR program began with products and now is available as a certification for homes, including all EarthCraft House homes, similarly a WaterSense Home certification is in the final stages of development and will launch later in 2008. The EPA has continued its consensus-building approach by including builders, developers and others at the table in developing the guidelines, including Greater Atlanta HBA members. The WaterSense Homes guidelines will include requirements for both indoor and outdoor water use, as well as maximum whole house pressure to ensure that all fixtures function as rated.

For more information about the WaterSense program, visit www.epa.gov/watersense. ■

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