

Water Ratings: Oh, the Data They'll Bring

Mike Collignon Green Builder[®] Coalition

Water Ratings



Water ratings are on-site analyses of properties that subsequently forecast future water usage.

Ratings do not mandate anything. They simply assess the design & materials of the property.

They can be more comprehensive than a water audit.

Inputs

• Indoor:

- Faucets
- Showers/Tubs
- Clothes & Dish Washers
- Fridge w/ Water Dispenser
- RO/Water Softeners
- Hot Tubs/Fountains/Pools
- Reuse Systems (Rain, Gray, Black)
- Structural Waste

• Outdoor:

- Irrigation Systems
- All Plantings
- Soil Type/Grade
- Roof Type
- Pervious & Impervious Surfaces
- Pools
- Rainwater & Graywater Systems

How Do Water Ratings Differ from Prescriptive/Hybrid Programs?

- EPA WaterSense, LEED for Homes, Florida WaterStar
 - Prescriptive, minimum compliance level
 - Pass/Fail, not quantitative
 - Points-based systems that may not reflect value or ROI
 - Administrative requirements, documentation and validation
 - Aspects of project not covered by program (evap cooler, RO filter)
 - Alternative source water, re-use credits not measured
 - Limited-to-no flexibility on product and/or design choices

How Water Ratings Differ from MWELO, QWEL, EPA Outdoor

- Irrigation only
- Does not account for alternative water sources
- Does not credit using outdoor water inside the home



What Are the Benefits of using a Water Rating?

- Long term conservation of a precious, essential resource
- Financial Incentives
 - Tax Credits
 - Rebate Programs
- Codes/regulations
- Green Building Programs
 - Alternative path for water efficiency
- Potential financial incentives
 - Reduced storm water impact fees
 - Reduced tap fees
 - Shortened permit review time



HERS H₂O

- Applicability
 - New or Existing Homes
 - Single Family or Duplex
 - Any Climate or Location
- Scoring System
 - Compares rated home with a hypothetical reference home of the same size and location
 - Reference home approximates a standard new home built c. 2006, and assigned a score of 100.
 - Rated home score may be lower or higher than the reference home.
 - Outputs include --
 - Annual water use volume
 - Annual water bill savings
- Attributes
 - Models grounded in robust field data.
 - Has "look and feel" of HERS.

- What's Covered
 - Plumbing fixtures, major appliances, water softeners, landscape irrigation systems.
 - Additional factors: house size, location, number of bedrooms, excess water pressure, hot water distribution layout, lot and landscape size, pool or spa.
 - Not yet included pending more data: humidifiers, water filtration systems, alternative water sources.
- Current Status
 - Initially completed as a RESNET technical guideline in 2017
 - Undergoing field testing by home builders
 - Now being refined and reissued as an ANSI standard
 - Public Comment draft
 expected this month

Water Efficiency Rating Score (WERS)®

- Applicability
 - New or Existing Properties
 - Single Family or Multifamily
- Outputs
 - Score: 0-100
 - Projected usage in gallons: Daily, monthly and yearly
 - Projected water costs: Daily, monthly and yearly

- Adopted/Implemented
 - State of New Mexico: SBTC since January 1, 2017
 - City of Santa Fe: RGBC since March 2017
- Partner Discounts
 - 45% TSV showerheads
 - 20% rainwater or graywater
 - 20% irrigation controllers
- Future
 - 4 green building programs incorporating into water chapter
 - WaterSense for Homes: Under consideration for dual certification

Questions? Contact Us for More Info

Green Builder[®] Coalition info@greenbuildercoalition.org



Thank you!

www.wers.us