

## Matrix of Water Efficiency Rating Systems

	ICC 700 - 2020/2025 NGBS Chapter 8: Prescriptive Path	ICC 700 - 2020 NGBS (Appendix D); 2025 (Appendix C) WRI Certification Standalone or concurrent NGBS Green Certification option	RESNET HERSH2O	WERS	EPA WaterSense v2
American National Standards Institute (ANSI) Approved Standard	Yes	Yes	Yes	No	Depends on the WaterSense Approved Certification Method (WACM) used
Requires an Independent Rater/Verifier	Yes	Yes	Yes	Yes	Yes
Standalone Certification Program	No ( <i>Part of overall home certification</i> )	Yes	Yes	Yes	Yes
Onsite Inspections	Yes	Yes	Yes	Yes	Yes
Certification Fees (Only includes fees paid to Certifying Body)	Whole project certification SF: \$200/home   MF: <u>tiered structure</u>	No certification fee if pursued concurrently with NGBS Green Certification. Separate WRI fee of \$50/home or \$100/MF building when pursued independently.	TBD - anticipated to be \$50-\$150	\$75 per single-family project (\$49 in NM)	None
Possible Additional Fees	NGBS Green Verifier fee ( <i>as part of whole home certification</i> )	NGBS Green WRI Verifier fee	HERSH2O Rater fee	WERS Verifier fee	Verifier fee
Project Certification Information	<a href="https://NGBS.com">https://NGBS.com</a>	<a href="https://NGBS.com/WRI">https://NGBS.com/WRI</a>	<a href="https://www.resnet.us/about/hersh2o/">https://www.resnet.us/about/hersh2o/</a>	<a href="http://www.wers.us/">http://www.wers.us/</a>	<a href="https://www.epa.gov/watersense/homes-specification">https://www.epa.gov/watersense/homes-specification</a>
Standard/Rating System Guide	<a href="http://www.nahb/ngbs">www.nahb/ngbs</a>	<a href="http://www.nahb/ngbs">www.nahb/ngbs</a>	<a href="http://www.resnet/hersh2o">www.resnet/hersh2o</a>	<a href="http://www.wers.us/">http://www.wers.us/</a>	<a href="https://www.epa.gov/sites/default/files/2021-02/documents/watersense_final_homes_specification_v2.0.pdf">https://www.epa.gov/sites/default/files/2021-02/documents/watersense_final_homes_specification_v2.0.pdf</a>
Applicable Building Types (SF = single-family) (MF = multifamily)	SF - New Construction & Existing Buildings ( <i>including duplexes, townhomes</i> ) MF - New Construction & Existing Buildings	SF - New Construction ( <i>including duplexes, townhomes</i> ) (Section 1204.4 for SF Certified Path) MF - New Construction 2025: New and Existing Buildings	SF - New Construction & Renovation ( <i>including duplexes, townhomes</i> ) ( <i>renovation implied, not referenced</i> ) MF - No	SF - New Construction & Renovation ( <i>including townhomes</i> ) MF - New Construction & Renovation	SF - New Construction ( <i>including townhomes</i> ) MF - New Construction
Water Cost Evaluation	No	No	No	Yes	No
Approved Product List	Yes	Yes	No	Yes	Depends on the WACM selected
<b>WATER ALLOCATION PLANNING TOOL</b>					
Provides a prediction of annual gallons of water usage for a dwelling unit	No	Yes	No	Yes	Depends on the WACM selected
Can be used to predict annual acre feet of water usage for subdivisions and multifamily developments	No	Yes	No	Yes	Depends on the WACM selected
Can be used by water planning jurisdiction to calculate impacts of predicted growth on limited water supplies	No	Yes	No	Yes	Depends on the WACM selected
Can become more restrictive by lowering numerical achievement requirements by authorities having jurisdiction	No	Yes	Yes	Yes	Depends on the WACM selected
<b>INDOOR WATER</b>					
Evaluates Overall Indoor Water Efficiency	No	Yes	Yes	Yes	Yes ( <i>Home must be at least 30% more efficient than typical new construction based on national standards and requirements</i> )
What's Included in the Calculations?	Prescriptive: Home features, fixtures and appliance information entered in scoring tool spreadsheet; points awarded for practices as defined in the standard	Formulas use home size, #bedrooms, fixtures & appliances, lot size, landscape design <i>Formula: (Anticipated indoor + outdoor water use) / (Baseline indoor + outdoor water use)</i>	Detailed in BSR/RESNET/ICC Standard 850 Formulas use home size, #bedrooms, fixtures & appliances, lot & landscape size <i>Formula: (indoor and outdoor gpd for rated home) / (indoor and outdoor gpd for reference home)</i>	Formulas use home size, #bedrooms, fixtures & appliances, lot size, landscape design <i>Formula: (Anticipated indoor + outdoor water use) / (Baseline indoor + outdoor water use)</i>	Any applicable WACM developed by EPA approved Home Certification Organization (HCO) can be used

