



Water Efficiency Research Committee Projects - 2009

Project No. 10

Project Name: UNAR for Commercial Toilet Fixtures

Description:

A UNAR (Uniform North American Requirements) specification for tank-type toilet fixtures was developed several years ago for the water utility industry to implement toilet replacement programs with assurance that predicted water savings would materialize and be retained (flapper failure, incorrect flapper replacement, customer tampering with the toilet, unsatisfactory performance, etc.). UNAR combines the requirements of the Los Angeles Supplementary Purchase Specification with MaP testing to arrive at a combined specification that was accepted by the plumbing industry. Subsequently, the WaterSense Program adopted the UNAR specification as the foundation for its first product introduction, high-efficiency toilets (HETs).

UNAR provides information about which toilet fixtures assure long-term water savings AND meet customers' flush performance expectations. UNAR provides for testing toilet fixtures against performance and water savings sustainability requirements. Water utilities are using the web "list" of UNAR-qualified tank-type fixtures as criteria for toilet rebate or voucher programs, or for guiding toilet purchases for giveaways or direct install programs.

However, a UNAR specification for flushometer type toilet fixtures for commercial applications has not yet been developed. This project would continue the work already underway on a commercial MaP test that incorporates more rigorous performance requirements than the current MaP test. The UNAR specification for flushometer toilet fixtures would incorporate the more rigorous MaP test and other requirements, such as limiting valve adjustability. This specification would be used by water utilities for identifying performance-based sustainable fixtures for their commercial rebate programs. Finally, the UNAR specification would, as before, provide a foundation for a WaterSense specification covering flushometer HETs.

Type of Research: Laboratory, field, and literature

Expected Term to Complete the Research: An additional 6 months

Estimated Cost Threshold: Medium

Current Status: MaP testing development is largely funded. Funding is required to develop the specification and conduct field trials.