

LEED DESIGN GUIDE

Irrigation Solutions for Residential Single-Family Homes

USGBC LEED v4.1 Certification

Hunter®



“Our mission is to transform the way buildings and communities are designed, built, and operated through LEED — enabling an environmentally and socially responsible environment that improves the quality of life.”

— U.S. Green Building Council

EARNING POINTS FOR WATER EFFICIENCY (WE) CREDITS *through irrigation practices*

Water Efficiency (WE) Credit: Total Water Use, 3-15 points

Intent: To reduce demand for water through high-efficiency fixtures and efficient landscaping practices.

Requirement: Reduce total indoor and outdoor water consumption by at least 20% over standard practices.

| Points for Reducing Indoor and Outdoor Water Use | |
|--|--------|
| Percentage of reduction | Points |
| 20% | 3 |
| 25% | 4 |
| 30% | 5 |
| 35% | 6 |
| 40% | 7 |
| 45% | 8 |
| 50% | 9 |
| 55% | 10 |
| 60% | 11 |
| 65% | 12 |
| 70% | 13 |
| 75% | 14 |
| 80% | 15 |

Single-family residential projects require a total water use reduction of 20% from baseline use. Additional reduction earns more points.

To calculate outdoor water use saving, use the **EPA WaterSense Water Budget Tool** at epa.gov/watersense/water-budget-tool.

Implement the following measures to further reduce landscape water consumption:

- Install smart scheduling technology. This strategy counts for a maximum reduction of 30% provided all landscape water use is controlled by a weather- or soil-moisture-based irrigation control system.
- Use captured rainwater or reclaimed water.
- Use water treated on-site or conveyed by a public agency specifically for non-potable uses (water from naturally occurring surface water bodies, such as streams and rivers, and groundwater, such as well water, does not count).

HUNTER SMART IRRIGATION SOLUTIONS *to meet and exceed the needs of LEED projects*



Pair any of these controllers with a Solar Sync Sensor to create an EPA WaterSense® certified smart controller.

The **Solar Sync® Sensor** offers on-site climate monitoring to provide automatic controller adjustments and increase irrigation efficiency.



The **Hydrowise® Platform** is available for a range of EPA WaterSense certified controllers that automatically adjust run times based on local weather data.

Achieving the 20% total water use reduction is a requirement for single-family residential projects seeking LEED certification. Water efficiency credit points can be earned in either the Total Water Use or Outdoor Water Use credit, but not both.

LEED v4.1 is a roadmap for sustainable construction that maximizes outdoor water use efficiency for single-family residential projects. Applicants can earn landscape irrigation points through Total Water Use or Outdoor Water Use credits.

Water Efficiency (WE) Credit: Outdoor Water Use

Intent: To reduce outdoor water consumption through efficient landscaping practices.

There are two options to receive points for the Outdoor Water Use credit.

OPTION 1

Efficient Landscaping, 1-4 Points

Landscaping with native and regionally adapted plants receives points based on its percentage footprint in the total landscape.

| Native or Adapted Plant Area | |
|------------------------------------|--------|
| Percentage reduction from baseline | Points |
| > 25% | 1 |
| > 50% | 2 |
| > 75% | 3 |
| > 100% | 4 |

OPTION 2

Efficient Irrigation, 1-2 Points

Design and install a high-efficiency irrigation system with the following considerations:

- Use of pressure regulation for every zone (valve or sprinkler).
- Use of check valves on sloped irrigation zones to prevent low-head drainage.
- Flow sensing with a master valve and irrigation controller that responds to a high-flow occurrence.
- Use of smart irrigation control technology (weather based, soil moisture sensors, rain sensors, etc.).
- Create separate zones for each type of bedding area based on watering needs.
- Use of drip irrigation for at least 50% of the planting area.



HC Flow Meter

Detect, monitor, and report critical flow data and total system flows with this robust flow sensor with flows from 0.22 to 132 GPM. Combine with Hydrowise Software to generate reports and accurately track landscape water use.

HUNTER IRRIGATION SOLUTIONS

to meet and exceed the needs of LEED projects

Pressure Regulation

Allows application devices to work at peak performance and efficiency.



Pro-Spray® PRS30 and PRS40 Sprinkler Bodies
30 PSI and 40 PSI regulated heads provide precise inlet pressure.



PGP® Ultra PRB Rotor
Built-in pressure regulation to maximize performance.