Flush and Flow Fixtures	Yes	Yes	Yes	Yes	Yes (Toilets, bathroom sink faucets and showerheads must be WaterSense labeled)
Water Heater	Yes	Yes	No	Yes	Depends on the WACM selected
Dishwasher	Yes (ENERGY STAR or equivalent)	Yes	Yes	Yes	Depends on the WACM selected
Washing Machine	Yes (ENERGY STAR or equivalent)	Yes	Yes	Yes	Depends on the WACM selected
Structural Waste Considered (water volume in the pipe between the hot water source and the plumbing fixture or appliance plus the extra volume needed to heat the pipe as hot water is delivered to its use)	Yes	Yes	No	Yes	Depends on the WACM selected
Other Indoor Considerations	No	Water Softeners   Humidifiers Evaporative Coolers   Water Filters (except Reverse Osmosis)	Water Softener Other water use in the home Static pressure adjustment (excess pressure)	Water Softeners   Humidifiers Evaporative Coolers   Water Filters Indoor Water Features	Inspection to confirm no visible leaks and proper service pressure
<b>OUTDOOR WATER</b>					
Evaluates Overall Outdoor Water Efficiency	No	Yes	Yes	Yes	Yes (Home must be at least 30% more efficient than typical new construction based on national standards and requirements)
What's Included in the Calculations?	Irrigation system and rainwater collection design parameter information entered in scoring tool spreadsheet; points awarded for practices as defined in the standard	Uses: Areas of hardscapes/pervious areas, monthly potential ETO & historic rainfall, types of plantings	Determines water demand based on one of two calculations, based on lot size and if there is an outdoor irrigation system	Uses: areas of hardscapes/pervious areas, monthly potential ETO & historic rainfall, types of plantings	Any applicable WACM developed by EPA approved Home Certification Organization (HCO) can be used
Landscape Design	No	Yes (Evapotranspiration factor based on plant type)	Yes (Based on lot size only - less than or greater than 7000 sq. ft.)	Yes [Water demand of plantings, plant grouping (hydrozones) considered]	Depends on the WACM selected
Irrigation System	Yes	Yes (Efficiency factors based on system type)	Yes	Yes (Potential water use based on type(s) of irrigation, irrigation zones, water demand)	Depends on the WACM selected
Other Outdoor Considerations	No	Swimming Pools, Fountains and Spas	Swimming Pools	Swimming Pools, Fountains and Spas	Depends on the WACM selected
<b>WATER CAPTURE AND REUSE</b>					
Rainwater Capture (precipitation that falls on a structure)	Yes	Yes	No* (Can be considered on a case-by-case basis)	Yes	Depends on the WACM selected
Graywater Capture (wastewater from bath, shower, lavatories or clothes washers)	Yes	Yes	No* (Can be considered on a case-by-case basis)	Yes (for indoor or outdoor use)	Depends on the WACM selected
Blackwater Capture (wastewater from toilets)	2020-Yes; 2025-No	2020: Yes; 2025-No	No	Yes	Depends on the WACM selected
Other	Reclaimed Water: Engineered Biological or Bioremediation System	Sitewater Capture (Precipitation falling on the ground, softscapes or hardscapes)	No	Sitewater Capture (Precipitation falling on the ground, softscapes or hardscapes; also direct capture)	Depends on the WACM selected
Water Reuse	Yes (Points based on system size/ % demand met)	Yes (Per local requirements. No indoor blackwater reuse (2020))	No* (Can be considered on a case-by-case basis)	Yes (Calculates storage needed, tank size, demand % met)	Depends on the WACM selected