Accu Sync® Pressure Regulator
Pressure regulation at the valve ensures downstream efficiencies.

Check Valves

Prevent low-head drainage, landscape damage, and water waste.



Spray Heads
Factory-installed check valves to prevent drainage.



Rotors
Factory-installed check valves to save water.



Check Valves
Field-installed check valves for laterals or emissions devices.

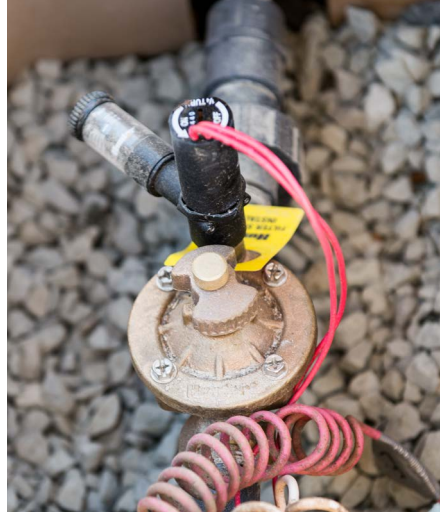
Flow Sensing

Flow sensing with a master valve and controller response stops irrigation when leaks or clogs are detected.



Flow Management

Flow sensors and master valves monitor and react to system flows.



Master Valve

Heavy-duty brass construction provides durability and reliability.



Controller

Turns off irrigation by closing the master valve when a leak or clog is detected.

Drip Irrigation

Drip devices deliver precise irrigation to plants throughout the landscape.



Hunter Dripline

Maximize irrigation efficiency with direct water application.



Eco-Mat® System

Provides a capillary action irrigation delivery system to maximize efficiency.



Drip Control Zone Kits

Stainless steel filters and pressure regulation to manage drip systems.

RECLAIMED WATER SOLUTIONS

to meet and exceed agency requirements

Using reclaimed water offsets potable water use in the landscape and accounts for water savings in the Total Water Use credit. Hunter provides a suite of reclaimed water products marked with purple identifiers.



Rotors

A high-visibility purple cap identifies these rotors as using reclaimed water.



Sprinkler Bodies

From a shrub riser to 12" pop-up, these sprinkler bodies are all available with purple caps.

Valves

Built with robust diaphragms and purple identifiers, these valves can handle the challenges of reclaimed water.



Drip Control Zone Kits

Reclaimed identification on both the valve and filter.



Dripline

Purple stripes to discreetly identify reclaimed water use.

RECYCLED MATERIAL INCLUSION

to reduce our environmental footprint

Hunter products can help you meet recycled material requirements for potential LEED certified projects. Recycled Content Credits are recorded within the Materials and Resources (M+R) Credits section, which requires a minimum amount of recycled material. LEED specifically excludes mechanical, electrical, and plumbing components from the calculations since they are considered minor, removable materials.

Although Hunter products are excluded from this credit, we include recycled material in our products to help decrease our environmental footprint. Our goal is to maximize recycled material inclusion without jeopardizing product quality or durability.



ABS Plastic

Products manufactured with ABS black plastic contain up to 13% recycled material.



Dripline

Hunter Dripline is manufactured with up to 75% recycled material.



Subsurface Irrigation

Synthetic fleece products like the Eco-Mat and Eco-Wrap® Systems are manufactured with 100% recycled material.



Rotor Keys and Wrenches

Plastic components of rotor keys are manufactured with 100% recycled material.

Hunter Industries manufactures and supplies best-in-class products that provide irrigation efficiency through application, control, and management features ideal for projects seeking LEED certifications. Partner with Hunter Industries to maximize your points and achieve real water efficiency.

Learn more about USGBC LEED Certification at: [usgbc.org/leed](https://www.usgbc.org/leed)

Learn more about the EPA WaterSense Budget Tool at: [epa.gov/watersense/water-budget-tool](https://www.epa.gov/watersense/water-budget-tool)



Helping our customers succeed is what drives us. While our passion for innovation and engineering is built into everything we do, it is our commitment to exceptional support that we hope will keep you in the Hunter family of customers for years to come.

A white, handwritten signature of Gregory R. Hunter.

Gregory R. Hunter, CEO of Hunter Industries

A white, handwritten signature of Gene Smith.

Gene Smith, President, Landscape Irrigation and Outdoor Lighting

Website hunterindustries.com | **Customer Support** 1-800-383-4747 | **Technical Service** 1-800-733-2823